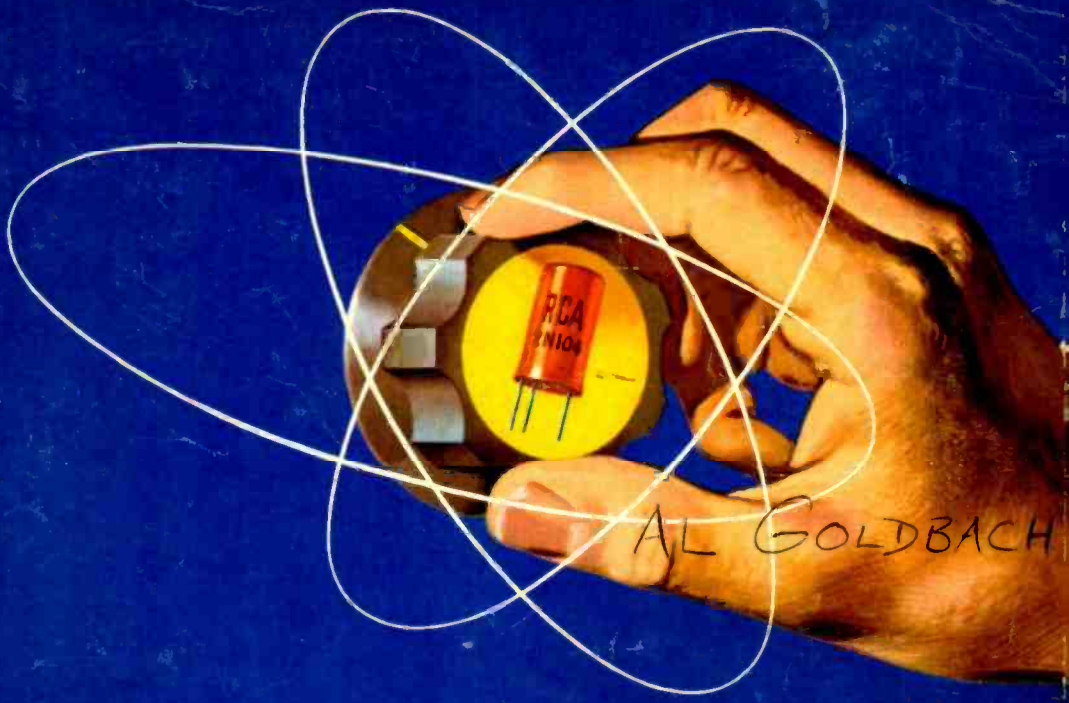

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CATALOG NO. 150

1956

INDEX ON PAGE 317

NEW WEBCOR verified high fidelity IMPERIAL diskchangers

New Hi-Fi Series 1632 Diskchangers on Bases

Series 1631 changers, but on matching metal bases. For shelf or table use. 8-ft. AC cord and plug. 8-ft. phono cable with pin plug. 14x14x9" high. Shpg. wt., 18 lbs.

MODEL 1632-27. 1631-27 (plug-in heads) on base.

Stock No.	Color	List	NET
95 RX 756	Burgundy and beige	$56.10	43.98
95 RX 757	Chrome and ebony	59.50	46.65

MODEL 1632-1. 1631-1 (ceramic cartridge) on base.

95 RX 758	Burgundy and beige	$73.00	57.23
95 RX 759	Chrome and ebony	76.50	59.98

MODEL 1632-21. 1631-21 (G.E. cartridge) on base.

95 RX 760	Burgundy and beige	$76.60	60.05
95 RX 761	Chrome and ebony	80.00	62.72

New Hi-Fi Series 1631 Webcor 3-Speed Diskchangers

The "Imperial" line of Webcor diskchangers represents the finest in record changer design, styling, and performance. Each component is precision checked before assembly to assure smooth, wow-free operation. Outstanding new features include extra-heavy, rubber matted turntable, sliding weight for precise adjustment of stylus pressure, intermix of 10" and 12" records at same speed, light to facilitate operation under dim lighting conditions. High-quality 4-pole, shaded-pole motor for constant speed and minimum hum. Mechanism is jamproof. Shuts off after last record. Idler is disengaged in "off" position to prevent flat spots. Adapter (bottom of page) permits playing 45 rpm records without need for inserts. For 110-120 v., 60 cycle AC.

Fig. A—MODEL 1631-27 WITH PLUG-IN HEADS

For custom installations and for modernizing existing phono systems. With two plug-in heads for magnetic, ceramic, or crystal cartridges with ½" mounting centers. Minimum mounting space, 15x15"; 6½" above and 3" below top of mounting board. With 3-ft. AC cord and plug, 3-ft. phono cable and pin plug, template and instructions. Less cartridges. Shpg. wt., 16 lbs.

95 RX 750. Burgundy & beige. List, $52.00. NET . . . 40.77
95 RX 751. Chrome & ebony. List, $55.70. NET . . . 43.68

MODEL 1631-1 WITH CERAMIC CARTRIDGE

As above, but with turnover-type ceramic cartridge—.001" diamond stylus; .003" sapphire stylus.

95 RX 752. Burgundy & beige. List, $70.00. NET . . . 54.88
95 RX 753. Chrome & ebony. List, $73.75. NET . . . 57.82

Fig. B—MODEL 1631-21 WITH MAGNETIC CARTRIDGE

As above, but with G. E. RPX-052A magnetic cartridge. Dual-tip stylus—.001" diamond tip for microgroove; .003" sapphire tip for standard.

95 RX 754. Burgundy & beige. List, $73.90. NET . . 57.94
95 RX 755. Chrome & ebony. List, $77.50. NET . . . 60.76

EASY TO INSTALL. All Webcor Diskchangers are designed for quick, easy installation. Pre-cut mounting boards (see page 37) eliminate need for making motor cut-outs. Units are supplied ready to operate. Depend on Webcor for top performance always.

45 RPM ADAPTER SPINDLE. For Webcor Imperial Series 1631 and 1632 Diskchangers. Automatically changes 45 rpm records—no need for record inserts. Simple to install—just slip over regular changer spindle. Shpg. wt., 8 oz.

96 R 839. List, $3.75. NET 2.94

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CORPORATION
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A. D. DAVIS, President

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We guarantee to bring you the world's largest and finest stocks of radio, television and electronic equipment at lowest prices.

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We guarantee that our merchandise conforms to the standards of the Radio-Electronics-Television Manufacturers' Association and will perform in the manner intended for such apparatus.

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COMPLETE INDEX ON PAGE 317

For Time Payment Plan See Page 315

For How To Order See Page 316

ALLIED *your Electronic Supply House*

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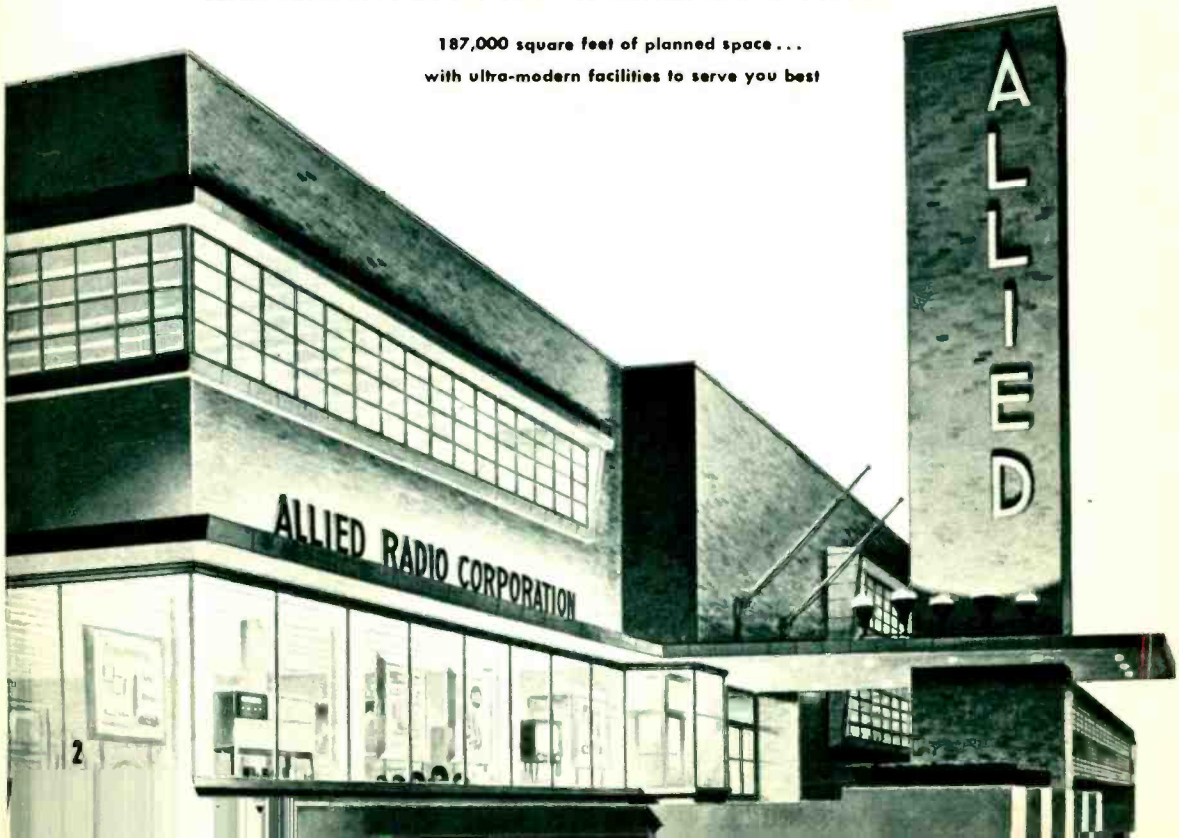
Depend on ALLIED to *serve you best.*

THE WORLD'S LARGEST ELECTRONIC SUPPLY HOUSE

187,000 square feet of planned space . . .
with ultra-modern facilities to serve you best



with ultra-modern facilities to **SERVE YOU BEST**

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Over 1500 feet of conveyor belts and 7200 feet of pneumatic tubes carry transactions and merchandise on a speedy order-filling schedule. Skilled, *interested* people handle your orders all along the line. Up-to-date stocking systems and personal inspection insure accuracy. At the end of the conveyor line there is a final check before your order is referred for careful packing and shipment.

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You are invited to consult with our technical experts for information and advice in making your selections. Our staff includes specialists in every type of electronic equipment for High Fidelity, Amateur, Service, Builders' or Industrial applications. Write to us and you will receive a prompt, authoritative and friendly reply. Take advantage of this free service.

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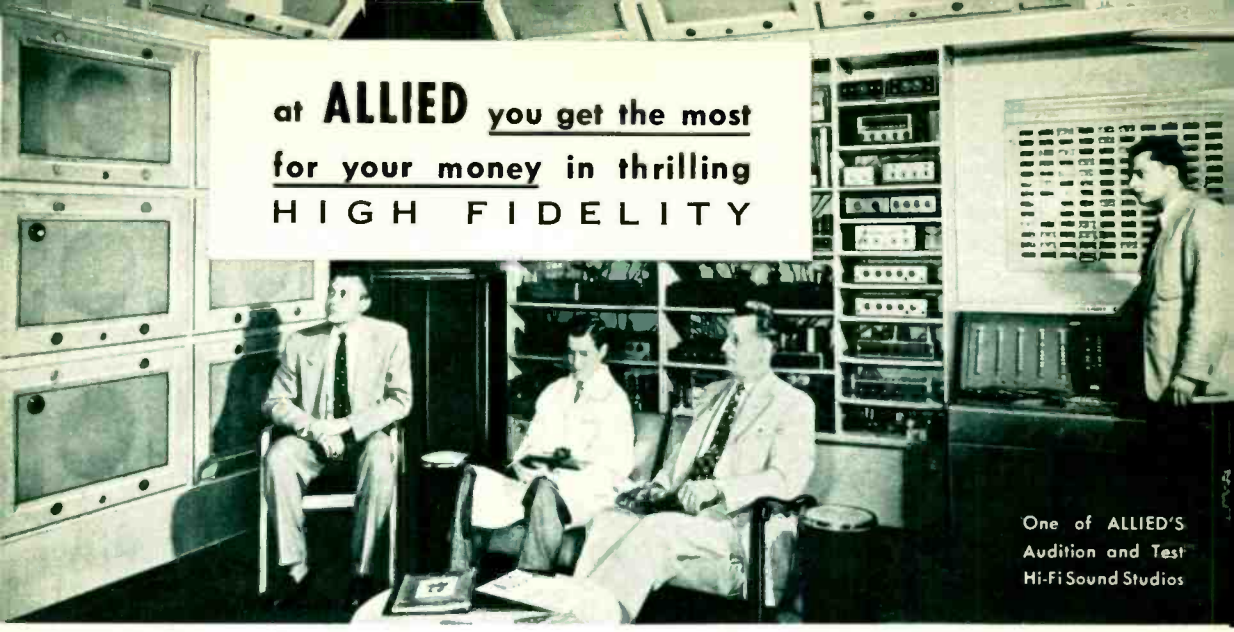
Our greatest satisfaction comes from giving you personal service and attention. All your orders and letters are assured of intelligent handling by people who show a *friendly* interest in your needs. A specially trained staff, using the best in facilities and equipment, handles your telephone orders. If you are in a special hurry, telephone your order for fast handling and shipment.

Your reliable one-supply-source for everything in electronics

ALLIED simplifies your buying problems by serving as a single, dependable, centrally-located supply source for all electronic parts and equipment. This catalog is your key to the products of the leading suppliers in the industry—quality products selected by our procurement specialists. Because we maintain the world's largest electronic stocks, one order to ALLIED will cover all your needs. Ultra-modern facilities and skilled organization assure you of fast delivery of your orders. To speed procurement, to save effort and money, order from this catalog—recognized everywhere as the most widely used Electronic Supply Guide.



One of ALLIED'S Audition and Test Hi-Fi Sound Studios

You get more from the foremost supplier of High-Fidelity equipment

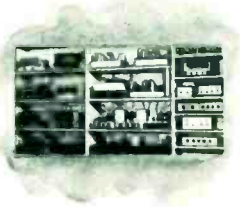
buy with confidence . . . enjoy the best for less

Many years ago, when only a few audiophiles were interested in improving the fidelity of record and radio reproduction, ALLIED was their leading source of supply. Since then, ALLIED has continued to pioneer in the supply of everything new in high-fidelity and has brought the best values obtainable to a growing group of discriminating hi-fi fans and music lovers. Now, this 1956 catalog—with a tremendous selection of systems and components in every price range—puts hi-fi within the range of everyone.

Only specialized audio components can provide true fidelity reproduction of voice and music. The selections offered by ALLIED in the high-fidelity equipment section of this catalog reflect the technical and merchandising experience of several decades.

Enjoy a whole new world of sound. Select a system or separate units from the pages that follow and get the very finest in hi-fi. Buy with confidence. *Your complete satisfaction is guaranteed.* See our money-back guarantee below. Convenient terms quickly arranged.

select from the world's largest stocks



This catalog presents the world's largest selection of high-fidelity components—amplifiers, tuners, speakers, enclosures, record changers, recorders. The famous names, the dependable standard brands, the hard-to-get accessories—all are included in a wide range of prices. Whether you select a complete system or separate components, ALLIED ships your orders promptly.

quality checked in our labs

ALLIED stocks only the quality products of reputable and established manufacturers. New high-fidelity components selected by our buyers are tested in our laboratories. Performance checks are also made with the *Auditioner* described on the opposite page. Catalog descriptions are, therefore, reliable and authoritative. You can depend on ALLIED'S quality checks.

expert, personal consulting service

The audio specialists on our technical staff have had many years of practical experience in matching high-fidelity components. Let us help you select a music system of well-balanced custom hi-fi components to fit your taste and purse. Your inquiry will receive a prompt reply with detailed recommendations. Take advantage of this free, personal consulting service.

15-day trial and money-back guarantee on Hi-Fi equipment

Any High-Fidelity system or separate component you buy at ALLIED can be tested under the terms of our trial guarantee. Place your order on our regular cash terms or use our budget plan (see below). Then check performance in your own home. If within 15 days you are not fully satisfied, return the equipment to us. We will refund your full purchase price (less only transportation charges). Every Hi-Fi unit is also covered by the regular RETMA warranty against defects in material and workmanship—for your complete protection.

easy terms to fit your budget

Hi-Fi systems or any combination of separate components priced at $45.00 or more may be purchased on ALLIED'S Easy Payment Plan. Pay only 10% down and take up to 12 months to pay the balance. You can enjoy hi-fi now even if you don't have all of the ready cash. For full details, see page 315. It's easy to order from ALLIED.

Your BEST BUY in HI-FI is an ALLIED-RECOMMENDED Home Music System

YOU GET ALL THESE ADVANTAGES

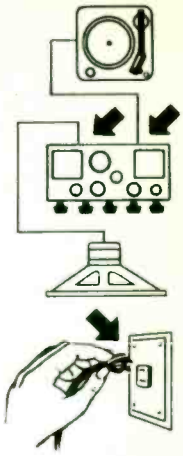
- **Perfectly matched, properly balanced components assure maximum flexibility and unsurpassed high-fidelity reproduction.**
- **No technical knowledge is required. ALLIED High-Fidelity Systems are complete with color-coded plugs and interconnecting cables—just match the colors.**
- **There's no need for soldering—phono cartridges are mounted, cables are ready for instant use.**
- **Clearly written, step-by-step instructions, plus valuable hints and data help you derive full enjoyment from your system.**
- **Each system is supplied with a complimentary 10" hi-fi demonstration record—provides a breath-taking demonstration of the capabilities of your system.**

HERE ARE THE EASY ALLIED STEPS TO COMPLETE MUSICAL ENJOYMENT

1. **Plug the record changer cables into the amplifier—they're color-coded—you can't make a wrong wiring connection.**
2. **Connect the speaker to the amplifier—the speaker cable and amplifier connection are color-coded too.**
3. **Plug the amplifier into the nearest AC electrical outlet and your ALLIED High Fidelity is ready to bring you a thrilling new world of musical entertainment.**

That's all there is to connecting an ALLIED High-Fidelity Phono System!

SUBSTITUTIONS ALLOWED. In selecting any of the systems from the chart below, you may replace any one component with another of your own selection; just add or subtract the difference in price. A system modified in this way retains all easy assembly features. Should you require any assistance, feel free to write our Audio Division—you'll get prompt expert advice.



Your Best Buy is an Auditioner-Selected Music System

The ALLIED Auditioners. The *Auditioner*, a push-button console used in our Hi-Fi studios permits instant "A-B" comparison of any combination of amplifier, speaker, enclosure, tuner, changer, pickup and cartridge. Lights on a "scoreboard" identify units in operation. The *Auditioner* was an invaluable aid in selecting the ALLIED matched systems in this catalog.

Each of the custom high-fidelity systems listed below and on the pages that follow is an outstanding "best buy" in its price class. Using the "Auditioner," our technicians tested numerous combinations. Other systems were selected on recommendations of product research organizations, authoritative publications and experts in the field. System components may be installed anywhere—in existing furniture, on book shelves and tables, or in custom cabinets.

Choice of Phono or Phono-Radio Systems. Systems are available with or without radio tuner. (Tuner may be added later to phono systems.) Please note that there are separate price and stock number columns for systems with and without tuner.

Recommendations. 1) Styli: Many of the systems employ diamond, rather than sapphire styli. Diamond styli, in spite of higher initial cost, are better values because they last longer and minimize record wear. 2) Cabinets: We can supply cabinets for almost any set of components. *See pages 33 and 34 for descriptions.* *Write for literature and prices on other cabinets.*

Amplifier	Record Changer	Cartridge	Speaker	Stock No. Phono System	NET	Tuner	Stock No. Radio-Phono System†	NET
Grommes LJ-4	Webcor 1641-21 Burgundy	G.E. RPX-050A	Permoflux 8UP-8-1	94 PA 209	88.50	Harman-Kardon A-200	94 PA 196‡	151.00
Bell 2122C	Webcor 1631-27 Burgundy	G.E. RPX-050A	G.E. S1201A	94 PA 210	108.00	Harman-Kardon A-200	94 PA 197‡	169.95
Grommes 55-C	Webcor 1631-27 Burgundy	G.E. RPX-050A	E-V SP12-B	94 PA 211	133.50	Knight Bantam FM-AM	94 PA 198‡	196.50
Pilot AA-903	Webcor 1631-27 Burgundy	G.E. RPX-050A	University 312	94 PA 212	160.50	Pilot AF-724	94 PA 199‡	249.95
Pilot AA-410	Garrard RC80	G.E. RPX-052A	E-V SP15-B	.....	.....	Pilot AF-825	94 PA 200§	264.50
Knight 24-watt	Garrard RC80	G.E. RPX-050A	E-V SP12	94 PA 213	179.95	Knight Deluxe	94 PA 201‡	272.95
E-V A15-CL	Garrard RC80	G.E. RPX-052A	E-V 12TRX-B	94 PA 214	202.00	E-V 3304	94 PA 202‡	417.75
Bogen DB20-DF	Garrard RC80	G.E. RPX-052A	Lansing D130	94 PA 215	230.95	Bogen R640	94 PA 203‡	330.95
Knight 24-watt	Garrard RC80 and base	G.E. RPX-052A	E-V Aristocrat & E-V 12TRX-B	94 PA 216	261.00	Knight Deluxe	94 PA 204‡	353.50
On Same Chassis as Tuner	Bogen B50-4LC Manual Player	G.E. RPX-052A	University 315	.....	.....	Harman-Kardon D-1100	94 PA 205§	366.95
Scott 210D	*Rek-O-Kut B-12 Pickering 190D	Pickering 350-DS	E-V 108-A system	94 PA 217	417.00	Scott 330	94 PA 206‡	578.95
Bogen D030-A	*Rek-O-Kut LP-743 Pickering 190D	Pickering 350-DS	E-V 116-A system	.....	.....	Bogen R765	94 PA 207§	525.95
Fisher 70-AZ	*Rek-O-Kut B-12H Fairchild 280A	Fairchild 220A	E-V 114-B system	.....	.....	Fisher 70-RT	94 PA 208§	623.50

†The radio-phono systems listed above can be divided into two basic types: §*Systems with centralized control at tuner.* In these systems, all controls (volume, bass, treble, AC off-on, function selector, etc.) are located on FM-AM tuner panel; amplifiers in these systems have no controls and may be installed in virtually any location, concealed or unconcealed. ‡*Systems with centralized control at amplifier.* In these systems, practically all controls are located on amplifier chassis. (*Turntable and pickup arm.)

Bantam Amplifier

Bantam Tuner

Webcor Changer

Changer plugs into Amplifier—Speaker is connected to Amplifier—Amplifier plugs into nearest AC Outlet. That's all There Is To It!

E-V Baronet Speaker

ALTERNATE CHANGER & SPEAKER CHOICE

Garrard RC80

Diminuette

"SPACE-SAVER" HI-FI SYSTEMS—NO CABINETS REQUIRED

ALLIED's "Space Saver" systems bring thrilling high fidelity to even the smallest rooms and apartments. No cabinets are required—there's plenty of space for components on bookshelf, tabletop, mantel, etc.

Knight "Space Saver" High-Fidelity Systems

Latest versions of the famous Knight "Space Saver" Phono and FM-AM-Phono systems—ready to provide superb hi-fi reproduction in the smallest of rooms or apartments. Although performance is far superior to commercially assembled phonos, the price remains unusually low. Features ALLIED-designed Knight tuner and amplifier, plus other value-packed, expertly engineered components. Systems include: New **Knight "Bantam" 12-watt Amplifier,** housed in distinctive, new cork-grained metal enclosure—a perfect accent to any interior decorative scheme. Offers bass and treble tone controls, record compensator, loudness control and variable damping. Response: ±0.5 db, 20-20,000 cps. FM and AM broadcasts are received with remarkable clarity with the new **Knight "Bantam" FM-AM Tuner.** Employs latest circuitry and "lock-in" tuning, and like the amplifier, is housed in new, cork-grained metal enclosure. Smooth record changing is accomplished with either the new **Webcor 1632-27** (burgundy finish) or **Garrard RC80,** both equipped with **G.E. RPX-050A Triple-Play Cartridge** and dual sapphire styli. Speaker system can be either the **E-V Baronet or Permoflux Diminuette,** depending on personal preference. "Space Saver" systems are complete—ready for quick, easy hookup. All operate from 110-120 v., 60 cycle AC source.

CHOICE OF CHANGERS. Either one of two changers is available with the Knight "Space Saver": The new Webcor Model 1632-27 with record intermix feature; or the renowned Garrard RC80. Both are supplied with mounting base and are equipped with the G.E. RPX-050A Triple-Play cartridge and dual sapphire styli. Less 45 rpm spindle.

CHOICE OF SPEAKER SYSTEMS. Either of two speaker systems can be chosen: The Electro-Voice Baronet, Klipsch-licensed corner enclosure using the SP8B 8" "Radax" speaker; or the Permoflux Diminuette, a modified bass reflex enclosure employing two 6" speakers and cone-type super-tweeter. *Please specify blonde or mahogany finish when ordering.*

"SPACE SAVER" PHONO SYSTEMS (LESS TUNER)

WITH BARONET CORNER SPEAKER AND WEBCOR CHANGER. With amplifier, record changer, G.E. cartridge. The Electro-Voice, Klipsch-licensed Baronet enclosure with SP8-B 8" "Radax" speaker—occupies minimum space—yet provides astoundingly realistic sound. Shpg. wt., 67 lbs.

94 PA 187. NET 159.95
94 PA 188. As above, but Garrard changer. **NET** 172.95

WITH DIMINUETTE SHELF SPEAKER AND WEBCOR CHANGER. With amplifier, record changer, G.E. cartridge. The Diminuette is perfect for tabletop or shelf use; its 3 speakers deliver clean, wide-range response. Wt., 60 lbs.

94 PA 189. NET 148.95
94 PA 190. As above, but Garrard changer. **NET** 161.00

COMPLETE "SPACE SAVER" FM-AM-PHONO SYSTEMS

WITH BARONET CORNER SPEAKER AND WEBCOR CHANGER. With FM-AM tuner, amplifier, speaker system, record changer and G.E. cartridge. Shpg. wt., 80 lbs.

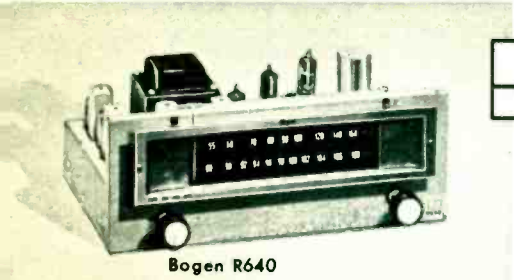
94 PA 191. NET 222.95
94 PA 192. As above, but Garrard changer. **NET** 235.95

WITH DIMINUETTE SHELF SPEAKER AND WEBCOR CHANGER. With FM-AM tuner, amplifier, speaker system, changer, G.E. cartridge. Shpg. wt., 73 lbs.

94 PA 193. NET 209.50
94 PA 194. As above, but Garrard changer. **NET** 223.95

See Page 8 for Complete Descriptions of the Knight "Bantam" Tuner and Amplifier

OFFERING MAXIMUM HI-FI PERFORMANCE, QUALITY AND VALUE



Bogen R640

Bogen DB110

E-V SP12-B

Garrard RC80

HI-FI SYSTEMS FOR EASY CUSTOM INSTALLATION

The home music systems described on this page are intended for those who wish to install their high-fidelity equipment in custom cabinets, existing furniture, wall, room dividers, etc.

Famous "Saturday Review" Custom Music Systems

CUSTOM PHONO SYSTEM ONLY (LESS TUNER)

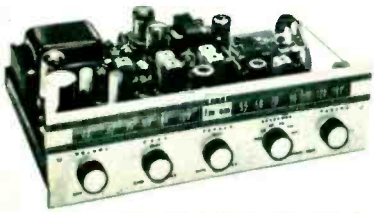
An unusually popular combination of high-fidelity components, based on recommendations made in the noted "Saturday Review" hi-fi book. Although very moderately priced, the design features of this system provide excellent audio fidelity and smooth, dependable performance. System includes: **Bogen DB110 10-Watt Amplifier** with response of ±1 db from 15 to 50,000 cps; calibrated bass and treble controls; three positions of record compensation; shock-mounted preamplifier; attractive gold and turquoise chassis. **Garrard RC80 3-Speed Record Changer** with jewel-mounted arm and 4-pole, shaded-pole motor for smooth operation and extremely low hum. Less 45 rpm spindle. **G.E. Cartridges, RPX-040A** with sapphire stylus for 78 rpm records and **RPX-061A** with diamond stylus for playing microgroove records with an absolute minimum of record wear. **E-V SP12-B 12" Speaker** for remarkably clean bass and treble response. System is complete, ready for thrilling reproduction of recorded music. For 110-120 volts, 60 cycle AC. Shpg. wt., 45 lbs.

94 PA 132. NET 144.50

CUSTOM FM-AM-PHONO HI-FI SYSTEM

Same fine system as above, but with the addition of the Bogen R640 FM-AM tuner for fine reception in all signal areas. This ultra-compact unit is noted for its high sensitivity and easy tuning. Has drift compensation and automatic frequency control. Forms a complete home music installation. Shpg. wt., 60 lbs.

94 PA 133. NET 244.50



Allied "Best Buy" FM-AM-Phono Custom Music System

An ALLIED "best buy" system, designed around the superb new Knight "Uni-Fi" tuner-amplifier. The system is composed of improved, latest-design components, perfectly matched to each other. Delivers rich, living sound for full-toned FM-AM reception and outstanding reproduction of records. Ideally suited for replacement of equipment in existing cabinets or for "built-in" installation in walls, room dividers, etc. This exceptionally fine, low priced system represents an unusual value for those who want authentic high-fidelity reproduction with minimum investment. Check the deluxe features and components of this system—performance equals or surpasses commercial radio-phonos costing three times the price!

The **Knight "Uni-Fi" Tuner-Amplifier** delivers a full 10 watts of output—more than enough for any home installation. Includes 3 positions of record compensation (Pop, LP, 78) for accurate playback of records; bass and treble tone controls; loudness control; tape inputs and outputs; two side-by-side dial scales with individual pointers and flywheel tuning; handsome gold panel. Other quality components include: Nationally recommended **Electro-Voice SP12-B 12" "Radax" Speaker**—famous for thrilling, wide-range performance. New **Webcor Model 1631-27 3-Speed Changer** with intermix feature allowing 10" and 12" records of the same speed to be mixed in stacking. Automatic shutoff after last record is played. Burgundy finish. Less 45 rpm spindle. **G.E. RPX-050A Triple-Play Magnetic Cartridge** with dual-tip sapphire stylus; just turn stylus knob to select proper tip for standard or microgroove records.

System is ready for simple, trouble-free custom installation. Includes all components, hardware, and color-coded plugs and cables. For 110-120 volts, 60 cycle AC. Shpg. wt., 45 lbs.

94 PA 195. NET 159.95

FAMOUS KNIGHT HIGH-FIDELITY COMPONENTS

Designed and Built to ALLIED's High Specifications

MORE FOR YOUR MONEY. You get more in performance, more in styling, more in genuine quality . . . and more in truly pleasurable listening when you buy Knight high-fidelity components. These units are fully tested and approved by ALLIED's own staff of engineers and technicians before being offered for use. If you have been denying yourself the richness of hi-fi musical enjoyment because of budget restrictions, ALLIED's low cost, Knight custom components are designed expressly for you. Enjoy the best in musical quality at minimum cost.

GUARANTEED FOR ONE FULL YEAR. For your complete protection, any Knight hi-fi component you buy at ALLIED *is unconditionally guaranteed for one full year.* We further protect you by our 15-day trial, with full money-back guarantee. Order any Knight high-fidelity component on our regular terms. Try it under your own operating conditions. If you are not fully satisfied within 15 days, return the equipment to us and we will refund your full purchase price, less transportation charges. *Your complete satisfaction is guaranteed.*

New Knight "Bantam" 12 Watt Hi-Fi Amplifier

ONLY $61.95

- Beautiful Styling—Matches Any Motif
- Variable Damping Control
- Loudness Control for Tonal Balance
- Three-Position Record Compensator
- Tape Recorder Input and Output Jacks

The new, restyled Knight "Bantam" amplifier offers topnotch performance and extreme versatility at very moderate cost. Compact design permits use on mantel, bookshelf, or tabletop. Includes built-in preamplifier for magnetic cartridges and 3-position equalizer for proper playback of all types of recordings. Variable damping control provides optimum coupling with specific speaker used. Switch converts volume control to loudness control for correct tonal balance at low levels. Ample inputs for use with the most elaborate hi-fi systems. *Unconditionally guaranteed for one year. Rated Output:* 12 watts with less than 1% total harmonic distortion. *Response:* ±0.5 db 20-20,000 cps. *Intermodulation:* Less than 2%. *Hum:* 75 db below rated output. *6 Inputs:* 1—Aux, for ceramic phono, etc.; 1—tuner or crystal phono; 1— tape, 1—high-level magnetic phono; 1—low-level magnetic phono; 1—microphone. *Controls:* Selector-Equalizer (Aux., Tuner, Tape, Microphone, FFRR, RIAA, and HICUT—for worn, noisy records); Bass; Treble; Off-On-Volume. *Output Impedances:* 8 and 16 ohms for speaker, plus high-impedance for tape recorder.
Housed in attractively styled metal cabinet with smart cork-grained finish. Escutcheon is removable. Requires 4 extension shafts (see below) for behind panel mounting. Two auxiliary AC outlets. Size: 3½x13x10½" deep. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 14 lbs.
94 SX 700. NET 61.95

EXTENSION SHAFTS. For behind panel mounting of 12 and 24-watt Knight amplifiers and preamp. One shaft required for each control. 4 oz. 2 per pkg.
94 S 705. PER PKG. 49c

New Knight "Bantam" Basic FM-AM Tuner

ONLY $62.95

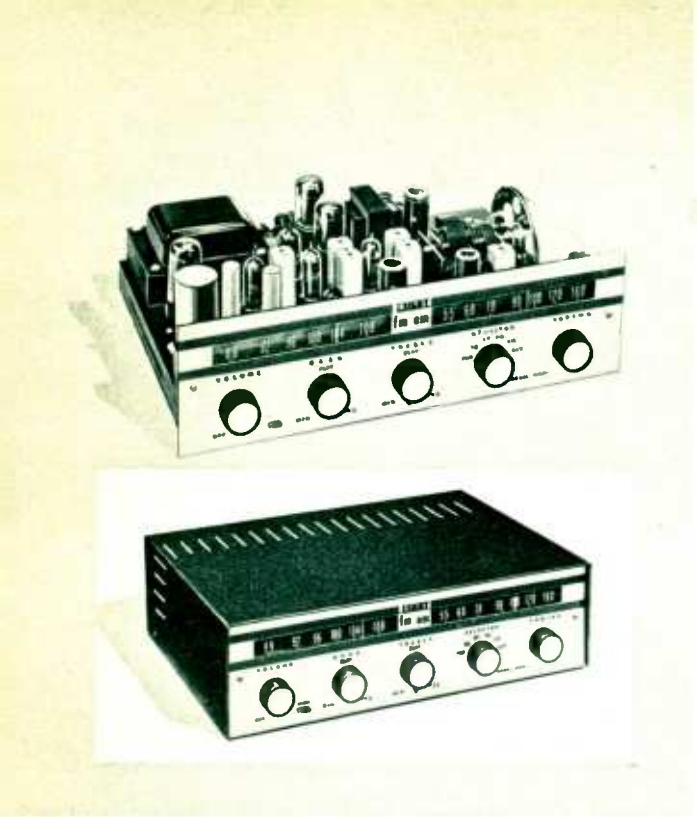
- Styled to Match "Bantam" Amplifier
- Effortless "lock-in" FM Tuning
- Output Level Control
- Up-to-the-minute 7-Tube Circuit
- Plenty of Sensitivity

The new, feature-packed "Bantam" FM-AM tuner—an ideal companion unit for the Knight "Bantam" 12-watt amplifier at left, or any other amplifier having volume and tone controls. Provides superb listening pleasure at remarkably low cost. Receives FM with thrilling realism and freedom from static; optimum selectivity on AM assures rich, full-range reproduction. *Unconditionally guaranteed for one year.*

Features include automatic frequency control (AFC) for effortless tuning—FM station "locks in" when its dial setting is approached. Stations are always tuned in correctly to assure clear, undistorted reception. Tuning is further simplified by temperature-compensated oscillator which eliminates "warm-up" drift. High sensitivity and selectivity assure excellent reception with indoor antennas supplied. Includes dipole antenna for FM and ferrite loop antenna for AM. FM section employs limiter and discriminator for wide frequency response and a very high signal-to-noise ratio. Tuner output control (on rear) balances tuner output for best results with hi-fi system amplifier—prevents overdriving.

Sensitivity: FM, 5 microvolts for 20 db quieting; AM, 20 microvolts for 1 volt output. *Frequency Response:* FM, ±0.5 db 20-20,000 cps; AM, ±4 db 20-5000 cps. *Controls:* Selector (Off, AM, FM with AFC, FM without AFC); Tuning. 7 tubes plus rectifier. Housed in metal cabinet with highly attractive cork grained finish. Size, 3½x11½x9¼" deep. Ferrite loop extends 2" behind cabinet. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 13 lbs.
94 SX 703. NET 62.95

Hi-Fi Components Are Available On Our Easy Payment Plan—See page 315



New Knight "Uni-Fi" Tuner-Amplifier Combination

ONLY $99.95

- Single Chassis Construction—Simple to Install
- Complete FM-AM Tuner-Preamplifier-Amplifier
- Compact Styling—Fits Anywhere
- High Sensitivity—for Weak Stations
- 10-watt High-Fidelity Amplifier

The all-new Knight "Uni-Fi" tuner-amplifier is a masterpiece of design and performance. A deluxe combination consisting of a high-fidelity FM-AM tuner and 10-watt amplifier built on a single, compact chassis. Ideal for limited space applications and the perfect replacement for obsolete equipment in existing cabinets. Just add a speaker and record changer and it's ready to deliver thrilling FM-AM-Phono entertainment. An outstanding choice for the modest-budget hi-fi installation.

Tuning is simplified by smooth-action dial mechanism and automatic frequency control for "lock in" FM station selection. Phono input on rear for addition of record player. Built-in preamplifier with selector switch for crystal or magnetic phono cartridge. Three-position equalizer permits accurate playback of all types of records. Separate bass and treble controls. Switch converts volume control to loudness control to provide correct tonal balance even at very low listening levels. Auxiliary input for playing tape recordings through amplifier. Detector output for making "off-the-air" tape recordings. Built-in line cord antenna for FM; ferrite loopstick for AM. Brushed brass panel.

10 tubes plus rectifier and germanium diode AM detector. *Sensitivity:* FM, 4 microvolts for 30 db quieting on 70 ohm antenna input—8 microvolts for 30 db quieting on 300 ohm antenna input; AM, 5 microvolts for 20 db signal-to-noise ratio. *Amplifier Response:* ±0.5 db 20-20,000 cps. *Output Impedances:* 4, 8, 16 ohms. *Controls:* Tuning, Selector-Equalizer (POP, 78, LP, FM, AM, Aux.), Off-On-Volume, Treble, Bass, and Loudness. *Size:* 4¼x15x10½" deep; 12½" including loopstick. Less cabinet. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.

94 SX 730. NET **99.95**

"UNI-FI" IN CABINET. As above, in cork-grained finish metal cabinet. 4⅜x15⅛x11½" deep. Shpg. wt., 21 lbs.

94 SZ 731. NET **105.50**

New Knight Preamplifier-Equalizer

ONLY $36.95

- Response: ±1 db 30-30,000 cps
- 3-Position Record Compensator
- Built-in Power Supply
- For Use With Any Basic Amplifier
- Extremely Low Cost

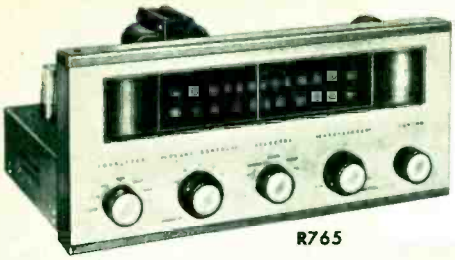
The completely restyled Knight self-powered preamplifier. Offers features and performance comparable with more expensive preamplifiers. An ideal central control unit for any high-fidelity installation—it has five inputs to accommodate ceramic phono cartridge, tuner, or crystal phono cartridge, tape recorder microphone, and magnetic phono cartridge (G.E. or Pickering). 3-position equalizer for accurate playback of any recording. Compact and attractive—excellent for shelf, tabletop, or chairside use. Can be used with any basic amplifier or in converting existing radio-phonograph combinations for high-fidelity. Has tape output for making "off-the-air" tape recordings. Highest quality components plus precision construction assure outstanding performance. *Unconditionally guaranteed for one year.*

Frequency Response: ±1 db, 30-30,000 cps. *Output:* 2.5 volts. *Tape Output:* 1 volt. *Output Impedances:* 22,000 and 68,000 ohms. *Hum:* 65 db down. *Controls:* Input Selector-Equalizer (Aux for ceramic phono; tuner or crystal phono; tape; microphone; magnetic phono—FFRR, RIAA, HICUT for noisy 78 rpm records); Bass; Treble; Off-On-Volume. *Size:* 3½x13x5½" deep. Attractive cork-grained finish metal cabinet. Chassis and escutcheon slide forward for behind panel mounting. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.

94 SX 706. NET **36.95**

Easy Steps To High Fidelity

If you have a TV or radio console, here's a low-cost way to start in high fidelity. Plug the Knight Preamplifier (above) into the phono input of your set and plug a hi-fi record changer (such as Webcor's 1632-27) into the preamplifier. (No phono input? Let us know and we'll tell you how to install one). This much will provide you with a better-than-average phono system. Later, add a basic amplifier and suitable speaker for a complete hi-fi phono system. **Write for our FREE bulletin "Conversion to High Fidelity." It tells how to convert present equipment to hi-fi at lowest possible cost.**



R765

BOGEN HIGH-FIDELITY AUDIO COMPONENTS

DO30A

R765 FM-AM TUNER WITH "AUTO-LOCK" TUNING

New, extremely versatile, highly sensitive tuner. An ideal central control designed for the finest high-fidelity systems. Features unique "Auto-Lock" delayed automatic frequency control for maximum tuning ease. Squelch circuit for complete silence between FM stations. Critical tuning is not necessary. "Auto-Lock" takes over when desired station is approached; makes precision tuning adjustment and locks in station. There is no AFC action between stations. Panel light goes on when "Auto-Lock" takes over. Other features include a built-in pre-amplifier with inputs for all popular magnetic cartridges; loudness-contour selector for excellent tonal balance at any volume level; 10 kc whistle filter; separate RF stages for AM and FM; high efficiency dual impedance-coupled limiter on FM; and cathode-follower outputs. (Low impedance outputs permit long lead lengths to amplifier.)

Sensitivity: FM, 2μv for 30 db quieting; AM 5 μv for 30 db signal-to-noise ratio. *Hum:* −60 db. *Controls:* 7-position Record Equalizer; Bass; Treble; Volume-On-Off; 5-position Loudness-Contour Selector; Input Selector (Aux., AM Normal, AM Hi-Fi, Phono, FM). *3 Inputs:* High-level magnetic; Low-level magnetic; Auxiliary. *2 Cathode follower outputs:* 1—amplifier; 1—tape recorder. 16-tube circuit; plus 6X4 rectifier. Dial escutcheon finished in striking golden bronze. Low impedance loop-type FM-AM antenna supplied. Size, 6½x14¾x9". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.

93 SX 887. NET **199.50**

DO30A 30-WATT HIGH-FIDELITY AMPLIFIER

The DO30A basic amplifier reproduces music with a richness of tone and a degree of realism that thrills even the most critical ear. Extremely uniform output, very low distortion, and high power handling capacity assure faithful reproduction of any and all music, regardless of volume level. No controls—may be installed in any convenient place. Turquoise chassis with gold-finish cover.

Incorporates Bogen's new, exclusive damping factor control network; provides cleaner bass response by permitting precise coupling of the amplifier to the loudspeaker system. A simple screwdriver adjustment, made upon installation, permits variation of damping factor from 2 through infinity to −1; "tunes out" resonant peaks

Rated Output: 30 watts. *Harmonic Distortion:* 0.7% at 30 watts. *Response:* ±0.2 db from 10-25,000 cps. *Hum:* 90 db below 30 watts. *Output Impedance:* 8 and 16 ohms. *Tubes:* 12AT6, 12AU7, 2—KT66; 5U4G rectifier. Size, 7¾x15x5¾" deep. For 110-120 volts, 60 cycle AC. Shpg. wt., 28 lbs.

93 SZ 870. NET **99.00**

NEW DO110 12-WATT BASIC AMPLIFIER. (Not illustrated.) Medium-power companion amplifier for R765 tuner, left, or PR100 audio control, below. Response: ±0.2 db, 20-20,000 cps with only 0.15% distortion at rated output. 4, 8, 16 ohm outputs. 5x15x4¾". For 110-120 v., 60 cycle AC. Shpg. wt., 13 lbs.

93 SX 878. NET **44.95**

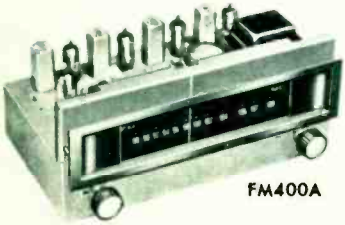
PR100 COMPLETE DELUXE AUDIO CONTROL

PR100

Deluxe, new equalizer-preamplifier with professional features. An ideal central control for high-fidelity systems using "basic" tuners and amplifiers. Pushbutton input selectors for simplified operation. Separate turnover and rolloff controls provide 36 positions of equalization for extremely accurate playback of all records. Up-to-the-minute circuitry includes provisions for binaural connection and control. Ample inputs are provided for even the most elaborate high-fidelity systems. Harmonic and intermodulation distortion are insignificant. Hum is inaudible with full gain from input channels.

Response: ±0.5 db, 5 to 150,000 cps. *Controls:* Record Equalization, 6-position Low Frequency Roll-off and 6-position High Frequency Turn-over; Bass, +15 to −15 db at 50 cycles; Treble, +15 to −15 db at 15 kc; 5-position Lo-Filter; 5-position Hi-Filter; Volume; Loudness-Contour; Input Selector (6 pushbuttons) Off-On, Monitor, Phono, Radio, Tape, and Auxiliary. *Inputs:* Magnetic, Tuner, Tape, Auxiliary, Tape Monitor, and Binaural. *Outputs:* Main, Tape, Binaural. 4 tubes, plus 6X4 rectifier. 4¼x14½x9". For 110-120 v., 60 cycle AC. Shpg. wt., 14 lbs.

93 SX 876. NET **109.00**



FM400A

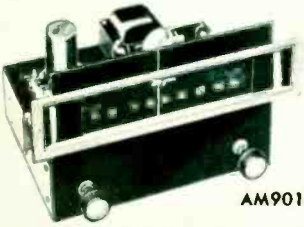
FM400A BASIC FM TUNER

High-quality basic tuner designed for use with any amplifier having tone and volume controls. Expertly engineered for those who want high-fidelity FM reception only. Features high sensitivity and selectivity for bringing in weak and distant stations. Highly efficient AFC (automatic frequency control) circuit assures the utmost ease in tuning and eliminates station drift. AFC takes over when station is neared and precision tunes to exact frequency, then locks in to prevent annoying drift. Temperature-compensated oscillator circuit further improves frequency stability. Compact design simplifies cabinet installation and permits use in very limited space if necessary. *Frequency Range:* Covers complete FM band, 88 to 108 mc. *Audio Output:* 2 volts, adequate to drive any high-fidelity amplifier to maximum output. *Frequency Response:* ±1 db from 50 to 15,000 cps. *Sensitivity:* 6 μv for 30 db quieting. 6 tubes, plus 6x4 rectifier. Size, 5¾x12x7½". Supplied with indoor antenna, mounting hardware, and escutcheon. For 110-120 v., 60 cycle AC. Shpg. wt., 14 lbs.

93 SX 873. NET **69.95**

FM400G-2 FM TUNER. Same high-quality tuner as unit described above, but housed in attractive gold finished metal cabinet. 6x13½x8⅝". Shpg. wt., 16 lbs.

94 SX 501. NET **76.90**



AM901-1

AM901-1 BASIC AM TUNER

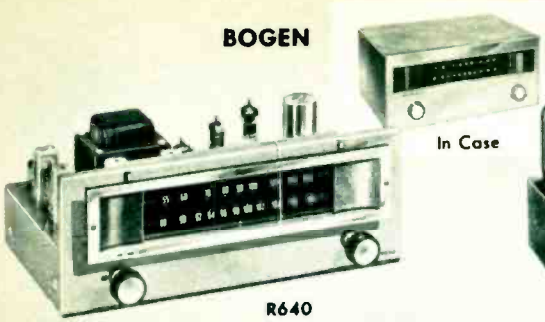
This exceptionally fine superhet tuner is designed to provide the utmost in reception of standard AM broadcasts. For use with amplifiers having tone and volume controls. Incorporates the latest in radio engineering techniques to assure outstanding performance and years of trouble-free operation. Designed specifically for those who want AM reception only, and to bring full-toned AM reception to areas beyond the range of FM broadcasts. Up-to-the-minute circuit design, with RF stage and 3-gang tuning, provides high sensitivity and selectivity for bringing in weak and distant stations. Has crystal phono input. Features variable selectivity for optimum reception under any conditions. Special filter circuit eliminates annoying 10 kc adjacent station whistle. Compact design simplifies cabinet installation and permits use in limited space.

Frequency Range: Covers complete AM broadcast band from 530 to 1650 kc. *Audio Output:* 1 volt output is adequate to drive almost any high fidelity amplifier. *Frequency Response:* 50 to 7500 cps in high fidelity position; 50 to 3500 cps in high sensitivity position. *Sensitivity:* 5 μv. *Controls:* Selector and Tuning. *Size:* 7x10x7". 4 tubes, plus 6X4 rectifier. For 110-120 v., 60 cycle AC. Shpg. wt., 13 lbs.

93 SX 913. NET **69.30**

Custom Components Available on ALLIED's Easy Payment Plan—See Page 315

BOGEN HIGH-FIDELITY AUDIO COMPONENTS



R640

DB20DF

R640 BASIC FM-AM TUNER

This ultra-compact FM-AM tuner is a noteworthy choice for those who insist on a very high standard of reception. A basic tuner, incorporating only 2 controls, the R640 is an ideal companion unit for the DB20 DF (at right) or other high quality amplifier with tone and volume controls. Separate FM and AM RF stages provide high sensitivity. Temperature compensated oscillator circuit eliminates bothersome drift. AFC provides smooth, effortless tuning; precision-tunes right on frequency as station is neared, and locks in. Switch permits cutting out automatic frequency control circuit; simplifies tuning of distant stations adjacent in frequency to local stations. Loop antenna (supplied) gives excellent AM reception. *Sensitivity:* FM, 5 μv for 20 db quieting; AM, 5 μv. *Controls:* Tuning; Selector (Power Off, AM, FM with AFC, FM without AFC). Circuit employs 10 tubes, plus 6X4 rectifier. An AC outlet is provided on the rear panel for supplying power to associated equipment. Dual audio output jacks permit driving amplifier and tape recorder at the same time. Supplied with attractive brown and gold finished escutcheon. Low impedance, loop-type FM-AM antenna supplied. Size, 6x13⅜x7⅛". For 110-120 volts, 60 cycle AC. Less enclosure. Shpg. wt., 15 lbs.

93 SX 968. NET **105.50**

MODEL R640G. As above, but in modern gold Metallustre enclosure. Size, 6¼x13½x9¾". Shpg. wt., 18 lbs.

93 SX 969. NET **112.95**

DB20DF 20-WATT HI-FI AMPLIFIER

Ideal central control amplifier for any high-fidelity installation. Features variable damping factor for precise coupling to speaker. 5-position loudness control for correct tonal balance at any listening level; 7-position record equalizer for accurate playback of all records; DC-operated preamp filaments minimize hum; 5 feedback loops for extremely low distortion. *Output:* 20 watts. *Harmonic Distortion:* 0.3% at 20 watts. *Frequency Response:* ±0.7 db, 20-20,000 cps. *Hum:* 75 db down at 20 watts. *Output Impedance:* 8 and 16 ohms. *5 Inputs:* High-level magnetic phono; low-level magnetic phono; tuner; tape; and auxiliary. *Controls:* Selector-Equalizer; Bass; Treble; Loudness; Volume; Off-On. 6 tubes plus rectifier. Push-pull 6L6G's in output. Size, 8x15x9¼". Removable escutcheon. For 110-120 v., 60 cycle AC. Shpg. wt., 30 lbs.

93 SZ 999. NET **108.00**

MODEL DB20DFG. As above, but in gold-finished metal cabinet. 8x15¼x10". Shpg. wt., 32 lbs.

94 SZ 508. NET **115.50**

MODEL DB20. Same as DB20DF, but damping factor fixed at 13. 8x15x9¼". Shpg. wt., 30 lbs.

93 SZ 917. NET **99.00**

MODEL DB20G. As above, but in gold-finished metal cabinet. 8x15¼x10". Shpg. wt., 32 lbs.

94 SZ 509. NET **106.50**

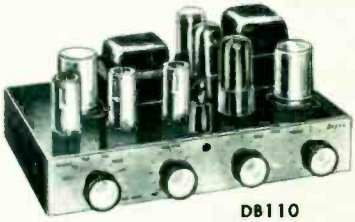
DB110 12-WATT HI-FI AMPLIFIER

Highly versatile, medium-power amplifier. Features unusually wide frequency response with extremely low harmonic and intermodulation distortion. Has built-in preamplifier compensated for all popular magnetic cartridges. Unique "Controlled Positive Feedback" circuit makes possible wideband frequency response and low distortion for performance comparable with more costly amplifiers. Infinity damping factor provides an improvement in low frequency response comparable to 50% increase in speaker magnet weight. Equipped with separate Bass, Treble and Volume controls—for use with record player and "basic" tuner. With removable brass escutcheon panel. *Output:* 12 watts. *Harmonic Distortion:* 0.65% at 12 watt level. *Frequency Response:* ±0.5 db, 10-60,000 cps. *Hum:* −55 db below rated output from phono input; −81 db from tuner input. *Output Impedance:* 4, 8, and 16 ohms. *Damping Factor:* Infinity. *Controls:* Bass; +17 to −17 db at 40 cps; Treble; +12 to −16 db at 15 kc; Off-On-Volume; Input-Equalization Selector. *4 Inputs:* Microphone; Tuner; Magnetic Phono; Auxiliary, (TV, tape, or crystal). *3-Position Equalizer,* RIAA-LP-AES, 78, Popular. 5 tubes, plus 5Y3GT rectifier. 5¼x11x7¼". For 110-120 v., 60 cycle AC. Shpg. wt., 12 lbs.

93 SX 874. NET **59.95**

MODEL DB110G. As above, but in gold-finish metal cabinet. 5⅜x11⅛x7¾". 14 lbs.

93 SX 875. NET **64.50**

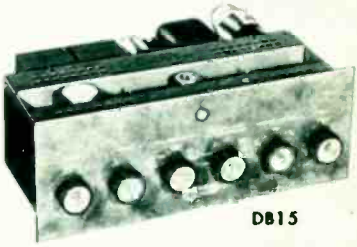


DB110

DB15 15-WATT COMPACT AMPLIFIER

Exceptional versatility and full-toned, well balanced reproduction. Loudness-Contour Selector preserves tonal balance at all levels. Separate high and low-frequency equalization controls. *Four Inputs:* Magnetic phono; Tuner; Tape; Microphone. *Output:* 15 watts. *Response:* ±0.5 db, 20-20,000 cps. *Harmonic Distortion:* 0.5% at 15 watts. *Hum:* −70 db at 15 watts. *Damping Factor:* 20. Output jack for tape recording. *Controls:* Off-On-Treble; Volume; High Equalization (LP-NARTB, AES, Ortho-RIAA, Pop, Flat); Low Equalization and Function Selector (LP, AES, Ortho-RIAA, European 78, Tape, Tuner, Mike); 5-position Loudness Contour Selector; Bass. *Output Impedance:* 8 and 16 ohms. 5 tubes, plus rectifier. 4⅝x12½x9¾". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 22 lbs.

93 SZ 997. NET **89.95**

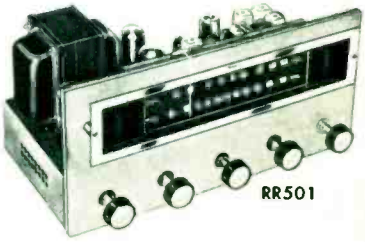


DB15

RR501 HI-FI TUNER-AMPLIFIER

Deluxe tuner-amplifier combination with built-in, equalizer-preamplifier. Consists of a highly sensitive and selective FM-AM tuner, a high-fidelity 10-watt amplifier, and a preamplifier with 3 positions of record equalization—on a single chassis. Compactly styled; an ideal unit for limited space high-fidelity installations. Requires only the addition of a speaker and it's ready to use. Extremely versatile, adequate inputs and outputs to serve as central control system for deluxe high-fidelity installation with record player and tape recorder. Front panel controls for selection of FM, AM, phono, or tape. Output jack for making "off-the-air" tape recordings without interference to speaker operation. *Frequency Range:* FM, 88-108 mc; AM, 530-1650 kc. *Sensitivity:* FM, 7 μv for 30 db quieting; AM, 5 μv on low impedance loop. *Frequency Response:* FM, ±2 db from 30 to 18,000 cps; AM, ±3 db from 40 to 4000 cps. *Power Output:* 10 watts. *Distortion:* 3% at rated output. *Output Impedance:* 4, 8, and 16 ohms. *Controls:* Off-On-Volume; Bass; Tuning; Treble; Input-Equalization Selector. Inputs for phono or tape. 3 record equalization positions; Popular, 78, and LP. Rear switch selects crystal or magnetic phono operation. 10 tubes, plus 5Y3GT rectifier. 7x13½x8". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 17 lbs.

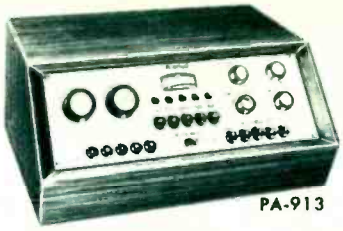
93 SX 967. NET **109.75**



RR501

PILOT HIGH-FIDELITY TUNERS AND AMPLIFIERS

AF-850



PA-913

AA-904

Top Quality Hi-Fi Components For Home Music Enjoyment

MODEL AF-850 FM-AM BASIC TUNER. Highest quality Pilot basic tuner. For use with PA-913 preamp at right. Armstrong dual cascade limiter-discriminator on FM. Excellent sensitivity. 10 kc. whistle filter. Tuned RF amplifier stage. Built-in meter assures fast, accurate tuning. Cathode follower outputs. Built-in FM and AM antennas. *Sensitivity:* FM; 1.5 microvolts for 20 db quieting. AM; 2 microvolts for 20 db signal to noise ratio. *Frequency Response:* ±0.5 db. 20 to 20,000 cps. *Distortion:* Less than 0.2% at 1 volt output. *Controls:* Off-On-Volume; AFC; Selector (FM, AM sharp, AM broad, Crystal Phono, Tape, Auxiliary); Tuning. 9 tubes plus rectifier. Size, 7½x14¼x9". For 110-120 v., 60 cycle AC. Less cabinet. Shpg. wt., 21 lbs.

94 SZ 376. NET 154.50

MODEL AF-860 FM-AM TUNER. Same as Model AF-850 above, but with built-in preamplifier, tone controls and record compensator. For use with AA-904 basic amplifier at right or other basic hi-fi amplifier. *Controls:* Off-On-Volume; Roll-off (0, 8, 16, 20 and 13.5 db); Turnover (RIAA, LP, AES, NAB and 800 cps); Treble; Bass; Selector (AM Sharp, AM Broad, FM, Magnetic Phono, Tape, Auxiliary); Tuning; AFC. 11 tubes plus rectifier. 7½x14¼x9". For 110-120 v., 60 cycle AC. Shpg. wt., 21 lbs.

98 SZ 647. NET 179.50

MODEL PA-913 PREAMP-EQUALIZER. Deluxe central control unit for high-fidelity systems. Professional appearance and simplified operation are achieved by sloping control panel and push-button input selector. Bass turnover and treble roll-off controls are also push-button operated. Calibrated db meter indicates output to amplifier or recorder. DC operated preamp filaments. Microphone may be mixed with any other channel. *Frequency Response:* ±1 db. 20 to 20,000 cps. *Intermodulation:* 0.2% at 1 volt output. *Hum and Noise:* 80 db below 1 volt. *Output:* 5 volts maximum, from cathode follower.

Controls: Volume; Loudness; Input Selectors (Off, Phono, Radio, Tape, Auxiliary); Bass; Treble; Meter Range; Microphone Volume; Bass Equalizer (RIAA, LP, AES, NAB, 800 cps); Treble Equalizer (RIAA, 20, 16, 8, 0 db); Meter Switch (Record, Monitor). Rumble filter cuts off frequencies below 20 cycles. Tuner and Tape input channels have individual level sets. Phono input variable, 6800 to 100,000 ohms.

5 tubes plus rectifier. Detachable brass front panel can be mounted vertically for custom installation. Size, 6x13¼x9½". For 110-120 v., 60 cycle AC. Shpg. wt., 13 lbs.

WITH MAHOGANY CABINET.

98 SX 699. NET 119.50

WITH BLONDE CABINET.

94 SX 377. NET 122.50

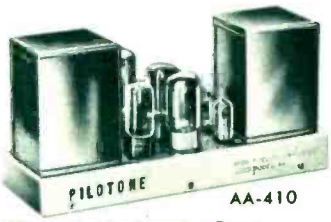
MODEL AA-904 30-WATT BASIC AMPLIFIER Williamson-type basic amplifier for use with AF-850 and PA-913, or AF-860. Delivers superb music reproduction. Has no controls —can be installed in any convenient, out-of-the-way location. Power, volume and tone are controlled with tuner or preamp-equalizer.

Max. Output: 30 watts. *Response:* ±1 db, 15-50,000 cps at 15 watts. *Harmonic Distortion:* Less than 0.3% at 25 watts; less than 0.1% at 10 watts. *IM:* Less than 0.5% at 10 watts. *Hum and Noise:* 90 db below 10 watts. *Negative Feedback:* 25 db. *Outputs:* 8, 16 ohms. *Input:* 470,000 ohms. *Sensitivity:* 0.8 volt rms input for 25 watts output. *Tubes:* 2—6SN7GT, 2—KT66; 5U4G rectifier.

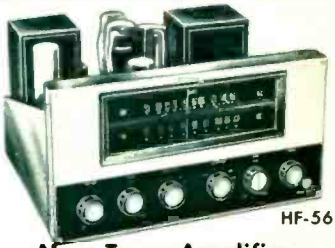
Compact chassis designed for simplified custom installation. Chassis constructed of heavy gauge steel for maximum rigidity. Output and power transformers are potted for long life and protection from atmospheric conditions and entire circuit is fused for added safety. KT-66 tubes in output stage conform with original Williamson design. Hum balance adjustment reduces hum to inaudible level. Brushed gold finish. Size: 7½x14x4¼" deep. With 4' shielded cable. Less cabinet. U.L. Approved. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 25 lbs.

98 SZ 664. NET 89.50

AF-825



AA-410



HF-56

High-Quality Tuner and Amplifier at Moderate Cost

MODEL AF-825 FM-AM TUNER. Extremely well built FM-AM tuner in the medium-price range. Built-in preamp and full controls make the tuner an excellent companion for AA-410 amplifier at right. Features Armstrong dual cascade, limiter-discriminator circuit on FM. Equalization: LP, NAB, AES, RIAA and Foreign. Cathode follower output. Tuned RF amplifier stage on both FM and AM. 10 kc whistle filter. With automatic frequency control—provision for switching off AFC. Temperature compensated oscillator for minimum drift.

Sensitivity: FM, 3μv for 20 db quieting; AM, 5μv for 0.2 volt output. *Response:* ±0.5 db. 20-20,000 cps. *Hum:* 80 db below 1 volt. *Controls:* Off-On-Volume; 5-pos. Equalizer; Bass; 6-position Function-Input Switch (includes positions for FM with or without AFC); Treble; Tuning. Built-in antennas for both FM and AM. Flywheel tuning. Rumble filter suppresses all frequencies below 20 cps. Removable gold and maroon escutcheon; brushed gold chassis. 10 tubes; 5Y3GT rectifier. 14¼x7½x9" deep. Less cabinet. For 110-120 v., 50-60 cycle AC. Shpg. wt., 17 lbs.

94 SX 375. NET 129.50

MODEL AA-410 15—WATT BASIC AMPLIFIER. A value-packed Williamson type amplifier at remarkably low cost. Has features usually found on higher priced amplifiers —5881 output tubes and delivers 15 watt power. Ideal for use with AF-825 tuner. Amplifier has no controls—may be placed in any convenient, hidden location. Output transformer constructed with interleaved winding for reduced leakage inductance.

Rated Output: 15 watts. *Frequency Response:* ±0.1 db. 15-20,000 cps. *Intermodulation Distortion:* Less than 2% at rated output. *Sensitivity:* 1.2 volts for rated output. *Hum and Noise:* 90 db below rated output. *Negative Feedback:* 15 db. *Output Impedances:* 4, 8 and 16 ohms. *Tubes:* 6C4, 12AU7, 2—5881; 5Y3GT.

Chassis contructed of heavy gauge steel and finished in attractive brushed gold. Transformer cases are finished in gleaming black enamel. Supplied with removable feet plus chassis mounting screws and washers. Size, 6⅛x4¼x12⅜". Less cabinet. For 105-120 volts, 60 cycle AC. Shpg. wt., 16 lbs.

98 SX 648. NET 49.50

New Tuner-Amplifier

MODEL HF-56 TUNER-AMPLIFIER. A complete FM-AM tuner, preamplifier and 35-watt, Ultra-Linear type amplifier on a single chassis. Deluxe features include Armstrong dual cascade limiter-discriminator circuit, tuned RF amplifier stage for improved sensitivity and selectivity, and DC filament supply to eliminate hum in all critical circuits. Has inputs for magnetic phono, tape recorder and auxiliary equipment. Automatic Frequency Control may be switched off for tuning weak stations.

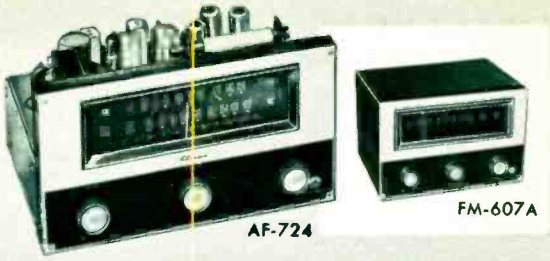
Built-in FM and AM antennas. Flywheel tuning. Loudness compensated volume control. 2 stage preamplifier. Compensation is provided for LP, NAB, AES, RIAA and Foreign recording curves. Amplifier uses KT-66 output tubes. Tape output jack independent of volume and tone controls.

Frequency Response: ±0.5 db. 20 to 20,000 cps at 35 watts. *Harmonic Distortion:* 0.1% at 35 watts. *Output Impedance:* 8 and 16 ohms. 12 tubes plus rectifier. Removable gold and maroon front panel. Less cabinet. Size, 7½x14¼x12". For 105-120 v., 60 cycle AC. Shpg. wt., 31 lbs.

94 SZ 378. NET 199.50

Cabinets for Above Pilot Units Are Listed on Next Page

PILOT TUNER-AMPLIFIER COMPONENTS



Nationally Recommended AA-903 Amplifier

Williamson-type. 10-watt hi-fi amplifier recommended by nationally known research organization. An ideal low-cost unit for any custom home installation. This popular, versatile amplifier is an excellent companion piece for Pilot tuners; may also be used with any other hi-fi tuner. Detachable front panel plate for convenient custom installation using up to ⅜" wood panel. With preamp and 4-position record equalizer (LP, NAB, AES, Foreign). Has 1 high level and 3 low level inputs—forms an excellent central control system.

Rated Power Output: 10 watts. *Response:* ±1 db, 15-40,000 cps at rated output. *Harmonic Distortion:* Less than 1% at 10 watts (30-15,000 cps); 0.1% at 1 watt (30-15,000 cps). *Hum Level:* 80 db below 1 volt. *Intermodulation Distortion:* Less than 2% at rated output. *Negative Feedback:* 15 db. *Speaker Output Impedances:* 4, 8 and 16 ohms. *Input Sensitivity:* Low level, 10 mv for 1 volt output; High level, 150 mv for 1 volt output.

Tone Control Range: Bass control, 18 db boost and cut at 20 cps; Treble control, 18 db boost and cut at 20 kc. *Input Impedance:* Radio, Aux 1, Aux 11, 500,000 ohms; Phono, adjustable from 6800 to 100,000 ohms. *Controls:* Off-On-Volume, Input-Equalizer switch (7 pos.), Bass, Treble. *Tubes:* 2—12AX7, 1—6C4, 1—12AU7, 2—6V6GT; 5V3GT rectifier. *Size:* 12x7x8¾" deep. Output transformer has interleaved windings for reduced leakage inductance. Hum balance control nulls out 60 cycle residual hum in tube filaments. Convenience AC outlet, controlled by On-Off switch, allows tuner or record changer to be turned on automatically with amplifier. Built-in rumble filter automatically cuts off frequencies below 20 cps, eliminating sub-sonic speaker oscillation. Attractive gold finish. With thru-chassis mounting screws and washers. Less cabinet. For 110-120 v., 60 cycle AC. Shpg. wt., 15 lbs.

98 SX 662. List, $116.00. NET **69.50**

Pilot Basic Tuners For FM-AM or FM Only

MODEL AF-724 FM-AM BASIC TUNER. New, moderately priced FM-AM basic tuner with many deluxe features. Excellent for use with Model AA-903 amplifier at left. *FM features:* Automatic Frequency Control for fast, accurate tuning. One position on selector switch disables AFC to allow tuning a weak station adjacent to a strong one. Built-in power line antenna. Tuned RF stage increases sensitivity and selectivity. Has temperature compensated oscillator for minimum drift. Fully shielded against oscillator radiation to conform with FCC regulations.

AM features: Tuned RF stage for maximum sensitivity and selectivity. Built-in powdered-iron loop antenna. Built-in 10 kc whistle filter.

Sensitivity: FM, 3.5 mv for 20 db of quieting; AM, 5 microvolts for 20 db of quieting. *Frequency Response:* ±0.5 db, 20 to 20,000 cps. *Distortion:* 0.2% at 1 volt output. *Hum Level:* 70 db below 1 volt output. *Maximum Audio Output:* 5 volts. Tuner has auxiliary inputs for crystal phono and TV audio, controlled by selector switch.

Cathode follower output permits long cable to amplifier without loss of highs. Highly attractive etched brass front escutcheon may be easily dismounted for cabinet installation. 7 tubes plus 6X4 rectifier. Size, 6⅞x11¾x8½" deep. Less cabinet. For 110-120 volts, 60 cycle AC. Shpg. wt., 13½ lbs.

98 SX 698. NET **89.50**

MODEL FM-607A FM BASIC TUNER. Same as Model AF-724 above, but for FM only. 7 tubes plus 6X4 rectifier. Size, 6⅞x10½x7¼" deep. For operation from 110-120 volts, 60 cycle AC. Supplied less cabinet. For a complete listing of matching cabinets, see below. Shpg. wt., 10 lbs.

98 SX 697. NET **69.50**

Metal and Wood Cabinets for Pilot Tuners and Amplifiers

METAL CABINETS. (Illustrated on AA-903 and FM-607A.) Matched metal enclosures for Pilot tuners and amplifiers. Beautifully finished in brushed gold, and fully perforated to insure adequate ventilation. Ideal for mounting equipment on bookshelves or table top. Av. shpg. wt., 2 lbs.

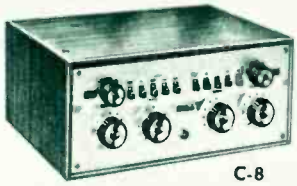
Stock No.	Model No.	For Use With	NET EACH
94 SX 379	81-66	AA-903	4.95
94 SX 380	81-69	AA-904	4.95
94 SX 381	81-68	AA-410	4.95
94 SX 382	81-65	FM-607A	4.95

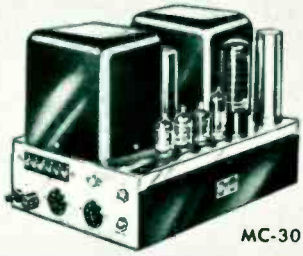
WOOD CABINETS. (Illustrated on AF-850, page 12.) Handsome, hand-rubbed wood cabinets for Pilot tuners. Allow mounting tuners on table top or bookshelf. Top-quality blonde or mahogany veneer finish. *Blonde, †Mahogany. Shpg. wt., 7 lbs.

Stock No.	Model No.	For Use With	NET EACH
94 SX 383	81-70†	AF-825	15.95
94 SX 384	81-71*	AF-860	16.95
		AF-850	
94 SX 385	81-72†	AF-724	15.95
94 SX 386	81-73*		16.95
94 SX 387	81-74†	HF-56	18.95
94 SX 388	81-75*		19.95

ALLIED stocks the complete Pilot line of High-Fidelity components, including AA-420 15-watt amplifier at $99.50; AA-905 30-watt amplifier at $129.50; and DD-10 Dynamic Damping Control at $9.95. DD-10 is a plug-in damping control for use with AA-905 and HF-56 only. Write for complete manufacturer's literature on the above units.

McIntosh Lab Standard Hi-Fi Components





MODEL C-8 AUDIO COMPENSATOR. Exceptionally flexible equalizer-preamplifier. Allows exact compensation for virtually any recording curve.

For use with the Model MC-30 Basic Amplifier (listed at right). *Features:* 5 turnover and 5 rolloff slide switches; 5-position rumble filter; 5-position aural compensator; 3 AC outlets; 3 outputs; variable load resistor terminates any magnetic cartridge. *Other Controls:* 5-position Input Selector, Bass, Treble, Off-On-Volume, Switch for FM or magnetic cartridges. *5-Inputs:* 2-tuner, tape, crystal mike, etc. 1-low impedance mike; 1-high level magnetic phono; 1-low level magnetic phono. *Tubes:* 3—12AX7. 3½x10x7½". Takes power from MC-30 amplifier. Less cabinet. Shpg. wt., 7½ lbs.

93 SX 889. NET **88.50**

MODEL C-8P SELF-POWERED COMPENSATOR. Same as Model C-8 above, but self-powered for use with any amplifier. For 110-120 v., 60 cycle AC. Wt., 12 lbs.

93 SX 890. NET **99.50**

MAHOGANY CABINET. For C-8 and C-8P compensators listed above. Size. 4¾x11 9/16x7¾". Shpg. wt., 1½ lbs.

93 SX 898. NET **8.00**

MODEL MC-30 30-WATT BASIC AMPLIFIER. Offers superb peak power handling capacity and virtually flawless audio reproduction to the lower and upper limits of audibility. A deluxe amplifier for use with any custom high fidelity system—and an excellent choice for those who demand brilliant, authentic music reproduction at moderate cost. Highest quality transformers are fully potted for long life.

Designed for use with the C-8 (listed at left) or other high quality preamplifier. Also for use with quality FM-AM tuners. Only 0.5 volt input is required for full 30 watt output. *Response:* ±0.1 db, 20 to 30,000 cps at 30 watts. *Harmonic Distortion:* Less than ⅓% at 30 watts, 20 to 20,000 cps. *Intermodulation:* Less than 0.5% for instantaneous peak power below 60 watts. *Hum and Noise:* 90 db below rated output. *Output:* 4, 8, 16 and 600 ohms. *Damping Factor:* 12 or better for 4, 8, and 16 ohms; 16 for 600 ohms.

Has 6 tubes and rectifier. 2—1614's in output. Attractive black and chrome finish. Extremely compact—only 8x13x8". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 36 lbs.

93 SZ 895. NET **143.50**

2256

Bell Custom High-Fidelity Components

2255

"Golden Bell" Twin Matching Amplifier And Tuner

MODEL 2256 12-WATT AMPLIFIER. New, ultra-compact and versatile hi-fi amplifier. Carefully matched in appearance and performance to tuners listed at right. A marvel of functional design, the amplifier offers every deluxe feature found in larger units. Includes built-in preamplifier, 7-position record equalization, separate bass and treble tone controls with boost and attenuation, and radio level set control for maintaining same volume level when switching between radio and phono.

Inputs are provided for crystal, magnetic, ceramic or frequency-modulated phono—plus tape, disc recorder or TV. 3 auxilliary AC outlets for tuner, record player and tape recorder. Removable dial plate and shaft extensions. Lustrous satin gold finish complements any room interior.

Frequency Response: ±0.5 db, 20-20,000 cps. *Output:* 12 watts with .5% distortion. *Hum Level:* 70 db below rated output. *6 Inputs:* 1—radio, 1—crystal phono, 2—magnetic phono, 1—FM or ceramic phono, 1—tape, disc recorder or TV. *Controls:* 7-pos. Selector-Equalization Switch (78 RPM, Col LP, RIAA-NARTB, FFRR, Eur, Radio, Tape); Loudness; Gain; Bass (−18 to +15 db at 40 cps); On-Off-Treble (−18 to +14 db at 15 kc); rear panel Radio Level Set control. *Outputs:* 4, 8, 16 ohms; high-impedance jack for tape or disc recording. 5 tubes plus rectifier. *Size:* 4x9½x8¾" deep. For 110-120 v., 50-60 cycle AC. Shpg. wt., 14 lbs.

98 S 610. List, $149.90. NET 88.15

MODEL 2255 AM-FM BASIC TUNER. This highly sensitive and efficient "twin" to the Model 2256 (both units are only 8" high, 9½" wide and 9" deep when stacked), is also an excellent companion unit for use with other quality amplifiers. Unique design permits table, shelf or cabinet mounting. Has grounded-grid input stage, double-tuned limiter, Armstrong circuit, automatic frequency control and cathode follower output. Edge-lighted slide-rule dial and momentary AFC defeat switch permit tuning with pin-point accuracy. Attractive brown and gold styling.

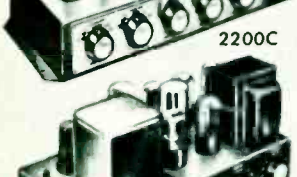
Frequency Response: FM, 20-20,000 cps, ±0.5 db; AM, 20-5000 cps, ±3 db. *Sensitivity:* FM, 4 μv for 20 db quieting; AM, 26 μv. *Hum Level:* 65 db below 100% modulation. *2 Controls:* 4-pos. Selector switch (Off-On, AM, FM with AFC, FM without AFC); Tuning with AFC defeat. *2 Outputs:* Amplifier, Tape Recorder. Built-in ceramic loopstick antenna for AM. 8 tubes plus selenium rectifier. *Size:* 4x9½x8¾" deep. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

98 S 609. List, $166.60. NET 97.95

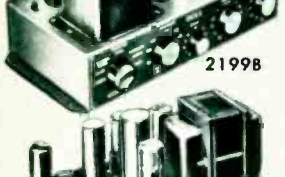
MODEL 2254 FM BASIC TUNER ONLY. Same dimensions and outward appearance as above, but for FM only. *Response:* ±1 db, 20-20,000 cps. *Sensitivity:* 4 μv for 20 db quieting. *Hum Level:* 60 db below 100% modulation. 300-ohm antenna input.

93 S 812. List, $133.25. NET 78.35

2200C



2199B



2122C

3-D

Famous Bell High-Fidelity Amplifiers

MODEL 2200C 20-WATT AMPLIFIER. Versatile high-fidelity amplifier. Ideal foundation for any deluxe, custom music ensemble. Features loudness control independent of volume control. 5-position magnetic phono equalizer (78 rpm; Columbia-LP; RCA-AES; FFRR; European). Selector switch for choice of phono with rumble filter, phono without rumble filter, tuner, TV or tape recorder. With shaft extension kit and removable dial plate.

Output: 20 watts at less than .3% distortion. *Response:* ±0.2 db, 20-20,000 cycles. *Hum:* 80 db below rated output. *7 Inputs:* Tuner, TV, recorder playback, microphone, crystal phono, high-level magnetic phono, and low-level magnetic phono. *Output Impedance:* 4, 8, and 16 ohms; plus tape recorder. *Controls:* Volume, Loudness, Bass, Off-On-Treble, Phono Equalizer switch and Input Selector switch. *Size:* 7⅝x16x8¾". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 23 lbs.

98 SZ 608. List, $166.60. NET 97.95

MODEL 2199B DELUXE 12-WATT AMPLIFIER This very moderately priced amplifier includes all the quality features of the 2122C amplifier at left below, plus many deluxe circuit refinements.

FEATURES. Five-position record compensator. Continuously variable loudness control. Turntable rumble filter. High-impedance output jack for tape or disc recording. Removable dial plate and 5 extension shafts simplify panel installation. 3 AC outlets.

SPECIFICATIONS. *Output:* 12 watts, with less than 1% harmonic distortion. *Response:* ±0.5 db from 20-20,000 cps. *Hum:* 70 db below rated output. *Six Inputs:* Radio; crystal phono; high and low-level magnetic phono; tape playback or TV. *Controls:* 7-position Selector-Equalizer; Loudness; Gain; Bass; Treble-Off-On. Rumble filter switch on chassis. *Outputs:* 4, 8, and 16 ohms. *Size:* 6¼x13x8⅛". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 18 lbs.

98 SX 604. List, $133.25. NET ... 78.35

MODEL 2201 PILOT LIGHT ASSEMBLY. Plugs into socket provided on Models 2200C, 2199B and 2122C amplifiers. With 5-foot cord. Shpg. wt., 5 oz.

98 S 600. List, $3.25. NET 1.91

MODEL 2122C 10-WATT AMPLIFIER. Latest version of the popular Bell 2122 amplifier. Has many deluxe features for exceptional performance in any hi-fi system.

FEATURES: 3-position record compensator (Lo-Noise Pop., AES-RCA-Col LP, FFRR-Early 78). High-impedance output for tape recording. Separate bass and treble controls. Dial plate may be removed for behind panel mounting. With four 1¾" extension shafts.

SPECIFICATIONS. *Response:* ±0.75 db, 20-20,000 cps. *Output:* 10 watts at less than 2% distortion. *Hum:* 65 db below rated output. *Four Inputs:* High-level and low-level magnetic phono; Tuner: Auxiliary (TV, crystal phono, tape playback, etc.). *Controls:* Selector-equalizer switch; Volume; Bass; Off-On-Treble. *Outputs:* 4, 8, and 16 ohms plus high-impedance to tape recorder. *Tubes:* 2—6SC7, 6SL7GT, 2—6V6GT; 5Y3GT rect. 6x11½x8". For 110-120 v., 50-60 cycle AC. Shpg. wt., 14 lbs.

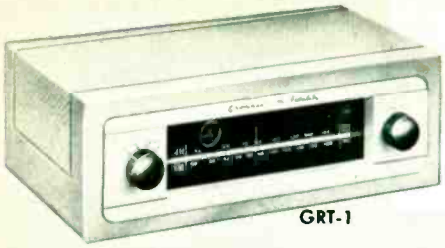
98 SX 606. List, $89.90. NET 52.87

MODEL 3-D BINAURAL AMPLIFIER. Dual channel high-fidelity amplifier. 20 watts (10 watts each channel). Especially designed for reproduction of binaural records, binaural tape recordings or binaural radio broadcasts. May also be used as a conventional monaural amplifier.

Dual inputs and outputs. Rear panel Radio Level set control allows switching between radio and phono without change of volume. 3 auxiliary AC outlets. *Output:* 10 watts per channel. Less than .5% total distortion. *Response:* ±0.5 db from 20-20,000 cps. *Hum:* 70 db below rated output. *Dual Inputs:* Radio, tape, magnetic phono. *Dual Outputs:* 4, 8, and 16 ohms plus dual tape recording. *Controls:* 3-position Selector; 6-position Function Switch (binaural, monaural, binaural reverse); Balance (gain of the two channels); Gain (both channels simultaneously); Bass; Off-On-Treble. *Size:* 8x16x11". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 28 lbs.

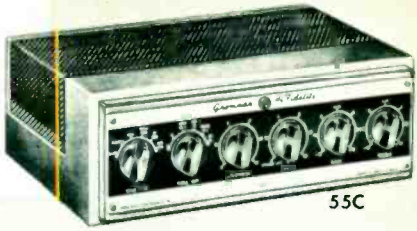
98 SZ 605. List, $249.90. NET .. 146.95

Express Shipment Recommended for Hi-Fi Equipment



GRT-1

Grommes Custom Music Components



55C

New Grommes FM-AM Basic Tuner And Matching Amplifiers

MODEL GRT-1 FM-AM BASIC TUNER. New FM-AM tuner for use with Grommes amplifiers or any other high-fidelity amplifier having a full set of controls. Offers exceptional selectivity and sensitivity at low cost. Deluxe features include: Armstrong FM circuit, cascode RF stage, ten tuned IF circuits and two double-tuned Foster-Seeley limiter stages. Assures maximum sensitivity and freedom from interference. Flywheel tuning and "magic eye" indicator for precise tuning. Cathode follower output permits long lead lengths to amplifier without any loss of high frequency output. Ultra-compact in size, the tuner is suitable for table top or shelf installation; removable escutcheon for trouble-free cabinet installation. In handsome brown and gold finish for perfectly matching any Grommes amplifier.

Sensitivity: FM, better than 2 microvolts for 30 db quieting; AM, 15 microvolts. *Response:* FM, ±0.5 db, 20-20,000 cps; AM, ±3 db, 20-5000 cps. *Antenna Inputs:* FM, 300 ohms; AM, built-in ceramic ferrite antenna plus high impedance external connection. *Hum Level:* 65 db below 100% modulation. *2 Controls:* Tuning and AFC defeat; Off-On, AM, FM with AFC, FM without AFC. *Distortion:* .03% at 1 volt. *Tubes:* 1—6BK7A, 1—12AT7, 1—6AB4, 1—6BE6, 1—6BA6, 1—6AL5, 3—6AU6, 1—6AL7, 1—12AU7; 6X4 rectifier. *Size:* 4x12½x7¼" deep. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 14 lbs.

93 SX 859. List. $216.00. NET **126.91**

MODEL 55C "FLAT SIX" 12-WATT AMPLIFIER. Styled to match GRT-1 tuner at left. Tremendous response with low distortion is achieved by feedback loops around every stage from input to output. Unusual design employs feedback phono equalization, bass and treble control circuits. Separate turnover and roll-off controls offer 24 positions of record compensation. Ultra-compact size for shelf or table-top installation. Removable panel for cabinet installation; brown and gold finish.

Output: Rated, 12 watts; peak, 24 watts. *Distortion:* 0.5% harmonic, 1% intermodulation at rated output. *Response:* ±0.5 db, 25-20,000 cps at rated output. *Hum:* 80 db below rated output. *Controls:* Selector (Tape, Radio, 4-pos. Turnover); 6-pos. Rolloff; Loudness; Off-On-Volume; Bass; Treble; Rumble Filter. *Outputs:* 4, 8 and 16 ohms for speaker; high impedance jack for tape recording. *5 Inputs:* Radio, Tape, Crystal Phono, High and Low-Level Magnetic Phono. 5 tubes plus rectifier. 4x8½x11½" deep. For 110-120 v. 60 cycle AC. Shpg. wt., 14 lbs.

93 S 858. List, $132.00. NET **77.91**

MODEL 61PG 20-WATT AMPLIFIER. Not illustrated; similar to 55C. *Damping Factor:* Continuously variable from +2 through infinity. *Response:* ±0.5 db, 27-20,000 cps. *Distortion:* Less than 1% harmonic; 2% IM at 20 watts. 4¾x12x10". Shpg. wt., 20 lbs.

93 SZ 860. List. $166.00. NET **97.51**

New Grommes Amplifiers and Deluxe Preamplifier

MODEL 211 PREAMP-EQUALIZER. Extremely versatile, advanced-design preamp. A notably fine choice as a control unit for use with the finest hi-fi systems. Provides 36 equalization combinations. Cascode input assures remarkably low hum and noise levels. Cathode follower input and output permit use of even extremely long cables. Removable panel. For use with Grommes 220BA or other basic amplifiers.

Response: ±0.1 db, 10-20,000 cps. *Distortion:* Less than .05% harmonic, 0.1% IM at 2 volts output. *Hum and Noise:* Better than 90 db below 2 volts output on high-level channels and 65 db on low-level channels. *10 Controls:* Selector for TV (or crystal or ceramic phono), tape, radio, high and low level magnetic phono, microphone; 6-pos. Turnover; 6-pos. Rolloff; Low Frequency Cutoff; Volume-Loudness; Low Frequency Balance; Bass; Treble; Presence; On-Off; individual level controls for Radio, Tape, TV and Phono channels. *7 Inputs:* Radio, tape, TV, low level magnetic phono, high level Magnetic Phono, Microphone. Constant Amplitude phono. 4x12x6" deep. In brown and gold. For operation from 110-120 v., 60 cycle AC. Wt., 8 lbs.

93 SX 861. List. $166.00. NET **97.51**

MODEL LJ-4 10-WATT AMPLIFIER. New, economy hi-fi amplifier at tremendous savings. Includes separate bass and treble controls, magnetic preamp compensated for RIAA curve, negative feedback and 4 inputs. Unique arrangement of bass control in volume control circuit enables volume control to be used as loudness control. In handsome brown hammerloid finish.

Output: Rated, 10 watts; peak, 18 watts. *Frequency Response:* ±1 db, 20-20,000 cps at 3 watts. *Distortion:* 2% harmonic; 3% intermodulation at 8 watts. *Feedback:* 12 db. *4 Controls:* Selector for Tape, Radio, Magnetic Phono (RIAA curve); Volume control; Off-On-Bass (Flat response; up to 15 db boost); Treble (Flat response; up to 18 db attenuation). *4 Inputs:* Radio; Tape; Magnetic Phono; Crystal or Ceramic Phono. *Output Impedances:* 4, 8 and 16 ohms. 4 tubes plus rectifier. 6x6x10". For 110-120 v., 60 cycle AC. Shpg. wt., 10 lbs.

93 SX 810. List. $66.00. NET **38.71**

MODEL 220BA 20-WATT BASIC AMPLIFIER. New basic amplifier. Ideal for use with Model 211 preamplifier or other preamp-equalizer control units. Employs special output transformer and variable impedance control for exact matching of amplifier to speaker for unusually clean bass response. Provides distortion-free power across the entire audio range. Excellent for custom hi-fi installations. Extremely uniform output and very low distortion assure ultra-smooth musical reproduction.

Power Output: Rated, 20 watts; peak, 40 watts. *Frequency Response:* ±0.5 db, 25-20,000 cps at rated output. *Distortion:* Less than 0.5% harmonic and 1% intermodulation at rated output. *Hum and Noise:* 90 db below rated output. *Feedback:* 20 db, plus current feedback from damping factor control. *Damping:* Continuously variable by internal impedance control from +2 through infinity. *Sensitivity:* 1 volt input for 20 watts output. *2 Controls:* Input gain; damping factor. *Output Impedances:* 4, 8 and 16 ohms. *Tubes:* 2—12AU7, 2—5881; 5U4G rectifier. Two auxiliary AC outlets. *Size:* 6x12x4" deep. For 110-120 volts, 60 cycle AC. Shpg. wt., 18 lbs.

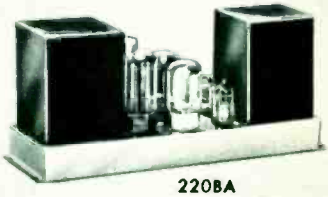
93 SX 808. List. $99.20. NET **58.31**

MODEL 56PG 12-WATT AMPLIFIER. New, 12-watt successor to the highly popular 50PG. Includes built-in preamplifier, record compensator, loudness control, bass and treble controls. Finished in brown and gold; removable panel for cabinet installation.

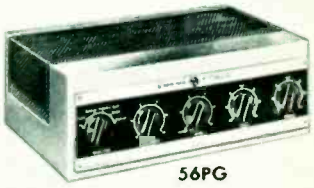
Rated Output: 12 watts. *Response:* ±1.0 db, 30-20,000 cps at rated output. *Distortion:* 1% harmonic, 2% IM at rated output. *Negative Feedback:* 15 db, stabilized for any speaker load. *Hum:* 80 db below output level. *5 Controls:* Selector for TV, Tape, Radio and 3-pos. Equalizer (Phono Flat, RIAA, Old LP); Loudness; Off-On-Level; Bass; Treble; and Rumble Filter switch. *5 Inputs:* Radio, Tape, TV, Magnetic Phono, Crystal or Ceramic phono. *Outputs:* 4, 8 and 16 ohms; high-impedance jack for tape recorder. 5 tubes plus rectifier. *Size:* 4x8½x11½". For 110-120 volts, 60 cycle AC. Shpg. wt., 14 lbs.

93 SX 809. List. $99.20. NET **58.31**

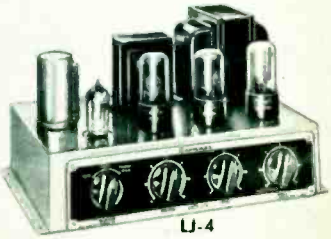
211



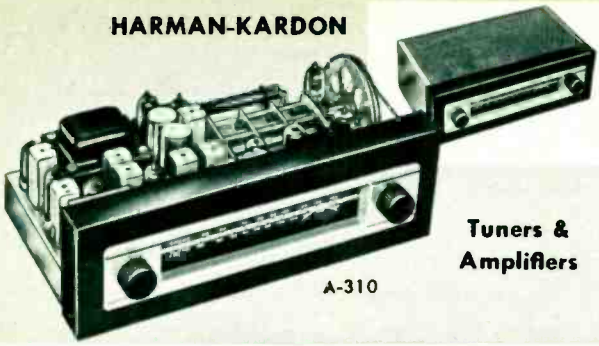
220BA



56PG



LJ-4



A-310

Tuners & Amplifiers

C-300

Deluxe, Matched Tuner and Amplifier—Ultra-compact

MODEL A-310 "THEME" FM-AM BASIC TUNER. All new FM-AM tuner. Companion piece for the Model C-300 amplifier (at right). Stack together for an ultra-compact, deluxe installation only 8" high. New features include improved sensitivity, wider AM and FM bandwidths, illuminated tuning meter.

FM Circuit: Armstrong FM with tuned cascode amplifier and 2 double-tuned limiters; low noise, all-triode front end and mixer. *AM Circuit:* Superheterodyne with tuned RF stage, 2 IF stages; 10 kc whistle filter and ferrite loop antenna. Other deluxe features include AFC defeat, momentary or permanent; professional-type flywheel tuning; 2 cathode-follower output circuits, 1 for amplifier and 1 for tape recorder.

Sensitivity: FM, 1.2 μv for 20 db quieting; AM, 2 μv. *Selectivity:* FM; 200 kc bandwidth, 6 db down; AM: 10 kc bandwidth, 6 db down. *Hum Level:* −65 db. *Harmonic Distortion:* Less than 1%. *Frequency response:* FM, ±.5 db, 20 to 20,000 cps; AM, ±2 db, 20 to 5000 cps. 11 tubes plus rectifier: 6BK7A, 12AT7, 6AB4, 6BE6, 6AL5, 12AU7, 3—6BA6, 2—6AU6; 6X4 rectifier. With beautiful brushed-copper escutcheon and cage, matte black panel. Edge-lighted slide-rule dial. Size, 4x12½x8¾". For operation from 110-120 v., 50-60 cyle AC. Shpg. wt., 14 lbs.

99 SX 087. NET 125.00

MODEL C-300 "TREND" AMPLIFIER. Versatile, amazingly compact amplifier, only 4" high. In sleek copper and black housing. An ideal mate for the "Theme" tuner (at left) and excellent for use with any basic tuner. Advanced, ultra-linear Williamson-type circuit delivers 30 watts with only ½% intermodulation. Built-in self-ventilating system.

Unusually versatile controls. Variable damping factor with choice of 6 positions of damping to assure best match to speaker load for rich, clean bass. 6 contour positions provide exact degree of loudness control. Preamplifier for all magnetic cartridges; record compensation with or without rumble filter. 4 inputs: magnetic cartridge, tuner, 2 auxiliary with level controls for tuner and auxiliary. Employs 2—5881 output tubes.

Frequency Response: ±1 db, 20-40,000 cps at 30 watts; ±0.1 db, 20-40,000 cps at 15 watts. *Hum:* −93 db. *Controls:* Variable damping; Phono Selector (GE, Pickering or Fairchild); Contour; Loudness; Bass; Treble; Function switch (Eur, RIAA, LP, Tuner, Aux 1, Aux 2, LP with rumble filter, RIAA with rumble filter, Eur with rumble filter). *Output Impedance:* 4, 8 and 16 ohms. 3 auxiliary AC outlets. With case. Size, 4x12½x9⅝". For 110-120 v., 50-60 cycle AC. Shpg. wt., 26 lbs.

99 SZ 073. NET 129.95

Moderate Cost High-Fidelity Amplifier and Basic Tuners

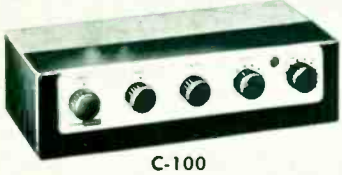
A-400

MODEL A-400 "COUNTERPOINT" FM TUNER. A truly deluxe, basic FM tuner at very moderate price. In smart, copper and black Harman-Kardon styling. A perfect match for the C-100 amplifier (at right) or other hi-fi amplifier.

Employs FM Armstrong circuit with dual limiters, Foster-Seeley discriminator, variable AFC, low-noise front end and triode mixer. Ten tuned circuits including tuned RF stage. Has two bridged cathode follower outputs, with output level control for amplifier and tape recorder. Ease of tuning is assured by use of an illuminated, precision tuning meter and counterweighted tuning mechanism.

Sensitivity: 2 microvolts for 20 db quieting. *Selectivity:* 200 kc bandwidth, 6 db down. *Hum Level:* −60 db. *Frequency Response:* ±½ db, 20-20,000 cps. *Harmonic Distortion:* Less than 1%. *Drift:* ±2½ kc. 8 tubes plus selenium rectifier: 6U8, 12AT7, 4—6AU6, 6AL5, 12AU7. Edge-lighted dial glass, yellow and white numerals. Less case (below). Size, 4x11⅛x7½". For operation from 110-120 volts, 50-60 cycles AC. Shpg. wt., 10 lbs.

99 S 074. NET 89.95



C-100

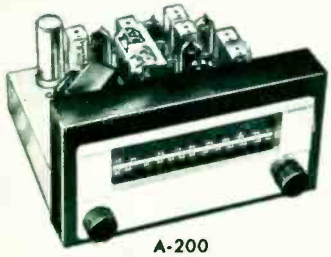
MODEL AC-4 COPPER CASE. Ventilated. For above. Shpg. wt., 2 lbs.

99 S 075. NET 8.00

MODEL C-100 "MELODY" AMPLIFIER. Moderately priced, ultra-linear, Williamson-type 10-watt hi-fi amplifier. In easy reach of the modest budget, this precisely designed amplifier offers performance characteristics usually found in more expensive units. Styled in modern, brushed-copper and black. Complete with ventilated copper case for handsome display on table top or bookcase. Cabinet installation kit supplied for easy installation in custom-type cabinet. Includes dynamic loudness contour control, record equalization, preamp for magnetic cartridges.

Output: Rated, 10 watts; peak, 16 watts. *Frequency Response:* ±.5 db, 40-15,000 at 10 watts. *Intermodulation Distortion:* .5% at 5 watts output, 2% at 10 watts output. *Damping Factor:* 10. *Output Impedances:* 8 and 16 ohms. *Hum Level:* −80 db. *Controls:* Record Compensation (LP-RIAA-EUR-Tuner-AUX 1-AUX 2), Contour, Loudness, Bass, Treble. *Contour Range:* 6 steps of Fletcher-Munson correction. *Tubes:* 2—12AX7, 1—12AU7, 2—6CM6; 5Y3GT rectifier. *Size:* 12½" W, 3¼" H, 7¼" deep. Installed in cabinet with A-400 or A-310 tuner, (described at left and above), requires space 8½" H, 12½" W, 8⅜" deep. With copper case. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 11 lbs.

99 SX 078. NET 74.50



A-200

MODEL A-200 "GUIDE" FM-AM TUNER. Delivers astonishing performance at modest cost. Beautifully styled in brushed copper and black. Low-noise FM front-end employs grounded-grid amplifier circuit. Automatic frequency control with front panel provision for momentary AFC defeat. Assures highly selective, pin-point tuning. Also has fly-wheel tuning mechanism. Foster-Seeley Discriminator. Makes it possible to enjoy high-quality FM-AM reception with minimum investment.

Sensitivity: FM, 3 μv for 20 db quieting; AM, 25 μv. *Selectivity:* FM, 200 kc bandwidth 6 db down; AM, 8 kc bandwidth 6 db down. *Frequency Range:* FM, 88 to 108 mc; AM, 530 to 1650 kc. *FM Drift:* ±15 kc maximum. *Image Rejection:* 30 db minimum. *Distortion:* Less than 1% at rated output. *Frequency Response:* FM, ±.5 db, 20-20,000 cps; AM, ±3 db, 20-5,000 cps. *Hum Level:* −60 db.

Tubes: 2—12AT7, 1—6BE6, 1—6BA6, 2—6AU6, 1—6AL5; selenium rectifier. *Size:* 5¼" H, 9½" W, 8" Deep. With efficient, built-in AM loopstick antenna. Edge-lighted slide rule dial. For 110-120 volts, 60 cycle AC. Less case. Shpg. wt., 9 lbs.

99 SX 079. NET 69.50

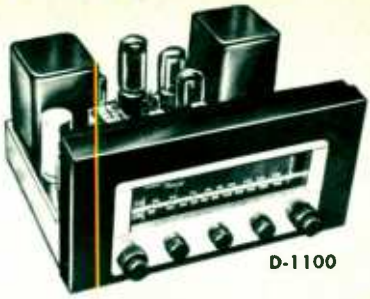
99 SX 088. MODEL AC-2 COPPER CASE. For above. Wt. 2 lbs. NET 8.00

HARMAN-KARDON SINGLE CHASSIS TUNER—AMPLIFIERS

D-200

Outstanding Hi-Fi Quality

Easy To Install



D-1100

Unique, Single-Chassis Hi-Fi Units

MODEL D-200 "RECITAL"—WITH 12-WATT AMPLIFIER. A new development in hi-fi design. FM-AM tuner and hi-fi amplifier on a single chassis, tastefully styled in copper and black. The single unit is easier to install and a perfect match between the component sections is assured. Add only a speaker system and record player for a complete high-fidelity, FM-AM phono system.

Employs the most advanced circuitry. *FM:* Armstrong circuit with limiter; Foster-Seeley discriminator; AFC; triode front end. *AM:* Superheterodyne; AVC; Ferrite loop antenna. *12 watt amplifier:* Ultra-linear, Williamson -type; 2—6L6GB output tubes. Inputs for magnetic cartridges and 1 aux. Outputs 8, 16 ohms.

Sensitivity: FM, 3 μv for 20 db quieting; AM, 20 μv. *Frequency Response:* ±½ db, 40-15,000 cps at 12 watts. *Hum:* −60 db. *Intermodulation:* 1% at 12 watts. *Controls:* 6-position Loudness Contour; Treble; Bass; Tuning; Function (AM, FM, Aux, LP, RIAA, EUR). 13 tubes plus selenium rectifier. Size. 5⅞" H, 12" W, 11⅞" deep. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 24 lbs.

99 SZ 071. NET **149.95**

MODEL DC-2 COPPER CASE. Ventilated. For above. 2 lbs.

99 SX 072. NET **10.00**

DELUXE MODEL D-1100 "FESTIVAL"—WITH 30-WATT AMPLIFIER. A fine tuner and top-quality amplifier combined on one compact chassis. The FM-AM circuits are exceptionally sensitive. The audio section includes a powerful, 30-watt, ultra-linear Williamson type amplifier and a preamplifier for magnetic cartridges.

FM Specs: Armstrong circuit, limiter, Foster-Seeley discriminator, illuminated tuning meter, tape output, optional AFC, tuned RF stage and triode mixer. *Sensitivity:* 2 μv for 20 db quieting. Bandwidth, 6 db. *AM Sensitivity:* 5 μv. Superheterodyne with tuned RF stage, AVC and ferrite loop antenna. *Harmonic Distortion:* Less than 1%.

Rated Output: 30 watts at ½% IM. *Output Impedance:* 8, 16 ohms. *Frequency Response:* At rated output, ±1 db, 20-40,000 cps. *Damping Factor,* 20. *Phono Hum:* −73 db. *Controls:* Tuning, Function (AM, FM, Aux, LP, RIAA, EUR), Treble, Bass, Loudness-Power-Contour. 15 tubes plus rectifier. Size, 7x13⅜x12½". Attractive brushed copper and black escutcheon. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 35 lbs.

99 SZ 086. NET **199.95**

MODEL DC COPPER CASE. Ventilated. For above. Shpg. wt., 2 lbs.

99 SX 076. NET **12.00**

ALLIED—ELECTRO-VOICE SELECTED-VALUE SPEAKER SYSTEMS

AN ALLIED EXCLUSIVE • RESEARCH-ENGINEERED FOR TOP PERFORMANCE

Electro-Voice 2-Way Speaker Installed in Klipsch-Licensed "Baronet" Enclosure

ONLY $66.15

The ideal speaker system for the hi-fi installation where space is limited. This ultra-compact speaker system is made up of the highest quality components. The Electro-Voice SP8-B 8" speaker features extremely smooth reproduction. It has a low cone resonance of 65 cps in free air. Installed in the "Baronet" enclosure, bass response is extended all the way down to 35 cps.

Although the system is less than 2 feet high, it equals the performance of many larger systems. A high-frequency "Whizzer," mounted inside the speaker, provides wide high-frequency dispersion and excellent overall balance. Crossover at 6000 cps. Response: ±6 db, 35-13,000 cps. Rated for 15-20 watts—ample power-handling capacity for the medium sized hi-fi system. 16-ohm voice coil impedance.

The "Baronet" is a Klipsch-licensed, folded-horn corner enclosure. Makes use of floor and walls of room to effectively extend the horn. This type of enclosure produces the effect of a large baffle area. Occupies only 22⅞x14½x13¾ inches. Clean, simple lines blend with any furnishings. Finished in hand-rubbed, hardwood veneers, plastic grille and brushed-brass hardware. Shpg. wt., 32 lbs.

LUSTROUS MAHOGANY.

81 DZ 754. List, $112.50. **NET** **66.15**

KORINA BLONDE.

81 DZ 755. List, $116.50. **NET** **68.50**

Electro-Voice 3-Way Speaker Installed in Klipsch-Licensed "Aristocrat" Enclosure

ONLY $123.19

A top-quality speaker system for thrilling high-fidelity reproduction. The very popular Model 12TRXB, 3-in-1, 12" speaker, installed in the recommended Aristocrat speaker enclosure. Klipsch-licensed, folded horn speaker enclosure and triaxial reproducer provide phenomenal bass response, vivid mid-range reproduction and crystal-clear treble.

Bass and mid-range reproduced by 12" cone with Radax propagator. Mechanical crossover at 2000 cps permits bass cone to generate full, distortion-free low frequencies. Mid-frequency propagator assures clean reproduction of the mid-range. At 3500 cps, electrical crossover feeds only the 2 higher octaves to sensitive T35B VHF driver. The treble range of the T35B extends beyond the limits of audibility.

The beautifully-styled Aristocrat enclosure enhances the performance of the 12TRXB by providing musical balance at all listening positions in the room. Adjustable hi-frequency level control permits correct matching to room acoustics. Power Capacity: 20 watts; 30 watts on peaks. Response: ±5 db, 30-15,000 cps. Cone Resonance: 50 cps. Impedance: 16 ohms. Size, 29⅜x19x16⅝". Shpg. wt., 60 lbs.

LUSTROUS MAHOGANY.

81 DZ 756. List, $209.50. **NET** **123.19**

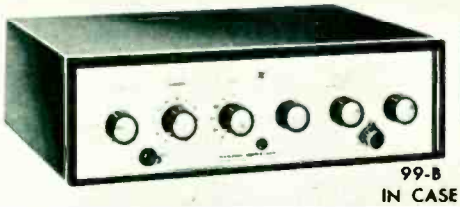
KORINA BLONDE.

81 DZ 757. List, $219.50. **NET** **129.07**

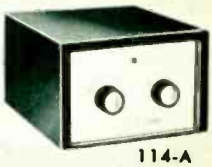
Refer to Pages 22-26 for other Electro-Voice High Fidelity Equipment

New H.H. Scott High-Fidelity Tuners and Amplifiers

210-D
IN CASE



99-B
IN CASE



114-A

NEW MODEL 210-D 30-WATT AMPLIFIER. Superb new amplifier for the music connoisseur who demands something "extra." Re-designed Dynaural Noise Suppressor now includes provision for rumble suppression only, scratch suppression only, or both rumble and scratch suppression together. Previously acclaimed and now further improved, this remarkable feature virtually eliminates record scratch and hiss and turntable rumble without any sacrifice in audio fidelity. Filters out noise during low-level passages and even between individual notes. The listener hears only the true reproduction of music with no background noise. Other deluxe features include: 8-pos. record compensator; magnetic inputs selected from front panel; variable damping control; loudness control; separate bass and treble; inputs for tuner, tape, TV, 2 magnetic phono, 1 constant-amplitude phono. DC-operated preamp circuits for extremely low hum.

Rated Output: 30 watts. Response: 19-35,000 cps. *Harmonic Distortion:* 0.5% at rated output. *IM (1st order):* 0.1% at rated output. *Hum:* 80 db below rated output. *Controls:* Mag. 1 or 2; Selector and 8-pos. Equalizer (Eur. RCA Lon, Col. Tape, Lon, Orig AES, RIAA-NARTB-RCA Ortho, Orig Col); Dynaural Noise Suppressor; Range (for rumble or scratch or both); Bass; Treble; Loudness; Volume-Loudness; Off-On. *6 Inputs:* 3 high-level (Tuner, Tape, TV); 2 magnetic phono; 1 constant-amplitude phono. *Speaker Outputs:* 1 to 24 ohms. *Tubes:* 2—1614, 3—12AU7, 3—12AX7, 1—6AL5; 5V4G rectifier. Gold finish. New panel mounting design eliminates need for escutcheon—opening is cut into panel and unit slid in from front. Less case (see below). Size: 4¾x15¼x12". For 105-125 volts, 50-60 cycle AC. Shipg. wt., 22 lbs.

93 SZ 847. List. $283.25. NET **169.95**

NEW MODEL 99-B 22-WATT AMPLIFIER. New, greatly improved amplifier. Compact and versatile, it's the last word in clean, careful design. Delivers performance that far exceeds the most critical requirements. Socket for plug-in addition of Model 114-A Dynaural Noise Suppressor (see below). New design simplifies panel mounting—eliminates need for escutcheons or dismantling of amplifier. Simply cut out panel hole then slide unit in place from front of cabinet. Features include: 5 positions of record equalization; magnetic inputs selected from front panel; volume-loudness control for correct tonal balance even at very low volume levels; rumble filter with switch; jacks for convenient tape recording and monitoring; adjustable scratch filter; hi-fi equipment inputs.

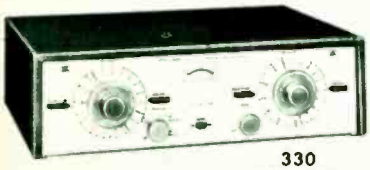
Rated Output: 22 watts. *Response:* 20-30,000 cps. *Harmonic Distortion:* Less than 0.8%. *Hum:* 80 db below rated output. *Controls:* Mag 1 or 2; Selector for Phono, Tuner, Tape or TV; 5-pos. Equalizer (Col, RIAA-NARTB-ORTHO, AES, Lon, Eur); Bass; Treble; Volume-Loudness; Input Level; On-Off, Scratch filter; Rumble filter. *6 Inputs:* Tuner, Tape, TV; 2 Magnetic Phono; 1 Constant-Amplitude Phono. Tape output and monitor jacks; input for Dynaural Noise Suppressor. *Speaker Outputs:* 2, 4, 8 and 16 ohms. 5 tubes plus rectifier. Gold panel. 4¾x15¼x12". Less case; see below. For 105-125 v., 50-60 cycle AC. Shipg. wt., 15 lbs.

93 SX 848. List. $166.60. NET **99.95**

MODEL 114-A DYNAURAL NOISE SUPPRESSOR. Eliminates record scratch and turntable rumble without affecting audio fidelity. Use only with 99-B. With case, 6x7½x9½". Shipg. wt., 3 lbs.

93 S 988. List. $83.25. NET **49.95**

New Scott High-Fidelity Basic Tuners



330
IN CASE

311
IN CASE

310-A

NEW MODEL 330 FM-AM TUNER. An advanced circuit basic tuner. Assures noise-free reception of weakest signals without distortion or interference. Has complete, separate FM and AM sections to permit binaural operation. Signal strength meter for pin-point station tuning on FM and AM. *FM Section:* 3 μv sensitivity at 300-ohm antenna terminal for 20 db quieting; 6 μv for 40 db quieting. Wide IF passband and excellent detector design provide unusual tuning ease. Automatic gain control. 2 stages of limiting assure outstanding signal-to-noise ratio. *AM Section:* 1 μv sensitivity for usable audio output. 10 kc whistle filter. *Controls:* FM fine and quick tuning; AM fine and quick tuning; On-Off; Selector for FM, AM wide range, AM normal, AM distance. Illuminated vernier tuning dials with logging scales. Separate output jacks for binaural operation and tape recording. 11 tubes; 2—CK705A diodes plus 6X5GT rectifier. 4¾x15¼x12". Less case; see below. For 105-125 v., 50-60 cycle AC. 17 lbs.

93 SX 849. List. $283.25. NET **169.95**

NEW MODEL 311 FM TUNER. For FM reception only. New circuitry employs 150 kc IF passband and 2 megacycle detector for drift-free operation and superior reception of weak signals. 2 stages of limiting for excellent signal-to-noise ratio. Automatic gain control makes manual adjustment of sensitivity unnecessary. Signal strength meter for simplified, precision tuning. Illuminated lucite vernier tuning dial with logging scale; On-Off-Level control. *Sensitivity:* 3 μv at 300-ohm antenna terminals for 20 db of quieting; 6 μv for 40 db of quieting. *Maximum audio output:* 4 volts for 75 kc deviation. 2 feedback stages. Low-impedance output permits connecting cables up to 70 ft. long; separate tape recorder output. 6 tubes; 2—CK-705A diodes; 6X4 rectifier. 4½x13¼x10½". Less case; see box. For 105-125 v., 50-60 cycle AC. Shipg. wt., 12 lbs.

94 SX 560. List. $166.60. NET **99.95**

MODEL 310-A FM MONITOR TUNER. Provides superb FM reception. The 2 mc wide-band detector, 3 limiters and full 150 kc wide flat pass-band IF characteristics make tuning completely non-critical and drift-free—offers virtually distortionless reproduction at all signal levels. Adjustable Dynaural Interstation Noise Suppressor, controlled from front panel, eliminates annoying "hiss" between stations. Single sweep tuning. Fine tuning control and signal meter allow precision tuning of weakest signals. Cathode follower output. *Tuning Range:* 87 to 109 mc. *Controls:* Coarse Tuning, Fine Tuning, Interstation Noise Suppressor, Level. *Sensitivity:* 2 microvolts for 20 db quieting; 4 microvolts with 40 db quieting. *Output Voltage:* 5 volts maximum undistorted. 85 db rejection of cross modulation of strong local signals. 9 tubes plus 3 CK-705A diodes; 6X5 rectifier. 13⅜x5⅛x9⅛". With case. For 105-125 volts, 50-60 cycle AC. Shipg. wt., 14 lbs.

93 SX 844. List. $249.10. NET. **149.50**

MODEL 310-X1 ESCUTCHEON. For panel mounting 310 Tuner. Bronze. ¼ lb.

94 S 561 List. $4.15. NET **2.49**

CASES FOR ALL SCOTT TUNERS AND AMPLIFIERS

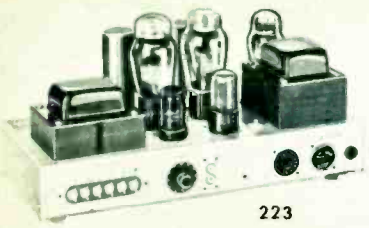
Cases of highly attractive, scuff-resistant, top-grain leather finish, plastic bonded to heavy-gauge metal. For table-top or shelf installation of all Scott amplifiers or tuners *that do not come with case.* Shipg. wt., ½ lb.

SIZE A: 4¾x15¼x12" (HWD). For Models 210-D, 99-B, 330, 331.
94 SX 562. List. $16.60. NET **9.95**

SIZE B: 4¾x13¼x10" (HWD). For Models 121-B, 311.
94 SX 563. List. $16.60. NET **9.95**

Custom Components Available on ALLIED's Easy Payment Plan—See Page 315

Latest H.H. Scott High-Fidelity Components



223

265

121-B

NEW MODEL 223 23-WATT BASIC POWER AMPLIFIER. For use with Model 331 FM-AM tuner described below; any Scott preamplifier; or for use in any custom hi-fi installation requiring a basic amplifier of highest quality. *Power Output:* Rated, 23 watts; peak, 46 watts. *Harmonic Distortion:* Less than 0.5% at rated output. *Intermodulation (first order):* Less than 0.1% at rated output. *Frequency Response:* Flat from 12-55,000 cps, with controlled cut-off characteristic beyond, for maximum stability and freedom from distortion. *Hum:* 85 db below full output. *Sensitivity:* 3 volts input for full output. 1.5 megohm input impedance. *Output Impedances:* 1 to 24 ohms. 7¾x14x6½". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 18 lbs.

94 SX 564. List, $124.90. NET ... **74.95**

NEW MODEL 331 FM-AM TUNER WITH CONTROLS. Not illustrated; similar in appearance to Model 330 shown on Page 18. Features reception of FM or AM binaural broadcasts. Includes all the features of the 330 tuner, plus a complete preamplifier and equalizer. An ideal match for any basic power amplifier on this page. Illuminated vernier lucite tuning dials with logging scale. Signal strength meter. *Controls:* Mag. 1 or 2; Selector for Tape, TV, FM, AM wide range, AM normal, AM distance and 6-pos. Equalization (Eur 78, NARTB-Tape, Orig-AES, RIAA-NARTB-ORTHO, Orig-Col); Bass; Treble; Loudness control; Loudness-Volume switch. *Inputs:* TV, Tape; 2 magnetic phono. *Outputs:* 6-ft output cable for FM, AM or Phono output; output jacks for binaural operation and tape recording. 11 tubes and 2—CK-705A diodes; 6X5 rectifier. Less case; see page 18. *Size:* 4¾x15¼x12". For 105-125 v., 50-60 cycle AC. Shpg. wt., 19 lbs.

94 SX 565. List, $316.60. NET ... **189.95**

NEW MODEL 265 70-WATT BASIC POWER AMPLIFIER. This new 70-watt basic amplifier fulfills the most demanding requirements of audio perfectionists. Skillfully engineered down to the finest detail, it provides absolute assurance of outstanding high-fidelity reproduction. Has extremely high power capacity and incorporates new, unusual features. "Snubber" circuit protects speakers from overload damage. Also employs adjustable damping control to provide perfect match between amplifier and speaker system. Class "A" circuitry used throughout for distortionless listening at all levels. *Power Output:* Rated, 70 watts; instantaneous peak, 140 watts. *Frequency Response:* Flat from 12 to 80,000 cps. Controlled cut-off at high end to eliminate ultrasonic oscillation in accordance with professional and broadcast station standards. Offers maximum stability and freedom from oscillation. *Hum Level:* 90 db below rated output. *Harmonic Distortion:* 0.5%. *Intermodulation (1st order):* 0.1%. *Output Impedances:* 2, 4, 8 and 16 ohms. 4—1614's in output stage. 18½x9x8½". For 105-125 v., 50-60 cycle AC. Shpg. wt., 45 lbs.

93 SZ 835. List, $333.35. NET ... **200.00**

NEW MODEL 232-B 32-WATT BASIC POWER AMPLIFIER. Not illustrated; resembles Model 223. Controlled by Model 121-B preamp-equalizer or any other preamp. *Output:* Rated, 32 watts; 64 watts instantaneous peak output. *Response:* Flat from 12 to 80,000 cps. *Harmonic Distortion:* 0.5%. *IM (1st order):* 0.1%. Hum balance adjustment; input level adjustment. Variable damping control with continuous adjustment. *Speaker Output Impedances:* 1 to 24 ohms. 4 tubes; 5U4G rectifier. *Size:* 6¼x14½x7½". For 105-125 v., 50-60 cycle AC. Shpg. wt., 22 lbs.

94 SZ 566. List, $166.60. NET ... **99.95**

NEW MODEL 121-B PREAMPLIFIER-EQUALIZER. This exceptional preamp-equalizer offers audio connoisseurs the ultimate in versatility and control flexibility. Completely redesigned, its new Dynaural Noise Suppressor now includes provisions for scratch suppression only, rumble suppression only, or both rumble and scratch suppression simultaneously. Continuously variable turnover and rolloff controls provide an infinite number of compensation settings for matching any recording characteristic.

Choice of either high or low-level magnetic phono inputs—selectable from front panel. Provision for monitoring tape with 3-head tape recorders. Monitor-Playback switch. Cathode-follower output permits long interconnecting cable—may be located up to 70 ft. from amplifier. Variable bass and treble controls; Loudness control. New mounting design simplifies panel mounting when installing in cabinet. Panel hole is cut to size and preamp slides easily into place—eliminates need for escutcheon.

Controls: Mag 1 or 2; 9-position Input Selector; Dynaural Noise Suppressor; Range (for rumble suppression, scratch suppression, etc.); Loudness control; continuously variable Turnover (calibrated for BBC, Col, Lon, NAB, RCA Ortho, NARTB, Old RCA, AES, Col 78, Decca 78, Eur 78, etc.); continuously variable Rolloff (calibrated for Col 33, Col 78, NAB, NARTB, All RCA, AES, Lon 33, BBC, Decca 78, Eur 78, etc.); Bass; Treble; Volume-Loudness; On-Off. *9 Inputs:* 5—high-level for tuner, tape, TV; 1—NARTB-tape 2—magnetic phono; 1—constant-amplitude phono. Distinctive, gold-anodized panel. Less case; see page 18. *Size:* 4¾x13¼x10" deep. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.

94 SX 567. List, $266.59. NET ... **159.95**

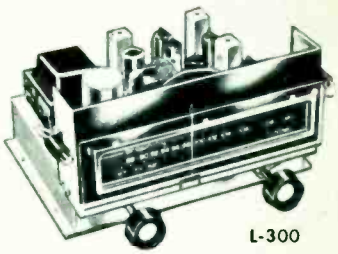
The Browning "Twins"—Basic FM or Shortwave-AM Tuners

MODEL L-300 "BROWNIE" BASIC FM TUNER ONLY. Unique, new FM tuner from the famous Browning Labs. Although very moderately priced, the L-300 delivers FM reception that will thoroughly please the most discriminating listeners. Ultra-compact for simple installation in cabinet, wall, existing furniture, etc. Employs super-sensitive Armstrong circuit. Low-noise 6BQ7A cascode RF amplifier provides high gain with minimum noise. Wide-band IF amplifier. Temperature-compensated oscillator prevents drifting off frequency. High sensitivity—3.5 microvolts for 20 db quieting. *Frequency Response:* ±1 db, 20-20,000 cps. Automatic Frequency Control provides "lock-in" tuning. Self-contained power supply. Cathode-follower permits using very long output cable. *Two Controls:* Output level control with On-Off switch; Tuning. Two audio output jacks—one for amplifier, one for tape recording. Slide rule dial. *Tubes:* 6BQ7A, 2—12AT7, 4—6AU6, 6AL5; 6X4 rectifier. With folded dipole FM antenna. *Size:* 4⅞x9x8". Less mahogany or blonde cabinet; see below. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 7 lbs.

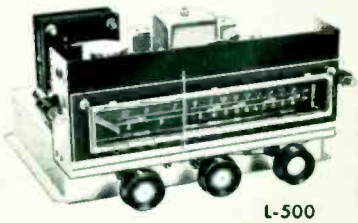
93 SX 817. NET ... **87.50**

MODEL L-500 "BROWNIE" SHORTWAVE-AM TUNER. New AM-Shortwave tuner. Provides an added measure of versatility to the hi-fi installation. Makes possible reception of musical broadcasts and other shortwave programming originating in Europe, South America, Asia, etc. Advanced superhet circuit covers the standard AM broadcast band (540 to 1600 kc), and the International Shortwave band (5.8 to 18.0 mc). Shortwave reception is equal to that of a professional communications receiver. Special delayed automatic volume control compensates for variations in signal strength due to atmospheric conditions. Cathode-follower output. Self-contained power supply. IF amplifier for broad and sharp bandwidth. 10 kc whistle filter. High gain RF stage. *Hum Level:* 60 db below 1 volt. *Distortion:* Less than 3% for 1 volt output; less than 0.5% for 1 volt output on audio stage only. Tape recorder output. *3 Controls:* Volume-On-Off; Fine Tuning; 3-pos. Selector switch for AM-Broad, AM-Sharp and Shortwave. *2 Outputs:* 1 for amplifier; 1 for tape recorder. Built-in antenna. 4⅞x9x8". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 8 lbs.

93 SX 818. NET ... **87.50**



L-300



L-500

WOOD CABINETS FOR L-300 AND L-500. Attractive, hand-rubbed cabinets, ready for installation of either tuner above. Size: 5⅞x8⅝x11". Shpg. wt., 2 lbs.

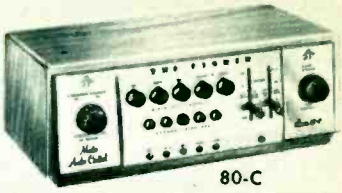
93 SX 813. Model LM. "Brownie" cabinet in mahogany.

93 SX 814. Model LB. "Brownie" cabinet in blonde. NET EACH ... **7.95**


50-R


50-AZ

FISHER HIGH-FIDELITY AUDIO COMPONENTS


80-C

Fisher Deluxe Music System Ensemble

The Fisher Music System Ensemble is a logical choice for those who wish absolute assurance of the very finest in high-fidelity reproduction. Consists of the 50-R Tuner, 50-AZ Amplifier, and the 80-C Master Audio Control—each a masterpiece of workmanship and electronic design. These three units deliver magnificent performance when used as a team in this fine ensemble—and they surpass the most exacting requirements when installed individually as companion units to other hi-fi components.

MODEL 50-R FM-AM TUNER

This beautifully engineered tuner is universally acclaimed for its extreme sensitivity, remarkably clean audio response, and drift-free operation. Incorporates every feature required for the ultimate in FM-AM reception. Ideal for use with Fisher or other top-quality hi-fi components. Up to 10 volts output with less than 0.8% distortion. Cathode-follower output; may be used up to 200 feet from amplifier or control unit. Separate shock-mounted front-ends for FM and AM. Separate DC supply for all audio tube filaments—assures extremely low hum. Variable automatic frequency control on FM; may be switched off for manual tuning.

FM Specs: Armstrong discriminator with dual limiters. Response from 20-20,000 cps, ±1 db. Cascode RF stage for extreme sensitivity; 2 microvolts for 30 db quieting on 72-ohm antenna input and 4 microvolts for 30 db quieting on 300-ohm antenna input. *AM Specs:* Two IF positions; sharp IF for minimum interference on long-distance reception and broad IF for full-fidelity. Tuned RF stage; sensitivity of less than 1 μv for 1 v. output. 10 kc whistle filter.

Two auxiliary inputs for crystal phono and TV. Controls: Off-On, Volume, Selector (AM Broad, AM Sharp, FM-AFC, FM, Phono, TV) and Tuning. Two AC outlets. 12 tubes plus tuning eye and rect. Brown panel. 8½x14¾x9¼" deep. With indoor AM loop and FM dipole. For 105-125 v., 50-60 cycles AC. Shpg. wt., 19 lbs.

98 SX 630. NET 164.50

MODEL 50-AZ BASIC AMPLIFIER

The Fisher Model 50-AZ basic amplifier is the "heart" of the Series 50 Music System Ensemble; also an outstanding amplifier for use with other custom components. Has unusual reserve power handling capacity, virtually flat response to beyond the limits of audibility, extremely high efficiency, and excellent transient response. Harmonic distortion, intermodulation distortion, and hum level are completely negligible. The Z-Matic continuously variable control feature provides superior matching of amplifier to speaker system; automatically corrects varying load impedance between speakers and amplifier.

Frequency Response: ±0.5 db, 15-60,000 cps at 40 watts. *Harmonic Distortion:* .05% at 5 watts; .08% at 10 watts; 0.3% at 40 watts; 1% at 50 watts. *Intermodulation Distortion:* 0.4% at 10 watts; 0.8% at 40 watts; 2% at 45 watts. *Hum and Noise:* Better than 96 db below full output. *Sensitivity:* Less than 1 volt for full output. *Output Impedance:* 8, 16 ohms. *Damping Factor:* 31. Cathode-follower driver stage; well-regulated bias and high-voltage supplies; input level and bias controls. Output transformer uses grain-oriented steel and has interleaved windings.

Tubes: 3—12AU7, 2—6CL6, 2—1614 (triode-connected); 2—5AW4 rectifiers. Etched aluminum chassis. 8¾x14½x9" high. For operation from 105-125 v., 50-60 cycles AC. Shpg. wt., 41 lbs.

98 SZ 628. NET 159.50

MODEL 80-C MASTER AUDIO CONTROL

New, masterfully designed preamp-equalizer for controlling the Fisher Music Ensemble or any other deluxe system. Hum and distortion are virtually non-existent. Up to 16 combinations of compensation for accurate reproduction of all records; also includes equalization for tape playback. Cathode-follower inputs and outputs provide independence from load conditions and lead lengths. DC-operated filaments for extremely low hum. 4 negative feedback loops.

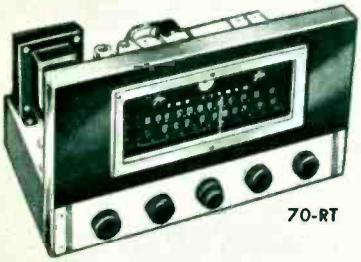
7 Inputs: 3—high-level (tuner, tape, TV), 1—magnetic phono, 1—constant amplitude phono, 1—microphone, 1—tape-playback. *Panel Controls:* Volume-Loudness/AC Off-On; Volume-Loudness switch; 5 input selector pushbuttons; 4-pos. high-frequency equalization; 4-pos. low-frequency equalization; Bass; Treble. In addition to 16 combinations of record equalization, equalization switches include settings for NARTB tape playback equalization. Each input has level control. *Harmonic Distortion:* 0.22% at 15 v. *Intermodulation:* 0.65% at 15 v. *Hum:* 85 db below 2 v. *Size:* 4¼x7¾x12¾". Less cabinet. For operation from 105-125 v., 50-60 cycles AC. Shpg. wt., 10 lbs.

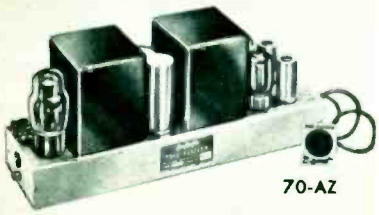
94 SX 353. NET 99.50

CABINETS FOR ABOVE. Attractive wood. 5¼x8x13 11/16". Shpg. wt., 3¼ lbs.

94 SX 354. MODEL CM. Mahogany.
94 SX 355. MODEL CB. Blonde.
NET EACH 9.95

Series 70 Deluxe Tuner and Amplifier


70-RT


70-AZ

MODEL 70-RT FM-AM TUNER

Performance of the Model 70-RT FM-AM tuner surpasses the most critical requirements of music lovers and audio perfectionists. Has full set of controls—serves as control unit for 70-AZ (at right), 50-AZ (above), or other deluxe amplifier. Offers unusual control versatility, extreme sensitivity and virtually flawless response. Has 4-position record compensator, preamp for magnetic cartridges, tone controls, and loudness control. Cathode-follower output permits using up to 200 feet of cable to amplifier. Tape recorder output jack.

FM Specs: Armstrong detector; 2 IF stages; cascode RF stage. Sensitivity for 20 db quieting: 72-ohm antenna input, 1.5 microvolts; 300-ohm antenna input, 3 microvolts. Variable automatic frequency control. *AM Specs:* 2 IF stages with broad and sharp selectivity positions: broad position for full-fidelity reception; sharp position for minimum interference during long-distance reception. Tuned RF stage. Sensitivity: 1 microvolt for 1 v. output. Whistle filter.

Panel Controls: Off-On-Bass, Loudness Off-On and Volume-Loudness (concentric), Selector (AM Broad, AM Sharp, FM with AFC, FM without AFC, AES, Ortho, NARTB, LP, and TV), Treble, Tuning. *2 Inputs:* 1—magnetic phono; 1—TV, tape recorder, etc. 13 tubes plus tuning eye and rectifier. 8½x14¾x9¼". With indoor AM and FM antennas. For 105-125 volts, 60 cycle AC. Shpg. wt., 19 lbs.

98 SX 633. NET 184.50

MODEL 70-AZ BASIC AMPLIFIER

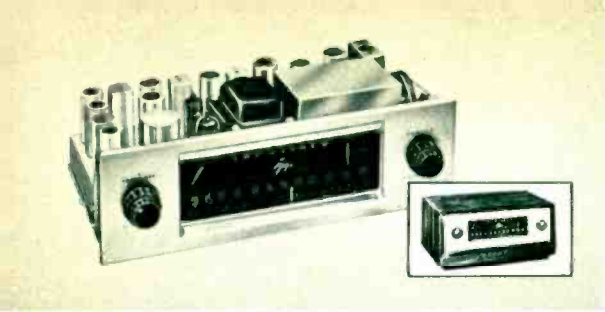
This 25-watt basic amplifier offers famous Fisher quality at very moderate cost. Has no controls; an outstanding companion unit for the Model 70-RT tuner (at left), the Master Audio Control (above), as well as other quality tuners or preamps with full sets of controls. Z-Matic circuit automatically corrects varying load impedance to the exact degree desired by the user.

Provides perfect matching of amplifier to speaker system. Peak power capacity of 50 watts assures authentic reproduction of even the loudest symphonic passages. An excellent value and a notably fine choice for the most critical music lovers. Features grain-oriented, interleaved winding output transformer and four separate feedback loops for extremely low distortion, unusual linearity and excellent transient response. Hum and noise are virtually unmeasurable.

Rated Output: 25 watts. *Frequency Response:* ±1 db from 15 to 35,000 cps at 25 watts output. *Harmonic Distortion:* Less than 0.15% at 20 watts. *IM:* Less than 0.5% at 20 watts. *Hum and Noise:* Better than 95 db below 25 watts. *Damping Factor:* 26. *Speaker Output Impedances:* 8 and 16 ohms.

Tubes: 12AT7, 12AU7, 2—5881; 5V4G rectifier. Power and output transformers are housed in sealed, drawn-steel cases. Silver-anodized chassis. Size: 6⅛x14¾x4⅛" deep. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 22 lbs.

98 SZ 634. NET 99.50



Fisher FM-80 Professional FM Tuner

The brilliant performance of this FM tuner has inspired high enthusiasm among the most critical audio connoisseurs. The FM-80 combines startling sensitivity, ultra-compact design and micro-accurate tuning. Includes two tuning meters—one indicates signal strength; the other shows when station is tuned in properly. Can be tuned with accuracy by demanding users and equally well by the unskilled. Armstrong system, dual limiters and cascode RF stage provide extreme sensitivity and superb noise rejection. Full limiting even on 1-microvolt signals. *Frequency Response:* ±1 db. 20-20,000 cps. Other deluxe features are variable automatic frequency control and two cathode-follower outputs. Output cables can be made any length up to 200 ft. Convenient 0-to-100 logging scale for spotting favorite stations. *Controls:* AFC, Off-On, and Sensitivity (concentric); and Tuning. 10 tubes and 6X4 rectifier. Brass panel. *Size:* 4⅛x12¾x7¾" deep. Less cabinet. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 15 lbs.

98 SX 624. NET **139.50**

CABINETS FOR FM-80 TUNER. Attractive wood. 6¼x13¼x8". 5 lbs.

94 SX 351. MODEL FM-M. Mahogany.

94 SX 352. MODEL FM-B. Blonde. NET EACH **14.95**

FISHER HIGH-FIDELITY ACCESSORIES

All are for 105-125 v., 60 cycle AC. *4⅞x5⅜x5"; 3¼ lbs.

*MODEL 50-M 2-CHANNEL MIXER. Mixes 2 signal sources for simultaneous feeding into hi-fi system. Permits superimposing voice from mike on recorded music, radio programs, tape recordings, etc. Cathode follower output. 2 inputs; level adjustment of sound for either input. No insertion loss.

98 S 625. NET **19.95**

*MODEL 50-PRC PREAMP-EQUALIZER. For all magnetic cartridges. 4 Turnover and 4 Rolloff positions for 16 combinations of accurate record compensation. Includes volume control; has hum balance control. Connects up to 50 ft. from amplifier. AC switch. For 105-125 v., 60 cycle AC.

94 S 350. NET **19.95**

*MODEL 50-F HI-LO FILTER. Sharp cutoff filter for suppression of record scratch, FM hiss, turntable rumble, etc. 4 positions of low-frequency and high-frequency cutoff for 16 possible combinations. Cathode follower output. AC switch.

98 S 631. NET **24.95**

MODEL PR-5 PREAMPLIFIER. Permits using magnetic cartridges with amplifiers, consoles and other phono equipment not already equipped with necessary preamp. 3¾x3⅝x3⅝". 1¾ lbs.

65 R 474. NET **10.95**

FM Boosters for Improved Reception

Regency DB-98-A

E-V 3005

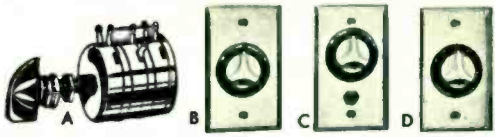
REGENCY MODEL DB-98-A. Highly stable, compact FM booster that extends reception by miles. Brings in signals in poor reception areas or where adequate antenna cannot be installed. Uses push-pull 6J6 tube in balanced circuit for maximum gain. Provides 20 db gain. 3-position (FM, On-Off) switch. In plastic cabinet. 4½x6x4½". For 110-120 volts, 60 cycles AC. Shpg. wt., 5 lbs.

97 T 234. List, $29.95. NET **17.61**

ELECTRO-VOICE MODEL 3005 TUNE-O-MATIC. Provides wide-band preamplification of FM signals in low signal areas and in primary signal areas where indoor antennas are used. No manual tuning. May be placed in or behind set. Thermal relay permits FM booster to be turned "on" and "off" by the receiver. With Hi-Lo gain switch to limit gain when signals are too strong. Size, 4x5½x5⅜". For 110-120 volts, 60 cycles AC. Shpg. wt., 3 lbs.

98 T 354. List, $45.00. NET **26.46**

Custom Installation Accessories



SPEAKER VOLUME CONTROLS. For custom systems with speakers located in more than one room. Permit controlling volume at individual speakers. Av. shpg. wt., 10 oz.

Fig. A. T-PAD TYPE. 15 watts peak audio. 2" shafts.

29 M 871. 8 ohms. NET ..... **2.50** **29 M 872.** 15 ohms NET **2.50**

Fig. B. VOLUME CONTROL ON WALL PLATE. Brushed brass. 4½x2¾". Fits std. outlet box. 15 watts peak audio. 2" deep.

94 S 451. Model L-1612/8. 8 ohms. NET

94 S 452. Model L-1612/16. 16 ohms. EACH **11.51**

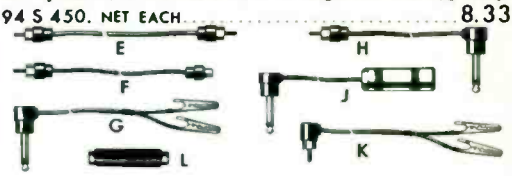
Fig. C. VOLUME CONTROL ON WALL PLATE WITH JACK. As above, but with phone jack on plate. Permits headphones or external speaker, (equipped with phone plug) to be inserted.

94 S 453. Model L-1613/8. 8 ohms. NET

94 S 454. Model L-1613/16. 16 ohms. EACH **12.49**

Fig. D. MODEL L-1601 SPEAKER SELECTOR. For selecting any one of 3 speakers, or combination, from single location. 1½" deep.

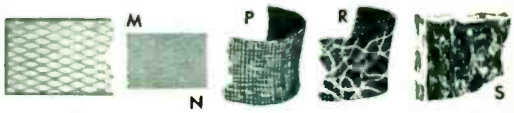
94 S 450. NET EACH **8.33**



LABTRONICS HI-FI CONNECTOR CABLES

Extremely valuable accessories for anyone installing hi-fi music system components. All are shielded cable except Figs. G and K, unshielded. Av. shpg. wt., 5 oz.

No.	Type	Fig.	Description	NET
99 S 855	C101	E	18". Phono pin plug on each end	.61
99 S 856	C102	E	36". As above	.70
99 S 857	C103	E	72". As above	.88
94 S 455	C201	F	18". Phono pin plug and jack	.76
94 S 456	C202	F	36". As above	.85
94 S 457	C203	F	72". As above	1.03
94 S 465	P701	G	10". Right angle phone plug and alligator clips	1.91
94 S 462	C104	H	72". Phono pin plug and right angle shielded phone plug	1.82
94 S 463	C301	J	10'. Right angle shielded phone plug and shielded phone jack	4.26
94 S 464	P601	K	10'. Right angle phono pin plug and alligator clips	1.32
94 S 458	C400	L	Double phono pin jack adapter	.59
94 S 459	C401	....	18". Phono pin jack on each end	.91
94 S 460	C402	....	36". As above	1.06
94 S 461	C403	....	72". As above	1.31



METAL GRILLE, GRILLE CLOTH & INSULATION

Fig. M. BRASS DIAMOND GRILLE. PATTERN. 2⅛x⅞". 4 lbs.

86 SX 070. 12x18". NET **1.76**

86 SX 071. 18x24". NET **3.23**

86 SX 072. 24x36". NET **6.14**

Fig. N. ALUMINUM FINE MESH GRILLE. 1 lb.

86 SX 063. 12x18". NET **2.12**

86 SX 064. 18x24". NET **4.56**

86 SX 069. 24x36". NET **8.42**

Fig. P. PANDANUS GRILLE CLOTH. Min. order, 1 yd. 28" widths. Wt. per yd., 6 oz.

86 SX 718. NET PER YD. **1.59**

86 SX 719. 10½-YD. ROLL **12.75**

Fig. R. BLACK AND GOLD GRILLE CLOTH. 36" widths. Minimum order, 1 yard. Wt. per yd., 6 oz.

86 SX 715. PER YD. **3.95**

PLASTIC GRILLE CLOTH. Woven Saran. Per yd., 6 oz.

86 SX 075. Bronze. **86 SX 076.** Ecru.

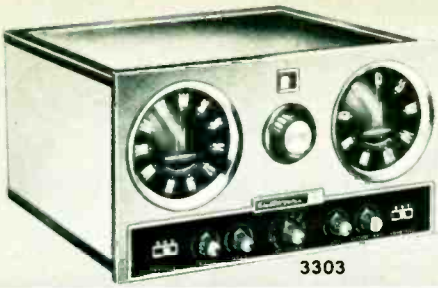
86 SX 073. Maroon. NET PER YARD **2.64**

Fig. S. FIBERGLAS ACOUSTIC INSULATION. 36" widths; ½" thick. In 5 or 10-yard lengths only. Wt., 10 yds., 4 lbs.

86 SX 710. 5-YARD PACKAGE. NET **2.50**

86 SX 711. 10-YARD PACKAGE. NET **3.80**

New Electro-Voice Hi-Fi Tuners & Amplifiers



3303

A20CL

NEW BINAURAL FM-AM TUNER WITH PREAMPLIFIER

MODEL 3303. Custom-styled hi-fi tuner with latest deluxe circuit features. Combines excellent sensitivity, micro-accurate tuning and drift-free operation. Completely independent AM and FM sections, including separate tuning dials, permit reception of stereophonic broadcasts. Included among its features are dual signal strength meters, magic eye tuning aid, preamp with individual power supply.

Dual limiters, cascode RF stage and audio squelch circuit provide extreme sensitivity and noise rejection. Cathode follower output. Other deluxe features include variable AFC, tape output jack, and 3-position "Presence" switch. *Controls:* Selector for tuner, tape, auxiliary and phono inputs; 3-position loudness control; 6-position equalizer; phono switch (magnetic or ceramic-crystal); bass, treble and volume. *Sensitivity* FM; 1μv. for 20 db quieting; AM; 5μv. for 2v. AVC. 10 kc. whistle filter. *Output* 1.25 volts per tuner.

16 tubes plus 5V3GT, 6X4 rectifiers and 6AL7 tuning eye. Finished in handsome coffee-brown baked enamel with black escutcheon and brushed brass trim. Brushed brass chassis with brown cover. 8x15x14½" deep. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.

94 SZ 306. List, $465.85. NET 273.91

MODEL 3304 BINAURAL BASIC FM-AM TUNER. Similar to above but for use with separate preamp and amplifier having complete set of controls. Has AFC, volume and FM-AM balanced-level controls. 13 tubes, plus 1 rectifier and tuning eye. Size. 8x15x14½" deep. For 110-120 v., 60 cycle AC. Shpg. wt., 38 lbs.

94 SZ 307. List, $399.16. NET 234.71

NEW LOWBOY 20-WATT AMPLIFIER

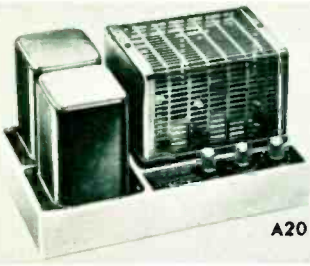
MODEL A20CL. Features "Circlotron Circuit" and critical damping for superb hi-fi reproduction. All DC is removed from output transformer—provides extra power capacity for greatly extended response at rated output, authentic reproduction of peaks, and minimum distortion. Damping factor control permits perfect match to speaker—eliminates bass loss. Beautiful, streamlined "low-boy" design—can be placed anywhere. Excellent companion piece to 3304 FM-AM tuner listed at left.

Output: 20 watts; 40 watts peak. *Response:* ±1 db. 20-20,000 cps. *Harmonic Distortion:* Less than 0.5% at 20 watts. *Intermodulation Distortion:* Less than 1% at 20 watts. *Hum and Noise:* −70 db below full output; −55 db magnetic channel. *Outputs:* 4, 8 and 16 ohms for speaker; also tape output jack. *Damping Factor:* Adjustable between 0.1 and 15. *Inputs:* Magnetic phono, ceramic-crystal phono, tuner, tape, auxiliary. *Controls:* Function Selector, Record Compensator (6-position); Presence; Loudness (3-pos.); Rumble Filter (3-pos.); Volume; Treble; Bass; Damping Factor; 2 Hum Adjustments; Power switch. *Tubes:* 7 plus 2-rectifiers. *Size:* 4⅛x15x14½" deep. Brushed brass chassis. Light brown panel with brushed brass trim. For 110-120 v., 60 cycle AC. 28 lbs.

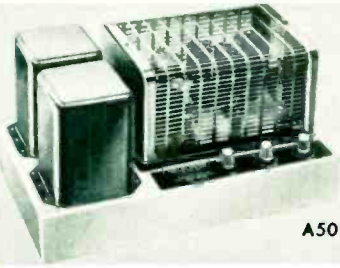
94 SZ 308. List, $207.50. NET 122.01

A15CL LOWBOY 15-WATT AMPLIFIER. Similar to above. 15 watts. 30 watts peak. Controls: Treble; Bass; Volume-Off-On. Playing Selector (tuner, tape, TV, auxiliary, phono); Phono-Cartridge Selector switch. Record compensation is color-keyed on bass and treble controls. 4¼x15x11½". Shpg. wt., 21 lbs.

94 SZ 309. List, $165.83. NET 97.51



A20



A50

PC-1

PC-2

BASIC AMPLIFIERS FEATURING WIGGINS "CIRCLOTRON CIRCUIT"

Sensational new design in amplifiers—employs "Circlotron Circuit" and controlled damping for superior hi-fi reproduction. Provides unity coupling between tubes with no switching transients and no DC in output transformer. Damping factor control assures perfect matching to speaker; prevents bass losses from overdamping. Also prevents underdamping, eliminating low frequency distortion and voice-coil override. Permits matching speaker to enclosure and enclosure to room acoustic characteristics. Very low leakage reactance; high tube efficiency with long component life for trouble-free operation.

All models have heavy-gauge brushed brass chassis, dark-brown ventilating tube-screens and transformer shells. Extremely compact, ideal for installation where only a minimum of space is available. An outstanding choice for those who insist upon thoroughly realistic music reproduction. Deliver exceptionally wide frequency response with high power handling capacity. Includes all necessary controls.

Designed for use with PC-1 or PC-2 Preamp-Remote Control units listed at right. Sensitivity, all models, 1.25 volt input for rated output. Damping Factor Control is continuously variable for perfect speaker load matching at all frequencies—covers all commercially available speakers and enclosures. Output impedance is 4, 8 and 16 ohms; Models A30 and A50 also have 70 volt line balance.

Hum and Noise Level: 85 db below rated output. *Negative Feedback:* A15—38 db; A20—33 db; A30—28 db; A50—30 db. *Controls:* Gain; Damping Factor (adjustable between .1 and 15); Hum adjustment; power switch. Built-in power supply. Input impedance is 250,000 ohms.

Tubes: Model A15; 12AX7, 12BH7, 2—EL84, 2—6X4 rectif. Model A20; 12AX7; 12BH7; 2—6V6GT; 2—6X4 rectif. Model A30; 12AX7; 12BH7; 2—1614; 2—5V3GT rectif. Model A50; 12AX7; 12BH7; 2—6550; 2—5U4GB rectif. With Input Level Control. For 110-120 volts, 60 cycle AC.

Stock No.	Mfrs. Type	Rated Output	Response ±5 db	% Distortion Harmonic	% Distortion 1M	Size H.W.D.	Shpg. Wt. Lbs.	List	NET
94 SZ 310	A15	15 W	20-50,000 cps	.15	0.35	5⅞x12¼x8¼"	19½	$115.83	68.11
94 SZ 311	A20	20 W	20-60,000 cps	.5	1.0	6¾x12¼x8¼"	22½	141.63	83.30
94 SZ 312	A30	30 W	20-75,000 cps	.3	0.5	7x13¾x9"	25	180.00	105.84
94 SZ 313	A50	50 W	20-75,000 cps	.5	1.0	8½x16½x10½"	45	281.67	165.62

PREAMP AND REMOTE CONTROL SETS

MODEL PC-1 CONTROL CENTER. Remote preamp-equalizer with "Presence" control. Compensates for Fletcher-Munson effect. *Distortion:* Less than .02%. *Noise Level:* —75 db. *Controls:* Playback Selector (5 input positions, plus 4 level controls—Tuner, Tape, TV, Auxiliary and Phono); 6-position Record Equalizer; 6-position Loudness Control; 3-position Rumble Filter; Bass; Treble; Presence; Volume; Power. Phono switch for magnetic or crystal-ceramic cartridges. Tape recording output jack. 2 chassis hum controls, fuse, one switched AC outlet, one unswitched AC outlet for record changer. Cathode-follower output. Has 3 tubes plus rectifier. 8x15x4" deep. Depth behind escutcheon, 7". Brushed brass chassis. Brown ventilating cover. Brown and black escutcheon; brushed brass trim. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 12 lbs.

94 SX 314. List, $165.83. NET 97.51

MODEL PC-2 PREAMP. Economical remote preamp-equalizer similar to above. *Controls:* Playing Selector (Tuner, Tape, TV, Auxiliary, Equalized Phono); Bass, Treble; Phono-Switch (magnetic or ceramic-crystal cartridges); Off-On. Tape recorder output. 2 tubes plus rectifier. 4⅛x15x7½". For operation from 110-120 v., 60 cycle AC. Shpg. wt. 11 lbs.

94 SX 315. List, $111.67. NET 65.66

Custom Components Available on ALLIED's Easy Payment Plan—See Page 315

Electro-Voice Research-Engineered High-Fidelity Speakers

THREE-WAY SPEAKERS

Employ three coaxially mounted sections for a superb standard of performance. TRX triaxial speakers deliver vibrant bass, full-bodied mid-range response and ultraclean treble. Features concentric mounting of all elements for wide-angle dispersion; adjustable balance control; half-section constant K crossover network. Edgewise-wound voice coil design provides 18% more efficiency and lower transient distortion. Heavy magnet structures. Excellent for use in custom high fidelity installations or for modernization of existing systems. All are 16 ohm impedance.

MODEL 15TRX. Electro-Voice's finest 3-way speaker. Custom-engineered in every detail to reproduce with a startling degree of realism. Uses extra-large 5¾ lb. magnet for minimum transient distortion and remarkably clean and distinct bass. Consists of Radax-type 15" speaker with "Whizzer" high-frequency propagator; coaxially mounted T-35 "Super-Sonax" very-high-frequency tweeter; X-36 half-section, constant K crossover network; and the AT-37 H-F level control. Uses 2½" aluminum voice coil. Frequencies above 3500 cps are distributed to "Super-Sonax" tweeter by the X36 crossover network. AT-37 level control adjusts tweeter output. Response, ±5 db. 30-15,000 cps (in Regency or Empire enclosure). Resonance, 40 cps. Capacity, 30 watts. Depth behind panel, 9⅛". 16 ohms. Shpg. wt., 49 lbs.

81 DZ 235. List, $225.00. NET....**132.30**

MODEL 15TRXB. New, moderate cost 15" speaker similar to above. Same excellent features, but employs smaller 1¼ lb. magnet. 3-way coaxial-mounted sections for smooth bass, mid-range and treble response. Consists of Radax-type 15" speaker with "Whizzer" high-frequency propagator; T-35B "Super-Sonax" VHF tweeter; HF level control. Mechanical crossover at 2000 cps. Built-in electrical crossover at 3500 cps—feeds to T-35B VHF tweeter. Response, ±5 db. 30-15,000 cps (in Regency or Empire enclosure). Power handling, 20 watts. Resonance, 38 cps. 16 ohms. 7⅝" depth. Shpg. wt., 15 lbs.

81 DZ 761. List, $130.00. NET....**76.44**

MODEL 12TRX. 12" speaker. Has same superior design features of Model 15TRX above. Use of Radax-type speaker insures phenomenal bass response; mid-range characteristic provides vivid realism; highest audible frequencies are faithfully reproduced by the T-35 Super-Sonax Very High-Frequency driver. AT-37 H-F control compensates for room furnishings—allows matching to room acoustics. Half-section constant K X-36 crossover network. Response, ±5 db. 30-15,000 cps. (in Aristocrat enclosure). Resonance, 40 cps. 3½ lb. magnet. Power capacity, 25 watts. Depth, 8". 16 ohms. Shpg. wt., 32 lbs.

81 DZ 236. List, $190.00. NET.....**111.72**

MODEL 12TRXB. Excellent 12" speaker similar to above except 1¼ lb. magnet. With Radax principle and 2000 cps first crossover for exceptional bass and mid-range response. 3500 cps built-in electrical crossover feeds to the T35B VHF driver for reproduction beyond the range of audibility. With brilliance control, wired with 5-ft. cable. Power handling, 20 watts; 30 watts on peak. Response (in Aristocrat enclosure), ±5 db. 35-15,000 cps. 16 ohms. 6⅛" depth. Shpg. wt., 13½ lbs.

81 DX 239. List, $99.50. NET.....**58.51**

RADAX SPEAKERS

Radax principle provides highly efficient and economical method of using two coaxially mounted cones operating from a single voice coil. Built-in mechanical crossover from low-frequency cone to high-frequency propagator permits design of each cone for optimum response.

MODEL SP15. Deluxe 15" Radax speaker with special 125 sq. in. bass cone and 2½" aluminum voice coil. Provides exceptionally fine bass, mid-range and treble reproduction. Excellent for custom home music systems. Heavy 5¼ lb. Alnico V magnet for unusually good damping—superb transient response and remarkably distinct bass. Resonance of bass cone is 40 cps. Bass cone is directly coupled to "Whizzer" HF radiator. Insures 100° treble dispersion. Frequency response, ±5 db. 30-13,000 cps. Rated, 30 watts. 16 ohms. Crossover, 3000 cps. Requires 13½" dia. baffle opening; 9" depth behind mtg. panel. 41 lbs.

81 DZ 280. List, $130.00. NET....**76.44**

MODEL SP15B. New, 15" Radax speaker similar to above except for smaller 1 lb. magnet and 15-20 watts handling capacity. Response characteristics—30-13,000 cps. Perfect choice for the moderate-cost home hi-fi system. Seamless molded type bass cone directly coupled to "Whizzer" HF radiator. Insures very wide dispersion—extends treble 2 full octaves. Crossover, 3500 cps. Resonance, 38 cps. Imp., 16 ohms. Requires 13½" baffle opening; 7⅝" depth behind mtg. panel. Shpg. wt., 12 lbs.

81 DZ 760. List, $65.00. NET....**38.22**

MODEL SP12. Popular, moderately-priced 12" speaker. Ideal for hi-fi installations and modernization of older systems. Radax principle uses two cones with single voice coil. 4000 cps built-in mechanical cross-over network. Bass cone resonates at 43 cps. Incorporates "Whizzer" high-frequency, wide-dispersion radiator for extended treble response. 100° solid angle dispersion. Highly efficient 3 lb. magnet. Response, ±5 db. 30-13,000 cps. 2" aluminum voice coil. Rated, 25 watts. Impedance, 16 ohms. 11" baffle opening 7½" depth behind mounting panel. Shpg. wt., 25 lbs.

81 DZ 279. List, $95.00. NET.....**55.86**

MODEL SP12B. 12" speaker, similar to above, but uses a smaller, 1-lb. magnet. Considered a "best buy" by many authoritative high fidelity publications, the SP-12-B ranks high on the list of desirable hi-fi components. Rated at 15-20 watts. Resonance, 50 cps. Response, ±6 db. 30-13,000 cps. 16 ohms impedance. Crossover, 4500 cps. RETMA sensitivity rating, 45 db. 11" baffle opening, 5¾" depth behind mounting panel. Shpg. wt., 10 lbs.

81 DX 278. List, $49.50. NET.....**29.11**

MODEL SP8B. 8" version of above. Excellent for limited space hi-fi applications. Employs same Radax-type construction features—concentric mounting of all elements for extremely smooth reproduction. Low cone resonance of 65 cps and "Whizzer" high frequency propagator provide good overall balance and wide dispersion angle. 1-lb. Alnico V magnet. Power handling capacity, 15-20 watts. Response, ±6 db. 35-13,000 cps. Crossover, 6000 cps. 16 ohms impedance. RETMA sensitivity rating, 44 db. 7" baffle opening, 4⅜" depth behind panel. Shpg. wt., 8 lbs.

81 D 277. List, $47.50. NET.....**27.93**

Low-Frequency Woofers

Featured in E-V speaker systems on following pages. Can also be used as components in custom 2 and 3-way sound systems. All woofers in listing are rated at 20-30 watts except Models 12BW, 15BW and 15BWK (15-20 watts). Compliance of outer cone rolls and inner spider carefully calculated for maximum extended bass range response. Cones are specially treated for moisture and fungus resistance. Heavy Alnico V magnets. "K" types are recommended for Klipsch type "K" systems only (have 3.2 ohms DC resistance). All models have 16 ohm impedance.

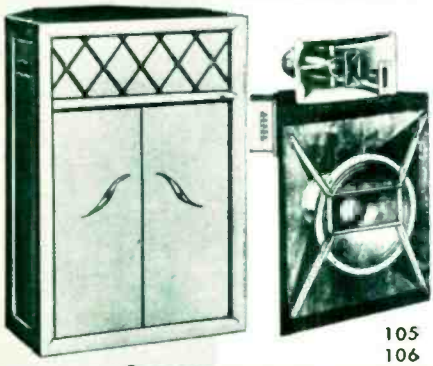
Stock No.	Type	Reson. Freq.	Shpg. Wt.	List	NET EACH
81 DX397	12BW	47	10 lbs.	$ 49.50	29.11
81 DZ 285 81 DZ 431	12W 12WK	40 41	25 lbs. 25 lbs.	95.00	55.86
81 DZ 762 81 DZ 850	15BW 15BWK	38 38	12 lbs. 12 lbs.	65.00	38.22
81 DZ 286 81 DZ 428	15W 15WK	30 32	41 lbs. 41 lbs.	130.00	76.44
81 DZ 287 81 DZ 433	18W 18WK	27-30 22-24	43 lbs. 43 lbs.	150.00	88.20

See Pages 24-25 for Complete Listings of Enclosures for E-V Speakers

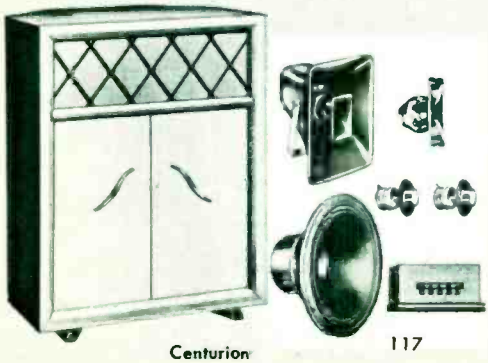
Electro-Voice

NEW CONCEPTS IN HIGH-FIDELITY REPRODUCTION

Patrician



Georgian



Centurion

Complete Speaker Systems and Enclosures

Complete selection of E-V speaker systems, driver component packages and horn assemblies for the ultimate in realistic, wide-range sound reproduction. All E-V speaker systems (except the Skylark), utilize the famous Klipsch-licensed horn loading principle. Al, driver components are research-engineered for ultra-efficient operation. Where systems are desired for built-in installation, individual speaker components can be purchased as required. This enables music lovers to enjoy clean, flawless sound while assembling a complete 2, 3 or 4-way speaker system over a period of time. Thus, a system stays within the user's budget, but keeps pace with listening requirements.

PATRICIAN IV 4-WAY SPEAKER SYSTEM

One of the finest speaker systems available at any price! Offers the ultimate in tonal realism and beauty of design. Easily blends into traditional or modern room motifs. Features Klipsch-licensed "K" indirect-radiator design. Complete 4-way system that divides the audio spectrum between separate drivers, each specifically designed to reproduce its own band with optimum distortion-free fidelity. Components, perfectly matched, include: 18WK 18" L-F driver (35 to 200 cps); 2—8281HF drivers with 2—A8419 wood and phenolic horn sections (200 to 600 cps); T25A treble driver (600 to 3500 cps) with a 611D HF-diffraction horn; T35 super tweeter (3500-20,000 cps); 3—AT37 H-F level controls; X2635 4-way crossover (200, 600 and 3500 cps). Custom-crafted corner cabinet made of selected woods. Capacity, 35 watts; 70-watt peaks. All components installed. Impedance, 16 ohms. Size: 62" H, 29" W, 29⅛" D. Shpg. wt., 380 lbs.

81 DZ 758. Mahogany. List. NET
81 DZ 759. Korina Blonde. $1287.50. EACH 757.05

MODEL 103C 4-WAY DRIVER COMPONENTS PACKAGE. Includes all driver components used in the Patrician, less Model 115 Klipsch "K" horn listed below. With instructions. Shpg. wt., 106 lbs.
81 DZ 774. List. $580.00. NET 341.04

MODEL 115 KLIPSCH "K" TYPE LF FOLDED HORN. Adding this horn to Model 103C components package, forms complete 4-way speaker system, less Patrician outer decorative cabinet. Black matte stain. Can be painted—will not take furniture finish. Size (HWD): 57½x37½x26½". Shpg. wt., 150 lbs.
81 DZ 775. List. $300.00. NET 176.40

GEORGIAN 4-WAY SPEAKER SYSTEM

Complete 4-way speaker system in attractively styled, medium-sized cabinet. Divides the audio spectrum into low-bass section, mid-bass section, treble section and very high range. Amazingly clean, highly realistic sound is assured by use of specialized driving units for each section. Employs Klipsch-licensed "K" indirect radiator folded corner horn with 15WK LF driver from 30-300 cps. X336 crossover feeds 8481HF coaxial mid-bass and treble assembly with acoustic crossover at 1000 cps. 3500 cps section of X336 feeds T35 VHF driver to beyond audible range. Two AT37 level controls. Capacity, 35 watts; 70-watt peaks. Complete with all components in Georgian cabinet. Impedance, 16 ohms. Size (HWD): 53x34x26". Shpg. wt., 290 lbs.
81 DZ 402. Mahogany. List. $825.00. NET 485.10
81 DZ 403. Korina Blonde. List. $858.33. NET 504.70

MODEL 105 4-WAY DRIVER COMPONENTS PACKAGE. Includes all driver components used in the Georgian, less Model 106 Klipsch "K" horn listed below. With instructions. Shpg. wt., 97 lbs.
81 DZ 750. List. $347.50. NET 204.33

MODEL 106 KLIPSCH "K" TYPE LF FOLDED HORN. Forms complete Georgian 4-way system when used with Model 105 components package. Less outer decorative cabinet. Flat black matte finish. Can be painted. HWD: 38½x32¼x22¾". Shpg. wt., 97 lbs.
81 DZ 751. List. $150.00. NET 88.20

NEW CENTURION ENCLOSURE AND 4-WAY SPEAKER SYSTEM

SENIOR CENTURION IV. New, 4-way speaker system employs Klipsch principles for clear bass tones and silk-smooth high frequency reproduction. Uses Model 105 Georgian driver components (see description above). Has sealed cavity behind 15" LF driver cone for promoting excellent transient response and subduing cone excursions to overcome distortion. Adds 1½ octaves of smooth bass range over enclosures of comparable size. Capacity, 35 watts; 70-watt peaks. Impedance, 16 ohms. HWD: 40x30x22½". Shpg. wt., 137 lbs.
81 DZ 776. Mahogany. List. $625.00. NET 367.50
81 DZ 777. Blonde. List. $640.00. NET 376.32

CENTURION IV. Similar to above in appearance, size and construction, but uses Model 117 driver components; employs "W" single-path indirect radiator folded horn with 15BWK LF driver from 30-300 cps. X336 crossover feeds new 847HF coaxial mid-bass and treble assembly with acoustical crossover at 1500 cps. 3500 cps section of X336 feeds T35B VHF driver to beyond audibility. Two AT37 controls for presence and brilliance. Power handling, 15 watts; 30-watt peaks. Impedance, 16 ohms. HWD: 40x30x22½". Shpg. wt., 125 lbs.
81 DZ 778. Mahogany. List. $495.00. NET 291.06
81 DZ 779. Blonde. List. $510.00. NET 299.88

CENTURION CABINET ONLY. Same cabinet as used in both the Senior and Centurion IV 4-way speaker systems above. Includes folded corner horn—add a Model 105 or 117 driver components package to form 4-way speaker system. Shpg. wt., 83 lbs.
81 DZ 780. Mahogany. List. $263.00. NET 154.64
81 DZ 781. Blonde. List. $278.00. NET 163.46

MODEL 117 4-WAY DRIVER COMPONENTS PACKAGE. All driver components in Centurion IV system. Shpg. wt., 53 lbs.
81 DZ 782. List. $232.00. NET 136.42

Letter Z in Stock Number Indicates Express Shipment Only

Research-Engineered High-Fidelity Components Offering Smooth Response, Low Distortion, High Efficiency

REGENCY TWO OR THREE-WAY SPEAKER SYSTEMS AND ENCLOSURES

REGENCY III 3-WAY SYSTEM. Complete 3-way music system in beautiful enclosure for corner or wall use. Employs Klipsch folded corner horn with "built-in" corner. Includes 15W Woofer, T35 VHF Driver, T25A Tweeter, 8HD Horn, X36 Crossover Network, X8 Crossover Network and AT37 Level Control. All components are mounted in the Regency cabinet. Impedance, 16 ohms. Size: 29⅝" high, 33½" wide, 19" deep. Shpg. wt., 140 lbs.

81 DZ 496. Mahogany.
List, $592.00. NET 348.10

81 DZ 497. Korina Blonde.
List, $607.00. NET 356.92

REGENCY II 2-WAY SYSTEM. As above, less Model T35 VHF Driver, Model X36 full ½ section network and Model AT37 VHF level control. Shpg. wt., 132 lbs.

81 DZ 411. Mahogany.
List, $517.00. NET 304.00

81 DZ 412. Korina Blonde.
List, $532.00. NET 312.82

REGENCY ENCLOSURE. Klipsch-licensed folded horn enclosure, superlatively styled in lowboy motif. Brushed brass grille. For 15" speakers or 2- or 3-way systems. Has integral "built-in corner." Can be used in corner or against wall of room. Provides one full octave of added bass response and increases power-handling capacity of speaker by proper loading. Size: 28⅝" H, 33½" W, 19" D. Shpg. wt., 88 lbs.

81 DZ 422. Mahogany.
List, $200.00. NET 117.60

81 DZ 423. Korina Blonde.
List, $215.00. NET 126.42

MODEL 114B SYSTEM WITH MTG. BOARD. Regency III system, less only cabinet. 26⅝x32½x13½". Shpg. wt., 107 lbs.

81 DZ 498. List, $387.00. NET 227.56

MODEL 114A SYSTEM WITH MTG. BOARD. Regency II system, less only cabinet. 26⅝x32½x13½". Wt., 95 lbs.

81 DZ 427. List, $312.00. NET 183.46

Regency

114B

NEW EMPIRE TWO OR THREE-WAY SPEAKER SYSTEMS & ENCLOSURES

EMPIRE 1A 3-WAY SYSTEM. New, pleasingly styled enclosure housing 3-way music system. Operates against a flat wall or in a corner. Smooth, extended bass reproduction, unmarred by peaks or valleys. Consists of 15BW LF Driver, T10A HF driver with 8HD horn, T35B VHF Driver, X825 and X36 Crossover Networks, and AT37 Level Control. Capacity, 15-20 watts. All components are mounted in the Empire cabinet. Impedance, 16 ohms. HWD: 25⅝x33½x17". Shpg. wt., 177 lbs.

81 DZ 765. Mahogany.
List, $386.17. NET 227.07

81 DZ 766. Blonde.
List, $396.17. NET 232.95

EMPIRE 1 2-WAY SYSTEM. As above, less T35B VHF Driver, X36 Crossover, AT37 Level Control. Shpg. wt., 165 lbs.

81 DZ 767. Mahogany.
List, $331.17. NET 194.73

81 DZ 768. Blonde.
List, $341.17. NET 200.61

EMPIRE ENCLOSURE. New, moderately priced enclosure designed to take Model 116 or 116A Empire components below, or 114B or 114A Regency components above. Klipsch-licensed design uses augmented throat inductance to lower Q of rear air-load mass—assures superior low-frequency response. Operates in corner or against a flat wall. Beautiful hardwood veneers; hand-rubbed finish. HWD: 25⅝x33½x17". Shpg. wt., 70 lbs.

81 DZ 769. Mahogany.
List, $131.67. NET 77.42

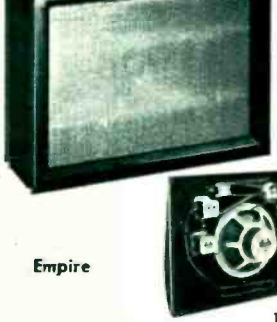
81 DZ 770. Blonde.
List, $141.67. NET 83.30

MODEL 116 SYSTEM WITH MTG. BOARD. Empire 1 system (at left) less cabinet. 26⅝x32½x12½". 95 lbs.

81 DZ 772. List, $199.50. NET 117.31

MODEL 116A SYSTEM WITH MTG. BOARD Empire 1A system (at left) less cabinet. 26⅝x32½x12½". Shpg. wt., 107 lbs.

81 DZ 771. List, $254.50. NET 149.65



Empire

116A

ARISTOCRAT TWO OR THREE-WAY SPEAKER SYSTEMS & ENCLOSURES

ARISTOCRAT I SYSTEM. Consists of 12BW Woofer, T10A Tweeter, 8HD Horn, X825 Crossover Network, Klipsch-licensed corner enclosure. 29½x19x16½". Shpg. wt., 50 lbs.

81 DZ 405. Mahogany.
List, $299.00. NET 175.81

81 DZ 406. Korina Blonde.
List, $309.00. NET 181.69

ARISTOCRAT 1A SYSTEM. As above but with addition of T35B VHF Driver, X36 Crossover, AT37 Level Control. Shpg. wt., 61 lbs.

81 DZ 763. Mahogany.
List, $354.00. NET 208.15

81 DZ 764. Korina Blonde.
List, $364.00. NET 214.03

ARISTOCRAT II SYSTEM. 2-way system. 12W Woofer, T25A Tweeter, 8HD Horn, X8 Crossover. Shpg. wt., 70 lbs.

81 DZ 407. Mahogany.
List, $392.00. NET 230.50

81 DZ 408. Korina Blonde.
List, $402.00. NET 236.38

ARISTOCRAT III SYSTEM. As above but with additon of T35 VHF Driver, X36 Crossover, AT37 Level Control. Shpg. wt., 74 lbs.

81 DZ 439. Mahogany.
List, $467.00. NET 274.60

81 DZ 442. Korina Blonde.
List, $477.00. NET 280.48

ARISTOCRAT ENCLOSURE. Klipsch-licensed folded horn corner enclosure. Designed to produce optimum results with E-V coaxial systems listed below. HWD: 29½x19x16½". Shpg. wt., 52 lbs.

81 DZ 295. Mahogany.
List, $110.00. NET 64.68

81 DZ 296. Korina Blonde.
List, $120.00. NET 70.56

MODEL 108 SYSTEM WITH MOUNTING BOARD. Aristocrat I system, less cabinet. 27x18x12½". Shpg. wt., 39 lbs.

81 DZ 425. List, $184.00. NET 108.19

MODEL 108A SYSTEM WITH MOUNTING BOARD. Aristocrat 1A system, less cabinet. 27x18x12½". Shpg. wt., 50 lbs.

81 DZ 773. List, $239.00. NET 140.53

MODEL 111 SYSTEM WITH MOUNTING BOARD. Aristocrat II system, less cabinet. 27x18x13½". Shpg. wt., 55 lbs.

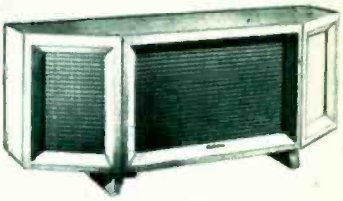
81 DZ 426. List, $277.00. NET 162.88

MODEL 111A SYSTEM WITH MOUNTING BOARD. Aristocrat III system, less cabinet. 27x18x13½". Shpg. wt., 68 lbs.

81 DZ 443. List, $352.00. NET 206.98

108A

Aristocrat



Skylark

PICCOLINO CABINET

Compact, attractive housing only for Model T35 or T35B driver. X36 crossover network and AT37 level control. Designed to simplify installation of auxiliary super tweeter in present systems without mechanical installation within reproducer itself. Lumite grille cloth. 6⅜x8x5⅝". Shpg. wt., 6 lbs.

81 D 545. Mahogany.

81 D 546. Korina Blonde.
List, $15.00. NET EACH 8.82

BARONET SPEAKER ENCLOSURES

For 8" speakers. Less driver components. HWD: 22⅞x14½x13¾". Shpg. wt., 24 lbs.

81 DZ 418. Mahogany.
List, $65.00. NET 38.22

81 DZ 419. Korina Blonde.
List, $69.00. NET 40.57

SKYLARK 3-WAY SYSTEM

Employs SP8C 8" coaxial driver. X36 crossover and T35B VHF driver. HWD: 14x33x10¼". Shpg. wt., 30 lbs.

81 DZ 547. Mahogany.
List, $149.50. NET 87.91

81 DZ 548. Korina Blonde.
List, $154.50. NET 90.85

Piccolino

Baronet

Electro-Voice "Do-It-Yourself" Enclosure Kits

KD-1

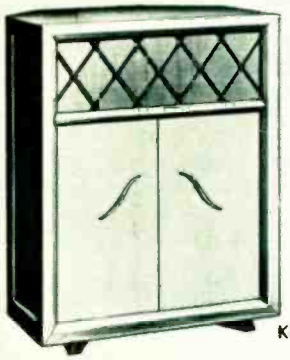
New, complete kits of components and accessories for construction of the famous E-V Klipsch-licensed folded horn speaker enclosures. It's easy and economical to assemble and finish your own "Patrician," "Georgian," "Centurion," "Regency," "Empire," "Aristocrat," or "Baronet" enclosure from these complete kits with the step-by-step instructions supplied. All parts are precision cut on the same factory equipment which forms the completed E-V cabinets described on pages 24 and 25. Slight differences in trim have been made to facilitate home assembly.

The kits listed below and at right include all materials necessary for assembling complete, professional looking enclosures. All lumber parts are cut to exact size, each edge is mill-sawed, mitered joints and compound angles are accurate to insure airtight seals. Utility models (KD-1 and KD-2) use top grade multi-ply Douglas Fir. All others use beautiful tropical mahogany hardwood veneers with eye-pleasing grain patterns.

Mating surfaces have matched panels for uniform design. Glue, screws, and nails are included; also black lacquer for staining interior baffle surfaces. Finishing kits in a variety of standard colors are listed. Each kit is supplied with complete, detailed, step-by-step instructions and illustrations. Kits from KD-3 through KD-7 are also supplied with grille cloth. Anyone can assemble these kits using only the most basic tools.

KD-2

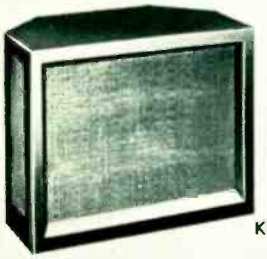
MODEL KD-1 "PATRICIAN IV" INTERIOR WORKING ASSEMBLY. For those who want the ultimate in reproduced music. Same as Model 115 K-Horn (page 24), but in kit form. Will not take a furniture finish but can be painted. Offers advantages of Patrician enclosure, but for built-in installation in walls, custom furniture, etc. Designed for use with 103C 4-way driver components. Size: 57x34x25½" deep. 106 lbs.
81 DZ 783. NET **97.02**



KD-3

MODEL KD-2 "GEORGIAN" INTERIOR WORKING ASSEMBLY. Second only to the "Patrician" in Electro-Voice line. For flawless music reproduction with extended-range response. Same as Model 106 (page 24), but in kit form. Will not take a furniture finish but can be painted. Designed for use with 105 4-way driver components in built-in installations. Size: 38½x32¼x22¾" deep. Shpg. wt., 88 lbs.
81 DZ 784. NET **56.84**

MODEL KD-3 NEW "CENTURION" FURNITURE-TYPE ENCLOSURE KIT. Folded corner horn enclosure for use with Model 105 or 117 4-way driver components. Exposed surfaces are smooth-sanded, ready for finishing. *Suggested accessories:* Finishing kit and AK-4 grille kit. Size: 42x29x22½" deep. Shpg. wt., 75 lbs.
81 DZ 785. NET **77.42**



KD-4

MODEL KD-4 "REGENCY" FURNITURE-TYPE ENCLOSURE KIT. Famous Regency design speaker enclosure for use in corner or against wall of room. For use with any quality 15" speaker, 114A or 116 2-way system, 116A or 114B 3-way system (page 25). Smooth-sanded, ready for finishing. *Suggested accessories:* Finishing kit; optional AK-5 grille. Size: 29½x33½x19" deep. Shpg. wt., 70 lbs.
81 DZ 786. NET **67.62**

MODEL KD-5 NEW "EMPIRE" FURNITURE-TYPE ENCLOSURE KIT. (Not illustrated). Folded corner horn enclosure; similar in appearance to Regency listed above. Simple, effective design for quick, easy assembly. For use with any quality 15" speaker or the component systems listed with the Regency above. *Suggested accessory:* finishing kit. Size: 29½x32x17" deep. Shpg. wt., 45 lbs.
81 DZ 787. NET **47.04**

KD-6

KD-7

MODEL KD-6 "ARISTOCRAT" FURNITURE-TYPE ENCLOSURE KIT. The Aristocrat space saving corner design is a popular choice for limited space applications. Achieves extended bass range using the walls of room as horn. For use with any 12" coaxial or triaxial speaker, the 111 or 108 2-way system, 111A or 108A 3-way system. *Suggested accessories:* Model AK-6 grille and finishing kit. Size: 29⅝x19x17" deep. Shpg. wt., 37 lbs.
81 DZ 788. NET **35.28**

MODEL KD-7 "BARONET" FURNITURE-TYPE ENCLOSURE KIT. Designed for 8" driver units; smallest of the folded corner horn enclosures. Occupies less than 1 square foot of floor space. For use with any high quality 8" speaker. For 3-way performance, use the Radax SP8B coaxial speaker with X36 crossover and T35B high-frequency driver with AT37 level control. (See page 25). *Suggested accessory:* Finishing kit. Completed size: 22⅞x14½x13¾" deep. Shpg. wt., 24 lbs.
81 DZ 789. NET **23.52**

FINISHING KITS FOR FURNITURE-TYPE ASSEMBLIES. These finishing kits are available in choice of colors. Each kit contains sufficient materials for finishing any of the KD enclosures. Kits contain sandpaper, excelsior for applying filler, steel wool for smoothing lacquer, pumice for mirror gloss. Also includes sealer, toner, filler, stick of patching shellac, stain and complete set of instructions. Blonde kits include bleach. Shpg. wt., 4 lbs.

81 D 790. Model 513. Walnut.
81 D 791. Model 514. Mahogany.
81 D 792. Model 515. Red Mahogany.
81 D 793. Model 516. Honey Maple.
81 D 794. Model 517. Golden Oak.
81 D 795. Model 518. Jet Black.
Above Kits. NET EACH **4.90**

METAL TRIM AND GRILLE KITS. For smart, professional finished appearance of any custom designed enclosures. Stylings duplicate popular decorator designs.

MODEL AK-3. Trim kit for "Patrician" and "Georgian" style exteriors. Consists of two 7x1" decorative handles, and modern crossbar grille. Brushed and lacquered antique brass finish. Grille is 33½x10". Includes attractive gold decals for speaker controls. Shpg. wt., 4 lbs.
81 DX 796. NET **11.76**

MODEL AK-4. As above, but for "Centurion" design. Handles are 5x¾". Grille is 31x8". With decals for speaker controls. Shpg. wt., 3 lbs.
81 DX 797. NET **8.82**

MODEL AK-5. For "Regency" style exterior. Consists of lacquered antique brass finish grille, 24x31", and decals for speaker controls. Shpg. wt., 3 lbs.
81 DX 798. NET **5.88**

MODEL AK-6. For "Aristocrat" style exterior. As above, but slightly smaller grille. With decals. Shpg. wt., 3 lbs.
81 DX 799. NET **4.70**

ELECTRO-VOICE SPEAKER ENCLOSURE PLANS. Instruction booklets containing complete plans and list of materials necessary to build any of the E-V speaker enclosures. The instruction booklets are each divided into five sections. (1) description of the specific enclosure and system, plus performance to be expected; (2) selection of materials, layout and cutting to size; (3) assembling the enclosure; (4) installation of speakers; (5) built-in systems which become part of house. Include step-by-step instructions, drawings, photos and hints to simplify building. Postpaid in U.S.A.

No.	Plan	For	NET
38 K 138	IB-1	Patrician horn	1.47
38 K 139	IB-2	Georgian horn	1.47
38 K 140	IB-3	Centurion	.98
38 K 141	IB-4	Regency	.98
38 K 142	IB-5	Empire	.98
38 K 143	IB-6	Aristocrat	.98
38 K 144	IB-7	Baronet	.73

Letter Z in Stock Number Indicates Express Shipment Only

Electro-Voice High Frequency Components

MODEL T35 "SUPER-SONAX" VERY HIGH FREQUENCY TWEETER. For clean, extended high frequency response—3500 cps to beyond range of audibility. Adds at least one more octave of highs. Features wide-angle (180°) dispersion horn; cutoff, 1500 cps. Uses molded phenolic impregnated linen diaphragm. Use with X36 crossover and AT37 level control. For systems rated at 20 watts or over. Crossover, 3500 cps. Impedance, 16 ohms. Horn size; 4½" long x 1½" wide. Pot size; 2⅝" dia., 3⅜" deep overall. Shpg. wt., 2 lbs.
81 D 434. List, $55.00. NET 32.34

MODEL T35B VHF TWEETER. Same as T35 above but for systems with speakers rated under 20 watts. Dispersion, 180°; cutoff, 1500 cps. Imped., 16 ohms. X36 crossover network required. Pot size, 1¾" dia.; 3" depth overall. Shpg. wt., 2 lbs.
81 D 432. List, $35.00. NET 20.58

MODEL AT37 LEVEL CONTROL. 16-ohm L-pad, for adjustment of mid-range and tweeter output. Shpg. wt., 6 oz.
81 D 437. List, $6.00. NET 3.53

MODEL T10A HIGH-FREQUENCY DRIVER. For ultra-clean, wide-range response. Used with 8HD or 6HD HF diffraction horn and appropriate crossover network. Response, ±5 db, 400-13,000 cps. Rated, 20 watts. Impedance, 16 ohms. ½-lb. Alnico V magnet. 3¾" dia., 3" deep. Throat, ⅞". Shpg. wt., 5 lbs.
81 D 424. List, $67.50. NET 39.69

MODEL T25A HIGH FREQUENCY DRIVER. Highly efficient, clean reproduction. Uses phenolic-impregnated linen diaphragm for added strength. Use with 8HD or 6HD horn and appropriate crossover network. Response, ±5 db, 400-13,000 cps. Rated, 20-30 watts. Impedance, 16 ohms. 1 pound Alnico V magnet. 3¾" dia. 4⅛" deep. Throat dia., ⅞". Wt., 8 lbs.
81 D 288. List, $95.00. NET 55.86

MODEL 848HF MID-RANGE DRIVER AND HORN. Two-way coaxial compression-type mid-bass and treble driver assembly with acoustically designed horn. Frequency response, 300-10,000 cps. Outer fiberglass horn with 58" path-length; smaller metal horn has acoustical 1000 cps crossover. Impedance, 16 ohms. Size, 10½" H, 20½ W, 20" D. Shpg. wt., 15 lbs.
81 DZ 274. List, $80.00. NET 47.04

MODEL 847HF MID-RANGE DRIVER AND HORN. Smaller version of above. Frequency response, 300-10,000 cps. Outer horn has 22" path length; smaller metal horn has acoustical crossover at 1700 cps. 7¾x11¾x 10". Shpg. wt., 7 lbs.
81 DX 448. List, $49.50. NET 29.11

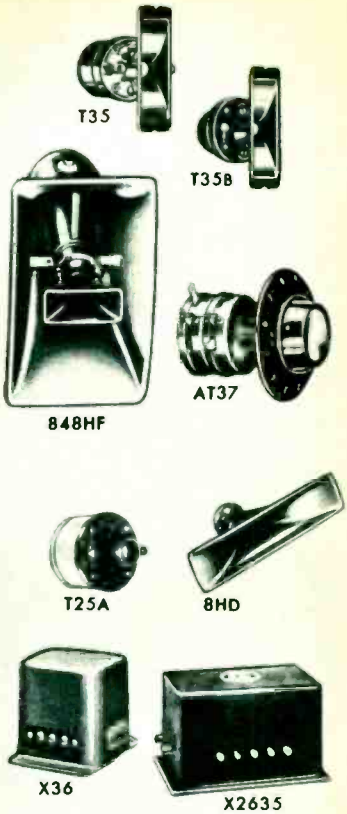
DIFFRACTION HORNS. Famous Hoodwin horn design for superior high frequency dispersion. 120° dispersion angle.

MODEL 8HD DIFFRACTION HORN. For use with T10A or T25A drivers. 600 cycle cutoff, 800 cycle crossover frequency. Size: 14¼" x 3⅜" x 7½". Shpg. wt., 4 lbs.
81 D 429. List, $27.00. NET 15.88

MODEL 6HD DIFFRACTION HORN. Popular horn for T10A and T25A drivers. Utilizes 400 cps cutoff, 600 cps crossover. Size: 19¾" x 3½" x 12". Shpg. wt., 5 lbs.
81 DX 491. List, $35.00. NET 20.58

CROSSOVER NETWORKS. Low insertion loss. Attenuation, 12 db per octave in ½-section; 6 db per octave in ¼-section crossover. 16 ohms impedance. Half-sections, except X825, ¼; X2635, ¼ and ½.

No.	Type	Crossover	Lbs.	List	NET
81 D 415	X825	800	3	$30.00	17.64
81 D 293	X8	800	5	50.00	29.40
81 D 416	X6	600	7	60.00	35.28
81 D 289	X336	300-3500	9	65.00	38.22
81 D 436	X36	3500	2	14.00	8.23
81 D 404	X2635	200-600-3500	11	120.00	70.56



Jim Lansing High-Fidelity Speakers

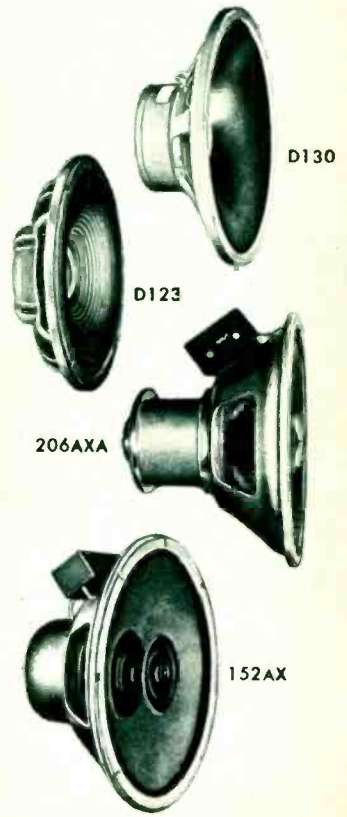
MODEL D130 15". Excellent for moderate-cost, high-fidelity music systems. Extremely efficient. Provides remarkably distinct bass and has high power handling capacity. High frequencies are reproduced with exceptional crispness and clarity. Has edge-wound ribbon voice coil. Frequency response, ±5 db from 30-17,000 cps. Capacity, 25 watts. Voice coil diameter, 4". Impedance, 16 ohms. Magnet weight, 3½ lbs. Cone resonance, 37 cps. Depth, 5⅝". Shpg. wt., 17 lbs.
82 DX 125. NET 76.00

MODEL D131 12". 12" version of D130 described above. Offers essentially the same design features that characterize the D130 as an outstanding reproducer, but occupies less space. Response, ±5 db from 30-15,000 cps. Capacity, 20 watts. Voice coil diameter, 4". Impedance, 16 ohms. Magnet weight, 3½ lbs. Resonance, 39 cps. Depth, 5". Shpg. wt., 16 lbs.
82 DX 129. NET 72.00

MODEL D123 12". New extended-range speaker featuring ultra-shallow frame design—only 3⅝" deep! Ideal for in-the-wall installation. Also delivers excellent performance in reflex or folded-horn enclosures. 3" voice coil. Frequency response, ±5 db, 30-15,000 cps. Capacity, 20 watts. Impedance, 16 ohms. Magnet weight, 1¾ lbs. Resonance, 40 cps. 12 lbs.
82 DX 112. NET 54.50

MODEL D208 8". Offers same deluxe features as Models D130 and D131 at left. Exceptional high efficiency. Unusually good response; ±5 db, 40-13,000 cps. Capacity, 12 watts. Voice coil diameter, 2". Impedance, 8 ohms. Magnet weight, 15 oz. Cone resonance, 55 cps. Depth, 2⅞". Shpg. wt., 5 lbs.
82 D 126. NET 25.92

ALLIED stocks Jim Lansing "Hartsfield" and D34001 speaker systems. Write for descriptive literature and prices.



Stephens Tru-Sonic High-Fidelity Speakers

MODEL 152AX 15". Combines latest engineering advances with precision construction for superb fidelity. Low-frequency cone with 2" voice coil reproduces frequencies from 30 to 5000 cps. Coaxially mounted spun metal diaphragm with 1" voice coil reproduces frequencies to 18,000 cps. 12-ohm impedance; matches 8 or 16-ohm amplifier outputs. Capacity, 20 watts. Magnet weight, 2½ lbs. Resonance, 48 cps. Shpg. wt., 27 lbs.
81 DZ 615. List, $118.00. NET 86.73

MODEL 122AX 12". High fidelity sound reproduction at moderate cost. Low-frequency, 2"-diameter voice coil gives clean, distinct bass reproduction down to 40 cps. Coaxially mounted tweeter with 1" voice coil provides smooth, crisp treble to 18,000 cps. 12-ohm impedance; matches 8 or 16-ohm amplifier outputs. Capacity, 20 watts. Resonance, 55 cps. Magnet weight, 1½ lbs. Shpg. wt., 12 lbs.
81 DX 702. List, $72.00. NET 52.92

MODEL 206AXA 15". Supersedes the famous Model 206AX. Meets the exacting requirements of fine custom music systems. A 15" low-frequency cone reproduces the lower register from 30-1200 cps with remarkable realism. A 7½ lb. Alnico V magnet provides extreme flux density for superior damping and unusually high efficiency. Cone resonance of only 35 cps further contributes to low-frequency performance. A separate, coaxially mounted high-frequency driver, with multi-cellular horn, deliver even, wide-angle dispersion from 1200 to 18,000 cps. Has built-in high pass filter with 1200 cps crossover. Voice coil diameters, 2" and 1½". Capacity, 20 watts. Impedance, 16 ohms. Shpg. wt., 31 lbs.
81 DZ 535. List, $178.00. NET 130.89

ALLIED stocks Stephens 103LX, 103LX-2 and 120LX woofers; also 214 and 216 tweeters. Write for literature and prices.

University High Fidelity Speakers and Enclosures

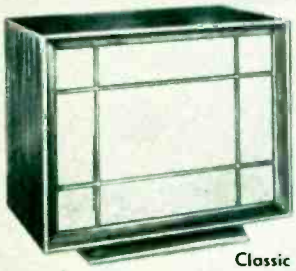

315


312


308


6201


Diffusicone


Classic


EN-15


Companionette


Tiny Mite


Dean

HIGH-FIDELITY SPEAKERS

MODEL 315 15" TRIAXIAL SPEAKER. Sensational 15" triaxial speaker system. Woofer is famous C15W containing a 6 lb. Alnico V magnet. Excellent mid-range dispersion by patented University Diffusicone, with mechanical crossover at 1000 cps. Crisp highs provided from compression-type, heavy-duty tweeter through a 5000-cps electrical crossover network. Response, 30 to 16,000 cps. Impedance, 8 ohms. Power handling capacity, 50 watts. 15½" diameter x 12" deep. Shpg. wt., 34 lbs.
95 DZ 187. List, $220.00. NET... 129.36

MODEL 312 12" TRIAXIAL SPEAKER. Brilliant 12" triaxial speaker for exceptional, wide-range reproduction. Has 12" woofer, "Diffusicone" mid-range unit, and HF-206 super-tweeter. Built-in electrical crossover network at 5000 cps. Response, 40 to 16,000 cps. 25 watts capacity. Impedance, 8 ohms. With brilliance control and 36" cable. Size, 12⅛" dia. x 8" deep. Shpg. wt., 12 lbs.
95 DX 188. List, $96.00. NET.... 56.45

MODEL 308 8" TRIAXIAL SPEAKER. Ideal where space is at a premium and quality reproduction is desired. Features special 8" woofer for excellent bass response. Has "Diffusicone" midrange unit, compression type tweeter and built-in 5000-cps electrical crossover. Response, 50-15,000 cps. Impedance, 8 ohms. Power capacity, 25 watts. 8⅞" diameter x 6¼" deep. Shpg. wt., 6 lbs.
95 D 189. List, $60.00. NET..... 35.28

MODEL 6201 12" COAXIAL SPEAKER. An exceptional value. True coaxial operation is provided by a compression-type tweeter and 2000-cps electrical crossover network. "W" shape Alnico V magnet and one-piece moulded diaphragm provide excellent low frequency transient response. Response, 45-15,000 cps. Impedance, 8 ohms. Has high-frequency balance control. Depth, 8¼". Shpg. wt., 7 lbs.
95 DX 176. List, $75.00. NET.... 44.10

DIFFUSICONE-12 12" EXTENDED RANGE SPEAKER. Quality, low-cost 12" speaker. Smooth, wide-angle dispersion achieved by patented University "Diffusicone." Power handling capacity, 30 watts. Frequency response, 45-13,000 cps. Impedance, 8 ohms. 24 oz. Alnico V magnet. Depth 4¼". Shpg. wt., 6 lbs.
95 DX 182. List, $45.00. NET... 26.46

DIFFUSICONE-8 8" EXTENDED RANGE SPEAKER. Low cost 8" speaker, for use where space is at a premium. Excellent frequency response, 70-13,000 cps. Power handling capacity, 25 watts. Impedance, 8 ohms. Depth, 3⅜". Shpg. wt., 5 lbs.
95 D 183. List, $35.00. NET..... 20.58

MODEL 6200 12" EXTENDED-RANGE SPEAKER 12" speaker with duraluminum dome at cone apex. For P.A. and radio-phono replacement. Response, 45-10,000 cps. Impedance, 8 ohms. Power capacity, 30 watts. Shpg. wt., 5 lbs.
95 DX 180. List, $35.00. NET... 20.58

HIGH-FIDELITY SPEAKER SYSTEMS

"CLASSIC" 3-WAY SPEAKER SYSTEM. One of the finest complete speaker systems available. Will operate at full efficiency placed flat against a wall—does not need a corner. Contains deluxe University components: C15W 15" woofer, Cobreflex-2 horn with T-30 mid-range driver, and HF-206 super-tweeter. N-3 L/C crossover network operates at 350 and 5000 cps. Enclosure forms a self-contained folded horn, front loading the woofer. Frequency response, 30 to 16,000 cps. Power capacity, 50 watts. Impedance, 8 ohms. Can be turned on side for use as "Highboy." Size, 34½x40½x24¾". Shpg. wt., 210 lbs.
95 DZ 143. Cherry Mahogany.
95 DZ 144. Blonde. NET EACH 441.00

"DEAN" 3-WAY SPEAKER SYSTEM. Same components and specifications as "Classic" system at left. Uses corner type enclosure that performs independently of walls and floor. Size, 36¼x36x22" deep. 170 lbs.
95 DZ 139. Cherry Mahogany.
95 DZ 140. Blonde. NET EACH.. 441.00

"COMPANIONETTE" 2-WAY SPEAKER SYSTEM Contains C8W 8" woofer, 4401 tweeter and high-pass filter. Attractive ultra-compact design. Delivers rich, extended hi-fi reproduction with true "presence." Size, 9⅝x24x10". 8 ohms. Shpg. wt., 27 lbs.
81 DZ 583. Cherry Mahogany.
81 DZ 584. Blonde. NET EACH... 58.31

NEW SPEAKER ENCLOSURES

EN-15 SPEAKER ENCLOSURE. New, advanced design gives exceptional performance. Combines rear horn loading, phase inversion and direct radiation for high efficiency. Wide range and excellent transient response. Baffle is acoustically designed to operate in a corner or flat against a wall. Will house a flexible group of components —any 12" or 15" woofer, coaxial or triaxial speaker. Mid-range and high-frequency units can also be mounted on the cut-out adapters supplied. Enclosure is free from mechanical resonance and braced for maximum rigidity. Handsome styling and fine furniture finish. Size, 37x28x19¼". Shpg. wt., 80 lbs.
95 DZ 133. Cherry Mahogany.
95 DZ 134. Blonde. NET EACH. 122.50

EN-12 SPEAKER ENCLOSURE. Uses same horn-loaded, bass-reflex principle as EN-15. Excellent for 12" woofers, coaxial or triaxia speakers. Baffle board is precut for University mid-range and high-frequency speakers, so that 3-way system can easily be installed. Size, 30x21½x15¾". Shpg. wt., 48 lbs.
95 DZ 102. Cherry Mahogany.
95 DZ 103. Blonde. NET EACH.. 73.50

TM-8 "TINY-MITE" SPEAKER ENCLOSURE. Versatile enclosure for 8" speakers. Features horn loaded bass reflex principle for excellent efficiency. Size, 25⅝x18x12". Shpg. wt., 28 lbs.
95 DZ 104. Cherry Mahogany.
95 DZ 107. Blonde. NET EACH... 38.95

Letter Z in Stock Number Indicates Express Shipment Only

University Woofers, Tweeters and Crossover Networks


C15W


C12W


C8W


N-1


N-2A

LOW-FREQUENCY WOOFERS

MODEL C15W 15" WOOFER. Highly efficient low-frequency driver. 6 lb. Alnico V magnet assures remarkably clean, distinct bass response. Deep voice coil allows excellent transient response on high-level passages. Dual impedances, 4-8 and 10-16 ohms. Power capacity, 50 watts. Frequency response, 30-3000 cps. For use with 600 to 2000-cycle crossovers. Depth, 10½". Shpg. wt., 24 lbs.
95 DZ 185. List, $125.00. NET 73.50

MODEL C12W 12" WOOFER. Features built-in low-pass filter, adjustable from 700 to 6000 cps. Response, 40-6000 cps. 8 ohms. Capacity, 30 watts. Wt., 8 lbs.
95 DX 191. List, $55.00. NET 32.34

MODEL C8W 8" WOOFER. Ideal for compact speaker systems. Response, 50-5000 cps. Power capacity, 25 watts. Impedance, 8 ohms. Shpg. wt., 4 lbs.
95 D 192. List, $22.50. NET 13.23

ADJUSTABLE CROSSOVER NETWORKS

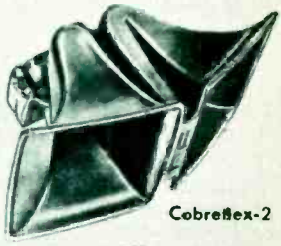
N-1 ADJUSTABLE HIGH-PASS FILTER. Crossover points: 16 ohms; 1250, 2500 or 5000 cps. 8 ohms; 2500, 5000 or 10,000 cps. 4 ohms; 5000 or 10,000 cps. High frequency control. 3⅝x3¼x3". Wt., 3 lbs.
95 D 193. List, $15.00. NET 8.82

N-2A CROSSOVER. 6 db. 2-way network. May be used in pairs as 12 db network, or singly as 12 db low or high-pass filter. Crossover, 350 or 700 cps at 8 and 16 ohms; 700 cps at 4 ohms. Shpg. wt., 3 lbs.
95 D 194. List, $30.00. NET 17.64

N-2B CROSSOVER. 6 db. 2-way network. May be used in pairs as 12 db network, or singly as 12 db low or high-pass filter. Crossover, 1250, 2500 or 5000 cps at 8 or 16 ohms; 2500 or 5000 cps at 4 ohms. Shpg. wt., 3 lbs.
95 D 195. List, $20.00. NET 11.76

N-3 3-WAY NETWORK. For 3-way systems. Crossover points, 350 and 5000 cps. 8 ohm impedance. Has "Brilliance" and "Presence" controls. Wt., 5 lbs.
95 D 196. List, $40.00. NET 23.52


N-3


Cobreflex-2

HIGH FREQUENCY TWEETERS

MODEL HF-206 SUPER TWEETER. For crisp, clear highs. Extends high-frequency response far beyond audibility. Compression-type driver handles 25-50 watts of program material. Has die-cast aluminum horn for wide-angle dispersion. Requires Model N-2B crossover. Response, 3500-16,000 cps. Impedance, 8 ohms. Size, 3¼x6x6 9/16". Shpg. wt., 3 lbs.
95 D 190. List, $45.00. NET 26.46

MODEL 4401 2000-CYCLE TWEETER. Quality, low-cost tweeter. Response, 2000-15,000 cps. Capacity, 25 watts. Impedance, 8 ohms. 2⅝x4½x5 7/64". Wt., 2 lbs.
95 D 167. List, $25.00. NET 14.70

MODEL 4402 2000-CYCLE DUAL TWEETER. Dual drivers for wider dispersion and higher power capacity. Matches 4-16 ohms. Capacity, 50 watts. Response, 2000-15,000 cps. 2⅝x9½x5". Wt., 4 lbs.
95 D 168. List, $40.00. NET 23.52

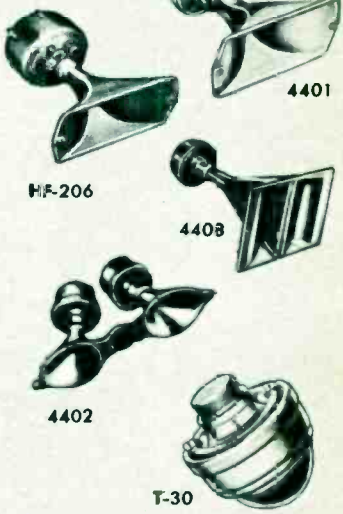
MODEL 4408 600-CYCLE TWEETER. Heavy-duty tweeter for two and three-way systems. Response, 600-15,000 cps. Impedance, 8 ohms. Capacity, 20 watts. Delivers rich, smooth reproduction. Size, 5 13/16x7⅜x11⅛". Shpg. wt., 5 lbs.
95 D 172. List, $30.00. NET 17.64

MODEL 4409 600-CYCLE TWEETER. Highly efficient. Same as Model 4408 but higher power handling capacity—40 watts. 5¾x7⅜x10½". Wt., 5 lbs.
95 D 173. List, $40.00. NET 23.52

MODEL T-30 DRIVER UNIT. For use with Cobreflex-2 Horn, shown below. Has exceptionally wide frequency response, 250-15,000 cps. Adds presence and realism to any multi-speaker system. Impedance, 8 ohms. Power handling capacity, 50 watts. Shpg. wt., 11 lbs.
81 D 589. List, $27.50. NET 16.17

COBREFLEX-2 HORN. Has 27" exponentially flared air column. Permits crossover as low as 350 cycles. Produces uniform dispersion pattern of 120x60°. Entire horn is one piece die-cast aluminum. Size, 9¼x18½x10¼". Shpg. wt., 11 lbs.
95 DX 184. List, $35.00. NET 20.58

MODEL AP-8 BALANCE CONTROL. Efficient attenuator pad for use with speakers and crossover networks. Permits balancing sound according to room acoustics and personal taste. Attractive polished brass escutcheon plate. Impedance, 8 ohms. Shpg. wt., 7 oz.
95 D 132. List, $6.25. NET 3.67

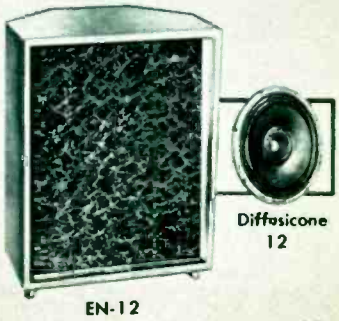


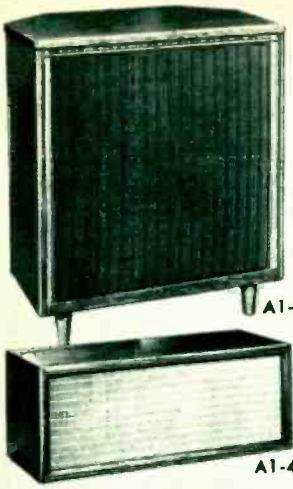
ALLIED-UNIVERSITY PROGRESSIVE SPEAKER EXPANSION SYSTEM

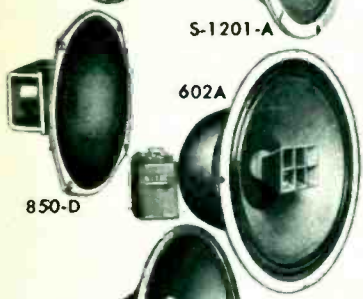
DIFFUSICONE-12 IN EN-12 ENCLOSURE. Here is an easy, budget-wise way to build a professional 3-way speaker system. Start with the Diffusicone 12—an extended range speaker that can later serve as the woofer in a 3-way system. ALLIED supplies the Diffusicone 12 completely mounted in an EN-12 enclosure. The speaker and enclosure are perfectly matched to provide extended range high-fidelity reproduction. Mid-range and high-frequency components can later be added to form a deluxe system. The EN-12 does not need a wall or corner to supplement its fine acoustical quality, and the baffle board is pre-cut for the add-on components. Size, 30x21½x15¾". Shpg. wt., 54 lbs.
95 DZ 151. NET 99.94

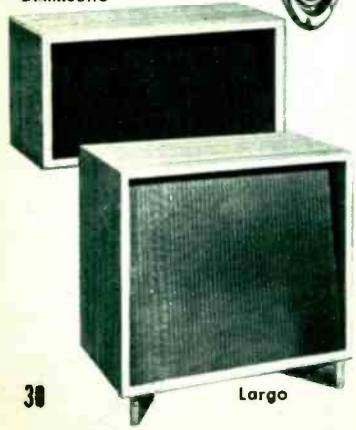
ADD-ON COMPONENTS FOR 2-WAY SYSTEM Consists of Model 4408 600 cycle tweeter, N-2A crossover network and AP-8 level control. Adds full-bodied mid-range for greater presence. Increases efficiency and lowers distortion, since each speaker operates only in its most efficient range. Shpg. wt., 9 lbs.
95 D 108. NET 38.95

ADD-ON COMPONENTS FOR 3-WAY SYSTEM Consists of Model HF-206 Super Tweeter, N-2B crossover network and AP-8 level control. Adds a full octave of bright, vibrant highs to complete a truly notable speaker system. Level controls permit matching system to room acoustics. 7 lbs.
95 D 109. NET 41.89









General Electric Speakers and Enclosures

MODEL A1-406 12" SPEAKER ENCLOSURE. Custom speaker enclosure combining rich styling and advanced acoustical design. Delivers exceptional performance whether used in corners or placed against wall. Ideal for use with G.E. A1-400; also delivers excellent results with G.E. S1201A, S1203A, or other 12" speakers. Features "distributed port" design to achieve highly effective damping and loading of speaker at low frequencies. Delivers very smooth, authentic bass. Beautiful hand-rubbed mahogany veneer; 1" acoustic lining. Size: 31¼" high, 25⅝" wide, and 18¼" deep. With hardware for mounting speaker. Shpg. wt., 55 lbs.
81 DZ 725. NET 58.75

MODEL A1-406. As above, in blonde oak.
81 DZ 726. NET 58.75

MODEL A1-411 8" SPEAKER ENCLOSURE. New G.E. 8" speaker enclosure for high-fidelity use. Designed to achieve optimum performance and to provide an attractive, compact mounting for G.E. 850D, or other high quality, wide-range 8" speakers. Utilizes the "distributed port" reflex principle for outstanding power handling ability and consistently good frequency response across the audio spectrum. ½" acoustic lining. Grille covered with attractive lumite cloth. Beautifully finished in lustrous mahogany. Can be positioned on side or bottom; shelf or wall-mounted. Ideal for limited space applications. Size: 10" high, 26" wide, 11" deep. Shpg. wt., 25 lbs.
81 DZ 733. NET 32.59

MODEL A1-412. As above, blonde finish.
81 DZ 734. NET 34.79

MODEL A1-413. As above, cherry finish.
81 DZ 746. NET 32.59

MODEL A1-414. As above, unfinished.
81 DZ 747. NET 30.38

ALLIED can supply General Electric Model A1-211 Components Cabinet for amplifier, tuner, record player, etc. Write for literature and price.

Altec-Lansing Speakers

MODEL 602A 15". Moderate-cost, 15" coaxial speaker. Excellent response from 30-22,000 cps. 15" low-frequency cone and coaxially mounted tweeter. Bass reproducing speaker has a 3" aluminum edge-wound voice coil. Compact system delivers full-bodied, brilliant tone—it's an outstanding unit for the home music system. Highly efficient crossover network; crossover frequency, 3000 cps. Three-position level control. Very even, wide-angle high-frequency dispersion is achieved with 2x3 sectionalized horn. Capacity, 20 watts. Resonance, 45 cps. Impedance, 8 ohms. Depth, 7¼". Shpg. wt., 25 lbs.
95 DZ 084. NET 114.00

MODEL 601A 12". A highly efficient 12" coaxial speaker. Same features as the 602A listed above, in a 12" model. Capacity, 20 watts. Resonance, 55 cps. Impedance, 8 ohms. Depth, 5⅝". Wt., 17 lbs.
95 DX 085. NET 99.00

MODEL 604C 15". One of the most efficient single-unit 15" coaxial speakers ever offered. Ideal for high-fidelity home music systems or PA systems. Duplex design—a full 2-way professional speaker system built into a single unit. Features extremely smooth and wide response from 30 to 22,000 cycles. Resonance peaks and valleys are virtually non-existent. Has a 15" cone for low frequencies. Six-cell high-frequency tweeter is coaxially mounted—delivers 60° horizontal and 40° vertical distribution. Improved crossover system employs new N-1600A network with adjustable high-frequency control. Has 1600-cycle crossover network for separate excitation of bass cone and tweeter. Extremely high power-handling capacity—will not distort at high levels. Power handling capacity: 50 watts peak, 35 watts continuous. Resonant frequency, 40 cps. Impedance, 16 ohms. Depth, 11⅛". Shpg. wt., 45 lbs.
95 DZ 057. NET 156.00

MODEL A1-400 12". An advanced-design coaxial speaker. Widely used in moderate-cost custom hi-fi installations. Remarkably smooth, extended response and wide dispersion. Unique slotted baffle plate serves as tweeter baffle and effectively minimizes interference between tweeter and woofer units; plate can be installed outside of speaker cabinet to serve as grille. Has pressure equalizer located at apex of tweeter cone; provides improved transient response for high-frequency peaks. Response, ±5 db from 40-15,000 cps. 1800 cps crossover network. 2¾" tweeter cone and 12" woofer cone. Heavy-duty Alnico V ring magnets; 14.5 oz. woofer magnet and 6.8 oz. tweeter magnet. Capacity, 25 watts. Imp., 8 ohms. 6⅛" deep. Shpg. wt., 9 lbs.
81 DX 517. NET 41.11

MODEL S-1201-A 12". Improved version of outstandingly popular S1201D. This 12" speaker has been highly recommended by nationally known consumer research organizations. Ideal for moderate-cost hi-fi installations; for modernization of radios, phonographs and television receivers. Very clean, smooth frequency response over the range of 50-13,000 cps. Employs extra-heavy Alnico V magnet for efficient performance and distinct bass. "All-Weld" frame maintains optimum flux density. Capacity, 25 watts. Resonance, 70 cps. 14.5 oz. magnet. Impedance, 8 ohms. Plastic magnet cover. Shpg. wt., 6 lbs.
81 DX 510. List, $33.95. NET 19.95

MODEL S-1203-A. 12" speaker. Same as S1201A, but 9 oz. magnet and metal magnet cover. Shpg. wt., 5 lbs.
81 DX 513. List, $23.60. NET 13.94

MODEL 850-D 8". A low-cost, wide-range speaker. Excellent for replacement use in radios, TV sets, etc. to improve tonal quality. Also fine choice for limited-space hi-fi systems or for use as hi-fi system extension speaker. Response, 70-11,000 cps. Curvilinear cone. Aluminum-base voice coil. 6.8 oz. magnet. Capacity, 15 watts. Impedance, 8 ohms. Shpg. wt., 2 lbs.
81 D 518. List, $16.55. NET 9.74

Permoflux Speaker Systems

"DIMINUETTE" MODEL DM-1M. Consists of 2—6" speakers and tweeter plus high-pass filter in modified bass-reflex enclosure. Impedance: 4-8 ohms. Capacity: 12 watts. 11½x23½x12". Mahogany finished wood cabinet. Shpg. wt., 25 lbs.
95 DZ 098. NET 48.51

MODEL DM-1B. As above, blonde finish.
95 DZ 099. NET 48.51

"LARGO" MODEL 8WH-3M. Compact speaker system. Consists of 2—8" speakers, tweeter, high-pass filter with control, in horn-loaded enclosure. Exceptional response (35-16,000 cps) at moderate cost. 8 ohms. 20 watts. 23x24x14". Mahogany finish. Shpg. wt., 45 lbs.
95 DZ 043. NET 97.75

MODEL 8WH-3B. As above, blonde finish.
95 DZ 044. NET 97.75

ROYAL MODELS. Quality speakers, ideal for low-cost hi-fi use; also for radios, TV sets and phonos. Slots on edge of cone and extra-large spider provide "super-soft" suspension for excellent bass response. Stiffened cone throat assures unusually good treble. Incorporate highly efficient magnet structure. Impedance, 8 ohms.

MODEL 12UP-8-1 12". Response, 45-12,000 cps. Resonance, 62 cps. Capacity, 12 watts. Magnet wt., 6.8 oz. Depth, 6½". With dust cover. Shpg. wt., 5 lbs.
81 DX 227. List, $35.00. NET 20.58

MODEL 8UP-8-1 8". Response, 50-12,000 cps. Resonance, 70 cps. Capacity, 10 watts. Magnet wt., 6.8 oz. Depth, 4½". With dust cover. Shpg. wt., 4 lbs.
81 D 226. List, $30.00. NET 17.64

MODEL 8T-8-1 8". Response, 50-12,000 cps. Resonance, 70 cps. Capacity, 8 watts. Magnet wt., 4.64 oz. Depth, 4". Less dust cover. Shpg. wt., 3 lbs.
81 D 224. List, $22.50. NET 13.23

Letter Z in Stock Number Indicates Express Shipment Only

Quality High-Fidelity Speakers and Enclosures

R-J FLOOR ENCLOSURES

Extremely compact, low-cost, high-fidelity speaker enclosures. Ideal for limited space applications and for modest budgets. Offer unusual extended-range response. Resonant cavity construction provides remarkable bass performance. Built of top quality veneers—available in hand-rubbed mahogany or blonde finish as well as smooth sanded, unfinished models. Offer improved range of response through direct radiation of high frequencies. For use with any single-cone, coaxial, or triaxial speaker.

FOR 12" SPEAKERS. HWD (including legs): 24x20x16". Shpg. wt., 36 lbs.

MODEL F-12-U. Unfinished.
95 DZ 398. NET 43.35

MODEL F-12-M. Mahogany.
95 DZ 392. NET 49.95

MODEL F-12-B. Korina Blonde.
95 DZ 394. NET 54.50

FOR 15" SPEAKERS. Same size as above. Shpg. wt., 36 lbs.

MODEL F-15-U. Unfinished.
95 DZ 399. NET 43.35

MODEL F-15-M. Mahogany.
95 DZ 393. NET 49.95

MODEL F-15-B. Korina Blonde.
95 DZ 395. NET 54.50

WHARFEDALE SPEAKERS

Built by Wharfedale Wireless Works, under the direction of G. A. Briggs, world-renowned sound engineer. Despite their modest price, all are fitted with cast chassis resulting in greater rigidity, less resonance, better air loading. All models except the 8" Bronze have cloth suspension cones which improve transient response by increasing dissipation at edges of the cone. High compliance assures smooth response.

MODEL SUPER 3 TWEETER. Highly efficient 3" tweeter features bakelized cone for wide diffusion. Range: 3000-20,000 cps. 15 ohms. 10 watts. Shpg. wt., 4 lbs.
82 D 145. NET 21.07

MODEL "8" BRONZE 8" SPEAKER. Excellent performance. Features high flux and open, die-cast chassis. 15 ohms. Wt., 6 lbs.
82 D 140. NET 14.75

MODEL SUPER 8/CS/AL 8" SPEAKER. May be used as speaker, or as tweeter in 2-way systems. 10 ohms. 50-15,000 cps. Wt., 6 lbs.
82 D 135. NET 21.07

MODEL W10/CSB. As above, but 10". Response, 30-18,000 cps. 15 ohms. Wt., 12 lbs.
82 D 141. NET 39.20

MODEL SUPER 12/CS/AL 12" SPEAKER. Unusually clean reproduction. Provides excellent high-frequency response. Range, 30-18,000 cps. 15 ohms. Wt., 23 lbs.
82 DZ 136. NET 74.63

MODEL W12/CS 12" WOOFER. Response to 25 cps. 10 watts. Cone resonance, 40/50 cps. 15 ohms. Wt., 15 lbs.
82 DX 137. NET 41.89

MODEL W15/CS 15" WOOFER. Power handling capacity, 20 watts. 15 ohms impedance. Exceptionally fine bass response down to 25 cps. Cone resonance, 25-30 cps. Shpg. wt., 21 lbs.
82 DZ 138. NET 74.63

CROSSOVER NETWORKS. Used to divide the bass and treble between loudspeakers at low impedance and thus eliminate distortion of the treble by modulation from the bass. All units are 7-16 ohms impedance. Maximum power-handling capacity, 30 watts. *For 3-way speaker systems.

Stock No.	Crossover Frequency	Wt. Lbs.	NET EACH
82 D 142	1000 cps	6	15.09
82 D 143	3000 cps	6	13.82
82 D 144	*5000,800 cps	7	34.30

Attenuation of the 1000 and 3000 cps units is 6 to 9 db per octave. Attenuation of the 3-speaker unit, 12 db per octave. All units have screw-type terminals.

R-J SHELF ENCLOSURES

Small, compact speaker enclosures designed for book-shelf installation. Provide maximum bass response in a minimum of space.

MODEL S-8-U. FOR 8" SPEAKERS. Single shelf type. Fine quality furniture construction throughout. Unit is smoothly sanded, ready for finishing. Speaker cut-out accommodates all standard 8" speakers, easily installed without the use of special tools. Only 11x10x23½". Shpg. wt., 20 lbs.
95 DZ 390. NET 24.50

MODEL S-12-U. FOR 12" SPEAKERS. Double shelf model. (Not illustrated.) Same cubic air space as the floor model, yet can be installed in book-shelf. Unit is sanded, ready for finishing in any matching finish. Provides clean bass response without cabinet resonances. Size, 24x21x10". Shpg. wt., 31 lbs.
95 DZ 391. NET 29.50

MODEL S-8-MC SPEAKER & ENCLOSURE. R-J single-shelf enclosure (as above, but mahogany finished) with matched, 8" Wharfedale speaker. Superb sound and attractive appearance at moderate cost. 10-ohm voice coil impedance. Shpg. wt., 25 lbs.
95 DZ 405. NET 54.50

MODEL S-8-BC. As above, blonde finish.
95 DZ 406. NET 57.50

QUAM SPEAKERS

These excellent extended-range speakers and tweeters meet the need for moderately priced music systems. Noted for their mellow, resonant-free bass response; clean, rich mid-range reproduction and crisp, clear high-frequency response.

Extended Range Speakers

All have curvilinear cones and 10 oz. Alnico V magnets. 1" voice coils have impedance of 8 ohms. Many other quality features make these speakers outstanding values.

MODEL 8A10X 8" SPEAKER. Frequency response, 65-12,000 cps. ±5 db. Power handling capacity, 10 watts. Depth 3¼". Shpg. wt., 3¼ lbs.
81 D 343. List, $18.60. NET 10.94

MODEL 10A10X 10" SPEAKER. Frequency response, 55-12,000 cps, ±5 db. Power handling capacity, 12 watts. Depth 5¼". Shpg. wt., 3½ lbs.
81 D 344. List, $24.00. NET 14.11

MODEL 12A10X 12" SPEAKER. Frequency response, 50-12,000 cps, ±5 db. Power capacity, 15 watts. Depth 5⅞". Wt., 4¾ lbs.
81 DX 345. List, $26.00. NET 15.29

Coaxial Speakers and Tweeters

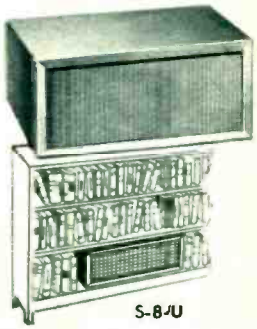
MODEL 12A6CO. 12" SPEAKER. Consists of 12" low frequency unit and 3½" high frequency tweeter. Power handling capacity, 14 watts. Response: 50-15,000 cps. ±5 db. 6.8 oz. Alnico V magnet. Voice coil impedance, 6-8 ohms. Shpg. wt., 10 lbs.
81 DX 318. List, $30.00. NET 17.64

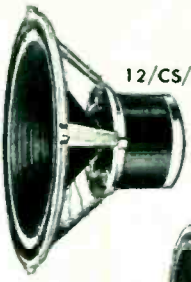
MODEL 15A10CO 15" SPEAKER. Has 15" woofer for faithful reproduction of the bass frequencies. High-frequency unit has 5" diameter cone. An ideal low-cost unit for binaural systems. Response over the entire range of 25-15,000 cps. ±5 db. Has 10 oz. Alnico V magnet. Voice coil impedance, 6-8 ohms. Shpg. wt., 15 lbs.
81 DX 319. List, $47.50. NET 27.93

MODEL 5A15T 5" TWEETER. Identical to tweeter used in Model 15A10CO speaker. Suggested for use with 15" speakers to extend their present range. Response, 2000-15,000 cps, ±6 db. Voice coil impedance, 14 ohms. Power capacity, 10 watts to input of system. 1.47 oz. Alnico V magnet. 2⅝" deep; 4 11/16" mtg. ctrs. Shpg. wt., 1 lb.
81 D 342. List, $6.50. NET 3.82

MODEL 3A15T. 3½" TWEETER. Same tweeter as Model 12A6CO above. Response, 2000-12,000 cps, ±6 db. Voice coil impedance, 14 ohms. Has heavy-duty 1.47 oz. magnet (Alnico V). Power capacity, 10 watts to input of system. Unit is 3½" square; depth 2 1/16". Shpg. wt., ¾ lbs.
81 D 341. List, $5.75. NET 3.38


F-12-M

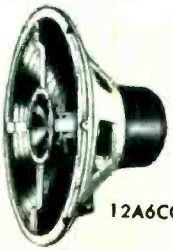

S-8-U


12/CS/AL

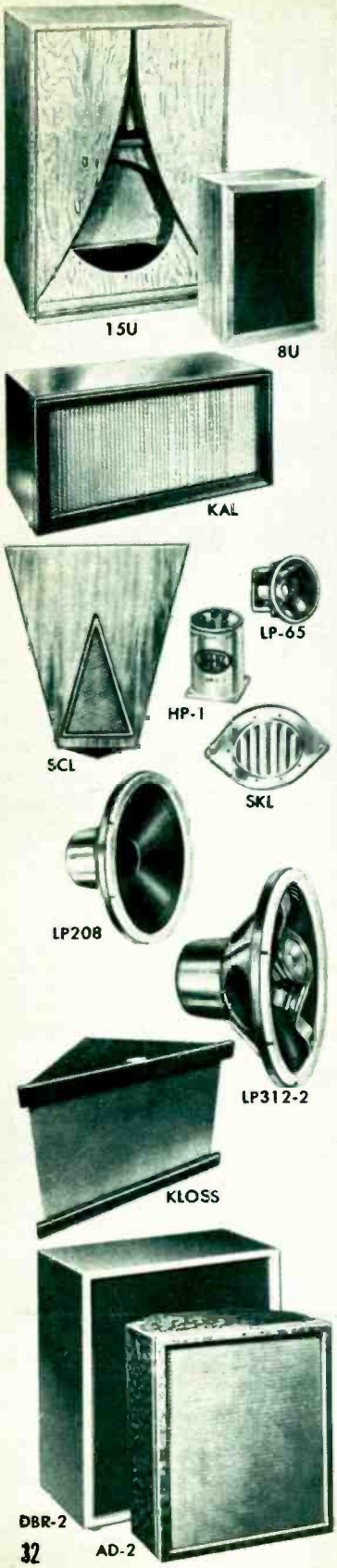

8/CS/AL


Crossover


5A15T


12A6CO

See Page 315 For ALLIED's Easy Payment Plan



High-Fidelity Enclosures and Speakers

KARLSON SPEAKER ENCLOSURES AND KITS

These new speaker enclosures feature the highly efficient exponential slot radiator principle. Deliver an almost completely flat frequency response from the lowest fundamental frequency to the upper limits of the audio spectrum. The Karlson enclosures for 12" and 15" speakers have gained a wide following among audio enthusiasts. Enclosures for either 8", 12" or 15" speakers are available assembled and Karlsonite finished, assembled but unfinished, or in kit form. Karlsonite is a bonded plastic finish that will not burn, stain, or scratch easily. Makes extremely attractive furniture piece. Sizes: 15" models, 34½x22½x18"; 12" models, 24¾x16¾x 13¾"; 8" models, 17¼x11¾x10".

UNFINISHED—ASSEMBLED. Ready-built enclosures, already assembled but unfinished. Complete with instructions for applying fine furniture finish.

MODEL 15U. For 15" single or coaxial speakers. Shpg. wt., 72 lbs.
81 DZ 716. NET 75.00

MODEL 12U. For 12" speakers. 42 lbs.
81 DZ 713. NET 61.40

MODEL 8U. For 8" speakers. 13½ lbs.
81 DX 705. NET 28.44

KARLSONITE FINISHED AND ASSEMBLED. Ready-built enclosure. Handsome mahogany or blonde Karlsonite finish.

MODEL 15M. For 15" speaker. Mahogany. Shpg. wt., 75 lbs.
81 DZ 717. NET 117.60

MODEL 15B. As above. Blonde finish.
81 DZ 718. NET 117.60

MODEL 12M. For 12" speaker. Mahogany. Shpg. wt., 45 lbs.
81 DZ 714. NET 99.60

MODEL 12B. As above. Blonde finish.
81 DZ 719. NET 99.60

MODEL 8M. For 8" speakers. Mahogany. Shpg. wt., 14½ lbs.
81 DX 707. NET 49.50

MODEL 8B. As above. Blonde finish.
81 DX 708. NET 49.50

KIT FORM—UNASSEMBLED—UNFINISHED. Assemble and finish it yourself—save more than half. Consists of seasoned plywood, precut for construction of the Karlson speaker enclosures. Full, easy-to-follow instructions for assembly—no cutting is necessary. Completed enclosure will equal the performance of factory assembled models. Consists of 34 pieces of precision cut wood. Complete with instructions for applying fine furniture finish.

MODEL 15K. For 15" single or coaxial speakers. Shpg. wt., 68 lbs.
81 DZ 715. NET 49.50

MODEL 12K. For 12" speakers. 35 lbs.
81 DZ 712. NET 39.95

MODEL 8K. For 8" speakers. Wt., 12½ lbs.
81 DX 706. NET 17.90

LORENZ SPEAKER SYSTEMS AND COMPONENTS

KAL 2-WAY AUDETTE SPEAKER SYSTEM. Excellent for use on shelf. Two-tone leatherette. Consists of LP-215 woofer; LP-65 tweeter; HP-1 high-pass filter. Response, 45-16,000 cps. Capacity, 12 watts. 8 ohms. 11x23¾x10". 22 lbs.
81 DZ 008. NET 49.50

SCL "SOUND CORNER." Two-way speaker system. Hangs in room corner. Occupies no floor space. 30-16,000 cps. Uses: LP-215 woofer; LP-65 tweeter; HP-1 hi-pass filter. 8 ohms. 12 watts. Ready to use. 31x27½x 11¾". Blonde finish. 20 lbs.
81 DZ 007. NET 59.50

LP312 TYPE COAXIAL & DIAXIAL SPEAKERS. New, 12" speakers with tweeters. Response, 20-17,000 cps. 3.8-lb. magnet. LP312-2 has diaxial tweeter system (2 tweeters). Handles 29 watts (27 watts for LP312-1). 16 ohms. 12¼" dia. x 7⅛" depth (6¾" depth for LP312-1).

LP312-2 DIAXIAL. 2 tweeters. 10 lbs.
81 DX 015. NET 71.79

LP312-1 COAXIAL. 1 tweeter. 9 lbs.
81 DX 016. NET 61.95

LP312 12" WIDE RANGE SPEAKER. Single cone. 20-14,000 cps. 3.8-lb. magnet. 25 watts. 16 ohms. 12¼" dia. 6¾" deep. Shpg. wt., 8 lbs.
81 DX 017. NET 49.50

LP208 8" SPEAKER. New 8" hi-fi speaker. Response, 35 to 15,000 cps. Average power handling capacity, 15 watts. 1.78-lb. magnet. Voice coil dia., 1". 8½" dia. x 4" deep. Imp., 8 ohms. Cast aluminum frame. Shpg. wt., 5 lbs.
81 D 018. NET 22.50

T8-1 TWEETER & BRACKET ASSEMBLY. Converts most 12" single-cone speakers into coaxial type. Consists of LP-65 tweeter (below) mounted on steel bracket—fits across dia. of speaker. Clears speaker cone. Shpg. wt., 1 lb.
81 D 019. NET 11.85

T8-2 DIAXIAL TWEETER & BRACKET ASSEMBLY. As above, but with 2 tweeters mounted diaxially for greater sound dispersion. Ready for installation. Wt., 2 lbs.
81 D 022. NET 21.69

HP-1 HIGH-PASS FILTER. Crossover, 5000 cps. Effect increases at rate of 3 db per octave starting at 2000 cps. At 120,00 cps tweeter comes into full use. Shpg. wt., 3 lbs.
81 D 004. NET 4.95

LP-65 TWEETER. Response to 16,000. Employs transparent plastic cone. Solid-backed frame prevents interaction with woofer. Impedance, 4 to 8 ohm. Dia., 2¼". Shpg. wt., 2 lbs.
81 D 003. NET 8.50

SKL ELECTROSTATIC SPEAKER. Smooth response from 5000 to 20,000 cps. Wide-angle sound dispersion. Use with woofer and filter for 2-way speaker system. Simple internal amplifier connection. 4⅜" mtg. comes into full use. Shpg. wt., 3 lbs.
81 D 014. NET 4.95

KLOSS BARUCH LANG SPEAKER SYSTEMS

Four matched speakers in single corner enclosure. Exceptionally compact, low-cost. Remarkably clean response—50 to 11,000 cps. Size, 20" front width, 13" high, 10" deep. Woven Saran plastic grille. Other panels finished in black. 15 watts. 4 and 16 ohm taps. Shpg. wt., 15 lbs.

81 DX 748. Mahogany.
81 DX 749. Blonde. NET EACH 29.75

ARGOS SPEAKER ENCLOSURES

Handsomely designed, extremely low-cost speaker enclosures for clean overall response. Made of ½" 5-ply wood covered with richly grained mahogany or blonde plastic-material finish. Smart 2-tone woven plastic grille cloth. Excellent for limited space applications. Easily blends into the decorating motif of any room. All have acoustically padded interior. DBR-2 has 4.3 cu. ft. capacity—can be used with 12" or 15" woofer and tweeter or as bass reflex with single speaker. Has adapter plate and hardware. All have terminal strip on rear for convenient speaker connections—maximum speaker depth, 11½".

DBR-2 ENCLOSURE. For 12" or 15" speakers. HWD. 29x24x15". Shpg. wt., 38 lbs.
95 DZ 425. Mahogany.
95 DZ 426. Blonde. NET EACH 34.10

AD-1 ENCLOSURE. For 8" or 12" speaker. HWD. 23⅜x19½x13½". Shpg. wt., 27 lbs.
95 DZ 427. Mahogany.
95 DZ 428. Blonde. NET EACH 21.07

AD-2 CORNER ENCLOSURE. For 8" or 12" speakers. HWD. 23⅜x19½x14¼". Shpg. wt., 29 lbs.
95 DZ 429. Mahogany.
95 DZ 430. Blonde. NET EACH 24.02

For Other Enclosures and Speaker Systems, See Pages 17, 24, 25 and 28

Cabinart Enclosures and Cabinets—Klipsch-Designed Enclosures

AVAILABLE IN ASSEMBLED OR KIT FORM

MODEL 28U EQUIPMENT CABINET. For record changer, amplifier and tuner. Matches Model 27U below—twins of commanding presence. Constructed of selected unfinished White Birch plywood—completely sanded, ready for finishing. Pull out record changer drawer has ball-bearing slides; decorative hardware. Blank board for changer; blank panel for amplifier and tuner. Record changer compartment, 11¾" H x 22" W x 17" D; tuner-amplifier compartment, 18½" H x 22" W x 16" D. Overall size, 35" H x 23½" W x 18" D. Wt., 70 lbs.
95 DZ 475. NET 69.00

MODEL 28K EQUIPMENT CABINET KIT. As above, but in kit form. ¾" white pine plywood, glue, hardware, sandpaper, etc.
95 DZ 476. NET 51.00

MODEL 27U SPEAKER ENCLOSURE. Bass-reflex type enclosure—precut for 15". Companion piece for Model 28U above. Unfinished white birch plywood. Has adapter panel cut for 12" speakers. Baffle vol., 6 cu. ft. Acoustic insulation. Plastic grille. 35x 23½x18". Shpg. wt., 58 lbs.
95 DZ 477. NET 48.00

MODEL 27K SPEAKER ENCLOSURE KIT. As above, but in kit form. ¾" white pine plywood, glue, hardware, sandpaper, etc.
95 DZ 478. NET 39.00

Models 27U and 28U are also available in fine furniture finishes—write for prices.

SPEAKER AND EQUIPMENT CABINETS. Quality matching cabinets—unfinished—in kit form or assembled. Constructed of high grade ⅝" white pine plywood. Kits are completely pre-cut. Include plastic wood, sandpaper, glue, hardware and instructions. Speaker enclosures include plastic grille cloth and acoustic insulation. Assembled cabinets are smoothly sanded.

MODEL 70 ASSEMBLED EQUIPMENT CABINET. Tuner compartment I.D., 20" H x 21¾" W x 15¼" D. Phono compartment, I.D., 11½" H x 21¾" W x 15¼" D. Size, 33½" H x 23" W x 16" D. Shpg. wt., 35 lbs.
95 DZ 367. NET 36.00

MODEL 80 EQUIPMENT CABINET KIT. Same as Model 70, but in kit form.
95 DZ 386. NET 27.00

MODEL 7112 ASSEMBLED SPEAKER CABINET. Pre-cut for 12" speaker. Bass-reflex type. Baffle volume, 6 cubic feet. Removable panels for easy equipment changes. 33½" H x 23" W x 16" D. Wt., 40 lbs.
95 DZ 368. NET 27.00

MODEL 8112 SPEAKER ENCLOSURE KIT. All necessary parts to assemble this quality bass-reflex speaker enclosure. Same as Model 7112, but in kit form. 40 lbs.
95 DZ 387. NET 21.00

MODEL 7115 ASSEMBLED SPEAKER CABINET. Pre-cut for 15" speaker. Bass-reflex type, 6 cubic feet of baffle volume. Size, 33½" H x 23" W x 16" D. Wt., 40 lbs.
95 DZ 369. NET 27.00

MODEL 8115 SPEAKER ENCLOSURE KIT. All parts (pre-cut wood parts, glue, grille, and easy-to-follow instructions) for complete assembly. Same as 7115 above, but kit form. 6 cubic ft. Shpg. wt., 40 lbs.
95 DZ 388. NET 21.00

CORNER SPEAKER ENCLOSURE KITS. Folded horn design extends bass a full octave. White pine plywood. Includes pre-cut baffle, grille cloth, hardware, glue, plastic wood, acoustic insulation, and easy-to-follow assembly and finishing instructions. Provides proper horn loading to greatly improve transient response and power handling capacity of speaker. An excellent enclosure for the low-cost music system.

MODEL 63. For 15" speakers. Overall size, 32x36x17". Shpg. wt., 28 lbs.
95 DZ 384. NET 23.95

MODEL 61. For 12" speakers. Overall size, 32x32x16". Shpg. wt., 26 lbs.
95 DZ 385. NET 19.95

KLIPSCH-DESIGNED ENCLOSURES. Extremely effective corner enclosures utilizing the back-loading, folded-horn principle. Uses walls of room as enclosure extension. Effectively reduce distortion and hangover—extend bass response to 30 cps.

REBEL KR-3 ENCLOSURE. Surpassed in performance only by the original "Klipschorn." Designed for speakers up to and including 15" in diameter, coaxial or separate, 2- or 3-way systems. Height, 37"; width, 25⅛"; depth, 22". Utility model in unfinished birch. Same acoustical qualities. With speaker grille and side grilles. Wts.: Finished models, 60 lbs. Utility model, 55 lbs.

MODEL KR-3. Unfinished.
95 DZ 467. NET 84.00

MODEL KR-3. French Mahogany.
95 DZ 464. NET 126.00

MODEL KR-3. Korina Blonde.
95 DZ 465. NET 126.00

MODEL KR-3. Honey Walnut.
95 DZ 466. NET 126.00

"BUILD-YOUR-OWN" KR-3 KLIPSCH. Outstanding performance of Rebel KR-3 enclosure now available in money-saving kit form. Panel mounting cut for 15" speakers, coaxial or separate, 2 or 3—way systems. Highest grade birch ready for finishing. Same acoustical qualities as KR-3. With pre-cut baffle, glue, hardware, plastic grille cloth, side grills, etc. Wt., 55 lbs.
95 DZ 479. Model K-3. Kit. NET 54.00

REBEL KR-4 ENCLOSURES. Ideally suited for "apartment-size" music installations where it is desirable to save valuable space without compromising quality. Reproduction surpasses that of bass reflex enclosures. Beautiful plastic grille cloth; hand rubbed finishes.

SPECIFICATIONS: Model KR-4-15: For 15" speakers. Size: Height, 32"; width, 24"; depth, 16½". Shpg. wt., 50 lbs. Model KR-4-12: For 12" speakers. Size: Height, 32"; width, 21"; depth, 14½". 40 lbs.

MODEL KR-4-15. French Mahogany.
95 DZ 376. NET 87.00

MODEL KR-4-15. Korina Blonde.
95 DZ 377. NET 87.00

MODEL KR-4-15. Honey Walnut.
95 DZ 381. NET 87.00

MODEL KR-4-12. French Mahogany.
95 DZ 374. NET 69.00

MODEL KR-4-12. Korina Blonde.
95 DZ 375. NET 69.00

MODEL KR-4-12. Honey Walnut.
95 DZ 389. NET 69.00

"BUILD-YOUR-OWN" KR-4 KLIPSCH. Distinctive Klipsch-designed true corner horn enclosures in kit form. Easy 12" or 15" speaker installation with dual port arrangement for two speakers in varying combinations. Highest grade birch ready for finishing. Complete with pre-cut baffle, glue, angle braces, hardware, plastic grille cloth, etc. Identical acoustically to Model KR-4, except no top or side moldings.

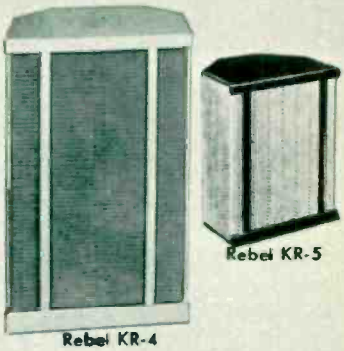
MODEL K-15. Shpg. wt., 35 lbs.
95 DZ 379. NET 42.00

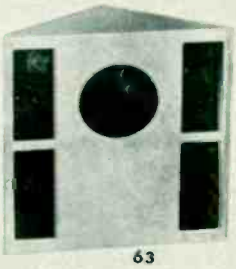
MODEL K-12. Shpg. wt., 32 lbs.
95 DZ 378. NET 36.00

REBEL KR-5 ENCLOSURES. Small version of the Cabinart-Klipsch corner horn enclosures. With handle for carrying, and wall mounting brackets. With 12" cutouts and 8" plate. For 8" or 12" speakers. 16⅝x14x21". Shpg. wt., 30 lbs.
95 DZ 468. French Mahogany.
95 DZ 469. Korina Blonde.
95 DZ 470. Honey Walnut.
95 DZ 471. Leatherette.
NET EACH 48.00

UTILITY MODEL. No grille or molding. Unfinished birch. Same acoustically as above.
95 DZ 473. For 8" speakers.
95 DZ 472. For 12" speakers.
NET EACH 33.00


Rebel KR-3


Rebel KR-5
Rebel KR-4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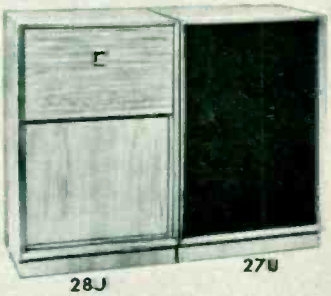
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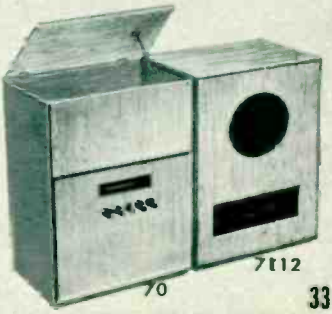
27U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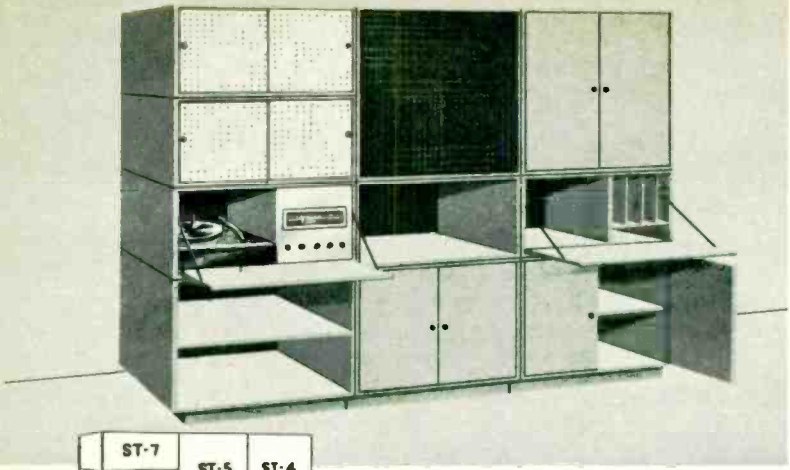
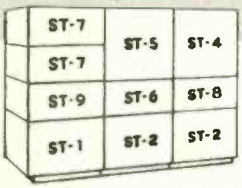
7112

Letter Z in Stock Number Indicates Express Shipment Only





Cabinart Wall Storage Cabinets

New, moderately priced and remarkably versatile wall storage cabinets. Manufactured of top-quality, warp-free plywood. All models are unfinished—ready for finishing to match room or furniture decor. For custom installation of any variety of high-fidelity components except TV; for storage of records, books, tapes, glassware, etc.; for assembling individually styled combinations of cabinets; for mixing or matching in any style. Light in weight, wall storage cabinets allow placement anywhere in the home—compact enough to fit any space. Combinations may be built up by using any number of cabinets. All cabinets are 35½" long and 16" deep—difference is only in height of units. Sliding doors are of unfinished, perforated masonite, ready for painting any color. Have ⅛" diameter holes drilled on 1" centers. Other doors (on ST-1, ST-2) are made of Novoply—unusually tough, laminated 3-ply wood plastic, ¾" thick. Bass-reflex cabinet (ST-5), has attractive plastic grille cloth for matching any furniture color. Baffle area, 9 cubic feet.

Description	Ht.	Assembled Units				Units in Kit Form			
		Model No.	Stock No.	Wt., Lbs.	NET	Model No.	Stock No.	Wt., Lbs.	NET
Open case, no doors; with adjustable shelf.	24"	ST-1	95DZ 490	40	36.00	KST-1	95DZ 480	37	27.00
Case with doors; adjustable shelf.	24"	ST-2	95DZ 491	54	48.00	KST-2	95DZ 481	51	36.00
Open case, no doors; with adjustable shelf.	32"	ST-3	95DZ 492	44	39.00	KST-3	95DZ 482	40	30.00
Case with doors; adjustable shelf.	32"	ST-4	95DZ 493	65	54.00	KST-4	95DZ 483	60	42.00
Bass-reflex speaker cabinet. Cut for 12", 15", or tweeter and woofer combination.	32"	ST-5	95DZ 494	60	48.00	KST-5	95DZ 484	55	36.00
Open cabinet.	16"	ST-6	95DZ 495	28	27.00	KST-6	95DZ 485	25	21.00
Case with sliding doors.	16"	ST-7	95DZ 496	33	39.00	KST-7	95DZ 486	31	30.00
Desk unit, with drop door for writing. Interior sectioned off in cubbyholes.	16"	ST-8	95DZ 497	37	42.00	KST-8	95DZ 487	35	33.00
Equipment cabinet for tuner, amplifier and record changer. Record changer box mounted on ball bearing slides; 9" pull-out to front.	16"	ST-9	95DZ 498	38	45.00	KST-9	95DZ 488	36	36.00
Base unit; 35½" long, 14" deep. Fits all models.	3"	ST-10	95DX 499	6	4.50	KST-10	95DX 489	5	3.60

Cabinart Model ACC-2 Turntable Mounting Bases

MODEL ACC-2. Turntable mounting base pre-cut for trouble-free installation of Rek-O-Kut Model B-12 or B-12H "Rondine" turntables. Choice of two attractive veneers.

95 RX 550. Mahogany.
95 RX 551. Korina Blonde.
NET EACH 24.90

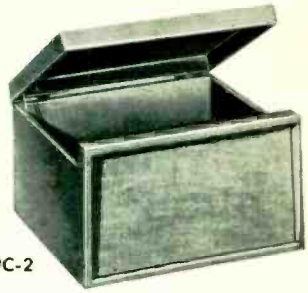
New, carefully designed turntable mounting bases. Greatly simplify installation of any popular turntable. Include features to absorb vibration and assure correct leveling. Free-floating top rests on foam rubber molding. Top has 45-degree bevel. Female bevel on base frame is fitted with foam rubber stripping, allowing top to fit snugly into bevel of base frame. Include precision leveling device and four, pre-mounted, rubber-tipped adjustable leveling screws. Available in lustrous mahogany or blonde veneers or in sanded, unfinished birch. HWD: 6½x21x16". Shpg. wt., 17 lbs.

MODEL ACC-2 UNCUT. Turntable mounting base supplied uncut. For use with any popular make of turntable. Available in blonde or mahogany veneers, it adds a smart, professional appearance to custom high-fidelity installations.

95 RX 552. Mahogany.
95 RX 553. Korina Blonde. NET EACH 24.90

MODEL ACC-2U UNCUT, UNFINISHED. Uncut and unfinished turntable mounting base. In smooth-sanded, white birch. Precision level and leveling screws pre-mounted for ease of installation. Ready for finishing.
95 RX 554. NET 19.95

UC-1



UC-2

Argos Equipment Cabinets

MODEL UC-1 EQUIPMENT CABINET. Beautifully styled cabinet for housing tuner or amplifier. Made of ¼" plywood, covered in richly embossed mahogany or blonde pyroxylin fabric, except front and back panels made of ⅛" hardboard. Front panel covered in smooth linen-finish fabric. Rubber feet to prevent marring surfaces. Outside HWD, 10 13/16x17x13½" (including rubber feet). Inside HWD, 9¼x16½x12¼". Wt. 8 lbs.

95 SX 363. Mahogany.
95 SX 364. Blonde.
List, $24.00. NET EACH 14.11

MODEL UC-2 RECORD PLAYER CABINET. Record player enclosure to match the UC-1 equipment cabinet described above. Houses any record changer listed in Catalog; also takes Garrard Model "T" or the Bogen B50-4LC. Same construction as UC-1 above, but 2" deeper. Shpg. wt., 15 lbs.

95 SX 365. Mahogany.
95 SX 366. Blonde.
List, $26.50. NET EACH 15.58

CABINART AND RIVER EDGE CUSTOM CABINETS AVAILABLE

River Edge and Cabinart modern, traditional or provincial cabinets offer unexcelled, up-to-the-minute styling, functional design and excellent construction.

Cutouts, made to fit your particular equipment, can be obtained for custom cabinets (not kits or unfinished models), on special order.

The River Edge line includes: Console cabinets for TV and hi-fi combinations, table model TV cabinets, console cabinets for complete hi-fi systems, special Hartley, RJ and Bozak-recommended speaker enclosures, etc. Available in 11 hand-rubbed finishes (Mahogany, Walnut, Limed Oak, Maple, etc.), and 30 cabinet styles from unfinished "do-it-yourself" kits to hand-painted cabinets.

The Cabinart line includes: Combination radio-phono-record storage cabinets, changer-tuner-amplifier-preamplifier cabinets, speaker enclosures, special Paul Klipsch-designed and licensed corner horn enclosures, complete equipment cabinets for hi-fi systems, storage wall cabinets, (assembled or in kit form), etc. Over 8 attractive finishes (Walnut, Mahogany, Ebony, Birch, etc.), and a wide variety of styles are available from this famous name in high-fidelity furniture.

ALLIED can supply the complete River Edge and Cabinart lines on special order. Write for price list, illustrations and descriptive literature.

A Complete Selection of Quality Phonograph Accessories

WALCO RECORD ACCESSORIES

Fig. A. RECORD CARE KIT. Contains: 6 oz. can of Stati-Clean, anti-static record spray and cleaner; 2 pkgs. plastic disc covers (12—12" sleeves, 15—10" sleeves); needle brush for cleaning needle tip; and book, "Guide to the Care of Modern Recordings" by K. A. Barleben. Shpg. wt., 2 lbs.
65 R 526. NET 2.91

Fig. B. DISC COVERS. Protective sleeves for 10" and 12" records. Made of polyethylene plastic. Prevent scratching of delicate record grooves, seal out dust. On long-playing records, sleeve fits into original record jacket. Shpg. wt., 6 oz.
65 R 515. Pkg. of 15, 10" sleeves.
65 R 516. Pkg. of 12, 12" sleeves. PKG. 88c

Fig. C. STATI-CLEAN. New anti-static record spray. Keeps LP records static free. Cannot collect dust. 6 oz. handy Aerosol spray can. Shpg. wt., 9 oz.
65 R 525. NET 88c

ROBINS PICKUP ACCESSORIES

Fig. D. SE-9 "ATOMIC JEWEL" RECORD NEUTRALIZER. Tiny jewel on clip. Makes records dust-resistant by neutralizing static electric charges which attract dust. Weighs less than 1/50 of oz. Lasts indefinitely. Clips to pickup arm. Wt., 2 oz.
96 R 768. NET 2.99

Fig. E. NB-1 KLEENEEDLE BRUSH. Automatic record changer needle brush. Brush is positioned to face upward. Whenever arm is cycled, needle is wiped over brush. With adhesive pad, instructions. Wt., 4 oz.
96 R 769. NET 98c

Fig. F—LEVEL & LEVELING SCREWS

CABINART MODEL ACC-3. Precision circular level indicator and four adjustable, rubber-tipped leveling screws. For use with any turntable installed on wood mounting board. Easy to install. Screws mount under base of turntable; level on top. Allows exact leveling. Shpg. wt., 6 oz.
95 R 555. NET 2.10

GOTHAM PHONO ACCESSORIES

Fig. G. RECORD EQUALIZER. Low-cost equalizer for improved record reproduction. Plug-in installation. Provides proper tonal balance; improves bass effect. For use with G.E. cartridges. 5 settings: LP, AES (for RIAA curve), Flat, Good 78 and Poor 78. Mounts in any position. Maximum depth, 4". With lead and plug. Size: 2½x2x2". Shpg. wt., 10 oz.
65 R 207. NET 4.95

Fig. H. FOAM RUBBER TURNTABLE MAT. Protective foam rubber record player mat. Fits any turntable or record changer. Cushions record drop on automatic record changers. Eliminates record slippage caused by worn turntable flocking. Reduces motor rumble; prevents needle damage if pickup arm is accidentally dropped. 9¾" diameter; 3/16" thick. Shpg. wt., 4 oz.
65 R 532. NET 89c

Fig. J—JENSEN "SILCLOTH" CLEANER

Anti-static, silicone-treated record wiping cloth. Helps maintain quiet, pop-free reproduction. Deposits microscopic anti-static film on record surface. Prevents records from attracting noise-producing lint and grit. One wiping lasts through repeated playings. In plastic pouch. 4 oz.
65 R 531. NET 73c

Fig. K—STYLUS INSPECTION MICROSCOPE

Pocket-size stylus inspection microscope. For checking phono needle tips to detect signs of wear or erosion. Approximately 50-power magnification. A "must" item for serious record collectors—instantly reveals record-damaging imperfections in stylus tips. Has groove for convenient centering of needle in microscope field. Metal barrel. Size. 3¼ long x ½" dia. Imported from Japan. Shpg. wt., 8 oz.
65 RC 440. NET 3.00

PHONO DRAWER SLIDES

Fig. L. STANDARD DRAWER SLIDES. For installation of record changers or turntables in cabinets. Carefully designed, and constructed of heavy steel for long trouble-free service. Slides are 15" long with a normal travel extension of 11". Slides can be attached either to bottom or sides of phono draw or base. Will firmly support phonograph assemblies up to a maximum weight of 50 pounds. Slide brackets have slotted holes to permit leveling slide after installation. High-quality ball-bearing action for smooth, easy operation. With rubber bumpers to reduce impact if drawer is carelessly handled. Shpg. wt., 4 lbs.
86 R 195. NET 1.90

STANDARD DRAWER SLIDES. As above, but 13" long. Shpg. wt., 4 lbs.
86 R 194. NET 1.90

Fig. M. HEAVY-DUTY DRAWER SLIDES. Extra-heavy steel ball bearing phono drawer slides for deluxe installations. Slide length, 18". Normal extension, 16". For extra-large changers. Can also be used for custom TV chassis installation. Supplied with 4 rollers which attach to sides of phono base or draw. Draw can be lifted completely out of cabinet without unscrewing slides or rollers. Supplied complete with full instructions and mounting hardware. Shpg. wt., 5 lbs.
86 R 199. List, $7.80. NET 4.60

PORTABLE PHONO CASES

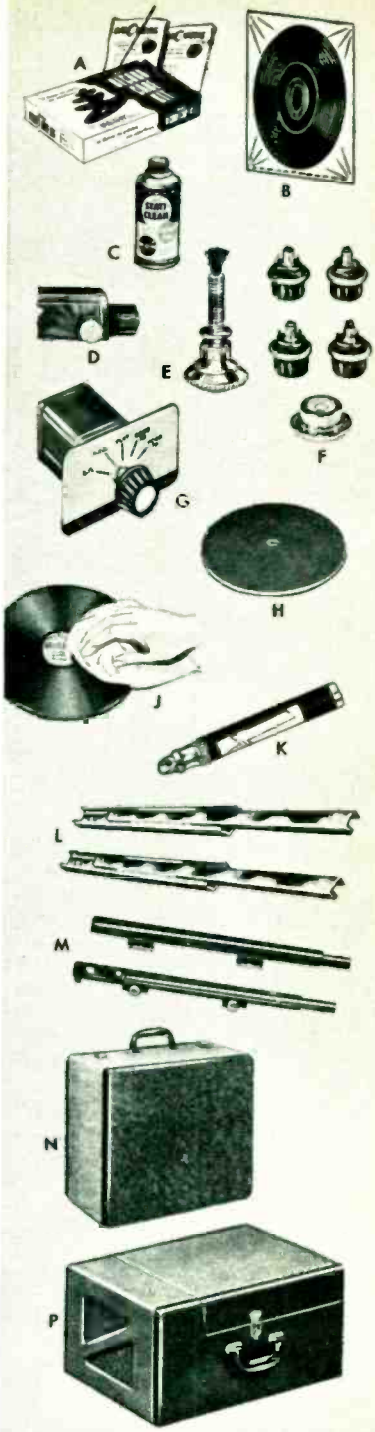
Fig. N. ARGOS PC-2 CARRYING CASE. Sturdy, attractive carrying case for Garrard and Webcor changers. Of heavy plywood, covered in two-tone brown leatherette. Has large, rubber mounting feet for furniture protection. Maximum clearance above mounting board, 6⅝". 16½" wide, 14½" deep. Outside case dimensions, 17" W x 9¾" H x 15¼" deep. Shpg. wt., 16 lbs.

FOR GARRARD CHANGERS. Mounting board cut out for Garrard Models RC80 and RC90 record changers.
93 SZ 636. NET 12.56

FOR WEBCOR MODEL 1631 CHANGERS. As above with mounting board cut out for Webcor Model 1631 changers.
93 SZ 638. NET 12.56

UNCUT. As above, but with blank mounting board. Can be cut for any changer. Will take Bogen B-50, etc.
93 SZ 639. NET 12.56

Fig. P. AMPLIFIER, SPEAKER, PHONO CASE. Rugged carrying case designed for an amplifier, speaker and phono motor. In two-tone brown simulated alligator leather. Ventilation by 4-vent holes. Blank sloping panel and blank mounting board. For all speakers to 8". Size: 19¾x15⅛x9⅝". Clearance; 6" above mtg. board, 2" below. Mtg. board, 15x14". Shpg. wt., 18 lbs.
93 SX 611. NET 12.95



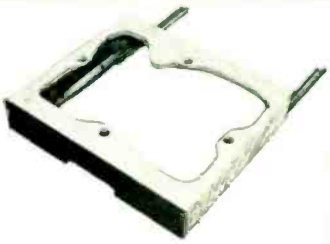
Cabinart Record Changer Boxes

MODEL ACC-1 UNCUT. Assembled record changer box. Made of smooth-sanded, ready-to-finish birch wood. Includes top-quality, steel ball-bearing phonograph slides, premounted for trouble-free installation in cabinet.

Perfect for the custom hi-fi installer—can be cut to accommodate any make of record changer or player. Hand-pull insert cut into front panel. Size: 3½" high, 16¼" long, 14½" deep. With complete installation instructions. Shpg. wt., 5 lbs.
95 RX 556. NET 9.90

MODEL ACC-1 PRE-CUT FOR GARRARD CHANGERS. Includes all features of record changer box described at left, but pre-cut for Garrard Model RC80 and RC90 record changers. Complete with instructions. Shpg. wt., 5 lbs.
95 RX 557. NET 9.90

MODEL ACC-1 PRE-CUT FOR WEBCOR CHANGERS. As above, but pre-cut to accommodate Webcor Model 1631 record changers. Complete with instructions. Shpg. wt., 5 lbs.
95 RX 558. NET 9.90



RC80

MODEL T

STYLUS PRESSURE GAUGE

301

Famous Garrard Record Changers and 3-Speed Players

MODEL RC80 "TRIUMPH" CHANGER

Latest version of an outstanding changer. Incorporates many new features and advancements. Precision-built unit plays 33⅓, 45 and 78 rpm records in all sizes (7", 10" or 12"). Uses automatic spindle (see listing below) for 45 rpm records. Free-moving, jewel-mounted tone arm—parallel lift construction guarantees true tangent tracking.

Top-of-base stylus-pressure adjustment—completely accessible. Records are gently handled by pusher-type platform—adjusts to all records. R-C network across AC switch prevents "popping" in speaker when motor shuts off. Automatically shuts-off after last record is played, regardless of type or size. In "off" position, idler is disengaged—prevents "flats" on idler wheel.

Powerful, constant-speed, 4-pole, shaded-pole motor. Speed maintained through wide variation in line voltage. Motor armature dynamically balanced and individually weighted to close tolerances. No appreciable speed difference whether operating with full load or single record. Heavily weighted turntable for smooth, flywheel action. New interwheel prevents rumble or flutter. Rumble-free spindle thrust assembly with new, durable plastic washer. Sintered bronze bearings. New record pawl guide for records of sub-standard thickness.

New snap-spring mounting hardware—changer instantly snaps into position on motor board—can easily be levelled. Equipped with new professional-type plug-in heads with handy finger lift. Min. mounting space: 15½"W, 13¼"D, 3½" below top of mounting board, 5¾" above. With 2 plug-in-heads, hardware, 6 ft. AC line cord and plug, 4 ft. output cable with phono plug. Less cartridges and preamp (for magnetic cartridges). For 100-130 or 200-250 v., 60 cycle AC. Shpg. wt., 18 lbs.

96 RX 724. NET **48.51**

RC80/GED CHANGER. As above but includes G.E. RPX-052A cartridge with .001" diamond and .003" sapphire tips.

96 RX 937. NET **70.07**

RC90 "CROWN" CHANGER. Similar to above except has manual feature for playing discs without change cycle. Also magnetic speed adjustment for exact rpm. Powerful 4-pole, shaded pole motor. Min. mounting space required: 15½"W, 13¼"D, 5¾" above, 4" below top of mounting board. Shpg. wt., 18 lbs.

96 RX 720. NET **68.11**

45 RPM SPINDLE. For above changers. Completely automatic. Shpg. wt., 10 oz.

96 R 723. NET **3.43**

MODEL T "CREST" MANUAL PLAYER

Deluxe 3-speed manual player incorporating all the basic features of the RC80 record changer. Guarantees finest reproduction of recorded music where a changer is not desired. Plays 33⅓, 45 and 78 rpm records in 7", 10" and 12" sizes. Simplified operation—starts when pickup is lifted and shuts off automatically after record has played. Easy adjustment of stylus pressure—simply adjust knurled knob at rear of tone arm for desired weight.

New ball-bearing-mounted pull-away idler wheel assures longer wear, smoother performance. Prevents flat spots on idler wheel while player is not in use. Ball-bearing main spindle drive provides smooth, quiet operation—eliminates turntable rumble. Heavily weighted turntable designed for smooth, flywheel action—any variations in the motor-speed are not reflected in record reproduction. Turntable covered with heavy velvet for added record protection. Heavy-duty, silent 4-pole, shaded-pole motor with perfectly balanced armature for constant speed. Eliminates motor hum pick-up.

R-C network across AC switch prevents "popping" in speaker when motor stops. New professional-type plug-in heads with convenient finger-lift for record groove protection. Has 45 rpm record adapter—no spiders or plugs are necessary. Heavy-gauge steel unit plate—will not warp or bend. Minimum mounting space: 13¾x12¾"; 3¼" above and 3½" below top of mounting board. Complete with 2 plug-in heads, 6 ft. AC line cord and plug and 4 ft. output cable with phono plug. Less cartridges and preamp (for magnetic cartridges). For operation from 110-130 or 200-250 v., 60 cycle AC. Shpg. wt., 13 lbs.

96 RX 630. NET **31.85**

MODEL 301 "PROFESSIONAL" TURNTABLE

New, 3-speed hi-fi turntable with highest professional standards. Plays at 33⅓, 45 and 78 rpm. Simple eddy current brake for instant variation of speed if desired: 32-34, 44-46 or 76-80 rpm. Positive action at all times—no friction loss. New, built-in pressure lubrication system. Oversized grease housing permanently mounted on main spindle. Easily turned knurled knob forces additional lubrication into spindle.

7½ lb., 12" dia. cast aluminum turntable for perfect "wow-free" operation. Has heavy rubber record cushion. Noiseless main spindle—rotates on specially designed frictionless bearing. Eliminates noise and rumble. R-C network suppresses "pop" in speaker as unit is turned off. Shut-off brake stops free turntable revolutions. New, speed safety-lock makes unit shutoff mandatory before changing speeds—prevents jamming of idlers and mechanism.

Wow is less than 0.2%; flutter less than 0.05%. Heavy-duty, 4-pole, shaded-pole motor assures constant speed. Motor is suspended by counterbalancing tension springs. Eliminates possibility of vibration transmission. Size, 16x13¾"; requires 2½" above, 3½" below motor board. With 24-page manual and etched plastic stroboscope. For 100-130 or 200-250 v., 60 cycles AC. Shpg. wt., 20 lbs.

96 RZ 912. NET **87.22**

MODEL WB301. For above. 2 piece ebony base, level indicator and adjustable legs. Shpg. wt., 28 lbs.

96 RZ 914. NET **24.01**

MB301 MOUNTING BOARD. 2 piece. Unfinished. With level indicator. 3½ lbs.

96 RX 913. NET **8.82**

ACCESSORIES FOR GARRARD PRODUCTS

STYLUS PRESSURE GAUGE. Accurately measures weight exerted by a stylus upon a record. Can be used with any pickup arm. Helps reduce record wear by having proper stylus pressure. Scientifically calibrated and marked in large, easy-to-read markings in one gram intervals to 15 grams. All moving parts are light-weight alloy, completely sealed for added protection. Red and ivory plastic case. Shpg. wt., 5 oz.

96 R 504. NET **2.45**

EXTRA PLUG-IN-HEAD. Replacement or extra plug-in-head for RC80, RC90 changers and Model "T" player. Has professional-type finger-lift for lifting arm. With knock-out for dual-stylus GE cartridges if desired. Standard ½" mntg. centers. 6 oz.

56 R 341. NET EACH **1.47**

WOOD BASES. Sturdy, attractive wood bases for table-top use. For Models RC80 and RC90 changers, or Model "T" manual player. Dark mahogany finish. Quality veneers. Shpg. wt., 6 lbs.

For Models RC80 and RC90 changers.

96 RX 595. NET **5.83**

For Model "T" manual player.

96 RX 631. NET **5.14**

MOUNTING BOARDS. Sturdy, unfinished wood mounting boards for cabinet installation of Model RC80 or RC90 changers and Model "T" manual player. Size: 18x16". Shpg. wt., 3 lbs.

96 RX 597. For RC80 and RC90 changers.
96 RX 632. For Model "T" manual player.
NET EACH **2.45**

KEEP YOUR CHANGER DUST-FREE

DONAL RECORD CHANGER COVERS

Decorative vinylite plastic covers for protecting record players. Custom made to fit over phonographs and changers. Will blend with color scheme of any installation. Protects player from dust, dirt and moisture. Stain and water resistant; will not crack or mildew. Maroon "Sataffetta" embossed finish. Wipes clean with a damp cloth. Folds compactly when not in use. Electronically welded seams for added durability. Average shpg. wt., 6 oz.

Stock No.	Type	Used For	NET EACH
96 R 920	101	V-M 920 Changer	1.49
96 R 923	104	V-M 936HF Changer	1.98
96 R 924	201	RCA 45J2 Changer	1.49
96 R 925	202	RCA 45EY2 Phono	1.49
96 R 930	303	All Webcor Changers	
		V-M 1200, 1225 Garrard RC80, RC90	1.98

See Pages 38, 39 and 40 for Magnetic Cartridges and Preamps

920

V-M Model 920 Changer

Handsomely styled. 100% automatic, 3-speed changer-player at an unbeatable low price. One piece styling on molded plastic base—ready for immediate use. No installation problems—plugs into any AC outlet and standard amplifier, radio or TV set equipped with phono jack. Blends into any furnishing scheme or installation. Positive intermix of ten 10" and 12" records of same speed. Automatic setdown selection on all size records—7", 10" and 12". Will also play manually if changer action is not desired. Completely jamproof mechanism. Simple, centralized one-knob control—easily accessible.

Tri-O-Matic spindle gently lowers records. Automatic shutoff after last record has played—shuts off amplifier and changer. Lightweight, gold-finish tone arm with dual-stylus turnover cartridge. Changer capacity: 12—10" or 7"; 10—12" records. 12x10x7¾". With 6 ft. AC cord and plug, 4 ft. shielded phono cable and pin plug. U.L. Approved. For 105-120 v., 60 cycle AC. Shpg. wt., 10 lbs.

96 RX 347. NET **29.95**

V-M PHONO ACCESSORIES

MOUNTING BOARDS. Pre-cut, unfinished mounting boards. Greatly simplify custom changer installations. 15⅞x15⅞". Shpg. wt., 3 lbs.

96 RX 579. For 935 changer. NET ... **1.79**

95 RX 511. For 1200 changer. NET ... **1.46**

45 RPM SPINDLE. For all V-M changers listed. Automatic—eliminates spiders. Shpg. wt., 8 oz.

96 R 329. List. $2.95. NET **1.88**

FIBER SPIDERS. For use with 45 rpm records. Used with changers or manual players with standard spindles. Wt., 3 oz.

96 R 244. NET PER PKG. OF 12 ..... **25c**

Webcor Intermix Automatic Record Changers

BR1641-21

BR1641-27

Completely restyled Webcor changers incorporating latest deluxe features. Replaces Series 1121 changers. Offers outstanding performance and ultra-smart styling. Automatically plays 7", 10" and 12" records at 33⅓, 45 and 78 rpm. New positive intermix feature—mixes any 10" or 12" records of same speed. Individual records may be played manually if desired.

Pickup automatically adjusts for proper setdown regardless of record size. Completely jamproof. Centralized control knob for rapid speed selection and manual change cycle. Idler wheel disengages in "off" position (prevents idler wheel "flats"). Motor automatically stops, pickup comes to rest after last record has played. New "rotodyne" motor for accurate, dependable turntable speed.

Heavily flocked, weighted turntable. New-lightweight pickup arm for maximum stylus and record life. Pickup can be adjusted for stylus pressure. Quiet change cycle—no AC "pop" in speaker.

Minimum mounting space required: 13⅞" wide x 13" deep. 4¾" above and 3¾" below top of mounting board. With 3 ft. AC line cord and plug. In attractive burgundy and beige finish. For operation from 105-120 volts, 60 cycle AC. Shpg. wt., 16 lbs.

MODEL BR1641-1. With turnover-type ceramic cartridge and two sapphire-tipped styli. Ceramic cartridge is unaffected by heat and moisture. High compliance. No preamp required. Replaceable styli.

95 RX 762. List. $49.50 NET **38.81**

MODEL BR1641-21. With new G.E. RPX-050A magnetic cartridge (features new "clip-in-tip" for rapid stylus replacement) and 4-pole, shaded pole motor. Has .001" and .003" sapphire styli. Requires preamp.

95 RX 763. List. $51.75. NET **40.57**

MODEL BR1641-27. Complete with two plug-in heads and 4-pole, shaded pole motor. Heads accommodate crystal, ceramic, magnetic cartridges. Less cartridges.

95 RX 764. List. $43.30. NET **33.95**

WEBCOR ACCESSORIES

METAL BASES. Highly attractive, burgundy-finish, metal mounting bases. For use with Series 1631 and 1641 record changers. Ideal for tabletop or shelf use. 3 lbs.

95 RX 765. NET **5.68**

MOUNTING BOARDS. For mounting Webcor 1631 and 1641 changers. Heavy plywood with cutout and countersunk mounting holes. 16x16x⅝". Shpg. wt., 3 lbs.

95 RX 767. List. $2.50. NET **1.96**

45 RPM SPINDLE. For 1631, 1632 and 1641 changers. Automatically changes 45 rpm records. Slips over changer spindle. Ready for instant use. 8 oz.

96 R 839. List. $3.75. NET **2.94**

METAL SPIDERS. Snap into center of 45 rpm records. Permits use of 45 rpm records on players with small spindles. In packages of 10. Shpg. wt., per pkg., 6 oz.

96 R 471. NET PER PKG. **46c**

See inside front cover for new Webcor Hi-Fi Series 1631 and 1632 Imperial Diskchangers. Models are available for every use and every location. Will suit all decorating motifs.

Popular V-M Automatic Record Changers

"B" SERIES HI-FI CHANGER MODELS. Specifically designed for hi-fi systems. Cast aluminum, resonance-free pickup easily adjusted for proper styli pressure. Heavily-weighted turntable, improved motor mounting and new drive system virtually eliminates "wow" and rumble. Constant speed, 4-pole, shaded-pole motor. Muting switch silences output during change cycle. Will intermix any ten 12" and 10" records of same speed. Plays 12—10" or 12" (33⅓ or 78 rpm); 14—7" (33⅓ or 45 rpm) records. Pickup comes to rest after last record has played. Also operates manually if changer cycle is not desired. Supplied with 45 rpm automatic spindle. Styled in gold and burgundy. With 2 plug-in heads (for magnetic, crystal, or ceramic cartridges); one gold and one burgundy. Magnetic cartridges require preamp. U.L. Approved. For operation from 105-125 v., 60 cycle AC.

MODEL 935B CHANGER. Requires 5" clearance above mounting board and 3½" below. Less cartridges. AC cord and output cable. 13½x13¼". Wt., 12½ lbs.

96 RX 938. List. $59.95. NET **38.97**

MODEL 936B CHANGER ON METAL BASE. As above, but with gold-finished metal base. 6 ft. AC cord and 4 ft. output cable with plugs. 13½x13¼x8½". 18¼ lbs.

96 RX 939. List. $69.95. NET **45.47**

NEW 1200 SERIES 4-SPEED CHANGERS. New 4-speed changers. Plays 33⅓, 45 and 78 rpm plus 16⅔ rpm "talking-book" speed. Tri-O-Matic spindle gently lowers records to spindle shelf. Capacity: 12—10", 10—12", 14—7" records. Positive intermix of 10-12" and 10" records of same speed. Automatic setdown for all sizes. Completely jamproof. Shuts off automatically after last record has played. Other features include: aluminum die-cast arm; direct drive motor; manual play. In gold and burgundy. Bases in beautiful tan finish. U.L. Approved. For 110-120 v., 60 cycle AC.

MODEL 1200 (LESS BASE). Ceramic cartridge with 2 sapphire styli. HWD. 8⅝x13¾x12¾". Less base, AC cord and output cable. Shpg. wt., 11 lbs.

95 RX 512. List. $46.50. NET **30.22**

MODEL 1200GE (LESS BASE). As above, but with G.E. RPX-050A magnetic cartridge.

95 RX 513. List. $51.50. NET **33.47**

MODEL 1225 (WITH BASE). Same as Model 1200 but with base. AC cord, output cable and plug. 8¾x13¾x12¾". 14¼ lbs.

95 RX 514. List. $49.95. NET **32.66**

MODEL 1225GE (WITH BASE). As above, but with G.E.RPX-050A magnetic cartridge.

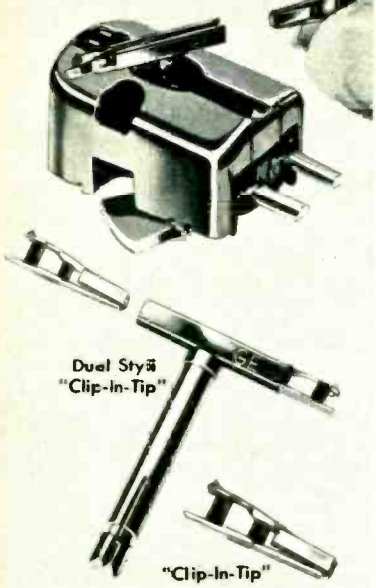
95 RX 515. List. $54.95. NET **35.91**

1200

935B
936B

General Electric Phono Components

Latest "Clip-In-Tip" Cartridges



G.E. Magnetic Cartridges With New "Clip-In-Tip"

G.E. magnetic (variable reluctance) cartridges feature the newly designed "clip-in-tip." The stylus tip is made as an individual part and can be separated from the shank assembly simply by sliding it out. When only one tip is worn it is not necessary to replace the entire assembly—just unclip the worn stylus and clip in a new one. The single-stylus types also offer the convenience of "clip-in-tips." Eliminates stylus centering problems.

G.E. cartridges are performance-proven in thousands of high fidelity systems. Response from 30 to 15,000 cps. .001" tips are for microgroove records; .003" tips are for standard 78 rpm records. "S" indicates sapphire tip; "D" indicates diamond tip. Diamond styli maintain proper tip shape at least 20 times longer than sapphire styli. For long-run economy use diamond styli. *"Golden Treasure" types have gold-plated cases. All require pre-amp (see below). Shpg. wt., 4 oz.

TRIPLE-PLAY TYPES

No.	Type	Stylus Tips	List	NET
65 R 980	RPX-050A	S-.001" S-.003"	$13.95	8.20
65 RC 981	RPX-052A*	D-.001" S-.003"	38.95	22.90
65 RC 982	RPX-053A*	D-.001" D-.003"	57.90	34.05

SINGLE STYLUS TYPES

No.	Type	Stylus Tips	List	NET
65 R 983	RPX-041A	S-.001"	$9.95	5.85
65 R 984	RPX-040A	S-.003"	9.95	5.85
65 RC 985	RPX-061A*	D-.001"	33.95	19.96
65 RC 986	RPX-063A*	D-.003"	33.95	19.96

BROADCAST "CLIP-IN-TIP" CARTRIDGES

Low-impedance cartridges for broadcast use. (Not for Hi-Fi systems.) Same response as above. Shpg. wt., 4 oz.

No.	Type	Stylus Tips	List	NET
65 RC 977	RPX-145	D-.001"	$33.95	19.96
65 RC 978	RPX-146	D-.0025"	33.95	19.96
65 RC 979	RPX-147	D-.001" D-.0025"	57.90	34.05

Replacement "Clip-in-Tip" Styli

For stylus replacement in single or triple play "Clip-In-Tip" cartridges. Wt., 2 oz.

No.	Type	Stylus	Radius
65 RC 992	RPJ-01D	Diamond	.001"
65 RC 993	RPJ-02D	Diamond	.0025"
65 RC 994	RPJ-03D	Diamond	.003"

NET EACH 15.68

65 R 995	RPJ-01S	Sapphire	.001"
65 R 996	RPJ-02S	Sapphire	.0025"
65 R 997	RPJ-03S	Sapphire	.003"

NET EACH 1.96

STYLI MODERNIZATION ASSEMBLIES

For modernizing G.E. triple-play cartridge types RPX-050, -052, -053, -047. Once installed, only the tips need be replaced when worn. "S"—Sapphire; "D"—Diamond. Shpg. wt., 2 oz.

No.	Type	Stylus Tips	List	NET
65 R 988	RPJ-010A	S-.001" S-.003"	$5.95	3.50
65 RC 991	RPJ-012A	D-.001" D-.003"	49.95	29.37
65 RC 989	RPJ-013A	D-.001" S-.003"	31.00	18.23
65 RC 987	RPJ-007A	S-.001" S-.0025"	5.95	3.50
65 RC 990	RPJ-011A	D-.001" D-.0025"	49.95	29.37

SINGLE-TIPPED REPLACEMENT STYLI

Replacement single-tipped styli for G.E. cartridge types RPX-040, -041, -061, and -063. (These cartridges cannot be converted for "Clip-In-Tip" styli.) Wt., 2 oz.

No.	Type	Stylus	Radius
65 R 281	RPJ-005	Sapphire	.001"
65 R 261	RPJ-006	Sapphire	.0025"
65 R 295	RPJ-001	Sapphire	.003"

List Each, $3.50. NET EACH 2.06

99 RC 815	RPJ-004	Diamond	.001"
99 RC 817	RPJ-002	Diamond	.0025"
99 RC 816	RPJ-003	Diamond	.003"

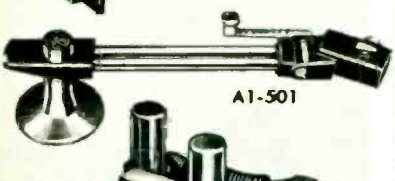
List Each, $27.50. NET EACH 16.17

RPK-009A REPLACEMENT PARTS KIT. For triple-play cartridges. Includes washers, spring and knobs. Shpg. wt., 4 oz.
65 R 971. NET 30c

RQB-001 STYLUS BRUSH. Soft brush for cleaning stylus assemblies. Wt., 2 oz.
65 R 972. NET 10c

G.E. PHONO ACCESSORIES AND MODERNIZING EQUIPMENT

A1-901 RECORD COMPENSATOR AND FILTER. For use with G.E. cartridges. Has 6 positions of record compensation plus 4-position low and high-frequency cut-off filters. Low filter reduces rumble and hum; high filter reduces record scratch and hiss. Size. 3⅝x7⅝x3⅝. Shpg. wt., 2¾ lbs.
99 R 819. NET 19.55



MODEL A1-500 "BATON" 12" PICKUP ARM. For G.E. single- or triple-play cartridges. Excellent tracking, even on warped records. Ball bearing suspension, aluminum construction. Cartridges "slide-in." Stylus pressure shown directly in grams on calibrated scale, quickly adjusted with sliding weight. Height adjustable to 2". Length. 10⅞". Shpg. wt., 1½ lbs.
99 R 843. NET 31.95

A1-501 16" ARM. Length. 14⅛". 2 lbs.
99 R 844. NET 35.50

UPX-003A PREAMP. For quick, easy modernization of phono equipment. Permits using G.E. magnetic cartridges with any radio or phono not having built-in preamp. With 14" shielded cable and plug. 6SC7 tube and selenium rectifier; instructions. 3⅝x3⅝x3¾". For 110-120 volts. 60 cycle AC. Shpg. wt., 2¼ lbs.
65 R 278. List, $17.95. NET 10.55

A1-200 PREAMP. Complete preamp and control unit. 3 inputs, 5 equalization positions, bass, treble and loudness controls. Size. 3⅛x12¾x8½". For 105-120 v., 50-60 cycles AC. Shpg. wt., 7 lbs.
93 SX 996. List. $96.55. NET 56.79

A1-300 10-WATT BASIC AMPLIFIER. For use with A1-200 above. Response: ±2 db, 30-15,000 cps. Output Impedance: 4, 8 and 16 ohms. 5½x12¼x4½". For 105-120 v., 60 cycle AC. Wt., 12 lbs.
93 SX 995. List. $79.55. NET 46.79

COMPONENTS FOR WEBCOR CHANGERS

UPX-009A PICKUP ARM & CARTRIDGE. Complete with new G.E. RPX-050A triple-play cartridge. For standard and microgroove records. Replaces crystal cartridge pickup arms on the following Webcor changers: Models 100-1, 101-1, 106-1, 246-1, 256-1, 346-1 and 356-1. Equipped with dual-tipped sapphire stylus and instructions. Requires preamplifier. Simple to install. Shpg. wt., ¾ lb.
65 R 998. List. $15.55. NET 9.14

UPX-111A TRIPLE-PLAY CARTRIDGE & HEAD. Consists of G.E. RPX-050A triple-play cartridge (listed above) installed in Webcor plug-in head. Fits Webcor plug-in type arm. With dual-tipped (.001" and .003") sapphire stylus. Requires preamplifier. Shpg. wt., 8 oz.
65 R 999. List. $15.95. NET 9.38

22X084-3 PICKUP ARM. Plastic arm with hinge and pivot shaft. For Webcor Models 114-1, 121-1, 126-1 and 127-1 (use Type 22X084-2 pickup arm below, for other Webcor changers). Takes Webcor plug-in heads. Shpg. wt., 8 oz.
96 R 783. NET 2.64

22X084-2 PICKUP ARM. As above, but for all other Webcor changers (except 1631 and 1641 series).
96 R 221. NET 2.64

PLUG-IN HEADS. Fit above pickup arms. Lightweight, plastic. For use with G.E. microgroove or standard single-play cartridges or triple-play cartridges. Available in choice of gray or burgundy. Less cartridges. Shpg. wt., 5 oz.
96 R 470. Type 1900. Gray.
96 R 469. Type 1900R. Burgundy.
NET EACH 59c

See Page 30 for G.E. Speakers and Cabinets

Pickering Cartridges and Accessories

NEW "FLUXVALVE" CARTRIDGES

WITH INDIVIDUAL REPLACEMENT STYLI. New replaceable stylus dual turnover magnetic cartridges with extremely wide response. Provide the ultimate in record reproduction. Stylus can be quickly and easily changed. Frequency response, ±2 db from 10 cycles to beyond 20,000 cps. Exceptional compliance and minimum mass assure extremely high tracking accuracy and minimum record and stylus wear. Can be used with all hi-fi changers and pickup arms. When used with the 190D pickup arm (shown at right), tracking force can be as low as two grams. Hermetically sealed. Available with either two diamond styli or with diamond LP and sapphire standard styli. "S" indicates sapphire tip; "D" indicates diamond. 30 millivolts output. Requires preamplifier. Shpg. wt., 3 oz.

No.	Type	Styli	NET
99 RC 847	350DD	D-.001", D-.0027"	63.00
99 RC 848	350DS	D-.001", S-.0027"	49.50

REPLACEMENT STYLI FOR 350 SERIES CARTRIDGES. Quickly and easily installed in Pickering 350 series cartridges, above. Precision ground tip. Shpg. wt., 2 oz.

Stock No.	Type	Tip	NET
99 RC 849	D3510	001" Diamond	21.00
99 RC 896	D3527	0027" Diamond	21.00
99 RC 897	S3527	0027" Sapphire	7.50

SERIES 200 "DYNAMIC COUPLING" CARTRIDGES. Magnetic cartridges for use in fine hi-fi systems. Frequency response, 20-20,000 cps. Stylus pressure, 4-8 grams. Output, 30 millivolts. With mounting brackets for plug-in heads and pickup arms. Require preamp.

TWIN-UNIT TYPES. Two "Dynamic Coupling" miniature cartridges mounted "back to-back." Just flip lever to select proper cartridge for standard or microgroove records. "S" indicates sapphire; "D" indicates diamond. Shpg. wt., 5 oz.

No.	Type	Styli	List	NET
99 RC 846	260DS	D-.001", S-.0027"	$80.00	48.00
99 RC 832	260DD	D-.001", D-.0027"	100.00	60.00

SINGLE-UNIT TYPES. Individual "Dynamic Coupling" miniature cartridges. Types for standard records are gold plated; microgroove type is silver plated. Shpg. wt., 4 oz.

No.	Type	Stylus	List	NET
65 R 258	S220	Sapphire .0027"	$21.00	12.60
99 RC 833	D220	Diamond .0027"	46.00	27.60
99 RC 834	D240	Diamond .001"	62.50	37.50

190D PICK-UP ARM

For Pickering and other magnetic cartridges. Arm is well balanced, resonance-free and has high tracking accuracy, negligible distortion. Stylus protected against accidental damage. Adjustments for tracking force, height and leveling. Minimum mounting board size: 17x17". Complete with plug-in cartridge holder and arm rest. 14½" long. Shpg. wt., 2 lbs.

99 R 830. List, $52.50. NET..... **31.50**

STYLUS FORCE GAUGE. A simple, accurate lever-type gram scale. For all pickups. Shpg. wt., 2 oz.

99 R 898. List, 25c. NET..... **15c**

230H PREAMPLIFIER. (Not illustrated.) Equalized preamplifier; for use with Pickering magnetic cartridges. Very low intermodulation distortion; only 0.2% at normal output. High-impedance output. Output Level, 2 volts. Less tubes; requires 6AU6, 6C4 and 6X4. Size, 8½x4½x5¼". For 110-120 v., 60 cycle AC. Shpg. wt., 5 lbs.

99 R 809. List, $40.00. NET..... **24.00**

SERIES 100 "DYNAMIC COUPLING" CARTRIDGES. Deluxe-quality magnetic cartridges for discriminating music lovers and professional users. Response, 20-20,000 cps. Stylus pressure: Type 120, 15 grams; Type 140, 6 grams. Output, 50 millivolts. .0027" stylus for standard records, .001" stylus for microgroove recordings. With clips for mounting in Garrard plug-in heads (see clips for Webcor mounting below) and most pickup arms. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Stylus	List	NET EACH
65 R 285	S-120M	Sapphire.0027"	$16.50	9.90
99 RC 806	D-120M	Diamond.0027"	41.50	24.90
99 RC 807	D-140S	Diamond .001"	60.00	36.00
65 RC 288	S-140S	Sapphire .001"	25.00	15.00

MOUNTING CLIPS. For mounting Type 120 and 140 cartridges in plug-in heads of Webcor changers. Shpg. wt., 2 oz.

65 R 297. For microgroove cartridges.

65 R 296. For standard cartridges.

List, 25c. NET EACH..... **15c**

132E RECORD COMPENSATOR

Brings out the full beauty of recorded music. Provides rich, properly balanced reproduction. 6 position: European 78; London 33 and Old LP; Old Capitol and AES; New AES (RIAA); Maximum treble and bass; Noisy Records. With cable, pin plug and jack; ready for installation between magnetic cartridge and preamp. For panel mounting, 17⅞x17⅞x3⅛" deep. Etched front panel plate. Wt., 1 lb.

99 R 808. List, $20.00. NET ... **12.00**

Fairchild Hi-Fi Audio Components

MODEL 280A TRANSCRIPTION ARM. Professional quality transcription pickup arm for the most exacting hi-fi installations. Accepts all magnetic cartridges. For recordings to 12" in diameter. Plug-in slide feature for quick cartridge change. Adjustable springs make contact with the cartridge terminals. Springs short when cartridge is removed, thus avoiding open circuit hum. Arm is curved and pivoted slightly off center for perfect tracking. Height, leveling and stylus pressure is adjustable. Arm drop limit adjustment prevents damaging stylus. In two-tone beige and gold. Shpg. wt., 3 lbs.

65 R 022. NET..... **33.95**

MODEL 281A. As above but for recordings up to 16" in diameter. Ideal for broadcast transcription use. Shpg. wt., 3 lbs.

65 R 023. NET..... **35.95**

SERIES 220 CARTRIDGES. Low-impedance, professional-type moving coil cartridges. Can be used with long cable to preamp without hum pickup or high-frequency attenuation. Response, ±2 db, 20-17,000 cps. Output, 5 millivolts. Impedance, 170 ohms. With diamond stylus. Require preamplifier. Standard ½" mounting centers. Shpg. wt., 4 oz.

Stock No.	Type	Stylus	NET EACH
65 RC 068	220A	.001"	37.50
65 RC 069	220B	.0025"	
65 RC 074	220C	.003"	

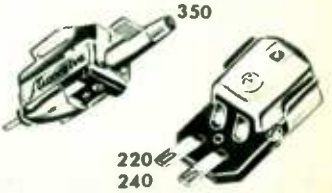
235 INPUT TRANSFORMER. Provides additional 14 db gain for Fairchild cartridges. Plugs in. With phono jack, 30" cable. Shpg. wt., 1½ lbs.

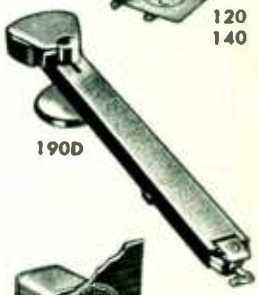
65 R 021. NET..... **10.75**

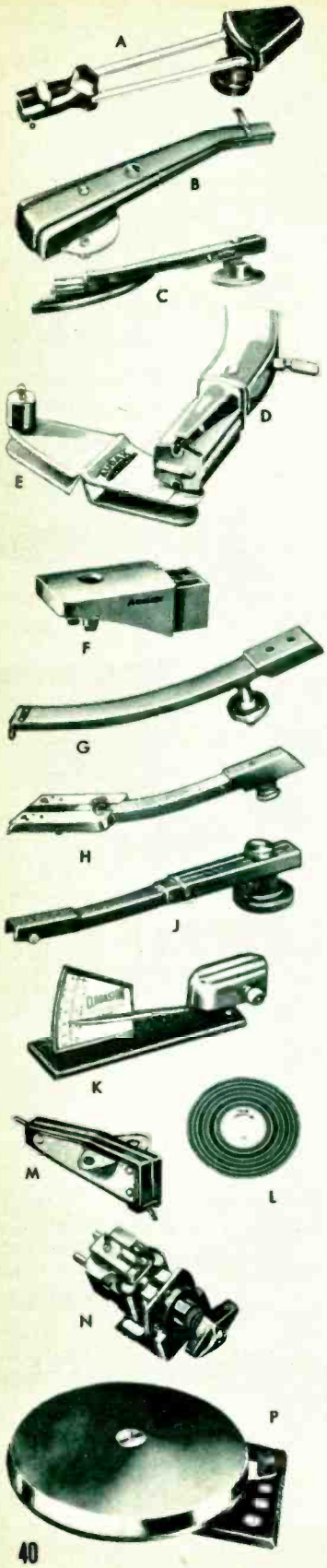
MODEL 240 PREAMPLIFIER. Deluxe preamplifier. Features "Balanced-Bar" tone control system. Low-noise cascode input circuit. Frequency response: 20-20,000 cps. Inputs: High level for tape, tuner and auxiliary, low level for magnetic cartridge. Output: 500 ohm cathode follower. Eight positions of equalization. Panel controls: 11-position input-equalization selector, loudness curve selector switch, bass and treble tone controls, volume-on-off. Rear controls: Tape output level, tuner input level, auxiliary input level. Finished in gray with gold trim. Size, 13⅜x7x3¼" high. Tubes: 12AT7, 2-12AX7 plus selenium rectifiers For 110-120 v. 50-60 cycles AC. Shpg. wt., 11 lbs.

65 RX 065. NET..... **98.50**

Pickering Hi-Fi Phono Components







High-Fidelity Transcription Arms, Cartridges And Turntables

Fig. A—B-J TONE ARM

New-design, professional pickup arm for 12" turntables. Geometrically constructed to move stylus parallel to record grooves. Tangential tracking minimizes noise, distortion and record wear. Counterweight not "carried" by stylus. Twin arms of unequal length co-ordinate to provide momentum-free movement. Tracks at less than 2 grams. For most high fidelity cartridges. Length of arm, 11 inches. Adjustable height to fit any turntable. Less cartridges. Shpg. wt., 2 lbs.

99 R 888. NET 22.50

Fig. B—GRAY 108C TONE ARM

Dependable, high-fidelity pickup arm for transcription-type turntables. Incorporates "viscous-damped" (fluid controlled) design to provide high tracking accuracy. For records up to 16" in diameter. Constructed of fine cast aluminum. Vertical motion of arm is controlled by "viscous-damped" mechanism. Accommodates most magnetic cartridges including Pickering, G.E., and Fairchild. Shpg. wt., 2 lbs.

99 RX 853. NET 39.95

AUDAX HIGH-FIDELITY COMPONENTS

Fig. D. AUDAX MAGNETIC CARTRIDGES. Turnover type. Response, 20-20,000 cps. Fit Audax No. 12 Arm; require adapters (below) for use in Garrard and Webcor plug-in heads. Types D-L-6 and HI-Q7 are for professional and broadcast use. Type HI-Q7 provides extra-high output. Type L-6 is for home, school, public address use, etc. "S" indicates sapphire stylus. "D" indicates diamond stylus. All require magnetic preamplifier. Shpg. wt. 5 oz.

Stock No.	Mfr's Type	Styli	List	NET EACH
65 RC 445	D-L-6	D-.001: S-.003"	$69.50	40.88
65 RC 476	L-6	S-.001: S-.003"	34.50	20.29
65 RC 479	HI-Q7	D-.001: S-.003"	79.50	46.75

65 R 446. Garrard Adapter. 4 oz.
65 R 447. Webcor Adapter. 4 oz.
List Each. $4.50. NET EACH 2.65

REPLACEMENT STYLI. Shpg. wt., 2 oz.

No.	Stylus	List	NET
65 RC 472	Diamond, .001"	$35.00	$20.58
65 RC 473	Diamond, .003"	25.00	14.70
65 R 493	Sapphire, .001"	3.50	2.06
65 R 494	Sapphire, .003"	3.50	2.06

Fig. C. MODEL HF-12 ARM. For Audax cartridges. High tracking accuracy. Shpg. wt., 2 lbs.

65 R 495. List. $32.00. NET 18.82

Fig. F. UNIVERSAL ADAPTER. Adapts Audax No. 12 Arm for use with magnetic cartridges other than Audax. Shpg. wt., 4 oz.

65 R 441. List. $8.00. NET 4.70

Fig. E. "STYLUS-BALANCE." Provides an accurate method for determining stylus pressure. End of pickup arm is placed on one end of balance arm; weights (supplied) are placed on opposite end of balance arm. Movement of balance arm gives indication if pressure is correct, too high, or too low. Shpg wt., 6 oz.

65 R 442. List. $8.00. NET 4.70

LIVINGSTON TRANSCRIPTION ARMS

Fig. G. UNIVERSAL MODEL. Professional-quality pickup arm—for use with any cartridge including G.E. triple-play. Plays recordings up to 17". Adjustable pressure, 6 to 30 grams; adjustable counterweight for MG cartridges. Ball bearings enclosed for maximum protection. Excellent tracking. Low arm resonance. Length, 14". Gray finish. Shpg. wt., 2 lbs.

65 R 070. NET 24.95

Fig. H. LIVINGSTON BINAURAL PICKUP ARM. Used with binaural or conventional records. For magnetic or crystal cartridges. Shpg. wt., 2½ lbs.

65 R 072. NET 39.95

COOK BINAURAL CONVERSION UNIT

(Not illustrated.) Clip-on bracket. Converts any conventional pickup arm (except Garrard) to accept second cartridge for high-quality reproduction of binaural recordings. Accommodates all conventional cartridges. Shpg. wt., 6 oz.

65 R 098. NET 5.95

CLARKSTAN PHONO PRODUCTS

Fig. J. MODEL 212 16" TRANSCRIPTION ARM. Professional arm for standard and microgroove records. Plays records up to 17". Takes cartridges ¾" wide. Slide-in cartridge holder. Spring loaded contacts—no soldering. Adjustable pressure from 5 grams up. Height adjustable from 1 11/16-2 3/16". Cast aluminum. Shpg. wt., 2 lbs.

65 R 450. NET 22.05

MODEL 212G. As above. Slotted for G.E. "triple-play" cartridges. Wt., 2 lbs.

65 R 458. NET 22.05

MODEL 213G. Plays 12" records. Slotted for G.E. "triple-play" cartridges. Shpg. wt., 2 lbs.

65 R 459. NET 21.56

Fig. K. NEEDLE PRESSURE GAUGE. Gram scale to 28.4. Ounce scale to 4. Wt., 5 oz.

85 R 029. List. $2.50. NET 1.47

Fig. L. STROBOSCOPIC CARD. Use with any 30 or 60 cycle light for checking all turntable speeds. Shpg. wt., 2 oz.

69 R 511. NET 15c

Fig. M—E-V CERAMIC CARTRIDGES

Electro-Voice, ultra-linear, wide-range ceramic cartridges. Frequency response: ±2.5 db. 20-15,000 cps. 0.5 v. output. No preamp needed. Under 2% intermodulation distortion. ½" mtg. ctrs. "S" indicates sapphire; "D" indicates diamond. *Turnover type with diamond for microgroove, sapphire for standard. Shpg. wt., 5 oz.

No.	Type	Stylus	List	NET
65 R 426	84S	S—.001"	16.00	9.41
65 RC 427	84D	D—.001"	38.50	22.64
65 R 428	82S	S—.003"	16.00	9.41
65 RC 418	86DS *	D—.001", S—.003"	57.50	33.81

REPLACEMENT STYLI. For use with above.

No.	Type	Stylus	List	NET
65 R 973	4127	S—.001"	2.50	1.47
65 R 974	4130	S—.003"	2.50	1.47
65 RC 953	4146	D—.001"	25.00	14.70

Fig. N—RECOTON TURNOVER CARTRIDGE

Model "500" magnetic cartridge. "Back-to-back" turnover type. Replaceable styli. Universal mounting for standard arms. High compliance. Easy tracking. Response, 20-16,000 cps. With mounting bracket. Shpg. wt., 4 oz.

MODEL 500—SS. Complete with two sapphire styli.

65 R 002. List. $16.50. NET 9.70

MODEL 500—SD. Has diamond stylus for microgroove, sapphire for 78 rpm.

65 RC 003. List. $39.00. NET 22.93

REPLACEMENT STYLI. For use with above.

No.	Type	Stylus	List	NET
65 RC 004	399D	D—.001"	25.00	14.70
65 R 005	399	S—.001"	3.50	2.06
65 R 006	398	S—.003"	3.50	2.06

Fig. P—PRESTO TURNTABLE

New, 12", 3-speed turntable for custom hi-fi and professional use. Idlers are mounted on shafts and fixed firmly to base to suppress "wow" and flutter. Turntable of machined and balanced aluminum casting. Panel size: 8x11". For 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.

MODEL T-18. Has high-quality shaded pole motor.

96 RX 918. NET 53.50

MODEL T-18 H. Has professional hysteresis-synchronous motor.

96 RX 919. NET 108.00

Scott 710 with base

Bogen B50-4LC

LP-743

B-12H

L-34

B-16H

CSV-12

Professional Turntables

SCOTT 710 TURNTABLE

Deluxe professional, 12" three-speed turntable. Features built-in neon stroboscope for exact speed adjustment with record in place. Simple, efficient push-button panel for instant selection of 33⅓, 45 or 78 rpm speeds. Has vernier speed controls; individual speeds adjustable within ±5%. Noise level reduced to more than 60 db below average recording level—uses unique mechanical noise filter system with long-life nylon gears. Four-pole, shaded pole, heavy-duty motor with balanced rotor and extremely low external hum field. Special pickup arm base mount suppresses turntable rumble. Arm base mount connected to turntable bearings through heavy aluminum casting. Prevents vibration differences between arm and turntable. Heavy, weighted, non-magnetic turntable is precisely balanced. Installation is simplified through use of special shock mounting—permits mounting directly to cabinet without making unit vibration-proof. Turntable base plate is of gleaming stainless steel; has mahogany strip for mounting pickup arm. Size, 16⅞x14". Requires 5" below base plate. Less mounting base (see below). For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 26 lbs.

93 RZ 845. List. $208.35. NET... **125.00**

TYPE 710-X1 MOUNTING BASE. For above. Mahogany finish. Wt., 3 lbs.

93 RX 846. List. $24.95. NET..... **14.95**

BOGEN B50-4LC TURNTABLE

Excellent manual player of transcription quality. Features variable speeds from 29 to 86 rpm, with notches for 33⅓ rpm, 45 rpm, and 78 rpm. Takes all records up to 16" in diameter. Turntable is balanced and weighted (3½ pounds), 12" in diameter, covered with molded rubber padding for greater record protection. Motor is 4-pole, heavy-duty type. High starting torque. Special bearings with large oil reservoir. Velocity trip, automatic start and stop. Less than 1% fluctuation over line voltage variations from 95 to 125 volts. Wow is less than 1%. Pickup arm is die-cast metal; ball-bearing mounted. Adjustable stylus pressure. Minimum mounting space: 15" wide, 12" deep, 3⅛" above and 2½" below mounting board. Takes any conventional phono cartridge. Supplied with one plug-in head for magnetic or crystal cartridge. 3-foot phono cable, 6-foot AC cord, and set of 4 shock-mounting springs. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 15 lbs.

96 RX 696. NET..... **40.40**

MODEL PB2 MOUNTING BASE. Handsome mahogany-finish wood base for tabletop or shelf mounting of Bogen B50-4LC turntable. Shpg. wt., 5 lbs.

96 RX 683. NET..... **4.80**

EXTRA PLUG-IN HEAD. For above.

96 R 697. NET..... **1.35**

Famous Rek-O-Kut Professional Quality Turntables

3-SPEED TURNTABLE

MODEL LP-743. Dependable, moderately-priced 12" professional quality turntable for 78, 45 and 33⅓ rpm. Widely used in hi-fi music systems in which record collections require all 3 turntable speeds. Noise level is 30 db below average recording level. Laboratory-tested, lathe-turned and balanced cast aluminum turntable. Quiet, vibration-free, constant-speed induction motor. Precision ground and polished turntable shaft turns on ball-thrust bearing. Instantaneous speed change without stopping motor or removing disc. Has convenient spindle adapter for use with 45 rpm records; spindle spiders not required. Gray hammertone-finish, pressed steel chassis. Size, 12x15"; requires clearance of 1⅜" above and 5" below motor panel. Less motor board. With detailed installation instructions. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.

96 RX 148. NET..... **59.50**

PROFESSIONAL TURNTABLE

MODEL B-16H. Rek-O-Kut's finest 16" turntable. Designed with the utmost care and precision-built in absolutely every detail to assure unsurpassed playback fidelity of 33⅓, 45 and 78 rpm recordings. Ideal for use with the most advanced broadcast studio and high-fidelity equipment. Surpasses NARTB standards for "wow", flutter content and speed regulation. Noise level is 50 db below average recording level. Hysteresis, synchronous motor. Starting time: From standing start—to 33⅓ or 45 rpm in ¼ turn; to 78 rpm in ¾ turn. Has 45 rpm adapter built in hub of turntable. Turntable diameter, 15¾". Self-locking speed shift. Cast-aluminum chassis; pre-drilled for pickup arm. Size, 20x18¾"; 1½" above and 6½" below motor panel. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 30 lbs.

96 RZ 459. NET..... **250.00**

VARIABLE SPEED TURNTABLES

CVS-12. 12" cast-aluminum turntable. Speed is continuously variable from 25 to 100 rpm. Noise level, 30 db below average recording level. Employs constant speed, 4-pole motor with internal rim drive. Size, 16x12"; requires 1½" above and 5" below motor panel. For 110-120 volts, 60 cycle AC. Shpg. wt., 16 lbs.

96 RX 308. NET..... **84.95**

MODELS P-43-VC & P-43-VM. (Not illustrated.) Handsome, portable record players incorporating CVS-12 turntable (above), 16" arm with cartridge, and carrying case. P-43-VC has dual sapphire stylus crystal cartridge. P-43-VM has G.E. RPX-050 hi-fi cartridge with two sapphire styli; requires preamplifier (see pages 38 and 39). Case size (closed), 16½x16½x8½". Shpg. wt., 19 lbs.

MODEL P-43-VC.

96 RX 307. NET..... **124.95**

MODEL P-43-VM.

96 RX 426. NET..... **129.95**

RONDINE SERIES

Rondine 12" turntables are widely recognized for their outstanding performance. Precision cast-aluminum construction and advanced-design mechanical filtering reduce noise and distortion to negligible values. Inter-moving parts are case-hardened and ground to micro finish. Cork-neoprene material eliminates record slippage. Permanently affixed strobe disc checks speed. All combine shock mounting and dynamic balance to assure smooth, quiet operation.

"RONDINE DELUXE"—MODEL B-12H. Professional quality 3-speed turntable. Meets all NARTB standards. Single knob selector, instantly selects speeds of 33⅓, 45, or 78 rpm. Self-lubricating hysteresis motor. Internal rim drive through special neoprene idler. 45 rpm hub adapter built into turntable center—disappears into table when not in use. Cross-ribbed cast-aluminum turntable, lathe turned and balanced. Turntable shaft of hardened steel, polished and hand-lapped to the bearing well for perfect fit. Noise level is 50 db below average recording level. Requires rectangular cutout 13⅛x14⅞" with clearance of 1" above and 6½" below motor board for mounting. With special Corprene table mat to afford maximum record traction. For operation from 110-120 volts, 60 cycles AC. Shpg. wt., 17 lbs.

96 RX 687. NET..... **119.95**

"RONDINE" MODEL B-12. As above, but with newly designed 4-pole induction motor. Noise level 40 db below average recording level. Shpg. wt., 17 lbs.

96 RX 688. NET..... **74.95**

"RONDINE JR."—MODEL L-34. Dual-speed, low-priced 33⅓ and 45 rpm turntable. Designed to professional specifications. Ideal for hi-fi as well as commercial radio station use. Noise level 30 db below average recording level for minimum rumble. Quiet, vibration free, constant speed 4-pole induction motor. Idler disengaged in "off" position. Has precision-ground and hand-lapped shaft which turns on sturdy ball-thrust bearing. Lathe-turned cast aluminum turntable, lab-tested for perfect balance. Rigid pressed steel chassis with attractive gray hammertone finish. Size, 15" wide x 12" deep. Requires 1⅜" above and 5" clearance below motor board. For operation on 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.

96 RX 686. NET..... **49.95**

"RONDINE JR."—MODEL L-37. As above, but 33⅓ and 78 rpm dual-speed. Shpg. wt., 15 lbs.

96 RX 694. NET..... **49.95**

ALLIED can supply all Rek-O-Kut products including the Model G-2 Deluxe and Standard 16" turntables. Model G-2 Deluxe—Stock No. 96 RX 689, $179.95 net. Model G-2 Standard—Stock No. 96 RX 162, $137.50 net. Write ALLIED for free manufacturer's literature.

Refer to Page 52 for Rek-O-Kut Recording Equipment

Latest High-Fidelity and Audio Test Records

COOK AUDIO TEST RECORDS

SERIES 10. 78 RPM. For checking frequency response of audio playback equipment. "V" groove permits playing entire record with either .001" or .003" stylus. Accurately calibrated from 35-20,000 cps. 8 oz.
65 R 085. NET 4.00

SERIES 10-LP. As above, but 33⅓ rpm.
65 R 086. NET 4.80

SERIES 20. 78 RPM. Wide-band thermal (white) noise test record. "V" groove. Extremely accurate.
65 R 087. NET 4.00

SERIES 50NA. For checking IM distortion in cartridges, amplifiers and speakers. No instruments needed. Simply play record—and listen. If the distortion exceeds 2%, code letter "N" is heard. Under 2%, "A" is heard. 33⅓ and 78 rpm. Record can be used over and over. 8 oz.
65 R 096. NET EACH 4.80

CLARKSTAN TEST RECORDS

STEADY-STATE FREQUENCY RECORDS. Spot frequencies throughout range of 50 to 10,000 cps for checking frequency response of 33⅓ or 78 rpm playback equipment. Extremely accurate calibration. Record can be used over and over.

TYPE 2001S-2002S. 12" Vinylite (2 sides). 33⅓ rpm. One side NARTB, other side flat recording. Shpg. wt., 12 oz.
69 R 223. NET 3.82

TYPE 2000S. 12" Vinylite (1 side). Recorded at 78 rpm. Flat recording. Wt., 12 oz.
69 R 230. NET 3.82

MG AUDIO SWEEP FREQUENCY RECORD 102M. 12" Vinylite (1 side) 33⅓ rpm. For rapid sweep testing. Used with oscilloscope. Sweeps 70-10,000 cps 20 times per NARTB curve. Shpg. wt., 12 oz.
69 R 231. NET 6.47

ALLIED will stock all new Cook, Audiophile and Livingston records as they are released. We also stock complete binaural and test records as they are issued. Many of the records listed on this page are available in binaural (require binaural playback equipment). Write for full listings and latest prices.

COOK "SOUNDS OF OUR TIMES" RECORDS

Famous "Sounds of Our Times" high-fidelity records—a must for the hi-fi record collector. 10" monaural microgroove 33⅓ rpm. No volume compression or expansion. All recording equipment is within 2 db from 20 to 25,000 cycles. Recorded by world-famous artists. A new achievement in faithful, realistic sound.

1012. MUSIC BOXES OF LONG AGO. 24 pieces on 19th century music boxes.
1013. ACCORDION POPS CONCERT. Charlie Magnante Eight "pop" tunes.
1024. ZEPOLL CONCERT GUITAR. Mexican.
1025. KILTS ON PARADE, BAGPIPES.
1026. INSIDE VIENNA. 4-piece ensemble.
1027. FIESTA FLAMENCA. Carlos Montoya.
1028. THE GUITAR. Carlos Montoya.
1029. MONTOYA. Fiery gypsy rhythms.
1030. THE HARP. Soloist Edward Vito.
1031. DUAL HARP. Edward & Joseph Vito.
1032. ZITHER-CIMBALOM. Exotic music.
1035. GREAT BARREL-HOUSE PIANO.
1037. FAMOUS EUROPEAN PIANOS.
1038. PIANO-ROMANTIC FABRIC. S. Sorin.
1039. BEETHOVEN-PIANOFORTE. L. Hambro.
1041. SPEED THE PARTING GUEST.
1050. PIPE ORGAN IN THE MOSQUE I.
1051. PIPE ORGAN IN THE MOSQUE II.
1052. PIPE ORGAN IN THE MOSQUE III.
1053. PIPE ORGAN IN THE MOSQUE IV.
1054. ORGAN AT SYMPHONY HALL—Vol. I.
1055. ORGAN AT SYMPHONY HALL—Vol. II.
1056. THE MORELIA CATHEDRAL ORGAN.
1057. FOORT POPS. Largest theater organ in country—Detroit's Fox Theater.
1063. DEBUSSY. Orchestral. Nocturnes, Fetes, Clouds. Afternoon of a Faun.
1067. BEETHOVEN SYMPHONY NO. 5.
1068. PACIFIC 231. Honegger. Famous train ride in music.
1069. HAYDN MILITARY SYMPHONY.
1070. RAIL DYNAMICS. N. Y. Central. Highly realistic "live" sound.
1080. TRIO LEONES OF CABRITO. Mex. vocal.
1081. ANGEL IN ABSINTHE HOUSE. LaVergne Smith. 11 vocals.
1085. CLAMBAKE ON BOURBON. Tony Almerico. Parisian Room Band.
1086. DRUMS OF RODRIGUEZ. Jazz rhythms.
1088. RED CAMP HORIZONTAL. Piano.
1089. RED CAMP UPRIGHT. Piano, Red Camp.
1092. HUFSTADER SINGERS. Choral.
1131. PEDAL HARPSICHORD. Only instrument in W. hemisphere. Bach, Mozart, etc.
1181. LIZZY MILES. Queen of Rue Royale.
2064. MASTERPIECES FROM THE THEATER. Carmen, Euryanthe, La Gazza Ladra.
2065. MOZART SYMPHONY NO. 40.
2066. MASTERPIECES OF THE DANCE. Danse Macabre, Dance of Buffoons, etc.

Any record above. Shpg. wt., 8 oz.
65 RR 600. Specify record No. EACH. 4.00

12" 33⅓ RPM RECORDS

1042. STEEL BANDS OF ANTIGUA. W. Indies.
1060. BRAHMS SYMPHONY NO. 1.
1062. STRAVINSKY, VILLA LOBOS AND BACH. Includes Bachianas Brasileiras No. 5.
1071. BURLESQUE UNCENSORED. A live show. Comedy, strip teasers, chorus.
1084. BLOWOUT AT MARDI GRAS. Jazz session. Sid Davilla and F. Kohlman.
1087. CAMP INVENTIONS. Red Camp plays piano. With zither and drums.
1094. SEVEN LAST WORDS. Dubois. Massed chorus, soloists. R. Foort organ.
1132. JAPANESE KOTO. Japanese strings.
1169. TSCHAIKOVSKY. Romeo & Juliet, etc.
1182. MOANS & BLUES. Lizzie Miles.
1183. HOT SONGS MOTHER TAUGHT. L. Miles. 14 selections. Red Camp piano.

Any record above. Shpg. wt., 12 oz.
65 RR 640. Specify record No. EACH 5.95

LIVINGSTON HI-FI RECORDS

33⅓ rpm. hi-fi records by Livingston Electronics, manufacturers of hi-fi audio equipment. On 10" high-quality vinyl discs for long use and noise-free playback.

1061. VIENNA STRING SYMPHONY. Hans Pfitzner's "Little Symphony."
1062. JUST FOR KICKS. Erskine Butterfield. Piano.
1081. THE BARBARA CARROLL TRIO. Consists of piano, bass and drums.
1083. MIGHTIEST LITTLE BAND IN THE LAND. Lenny Herman Orchestra.
1085. JOSH WHITE. Famed folk singer.
1093. VOICES FROM VIENNA. Choral.

Any record above. Shpg. wt., 8 oz.
65 RR 670. Specify record No. EACH 4.00

COOK "ROAD RECORDINGS"

12-inch, 33⅓ rpm recordings made "on location," not studio recorded. "Conversation-piece" records, unique in content, curious in sound, and fascinating to hear. A wide varity of music and narrations from unusual places. *"Duplex" two-track recordings—outside track equalized for monaural playback; both tracks may be used to obtain a binaural effect.

5002 GUITAR BLUES. K. C. Douglas plays.
5003. CARIBEANA Calypso music.
5004. TIRORO. Haitian rhythm—mixture of African, jazz and voodoo.
5005. *CAMP HAS A BALL. Red Camp jamming and improvising.
5006. SQUARE DANCE. Al Brundage calls.
5007. *MARIMBA BAND. Mexican music recorded in a Mexico City alley.
5010. *CALLIOPE AND CAROUSEL. Circus tunes, steam pianos, etc.
5011. VOICE OF THE SEA. Pounding of surf, foghorns, bells, etc.
5012. OUT OF THIS WORLD. Earthquake tremors. First recording.
5014. MARIACHI MUSICAL FROM MEXICO.

Any record above. Shpg. wt., 10 oz.
65 RR 620. Specify record No. EACH 4.80

AUDIOPHILE HIGH-FIDELITY RECORDS

A new series of wide-range, high fidelity recordings. All are 12". 33⅓ or 78 rpm microgroove records. Exceptionally clean; low distortion. Unusual subject material not found on commercial recordings.

78 RPM MICROGROOVE

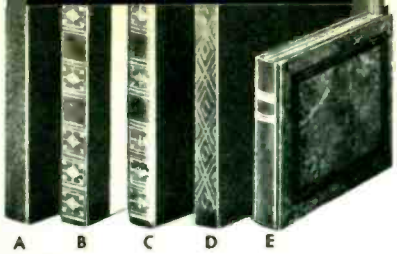
AP- 1. DIXIELAND JAZZ Vol. 1. H. Blons.
AP- 6. DIXIELAND JAZZ Vol. 2. H. Blons.
AP- 7. SWING CHAMBER MUSIC. Vol. 1.
AP- 8. SWING CHAMBER MUSIC. Vol. 2.
AP- 9. ORGAN MUSIC OF BACH.
AP-10. EASY LISTENING. Vol. 1. Quartet.
AP-11. TRADITIONAL JAZZ Vol. 1. D. Evans.
AP-12. TRADITIONAL JAZZ Vol. 2. D. Evans.
AP-13. EASY LISTENING. Vol. 2. Jazz.
AP-18. TRADITIONAL JAZZ Vol. 3. G. Mayl.
AP-19. DIXIELAND JAZZ Vol. 3.
AP-29. TRADITIONAL JAZZ Vol. 4. D. Evans.
AP-30. TRADITIONAL JAZZ Vol. 5. D. Evans.

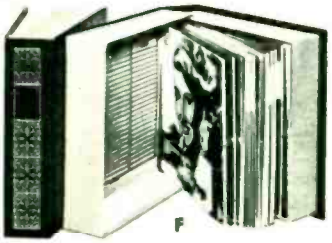
33⅓ RPM MICROGROOVE

AP- 2. ORGAN MUSIC. Great baroque organ. Lizst, Vierne, Reger.
AP-14. WOODWIND QUINTET. Chicago Symphony quintet. Stravinsky, etc.
AP-15. WOODWIND QUINTET MASTERWORKS. Ibert, Milhaud, Hindemith.
AP-16. WOODWIND QUINTET HIGHLIGHTS. Haydn, Ravel, Danzi, etc.
AP-17. WOODWIND ENCORE. Delibes, Gould, Dvorak, Haydn, etc.
AP-20. THE STORM. Actual thunderstorm.
AP-22. THE MUSART STRING QUARTET OF LOS ANGELES. Music by Mozart.
AP-23. SWING POTPOURRI. Red Dougherty Trio & Quintet; Bel Quintet.
AP-24. JAZZ POTPOURRI. Vol. 1. Red Nichols.
AP-25. PIANO ARTISTRY. Margaret Barthel plays Schumann, Debussy and Liszt.
AP-26. CLARINET ARTISTRY. Jerome Stowell with piano accompaniment.
AP-27. EASY LISTENING. Vol. 3. Red Dougherty sextette plays jazz.
AP-31. CORNET ARTISTRY. Doc Evans plays cornet. With piano, bass, drums.

Any record above. Shpg. wt., 12 oz.
65 RR 671. Specify record No. EACH 5.95

Be Sure To Specify Record Type Number When Ordering





Values in Quality Albums for All Record Sizes

Fig. A. STANDARD. Sturdy 12-pocket album. Wine color fabrikoid cover. With index. Opens flat. Shpg. wt., 1¼ lbs.

96 R 850. 10" Size. EACH 68c
Lots of 12, EACH 57c

96 RX 851. 12" Size. EACH 85c
Lots of 12, EACH 71c

Fig. B. CORK-GRAINED. Solidly made binder, finished in matching cork-grain material. Stiff back covered with brown swirl-cloth; has gold-stamped design. Holds 12 records. Opens flat. Shpg. wt., 2 lbs.

96 R 852. 10" Size. EACH 90c
Lots of 12, EACH 76c

96 RX 853. 12" Size. EACH 1.06
Lots of 12, EACH 90c

Fig. C. PADDED COVER. Deluxe album. Luxuriously styled. Adds decorative touch to any shelf or cabinet. Covers are padded and bound with durable rich brown swirl design material. Gold stamped back. Holds 12 records. Shpg. wt., 4 lbs.

96 R 865. 10" Size. EACH 1.28
Lots of 12, EACH 1.13

96 RX 866. 12" Size. EACH 1.49
Lots of 12, EACH 1.26

Fig. D. SPANISH-GRAINED. Beautiful maroon leatherette cover. Records are held in 12 heavy Kraft-paper envelopes in binder. Gold stamped back. With handy index. Shpg. wt., 2 lbs.

96 R 856. 10" Size. EACH 90c
Lots of 12, EACH 76c

96 RX 857. 12" Size. EACH 1.06
Lots of 12, EACH 90c

Fig. E. FOR 7" RECORDS. Holds twelve 7" records, in individual flaps. Covers are bound in attractive simulated leather with gold stamping. Complete with record index. Shpg. wt., 1 lb.

96 R 845. Red.
96 R 846. Brown. EACH 43c
Lots of 12, EACH 36c

EP AND LP STORAGE BOXES

Fig. F. Handsome, low-cost storage boxes. For twelve 7" (EP) or ten 10" or 12" (LP) records in their original jackets. Red, grained, lacquered finish; gold-embossed backs. Look like albums or books on a shelf. Perfect for keeping records dust-free. Add to record life. Complete with index. Av. shpg. wt., 1 lb.

96 R 884. 7" Size. EACH 83c
Lots of 12, EACH 75c

96 R 885. 10" Size. EACH 1.25
Lots of 12, EACH 1.11

96 RX 886. 12" Size. EACH 1.66
Lots of 12, EACH 1.50

Famous Pilot "Encore" High-Fidelity Phonographs

TYPE PT-1020A. Splendid, deluxe table phono system with ultra-modern styling and high-fidelity performance. Housed in sturdy wood cabinet—beautifully styled in rich, hand-rubbed mahogany finish. Console response, yet table-model size. Ideal for limited space applications—can be used anywhere with perfect ease. An outstanding unit.

Deluxe features include: 6-tube, 8-watt Williamson-type amplifier; 3-position record-equalizer including the widely accepted RIAA recording curve; Garrard RC-80 3-speed changer with G.E. RPX-050 cartridge (dual sapphire tips); special spindle for 45 rpm records; bass and treble controls; volume control compensated for bass boost; input for tuner and recorder; 6" and 8" speakers for response from 50 to 20,000 cps; external speaker output. May be used as consolette with auxiliary legs listed below. Beautifully styled, beige plastic grille. Size. 23x18½x10¾". For 110-120 volts, 60 cycle AC. Shpg. wt., 46 lbs.

95 RZ 903. NET 189.50

As above except limed oak finish.

95 RZ 904. NET 199.50

WROUGHT IRON LEGS. For converting "Encore" phono to consolette type. Shpg. wt., 4 lbs.

95 R 905. NET 3.95

TYPE PT-1010A. Here is a complete, deluxe quality, phono system at a pace-setting low price. Housed in compact, luggage-type carrying case—offers console performance, yet can easily be taken wherever you go. An ideal phono system for limited space applications. Outstanding features make it an exceptional value.

Deluxe features include: 6-tube, 8-watt, Williamson-type amplifier; Garrard RC-80 3-speed changer with G.E. RPX-050 dual sapphire cartridge and special spindle for 45 rpm records; bass and treble controls; 3-position equalizer; volume control compensated for bass boost; input for tuner or recorder; dual speaker system using a 6" and 8" speaker for full range from 50 to 20,000 cps; external speaker output; detachable AC line cord stores in lid for convenient carrying. May be adapted for chairside use with the auxiliary legs listed below. Beautifully styled, sturdy, wood case covered with wood-grain plastic. Aluminum grille finished in non-tarnishing gold. 21¾x17¼x10". For 110-120 volts, 60 cycle AC. Shpg. wt., 55 lbs.

96 RZ 752. NET 159.50

LEGS AND BRACKET KIT. Can be added to above for convenient chairside use. Shpg. wt., 5 lbs.

96 R 753. NET 4.95

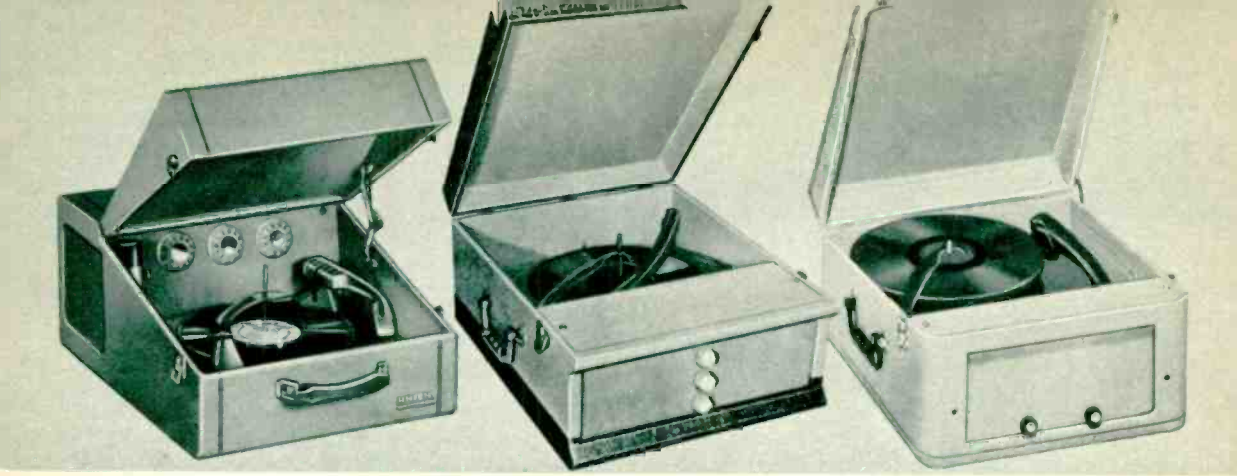
Deluxe 3-Speed Table Model Phonograph

An up-to-the-minute, completely modern, table model phonograph priced phenomenally low. In performance and features, this new extended range table phono compares favorably with phonographs selling for many times more. Housed in beautiful, hand-rubbed mahogany veneer cabinet. Plays 33⅓, 45 and 78 rpm records in 7", 10" and 12" size. Has new Webcor, completely-automatic, quality changer. Features positive intermix of 10" and 12" records of same speed. Setdown is fully automatic on all record sizes. Will play manually if change cycle is not desired. Extremely simple, centralized changer controls. After last record is played, changer motor shuts off, tone arm comes to rest. Completely jam-proof.

Uses quality, turn-over type crystal cartridge with .001" and .003" sapphire styli. Has 3 extended-range Alnico V speakers; two 4" tweeters and one heavy-duty 8" size. Provides balanced, room-filling sound dispersion. Push-pull 4½-watt amplifier assures rich, full-toned music reproduction. Separate bass and treble tone controls offer flexibility for meeting individual playback tastes. Supplied with streamlined, wrought-iron legs (at left above). Without legs, it's a deluxe table model that will easily fit into decorating motif. With the legs, it's an unusually attractive consolette for chairside music enjoyment. Size 21½x19x11⅛". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 48 lbs.

96 RZ 840. NET 76.50

96 RZ 841. As above, except in blonde finish. NET 81.50



Selected Values in High-Quality Phonographs

WIDE-RANGE AUTOMATIC PHONO

A great value! In design, features and performance, this extended-range portable phono compares favorably with phonographs selling at twice this low price.

Important "plus" features include: Four tubes; push-pull amplifier output stage; V-M changer; plays 7", 10" and 12" records in 78, 45 and 33⅓ rpm speeds automatically; inter-mixes 10" and 12" records of the same speed; automatically shuts off after last record is played; special "45" rpm spindle—no spiders are needed to play large center-hole records. Arm automatically adjusts for proper setdown. Completely jam-proof. Resonance-free, aluminum die-cast tone arm contains ceramic "flip-under" cartridge (humidity and moisture-resistant) with two sapphire needles, .001" and .003" for microgroove and standard records. Two 6", extended-range speakers and one small "tweeter" for distortionless reproduction of high frequencies and lifelike tonal quality. Separate bass and treble controls for versatile balance of highs and lows at any volume level. Overall response, 50-15,000 cps.

Heavy-laminated-wood cabinet, with rugged, attractive luggage-type tan covering. Heavy stock eliminates resonance and resulting distortion. Size, 9x15¼x20". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 30 lbs.

96 RZ 538. NET 69.95

DELUXE AUTOMATIC PHONO

A quality portable phonograph complete with built-in amplifier and 2—6" matched speakers. Features new 3-speed Webcor changer and rugged, attractive carrying case. Changer has intermix feature; any ten 12" or 10" records of the same speed can be intermixed. Automatically plays twelve 7" or 10" records or ten 12" records at 33⅓, 45 or 78 rpm. Positive set-down selection for all size records.

Plays manually if changer action is not desired. Mechanism completely jam-proof. Simple, one-knob control for turntable speed selection, reject-change cycle and idler wheel disengagement. Automatic shut-off switch—after last record is played, changer motor shuts off. Records are gently dropped on heavily flocked turn-table. Dual Alnico V speakers are matched for wide-range tonal reproduction and dispersion. Powerful push-pull amplifier for smooth reproduction at high volume levels. Separate bass and treble controls for versatile balance of highs and lows.

Dependable, constant-speed, heavy-duty motor for wow-free operation. Dual-needle, turnover-type crystal cartridge for both standard and microgroove records. Attractive, sturdy, carrying case finished in two-tone gray, driftwood-pattern leatherette. 16x19x9½". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 28 lbs.

96 RZ 864. NET 59.95

QUALITY AUTOMATIC PHONO

New, beautifully performing 3-speed phono-changer. Plays all records automatically at 33⅓, 45 and 78 rpm. Unusually fine appearance. Advanced design assures excellent record reproduction. Complete with built-in amplifier and 2—heavy-duty Alnico V 5" speakers. Speakers are matched for clear, lifelike reproduction.

Features quality, V-M 3-speed changer—plays 7", 10" and 12" records. Intermixes 10" and 12" records of same speed; automatically shuts off after last record has been played. Set-down selection is completely automatic for all types of records—no adjustments necessary when switching from one size record to another. Turntable is well balanced and heavily flocked for extra record protection. Resonance-free, lightweight tone arm contains crystal turnover cartridge with two sapphire styli, .001" for microgroove and .003" for standard records. Has dependable, constant-speed motor with simple speed-change control. Powerful, three-tube amplifier (including rectifier) has ample reserve power for reproduction at high volume levels.

Attractively designed, slant-cut carrying case is covered in popular charcoal and gray leatherette with nickel-plated trim. With carrying handle. 16¼x17¼x9". U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 33 lbs.

96 RZ 847. NET 49.95

DELUXE, SINGLE-PLAY TWO-SPEAKER PHONO

New, popular 3-speed phonograph for playing all records singly. Plays at 33⅓, 45 and 78 rpm. Features amazing room-filling power, excellent tonal reproduction and extremely compact design. Perfect as the extra phonograph for socials, den, school, resort, etc. Plays all sizes of records — 7", 10" or 12". Amplifier and 2 speakers are matched for clear, lifelike performance. Speakers are Alnico V type, 1—5¼" and 1—4", balanced to match resonance of case. Lightweight tone arm is resonance-free. Contains ceramic turnover-type cartridge with .001" and .003" sapphire styli. Turntable is evenly balanced and heavily flocked for added record protection. Dependable motor with simple four-position speed-change control (includes "off" position). Special retractable 45 rpm record adapter built into turntable center. Retracts when not in use—simply twist and it's ready for 45 rpm recordings—spindle spiders are not required. Employs powerful amplifier—assures ample output and rich reproduction of sound. Has volume control and 3-position tone control switch. Tone control positions are: Normal, bass and treble. Tone emphasis can be varied to suit individual taste. Housed in sturdy wood case covered with handsome British tan pigskin leatherette. Case completely coated with moisture-resistant pyroxylin. Size, 13½x 11½x8½". For operation from 110-120 volts, 60 cycle AC. U.L. Approved. Shpg. wt., 14 lbs.

96 RX 904. NET 30.75

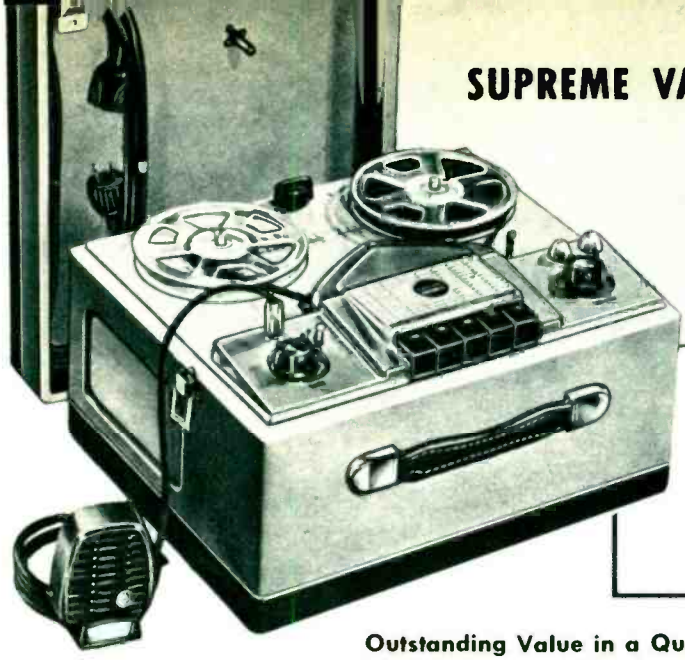
PORTABLE SINGLE-PLAY 3-SPEED PHONO

A portable single-play, 3-speed phonograph at a money-saving price. Latest, airplane-luggage-type design makes this an outstanding unit for schools, resorts, hobby rooms, socials and as an "extra" phonograph in the home. Plays 7", 10" and 12" records at 33⅓, 45 and 78 rpm. Features amazing volume, excellent tonal reproduction and unusually compact design. Can be carried anywhere—weighs only 10 lbs. Amplifier and powerful Alnico V speaker are perfectly matched for clear, lifelike reproduction. Newly designed, extra-lightweight pickup arm provides added record protection. Uses turnover crystal cartridge with .001" and .003" sapphire needles. Has dependable, rim-drive, constant-speed motor and simple speed-change control. Motor holds "wow" to a minimum. Turntable is well balanced, smoothly flocked. Has individual volume and tone controls. Tone control continuously variable type. Amplifier delivers amazing power— more than sufficient for average room volume. Attractive, rugged carrying case is covered with double-stitched sun-tan leatherette. Withstands rough usage—resistant to scuff marks and moisture. With carrying handle. Size, only 15x12x5½". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.

96 RX 909. NET 25.75

Letter Z in Stock Number Indicates Express Shipment Only

SUPREME VALUE TAPE RECORDERS



KNIGHT PUSH-BUTTON RECORDER

Records . . . Plays Back . . . Erases
. . . Fast Forward and Rewind . . .

Records from Microphone
Radio and Television

Outstanding Value in a Quality Dual-Speed Tape Recorder

This famous Knight tape recorder is acclaimed coast-to-coast as an outstanding value. It offers beautiful styling, genuine portability and includes an array of features that provide extremely smooth, easy operation and rich, full-toned recording quality—makes excellent recordings from microphone, radio or television set. Check the luxury features of this fine, low-cost recorder—it's the unrivalled choice for budget-wise home recording enthusiasts.

EASY TO OPERATE. Anyone can get perfect results. It's easy to record, easy to play back. Five "piano keyboard" push-button controls permit instant selection of all recording functions: Fast Forward, Playback, Stop, Record and Fast Reverse. Controls (Tone, Off-On-Volume and Speed Selector) are located for quick simplified operation. Record "Lock" button prevents accidental erasure. Efficient erase system removes all trace of previous recording while new recording is being made. 7-inch reel rewinds in 3 minutes. Two "Easy-View" neon-type indicators give clear indication of "Normal" and "Overload" recording levels.

EASILY PORTABLE—HANDSOME STYLING. Handsomely styled and designed for easy portability. Highly attractive and durable, luggage-type case. Extremely compact and lightweight—carrying weight is only 23 lbs!

WIDE RANGE OF RECORDING TIMES. Two-speed, dual-track recording. Operates at 3¾" or 7½" per sec. Records on each half of tape width. At 3¾" per sec., 1200 ft. reel records continuously for 1 hour—2 hours overall. At 7½" speed, 1200 ft. tape records ½ hr. continuously and 1 hour overall.

EXCELLENT TONE QUALITY. Response: 7½" speed; ±3 db from 55 to 8500 cps and 55 to 6000 cps at 3¾" speed. "Wow": Less than 0.5%. Records from mike, radio, TV or phonograph (see patch cord below). Plays through built-in amplifier and 5x7" PM speaker. Output jack (hi. imp.) for playback through headphones, 3.2 ohm external PM speaker, or external hi-fi system. Tubes: 5879, 12AX7, 6AQ5; 6X4 rectifier. With crystal microphone and 7 ft. cord, 600 ft. reel type "A" tape and 5" take-up reel. Size, 14x12x9". U.L. Approved. For 110-120 v., 60 cycle AC. Shpg. wt., 29 lbs.

96 RZ 675. NET **97.45**

CHAIRSIDE CONTROL. For remote operation of above recorder. 3-position switch—Off, Start-Stop, B+. 18 ft. cable. Size, 2x3x3". Shpg. wt., 3 lbs.

96 R 636. NET **6.64**

FOOT-OPERATED REMOTE CONTROL. For above recorder. With 18 ft. cable and plug. Shpg. wt., 3 lbs.

96 R 638. NET **9.97**

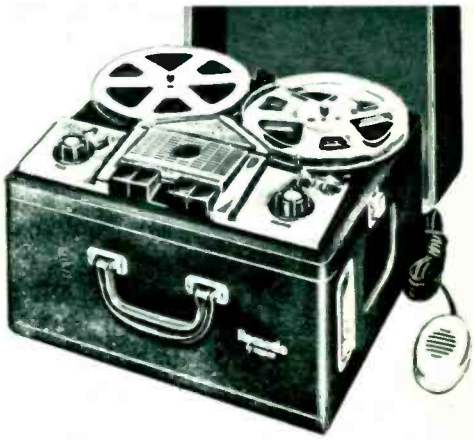
New Knight Economy Tape Recorder

Economy version of the Knight push-button tape recorder. Operates dual track at 3¾" and 7½"/sec. *Push-button controls:* Fast Forward, Playback, Stop, Record and Fast Reverse. Also Tone, Off-On-Volume, Speed and Record Lock controls. Neon-type record-level indicator. New, Redi-Lite lamp indicates proper warm-up period. *Recording Times (1200 ft.):* ½ hr. and 1 hr. at 7½"/sec.; 1 hr. and 2 hrs. at 3¾"/sec. *Response:* ±3 db, 65-8000 cps at 7½"; 65-6000 at 3¾". Input for recording from radio, TV, etc. Built-in amplifier and speaker; also high-impedance output jack for external hi-fi amplifier. With mike and 5½ ft. cord, 600 ft. of tape and 5" take-up reel. 14x12x9". Luggage-type gray case. U.L. Approved. For 110-120 volts, 60 cycle AC. Shpg. wt., 27 lbs.

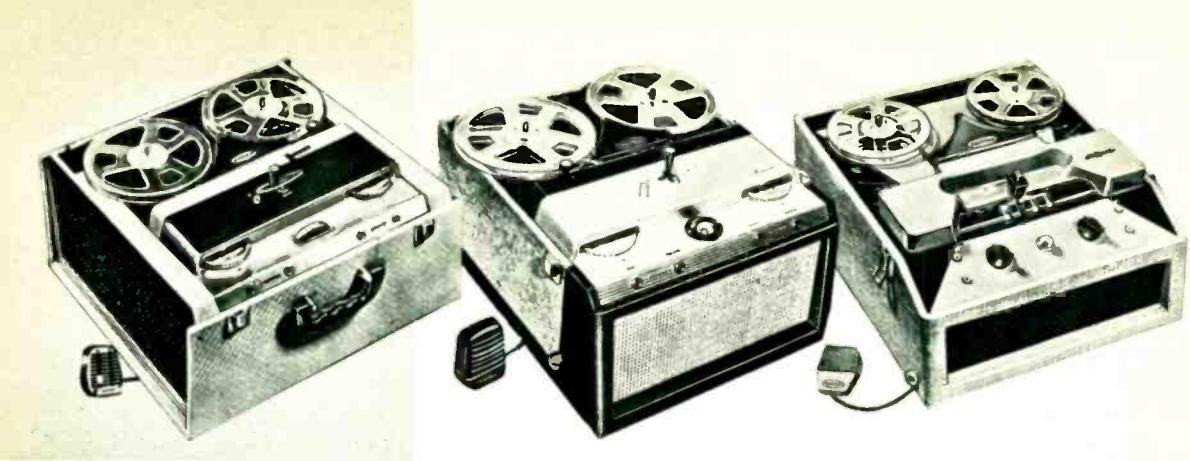
96 RZ 940. NET **84.50**

PATCH CORD. For above recorders. Permits recording from radio, TV. Shpg. wt., 1 lb.

96 R 674. NET **1.25**



See Inside Back Cover for Knight Hi-Fi Tape Recorder Value



Pentron Portable Tape Recorders

MODEL HF-400 "EMPEROR" HI-FI RECORDER

New, deluxe portable tape recorder for outstanding performance. A built-in professional VU meter assures perfect control of recording level. Two 6" speakers and 4" tweeter give superior playback quality. Push-pull 10 watt amplifier and L/C crossover network for low distortion. Records on both tracks for extra recording time.

Speeds: 3¾" and 7½" per second. *Response:* 40-12,000 cps at 7½"; 40-6000 cps at 3¾". *Recording Time* (1200 ft. reel) overall: 7½", 1 hr; 3¾", 2 hrs. *Signal-To-Noise Ratio:* 50 db. *Flutter:* less than 0.3% at 7½". *2 Inputs:* 1 for microphone and 1 for radio, phono or TV. *2 Outputs:* 1 for external speaker and 1 for external amplifier or headphones. Automatic index counter makes possible fast, easy location of recorded material. Single "Unimagic" control selects Fast Forward, Rewind or Play with utmost simplicity. Any position may be selected by flick of finger, in either tape speed. Separate record-playback and erase heads assure low noise level. Interlock switch prevents accidental erasure. Supplied with mike, 600 ft. pre-recorded sample tape and 7" take-up reel. Size, 15¾x15x11". For 110-120 v., 60 cycle AC. Shpg. wt., 33 lbs.

95 RZ 931. List. $249.50. NET ... **187.50**

FULL TRACK MODEL HF-400.
95 RZ 932. List. $259.50. NET ... **195.00**

MODEL T-90 "PACEMAKER" RECORDER

New, quality recorder at moderate cost. Features include "Unimagic" single lever control and 2-way speaker system with high-pass filter. Separate record-playback and erase heads assure low noise level. Has "magic eye" recording indicator and indexed counter for rapid location of recorded material. Records on both tracks for extended recording time.

Speeds: 3¾" and 7½" per second. *Response:* 7½" speed, 50-10,500 cps; 3¾" speed, 50-5000 cps. *Recording Time* (1200-ft., 7" reel, both tracks): 7½", 1 hr.; 3¾", 2 hrs. *Signal-To-Noise Ratio:* 50 db. *Flutter:* less than 0.3% at 7½". *2 Inputs:* 1 for microphone and 1 for radio, phono or TV. *2 Outputs:* 1 for external speaker and 1 for external amplifier or headphones.

Heads have removable pole pieces. Interlock switch prevents accidental erasure. Separate tone and volume controls. Fast, sure automatic braking of both tape reels eliminates possibility of tape spillage. Handsome carrying case. Supplied with mike, 600 ft. pre-recorded sample tape and 7" take-up reel. For operation from 110-120 volts, 60 cycle AC. Size, 13x15x10". Shpg. wt., 27 lbs.

95 RZ 933. List. $189.50. NET ... **139.50**

FULL TRACK MODEL T-90.
95 RZ 934. List. $199.50. NET ... **147.00**

MODEL RWN "CLIPPER" RECORDER

Low cost tape recorder with deluxe features. Compact and portable, the "Clipper" can be used to record any sound, any time, anywhere. Easy to operate, it's perfect for recording favorite radio or TV programs. Has separate record-playback and erase heads for low noise level. Dual speed and dual track operation gives wide range of recording time. *Response:* 7½" speed, 50-9000 cps; 3¾" speed, 50-5000 cps. *Recording Time* (with 1200-ft. reel of tape, both tracks): 7½", 1 hr.; 3¾", 2 hrs. *Signal-To-Noise Ratio:* 48 db. *Flutter* less than 0.5% at 7½". *2 Inputs:* 1 for microphone and 1 for radio, phono or TV. *2 Outputs:* 1 for external speaker and 1 for external amplifier or headphones. Neon bulb recording level indicator.

"Monomatic" control gives single lever selection of fast forward, rewind or play position. Slot loading eliminates complicated tape threading, and assures simple operation. Tape heads have removable pole pieces. Built-in 4x6" PM speaker and 4 watt amplifier give clear playback at good volume. Continuously variable tone control allows compensation for room acoustics and source material. Carrying case has ample storage area for accessories. Supplied with mike, 600 ft. pre-recorded sample tape and 7" take-up reel. For operation from 110-120 volts, 60 cycle AC. Size, 15¾x13¾x8⅛". Shpg. wt., 23 lbs.

95 RZ 935. List. $129.50. NET ... **99.50**

PENTRON RECORDING COMPONENTS FOR CUSTOM INSTALLATION

NEW MODEL MP-2 BASIC RECORDER. New basic tape mechanism and preamp mounted in a handsome carrying case. Contains Model TM-56 tape mechanism and Model P-4 preamplifier. See below for specifications. Designed specifically for use in high fidelity systems—gives superior performance at low cost. Deluxe features include illuminated VU meter, separate record-playback and erase heads, and balanced 4-pole, shaded-pole motor. Carrying case is finished in tan plastic fabric. With 5" reel of tape and 7" take-up reel. For 110-120 volt, 60 cycle AC. Size, 12½x15½x10". Shpg. wt., 29 lbs.

95 RZ 936. List. 174.50. NET ... **134.50**

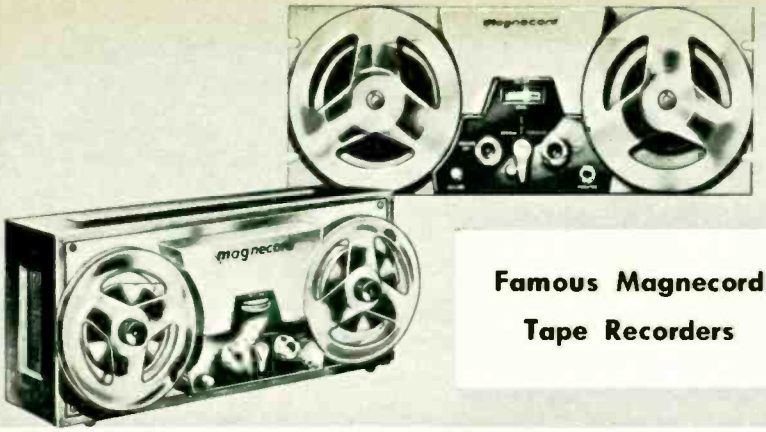
NEW MODEL TM-56 TAPE MECHANISM. Newly designed tape mechanism for custom installation. Has new Pentron "Unimagic" single lever control. Simple flick of the switch selects Play, Fast Forward or Rewind. Push-pull control selects 3¾" or 7½" recording speed. Dual track recording head effectively doubles recording time. Has separate record-playback and erase heads for high signal-to-noise ratio. Shaded-pole, 4-pole motor assures low hum and flutter. *Recording Time* (1200-ft., 7" reel, both tracks): 7½" speed, 1 hr.; 3¾" speed, 2 hrs. *Flutter:* Less than 0.3% at 7½" speed. Recording heads have removable pole pieces. For operation from 110-120 v., 60 cycle AC. *Mounting space:* 10⅞x9¾x7" deep. Shpg. wt., 15 lbs.

95 RX 937. List. $77.75. NET ... **59.75**

NEW MODEL P-4 PREAMPLIFIER. For use with Model TM-56 above. Provides preamplification, record-erase bias and necessary audio output to feed audio amplifier in hi-fi system. Has professional, illuminated VU meter for accurate control of recording level. Other deluxe features include wide range frequency response, excellent signal-to-noise ratio, equalization switch for 7½" and 3¾" speeds and highly efficient bias erase oscillator. *Response:* ±3 db. 50-12,000 cps. *Signal-To-Noise Ratio:* 47 db. *Two Inputs:* 1—mike; 1—radio, TV or crystal phono. *Mounting space:* 9½x4¼x5⅝". For 110-120 v., 60 cycle AC. Wt., 12 lbs.

95 RX 938. List. $77.75. NET ... **59.75**

Letter Z In Stock No. Indicates Express Shipment Only.



Famous Magnecord Tape Recorders

NEW F35B PORTABLE

New, complete portable recorder for Hi-Fi and audio visual use. Has Magnecord's famous quality construction and performance at a remarkably low price. Includes recorder, playback amplifier and 6x9" speaker, all in one compact case.

Operates at 3¾" and 7½" speed. Has dual track head for increased recording time. *Response:* 7½", ±2 db from 50-10,000 cps; 3¾", ±2 db from 50-5000 cps. *Recording Time* (1200 ft. reel, overall): 7½", 1 hr; 3¾", 2 hrs. *Signal-To-Noise Ratio:* 45 db. *Flutter:* 0.3% at 7½". *2 Inputs:* 1 for microphone and 1 for radio, phono or TV. *2 Outputs:* 1 for external speaker and 1 cathode follower output for external amplifier. Has monitor output on front panel; safety interlock to prevent accidental erasure of recorded tape.

Professional features include illuminated VU meter for accurate recording level, slot loading of tape and 40 second rewind time.

Recording amplifier has printed circuitry for compact size and high stability. Playback amplifier has 8 watt output. Styled in brushed gold with genuine top-grain brown cowhide case. Supplied with microphone and 7" take-up reel. Size, 9¾x17x12½". For operation from 110-120 v., 60 cycle AC. Wt., 42 lbs.

96 RZ 945. NET **349.00**

MODEL S35-B. Same as above, but employs synchronous motor.

96 RZ 983. NET **399.00**

NEW S36BX STUDIO RECORDER

Brand new Magnecord recorder designed for rack or cabinet mounting. Ideal for studio and other professional use or custom hi-fi installation. Has hysteresis synchchronous drive motor for exceptional performance. Knob control with interlock to prevent accidental erasure of tape.

Operates at 7½" and 15" speed. *Response:* 15", ±2 db from 50-15,000 cps; 7½" ±2 db from 50-10,000 cps. *Recording Time* (1200 ft. reel): 7½", 30 minutes; 15", 15 minutes. *Signal-To-Noise Ratio:* 54 db. *Flutter:* less than 0.3% at 15". *3 Inputs:* 1—high impedance mike; 1—50-250 ohm mike; 1—unbalanced bridge for radio, phono or TV. *2 Outputs:* 1—monitor output on front panel; 1—600 ohm balanced or unbalanced output for external power amplifier; also a 2-volt cathode follower output.

Has illuminated VU meter, straight loading, printed circuit construction and full track heads. Anodized-aluminum matte-panel with gray trim. Supplied with 7" take-up reel. Size, 7x19x12". For 110-120 v., 60 cycle AC. Shpg. wt., 45 lbs.

96 RZ 946. NET **370.00**

CARRYING CASE. Heavy-duty case for Model S36B above. Shpg. wt., 14 lbs.

96 RX 947. NET **25.00**

10½" ADAPTER KIT. Adapts S36BX and F35B recorders to permit use with 10½" reels. Shpg. wt., 2 lbs.

96 R 949. NET **39.00**

MAGNECORD PROFESSIONAL RECORDERS

Magnecord professional tape recorders meet the highest standards of tape recorder design. In addition, there is now a professional Magnecorder to fit every budget. The units listed below have such deluxe features as electrical push button controls, high speed cueing, direct capstan drive, adjustable bias and provisions for high and low impedance input. 4" illuminated VU meter reads bias, record and playback. Tape automatically lifts from heads during fast forward and rewind. Other features include snap or hinge mounted head covers for speedy editing, cleaning and adjustment. 3 heads for simultaneous playback while recording, and deep-slot loading. *Tape Speeds:* 7½" and 15" per sec. *Response:* 40-15,000 cps, ±2 db at 15"/sec.; 40-10,000 cps, ±2 db at 7½"/sec. *Signal-To-Noise Ratio:* 55 db. *Timing Accuracy:* ±3 sec. in 30 min. Fast forward and rewind for 10½" reel is less than 90 seconds. Average shipg. wt., 125 lbs.

P60-AC PORTABLE WITH CASE.

96 RZ 948. NET **625.00**

M81-AC PORTABLE WITH CASE.

96 RZ 944. NET **870.00**

M90-AC PORTABLE WITH CASE.

96 RZ 941. NET **1365.00**

ALLIED stocks all Magnecord professional recorders and accessories. Write for literature and technical specifications on the complete Magnecord line, including the recorders listed above.

New Crestwood Quality Recorders

MODEL 304 PORTABLE RECORDER

Fig. A. This versatile new, tape recorder is excellent for home and office, as well as for school and industrial uses. Incorporates powerful 10 watt push-pull amplifier plus large 6x9" dynamic speaker for faithful, realistic sound reproduction. Has easy-to-use push-button controls. Also has bass and treble response controls. Single lever controls volume, fast forward, tape start-stop-rewind, safety lock. Features include: High quality half-track recording heads; safety lock for preventing accidental erasure of previously recorded tape; jack for external speaker use; jack for headphone monitoring or for external amplifier if desired. All jacks mounted on rear panel—completely out-of-way. Provides two neon lamp recording level indicators—indicates normal recording and over-recording. *Speeds:* 7½" and 3¾" per second. *Recording Times (1200 ft. reel):* 7½", ½ hr. continuously and 1 hour overall; 3¾", 1 hour continuously and 2 hours overall. *Response:* From 50-10,000 cps at 7½" per sec. *Flutter:* Less than 0.3%. *2 Inputs:* 1—mike, 1—radio, TV or phono. *Tubes:* 1—5879, 1—12AX7, 2—12AU7, 1—6V6GT, 1—6X5 rectifier. Supplied complete with crystal microphone, 6-ft. cord, cable for recording from radio and 7" take-up reel. *Size:* 10¼x12¾x15¾". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.

96 RZ 754. NET **229.50**

MODEL 404 BASIC RECORDER

Fig. B. New basic recorder. Specially designed for use with hi-fi systems. Just plug into hi-fi system and enjoy unusually clean, extended range tape reproduction. Precision engineered to deliver years of quality performance with minimum attention. Equalized input for magnetic cartridges permits high quality re-recording of disc records. *Speeds:* 7½ and 3¾" per second. *Response:* ±2 db, 30-13,000 cps at 7½" per sec. *Distortion:* Less than 2%. *Wow and Flutter:* 0.3% or lower at 7½" per second. *3 Inputs:* 1—mike, 1—high-level radio and TV, 1—magnetic phono. *Outputs:* Headphone monitor and for external amplifier. *Recording Time (1200 ft. reel):* 7½" speed, ½ hour continuously and 1 hour overall; 3¾" per sec. speed, 1 hour and 2 hours. Features "Magic Eye" level indicator. *Controls:* Selector switch for tape playback, microphone, radio-TV, phonograph; Monitor volume; Recording volume; Tone balance; Record safety interlock. Uses self-contained power supply with DC supply for low-level tube heaters—insures minimum noise levels. *Tubes:* 1—5879, 4—12AU7, 1—6AT6, 1—6E5 ("Eye"), 1—6X5GT rectifier. Heavy vinyl covered case with saddle stitched leather binding. With power cable, 7" take-up reel. *Size:* 11x13½x16". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 37 lbs.

96 RZ 704. NET **229.50**

Letter Z in Stock Number Indicates Express Shipment Only

RT-88

RT-75

Famous Bell Tape Recorders

MODEL RT-88 "PUSH-KEY" PORTABLE. New, moderately priced, advanced-design recorder. Simplified controls allow anyone to enjoy the advantages of tape recording. Features two-speed (3¾" and 7½"), dual-track operation. Records on both halves of tape width. *Recording Time* (with 1200-ft. standard reel of tape, using both tracks): 7½", 1 hr.; 3¾", 2 hrs. *Frequency Response:* 7½" speed, 50-10,000 cps. Negligible "wow" and flutter. Extremely smooth running fast forward and rewind. Seven, piano-type, push keys control all functions for quick, convenient operation. Unique level indicator and pilot light for recording levels. Employs powerful 5" built-in speaker for accurate playback.

Power Output: 3.5 watts. *2 Inputs:* 1—microphone; 1—radio or phono. *2 Outputs:* 1 for external 6-8 ohm speaker; 1 monitor for headphones. *Controls:* Tone-On-Off; Volume; 7 "push key" controls (3¾" speed, 7½" speed, Record, Play, Fast Forward, Fast Rewind, Stop). Cream colored carrying case with gold and maroon trim. *Size:* 8x15½x17". Supplied with microphone, 5" reel of Type "A" tape (inside coated), 5" plastic take-up reel. For 110-120 v., 60 cycle AC. Shpg. wt., 29 lbs.

96 RZ 951. List, $186.95. NET ... 139.95

MODEL RT-75 3-SPEED PORTABLE. Six hours of recording on a single 1800-ft. reel of "long play" tape! Ideal for lectures, conferences and medical interviews. Features 3 speeds and dual-track head which permits recording on both halves of tape width. Ideal for parties, home movies, recording from radio or TV. Excellent for recording meetings, conferences, speeches, etc.

Response: 7½" speed, 30-12,000 cps; 3¾" speed, 30-7500 cps; 1⅞" speed, 50-4500 cps. *Recording Time* (with 1200-ft. standard reel of tape, using both tracks): 7½", 1 hr.; 3¾", 2 hrs.; 1⅞", 4 hrs. *3 Inputs:* 2—for microphone (one permits combining mike with radio, phono or TV); 1—for radio, phono or TV. *2 Outputs:* 3.2 ohm for external speaker and high impedance for feeding external amplifier. *Controls:* Volume; Tone; Speed Selector; Record, with safety interlock, Run and Stop; Fast Forward; Rewind. Has powerful 6x9" PM speaker, neon recording level indicator, and pilot lights to indicate "on" and "record." Beautifully styled case is covered with durable plasticized fabric. With mike, 5" (600-ft.) reel of type "A" tape, 5" take-up reel. Size: 16⅜x15x9⅛". For 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.

96 RZ 633. List, $219.95. NET ... 164.95

Bell "Cub Corder" Portable Tape Recorder

Versatile, portable recorder. Excellent for remote broadcast pickups such as "man-on-the-street" interviews, etc. Operates from self-contained batteries—permits recording anywhere. Rechargeable, non-spilling wet cells and dry batteries provide power for up to 450 hours of recording. Unique features include microphone with built-in monitor playback level; a miniature transmitter for playback through any radio without connections to set; wet cell battery that can be recharged by plugging into cigarette lighter outlet of car. *2 speeds:* 7½" and 3¾". *Tape:* Type "A", 5" reel, maximum size. Less than 1% wow and flutter. *Response:* 200-6000 cps at 7½" speed. *Input:* High-imp. mike. *Tubes:* 3S4, 2—CK512-AX, 1A5G. On-Off control on mike. Supplied complete with ceramic microphone, charging cable and battery syringe, batteries, 5" reel of tape, and take-up reel. Tan, leather-grained luggage case with shoulder strap. Size, 5⅛x13½x12". Carrying wt., 13 lbs. Shpg. wt., 19 lbs.

96 RZ 524. NET ... 225.00

WILLARD 4-VOLT WET BATTERY. Rechargeable. Shpg. wt., 5 lbs.

98 J 021. NET ... 16.08

BURGESS XX45 "B" BATTERY. Wt. 1 lb.

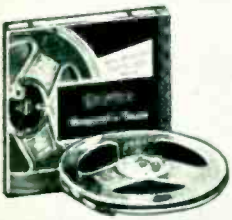
80 J 544. NET ... 2.28

Minnesota Mining "Scotch" Recording Tape and Accessories

A

Fig. A. TYPE 111A STANDARD RECORDING TAPE. ¼" plastic base tape. On plastic reel, except 96 R 313, aluminum NARTB reel, and 96 R 303, hub only. *Type 111AP on professional reel with 2¾" hub. "A" type. Av. wt., 8 oz.

Stock No.	Footage	Reel Size	List EACH	1-11 EACH	12 or More Ea.
96 R 227	150'	3"	$1.00	.67	.60
96 R 343	300'	4"	1.75	1.17	1.05
96 R 226	600'	5"	3.50	2.33	2.10
96 R 192	1200'	7"	5.50	3.67	3.30
96 R 327	1200'	7"*	6.00	4.00	3.60
96 R 303	2400'	10½"	10.00	6.67	6.00
96 R 313	2400'	10½"	12.85	8.57	7.71



B

Fig. B. TYPE 190A EXTRA PLAY RECORDING TAPE. ¼" acetate plastic base with red oxide coating. Gives 50% more footage on standard size reels. On plastic reels, except *NARTB hub and †NARTB aluminum 10½" reel. Coating faces in (Type "A"). Av. wt., 12 oz.

Stock No.	Footage	Reel Size	List	EACH	Lot Price
96 R 984	900'	5"	$4.50	3.00	2.70§
96 R 985	1800'	7"	7.70	5.14	4.62§
96 R 986	3600'	*Hub	14.40	9.60	8.64‡
96 R 987	3600'	†10½"	17.25	11.50	10.35‡

§ Net Each, 12 or more. ‡ Net Each, 6 or more.

C

Fig. C. TYPE 120A HIGH OUTPUT TAPE. 8 to 12 db higher output. Av. shpg. wt., 12 oz.

Stock No.	Footage	Reel Size	List EACH	1-11 EACH	12 or More Ea.
96 R 558	1200'	7"	$6.50	4.34	3.90
96 R 556	2400'	Hub	12.00	8.00	7.20
96 R 557	2400'	10½"	14.85	9.90	8.91

NO. 43 LEADER AND TIMING TAPE Marked in one-second intervals for 3.75", 7.5" and 15" per second speeds. ¼" x 150 ft. 3 oz.

96 R 348. List, 60c. NET ... 40c

NO. 41 SPLICING TAPE. 150" long. 3 oz.

96 R 232. NET ... 35c

TYPE 111AM PE TAPE. (Not illustrated.) New, unusually strong ¼" tape with polyester "Mylar" backing. Excellent frequency response and extremely uniform output. Type "A"—coating faces in. On plastic reels, except *NARTB hub and †NARTB aluminum 10½" reel. Av. wt., 10 oz.

Stock No.	Footage	Size	List	EACH	Lot Price
96 R 990	600'	5"	$5.25	3.50	3.15§
96 R 991	1200'	7"	9.75	6.50	5.85§
96 R 992	2400'	10½"	19.80	13.20	11.88‡
96 R 993	2400'	*Hub	16.95	11.30	10.17‡
96 R 994	2400'	†10½"	19.80	13.20	11.88‡

§Net Each, 12 or more. ‡Net Each, 6 or more.

TYPE 101A PAPER BASE TAPE. Not illustrated. Red oxide coating facing in. Wound on plastic reels. Av. shpg wt., 8 oz.

Stock No.	Footage	Reel Size	List EACH	1-11 EACH	12 or More Ea.
96 R 224	150'	3"	$0.75	.50	.45
96 R 339	300'	4"	1.50	1.00	.90
96 R 223	600'	5"	2.25	1.50	1.35
96 R 191	1200'	7"	3.50	2.33	2.10

EMPTY PLASTIC REELS. In index box. *2¼" hub. Av. shpg. wt., 4 oz.

Stock No.	Reel Size	List EACH	1-11 EACH	12 or More Ea.
96 R 237	3"	$0.25	17c	15c
96 R 349	4"	.55	37c	33c
96 R 236	5"	.65	44c	39c
96 R 194	7"	.75	50c	45c
96 R 328	7"*	1.25	83c	75c

ONE-REEL MAILING BOXES. Shpg. wt., 3 oz.

Stock No.	Reel Size	List EACH	1-11 EACH	12 or More Ea.
96 R 324	5"	15c	10c	9c
96 R 323	7"	20c	13c	12c
96 R 322	10½"	30c	20c	18c

Concertone 20/20 Series Recorder

MODEL TWR-2. Amazingly versatile home model of Concertone's professional broadcast recorder. Consists of separate drive mechanism and preamp. Features 3 dual-track heads with provision for adding two more heads to permit many combinations of full and dual-track operations—monaural, binaural, multiple recording, etc. One simple lever provides completely variable fast forward and rewind speeds. Test fader permits monitoring during recording of either incoming signal or tape output without clicks. Separate playback volume control while recording. Signal level meter. Adjustable bias.

Two Speeds: 15" and 7½" per second. *Frequency Response:* ±2 db. 40-15,000 cps at 15" speed; ±4 db. 40-15,000 cps at 7½" speed. *Signal-to-Noise Ratio:* 55 db. *Flutter and Wow:* Less than 0.1% at 15" speed; less than 0.2% at 7.5" speed. *Rewind and Fast Forward Speeds:* Less than 60 seconds for 2500 ft. *Inputs:* High impedance for mike; 200,000 ohm unbalanced bridge-in for radio, phono, etc. Cathode follower output. DC filament supply.

Sizes: Drive mechanism, 14x19"; Preamp. 5¼x19". Less cases; see below. For 110-120 v., 60 cycle AC. Shpg. wt., 55 lbs.

96 RZ 933. NET **445.00**

CARRYING CASES FOR ABOVE

TWDA MECHANISM-AMPLIFIER CASE. Shpg. wt., 14 lbs.
96 RZ 934. NET **67.50**

TWDC MECHANISM CASE ONLY. Wt., 11 lbs.
96 RZ 935. NET **47.50**

TWAC AMPLIFIER CASE ONLY. Wt., 4½ lbs.
96 RX 936. NET **24.50**

600

620

Ampex Professional Tape Recorders

MODEL 600. This ultra-compact, lightweight recorder incorporates every feature required by the most critical professional user—yet its superb styling blends in beautifully with the most fastidiously appointed living room. For high-fidelity playback through any audio amplifier and speaker. Separate heads for recording, playback and erase; separate recording and playback preamp. Operates at 7.5" per second—takes up to 7" reels. Available in full or dual-track operation for professional use or tape economy. Precision components used throughout for exceptionally long life. Direct-reading meter for recording level. Easily carried anywhere for on-the-spot recording.

Tape tension controlled to 8 oz. maximum. "Wrap-around" threading—only one hand is needed to thread tape onto mechanism. Goes from Play to Record (and Erase) position, and back again, without stopping tape. Independent level controls for microphone and line provide a "built-in" two-channel mixer. Phone jack permits monitoring input of record head or playback output of tape while recording. Record safety button prevents unintentional erasure. *Frequency Response:* 40-15,000 cps. ±2 db at 40-10,000 cps; down not more than 4 db at 15,000 cps. *Signal-to-Noise Ratio:* 55 db. *Flutter and Wow:* Less than 0.25%. *Starting Time:* Instantaneous (tape accelerates to full operation in less than one second). *Stopping Time:* Less than one second. *Playing Time:* 32 minutes with 7", standard 1200-ft. reel—32 min. each direction on dual-track machine. *Fast forward or Rewind Time:* 90 seconds for full 1200-ft. reel.

2 Inputs: 1—for high-impedance microphono, etc. *Output:* Cathode follower (1.25 v. across 10,000 ohms). Professional recording level meter; jack for headphone monitoring. *Size in Case:* 8x13¾x16½"; *Less Case:* 15½x12½x5". For 110-120 volts, 60 cycle AC. Shpg. wt., 31 lbs.

96 RZ 669. Dual-track heads.
96 RZ 770. Full-track heads.
NET EACH with case **545.00**

96 RZ 644. Dual-track heads.
96 RZ 643. Full-track heads.
NET EACH less case **498.00**

MODEL 620 AMPLIFIER-SPEAKER SYSTEM. Ingeniously designed, amplifier-speaker system, housed in a portable, shockproof case. For use with the Model 600—matches it in appearance, portability and quality. Employs Ampex-engineered 8" speaker with push-pull, high-fidelity 10-watt amplifier for superb reproduction of sound. Includes volume control and tone equalization control, on-off switch and external speaker jack. Use of external speaker jack automatically cuts out built-in speaker. Auxiliary AC outlet. *Power Output:* 10 watts, with less than 1% harmonic distortion. *Amplifier Frequency Response:* ±.25 db. 20-20,000 cps. *Hum and Noise:* 70 db below full rated output. *Input Impedance:* 20,000 ohms. *Output Impedance:* 12 ohms. In unusually attractive, rugged, brown Samsonite case. *Size:* 13x10x8". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 25 lbs.

96 RZ 668. NET **149.50**

ALLIED can supply the complete Ampex line—write for specs and prices

Super-Value Knight Quality Plastic Recording Tape

Fig. A—NEW "PLUS-PLAY" TAPE

A real boon to tape recording fans! New Knight "Plus-Play" tape provides 50% more recording time on standard-size tape reels. For added convenience and greater recording versatility. Makes possible uninterrupted recording of lengthy musical programs, conferences, etc. ¼" cellulose acetate plastic base with red oxide coating. Offers the same excellent recording characteristics as the popular, standard Knight tape listed at right.

Maximum Fidelity at Minimum Cost

Knight "Plus-Play" tape offers the same fidelity and uniformity of output as conventional tape. Thinner base and special coating processes are employed to make extra length possible—there is no difference in frequency response or winding characteristics. Assures maximum signal-to-noise-ratio. For achieving perfect results in extended recording, your best buy is new Knight "Plus Play" tape.

Available in 5" (900 ft.) and 7" (1800 ft.) reels in single quantities or in quantities of 5 or more for extra savings. Coating faces in (Type "A"). On transparent plastic reels. Shpg. wts.; 900-ft. reel, ¾ lb.; 1800-ft. reel, 1¼ lbs.

96 R 981. 900-ft. reel.
1 to 4, EACH **1.67** 5 or More, EACH **1.50**

96 R 982. 1800-ft. reel.
1 to 4, EACH **2.95** 5 or More, EACH **2.65**

Fig. B—PLASTIC BASE TAPE

This fine, ¼" plastic-base tape meets the most critical professional requirements—yet it's extremely low in cost. Rigid manufacturing and quality-control specifications assure clean, noise-free reproduction and exceptionally uniform output. Has red oxide coating on smooth, strong plastic base. Coating is controlled to an extremely close tolerance and mirror-polished for excellent high-frequency response and minimum wear on heads.

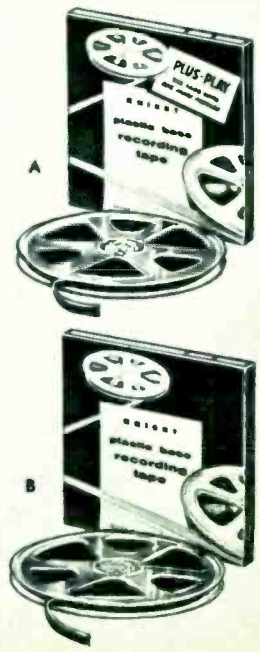
Top Quality at Tremendous Savings

Knight recording tape delivers performance easily comparable to other brands of regularly priced tape and can be depended upon for top-notch results in even highly critical recording applications. Provides crystal clear, authentic reproduction. Secure bonding and mirror-polishing combine to provide wide frequency response, high signal-to-noise-ratio, low distortion and uniformity of output.

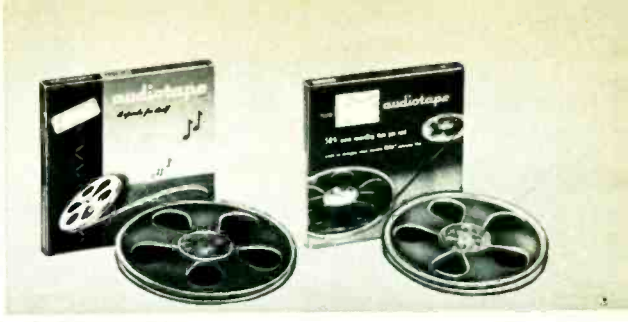
Available in 5" (600 ft.) and 7" (1200 ft.) reels in single quantities or in quantities of 5 or more for extra savings. Type "A", inside coated. 1200-ft. reels splice free. On transparent plastic reels. Shpg. wts.; 600-ft. reel, ½ lb.; 1200-ft. reel, 1 lb.

96 R 698. 600-ft. reel.
1 to 4, EACH **1.37** 5 or More, EACH **1.24**

96 R 699. 1200-ft. reel.
1 to 4, EACH **1.98** 5 or More, EACH **1.78**



ALLIED is Headquarters for Magnetic Recording Accessories



Recording Tapes and Accessories

REEVES SOUNDCRAFT TAPE

"PLUS-50" TAPE. 50% more footage. Dupont "Mylar" base; 1 mil thick. Plastic reels except *NARTB hub. †NARTB aluminum reel and ‡NARTB fiberglass reel. Av. shpg. wt., 8 oz.

Stock No.	Mfr's. Type	Tape Footage	Reel Size	List	NET EACH	10 or More. NET EACH
96R 972	PL-9	900′	5″	$4.40	2.87	2.58
96R 973	PL-18	1800′	7″	7.95	5.19	4.67
96R 974	PL-36H*	3600′	Hub	16.00	10.45	9.41
96R 975	PL-36RA†	3600′	10½″	17.95	11.71	10.55
96R 954	PL-36RB‡	3600′	10½″	17.95	11.71	10.55

"PLUS-50" TAPE AND CHEST. Five 1800 ft. (7″) reels of "Plus-50" Mylar plastic tape in storage chest. Shpg. wt., 9 lbs.
96 R 952. List, $39.75. NET 23.37

LIFETIME TAPE. Mylar base recording tape. Micropolished. On plastic reels, except Type L-24. *Professional tape on NARTB hub; †professional tape on NARTB aluminum reel; ‡professional tape on NARTB fiberglass reel. Av. shpg. wt., 8 oz.

No.	Type	Footage	Reel	List	EACH
96R 968	L-6	600′	5″	$5.25	3.09
96R 969	L-12	1200′	7″	9.75	5.73
96R 970	L-24*	2400′	Hub	16.95	9.97
96R 971	L-24A†	2400′	10½″	19.80	11.64
96R 995	L-24B‡	2400′	10½″	19.80	11.64

LIFETIME TAPE AND CHEST. Five 1200 ft. (7″) reels of Lifetime Mylar base tape in storage chest. Shpg. wt., 8 lbs.
96 R 953. List, $48.75. NET 28.66

PLASTIC BASE RECORDING TAPE. Micropolished acetate base tape. Coating facing in. On plastic reels except§ 7″ professional reel with 2¾″ hub; *professional tape on NARTB aluminum reel; †professional tape on NARTB hub; ‡professional tape on NARTB fiberglass reel. Av. shpg. wt., 8 oz.

No.	Type	Footage	Reel	List	EACH
96R 960	SPN-1	150′	3″	$1.00	.59
96R 961	SPN-3	300′	4″	1.75	1.03
96R 962	SPN-6	625′	5″	3.50	2.06
96R 963	SPN-12	1250′	7″	5.50	3.23
96R 965	SPN-12P§	1200′	7″	6.00	3.53
96R 966	SPN-24PH†	2450′	Hub	10.00	5.88
96R 967	SPN-24PA*	2450′	10½″	12.85	7.56
96R 996	SPN-24PB‡	2450′	10½″	12.85	7.56

PLASTIC TAPE AND CHEST. Five 1200 ft. (7″) reels of plastic base tape in storage chest. Shpg. wt., 8 lbs.
96 R 964. List, $27.50. NET 16.17

AUDIOTAPE RECORDING TAPE

TYPE "LR" (LONGER RECORDING) TAPE. New, quality "Longer Recording" tape. Provides 50% more recording time on standard type reels. Made of Dupont "Mylar" base. Only 1 mil thick. On plastic reels except *NARTB hub and †NARTB aluminum reel. Coating faces in. Av. shpg. wt., 12 oz.

Stock No.	Mfr's. Type	Tape Footage	Reel Size	List	NET EACH
96R 955	961	900′	5″	$4.40	2.59
96R 956	1861	1800′	7″	7.95	4.67
96R 957	3661H*	3600′	Hub	16.00	9.41
96R 958	3661R†	3600′	10½″	17.95	10.55

PLASTIC BASE TAPE. Excellent response and low noise level. Red oxide coating faces in (Type A). Plastic reels except *NARTB aluminum and †NARTB fiberglass. Av. shpg. wt., 8 oz.

No.	Type	Footage	Reel	List	EACH
96R 562	151	150′	3″	$0.85	.50
96R 561	351	300′	4″	1.60	.94
96R 560	651	600′	5″	3.50	2.06
96R 356	1251	1200′	7″	5.50	3.23
96R 357	2551R*	2500′	10½″	12.85	7.56
96R 685	2551F†	2500′	10½″	12.85	7.56

COLORED BASE TAPE. Colored base recording tape of same high quality as conventional plastic base (above). Ideal for spotting specific selections on one reel; material to be saved, etc. Red oxide coating. Plastic reels. Shpg. wt., 8 oz.

No.	Green	No.	Blue	Footage	Reel	List	EACH
96R 736	651G	96R 738	651B	600′	5″	$3.50	2.06
96R 737	1251G	96R 739	1251B	1200′	7″	5.50	3.23

COLORED PLASTIC REELS. Extremely attractive, colored plastic reels (less tape) available in green, blue, yellow and red as well as standard clear plastic. All are available in 5″ and 7″ sizes. Can be used to provide a simple and positive means of identification. In boxes. Av. shpg. wt., 4 oz.

Size	Clear	Red	Yellow	Green	Blue	List	NET
5″	96 R 748	96 R 740	96 R 742	96 R 744	96 R 746	$0.55	.32
7″	96 R 749	96 R 741	96 R 743	96 R 745	96 R 747	.85	.50

TYPE 10RB 10½″ ALUMINUM REEL. NARTB type w/box. 8 oz.
96 R 358. List, $4.50. NET 2.64
TYPE 10BF 10½″ FIBERGLASS REEL. NARTB type w/box. 8 oz.
95 R 902. List, $4.50. NET 2.64
TYPE 10BFS 10½″ FIBERGLASS ADAPTERLESS TYPE REEL. With box. Has 5/16″ center hole. Shpg. wt., 8 oz.
96 R 997. List, $4.50. NET 2.64

Fig. A. TAPE CARRYING CASE. Holds twelve 7″ reels of tape. Sturdily constructed of wood with simulated leather maroon and gray covering. Has securely fastened carrying handle and protective feet. Measures only 8½x8½x8¾″. Wt., 3¼ lbs.
96 RX 580. List, $7.95. NET 5.95

Fig. B. ROBINS TS-4DLX TAPE SPLICER. For rapid tape editing and repairing. A "must" accessory for tape recording enthusiasts. Only 2½x4″. Consists of snap arms to hold tape in position and double cutting mechanism. Cuts diagonal splice and trims "waist" along sides of splice. With splicing tape and holder. Shpg. wt., 12 oz.
96 R 734. List, $14.50. NET 8.70

TS-4 TAPE SPLICER. Same as TS-4DLX tape splicer above except less splicing tape and holder. Shpg. wt., 8 oz.
96 R 319. List, $8.50. NET 6.25

Fig. C. COUSINO U-300 TAPE VENDOR. Plays tape-recorded messages continuously. Fits standard recorders. Plays 15 min. at 3¾″/sec. Complete with tape. Clockwise rotation. Shpg. wt., 1½ lbs.
96 R 717. List, $18.50. NET 14.80
96 R 714. As above. Counter-clockwise rotation. NET 14.80

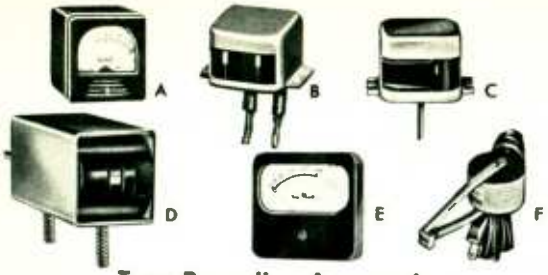
Fig. D. TAPE SPLICER KIT. With plastic splicer, blade, splicing tape. Will adhere to body of tape recorder. Shpg. wt., 6 oz.
96 R 718. List, $1.50. NET 1.20
SPLICING TAPE REFILLS. For above. 24 precut pieces. 2 oz.
96 R 719. NET 20c

Fig. E. JIFFY RECORDING TAPE SPLICER. For holding recording tape in alignment for cutting and splicing. Shpg. wt., 5 oz.
96 R 379. NET 1.50

Fig. F. JIFFY-RASE TAPE ERASER. Efficient tape demagnetizer. Extremely simple to use. Tape eraser fits over entire reel of tape. Simply push switch. Reduces noise and distortion. Momentary On-Off switch. 5″ O.D. x3½″ H. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 7 lbs.
96 R 569. NET 20.98

Fig. G. TYPE 30AL IDENTIFICATION LABELS. Easy-to-apply, self-adhesive labels for quick identification of recorded tape reels. Size: ½x2″. Shpg. wt., 4 oz. 30 per pkg.
96 R 564. PER PKG. 17c

Fig. H. FLAHAN TAPE THREADER. Simplifies starting tape on a reel. Slips over capstan shaft and over empty reel. Few turns of crank and tape is securely threaded. Lightweight aluminum. For reels to 7″. 2½″ long. Shpg. wt., 2 oz.
96 R 713. NET 79c



Tape Recording Accessories

Fig. A. TRIPLETT 327-TC 3" VU METER. Helps visually determine the correct recording level when using portable tape recorders. Extremely compact—only 3x3x1⅜" deep. In sturdy black bakelite case with 18" cord, plug and jack. Shpg. wt., 2 lbs.
66 F 077. NET 18.62

Fig. E. TAPEMASTER 10VU 3½" VU METER. Low-cost, professional recording accessory. Excellent for use with portable tape recorders. Gives accurate indication of recording level—helps make more professional recordings; minimizes distortion. Sensitivity 1.2 volt for 0 VU using 7500 ohm connection; 12 volts for 0 VU at 85,000 ohms. 3½" scale in VU and percent modulation. Size. 3¼x3⅝x2⁷⁄₁₆" deep. Shpg. wt., 2 lbs.
96 R 554. NET 13.95

SHURE REPLACEMENT TAPE RECORDER HEADS. Popular tape recorder head replacements. All are upper track recording (half-track). All function as record-playback and erase except (*) Models 816, 817 and TR16 which are record-playback only. Model 815 replaces Shure TR5 and TR5H. Model TR5B replaces Shure TR5D. Model 816 replaces Shure TR6C. Model 817 replaces Shure TR-16A. TR5B has Cinch plug and 14" insulated leads.

Stock No.	Mfr's Type	Fig.	Coil, Imped.	Tape Recorder Used In	Wt., Oz.	List	NET EACH
65 R 366	815	B	Low	Electro-Magnemite Magnemaster 815 Bell RT-65B Revere T-100, TR-200	4	$13.50	7.94
65 R 584	815H	B	High	Revere T-500, TR-600 Tapemaster TH-21, PT-121 and PT-125	4	13.50	7.94
65 R 588	816*	C	High	Ampro 730, 731 Masco R-3, M-60	4	10.50	6.17
56 R 315	817*	D	Low	RCA SRT-403, 402, 401 Wilcox Gay 3A11	6	7.50	4.41
65 R 586	TR5B	B	Low	Revere T-700, TR-800, TR-20	10	15.00	8.82
65 R 413	TR16*	D	High	Knight 96 RZ 940, 96 RX 675, 96 RX 635, 96 R 485, 96 R 590 Wilcox-Gay 2A-10B, 3A10. Telectro TR-48	6	7.50	4.41

Fig. F. AUDIOTAPE TYPE 400 HEAD DEMAGNETIZER. For removing magnetism accumulated in recording head. For operation from 110-115 volts, 60 cycle AC. Shpg. wt., 1 lb.
96 R 563. List, $12.00. NET 7.06

Magnetic Telephone Pickups

Fig. G—ELECTRODUCER TELEPHONE PICKUP

May be used with any recorder; disc, wire or tape—on all types of phones. Response, 100-6500 cycles. No electrical connection to telephone needed. Connects to high-impedance mike input of any recorder or amplifier. Coil is removable. Made of heavy chipboard. Size, 9½x6½x1". With 12-ft. cable. Shpg. wt., 1¼ lbs.
99 S 482. List, $12.50. NET 7.35

Fig. H—ELECTRO-SCRIBER PHONE PICKUP

Induction pickup for recording conversation from standard rectangular-base cradle phones. Telephone fits into recess of rubber base; no electrical connections necessary. Output goes to mike input of disc, wire or tape recorder. Complete with 8-ft. cable and 3-prong Jones plug. Shpg. wt., 1¾ lbs.
99 S 489. List, $12.50. NET 7.35

As above, but for push-button rectangular-base cradle phones. Shpg. wt., 1¾ lbs.
99 S 490. List, $14.50. NET 8.53

Fig. J—KORD-O-COIL MAGNETIC PICKUP

Induction pickup for recording telephone conversations. For cradle type phone only. No connection to telephone necessary. Connects to mike input of any disc, wire, or tape recorder. 5½" wide, ⅝" high, 9¼" deep. Leatherette finish. Complete with 6-ft. cord and plug. Shpg. wt., 1¾ lbs.
99 S 486. List, $10.00. NET 5.88

Fig. K—PERMOFLUX M53-A PICKUP

For attaching to receiver of telephone. Can be used with either cradle or old type telephones. Output of pickup feeds mike input of any recorder or amplifier. No electrical connection necessary. 6 ft. shielded cable included. Shpg. wt., 8 oz.
81 S 244. List, $17.50. NET EACH 10.29

Fig. L—MAGNETIC RECORDING IND. VM938 PICKUP

Small size pickup coil for recording telephone conversations. No electrical connection needed. Fits any telephone—cradle or old type. Extremely simple to use. Shpg. wt., 1½ lbs.
99 S 478. NET 4.50

CANNON RECORDER CONNECTOR

(Not illustrated). For connecting recorders (disc, tape or wire) to Bell Telephone "beep" warning signal device. Female; 7 contacts; ½" cable clamp. Shpg. wt., 4 oz.
40 H 725. Type SK-M7-21C-½. NET 2.78

Wire Recording Accessories

Fig. M. WEBSTER-CHICAGO 2904 WIRE RECORDING HEAD. Record-playback-erase. Less cartridge cap, mtg. screw. Wt., 11 oz.
96 R 049. List, $7.50. NET 5.88

Fig. N. ECHO RECORDING WIRE. .0036" stainless steel wire.

Stock No.	Spool Size	Shpg. Wt.	NET EACH	10 or More EACH
96 R 145	¼ hour	6 oz.	1.54	1.23
96 R 146	½ hour	8 oz.	2.31	1.85
96 R 147	1 hour	11 oz.	3.84	3.07

Fig. P. WEBSTER-CHICAGO RECORDING WIRE. .0036" stainless steel.

Stock No.	Mfr's Type	Spool Size	Shpg. Wt.	NET EACH	10 or More EACH
96 R 061	W-173	¼ hour	6 oz.	2.94	2.35
96 R 062	W-174	½ hour	8 oz.	3.92	3.14
96 R 063	W-175	1 hour	11 oz.	5.88	4.70

EMPTY METAL SPOOL. Holds 1 hr. wire supply. Shpg. wt., 8 oz.
96 R 044. 10 or more, EACH, 30c. NET EACH 38c

G. I. RECORDER-PHONO ASSEMBLY

MODEL GI-R85L-LP. Low-cost recorder-phono assembly for cutting and playing records at 78 and 33⅓ rpm. Excellent unit for replacement of older-type disc recorders. Can be easily mounted in cabinet, carrying case, etc. Spring supplied for easy conversion of 33⅓ speed to 45 rpm. Crystal cutter cuts discs up to 10" in diameter at 160 lines per inch (std. groove). Plays records up to 12". Has handy, centrally located dial—for quick selection of two speeds. Weighted pickup arm provides proper needle pressure for both standard and microgroove records. Dynamically balanced, rim-drive, 4-pole motor. Convenient depth-of-cut adjustment. Size: Base plate, 15" W, 11½" D; height, 6⅝", 2¾" above, 3⅞" below plate. Requires high-gain amplifier or radio with 3 watts or more output. Supplied complete with playback styli, less cutting needle (requires short shank type). For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 17 lbs.
96 RX 106. List, $56.50. NET 33.90

Same as Model GI-R85L-LP above, but with 8 ohm magnetic cutting head. Shpg. wt., 18 lbs.
96 RX 703. List, $58.50. NET 35.10

Bell RC-47A Disc Recorder

An excellent, portable disc recorder; cuts and plays records at 78 and 33⅓ rpm. Unusually compact, can be easily stored or placed in any location. Spring supplied to convert 33⅓ speed to 45 rpm. Cuts discs up to 10" diameter at 160 lines per inch (std. groove). Has highly efficient magnetic cutting head; crystal phono pickup (dual styli). Three inputs: Mike, Radio-Phono, and Direct External Recording. Controls permit recording from mike and radio-phono simultaneously. One central control provides for instant selection of all functions. May be used as a public address system. Has visual recording level indicator, and headphone monitoring jack. Amplifier output, 3 watts; 5 watts peak. Hum: —58 db. Supplied with built-in amplifier, 6" PM speaker, Hi-Z crystal mike with 6 ft. shielded, rubber-covered cable and shielded plug. External speaker jack. Entirely self-contained—in two-piece portable case. Requires short shank cutting needle. Size, 18x10x16". For operation from 105-125 volts, 60 cycles AC. Shpg. wt., 41 lbs.

96 RZ 507. List, $175.00. NET **116.67**

Rek-O-Kut Professional Recorder

"CHALLENGER." Cuts standard records at 33⅓ and 78 rpm, from 6" to 13¼" masters. Uses G.E. RPX-050 cartridge to play back discs to 16"; 33⅓ and 78 rpm. Amplifier response, ±1 db 30-20,000 cps. 13.5 watts output. Hum: —64 db. 4, and 8, 15, and 500 ohm outputs. 2 mike and 1 phono or radio input. Monitoring provision. Treble and bass controls. Recording level meter. 8-ohm magnetic cutter, flat. 40-7000 cps. Cuts 108 lines—inch. 12" turntable. 10" PM speaker. Gain: mike, 120 db; phono, 90 db. Plywood case. Leatherette covering. 19x17x8¾". Less mike and short-shank needle. For 105-125 v., 60 cycle AC. 80 lbs.

96 RZ 425. NET **459.95**

M-12 OVERHEAD CUTTING MECHANISM. Contained in above. Mounts on any 12" turntable. Less turntable and motor. Shpg. wt., 19 lbs.

96 RX 165. NET **99.95**

MICROGROOVE LEADSCREW. 240 lines per inch, for Model M-12, above. Shpg. wt., 1 lb.

96 R 107. NET **27.95**

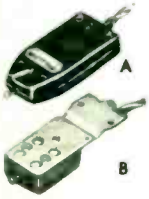
TR-12H. DUAL-SPEED RECORDING TURNTABLE. 33⅓ and 78 rpm. 12" aluminum turntable. Tapped for M-12 cutter. Synchronous motor. Less cutter. Shpg. wt., 21 lbs.

96 RZ 506. NET **129.95**

45-RPM IDLER. Adapter for TR-12H above. Shpg. wt., 4 oz.

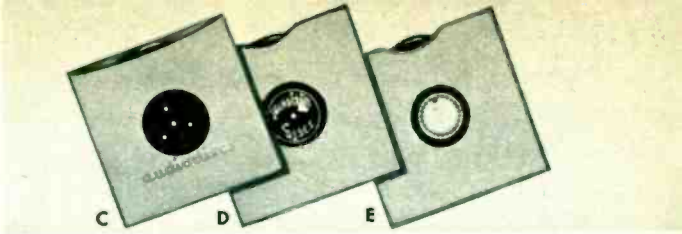
96 R 111. NET **8.00**

ASTATIC RECORDING HEADS



Popular disc recording head replacements. Feature high needle stiffness, wide frequency range and excellent power sensitivity. Use short-shank needles. 24" leads. Used as original equipment in many popular recorders. *Crystal type with flange bracket for replacement in Knight, Wilcox-Gay and G.I. recorders. †Magnetic type with 8 ohms impedance. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	RMS Volts	Upper Freq.	Size	NET EACH
65 R 125	*X26	A	150	6000	1⅜x ⅝x3¼"	7.53
65 R 128	†M41	B	3	7000	1⅜x1 1/16x3¾"	



Quality Recording Discs for All Purposes

The wide selection of recording blanks below covers all the needs of recording studios, broadcast stations, schools, sales demonstrations, home, etc.

FIG. C—AUDIODISC PROFESSIONAL RECORDING BLANKS

Smooth-coated on both sides of aluminum base. Red Label discs for highest quality work; Yellow Label for general purpose work in studios and schools; Blue Label for home recording. *Large center hole for 45 rpm recordings.

Stock No.	Size	Label	Base Thickness	Lbs. Pkg.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
69 R 085	7"*	Red	.050"	5	25	.83	.75
69 R 069	8"	Red	.040"	5	25	.66	.59
69 R 070	10"	Red	.040"	8½	25	.91	.80
69 R 071	12"	Red	.050"	13½	25	1.51	1.35
69 RX072	16"	Red	.050"	25	25	2.75	2.48
69 R 089	8"	Yellow	.040"	5	25	.55	.49
69 R 090	10"	Yellow	.040"	8½	25	.73	.66
69 R 091	12"	Yellow	.050"	13½	25	1.22	1.14
69 RX092	16"	Yellow	.050"	25	25	2.17	1.95
69 R 065	6½"	Blue	.027"	6½	50	.29	.26
69 R 066	8"	Blue	.027"	7½	50	.40	.36
69 R 067	10"	Blue	.027"	10½	50	.59	.53

FIG. D—REEVES SOUNDCRAFT RECORDING DISCS

THE BROADCASTER. For extremely critical recordings. Finest quality physical and sound properties. Made with scrupulous care. Double face.

Stock No.	Size	Wt., Ea.	Std. Pkg.	Lbs. Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
69 R 260	10"	5 oz.	25	7	1.01	.91
69 R 261	12"	8 oz.	25	13	1.57	1.41
69 RX 262	16"	16 oz.	25	25	2.87	2.59

THE PLAYBACK. Standard broadcast-quality disc for all professional applications in radio stations, recording studios, etc. Double face.

69 R 263	6½"	3 oz.	25	3	.52	.47
69 R 265	10"	5 oz.	25	7	.91	.82
69 R 266	12"	8 oz.	25	13	1.47	1.32

THE AUDITION. For good-quality recording in the home, school, etc. Double face disc.

69 R 268	6½"	3 oz.	25	3	.46	.41
69 R 270	10"	5 oz.	25	7	.71	.65
69 R 271	12"	8 oz.	25	13	1.17	1.06

FIG. E—RECORDISC SEMI-PROFESSIONAL & HOME-TYPE

For home, semi-professional and school use. Aluminum base (except †paper bond base), cellulose nitrate coated. Red Label is semi-professional grade with excellent sound qualities.

Stock No.	Size	Label	Base Thickness	Wt., Ea.	Std. Pkg.	Wt., Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
69 R 110	6½"	Orange	†	3 oz.	6	½ lb.	25¢	15¢
69 R 140	6½"	Red	.021"	3 oz.	5	½ lb.	30¢	27¢
69 R 141	8"	Red	.021"	4 oz.	5	¾ lb.	40¢	36¢
69 R 142	10"	Red	.021"	4 oz.	5	1 lb.	60¢	54¢
69 R 143	12"	Red	.021"	6 oz.	5	2½ lbs.	73¢	66¢
69 R 195	6½"	Purple	.012"	3 oz.	5	½ lb.	23¢	21¢
69 R 196	8"	Purple	.012"	4 oz.	5	¾ lb.	33¢	30¢
69 R 197	10"	Purple	.012"	4 oz.	5	1 lb.	47¢	42¢

RECORD LABELS. Gummed record labels with spaces for title, artist, date, etc. Shpg. wt., per pkg., 2 oz.

65 R 520. Package of 50 .... NET 35c 4 or more Pkgs., EACH 31c

Disc Cutting Needles

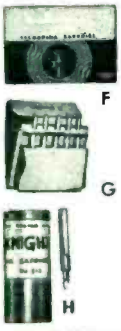


Fig. F. AUDIOPOINTS. High-quality recording needles. *For non-professional and Presto Model K recorders. †For professional recorders. 65 RC 960 has 87° included angle; 65 RC 961, 70°. All .003" except Type 20, .001". Shpg.wt., per package of 3, 3 oz.

Stock No.	Mfr's Type	Description	NET EACH	6 or More, EACH
65 RC 960*	14	Sapphire, short dural shank	4.90	4.41
65 RC 967*	20	As above, for microgroove		
65 RC 961†	14	Sapphire, long dural shank		
65 RC 966†	20	As above, for microgroove		
65 RC 962*	202	Sapphire, short brass shank	3.92	3.53
65 RC 963†	202	Sapphire, long brass shank		

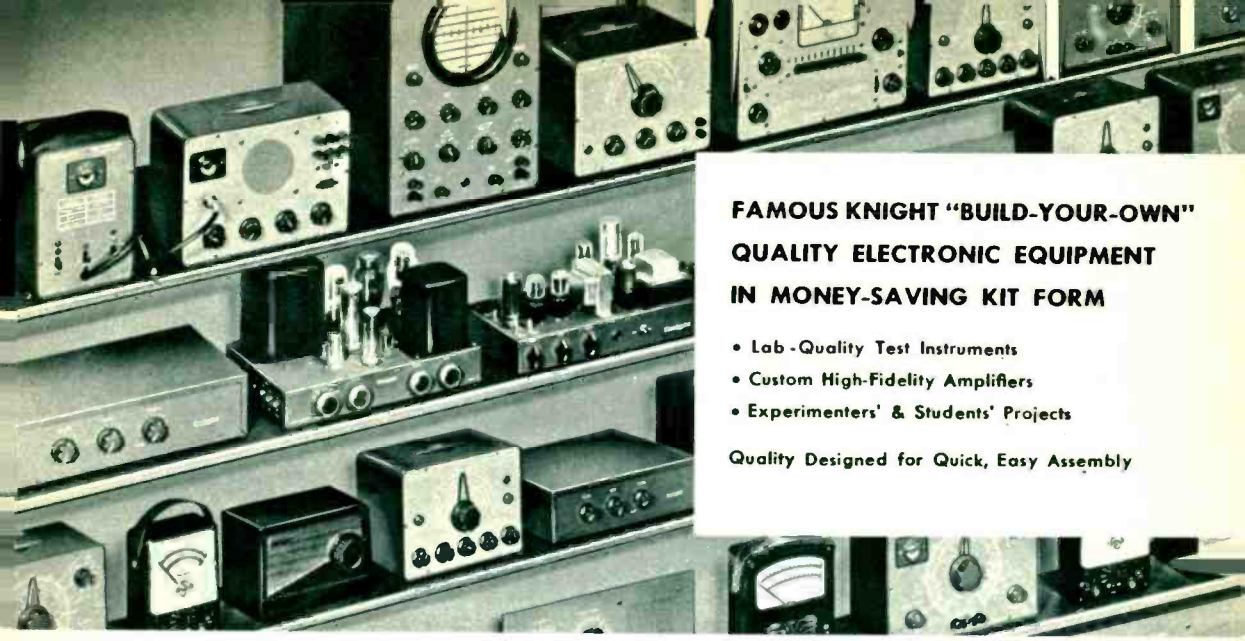
Stock No.	Type	Description	EACH	12 or More, EA.
65 R 964*	34	Stellite, short brass shank	1.31	1.17
65 R 965†	34	Stellite, long brass shank		

Fig. G KNIGHT STEEL CUTTING NEEDLES. Short, flat-shank. .003" Av. cutting life, 20 minutes. Quiet cutting assures fine recording. 3 oz.

65 R 803. Pkg. of 5, NET **59c**

Fig. H. KNIGHT SAPPHIRE CUTTING NEEDLE. Precision ground and highly polished. Short-flat shank. .003". Av. cutting life, 5 hrs. 2 oz.

65 RC 800. NET EACH **3.53**



FAMOUS KNIGHT "BUILD-YOUR-OWN" QUALITY ELECTRONIC EQUIPMENT IN MONEY-SAVING KIT FORM

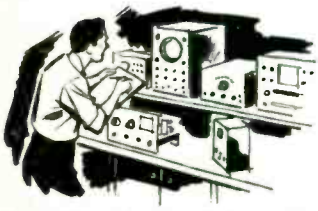
- Lab-Quality Test Instruments
- Custom High-Fidelity Amplifiers
- Experimenters' & Students' Projects

Quality Designed for Quick, Easy Assembly

Build Your Own Professional-Quality Electronic Equipment at Substantial Savings

Knight kits are the number one choice of engineers, servicemen, music lovers, Amateurs, experimenters, and beginners in electronics. These outstanding units, based on over 25 years of experience, are engineered down to the finest detail to give you more for your money in performance, appearance, dependability and genuine ease of assembly. Knight kits are presented on pages 54-64. Compare them feature for feature with other kits and factory-built units—you'll quickly see why they're the finest kit values ever offered.

HERE ARE THE IMPORTANT FACTS BEHIND KNIGHT KIT QUALITY AND VALUE

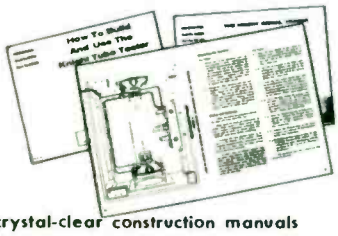


advanced engineering design and superior circuit features

Knight equipment is famous for its advanced design and outstanding performance. All units on the following pages have been engineered by leading kit design specialists and pass through many stages before they are presented to the user. No trick, shortcut circuits are employed and every possible factor is considered to guarantee the customer maximum value. All circuits are critically tested under laboratory and actual operating conditions to be sure that specifications meet or surpass original engineering standards. All this adds up to true professional performance, equivalent or superior to factory-built equipment costing far more. You can always be sure of more for your money.

new printed circuits

Many Knight kits feature printed circuits—eliminate wiring in critical, complex circuits and save space.



crystal-clear construction manuals

One of the first questions that comes to the mind of anyone planning to build a kit is, "Will it be easy to put together?" Knight kits are famous for their easy assembly. Thanks to Knight construction manuals, even those with no previous experience will find assembly a marvel of simplicity. Prepared by skilled technical writers and artists, these crystal-clear manuals include detailed written instructions, parts lists, and oversize pictorial and schematic diagrams. For "proof positive" of the clarity of Knight manuals, drop a card to ALLIED—we'll send you a free copy of the construction manual for the Knight VTVM—you'll quickly see why Knight manuals are acclaimed by kit builders everywhere.

easy to assemble

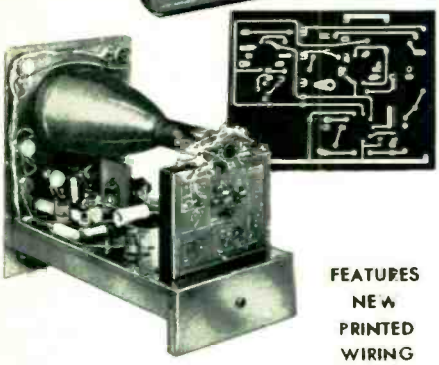
Anyone can build a Knight kit. Panels are drilled and calibrated and chassis are punched—no holes to drill, no dials to mark. You can build your kit with only a soldering iron and a few ordinary hand tools.

more for your kit dollar

Although prices on Knight kits are trimmed to the bone, you get only premium-quality components to assure dependable operation and top performance. These premium-quality parts are purchased in huge quantities to obtain the best possible price advantage—this, plus the fact that you buy Knight kits DIRECT, without any intermediate handling to boost cost, further assure you of extra savings without any compromise in quality. Knight kits are an exclusive ALLIED product.

Buy Knight Kits On Our Easy Payment Plan

Knight "Build-Your-Own" kits and accessories may be purchased on ALLIED's Easy Payment Plan. If your order totals $45.00 or more, pay only 10% down—then complete the balance in small, easy-on-the-budget monthly payments. Turn to page 315 for time payment details.



FEATURES NEW PRINTED WIRING

New Knight 5" Printed Circuit Oscilloscope Kit

ONLY **$69.00**

- Printed Circuit Construction
- Over 5 mc Bandwidth
- Horizontal Sweep to 600 kc
- DC Positioning Controls
- 25 Mv/Inch Sensitivity
- Z Axis Input

Here is an entirely new, wide-band 5" oscilloscope. It equals or betters the performance of commercially-wired scopes costing several times the price. Now exceptionally easy to wire. Assembly time has been cut to a minimum by using two printed-circuit boards, single-chassis construction, and laced wiring harness.

It's an ideal scope for color TV servicing and other high-frequency applications. Has 6 times the usual sweep range —15 to 600,000 cps! Locks in frequencies as high as 9 mc. Excellent response at the important 3.58 mc color burst frequency. Vertical response: ±3 db, 5 cycles to 5 mc. Has high vertical sensitivity, 25 rms millivolts/inch. Input capacity, 20 mmf.

Cathode-follower vertical and horizontal inputs assure minimum circuit loading. Has the 5UP1 cathode ray tube; interchangeable with other 5UP types for scope photography and other special lab applications. 2nd anode voltage of 1400 volts provides high-intensity trace. Push-pull vertical and horizontal amplifiers assure minimum distortion. Employs positive and negative locking to achieve excellent synchronization on complex waveforms. Faithful square wave response.

Many other important features. Frequency-compensated input attenuator. Z-axis input permits intensity modulation. One volt peak-to-peak calibrating voltage. Internal astigmatism control for adjustment of symmetry. Blanking circuit eliminates retrace lines. DC positioning controls instantaneously position trace.

Complete with all tubes including CRT, all parts, punched chassis, handsome, professionally-styled blue case with gray panel, pre-cut wire, solder. Step-by-step instructions, pictorial and schematic diagrams. Size, 14½x9½x16" deep. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 40 lbs.

83 FX 144. NET 69.00

R. F. DEMODULATOR PROBE. For above. 2 lbs.
83 F 148. NET 3.45

LOW CAPACITY PROBE. For above. 12 mmf. 2 lbs.
83 F 147. NET 3.45

Wiring time cut to minimum! — printed circuits eliminate complex wiring.

New Knight Printed Circuit VTVM Kit

ONLY **$24.95**

- Printed Wiring Construction
- Reads AC Peak-to-Peak
- Balanced-Bridge, Push-Pull Circuit
- 1% Film-type Resistors

New, extremely stable, highly accurate VTVM. Wiring is greatly simplified—the entire chassis is a printed circuit board. Uses low-leakage type switches; 1% film-type, precision resistors. Balanced-bridge, push-pull circuit permits switching to any range without adjusting zero set. 4½" meter with sensitive 200 microamp movement. Zero-center scale and direct-reading db scale. Polarity reversing switch. Response, 30 cycles to 3 mc. Input resistance, 11 megs. Ranges: AC peak-to-peak volts, 0-4-40-140-400-1400-4000; AC rms v. and DC v., 0-1.5-5-15-50-150-500-1500; ohms, 0-1000-10K-100K; 1-10-100-1000 megs; db scale, —10 to +5. With tubes, blue case, gray panel, printed circuit chassis, battery, all parts, pre-cut wire, solder, test leads and instruction. Size, 7¾x5¼x4³⁄₁₆". For 110-120 v., 60 cycle AC. Shpg. wt., 6 lbs.

83 F 125. NET 24.95

HI-VOLTAGE PROBE. Extends DC to 50,000 v. 1½ lbs.
83 F 126. NET 4.75

HI-FREQUENCY PROBE. Extends AC to 250 mc. 1½ lbs.
83 F 127. NET 3.45

NEW PRINTED CIRCUIT CHASSIS. A great time saver and convenience. Simplifies assembly—and assures accurate wiring.

Counter Model

Knight Tube Tester Kit

ONLY **$29.75**

- Quick "Good-?-Replace" Readings
- 14 Heater Voltages
- Tests 600-ma Tubes
- 4½" Square Meter
- Easy-Action Roll Chart
- Obsolescence Protection

Available in Portable Model

OUTSTANDING VALUE IN AN ACCURATE, EASY-TO-BUILD TUBE TESTER

This up-to-date, expertly designed tube tester is an unusually fine choice for the radio-TV serviceshop, industrial maintenance lab, etc. Although priced remarkably low, it offers high accuracy, plus top versatility and convenience. Professional styling inspires customer confidence. Tests 4, 5, 6 and 7-pin large, regular and miniature types, octals, loctals, 9-pin miniatures and pilot lamps. Features provision for testing 600-ma tubes; roll-chart data for all popular series-string types.

Accurately measures tube performance by amount of cathode emission. Easy-to-read 4½" square meter has "GOOD-?-REPLACE" scale. Also tests for shorts, open elements, cathode-to-filament leakage, and heater continuity. Provides continuity check for other components, appliances, etc. Has line-voltage indicator and line-adjust control to compensate for line voltage variations; assures greater test accuracy. Choice of 14 filament voltages from .63 to 117 volts to check virtually all receiving tube types.

Special circuit features assure years of thoroughly dependable service. Has blank panel socket for future tube types. Tubes with new base connections can be tested without making wiring changes. Any combination of pin connections can be selected since universal-type selector switches are used. Single-unit, 10-lever function switch simplifies assembly. Smooth operating, illuminated roll chart lists over 700 different tube types. Roll chart is easily removable. Kit is complete with all parts, blue wrinkle case, gray panel, wire, solder, step-by-step instructions, pictorial and schematic diagrams. Size, 5x14x10". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.

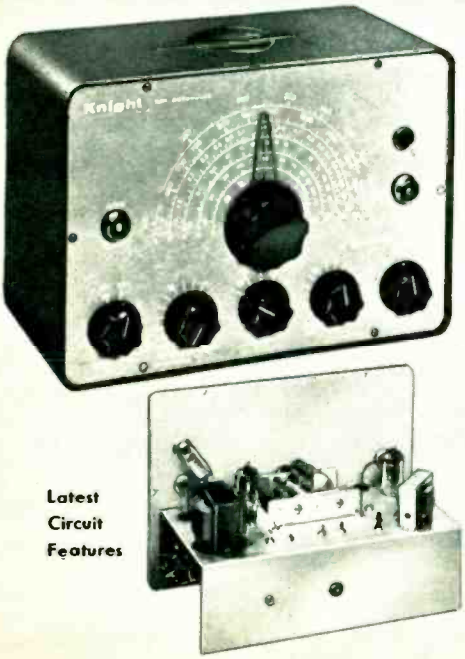
83 FX 143. NET 29.75

PORTABLE MODEL TUBE TESTER. As above, but in durable, fabrikoid-covered portable case, 6½x14½x10½". Shpg. wt., 15 lbs.

83 FX 142. NET 34.75

TV PICTURE TUBE ADAPTER. Ready to use. Permits testing TV picture tubes with Knight tube testers. Wt., 1 lb.

83 F 141. NET 3.75



Latest Circuit Features

Knight RF Signal Generator Kit

ONLY **$19.75**

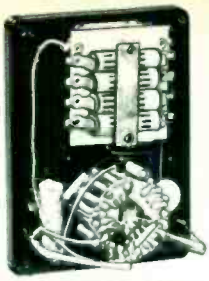
- Ideal for Servicing
- Easy to Build
- Output to 110 mc on Fundamentals
- Usable Harmonics to 220 mc
- Stable Colpitts Oscillators
- 400-Cycle Sine Wave Output
- Internal or External Modulation

Build this wide-range, extremely stable RF signal generator and save two-thirds the cost of a comparable wired instrument. Delivers output on fundamentals from 160 kc all the way out to 110 mc; useful harmonic output to 220 mc. It's ideal for alignment of RF and IF stages, and for troubleshooting audio equipment. Also serves as a TV marker generator when used with any sweep generator.

Features the widely-acclaimed, high-stability Colpitts circuit to assure a high degree of accuracy and negligible drift. Output can be modulated at 400 cycles. Has built-in sine-wave audio oscillator with output jack for 400-cycle output. Maximum audio output, 10 volts. Convenient jack permits external modulation. Has step and continuous-type output attenuators. RF output, over 100,000 microvolts.

With blue case, gray panel, punched chassis, tubes, all parts, pre-wound coils, wire, solder, step-by-step instructions, schematic and pictorial diagrams. Size, 7x10x5". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.

83 F 145. NET 19.75



Engineered for first-rate performance—provides high accuracy for critical measurements.

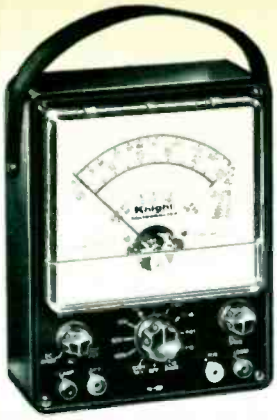
Knight 20,000 Ohms-Per-Volt VOM Kit

ONLY **$26.50**

- Clear Instructions
- Highly Accurate
- 50 μa, 4½" Meter
- Has 32 Ranges
- 1% Precision Resistors

The Knight 20,000 ohms-per-volt VOM offers outstanding quality and performance at extremely low cost. Carefully engineered circuit design achieves high sensitivity and great versatility. Has full-vision, bakelite-cased, 4½" meter with large, easy-to-read dial. Precision movement, accurate within 2% of full scale deflection. 50 microampere meter sensitivity provides 20,000 ohms-per-volt input resistance on DC to assure highly accurate measurements in critical circuits. Front panel "zero adjust" control compensates for aging of ohmmeter batteries. Single switch for quick, convenient selection of function and range. Ranges: AC, DC and output volts, 0-2.5-10-50-250-1000-5000; Resistance, 0-2000-200,000 ohms and 0-20 megohms; DC ma, 0-.1-10-100; DC amps, 0-1-10; Decibels, −30 to +63 in six ranges. Employs precision 1% multipliers for a high degree of accuracy; resistors are film type and protected against effects of moisture. Sturdy, attractive black bakelite case with highly legible white markings. Size, 6¾x5¼x3¾". Supplied complete with all parts, test leads, batteries, wire, solder and easy-to-follow instructions. Shpg. wt., 5 lbs.

83 F 140. NET 26.50



Exceptional savings in a high-quality, extremely accurate, 38-range VOM. Easy-to-build.

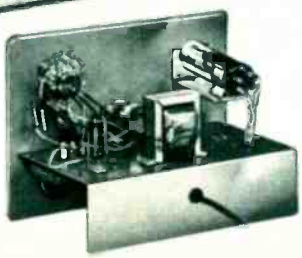
Knight 1000 Ohms-Per-Volt VOM Kit

ONLY **$14.25**

- 38 Ranges
- Unusually Accurate & Versatile
- 1% Precision Resistors
- Quality 4½" Meter
- Pre-Cut Wires

Another great value in an easy-to-build Knight test instrument. This new volt-ohm-milliammeter kit provides exceptional accuracy and versatility at phenomenally low cost. An excellent choice for service-shop, lab and Amateur use. Has easy-to-read 4½" meter with separate scales for AC voltage and current, DC voltage and current, decibels and resistance. Total of 38 ranges. Ranges: AC, DC and Output volts, 0-1-5-10-50-100-500-5000 (with sensitivity of 1000 ohms-per-volt); Resistance, 0-1000-100,000 ohms and 0-1 megohms (center scale readings of 60, 150 and 1500 ohms); Current, AC or DC, 0-1-10-100 ma and 0-1 amps; Decibels, from −20 to +69 in six ranges. Vinyl-covered, 1% precision resistors are used as shunts and multipliers to assure extreme accuracy of measurements. Three-position function switch and 12-position range switch. Meter, high-quality 400-microampere movement. Rugged, handsome, black bakelite case and panel with highly legible markings. Size, 6¾x5¼x3¾". Kit is supplied complete with battery, test leads, step-by-step instructions plus pictorial diagrams and schematics, solder and pre-cut wire. Shpg. wt., 2½ lbs.

83 F 128. NET 14.25



Excellent for lab and service shop. Accurately analyzes capacitors and resistors.

New Knight Resistor-Capacitor Tester Kit

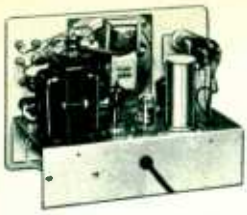
ONLY **$18.75**

- Measures Capacity, Resistance
- Measures Power Factor
- Shows Opens and Shorts
- Balanced-Bridge Circuit

This new, highly accurate, resistor-capacitor tester meets the critical requirements of lab and serviceshop. Measures capacitance and resistance; checks for opens and shorts in paper, mica and ceramic capacitors; indicates power factor of electrolytics. Large dial shows capacitance and resistance at a glance—balanced-bridge circuit with "magic eye" tube for clear indication of correct dial setting. Direct-reading potentiometer and "magic eye" measure power factor from 0-50%. "Magic eye" also used in testing for opens, shorts and intermittents. Tests capacitors with rated voltages applied. 5 test voltages: 50, 150, 250, 350, 450 v. Capacity ranges: 10 mmf to .005 mfd, .001 to .5 mfd, .1 to 50 mfd and 20 to 1000 mfd. Resistance ranges: 100 to 50,000 ohms and 10,000 ohms to 5 megs. Accuracy, ±10%. Automatic discharge feature prevents after-test shock. 6E5 "magic eye"; 6X4 rectifier. Portable metal case with blue-wrinkle finish; 7x10x5". With tubes, instructions, wire and solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.

83 F 124. NET 18.75

See ALLIED's Easy Payment Plan—Page 315



For extremely fast, convenient signal tracing by aural and visual methods.

Knight Visual-Aural Signal Tracer Kit

ONLY **$23.75**

- Low Cost—Easy to Build
- Built-in Wattmeter
- Measures Stage Gain
- Reveals "Dead" Stage

The Knight visual-aural signal tracer kit is extremely easy to build and offers unusual quality and convenience at a remarkably low price. This fine, value-packed instrument kit permits visual and aural signal tracing of RF, IF, video and audio circuits. Allows tracing of signal all the way from antenna to the speaker. Reproduces signal at plate or grid connection of any stage. Also serves as output indicator or auxiliary amplifier for checking microphones and record players. An exceptionally valuable, time-saving test instrument for radio-television servicemen, amateurs and experimenters.

DELUXE FEATURES. Employs pentode front-end for extremely high amplification; has gain of 50,000. "Magic Eye" with calibrated attenuators gives positive indication of signal presence and permits stage by stage gain measurements. Identifies and isolates "dead" stages. Built-in, quality four inch PM speaker for audible tracing.

COMPLETE FLEXIBILITY. RF probe supplied for checking RF, IF, and video stages. Audio probe tip included for tracing audio circuits without rectification distortion. Noise test—applies DC to volume controls for amplification of noise characteristic. Has built-in wattmeter calibrated 25 to 1000 watts; checks virtually all types of radios, TV receivers and most appliances. Provision for external scope or VTVM.

Gray panel, blue wrinkle case, 7x10x5". With all parts, tubes, probe and pre-cut leads. Step-by-step instructions, pictorial diagrams and schematics assure extreme ease of assembling. Tubes: 6AU6 high gain amplifier, 6AV6 amplifier and wattmeter rectifier, 6V6GT power amplifier; 6E5 "magic eye"; 6X4 full-wave rectifier. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 13 lbs.

83 F 135. NET 23.75

New Knight Capacity Checker Kit

ONLY **$11.65**

- No Need to Unwire Capacitors
- Perfect for Servicemen
- "Magic-Eye" Indicator
- Lightweight and Compact

This remarkable new Knight Capacity checker permits testing of capacitors while they are still wired in the circuit! Saves a tremendous amount of time and bother in testing the many capacitors in a set—it's an instrument that no serviceman or technician should be without. Just a press on a button and the "magic-eye" helps you spot opens and shorts. Checks by-pass, blocking, coupling and filter capacitors from 20 mmf to 2000 mfd, even when the capacitor being tested is wired in parallel with a resistance as low as 60 ohms. Capacitors between .1 mfd and 2000 mfd may be tested even when in parallel with resistance as low as 2 ohms. Housed in sturdy steel case in blue wrinkle finish with light gray panel. Size, 7¾x5¼x5". Supplied complete with tubes, wire, solder and easy-to-follow instructions. For 115 volts, 50-60 cycles AC. Shpg. wt., 5 lbs.

83 F 119. NET 11.65

Extremely valuable for anyone doing work on hi-fi and other audio equipment.

New Knight High Quality Audio Generator Kit

ONLY **$31.50**

- Latest Design
- Less Than .25% Distortion
- 600 Ohm Output
- Range: 20 cps to 1 mc.

The new Knight audio generator kit features up-to-the-minute circuit design at a money-saving price. Performance equals or surpasses far costlier factory-built units. Provides an audio source for checking high-fidelity amplifiers and other audio equipment. Also excellent for checking speaker response.

Frequency range: 20 cps to 1 mc in 5 ranges. Output voltage: 10 volts to high impedance, ±1 db to 200 kc. Generator impedance: 600 ohms. Distortion: Less than .25% from 100 cps through the audible range; less than .5% when driving 600 ohm load at maximum output. Step-attenuated output continuously variable between steps.

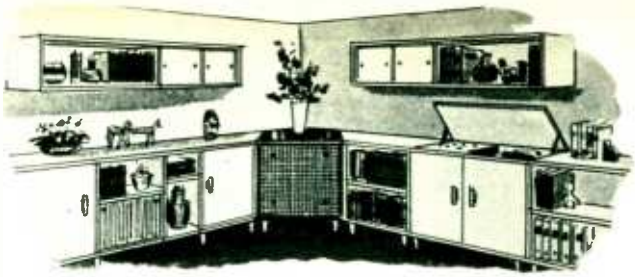
Latest circuit as developed by U.S. Bureau of Standards. Uses 6BA6 Wien bridge-type stable oscillator, 6CL6 buffer-amplifier and 6CL6 cathode follower output. Rectifier is type 6X4.

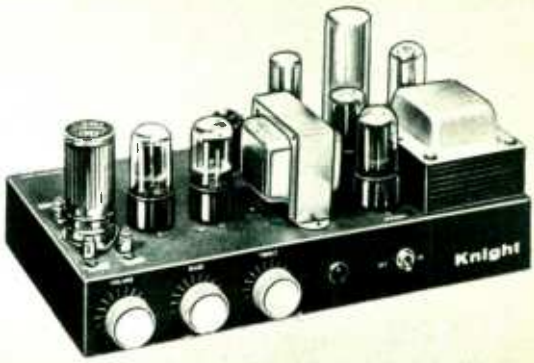
Attractive blue metal case with light gray panel 8½x11x7½". Complete with all parts, tubes, precut leads, solder and step-by-step instructions. For operation from 105-125 v. 50-60 cycles AC. Shpg. wt., 17 lbs.

83 FX 137. NET 31.50

KNIGHT CUSTOM QUALITY HIGH-FIDELITY AMPLIFIERS IN EASY-TO-BUILD KIT FORM

Here is the ideal way to own quality Hi-Fi equipment at the lowest possible price. Knight kits are designed for top performance and top value, always.





New Knight 20-Watt Hi-Fi Amplifier Kit

ONLY **$34.75**

- 20-Watt Output
- Wide Frequency Response
- Low Distortion
- Built-in Preamp

New, high-quality 20-watt amplifier kit, designed for use in fine home music systems. This versatile amplifier is an excellent foundation unit for starting a top-performing, economical hi-fi system. Can be easily built without any previous radio experience—step-by-step instructions and detailed diagrams assure fast, professional results.

Frequency Response: ±1 db, 20 to 20,000 cps at 20 watts. *Rated Output:* 20 watts. *Distortion:* 1% at 20 watts. *Hum and Noise Level:* Tuner input, 90 db below 20 watts: Phono input 72 db below 20 watts. *4 Inputs:* Magnetic phono, microphone, crystal phono or recorder, and tuner. *Sensitivity:* Tuner Input, 0.6 volt for 20 watts output; Magnetic Phono, .007 v. for 20 watts output. *Output Impedances:* 4, 8, 16 and 500 ohms. *Controls:* Bass, On-Off-Treble, Volume, Selector. *Tubes:* 12AX7 preamplifier, 12AU7 voltage amplifier and tone control amplifier, 12AU7 voltage amplifier and phase inverter, 2—6L6G power output; 5V4 rectifier.

Has record compensation positions for 78 and LP records, selectable from the front panel. Chassis is blue with gray knobs. Size, 7½x13x8¾". For 110-120 v., 50-60 cycle AC. Complete with all parts, tubes, instructions and punched chassis. Less only wire and solder. Shpg. wt., 23 lbs.

83 SZ 750. NET 34.75

Knight 10-Watt High-Fidelity Amplifier Kit

ONLY **$20.95**

- Ideal for low cost, home music systems
- Response, ±1 db, 30-20,000 cps
- Separate bass and treble tone controls
- Fine fidelity, very low distortion

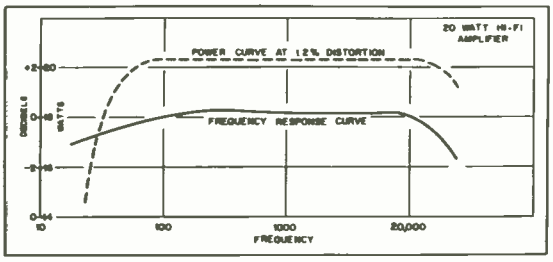
The Knight 10-watt high-fidelity amplifier kit provides wide response and smooth reproduction at exceptionally low cost. Offers many fine features not ordinarily obtained at a price this low. Only 0.5 volt drives amplifier to full 10 watts output. Construction is greatly simplified by an easy-to-follow manual, complete with schematic diagrams and clear illustrations. With no previous experience, anyone can assemble this fine amplifier from the pictorial diagrams alone!

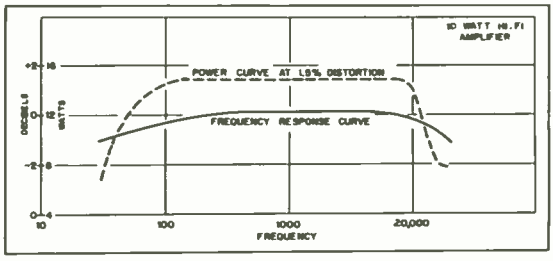
Frequency Response: ±1 db, 30-20,000 cps at 10 watts. *Harmonic Distortion:* Less than 0.5% at 10 watts. *Intermodulation Distortion:* Less than 1.5% at 10 watts output. With input for crystal phono or tuner. Chassis is punched for preamp kit below (for use with magnetic cartridges). Matches 8 ohm speakers. *Tubes:* 2—6SN7GT, 2—6V6GT, 5Y3GT rectifier. Kit is complete with tubes, all parts, punched blue wrinkle chassis. Less only wire, solder and preamp parts, *Size:* 7x13x6" deep. For 110-120 v., 50-60 cycle AC. Shpg. wt., 14 lbs.

83 SX 234. NET 20.95

EQUALIZED PREAMP KIT. Includes 6SL7 tube and all parts (no chassis; wired into amplifier chassis). Shpg. wt., 1 lb.

83 S 235. NET 2.75





Knight Kits Available on Easy Payments—See Page 315.

REAR VIEW

Knight 5-Watt High-Fidelity Amplifier Kit

ONLY **$16.95**

- Low-priced, true hi-fi kit
- Built-in magnetic cartridge preamp
- Push-pull audio output stage
- ±1 db, 40-15,000 cps

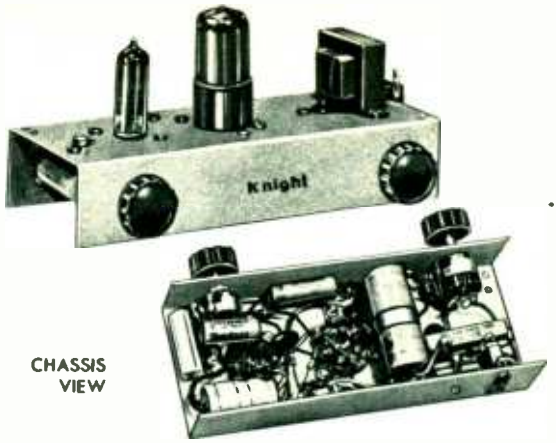
Feature packed. "New look" design. Space-saver size; place on shelves or tables. Includes: True boost and attenuate circuits for fullest control over bass and treble; push-pull audio output stage; heavy feedback circuit; built-in preamp for G.E. and Pickering cartridges.

Rated Output: 5 watts. *Distortion:* Less than 2% at full rated output. *Frequency Response:* ±1 db, 40-15,000 cps at 2½ watts output. *Hum and Noise Level:* —70 db. *Speaker Output Impedances:* 4 and 8 ohms. *Tubes:* 2—6V6GT, 6U8 (dual purpose—tone control and voltage amplifier), 12AX7 preamp (equalized for AES record characteristic curve); 5Y3GT rectifier. *Controls:* Volume: separate Bass and On-Off-Treble. *Size:* 3x13x9½" deep. Size in metal cabinet: 3¼x13¼x10" deep. Blue wrinkle finish. With tubes, all parts, instruction manual, schematic and pictorial diagrams. Less wire and solder. Less cabinet; see below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 9 lbs.

83 SX 795. NET 16.95

METAL CABINET FOR ABOVE. Pre-formed metal cabinet in attractive blue crackle finish. Size: 3¼x14x10" deep. Shpg. wt., 6 lbs.

83 SX 796. NET 1.80



CHASSIS VIEW

Knight Low Cost Phono Amplifier Kit

ONLY **$6.95**

- Low Distortion
- Compact Size
- Built-In Tone Control
- Portable

Here's a low-cost, unusually compact phono amplifier that delivers excellent tonal quality. Presents unusual specifications in a moderately priced package. Excellent for building a low priced portable phonograph—any record changer (even one from an old console radio) and an inexpensive speaker are all that are needed. Compact chassis fits most portable phono cabinets; attractive styling allows use outside of case. Works equally well with crystal or ceramic cartridges.

Provides full output with less than .25 volt input. Delivers 1-watt output at less than 3% distortion, and 1½-watt output before clipping. 2-watt peaks. Employs pentode voltage amplifier, unique in this type of circuit, to permit over 8 db of inverse feedback. This negative feedback accounts for low distortion and hum levels.

Tone control permits adjustment of high frequency response and balance. AC power takeoff at rear for phono motor. Matches any 3 to 4-ohm speaker. Tubes: 1—12AU6, 1—50L6; selenium rectifier. Size: 4½x7x4" deep. Blue wrinkle finish. With tubes, all parts and easy-to-follow instructions; less wire and solder. For operation from 110-120 v., 60 cycle AC, or DC. Shpg. wt., 3 lbs.

83 S 790. NET 6.95

A complete selection of tuners, speakers, baffles, record changers, tape recorders, etc., will be found on Covers 2, 3 and 4, and Pages 8 to 49.

These components will match the Knight amplifier kits perfectly, to produce a fine home music system. Many fine speaker enclosure kits are also listed—another excellent way to obtain high quality music reproduction at low cost.

Popular Low Cost Knight Phono Oscillator Kit

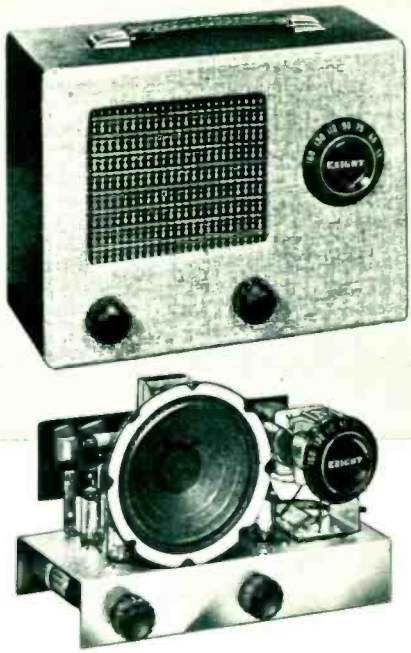
ONLY **$4.75**

Popular Knight economy-model phono oscillator. Use it with any crystal phono for "broadcasting" recorded music to any standard radio set up to 50 feet away. Requires no direct connection to radio set. Operates on any frequency between 600 and 800 kc. Delivers excellent, full-bodied tonal quality. Has controls for adjustment of modulation level and selection of clear frequency on radio set. Uses 50L6GT modulated oscillator and 35Z5GT rectifier. Kit is supplied complete with all parts and easy-to-follow assembly instructions. Instructions include schematic and pictorial diagrams—can quickly and easily be wired from pictorial diagram alone. With tubes and punched chassis. Less only wire and solder. Size, 4¼x4¼x4½". For operation from 110-120 volts DC or 50-60 cycle AC. Shpg. wt., 1 lb.

83 S 760. NET 4.75

FAMOUS KNIGHT "BUILD-YOUR-OWN" RADIO KITS

Easy To Assemble . . . Featuring Sensitive, Powerful Reception and Fine Tone



Knight "Ranger II" AC-DC Superhet Radio Kit

ONLY **$14.85**

Here's a remarkably fine table radio in kit form. High-quality parts and expert circuit design give outstanding superhet performance on the broadcast band.

Careful engineering assures that it will be easy to construct in your home workshop or on your kitchen table. Can be assembled by the novice with no previous radio experience. The clear, step-by-step instructions and generous-sized diagrams make construction easy and fun. An excellent aid to understanding radio. No special tools or instruments required. The entire job can be done with a soldering iron, screwdriver, and pliers.

Covers a range from 540 to 1680 kc receiving the entire broadcast band and exciting police calls. Fine quality Alnico V speaker and acoustically designed cabinet for clear, full tone. Sensitive superheterodyne circuit includes automatic volume control to reduce blasting and fading. Cadmium-plated steel chassis. All metal parts are die-stamped to assure perfect fit. Ball bearing tuning condenser for smooth operation. Smart brown plastic case, with handsome gold mesh grille insert. Very attractive in any room. Handy, compact size, only 6" high, 9" wide and 5" deep.

The Knight "Ranger II" is supplied with the following tubes: 12SA7GT—mixer; 12SK7GT—IF amplifier; 12SQ7GT—detector-AVC-audio; 50L6GT—audio output. Rectifier is a 35Z5GT. Efficient pre-formed loop antenna for maximum sensitivity. Construction of this quality radio will reward the builder with years of dependable service and the pride of having made it himself. Complete with tubes, cabinet, speaker, all parts, and hardware. Complete easy-to-follow instructions include step-by-step procedure. Less only wire and solder. For operation from 110-120 volts, 50-60 cycle AC or DC. Shpg. wt., 8 lbs.

83 S 735. NET 14.85

Knight 3-Way Portable Radio Kit

ONLY **$18.75**

A top-performing 3-way portable AM receiver—at unusually low cost. Covers full standard broadcast band, from 535 kc to 1650 kc. Delivers excellent reception whether operating from AC, DC, or self-contained batteries. Anyone can build it, even without previous experience. Sensitive superhet circuit is specially designed for use with the new type long-life batteries (listed below). 5" Alnico V speaker for clear, full tone. Highly efficient ferrite loop-stick antenna for extra-sensitive reception. Tubes: 1R5 converter, 1U4 IF amplifier, 1U5 detector-AVC-audio, and 3V4 audio output.

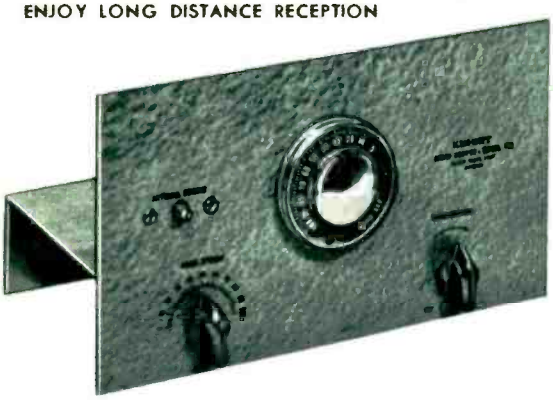
Handsome wood cabinet, covered with mahogany and gray leatherette; contrasting gold trim. Leather carrying handle. Size, 7⅝x10¼x5¼". Complete with tubes, all parts—down to the smallest piece of hardware, and the clear, easy-to-follow instruction manual. Less only wire, solder, and batteries. For 110-120 v., 50-60 cycle AC, DC, or batteries. Shpg. wt., 6 lbs.

83 S 730. NET 18.75

BATTERY KIT FOR ABOVE. Consists of 2—1½ v. "A" batteries and 1—67½ v. "B" battery. Shpg. wt., 1¼ lbs.

80 J 651. NET 2.40

ENJOY LONG DISTANCE RECEPTION



Knight "Ocean Hopper" Receiver Kit

BROADCAST, LONG-WAVE AND SHORT-WAVE RECEPTION

ONLY **$10.75**

An easy-to-put-together, top-performing receiver kit truly worthy of its name! Employs a highly sensitive, regenerative-type circuit for excellent performance with only 2 tubes. Provides excellent headphone reception; may be used with any 3-4 ohm PM speaker on strong broadcast band stations. The "Ocean Hopper" is supplied with plug-in coil for covering standard broadcast band; covers long wave and popular short wave bands with coils listed below. A great little receiver for listening to thrilling foreign broadcasts, police, Amateurs and aircraft.

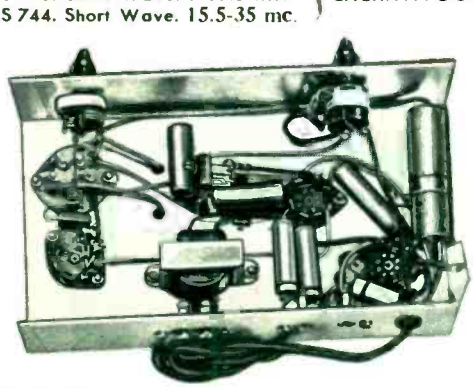
All controls are mounted on the front panel: Main Tuning, Bandspread, Antenna Tuning, and Off-On-Regeneration. Tubes: 12AT6 detector and 50C5 audio output; 35W4 rectifier. Gray panel and clearly marked lucite main tuning knob. Size, 6x9½x5". With all parts and instructions; less extra coils, headphones, speaker, wire and solder. Includes pictorial and schematic diagrams; easily assembled without previous radio experience. For 110-120 v., 50-60 cycle AC or DC. Shpg. wt., 5 lbs.

83 S 740. NET 10.75

PLUG-IN COILS. Additional coils for greater frequency coverage with the "Ocean Hopper." Shpg. wt., each, 3 oz.

83 S 741. Long Wave. 155-470 kc. NET 79c

83 S 742. Short Wave. 1.65-4.1 mc.
83 S 743. Short Wave. 2.9-7.3 mc.
83 S 745. Short Wave. 7-17.5 mc.
83 S 744. Short Wave. 15.5-35 mc.
} NET EACH 65c



Chassis View

SENSATIONAL NEW KNIGHT "SPACE SPANNER" SHORT WAVE & BROADCAST RECEIVER KIT

EASY TO BUILD FOR THRILLING RECEPTION

REMARKABLE LOW COST SENSITIVE RECEIVER KIT

Knight "Space Spanner" 2-Band Receiver Kit

ONLY **$13.95**

- Built-In PM Speaker
- Sensitive Regenerative Circuit
- Standard and Short Wave Reception
- Convenient Bandswitching

Entirely new 2-band receiver in easy-to-build kit form. Provides standard broadcast and thrilling short wave reception at a remarkably low price. Short wave band covers 6 to 18 megacycles—pulls in exciting foreign broadcasts from many parts of the world, plus Amateur, aircraft, police and marine radio. Specially designed regenerative circuit also provides highly sensitive reception on broadcast band. Broadcast band or short wave is selected simply by turning the built-in bandswitch.

The "Space Spanner" is complete in every detail. Built-in 4" PM speaker and beam-power output tube for plenty of volume. Headphone connectors on rear panel allow weak signal listening; slide switch cuts out the speaker. Sensitive circuit employs 12AT7 regenerative detector and audio amplifier; 50C5 power output; 35W4 rectifier. 6 controls allow precise, accurate tuning: Bandspread; Main Tuning; Antenna Trimmer; Bandswitch; Regeneration; Audio Gain. Chassis is finished in attractive gray with black knobs. Detailed, step-by-step instructions, including pictorial and schematic diagrams, allow the beginner to assemble the "Space Spanner" easily and quickly. Complete with all parts, punched chassis and tubes. Less only wire and solder. Size, 7x10½x6". For 110-120 v., 50-60 cycle AC or DC. Shpg. wt., 4½ lbs.

83 S 243. NET 13.95

HEADSET & ANTENNA FOR RECEIVER KITS

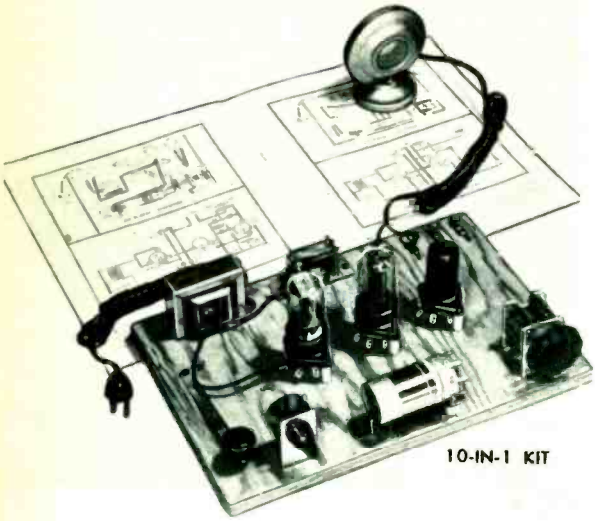
HEADSET. High quality, 2000 ohm dual headset. Excellent for use with Knight receiver kits. Inside terminals and 4½ ft. cord. Shpg. wt., 12 oz.

59 J 110. NET 1.79

ANTENNA KIT. Antenna kit for use with Knight receivers. 50' of antenna wire, 25' of lead-in, insulators, etc. Shpg. wt., 1½ lbs.

83 C 100. NET 89c

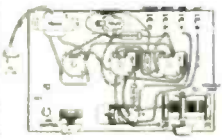
POPULAR ELECTRONIC KIT VALUES FOR EXPERIMENTERS & STUDENTS



10-IN-1 KIT

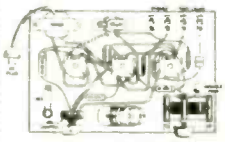
BUILD ANY OF THESE INSTRUCTIVE, FASCINATING PROJECTS WITH THE FAMOUS KNIGHT LAB KITS . . .

Code Practice Oscillator

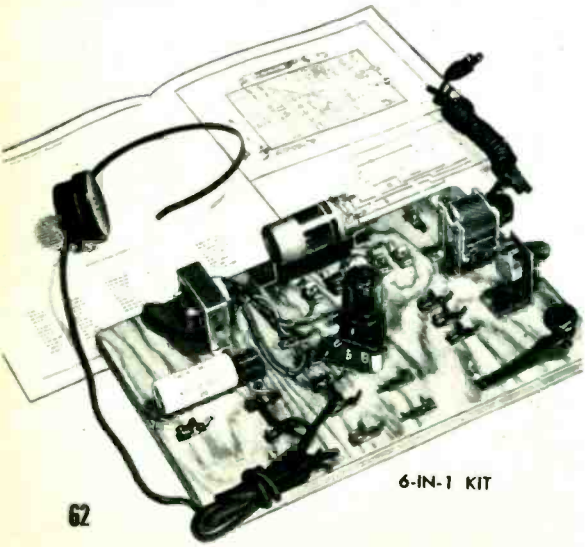


"Broadcast Station"

Broadcast Receiver



Wireless Oscillator



6-IN-1 KIT

Famous Knight 10-In-1 Radio Lab Kit

It's Easy to Build Any of These Electronic Devices:

ONLY **$12.45**

Equipment for Any of 10 Projects—Wire One and Change It When You Wish

- Sensitive Broadcast Receiver
- Amplifier for Use with Phono or Mike
- Wireless Phono Oscillator
- Home "Broadcast Station"
- Code Practice Oscillator
- Capacity-Operated Relay
- Signal Tracer for Repair Work
- Electronic Timer
- Electronic Switch
- Photo Relay

Beginners! Here's an instructive, fascinating kit specially designed for those just getting started in radio and electronics. The "10-In-1" kit enables you to build any one of 10 circuits that really work! Low voltages; safe to build and operate. The only tools needed are a soldering iron, screwdriver and pliers. Perfect for self-teaching of circuit fundamentals.

Build what you want for fun as well as practical applications. The "wireless" phono oscillator permits you to play records through your radio from anywhere in the house; the capacity operated relay serves as a burglar alarm; the code practice oscillator enables you to "send" code through your headphones or radio; the photo relay operates electrical appliances when actuated by light; etc.

Complete kit includes: 12SF5, 35L6GT tubes and 35Z5GT rectifier; mike; power transformer; relay; condensers; resistors; mounting board; hardware; and easy, 12-page instruction manual with schematic and pictorial diagrams for each circuit. Less headphone, phototube, phototube socket, wire and solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 10 lbs.

83 S 265. NET.....12.45

HEADPHONE. Single, 1000-ohm. Shpg. wt., 8 oz.
59 J 112. NET.....98c

PHOTOTUBE. Shpg. wt., 5 oz.
77 P 003. NET.....2.00

4-PRONG TUBE SOCKET. For phototube. Bakelite. Shpg. wt., 2 oz.
40 H 024. NET.....8c

Special Value Knight 6-In-1 Radio Lab Kit

Build These Projects:

ONLY **$6.50**

- Standard Broadcast Receiver
- Wireless "Home Broadcaster"
- Code Practice Broadcaster
- Code Practice Oscillator for Headset Use
- Signal Tracer
- Single Sine Wave Generator

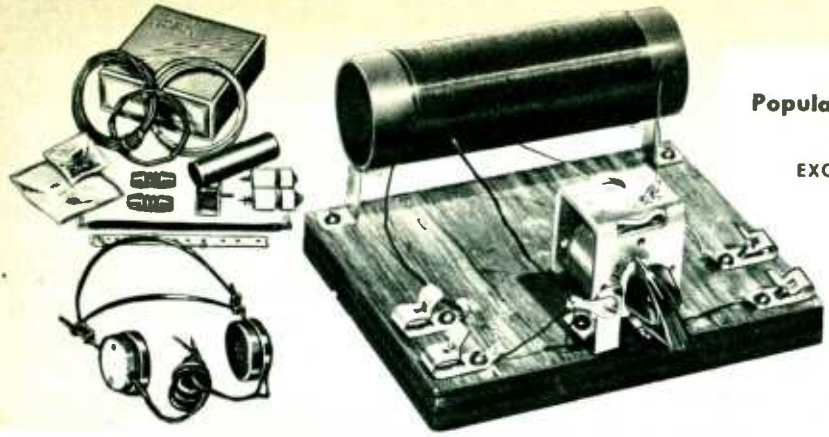
Here's a smaller version of the famous "10-In-1" Radio Lab Kit, described above. 6 useful circuits. Features special design for quick, easy change from one circuit to the next. After basic wiring is completed, circuits can be changed without any soldering. Code practice oscillator permits "sending" code through your radio for group code instruction or for practice use with headphone; single sine wave generator (1700 cps) is excellent for checking audio circuits. Includes 6SN7 tube, selenium rectifier, power transformer, all parts, mounting board and complete instructions. Less headphone (also serves as mike), wire and solder. For 110-120 v., 50-60 cycle AC. Shpg. wt., 6 lbs.

83 S 770. NET.....6.50

HEADPHONE. Single, 1000-ohm headphone. 8 oz.
59 J 112. NET.....98c

ANTENNA KIT. For use with receiver circuits of either kit listed above. Shpg. wt., 1½ lbs.
83 C 100. NET.....89c

See Pages 54-57 for Listings of New Knight Test Instrument Kits



Popular Knight Crystal Set Kit

IDEAL FOR BEGINNERS
EXCELLENT LOCAL RECEPTION

ONLY $4.55

- Fixed-Type Germanium Crystal
- Variable Condenser
- A Greater Value Than Ever

Thousands of beginners have started in radio and electronics by building the Knight crystal set. This famous, feature-packed kit is acclaimed everywhere for its outstanding performance at remarkably low cost—and now it's available complete with outdoor antenna and sensitive, 2000-ohm headphones. You get everything needed for loud, clear reception of local broadcast stations—you'll be delighted with the results! The Knight crystal set incorporates features that put it in a class all by itself. A germanium crystal diode detector assures high sensitivity and simple operation—crystal does not require adjustment. Has specially designed "Hi-Q" coil for very high efficiency. A variable capacitor provides smooth, easy tuning. Instruction pamphlet includes pictorial diagrams — anyone can quickly and easily build the Knight crystal set kit. With all parts, coil wire, baseboard, headphones, 50′ of antenna wire, 25′ of antenna lead-in, and insulators. Less hook-up wire and solder. Shpg. wt., 4 lbs.

83 S 245. NET **4.55**

CRYSTAL SET KIT ONLY. Same components as described above, but less headphones, antenna wire, antenna lead-in, and insulators. Shpg. wt., 1 lb.

83 S 261. NET **1.95**

HEADPHONES. Dual 2000-ohm headset for use with above crystal set. Shpg. wt., 12 oz.

59 J 110. NET **1.79**

ANTENNA KIT. Includes 50 feet of antenna wire, 25 feet of lead-in, and insulators. Shpg. wt., 1½ lbs.

83 C 100. NET **89c**

New Knight Geiger Counter Kit . . . Super-Sensitive Uranium Locator & Radioactivity Detector

Get started in uranium prospecting now—with the super-value Knight Geiger counter kit. There's no need to put off uranium prospecting because you don't want to make a big investment in detection equipment—this new, extremely sensitive instrument is tailored to your needs! Though priced at a fraction of what you'd expect to pay, it offers sensitivity comparable to far more costly instruments. It's simple to operate. Just turn it on and occasionally flip the high-voltage switch—as radioactive source is approached, clicks in headphones rapidly increase. Uses low-cost batteries; extremely long battery life. Ruggedly constructed to assure lasting dependability. Compact, lightweight design—can be hand held or hung from shoulder strap. Includes all parts, case with handle, leather shoulder strap, 3V4 and 1B85 tubes, 22½ and 1½-volt batteries, AEC prospecting booklet, radioactive sample and headphone. There's nothing else to buy. Easy-to-follow, step-by-step instructions including pictorial and schematic diagrams for simplified assembly. Size, 6¾x5¼x2¼". Shpg. wt., 2½ lbs.

83 S 242. NET **15.95**

EXTRA BATTERY KIT. For Knight Geiger Counter. Shpg. wt., 4 oz.

80 J 663. NET **1.07**

EASY TO BUILD AND OPERATE

ONLY $15.95

Amateur Special! Low Cost Knight Build-Your-Own VFO Kit

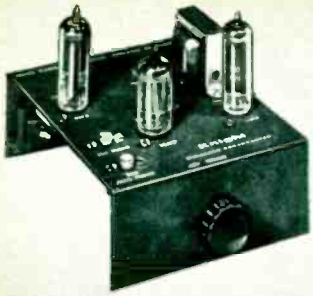
The Knight VFO kit with built-in power supply offers top-notch performance combined with simplified operation—at an incomparably low price. Calibrated for 80, 40, 20, 15, 11 and 10 meters; output on 80 and 40. Careful design and quality components assure extreme stability and excellent keying — a T9X signal. Oscillator keying for fast, break-in operation. Features include: TVI suppression; vernier drive; plenty of bandspread; no-swish tuning. Two-chassis design (power supply on top) keeps heat from frequency determining circuits. Rigid construction, ceramic coil form, voltage regulation, and use of 1% silver mica capacitors further increase stability. 6BH6 Clapp oscillator, 6BH6 buffer-doubler, 6X4 rectifier, and OA2 voltage regulator. Gray and blue, steel cabinet; 6x6x8¾". Includes all parts, tubes, and step-by-step instructions with pictorial and schematic diagrams for quick, easy assembly. Simple to use—plugs into crystal socket of transmitter. For 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.

83 S 725. NET **27.50**

ONLY $27.50

- Built-in Power Supply
- Extremely Compact
- Excellent Stability

PRACTICAL, EDUCATIONAL KNIGHT "BUILD-YOUR-OWN" KITS



Wireless Broadcaster Kit

Highly efficient Knight wireless broadcaster. For "broadcasting" with phonograph or microphone to any standard radio up to 50 feet away—without any connection to set. May be used with crystal cartridge, magnetic cartridge, or mike (crystal or high-impedance dynamic). Class A Heising modulator and inverse feedback for minimum distortion. Broadcasts clear, well-modulated signal. High-gain stage with equalizer permits using magnetic cartridge without external preamp; equalizer may be disconnected for use with mike. Tubes: 12AX7; 2—50C5; selenium rectifier. With tubes, chassis, all parts, instructions and diagrams. 4½x5x6". For 110-120 volts, 50-60 cycles AC or DC. Wt., 3 lbs.

83 S 705. NET **8.75**

KNIGHT CRYSTAL MIKE. Quality mike for above. 5-ft. cable. Wt., 1 lb.

99 S 556. NET **3.95**

Photoelectric Relay Kit

Highly dependable photo-electric cell kit. Serves as "heart" of burglar alarm systems, lighting control systems, door openers, etc. Extremely compact—can be easily hidden from view if desired. Controls low-voltage (24 v. or less) bell, chime, light, motor, or similar devices. Relay contacts rated at 2 amps. Complete with black-crackle metal case, photocell, 50L6GT tube, relay, wire and solder. Instructions include schematic and pictorials. Size, 5¾x5⅛x2". For 110-120 v., 50-60 cycles AC or DC. Wt., 2½ lbs.

83 P 710. NET **12.64**

LIGHT SOURCE KIT. Light source for use with above kit. Covers distances up to 10 feet. With bulb. 4⅞x4¾x2½". Shpg. wt., 2½ lbs.

83 P 715. NET **7.94**

REPLACEMENT PROJECTION BULB. For light source, above. Shpg. wt., 5 oz.

77 P 024. NET **1.35**

Battery Charger Kit

Here's a battery charger kit at unusually low cost. Charges 6-volt storage batteries. Has selenium dry-disc rectifiers. Charging rate tapers from 4 to 2 amperes. Pilot light indicates correct connection of cables to battery; lights if cables are connected correctly. Primary of transformer is fused. Complete with all parts, punched chassis, AC cord and plug, and DC leads with battery clips. Instructions include schematic and pictorial diagrams. 3⅝x6⅛x5". For 110-120 volts, 60 cycles AC. Shpg. wt., 6 lbs.

83 S 780. NET **5.95**

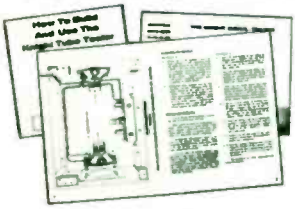
2-VOLT ADAPTER KIT. For charging 2-volt storage batteries. 6 oz.

83 S 781. NET **99c**

"A" SUPPLY ADAPTER KIT. Filters output of charger to permit use as 6.3-volt, 4-amp DC filament supply. Shpg. wt., 6 oz.

83 S 782. NET **1.35**

Popular Knight Builders' Diagrams and Instructions



Complete, easy-to-follow instruction manuals for the famous Knight "Build-Your-Own" electronic kits—identical to manuals supplied with kits. Offers an inexpensive preview of any Knight kit—for only 10c. Contain breakdown of equipment, construction notes, technical hints, operating data, plus parts lists. Include comprehensive schematic and pictorial diagrams. Each diagram includes all essential construction data, fully keyed with helpful cross references. No wiring experience or knowledge of schematics is necessary to follow these simplified manuals.

38 K 165. Tube Tester.
38 K 166. AM Signal Generator.
38 K 167. 5" Oscilloscope.
38 K 168. Volt-Ohm-Milliameter—20,000 ohms-per-volt.
38 K 183. Volt-Ohm-Milliameter—1000 ohms-per-volt.
38 K 169. Audio Generator.
38 K 170. Signal Tracer.
38 K 172. AC-DC Phono Amplifier.
38 K 160. 3-Way Portable Radio.
38 K 161. "Ocean Hopper" Receiver.
38 K 050. Crystal Set.
38 K 044. "10-in-One" Lab Kit.
38 K 164. "6-in-One" Lab Kit.
38 K 176. "Ranger" Superhet Radio.
38 K 163. Battery Charger.
38 K 178. Wireless Broadcaster.
38 K 162. Phono Oscillator.
38 K 180. Variable Frequency Oscillator.
38 K 187. "Space Spanner" Regenerative Receiver.
38 K 184. Resistor-Capacitor Tester.
38 K 188. Capacitor Checker.
38 K 185. Printed-Circuit VTVM.
38 K 190. 20-Watt Hi-Fi Amplifier.
38 K 182. Geiger Counter.
38 K 171. 5-Watt Hi-Fi Amplifier.
38 K 059. 10-Watt Hi-Fi Amplifier.

EACH, Postpaid in U.S.A. **10c**

Kit Builders' Accessories

Fig. A. DRAKE MODEL 5 SOLDERING IRON. Lightweight, efficient 40-watt soldering iron. Highest grade nichrome heating element. ½" dia., pencil-type tip. 10" long. For 110-120 v., AC or DC. Shpg. wt., ¼ lb.

46 N 505. NET **1.15**

Fig. B. KRAEUTER 6" NEEDLE-NOSE PLIERS. Rugged, precision needle-nose pliers. Simplifies work on crowded chassis. Perfectly aligned side-cutters. Shpg. wt., ½ lb.

46 N 401. NET **2.50**

Fig. C. XCELITE R146 6" SCREWDRIVER High-quality 6" screwdriver with chrome-vanadium steel shaft and plastic handle. ¼"-dia. shaft. Overall length. 10". Shpg. wt., 6 oz.

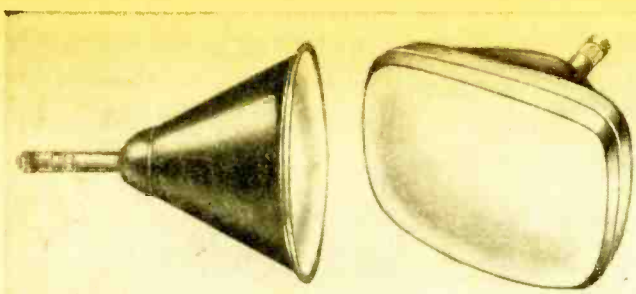
45 N 796. NET **63c**

KESTER ROSIN-CORE SOLDER. Handy tin of solder. Compounded of highest grade tin and lead. Plastic rosin filled. Flows easily; makes perfect connections. Non-corrosive. Wt., 3 oz.

46 N 900. NET **17c**

WIRE KIT. Package of five, 5-ft. lengths of No. 20 solid hook-up wire. 5 different colors. Shpg. wt., ½ lb.

48 T 198. NET **52c**



TV PICTURE TUBES

RAYTHEON
DUMONT
Norelco
RCA

Fully guaranteed for 1 year. Number prefix in tube type indicates screen size of tube. All tubes have magnetic focus and deflection, except †electrostatic focus and deflection, and ‡electrostatic focus and magnetic deflection. *Indicates tubes with aluminized (metal backed) screens. Manufacturers: DUM, Dumont; RCA, Radio Corporation of America; RAY, Raytheon; NAP, North American Phillips; RAU, Rauland. Prices include Federal Excise Tax. When ordering, give the complete Stock Number, which consists of the Department No. and the Manufacturer's Tube Type. Give Stock Number thus: AX3-17BP4B. **Shipped by express only.**

Stock No. Dept.	Stock No. Type	Mfr.	List	NET EACH
AX3	3KP4†	RCA	$25.50	18.67
AX5	3NP4	NAP	.....	22.00
AX3	5TP4‡*	RCA	78.25	57.48
AX3	7DP4‡	RCA	39.75	29.15
AX3	7JP4†	RCA	27.75	20.38
AX4	8BP4†	RAY	32.00	23.52
AX3	10BP4A	RCA	19.25	13.87
AX4	10BP4A	RAY	19.25	13.87
AX3	10FP4A*	RCA	25.40	17.79
AX3	12KP4A*	RCA	29.75	20.92
AX3	12LP4A	RCA	24.25	17.00
AX4	12LP4A	RAY	24.25	17.00
AX4	14BP4	RAY	26.75	18.96
AX4	14CP4	RAY	26.75	18.96
AX3	14EP4/14CP4	RCA	26.75	18.96
AX3	14HP4‡	RCA	27.75	20.24
AX3	16AP4A	RCA	44.75	32.83
AX4	16AP4A	RAY	44.75	32.83
AX3	16DP4A	RCA	44.75	32.83
AX4	16DP4A	RAY	44.75	32.83
AX3	16GP4B	RCA	44.75	32.83
AX4	16GP4B	RAY	44.75	32.83
AX4	16KP4	RAY	32.00	23.52
AX4	16KP4A*	RAY	37.50	27.44
AX3	16LP4A	RCA	41.50	30.38
AX3	16RP4/16KP4	RCA	32.00	23.52
AX3	16RP4A/16KP4A*	RCA	36.75	26.95
AX4	16RP4	RAY	32.00	23.52
AX3	16TP4	RCA	32.00	23.52
AX4	16TP4	RAY	32.00	23.52
AX3	16WP4A	RCA	41.50	30.38
AX4	16ZP4	RAY	34.00	24.99
AX4	17AP4	RAY	37.50	27.44
AX3	17AVP4‡	RCA	34.00	24.99
AX4	17AVP4‡	RAY	34.00	24.99
AX3	17BP4A	RCA	32.00	23.52
AX4	17BP4A	RAY	32.00	23.52
AX3	17BP4B*	RCA	37.50	27.44
AX4	17BP4B*	RAY	37.50	27.44
AX3	17CP4	RCA	40.00	29.40
AX4	17CP4	RAY	40.00	29.40
AX3	17GP4‡	RCA	44.75	32.83
AX3	17HP4/17RP4‡	RCA	34.00	24.99
AX4	17HP4‡	RAY	34.00	24.99
AX3	17HP4B*	RCA	39.00	28.66
AX4	17HP4B*	RAY	39.00	28.66
AX3	17JP4	RCA	34.00	24.99
AX3	17LP4/17VP4‡	RCA	34.00	24.99
AX3	17LP4A*	RCA	39.00	28.66
AX4	17LP4A*	RAY	39.00	28.66
AX3	17QP4	RCA	32.00	23.52
AX4	17QP4	RAY	32.00	23.52
AX3	17TP4‡	RCA	$40.00	29.40
AX4	19AP4A	RAY	59.00	35.77
AX3	19AP4B	RCA	48.75	35.77
AX4	19AP4B	RAY	59.00	35.77
AX3	20CP4	RCA	39.00	28.62
AX4	20CP4A	RAY	39.00	28.62
AX3	20DP4A/20CP4A	RCA	39.00	28.62
AX4	20DP4A	RAY	39.00	28.62
AX3	20DP4C/20CP4D*	RCA	44.25	32.54
AX4	20DP4C*	RAY	44.25	32.54
AX4	20HP4A	RAY	40.75	29.89
AX3	20MP4‡	RCA	57.75	42.38
AX3	21ACP4A	RCA	44.25	32.54
AX4	21ALP4	RAY	40.75	29.89
AX3	21ALP4A*	RCA	46.00	33.81
AX3	21AMP4A*	RCA	44.25	32.54
AX3	21AP4	RCA	47.00	34.50
AX4	21AP4	RAY	47.00	34.50
AX3	21ATP4*	RCA	46.00	33.81
AX3	21AUP4A/21AVP4A*	RCA	46.00	33.81
AX4	21AUP4A*	RAY	46.00	33.81
AX4	21AVP4A*	RAY	46.00	33.81
AX3	21AWP4*	RCA	44.25	32.54
AX4	21AWP4*	RAY	44.25	32.54
AX3	21EP4A	RCA	39.00	28.62
AX4	21EP4A	RAY	39.00	28.62
AX3	21EP4B*	RCA	44.25	32.54
AX4	21EP4B*	RAY	44.25	32.54
AX3	21FP4A‡	RCA	40.75	29.89
AX4	21FP4A‡	RAY	40.75	29.89
AX4	21FP4C‡*	RAY	46.00	33.81
AX5	21KP4A‡	DUM	54.75	40.18
AX3	21MP4‡	RCA	48.75	35.77
AX4	21MP4‡	RAY	59.00	35.77
AX3	21VP4A‡*	RCA	46.00	33.81
AX4	21VP4A‡*	RAY	46.00	33.81
AX3	21ZP4A	RCA	39.00	28.62
AX4	21ZP4A	RAY	39.00	28.62
AX3	21ZP4B*	RCA	44.25	32.54
AX4	21ZP4B*	RAY	44.25	32.54
AX5	24AP4	RAU	120.00	90.00
AX3	24CP4A*	RCA	65.60	49.73
AX4	24CP4A*	RAY	70.00	52.94
AX3	24DP4A‡*	RCA	71.10	52.33
AX4	24DP4A‡*	RAY	71.50	52.92
AX3	24VP4*	RCA	71.10	52.33
AX5	27AP4‡	RAU	133.50	102.50
AX4	27EP4*	RAY	110.00	80.85
AX3	27MP4*	RCA	152.50	112.11
AX4	27RP4*	RAY	110.00	80.85
New 21" Color Tube:				
AX3	21AXP22*	RCA	175.00	142.10

SHELDON HI-PO TV TUBES

TYPE 567 RECTIFIER. New B-plus booster tube. Same as 5U4G, but boosts low voltage supply by up to 35 volts. Excellent for use in areas where line voltage is below normal; "peps up" old TV receivers. Shpg. wt. 3 oz.

TYPE 6S78 DOUBLE TRIODE. Replaces 6SN7GT; provides higher output for more drive. Shpg. wt., 3 oz.

Stock No.	Tube Type	List Price	NET EACH In Quantities of 1 to 5	6 to 49
37 A 133	567	$2.70	1.51	1.43
37 A 134	6S78	4.20	2.35	2.22

On 50 or more, deduct additional 10%

RCA TUBE LITERATURE, SERVICE AIDS AND PROMOTIONAL DISPLAY

RC17 TUBE MANUAL. Latest edition. No charge with order for 15 tubes.
37 K 575. NET 60c

1275-F TUBE CHARACTERISTICS BOOKLET. No charge with tube order.
37 A 059. NET 15c

1F9940 COLOR-CODE PENCIL. Revolving barrel gives values. No charge with order for 50 tubes. Shpg. wt., 6 oz.
38 A 485. NET 1.76

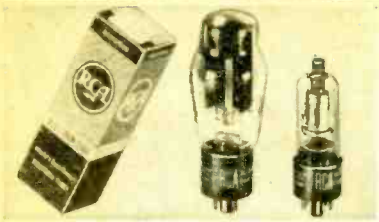
TVS-1030 TV SERVICING. 45 pages. No charge with order for 5 tubes.
38 A 379. NET 35c

TVS-1031 TV SERVICING SUPPLEMENT. No charge with tube order.
38 A 380. NET 15c

3F230 TV SERVICE SIGN. 20x9½" high. With bulb. No charge with 100-tube order.
38 AZ 393. NET 4.50

1 picture tube equals 35 receiving tubes on RCA service aids, display or literature orders.

RCA Receiving Tubes



The great name in electronic tubes—RCA Radiotrons. These premium-quality tubes, in the famous red and black safety cartons, are universally known for their highly efficient, absolutely dependable performance. Purchasers of tubes in quantity lots may obtain RCA service aids, tube literature and promotion displays at no cost—see page 65 of this Catalog. *Not made by RCA—other well-known brands supplied.

You Save If You Buy More Than 5 Tubes

If you buy 6 or more tubes of any one type or assorted types (and up to a total of 49), use the prices in the second net price column (6 to 49). The first net price column (1 to 5) is for orders of less than 6 tubes.
For 50 tubes and over, deduct 10% from the second price column (6 to 49).

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
OZ4	$1.40	.78	.69
OZ4G	1.70	.95	.83
1A3	2.50	1.40	1.23
1A5GT	2.10	1.17	1.03
1A7GT	2.50	1.40	1.23
1AC5	3.50	1.96	1.72
1AD5	3.50	1.96	1.72
1AG4*	2.85	1.59	1.40
1AH4*	2.85	1.59	1.40
1AJ5*	2.90	1.62	1.43
1AX2*	2.45	1.37	1.20
1B3GT	2.50	1.40	1.23
1C5GT	2.60	1.45	1.27
1D8GT	4.15	2.32	2.03
1E8	3.85	2.15	1.89
1G4GT*	2.55	1.43	1.25
1G6GT*	2.90	1.62	1.43
1H4G*	2.35	1.31	1.15
1H5GT	2.00	1.12	.98
1L4	2.15	1.20	1.05
1L6	2.90	1.62	1.43
1LA4*	2.90	1.62	1.43
1LA6	2.75	1.54	1.35
1LB4	2.95	1.65	1.44
1LC5	2.75	1.54	1.35
1LC6	2.75	1.54	1.35
1LD5	2.75	1.54	1.35
1LE3	2.75	1.54	1.35
1LG5	2.75	1.54	1.35
1LH4	2.75	1.54	1.35
1LN5	2.75	1.54	1.35
1N5GT	2.45	1.37	1.20
1Q5GT	3.05	1.70	1.49
1R5	2.25	1.26	1.10
1S4	2.55	1.43	1.25
1S5	1.90	1.06	.93
1T4	2.15	1.20	1.05
1T6	3.50	1.96	1.72
1U4	2.10	1.17	1.03
1U5	1.85	1.03	.91
1V	2.55	1.43	1.25
1V2	1.55	.87	.76
1V6*	3.65	2.04	1.79
1X2A	2.50	1.40	1.23
1X2B	2.50	1.40	1.23
2A3	4.55	2.54	2.23
2A6*	2.75	1.54	1.35
2AF4-A	3.45	1.93	1.69
3A2	2.90	1.62	1.43
3A3	2.90	1.62	1.43
3AL5	1.60	.89	.78
3AU6	1.75	.98	.86
3AV6	1.55	.87	.76
3B2	4.45	2.49	2.18
3BC5	2.00	1.12	.98
3BY6	1.90	1.06	.93
3CB6	2.00	1.12	.98
3CF6	2.20	1.23	1.08
3LF4	3.10	1.73	1.52
3Q4	2.20	1.23	1.08
3Q5GT	2.80	1.56	1.37
3S4	2.15	1.20	1.05
3V4	2.15	1.20	1.05
4BQ7-A	3.25	1.82	1.59
4BZ7	3.45	1.93	1.69
5AM8	2.75	1.54	1.35
5AN8	2.85	1.59	1.40
5AQ5	1.90	1.06	.93
5AS4	1.75	.98	.86
5AS8	2.85	1.59	1.40
5AT8	2.65	1.48	1.30
5AV8*	2.90	1.62	1.43
5AW4*	2.70	1.51	1.32
5AZ4	1.55	.87	.76
5J6	2.35	1.31	1.15

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
5T4	$5.00	2.79	2.45
5U4G	1.70	.95	.83
5U4-GB	1.75	.98	.86
5U8	2.75	1.54	1.35
5V4G	2.55	1.43	1.25
5W4GT	1.75	.98	.86
5X4G	2.05	1.15	1.00
5X8	2.65	1.48	1.30
5Y3G	1.30	.73	.64
5Y3GT	1.25	.70	.61
5Y4G	1.85	1.03	.91
5Y4GT*	1.85	1.03	.91
5Z3	2.00	1.12	.98
5Z4	3.30	1.84	1.62
6A3*	3.90	2.18	1.91
6A6*	2.85	1.59	1.40
6A7	2.75	1.54	1.35
6A8	2.90	1.62	1.43
6A8G	2.75	1.54	1.35
6A8GT	2.90	1.62	1.43
6AB4	1.70	.95	.83
6AB5/6N5	2.85	1.59	1.40
6AB7	3.55	1.98	1.74
6AC5GT	3.10	1.73	1.52
6AC7	3.10	1.73	1.52
6AD7G	3.85	2.15	1.89
6AF4-A	3.40	1.90	1.66
6AF6G	2.85	1.59	1.40
6AG5	2.05	1.15	1.00
6AG7	3.50	1.96	1.72
6AH4GT	2.45	1.37	1.20
6AH6	3.45	1.93	1.69
6AH6V*	3.50	1.96	1.72
6AJ4*	4.40	2.46	2.16
6AK5	4.20	2.35	2.06
6AK6	2.30	1.29	1.13
6AL5	1.55	.87	.76
6AL7GT	3.85	2.15	1.89
6AM4*	4.40	2.46	2.16
6AM8	2.75	1.54	1.35
6AN4*	4.40	2.46	2.16
6AN8	2.80	1.56	1.37
6AQ5	1.85	1.03	.91
6AQ6	1.70	.95	.83
6AQ7GT	3.05	1.70	1.49
6AR5	2.05	1.15	1.00
6AS5	2.00	1.12	.98
6AS8	3.00	1.68	1.47
6AT6	1.50	.84	.74
6AT8	2.75	1.54	1.35
6AU4GTA	2.75	1.54	1.35
6AU5GT	3.20	1.79	1.57
6AU6	1.70	.95	.83
6AV5GT	3.35	1.87	1.64
6AV6	1.50	.84	.74
6AW8	3.10	1.73	1.52
6AX4GT	2.35	1.31	1.15
6AX5GT	2.05	1.15	1.00
6AZ8	3.15	1.76	1.54
6B4G	3.35	1.87	1.64
6B5*	3.50	1.96	1.72
6B6G*	2.40	1.34	1.18
6B7*	3.50	1.96	1.72
6B8	3.50	1.96	1.72
6B8G*	3.50	1.96	1.72
6BA6	1.80	1.01	.88
6BA7	2.60	1.45	1.27
6BC4	4.10	2.29	2.01
6BC5	2.00	1.12	.98
6BC7	3.20	1.79	1.57
6BD4-A	14.25	9.75	9.75
6BD6	1.80	1.01	.88
6BE6	1.90	1.06	.93
6BF5	2.25	1.26	1.10
6BF6	1.60	.89	.78

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
6BG6G	$5.20	2.90	2.55
6BH6	2.25	1.26	1.10
6BJ6	1.95	1.09	.96
6BK4	6.15	3.44	3.01
6BK5	2.60	1.45	1.27
6BK7A	2.90	1.62	1.43
6BL4	5.25	2.93	2.57
6BL7GT	3.25	1.82	1.59
6BN6*	2.65	1.48	1.30
6BQ6GT*	3.50	1.96	1.72
6BQ6GTB/6CU6	3.50	1.96	1.72
6BQ7A	3.25	1.82	1.59
6BX7GT*	3.35	1.87	1.64
6BY5G*	3.25	1.82	1.59
6BY5-GA	3.30	1.84	1.62
6BY6	1.90	1.06	.93
6BZ6	2.00	1.12	.98
6BZ7	3.40	1.90	1.66
6C4	1.50	.84	.74
6C5	2.00	1.12	.98
6C5GT	2.15	1.20	1.05
6C6	2.55	1.43	1.25
6C8G	3.85	2.15	1.89
6CB5	7.60	4.24	3.72
6CB6	2.00	1.12	.98
6CD6G	4.70	2.63	2.30
6CF6	2.15	1.20	1.05
6CG7	2.20	1.23	1.08
6CL6	3.10	1.73	1.52
6CM6*	2.25	1.26	1.10
6CM7	2.40	1.34	1.18
6CS6	1.85	1.03	.91
6D6	2.55	1.43	1.25
6DC6	2.30	1.29	1.13
6DE6	2.00	1.12	.98
6DG6GT*	1.85	1.03	.91
6E5	2.15	1.20	1.05
6F5	2.20	1.23	1.08
6F5GT	1.90	1.06	.93
6F6	2.50	1.40	1.23
6F6G	2.00	1.12	.98
6F6GT	2.00	1.12	.98
6F7	3.85	2.15	1.89
6F8G	3.85	2.15	1.89
6G6G	2.85	1.59	1.40
6H6	2.00	1.12	.98
6H6GT*	2.30	1.29	1.13
6J5	1.75	.98	.86
6J5GT	1.85	1.03	.91
6J6	2.35	1.31	1.15
6J7	2.50	1.40	1.23
6J7GT	2.80	1.56	1.37
6J8G	3.85	2.15	1.89
6K5GT*	2.65	1.48	1.30
6K6GT	1.65	.92	.81
6K7	2.30	1.29	1.13
6K7G*	2.40	1.34	1.18
6K7GT	2.35	1.31	1.15
6K8	3.35	1.87	1.64
6K8G*	3.40	1.90	1.66
6L5G*	2.85	1.59	1.40
6L6	4.35	2.43	2.13
6L6G	3.40	1.90	1.66
6L6GB*	3.10	1.73	1.52
6L7	3.15	1.76	1.54
6L7G*	3.40	1.90	1.66
6N7	2.95	1.65	1.44
6N7GT	2.85	1.59	1.40
6P5GT*	2.45	1.37	1.20
6Q7	2.45	1.37	1.20
6Q7G*	2.10	1.17	1.03
6Q7GT	2.10	1.17	1.03
6R7	2.80	1.56	1.37
6R8*	3.60	2.01	1.76
6S4-A	1.75	.98	.86

See Pages 68-70 for Special Purpose Tubes

RCA Receiving Tubes

GUARANTEED FOR 12 FULL MONTHS. You can be sure of complete satisfaction when you order from ALLIED. We will replace any tube listed on these pages that does not give efficient performance for 12 months from date of purchase. This does not apply to burned-out or broken tubes. Depend on ALLIED for your tube requirements—as new tubes are released we will stock them. Av. shpg. wt., per tube, 4 oz.: per 10 tubes, 2½ lbs.

You Save If You Buy More Than 5 Tubes

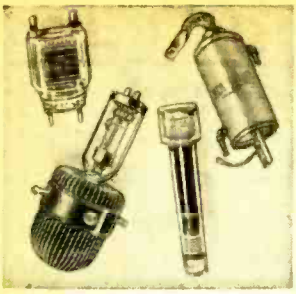
If you buy 6 or more tubes of any one type or assorted types (and up to a total of 49), use the prices in the second net price column (6 to 49). The first net price column (1 to 5) is for orders of less than 6 tubes.

For 50 tubes and over, deduct 10% from the second price column (6 to 49).

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
6S7	$3.25	1.82	1.59
6S8GT	2.75	1.54	1.35
6SA7	2.15	1.20	1.05
6SA7GT	2.15	1.20	1.05
6SB7Y	2.90	1.62	1.43
6SC7	2.25	1.26	1.10
6SD7GT*	3.35	1.87	1.64
6SF5	1.90	1.06	.93
6SF5GT	2.00	1.12	.98
6SF7	2.75	1.54	1.35
6SG7	2.35	1.31	1.15
6SH7	2.75	1.54	1.35
6SH7GT*	2.50	1.40	1.23
6SJ7	2.00	1.12	.98
6SJ7GT	1.65	.92	.81
6SK7	2.00	1.12	.98
6SK7GT	2.00	1.12	.98
6SL7GT	2.60	1.45	1.27
6SN7GTA	2.15	1.20	1.05
6SN7GTB	2.15	1.20	1.05
6SQ7	1.75	.98	.86
6SQ7GT	1.75	.98	.86
6SR7	1.90	1.06	.93
6SS7	2.75	1.54	1.35
6ST7	2.80	1.56	1.37
6SV7*	3.35	1.87	1.64
6SZ7	2.50	1.40	1.23
6T4*	3.40	1.90	1.66
6T8	2.90	1.62	1.43
6U5/6G5	2.05	1.15	1.00
6U6GT*	2.45	1.37	1.20
6U7G*	2.30	1.29	1.13
6U8	2.85	1.59	1.40
6V3A	3.95	2.21	1.94
6V6	3.65	2.04	1.79
6V6GT	1.85	1.03	.91
6V8*	3.75	2.10	1.84
6W4GT	1.75	.98	.86
6W6GT	2.25	1.26	1.10
6X4	1.40	.78	.69
6X5GT	1.40	.78	.69
6X8	2.75	1.54	1.35
6Y6G	2.60	1.45	1.27
6ZY5G*	2.55	1.43	1.25
7A4	2.05	1.15	1.00
7A5	2.60	1.45	1.27
7A6	2.15	1.20	1.05
7A7	2.20	1.23	1.08
7A8	2.10	1.17	1.03
7AD7	4.70	2.63	2.30
7AF7	2.40	1.34	1.18
7AG7	2.55	1.43	1.25
7AH7	2.55	1.43	1.25
7AU7	2.25	1.26	1.10
7B4	2.00	1.12	.98
7B5	1.90	1.06	.93
7B6	2.05	1.15	1.00
7B7	2.05	1.15	1.00
7B8	2.30	1.29	1.13
7C4*	3.60	2.01	1.76
7C5	2.15	1.20	1.05
7C6	1.90	1.06	.93
7C7	2.15	1.20	1.05
7E5*	2.90	1.62	1.43
7E6*	2.90	1.62	1.43
7E7	3.35	1.87	1.64
7F7	2.55	1.43	1.25
7F8	3.45	1.93	1.69
7G7	3.00	1.68	1.47
7H7	2.25	1.26	1.10
7J7	3.65	2.04	1.79
7K7	3.20	1.79	1.57
7L7	3.00	1.68	1.47
7N7	2.35	1.31	1.15
7Q7	2.60	1.45	1.27

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
7R7	$3.50	1.96	1.72
7V7	3.50	1.96	1.72
7W7	3.50	1.96	1.72
7X7	3.35	1.87	1.64
7Y4	1.85	1.03	.91
7Z4	1.85	1.03	.91
12A8GT	2.90	1.62	1.43
12AB5	1.85	1.03	.91
12AH7GT	3.05	1.70	1.49
12AL5	1.65	.92	.81
12AQ5	1.90	1.06	.93
12AT6	1.50	.84	.74
12AT7	2.60	1.45	1.27
12AU6	1.70	.95	.83
12AU7	2.20	1.23	1.08
12AV6	1.45	.81	.71
12AV7	3.05	1.70	1.49
12AW6	2.45	1.37	1.20
12AX4-GTA	2.45	1.37	1.20
12AX7	2.30	1.29	1.13
12AZ7	2.25	1.26	1.10
12B4-A	2.20	1.23	1.08
12BA6	1.80	1.01	.88
12BA7	2.60	1.45	1.27
12BD6	1.80	1.01	.88
12BE6	1.90	1.06	.93
12BF6	1.60	.89	78
12BH7	2.55	1.43	1.25
12BH7-A	2.55	1.43	1.25
12BK5*	2.60	1.45	1.27
12BR7*	2.25	1.26	1.10
12BQ6GTB/12CU6	3.55	1.98	1.74
12BY7	2.65	1.48	1.30
12BY7-A	2.55	1.43	1.25
12BZ7*	2.50	1.40	1.23
12C8	3.95	2.21	1.94
12CA5	2.05	1.15	1.00
12H6	2.20	1.23	1.08
12J5GT	1.85	1.03	.91
12J7GT	2.55	1.43	1.25
12K7GT	2.35	1.31	1.15
12K8	3.30	1.84	1.62
12L6GT	1.90	1.06	.93
12Q7GT	2.10	1.17	1.03
12S8GT*	2.75	1.54	1.35
12SA7	2.15	1.20	1.05
12SA7GT	2.15	1.20	1.05
12SC7	2.50	1.40	1.23
12SF5	1.95	1.09	.96
12SF5GT*	2.10	1.17	1.03
12SF7	2.75	1.54	1.35
12SG7	2.35	1.31	1.15
12SH7	2.75	1.54	1.35
12SJ7	2.00	1.12	.98
12SJ7GT*	1.90	1.06	.93
12SK7	2.00	1.12	.98
12SK7GT	2.00	1.12	.98
12SL7GT	2.65	1.48	1.30
12SN7GT	2.15	1.20	1.05
12SQ7	1.75	.98	.86
12SQ7GT	1.75	.98	.86
12SR7	2.00	1.12	.98
12V6GT	1.85	1.03	.91
12W6GT	2.30	1.29	1.13
12X4	1.40	.78	.69
12Z3*	2.65	1.48	1.30
14A7	2.25	1.26	1.10
14AF7	2.50	1.40	1.23
14B6	2.25	1.26	1.10
14C7	2.50	1.40	1.23
14F7	2.55	1.43	1.25
14F8	3.45	1.93	1.69
14Q7	2.60	1.45	1.27
14R7	3.50	1.96	1.72
19*	3.50	1.96	1.72

Tube Type	List Price	NET EACH In Quantities of: 1 to 5	6 to 49
19BG6G	$6.00	3.35	2.94
19C8*	3.35	1.87	1.64
19J6	2.50	1.40	1.23
19T8	2.90	1.62	1.43
19X8	3.10	1.73	1.52
24A	2.75	1.54	1.35
25A6	3.50	1.96	1.72
25AV5GT*	3.30	1.84	1.62
25AX4GT*	2.75	1.54	1.35
25BK5*	2.75	1.54	1.35
25BQ6GT*	3.65	2.04	1.79
25BQ6GTB/25CU6	3.65	2.04	1.79
25C5*	2.05	1.15	1.00
25CD6G*	4.70	2.63	2.30
25CD6-GA	4.70	2.63	2.30
25L6	3.85	2.15	1.89
25L6GT	1.90	1.06	.93
25W4GT	2.10	1.17	1.03
25Y5*	3.10	1.73	1.52
25Z5	2.00	1.12	.98
25Z6	2.60	1.45	1.27
25Z6GT	1.95	1.09	.96
26*	2.25	1.26	1.10
27	1.75	.98	.86
30*	2.30	1.29	1.13
32L7GT*	3.35	1.87	1.64
35/51*	2.40	1.34	1.18
35A5	2.25	1.26	1.10
35B5	2.10	1.17	1.03
35C5	1.90	1.06	.93
35L6GT	1.95	1.09	.96
35W4	1.25	.70	.61
35Y4	1.85	1.03	.91
35Z3	1.85	1.03	.91
35Z4GT	1.55	.87	.76
35Z5GT	1.40	.78	.69
36*	2.85	1.59	1.40
37*	1.85	1.03	.91
38*	2.30	1.29	1.13
39/44*	2.80	1.56	1.37
41	1.95	1.09	.96
42	1.95	1.09	.96
43	2.10	1.17	1.03
45	2.15	1.20	1.05
47	5.30	2.96	2.60
50A5	2.25	1.26	1.10
50B5	2.10	1.17	1.03
50C5	1.90	1.06	.93
50C6G	3.35	1.87	1.64
50L6GT	1.95	1.09	.96
50X6	2.25	1.26	1.10
50Y6GT	2.30	1.29	1.13
50Y7GT	2.10	1.17	1.03
55*	2.30	1.29	1.13
56*	1.90	1.06	.93
57*	2.10	1.17	1.03
58*	2.10	1.17	1.03
59*	3.80	2.12	1.86
70L7GT	6.95	3.88	3.41
71A	2.40	1.34	1.18
75	2.00	1.12	.98
76*	1.70	.95	.83
77*	2.20	1.23	1.08
78	2.20	1.23	1.08
80	1.70	.95	.83
82*	2.80	1.56	1.37
83V	3.40	1.90	1.66
84/6Z4	1.85	1.03	.91
85*	2.30	1.29	1.13
117L7/117M7GT	6.95	3.88	3.41
117N7GT	4.80	2.68	2.35
117P7GT	4.80	2.68	2.35
117Z3	1.85	1.03	.91
117Z6GT	3.15	1.76	1.54
5642*	2.65	1.48	1.30



Special Purpose Tubes for

Immediate Delivery From Stock. The listing on this and the following pages is a complete selection of tubes for broadcast, industrial and research use. Included are power tubes, rectifiers, cathode-ray, photo-electric and miniature tube types. Almost 700 types of special-purpose tubes are listed, representing the products of leading manufacturers in the electron tube industry. Each tube will provide maximum efficiency and dependable service. As new tubes are released, ALLIED will stock them. ALLIED supplies all tubes at the lowest current prices from the largest distributor stocks in the country. Depend on ALLIED for fast shipment.

Stock No. Dept.	Tube Type	Mfr.	NET EACH
E1	OA2	RCA	1.26
E1	OA3	RCA	1.27
E1	OA4G	RCA	1.48
E3	OA5	SYL	5.40
E2	OZ4A/CK1003	RAY	1.00
E1	OB2	RCA	1.39
E2	OB3	RAY	1.65
E1	OC3	RCA	1.27
E1	OD3	RCA	1.27
E2	OY4	RAY	2.79
E2	1AD4	RAY	1.95
E2	1AE4	RAY	1.55
E2	1AG5	RAY	1.90
E3	EL C1B	ELEC	9.60
E3	1B85	VIC	7.50
E3	1B86	VIC	7.50
E3	1B88	VIC	8.00
E3	EL 1C	ELEC	7.60
E1	1C21	RCA	3.85
E3	CE 1C/918	CE	2.30
E3	1D21/SN4	SYL	6.50
E3	EL C1J	ELEC	9.60
E3	EL C1K	ELEC	10.40
E1	1P21	RCA	50.00
E1	1P22	RCA	14.75
E1	1P28	RCA	22.00
E1	1P29	RCA	2.95
E1	1P37	RCA	2.85
E1	1P39	RCA	1.75
E1	1P40	RCA	2.60
E3	CE 1P/40	CE	1.75
E1	1P41	RCA	2.80
E1	1P42	RCA	11.00
E4	E 1T	AMP	16.50
E3	1Z2	CHA	4.53
E1	2AP1A	RCA	10.85
E3	2AS15	THER	7.50
E1	2A4G	RCA	2.40
E1	2BP1	RCA	11.00
E1	2BP11	RCA	12.50
E1	2C39A	RCA	25.00
E4	2C39A	AMP	25.00
E3	2C39B	EIM	32.15
E1	2C43	RCA	21.50
E3	2C53	.....	15.00
E3	CE 2D	CE	3.65
E1	2D21	RCA	2.00
E4	2D21	AMP	2.00
E3	2D21W	CHA	2.40
E1	2E24	RCA	4.65
E2	2E26	RAY	3.85
E1	2E26	RCA	3.85
E2	2E30	RAY	2.60
E3	2E30	HYT	2.60
E2	2E31	RAY	2.12
E2	2E32	RAY	2.12
E2	2E36	RAY	2.17
E2	2G21	RAY	2.20
E2	2G22	RAY	2.20
E4	2K25	AMP	41.00
E2	RK 2K25	RAY	38.00
E1	2K26	RCA	56.50
E2	RK 2K28	RAY	55.00
E1	2X2A	RCA	2.15
....	3-200A3	See type 592	
E1	3A4	RCA	1.20
E1	3A5	RCA	1.22
E2	3A5	RAY	1.10
E1	3AP1A	RCA	19.50
E2	3B4	RAY	2.75
E3	3B4	HYT	2.75
E3	WL 3B22/1C	WES	7.60
E2	RK 3B24W	RAY	10.50
E3	GL 3B24W	GE	11.75
E1	3B25	RCA	5.90
E1	3B28	RCA	7.15
E4	3B28	AMP	9.45

Stock No. Dept.	Tube Type	Mfr.	NET EACH
E1	3BP1A	RCA	16.50
E3	EL 3C	ELEC	8.90
E1	3C23	RCA	12.50
E4	3C23	AMP	12.50
E3	GL 3C23	GE	11.98
....	3C45	See type 6130	
E3	3D21A	HYT	11.90
E1	3D22A	RCA	16.40
E1	3E29	RCA	20.25
E3	EL C3J	ELEC	12.10
E3	EL C3J/A	ELEC	15.10
E1	3JP1	RCA	20.50
E1	3KP1	RCA	16.70
E1	3KP11	RCA	18.60
EX3	3K20000LA	EIM	2,975.00
EX3	3K20000LF	EIM	2,975.00
EX3	3K20000LK	EIM	2,975.00
E1	3RP1	RCA	16.45
EZ4	3X2500A3	AMP	198.00
EZ3	3X2500A3	EIM	198.00
EX4	3X2500F3	AMP	198.00
EX3	3X2500F3	EIM	198.00
EZ3	3X3000A1	EIM	198.00
....	SN 4	See type 1D21	
E1	4-65A	RCA	20.00
E3	4-65A	EIM	20.00
E1	4-125A/4D21	RCA	30.25
E3	4-125A	EIM	30.25
E4	4-125A	AMP	23.00
E1	4-250A/5D22	RCA	41.25
E3	4-250A	EIM	41.25
E4	4-250A	AMP	35.00
E3	4-400A	EIM	60.50
EZ3	4-1000A	EIM	132.00
E3	WL 4B24/3C	WES	8.90
E4	4B32	AMP	12.00
E3	4C35	SYL	20.25
E4	4C35	AMP	28.75
....	4D21	See type 4-125A	
E2	RK 4D32	RAY	27.50
E1	4E27/8001	RCA	24.50
E1	4E27A/5-125B	RCA	35.75
E3	4E27A/5-125B	EIM	35.75
EX3	4W20000A	EIM	1850.00
E4	4X150A	AMP	38.95
E1	4X150A	RCA	38.95
E1	4X150D	RCA	38.95
EZ1	4X500A	RCA	121.00
EZ3	4X500A	EIM	121.00
....	5-125B	See type 4E27A	
EZ1	5ABP1	RCA	29.50
EZ1	5ABP7	RCA	35.00
EZ1	5ABP11	RCA	35.25
E1	5AUP24	RCA	93.00
EZ1	5BP1A	RCA	23.80
EZ1	5CP1A	RCA	27.00
EZ1	5CP7A	RCA	31.40
EZ1	5CP11A	RCA	31.40
E4	5C22	AMP	45.00
E3	5C22	SYL	35.25
....	5D22	See type 4-250A	
EZ1	5FP4A	RCA	41.75
E1	5R4GY	RCA	1.72
E2	5R4GY	RAY	1.89
E3	5R4GY	GE	2.20
EZ1	5UP1	RCA	17.50
EZ1	5UP7	RCA	25.40
EZ1	5ZP16	RCA	100.00
E1	6AG7Y	RCA	2.35
E2	6AJ5	RAY	3.50
E3	6AJ5	SYL	3.50
E2	6AK5W	RAY	3.05
E2	6AL5W	RAY	1.35
E2	6AN5	RAY	3.65
E3	6AR6	TUNG	5.75
E1	6AS6	RCA	3.46
E2	6AS6	RAY	3.45

Stock No. Dept.	Tube Type	Mfr.	NET EACH
E3	EL 6B	ELEC	11.05
E3	6BF7W	SYL	4.45
E3	EL C6C	ELEC	43.20
E3	EL 6C	ELEC	16.60
E4	6CA7	AMP	2.75
E2	6C4W	RAY	8.05
E3	6D4	SYL	2.85
E1	6F4	RCA	7.00
E3	EL C6J	ELEC	26.40
E3	EL C6J/A	ELEC	29.30
E1	6J4	RCA	6.22
E2	6J4	RAY	8.09
E2	6J5WGT	RAY	4.85
E2	6J6W	RAY	3.05
E3	6L6WGA/5932	SYL	10.50
E1	6AS7G	RCA	4.45
E1	6SJ7Y	RCA	1.35
E3	6SJ7WGT	SYL	2.45
E2	6SN7WGT	RAY	2.45
E3	6SU7GTY	TUNG	4.25
E3	6V6GTY	SYL	1.08
E2	6X4W	RAY	1.80
E2	6X5WGT	RAY	1.89
....	7C24	See type 5762	
E3	7AK7	SYL	6.30
EZ1	7CP4	RCA	40.00
EZ3	GL 7D21	GE	320.00
EX3	7JP1/7VP1	SYL	23.50
EZ1	7TP4	RCA	54.00
EZ1	7VP1	RCA	25.00
EZ1	8D21	RCA	1300.00
EX1	9C22	RCA	1300.00
EZ1	10SP4	RCA	64.50
E1	10Y	RCA	4.30
E3	UX CV11	UE	15.40
E1	12A6	RCA	1.64
E1	12AY7	RCA	3.23
E3	EL C16J	ELEC	57.90
E3	EL C16J/A	ELEC	63.70
....	FG 17	See type 5557	
E3	KY 21A	EIM	13.25
E3	RX 21A	EIM	9.00
E3	PJ 22	GE	2.50
....	PJ 23	See type GL 868	
E3	CE 23A	CE	2.00
E3	CE 25C/927	CE	2.25
E3	25T	EIM	11.00
E1	26A7GT	RCA	6.75
E3	FG 27A	GE	26.00
E3	28D7	SYL	2.85
E3	CE 29R	CE	2.80
E3	CE 30C/930	CE	1.50
....	32	See type WL 5558	
....	FG 33	See type GL 5720	
E3	35T	EIM	12.00
E3	TZ 40	TAY	7.70
....	FG 57	See type GL 5559	
E4	EFP 60	AMP	8.75
E3	KT 61	EMIT	2.21
E2	RK 61	RAY	3.30
E3	KT 66	EMIT	3.50
E3	75TL	EIM	16.00
E4	75N	AMP	10.00
E4	75NB3	AMP	10.00
E3	FG 81A	GE	18.00
E1	83	RCA	1.23
E4	EL 84	AMP	1.25
E4	90NB	AMP	20.00
....	FG 95	See type GL 5560	
E4	HF 100	AMP	17.50
E3	100TH	EIM	18.25
E4	FG 105	AMP	49.50
E1	172	RCA	65.00
E3	WL 172	WES	65.00
E4	HF 200	AMP	37.50
E3	T 200	TAY	25.00
E4	200 NB	AMP	47.50

Industry & Broadcast Use

AMP	Amperex Elect. Corp.
CE	Continental Electric
CHA	Chatham Electronics
EIM	Eitel McCullough
ELEC	Electrons, Inc.
EMIT	Emitron
GE	General Electric
HYT	Hytron Corp.
NAT	Nat'l Electronics, Inc.
RCA	Radio Corp. America
RAY	Raytheon Mfg. Co.
SYL	Sylvania Electric
TAY	Taylor Co.
THER	Thermosen, Inc.
TUNG	Tungsol
UE	United Electronics
VIC	Victoreen Instrument
WES	Westinghouse

Easy to Order—Specify Department and Tube Type. This tabular presentation enables you to locate the tube types you want, quickly and easily. When ordering, give the *full* Stock Number, which consists of the Department Number and the Manufacturer's Type Number. The Department Number represents exact location of the tube in ALLIED stockrooms—speeds up your shipment. Give stock Number thus: E3-1B85. The chart at right shows the full names of the manufacturers whose tubes are listed on these pages. For technical literature, see page 70. You can depend on ALLIED for prompt shipment of all special purpose tubes.

Stock No. Dept.	Tube Type	Mfr.	NET EACH
E4	HF 201A/468	AMP	28.50
E3	CE 203	CE	11.60
E3	CE 206	CE	10.00
EX4	207	AMP	240.00
E1	211	RCA	13.75
E3	CE 213A	CE	7.50
E3	GL 242C	GE	15.50
E4	249B	AMP	9.00
E3	249S	TAY	7.00
EZ3	250TH	EIM	33.00
E4	HF 300	AMP	37.50
E3	304TH	EIM	60.50
E3	304TL	EIM	60.50
E3	SA 309	SYL	7.50
E3	GL 393A	GE	11.98
E3	394A	CHA	7.50
E3	395A	CHA	4.40
E3	GL 441	GE	4.50
EZ4	450TH	AMP	77.00
EZ3	450TH	EIM	77.00
EX4	450TL	AMP	77.00
E3	WL 481B	WES	8.25
EX4	498	AMP	500.00
EX4	501R	AMP	160.00
EZ4	502	AMP	150.00
EX4	502R	AMP	180.00
E3	GL 502A	GE	1.85
E1	502A	RCA	1.85
E2	CK 502AX	RAY	2.10
E4	504R	AMP	175.00
E2	CK 506AX	RAY	1.50
E2	CK 510AX	RAY	2.55
E2	CK 511X	RAY	2.38
E2	CK 512AX	RAY	2.40
E2	CK 526AX	RAY	1.90
E2	CK 532DX	RAY	2.55
E2	CK 533AX	RAY	2.40
E2	CK 534AX	RAY	2.45
E2	CK 536AX	RAY	1.58
....	CK 538DX	See type CK549DX	
E2	CK 539DX	RAY	2.55
E2	CK 542DX	RAY	2.55
E2	CK 546DX	RAY	2.55
E2	CK 548DX	RAY	2.55
E2	CK 549DX	RAY	2.05
EX1	575A	RCA	20.00
E4	575A	AMP	21.00
E1	579B	RCA	15.00
E3	WL 579B	WES	15.00
E3	592/3-200A3	EIM	30.25
E3	NL 600	NAT	8.20
E3	NL 604	NAT	8.90
E3	NL 606	NAT	16.60
E3	KU 610	WES	22.00
E3	NL 615	NAT	7.50
E3	NL 617	NAT	11.60
E3	NL 619	NAT	10.00
E3	NL 623	NAT	11.60
E3	KU 627	WES	22.00
E3	KU 628	WES	34.00
E1	629	RCA	13.00
E3	WL 632B	WES	28.00
E3	NL 635	NAT	11.05
E3	NL 649/5834	NAT	7.75
....	651	See type WL 5552A	
....	652	See type WL 5551A	
E3	NL 653/5835	NAT	11.75
E1	672A	RCA	35.00
E3	WL 672A	WES	35.00
EX1	673	RCA	20.00
EX4	673	AMP	21.00
E3	KU 676	WES	55.00
E1	677	RCA	55.00
E4	678	AMP	47.00
EX3	WL 678	WES	47.00
E3	NL 710/6011	NAT	12.10
E3	NL 714	NAT	8.50

Stock No. Dept.	Tube Type	Mfr.	NET EACH
....	NL 715	See type 5557	
E3	NL 716	NAT	9.60
E3	Z 729	EMIT	2.99
E3	NL 760	NAT	29.30
E1	801A	RCA	6.70
E1	802	RCA	6.20
E1	803	RCA	25.95
E1	804	RCA	17.50
E1	805	RCA	13.50
E4	805	AMP	13.50
E1	807	RCA	2.50
E2	RK 807	RAY	2.50
E4	807	AMP	2.40
....	807W	See type 5933	
E3	807Y	SYL	4.90
E1	809	RCA	4.70
E1	810	RCA	16.25
E4	810	AMP	16.25
E1	811A	RCA	5.00
E4	811A	AMP	5.00
E2	RK 811A	RAY	5.00
E1	812A	RCA	5.00
E2	RK 812A	RAY	5.00
E1	813	RCA	18.00
E4	813	AMP	18.00
E1	814	RCA	14.25
E1	815	RCA	12.35
E1	816	RCA	2.15
E2	RK 816	RAY	1.65
E1	828	RCA	18.30
E4	828	AMP	18.30
E2	RK 829	RAY	16.25
E1	829B	RCA	16.25
E4	829B	AMP	16.25
E1	832A	RCA	12.90
E2	RK 832A	RAY	12.90
EX1	833A	RCA	49.50
EZ4	833A	AMP	49.50
E1	836	RCA	9.00
E1	837	RCA	5.80
E1	838	RCA	15.15
E4	838	AMP	15.15
E1	845	RCA	13.75
E4	845	AMP	13.75
EX4	849	AMP	138.00
EZ4	857B	AMP	215.00
....	866	See type RK 866A	
E1	866A	RCA	2.45
E3	GL 866A	GE	2.45
E4	866AX	AMP	2.45
E2	RK 866A/866	RAY	2.45
E3	866JR	TAY	1.65
E1	868	RCA	2.85
E3	GL 868/PJ23	GE	2.85
EX4	869B	AMP	132.00
E1	872A	RCA	8.20
E4	872AX	AMP	8.20
EX4	880	AMP	510.00
E1	884	RCA	1.85
E2	884	RAY	1.85
E1	885	RCA	2.00
EZ4	889A	AMP	210.00
EZ1	889RA	RCA	295.00
EZ4	889RA	AMP	295.00
EZ4	891	AMP	235.00
EZ1	891R	RCA	385.00
EZ4	891R	AMP	380.00
EZ1	892	RCA	237.00
EZ4	892	AMP	230.00
EZ1	892R	RCA	385.00
EX4	893A	AMP	630.00
EX4	893AR	AMP	1212.00
EZ3	WL 895	WES	950.00
EZ3	WL 895R	WES	1300.00
E1	902A	RCA	12.50
E1	917	RCA	4.65
E1	918	RCA	3.10

Stock No. Dept.	Tube Type	Mfr.	NET EACH
E1	919	RCA	4.65
E1	920	RCA	4.15
E1	921	RCA	2.65
E1	922	RCA	2.60
E1	923	RCA	2.35
E3	GL 923	GE	2.35
E1	924	RCA	3.30
E1	925	RCA	2.85
E1	926	RCA	2.95
E1	927	RCA	2.70
E1	928	RCA	3.35
E1	929	RCA	1.50
E1	930	RCA	2.45
E1	931A	RCA	8.60
E1	934	RCA	3.40
E1	935	RCA	7.80
E1	954	RCA	6.95
E1	955	RCA	4.00
E1	956	RCA	7.20
E1	957	RCA	4.90
E1	958A	RCA	7.50
E1	959	RCA	7.95
E1	991	RCA	.87
EZ3	1000T	EIM	137.50
....	CK 1003	See type OZ4A	
E2	CK 1005	RAY	1.00
E2	CK 1006	RAY	5.85
E2	CK 1007	RAY	1.10
....	CK 1013	See type 5517	
E2	CK 1020	RAY	12.00
E2	CK 1021	RAY	11.50
E2	CK 1022	RAY	15.00
E2	CK 1026	RAY	3.35
E2	CK 1034	RAY	7.50
....	CK 1036	See type CK 6436	
....	CK 1037	See type CK 6437	
E2	CK 1038	RAY	7.50
E2	CK 1049	RAY	5.60
E3	R 1130B	SYL	17.65
E3	R 1131C	SYL	17.65
E3	1229	SYL	6.40
E3	1273	SYL	1.50
E3	1280	SYL	1.50
....	GL 1367	See type 5662	
E1	1612	RCA	3.00
E1	1614	RCA	2.55
E1	1616	RCA	8.65
E1	1619	RCA	2.50
E1	1620	RCA	6.25
E1	1621	RCA	1.95
E1	1622	RCA	2.50
E1	1624	RCA	4.00
E1	1625	RCA	2.65
E1	1626	RCA	1.85
E1	1629	RCA	1.40
E1	1635	RCA	2.00
....	1640	See type 6405	
EZ1	1850A	RCA	565.00
....	1854	See type 6474	
E1	1946	RCA	10.90
E1	1947	RCA	13.15
E1	1949	RCA	11.30
E1	1950	RCA	7.80
E1	2020	RCA	88.00
E1	2050	RCA	1.85
E2	2050	RAY	1.85
E3	2050W	CHA	5.70
E2	2051	RAY	1.90
EX4	ZB 3200	AMP	350.00
E3	R 4330	SYL	15.35
E3	5514	HYT	4.95
E3	5516	HYT	7.95
E2	CK 5517	RAY	3.55
EX1	5527	RCA	150.00

LISTINGS OF SPECIAL PURPOSE TUBES CONTINUED ON THE FOLLOWING PAGE

Special Purpose Tubes

TUBE LISTINGS CONTINUED FROM PAGES 68 AND 69

Dept.	Stock No. Tube Type	Mfr.	NET EACH
E4	5544	AMP	27.00
E3	GL 5544	GE	27.00
E4	5545	AMP	35.00
E3	GL 5545	GE	35.00
E1	5550	RCA	41.00
E4	5550	AMP	41.00
E1	5551	RCA	65.00
EZ3	WL 5551A/652	WES	65.00
EX4	5551	AMP	65.00
EZ3	WL 5551/652	WES	65.00
EZ1	5552	RCA	99.00
EZ3	WL 5552A/651	WES	99.00
EZ4	5552	AMP	99.00
EZ3	WL 5552/651	WES	99.00
EZ4	5553	AMP	216.00
EZ4	5555	AMP	316.00
E1	5556	RCA	13.50
E1	5557	RCA	8.50
E3	5557/NL-715	NAT	8.50
E4	5557	AMP	8.50
E3	GL 5557/FG17	GE	8.50
E1	5558	RCA	15.50
E3	WL 5558/32	WES	15.50
E1	5559	RCA	22.00
E4	5559	AMP	16.00
E3	GL 5559/FG57	GE	22.00
E1	5560	RCA	28.00
E3	GL 5560/FG95	GE	28.00
E1	5563A	RCA	47.00
E1	5581	RCA	2.25
E1	5582	RCA	4.30
E1	5583	RCA	3.70
E1	5588	RCA	120.00
EX4	5604	AMP	540.00
E2	CK 5608A	RAY	3.15
E3	GL 5610	GE	2.25
E1	5618	RCA	4.12
EX4	5619	AMP	390.00
E1	5651	RCA	2.24
E2	CK 5651	RAY	2.30
E1	5652	RCA	6.55
E1	5653	RCA	1.15
E1	5654	RCA	3.10
E2	CK 5654	RAY	3.00
E2	CK 5656	RAY	20.55
EX4	5658	AMP	510.00
E3	GL 5662	GE	3.20
E3	GL 5663	GE	1.90
EX4	5666	AMP	230.00
EX4	5667	AMP	310.00
E3	GL 5670	GE	4.85
E2	CK 5670	RAY	4.85
E2	CK 5672	RAY	1.60
E1	5675	RCA	13.55
E2	CK 5676	RAY	1.90
E2	CK 5678	RAY	1.60
E3	5679	SYL	1.35
E3	WL 5684	WES	15.10
E4	5685/C6J	AMP	31.90
E3	GL 5686	GE	3.30
E3	5687	TUNG	4.50
E3	GL 5687	GE	4.50
E1	5690	RCA	9.35
E1	5691	RCA	8.45
E1	5692	RCA	8.15
E3	WL 5692	WES	8.15
E1	5693	RCA	6.40
E1	5696	RCA	1.90
E2	CK 5702	RAY	5.85
E2	CK 5702WA	RAY	9.30
E2	CK 5703	RAY	2.20
E2	CK 5703WA	RAY	8.75
E1	5718	RCA	5.95
E1	5719	RCA	5.85
E3	GL 5720/FG33	GE	23.00
E3	5722	SYL	6.40
E2	CK 5725	RAY	3.25
E1	5726	RCA	1.65
E3	GL 5726	GE	1.45
E2	CK 5726	RAY	1.45
E4	5727	AMP	2.75
E3	GL 5727	GE	2.70
E1	5734	RCA	18.00
EZ4	5736	AMP	160.00
EZ3	WL 5736	WES	145.00
E2	CK 5744	RAY	2.70
E2	CK 5744WA	RAY	8.75
E3	GL 5749	GE	2.00
E2	CK 5749	RAY	2.00
E3	GL 5750	GE	2.50
E1	5751	RCA	3.80
E3	GL 5751	GE	3.35
E2	CK 5751	RAY	3.35
E2	CK 5755	RAY	9.90
EZ1	5762/7C24	RCA	195.00
E1	5763	RCA	1.93
E2	CK 5763	RAY	1.93
EX4	5771	AMP	510.00
E2	CK 5783WA	RAY	7.90
E2	CK 5785	RAY	2.35
E1	5786	RCA	110.00
E2	CK 5787WA	RAY	11.85
E1	5814A	RCA	3.90
E3	GL 5814A	GE	3.25
E2	CK 5814A	RAY	3.25
E1	5819	RCA	55.00
EZ1	5820	RCA	1200.00
EX4	5822	AMP	116.00
E1	5823	RCA	1.44
E3	GL 5824	GE	3.35
EX1	5825	RCA	13.85
E2	CK 5829	RAY	4.80
....	5834	See type NL 649	
....	5835	See type NL 653	
E1	5840	RCA	8.85
E3	5841	VIC	6.50
E3	GL 5844	GE	2.20
E2	CK 5854	RAY	2.05
E4	5866	AMP	20.00
E4	5867	AMP	30.00
EZ4	5868	AMP	50.00
E4	5869	AMP	25.00
EZ4	5870	AMP	100.00
E2	CK 5875	RAY	2.10
E1	5876	RCA	13.55
E1	5879	RCA	1.75
E2	CK 5879	RAY	1.75
E3	5881	TUNG	2.95
E2	CK 5886	RAY	4.50
E2	CK 5889	RAY	11.30
EX3	WL 5891	WES	1300.00
E1	5893	RCA	19.40
E3	GL 5896	GE	8.50
E3	GL 5899	GE	10.95
E1	5915	RCA	1.20
E4	5920	AMP	2.00
E4	5923	AMP	150.00
EZ4	5924	AMP	210.00
....	5932	See type 6L6WGA	
E3	5933/807W	SYL	12.85
E1	5963	RCA	1.40
E1	5964	RCA	1.50
E1	5965	RCA	2.20
E2	CK 5975	RAY	3.75
E2	RK 5976	RAY	68.00
E3	GL 6005	GE	3.55
E4	6007	AMP	1.50
E4	6008	AMP	1.50
....	6011	See type NL710	
E1	6012	RCA	5.95
E2	CK 6029	RAY	4.50
E3	GL 6072	GE	4.55
E1	6073	RCA	3.40
E1	6074	RCA	3.85
E4	6075	AMP	225.00
E4	6076	AMP	275.00
EZ4	6079	AMP	60.00
E1	6080	RCA	6.00
E1	6082	RCA	5.30
E4	6083	AMP	13.50
E3	GL 6087	GE	5.25
E2	CK 6088	RAY	2.60
E1	6101	RCA	7.25
E2	CK 6111	RAY	9.00
E2	CK 6112	RAY	9.40
E1	6130/3C45	RCA	17.80
E3	GL 6134	GE	5.45
E3	GL 6135	GE	1.90
E3	GL 6136	GE	2.20
E3	GL 6137	GE	2.20
E1	6146	RCA	4.90
E2	CK 6146	RAY	4.90
E2	CK 6152	RAY	8.70
E1	6159	RCA	4.90
EZ1	6166	RCA	905.00
EZ1	6181	RCA	835.00
E1	6197	RCA	2.55
EZ1	6198	RCA	315.00
E1	6199	RCA	50.00
E3	GL 6201	GE	4.15
E3	GL 6202	GE	3.17
E3	GL 6203	GE	3.97
E1	6211	RCA	2.20
E3	6216	HYT	3.50
E1	6217	RCA	70.00
E2	CK 6247	RAY	14.65
EZ3	GL 6251	GE	2200.00
E4	6252	AMP	22.00
E1	6263	RCA	20.00
E1	6264	RCA	20.00
E1	6323	RCA	7.95
EX1	6326	RCA	565.00
E1	6328	RCA	9.70
EZ4	6333	AMP	230.00
E3	6336	CHA	15.75
E1	6342	RCA	69.00
E4	6360	AMP	3.00
E3	GL 6386	GE	7.15
E1	6405/1640	RCA	7.15
E1	6417	RCA	1.93
E2	CK 6436/CK 1036	RAY	7.90
E2	CK 6437/CK 1037	RAY	7.90
EZ4	6445	AMP	375.00
EX4	6446	AMP	255.00
EX4	6447	AMP	400.00
EX1	6448	RCA	4200.00
E1	6472	RCA	10.20
EX1	6474/1854	RCA	1700.00
E2	CK 6485	RAY	1.60
EX4	6508	AMP	80.00
E1	6524	RCA	15.75
E3	6550	TUNG	4.35
E1	6570	RCA	7.60
E1	6655	RCA	55.00
E4	6693	AMP	30.00
....	8001	See type 4E27	
E1	8005	RCA	9.45
E1	8008	RCA	8.20
E4	8008	AMP	8.25
E1	8013-A	RCA	10.30
E3	GL 8020	GE	24.00
E1	8025A	RCA	13.95
E1	9001	RCA	4.00
E1	9002	RCA	2.85
E2	9002	RAY	2.85
E1	9003	RCA	3.80
E2	9003	RAY	3.80
E1	9005	RCA	4.05
E1	9006	RCA	1.90

SPECIAL PURPOSE TUBE LITERATURE
RCA PUBLICATIONS

37 A 109. TYPE 1D-1020A. INTERCHANGEABILITY DIRECTORY. Guide to selection of proper RCA tube types for replacement of non-receiving tubes. Covers vacuum power tubes, thyratrons, ignitrons, etc. **No charge.**

37 A 159. TYPE 3F801R. USER PRICE SCHEDULE. Six-page folder giving tube serial numbers, weights, etc. Most recent edition is always sent. **No charge.**

37 A 162. TYPE CRPS-102A. CATHODE-RAY TUBES, PHOTOTUBES & SPECIAL TUBES. Provides valuable technical information on 145 single-unit, twin-unit, and multiplier phototubes, cathode-ray tubes, camera tubes, monoscopes and types for special applications. 20 pages. **No charge.**

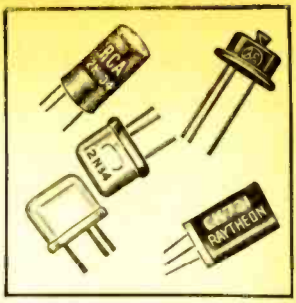
37 A 165. TYPE SRB-1002. SPECIAL RED TUBE BULLETIN. Full data on 5691, 5692 and 5693 Red Tubes. Contains 8 pages of information including curves, socket connections, operating characteristics, etc., on these three rugged industrial tubes. **No charge.**

37 A 576. TYPE PG-101-B. POWER AND GAS TUBE BULLETIN. Data on transmitting, industrial, RF heating, and other special tubes. Covers more than 150 RCA vacuum power tubes, vacuum gauge tubes, rectifier tubes, thyratrons, ignitrons, magnetrons and voltage regulators. 20 pages. **No charge.**

37 A 157. HAM-103B. Latest ratings, technical data and terminal connection diagrams for 48 popular RCA Amateur tubes. Includes modulators, class C amplifiers and oscillators, frequency multipliers, rectifier tubes, thyratrons, cold-cathode (glow-discharge) tubes, and cathode ray tubes. 4 pages. **No charge.**

Transistors for Every Application

A listing of popular, famous-name transistors for industrial, servicing and experimental use. Included are types for RF, IF and audio amplifiers, hearing aids, oscillators, high-speed switching circuits, computers, telemetering and miniaturized equipment. Transistors are extremely rugged and compact. They require no filament supply and only a fraction of the power used by vacuum tubes for the same amount of work. They are extremely stable and have exceptionally long life. ALLIED will stock new transistors as soon as they are released by the manufacturer. Depend on ALLIED for fast shipment from complete stocks.



G. E. TRANSISTORS HERMETICALLY SEALED

2N43 P-N-P Junction Transistor. For high-gain, low-to-medium power applications. Absolute maximum ratings: Collector dissipation, 150 mw; collector voltage, −45 volts; current, −50 ma. Size, 9/32x21/64". Wt., 3 oz.
7 EC 443. NET 6.85

2N43A P-N-P Junction Transistor. Extra-rugged, reliable transistor similar to Air Force Type USAF 2N43A. Will operate reliably up to 100°C at reduced ratings. Absolute maximum ratings: Collector dissipation, 150 mw; collector voltage, −20 volts; collector current, −50 ma. Size, 21/64x21/64". Shpg. wt., 3 oz.
7 EC 446. NET 6.05

2N44 P-N-P Junction Transistor. For intermediate-gain, low-to-medium power applications. Absolute maximum ratings: Collector dissipation, 150 mw; voltage, −45 volts; current, −50 ma. 9/32x21/64". Wt., 3 oz.
7 EC 444. NET 5.40

2N45 P-N-P Junction Transistor. Designed for medium-gain, low-to-medium power applications. Absolute maximum ratings: Collector dissipation: 150 mw; collector voltage, −45 volts; collector current, −50 ma. Size, 9/32x21/64". Shpg. wt., 3 oz.
7 EC 445. NET 3.75

2N76 P-N-P Junction Transistor. For intermediate gain, low-power applications. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, −20 v.; collector current, −10 ma. 21/64x21/64". 3 oz.
7 EC 447. NET 3.25

2N78 N-P-N Junction Transistor. Excellent for use in RF and IF amplifiers. High frequency cutoff above 3.7 mc. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, 15 volts; collector current, 20 ma. Size, 17/32x3/4". Shpg. wt., 2 oz.
7 EC 448. NET 9.95

2N81 P-N-P Junction Transistor. For high-gain, medium-power applications. Exceptionally wide operating temperature range, −55° to 100° C. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, −20 volts; collector current, −15 ma. Size, 21/64x21/64". Shpg. wt., 2 oz.
7 EC 449. NET 7.05

RCA TRANSISTORS HERMETICALLY SEALED

2N32-A. Point Contact Transistor. Designed for use in pulse or switching applications. Has high current amplification factor, 2.2. Operating frequency for current-gain cutoff, 2.7 mc. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, −40 volts, collector current, −8 ma. Maximum ambient temperature, 40°C. Size, 1/2x3/8". Shpg. wt., 2 oz.
5 EC 850. NET 12.25

2N77 P-N-P Junction Transistor. Designed especially for audio-frequency amplifier service in hearing aid applications. Features improved frequency response, low ohmic loss and extreme stability. Excellent noise factor, average 6.5 db. Absolute maximum ratings: Collector dissipation, 35 mw; collector voltage, −25 volts; collector current, −15 ma. Size, 11/32x15/64". Shpg. wt., 2 oz.
5 EC 855. NET 2.80

2N104 P-N-P Junction Transistor. Designed for low-power audio applications. Features extreme stability, very low leakage currents and excellent uniformity of characteristics. Absolute maximum ratings: Collector dissipation, 150 mw; collector voltage, −30 volts; collector current, −50 ma. Highly stable operation at temperatures up to 70°C. Size, 11/64x1/2". Shpg. wt., 2 oz.
5 EC 854. NET 4.60

2N105 PNP Junction Transistor. Designed especially for audio-frequency amplifier service in hearing aid applications. Features an exceptionally low average noise factor of 4.5 db. Absolute maximum ratings: Collector dissipation, 35 mw; collector voltage, −25 volts; collector current, −15 ma. Size, 1/4x9/64". Shpg. wt., 2 oz.
5 EC 856. NET 2.85

2N109 P-N-P Junction Transistor. Excellent for class B, push-pull power output stages of battery-operated portables. Features high power sensitivity, low distortion and low battery drain. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, −20 volts; collector current, −50 ma. Size, 1/2x15/64". Shpg. wt., 2 oz.
5 EC 857. NET 2.65

RAYTHEON TRANSISTORS

CK-721 Junction P-N-P. Plastic and glass case, 1/2x1/4" dia. Maximum ratings: Collector voltage, −15 volts; collector current, −10 ma; collector dissipation (at 30° C), 160 mw; emitter current, 10 ma. Av. power gain, 38 db; av. noise factor, 22 db. Shpg. wt., 3 oz.
5 EC 821. NET 2.40

CK-722 Junction P-N-P. Plastic and glass case, 1/2x1/4" dia. Especially suitable for oscillator, power amplifier and Class B output applications. Maximum ratings: Collector voltage, −22 volts; collector current, −10 ma; collector dissipation (at 30° C), 160 mw. emitter current, 10 ma. Shpg. wt., 2 oz.
5 EC 822. NET 2.20

CK-725 Junction P-N-P. For audio or low-frequency RF applications. Max. ratings: Collector voltage, −12 v.; current, −10 ma; dissipation (at 30° C), 160 mw. 15/64x15/64x1/2". Wt., 3 oz.
5 EC 825. NET 2.80

2N106/CK-727 Junction P-N-P. For low level audio applications. Low noise figure. Max. ratings: Collector voltage, −6 v.; current, −10 ma; dissipation (at 30° C), 160 mw. 15/64x15/64x1/2". Shpg. wt., 2 oz.
5 EC 824. NET 4.35

HERMETICALLY SEALED

2N112/CK760 P-N-P Junction Transistor. For high-frequency amplifiers. Maximum ratings: Collector, −6 volts; 88 mw at 30° C. Typical grounded-emitter operation: Collector voltage −6 v.; base current amplification factor, 40. Size, 25/64x25/64". Shpg. wt., 2 oz.
5 EC 818. NET 6.35

2N113/CK761 P-N-P Junction Transistor. For high-frequency amplifiers. Maximum ratings: Collector, −6 volts; 88 mw. Typical figures for grounded-emitter operation: Collector voltage, −6 v.; base current amplification factor, 45. Size, 25/64x25/64". Shpg. wt., 2 oz.
5 EC 819. NET 7.50

2N114/CK762 P-N-P Junction Transistor. For high-frequency amplifiers. Maximum ratings: Collector, −6 volts; 88 mw. Figures for typical grounded-emitter operation: Collector voltage, −6 v.; base current amplification factor, 65. Size, 25/64x25/64". Wt., 2 oz.
5 EC 820. NET 8.70

2N63 Junction P-N-P. For audio or low-frequency RF applications. Max. ratings: Collector voltage, −22 v.; current, −10 ma; dissipation, 33 mw; noise factor, 25 db. Collector voltage for typical grounded-emitter operation, −6 volts. Size, 27/64x15/64x15/32". Shpg. wt., 2 oz.
5 EC 863. NET 3.60

2N64 Junction P-N-P. For audio or low-frequency RF applications. Max. ratings: Collector voltage, −15 v.; current, −10 ma; dissipation (at 30°C), 33 mw; noise factor, 22 db. Size, 27/64x15/64x15/32". Shpg. wt., 2 oz.
5 EC 864. NET 4.00

2N65 Junction P-N-P. For audio or low-frequency RF applications. Max. ratings: Collector voltage, −12 v.; current, −10 ma; dissipation (at 30°C), 33 mw; noise factor, 20 db. Size, 27/64x15/64x15/32". Shpg. wt., 2 oz.
5 EC 865. NET 4.35

SYLVANIA TRANSISTORS AND KIT

NEW EXPERIMENTAL TRANSISTOR KIT

New, experimental transistor kit especially designed for Amateurs, experimenters, hobbyists, etc. A $9.60 value if components were purchased individually—now in a complete kit for only $4.95! Offers an unprecented opportunity for building transistorized devices of all types. Each circuit suggested has been designed and built in the Sylvania laboratories—and with Sylvania transistors.

Consists of highly informative booklet, "28 Uses for Junction Transistors," 2—type 2N35 junction transistors and 1—1N34A crystal diode. Booklet contains extremely detailed, easy-to-follow circuits on amplifiers, oscillators, electronic control devices of all types. Includes readable, down-to-earth discussion on transistors; theory and practical operation. An extremely valuable, educational and helpful kit. Shpg. wt., 1 lb.
7 E 340. NET 4.95

See page 72 for listing of Sylvania diodes.

2N35 N-P-N Junction Transistor. Designed for audio amplifier applications. Especially useful in low-level work where lower noise level is required. Also for moderately high-speed switching applications. Absolute maximum ratings: Collector dissipation, 50 mw; collector voltage, 25 volts, collector current, 10 ma. Size, 7/16x2". Shpg. wt., 3 oz.
7 EC 341. NET 4.30

2N34 P-N-P Junction Transistor. Same as 2N35 listed above except for reversed polarity. Shpg. wt., 3 oz.
7 EC 342. NET 4.30

2N68 P-N-P Transistor. Designed for high current, low voltage operation from 6 to 24 volts power supplies. Useful in driver and output stages of audio systems. Adapted to either solder, plug-in or screw mounting. Absolute maximum ratings: Collector dissipation, 4 watts (Heat sink), 2.5 watts (Free air); collector voltage, −25 volts, collector current, −1.5 amp. Size, 21/32x1". Shpg. wt., 4 oz.
7 EC 343. NET 6.50

HYDRO-AIRE HIGH-FREQUENCY TRANSISTOR

Type CQ-1. New, stable, high-frequency transistor at very low cost. Hermetically sealed for complete moisture protection. P-N-P type specially developed for high-frequency work. An excellent, economical choice for experimental and industrial use.

Absolute maximum ratings: Collector voltage, −12 volts; collector current, −3 ma; collector dissipation at 55°C, 30 mw. Maximum power gain for grounded-emitter operation, 25 db. Frequency cutoff at 20°C, 5 mc—current amplification down 3 db at 5 mc.

Average characteristics for common base circuit (at ambient temperature of 20°C and frequency of 1 kc): Collector voltage, −4.5 volts; emitter current, 0.5 ma; collector cutoff current, −5 microamps; current amplification, −0.75. Size, 11/32x9/16x1/8". 2 oz.
7 EC 631. NET 2.50

LATEST TRANSISTOR BOOKS

TRANSISTORS—THEORY AND PRACTICE. By Rufus P. Turner. Described in simple terms for the practical user. 144 pages. Size, 5½x8½".
37 K 923. Postpaid In U.S.A. 2.00

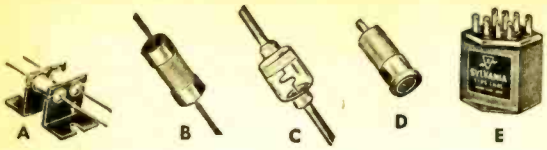
TRANSISTORS. By Coblenz and Owens. McGraw Hill. Theory and practical applications for engineers and technicians. 313 pages. Size, 6x9".
37 K 459. Postpaid In U.S.A. 5.88

TRANSISTOR APPLICATIONS. By Raytheon. 50 practical circuits using CK722 transistors. 115 pages. 8½x11".
37 A 119. Postpaid In U.S.A. 50c

TRANSISTORS AND THEIR APPLICATIONS. By L. E. Garner, Jr. (Coyne). A practical guide to the uses of transistors. Chapters on transistor characteristics, circuits, components and servicing. Includes a clear and non-mathematical explanation of how transistors work. Illustrated. 105 pages. 5½x8½".
38 K 608. Postpaid in U.S.A. 1.50

FUNDAMENTALS OF TRANSISTORS. By L. Krugman. Explains use of transistors for replacement of vacuum tubes, basic transistor operation, characteristics, etc. Illustrated. 160 pages. Size, 5½x8½".
37 K 474. Postpaid in U.S.A. 2.65

Crystal Diodes



SYLVANIA CRYSTAL DIODES

These compact, highly efficient crystal diodes have hundreds of applications. Silicon types are used in radar, industry, and microwave instruments such as test probes, power indicators, etc. Germanium types are used for low-power rectification of frequencies up to 200 mc, and as detectors in TV receivers, etc. Av. shpg. wt., 2 oz.

GERMANIUM DIODES

Fig. A. 1N35. DUAL DIODE. Consists of two electrically matched 1N34 germanium diodes in mounting bracket. For full-wave rectification applications. Overall size, 1½x⅞x¾". Shpg. wt., 4 oz.
7 E 220. NET 2.20

Stock No.	Mfr's Type	Fig.	Description	Anode Max. ma	Continuous Reverse W.V.	NET EACH
7 E 235	1N39	B	200 Back Volt Diode	50	200	3.95
7 E 285	1N41	E	Varistor—Lug Type	22.5	25	11.50
7 E 289	1N56	B	High-Cond. Diode	60	40	1.05
7 E 292	1N60	B	Video Detector Diode	50	25	.50
7 E 436	1N105	.....	Video Detector Diode	150	25	.50

Fig. C—"SEALED IN GLASS" DIODES

Germanium crystal diodes hermetically sealed in moisture-proof glass cartridges. Electrically identical to corresponding ceramic types, but smaller and lighter in weight. 1 mmf shunt capacity. Size. ¼x¼". Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	Anode Max. ma	Continuous Reverse W. V.	NET EACH
7 E 236	1N34A	General Purpose Diode	50	60	.75
7 E 426	1N38A	100-Volt Diode	50	100	1.30
7 E 427	1N54A	High Back-Resistance	50	50	1.05
7 E 428	1N55A	150-Volt Diode	50	150	2.10
7 E 237	1N58A	100-Volt Diode	50	100	1.30

Fig. D—MICROWAVE SILICON DIODES

Point contact crystal rectifiers designed for use as non-linear circuit elements in microwave applications. Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	Test Conditions: Frequency in Mc	Test Conditions: Conversion Loss in db	NET EACH
7 E 274	1N21B	Converter	3060	6.5	2.90
7 E 278	1N23A	Converter	9375	8.0	1.10
7 E 279	1N23B	Converter	9375	6.5	1.85
7 E 440	1N82	Converter	1,000	...	.90

GERMANIUM DIODE BOOKS

40 USES FOR GERMANIUM DIODES. By Technical Staff of Sylvania Electric Products, Inc. Written by engineers who helped develop the crystal diode. Has w rkable circuits and data for 40 important uses of diodes and suggests numerous others. Includes 42 schematic diagrams. 46 pages. Size, 6x9".
37 K 044. Postpaid in U.S.A. 25c

ELECTRONIC SHORTCUTS FOR HOBBYISTS. Prepared by Sylvania engineers. Tells how to build 24 devices using germanium diodes. Includes: Interval Timer, Charger for Small Dry Batteries, Replacing Tubes with Germanium Diodes, etc. With illustrations. Also Germanium Diode Rating and Characteristics chart. Has 40 pages. Size, 6x9".
37 K 074. Postpaid in U.S.A. 25c

SYLVANIA CRYSTAL DIODE CIRCUIT KINKS. Another valuable book by Sylvania covering applications for germanium crystal diodes. Includes schematic diagrams and discusses 40 tried and proven circuits. Covers use of germanium diodes in meters, television and radio receivers, experimental circuits, etc. Excellent for the engineer, service technician, Amateur and experimenter. Includes complete ratings and characteristics of all Sylvania germanium diodes. 35 pages. 6x9".
37 K 091. Postpaid in U.S.A. 25c

MINI-SPRING TUBE HOLD-DOWNS

These highly dependable tube hold-downs keep tubes securely in place. Particularly valuable for use with equipment in which tubes are upside-down or horizontal; also excellent for portable radios, mobile gear and other equipment subject to vibration and shock. Two-way support keeps tube perpendicular to chassis; maintains downward axial force as well as sideway support. Permanently resilient springs. For use with 7- or 9-pin miniature tubes. Mount on wafer or molded tube socket, with nut and bolt, or rivet. Av. shpg. wt., 3 oz. 3 per package.

Stock No.	Mfr's Type	Height	For Tubes:	Per Pkg.
41 H 121	20A	2⅜"	6AQ5, 6X4, 35B5, 35W4, 50B5, etc.	26¢
41 H 122	21A	1⅞"	1R5, 6AG5, 6AT6, 6BE6, 6C4, etc.	26¢
41 H 123	23A	1½"	6AJ5, 6AK5, 6AL5, 6AS6, 6N4, etc.	26¢
41 H 124	24C	1⅞"	12AT7, 12AU7, etc.	26¢

G. E. CRYSTAL DIODES

Complete line of general-purpose and special-type G.E. crystal diodes for use in electronic and electrical power circuits requiring detection, rectification or amplification. Features welded joint between platinum whisker and crystal for high strength and rigidity. Withstand shock and vibration. Free from microphonic effects. Low shunt capacitance. Exceptionally stable in operation. 1N69, 1N70, 1N81 are hermetically sealed in gas-tight, moisture-proof ceramic cases. 1N48, 1N51, 1N52, 1N63, 1N64, 1N65, 1N72, 1N75 are sealed in plastic cases; withstand extended exposure to high humidity. Shpg. wt., 2 oz.

GENERAL PURPOSE DIODES

Stock No.	Mfr's Type	Fig.	Peak Inv. Voltage	Av. Rect. Current (ma)	Peak Rect. Current (ma)	NET EACH
7 E 250	1N48	F	85	50	150	.65
7 E 247	1N51	F	50	25	100	.50
7 E 248	1N52	F	85	50	150	1.40
7 E 249	1N63	F	125	50	150	2.50
7 E 464	1N65	F	85	50	150	.65
7 E 470	1N75	F	125	50	150	2.65

TV DIODE

7 E 246	1N64	F	20	Min. DC in 44 mc rect..	100 ma.	.50

JAN DIODE (CERAMIC CASE)

7 E 465	1N69	F	75	40	125	.90
7 E 466	1N70	F	125	30	90	2.40
7 E 471	1N81	F	50	30	90	1.95

UHF DIODES

7 E 467	1N72	F	5	25	75	1.00

MATCHED PAIRS

7 E 472	1N48	F	85	50	150	1.80
7 E 473	1N52	F	85	50	150	3.35
7 E 474	1N63	F	85	50	150	6.00

DIFFUSED JUNCTION RECTIFIERS

Diffused junction rectifiers. Used in signal corps switchboards, computers, magnetic amplifiers, experimental circuits, etc. Feature long life—hermetically sealed construction. Extremely small size. Leads attached for soldering (on types 1N91, 1N92, 1N93, 1N315, 1N315A). 1N151, 1N152, 1N153 and 1N158 are attached to mounting brackets. Versatile. Ratings for ambient temperatures to 65° C. *Av. forward/av. inverse current at full load, 700. †Av. forward/av. inverse current at full load, 1600. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fig.	Peak Inv. Voltage	Av. Rect. Current (ma)	Peak Rect. Current (ma)	NET EACH
7 E 479	1N151	G	100	500	1570	2.55
7 E 480	1N152	G	200	500	1570	3.35
7 E 481*	1N315	H	200	100	314	2.95
7 E 482†	1N315A	H	200	100	314	3.75
7 E 491	1N91	H	100	150	470	1.40
7 E 492	1N92	H	200	100	310	2.85
7 E 493	1N93	H	300	75	250	3.80
7 E 476	1N153	G	300	500	1570	4.25
7 E 495	1N158	G	380	500	1570	6.66

HUGHES GERMANIUM DIODES

Point-contact germanium diodes. Fusion-sealed in one piece glass envelope. Impervious to external contaminating elements. Strong, flexible leads may be spot-welded, iron or dip soldered as close as ¼" to diode body. Germanium crystal is permanently bonded to one lead—cat whisker welded to other lead. Highly resistant to shock and vibration. Each diode tested to insure stability. Diode body dimensions, .265 x .130" maximum. Shunt capacitance, .5 mmf maximum. Ambient operating temperature range, —78° C. to +90° C. All specifications below are at 25° C. 1N126 formerly JAN type 1N69A. 1N127 formerly JAN type 1N70A. 1N128 formerly JAN type 1N81A. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Description	Peak Inv. Voltage	Max. Inv. Voltage	Max. Inv. Current (ma)	NET EACH
7 E 575	1N55B	High Peak Diode	190	150	.5 @ 150 V	5.33
7 E 576	1N67A	1 Meg Type	100	80	.005 @ 5 V	1.74
7 E 577	1N68A	High Peak Diode	130	100	.625 @ 100 V	1.17
7 E 578	1N89	500K Type	100	80	.008 @ 5 V	.98
7 E 579	1N90	General Purpose	75	60	.5 @ 50 V	.65
7 E 580	1N95	General Purpose	75	60	.5 @ 50 V	.88
7 E 581	1N96	General Purpose	75	60	.5 @ 50 V	1.14
7 E 582	1N97	500K Type	100	80	.008 @ 5 V	1.74
7 E 583	1N98	500K Type	100	80	.008 @ 5 V	1.66
7 E 584	1N99	1 Meg Type	100	80	.005 @ 5 V	1.63
7 E 585	1N100	1 Meg Type	100	80	.005 @ 5 V	2.67
7 E 586	1N116	500K Type	75	60	.1 @ 50 V	.88
7 E 588	1N118	500 K Type	75	60	.1 @ 50 V	1.37
7 E 589	1N126	JAN Type	75	60	.05 @ 10 V	.72
7 E 590	1N127	JAN Type	125	100	.025 @ 10 V	1.20
7 E 591	1N128	JAN Type	50	40	.01 @ 10 V	1.01
7 E 592	1N191	Computer Type	...	...	.....	2.05

Crystal Diodes and Photocells

RAYTHEON DIODES

High-quality Raytheon crystal diodes. All are germanium, except †silicon types. Low shunt capacitance. Have wire leads. *Indicates hermetically sealed. Av. shpg. wt., 3 oz.

Stock No.	Type	Description	NET
5 E 845	1N34	General-purpose diode	.65
5 E 785	1N66/CK705*	General-purpose diode	.65
5 E 786	1N67*	5-50 v. DC restorer applications	1.57
5 E 828	1N68/CK708*	100 v. DC restorer applications	1.57
5 E 810	1N294/CK705A*	General-purpose diode	.70
5 E 812	1N295/CK706A*	Video detector applications	.36
5 E 726	1N297/CK707*	5-50 v. DC restorer applications	1.35
5 E 831	1N298/CK713A*	Computer diode	.95
5 E 841	1N300/CK735†*	Junction diode	5.55
5 E 842	1N301/CK736†*	Junction diode	5.55
5 E 846	1N302/CK737†*	Junction diode	7.15
5 E 843	1N303/CK738†*	Junction diode	5.55
5 E 780	CK709*	4 matched bridged rectifiers	9.40
5 E 781	CK710	UHF converter applications	.87
5 E 830	CK711*	4 matched bridged rectifiers	12.60
5 E 832	CK715*	Frequency multiplier	.65
5 E 833	CK730	UHF mixer applications	.95
5 E 847	CK731	.....	.95
5 E 834	CK732	UHF converter applications	1.05
5 E 835	1N305/CK739	Gold bonded	2.00
5 E 838	1N307/CK742	Gold bonded	2.63

RAYTHEON SILICON POWER RECTIFIERS

These new silicon power rectifiers are capable of handling up to 15 amperes—yet they occupy but a fraction of the space required for conventional rectifiers performing the same function. Hermetically sealed and designed to operate at ambient temperatures from −55 to 175° C. Type CK775 can be operated at up to 40 volts RMS; Type CK776 can be operated at up to 125 volts RMS. *Indicates average current handling capacities at case temperatures. Specified case temperature may be maintained by means of a heat dissipator. †Indicates average current handling capacities at ambient temperatures. Both units have an overall length of 1 3/16"; cathode is 1/4-28 bolt 5/16" long; anode is terminal lug for 8-32 bolt. Max. dia. 7/8". Shpg. wt., 5 oz.

Stock No.	Mfr's Type	RMS Volts	*Av. Amperes 30° C	*Av. Amperes 170° C	†Av. Amperes 25° C	†Av. Amperes 170° C	NET EACH
5 E 848	CK775	40	15	5	2	0.5	34.50
5 E 849	CK776	125	15	5	2	0.5	41.50

RCA CRYSTAL DIODES

Germanium crystal diodes for use as low power rectifiers. Very small in size yet have great resistance to shock and vibration. Low shunt capacity for extreme efficiency in rectifying low voltage AC signals. Point contact types, hermetically sealed in glass. Av. shpg. wt., 3 oz.

Type 1N34A. General-purpose type for low power rectification in applications such as isolating, clipping, switching, and meter circuits. Peak inverse voltage, 75 v. Maximum average current, 50 ma.
5 E 870. NET 58c

Type 1N38A. Large-signal type for electronic computers and clamping circuits. Peak inverse voltage, 120 v. Maximum average current, 50 ma.
5 E 874. NET 1.40

Type 1N54A. High back resistance type for clipping circuits, high-voltage probes, DC restorer circuits, and high-impedance detector circuits. Peak inverse voltage, 75 v. Maximum average current, 50 ma.
5 E 875. NET 1.15

Type 1N55A. Large-signal type for electronic computers, clamping circuits, DC restorer circuits, and high-voltage probes. Peak inverse voltage 150 v. Maximum average current, 50 ma.
5 E 871. NET 2.10

Type 1N58A. Similar to 1N55A, but peak inverse voltage is 120 v. Maximum average current, 50 ma.
5 E 873. NET 1.30

Type 1N56A. High-conduction type for discriminator circuits of FM receivers. Peak inverse voltage, 40 v. Maximum average current, 60 ma.
5 E 872. NET 1.15

AMPEREX GERMANIUM DIODES

Shunt capacity, 1.0 mmf. High stability in operation. Maximum ratings, peak rectified current, 150 ma; av. rectified current, 50 ma; surge current for 1 sec., 500 ma. 1/4"x2 5/32". Shpg. wt., 3 oz. **Write for special prices in lots of 100 or more.**

Stock No.	Mfr's Type	DC Peak Inverse	NET EACH	5-24, EACH	25-99, EACH
5 E 805	1N34A	75 V.	.80	.72	.65
5 E 806	1N38A	120 V.	1.80	1.62	1.46
5 E 807	1N54A	75 V.	1.10	.99	.89
5 E 808	1N58A	120 V.	1.30	1.17	1.05

AMPEREX VACUUM CAPACITORS

For use in industrial RF applications. Vacuum-type construction provides extremely high stability in critical bypass, coupling and neutralizing circuits. Used as plate tank capacitor, high-voltage coupling and bypass capacitors at high frequencies and high-voltage neutralizing. VC-25 rated at 30 KV maximum. VC-50 and VC-100 at 32 KV maximum. Size, 2 1/2x6 1/2". Av. shpg. wt., 10 oz.

No.	Type	Mmf	NET
42 H 075	VC- 25	25	24.50
42 H 076	VC- 50	50	28.50
42 H 077	VC-100	100	33.00

INTERNATIONAL RECTIFIER SELF-GENERATING PHOTO-CELLS

UNMOUNTED

Convert Light into Electrical Energy

MOUNTED

New self-generating selenium photo-cell sun batteries. Convert light energy into electrical energy with no auxiliary source of voltage. Outputs in average sunlight range from 0.2 to 60 ma. Excellent for use with meters as light measuring devices. Optimum load resistance ranges from 10 to 10,000 ohms. *Outputs in table below taken at 100 foot-candle illumination with 100-ohm load. Av. shpg. wt., 2 oz.

Stock No.	Type	Size	Style	*Output µa.	NET
7 E 732	A-2M	9/32" dia.	Mounted	13	5.14
7 E 731	B-2M	2 1/32x7/16"	Mounted	55	1.47
7 E 733	A-5	1 1/8" dia.	Unmounted	250	1.96
7 E 734	A-10	1 3/4" dia.	Unmounted	500	4.41
7 E 735	A-15	2" dia.	Unmounted	750	5.88
7 E 736	B-2	2 3/32x3/16"	Unmounted	75	.98
7 E 737	B-5	1 7/16x1 1/64"	Unmounted	220	1.96
7 E 738	B-10	1 11/16x7/8"	Unmounted	350	2.45
7 E 739	B-15	1 11/16x1 11/16"	Unmounted	750	5.88
7 E 740	B-10M	1 11/16x7/8"	Mounted	350	9.31
7 E 741	DP-2	1 3/32x3/16"	Mounted	24	12.25
7 E 742	DP-3	9/16x7/8"	Mounted	60	13.23
7 E 743	DP-5	1 11/16x1 11/16"	Mounted	600	18.13

NATIONAL FABRICATED SOLAR CELL

New lifetime silicon junction solar energy converter. Developed by Bell Telephone Labs. Offers countless uses. Extremely compact, only 1 3/8" diameter by 3/16" thick. High output—under direct noon sunlight measures 0.25 volts across 10 ohm load. Under optimum conditions will produce up to 10 milliwatts electrical power from solar energy. High stability and rugged construction. May be banked in series or parallel arrangements to obtain increased voltage or current output. Shpg. wt., 4 oz.
77 PC 029. NET 25.00

CLAIREX CL-1 CRYSTAL PHOTOCELL

Cadmium sulphide photocell. Million times more sensitive than conventional types. Excellent for photo electric experiments. Conductivity is extremely sensitive to visible light; also usable response in near infra-red region, and exceptionally sensitive to hard X-rays and gamma rays. Requires voltage source. Will operate receiving tube, meter, 1 ma relay, small neon indicator, or cold cathode gas triode. Maximum voltage, 250 AC or DC. Sensitivity, 100 µa at 100 v. and 2 foot-candles. Dark current, 0.05 µa at 100 v. 1/4"x1/2" long. Shpg. wt., 3 oz.
7 E 880. NET 2.45

BRADLEY LUXTRON 1-1A PHOTO CELL

Selenium type photo cell. Converts light energy to electrical energy with no auxiliary power supply. Develops sufficient current to operate meters and sensitive relays. Sensitive to ultra-violet, infra-red, and visible light rays. At 100 foot-candle illumination and with 100-ohm load over 600 microamperes is generated. Load resistance from 10 to 10,000 ohms may be used. Used in light measuring equipment, burglar alarms, smoke detectors, warning devices, etc. Housed in rugged metal holder. Will withstand shock and severe vibration without injury. Fits standard 4-prong tube socket. 2 5/16x2 5/16x3/4". Shpg. wt., 8 oz.
77 P 040. NET 8.23

JFD TV, ADJUSTABLE AND STEP-DOWN BALLASTS

TV Ballasts. Quality plug-in ballasts for AC-DC TV sets. Perforated shells for maximum dissipation and radiation of heat. Large insulating surfaces and heavy resistance elements. Provide highly dependable service. Shpg. wt., 1 1/2 lbs.

No.	Type	For	No.	Type	For	EACH
9 E 860	17A470303	Motorola	9 E 862	397022	Emerson	2.35
9 E 861	17A485459	Motorola	9 E 863	397023	Emerson	

Adjustable Types. For virtually all replacement needs. 8-prong. 6 oz.

9 E 885. Replaces ballasts beginning with K, L, M, BK, BL, BM having numbers 6- 42, ending with A, B, C, D, F, G, or H.
NET 1.32

9 E 886. Replaces ballasts beginning with K, L, M, BK, BL, BM having numbers 45 through 105 and ending with A, B, C, D, F, G, H, S-1, 2 or 3.
NET 1.32

49 E 535, Type 464 Step-Down Ballast. Reduces 220 v. to 110 v. For 4-5 tube AC-DC radios using .15 amp tubes. Plugs into power outlet; line cord of set plugs into ballast. Shpg. wt., 5 oz.
NET 1.91

CLAROSTAT UNIVERSAL RESISTOR TUBES

Clarostat resistor tubes for voltage-reducing purposes. Replace all AC-DC tubes beginning with letters BK, BL, K, L and M; and corresponding numbers and letters given below. Order tubes according to letter and numeral designation of tube being replaced. For example, to replace a BK-23-A tube, or an M-55-D tube, the Clarostat 23-55-A would be used, etc. Shpg. wt., 1 tube, 6 oz.; additional tubes, 2 oz. each.

Stock No.	Mfr's Type	Tube Numbers From:	Ending In Letter:	NET EA.
9 E 853	23-55-A	23 to 55	A, B, C, D	1.32
9 E 855	23-55-F	23 to 55	F, G, H	
9 E 856	60-92-A	60 to 92	A, B, C, D	

Rectifiers and Ballasts

SARKES TARZIAN SELENIUM RECTIFIERS
MINIATURE TYPE

"Centre-Kooled" selenium rectifiers—premium quality at low cost. Widely used as replacements in radio and TV sets, intercoms, bias supplies, amplifiers, etc. Also excellent for original equipment. Supply plate, filament and bias voltages directly from power line or from transformer. Maximum rms input volts, 130. Conservatively rated to deliver highly dependable and efficient performance. "Centre-Kooled" design assures cool, stable operation. Maximum inverse peak volts, 380. Approximate internal drop, 5 volts. *Has locking lug. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	DC Ma	Size	NET EACH	5 or more, EACH
4 A 631	50	50	1 3/16x2 3/32x1 9/32"	.58	.52
4 A 616	65	65	1x1x1 1/16"	.65	.59
4 A 617	75	75	1x1x1 3/16"	.84	.76
4 A 618	100	100	1 1/4x1 1/4x1 3/16"	.94	.85
4 A 619	*100A	100	1x1x1"	.90	.81
4 A 620	150	150	1 1/4x1 1/4x1 11/64"	1.04	.94
4 A 621	200	200	1 9/32x1 19/32x1"	1.47	1.32
4 A 622	250	250	1 19/32x1 19/32x1 5/16"	1.47	1.32
4 A 623	300	300	1 19/32x1 19/32x1 7/8"	1.47	1.32
4 A 624	*350A	350	1 19/32x1 19/32x2 3/32"	1.81	1.62
4 A 627	400	400	2x2x1 5/16"	1.91	1.72
4 A 625	500	500	2x2x1 7/8"	2.09	1.88

EXTRA-SMALL SELENIUM RECTIFIERS

Extra-small rectifiers. Ideal universal replacements. "Centre-Kooled" design assures cool, stable operation. May be conventionally mounted or plugged-in using CC-1 Conversion Unit listed below. All units have a maximum input rating of 130 volts rms. Approximate internal drop, 5 volts. Supply plate, filament and bias voltages directly from power line or from transformer. *May be assorted. Less Conversion Unit. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	D. C. Ma.	Size	NET EACH	5 or more* EACH
4 A 671	300X	300	1 1/8x1 3/8x1 3/8"	1.47	1.32
4 A 672	350X	350	1 11/32x1 5/8x1 3/8"	1.72	1.55
4 A 673	400X	400	1 1/8x2x2"	1.91	1.72
4 A 674	500X	500	1 11/32x2x2"	2.09	1.87

CC-1 Conversion Unit. 6 1/2" base containing 4 sockets (2 movable). For rectifiers above. Shpg. wt., 1 oz.
4 A 642. NET 88c

FULL-WAVE POWER RECTIFIERS

Single-phase, full-wave selenium rectifier stacks for general-purpose and industrial use. Applications: Electro-plating, motor control, DC filament supplies, battery charging, DC relay supplies, DC supplies for telephone equipment, etc. *Center-tapped. †Bridge-connected. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Amps.	Max. AC Input V.	DCV Output	Size	NET EACH
4 A 700	*D-10	2	13	6–10	3x2 1/2x3"	3.43
4 A 701	*D-12	6	13	6–10	4x2 7/8x4"	4.85
4 A 702	*D-14	12	13	6–10	5x2 7/8x6"	6.08
4 A 710	*D-16	22.5	13	6–10	4 1/4x2 7/8x12"	10.58
4 A 703	†D-17	2	26	6–20	3x3 3/16x3"	5.88
4 A 704	†D-18	4	26	6–20	4x3 3/16x4"	7.74
4 A 705	†D-19	6	26	6–20	4x4x4"	8.28
4 A 706	†D-20	8	26	6–20	5x3 3/16x6"	10.04
4 A 707	†D-21	12	26	6–20	5x4x6"	10.63
4 A 711	†D-23	225	26	6–20	4 1/4x4x12"	18.52
4 A 708	†D-24	2	52	20–40	3x4 5/8x3"	10.34
4 A 709	†D-25	4	52	20–40	4x4 5/8x4"	14.11
4 A 712	†D-26	6	52	20–40	4x6 5/16x4"	14.94
4 A 713	†D-30	22.5	52	20–40	4 1/4x6 5/16x12"	34.45
4 A 714	†D-39	1	130	60–100	2x5 5/16x2"	15.63
4 A 715	†D-40	2	130	60–100	3x8 13/16x3"	20.53
4 A 716	†D-45	.5	156	100–120	1.6x6x1.6"	11.61
4 A 717	†D-46	1	156	100–120	2x6x2"	18.23
4 A 718	†D-47	2	156	100–120	3x10 1/4x3"	23.96
4 A 719	†D-48	4	156	100–120	4x10 1/4x4"	35.77
4 A 720	†D-49	6	156	100–120	4x15 5/16x4"	37.09

FEDERAL SELENIUM RECTIFIERS
MINIATURE TYPE

Top-quality selenium rectifiers at unusually low prices. Ideal for replacement use and for original equipment. Types 1016 and 1017 are bridge-connected. Rated: Max. rms input volts, 25; max. peak inverse volts, 35. Type 1001 rated: Max. rms input volts, 20; max. peak inverse volts, 35. Type 1022: Max. rms input volts, 160; max. peak inverse volts, 460. All other types: Max. rms input volts, 130; max. peak inverse volts, 380; internal drop, 7 volts. Rectifiers with letter A in type no. have locking lug. *Ultra-compact tubular rectifier; enclosed in paper tube. Has 1 1/2" leads for easy installation. Average shpg. wt., 5 oz.

Stock No.	Mfr's Type	DC MA	Size	NET EACH	5 or more, EACH
4 A 662	1159	20	*1/2" dia.x1/4"	.72	.65
4 A 606	1002	65	1x1x5/16"	.65	.59
4 A 602	1003	75	1x1x3/4"	.84	.76
4 A 668	1001	75	1x1x1/2"	.39	.35
4 A 600	1004A	100	1 9/32x1 13/64x3/4"	.94	.85
4 A 661	1101A	100	1x1x1 1/8"	.87	.79
4 A 603	1005A	150	1 9/32x1 13/64x1"	1.04	.94
4 A 601	1006A	200	1 17/32x1 11/32x1"	1.47	1.32
4 A 607	1028A	250	1 17/32x1 11/32x1 1/8"	1.47	1.32
4 A 663	1090A	300	1 17/32x1 17/32x2 7/32"	1.47	1.32
4 A 666	1016	300	1 13/64x1 9/32x3/8"	1.11	1.00
4 A 612	1023	350	1 3/4x1 3/4x2 7/32"	1.91	1.72
4 A 615	1130	400	2x2x1 1/4"	1.91	1.72
4 A 665	1022	450	2x2x7/16"	2.30	2.07
4 A 611	1179	500	2x2x2 1/2"	2.09	1.88
4 A 660	1017	600	1 17/32x1 17/32x3/4"	1.53	1.38

Type 1013 Battery Charger Rectifier. For charging small 2 and 6-volt batteries, such as used in electronic photoflash equipment and self-charging portable radios. Max. rms input volts, 18. Max. DC, 450 ma. Size, 1 17/32x1 17/32x1/4". Shpg. wt., 4 oz.
4 A 604. NET 65c

Type 1018 Battery Charger Rectifier. For trickle charging of 6-volt auto batteries. Also suitable for DC filament supplies. Max. rms input volts, 26. Max. DC, 1800 ma. 4 1/4x2 1/8x5/8". Shpg. wt., 6 oz.
4 A 664. NET 2.26

Federal Miniature Selenium Rectifier Handbook. Valuable handbook for radio-TV servicemen and experimenters. Includes full specifications and circuit applications. 80 pages. 8 1/2x4 1/4".
37 K 106. Postpaid in U.S.A. 50c

EXTRA-SMALL UNIVERSAL SELENIUMS

Extremely compact, universal replacement, selenium rectifiers. Eliminate installation problems where space is limited. Maximum rms input volts, 130. Maximum peak inverse volts, 380. Internal drop, 7 volts. All have locking lug. Av. shpg. wt., 4 oz.

Stock No.	Mfr's Type	DC MA	Size	NET EACH	5 or more, EACH
4 A 684	1263A	65	11/16x11/16x2 1/32"	.60	.54
4 A 680	1236A	300	1 3/8x1 3/8x1 3/8"	1.47	1.32
4 A 681	1238A	350	1 3/4x1 3/4x1 3/8"	1.72	1.55
4 A 682	1241A	400	2x2x1 1/4"	1.91	1.72
4 A 683	1237A	500	2x2x1 3/8"	2.09	1.87

INTERNATIONAL RECTIFIER HIGH-VOLTAGE SELENIUMS

High-voltage, cartridge-type selenium rectifiers. For replacement in TV cameras, Geiger counters, computing machines, etc. For applications requiring high DC voltages at comparatively low current. Handle up to 5 ma. Cartridge terminals fit in standard 30-ampere size fuse clips. Meet JAN specifications to withstand humidity, altitude, vibration and shock. Designed for long life, extreme dependability. Dia., 3/16". Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Max. AC Input V	DCV Output	Peak Inverse V	Length	NET EACH
4 A 690	V501HF	1300	1000	3650	2 11/32"	6.40
4 A 691	V751HF	1950	1500	5450	3 1/4"	8.90
4 A 692	V1001HF	2600	2000	7300	4 5/32"	11.40
4 A 693	V1251HF	3250	2500	9100	5 1/32"	13.90
4 A 694	V1751HF	4550	3500	12,700	6 27/32"	18.90

JFD AC-DC LINE CORD RESISTORS

Supply proper voltage for tubes wired in series across 115 volt lines. 135, 160, 180 and 200 ohm cords can also be used for 1-lamp, 15 and 20-watt fluorescent units. *For 45Z3 tube. †For 3-way battery portables. 6' long. Wt., 6 oz.

Stock No.	Type	Ohms	EACH
49 T 522	2180	135	
49 T 520	2181	160	
49 T 519	2182	180	
49 T 518	2183	200	1.23
49 T 517	2184	220	
49 T 516	2185	250	
49 T 515	2186	290	
49 T 524	2187	300	
49 T 512	2188	330	1.23
49 T 511	2189	350	
49 T 510	2190	390	
49 T 525	2197†	560	
49 T 526	2157*	960	1.81

Type 2175 Universal AC-DC Cord. Replaces AC-DC cords from 220 to 300 ohms. Very easy to install. Just select desired resistance leads; clip off unused ones. For standard three-terminal or pilot bulb tapped cords. Universal-type resistor cord is standard length, 6 feet. Shpg. wt., 5 oz.
49 T 530. NET 1.81

Type 2192. Step-down Line Cord. For operating 110-volt AC-DC radio sets from 220 volts AC-DC. Convenient way to step down 220 volts for sets using 15 amp tubes. Supplied complete with plug for quick installation. Resistance rating, 560 ohms. Current capacity, 0.2 amperes. Shpg. wt., 5 oz.
49 T 580. NET 2.54

"MAKE-UR-OWN" RESISTANCE CORDS

For supplying exact line cord resistance needed. Shpg. wt. for 10', 1/2 lb.; 25', 1 lb.
49 W 560. 30 ohms resistance per foot.
49 W 570. 60 ohms resistance per foot.
NET Per Foot 13c
25 feet for 2.55

MALLORY GRID BIAS CELLS

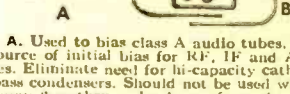


Fig. A. Used to bias class A audio tubes, and as source of initial bias for RF, IF and AVC stages. Eliminate need for hi-capacity cathode by-pass condensers. Should not be used where DC may flow thru or be drawn from the cell. Accuracy, ±10%. Temp. range, 0° F to 140° F. Size, 1 1/64x3 3/64". Shpg. wt., 2 oz.

No.	Type	Volts	Description	NET
9 M 948	BC-3	1 1/2		35c
9 M 944	BC-4	1 1/2	With mtg. stud	42c
9 M 949	BC-5	1 3/4		35c
9 M 945	BC-6	1 3/4	With mtg. stud	42c

Fig. B—BIAS CELL CLIPS

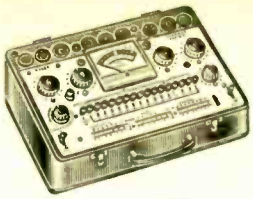
No.	Type	Used With	Cap. EA.
9 M 952	GB-15		2-cell
9 M 953	GB-16	BC-3 or BC-5	4-cell 27c
9 M 954	GB-17		1-cell

Modern Test Equipment


FSM-5000


SMI-53


BZ-1


620


303

RADION, SCALA & SYLVANIA TEST INSTRUMENTS

RADION TEST INSTRUMENTS

MODEL FSM-5000 FIELD STRENGTH METER

A compact battery-operated, portable UHF-VHF field strength meter. Designed to give accurate readings in both primary and fringe signal areas. Ideally suited for on-the-spot orientation of antennas as well as for selection of best antenna location. Long extension cords are not required—unit is completely self-contained with built-in battery-operated power supply. Offers continuous tuning over two ranges—50 to 220 mc and 260 to 940 mc. Simple one-knob tuning. IF center frequency, 20 mc. Selector switch permits checking filament and B+ battery supply. High selectivity allows individual measurement of both sound and video portion of TV signal. Has built in phone-jack for monitoring voice signals of TV or FM stations. Housed in rugged, non-corrosive, duraluminum case equipped with convenient carrying handle. Input impedance is 300 ohms. Power requirements: 3—45 v. Type M30 B batteries (ALLIED Stock No. 80 J 546 at 2.13 each) and 2—1½ v. Type 4F A batteries (ALLIED Stock No. 53 J 003 at 89c each). Overall size: 11½x10x8". Supplied less batteries. Shpg. wt., 9 lbs.
84 FX 012. NET 97.50

Model UPA-1 UHF Probe Antenna. Highly efficient, loop-type UHF antenna for above. Supplied complete with 3-foot handle, plus connecting cable for attaching to FSM-5000 Field Strength Meter. Antenna is used as probe in seeking best location to place permanent antenna. Shpg. wt., 3 lbs.
84 FX 013. NET 6.95

Model CC-1 Carrying Case. Heavy-duty, canvas carrying case for FSM-5000 Field Strength Meter above. Has reinforced canvas handle and snap-type closure. Shpg. wt., 1½ lbs.
84 F 014. NET 7.50

SCALA TEST INSTRUMENTS

MODEL SMI-53 SUPER MARKER INJECTOR

Mixer-amplifier for mixing sample of sweep voltage with sample of marker voltage (from external generator). Injects large, stable pip into oscilloscope. Marker pip is always the same size—from base to top of curve. Metal case, 10x8x7". For 110-120 volt, 60 cycle AC. Shpg. wt., 13 lbs.
84 FX 600. NET 67.50

Model SMI-53X Duo-Marker Injector. Same as above but with crystal oscillator. Gives 2 markers on response curve—marker frequency and marker frequency plus or minus crystal frequency. With 4.5 mc crystal. Shpg. wt., 13 lbs.
84 FX 605. NET 79.50

TEST PROBES

Model BZ-1 Signal Tracing Probe. Low-C, Hi-Z demodulator. Non-resonant to 225 mc; useful to 1000 mc. With cables. Wt., 8 oz.
84 F 601. NET 9.75

Model BZ-2 Low Capacity Probe. Traces through Hi-Z circuits without distortion from circuit loading. Shpg. wt., 8 oz.
84 F 602. NET 9.75

Model BZ-3 Voltage Divider Probe. Checks wave-forms and voltages at plates of horizontal output and damper tubes. Shpg. wt., 8 oz.
84 F 603. NET 9.75

Model BZ-4 Voltage Doubler Probe. Virtually doubles deflection on scope screen compared with half-wave probes. Dual low-C, Hi-Z demodulators useful to 150 mc. Shpg. wt., 8 oz.
84 F 604. NET 10.75

Model BZ-5 2-In-1 Direct and Alignment Probe. Low-C, shielded probe with coax cable. Switch converts unit to resistive probe for visual alignment work. Shpg. wt., 8 oz.
84 F 009. NET 6.90

SYLVANIA TEST INSTRUMENTS

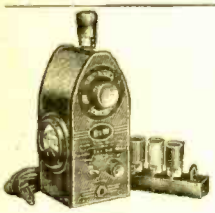
TYPE 620 TUBE TESTER

New portable tube tester. Features provision for accurately testing the new 600-ma series-string type tubes. Easy to operate—simplified switching system accommodates all possible tube types. Tests 4, 5, 6, 7, 8, and 9-pin tubes including octal, loctal, subminiature, hearing aid, and low-power transmitting and industrial tubes. Gives composite emission-transconductance test and also checks for shorts, leakage, and open elements. Large, 4½" clear plastic-cased meter. All readings, including shorts and leakage, are indicated directly on meter. Tube tests made under typical operating conditions. Easy-view, fast operating roll chart is easily removable for addition of new tube settings. Durable steel cabinet with gray wrinkle finish. Size: 6x17⅛x11⅛". For 110-120 v., 50-60 cycle AC. Shpg. wt., 20 lbs.
84 FZ 895. NET 139.50

Type 228 CRT Adapter. For use with Sylvania tube testers. Checks picture tubes for low emission, leakage and shorts without removal of tube from TV set. Shpg. wt., 1 lb.
84 F 893. NET 7.60

TYPE 303 POLYMETER

High quality VTVM for radio-TV servicing. Accurately measures AC volts, DC volts and resistance. Stabilized against errors in calibration due to changing line voltage. Six ranges on each function provide optimum accuracy and are easily viewed on large, 4" meter. 10-megohm input resistance on DC ranges, and 2-megohm input impedance on AC ranges. AC volts: 0-3-10-30-100-300-1000. DC volts: 0-3-10-30-100-300-1000. Resistance: 0-1000-10,000-100,000 ohms; 0-1-10-1000 megohms. Steel case, 5¼x8½x4" deep. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 6 lbs.
84 F 894. NET 54.50


600


404


400


200

BARKER & WILLIAMSON TEST INSTRUMENTS

MODEL 600 DIP METER

This very sensitive, calibrated dip meter is invaluable for servicemen, Amateurs, experimenters and laboratories. Covers 1.75 to 260 mc in 5 ranges. Can be used as: (1) grid dip meter; (2) absorption wavemeter; (3) auxiliary signal generator. Specific uses include: indicating circuit Q; measurement of inductance, capacity, antenna frequency; pre-tuning wave traps; tuning beam antennas; adjusting tuned feeders; alignment of receivers; determination of transmitter tuned circuit frequency; alignment of TV filter and peaking coils. For operation from 110-120 volts, 60 cycles AC. Size, 3x3x7". Shpg. wt., 3 lbs.
84 F 487. NET 39.75

MODEL 300 FREQUENCY METER

Measures any waveform with peak ratio of less than 8 to 1. Range: 20 to 30,000 cps. Sensitivity: Minimum .25 volt input. Calibration accuracy: When referenced against 60 cycles, all other frequencies fall within 5%. Controls: Frequency Range, "Calibrate" and Input Level. For 105-125 volts, 50-60 cycles AC. Size: 13¼x9½x7½". Shpg. wt., 15 lbs. (Not illustrated.)
84 FX 484. NET 126.00

MODEL 404 LINEAR DETECTOR

For use with distortion meter to measure distortion or noise in amplitude modulated carriers or balanced and unbalanced audio circuits. Meets FCC proof-of-performance requirements. May be used to check carrier on any frequency from 400 kc to 30 mc. 20 to 30 RF v. required for proper operation of carrier rectifier. Response essentially flat, 20-50,000 cps. With bridging transformer, vacuum tube detector, 40 db pad adjustable in 10 db steps, and function switch. With accessories for attachment to BW Model 400 (at right). Size, 5x8¾x7½". For 105-125 volts, 50-60 cycles AC. Shpg. wt., 7 lbs.
84 FX 486. NET 85.00

MODEL 250 SINE WAVE CLIPPER

Takes sine wave from any audio oscillator and produces output closely resembling a square wave. Provides all the advantages of using square waves in checking audio equipment. Has front-panel input and output terminals, output volume control, and 4-position wave-shape selector switch. Ideal for audio research work and audio servicing. Size, 5½x4x2". Shpg. wt., 3 lbs. (Not illustrated.)
84 F 485. NET 10.00

MODEL 400 DISTORTION METER

Measures low-level audio voltages, noise and harmonic content, and amplifier gain. Ranges: Distortion meter—30 to 15,000 cps on fundamentals, to 45,000 cps on harmonics; voltmeter and db meter—30 to 45,000 cps. Sensitivity: Noise and distortion, 0.3 v. minimum input; voltmeter, 0.3, 0.1, 0.03, .01 and 0.003 v. for full scale readings. Calibration: Distortion, ±.5 db; voltage, ±5% of full scale at 1000 cps. Size, 13¼x7¼x9½", 4½" meter. For operation from 105-125 v., 50-60 cycles AC. Shpg. wt., 17 lbs.
84 FX 483. NET 168.00

MODEL 200 AUDIO OSCILLATOR

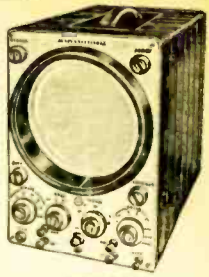
RC type broadcast-quality audio oscillator for making frequency response, distortion, and other audio measurements. Ranges: 30-300, 300-3000, 3000-30,000 cps. Output: 10 volts into 500 ohm load. Less than 1% rms harmonics from 30-15,000 cps, with 500 ohm load. Response: Better than ±1 db from 30-15,000 cps. Stability, better than 1%. Calibration accuracy, 3% of scale reading. 13¼x7¼x9½". For operation from 105-125 volts, 50-60 cycles AC. Shpg. wt., 17 lbs.
84 FX 482. NET 138.00

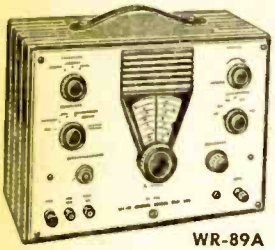
RCA Test Instruments


WR-49A


WR-59C


WO-88A


WO-56A


WR-89A


WV-87A


WV-97A


WV-77A

WG-290


WG-222

FOR ALL RADIO-TV SERVICING APPLICATIONS

WR-49A RF SIGNAL GENERATOR

Accurate RF signal generator. Continuous coverage from 85 kc to 30 mc, in six ranges, all on fundamentals. Excellent, low-cost generator for aligning AM and FM receivers of all types. Dial calibration accurate within 1%. Built-in 400 cycle oscillator for internal or external modulation. Continuously variable percentage of modulation. High and low RF output connectors. Shielded cable minimizes radiation; permits trouble-shooting sensitive RF circuits. Attenuator for positive control of RF level. Approximate range: 2000 to 1. Cathode-follower output stage isolates oscillator from effects of load; assures high stability. RF output voltages at least 0.05 v. rms and 0.01 v. rms at high and low connectors respectively. With cable. Blue gray case, 7½x10½x6". For 105-125 v., 50-60-cycle AC. Shpg. wt., 10 lbs.
84 FX 094. NET 59.50

WR-59C TV SWEEP GENERATOR

Frequency-modulated sweep generator. Permits accurate measurement of TV receiver bandwidths when used with a TV marker generator and a scope. Continuous IF coverage from 50 kc to 50 mc. Pre-set switch positions for TV channels 2-13. Sweep width, 12 mc, continuously variable. Output flat within ±1 db. Fundamental oscillator output on TV channels; filtered beat-frequency fundamental output on IF/VF range. Output, .1 volt to 5 microvolts. Dual-piston attenuator with 20,000 to 1 ratio. Blanking circuit provides zero-reference line on scope screen. 60-cycle horizontal sweep, phase-controlled, also provided for use with scope. Balanced RF output. Attractive blue-gray case with aluminum panel. 10x13½x7½". With cables. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 30 lbs.
84 FZ 074. NET 274.50

WO-88A OSCILLOSCOPE

Highly popular 5" oscilloscope featuring a direct-coupled, push-pull vertical amplifier to provide flat response within 3 db from 0-500,000 cps—excellent reproduction of square waves and sync pulses. Sensitivity: vertical with WG-218 probe, 25 rms millivolts/inch; vertical with WG-216B probe, 0.25 rms volts/inch. Impedance: vertical with WG-218 probe, 1 meg and 75 mmf; vertical with WG-216B probe, 10 megs and 9.5 mmf; horizontal, 2.2 meg and 55 mmf. Sweep: variable from 15-30,000 cps. Frequency compensated step attenuator. Green graph screen is calibrated for peak-to-peak voltage. Excellent shielding throughout. Housed in blue Hammeroid case. Size, 13½x9x16½" deep. Supplied complete with WG-218 AC probe, WG-216B low-capacitance probe, ground lead, alligator clip and instructions. For operation from 105-125 volts, 50-60 cycles AC. Shpg. wt., 32 lbs.
84 FZ 089. NET 169.50

WG-388A Wide-Band Modification Kit. To adapt WO-88A scopes for color television use. Includes all parts and instructions for modification. No special tools required. Provides wide and narrow-band operation from DC to 4.5 mc. Sensitivity: 700 mv peak-to-peak per inch with direct probe. Shpg. wt., 1 lb.
84 F 006. NET 5.95

WO-56A TV FM-AM OSCILLOSCOPE

Big 7" screen. DC or AC input. Frequency-compensated, voltage-calibrated attenuators. Vertical response flat, within 2 db, to 500 kc (within 6 db to 1 mc, useful beyond 2 mc). Input impedance: one megohm, 75 mmf with WG-218 direct probe 9.5 mmf with WG-216B low-capacity probe. Sensitivity: 10.6 rms mv/inch or 30 mv. p-to-p using WG-218; 106 rms mv/inch or 300 mv. p-to-p, using WG-216B. Sweep: variable, 3-30,000 cps with fast retrace and preset fixed positions for TV-vertical (30 cps) and TV-horizontal (7875 cps). Has peak-to-peak calibrating voltage source and line-frequency sweep with phase control. Blue-gray case, 13¾x9x16⅝". With WG-218 and WG-216B probes and instructions. For operation from 105-125 v., 50-60 cyc. AC. Shpg. wt., 38 lbs.
84 FZ 085. NET 274.50

WG-291 Demodulator Probe. For use with WO-56A, WO-78A and WO-88A oscilloscopes to measure modulating wave peak voltage in amplitude modulated RF carriers to 250 mc. Audio frequency range, 30-5000 cps. Shpg. wt., 12 oz.
84 F 090. NET 7.95

WR-89A MARKER-GENERATOR

For alignment of TV, communications, and other electronic equipment operating between 19 and 260 mc. Built-in crystal oscillator gives 96 check points at 2.5 mc intervals. Accuracy, .01%. Output, 0.1 v. rms. Single piston-type capacitor provides 60 db attenuation. Separate crystal oscillator at 4.5 mc for aligning TV sound IF amplifiers and FM detectors. Dial drive ratio 11.6 to 1. Scale length of 144". Auxiliary VFO tunable from 100 to 150 kc for modulating main VFO. Simultaneous modulation at 4.5 mc and 600 cps for discriminator alignment. Bar patterns for checking vertical and horizontal linearity of TV receivers. Blue-gray case. Size, 10x13½x7½". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 18 lbs.
84 FX 093. NET 242.50

WV-87A MASTER VOLTOHMYST

Deluxe VTVM. Reads peak-to-peak to 4200 volts. Response: 30 cps-3 mc. Has zero-center for FM discriminator alignment. Full 7½" meter. Highly stable ±2% meter movement. Reads DC current to 15 amps. Measures DC voltage to 1500 in 7 ranges with 11 meg input resistance. Reads AC rms to 1500 volts; AC input impedances from 0.83 meg and 85 mmf to 1.5 meg and 75 mmf. DC resistance to 1000 megs in 7 ranges. Uses ±1% multiplier and shunt resistors. Accuracy, ±3% of full scale for DC; ±5% of full scale for AC. Blue-gray case, 10x13½x7½". With WG-218 and WG-222 probes, and cables. For 105-125 volts, 50-60 cycles AC. Shpg. wt., 16 lbs.
84 FX 088. NET 112.50

WG-218 Direct Probe with Cable. Shielded input cable fitted with direct probe tip at one end and coaxial connector at the other. Direct probe tip accepts RCA "slip-on" probes WG-222, WG-264, etc. Shpg. wt., 1 lb.
84 F 018. NET 3.75

MODEL WV-97A SENIOR VOLTOHMYST

Improved VTVM. Response, 30 cps to 3 mc. Easy-to-read 4½" meter with 200 microamp movement. Zero-center scale for FM discriminator alignment. Seven non-skip ranges on all functions. Reads AC rms to 1500 volts; AC peak-to-peak, to 4200 volts. AC input impedance of .83 meg and 70 mmf to 1.5 megs and 60 mmf. Measures resistance of 0.1 ohm to 1000 megs. Input resistance on DC: 11 megohms. Blue-gray case, 7⅞x5¾x4½" D. With WG-222 DC/direct probe, WG-218 direct AC probe, battery and leads. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 7 lbs.
84 F 075. NET 67.50

WG-264 Crystal Diode Probe. Extends the RF range of Master, Senior and Junior Volt-Ohmysts to 250 mc. Shpg. wt., 12 oz.
84 F 084. NET 7.75

MODEL WV-77A JR. VOLTOHMYST

A high-quality, very accurate VTVM at low cost. Has zero-center scale to permit simplified FM discriminator alignment. Polarity-reversing switch. Measures AC even in presence of DC. Easy-to-read 4½" meter. Negative feedback bridge circuit. Uses precision 1% resistors. Ranges: DC and AC volts, 0-3-12-60-300-1200 (11 megs input impedance on DC, .2 meg and 75 mmf to 2.0 megs and 50 mmf on AC); resistance, 0-1000 megs in 5 ranges. Response, ±1 db, 30 cps to 3 mc; with WG-264 probe (see 84 F 084 listed above), response range is 100 kc to 250 mc. Supplied complete with battery, WG-218 AC probe and WG-222 DC/direct probe, leads and instructions. Size: 8x5¾x4½". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 6 lbs.
84 F 087. NET 47.50

WG-222 DC/Direct Probe. Has built-in 1 meg. isolating resistor for DC measurements. Slide switch cuts out isolating resistor for making AC or resistance measurements without changing probes. Shpg. wt., 1 lb.
84 F 091. NET 3.50

HIGH-VOLTAGE PROBES

For adapting VOM's and VTVM's to read up to 50,000 v. DC. Low-loss polystyrene body, with 9" leakage path and grounded arc-over protection baffle. With shielded cable and separate ground lead. Less multiplier resistor. 12½" long. Shpg. wt., 1¼ lbs.

WG-290. With phone tips (Fig. A).
84 F 076. NET EACH 7.15

WG-289. With coax. connector.
84 F 077. NET EACH 7.15

Special RCA HV Probe Guide. Lists testers by manufacturer and model number, showing correct multiplier to be used with each meter.
37 F 097. ..... **No charge**

MULTIPLIER RESISTORS. For use in WG-290 or WG-289 probes, listed above.

84 F 079. WG-206. 1090 megohms.
84 F 080. WG-207. 991 megohms.
84 F 081. WG-208. 400 megohms.
84 F 082. WG-209. 480 megohms.
84 F 083. WG-210. 900 megohms.
NET EACH 2.80

Test Instruments Available on ALLIED's Easy Payment Plan—See Page 315

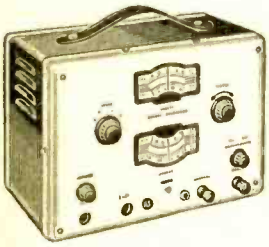
RCA Test Equipment

WR-61A

WR-36A

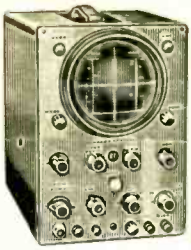
WT-100A

WR-86A



WA-44A

WO-78A



WO-91A

WV-37A

FOR SERVICE, LAB AND INDUSTRIAL USE

WR-61A COLOR-BAR GENERATOR

Compact, lightweight color-bar generator. For checking overall operation of color TV receivers, and for adjusting color phasing and matrixing. Produces 10 bars of different colors, simultaneously, corresponding to all major axes. Provides picture-carrier, color-subcarrier and sound-carrier frequencies on channel 3; crystal controlled for extreme accuracy. Luminance signals at edges of color bars for checking registration of luminance and chrominance signals. Push-button controlled brightness signal produces horizontal area of increased brightness to permit checking for shift of hue in bright areas of picture. Adjustable subcarrier amplitude. Delivers video of positive or negative polarity. Built-in rectifier provides demodulated signal for measurement of sync and subcarrier amplitudes with VTVM. 9¾x13½x7½". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 18 lbs.
84 FX 031. NET 247.50

WR-36A DOT-BAR GENERATOR

This dot-bar generator is an essential instrument for color TV adjustment; also valuable for black-and-white receivers. Provides a pattern of small-size, white dots for making all convergence adjustments on large-screen color TV receivers. Also offers a choice of horizontal bars, vertical bars, or cross-hatch pattern for linearity adjustment of color as well as black-and-white receivers. Number of bars is adjustable; 8 to 15 horizontal bars and 11 to 13 vertical bars. Delivers modulated RF and video output. Frequency of RF output is continuously adjustable for any channel from 2 to 6; amplitude is also adjustable. Positive or negative video output is approximately 5 volts for feeding video amplifier of color or black-and-white receivers. Internal 60-cycle or external sync. 9¾x13½x7½". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 18 lbs.
84 FX 097. NET 147.50

MODEL WR-86A SWEEP GENERATOR

A highly dependable, smooth performing UHF sweep generator for servicemen, labs and production lines. Excellent for alignment of UHF TV sets (color and black-and-white) and all other types of UHF receiving equipment. Very flat output voltage; varies 0.1 db or less per mc over swept ranges. Frequency range, continuously variable from 300 to 950 mc. Sweep width, 10% of frequency to 750 mc; 75 mc from 750-950 mc. Employs electro-mechanical sweep of rugged, time-tested design. Uses highly stable Colpitts oscillator with quarter-wave tuned line. Phased blanking provides circuit-zero-reference base line. Phased horizontal deflection voltage for scope. Output (300 ohms), at least 0.6 volt. Output may be attenuated up to 60 db. Exceptionally well shielded—entire oscillator housed in silver-plated compartment; pi filters on both sides of power line; attenuator operates inside silver-plated shield. Excellent impedance match to 50-ohm unbalanced and 300-ohm balanced circuits; matches 50-ohm circuits directly and 300-ohm circuits with balun network. With 4-ft. output cable and balun. Blue-gray case. 9¾x13½x7½". For 105-125 v., 50-60 cycle AC. Shpg. wt., 19 lbs.
84 FX 027. NET 275.00

WO-91A 5" OSCILLOSCOPE

This all-new, moderately priced 5" oscilloscope offers features usually found only in more expensive instruments. Provides all the functions necessary to do both black-and-white and color TV servicing—quickly and accurately. Among the deluxe features offered are: Dual-band response; wide-band position flat within ±1 db from 10 cps to 4.5 mc and narrow-band position flat within −6 db from 10 cps to 1.5 mc, and voltage calibrated frequency-compensated 3-to-1 step attenuator for vertical amplifier. Removable, multi-scale graph screen for measuring peak-to-peak voltages as easily as with a VTVM. Vertical polarity reversal switch for upright or inverted trace. Preset vertical and horizontal sweep positions for TV trouble shooting. Built-in calibration for peak-to-peak voltage measurements. Plus or minus internal sync selector. Positive-lock internal sync. Shielded vertical input connector and shielded cable minimize hum and stray field pickup. Sturdy, one-piece, low-capacitance direct probe minimizes circuit loading. Sensitivity is 0.05 volt peak-to-peak per inch (0.018 volt rms) in narrow-band position and 0.150 volt peak-to-peak per inch (0.053 volt rms) in wide-band position. Vertical input impedance 75 mmf and 1 meg direct, and 11 mmf and 10 meg low-capacity position, with probe supplied. Type 5UP1 CRT. Size: 13¼x9x16½". For 105-125 v., 50-60 cycle AC. Shpg. wt., 33 lbs.
84 FZ 049. NET 229.50

WA-44A AUDIO SIGNAL GENERATOR

Highly versatile audio signal generator. Ideal for measuring intermodulation, response, input and output impedances, resonant frequency of speakers, etc. Four ranges: 11-110 and 110-1100 cps; 1.1-11 and 11-100 kc. Also has separate 60-cycle, variable-amplitude output. Cathode-follower output. Built-in blocking capacitor permits direct connection to plate with up to 275 volts of DC present. "Hi" and "Lo" outputs: 0-2.5 and 0-15 volts (rms). Voltage regulation and amplified AGC. Frequency stability, 3%. Response, ±1 db (1100 cps reference). Total harmonic distortion, 2% (max.) from 30 cps to 15 kc. Hum level, 0.1% or less. Size, 7x10½x6". For 105-125 v., 50-60 cycle AC. Shpg. wt., 12 lbs.
84 FX 095. NET 87.50

WO-78A 5" OSCILLOSCOPE

Up-to-the-minute scope for checking color and black-and-white TV receivers. Features: Dual-bandwidth; wide-band response, flat within −1 db from 3 cps to 4.5 mc to assure accurate reproduction of the 3.58 mc sync burst and 3.58 mc oscillator signals in color TV receivers; built-in voltage calibrators; constant sync amplitude; trace expansion of 3 times screen diameter. Vertical sensitivity (wide-band), 0.035 volts rms per inch; vertical sensitivity (narrow-band), 0.0035 volts rms per inch. Narrow-band response, flat within −3 db from 3 cps to 500 kc. Horizontal response, flat within −6 db from 3 cps to 1.0 mc. Horizontal sensitivity, 0.07 volt per inch. 14-position vertical attenuator. Vertical input 14 mmf and 10 megs with probe supplied. With 5ABP1 "flat-face" CRT. 13¼x9x19¼". For 105-125 v., 50-60 cycle AC. Shpg. wt., 58 lbs.
84 FZ 096. NET 425.00

WT-100A ELECTRON TUBE MICRO-MHO-METER

All-new, laboratory-quality tube testing instrument designed for specialized production line and laboratory testing, and for circuit design engineering. Checks general-purpose and industrial-type receiving tubes and low-power transmitting tubes. No tube chart required—tester can be set up to check tubes under conditions listed in tube manual; or under conditions of actual use. Offers accuracy and versatility which approaches that of tube factory equipment for measuring transconductance. Measures control grid-to-plate and suppressor grid-to-plate transconductance with better than 5% accuracy. Built-in calibrating circuit assures accuracy and reliability. Regulated power supply for all DC voltages. Meter is electronically protected against burnout. Measures individual electrode currents, AC heater currents, and voltage drop across electron tubes, dry-disc rectifiers and crystal diodes. Though extremely versatile, the WT-100A is simple to operate.

Electrode supply voltages: Plate, 40 to 300 v. at 100 ma; Suppressor grid, 0 to 100 v. negative; Screen grid, 0 to 300 v. at 30 ma; Grid bias, 0 to 100 v. negative. *Heater-filament supply:* AC, 0.6 to 7 v. at 3 amps and 7v. to 117v. at 600ma; DC, up to 3 v. at 250 ma. *Transconductance ranges:* 0-300-1000-3000-10,000-30,000-100,000 micromhos. *Tube voltage drop ranges:* 0-10-100-300 v. *Tube complement:* Regulated power supply—5U4GB, 6CL6, 6X4, 6AU6, OA2, 6U8, 6CB5; Current amplifier—12AU7; Transconductance amplifier—6U8.

Blue-gray cabinet, 8x18½x23½". For 105-125 v., 50-60 cycle AC. Shpg. wt., 60 lbs.
84 FZ 021. NET 785.00

WG-295A VIDEO MULTIMARKER

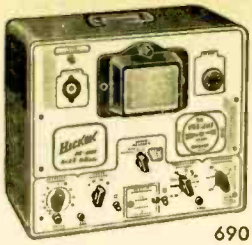
(Not illustrated.) Accurate, convenient marker for use with sweep generator in color TV servicing. For checking response of video amplifier (color or black-and-white), alignment of chrominance bandpass filter, and alignment of I and Q filters. 5 simultaneous absorption-type markers: 0.5 mc (for Q filter); 1.5 mc (for I filter); 2.5 mc (for bandpass filter); 3.58 mc (color subcarrier); 4.5 mc (sound-trap). Markers are instantly identified by touching metal buttons on side of unit. Connects between sweep generator and output cable. Size, 5x2⅞x2½". Shpg. wt., 1 lb.
84 F 070. NET 24.95

WV-37A BATTERY TESTER

Accurate radio battery tester. For testing portable radio batteries under actual load conditions. An extremely practical unit for all service shops and sales counters. Built-in load circuits eliminate time-consuming load set-ups. Nine pre-fixed positions to accommodate virtually all portable radio batteries from 1.5 to 90 volts. 8 blank test positions for new types. Ruggedly built for long service. Full 4½" easy-to-read meter. Double meter scale has "Replace—Usable—Good" legend; also indicates percentage of rated battery voltage. Complete with red and black plastic test prods and leads. Size: 9½x6x1½". Shpg. wt., 5 lbs.
84 F 092. NET 24.95

Hickok Test Equipment


650C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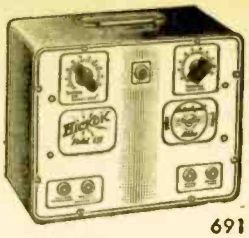
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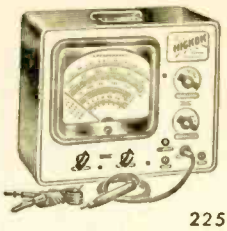
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655XC


770

FOR SERVICE, LAB AND INDUSTRIAL USE

MODEL 650C VIDEO GENERATOR

White dot pattern generator. Essential equipment for servicing color television sets. Used to check dynamic convergence and individual beam centering. Also provides a black dot pattern for troubleshooting black and white sets. Will check any TV set for correct adjustment of focus, yoke, linearity and aspect ratio, etc. Video amplifier of the 650C employs low-impedance cathode-follower output stage for excellent isolation; electrolytic output coupling condenser for maximum low-frequency response. RF output on channels 2 to 13 (on fundamentals), is metered and calibrated from 1 to 10,000 microvolts. Provides crystal-controlled pulses of 60, 900, 15,750 cycles and 315 kc for use singly or in any combination either direct or to modulate the RF output. Amplitude is sufficient to light up pix tube and give full raster deflection. Has a built-in video amplifier, 5 cycles to 4 mc, with variable gain from 0 to 10, with high input impedance, low output impedance and metered peak-to-peak voltage output. Produces vertical or horizontal bars (or both) for linearity adjustments. 3½" meter also reads AC line voltage. Attenuator leakage less than 3 microvolts. Test leads included. Blue Hammertex steel case, 13x16¼x7". For 110-120 v., 60 cycle AC. Shpg. wt., 40 lbs.
84 FZ 159. NET 348.00

MODEL 690 VHF-UHF CALIBRATOR

Crystal-controlled marker generator. Supplies dual markers with any sweep generator. Features a non-parallax, shadow-type dial. Can be read from any angle without introducing error. Extremely accurate. Employs built-in crystal calibrator to obtain settings accurate within .05%. Calibration is quick and simple, and does not require interpolation or counting of beats. Can be used to calibrate any other signal generator to crystal accuracy. Marker modulated by an internal 400-cycle signal. Complete RF coverage through channel 83. All VHF frequencies on fundamentals. High RF output—0.25 volt. All channels have picture and sound settings marked directly on the scale. Ranges: 4.25-11 mc, 19-50 mc, 50-90 mc, 155-225 mc. Third harmonic output on UHF channels 14-47; fourth harmonic on 48-83. Tuning eye indicator and phone jack for visual or aural zero beat. With 2.5 mc crystal (provision for 2 others) and leads. Attractive blue-finish, steel portable case. For 110-120 volts, 60 cycle AC. Size (HWD), 13¼x16½x8". Shpg. wt., 31 lbs.
84 FZ 166. NET 259.00

MODEL 691 HETERODYNED MARKER ADDER

An extremely valuable instrument for simplified, highly accurate TV alignment. Designed specifically for use with Model 690 marker generator and Model 695 sweep generator—also excellent for use with any other marker or sweep generators delivering 50,000 microvolts or greater. Provides the utmost in TV alignment accuracy; removes all guesswork from alignment procedures. Eliminates errors by preventing marker signal from overloading circuit under alignment. Output signals from sweep generator and marker generator are heterodyned and applied to oscilloscope without marker pips passing through TV set. Marker signal is visible at all times, is not attenuated at trap points, and has no effect on amplitude or shape of response curve. Marker output, 3 volts maximum. Variable marker output; may be attenuated from 0-60 db. Variable attenuation of response curve from 0-20 db. Input impedance, 90 ohms. Housed in sturdy, blue portable steel case. Size, 8¼x11¼x7". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.
84 FX 156. NET 99.50

MODEL 695 VHF-FM SIGNAL GENERATOR

Highly stable sweep generator for TV-FM servicing. Triple shielding and 0-50 mc heterodyned output permit thorough check of IF's and assures a strong signal necessary for stage-by-stage alignment. Permits signal attenuation from 300,000 to 3 microvolts. Three RF oscillators provide complete VHF coverage (channels 2-13) on fundamentals. .15 volt output. Fundamental output of .3 volt on all channels. Blanking of oscillator gives reference base line. Continuously variable tuning. Metered, variable DC bias voltage, 0-12 volts. 170° of phasing. Sweep width: 0-15 mc; ±3 mc, depending on frequency. Linear sweep. Amplitude constant within .1 db per mc. 100 db attenuation .5 volt to 5 microvolts. Output impedance: 90 ohms. Supplied complete with leads and instruction manual. Size: 16¼x13¼x8". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 31 lbs.
84 FZ 165. NET 284.00

MODEL 225 VTVM

Giant-sized VTVM, precision-built for highly dependable service. Designed expressly for radio-TV service technicians. Provides practical design, exceptional value and simplicity of operation. Large, 9" meter for fast, easy readings at all convenient distances. Accurate, peak-to-peak scales. Built-in audio tone for quick continuity checks. Also includes a convenient, efficient, Hickok dual-purpose, single unit AC-DC probe. Functions: DC Voltmeter: Plus DC volts and Minus DC volts; 0-1.5, 3, 12, 30, 120, 300, 1200. Input resistance: 10 megohms. Ohmmeter: Center scale; 10 ohms. Readability: 0.2 ohms to 100 megohms. AC voltmeter: 7 ranges AC rms; 0-1.5, 3, 12, 30, 120, 300, 1200. 7 ranges AC peak-to-peak: 0-4, 8, 32, 80, 320, 800, 3200. Frequency characteristics: 40 cps to 3.5 mc. Complete with probe, leads and instructions. In blue Hammertex portable steel case. Size, 13¼" H, 16½" W, 7" D. For operation from 110-120 volts, 50-60 cycles. Carrying wt., 15 lbs. Shpg. wt., 23 lbs.
84 FZ 158. NET 89.50

Model PR30 Probe. For use with above to extend range to 30,000 volts DC. 4-ft. cable and connector. Shpg. wt., 2 lbs.
84 F 177. NET 11.90

MODEL 655XC TV COLOR BAR GENERATOR

New, highly accurate color bar generator, for color TV servicing. Supplies the same type of color signal that is transmitted over the air; a standard 100% fully saturated NTSC color bar pattern. Can be used with present-day color models as well as future color sets. Permits adjustment and troubleshooting of chrominance and luminance circuits. Crystal-controlled 3.58 mc color burst. Provides signals for demodulator alignment; I, Q, and R-Y and B-Y signals. Video output, 0-2 volts p-to-p open circuit. RF output, modulated with color bar pattern, on channels 4, 5, and 6. Sound carrier for setting local oscillator. Leatherette-covered carrying case. Size, 7½x16¾x18⅛". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 42 lbs.
84 FZ 607. NET 495.00

MODEL 670 5" OSCILLOSCOPE

A very sensitive and stable 5" scope. Direct-coupled, push-pull amplifiers for both vertical and horizontal deflection. Vertical amplifier has usable response beyond 2 mc. Horizontal amplifier response from 0 to 100 kc. High sensitivity—vertical amplifier, 15 millivolts rms per inch; horizontal amplifier, 70 millivolts rms per inch. Input impedance: vertical amplifier, 2.2 megohms and 30 mmf; horizontal amplifier, 1 megohm and 35 mmf. Recurrent linear sweep from 3 to 50,000 cps and fixed sweeps at 30 and 7,875 cps. In steel case, 13x10x18" deep. Supplied with 5UP1 CRT. For 110-120 volts, 50-60 cycles AC. Shpg. wt., 35 lbs.
84 FZ 160. NET 268.00

MODEL 770 LABORATORY OSCILLOSCOPE

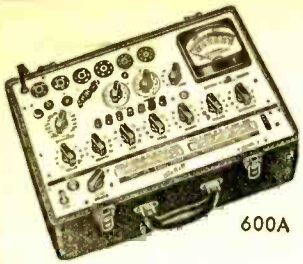
Wide-band, 5" oscilloscope, for professional applications and TV use. Ideal for color TV servicing. Dual bandwidth for flat response and maximum sensitivity over the entire range. *Wide band:* Frequency response 0 to 5 mc, within 3 db; Vertical sensitivity, 35 rms millivolts/inch. *Narrow band:* Frequency response 0 to 2.5 mc. down only 3 db; Vertical sensitivity, 10 rms millivolts/inch. The horizontal amplifier is flat within −3 db from 0 to 500,000 cycles, and has excellent sensitivity of 75 rms millivolts/inch. Input Impedance, 2.2 megohms, 50 mmf. Expandable sweep; 6 times screen diameter. Recurrent and driven sweep for linear time base from 2 to 30,000 cycles. Slower sweeps by using external capacities. Built-in calibrating voltages, p-to-p, 100, 10, 1, .1 volts. Test signal on front panel with provision for line-frequency phasing. For 110-120 v., 60 cycle AC. With 5ABP1, leads, light shield, camera base. Portable steel case, 14x12x18". Shpg. wt., 60 lbs.
84 FZ 606. NET 398.00

Model 34 Demodulator Probe. (Not illustrated.) For use with above scopes. Extends RF range to 500 mc. With leads. 1½ lbs.
84 F 138. NET 9.80

Model TVP-1 Probe. (Not illustrated.) New probe for increasing usefulness of scopes. Enables technician to accurately duplicate mfr's. pattern. Low input impedance reduces loading. 4-ft. heavy duty cord with spade connectors. Handling wt., 6 oz. Shpg. wt., 2 lbs.
84 F 162. NET 12.60

Test Instruments Available on ALLIED's Easy Payment Plan—See Page 315

Hickok & Jackson Test Equipment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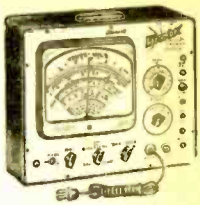
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HICKOK TEST INSTRUMENTS

MODEL 600A TUBE TESTER

Especially designed for speedy, accurate TV servicing; also lab and industrial applications. Dynamic Mutual Conductance type—checks tubes under simulated operating conditions for greater accuracy. Has these outstanding features: easily portable; tests for gas content; reads directly in micromhos; applies separate voltage to each element; easily detects hard-to-locate weak tubes. Easy-to-read triple-scale 5" lucite-case meter has ranges of 0-3000-6000-15,000 micromhos and REPLACE—?—GOOD legend to indicate condition of tube. Fused to protect bias potentiometer. Replaceable roll chart gives adjustment setup data at a glance. Leatherette-covered case with detachable cover. Excellent for on-location or shop bench servicing. Size: 16¾x7½x11¼". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 21 lbs.
84 FZ 185. NET 169.00

MODEL 605A TUBE TESTER-VOM

Combination tube tester and multimeter. This versatile instrument has all the features of the mutual conductance tube tester, Model 600A, above. Built-in multimeter has a high sensitivity of 20,000 ohms per volt, DC. Quick selection of functions and ranges. Measures AC or DC volts: 0-10-100-500-1000. Resistance readings: 0.1 ohm to 100 megohms. (Center scale: 25, 2500, 500,000 ohms). DC current: 10-100-500 ma. Capacitance: From .0001 to 50 mfd. Conversion chart to read inductance to 70 hy. With leads. For 110-120 v., 50-60 cycle AC. 16¼x7½x11¼". Shpg. wt., 22 lbs.
84 FZ 189. NET 199.00

Cathode Ray Tube Tester Adapter. For use with Hickok tube testers. Permits checking of TV picture tubes. Adapter consists of cable, plug and special dual socket. Makes test without removing picture tube from TV set. With instructions. Shpg. wt., 1 lb.
84 F 184. NET 9.90

MODEL 533AP TUBE TESTER

Highly dependable and accurate portable tube tester—specially designed for radio-TV servicing. Reads mutual conductance in micromhos—tests tubes under simulated operating conditions. Checks latest tubes including miniature and subminiature types. Dynamic mutual conductance. Ranges: 0-3000, 6000, 15,000 micromhos. Accurately tests and detects weak tubes. Has special feature to forecast tube life. Predicts tube failures—saves return calls. Large, easy-to-read, 5" meter with accurately calibrated dual-scale. Tests for gassy tubes. For on-location or shop-bench servicing. Rugged, portable carrying case, covered in durable black leatherette. For operation from 110-120 v., 50-60 cycle AC. Size, 16¼x18¾x7½". Shpg. wt., 30 lbs.
84 FZ 187. NET 198.00

Model 533AC. As above, but in counter-type blue enameled steel case. Size 17½x18½x6". Shpg. wt., 30 lbs.
84 FZ 186. NET 198.00

MODEL 539A TUBE TESTER

Professional lab model. Provides outstanding accuracy and dependability. Measures mutual conductance in micromhos—under simulated operating conditions. Tests airline ruggedized tubes, hearing aid tubes, miniature and subminiature types—in addition to all common types. Features include: Choice of 3 AC signals (0.25, 0.5 and 2.5 volts) for accurate check of high-gain tubes; vernier adjustment and 2-range meter for accurate grid bias setting; built-in optional self-bias; AC meter for line voltage check; provision for use of external plate milliammeter. Separate voltmeter measures grid bias. Tests for gassy tubes and has test feature helpful in forecasting future tube life. Sturdy case covered with durable leatherette. Size, 16¾x18¾x7½". For operation from 110-120 volts, 50-60 cycles AC. Shpg. wt., 39 lbs.
84 FZ 180. NET 299.00

MODEL 209A VTVM

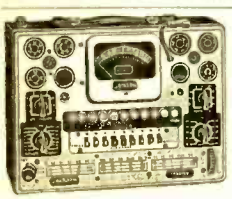
A professional-quality VTVM and capacitance checker. An outstanding instrument, perfect for the most critical applications. Features extreme sensitivity and accuracy. Extra-large size with 9" laboratory-type meter for maximum visibility. Flat response to 300 mc. Ideal for checking TV and other high-frequency circuits. High input impedance: (DC) 12 megs; (AC) 3 to 12 megs. Includes zero-center scale. Measurements as low as 1/10 ohm resistance. 5 microamperes DC current. Full-scale deflection with only 1 volt rms. 7 ranges of capacity from as low as 1 mmf to as high as 1000 mfd. Other scales: AC-DC v., 0-3-12-30-120-300-1200; DC current, 0-3-12-30-120-300-1200 ma; resistance, .1 ohm to 10,000 megs in 8 ranges; inductance, 50 mh to 100 henries; db, −20 to +25 in 3 ranges; AC peak-to-peak v., 0-3-12-30-120-300. Blue case, 16¼x13¼x7". With HF probe, leads. For 110-120 v., 50-60 cycle AC. Shpg. wt. 26 lbs.
84 FZ 136. NET 132.50

Model PR 30A Probe. Extends range of VTVM above to 30,000 v. DC. Shpg. wt., 1½ lbs.
84 F 149. NET 11.90

MODEL 215 VTVM

5" meter. Reads RMS and peak-to-peak AC v. (7 ranges each), and DC v. (7 ranges): 0-1.5-3-12-30-120-300-1200, for both positive and negative measurements. Peak-to-peak, 3200 v. Resistance, 0 to 1000 megohms in 7 ranges. Has zero center scale. Input Imp. with dual-purpose AC-DC probe: DC, 10 megohms; AC, 30 megohms and 150 mmf. Probe has AC to DC switch. Case: 8½x5¼x4½". With AC-DC probe, leads, instructions. For 110-120 v., 50-60 cycles. Wt., 7 lbs. (Not illustrated.)
84 F 181. NET 67.50

Model PR30 Probe. For use with above to extend range to 30,000 volts DC. 4-ft. cable and connector. Shpg. wt., 2 lbs.
84 F 177. NET 11.90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648-P

JACKSON TEST INSTRUMENTS


712


CRO-2

MODEL 715 TUBE TESTER

Employs dynamic test method for testing all tubes under actual load conditions—applies separate voltages to each tube element. Each tube element is fully tested for possible shorts and leaks. Includes provision for CRT testing. Improved switching system has provisions for handling future tube types—provides spare circuits together with switch and socket positions for future use. Easy-to-read 4" square meter has REPLACE-GOOD scale. High voltage power supply delivers more than 200 volts to some tube types. Uses push buttons and rotary switches for element and voltage selection. Tests over 700 types of tubes. Built-in roll chart. Finished in gray Hammertex with harmonizing ivory knobs. Case size: 9½x13x5½". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 15 lbs.
84 FX 478. NET 77.91

MODEL 710 SELENIUM TESTER

(Not illustrated.) The 710 accurately tests all selenium rectifiers rated from 20-650 ma. "Line Adjust" control gives positive readings. Variable voltage range from 25-300 volts AC. "Good—Replace" meter dial indicates open, shorted, or erratic rectifiers. Extremely simple to operate—just choose correct range, connect rectifier to tester, and press switch. Size: 3¼x7¼x4¼". For 110 to 120 volts, 50-60 cycle AC. Shpg. wt., 5 lbs.
84 F 458. NET 28.91

MODEL 648B TUBE TESTER

Highly accurate tube tester, featuring simplified, push-button operation. Only 3 controls to be set—heater voltage, plate control, and sequence switch. Tests each element for possible shorts. Lamp indicator shows shorts. Line voltage control adjusts the tester for any variations in line voltage; control is calibrated to give the actual value of the line voltage. For quick readings, the 4" meter is calibrated "Good-Bad;" also indicates mutual conductance percentages. Only plate current flows through the meter to assure a true test of tube performance. Headphone jacks provide audible test for noisy tubes. Choice of 15 filament voltages from .75 to 117 volts. Ample current capacity for testing series-string tubes. Has "Life-line" indicator to test life expectancy of tubes. Checks all receiving type tubes including hearing-aid and other subminiatures. Accommodates two sockets for addition of future tube types. Convenient roll chart shows settings for every receiving type. Sturdy, bench-type steel case, finished in attractive gray. Size, 15½x10½x4½". For 110-120 volts, 50-60 cycles AC. Shpg. wt., 18 lbs.
84 FX 463 NET 102.41

Model 648-P. As above, but portable model in attractive wood case with an additional compartment for storage. Size, 16¼x13¾x6". Shpg. wt., 23 lbs.
84 FZ 464. NET 107.31

MODEL 712 COLOR BAR & DOT GENERATOR

Extremely versatile instrument for adjusting all color TV circuits. Crystal controlled for complete accuracy. Generates color bar signals, sync signals, white dot pattern and cross-hatch pattern. Used to check and adjust 3-gun convergence, yoke and focus adjustment, linearity, chrominance and luminance circuits. Supplies modulated RF output of .1 volt on channels 3, 4 or 5. 9½x16½x10¼". For 110-120 v., 60 cycle AC. Wt., 31 lbs.
84 FZ 612. NET 387.10

MODEL CRO-2 OSCILLOSCOPE

Improved, highly sensitive 5" scope. Excellent for VHF-UHF-color TV servicing. Push-pull amplifiers. Wide band amplifier flat within 1 db from 20 cps through 4.5 mc. 2 vertical sensitivity ranges—Narrow band (from 20 cps through 100 kc): .018, .18, 1.8 rms v./inch; Wide band (from 20 cps through 4.5 mc) .25, 2.5, 25 rms v./inch. Horiz. deflection sensitivity: 0.40 rms v./inch. Vert. input imped.: 1.5 megs and 20 mmf. Horiz. input imped.: 1.1 megs. Sweeps: 20 cps thru 50 kc. 4 input control positions. New amplifier-timer combination for blanking return traces. Gray steel cabinet. Size: 13x10¼x15⅛" D. For 110-120 v., 60 cycle AC. Shpg. wt., 32 lbs.
84 FZ 475. NET 220.50

Letter Z in Stock Number Indicates Express Shipment Only

Triplett Test Equipment


630


630-A


650

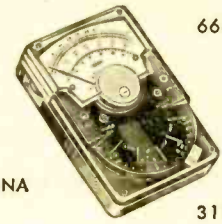

631


666-R


630-T


630-NA


625-NA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666-HH

MODEL 630 VOM

Accurate VOM for TV, radio, etc. Has 5½" meter with 4¼" scale. Meter is flush with panel. Uses 1% resistors, each sealed in its own molded compartment. "Unit construction"—all resistors, shunts, rectifier, and batteries are housed in molded base integral with the switch. Provides direct connections without cabling, thus greatly reducing chance of shorts. Ranges: DC and AC volts, 0-3-12-60-300-1200-6000, DC at 20,000 ohms per volt, AC at 5000 ohms per volt; DC current, 0-60 microamps, 0-1.2-12-120 ma, and 0-12 amps; resistance, 0-1000-10,000 ohms and 0-1-100 megs; db. −30 to +70 in 7 ranges; output v., 0-3-12-60-300-1200-6000. Flush-mounted knob controls 20-position switch which selects both circuit and range. Plastic case. 7½x5½x3½". With batteries and 50" leads and instructions. Shpg. wt., 6 lbs.

84 F 568. NET 38.71

MODEL 630-T VOM

This highly dependable, ruggedly built VOM is designed specifically for telephone and industrial maintenance applications. Includes important features for maximum safety and operating convenience. Special neck straps to hold instrument in easy-to-read position and free lineman's hands. Special banana jack test lead connectors assure maximum safety. Flush-mounted range selector switch selects both circuit and range. Ranges: DC volts, 0-0.3-3-12-60-300-600 at 20,000 ohms/volt; DC amps, 0-12; DC ma, 0-.06-1.2-12-120-1200; AC volts, 0-3-12-60-300-600 at 3000 ohms/volt; resistance, 0-1000-10,000-100,000 ohms and 0-1-10 megohms. Accuracy: DC, 2%; AC, 5%. Complete with straps, test leads and batteries. Rugged, black plastic case. Size, 3¼x5½x7½". Shpg. wt., 6 lbs.

84 F 543. NET 51.45

MODEL 630-NA VOM

This new VOM offers unusually high accuracy. 70 ranges: ±1½% on DC to 1200 v.; ±3% on AC to 1200 v. Features include: Overload protection; ½% resistors; frequency compensation up to 20 kc; 5½" meter with mirror scale. DC volts: 8 ranges to 6000 (10,000 ohms/v.); 8 ranges to 3000 (20,000 ohms/v.). AC volts: 6 ranges to 6000 (5000 ohms/v.); 6 ranges to 3000 (10,000 ohms/v.). DB: −30 to +70 in 12 ranges. DC microamps: 1 range to 120 (240 mv); 2 ranges to 600 (120 mv). DC milliamps: 4 ranges to 1200 (240 mv); 3 ranges to 600 (120 mv). DC amps: 1 range to 12 (240 mv); 1 range to 6 (120 mv). Resistance: 3 ranges to 100,000 ohms; 3 ranges to 100 megohms. Output: All 12 AC volt ranges. 7½x5½x3½". With leads and batteries. 6 lbs.

84 F 512. NET 68.11

Type T-79-162 30-KV AC-DC Probe. 8 oz.
84 F 548. NET 14.21

MODEL 630-A VOM

Here's the VOM for those applications requiring top accuracy. Overall accuracy: 1½% on ohms and 0-1200 DC volts; 4% on 6000 DC volts and all AC ranges. Features mirror scale to eliminate errors in reading due to parallax; uses ½% resistors. Unit construction provides direct connections between components. Resistors, shunts, rectifier, battery—all are housed in a molded base integral with the selector switch. Ranges: DC and AC volts 0-3-12-60-300-1200-6000 (DC at 20,000 ohms per volt, AC at 5000 ohms per volt); DC current, 0-60 microamps, 0-1.2-12-120 milliamps, and 0-12 amps; resistance, 0-1000-10,000 ohms, and 0-1-100 megohms; db. −30 to +70 in 7 ranges; output volts, 0-3-12-60-300-1200-6000. 5½" meter with 4⅜" scale. Black plastic case. 7½x5½x3½". Supplied complete with batteries and 50" leads. Shpg. wt., 6 lbs.

84 F 574. NET 48.51

MODEL 631 VTVM-VOM

Battery-operated, 34-range VTVM and VOM. Versatile, accurate, and easy to operate. Single switch selects all ranges; also switch to select VTVM or VOM operation. 5½" Red Dot meter with 50 microampere movement. Zero center scale for discriminator alignment. Push-button permits checking B+ for VTVM without removing batteries. VTVM ranges: 0-1.2-6-30-120 DC volts; 11 megohms input impedance. VOM ranges: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, and audio output volts, 0-3-12-60-300-1200 at 5000 ohms/volt; DC microamperes, 0-60; DC ma, 0-1.2-12-120-1200 at 250 mv; DC amps, 0-12 at 250 mv; db. −30 to +56; ohms, 0-1500-15,000; megohms, 0-1.5-150. Black plastic case. 3½x5½x7¼". Supplied complete with 1R5 tube, batteries and 48" leads with alligator clips. Shpg. wt., 5 lbs.

84 F 546. NET 58.31

MODEL 625-NA VOM

Popular, wide-range tester, for TV, FM, etc. Features dual DC sensitivity: 20,000 ohms per volt and 10,000 ohms per volt. Long mirror scale (5" at top arc) provides maximum reading accuracy. Reads as low as 1.25 volts DC and 2.5 volts AC, full scale. Six-inch Red Dot 50 microamp meter. 39 ranges: DC volts, 0-1.25-5-25-125-500-2500 at 20,000 ohms/volt and 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt; DC current, 0-50 microamps, 0-1-10-100-1000 ma, and 0-10 amps; resistance, 0-2000-200,000 ohms, 0-40 megs. AC volts, 0-2.5-10-50-250-1000-5000 at 10,000 ohms/volt. Six db ranges. −30 to +69. Size, 5½x2½x6". With batteries, and 50" test leads. Shpg. wt., 6 lbs.

84 F 575. NET 48.51

Model 629 Case. Leather case with handle for 625NA VOM. Shpg. wt., 1 lb.
84 F 561. NET 6.37

MODEL 310 VOM

New, miniature 20,000 ohm-per-volt VOM. Ultracompact and highly efficient. Self-shielded 50 microamp meter movement; single selector switch for all settings. Accuracy: ±3% on DC; ±4% on AC. Interchangeable test prods—prod tip fits into top of tester to become common probe; prods plug together to double regular length. Ranges: DC volts, 0-3-12-60-300-1200 at 20,000 ohms/volt; AC volts, 0-3-12-60-300-1200 at 5,000 ohms/volt; DC μa, 0-600 at 250 mv; DC ma, 0-6-60-600 at 250 mv; ohms, 0-20,000-200,000; megohms, 0-2-20. Black molded plastic case. 2¼x4¼x1⅜". Molded meter window with 2⅛" scale. Complete with batteries and leads. Shpg. wt., 1 lb.

84 FC 674. NET 28.91

Model 369 Case. Black leather with belt loop.
84 F 675. NET 2.84

MODEL 666-HH VOM

Low-cost, accurate VOM. 400 microampere, 3" Red Dot meter. Offers high stability on voltage ranges by use of special resistors. Scale is 2⅝" long at top arc. Ranges: AC-DC volts, 0-10-50-250-1000-5000 at 1000 ohms per volt; DC ma, 0-10-100-500; ohms, 0-2000-400,000. With battery and 50" leads. Unusually compact plastic case. 5⅞x3 1/16x2 9/16". Wt., 4 lbs.

84 F 555. NET 24.01

MODEL 666-R VOM

Pocket-size VOM. Only 2 controls—range switch and the ohms adjust control. 1000 ohms-per-volt sensitivity on AC and DC volt ranges. Red Dot 3" 0-200 microammeter movement. Ranges: DC and AC volts, 0-10-50-250-1000-5000; DC ma, 0-10-100; DC amps, 0-1; ohms, 0-3000-300,000; megs., 0-3. Black plastic case, 5⅞x3 1/16x2 9/16". With batteries, 50" test leads. Shpg. wt., 4 lbs.

84 F 557. NET 25.97

Model 669 Case. Long-wearing cowhide case for Model 666R or 666-HH. Wt., 1 lb.
84 F 560. NET 5.39

Model 669-RL Case. Camera-type leather case for Model 666-R. VOM may be used without removal from case. Shpg. wt., 1 lb.
84 F 547. NET 5.88

MODEL 650 VTVM

A highly sensitive and accurate VTVM. Meter shorted in off position. Ranges: DC volts, 0-1-5-10-50-100-500-1000 (constant 11 megohm input—reads to 50 KV with hi-v. probe listed below); AC volts, 0-1-5-10-50-100-500 (1.4 megohms, 13 mmf @ 100 kc); peak-to-peak volts, 0-2.8-14-28-140-280-700; resistance, 0-1000 megohms in six ranges; zero center scale for discriminator alignment. Accuracy: DC volts and ohms ±3%; AC volts ±5% (of full scale). Response: ±3 db, 15 cps to 1.0 mc. Meter scale, 4⅜". Black plastic case, 7½x5½x3¾". With 2 alligator clips. AC-RF probe, ohms-DC probe and battery. For 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.

84 F 558. NET 87.71

High-Voltage Probe. Extends DC range to 50,000 v. Shpg. wt., 8 oz.
84 F 564. NET 14.21

Model 659 Leather Carrying Case. 1½ lbs.
84 F 559. NET 9.31

Model 659-P Padded Leather Case. Lined with ⅛" sponge rubber for maximum protection. Shpg. wt., 1½ lbs.
84 F 676. NET 14.21

ACCESSORIES FOR 630, 630-A, 630-NA, 630-T AND 631

High-Voltage Probe. For 630, 630-A or 631. Extends DC range to 30 KV. Shpg. wt., 8 oz.
84 F 544. NET 14.21

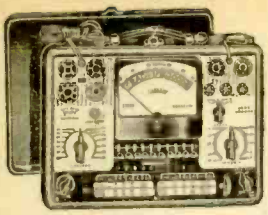
Model 639 Case. Leather carrying case for 630, 630-A, 630-NA or 631. Shpg. wt., 1½ lbs.
84 F 569. NET 8.33

Model 639-P Case. Same as 639, but with sponge-rubber padding. Shpg. wt., 1¾ lbs.
84 F 562. NET 13.23

Model 639-N Case. Neolite carrying case. For 630, 630-A, 630-NA, 630-T or 631. Shpg. wt., 1½ lbs.
84 F 599. NET 8.33

Tester Stand. Holds Models 630, 630-A, 630-NA, 630-T, 631 and 650 at 45° angle.
84 F 573. NET ..... 49¢

Triplett Test Equipment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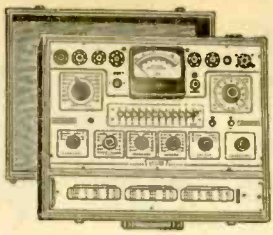
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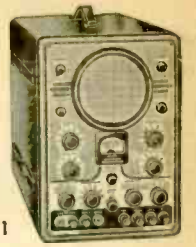
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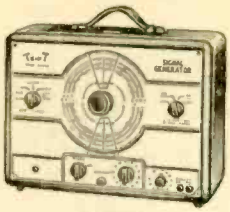
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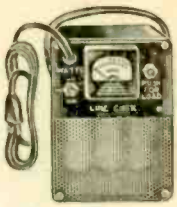
T-2247-BV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MODEL 3413-B TUBE TESTER

An extremely versatile tube tester. Checks all radio receiving tubes, including ballasts, miniatures, and hearing aid types. Also checks TV picture tubes when used with Type T-2247-BV adapter listed below. Line voltage compensator assures correct voltage for each tube test. Has high meter sensitivity for tubes with low cathode current. Wide-angle neon indicator gives excellent visibility when checking for inter-element shorts or leakage. Filament voltage range: 0.63 to 110 volts in 19 steps. Slide-lever switches are numbered to correspond with RETMA tube pin numbers, and connected to bring out each active tube element. Simple up or down motion of the lever instantly makes connection. Shows shorts, open circuits and condition of all tube elements, connections, taps, etc. Also provides continuity test for checking electrical appliances, motors, etc. Oversize 6" Red Dot lifetime guaranteed meter with highly legible 3-color scale gives quick, accurate BAD—?—GOOD tests. Line voltage indication on center of meter dial permits observation and adjustment for line fluctuations. Checks emission, shorted and open elements. Built-in, Speed-Roll chart; new tube data easily added to chart. Counter-portable case; handle and removable cover. Size 15½x11½x6⅛". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 28 lbs.
84 FZ 591. NET 77.91

MODEL 3423 TUBE TESTER

Highly accurate and exceptionally versatile tube tester. Employs unique, advanced circuit for testing by proportional mutual conductance method. A built-in oscillator applies a 4 kc signal to grid of tube under test—closely simulates actual tube operating conditions. Tests all types of receiving tubes, hearing aid tubes, low-power transmitting tubes, rectifiers, voltage regulators, including subminiatures, acorns and ballasts. Special circuits for testing thyratrons and "magic eye" tubes. Reads mutual conductance directly in micromhos; also GOOD—?—BAD scale. Variable AC voltage available for emission tests on diodes. Also checks pilot lamps and continuity of motors, resistance elements, etc. Checks for shorts and leakage between any tube elements. Indicates gassy and noisy tubes. Single lever switch for checking tube value and gas. Sockets for all present-day types. Six plate voltages for tube tests. Meter has 4" scale and knife edge pointer for quick reading. Movement rated 100 microamperes, 200 millivolts. Adjusted for good temperature compensation. Filament voltage adjustable from 0.63 to 117 volts in 14 steps. Two easily replaceable fuses—one on each side of line. Three-position lever switches and removable roll chart permit each modification for future tube types. Attractive, portable case. 14¾x18⅝½x6½". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 24 lbs.
84 FZ 541. NET 195.51

MODEL T-2247-BV ADAPTER

Adapts Models 3413-B and 3423 above for checking TV picture tubes. Allows testing picture tube right in the shipping carton or TV receiver—saves time and increases safety. Tests for shorts; permits reading cathode emission with electronic gun in operation. Increases usefulness of tube tester. Shpg. wt., 1 lb.
84 F 539. NET 4.41

MODEL 3432-A SIGNAL GENERATOR

High-quality signal generator for AM-FM radio, black-and-white and color TV servicing. Covers complete range from 160 kc to 110 mc (220 mc using harmonics) with no skips in frequency. RF circuits are double shielded with copper-plated steel. Large, easy-to-read 6¾" etched dial. Cathode follower provides good stability by isolating oscillator from output load. Step-type attenuator provides fine control of RF output. Jacks provided for either internal modulation or audio output. Internal modulation variable 0-100% at 400 cps. Ranges selected by 7-position switch. Has 7 directly calibrated 160° scales and planetary dial drive. Coaxial output cable. Size: 15½x11½x6¼". Tubes: 12AU7, 6C4 and 6X4. For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.
84 FX 677. NET 97.51

MODEL 3441 TV-FM OSCILLOSCOPE

Wide-range 5" oscilloscope for TV-FM use. Features push-pull vertical and horizontal output amplifiers. Has 4 megacycle bandwidth. Vertical sensitivity: 10 rms mv/inch maximum. Input impedance of vertical amplifier is 2 megs in parallel with 45 mmf at input terminals. Reversible vertical input polarity. Horizontal response, from 20 cps to 150 kc. Deflection sensitivity: .15 rms v/inch. Peak-to-peak, 2¾" voltmeter reads 0-1000 volts in 8 ranges. Low range, 0.3 v. Linear sweep: 10 cps to 60 kc. Phased 60-cycle horizontal sweep and return trace eliminator for use with sweep generators. Synchronizing and horizontal sweep selector combined in same control for simplicity of operation. Has phone jack on panel connected to output of vertical amplifier for audio check of waveform under observation; for audio circuit tracing. Supplies variable saw-tooth output from 10 to 60,000 cycles; can be attenuated from 0 to 70 volts peak-to-peak. With 5UP1 cathode ray tube. Telescoping escutcheon shades cathode ray tube. Complete with coaxial cable. Size: 15½x16x11½". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 42 lbs.
84 FZ 530. NET 244.51

MODEL 9989 CRYSTAL PROBE

Crystal probe for use with Model 3441 oscilloscope above. Excellent for demodulating RF signals and signal tracing. Extremely useful in trouble shooting TV IF's—greatly increases usefulness of scope. Shpg. wt., 8 oz.
84 F 545. NET 9.31

MODEL 3434-A TV-FM SWEEP AND MARKER GENERATOR

For TV and FM receiver servicing. Continuous tuning to 243 mc. Regulated power supply for greater oscillator stability. Sweep center frequency: 0-60, 60-120 and 120-243 mc. Sweep width: 0.1 to 12 mc, continuously variable. Marker frequencies: 3.5-4.9, 19.5-29.3, 29-48.6 (fundamentals); 48.6-243 mc on harmonics. Crystal frequency: to 20 mc on fundamentals; harmonics to 243 mc (crystals not supplied). Modulation: 600 cycles in both crystal and marker frequencies. Crystal and variable marker permits simultaneous presentation of two markers. 15½x11½x8¼". With two coaxial cables, ground straps and test leads. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 27 lbs.
84 FZ 534. NET 234.71

MODEL 3439 COLOR BAR GENERATOR

For checking overall performance of color TV receivers, including color phasing adjustments, color synchronizing and color matrixing. Accurately produces 10 standard color bars corresponding to R-Y, B-Y, I and Q axis, spaced at 30° phase intervals. Crystal-controlled RF output. Built-in VTVM circuit and panel meter provide quick, easy checking of sync, subcarrier and modulation amplitudes. Sound carrier (unmodulated) assures precise receiver tuning—permits checking sound rejection and presence of beat interference between color subcarrier and sound carrier. Has brightness modulation to check possible shift of hue in bright areas or highlights. Amplitude of the color subcarrier is adjustable; allows checking color sync lock action in the receiver. Both positive and negative video signals are provided for 75 and 5000-ohm video circuits. Controls: Video and horizontal hold, subcarrier modulation, meter zero, off-on, metering selector. Modulation and sound carrier push-buttons. Completely self-contained; supplied with all cables and test leads. Panel trimmed in silver, black and red. Size: 6¼x11½x15½". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 16 lbs.
84 FX 678. NET 244.51

MODEL 3000 LINE CHECK

For rapidly and easily checking the condition of a line under load. Simply plug Line Check into outlet to be tested, set load switch to desired wattage, and press button for direct reading of line voltage. 3 position switch selects desired load of 500, 1000 or 1500 watts. Unit is portable, can easily be taken to job location. Operates on all 105-125 volt, 50-60 cycle AC lines. Indispensable when installing high wattage appliances, air conditioners, etc., on marginal lines. Prevents installation of high wattage equipment on lines that will have excessive voltage drop. Allows air-conditioning and X-ray equipment technicians, etc., to pre-check AC lines before installation is made. Size: 2¾x5½x7½". Shpg. wt., 10 lbs.
84 F 679. NET 33.81

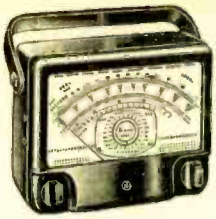
MODEL 660 LOAD-CHEK

Wattmeter-voltmeter. A valuable time-saver in servicing radio and TV sets, appliances, and many other types of electronic equipment. Quickly detects overloads and underloads caused by open or shorted tubes, components and wiring. Tests by power consumption measurement method. Power consumption of radios, TV sets, etc., is normally indicated on rear of chassis: the Load-Chek shows if power drawn from line exceeds or is less than the proper value. Power cord of unit under test plugs into convenient receptacle on Load-Chek. Watt scale gives instant indication when trouble is isolated; no need to lay down tools to check with test leads. Two 3" meters provide simultaneous wattage and voltage readings on 3x2⅛" scales. Wide window allows easy reading of both scales even in poor light. Two wattmeter ranges assure highly accurate readings on low-drain and high-drain sets. Low end of wattage scale has expanded range for use on small radios with low consumption. Single toggle switch easily changes watt scale. Ranges: 0-500-1000 AC-DC watts; 0-150 AC-DC volts. Housed in sturdy, black plastic case. Has removable leather strap handle. Size. 6x5½x2½". Wt., 4 lbs.
84 F 537. NET 28.91

Simpson Test Equipment


260


303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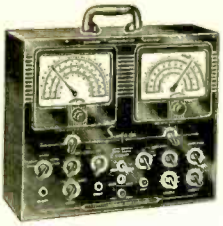
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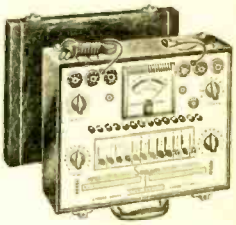
498A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MODEL 260 VOM

This VOM features extreme versatility, accuracy and ruggedness. Current consumption is practically negligible. Molded bakelite subpanel assembly has separate pockets for multipliers; high strength and excellent insulation. DC sensitivity of 20,000 ohms/volt. Reads as low as 2 microamps and ⅓ ohm, and as high as 10 amps and 20 megs. 5" meter. AC sensitivity, 1000 ohms/volt. Ranges: AC and DC volts, 0-2.5-10-50-250-1000-5000. Output volts: 0-2.5-10-50-250. DC current, 0-100 microamps, 0-10-100-500 ma and 0-10 amps; resistance, 0-2000-200,000 ohms and 0-20 megs. Db, −12 to +55 in 5 ranges. Molded bakelite case, 5¼x7x3⅛". With batteries and leads. Shpg. wt., 5 lbs.
84 F 780. NET 38.17

Model 260 RT. As above, but in "roll top" safety case with built-in test-lead compartment. Helps eliminate annoyance of misplaced leads. Provides instrument protection. Size. 6¼x9x4¾". Shpg. wt., 9 lbs.
84 F 779. NET 45.96

Hi-Voltage Probe. Extends DC range to 25,000 volts. Shpg. wt., 8 oz.
84 F 771. NET 9.75

MODEL 303 VTVM

Extremely compact, versatile, highly accurate VTVM. Has zero-center scale for FM discriminator alignment. Input resistances: DC, 10 megohms (DC probe has 1-meg isolating resistor); AC (with cable), 275,000 ohms and 200 mmf. Ranges: AC and DC volts, 0-1.2-12-60-300-1200; AF volts, 0-1.2-12-60, flat to 100 kc; resistance, 0-1000-100,000 ohms and 0-1-10-1000 megohms; db, −20 to +63 in 5 ranges; RF, 0-20 v., flat from 20kc to 100 mc, for signal tracing. Has DC polarity-reversing switch. 5" meter with easy-to-read scales. Bakelite case, 7x5¼x3⅛". Supplied with DC and AC-Ohms probes; less RF probe (see below). For 105-125 volts, 60 cycle AC. Shpg. wt., 6½ lbs.
84 F 712. NET 66.64

Model 303 RT. As above, but in "roll top" case for meter protection. Wt., 8 lbs.
84 F 725. NET 74.48

84 F 715. HV Probe. Extends DC volts range to 30,000. Wt., 1 lb. **NET** 9.75

84 F 716. RF Probe. Wt., 1 lb. **NET** ... 7.35

84 F 721. "Ever-Ready" Leather Carrying Case. Front opens, permits meter use in case. For Models 260, 303. Wt., 2 lbs. **NET** 8.57

84 F 782. Standard Carrying Case. For models 260, 303. Wt., 2 lbs. **NET** 6.61

MODEL 372 OHMMETER

An accurate, wide-range ohmmeter that easily fits into pocket or tool box. Exceptionally small size and 5-range flexibility make this unit ideal for field servicing. Employs a special 3" meter. Basic movement has a sensitivity of 85 microamperes. Ranges; 0-500 (5 ohms center), 0-5000 (50 ohms center), 0-50,000 (500 ohms center), 0-5 megohms (50,000 ohms center), 0-50 megohms (500,000 ohms center). With batteries and test leads. 3x5⅞x2½". Shpg. wt., 3 lbs.
84 F 796. NET 24.99

MODEL 269 MICROAMMETER VOM

One of the most sensitive, non-vacuum-tube type multitesters ever offered. Sensitivity, 100,000 ohms-per-volt. Lowest DC current scale, 0-16 microamps. Other features: Battery-operated; 33 ranges; big 7" dial; only 2 controls. Ranges: DC current, 0-16-160 microamps, 0-1.6-16-160 milliamps and 0-1.6-16 amps; DC volts, 0-1.6-8-40-160-400-1600-4000 (100,000 ohms-per-volt); AC volts, 0-3-8-40-160-800 (5000 ohms-per-volt); output volts, 0-3-8-40-160; resistance, 0-2000-20,000-200,000 ohms, 0-2-20-200 megohms; db −8 to +45.5 in 4 ranges (calibrated for use across 600-ohm lines). Accuracy: DC, ±3%; AC, ±5% (of full scale). Size, 8x6x3". With test leads. 4000-v. DC probe and batteries. Shpg. wt., 6 lbs.
84 F 726. NET 86.24

Hi-Voltage Probe. Extends DC range of Model 269 to 40,000 volts. 2 lbs.
84 F 742. NET 12.25

MODEL 262 VOM

(Not illustrated—similar to Model 269 above.) VOM featuring 20,000 ohms-per-volt sensitivity on DC volts. All other features and ranges same as for Model 269, except: Resistance ranges: 0-500-5000-50,000-500,000 ohms and 0-5-50 megohms. DC current: 0-80-160 microamps, 1.6-16-160 ma and 0-1.6-16 amps. Shpg. wt. 6 lbs.
84 F 727. NET 58.31

Hi-Voltage Probe. Extends DC range of Model 262 to 40,000 volts. Wt., 2 lbs.
84 F 743. NET 12.25

Model 5262 Carrying Case. Eveready Neolite carrying case for Models 269 and 262. Size, HWD. 7x8x4". Shpg. wt., 2 lbs.
84 F 728. NET 9.75

MODEL 240 HAMMETER

Self-contained wide-range AC-DC Volt-Ohm-Milliammeter originally built to accurately check high voltage and all components of transmitters and receivers. Shock-proof. Has sensitivity of 1000 ohms per volt on both AC and DC. Ranges: DC volts, 0-15-75-300-750-3000. AC volts, 0-15-150-750-3000; DC ma, 0-15-150. 750; ohms, 0-3000-300,000 (center reads 30 and 3000). Matched-pair resistors. 3" meter. Accuracy: DC, ±3%; AC, ±5%. Bakelite case. Size: 3x5⅞x2½". With battery and 3000-volt leads. Shpg. wt., 3 lbs.
84 F 787. NET 25.82

FIELD STRENGTH METERS

Model 498A. AC-operated field strength meter for measuring TV signals in any locality, including fringe areas. Extremely useful to servicemen in antenna installation. Helps determine best location for antenna; type of antenna to use, etc. Has 4 ranges: 50, 500, 5000 and 50,000 microvolts, in continuously variable positions. Grey case, 8x11x8½". For 110-120 v., 50-60 cyc. AC. Wt., 15 lbs.
84 FX 737. NET 145.53

Model 498D. As above but also works from self-contained rechargeable storage battery (not supplied), auto battery, etc. For 110-120 v., AC and 6 volt DC operation. Wt., 17 lbs.
84 FX 740. NET 152.10

Storage Battery. For use with 498D. Has 12 amp. hr. capacity. Shpg. wt., 5 lbs.
98 J 005. NET 9.31

MODEL 1000 TUBE TESTER

Tests all receiving tubes including miniatures and subminiatures with a linear or circular base arrangement. Meter shows percentage of rated plate conductance to give a very accurate indication of tube condition. Also provides highly dependable short and leakage tests—shows exact resistance values for shorts and inter-element leakage. Easy-to-read roll-chart; additions can be made without removal. 4½" dial. Fuse socket on panel. Burgundy case; gray panel. 15¾x11¼x6". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 19 lbs.
84 FX 723. NET 132.30

MODEL 479 SIGNAL GENERATOR

Three-in-one AM marker, FM sweep generator and crystal calibrator. For aligning TV and FM receivers. Oscillator ranges for both units: AM, 3.3-15.6 mc, 15-76 mc, 75-250 mc (30% modulated at 400 cycles or unmodulated); FM, 2-120 mc and 140-260 mc. Dial marked for harmonic use for UHF. *Sweep rate:* 60 cycles (line frequency). *Accuracy:* 0.1%. *Sweep width:* 0-15 mc. 400-cycle audio signal. Has two 7" scales. Supplied with 2 oscilloscope cables, impedance matching output cable, signal input cable and manual. *Size:* 17x14x7½". For 105-125 v., 60 cycle AC. Shpg. wt., 43 lbs.
84 FZ 710. NET 318.50

MODEL 480 GENESCOPE

Same as model 479 above, but has built-in 3" oscilloscope. 3 inv/inch vertical sensitivity, 70 mv/inch horizontal sensitivity. Linear sweep, 3 cps to 60 kc. Size: 22x14x7½". For 105-125 v., 60 cycle AC. With leads, crystal probe and manual. Shpg. wt., 58 lbs.
84 FZ 709. NET 465.50

MODEL 406 CHROMATIC AMPLIFIER

(Not illus.) For use with 480 Genescope and 479 Signal Generator. Steps up test signal for checking low voltage color circuit; tests I, Q and Y signals. With HF probe. Wt., 4 lbs.
84 F 731. NET 24.45

Chromatic Probe. New, peak-to-peak chromatic probe for use with above. Wt., 6 oz.
84 F 732. NET 9.75

MODEL 390 VOLT-AMP WATTMETER

Measures power consumption of any 60 cycle AC appliance, radio or TV. Speeds trouble-shooting. Ranges: AC volts, 0-150 and 0-300; amps, 0-3 and 0-15; watts, 0-300, 0-600, 0-1500 and 0-3000. Has 3" meter. Case size 5⅞x3x2½". Supplied with break-in plug and leads. For 60 cycle AC only. Shpg. wt., 4 lbs.
84 F 788. NET 38.71

Model 370. AC Ammeter. (Not illus.) Ranges: 0-1-2.5-5-10-25 amperes. Built-in current transformer. 3" meter. 3x5⅞x2½". Less leads. For 60 cycle. Shpg. wt., 3 lbs.
84 F 794. NET 19.55

Model 379. Battery Tester. (Not illus.) Tests all radio and hearing aid batteries from 1.5 to 90 volts. 3" dial. With needle-type prods. Size: 3x5⅞x2½". Shpg. wt., 3 lbs.
84 F 764. NET 23.23

Test Instruments Available on ALLIED's Easy Payment Plan—See Page 315


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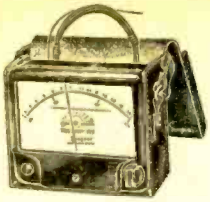
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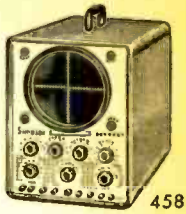
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SIMPSON QUALITY TEST INSTRUMENTS

MODERN SERVICE UNITS

MODEL 355 MIDGETESTER

Exceptionally accurate and ultra-compact VOM. A trifle larger than a package of cigarettes! 10,000 ohm/volt sensitivity on AC and DC. Accuracy: ±3% on DC; ±5% on AC. 100 microamp, self-shielded and shock-proof meter movement. Handy ohms zero-adjust thumbwheel on side of case. Ranges: AC and DC volts, 0-3-12-60-300-1200. Resistance: 0-10,000-100,000 ohms, 0-1-10 megs. Function and range selection by insertion of leads. Size: 2¾x4½x1". With batteries and test leads. Shpg. wt., 10 oz.
84 FC 734. NET 29.35

Type 6355 Case. For above. Black leather with zipper. Shpg. wt., 3 oz.
84 F 741. NET 2.89

MODEL 388 THERM-O-METER

Extremely accurate thermocouple thermometer. For gases, liquids or solids. Reads —50° to 1000° F. on 7" scale. Has 7½-ft. general-purpose interchangeable thermocouple probe. 6x 7⅛x2⅛". With battery, probe. 6 lbs.
84 F 738. NET 58.31

Model 388-3L. As above, but with provision for 3 probes. Allows temperature readings in 3 different areas by rotating switch.
84 F 744. NET 63.21

Probes. Any combination of probes listed below can be used with Model 388-3L. Wt., 1 lb.

Type 10-890187 Surface Temp. Probe. Can be interchanged with general-purpose probe supplied with Model 388. 7½-ft.
84 F 745. NET 6.81

Type 10-890190 General-Purpose Probe.
84 F 746. NET 4.85

Type 6262 Case. For 388, 388-3L. 5 oz.
84 F 728. NET 9.75

CAPACITOR CHECKER AND COLOR TV TEST UNITS

MODEL 383 IN-CIRCUIT CAPACITOR LEAKAGE TESTER

Unique new capacitor leakage tester. Actually checks capacitors at full rated working voltage right in the circuit—without disconnecting either end of the capacitor! Checks paper, mica and ceramic capacitors 3 ways: Makes static test for leakage; makes dynamic test for leakage; makes voltage breakdown test. New Simpson circuit distinguishes between leakage resistance and circuit resistance. Accurately checks capacitors from 1 mmf to 0.25 mfd; useful up to 1 mfd. Detects leakage from short circuit to hundreds of megohms. Also checks leakage of wiring, switches, terminal strips, transformers, plugs, connectors, etc. In gray steel case, 8¾x11⅜x8½". For 110-120 v., 60 cycle AC. Shpg. wt., 12 lbs.
84 FX 632. NET 78.35

MODEL 434 WHITE DOT GENERATOR

New, "Varidot" white dot generator—for linearity adjustment of black and white TV sets and convergence adjustments on color sets. Provides white dot pattern with variable dot size (from 1 to 8 scanning lines, with corresponding dot widths), and variable dot number from 8 to 20 horizontal dots and 6 to 15 vertical dots. Positive or negative video output for checking transient response of video amplifiers. Hum checking feature. Vertical and horizontal sync pulses for correct aspect ratio —adjustable vertical sync can be operated at line frequency or off line frequency. Modulated RF output; on fundamentals from channels 2 to 6. 300-ohm RF output. Attenuator control. Gray case, 8x11x8½". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.
84 FX 739. NET 144.55

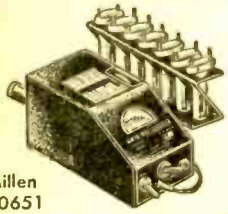
MODEL 458 COLORSCOPE

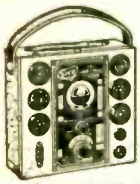
New, 7" dual bandwidth, oscilloscope. Highly sensitive and accurate—sturdily built to assure dependable service. Skillfully engineered for efficient servicing of both black-and-white and color TV receivers. Accurately displays color burst frequency. Other features include: Properly compensated wide band vertical amplifier stages; vernier and compensated decimal step attenuator for continuous signal voltage control; CRT balanced deflection; tight locking of patterns. Excellent square wave response provides accurate representation of sync pulses and composite waveform patterns for trouble-shooting video, sync and sweep circuits. Horizontal sweep to 50 kc for expansion of high frequency waveform detail and color burst. Provision for intensity modulation of cathode ray tube. Graph screen.

On wide-band operation, frequency response is ±1 db to 4.5 mc and is useful beyond 7 mc. On narrow band operation, frequency response is ±3 db from 10 cycles to 100 kc. Deflection sensitivity: In wide band position, 25 millivolts rms per inch; in narrow band position, 10 millivolts rms per inch. Calibrating voltage, 6.3 volts rms. Rise time (wide-band position): Less than 0.10 microseconds. 100% response at 3.58-mc color burst.

Negligible loading of circuit being checked. Wide range sweep. A completely reliable and highly versatile scope, designed to meet the demands of the professional TV serviceman or electronics technician. Complete with two sets of leads and detailed instruction manual. Size: 13⅝" high, 11" wide, 17¼" deep. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 32 lbs.
84 FZ 631. NET 195.95

SPECIAL PURPOSE TEST INSTRUMENTS


Millen 90651


Seco GCT-5


Hycon 615


Hycon 622

MILLEN GRID DIP METER

Model 90651. Accurate, highly versatile and calibrated RF oscillator unit. Has 2" G.E. meter. Used as: (1) Grid Dip Oscillator; (2) Oscillating Detector; (3) Signal Generator; (4) Absorption Wavemeter. Specific uses include: receiver alignment; determination of transmitter tuned circuit frequency; finding parasitic oscillations; pretuning wave traps; determination of inductance and capacity. Most commonly used as an oscillating frequency meter for determining resonant frequencies of de-energized tuned circuits. Built-in power supply plus connections for battery operation. With 7 polystyrene-encased plug-in coils covering 1.7-300 mc. Polystyrene case assures permanence of calibration. To extend range, use coils below. Calibrated 270° dial. Black metal case, 7x3⅛x 3⅛". For 105-125 v., 50-60 cycle AC. Shpg. wt., 3½ lbs.
84 F 962. NET 61.50

GRID DIP METER ACCESSORIES

No. 46721. Extension Probe. Use with coils from 220 kc to 75 mc. Shpg. wt., 6 oz.
84 F 996. NET 1.95

LOW-FREQUENCY COILS

No.	Type	Range KC	EACH
84 F 966	46702	925-2000	6.72
84 F 967	46703	500-1050	
84 F 968	46704	325-600	
84 F 972	46705	220-350	

SECO GRID CIRCUIT TUBE TESTER

Model GCT-5. Compact, new grid circuit tube tester. Has 7 wired sockets for testing tube types of any voltage from 3 to 12 volts. Provides positive continuity check of series-strung heaters. Quickly and positively checks: Control grid emission; grid-to-cathode shorts; cathode-to-heater shorts; gassy tubes. Has "Magic Eye" Bad-OK-Bad indicator; filament voltage selector and tube chart on front panel. Size, 6½x6½x2½" deep. Leather carrying handle. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 4 lbs.
84 F 639. NET 29.35

HYCON DIGITAL VTVM

Model 615. Revolutionary new VTVM—no needle, no scale. Big rotating numbers move to correct reading—no other numbers are visible. Illuminated decimal point on all scales; illuminated polarity sign. Eliminates interpolation and multiple scale reading errors. Perfect for production line or lab use, rapid radio-TV servicing, etc. 1 millivolt sensitivity on low scale. Overload protection. Combines field-use ruggedness with precision design. Accuracy ±1% on DC and resistance; ±2% on AC. Ranges: DC, 0-1-10-100-1000 volts; AC, 0-10-100-1000 volts. Resistance: 0-1000-10,000-100,000 ohms. 0-1-10 megs. DC input impedance 11 megohms. AC frequency response (direct probe): 30 cycles to 3 mc. Steel case, 8½x11x7½". For 100-125 volts, 60 cycle AC. Shpg. wt., 18 lbs.
84 FX 849. NET 374.50

HYCON 5" OSCILLOSCOPE

Model 622. New, laboratory-quality oscilloscope. Accurate enough for research, yet ruggedly designed for day-in, day-out servicing. Offers unusual convenience and versatility. Particularly well-adapted to tracing of random signals or low duty cycle pulses. Deluxe features include: Automatic triggered sweep obtained by simply turning sync-level control—reduces adjustments, makes synchronization positive, eliminates damage to phosphor lining of tube face in absence of signal. Employs 5" flat-faced cathode ray tube, for undistorted trace from edge-to-edge. Preset TV sweep frequencies. Illuminated scale with dimmer.

Specifications. *Vertical amplifier.* Frequency response: 6 cycles to 6 mc. ±3 db; down less than 0.5 db at 4 mc. Sensitivity: 10 millivolts rms (28 mv peak-to-peak) per inch. Input impedance: 1 megohm, 40 mmf (±2mmf) over entire attenuator range. *Horizontal amplifier.* Frequency response: 1.5 cycles to 500 kc, ±3 db. Sensitivity: 75 millivolts rms (210 mv peak-to-peak) per inch. Input impedance: 100k ohms, 25 mmf. *Sweep Characteristics.* Speed: 0.03 sec/in. to 3μ sec/in. Ranges: 10 cps to 300 kc. Built-in vertical and horizontal at 7575 and 30 cps. 60 cps, variable phase line. Automatic triggered or straight triggered (by switching). *Synchronization.* Internal, external, positive, negative or AC line. *Calibration.* Internal 60 cps square-wave .05 volts peak-to-peak, ±3%. Size: 13⅝x10½x18¾". For 100-125 volts, 50-400 cycle AC. 43 lbs.
84 FZ 848. NET 406.00

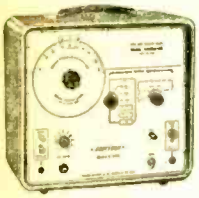
Precision Test Equipment


E-200-C


E-400

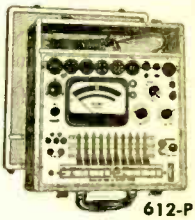

ES-550


ES-520


E-300


10-12-P


10-15


612-P

New Deluxe Models. An excellent selection of very attractive, custom-styled test instruments. Steel cases are finished in handsome blue-grey ripple and have saddle-stitched, "snap-flat" carrying handles. Deluxe, satin-brushed aluminum panels have deep-etched blue and red characters. **Standard Models.** Electrically identical to the deluxe models, but are housed in standard black steel cabinets with black aluminum panels.

E-200-C DELUXE SIGNAL-MARKER GENERATOR

Deluxe marker generator for TV alignment and efficient servicing of AM and FM receivers. 9 bands covering 88 kc to 240 mc; to 60 mc on fundamentals. Accuracy to 1%. Uses highly stable, electron-coupled oscillator. Outputs: Unmodulated RF; 400-cycle modulated RF; and 400-cycle sine wave audio output. Control for variable modulation, 0-100%. 6½" full-vision, direct reading dial with 0-100 vernier scale. Supplies 0-50 volts AVC-AGC voltage for alignment by constant bias procedure. With coaxial cable and "LO-HI" connectors. Deluxe cabinet 11½x13x6¾". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.

87 FX 000. NET 85.75

Standard Model E-200-C. As above, but standard cabinet, 10½x12x6".
84 FX 409. NET 80.85

E-400 DELUXE SWEEP GENERATOR

Sweep signal generator for television and FM servicing. Frequency range is 3-900 mc; to 240 mc on fundamentals; read directly on panel dial. Has narrow and wide-band sweep—frequency widths: 0-1 mc and 0-15 mc. Permits easy band width setting for both FM and TV; Built-in base-line reference. Self-contained multiple crystal marker-calibrator. Supplied with 2 crystals (2 mc and 4.5 mc). Special socket accommodates 4 crystals. Full vision, 6½-inch dial. Phasing control. Deluxe cabinet, 11½x13x6¾". For 110-120 v., 50-60 cycles AC. Shpg. wt. 24 lbs.

87 FZ 001. NET 147.00

Standard Model E-400. Same as E-400 Deluxe but standard cabinet, 10½x12x6".
84 FZ 438. NET 142.10

E-300 DELUXE SIGNAL GENERATOR

Accurate sine and square wave signal generator for performance testing audio amplifiers, TV video amplifiers, carrier current systems and other wide-range devices. Four variable-frequency sine-wave ranges, 20 cycles to 200 kc. Three variable-frequency square-wave ranges, 20 cycles through 20,000 cycles. Four fixed, high-frequency square-wave ranges, 50-100-250-500 kc. Separate output circuits with pilot lamps for variable and fixed-frequency ranges. Output flat within ±1 db; less than 1% distortion. 5¼" "no-glare" dial. Deluxe cabinet. Size 11½x13x6¾". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 25 lbs.

87 FZ 005. NET 176.40

Standard Model E-300. As above, but standard cabinet, 10½x12x6".
84 FZ 425. NET 171.50

ES-550 DELUXE 5" OSCILLOSCOPE

New wide-band scope. Excellent for servicing and lab work, including color TV. Push-pull vertical amplifier has 10 mv/inch sensitivity; response within 1 db, 10 cps to 3.5 mc; (3 db at 5 mc). Push-pull horizontal amplifier rated 100 mv/inch sensitivity; response within 1 db, 20 cps to 1 mc (3 db at 2 mc). Sweep frequency, 10 cycles to 100 kc; also 30 and 7875 cycles synchronized sweep. Negative and positive internal sweep. Vertical pattern reversal switching. Direct reading, peak-to-peak voltage calibrator. Deluxe cabinet, 8¼x14½x18½". For 110-120 volts, 50-60 cycle AC. Shpg. wt., 47 lbs.

87 FZ 002. NET 210.70

STANDARD MODEL ES-550. Same as above, but standard cabinet.
87 FZ 003. NET 205.80

ES-520 DELUXE 5" OSCILLOSCOPE

Expertly engineered, moderately priced 5" oscilloscope. Push-pull vertical and horizontal drive. Vertical: Sensitivity, 20 mv/inch; response, 3 db at 500 kc. Horizontal: Sensitivity, 50 mv/inch; response, 3 db at 200 kc. Peak-to-peak voltage calibrator. Negative or positive internal sweep. Sweep frequency, 10 cps to 30 kc. In deluxe cabinet, 8¼x14½x16½". For 110-120 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

87 FZ 004. NET 129.85

Standard Model ES-520. Same as above, but standard cabinet.
84 FZ 493. NET 124.95

Model SP-5 Probe Set. 4 probes (high-Z low-capacity, crystal, isolating, shielded); coax cables; connectors. For above scopes. Shpg. wt., 3 lbs.
84 F 491. NET 23.03

612 CATHODE CONDUCTANCE TUBE TESTERS

Moderately priced, portable tube testers. Employs standard RETMA emission circuit. Quick readings of "Replace-Good"; also numerical values. Tests all modern radio and TV tubes. Provision for testing ballast units. Individual test for each section of multi-section tubes. Free-point, 10-element lever-selection. Filament voltages from .75 to 117 volts. Easy-to-read 5¼" meter, rated for 2% accuracy. Checks for shorts between elements. Noise and capacitor test pin jacks. Dynamic "under-load" test for all popular A, B and C radio batteries. Brass-geared, high-speed roll chart for quick settings. Provision for adding test data. For 110-120 v., 50-60 cycle AC. Shpg. wt., 19 lbs. Choice of 4 styles:

Deluxe Model 612-P. Hardwood case. Two-color panel. Size: 12x13x6".
87 FX 006. NET 87.71

Standard Model 612-P. Hardwood case. Black panel. 12x13x6".
84 FX 433. NET 82.81

Deluxe Model 612-MCP. Deluxe, blue-grey metal case, 11½x13x6¾".
87 FX 007. NET 85.01

Standard Model 612-MCP. Standard black metal case, 10½x12x6".
84 FX 444. NET 80.11

Deluxe Model 654-P. Same as deluxe 612-P but has built-in, 24-range, 20,000-ohms-per-volt, DC multimeter. Shpg. wt., 20 lbs.
87 FZ 008. NET 117.60

10-12 ELECTRONAMIC TUBE TESTERS

Extremely accurate tube tester. Feature the electronamic test circuit. AC voltages are applied to tube elements to provide a dynamic test for mutual conductance and other tube characteristics. Tubes are tested along a wide portion of their characteristic curves. For all modern radio and TV tubes including sub-miniatures and acorns. Choice of 17 filament voltages from .75 to 117 volts. Free-point element selection for up to 12-pin types. Has direct facilities for battery, ballast, pilot bulb and capacitor testing. Checks for shorts between tube elements, noise and continuity. 5¼" full-vision meter; accuracy within 2%. Double-window, high-speed roll chart has space for adding new tube data. "Replace—Good" and numerical readings. For 110-120 volts, 50-60 cycle AC. Shpg. wt.: Portable models, 24 lbs; counter models, 32 lbs. Choice of 4 styles:

Deluxe Model 10-12-P. Portable hardwood case. Two-color panel. 17¼x13¾x6¼".
87 FZ 009. ..... 115.15

Standard Model 10-12-P. Portable hardwood case. Black panel. 17¼x13¾x6¼".
84 FZ 426. NET 110.25

Deluxe Model 10-12-C. Deluxe metal counter case, 17x17⅞x7½".
87 FZ 010. NET 119.80

Standard Model 10-12-C. Black metal counter case, 17x17⅞x7½".
84 FZ 430. NET 114.90

Deluxe Model 10-54-P. Same as Deluxe Model 10-12-P but has built-in, 35-range multitester. DC sensitivity, 20,000 ohms/volt.
87 FZ 011. NET 146.02

Standard Model 10-54-P. Same as deluxe 10-54-P, but black panel.
84 FZ 422. NET 141.12

10-15 DELUXE ELECTRONAMIC TUBE TESTER

Deluxe tube and set tester for counter display. Has huge 9" meter and chrome reflector—gives customers convincing demonstration of tube and battery condition. Includes electronamic tube testing circuit plus radio battery tester—has same circuit features as the 10-12 testers above. Supplies quick readings in simple terms of Replace—Weak—Good. A great merchandising aid—promotes customer confidence. Deluxe metal case, 24" high, 17½" wide. Sloping front. Bottom depth, 10"; top, 4". For 110-120 v., 50-60 cycle. Shpg. wt., 45 lbs.

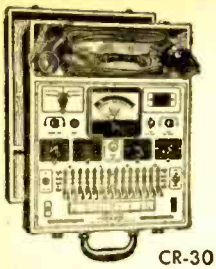
87 FZ 012. NET 160.72

Standard Model 10-15. As above, but standard metal case.
87 FZ 013. NET 155.82

Model PTA Cathode-Ray-Tube Adapter. For use with any Precision Apparatus tube tester to test all picture tubes. Shpg. wt., 1 lb.
84 F 492. NET 6.61

Model TV-2 HV Probe. Extends DC range to 30,000 v. For multitester models 654, 10-54 and 10-15. Shpg. wt., 2 lbs.
84 F 446. NET 14.45

Letter Z in Stock Number Indicates Express Shipment Only


CR-30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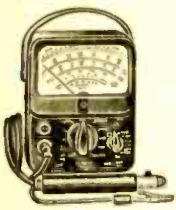
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PRECISION APPARATUS TEST INSTRUMENTS

CR-30 CATHODE RAY TUBE TESTER

This expertly designed tester provides an extremely accurate indication of picture tube condition. Tests any size CR tube. Measures actual beam current in the electron gun. Detects defective CR tubes which would pass an ordinary cathode emission test.

Uses free-point, 14-lever selection system to provide an independent test of each tube element. Test procedure is very simple. No need to remove picture tube from TV receiver; also tests CR tubes in factory carton. Shows shorts, leakage and tube condition on a large 4½" meter. Reading immediately shows if tube has sufficient brightness.

Has voltage-regulated, bridge-type VTVM, metered line-voltage adjustment, speed roll-chart, test cable. In portable hardwood case, 6¼x13¾x17¼". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 22 lbs.
84 FZ 448. NET 106.82

MODEL 68 VTVM

New AC-operated VTVM for all radio and TV servicing requirements. Accurate, and versatile—has many uses for inspection work and other industrial applications. 5 zero-center ranges for FM discriminator balancing, voltage polarity determinations, etc.

Large, 5¼" wide-angle meter with 400 microamperes sensitivity. Accuracy, ±2%. Multiplier resistors are deposited film and wire-wound types rated for accuracy within ±1%. High input resistance of 13.3 megohms on DC ranges.

Ranges: DC volts, 0-3-12-60-300-1200. Resistance, 0-1000-100,000 ohms; 0-1-100-1000 megohms. AC volts, 0-3-12-60-300-1200. Peak-to-Peak volts, 0-8-32-160-800-3200. Also 5 stabilized zero-center ranges. Blue-gray ripple steel cabinet, 5⅞x7¾x3½". For 110-120 v., 60 cycle AC. Shpg. wt., 9 lbs.
87 F 018. NET 48.51

MODEL 78 BATTERY VTVM

This newly developed VTVM offers unusual convenience and versatility. Battery powered—can be used anywhere. Designed for outstanding VTVM performance and long battery life. Batteries are standard portable radio type, easily replaceable. An excellent instrument for radio-TV servicemen, field engineers, etc.

Large, easy-to-read 5¼" meter. Extra-sensitive—rated at 100 microamperes sensitivity, ±2% accuracy. All multipliers rated for ±1% accuracy. Resistors are deposited film and wire-wound type. High input resistance—13.3 megohms on all DC ranges. Extra-high input impedance on AC ranges—8 megohms, 67 mmf.

Ranges: Resistance, 0-1000-100,000 ohms; 0-1-100-1000 megohms. Zero-center DC volts, 0-1.5-6-30-150-600-1500. AC volts (rms), 0-3-12-60-300-1200. Blue-gray ripple case, 5⅞x7¾x3½". With batteries and instructions. Shpg. wt., 9 lbs.
87 F 019. NET 56.35

Model TV-4 High-Voltage Probe. For Models 68 or 78 VTVM. Extends DC voltage range to 60,000 volts. Shpg. wt., 2 lbs.
84 F 445. NET 14.45

MODEL 88 VTVM

Highly sensitive vacuum tube voltmeter. Employs full-bridge VTVM circuit with 1% multipliers and shunts for extremely accurate readings. 5¼" meter with 200 microamp sensitivity, ±2% accuracy. Reads AC rms in 6 ranges: 0-1.2-6-12-60-300-1200 volts. 6 peak-to-peak AC volt ranges: 0-3.2-16-32-160-800-3200. 5 resistance ranges: 0-1000-10,000 ohms; 0-1-100-1000 megohms. 6 DC ranges: 0-1.2-6-12-60-300-1200 volts with 26⅔ meg input resistance. Molded case, 5¼x7x3½". For 110-120 v., 50-60 cycle AC. Shpg. wt., 8 lbs.
84 F 680. NET 68.36

MODEL 98MCP DELUXE VTVM

A deluxe VTVM for accurate measurement over 55 wide-spread ranges. Accurate response to pulsed waveforms. Extra-large 7" meter with 200-microampere sensitivity and accuracy of ±2%. Ranges: Zero-center DC volts, 0-1.2-6-12-60-300-1200 (Impedance, 26.6 megs). Resistance, 0-1000-100,000 ohms; 0-1-10-100-1000 megohms. DC volts, 0-1.2-6-12-60-300-1200 (impedance, 13.3 megs). AC volts (rms), 0-1.2-6-12-60-300-1200. P-to-P AC volts, 0-3.2-16-32-160-800-3200. DC current, 0-300 microamperes; 0-1.2-6-30-120-600 ma; 0-1.2-12 amps. 6 db ranges, −20 to +63 db. In custom-styled, metal cabinet with brushed aluminum panel. Size, 11½x13x6⅝". With 3-way probe. For 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.
87 FX 014. NET 107.31

Model 98MCP Standard VTVM. As above, but standard black ripple cabinet and black panel.
87 FX 015. NET 102.41

Model 98P Deluxe VTVM. Same as 98MCP Deluxe, but portable, hardwood cabinet.
87 FX 016. NET 110.00

Model 98P Standard VTVM. Like 98MCP Standard, but portable, hardwood cabinet.
87 FX 017. NET 105.10

Model TV-8 High-Voltage Probe. For Model 88 or 98 VTVMs. Extends DC voltage range to 60 kilovolts. Shpg. wt., 2 lbs.
84 F 681. NET 14.45

Model RF-10A High-Frequency Probe. For above VTVMs. Extends response to 300 mc. Shpg. wt., 2 lbs.
84 F 419. NET 14.11

MODEL 120 MULTI-RANGE TESTER

Highly sensitive VOM. Has more ranges than most meters of its type and size. Ranges: AC, DC, and output volts, 0-1.2-3-12-60-300-600-1200-6000 with 5000 ohms/v on AC and 20,000 ohms/v on DC; DC current, 0-60-300 μa, 0-1.2-12-120-600 ma, 0-12 amps; resistance, 0-200-2000-200,000 ohms, 0-2-20 megs; 8 db ranges, −20 to +77. 5¼" meter. With batteries and test leads. 5¾x7x3". Wt., 5 lbs.
84 F 490. NET 39.15

Model LC-3 Leather Case. For Model 120. Top-grain cowhide. Shpg. wt., 3 lbs.
84 F 496. NET 9.31

Model TV-2B HV Probe. For Model 120. Extends DC range to 30,000 v. Wt., 2 lbs.
84 F 495. NET 14.45

Model ST-1 Retractable Stand. For Models 88, 120. Convenient 45-degree table mount. Shpg. wt., 1 lb.
87 F 020. NET ..... 98¢


431A


312

CHICAGO INDUSTRIAL TEST EQUIPMENT

MODEL 431A VOM

An exceptional value in a convenient, accurate, 18-range volt-ohmmeter. Has dependable, high-quality 860-microampere meter movement. All multipliers within 1% tolerance to assure high accuracy on each range. Copper-oxide rectifier for AC.

Ranges: AC-DC volts, 0-15-30-150-300-1500-3000 (at 1000 ohms per volt); DC current, 0-1.5-150 ma and 0-7.5 amps; resistance, 0-10,000-100,000 ohms, 0-1 meg. (center scale readings, 50, 600 and 6000 ohms).

Housed in handsome gray Hammerloid case made of durable aluminum. Compact size: 6¼" high, 3¼" wide and 5¾" deep. With four penlight cells, leather carrying strap and leads. Shpg. wt., 3½ lbs.
84 F 309. NET 19.11

MODEL 312 VOM

A pocket-size, 6-range VOM at unusually low cost. This ultra-compact meter is excellent for convenient, on-the-spot testing. Has 2" meter with hairspring, repulsion-type movement. Reads: DC volts, 0-25-50-125-250. AC volts, 0-25-50-125-250. DC ma, 0-50. AC ma, 0-50. Resistance, 100,000 ohms full scale, with 1600 ohms half-scale reading. Capacitance, .05-15 mfd. Resistance ranges operate from 110-120 volt line—no batteries to replace. In sturdy bakelite case, 3⅞x2¼x1¾". With power cord, less test leads. Power cord may also be used for testing line voltage. For 110-120 v., 60 cycle AC. Shpg. wt., 1¼ lbs.
84 F 306. NET 8.82

SENCO TUBE FILAMENT CHECKER

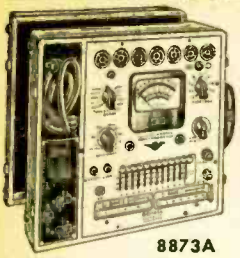
Model FC-4. Handy new tube checker. Quickly locates bad tubes in series filament TV receivers such as G.E., Admiral, Motorola, Crosley, etc. Test is extremely simple. Power cord is disconnected from TV set and plugged into checker. The tube in question is inserted into one of 4 sockets—if neon lamp goes out, filament is good. Also checks voltages (100-600 v.) and tests for continuity of appliances, motor windings, etc. Size, 3¼x4x1¼". With leads. For 110-120 v., AC or DC. Shpg. wt., 1 lb.
84 F 697. NET 2.89

HAMMOND INDUSTRIES QUIK-CHEX TESTER

Battery-operated, portable continuity checker. Checks open or intermittent tube filaments. Accommodates octal, loctal, seven and nine-pin miniature tubes. Also checks fuses and pilot lamps. If tube is good indicator lamp lights at full brilliance. No indication, faint or intermittent light indicates a defective tube. Relative brilliance of indicator can also be used to check condensers for shorts or leakage, and resistors for continuity or large changes in value. A time-saver for checking continuity of antenna lead-in lines on folded dipole installations. Other applications include checking generators, motors and electrical appliances. Size: 4⅞x3¾x2¼". Less battery and test leads (battery—Stock No. 80 J 911, $2.77; test leads—Stock No. 42 N 240, $1.32). Shpg. wt., 1 lb.
84 F 016. NET 4.95

For Complete Product and Manufacturers Index, See Pages 317-320

Radio City Test Equipment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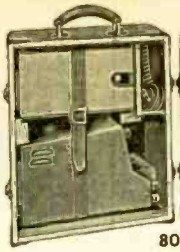
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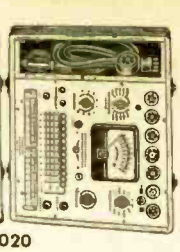

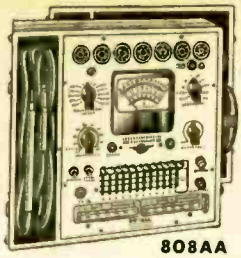
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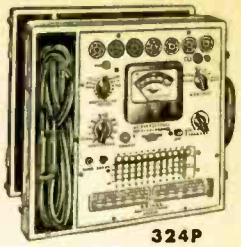
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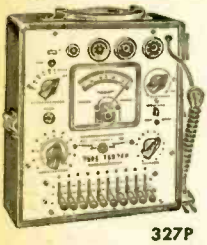
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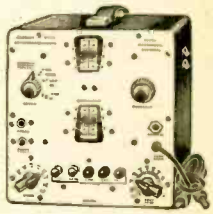
750


706A


780

MODEL 8873A SERVISHOP

The extremely versatile 8873A Servishop combines a tube tester, VTVM and FM-AM signal generator—all in one convenient portable case. Consists of Model 808AA Tube Tester-VTVM and the Model 730 AM-FM Signaligner. Tests all modern tubes, including miniature, sub-miniature and noval base types; also checks and reactivates picture tubes. The 17-range VTVM measures AC and DC volts to 1000, resistance to 1000 megohms, db from −20 to +62. Signal generator provides all required fixed frequencies for aligning AM and FM broadcast bands and IF's; also provides 400-cycle audio tone. With tubes, batteries, HVMP-1 hi-voltage probe and leads. In oak carrying case, 16½x12¾x5¼". For 105-125 volts, 60 cycle AC. Shpg. wt., 19 lbs.
84 FX 364. NET 130.29

MODEL 730 "SIGNALIGNER" SIGNAL GENERATOR

(Not illustrated.) AM-FM signal generator. Fixed-frequency design provides exact frequencies needed—speeding up alignment of AM and FM receivers. Frequencies available: 1500 kc and 550 kc for broadcast band alignment; 456 and 465 kc for AM IF alignment; 88 mc and 108 mc for FM band alignment; 10.7 mc and 9.1 mc for FM IF alignment; FM section is frequency-modulated for use with ratio detectors; deviation is plus and minus 500 kc. For AM, AF modulation is provided at 400 cycles; 400 cycles also is available separately. Calibrated to be accurate within 1%; trimmers permit recalibration (to obtain 460 kc for IF's, for example). Attenuator provides very smooth control of output. Size, 7x2¼x2¾". Complete with tubes and shielded output cable. For 105-125 volts, 50-60 cycle AC, or DC. Shpg. wt., 4 lbs.
84 F 332. NET 27.37

MODEL 8020 FM-TV SERVISHOP

Here's a complete "service shop" in a single portable case. Consists of: Model 750 TV Signal Generator, Model 533M Midgetscope, Model 808AA Tube Tester-VTVM and the Model HVMP-1 Probe. Checks, tests and aligns TV (UHF and VHF) and FM receivers from antenna to picture tube. Signal generator uses an inductuner for 0.5% accuracy over range of 9-900 mc. Provides horizontal or vertical bars, or crosshatch pattern, on all channels. 3" scope features high sensitivity and wide response. Tube tester checks all modern tubes, including picture tubes. VTVM has 17 ranges; probe supplied extends DC volts range to 30,000. Oak case, 17x14½x12½". With tubes and leads. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 45 lbs.
84 FZ 365. NET 303.80

MODEL 8023 AM-FM-TV SERVISHOP

(Not illustrated.) An instrument with a wide range of features. Handles virtually all jobs in the service shop and in the home. Consists of Model 730 AM-FM Signal Generator, Model 750 FM-TV Signal Generator, Model 808AA Tube Tester-VTVM, Model 533M Midgetscope—and the Model HVMP-1 High Voltage Probe. For testing and aligning all circuits in AM, FM and TV receivers (UHF as well as VHF). All in one convenient portable case. With tubes, batteries and leads. Size, 17x14½x12½". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 45 lbs.
84 FZ 366. NET 321.44

MODEL 808AA DO-ALL TUBE TESTER-VTVM

Consists of the 324P Tube Tester and a CRT tester-reactivator, plus a VTVM. Checks all modern tubes including miniatures, sub-miniatures and magnetically deflected TV picture tubes. Easy-to-read 4½" meter. Has new fast-operating double Rollindex. 20-range VTVM uses a balanced bridge type push-pull circuit. Input impedance of 25 megohms for minimum current drain. Has zero center scale for discriminator alignment. Ranges: AC and DC volts, 0-5-25-100-250-1000; resistance, 0.2 ohm to 1000 megohms in 5 ranges; db, −20 to +62 in 5 ranges. Accuracy: AC, ±5%; DC, ±3%. Also checks capacitors for shorts and leakages. Oak carrying case, 12½x12¾x4¾". With test leads, isolation probe and batteries. For 105-125 volts, 60 cycle AC. Shpg. wt., 12½ lbs.
84 FX 333. NET 97.95

Model HVMP-1. High-voltage multiplier probe. Extends DC range of VTVM in Model 808AA above, to 30,000 volts.
84 F 334. NET 8.77

MODEL 324C TUBE TESTER

Tube and battery checker. Tests all TV and radio tubes including B-W picture tubes—checks color picture tubes with PTA-2 adapter listed below. Sockets for standard 4, 5, 6, 7, octal, loctal, miniature, sub-miniature and hearing-aid types. Also checks transmitting tubes, gaseous rectifiers, tuning indicator tubes, ballasts and pilot lamps. Large-scale 4½" meter gives easy-to-read indications. Has new, fast-operating double Rollindex. CRT tester checks all magnetically deflected picture tubes right in the receiver or carton. Locates and isolates shorts. CRT tester also can be used to reactivate picture tubes after brightness has fallen off. Battery tester will test all popular portable battery types under load. Open style metal case. Complete with adapter cable for CRT's. Size, 13¾x12¼x4". For 105-125 volts 60 cycle AC. Shpg. wt., 11 lbs.
84 FX 367. NET 68.55

Model 324P Portable Type. Same as model 324C above, but housed in portable carrying case with removable, slip-hinge cover. Size, 16¼x14¼x5". With battery test leads. Shpg. wt., 13 lbs.
84 FX 368. NET 77.91

84 F 628. PTA-2. For color tubes. **NET** 9.75

MODEL 534 DC MIDGETSCOPE

New, compact and lightweight 3" oscilloscope. Combines linear sweep with DC amplifier for color TV restorer circuits. With all controls on front panel and CR tube tilted for best viewing angle, this fine scope is ideal for on-the-spot servicing as well as shop use. Push-pull deflection for undistorted response. Full vertical and horizontal expansion of trace. Automatic astigmatism control circuit. Includes provision for AC coupling. Linear time base and sweep; returned trace automatically blanked. Sensitivity: Better than 50 millivolts. Frequency response: ±2 db, 20 cps to 200 kc.; ±4db, 20 cps to 500 kc. Input impedance: 0.5 megohm. vertical and horizontal. Has 3RP1 CRT. Metal case, hammerloid blue-gray finish. Size, 7⅜" H, 5⅞" W, 14⅜" deep. Etched satin aluminum panel. CRT has protective bezel and graph screen. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 10½ lbs.
84 FX 629. NET 121.37

MODEL 750 UHF-VHF DO-ALL SIGNAL-PATTERN GENERATOR

Combination signal, marker and pattern generator. Covers all UHF-VHF channels for FM and TV receiver servicing. A completely versatile unit in a single convenient case. Checks and aligns front ends, sound IF's and picture traps, linearity, sync circuits, sweep circuits, focus and deflection. Use of inductuner and special anti-backlash drive assures accuracy of 0.5%. All VHF frequencies are covered on fundamental. Ranges: 9-11, 21-47, 54-220, 465-690 and 650-900 mc. RF's and IF's are clearly calibrated on large etched dial. Provides steady horizontal or vertical bars or crosshatch pattern on all channels. Internal modulation: 360 cps and 141.75 kc. Also provides unmodulated carrier signal. 4½" dial. Complete with leads and instructions. Size, 10¼x6½x5⅝". For 105-125 volts, 60 cycle AC. Shpg. wt., 10 lbs.
84 FX 338. NET 77.91

Model 740A VHF Signal Generator. Similar to the 750 above, but range is 9-220 mc, all on fundamentals. Also provides 540 cycle audio signal. Size, 10x6x6". Shpg. wt., 9 lbs.
84 F 336. NET 68.11

MODEL 327P TUBE TESTER

Tests all tubes currently used in radio and TV receivers. Will check transmitting, hearing aid, ballast and gaseous rectifier types. It will check both black and white and color CR tubes with adapter cables PTA-1 and PTA-2 (listed below). Black and white tubes can be reactivated with this tester. New data permits rapid insertion of new information as available. Oak carrying case. For 105-125 v., 50-60 cycle AC. 9¼x11x5½". Wt., 11 lbs.
84 FX 339. NET 50.91

84F627. PTA-1. For B-W. ..... **NET** 3.87

84F628. PTA-2. For color ..... **NET** 9.75

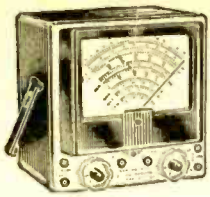
MODEL 706A WIDE-RANGE SIGNAL GENERATOR

High-quality performance, construction and appearance. Special electron-coupled circuit design, permeability adjusted coils, and air trimmer capacitors assure stability and constancy of calibration. Accurate within 1% of calibration adjustment. Ladder-type step attenuator consisting of a multiplier and fine attenuator control. Planetary drive for vernier tuning without back-lash. Covers 150 kc to 220 mc in eight ranges. Six fundamental ranges through 55 mc. 400 cycle audio at 50 ohms for external use. For 105-125 v., 50-60 cycle AC. Size, 15x9x7". Shpg. wt., 14 lbs.
84 FX 331. NET 66.15

MODEL 780 SWEEP GENERATOR

An all-electronic sweep generator for black and white and color TV as well as AM and FM. Specifications: Voltage, 0.15 volt minimum peak-to-peak, terminated in 73 ohms; attenuator, individual push-button type, shielded low-leakage steps 0-db, 3-db, 5-db, 10-db, 20-db, 40-db individually, or total 78 db; AGC for constant output; Horizontal scope output, 60 cps front panel control, 180° of phasing; sweep in one direction only, forward. Range: 3.4 mc to 900 mc calibrated on dial, fundamentals to 200 mc in 4 bands. With cables. For 105-125 v., 50-60 cycle AC. 9¼x9¼x12½". Shpg. wt., 16½ lbs.
84 FX 626. NET 185.71


655


657-A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123

RADIO CITY TEST EQUIPMENT

MODEL 655 DO-ALL VTVM

Peak-to-peak type VTVM. Provides accurate measurements of complex wave-forms. 4½" meter reads peak-to-peak and rms waveshapes in video, sync and deflection circuits. Industrial uses include servicing vibrator-type power supplies and AC generators. 7 ranges on all functions. DC volts, 0-1.5-5-15-50-150-500-1500. Input resistance (including 1 megohm in DC probe) 11 megohms. Sensitivity on 1.5 volt range: 7.3 meg/volt. Accuracy on DC ranges ±3% of full scale reading. AC voltage ranges: peak-to-peak, 0-4.2-14-42-140-420-1400-4200; rms, 0-1.5-5-15-50-150-500-1500. Accuracy on AC ranges ±5% of full scale reading. Response: 30 cps to 3 mc for 1.5, 5, 15, 50, 150 and 500 volt ranges (voltage source having low impedance output). Resistance ranges: 0-1000-10,000 ohms. 0-0.1-1-10-100-1000 megohms. Center scale: 10, 100, 1000, 10,000 ohms and 0.1, 1, 10 megohms. Balanced bridge-type circuit and peak-to-peak rectification eliminate circuit loading, waveform distortion and frequency error. Complete with test leads and full operating instructions. Size: 10x6x5". For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.
84 F 324. NET 58.31

Model HVMP-2 High Voltage Multiplier Probe. For use with Model 655 VTVM (above). Extends DC volts range to 30,000 volts. Shpg. wt., 1 lb.
84 F 622. NET 8.77

MODEL 657-A DO-ALL VTVM

Peak-to-peak and rms VTVM. Features an unusually large 8½" meter. Function and range settings in use are individually illuminated. Reads DC voltage 0 to 6000 in 8 ranges. Positive or negative. 11 megohm input impedance. 7 zero-center DC voltage ranges, 0 to 750 v. AC peak-to-peak 0 to 4200 v. in 7 ranges. Input impedance, 1 megohm shunted by 30 mmf. AC rms voltage 0 to 1500 v. in 7 ranges. AC high voltage 0 to 6000 v. Input impedance approximately 5 megohms. Ohmmeter reads 0 to 10,000 megohms in 8 ranges. Center scale is 1/100 of full scale. Capacity readings to 1000 mfd in 6 ranges. Full scale accuracy: DC 3%; AC 5%. Size: 9¼" x 9¼" x 6¼". For 105-125 v., 50-60 cycle AC. Shpg. wt., 11 lbs.
84 FX 623. NET 97.85

MODEL 463 VOM

20,000 ohms-per-volt VOM. 1% tolerance on voltage multipliers. Ranges: DC volts, 0-5-50-250-1000 at 20,000 ohms per volt; AC volts, 0-10-100-500-1000 at 1000 ohms per volt; DC current, 0-1-10-100 milliamps, 0-1 amps; resistance 0-10,000-100,000, 0-1-10 megohms; db, −10 to +55. Meter accuracy is within 2% of full scale reading on all ranges. Housed in newly-designed, all molded case. Sturdy bakelite withstands hard usage. Size: 7x4⅛x2⅝". Complete with batteries—ready to operate. Shpg. wt., 2 lbs.
84 F 624. NET 25.43

MODEL 480 MULTITESTER

Very moderately priced, 1000 ohm-per-volt, multitester. Features 3" square meter with 800 microampere D'Arsonval movement. Ruggedly constructed for long, dependable service. Housed in newly designed all-molded bakelite case and panel. For the shop, lab, and serviceman's kit. DC voltage ranges: 0-5-50-250-500-1000 volts. AC readings at 0-10-100-500-1000 volts. Output voltage readings over same ranges as AC. Milliammeter reads 0-1-10-100 ma and 0-1 ampere. Ohmmeter has 4 resistance ranges: 0-10,000-100,000 ohms, 0-1 megohm and 0-10 megohms external. Decibel meter reads from −10 to +55 db. Size: 7"x4⅜"x2⅝". With battery. Shpg. wt., 2¼ lbs.
84 F 621. NET 14.55

MODEL 123 "FLYBACKER"

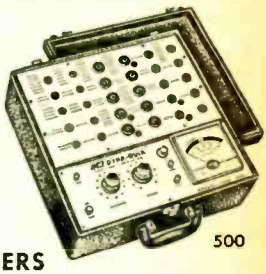
A revolutionary type of TV test unit. Permits accurate and speedy trouble shooting in the horizontal deflection circuits of any TV receiver. Instantly shows up a single shorted turn in a flyback transformer or yoke. Leads to these units do not have to be unsoldered for testing. Checks both low and high impedance yokes. May also be used for testing windings of transformers, chokes, relays, solenoids, etc. Readily checks windings for opens or shorts. Large illuminated meter has "Good-Replace" scales. Gray steel case, 6x9½x4¾". For 105-125 volts, 60 cycle AC. Wt., 8 lbs.
84 F 620. NET 38.95


555


777


V-1000


400


500

PHAOSTRON TEST INSTRUMENTS

Model 655 Multitester. New, expertly designed multimeter. Offers unusual versatility and extremely high accuracy. Has very large (4⅞") meter scale, yet it's ultra compact. Anti-magnetic, chrome-finished metal case. Color-coded meter scale for easy reading. Sensitivity: 20,000 ohms per volt DC; 2000 ohms per volt AC. AC current ranges: 0-1.5-5-15-50-150-500-1500 ma and 0-15 amps. DC current ranges: 0-50-150-500 microamps, 0-1.5-5-15-50-150-500-1500 ma, and 0-15 amps. Resistance: 0-1000-100,000 ohms; 0-1-10 megohms. AC and DC volts: 0-1.5-5-15-50-500-1500. 6 db ranges: −38 to +56. 33 of ranges are in 3-to-1 steps. With probes, batteries. 6⅛x4⅝x2⅛". Shpg. wt., 5 lbs.
84 F 685. NET 39.15

Model 555-CC Carrying Case. For above. Shpg. wt., 6 oz.
84 F 686. NET 5.83

Model 777 VTVM. New, 42-range VTVM. 200-microamp meter movement, doubly shielded. Color coded scales for fast, accurate readings. 4⅞" meter scale. Accuracy: DC, ±3%; AC, ±5%. All AC-DC ranges in approximate 3-to-1 steps. Ranges: DC volts (positive and negative), 0-1.5-5-15-50-150-500-1500; AC rms volts, 0-1.5-5-15-50-150-500-1500; AC P-to-P, 0-4.2-14-42-140-420-1400-4200. Resistance: 0-1000-10,000-100,000 ohms; 0-1-10-100-1000 megohms. DC v. zero-center discriminator scale: 7 ranges from .75-0-.75 to 750-0-750. Leather carrying case; may also be used as an easel mount. Overall size, 6⅛x7¾x3¼". With HF coax cable, DC probe, leather case, instructions. For 105-125 v., 50-60 cycle AC. Shpg. wt., 8 lbs.
84 F 687. NET 68.55

TV ENGINEERS INC. TUBE TESTER

Model V-1000. New, "Vis-U-All" emission-type tube tester. Designed for quickly and accurately testing over 400 different types of popular TV and radio tubes. Uses 5 tube sockets and 2 tube charts—no roll chart. Separate grid-to-cathode and heater-to-cathode short tests; tests for gassy tubes; checks inter-element leakages when less than 3.5 megohms; checks all sections of multi-sectional tubes. Filament voltages from 1.5 to 117 volts. Master switching dial shows settings directly on panel—other tube settings listed in chart on inside cover. Switching arrangement allows for future types. With "Good-Bad" meter. Brown leatherette case. 15x12x6". For 105-125 v., 50-60 cycle AC. Shpg. wt., 12 lbs.
84 FX 614. NET 97.51

B & K TUBE TESTERS

Model 600 Tester. New "Dyna-Quik," dynamic mutual conductance tube tester. Checks tubes under actual operating conditions. Requires no switching—no roll chart. Provides remarkably fast and accurate tube checks. Checks all 7- and 9-pin miniature tubes, octal tubes and new 600 ma series tubes. Life test indicates tubes nearing end of useful life. New grid emission and gas test positively checks RF, IF, AGC, and critical sync tubes directly on meter through DC amplifier circuit. 7- and 9-pin tube straighteners mounted on panel. Reading can be taken from "Good-Bad" scale or directly in micromhos. Two highly sensitive scales calibrated 0-6000 and 0-18,000 micromhos. 4½" meter. Automatic line compensation—special bridge monitors line voltage continuously. Spare socket on panel for future tube types. Portable, luggage-styled carrying case, covered in black hammer-tone leatherette. Size: 15⅛x14½x5¾". For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 12½ lbs.
84 FX 644. NET 107.75

Model 400 Rejuvenator-Tester. A unique, new TV picture tube testing and repairing unit. Designed expressly for the serviceman's use—either in the shop or the customer's home. Quickly and accurately checks any make or model of TV picture tube and instantly determines if tube is good or bad, without removing the picture tube from TV set. Checks for continuity between base pins and the elements within the picture tube. 4½" meter. Also checks for shorts or leakage between elements. Determines which elements are shorted. Tests amount of emission from the cathode and also the amount of grid bias necessary to produce cutoff. Repairs shorts between elements, open connections to elements and weak emission. Includes easy-to-operate, pushbutton-controlled rejuvenation circuit for boosting cathode emission. Instrument will also predict the probable useful life of the TV tube. Tough and durable, leatherette-covered plywood carrying case; gray panel with black letters. Size, 5x7½x11¼". For 110-120 volts, 60 cycle AC. Shpg. wt., 6 lbs.
84 FX 643. NET 53.85

Model 200 Rejuvenator-Tester. Performs most of the functions of the Model 400 described above, but has smaller 3" meter, lower rejuvenating voltage and rotary switch instead of pushbutton control. Size: 11x7½x5" deep. In durable leatherette carrying case. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs.
84 F 645. NET 39.15

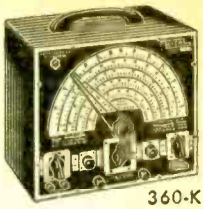
Eico Test Equipment and Kits

VERSATILE TEST EQUIPMENT

Eico test instruments have gained widespread acceptance among electronics men and manufacturers. Production-line checks and trouble-shooting of TV sets are achieved at very low cost with these popular Eico units. At the same time, these instruments offer excellent design, rugged construction, ease of operation and complete dependability. Laboratory styled, Eico units look distinctively professional and perform that way. They're outstanding values!


315-K


320-K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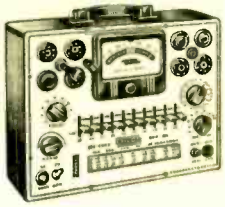
425-K


460-K


470-K


625-K


324-K

MODEL 315-K DELUXE RF SIGNAL GENERATOR KIT. For AM, FM, TV servicing. 1% accuracy. Range, 75 kc to 150 mc in 7 calibrated bands. Big, 9" illuminated dial. Vernier tuning. Attenuation controls are shielded; also have line filter. Provision for external modulation. Internal 400 cps sine wave audio generator with attenuator for RF modulation and external audio testing. Uses: 7F7 and 6C4. Also has VR150 voltage regulator and 6X5 rectifier. Steel case. 12x13x7". Complete with all parts, tubes, instructions and operating manual. Less solder. For operation from 105-130 volt, 60 cycle AC. Shpg. wt., 20 lbs.
83 FZ 162. NET 39.95

Model 315. As above, but factory-wired and tested.
84 FZ 395. NET 59.95

MODEL 320-K RF SIGNAL GENERATOR KIT. Well-designed circuit uses a stable Hartley oscillator. Covers 150 kc to 34 mc on fundamentals—to 102 mc on harmonics. 400 cps modulation. Has 9" dial calibrated in 7 bands. Complete with tubes, portable case, etched panel, all parts, knobs, wire, shielded cable, instructions, diagrams, and operating manual. Less solder. 10x8x4¾". For 105-125 v., 60 cycle AC. Shpg. wt., 10 lbs.
83 F 154. NET 19.95

Model 320. As above, but factory-wired and tested.
84 F 394. NET 29.95

MODEL 322-K RF-AF SIGNAL GENERATOR KIT. Accurate 150 kc to 34 mc generator. *Individual calibration for each of 5 bands.* Switch selects pure RF, modulated RF or pure AF. Shielded RF and AF attenuators. 400-cycle output. With 6SN7; 6X5 rectifier. Steel case, 10x8x4¾". Instructions. Less solder. For 105-125 v., 60 cycle AC. Shpg. wt., 10 lbs. (Not illustrated.)
83 F 168. NET 23.95

Model 322. As above, but factory-wired and tested.
84 F 396. NET 34.95

MODEL 360-K SWEEP GENERATOR KIT. For 500 kc-228 mc. Variable sweep, 0-30 mc. Crystal marker oscillator with variable amplitude. Provision for injection of external marker. Phase control. 8½" vernier tuning dial. Center of each TV channel is marked on front panel. Uses 1—6C4, 2—6J5, 1—7193; 6X5GT rectifier. With tubes, all parts, wire, instructions. Less 5 mc crystal and solder. 10x8x6¾". For 110-120 v., 60 cycle. Shpg. wt., 12 lbs.
83 FX 159. NET 34.95

Model 360. As above, but factory-wired and tested.
84 FX 342. NET 49.95

MODEL 625-K TUBE TESTER KIT. An excellent, versatile tube tester with outstanding features. Tests all radio and TV tubes. Short and open test for each element. Full-vision, bakelite-cased meter. Easy to read Replace-Weak-Good scale. An overload bulb indicates transformer overload and also serves as fuse. Rugged steel case. Illuminated, "speed-roll" chart—speeds location and setting up. Lever-action switches for individual testing of every tube element. Knock-out for addition of new socket. Handsome three-color panel. Has large, 4½" meter. Less solder. For 110-120 v., 60 cycle, AC. Size, 12½x9½x4¼". Shpg. wt., 12 lbs.
83 FX 161. NET 34.95

Model 625. As above, but factory-wired and tested.
84 FX 397. NET 49.95

MODEL CRA PICTURE TUBE ADAPTER. (Not illus.) Adapts 625-K and 625 Tube Testers for checking all sizes of TV picture tubes. Measures cathode emission. Tests for filament continuity, shorts between elements. With standard 12-pin socket, octal connector and 4-ft. cable for testing tube without removal from set. Wt., 2 lbs.
84 F 348. NET 4.50

MODEL 425-K 5" OSCILLOSCOPE KIT. Designed for AM, FM and TV alignment. Push-pull deflection. Sensitivity, .05 to .1 rms volt/inch. Range, 5 cps to 500 kc. Wide-range multi-vibrator sweep circuit, 15-75,000 cps. Provision for external sync., Z-modulation and direct input to CR tube plates. Calibrating voltage terminal on panel. Graph screen. Uses: 3—6SN7, 2—6J5, 5BP1 cathode ray tube, 2—5Y3GT. With tubes, portable case, all parts, wire, instructions, and operating manual. Less solder. 8½x17x13". For 110-120 volts, 60 cycle AC. Wt., 30 lbs.
83 FZ 155. NET 44.95

Model 425. As above, but factory-wired and tested.
84 FZ 392. NET 79.95

MODEL 470-K 7" OSCILLOSCOPE KIT. Push-pull amplifiers and cathode follower inputs to both vertical and horizontal sections. Wide-range sweep frequency generator (15 cps to 100 kc). Intensity modulation, external sync inputs, saw-tooth and line frequency outputs—all on front panel. Internal voltage calibrator for peak-to-peak voltage measurement. Frequency response: Vertical amplifier, flat within ±2 db from 10 cps to 1 mc with sensitivity of .01 volt rms/inch; horizontal amplifier, ±2 db from 10 cps to 500 kc with sensitivity of .3 volt rms/inch. Input impedance: Vertical, 3 megs and 35 mmf; horizontal, 1 meg and 40 mmf. Graph screen. 15x15x10". With all tubes including CRT, all parts, instructions, diagrams. Less solder. For 105-125 v., 60 cycle. AC. Wt., 35 lbs.
83 FZ 174. NET 79.95

Model 470. As above, but factory-wired and tested.
84 FZ 343. NET 129.50

MODEL 324-K RF SIGNAL GENERATOR KIT. Provides modulated or unmodulated RF signal. For signal tracing and IF-RF alignment of AM, FM, TV receivers. Has expanded frequency range of 6 fundamental bands: 150-400 kc, 400-1200 kc, 1.2-3.5 mc, 3.5-11 mc, 11-37 mc and 37-145 mc. One harmonic band covers 111-435 mc. Frequency is accurate ±1.5%. Etched tuning dial has 6:1 vernier knob, plexiglass windows and edge-lit hairlines. Output impedance, 50 ohms. Internal modulation of 400 cps variable from 0 to 50%; can be used separately for audio testing. Input has gain control for use with external modulation amplifier. Colpitts RF oscillator is directly plate-modulated by cathode follower for improved modulation. Separate fine and coarse RF attenuators. Coils are slug-tuned and turret mounted. Steel cabinet with handle. Size: 8x10x4¾". For operation from 105-125 v., 50-60 cycle AC. Shpg. wt., 10 lbs.
83 FX 192. NET 26.95

Model 324. As above, but factory wired and tested.
84 FX 666. NET 39.95

MODEL 460-K 5" OSCILLOSCOPE KIT. Wide-band scope for laboratory and color TV applications. Frequency response flat from DC to 4.5 mc—usable to 5 mc. Accurately reproduces 3.58 mc color TV sync burst. 4-step compensated attenuator in both DC and AC position. Vertical sensitivity 25 mv/inch. Built in voltage calibrator. full DC horizontal and vertical positioning. Automatic sync limiter and amplifier eliminates sync voltage adjustment. Sweep frequencies: 10 cps to 100 kc, plus low frequency sweep with external capacitor. Edge-lit plexiglass filter screen with variable illumination. Push-pull vertical amplifier, voltage regulated. Cathode follower input on both vertical and horizontal. Bezel designed to fit standard photographic equipment. Switch for 6 times horizontal expansion. With all tubes including CRT, all parts, instructions, diagrams. Size, 13x8½x16". Less solder. For 105-125 v., 60 cycle AC. Shpg. wt., 26 lbs.
83 FZ 193. NET 79.95

Model 460. As above, but factory-wired and tested.
84 FZ 668. NET 129.50

TV probes for oscilloscopes are listed on page 91.

Express Shipment Recommended for Factory-Wired Test Instruments

Eico Test Equipment and Kits


221-K

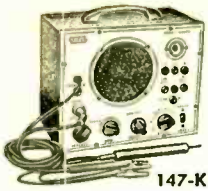

214-K


232-K


249-K

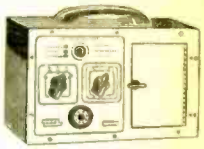

556-K


145-K


147-K


565-K


536-K


630-K

MODEL 221-K VACUUM-TUBE VOLTMETER KIT. An easy-to-build, sensitive VTVM for making measurements in high-resistance circuits. 20 ranges, with DC input resistance of 25 megohms. 4½" meter is protected against burnout. Includes zero center for alignment of FM and TV discriminators. Dual-triode balanced bridge, 1% multiplier resistors. Ranges: AC-DC volts, 0-5-10-100-500-1000; extends to 30,000 volts and 200 mc with HVP-2 and PRF-25 probes; resistance, 0-1000 ohms 0-1-10-100-1000 megohms; db —20 to +55. With tubes, test leads, wire, battery, instructions, diagrams and operating manual. Less solder. Size: 6x9⅞x5". For 110-130 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.

83 F 152. Complete kit. NET **25.95**

Model 221. As above but factory-wired and tested.

84 FX 389. NET **39.95**

MODEL 214-K DELUXE VACUUM-TUBE VOLTMETER KIT. All the versatility and performance-proven features of Model 221, plus the extra convenience and legibility of its big 7½" meter. Reliable "can't-burn-out" circuit. 13¼x9x6". Shpg. wt., 11 lbs.

83 FX 170. Complete kit. NET **34.95**

Model 214. As above but factory-wired and tested.

84 FX 344. NET **54.95**

MODEL 232-K VACUUM-TUBE VOLTMETER KIT. Revolutionary new engineering design. Professional peak-to-peak VTVM with laboratory precision features and low price. Exclusive "Uni-Probe" is a terrific time-saver. Only one probe performs all functions. Half turn of tip selects DC or AC/Ohms. Ranges: Measures directly p-p voltage of complex and sine waves. 0-4-14-42-140-420-1400-4200 volts p-p; DC/rms sine voltages, 0-1.5-5-15-50-150-500-1500 volts; Resistance, 0 to 1000 megs in 7 ranges. 4½" meter. Size, 7x4 x5" For 110-130 v., 50-60 cycle AC. Shpg. wt. 7 lbs.

83 F 186. Complete kit. NET **29.95**

Model 232. As above but factory-wired and tested.

84 F 659. NET **49.95**

MODEL 249-K DELUXE VACUUM-TUBE VOLTMETER KIT. Same outstanding features and ranges as Model 232 above, but with large, 7½" meter for extra convenience and readability. Makes an ideal bench VTVM. Size, 8½x13x5". Shpg. wt., 9 lbs.

83 F 187. Complete kit. NET **39.95**

Model 249. As above, but factory-wired and tested.

84 F 660. NET **59.95**

PROBE KITS. For VTVM kits. Av. shpg. wt., 1 lb.

83 F 188. Model PTP-25-K. Peak-to-peak Probe Kit. NET **4.95**

84 F 661. Model PTP-25. As above but factory wired. NET **6.95**

83 F 189. Model PRF-25-K. RF Probe Kit. NET **3.75**

84 F 662. Model PRF-25. As above but factory wired. NET **4.95**

MODEL HVP-2. HIGH VOLTAGE PROBES. For adapting VTVM units to read up to 30,000 volts. Factory-wired and tested.

84 F 663. For Models 214, 221. NET **4.95**

84 F 669. For Models 232, 249. NET **4.95**

MODEL 556-K STANDARD MULTIMETER WITH 4½" METER KIT. Has 400-microamp movement. 38 full-scale ranges: DC, AC and output volts, 0-1-5-10-50-100-500-5000 (at 1000 ohms per volt); AC and DC current, 0-1-10 ma and 0-0.1-1 amp; resistance, 0-500-100,000 ohms and 0-1 megohm. Six db ranges, —20 to +69. Accuracy, DC ±3%, AC, ±5%. With case, wire, battery and instructions. Less leads and solder. 6¾x5¼x3". Wt., 4 lbs.

83 F 173. Complete kit. NET **16.90**

Model 556. As above, but factory-wired and tested.

84 F 347. NET **23.50**

MODEL 145-K MULTI-SIGNAL TRACER KIT. For tracing IF, RF, video and audio circuits. Built-in 4" PM speaker. Front-panel jacks for VTVM—for visual signal tracing. Germanium crystal diode probe. Response to over 200 mc. Complete with tubes, all parts, steel case, speaker, wire and instructions. Less solder. For 110-130 volts, 60 cycle AC. 10x8x4¾". Shpg. wt., 9 lbs.

83 F 158. Complete kit. NET **19.95**

Model 145. As above but factory-wired and tested.

84 F 385. NET **28.95**

MODEL 147-K DELUXE SIGNAL TRACER KIT. Versatile transformer-operated instrument. High and low-gain RF channels with internal wide-frequency range demodulator permits direct observation of actual transmitted signal. Heavy filtering and hum-balance control. Both visual and aural monitoring of all RF and AF channels—magic eye and 5" PM speaker. Calibrated wattmeter circuit indicates abnormal wattage consumption in unit under test. Fully shielded RF crystal and audio probes. Complete with probes and instructions. For 105-125 volts, 50-60 cycles. Size, 9x10x5". Shpg. wt., 10 lbs.

83 F 190. Complete kit. NET **24.95**

Model 147. As above but factory-wired and tested.

84 F 664. NET **39.95**

MODEL 565-K 20,000 OHMS-PER-VOLT MULTIMETER KIT. Has 31 ranges: DC, AC and output volts, 0-2.5-10-50-250-1000-5000 (DC at 20,000 ohms per volt, AC at 1000 ohms per volt); DC current, 0-100 microamps, 0-10-100-500 ma. and 0-10 amps; resistance, 0-2000-200,000 ohms and 0-20 megohms. Five db ranges. —12 to +55. 4½" meter. 6¾x5¼x3". With batteries, wire and instructions. Less leads, solder. Shpg. wt., 4 lbs.

83 F 172. Complete kit. NET **24.95**

Model 565. As above, but factory-wired and tested.

84 F 346. NET **29.95**

MODEL 555-K 20,000 OHMS-PER-VOLT MULTIMETER KIT. Same as Model 565-K above, but with 1% resistors. Wt., 4 lbs.

83 F 167. Complete kit. NET **29.95**

Model 555. As above, but factory-wired and tested.

84 F 391. NET **34.95**

MODEL 536-K STANDARD MULTIMETER KIT. 31 ranges. 3" meter. Ranges: AC and DC volts: 0-1-5-10-50-100-500-5000 at 1000 ohms/volt; resistance, 0-500, 0-100,000 ohms, 0-1 meg; AC and DC current, 0-1-10 ma and 0-0.1-1 amps; 6 decibel ranges. —20 to +69 db. Ideal low-cost unit for servicemen. With bakelite case, wire, battery and instructions. Less leads and solder. Size: 6¼x3¾x2". Shpg. wt., 3 lbs.

83 F 171. Complete kit. NET **12.90**

Model 536. As above, but factory-wired and tested.

84 F 345. NET **14.90**

MODEL 526-K STANDARD MULTIMETER KIT. Same as Model 536-K above, but with 1% resistors. Shpg. wt., 3 lbs.

83 F 166. Complete kit. NET **13.90**

Model 526. As above, but factory-wired and tested.

84 F 390. NET **16.90**

MODEL 630-K CATHODE RAY TUBE CHECKER KIT. For checking any TV picture tube having either electrostatic or magnetic deflection and focus. Bridge measurement of peak beam current. Test sockets and 2½ ft. cable for duodecal or diheptal base tubes. Octal socket on panel for adapters. Less solder. For 105-125 v. 50-60 cycle AC. 9½x6½x3". Shpg. wt., 6 lbs.

83 F 177. Complete kit. NET **17.95**

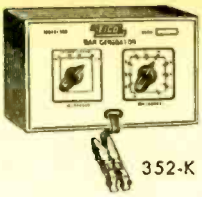
Model 630. Same as above, but factory-wired and tested.

84 F 650. NET **24.95**

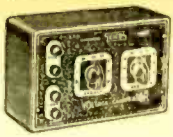
For Additional Eico Equipment, See Pages 90 and 91

Eico Test Equipment

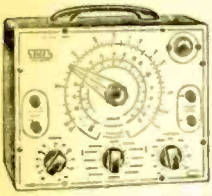

1050-K


352-K

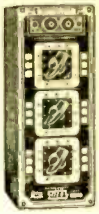

377-K


495-K


488-K


950-K


1100-K


1180-K


1171-K


1120-K

FAMCUS EICO KITS AND ASSEMBLED INSTRUMENTS

MODEL 1050-K 6-12 VOLT BATTERY ELIMINATOR KIT. Used for auto radio servicing. Can also be used as battery charger. Provides DC output at 0-8 v. or 0-16 v. Continuous current rating: 10 amps at 6 v., 6 amps at 12 v. Intermittent current rating: 20 amps at 6 v., 12 amps at 12 v. Two meters: one is scaled at 0-20 v. and one at 0-20 amps. Provide simultaneous readings. Switch selects 6 v. or 12 v. operation. Double protection: fused primary, automatic reset overload relay for secondary. Blue-gray steel cabinet. Etched panel. 10½x7¾x8¾". With instructions. Less solder. For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 15 lbs.
83 FX 175. NET 29.95

Model 1050. As above, but factory-wired and tested.
84 FX 341. NET 38.95

MODEL 352-K BAR GENERATOR KIT. For adjusting vertical and horizontal linearity. A valuable instrument for use in shop and on service calls. Produces 16-23 vertical and 13-22 horizontal bars when connected to antenna terminals (number of bars is adjustable). Since bars will be equally spaced on a correctly adjusted set, a quick indication is obtained of the picture linearity of TV set under test. Also indicates vertical and horizontal sync circuit stability. Video carrier oscillator tunable over channels 2-6. 3-way antenna clip. Less solder. 7½x5x4½". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 4 lbs.
83 F 178. NET 14.95

Model 352. Same as above, but factory-wired and tested.
84 F 651. NET 19.95

MODEL 950-K RESISTANCE-CAPACITANCE BRIDGE KIT. Measures and tests all resistors, 0.5 ohm to 500 megs, and all condensers 10 mmf to 5000 mfd. Comparator range also gives instant R-C-L comparison measurement with any external component as a standard. 0-500 DC voltage source. Quickly tests for leakage at rated WVDC. Magic eye indicator. Allows determination of capacitor power factor by means of calibrated potentiometer and magic eye. 6" easy-to-read dial scale. With steel case, 10x8x4¾". etched panel. all parts, wire, instructions. Less solder. For operation from 105-125 volts, 60 cycle AC. Shpg. wt., 10 lbs.
83 F 164. NET 19.95

Model 950. As above, but factory-wired and tested.
84 F 387. NET 29.95

MODEL 377-K AUDIO GENERATOR KIT. Provides sine and square waves for audio servicing. 1% resistors in oscillator circuit. Response, ±1.5 db, from 60 cps to 150 kc. Wien bridge-type oscillator; cathode follower output. Sine waves. 20-200,000 cycles in 4 ranges; square waves, 60-50,000 cycles. Output, continuously variable, 0-10 volts. Distortion, 1% of rated output; hum, less than 0.4%. Large 6½" dial includes 0-100 reference scale. Tubes: 6SJ7, 2—6K6, 6SN7; 6X5 rectifier. 7⅛x11⅛x7⅝". With tubes, wire, instructions and manual. Less solder. For 105-125 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.
83 FX 169. NET 31.95

Model 377. As above, but factory-wired and tested.
84 FX 349. NET 49.95

MODEL 1100-K RESISTANCE SUBSTITUTION BOX KIT. Engineered for versatile, practical use at moderate cost. Determines value of illegible resistors by substitution. Features resistance range from 15 ohms to 10 megs in decade multiples of 15, 22, 33, 47, 68 and 100 ohms. 36 RETMA 1-watt 10% resistors. 5-way jack-top binding posts for connecting any type test leads. Molded black bakelite case, with handsome 2-color etched aluminum panel. 3¾x6½x3½". Less solder. Shpg. wt., 2 lbs.
83 F 179. NET 5.95

Model 1100. As above, but factory-wired and tested.
84 F 652. NET 9.95

MODEL 495-K SCOPE VOLTAGE CALIBRATOR KIT. Makes any scope a wide-range, accurate, peak-to-peak AC electronic voltmeter. Injects a calibrated, semi-square wave voltage on the scope screen for comparison with any waveform. Ranges are: .1, 1, 10 and 100 volts peak-to-peak. Continuously calibrated output from 0 to 100 volts. Uses 1% decade attenuator resistors. Switch permits transfer of signal under observation direct to scope. Calibrator can be permanently connected to scope. No need to constantly transfer leads from unknown signal source to calibrator. Regulated power supply. Size, 5x7⅝x4". Less solder. For operation from 105-125 volts, 50-60 cycle. Shpg. wt., 4 lbs.
83 F 176. NET 12.95

Model 495. As above, but factory-wired and tested.
84 F 384. NET 17.95

MODEL 488-K ELECTRONIC SWITCH KIT. Allows simultaneous observation of two patterns on the screen of a single scope. Amplitudes of two patterns are separately adjustable by individual gain controls in each input channel. Patterns may be superimposed or separated by desired amount with positioning control. Switching rates: Low range, less than 10 cps to 100 cps; mid-range, 50 cps to 400 cps; high range, 250 cps to 2000 cps, all continuously variable. 2 signal amplifiers. Frequency response, 0-30,000 cps, usable to 300,000 cps. With tubes, instructions; less solder. For 105-125 v., 50-60 cycles. Size, 6x8x6". Shpg. wt., 7 lbs.
83 F 185. NET 23.95

Model 488. As above, but factory-wired and tested.
84 F 658. NET 39.95

MODEL 1180-K DECADE CONDENSER BOX KIT. For general design and development work. Useful in every laboratory as tuned circuit elements, bridge impedances, filter elements or components of any circuit where a wide-range variable capacitor is necessary. Provides very rapid experimental determination of proper capacitance values required in a circuit. Range: 100 mmf to .111 mf in steps of 100 mmf; voltage rating, 350 volts DC continuous. Silver mica dielectric capacitors are ±1%. Zero capacitance approx. 7 mmf. Positive detent, ceramic wafer switches. Low-loss lucite terminal board. 9x3½x3½". Less solder. Shpg. wt., 3 lbs.
83 F 183. NET 14.95

Model 1180. As above, but factory-wired and tested.
84 F 656. NET 19.95

MODEL 1171-K RESISTANCE DECADE BOX KIT. Supplies resistance values from 0 to 99,999 ohms in 1-ohm steps with 5 decades, with ½% accuracy. Uses ½% 1-watt resistors. Has 5 separate 10-position switches. Ideal low-cost unit for the experimenter and builder. Its versatility makes it highly desirable in designing new circuits. Comparator position and binding posts for instant substitution of actual equivalent component. Rugged, trouble-free construction. Steel case, 3½x12x3". With all parts, instructions. Less solder. Shpg. wt. 3 lbs.
83 F 165. NET 19.95

Model 1171. As above, but factory-wired and tested.
84 F 388. NET 24.95

MODEL 1120-K CAPACITOR SUBSTITUTION BOX KIT. For rapidly substituting a wide range of RETMA capacitance values. A time-saving instrument for laboratory and serviceshop use. Provides capacitance values from 0.0001 to 0.22 microfarads in 18 steps. Determines values needed for optimum performance, or values of badly damaged or otherwise illegible capacitors. 18-position rotary switch. Accuracy, ±10%. Most of capacitors rated at 600 v.; others 400 v. 5-way jack-top binding posts take any type of test lead. Black bakelite case; attractive two-color etched aluminum panel. Size, 3¾x6½x3½". Complete with all parts and instructions; less solder. Shpg. wt., 2 lbs.
83 F 191. NET 5.95

Model 1120. As above, but factory-wired and tested.
84 F 665. NET 9.95

See Pages 88, 89 and 91 for Additional Eico Equipment

Test Equipment and Kits

944-K

803-K

584-K

SCOPE TV PROBES

EICO TEST INSTRUMENTS

944-K FLYBACK TESTER KIT

Provides positive check of all types of flybacks and yokes in or out of the set—they need not be disconnected. Shows even 1 shorted turn. Separate calibration for air core and iron core flybacks for more accurate testing. 4½" meter. Size, 8½x5x5". Operation from 105-125 v., 50-60 cycles. Shpg. wt., 5 lbs.

83 F 184. Complete Kit. NET.....23.95

Model 944. As above but factory-wired.
84 F 657. NET.....34.95

803-K GEIGER COUNTER KIT

Detects ore with as little as .01% uranium. 900-volt Geiger tube, with special thin brass envelope. With headphone and radioactive sample; less batteries. Size, 7x4½x2¼". Requires 2—67½ volt B batteries and 2—1½ volt A batteries. (ALLIED stock numbers 80 J 642 at 1.94 ea. and 53 J 029 at 11c ea.) Shpg. wt., 3 lbs.

83 F 194. Complete kit. NET.....19.95

Model 803. As above but factory wired.
84 F 670. NET.....29.95

584-K BATTERY TESTER KIT

Tests all "A" and "B" batteries under actual load conditions. Batteries need not be installed in receiver for check—tester provides correct current drain. 10 switch positions plus spare provide range of 1.5 to 90 volts. 3½" meter, calibrated Good, Usable and Bad. 6¼x3¾x2". With test leads. Shpg. wt., 2 lbs.

83 F 195. Complete kit. NET.....9.95

Model 584. As above but factory wired.
84 F 671. NET.....12.95

OSCILLOSCOPE TV PROBES

For signal and waveform tracing, alignment applications and other test procedures. Probes are fully shielded. Rugged terminal board mounting of parts. Swivel-action, shock-mounted construction. Av. shpg. wt., 5 oz.

Model PSD-K. Demodulator Probe Kit.
83 F 180. NET.....3.75

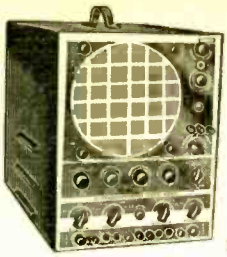
Model PSD. As above, but factory wired.
84 F 653. NET.....5.75

Model PD-K. Direct Probe Kit.
83 F 181. NET.....2.75

Model PD. As above, but factory wired.
84 F 654. NET.....3.95

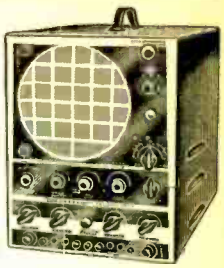
Model PCL-K. Low Capacity Probe Kit.
83 F 182. NET.....3.75

Model PCL. As above, but factory wired.
84 F 655. NET.....5.75



300-K

PRECISE TEST EQUIPMENT KITS



308-K

MODEL 300-K 7" SCOPE KIT

Expertly engineered 7" scope kit. High-quality components throughout. A lab type instrument at low cost. Vertical, flat ±3db through 5 megacycles with sensitivity of 10 millivolts. Frequency-compensated vertical and horizontal stepping attenuators. Push-pull DC amplifiers; push-pull horizontal. Astigmatic focus control. Linear sweep from 1 cycle to 80 kc. Internal square wave calibrator with pot. Electronic magnifier circuit allows any portion of signal to be magnified up to 10 times. Calibration screen is edge lighted—may be switched on or off. Bridge type positioning on vertical and horizontal does not vary tube characteristics. 5-way binding posts for easy hookup. Has plus gate and sawtooth outputs on front panel. Extra-heavy, fused power supply designed for additional circuitry. Deeply etched aluminum front panel. Steel cabinet, 11x14x17". With all parts, wire, tubes and instructions; less solder. For 110-120 v., 60 cycle AC. Shpg. wt., 35 lbs.

83 FZ 131. Complete kit. NET.....94.95

Model 300-W. As above, but factory-wired.
84 FZ 498. NET.....199.50

MODEL 308-K 8½" SCOPE KIT

Unusually fine, easily assembled, 8½" scope kit at very moderate cost. Many deluxe features; excellent for any radio-TV servicing or laboratory application. 8½" screen and magnifier positioner permit extremely accurate waveform analysis. Push-pull inputs for internally mixing 2 signals or observing push-pull waveforms. Exceptional vertical response; ±1.5 db to 5 mc. Sensitivity, 10 mv/inch. Return trace eliminator. Linear sweep, 1 cycle to 80 kc. Square-wave calibrator with pot. External, internal negative or positive sync, or internal 60 or 120 cycle sync. Steel cabinet, 11x14x19". With all parts, wire, tubes and instructions; less solder. For 110-120 volts, 60 cycle AC. Shpg. wt., 36 lbs.

83 FZ 132. NET.....129.50

Model 308-W. As above, but factory-wired.
84 FZ 690. NET.....229.50

Model 960 Capacity Attenuator Probe. For Model 300 and 308 scopes. Permits measurements with 1/10 the capacity loading effect. Range, through 100 mc. Input capacity, 7 mmf. Shpg. wt., 1½ lbs.

84 F 691. NET.....5.95

111-K

- For Lab and Shop
- Professional Design
- Exceptional Value

630-KA

MODEL 111-K TUBE TESTER KIT

New, advanced-design tube tester kit. Checks both emission and mutual conductance separately—roll chart indicates the most important single test for normal applications. Tests all receiving tubes and cathode ray tubes. Features rotary type switches; gas check; ultra-convenient single-switch short check; latest type anti-backlash roll chart. Tests for shorts whether tube is hot or cold, without changing other switches. Allows filament current and tube bias to be measured directly on the meter. Has spare switch for future tube types. Rugged steel cabinet with aluminum panel. 3-color, step-by-step instruction manual. 14x16x6". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 25 lbs.

83 FZ 133. NET.....69.95

Model 111W. As above, but factory-wired.
84 FZ 692. NET.....139.95

MODEL 630-KA SIGNAL GENERATOR KIT

RF-AF-TV Signal generator and marker. Reaches 110 mc on fundamentals; 330 mc on harmonics. Pre-assembled and calibrated RF heads; audio of 20-20,000 cycles; cathode follower output; variable percent modulation; external modulation; speech amplifier; crystal marker; RF and AF stand-by; Wien bridge AF osc.; Colpitts RF osc.; filtered line; separate RF section; coax fittings. Other features include constant output impedance, vernier tuning on RF and AF, plus complete shielding. Etched aluminum panel. Steel cabinet with handle. Size 8x11x5". With tubes, all parts, wire and instructions; less solder. For 110-120 v., 60 cycles AC. Shpg. wt., 11 lbs.

83 FX 130. Complete Kit. NET....38.95

Model 630-W. As above, but factory-wired.
84 FX 497. NET.....53.95

SEE PAGES 53-57 FOR KNIGHT INSTRUMENT KITS

Professional-quality Knight test equipment kits are "best buys" for value conscious technicians, servicemen and experimenters. These famous kits are complete in every detail, from punched chassis to carefully prepared instructions and diagrams. This, plus advanced engineering, quality components and modern styling, guarantee a first rate instrument worth many times its price. You can't get more for your test instrument dollar.

Modern Test Equipment

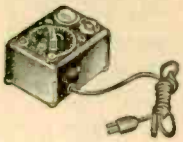

BF-60


BF-70


BF-80


BF-90


RDA


BN

CORNELL-DUBILIER TEST INSTRUMENTS

CAPACITOR-RESISTOR BRIDGE

Model BF-60. Built to meet precision requirements of industrial and electronic labs. Accurately measures the important characteristics of capacitors and resistors. It checks for opens, shorts, intermittents, capacity and power factor of electrolytics as well as insulation resistance of papers, micas and ceramics. Capacity ranges are: 10 mmf-.005 mfd, .001-.5 mfd, .1-50 mfd, 20-1000 mfd. Resistance ranges: 100-50,000 ohms and 10,000 ohms to 5 megohms. Supplies polarizing voltages for leakage tests from 25 to 450 volts DC. Power factor range. 0-50% at 60 cycles. Balance or null condition is indicated by a 6E5 eye. Uses a 6W4GT rectifier. Hammered-enamel finish. 5½x7x10". For 110-125 volts, 50-60 cycle AC. Shpg. wt., 10 lbs.
84 FX 457. NET 42.85

CAPACITANCE-RESISTANCE ANALYZER

Model BF-70. Quickly and accurately measures important characteristics of capacitors and resistors. Wien bridge circuit assures accurate readings unaffected by line voltage variations. Measures capacity of paper, mica, air, ceramic, electrolytic and AC capacitors from .00001 to 2000 mfd in 4 ranges. Checks power factor of electrolytics from 0 to 50%. May also be used to check continuity, capacity between circuits, insulation of coil and transformer windings, etc. "Magic-Eye" indicates insulation resistance of paper, mica, and ceramic capacitors. Built-in VOM for leakage measurements or for external use. VOM ranges: DC volts, 0-15-150-750; DC milliamps. 0-1.5-15-75; DC resistance, 2.5-2500 ohms, 250-250,000 ohms, 250,000 ohms to 25 megs. All scales calibrated for direct readings. Metal case. Gray hammered enamel finish. Size: 11x10x5½". For 110-125 v., 50-60 cycle AC. Wt., 11 lbs.
84 FX 613. NET 71.50

FLYBACK—YOKE CHECKER

Model BF-80. For rapidly locating defects in flyback transformers and yokes. Invaluable for TV servicing. Extremely sensitive—detects short circuited vacuum tube elements and windings or any major change in inductance. Will even detect a single shorted turn. Also indicates open circuits in transformers, yokes, coils and switches. Includes 4½" microammeter with 50 microamp full-scale sensitivity. Meter scale divided into 6 colored sections. Indicates "GOOD", and "REPLACE" for short and continuity checks. Uses oscillator circuit with 6V6 tube. Oscillator frequency is approximately 1000 cps modulated at 60 cycles. Metal case with recessed handle. Size, 5½x7x10". With test leads. For 110-125 v., 60 cycles AC. Shpg. wt., 9½ lbs.
84 F 618. NET 46.45

NEW "HANDICHECK" CAPACITOR CHECKER

Model BF-90. Quickly and conveniently check capacitors of all types without removing them from the circuit. "Magic-Eye" indicates shorted, open, or intermittent condition. 60 cycle test for direct or intermittent short; 20 mc test for open or intermittent capacitors. Checks capacitors from 30 mmfd to 2000 mfd for open, short or intermittent condition even when connected across resistances as low as 50 ohms. Capacitors from .1 mfd to 2000 mfd can be checked for short circuit even when connected in parallel with a resistance as low as 1 ohm. Size: 7x10x5½". With leads and test clips. For 110-125 volts, 60 cycle AC. Shpg. wt., 8 lbs.
84 F 619. NET 34.50

RESISTANCE DECADES

Decade resistors provide a rapid and dependable source of resistance for substitution purposes in a wide variety of applications, within the current and resistance rating of each unit. Resistances available, percentage of accuracy, and current handling capacity for the various ranges of the three units available are given in their respective listings, below. Each of the instruments described below permits a possible selection of 110 resistance values. Indispensable for design or experimental use, electronics laboratories, radio-TV servicing, etc. Resistance is selected from the direct reading panel switch scale. Size: 3¾x5x3". Shpg. wt., 2 lbs.

MODEL RDA. Resistance source for substitution purposes. 1-110 ohms in 1 ohm steps. 2 direct reading switch scales, show resistance of any setting at a glance. ±5% wire-wound elements with 1 amp capacity on 1-10 ohm range; ±3% non-inductive wire-wound elements with 0.5 amp capacity on 10-100 ohm range.
84 F 615. NET 11.91

MODEL RDB. As above, but 100-11,000 ohms in 100 ohm steps. ±3% non-inductive wire-wound elements. 100 ma capacity on 100-1000 ohm range; 50 ma on 1000-10,000 ohm range.
84 F 616. NET 12.25

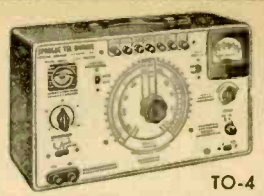
MODEL RDC. As above, but 10,000-1,100,000 ohms in 10,000 ohm steps. ±1% carbon precision elements. 5 ma capacity on 10,000-100,000 ohm range; 2 ma on 100,000-1,000,000 ohm range.
84 F 617. NET 12.25

CAPACITOR TESTERS

Model BN Bridge. Highly popular, Wien-type capacitor bridge for accurately measuring capacity of paper, mica, electrolytic and air capacitors from 10 mmf to 50 mfd. Also a highly effective unit for detecting open and short circuits. Ideal for use as a continuity meter, checking circuits, coils, transformers, etc. Indicates power factor of capacitors. Has direct reading scale. Scale markings on all ranges are calibrated directly in microfarads. No charts or multipliers required. Uses "magic eye" bridge balance for accurate measurements—no headphones or external meters are required. Accuracy is not affected by changes in line voltage. Housed in attractive walnut bakelite case. Size, 3¾x5x3". Supplied with detachable test leads and complete operating instructions. For operation from 110-125 volts, 50-60 cycles AC. Shpg. wt., 4 lbs.
84 F 450. NET 24.95

Decade Boxes. Provide accurate standards over a wide range of capacity. Rated at 600 volts DC and 220 volts AC. They may be used singly or in groups of two or more decades. With calibration chart giving exact capacity values for all scale markings. Types CDA-5, CDB-5, and CDC-5 have a ±5% tolerance; CDB-3 and CDC-3 have a ±3% tolerance. Type CDA-5 has mica dielectric capacitors; all others have oil-impregnated paper capacitors. Shpg. wt., 4 lbs.

No.	Type	Range, Mfd	Steps	NET
84 F 452	CDA-5	.0001-.011	.0001	11.12
84 F 453	CDB-5	.01-1.1	.01	11.12
84 F 455	CDB-3	.01-1.1	.01	13.23
84 F 454	CDC-5	1.0-10	1.0	19.55
84 F 456	CDC-3	1.0-10	1.0	21.56


TO-4

SPRAGUE TEST INSTRUMENTS

TEL-OHMIKE CAPACITOR-RESISTOR BRIDGE

Model TO-4. Multi-purpose bridge-type capacitor-resistor analyzer. Quickly detects open, shorted or intermittent capacitors. Reliable, simple-to-use instrument for checking all types of capacitors. Easy-to-read 3" meter with directly calibrated scales. "Magic-Eye" tube for simplified bridge balancing. Provides an accurate, multi-range capacitance and power factor measuring bridge; an insulation resistance checker for paper, mica, and ceramic capacitors; a leakage current indicator for electrolytics operating at rated voltages; and an AC resistance bridge for measuring resistors at line frequency—all in one instrument. Push-button switches provide instant range selection and also discharge capacitors for safety after check. Measures capacitance from 1 mmf to 2000 mfd in 5 ranges; electrolytic leakage from 0 to 60 ma in 2 ranges; power factor of electrolytics to 55% in 3 ranges; and resistance from 2.5 ohms to 25 megohms in 3 ranges. Built-in DC voltage source supplies continuously variable voltage up to 600 volts for electrolytic test at rated voltage. Steel case finished in two-tone gray. Size: 8⅞x14⅝x6⅛". For operation from 110-120 volt, 50-60 cycle AC. Shpg. wt., 15 lbs.
84 FX 004. NET 72.03

KWIK-TEST CAPACITOR CHECKER

Model KT-1. An up-to-the-minute capacitor tester. Permits checking capacitors while they are wired into the equipment being serviced. No unsoldering is necessary—not even when capacitor is wired in parallel with a resistor. Checks for direct short, open or intermittent conditions in all types of capacitors. Bypass, coupling, and blocking capacitors from 30 mmf to 2000 mmf can be checked even when wired in parallel with resistances as low as 60 ohms. Capacitors between .1 mfd and 2000 mfd can be checked even when wired in parallel with resistances as low as 2 ohms. Checking any capacitor is simplicity itself. Just connect the test leads across the capacitor to be checked, set the slide switch for "open" or "short" test, press a button and the "Magic-Eye" indicator tube tells its condition. Front-panel chart gives condition of capacitor as indicated on "Magic-Eye" tube. A "must" instrument for technicians who service radio and TV receivers. It will quickly pay for itself in time saved. Housed in sturdy steel case with two-tone gray wrinkle finish. Size: 8¼x5½x5". For operation from 110-120 volt, 50-60 cycle AC. Shpg. wt., 8 lbs.
84 FX 005. NET 33.81

PRECISION SIGNAL TRACER

Model 202. New, all-purpose signal tracer for servicing radio, TV, audio, and electronic equipment. For quick checking all stages from antenna to speaker or picture tube. Locates intermittents, open circuits, hum, noise, and distortion. Provides both visual and aural tracing with sensitive "magic-eye" and built-in 5" speaker. RF probe has extremely high gain and frequency response to 300 mc. 3-stage preamplifier features cascode connection, cathode follower, and overall feedback. Preamp provides additional voltage gain of 400 for scope or VTVM. Audio input flat from 2 cps to 200 kc. 3-position attenuator. 4-position selector switch for using instrument as RF probe, audio probe, noise test, or wattmeter. Tubes: 6AB4, 2—12AX7, 6V6GT; 6E5 magic-eye and 6X4 rectifier. Size: 7½x10½x6½". For 110-120 v., 60 cycle AC. Shpg. wt., 11 lbs.
84 FX 197. NET 44.05

Meters, Amprobes & Rectifiers

NF-2C

RF-2C

EMICO PANEL METERS

Sturdy panel meters, with well-built magnetically-controlled movements incorporating high-quality Alnico magnets, thus affording a high torque without increasing the weight of the movement. Handsome black enamel finished steel cases. Markings are standard. Have screw terminal binding posts and lugs for soldered connections. Model NF-2C (round): Flange size, 2¼"; overall depth including terminal binding posts, 1¼". Model RF-2C (square): Flange size, 2¼"; overall depth, 1⅜". With mounting bracket. Both types mount in 2⅛" round hole. 5% accuracy. Wt., 9 oz.

DC MILLIAMMETERS

Model NF-2C			Model RF-2C		
No.	Ma	EACH	No.	Ma	EACH
67 F 609	0-1	3.53	67 F 614	0-1	3.58
67 F 600	0-10	1.81	67 F 615	0-10	1.91
67 F 601	0-20	1.47	67 F 616	0-20	1.57
67 F 602	0-30		67 F 617	0-30	
67 F 603	0-50		67 F 618	0-50	
67 F 604	0-100		67 F 619	0-100	
67 F 605	0-150		67 F 620	0-150	
67 F 606	0-200		67 F 621	0-200	
67 F 607	0-300		67 F 622	0-300	
67 F 608	0-500		67 F 623	0-500	

DC VOLTMETERS

No.	Volts	EA.	No.	Volts	EA.
67 F 630	0-3	1.47	67 F 635	0-3	1.57
67 F 631	3-0-3		67 F 636	3-0-3	
67 F 632	0-10		67 F 637	0-10	

DC AMMETERS

No.	Amps	EA.	No.	Amps	EA.
67 F 650	0-10	1.47	67 F 656	0-10	1.57
67 F 651	3-0-3		67 F 657	3-0-3	
67 F 652	20-0-20		67 F 658	20-0-20	
67 F 653	30-0-30		67 F 659	30-0-30	

AC AMMETERS

No.	Amps	EA.	No.	Amps	EA.
67 F 646	0-5	2.50	67 F 648	0-5	2.60
67 F 647	0-10	2.50	67 F 649	0-10	2.60

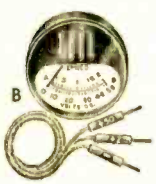
AC MILLIAMMETERS

Model NF-2C			Model RF-2C		
No.	Ma	EA.	No.	Ma	EA.
67 F 640	0-500	2.50	67 F 643	0-500	2.60

AC VOLTMETERS

No.	Volts	EA.	No.	Volts	EA.
67 F 665	0-15	2.50	67 F 670	0-15	2.60
67 F 666	0-150	3.43	67 F 671	0-150	3.53
67 F 667	0-300	4.02	67 F 672	0-300	4.07

A



B

Fig. A—EMICO AC VOLTAGE TESTER

Handy AC line voltage tester. Gives accurate voltage check at receptacle. Has 2-prong male plug to fit all conventional outlets. 90 degree swivel permits reading at angle. Range: 0-150 volts. 5 volt graduations between 50 and 150 volts. 2" meter has damped movement. 5% accuracy. Shpg. wt., 8 oz.
67 F 626. NET.....2.94

Fig. B—HEARING AID BATTERY TESTER

2-inch DC voltmeter. Designed specifically to check hearing aid batteries. Separate ranges for "A" and "B" types assure reliable, accurate readings. "A" scale reads 0 to 2 volts in 0.1 v. divisions. "B" scale reads 0 to 50 volts in 2 v. divisions. Provides proper test load. With test leads. Shpg. wt., 8 oz.
67 F 627. NET.....2.94

A

B

C

D

PYRAMID AMPROBES—"SNAP-AROUND" AC VOLT-AMMETERS

Amprobes safely and accurately measure high current without breaking circuit or insulation of conductors. Just press the trigger to open probe jaws, then close them around the conductor under test. Accurate meter instantly gives correct reading. Perfect for engineers, electricians, maintenance men, etc. Easily carried in pocket. One hand operation; trigger finger opens jaws, small finger selects range desired. Transformer core jaws are completely insulated. Dustproof D'Arsonval meter movements, precision balanced. 1% resistors. Accuracy, ±3% of full scale. Voltage is measured with new automatic-safety test leads. When leads are removed from meter, snap-out sleeve, automatically insulates plugs. Specifications, all models below: 2.363" scale length; 3000 v. AC break-down test; 50-70 cycle frequency. With top-grain cowhide leather case (and belt loop) and automatic voltage test leads.

Fig. A. Model 300. Features tapered probe jaws for hard-to-get-at wires in switch boxes, etc. Handles conductors up to 1" in dia., or bars to ¼x1½". Reads 0 to 300 amps in 6 ranges; 0 to 600 AC volts in 3 ranges. Size: 2⅝x1¼x8" long. Shpg. wt., 2 lbs.
84 F 381. NET.....49.50

Fig. B. Model 600. With exclusive, new doughnut-type transformer—eliminates error due to position of conductor within jaws. Takes conductors to 2". Reads 0 to 600 amps in 6 ranges; 0 to 600 AC volts in 3 ranges. Size: 2⅝x1¼x 8½" long. Shpg. wt., 2¼ lbs.
84 F 383. NET.....59.50

Fig. B. Model 1200. Similar to Model 600 but reads to 1200 amps in 6 ranges; 0 to 600 AC volts in 3 ranges. Also employs toroidal-wound transformer—conductor doesn't have to be centered for accurate readings. Size: 2⅝x1¼x 8½" long. Shpg. wt., 2¼ lbs.
84 F 896. NET.....67.50

Fig. C. Amprobe Junior. Highly accurate and dependable "junior" versions of Amprobe "snap-around" meters listed above. Measure AC current instantly without any need for breaking circuit. Provide accurate reading on full size 1.8" scale. Employ D'Arsonval movement with Alnico V magnet. Accuracy, ±3% of full scale. For measuring current, trigger-operated jaws are snapped around conductor—for voltage, safety test leads are plugged into back of meter and clipped to load. User is completely protected at all times. No metal parts can come in contact with the user or the circuit. Rugged, impact-proof plastic case and plastic window, molded in one piece. Frequency, 60 cycles. Voltage breakdown test, 3000 volts AC. Size: 2½" W, 4¾" H, 1⅜" Thick. With leads. Shpg. wt., 1 lb.

Stock No.	Model	Amps	Volts
84 F 369	10	0-10	0-125-250
84 F 373	25	0-25	0-125-250
84 F 374	50	0-50	0-125-250
84 F 379	100	0-100	0-125-250
84 F 897	525	0-25	0-150-600
84 F 898	550	0-50	0-150-600
84 F 899	500	0-100	0-150-600

NET EACH.....19.85

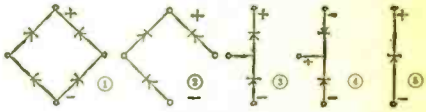
Model P-1 Leather Carrying Case. For any Amprobe above. Shpg. wt., 12 oz.
84 F 488. NET.....2.85

Fig. D. Model A-40 Energizer. Amprobe accessory with 3 functions: serves as "split" plug to divide 2-cond. line cords at outlet; increases ammeter sensitivity by 10 times for precise readings on appliances, small motors; measures line voltage at outlet while appliance is connected to line. Capacity, 25 amps in neutral (1x) position—10 amps at 10x pos. With pouch. Shpg. wt., 8 oz.
84 F 489. NET.....3.75

500

160

160-C



Internal Circuit Diagrams

CONANT INSTRUMENT RECTIFIERS

Instrument type copper-oxide rectifiers for meter and relay circuits, etc. Also for general replacement purposes. Easy to select correct replacement: body color indicates circuit type; appearance indicates series. Maximum AC input, all units, 5 volts. May be connected in series for higher voltage ratings; or in parallel for increased current capacity. Av. shpg. wt., 5 oz.

Series 500. For use in apparatus drawing up to 30 milliamperes. Reverse voltage: 2.25 DC. Frequency response: 0-1 mc. Cell diameter .500" with .166" center hole. .038" thick. Copper-oxide with pure silver contact face. Active area .15 sq. in. Terminal lugs. .010" No. 8 hard brass, nickel plated. 16x36 braided, tinned copper, 3" lead wires welded to terminals. Stack assembled between brass or aluminum end plates. Phillips head, 6-32 mounting stud. Insulating washers of XP grade bakelite. Synthetic lacquer-enamel finish.

Series 160. Ideal for conventional circuits using meter movements drawing up to 5 milliamperes. Reverse voltage: 2.25 DC. Frequency response: 0-75 mc. Cell diameter .166", .038" thick. Copper-oxide with pure silver contact face. Active area .019 sq. in. Terminals .010" No. 8 hard brass, nickel plated. 7x35 tinned copper, thermoplastic insulated. 3" lead wires welded to terminals before assembly. Stack housed in molded phenolic case. 90 degree crossed holes for No. 2 mounting screw. Sealed in housing with polystyrene base, moisture-proof compound.

Series 160C. Same specifications as series 160 except stack is housed in formed and welded brass case. Occupies a minimum of space. Clip type mount. Synthetic lacquer-enamel finish.

Stock No.	Type	Series	Body Color	Internal Circuit	No. of Term	Forward DC MA	Av. Output DC MA	EACH
68 F 041	M	500	Yellow	1	4	60	30	2.06
68 F 035	TH	500	Brown	2	4	60	30	1.82
68 F 043	HS	500	Black	3	3	60	30	1.50
68 F 047	T	500	Red	4	3	60	30	1.50
68 F 042	H	500	Green	5	2	60	30	1.18
68 F 040	B	160	Yellow	1	4	10	5	2.06
68 F 036	BTH	160	Brown	2	4	10	5	1.82
68 F 044	BHS	160	Black	3	3	10	5	1.50
68 F 046	BT	160	Red	4	3	10	5	1.50
68 F 037	BH	160	Green	5	2	10	5	1.18
68 F 038	B-C	160-C	Yellow	1	4	10	5	2.06
68 F 039	BTH-C	160-C	Brown	2	4	10	5	1.82
68 F 045	BHS-C	160-C	Black	3	3	10	5	1.50
68 F 048	BT-C	160-C	Red	4	3	10	5	1.50
68 F 049	BH-C	160-C	Green	5	2	10	5	1.18

Instrument Rectifiers. By H. B. Conant. Revised edition containing graphs, curves, etc.
37 K 170. NET.....15¢

Triplett Panel Meters

METER SPECIFICATIONS

High-quality panel meters. Accurate to within 2% of full scale. DC meters employ D'Arsonval moving coil movements. AC meters have double, iron repulsion-type movements. Jeweled bearings and hardened alloy steel pivots assure highly dependable service. Finest quality magnet frames. Cushioned ceramic bumpers protect pointer against overtravel. Metal dial faces, finished in white enamel. Easy-to-read black scales. Cases smoothly molded of rugged, black bakelite. Av. shpg. wt., 1½ lbs. When ordering, include range and model no. of meter. ALLIED can supply the entire line of Triplett meters. Write for free Triplett catalog No. 37 F 081.

*Indicates overall depth including terminals.

METER DIMENSIONS

ROUND FLUSH MOUNTING

Mod.	Flange	Body Dia.	*Depth	Scale
221T	2 11/16"	2 7/32"	1 3/8"	1.76"
231S	2 11/16"	2 7/32"	1 13/16"	1.58"
321T	3 1/2"	2 3/4"	1 3/8"	2.49"
331S	3 1/2"	2 3/4"	1 13/16"	2.22"
361	3 1/2"	2 3/4"	2 9/16"	2.22"

RECTANGULAR FLUSH MOUNTING

Mod.	Flange	Body Dia.	*Depth	Scale
227T	2 1/8 x 2 1/8"	2 5/32"	1 11/16"	1.76"
237S	2 1/8 x 2 1/8"	2 5/32"	1 7/8"	1.58"
327T	3 x 3"	2 3/4"	1 11/16"	2.49"
337S	3 x 3"	2 3/4"	1 7/8"	2.22"
420	4 5/8 x 4 3/16"	2 3/4"	1 5/8"	4.14"
430	4 5/8 x 4 3/16"	2 3/4"	1 5/8"	3.6"

2½", 3"

2½", 3½"

4½"

GLASS-FRONT PANEL METERS

DC MILLIAMMETERS

Range	221T 2½" Rnd.	227T 2½" Rect.	NET EACH	327T 3" Rect.	321T 3½" Rnd.	NET EACH	420 4½" Rect.	NET EACH
0-1	66 F 150	66 F 170	7.35	66 F 120	66 F 100	8.33	66 F 136	9.31
0-1.5	66 F 151	66 F 171		66 F 121	66 F 101		66 F 196	
0-3	66 F 165	66 F 185		66 F 118	66 F 115		66 F 197	
0-5	66 F 152	66 F 172		66 F 122	66 F 102		66 F 137	
0-10	66 F 153	66 F 173		66 F 123	66 F 103		66 F 138	
0-15	66 F 154	66 F 174		66 F 124	66 F 104		66 F 139	
0-25	66 F 155	66 F 175		66 F 125	66 F 105		66 F 140	
0-50	66 F 156	66 F 176		66 F 126	66 F 106		66 F 141	
0-75	66 F 166	66 F 186		66 F 119	66 F 116		66 F 198	
0-100	66 F 157	66 F 177		66 F 127	66 F 107		66 F 142	
0-150	66 F 158	66 F 178		66 F 128	66 F 108		66 F 143	
0-200	66 F 159	66 F 179		66 F 129	66 F 109		66 F 144	
0-250	66 F 160	66 F 180		66 F 130	66 F 110		66 F 145	
0-300	66 F 161	66 F 181		66 F 131	66 F 111		66 F 146	
0-400	66 F 167	66 F 187		66 F 135	66 F 117		66 F 199	
0-500	66 F 162	66 F 182		66 F 132	66 F 112		66 F 147	
0-750	66 F 163	66 F 183		66 F 133	66 F 113		66 F 148	
0-1000	66 F 164	66 F 184		66 F 134	66 F 114		66 F 149	

DC VOLTMETERS

1000 Ohms per Volt—With Carbon, Film-Type Resistors

Economical. For applications where high humidity is not encountered. †Have external resistors.

Range	221T 2½" Rnd.	227T 2½" Rect.	NET EACH	327T 3" Rect.	321T 3½" Rnd.	NET EACH	420 4½" Rect.	NET EACH
0-10	66 F 903	66 F 923	7.35	66 F 943	66 F 963	8.33	66 F 983	9.31
0-15	66 F 904	66 F 924		66 F 944	66 F 964		66 F 984	
0-25	66 F 905	66 F 925		66 F 945	66 F 965		66 F 985	
0-50	66 F 906	66 F 926		66 F 946	66 F 966		66 F 986	
0-100	66 F 907	66 F 927		66 F 947	66 F 967		66 F 987	
0-150	66 F 908	66 F 928		66 F 948	66 F 968		66 F 988	
0-200	66 F 909	66 F 929		66 F 949	66 F 969		66 F 989	
0-250	66 F 910	66 F 930		66 F 950	66 F 970		66 F 990	
0-300	66 F 911	66 F 931		66 F 951	66 F 971		66 F 991	
0-500	66 F 912†	66 F 932†		66 F 952	66 F 972		66 F 992	
0-750	66 F 913†	66 F 933†		66 F 953	66 F 973		66 F 993	
0-1000	66 F 914†	66 F 934†	11.86	66 F 954†	66 F 974†	12.84	66 F 994†	13.82
0-2000	66 F 915†	66 F 935†		66 F 955†	66 F 975†		66 F 995†	
0-3000	66 F 916†	66 F 936†		66 F 956†	66 F 976†		66 F 996†	
0-4000	66 F 917†	66 F 937†		66 F 957†	66 F 977†		66 F 997†	
0-5000	66 F 918†	66 F 938†		66 F 958†	66 F 978†		66 F 998†	

1000 Ohms per Volt—With Wire-Wound Multiplier Resistors

Have moisture-resistant, vacuum-sealed, wire-wound resistors. †Have external resistors.

Range	221T 2½" Rnd.	227T 2½" Rect.	NET EACH	327T 3" Rect.	321T 3½" Rnd.	NET EACH	420 4½" Rect.	NET EACH
0-1	66 F 900	66 F 920	7.35	66 F 940	66 F 960	8.33	66 F 980	9.31
0-3	66 F 739	66 F 750		66 F 762	66 F 424		66 F 770	
0-5	66 F 740	66 F 751		66 F 763	66 F 425		66 F 771	
0-10	66 F 741	66 F 752	9.70	66 F 430	66 F 420	10.68	66 F 435	11.66
0-25	66 F 743	66 F 754		66 F 765	66 F 427		66 F 773	
0-50	66 F 744	66 F 755		66 F 766	66 F 428		66 F 774	
0-100	66 F 745	66 F 756	10.09	66 F 767	66 F 429	11.07	66 F 775	12.05
0-150	66 F 746	66 F 757		66 F 431	66 F 421		66 F 436	
0-300	66 F 748	66 F 759	12.35	66 F 432	66 F 422	13.33	66 F 437	14.31
0-500	66 F 749†	66 F 760†	13.82	66 F 433	66 F 423	14.80	66 F 777	15.78

DC AMMETERS

Ammeters are self-contained up to and including 50 amperes. Meters for 100 amperes (50 millivolts) and higher have switchboard type shunts with five foot leads.

Range	221T 2½" Rnd.	227T 2½" Rect.	NET EACH	327T 3" Rect.	321T 3½" Rnd.	NET EACH	420 4½" Rect.	NET EACH
0-1	66 F 510	66 F 525	7.35	66 F 450	66 F 440	8.33	66 F 460	9.31
0-5	66 F 511	66 F 526		66 F 451	66 F 441		66 F 461	
0-10	66 F 512	66 F 527		66 F 452	66 F 442		66 F 462	
0-15	66 F 513	66 F 528		66 F 540	66 F 560		66 F 465	
0-25	66 F 514	66 F 529		66 F 453	66 F 443		66 F 463	
0-30	66 F 515	66 F 530		66 F 541	66 F 561		66 F 466	
30-0-30	66 F 516	66 F 531		66 F 455	66 F 445		66 F 464	
0-50	66 F 517	66 F 532		66 F 542	66 F 562		66 F 467	
0-100	66 F 518	66 F 533	14.21	66 F 543	66 F 563	15.19	66 F 468	16.17
0-200	66 F 519	66 F 534		66 F 544	66 F 564		66 F 469	
0-300	66 F 520	66 F 535	15.58	66 F 545	66 F 565	16.56	66 F 458	17.54
0-500	66 F 521	66 F 536	19.89	66 F 546	66 F 566	20.87	66 F 459	21.85

AC AMMETERS

Range	231S 2½" Rnd.	237S 2½" Rect.	NET EACH	337S 3" Rect.	331S 3½" Rnd.	NET EACH	430 4½" Rect.	NET EACH
0-1	66 F 340	66 F 350	7.35	66 F 320	66 F 300	8.33	66 F 330	9.31
0-2	66 F 341	66 F 351		66 F 321	66 F 301		66 F 331	
0-3	66 F 342	66 F 352		66 F 322	66 F 302		66 F 332	
0-5	66 F 343	66 F 353		66 F 323	66 F 303		66 F 333	
0-10	66 F 344	66 F 354		66 F 324	66 F 304		66 F 334	
0-15	66 F 347	66 F 357		66 F 328	66 F 308		66 F 338	
0-25	66 F 345	66 F 355		66 F 325	66 F 305		66 F 335	
0-30	66 F 348	66 F 358		66 F 329	66 F 309		66 F 339	
0-50	66 F 346	66 F 356		66 F 326	66 F 306		66 F 336	
0-75	.....	.....		66 F 327	66 F 307	9.60	66 F 337	10.58

Include Range and Model Number on Meter Orders

Triplett Panel Meters

GLASS-FRONT PANEL METERS
(Continued)

2½", 3", 3½", and 4½"

AC MILLIAMMETERS

Range	231S 2½" Rnd.	237S 2½" Rect.	NET EACH
0-10	66 F 570	66 F 580	7.35
0-15	66 F 571	66 F 581	
0-25	66 F 572	66 F 582	
0-50	66 F 573	66 F 583	
0-100	66 F 574	66 F 584	
0-200	66 F 575	66 F 585	
0-250	66 F 576	66 F 586	
0-500	66 F 577	66 F 587	

Range	337S 3" Rect.	331S 3½" Rnd.	NET EACH
0-10	66 F 490	66 F 470	8.33
0-15	66 F 491	66 F 471	
0-25	66 F 488	66 F 476	
0-50	66 F 492	66 F 472	
0-100	66 F 493	66 F 473	
0-200	66 F 489	66 F 477	
0-250	66 F 494	66 F 474	
0-500	66 F 495	66 F 475	

Range	430 4½" Rect.	NET EACH
0-10	66 F 496	9.31
0-15	66 F 446	
0-25	66 F 447	
0-50	66 F 448	
0-100	66 F 497	
0-200	66 F 449	
0-250	66 F 498	
0-500	66 F 499	

DC MILLIVOLTMETERS

Range	327T 3" Rect.	321T 3½" Rnd.	NET EACH
0-50	66 F 078	66 F 088	8.33
0-100	66 F 079	66 F 089	

Range	420 4½" Rect.	NET EACH
0-50	66 F 098	9.31
0-100	66 F 099	

VOLUME UNIT METERS

Highly damped meters for power amplifiers and broadcast equipment. "A" scale; —20 to +3 vol. units. 0-100% scale for 600 ohm lines. Steady state ref., 1 mw. Zero adjustment. Internal impedance, 3900 ohms. Bakelite case. *Illuminated.

327T 3" Rect.	NET EACH	420 4½ Rect.	NET EACH
66 F 075	15.19	66 F 071	16.17
66 F 076*	16.66	66 F 072*	17.64

DECIBEL METERS (+6 to —10 db)

Power level indicators. For measuring sound or noise levels. Read up 6 and down 10 db. Zero db is 1.73 volts. Reference level is 6 milliwatts. Calibrated for 500 ohm line. Internal resistance 5000 ohms. *Illuminated.

327T 3" Rect.	NET EACH	420 4½" Rect.	NET EACH
66 F 263	12.15	66 F 265	13.13
66 F 264*	13.72	66 F 266*	14.70

TYPE 361 WATTMETERS

Electrodynamometer type instrument for shop, field and laboratory. Can be used as appliance tester, wattmeter, voltmeter or ammeter. Accuracy guaranteed within 2% for either DC or single-phase AC to 133 cps.

Stock No.	Watts	Volts	Amps	NET EACH
66 F 286	0-150	150	1	19.11
66 F 285	0-300	150	2	
66 F 287	0-750	150	5	

ZERO CENTER DC MICROAMMETERS

Range	327T 3" Rect.	321T 3½" Rnd.	NET EACH
50-0-50	66 F 086	66 F 084	10.78
100-0-100	66 F 087	66 F 085	9.31

Range	420 4½" Rect.	NET EACH
50-0-50	66 F 094	11.76
100-0-100	66 F 095	10.29

TYPE PL PLASTIC-FRONT PANEL METERS

METER MOUNTING SIZES

*Round †Rectangular

Mfr's Type	Flange	Body Dia.	Depth	Scale
221-PL*	2 11/16"	2 13/64"	1"	2.197"
227-PL†	2 19/32x2 1/8"	2 9/32"	1 3/32"	2.197"
231-PL*	2 11/16"	2 13/64"	1"	1.92"
237-PL†	2 19/32x2 1/8"	2 9/32"	1 3/32"	1.92"
321-PL*	3 1/2"	2 3/4"	1"	3.11"
327-PL†	3 1/8x3 1/16"	2 3/4"	1 3/32"	3.11"
331-PL*	3 1/2"	2 3/4"	1"	2.65"
337-PL†	3 1/8x3 1/16"	2 3/4"	1 3/32"	2.65"
341-PL*	3 1/2"	2 3/4"	1"	3.11"
347-PL†	3 1/8x3 1/16"	2 3/4"	1 3/32"	3.11"
420-PL†	4 5/8x4 3/16"	2 3/4"	1 1/16"	4.14"
430-PL†	4 5/8x4 3/16"	2 3/4"	1 1/16"	3.6"
440-PL†	4 5/8x4 3/16"	2 3/4"	1 1/16"	4.14"

2 1/2" and 3 1/2" Round

4 1/2" Rectangular

Advanced-design panel meters with wrap-around fronts of clear, unbreakable plastic. Feature greatly improved visibility and maximum protection of meter face. Raised plastic "coverglass" allows unobstructed lighting from top, side and bottom. White, enameled meter faces with large black, oversized scales. Extremely easy to read.

Accuracy within 2% of full scale. DC types employ sensitive D'Arsonval movements; AC types use double-iron repulsion movements. Finest alloy-steel permanent magnets. Movements withstand severe vibration. Streamlined, modern appearance. Mounts by inserting studs through panel. Average shpg. wt., 1½ lbs. Include range and model no. on all meter orders.

AC MILLIAMMETERS

Range	331-PL 3½" Rnd.	NET EACH	337-PL 3½" Rect.	NET EACH	430-PL 4½" Rect.	NET EACH
0-100	66 F 863	8.82	66 F 864	8.82	66 F 854	9.31

AC VOLTMETERS

Range	231-PL 2½" Rnd.	NET EACH	237-PL 2½" Rect.	NET EACH	331-PL 3½" Rnd.	NET EACH	337-PL 3½" Rect.	NET EACH	430-PL 4½" Rect.	NET EACH
0-50					66 F 859	8.82	66 F 780	8.82		
0-150	66 F 825	8.82	66 F 826	8.82	66 F 860	9.80	66 F 781	9.80	66 F 888	10.29
0-300					66 F 861	11.56	66 F 782	11.56	66 F 889	12.05

AC AMMETERS

Range	231-PL 2½" Rnd.	NET EACH	237-PL 2½" Rect.	NET EACH	331-PL 3½" Rnd.	NET EACH	337-PL 3½" Rect.	NET EACH	430-PL. 4½" Rect.	NET EACH
0-5	66 F 828	7.84	66 F 784	7.84	66 F 865	8.82	66 F 787	8.82	66 F 892	9.31
0-10					66 F 866		66 F 788		66 F 893	9.31
0-25					66 F 867		66 F 789			
0-30					66 F 868		66 F 790			
0-50	66 F 832	7.84	66 F 785	7.84	66 F 869		66 F 791		66 F 896	9.31

DC MILLIAMMETERS

Range	221-PL 2½" Rnd.	NET EACH	227-PL 2½" Rect.	NET EACH	321-PL 3½" Rnd.	NET EACH	327-PL 3½" Rect.	NET EACH	420-PL 4½" Rect.	NET EACH
0-1	66 F 812	7.84	66 F 814	7.84	66 F 843	8.82	66 F 793	8.82	66 F 878	9.31
0-50	66 F 813	7.84	66 F 815	7.84	66 F 844		66 F 794		66 F 879	9.31
0-100					66 F 845		66 F 795			
0-200					66 F 846		66 F 796			
0-300					66 F 847		66 F 797		66 F 882	9.31
0-500					66 F 848		66 F 798		66 F 883	9.31

DC VOLTMETERS

1000 OHMS PER VOLT—FILM-TYPE MULTIPLIER RESISTORS

Range	221-PL 2½" Rnd.	NET EACH	227-PL 2½" Rect.	NET EACH	321-PL 3½" Rnd.	NET EACH	327-PL 3½" Rect.	NET EACH	420-PL 4½" Rect.	NET EACH
0-50	66 F 804	7.84	66 F 805	7.84	66 F 834	8.82	66 F 806	8.82	66 F 872	9.31

DC AMMETERS

Range	221-PL 2½" Rnd.	NET EACH	227-PL 2½" Rect.	NET EACH	321-PL 3½" Rnd.	NET EACH	327-PL 3½" Rect.	NET EACH	420-PL 4½" Rect.	NET EACH
0-5					66 F 855	8.82	66 F 880	8.82		
0-10	66 F 822	7.84	66 F 830	7.84	66 F 856		66 F 881		66 F 886	9.31
0-50	66 F 823	7.84	66 F 831	7.84	66 F 857		66 F 884			

DC MICROAMMETERS

Range	221-PL 2½" Rnd.	NET EACH	227-PL 2½" Rect.	NET EACH	321-PL 3½" Rnd.	NET EACH	327-PL 2½" Rect.	NET EACH	420-PL 4½" Rect.	NET EACH
0-50	66 F 807	10.78	66 F 809	10.78	66 F 836	11.76	66 F 873	11.76	66 F 874	12.25
0-100	66 F 808	10.29	66 F 810	10.29	66 F 837	11.27	66 F 876	11.27	66 F 875	11.76
0-200					66 F 838	9.80	66 F 877	9.80		

DB METERS

Stock No.	Type	Range	Calibration	NET EACH
66 F 811	321-PL	+6 to —10 db	for 500 ohm line	12.64
66 F 816	327-PL	+6 to —10 db	for 500 ohm line	

VOLUME UNIT METERS ("A" SCALE)

Range	221-PL 2½" Rect.	NET EACH	321-PL 3½" Rnd.	NET EACH	327-PL 3½" Rect.	NET EACH
—20 to 3	66 F 894	14.70	66 F 897	15.68	66 F 895	15.68

THERMO AMMETERS (RF)

Range	341-PL Rnd. 3½"	NET EACH	347-PL 3½" Rect.	NET EACH	440-PL Rect. 4½"	NET EACH
0-5	66 F 818	9.80	66 F 817	9.80	66 F 819	10.29

Panel Meters and Accessories

SIMPSON PANEL METERS

3½" and 4½" RECTANGULAR MODELS

An excellent selection of high-quality panel meters. Expertly engineered to maintain very high accuracy through continued usage. Easy-to-read black on white scales. Wide scale arc of 100°. Models 27, 29, 37 and 39 employ exclusive patented version of D'Arsonval movement—suspension of movement on fine bifilar wire assures virtually friction-free action. Models 57 and 59 have efficient, iron-vane movements. 27, 37 and 57 are illustrated at left; 29, 39 and 59 are illustrated at right. All are well damped. Polished pivots are seated in finest quality jewels. Accuracy: ±2%. DC voltmeters, 1000 ohms/volt movement. Scale length: 27, 37 and 57, 2⅝"; 29, 39 and 59, 3⅜". Size: 27, 37 and 57, 3⅛" high x3" wide x 2¼" deep (57, 4¾" deep); 29, 39 and 59, 4⅛" high x 4½" wide x 2¼" deep (59, 2⅛" deep). All require 2¼" diameter round holes. Recessed zero adjustments. Black bakelite cases. With mounting hardware and template. Shpg. wt., 1 lb.

DC MILLIAMMETERS

Model 27			Model 29	
No.	EACH	Range	No.	EACH
67 F 520 67 F 521 67 F 522 67 F 530 67 F 523	8.53	0-1 0-5 0-10 0-15 0-25	67 F 420 67 F 421 67 F 422 67 F 430 67 F 423	9.55
67 F 524 67 F 531 67 F 525 67 F 532 67 F 526	8.53	0-50 0-75 0-100 0-150 0-200	67 F 424 67 F 431 67 F 425 67 F 432 67 F 426	9.55
67 F 533 67 F 527 67 F 528 67 F 534 67 F 529	8.53	0-250 0-300 0-500 0-750 0-1000	67 F 433 67 F 427 67 F 428 67 F 434 67 F 429	9.55

DC VOLTMETERS

67 F 515 67 F 516 67 F 500 67 F 501 67 F 502	8.67	0-3 0-5 0-8 0-10 0-15	67 F 415 67 F 416 67 F 401 67 F 402 67 F 403	9.55
67 F 517 67 F 518 67 F 507 67 F 504	8.67	0-25 0-50 0-100 0-150	67 F 417 67 F 418 67 F 405 67 F 406	9.55
67 F 519 67 F 505 67 F 508 67 F 509	8.67	0-200 0-250 0-300 0-500	67 F 419 67 F 407 67 F 408 67 F 409	9.55
67 F 510 67 F 514 67 F 511 67 F 512 67 F 513	12.49	*0-1000 *0-1500 *0-2000 *0-3000 *0-5000	67 F 410 67 F 411 67 F 412 67 F 413 67 F 414	13.38

*0-1000 to 0-5000 types are supplied with external multiplier resistor.

DC AMMETERS

No.	EACH	Range	No.	EACH
67 F 535 67 F 536 67 F 537 67 F 538	8.53	0-1 0-2 0-3 0-5	67 F 435 67 F 436 67 F 437 67 F 438	9.55
67 F 539 67 F 540 67 F 541 67 F 542	8.53	0-10 0-25 0-30 0-50	67 F 439 67 F 440 67 F 441 67 F 442	9.55

DC MICROAMMETERS

67 F 544	14.55	0-25	67 F 444	16.76
67 F 545	11.61	0-50	67 F 445	12.79
67 F 546	11.02	0-100	67 F 446	12.35
67 F 547	9.41	0-200	67 F 447	10.73
67 F 548	8.97	0-500	67 F 448	10.14
67 F 684	11.76	25-0-25	67 F 691	12.94
67 F 685	11.17	50-0-50	67 F 692	12.49
67 F 686	9.55	100-0-100	67 F 693	10.88
67 F 687	8.65	500-0-500	67 F 694	9.70

MODEL 27 DC GALVANOMETERS

Sensitivity, 500-0-500 microamperes. Scale, 50-0-50. Approximate internal resistance, 46 ohms. 3½" rectangular case.
67 F 591. NET 8.53

Sensitivity, 75-0-75 microamperes. Scale, 50-0-50. Approximate internal resistance, 2,000 ohms. 3½" rectangular case.
67 F 592. NET 10.29

DB METERS

General-purpose volume level indicators. Reference level, 6 mw. Calibrated for 500-ohm line. Range, −10 to +6 db. Internal resistance, 5000 ohms.
67 F 549. Model 47. NET 12.05
67 F 404. Model 49. NET 13.67

AC MILLIAMMETERS

Model 57			Model 59	
No.	EACH	Range	No.	EACH
67 F 565 67 F 566 67 F 567 67 F 568	7.94	0-50 0-100 0-250 0-500	67 F 465 67 F 466 67 F 467 67 F 468	9.70

AC VOLTMETERS

67 F 558 67 F 550 67 F 559 67 F 551	7.94	0-1.5 0-3 0-5 0-10	67 F 458 67 F 450 67 F 459 67 F 451	9.55
67 F 552 67 F 560 67 F 553 67 F 554	7.94	0-15 0-25 0-50 0-100	67 F 452 67 F 460 67 F 453 67 F 454	9.55
67 F 555 67 F 561 67 F 556 67 F 557	9.41 9.41 9.41 13.23	0-150 0-250 0-300 0-500	67 F 455 67 F 461 67 F 456 67 F 457	10.29 10.29 10.29 14.11

AC AMMETERS

67 F 575 67 F 576 67 F 577 67 F 578 67 F 579	7.94	0-1 0-2 0-3 0-5 0-10	67 F 475 67 F 476 67 F 477 67 F 478 67 F 479	9.70
67 F 582 67 F 580 67 F 581	7.94 8.23 9.11	0-15 0-25 0-50	67 F 482 67 F 480 67 F 481	9.70 10.29 12.35

RF AMMETERS

Have internal thermocouples.

Model 37			Model 39	
No.	EACH	Range	No.	EACH
67 F 585 67 F 586 67 F 587 67 F 588 67 F 589	10.29	0-1 0-1.5 0-2 0-3 0-5	67 F 485 67 F 486 67 F 487 67 F 488 67 F 489	12.49

RECTIFIER TYPE VOLTMETERS

1000 OHMS PER VOLT

Model 47			Model 49	
No.	EACH	Range	No.	EACH
67 F 569 67 F 570 67 F 571 67 F 572	12.49	0-1 0-5 0-10 0-15	67 F 490 67 F 491 67 F 492 67 F 493	13.38
67 F 573 67 F 574 67 F 583 67 F 584	12.49	0-50 0-100 0-150 0-300	67 F 494 67 F 495 67 F 496 67 F 497	13.38

2000 OHMS PER VOLT

67 F 562 67 F 563 67 F 564 67 F 462	12.79	0-1 0-5 0-10 0-15	67 F 471 67 F 472 67 F 473 67 F 474	13.96
67 F 463 67 F 464 67 F 469 67 F 470	12.79	0-50 0-100 0-150 0-300	67 F 483 67 F 484 67 F 498 67 F 499	13.96

VU METERS

Scales show level both in VU and percentage modulation. D'Arsonval movement. Highly damped. Accuracy, ±5%. Meet Bell Lab standards. Dials have 100° arc. VU scale A, −20 to +3. 3900 ohm internal impedance across 600-ohm lines (zero reference, 1 milliwatt). Have bakelite case.

67 F 597. Model 47. 2⅜" scale. 3½" case. 2¼" deep. Mounts in 2¼" hole. NET 15.59
67 F 598. Model 142. 3½" scale. 4½" case. 1⅝" deep. Mounts in 3¼" hole. NET..16.46
67 F 599. Model 142. Same as above, but illuminated. 2⅜" deep. NET 19.11

JBT TIME, FREQUENCY AND TEMPERATURE METERS

ELAPSED TIME METER

Model 31-EX. Records operating time of AC electrical and electronic equipment. Registers in 1/10th hour steps to 9999.9 hours, then automatically resets. Shows tenths in red numerals, all others in black. Molded case is 3½" panel mount type and fully encloses all parts. Recommended for accuracy and dependability, especially where voltage or ambient temperatures vary widely. Self-starting synchronous motor. Mounts in 2¼" hole. Body: 2¹⁄₁₆" dia. x 2²¹⁄₃₂" deep. 110-120 v., 60 cycle. Shpg. wt., 1¼ lbs.
66 F 689. NET 15.63

FREQUENCY METER

Model 34-FX. Sturdy, vibrating reed frequency meter. Use wherever constant or known frequency is important to efficient operation of equipment. Accurately measures frequency of AC power in the range of 56-64 cycles in 1-cycle steps. Consists of nine reeds and driving coil, permanent magnet and series resistor. Easy-to-read dial. Guaranteed accuracy of ±0.3% at reference temperature of 77° F. Designed for continuous operation. For 100-130 volts. Flush panel mounting. Molded case; 3½" diameter, 2²¹⁄₃₂" deep. Power consumption, 1 watt. Wt., 12 oz.
66 F 685. NET 26.70

TEMPERATURE METER

Model 23-JP-1. Portable temperature meter. Tests thermostats on gas or electric appliances. Has 2⅛" scale arc reading from 0-650°F. in 10 divisions. Automatically compensated for ambient temperature changes. Meter is mounted on a black metal panel. Comes complete with attached SA-116 5½' calibrated thermocouple, clip, and convection shield. Supplied in black top-grain leather case. Size: 4½x2⅞x4¼". Shpg. wt., 2¼ lbs.
66 F 688. NET 23.03

STERLING BATTERY TESTERS

Watch-case type testers for checking hearing aid batteries, "B" batteries, dry cells, etc. Durable and accurate. White dial face with black easy-to-read markings. Handy pocket size. Housed in sturdy nickel-finished cases. 2¼" diameter, ⅝" thick. Av. shpg. wt., 6 oz.

FOR HEARING-AID BATTERIES

78 F 031. Type 31A. Voltmeter for 30 or 45 v. "B" and 1½ v. "A" hearing aid batteries. Scale, 0-50 v., 0-2 v. NET 2.35

FOR PORTABLE BATTERIES

78 F 024. Type 37A. 0-2-50 Volts 2.06
78 F 025. Type 38A. 0-2-100 Volts 2.20
78 F 026. Type 39A. 0-2-150 Volts 2.20
78 F 027. Type 40A. 0-10-150 Volts 2.35

FOR DRY CELL BATTERIES

Nickel-finish cases. 2¼" dia. ⅝" thick.

78 F 028. Type 24. 0-35 Amps 1.47
78 F 029. Type 34C. 0-50 Volts 1.96
78 F 030. Type 45. 0-35 Amps and 0-50 Volts. NET 2.62

BENCH-TYPE METER CASE

Sloping front metal case for round meters with 2¾" body diameters. Binding posts on top for convenient attaching of test leads. Black wrinkle finish. Holds meter at ideal angle. Height, 3½"; width, 4"; depth at base, 3¼". Less meter. Wt., 1 lb.
66 F 506. NET 98c

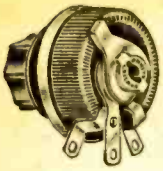
BRADLEY UNIVERSAL INSTRUMENT RECTIFIERS

TYPE CX4D4U. Used for applications requiring up to 50 ma DC output. AC input: as half-wave or full-wave center-tapped rectifier, 12 volts; as double half-wave or full-wave bridge, 6 volts. Complete with all operating data. Size ⅞x¼x½". Shpg. wt., 4 oz.
68 F 034. List, $4.65. NET 2.73

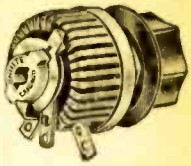
TYPE CX2E4U. For circuits with up to 5 ma DC output. AC input: As half-wave or full-wave center-tapped rectifier, 12 volts. As double half-wave or full-wave bridge, 6 volts. Size: ⅞x¼x⅛". Supplied with complete operating data. Shpg. wt., 3 oz.
68 F 033. List, $3.50. NET 2.06

Include Range and Model Number on Meter Orders

WIREWOUND INDUSTRIAL RHEOSTATS



Quality vitreous-enameled wirewound rheostats. Provide extremely smooth, highly dependable control of industrial and other electronic devices. Resistance wire is wound on a solid ceramic core and each turn is permanently bonded in place by vitreous enamel. The core and base are also bonded by vitreous enamel. A pivoted universal-action-mounted contact brush rides over a smooth, flat surface to assure perfect contact at all settings. Copper-graphite contact brush, except *silver-graphite contact brush. Ratings indicated are at full setting. U.L. Approved. Types H, J, K and L mount on panels up to ¼" thick; Type N on panels up to 1¼" thick. Specifications: Type H, dia. 1⅜", depth behind panel 1⅛"; Type J, dia. 2⅜", depth behind panel 1⅜"; Type K, dia. 3⅛", depth behind panel 1¾"; Type L, dia. 4", depth behind panel 2"; Type N, dia. 6", depth behind panel 2⅛". Av. shpg. wt., 10 oz. With knob.



25 WATT—TYPE H

No.	Type	Ohms	EACH
74 M 320	0140*	1	4.14
74 M 321	0141	2	3.66
74 M 337	0142	3	
74 M 322	0143	6	
74 M 338	0144	8	
74 M 323	0145	10	
74 M 324	0146	15	
74 M 325	0147	25	
74 M 339	0148	35	
74 M 326	0149	50	
74 M 340	0150	75	
74 M 327	0151	100	

No.	Type	Ohms	EACH
74 M 341	0152	125	3.66
74 M 328	0153	175	
74 M 329	0154	250	
74 M 342	0155	350	
74 M 330	0156	500	
74 M 331	0157	750	
74 M 332	0158	1000	4.14
74 M 333	0159	1500	
74 M 334	0160	2500	
74 M 335	0161	3500	4.34
74 M 336	0162	5000	

50 WATT—TYPE J

No.	Type	Ohms	EACH
74 M 350	0308*	0.5	4.60
74 M 351	0309*	1	
74 M 352	0310*	2	
74 M 353	0311	4	4.14
74 M 367	0312	6	
74 M 354	0313	8	
74 M 355	0314	12	
74 M 368	0315	16	
74 M 356	0316	22	
74 M 369	0317	35	
74 M 357	0318	50	
74 M 358	0319	80	
74 M 370	0320	125	

No.	Type	Ohms	EACH
74 M 359	0321	150	4.14
74 M 360	0322	225	
74 M 361	0323	300	
74 M 362	0324	500	
74 M 371	0325	800	4.34
74 M 363	0326	1000	
74 M 372	0327	1600	
74 M 364	0328	2500	
74 M 373	0329	3500	4.60
74 M 365	0330	5000	
74 M 374	0331	8000	
74 M 366	0332	10,000	

100 WATT—TYPE K

No.	Type	Ohms	EACH
74 M 380	0440*	0.5	6.88
74 M 393	0441*	1	
74 M 381	0442*	2	
74 M 382	0443*	3	
74 M 394	0444*	5	
74 M 395	0445	7.5	6.44
74 M 383	0446	10	
74 M 397	0447	16	
74 M 384	0448	25	
74 M 385	0449	50	
74 M 398	0450	75	
74 M 386	0451	100	

No.	Type	Ohms	EACH
74 M 399	0452	200	6.44
74 M 400	0453	300	
74 M 401	0454	400	
74 M 387	0455	500	
74 M 402	0456	750	
74 M 388	0457	1000	6.88
74 M 403	0458	1500	
74 M 404	0459	2000	
74 M 389	0460	2500	
74 M 390	0461	5000	7.33
74 M 391	0462	7500	7.81
74 M 392	0463	10,000	8.25

ALLIED can promptly supply all Ohmite industrial controls, including 75, 225, 500, 750 and 1000 watt types. In addition to standard Ohmite controls, special types are also available—tandem-mounted controls, special resistance values, special length bushings and shafts, bridged-gap types, tapped-winding types and controls for virtually all industrial rheostat applications. Prices available on request; send in blueprints or specifications. Write for free copy of Ohmite catalog, our Stock No. 37 M 047.

150 WATT—TYPE L

No.	Type	Ohms	EACH
74 M 450	0524*	0.5	8.72
74 M 451	0525*	1	
74 M 452	0526*	2	
74 M 453	0527*	3	
74 M 454	0528*	5	
74 M 455	0529*	7.5	
74 M 456	0530	10	8.25
74 M 457	0531	15	
74 M 458	0532	25	
74 M 459	0533	35	
74 M 460	0534	50	
74 M 461	0535	75	
74 M 462	0536	100	

No.	Type	Ohms	EACH
74 M 463	0537	150	8.25
74 M 464	0538	200	
74 M 465	0539	250	
74 M 466	0540	350	
74 M 467	0541	500	
74 M 468	0542	750	8.72
74 M 469	0543	1250	8.72
74 M 470	0544	1800	9.18
74 M 471	0545	2250	9.18
74 M 472	0546	3000	9.18
74 M 473	0547	4500	9.62
74 M 474	0548	7500	10.09
74 M 475	0549	10,000	11.01

300 WATT—TYPE N

No.	Type	Ohms	EACH
74 M 476	0650*	1	12.39
74 M 477	0651*	2	
74 M 478	0652*	3	
74 M 479	0653*	4	
74 M 480	0654*	5	
74 M 481	0655*	7.5	
74 M 482	0656*	10	
74 M 483	0657*	15	
74 M 484	0658	25	
74 M 485	0659	50	
74 M 486	0660	75	

No.	Type	Ohms	EACH
74 M 487	0661	100	12.39
74 M 488	0662	150	
74 M 489	0663	200	
74 M 490	0664	300	
74 M 491	0665	400	
74 M 492	0666	700	
74 M 493	0667	900	
74 M 494	0668	1200	
74 M 495	0669	1500	
74 M 496	0670	1750	
74 M 497	0671	2500	

Type 5000 Dial Plate. For Type H, J, K and L. 2⅛" diameter. Handsomely finished with bright figures and lines on etched black background. 0-100 scale. Shpg. wt., 2 oz.
74 M 405. NET 19c

Type 5001 Dial Plate. For Type N. 5½" dia. 0-100. 3 oz.
74 M 407. NET 1.51

TANDEM COUPLING KITS

Kits for assembling Ohmite rheostats in tandem, formerly available only in made-to-order assemblies. Rheostats are mounted colinear, so that both are operated with a single knob. Each kit consists of a steel "U" frame, mica washer, coupling, Allen wrench, and complete instructions for assembly. Rheostats are joined together by means of a coupling fastened to the shaft of the rear unit with a socket set screw. Large frame (No. 6533) is designed for Models K and L rheostats, and will accommodate Model H or J in the rear position. Maximum panel thickness when using standard Ohmite knobs, ⅛". Frame is 2⅜" long and 1¼" wide. Small frame (No. 6532) is designed for Models H and J, and will accommodate Model K or L in the rear position. Maximum panel thickness, 5/32". Frame is 2½" long and 1¼" wide.

No. 6532 Tandem Coupling Kit. Shpg. wt., 4 oz.
74 M 408. NET 1.64

No. 6533 Tandem Coupling Kit. Shpg. wt., 5 oz.
74 M 409. NET 2.04

OHMITE "AB" POTENTIOMETERS

Type CLU

Type CA, CB, CU

The Ohmite "AB" type potentiometer is a high-quality two-watt variable resistance control unit designed especially for industrial laboratory, TV service and other uses where reliability is particularly important. Features molded resistor element construction for exceptionally high safety factor. For complete protection this resistor element is sealed in a metal enclosure to make each unit dust-proof and splash-proof. Carbon sliding contact and terminals imbedded in the resistor element assure smooth, noise-free operation.

Size of single units, 1⅛" dia. x 3/16". Size of double units, 1⅛" dia. x 1⅜". Mount in ⅜" hole on panels up to ¼" thick. Types CU, CCU, CA and CB have 2" standard ¼" round shafts; type CLU has locking nut and slotted shaft for screw driver adjustment. Type number prefix indicates taper of potentiometer. CU, CCU and CLU types have linear taper; CA types, clockwise logarithmic; CB types, counterclockwise logarithmic. All ±10% tolerance, except * ±20%. Average shpg. wt., 5 oz.

Type CCU

TYPES CA, CB, CU—WITH 2-INCH SHAFT

No.	Type	Ohms	EACH
28 M 500	CU5001	50	1.91
28 M 501	CU1011	100	
28 M 502	CU2511	250	
28 M 503	CU5011	500	
28 M 504	CU1021	1000	
28 M 505	CU2521	2500	
28 M 506	CU5021	5000	
28 M 507	CU1031	10,000	
28 M 508	CB1031	10,000	2.20
28 M 509	CU2531	25,000	1.91
28 M 510	CB2531	25,000	2.20
28 M 511	CU5031	50,000	1.91

No.	Type	Ohms	EACH
28 M 512	CB5031	50,000	2.20
28 M 513	CU1041	100,000	1.91
28 M 514	CA1041	100,000	2.20
28 M 515	CU2541	250,000	1.91
28 M 516	CA2541	250,000	2.20
28 M 517	CU5041	500,000	1.91
28 M 518	CA5041	500,000	2.20
28 M 519	CU1052	1 Meg*	1.91
28 M 520	CA1052	1 Meg*	2.20
28 M 521	CU2552	2.5 Meg*	1.91
28 M 522	CA2552	2.5 Meg*	2.20
28 M 523	CU5052	5 Meg*	1.91

Type CS-1 SPST Switch. For AB potentiometers.
28 M 524. NET 65c

TYPE CLU—WITH LOCKING SHAFT

No.	Type	Ohms	EACH
28 M 525	CLU5001	50	2.50
28 M 526	CLU1011	100	
28 M 527	CLU2511	250	
28 M 528	CLU5011	500	
28 M 529	CLU1021	1000	
28 M 530	CLU2521	2500	
28 M 531	CLU5021	5000	
28 M 532	CLU1031	10,000	

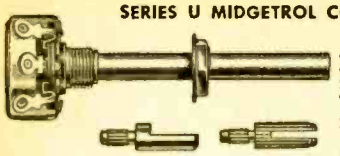
No.	Type	Ohms	EACH
28 M 533	CLU2531	25,000	2.50
28 M 534	CLU5031	50,000	
28 M 535	CLU1041	.1 Meg	
28 M 536	CLU2541	.25 Meg	
28 M 537	CLU5041	.5 Meg	
28 M 538	CLU1052	1.0 Meg*	
28 M 539	CLU2552	2.5 Meg*	
28 M 540	CLU5052	5.0 Meg*	

TYPE CCU DUALS

28 M 541	CCU1031	10,000	5.73
28 M 542	CCU2531	25,000	
28 M 543	CCU5031	50,000	
28 M 544	CCU1041	100,000	
28 M 545	CCU2541	250,000	5.73
28 M 546	CCU5041	500,000	
28 M 547	CCU1052	1 Meg*	

Mallory Controls

SERIES U MIDGETROL CONTROLS



For audio, tone and similar control circuits in home receivers, audio amplifiers, portables, TV sets, and industrial electronic equipment. Available in a full line of resistances, tapers, and taps. Round, hollow shaft—easily cut to desired length. Two spline-shank knob adapters furnished with each Midgetrol—see illustration above. With nut and lock washer. 15/16" dia. brass shaft, 2½" long, ¼" dia. Less switch (see below). Shpg. wt., 3 oz.

No.	Type	Ohms	Taper	No.	Type	Ohms	Taper
29 M 709	U- 2	500	4	29 M 765	U-39	100K	1
29 M 796	U- 3	1K	2	29 M 766	U-40	100K	2
29 M 785	U- 4	1K	4	29 M 767	U-41	100K	4
29 M 797	U- 5	1500	2	29 M 795	U-415	125K	4
29 M 710	U-5L	1500	4	29 M 768	U-42	150K	1
29 M 786	U- 6	2K	4	29 M 769	U-43	200K	4
29 M 798	U- 7	2500	2	29 M 770	U-44	250K	1
29 M 787	U- 8	3K	4	29 M 771	U-45	250K	2
29 M 751	U-12	5K	1	29 M 772	U-46	250K	4
29 M 752	U-14	5K	4	29 M 773	U-48	500K	1
29 M 753	U-18	10K	1	29 M 774	U-50	500K	4
29 M 754	U-19	10K	2	29 M 775	U-51	750K	1
29 M 755	U-20	10K	4	29 M 776	U-53	1 Meg	1
29 M 756	U-21	15K	1	29 M 777	U-54	1 Meg	4
29 M 757	U-22	15K	2	29 M 790	U-155	1.5Meg	4
29 M 758	U-24	20K	1	29 M 778	U-55	2 Meg	1
29 M 783	U-26	20K	4	29 M 781	U-56	2 Meg	4
29 M 759	U-28	25K	2	29 M 784	U-255	2.5Meg	4
29 M 760	U-29	25K	4	29 M 779	U-57	3 Meg	1
29 M 761	U-33	50K	1	29 M 782	U-59	3 Meg	4
29 M 762	U-34	50K	2	29 M 780	U-65	5 Meg	1
29 M 763	U-35	50K	4	29 M 788	U-67	5 Meg	4
29 M 764	U-36	75K	1	29 M 789	U-82	10 Meg	4

NET EACH 73c

TYPE UT SINGLE-TAPPED MIDGETROLS

Same as U-types above, but tapped for tone compensation.

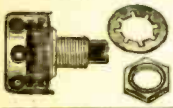
29 M 802	UT-420	250K	50K	29 M 806	UT-443	1 Meg	450K
29 M 803	UT-425	350K	70K	29 M 807	UT-450	2 Meg	125K
29 M 816	UT-429	500K	50K	29 M 808	UT-448	2 Meg	250K
29 M 804	UT-427	500K	100K	29 M 809	UT-454	2 Meg	400K
29 M 860	UT-430	500K	150K	29 M 863	UT-449	2 Meg	600K
29 M 805	UT-431	500K	225K	29 M 810	UT-451	2 Meg	900K
29 M 861	UT-440	1 Meg	200K	29 M 817	UT-457	3 Meg	900K
29 M 862	UT-438	1 Meg	300K	29 M 711	UT-461	3.2 Meg	300K

NET EACH 1.09

TYPE UDT DOUBLE-TAPPED MIDGETROLS

No.	Mfr's Type	Ohms	Taps	EACH
29 M 988	UDT-283	500K	100K/200K	1.09
29 M 989	UDT-289	1 Meg.	250K/500K	
29 M 990	UDT-291	1.5 Meg.	225K/500K	
29 M 991	UDT-295	2.25 Meg	250K/500K	
29 M 992	UDT-296	2.25 Meg	500K/1 Meg	

TYPE SU INSULATED-SHAFT MIDGETROLS FOR TV



Size and basic construction is the same as Midgetrols listed above, except the SU type control has a ¼" dia., fixed knurled and slotted phenolic shaft protruding ¼" beyond bushing. Meet exact physical and electrical requirements for special applications. Linear taper. With hex nut. Shpg. wt., 3 oz.

No.	Mfr's Type	Ohms	No.	Mfr's Type	Ohms
29 M 646	SU-6	1.5K	29 M 828	SU-46	250K
29 M 647	SU-8	3K	29 M 814	SU-50	500K
29 M 832	SU-14	5K	29 M 829	SU-54	1 Meg
29 M 826	SU-20	10K	29 M 830	SU-56	2 Meg
29 M 812	SU-29	25K	29 M 833	SU-565	2.5 Meg
29 M 827	SU-35	50K	29 M 831	SU-59	3 Meg
29 M 813	SU-41	100K	29 M 815	SU-67	5 Meg

NET EACH 73c

SWITCHES AND ACCESSORIES FOR MIDGETROLS

"Push-on, stay-on" switches for Midgetrols. Shpg. wt., 2 oz.

29 M 620. **US-26 SPST Switch. NET** ..... 35¢
29 M 621. **US-26T SPST Switch.** With dummy terminal. **NET** .. 44¢
29 M 622. **US-27 DPST Switch. NET** ..... 44¢
29 M 623. **US-28 SPDT Switch. NET** ..... 44¢

29 M 984. **DS-35 Flatted, Split-Knurl Shaft End.** Exact replacement for Zenith. Shpg. wt., 2 oz. **NET** ..... 26¢

29 M 985. **DS-36 Special 3" Extension Shaft.** For tubular shaft. Midgetrols above; TV and industrial 2-watt potentiometers at right. Also couples front and rear sections together. Shpg. wt., 2 oz. **NET** ... 26¢

29 M 882. **DS-37 3/16" Diameter Shaft.** For use with round-shaft Midgetrols to accommodate knobs requiring 3/16" shaft. Wt., 2 oz. **NET** .. 26¢

29 M 986. **EB-158 Special Bushing.** Dimensions: 7/16"—28 thread, 1 11/16" long, with a 3/8" milled double flat. Shpg. wt., 2 oz. **NET** ..... 35¢

29 M 987. **EB-214 Special Bushing.** Dimensions: ½"—28 thread, 2 3/16" long with .403" milled flat. Shpg. wt., 2 oz. **NET** ..... 35¢

EXPLANATION OF TAPERS

Taper No. 1: For use in audio or antenna shunt circuits.
Taper No. 2: For series circuits or cathode voltage controls.
Taper No. 4: Linear. For voltage control.

DUAL CONCENTRIC MIDGETROLS FOR TV

Exact replacements in over 90% of all television sets and auto radios. Each dual Midgetrol is composed of a front and a rear section—each ordered separately. Necessary hardware is supplied with front section. Diameter: only 15/16". Hardware supplied with each front section includes one inner shaft, one bakelite spacer, one coupling cup, and two shaft ends which fit .187 and .202 RETMA knobs. Uses Midgetrol switches (see below left). Depth without switch: 1 1/8"; with switch, 1 3/8". Instructions included. Shpg. wt., front section, 5 oz.; rear, 4 oz.

TYPE UF CARBON FRONT SECTIONS

No.	Type	Ohms	Taper	No.	Type	Ohms	Taper
29 M 648	UF13R	1000	2	29 M 937	UF54L	50K	4
29 M 926	UF13L	1000	4	29 M 738	UF753L	75K	4
29 M 649	UF152R	1500	2	29 M 938	UF15A	100K	1
29 M 819	UF152L	1500	4	29 M 939	UF15R	100K	2
29 M 652	UF23R	2000	2	29 M 940	UF15L	100K	4
29 M 918	UF23L	2000	4	29 M 941	UF254A	250K	1
29 M 653	UF252R	2500	2	29 M 919	UF254L	250K	4
29 M 736	UF252L	2500	4	29 M 942	UF55A	500K	1
29 M 654	UF33R	3000	2	29 M 943	UF55R	500K	2
29 M 737	UF33L	3000	4	29 M 944	UF55L	500K	4
29 M 929	UF53R	5000	2	29 M 945	UF16A	1 Meg	1
29 M 930	UF53L	5000	4	29 M 946	UF16L	1 Meg	4
29 M 931	UF73R	7000	2	29 M 739	UF155A	1.5Meg	1
29 M 666	UF14R	10K	2	29 M 667	UF155L	1.5Meg	4
29 M 932	UF14L	10K	4	29 M 947	UF26A	2 Meg	1
29 M 933	UF253R	25K	2	29 M 948	UF26L	2 Meg	4
29 M 934	UF253L	25K	4	29 M 740	UF255L	2.5Meg	4
29 M 935	UF34A	30K	1	29 M 741	UF46A	4 Meg	1
29 M 936	UF54A	50K	1	30 M 012	UF106L	10Meg	1

NET EACH 1.18

TYPE WF WIRE-WOUND FRONT SECTIONS

1 11/16" dia. Tapped: *250 ohms; §500 ohms; †2000 ohms.

No.	Type	Ohms	NET	No.	Type	Ohms	NET
29 M 794	WF32	300	1.23	29 M 669	WF152-T52	1500§	1.47
29 M 742	WF751	750	1.23	29 M 744	WF23	2000	1.23
29 M 668	WF751-T52	750§	1.47	29 M 793	WF252-T23	2500†	1.47
29 M 993	WF751-T251	750*	1.47	29 M 996	WF252	2500	1.23
29 M 994	WF13	1000	1.23	29 M 997	WF33	3000	1.23
29 M 995	WF13-T251	1000*	1.47	29 M 998	WF53	5000	1.23
29 M 743	WF152	1500	1.23	29 M 999	WF73	7000	1.23

TYPE UR CARBON REAR SECTIONS

No.	Type	Ohms	Taper	No.	Type	Ohms	Taper
29 M 951	UR13L	1000	4	29 M 962	UR254A	250K	1
30 M 011	UR152L	1500	2	29 M 963	UR254L	250K	4
29 M 954	UR23L	2000	4	29 M 746	UR354A	350K	1
29 M 673	UR352R	3500	2	29 M 964	UR55A	500K	1
29 M 745	UR352L	3500	4	29 M 965	UR55L	500K	4
29 M 955	UR53R	5000	2	29 M 966	UR16A	1 Meg	1
29 M 949	UR53L	5000	4	29 M 967	UR16L	1 Meg	4
29 M 956	UR14R	10K	2	29 M 968	UR26A	2 Meg	1
29 M 957	UR14L	10K	4	29 M 969	UR26L	2 Meg	4
29 M 958	UR253L	25K	4	29 M 674	UR255L	2.5meg	4
29 M 959	UR54L	50K	4	29 M 747	UR36A	3 Meg	1
29 M 960	UR15R	100K	2	30 M 013	UR56L	5 Meg	4
29 M 961	UR15L	100K	4				

NET EACH 59c

2-WATT TV AND INDUSTRIAL CONTROLS

Two-watt wirewound potentiometers designed especially for replacement of television controls. Also excellent for use as voltage dividers and bias controls. Insulated contact arm type, linear taper. Special dual contactor mechanism. 900 volts AC insulation between resistance element and chassis. 297° rotation. Taper 4. 1 23/64" in diameter. Knurled stub shaft has screwdriver slot. *Center-tapped. 3/8" bushing. Shpg. wt., 4 oz.

No.	Type	Ohms	NET	No.	Type	Ohms	NET
29 M 835	R20L	20	.73	29 M 842	R1000L	1000	82¢
29 M 836	R20CT*	20	1.09	29 M 843	R1500L	1500	82¢
29 M 837	R25L	25	.73	29 M 844	R2500L	2500	82¢
29 M 838	R30L	30	.73	29 M 846	R3000L	3000	82¢
29 M 839	R30CT*	30	1.09	29 M 845	R5000L	5000	82¢
29 M 840	R50L	50	.73	29 M 692	R7500L	7500	88¢
29 M 864	R100L	100	.73	29 M 693	R10ML	10,000	88¢
29 M 841	R250L	250	.73	29 M 694	R15ML	15,000	88¢
29 M 834	R500L	500	.73	29 M 695	R20ML	20,000	88¢

THEATER SPEAKER CONTROLS

Precision units developed especially as replacements for a majority of controls in drive-in theater speaker installations. Withstand extremes of temperature and humidity. TSA-10 is an L-pad with 10-ohm input and 4-ohm output. TSA-35 is a 35-ohm series-type potentiometer. TSA-6 is a 2-watt shunt-type attenuator. Knurled shaft. 1 1/16" dia., 3/8"-32 thread. Shpg. wt., 4 oz.

No.	Mfr's Type	Description	EACH
29 M 847	TSA-10	L-pad	1.18
29 M 848	TSA-35	Potentiometer	.88
29 M 849	TSA-6	Shunt-type Attenuator	.88

Guide to Auto Radio Replacement Controls. Lists Mallory replacements for controls in auto radios.
29 M 799 ..... **No charge with your next order.**

Include Ohms and Manufacturer's Type Number When Ordering Controls

Mallory Industrial Controls

TYPE K VITREOUS WIRE WOUND RHEOSTATS

Power rheostats and potentiometers. Used in battery chargers, blue print machines, dental and medical equipment, fans, film printers, generators, motion picture projectors, motors, and many other applications where it is desirable to vary a stable current. Contact arm is hinged and under constant pressure to insure proper contact with element. Knob and dial plate supplied. Av. shpg. wt., 10 oz.

TYPE 25K—25 WATTS

Outside diameter, 1 9/16". Angle of rotation, 295 degrees.

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74M 800	25K1P	1	4.12	74M 812	25K125P	125	3.65
74M 801	25K2P	2	3.65	74M 813	25K175P	175	
74M 802	25K3P	3	3.65	74M 814	25K250P	250	
74M 803	25K6P	6	3.65	74M 815	25K350P	350	
74M 804	25K8P	8	3.65	74M 816	25K500P	500	3.65
74M 805	25K10P	10	3.65	74M 817	25K750P	750	3.65
74M 806	25K15P	15		74M 818	25K1000P	1000	4.12
74M 807	25K25P	25		74M 819	25K1500P	1500	4.12
74M 808	25K35P	35	3.65	74M 820	25K2500P	2500	4.12
74M 809	25K50P	50		74M 821	25K3500P	3500	4.35
74M 810	25K75P	75		74M 822	25K5000P	5000	4.35
74M 811	25K100P	100					

TYPE 50K—50 WATTS

Outside diameter, 2 13/32". Angle of rotation, 300 degrees.

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74M 823	50K.5P	.5	4.59	74M 835	50K125P	125	4.12
74M 824	50K1P	1	4.59	74M 836	50K150P	150	
74M 825	50K2P	2	4.59	74M 837	50K225P	225	
74M 826	50K4P	4	4.12	74M 838	50K300P	300	
74M 827	50K6P	6	4.12	74M 839	50K500P	500	4.12
74M 828	50K8P	8	4.12	74M 840	50K800P	800	4.35
74M 829	50K12P	12		74M 841	50K1000P	1000	4.35
74M 830	50K16P	16		74M 842	50K1600P	1600	4.35
74M 831	50K22P	22	4.12	74M 843	50K2500P	2500	4.35
74M 832	50K35P	35		74M 844	50K350CP	3500	4.59
74M 833	50K50P	50		74M 845	50K5000P	5000	4.59
74M 834	50K80P	80		74M 846	50K8000P	8000	4.59

TYPE 100K—100 WATTS

Outside diameter, 3 1/8". Angle of rotation, 300 degrees.

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74M 847	100K.5P	.5	6.88	74M 859	100K200P	200	6.44
74M 848	100K1P	1		74M 860	100K300P	300	
74M 849	100K2P	2		74M 861	100K400P	400	
74M 850	100K3P	3		74M 862	100K500P	500	
74M 851	100K5P	5	6.88	74M 863	100K750P	750	6.44
74M 852	100K7.5P	7.5	6.44	74M 864	100K1000P	1000	6.88
74M 853	100K10P	10	6.44	74M 865	100K1500P	1500	6.88
74M 854	100K16P	16	6.44	74M 866	100K2000P	2000	6.88
74M 855	100K25P	25	6.44	74M 867	100K2500P	2500	6.88
74M 856	100K50P	50		74M 868	100K5000P	5000	7.32
74M 857	100K75P	75		74M 869	100K7500P	7500	7.79
74M 858	100K100P	100		74M 870	100K10000P	10000	8.23

TYPE 150K—150 WATTS

Outside diameter, 4 1/32". Angle of rotation, 315 degrees.

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74M 871	150K.5P	.5	8.73	74M 884	150K150P	150	8.23
74M 872	150K1P	1		74M 885	150K200P	200	
74M 873	150K2P	2		74M 886	150K250P	250	
74M 874	150K3P	3		74M 887	150K350P	350	
74M 875	150K5P	5	8.73	74M 888	150K500P	500	8.23
74M 876	150K7.5P	7.5	8.73	74M 889	150K750P	750	8.73
74M 877	150K10P	10	8.23	74M 890	150K1250P	1250	8.73
74M 878	150K15P	15	8.23	74M 891	150K1800P	1800	9.17
74M 879	150K25P	25	8.23	74M 892	150K2250P	2250	9.17
74M 880	150K35P	35		74M 893	150K3000P	3000	9.17
74M 881	150K50P	50		74M 894	150K4500P	4500	9.61
74M 882	150K75P	75		74M 895	150K7500P	7500	10.08
74M 883	150K100P	100		74M 896	150K10000P	10000	11.00

TYPE 300K—300 WATTS

Outside diameter, 6 1/16". Angle of rotation, 315 degrees.

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
74M 897	300K1P	1	12.38	74M 908	300K100P	100	12.38
74M 898	300K2P	2		74M 909	300K150P	150	
74M 899	300K3P	3		74M 910	300K200P	200	
74M 900	300K4P	4		74M 911	300K300P	300	
74M 901	300K5P	5	12.38	74M 912	300K400P	400	12.38
74M 902	300K7.5P	7.5		74M 913	300K700P	700	
74M 903	300K10P	10		74M 914	300K900P	900	
74M 904	300K15P	15		74M 915	300K1200P	1200	
74M 905	300K25P	25	12.38	74M 916	300K1500P	1500	12.38
74M 906	300K50P	50		74M 917	300K1750P	1750	
74M 907	300K75P	75		74M 918	300K2500P	2500	

VOLUME CONTROL ACCESSORIES

*Couples 1/4" shafts to 1/4" or 1/4" to 3/16" shafts. §Bushing for panel mounting. †Extends body of control 5/8" away from mounting surface. Av. shpg. wts.: Brackets, 3 oz.; shafts, couplers and bushings, 1 1/4 oz.

No.	Type	Fig.	Description	EACH
29 M 676	RB249	A	Mtg. bracket. Mtg. Ctrs. 2 1/2"	15¢
29 M 675	RB248	A	Mtg. bracket. Mtg. Ctrs. 1 3/4"	15¢
29 M 661	EB247†	D	Extender	15¢
29 M 665	178	E	Wrench for 1/2"-9/16" v.c. hex nuts	44¢
29 M 655	RS242	F	Ext. shaft, 4x1/4x1/32" flat.	24c
29 M 656	RS243	F	Ext. shaft, 4x1/4x1/32" flat.	
29 M 657	RS244	F	Ext. shaft, 4x3/16x1/64" flat.	
29 M 658	RS245	F	Ext. shaft, 2x1/4" with 1/32" slot.	26¢
29 M 672	EC240*	B	Coupling	44¢
60 H 390	UB241§	C	Bushing	6¢

"M" AND "MT" WIRE WOUND CONTROLS

For industrial and laboratory use as bias controls and voltage dividers. Also for TV replacement. 4 watts. Arm insulated from shaft. 294° rotation. Knurled 1/4" shaft is 1/8" long; has screwdriver slot and is hollow to accept DS-36 and DS-37 extension shafts (see page 98). MT types are center-tapped TV units. 1 5/8" dia. x 9/16". Mount in 1/8" hole. Linear taper. Shpg. wt., 4 oz.

POTENTIOMETERS

No.	Type	Ohms	EA.	No.	Type	Ohms	EA.
29 M 424	M1PK	1	88c	29 M 411	M500PK	500	88c
29 M 425	M3PK	3		29 M 412	M600PK	600	
29 M 426	M6PK	6		29 M 413	M1MPK	1000	1.03
29 M 427	M10PK	10		29 M 431	M1.5MPK	1500	
29 M 428	MT10PK	10	1.32	29 M 414	M2MPK	2000	
29 M 400	M15PK	15	88c	29 M 432	M2.5MPK	2500	
29 M 401	M20PK	20		29 M 415	M3MPK	3000	
29 M 429	MT20PK	20	1.32	29 M 416	M4MPK	4000	
29 M 402	M25PK	25	88c	29 M 417	M5MPK	5000	
29 M 403	M30PK	30		29 M 418	M10MPK	10000	1.18
29 M 430	MT30PK	30	1.32	29 M 419	M15MPK	15000	
29 M 404	M40PK	40	88c	29 M 420	M20MPK	20000	
29 M 405	M50PK	50		29 M 421	M25MPK	25000	
29 M 406	M60PK	60		29 M 422	M50MPK	50000	1.41
29 M 407	M75PK	75		29 M 423	M70MPK	70000	
29 M 408	M100PK	100		29 M 433	M75MPK	75000	2.06
29 M 409	M200PK	200		29 M 434	M100MPK	100000	
29 M 410	M400PK	400					

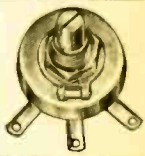
RHEOSTATS

No.	Type	Ohms	Amps	No.	Type	Ohms	Amps
29 M 451	M05RK	1/2	2.80	29 M 459	M20RK	20	.45
29 M 452	M1RK	1	2.00	29 M 460	M25RK	25	.40
29 M 453	M2RK	2	1.40	29 M 461	M30RK	30	.37
29 M 454	M3RK	3	1.15	29 M 462	M40RK	40	.32
29 M 455	M4RK	4	1.00	29 M 463	M50RK	50	.28
29 M 456	M6RK	6	.82	29 M 464	M60RK	60	.26
29 M 457	M10RK	10	.63	29 M 465	M75RK	75	.23
29 M 458	M15RK	15	.52	29 M 466	M100RK	100	.20

Have open or "off" position counter-clockwise.
NET EACH.....73c

29 M 651. Type 395 Dial Plate. For "M" Controls. 2 oz. NET.. 15¢

"C" WIREWOUND CONTROLS



Ideal for limited space applications. Conservatively rated to dissipate 2 watts. Contact arm grounded to shaft. 266° effective electrical rotation. 1 1/16" dia. x 7/16" deep. 1/4" shaft, slotted 3/64" x 1/16" deep, extends 3/8" from bushing. Hexagon nut furnished. Use dial plate 34 B 622, listed below. Linear taper. Av. shpg. wt., 4 oz.

POTENTIOMETERS

No.	Type	Ohms	Amps	No.	Type	Ohms	Amps
29 M 720	C6P	6	.58	29 M 725	C40P	40	.22
29 M 721	C10P	10	.45	29 M 726	C50P	50	.2
29 M 722	C15P	15	.37	29 M 727	C100P	100	.14
29 M 723	C20P	20	.32	29 M 728	C200P	200	.1
29 M 724	C30P	30	.26	29 M 729	C400P	400	.07

NET EACH.....88c

29 M 730	C1MP	1000	.045	29 M 731	C3MP	3000	.025

NET EACH.....1.03

29 M 732	C5MP	5000	.02	29 M 734	C10MP	10000	.014
29 M 733	C6MP	6000	.018	29 M 735	C15MP	15000	.011

NET EACH.....1.18

RHEOSTATS

29 M 700	C6R	6	.58	29 M 704	C30R	30	.26
29 M 701	C10R	10	.45	29 M 705	C40R	40	.22
29 M 702	C15R	15	.37	29 M 706	C50R	50	.2
29 M 703	C20R	20	.32	29 M 707	C100R	100	.14

NET EACH.....73c

34 B 622. Type 393 Dial Plate. For "C" controls. 2 oz. NET.....15¢

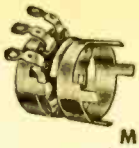
"E" WIREWOUND POTENTIOMETERS

Ruggedly constructed, heavy-duty, wire-wound potentiometers. Conservatively rated to dissipate 7 watts. For industrial and laboratory production control and research applications. Contact arm grounded to shaft. 295° effective electrical rotation. 2 3/16" dia. x 5 3/64" deep. 1/4" shaft slotted 3/64" x 1/16" deep, extends 1 1/32" from bushing. Mount in 3/8" hole. Hexagon nut furnished. Use dial plate 29 M 650, listed below. Linear taper. 6 oz.

No.	Type	Ohms	Amperes	NET
29 M 480	E5MP	5000	.042	2.23
29 M 481	E10MP	10,000	.03	2.38
29 M 482	E20MP	20,000	.021	2.47
29 M 483	E25MP	25,000	.019	2.50
29 M 484	E50MP	50,000	.0135	2.53
29 M 485	E75MP	75,000	.011	2.62
29 M 486	E100MP	100,000	.0095	2.68
29 M 487	E125MP	125,000	.0085	2.68
29 M 488	E150MP	150,000	.0078	2.73

29 M 650. Type 399 Dial Plate. For "E" Controls. 2 oz. NET...15c

IRC Controls



INDUSTRIAL CONTROLS

Versatile PQ and RQ type industrial carbon controls with Type M add-on control sections. Permit exact "tailoring" of dual, triple and quadruple units to meet individual requirements. Available in two round, fixed shaft styles—standard (PQ), and slotted stub, (RQ). Molded bakelite, blue base. 1 3/16" dia. PQ type has round shaft, 1/4" dia., 3" long. Rated at 1/2 watt, 500 v. max. RQ type has same rating, shorter shaft slotted for screwdriver adj. For use where control adjustment is semi-permanent. Threaded 1/8" bushing—shaft extends 1/2" beyond. Type M multisections attach like switches to any Q, PQ or RQ controls. Both shaft types and multisection units use Type 76 switches listed below. M sections can be used to make inexpensive T and L-pad attenuators. Write for bulletin. Av. shpg. wt., 4 oz.

Mfr's. Type	Ohms	Taper	Stock No. PQ	Stock No. RQ	Stock No. M
11-103	500	A	30 M 510	30 M 542	30 M 592
11-108	1000	A	30 M 511	30 M 543	30 M 574
11-110	2000	A	30 M 512	30 M 544	30 M 593
11-112	3000	A	30 M 513	30 M 545	30 M 598
11-114	5000	A	30 M 514	30 M 546	30 M 575
11-115	7500	A	30 M 515	30 M 547	.....
11-116	10K	A	30 M 516	30 M 548	30 M 576
13-116	10K	C	30 M 517	30 M 549	.....
14-116	10K	D	30 M 518	30 M 550	.....
17-116	10K	Q	.....	.....	30 M 599
11-119	20K	A	30 M 519	30 M 551	.....
11-120	25K	A	30 M 520	30 M 552	30 M 577
14-120	25K	D	30 M 521	30 M 553	.....
11-121	30K	A	30 M 522	30 M 554	30 M 596
11-123	50K	A	30 M 523	30 M 555	30 M 578
13-123	50K	C	30 M 524	30 M 556	.....
14-123	50K	D	30 M 525	30 M 557	.....
11-128	100K	A	30 M 526	30 M 558	30 M 579
13-128	100K	C	30 M 527	30 M 559	30 M 580
11-129	200K	A	30 M 375	30 M 376	.....
11-130	250K	A	30 M 528	30 M 560	30 M 581
13-130	250K	C	30 M 529	30 M 561	30 M 582
11-133	500K	A	30 M 530	30 M 562	30 M 583
13-133	500K	C	30 M 531	30 M 563	30 M 584
11-137	1.0 meg	A	30 M 532	30 M 564	30 M 585
13-137	1.0 meg	C	30 M 533	30 M 565	30 M 586
11-138	1.5 meg	A	30 M 534	30 M 566	.....
13-138	1.5 meg	C	.....	.....	30 M 499
11-139	2.0 meg	A	30 M 535	30 M 567	30 M 587
13-139	2.0 meg	C	30 M 536	30 M 568	30 M 588
11-239	2.5 meg	A	30 M 537	30 M 569	.....
11-140	3.0 meg	A	30 M 538	30 M 570	.....
13-140	3.0 meg	C	30 M 539	30 M 571	30 M 594
11-141	5.0 meg	A	30 M 540	30 M 572	30 M 589
11-143	10.0 meg	A	30 M 541	30 M 573	30 M 590
17-140	10.0 meg	Q	.....	.....	30 M 597

NET EACH.....73c

See page 101 for explanation of tapers shown on IRC controls.

TYPE 76 ATTACHABLE SWITCHES FOR Q, PQ, RQ AND M CONTROLS

Specially engineered for type Q, PQ, RQ and M controls. Blue bakelite enclosure is precision molded. Easily and quickly attached. U. L. Approved. Shpg. wt., 2 oz.

30 M 359. Type 76-1. SPST.....35¢
30 M 591. Type 76-2. DPST.....35¢

"W" AND "WK" WIRE-WOUND CONTROLS

Dependable 2-watt wire-wound precision controls. All have linear taper except WK 750R and WK 2500R which has a right-hand log and Type WK 750L, which has a left-hand log. All controls are 1 1/4" in diameter; require 9/16" depth behind panel for mounting; shaft length is 3" long from control face; bushing is 1/4" long. Type "W" has a 1/4" full round shaft. Type "WK" has the Knob Master Shaft for both knurled and flatted knobs. Both Type "W" and Type "WK" will accommodate Type "W" switches. Switches for both types are listed below. Average shpg. wt., for both Type "W" and Type "WK," 4 oz.

Mfr's Type	Ohms	Mfr's Type	Ohms	Mfr's Type	Ohms
W2	2	W100	100	WK2000	2000
W3	3	W200	200	WK2500	2500
W5	5	WK250	250	WK2500R	2500
W6	6	W300	300	W3000	3000
W8	8	W400	400	WK3000	3000
W10	10	W500	500	W4000	4000
W15	15	W750	750	W5000	5000
W20	20	WK750L	750	WK5000	5000
W25	25	WK750R	750	W7500	7500
W30	30	W1000	1000	WK7500	7500
W40	40	WK1000	1000	W10000	10,000
W50	50	WK1500	1500	WK10000	10,000
W60	60	W2000	2000	WK12500	12,500
W75	75				

30 MM 025. Specify type and value. NET EACH.....73c

TV CENTERING CONTROLS—CENTER-TAPPED

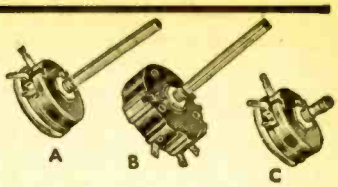
Specify type and value

Type	Ohms	Type	Ohms	Stock No.	NET EACH
W10X5	10	W30X15	30	30 MM 045	1.09
W20X10	20	W50X25	50		

SWITCHES FOR "W" AND "WK" CONTROLS

Specially designed switches for use with the Type "W" and "WK" controls above. Simplified attachment. Conservatively rated at 6 amperes at 125 volts. U.L. Approved. Shpg. wt., 2 oz.

30 M 004. No. 51 SPST. NET.....35c
30 M 005. No. 52 DPST. NET.....44¢



TELEVISION CONTROLS

Fig. A. Type 4WK. Wire-wound, 4-watt, controls. 1/4" shafts, 3" long are knurled, flatted and grooved. 1 3/4" dia.; 1 1/16" depth. Tapers: *Right-hand log; †left-hand log. Others are linear. Shpg. wt., 4 oz.

No.	Mfr's Type	Ohms	EACH
30 M 463	4WK-10	10	1.18
30 M 464	4WK-20	20	
30 M 465	4WK-30	30	
30 M 466	4WK-50	50	
30 M 467	4WK-100	100	
30 M 468	4WK-200	200	1.18
30 M 469	4WK-300	300	
30 M 470	4WK-400	400	
30 M 471	4WK-500	500	
30 M 472	4WK-600	600	
30 M 473	4WK-650	650	1.18
30 M 474	4WK-750	750	
30 M 485	4WK-1000	1000	
30 M 486	4WK-1350	1350	
30 M 487	4WK-1500	1500	
30 M 489	4WK-2000	2000	1.18
30 M 490	4WK-2500	2500	
30 M 491	4WK-3000	3000	
30 M 492	4WK-5000	5000	
30 M 493	4WK-6000	6000	
30 M 494	4WK-7500	7500	
30 M 495	4WK-10K	10K	1.38
30 M 496	4WK-15K	15K	
30 M 497	4WK-20K	20K	
30 M 498	4WK-25K	25K	
30 M 484	4WK-750R *	750	1.29
30 M 488	4WK-1500L†	1500	

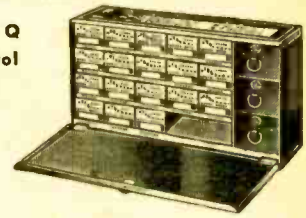
Fig. C. Type 4WS. Same as type 4WK controls but with knurled and slotted shaft 3/4" long. Designed for replacement of TV controls on rear chassis apron or under front panel cover. Linear taper. Shpg. wt., 4 oz.

No.	Mfr's Type	Ohms	EACH
30 M 263	4WS-25	25	1.18
30 M 264	4WS-250	250	
30 M 265	4WS-500	500	
30 M 266	4WS-1000	1000	
30 M 267	4WS-1500	1500	
30 M 268	4WS-2000	2000	
30 M 269	4WS-2250	2250	1.18
30 M 270	4WS-2500	2500	
30 M 271	4WS-3000	3000	
30 M 272	4WS-4000	4000	
30 M 273	4WS-5000	5000	

Fig. B. Type HV. 2-watt carbon. For sets using electrostatic focus. Shaft same as 4WK type. 2 11/64" dia., 45/32" depth. Wt., 4 oz.

No.	Type	Ohms	EACH
30 M 274	HV-15	15 meg	1.76
30 M 286	HV-25	25 meg	1.76

Type Q Control Kit



ASSORTMENT NO. 9

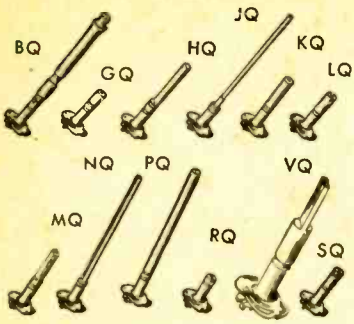
An assortment of versatile type Q Volume Controls plus switches and shafts, in a handsome metal cabinet. These units are carefully selected and will handle over 90% of all AM, FM and TV standard control replacements. Contains 18 controls, 6 switches and 5 special shafts, as follows: 1—Q11-116 (10,000 ohms), 1—Q11-123 (50,000 ohms), 1—Q13-123 (50,000 ohms), 1—Q11-128 (100,000 ohms), 1—Q13-128 (100,000 ohms), 1—Q11-130 (250,000 ohms), 1—Q13-130 (250,000 ohms), 1—Q13-130X (250,000 ohms), 1—Q11-133 (1/2 meg), 2—Q13-133 (1/2 meg), 1—Q13-133X (1/2 meg), 1—Q11-137 (1 meg), 1—Q13-137 (1 meg), 1—Q13-137X (1 meg), 1—Q13-139 (2 meg), 1—Q13-139X (2 meg), 1—Q18-139X (2 meg), 6—No. 76-1 SPST switches, 1—BQ shaft, 1—GQ shaft, 2—HQ shaft, and 1—NQ shaft.

Cabinet is included at no extra charge. Contains drawers for shafts, switches and spare parts. Size, 7 3/8x14 1/2x4 1/2". Wt., 7 lbs.

30 M 297. NET.....18.17

Include Ohms and Manufacturer's Type Number When Ordering Controls

INTERCHANGEABLE SHAFTS FOR Q CONTROLS



For quick, easy, conversion of Q controls to special, non-standard controls. These interchangeable shafts make possible the widest coverage of replacement control needs with a small stock of controls. Fit all Q controls. Cushioned retainer ring for fixed shaft security after assembly. Simple to install. Complete instructions for shaft interchange included with each unit. Av. shpg. wt., 3 oz.

Type AQ. Master shaft. Same as in Type Q controls. Flatted, grooved and knurled. 3" long.
30 M 299. NET ..... 29¢

Type BQ. Slotted. For remote control cables. 7/16" and 1 5/8" guide funnels and tongue. 1/4" diameter. 3 1/2" long.
30 M 360. NET ..... 26¢

Type GQ. Slotted with hole in bottom. For Philco sets. Slot, 1/8x3/16". 1/4" dia. 1 1/16" long.
30 M 364. NET ..... 18¢

Type HQ. Flatted with groove for dial plate. For Delco, RCA, Silvertone and Westinghouse. 3/32" flat, 1/64" groove. 1 11/16" long. 1/4" diameter.
30 M 365. NET ..... 18¢

Type JQ. For Zenith. 1/8" diameter, .105" flat, 4 1/8" long.
30 M 361. NET ..... 26¢

Type KQ. 1/4" round type with two concentric holes in the end. For Motorola. 1 3/8" long.
30 M 366. NET ..... 18¢

Type LQ. Short, flat type with groove and threaded hole. For Belmont and Airline. Flat and groove, 1/2". 1" long from mounting face. 1/4" diameter.
30 M 368. NET ..... 21¢

Type MQ. Double flat type. 1/4" dia. 1 1/2" long, threaded for 3/8". Two concentric holes, smaller one tapped. For Belmont, Airline and Wells-Gardner sets.
30 M 362. NET ..... 26¢

Type NQ. Universal 3/16" flatted and slotted type. 4" long. Milled entire length of shaft except for thin web.
30 M 363. NET ..... 26¢

Type PQ. Universal 1/4" full round type. For 1/4" or 3/8" bushings. 3" long from mounting face. With 3/8" bushing.
30 M 369. NET ..... 21¢

Type RQ. Short slotted type. For 3/8" bushing. Slot, 3/64x1/16". 1/4" diameter. 1/2" long. Complete with bushing.
30 M 370. NET ..... 21¢

Type SQ. Knurled and slotted. Knurl, 1/8". Slot, 3/64x1/16". 1/4" diameter. 3/4" long.
30 M 367. NET ..... 18¢

Type TQ. Insulated for TV. Similar to type PQ. Cannot be used with switch. (Not illus.)
30 M 371. NET ..... 35¢

Type UQ. Similar to BQ, but with friction-drive clutch. For remote control. (Not illus.)
30 M 372. NET ..... 35¢

Type VQ. Tongued shaft, 1" long from mounting face. Tongue: 3/16" wide, 3/16" long. .050" thick. For Magnavox.
30 M 289. NET ..... 21¢

Type WQ. Tongued shaft, 1 3/16" long. Tongue: 1/4" wide, 1/2" long. .062" thick. For Zenith TV sets. (Not illustrated.)
30 M 290. NET ..... 21¢

Q CONTROLS WITH UNIVERSAL SHAFTS

Handle over 90% of all radio-TV control applications. Knurled, flatted and slotted, 3" shaft. 15/16" dia., 1/4" long bushing. Use with "M" multi-sections (page 100) for ganged controls. Only the Q control has a removable shaft, interchangeable with the shafts listed at left. *Includes 270 ohm, 1/2-watt fixed bias resistor. Less switch. See attachable switches and taper explanations below. Av. shpg. wt., 4 oz.

No.	Type	Ohms	Taper	No.	Type	Ohms	Taper
30 M 395	Q11-201	250	A	30 M 317	Q11-128	100K	A
30 M 300	Q11-103	500	A	30 M 318	Q13-128	100K	C
30 M 377	Q11-105	750	A	30 M 388	Q11-228	125K	A
30 M 441	Q17-105	750	P	30 M 444	Q13-328	150K	C
30 M 301	Q11-108	1000	A	30 M 374	Q11-129	200K	A
30 M 379	Q17-108	1000	Q	30 M 319	Q11-130	250K	A
30 M 442	Q11-109	1500	A	30 M 320	Q13-130	250K	C
30 M 380	Q17-109	1500	Q	30 M 445	Q11-131	300K	A
30 M 302	Q11-110	2000	A	30 M 321	Q13-132	350K	C
30 M 373	Q13-111	2500	C	30 M 322	Q11-133	500K	A
30 M 381	Q17-111	2500	Q	30 M 323	Q13-133	500K	C
30 M 303	Q11-112	3000	A	30 M 324	Q14-133	500K	D
30 M 382	Q17-112	3000	Q	30 M 397	Q17-133	500K	Q
30 M 304	Q11-114	5000	A	30 M 398	Q11-134	600K	A
30 M 383	Q13-114	5000	C	30 M 390	Q11-136	750K	A
30 M 384	Q17-114	5000	Q	30 M 325	Q11-137	1 meg	A
30 M 305	Q11-115	7500	A	30 M 326	Q13-137	1 meg	C
30 M 306	Q11-116*	10K	A	30 M 327	Q14-137	1 meg	D
30 M 307	Q13-116	10K	C	30 M 328	Q11-138	1.5 meg	A
30 M 308	Q14-116*	10K	D	30 M 329	Q11-139	2 meg	A
30 M 385	Q17-116	10K	Q	30 M 330	Q13-139	2 meg	C
30 M 309	Q11-119	20K	A	30 M 399	Q17-139	2 meg	Q
30 M 310	Q16-119*	20K	Spec.	30 M 331	Q11-239	2.5 meg	A
30 M 311	Q11-120	25K	A	30 M 332	Q11-140	3 meg	A
30 M 443	Q13-120	25K	C	30 M 333	Q13-140	3 meg	C
30 M 312	Q14-120*	25K	D	30 M 446	Q17-140	3 meg	Q
30 M 313	Q11-121	30K	A	30 M 334	Q11-141	5 meg	A
30 M 396	Q11-122	35K	A	30 M 287	Q12-141	5 meg	Spec.
30 M 314	Q11-123	50K	A	30 M 392	Q13-141	5 meg	C
30 M 315	Q13-123	50K	C	30 M 393	Q17-141	5 meg	Q
30 M 316	Q14-123*	50K	D	30 M 394	Q11-142	7.5 meg	A
30 M 387	Q11-125	75K	A	30 M 335	Q11-143	10 meg	A

NET EACH ..... 73¢

TAPPED Q CONTROLS WITH UNIVERSAL SHAFTS

* Ohms.

No.	Type	Megs	Taps, Ohms	Taper	No.	Type	Megs	Taps, Ohms	Taper
30M 378	Q17-105X	750*	250	Spec.	30M 346	Q13-137X	1.0	250K	H
30M 386	Q13-118XX	15K*	5K/10K	Spec.	30M 348	Q17-137XX	1.0	50K/100K	Spec.
30M 288	Q17-118X	15K*	5K	Spec.	30M 349	Q18-137X	1.0	100K	Spec.
30M 447	Q17-118XX	15K	5K-10K	Spec.	30M 350	Q18-137XX	1.0	250K/.5 Meg	Spec.
30M 389	Q17-328XX	.15	19K/38K	Spec.	30M 351	Q19-137X	1.0	.5 Meg	Spec.
30M 337	Q18-130X	.25	60K	H	30M 352	QVC-539X	1.0	.5 Meg	Spec.
30M 336	Q13-130X	.25	125K	Spec.	30M 391	Q13-138X	1.5	.25 Meg	Spec.
30M 338	Q18-130XX	.25	60K/120K	Spec.	30M 358	Q19-139X	2.0	50K	Spec.
30M 339	Q17-132X	.35	35K	Spec.	30M 355	Q17-139X	2.0	150K	Spec.
30M 340	Q18-132X	.35	75K	H	30M 357	Q18-139XX	2.0	250K/.5 Meg	Spec.
30M 342	Q17-133X	.5	25K	Spec.	30M 354	Q13-139XX	2.0	.5 Meg/1 Meg	Spec.
30M 343	Q18-133X	.5	50K	Spec.	30M 353	Q13-139X	2.0	.5 Meg	H
30M 341	Q13-133X	.5	125K	H	30M 356	Q18-139X	2.0	1 Meg	Spec.
30M 344	Q19-133X	.5	250K	Spec.	30M 448	Q13-140X	3.0	900K	Spec.
30M 345	Q18-133XX	.5	100K/200K	Spec.	30M 449	Q18-140X	3.0	1.5 Meg	Spec.
30M 347	Q17-137X	1.0	35K	Spec.					

NET EACH 1.09

TYPE 76 ATTACHABLE SWITCHES FOR Q CONTROLS

Blue bakelite enclosure. Easily and quickly attached. U.L. Approved. Shpg. wt., 2 oz.

30 M 359. Type 76-1. SPST ..... 35¢
30 M 591. Type 76-2. DPST ..... 35¢

EXPLANATION OF TAPERS

Taper A. Linear.

Taper C. Logarithmic curve for audio circuit control or antenna shunt control.

Taper D. Tapered at both ends to provide control of grid bias and antenna circuit. Used where control of grid bias is of prime importance in controlling gain.

Taper H. Tapped logarithmic curve. Audio level control for automatic bass compensation.

Taper P. Semi-logarithmic curve with reverse taper. For use in contrast and picture control circuits in television.

Taper Q. Same applications as Taper P above, but has slightly steeper curve.

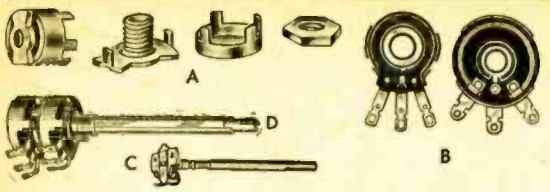
TYPE LC-1 LOUDNESS CONTROL

An easily installed, loudness-type volume control. Permits complete listening pleasure during periods when amplifier volume must be kept low. Replaces conventional volume control in amplifier, radio or phono. Automatically compensates for reduced response of the ear to bass and treble frequencies at low volume levels. Audio output can be reduced to nearly a whisper level and yet retain almost perfect tonal balance. Has input resistance of 5 megohms. Insertion loss is only 6 db. Space required behind panel: With switch 2 5/16", without switch, 1 3/4". With instructions, less AC switch (may be used with Type 76-1 or 76-2 switch, above). Shpg. wt., 4 oz.
30 M 595. List, $9.95. NET 5.85

TV SIGNAL ATTENUATOR

Type QJ-3. Economically priced L-pad television signal attenuator. For use with sets having 300-ohm twin line antenna input. Minimizes interstation interference, definition loss and sound bars caused by excessive signal strength. Diminishes buzz or hum due to high signal level in intercarrier systems. Reduces overloading effects in strong signal area. In many cases, corrects or reduces horizontal or vertical jitters in picture; also picture and sound "break-over." Very useful device for the TV serviceman to simulate fringe-area signals when shop is located near powerful local station. A nearly constant 300-ohm load is maintained on antenna lead-in to minimize ghosts caused by mismatch of antenna lead to receiver. Easily mounted on cabinet or chassis. Slotted shaft for screwdriver adjustment. Supplied with mounting bracket and instructions. 7/8" diameter, 1" deep. Shaft: 1/4" diameter, 1/2" long. Shpg. wt., 3 oz.
29 M 915. List, $3.30. NET 1.94

TV and Special Controls



IRC CONCENTRIKIT TV CONTROLS

"One-minute-assembly" concentrikits. Duplicate most TV concentric controls. No filing, slotting, soldering or special tools required. Feature improved design, exact-duplicate shafts and a large choice of base elements. Provide exceptionally wide coverage of TV concentric dual controls—including wire-wound-carbon combination types. For complete listing of single TV controls, see "Q" controls on pages 100, 101. A concentrikit (A), 2 base elements (B), and a pair of shafts (C), can be quickly assembled to make up the exact complete control needed (D). All stocks always complete and up-to-date. **NOTE:** Manual below is required for selection of correct concentrikit parts to make up exact duplicate controls.

NOTE—USE THIS GUIDE TO SELECT CONCENTRIKIT PARTS

IRC Replacement Listing by Trade Name and Part Number (Form SO12D). New guide lists all IRC controls. Shows manufacturer's original part number—then IRC replacement part number. **Use this guide to order all TV, Auto controls and concentrikit parts.**
30 M 649. (Free with your next IRC control order.) NET ... 15c

Fig. A—CONCENTRIKITS

These concentrikits are one of four items required to make up a complete concentrikit TV replacement control. Each kit consists of a panel cover, rear cover, mounting nut and bushing. Easily and quickly assembled.

Use the IRC Control Replacement Guide Book listed above (30 M 649), for selection of proper base elements and shaft to complete any control. See page 101 for complete listings of IRC "Q" type replacement single controls and shafts. Average shpg. wt., 4 oz.

Stock No.	Kit No.	List	NET
30 M 775	K-2	80¢	47¢
30 M 776	K-3	80¢	47¢
30 M 898	K-4	90¢	53¢
30 M 899	K-5	80¢	47¢
30 M 894	K-6	80¢	47¢
30 M 895	K-7	80¢	47¢
30 M 896	K-8	45¢	26¢
30 M 897	K-9	25¢	15¢

Fig. B—BASE ELEMENTS

2 required for each concentric dual control. *Order by IRC base element type number as given in Concentrikit Guide.* Wt., 1 oz.
30 MM 785. NET EACH ... 29c

Tapped Base Elements. Shpg. wt., 1 oz.
30 MM 790. NET EACH ... 65¢

Figs. C, D—EXACT DUPLICATE SHAFTS

Exact duplicate shafts for concentrikit controls. Factory-tailored for mechanical fit. No filing, slotting, soldering or cutting required. All are flatted as well as slotted. Each shaft assembly is complete. *When ordering, specify IRC shaft type number as given in Concentrikit Guide.* Each shaft is completely assembled, including contactor. 2 oz.
30 MM 795. NET EACH ... 35c

SLEEVE BUSHINGS AND EXACT DUPLICATE BUSHINGS

Wide assortment of sleeve bushings and exact duplicate bushings. Allow quick, easy control assembly without cutting, filing or modification. *When ordering, specify IRC type number as given in the Concentrikit Guide.*

Stock No.	Type No.	List	NET
30 M 842	S1	45¢	26¢
30 M 843	S2	30¢	18¢
30 M 844	S3	60¢	35¢
30 M 845	S4	60¢	35¢
30 M 846	S5	60¢	35¢

S6 THROUGH S32. Exact duplicate bushings for auto radio controls.
30 MM 850. List, 75c. NET EACH ... 44¢
30 M 847. Type S33. List, 20c. NET ... 12¢
30 M 848. Type S34. List, 20c. NET ... 12¢

PRINTED-SILVER TONE SWITCH ELEMENTS

Brand-new development in replacement tone switches. Allows field assembly of exact duplicate auto radio controls. Simply use parts shown in IRC Control Replacement Guide Book to assemble an exact duplicate of the manufacturer's original control. Tone switch element assembles like a standard IRC base element—no loose parts. Printed-silver switch eliminates contact fatigue; simple detent on panel cover assures positive positioning, independent of switch action. Tone switch element packed with detent-panel cover. Shpg. wt., 4 oz.

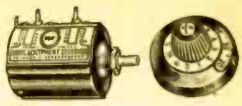
BS1. 4-Position Tone Switch Element for Ford.
30 M 851. List, $1.10. NET ... 65c

BS2. 4-Position Tone Switch Element for Delco.
30 M 852. List, $1.10. NET ... 65¢

BS3. 3-Position Tone Switch Element for Philco.
30 M 853. List, $1.10. NET ... 65¢

BS4. 4-Position Tone Switch Element for Delco.
30 M 854. List, $1.10. NET ... 65¢

G. W. BORG 'MICROPOTS' AND 'MICRODIALS'



Model 205. High-precision, ten-turn linear potentiometers. Widely used in electronic instruments, industrial and aircraft controls, electronic computers, radar and sonar gear, etc. Resistance output directly proportional to shaft rotation. Extremely high accuracy. Wire and terminals are imbedded firmly within the housing. Smooth action and low uniform torque. Anti-backlash spring in contact guide. Fine resolution. Every unit machine tested for linearity at 100 points. Mechanical and electrical rotation 3600°. Linearity, 0.1%. Torque, not over 1.5 inch-oz. running; not over 3 inch-oz. starting. Power dissipation, 5 watts @ 40° Centigrade. Shaft extension length, ⅞". Life is more than 1 million revolutions. Av. shpg. wt., 1½ lbs.

Stock No.	Ohms	Stock No.	Ohms	Stock No.	Ohms
29 M 680	100	29 M 683	5000	29 M 686	50K
29 M 681	500	29 M 684	10K	29 M 687	100K
29 M 682	1000	29 M 685	20K		

NET EACH ... 15.00

Ten-Turn "Microdials". For use with above. Have 2 concentrically mounted dials—one for counting increments of each turn and the other for counting turns. May be locked in any position. For panels to 1/16" thick. Satin chrome dial, with black-filled numerals. Black bakelite knob. Overall diameter, 1¾". Overall depth, 1 3/16". Shpg. wt., 4 oz.

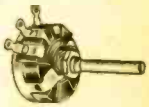
Model 1311. Type "A." With slotted locking screw for screwdriver.
29 M 688. NET ... 4.80

Model 1312. Type "B." With knurled locking screw.
29 M 689. NET ... 5.52

MODEL 1301 DIRECT READING MICRODIAL

For use with Micropots listed above. Three digit readings allow extremely accurate indexing. Designed for rapid operation—may be hand or servo-operated at speeds up to 100 rpm. Built-in, finger-tip brake—may be locked in any position. Nylon counter wheels have individual windows. Designed for wide-angle reading. Knob is finished in black, with brake panel in satin chrome. Mechanism is completely sealed against dust. Indexing accuracy, 1 part in 1000. Size, 1¾x2" diameter. Shpg. wt., 4 oz.
29 M 679. NET ... 23.25

CLAROSTAT WIRE-WOUND CONTROLS

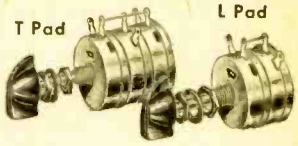


Excellent 3 watt wire-wound controls. Ideal for voltage dividers, bias controls, etc. Have linear windings and resistance tolerance of ±10%. Control size, 25/32" deep x 1 21/32" diameter. Shaft 2" long x ¼" dia. Molded phenolic body. Less switch. Wt., 4 oz.

TYPE 58 CONTROLS

No.	Type	Ohms	EACH	No.	Type	Ohms	EACH
31 M 000	58-1	1	73c	31 M 017	58-500	500	73c
31 M 001	58-2	2		31 M 018	58-750	750	
31 M 002	58-4	4		31 M 019	58-1000	1000	
31 M 003	58-6	6		31 M 102	58-1500	1500	
31 M 004	58-10	10		31 M 020	58-2000	2000	
31 M 005	58-15	15		31 M 103	58-2500	2500	
31 M 006	58-20	20	73c	31 M 021	58-3000	3000	.73
31 M 007	58-25	25		31 M 022	58-5000	5000	.73
31 M 008	58-30	30		31 M 023	58-7500	7500	.73
31 M 009	58-40	40		31 M 024	58-10K	10,000	.73
31 M 010	58-50	50		31 M 025	58-15K	15,000	.94
31 M 011	58-60	60		31 M 026	58-20K	20,000	.94
31 M 012	58-75	75	73c	31 M 027	58-25K	25,000	.94
31 M 013	58-100	100		31 M 028	58-30K	30,000	1.32
31 M 014	58-200	200		31 M 029	58-40K	40,000	1.32
31 M 015	58-300	300		31 M 030	58-50K	50,000	1.32
31 M 016	58-400	400					

MALLORY SPEAKER CONTROLS



Constant load attenuator pads. Widely applied to control the level of low-impedance audio circuits in sound systems. Rated at 4 watts, continuous DC; 15 w. peak audio. Have 2" shafts. Bushing size: ⅜x⅜" diameter. With bar knob, 0-10 dial plate and instructions. Av. shpg. wt., 7 oz.

T Pad Attenuators. Present constant source impedance as well as constant load at all control settings. Size: 1⅝" dia., 1 11/16" deep.

L Pad Attenuators. Present a constant load impedance at all control settings. Size: 1⅝" dia., 1⅛" deep.

Stock No.	Type	Ohms	Stock No.	Type
29 M 868	T2	2	29 M 883	L2
29 M 869	T4	4	29 M 884	L4
29 M 870	T6	6	29 M 885	L6
29 M 871	T8	8	29 M 892	L8
29 M 872	T15	15	29 M 886	L15
29 M 873	T50	50	29 M 887	L50
29 M 865	T100	100	29 M 920	L100
29 M 874	T200	200	29 M 888	L200
29 M 875	T250	250	29 M 889	L250
29 M 876	T500	500	29 M 890	L500
29 M 866	T600	600	29 M 921	L600
29 M 867	T1000	1000	29 M 922	L1000
29 M 877	T2000	2000	29 M 891	L2000
29 M 878	T3000	3000	29 M 923	L3000
		4000	29 M 708	L4000

"T" Pads. NET EACH ... 2.50 | "L" Pads. NET EACH ... 2.20

Controls and Resistors

CENTRALAB CONTROLS


less switch


with switch

BLUE SHAFT TYPE B—15/16" DIAMETER SINGLE CONTROLS

Radiohms are available with and without switch; types ending with letter S are with switch. Switch is Centralab KB-2 DPST universal type, easily wired for SPST or DPST operation. All controls, except BSK types, have universal fluted shafts; 3" long from end of bushing. BSK types have Centralab-patented, split, knurled shaft; 2⅛" long from end of bushing. Tapers: *C-1, †C-2; see "Explanation of Tapers" below. "Fastatch" switches and switch shields are listed below. Av. shpg. wt., 4 oz.

Stock No. L/Switch	Type	NET EACH	Ohms	Stock No. W/Switch	Type	NET EACH
29 M 350	B-4	73c	500*	29 M 351	B-4-S	1.03
29 M 352	B-5		1000*	29 M 353	B-5-S	
29 M 354	B-10		5000*	29 M 355	B-10-S	
29 M 356	B-14		10,000*	29 M 357	B-14-S	
29 M 358	B-26		25,000*	29 M 359	B-26-S	
29 M 360	B-31	73c	50,000*	29 M 361	B-31-S	1.03
29 M 362	B-32		50,000†	29 M 363	B-32-S	
29 M 364	B-40		100K*	29 M 365	B-40-S	
29 M 366	B-41		100K†	29 M 367	B-41-S	
29 M 368	B-50		250K*	29 M 369	B-50-S	
29 M 370	B-51		250K†	29 M 371	B-51-S	
29 M 372	B-59	73¢	500K*	29 M 373	B-59-S	1.03
29 M 374	B-60	59¢	500K†	29 M 376	B-60-S	.88
29 M 377	BSK-60	65¢	500K†	29 M 378	BSK-60-S	.94
29 M 379	B-69	73¢	1 meg*	29 M 380	B-69-S	1.03
29 M 381	B-70	59¢	1 meg†	29 M 382	B-70-S	.88
29 M 383	BSK-70	65¢	1 meg†	29 M 384	BSK-70-S	.94
29 M 389	B-75	73¢	2 meg*	29 M 390	B-75-S	1.03
29 M 391	B-76	73¢	2 meg†	29 M 392	B-76-S	1.03
29 M 393	B-83	73¢	2.5 meg*	29 M 394	B-83-S	1.03
29 M 395	B-87	73¢	5 meg*	29 M 396	B-87-S	1.03
29 M 397	B-98	73¢	10 meg*	29 M 398	B-98-S	1.03

FASTATCH SWITCHES AND SWITCH SHIELDS

For Blue Shaft controls. Rated at 5 amps. 125 volts AC; .5 amp. 125 volts DC; 12 amps. 12 volts DC. Type KB-5 Switch Shield is for Blue Shaft controls with attached switches only. Wt., 3 oz.

Stock No.	Type	Description	NET EACH
29 M 311	KB-1	SPST	29¢
29 M 312	KB-2	DPST (universal)	35¢
29 M 313	KB-3	SPDT	44¢
29 M 314	KB-5	Switch shield (Pkg. of 5)	29¢

EXPLANATION OF TAPERS

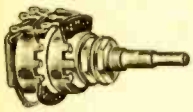
Taper C-1. Linear taper, having uniform resistance change from either end. Television uses: horizontal and vertical centering; horizontal and vertical hold; horizontal drive; vertical linearity; brightness; height and contrast controls. **Taper C-2.** Semi-log (Audio) 10% center. Used for volume or tone controls. Increases with clockwise rotation. Charted on standard resistance curves, measuring from left to right terminal.

MINIATURE CONTROLS

Type B16-228 is for use with the Centralab "Ampec" printed circuit audio amplifier (page 123). Have C2 semi-log (audio) taper. Phenolic-imbedded carbon resistance element is inside knob—only terminals go through panel. Switch types have switch completely enclosed in unit. Switch ratings: 6.5 amps at 1.5 v.; 2 amps at 45 v. Size: knob dia., 2³⁄₃₂"; only ½" deep including knob and terminals. Shpg. wt., 3 oz.

Less Switch				With Switch, SPST			
No.	Type	Megs	EACH	No.	Type	Megs	EACH
30 M 418	B16-118	.5	1.47	30 M 414	B16-218	.5	2.35
30 M 417	B16-120	1		30 M 413	B16-220	1	
30 M 416	B16-122	2		30 M 412	B16-222	2	
30 M 415	B16-124	3		30 M 411	B16-224	3	
30 M 420	B16-128	5		30 M 419	B16-228	5	

CENTRALAB C2-100 COMPENTROL "SENIOR"



Combination volume control and tone compensator. Has printed electronic circuit network. Automatically compensates for reduced response of human ear at low volume levels—insures properly balanced tone regardless of volume level. Permits adjustment for exact amount of compensation desired. A worthwhile addition to hi-fi amplifiers, radios, TV sets, etc. Complete with 2 brown plastic knobs and instructions. Shaft length, ⅞". Shpg. wt., 6 oz.
30 M 436. NET EACH 4.41

TYPE C-1 COMPENTROLS

Combination volume control and tone compensator. Easily installed in place of existing volume controls. Switch is SPST with shield to prevent AC hum. No insertion loss. Shaft length, 3". Width across face of switch, 1³⁄₁₆". Shpg. wt., 5 oz.

Stock No.	Type	Description	NET
30 M 421	C1-60	½ meg. plain	2.45
30 M 422	C1-60-S	½ meg. with switch	2.94
30 M 423	C1-70	1 meg. plain	2.45
30 M 424	C1-70-S	1 meg. with switch	2.94

CONTINENTAL CARBON NR & NA ±1% PRECISION RESISTORS

NR-25 1-watt resistors have metallic resistance film formed on surface of low-loss ceramic tubes. Hermetically sealed with smooth, uniform vitreous enamel coating. Hollow body for withstanding temperatures to 400° F. Rating, 500 v. No. 18, 1½" tinned copper leads. Size, ¼" dia., 1⁹⁄₁₆" long. NA-15, ½-watt precision resistors are available in values (listed in table below) up to 1.0 meg. Have No. 20, 1½" tinned copper leads. Rating, 350 v. Size, ⅛" dia., 1⁷⁄₁₆" long. Shpg. wt., 2 oz.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs
1	150	2000	5500	15,000	85,000	400,000	1.0
5	200	2500	5950	15,000	90,000	450,000	1.5
10	300	2950	7450	25,000	100,000	490,000	2.0
15	400	3500	8500	30,000	150,000	500,000	2.5
20	500	4000	8950	40,000	200,000	600,000	3.0
25	1000	4450	9950	50,000	240,000	750,000	3.5
50	1450	4950	10,000	60,000	250,000	800,000	4.0
100	1500	5000	13,500	75,000	300,000	900,000	5.0

NR-25 1-WATT

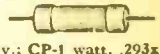
2 MM 300. 1 ohm—1.0 megohm. Specify value. NET EACH 59c
25 or more of one value, EACH 44c

2 MM 301. 1.5—5.0 megohms. Specify value. NET EACH 76c
25 or more of one value, EACH ..... 55¢

NA-15 ½-WATT

2 MM 350. 1 ohm—1.0 megohm. Specify value. NET EACH 47c
25 or more of one value, EACH ..... 36¢

±1% AEROVOX CARBOFILM PRECISION RESISTORS



For circuits requiring accuracy and stability. Carbon deposited on ceramic rod. Silver-plated contacts. Size and voltage ratings: CP-½ watt, .230x1¹¹⁄₁₆", 1500 v.; CPL-½ watt, .230x1⁵⁄₁₆", 2000 v.; CP-1 watt, .293x1⁵⁄₁₆", 2500 v.; CP-2 watt, .293x2¹⁄₁₆", 6000 v. Av. wt., 2 oz.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs	Megs
100	510	2700	12,000	68,000	390,000	2.2	10.0
110	560	3000	15,000	75,000	430,000	2.4	12.0
120	620	3300	18,000	82,000	470,000	2.7	15.0
130	680	3600	20,000	91,000	510,000	3.0	18.0
150	750	3900	22,000	100,000	560,000	3.3	20.0
180	820	4300	24,000	110,000	620,000	3.6	22.0
200	910	4700	27,000	120,000	680,000	3.9	25.0
220	1000	5100	30,000	150,000	750,000	4.3	27.0
240	1100	5600	33,000	180,000	820,000	4.7	33.0
270	1200	6200	36,000	200,000	910,000	5.1	36.0
300	1300	6800	39,000	220,000	1.0 meg	5.6	39.0
330	1500	7500	43,000	240,000	1.1 megs	6.2	43.0
360	1800	8200	47,000	270,000	1.2 megs	6.8	47.0
390	2000	9100	51,000	300,000	1.5 megs	7.5	50.0
430	2200	10,000	56,000	330,000	1.8 megs	8.2	100.0
470	2400	11,000	62,000	360,000	2.0 megs	9.1	.....

SPECIFY RESISTANCE VALUE

All are ±1% tolerance, except * ±2%.

Type CP-½. ½-watt. 100 ohms to 4.7 megohms.
2 MM 150. NET EACH ..... 38¢

Type CPL-½. ½-watt. 5.1 megohms to 7.5 megohms.
2 MM 155. NET EACH ..... 44¢

Type CP-1. 1-watt. 100 ohms to 1.0 megohm.
2 MM 160. NET EACH ..... 56¢

Type CP-1. 1-watt. 1.1 megohms to 4.7 megohms.
2 MM 165. NET EACH ..... 59¢

Type CP-1. 1-watt. 5.1 megohms to 15 megohms.
2 MM 170. NET EACH ..... 65¢

Type CP-2. 2-watt. 100 ohms to 10 megohms.
2 MM 175. NET EACH ..... 71¢

Type CP-2. 2-watt. 12 megohms to 20 megohms.
2 MM 180. NET EACH ..... 76¢

Type CP-2. 2-watt. 22 megohms to 27 megohms.
2 MM 185. NET EACH 1.03

Type CP-2. 2-watt. 33 megohms to 50 megohms.
2 MM 190. NET EACH 1.18

Type CP-2*. 2-watt. 100 megohms only.
2 M 195. NET EACH 2.94

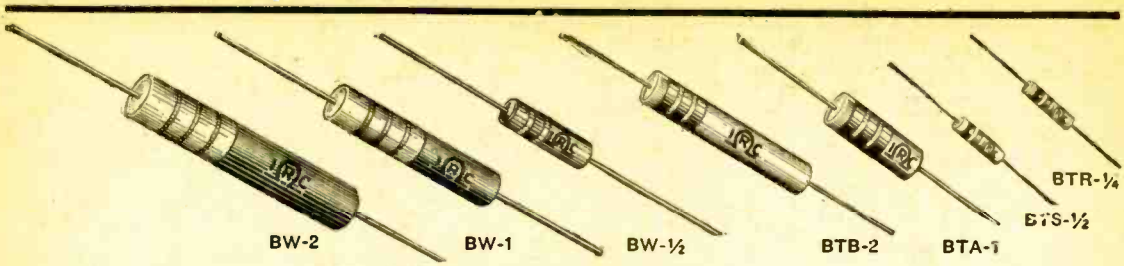
ALLIED BARGAIN RESISTOR ASSORTMENT

Servicemen—here's a useful assortment of 100 high quality carbon resistors at a money-saving low price! An excellent selection of most-often-used values, all in ½ watt and 1 watt sizes. All resistors are brand new and have tinned copper leads. Non-insulated types. Shpg. wt., 12 oz.
58 M 086. NET 95c

ALLIED'S COLOR-CODE GUIDE

An "Instant-reference" color-code guide for resistors. Code colors may be set to show corresponding resistance values, or resistance values set to show corresponding code colors. Size, 2¾x3¼". Includes tolerance code and listing of RETMA-JAN ±10% standard stock values. (Supplied at no charge with order for 20 or more resistors.) Shpg. wt., 2 oz.
2 M 770. EACH 10c

IRC Resistors



BT AND BW 10% INSULATED TYPES

Type BT Filament Carbon. Exceed rigid MIL-R-11 specifications. Withstand 50-100% overloads for short periods. RETMA-coded. Sizes: BTR, 13/32x3/32"; BTS, 13/32x1/8"; BTA, 23/32x1/4"; BTB, 1 1/4x1/4". Figure in Type No. indicates wattage rating.

Type BW Wire Wound. Will withstand 50% to 100% overloads with little or no resistance change. Values clearly indicated by standard RETMA color coding. Sizes: BW-1/2, 5/8x5/16"; BW-1, 1 1/4x1/4"; BW-2, 1 3/4x 21/64". Figure in Type No. indicates wattage rating.

10% RETMA Values—Specify Resistance Wanted

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.27	1.2	5.6	27	120	560	2700	12,000	56,000	0.27 meg	1.2 meg	5.6 meg
0.33	1.5	6.8	33	150	680	3300	15,000	68,000	0.33 meg	1.5 meg	6.8 meg
0.39	1.8	8.2	39	180	820	3900	18,000	82,000	0.39 meg	1.8 meg	8.2 meg
0.47	2.2	10	47	220	1000	4700	22,000	0.1 meg	0.47 meg	2.2 meg	10 meg
0.56	2.7	12	56	270	1200	5600	27,000	0.12 meg	0.56 meg	2.7 meg	12 meg
0.68	3.3	15	68	330	1500	6800	33,000	0.15 meg	0.68 meg	3.3 meg	15 meg
0.82	3.9	18	82	390	1800	8200	39,000	0.18 meg	0.82 meg	3.9 meg	18 meg
1.0	4.7	22	100	470	2200	10,000	47,000	0.22 meg	1.0 meg	4.7 meg	22 meg

TYPE BT 10% CARBON

5-lot price applies to purchase of one resistance value only.

Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	5 FOR
1 MM 010	BTR-¼	RC09	10 Ω to 22 megs	10c	39c
1 MM 000	BTS-½	RC20	10 Ω to 22 megs	10c	29c
1 MM 020	BTA-1	RC30	10 Ω to 22 megs	15c	44c
1 MM 050	BTB-2	RC41	100 Ω to 22 megs	20c	78c

TYPE BW 10% WIRE WOUND

5-lot price applies to purchase of one resistance value only.

Stock No.	Mfr's Type	MIL Equiv.	Values (See Chart Above)	NET EACH	5 FOR
1 MM 060	BW-½	RU-3	0.27 to 820 Ω	10c	39c
1 MM 080	BW-1	RU-4	0.47 to 4700 Ω	15c	59c
1 MM 100	BW-2	RU-6	1 to 8200 Ω	20c	78c

Industrial Quantities—Substantial Savings

Industrial quantities—to provide tremendous savings on IRC 10% resistors. Supplied in boxes of 100—the minimum quantity of any one value that you may order.

Values may be assorted for 500- and 1000-lot prices—but only in boxes of 100 per value. For example, if you order 1000 resistors, select up to 10 different values.

Type BTS ½-Watt Carbon

Stock No.	MIL Equiv.	Values	Lots of 100, Per 100	Lots of 500, Per 100	Lots of 1000, Per 100
1 MM 001	RC20	10 Ω to 22 megs	4.00	3.00	2.70

Type BTA 1-Watt Carbon

Stock No.	MIL Equiv.	Values	Lots of 100, Per 100	Lots of 500, Per 100	Lots of 1000, Per 100
1 MM 021	RC30	10 Ω to 22 megs	6.00	4.50	4.00

BT AND BW 5% INSULATED TYPES

Type BT Filament Carbons. Fixed composition, filament carbon 5% resistors. Dependable low-cost units for use in circuits requiring close tolerance values. RETMA color coding. Fully insulated.

Type BW Wire-Wound. Highly stable, low-cost units, completely insulated. Similar in appearance to carbon resistors, but have double width first color code band. Withstand shock, vibration and temperature changes.

5% RETMA Values—Specify Resistance Wanted

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.24	1.1	5.1	24	110	510	2400	11,000	51,000	0.24 meg	1.1 meg	5.1 meg
0.27	1.2	5.6	27	120	560	2700	12,000	56,000	0.27 meg	1.2 meg	5.6 meg
0.30	1.3	6.2	30	130	620	3000	13,000	62,000	0.30 meg	1.3 meg	6.2 meg
0.33	1.5	6.8	33	150	680	3300	15,000	68,000	0.33 meg	1.5 meg	6.8 meg
0.36	1.6	7.5	36	160	750	3600	16,000	75,000	0.36 meg	1.6 meg	7.5 meg
0.39	1.8	8.2	39	180	820	3900	18,000	82,000	0.39 meg	1.8 meg	8.2 meg
0.43	2.0	9.1	43	200	910	4300	20,000	91,000	0.43 meg	2.0 meg	9.1 meg
0.47	2.2	10	47	220	1000	4700	22,000	0.1 meg	0.47 meg	2.2 meg	10 meg
0.51	2.4	11	51	240	1100	5100	24,000	0.11 meg	0.51 meg	2.4 meg	11 meg
0.56	2.7	12	56	270	1200	5600	27,000	0.12 meg	0.56 meg	2.7 meg	12 meg
0.62	3.0	13	62	300	1300	6200	30,000	0.13 meg	0.62 meg	3.0 meg	13 meg
0.68	3.3	15	68	330	1500	6800	33,000	0.15 meg	0.68 meg	3.3 meg	15 meg
0.75	3.6	16	75	360	1600	7500	36,000	0.16 meg	0.75 meg	3.6 meg	16 meg
0.82	3.9	18	82	390	1800	8200	39,000	0.18 meg	0.82 meg	3.9 meg	18 meg
0.91	4.3	20	91	430	2000	9100	43,000	0.20 meg	0.91 meg	4.3 meg	20 meg
1.0	4.7	22	100	470	2200	10,000	47,000	0.22 meg	1.0 meg	4.7 meg	22 meg

TYPE BT 5% FILAMENT CARBONS

5-lot price applies to purchase of one resistance value only.

Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	5 FOR
1 MM 015	BTR-¼	RC09	82 Ω to 22 megs	20c	.78
1 MM 005	BTS-½	RC20	10 Ω to 22 megs	20c	.78
1 MM 025	BTA-1	RC30	100 Ω to 22 megs	30c	1.18
1 MM 035	BTB-2	RC41	330 Ω to 22 megs	40c	1.57

TYPE BW 5% WIRE-WOUND

5-lot price applies to purchase of one resistance value only.

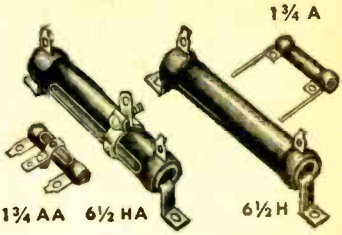
Stock No.	Mfr's Type	MIL Equiv.	Values	NET EACH	5 FOR
1 MM 065	BW-½	RU-3	0.24 Ω to 820 Ω	20c	.78
1 MM 085	BW-1	RU-4	0.47 Ω to 5100 Ω	30c	1.18
1 MM 105	BW-2	RU-6	1.0 Ω to 8200 Ω	40c	1.57

ALLIED Can Supply All the Above Resistors in Quantity Lots—Write for Prices

IRC Resistors

IRC WIRE WOUND POWER RESISTORS

Large, non-porous ceramic cores. Thick cement coatings. All have lugs, except types 1¾ A and 2D, which have tinned 1¼" leads. Units of 25 watts and up include mtg. brackets. All have ±10% tolerance except fixed types of 50 ohms and up, which are ±5%. **NOTES ON ADJUSTABLE TYPES:** Units of 25 watts and up have silver contacts. Wattage rating applies only if total resistance is used. Ohms values given represent range of maximum values in which the units are available. E.g., under I MM 202, "6000 to 10,000 ohms" means the units are available in all values from 6000 to 10,000 ohms, as given in table. These are *maximum* values. *Specify resistance values when ordering.* Av. shpg. wts.: 10-50 watts, 4 oz.; 100-200 watts, 1 lb. **Letter "K" means 1000.**



PREFERRED STOCK RANGES—SPECIFY RESISTANCE VALUES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1*	15	150*	500*	1200†	2000*	4500	8500†	14300†	40000*
2*	20	200*	600†	1250	2250	5000*	9000	15000*	50000*
3*	25*	250*	750*	1450†	2500*	6000*	10000*	20000*	60000*
5*	50*	300	800*	1500*	3000*	7000*	11000†	25000*	75000*
7.5	75*	350†	850†	1750†	3500	7500*	12000*	30000*	100000*
10*	100*	400	1000*	1850†	4000*	8000*	12500*†	35000*	.....

FIXED POWER RESISTORS

1¾ A (AB)—10 WATT

Size, 1¾" x ⅝". Available in values above to 25,000, except 850 and 1850.

No.	Ohms	EACH
I MM 120	1 to 1000	44¢
I MM 121	1200 to 5000	47¢
I MM 122	6000 to 10K	54¢
I MM 123	11K to 20K	61¢
I M 124	25K	64¢

2D (DG)—20 WATT

Size, 2 x ⅝". In values above to 50,000, except 2, 3, 7.5, 15, 20, 600, 1450 and 14,300 ohms.

I MM 140	1 to 1000	56¢
I MM 141	1200 to 5000	57¢
I MM 142	6000 to 10K	66¢
I MM 143	11K to 20K	71¢
I MM 144	25K to 40K	81¢
I M 145	50K	93¢

4½ E (EP)—50 WATT

4½x¾". Available in all values indicated by*.

I MM 160	1, 2 and 3	1.32
I MM 161	5 to 1000	.96
I MM 162	1500 to 5000	1.03
I MM 163	6000 to 10K	1.13
I MM 164	12K to 20K	1.23
I MM 165	25K to 40K	1.37
I MM 166	50K to 60K	1.52
I M 167	75K	1.72
I M 168	100K	1.88

6½ H (HA)—100 WATT

Size 6½x1⅛". In values below.

I MM 300, 5, 10, 25, 50, 75, 100, 150, 250, 500, 750, 1000 ohms. EACH 1.42

I MM 301, 1250, 1500, 2000, 2500, 3000, 5000 ohms. EACH 1.49

I MM 302, 7.5K, 10K ohms. EACH 1.59

I MM 303, 15K, 20K ohms. EACH 1.74

I MM 304, 25,000, 30,000, 40,000 ohms. EACH 1.88

I MM 305, 50K, 60K ohms. EACH 1.98

I M 306, 75K ohms. EA. 2.11

I M 307, 100K ohms. EA. 2.23

10½ H (HO)—200 WATT

Size 10½x1⅛". In values below.

I MM 320, 25, 50, 75, 100, 150, 250, 500, 750, 1000 ohms. EA. 1.89

I MM 321, 1500, 2000, 2500, 3000, 5000 ohms. EACH 1.94

I MM 322, 7.5K, 10K ohms. EACH 2.08

I MM 323, 15K, 20K ohms. EACH 2.21

I MM 324, 25,000, 30,000, 40,000 ohms. EACH 2.29

I MM 325, 50K, 60K ohms. EACH 2.37

I M 326, 75K ohms. EA. 2.50

I M 327, 100K ohms. EA. 2.67

ADJUSTABLE POWER RESISTORS

1¾ AA (ABA)—10 WATT

Size, 1¾x⅝". In values above except 850, 1200, 1750, 1850 ohms.

I MM 200, 1 to 1000 ohms. EA. 86¢

I MM 201, 1250-5K ohms. EA. 90¢

I MM 202, 6K to 10K ohms. EA. 96¢

2½ DA (DHA)—25 WATT

Size, 2½x⅝". Available in all values, except those with †.

I MM 220, 1 to 1000 ohms. EACH 1.10

I MM 221, 1250-5K ohms. EA. 1.11

I MM 222, 6K to 10K ohms. EA. 1.20

I MM 223, 12K to 20K ohms. EA. 1.23

I M 224, 25K ohms. EA. 1.34

4½ EA (EPA)—50 WATT

Size, 4½x¾". Available in values indicated by * except 1, 2, 3, 12,500 and 35,000 ohms.

I MM 240, 5 to 1000 ohms. EACH 1.39

I MM 241, 1.5K to 5K ohms. EACH 1.45

I MM 242, 6K to 10K ohms. EACH 1.55

I MM 243, 12K to 20K ohms. EACH 1.67

I MM 244, 25,000 to 40,000 ohms. EACH 1.81

I MM 245, 50K, 60K Ω EA. 1.94

I M 246, 75K. EA. 2.16

I M 247, 100K. EA. 2.30

6½ HA (HAA)—100 WATT

Size, 6½x1⅛". In values below.

I MM 260, 100, 200, 400, 500, 750, 1000 ohms. EACH 2.11

I MM 261, 1500, 2000, 2500, 3K, 4K, 5K ohms. EACH 2.16

I MM 262, 6000, 7500, 8000, 10,000 ohms. EACH 2.27

I MM 263, 15K, 20K ohms. EACH 2.42

I MM 264, 25,000, 30,000 and 40,000 ohms. EACH 2.57

I MM 265, 50K, 60K. EA. 2.67

I M 266, 75K. EACH 2.79

I M 267, 100K. EA. 2.91

10½ HA (HOA)—200 WATT

Size, 10½x1⅛". In values below.

I MM 340, 10, 25, 50, 100, 250, 500, 1000 ohms. EACH 2.57

I MM 341, 1500, 2000, 2500, 3000 and 5000 ohms. EACH 2.62

I M 342, 10K Ω. EA. 2.76

I MM 343, 15K, 20K Ω. EA. 2.89

I MM 344, 25,000, 30,000 and 40,000 ohms. EACH 2.96

I MM 345, 50K, 60K. EA. 3.04

I M 346, 75K. EA. 3.19

I M 347, 100K. EA. 3.33

EXTRA SLIDERS

2 M 604, For 2½ DA.
2 M 605, For 4½ EA. } EA. 15¢
2 M 600, For 1¾ AA.
2 M 603, For 6½ & 10½ HA. 25¢

IRC 1% RESISTORS

Deposited carbon resistors for circuits requiring high voltage ratings, low noise levels, excellent frequency and temperature characteristics. Rated at 70°C. ambient. **Specify values.**

Ohms	Ohms	Ohms	Megs	Megs
51	750	11,000	.16	2.4
56	820	12,000	.18	2.5
62	910	13,000	.20	2.7
68	1000	15,000	.22	3.0
75	1100	16,000	.24	3.3
82	1200	18,000	.25*	3.6
91	1300	20,000	.27	3.9
100	1500	22,000	.30	4.0
110	1600	24,000	.33	4.3
120	1800	25,000*	.36	4.7
130	2000	27,000	.39	5.0
150	2200	30,000	.40*	5.1
160	2400	33,000	.43	5.6
180	2500*	36,000	.47	6.2
200	2700	39,000	.50†	6.8
220	3000	40,000*	.51	7.5
240	3300	43,000	.56	8.2
250*	3600	47,000	.62	9.1
270	3900	50,000*	.68	10.0
300	4000*	51,000	.75	11.0
330	4300	56,000	.82	12.0
360	4700	62,000	.91	13.0
390	5000*	68,000	1.0	15.0
400*	5100	75,000	1.1	16.0
430	5600	82,000	1.2	18.0
470	6200	91,000	1.3	20.0
500*	6800	.1 meg	1.5	22.0
510	7500	.11 meg	1.6	24.0
560	8200	.12 meg	1.8	27.0
620	9100	.13 meg	2.0	30.0
680	10,000	.15 meg	2.2	

Type DCC ½ Watt. Size, ⅜x5/32". Wt., 3 oz.
Type DCF 1 Watt. Size, 13/16x9/32". Wt., 4 oz.
Type DCH 2 Watt. Size, 2 1/16x9/32". 6 oz.

Stock No.	Type	Values	EA.
I MM 490	DCC	51 ohms thru 2 megs except * or †	39¢
I MM 450	DCF	100 ohms thru 5 megs	59¢
I MM 451	DCF	5.1 megs thru 10 megs	65¢
I MM 470	DCH	200 ohms thru 10 megs except *.	71¢
I MM 471	DCH	11 Megs thru 30 megs	76¢

IRC WW SERIES PRECISION RESISTORS

WW2J WW5J WW4J WW10J

Type WW4J. These extremely dependable precision resistors are used by leading instrument manufacturers for precision meter multipliers and shunts, decade boxes, calibrated controls, etc. Reversed windings reduce inductance and interstage coupling to a minimum. Enameled windings on non-hygroscopic ceramic coil forms. Provides high mechanical strength and low thermal expansion. Tolerance is ±1%. Rated at ½ watt. Maximum volts, 700. With solder-lug terminals. A special impregnant assures complete humidity protection, high-stability and long-life. Shpg. wt., 3 oz.

Type	Watts	Size	Terminals
WW2J	1	7/8x2 15/16"	Lug
WW4J	.5	9/16x1"	Lug
WW5J	.5	25/32x1¼"	Lug
WW10J	.15	9/32x1 3/32"	Wire

Type WW10J. Extremely small, wire-wound resistors with ±1% tolerance. Rated at .15 watts. Max. volts, 200. Humidity-proof enameled winding on ceramic core. Temperature coefficient from 20 to 100 degrees C. is .0025% per degree. 2" leads. Wt., 2 oz.

Type WW2J. Reversed windings reduce inductance and assure minimum coupling to other parts of circuit. Tolerance is ±1%. 1 watt. Max. volts, 2000. Ceramic forms. Odd values are available on special order; price same as next higher value. Shpg. wt., 2 oz.

Type WW5J. Have reversed windings to reduce inductance and undesirable interstage coupling to a minimum. Tolerance is 1%. Rated at ½ watt. Maximum volts, 1000. Shpg. wt., 3 oz.

TYPE WW4J

No.	Ohms	EACH	No.	Ohms	EACH
2 M 541	0.1	1.86	2 M 516	12500	1.30
2 M 549	0.2	1.86	2 M 517	15000	
2 M 542	0.5	1.61	2 M 518	20000	
			2 M 544	22500	
2 M 500	1	1.40	2 M 519	25000	
2 M 546	5				
2 M 501	10		2 M 520	30000	1.69
2 M 502	25		2 M 521	40000	
2 M 503	50		2 M 522	50000	
			2 M 523	60000	
2 M 504	100	1.15	2 M 524	75000	
2 M 505	200		2 M 525	100000	
2 M 506	250				
2 M 543	300		2 M 526	125000	1.94
2 M 507	500		2 M 527	150000	2.12
2 M 508	1000		2 M 528	175000	2.16
2 M 509	1500		2 M 529	200000	2.16
2 M 510	2000		2 M 530	225000	2.62
2 M 511	2500				
			2 M 531	250000	2.62
2 M 547	3000	1.30	2 M 532	300000	2.62
2 M 548	3500		2 M 533	400000	2.67
2 M 512	4000		2 M 534	500000	3.09
2 M 513	5000				
2 M 514	7500				
2 M 515	10000				

TYPE WW10J

No.	Ohms	EACH	No.	Ohms	EACH
2 M 550	10	1.20	2 M 564	4000	1.05
			2 M 565	5000	
2 M 551	25	96¢	2 M 566	7500	
2 M 552	50		2 M 567	10,000	
2 M 553	100		2 M 568	12,500	
2 M 554	200				
2 M 555	250		2 M 569	15,000	1.15
2 M 556	300		2 M 570	20,000	1.15
2 M 557	500		2 M 571	25,000	1.15
2 M 558	1000		2 M 572	30,000	1.15
2 M 559	1500		2 M 573	40,000	1.27
			2 M 574	50,000	1.27
2 M 560	2000	1.05			
2 M 561	2500		2 M 575	60,000	1.39
2 M 562	3000		2 M 576	75,000	1.49
2 M 563	3500		2 M 577	0.1 Meg.	1.49

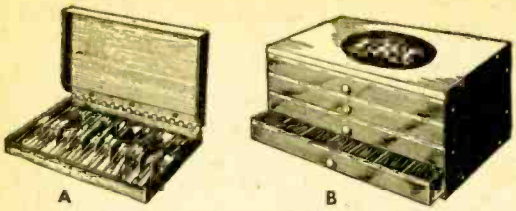
TYPE WW5J

No.	Ohms	EA.
2 M 580	0.6 Meg	5.00
2 M 581	0.75 Meg	5.88
2 M 582	0.9 Meg	5.24
2 M 583	1 Meg.	6.37

TYPE WW2J

No.	Ohms	EACH
2 M 538	1.5 Meg	12.59
2 M 539	2 Meg.	14.94
2 M 540	2.5 Meg	18.18

Wire Wound Resistors—Kits



POPULAR IRC RESISTOR ASSORTMENTS

IRC RESIST-O-KITS and RESIST-O-CABINETS help the radio-TV serviceman keep his resistor stocks complete and accessible at all times. Save valuable bench space and improve working efficiency. Each resistance stored in its own separate compartment. Assortments listed are designed to provide greatest usefulness at minimum cost. All resistors have ±10% tolerance. Metal RESIST-O-KITS have 10 compartments, and measure 1⅛x3⅞x6⅝". Metal RESIST-O-CABINETS have 4 drawers, and a total of 28 compartments which hold nearly all commonly used resistance values. RESIST-O-CABINETS can be stacked to provide extra storage space. Size, 5⅜x5¹⁵⁄₁₆x10⅞". No extra charge for metal cabinets or kit containers. You pay only for the resistors.

FIG. A—METAL RESIST-O-KITS

Assortment No. 7. A versatile selection of often-needed composition resistors. A great aid to servicing; provides handy stock of most-often used resistors. Assortment includes 45 type BTS ½-watt resistors. Values selected are especially handy in television servicing; replace most commonly used resistors found in popular television sets. Consist of 6 each—0.1 and 0.47 megs; 5 each—47,000 ohms, 0.27 and 1.0 meg; 4 each—1000 ohms, 10,000 ohms and 2.2 megs; 3 each—4700 ohms and 0.22 meg. Shpg. wt., 11 oz.
2 M 758. NET 4.41

Assortment No. 8. Contains 30 BTA 1 watt 10% resistors in flat, pocket-sized metal kit. 10 compartments prevent ranges from mixing. For general servicing and replacement. Consists of 4 each—1000 and 47,000 ohms, 0.1 and 0.47 meg; 3 each—10,000 ohms and 1.0 meg; 2 each—2200, 4700, and 27,000 ohms, 0.27 meg. A selection of most commonly needed values. Keep one of these kits handy at all times. Shpg. wt., 11 oz.
2 M 759. NET 4.41

Fig. B—METAL RESIST-O-CABINETS

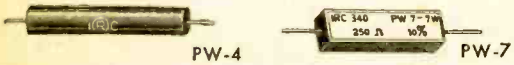
Assortment No. 3. Consists of 80 BW-2 and BTB-2 2-watt resistors. In 4 drawer cabinet with 28 labeled compartments. Ideal for radio and TV servicemen. Consists of 2 each—4.7, 10, 22, 68, 470, 1500, 2200, 3300, 4700, 27,000 ohms and 1.0 meg; 3 each—47, 82, 150, 220, 270, 1000, 6800, 15,000, 100,000 ohms; 4 each—100, 330, 8200, 10,000, 22,000 and 47,000 ohms; 1 each—15, 27, 33, 39, 3900, 220,000 and 470,000 ohms. Shpg. wt., 4½ lbs.
2 M 760. NET 15.68

Assortment No. 4. Consists of 100 BW and BTS ½ watt 10% resistors. ½-watt values most widely found in television. Consist of 6 each—1000 and 47,000 ohms, 0.1, 0.27, 0.47 and 1.0 meg; 5 each—4700 and 10,000 ohms, 0.22 and 2.2 megs; 3 each—100, 470, 3300, 22,000, 27,000, and 33,000 ohms, 0.33 and 4.7 megs; 2 each—47, 220, 270, 1500, 2200, 2700, 56,000 and 68,000 ohms, 3.3 and 10 megs. Shpg. wt., 4½ lbs.
2 M 755. NET 9.80

Assortment No. 5. Contains 83 BW-1 and BTA 1 watt resistors. 4-drawer cabinet has 28 labeled compartments for rapid and accurate location of wanted resistor. Consists of 5 each—1000, 10,000, 27,000 and 47,000 ohms, 0.1, 0.27, 0.47, and 1.0 megs; 3 each—2200, 4700, and 22,000 ohms; 2—each 47, 100, 150, 220, 270, 470, 1500, 2700, 3300, 15,000, 33,000, 39,000, and 68,000 ohms, 0.15, 0.22, 2.2, and 4.7 megs. Shpg. wt., 4¼ lbs.
2 M 756. NET 12.20

Assortment No. 6. Consists of a complete resistor stock for AM, FM and TV—all in one handy cabinet. A real time and money saver for the serviceman, kit-builder, and experimenter. Exact values on each resistor supplement the RETMA color-code. The assortment consists of 91 resistors in the following sizes: 1 each of the DCF "precistors" (see full description on page 105) in values of 1000 and 10,000 ohms, 0.1, 1.0, and 5.0 megohms; 1 each of the 2-watt resistors in values of 47, 100, 470, 4700, 10,000, 22,000, and 47,000 ohms; and a selection of thirty-five 1-watt and forty-four ½-watt resistors in values of 47, 100, 150, 220, 270, 470, 1000, 1500, 2200, 2700, 3300, 4700, 10,000, 15,000, 22,000, 27,000, 33,000, 39,000, 47,000, and 68,000 ohms; 0.1, 0.15, 0.22, 0.27, 0.47, 1.0, 2.2, and 4.7 megohms. Shpg. wt., 5 lbs.
2 M 757. NET 13.77

TYPE PW WIREWOUND RESISTORS



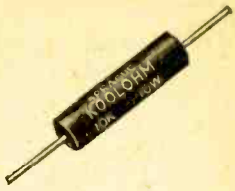
PW-4 PW-7

Wire-wound resistors, with resistance element wound on glass fiber core. Molded in tan, high temperature plastic. PW-4 is tubular in shape; PW-7 and PW-10 are rectangular. Types PW-7 and PW-10 are particularly recommended for circuits where a stable resistor is required with an actual wattage dissipation of 7 or 10 watts or less. Element-lead assembly sealed in ceramic case. Axial leads, 1½" long. 4, 7 and 10 watts. ±10% tolerance. Sizes: PW-4, 1¾x²¹⁄₆₄"; PW-7, 1²⁵⁄₆₄x⅜x1½"; PW-10 1⅞x⅜x1½". Shpg. wt., 2 oz. **Specify values when ordering.**

Ohms	Ohms	Ohms	Ohms	Ohms
1	10	75	300	1500	5000
2	15	100	500	2000	7500
3	20	150	750	2500	8200
4	25	200	1000	3000	10,000
5	50	250	1250	4000	

IMM 170. PW-4. 4-watt. Specify value. 1 to 8200 ohms. NET EA. 28¢
IMM 180. PW-7. 7-watt. Specify value. 1 to 5000 ohms. NET EA. 30¢
IMM 190. PW-10. 10-watt. Specify value. 1 to 10K ohms. NET EA. 32¢
Write for Quantity Prices

SPRAGUE KOOLOHM WIREWOUND RESISTORS



Feature specially developed high-insulation resistance wire windings. Type KT is inductively wound. Type NIT has non-inductive winding. Glazed ceramic jackets and special end-seals provide complete protection against high humidity. Easily meet requirements of television and other high-voltage circuits—will withstand 10,000 volts from surface of ceramic jacket to resistance element. The ceramic coating insulation is resistant to heat—will withstand temperatures as high as 1000°C. Accuracy within 5%. 2 oz.

SPECIFY VALUES DESIRED

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
5	50	400	1000	4000	12,000	30,000
10	75	500	1250	5000	12,500	35,000
15	100	600	1500	6000	14,000	40,000
20	150	700	1750	7500	15,000	50,000
25	200	750	2000	8000	17,500	60,000
30	250	800	2500	9000	20,000	70,000
40	300	900	3000	10,000	25,000	

TYPE 5KT—5 WATT—1⁷⁄₁₂x1⁵⁄₁₂"

*Except 750 ohms.

No.	Ohms	EACH	No.	Ohms	EACH
IMM 640	5 to 1000*	38¢	IM 645	20,000	56¢
IMM 641	1250 to 5000	41¢	IM 646	25,000	65¢
IMM 642	6000 to 10,000	47¢	IM 647	30,000	71¢
IMM 643	12,500 to 14,000	53¢	IM 649	35,000	82¢
IM 644	15,000	56¢	IM 648	40,000	88¢

TYPE 10KT—10 WATT—1²⁷⁄₁₂x1⁵⁄₁₂"

*Except 12,500 ohms.

No.	Ohms	EACH	No.	Ohms	EACH
IMM 660	5 to 1000	44¢	IM 666	30,000	.76
IMM 661	1250 to 5000	47¢	IM 658	35,000	.88
IMM 662	6000 to 10,000	53¢	IM 667	40,000	.97
IMM 663	12,000 to 17,500*	59¢	IM 668	50,000	1.06
IM 664	20,000	65¢	IM 669	60,000	1.18
IM 665	25,000	71¢	IM 659	70,000	1.29

TYPE 5NIT—5 WATT—1⁷⁄₁₂"x1⁵⁄₁₂"

*Except 750 ohms.

No.	Ohms	EACH	No.	Ohms	EACH
IMM 670	5 to 1000*	59¢	IMM 672	2500 to 4000	73¢
IMM 671	1250 to 2000	68¢	IM 673	5000	76¢

TYPE 10NIT—10 WATT—1²⁷⁄₁₂"x1⁵⁄₁₂"

IMM 680	5 to 1000	59¢	IMM 683	5000 to 6000	.76
IMM 681	1250 to 2000	68¢	IMM 684	7500 to 9000	.85
IMM 682	2500 to 4000	73¢	IM 685	10,000	1.12

CLAROSTAT "GREENOHM" WIREWOUND RESISTORS

5 and 10-watt, fixed, wire-wound resistors. Wound on high-grade ceramic with special inorganic cement coating. Exceptionally rugged—withstand extreme overload with maximum heat dissipation. Rugged terminals. Accuracy within ±10% for 1-40 ohms; ±5% for 50 ohms or above. Specifications: 10 watt, 1¼" overall length, ⁵⁄₁₆" core dia., 5 watt, 1x⅜". Shpg. wt., 3 oz. **Specify values.**

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	25	225	800	2500	8500	17,500
2	30	250	900	3000	9000	18,000
3	35	300	1000	3500	10,000	20,000
4	40	350	1100	4000	11,000	22,500
5	50	400	1200	4500	12,000	25,000
7.5	75	450	1250	5000	12,500	30,000
10	100	500	1500	6000	13,500	35,000
12	125	600	1750	7000	14,500	40,000
15	150	700	2000	7500	15,000	50,000
20	200	750	2250	8000	16,000	

Type PR-5-F. 5 watt. All values through 10,000 ohms only.
2 MM 400. NET EACH 29c
Type PR-10-F. 10 watt. All values listed above.
2 MM 425. NET EACH 32c

CARBORUNDUM CO. GLOBAR TYPE F RESISTORS

Widely used in AC-DC radio receivers, television sets, etc. Limits initial current; protects tubes during warm-up. Resistance decreases as temperature increases. Protects circuit components against damage from voltage surges, line voltage fluctuations, etc. Operate dependably over range of 52-100° C. 1M950—1½x¼"; 1M951-1¾x⅜"; 1M952-3x⅜". Wt., 3 oz.

No.	Type	Ohms-Hot	Ohms-Cold	NET EACH
IM 950	439F	200	1400	1.13
IM 951	525F-1	20	250	1.28
IM 952	327F-1	35	460	1.43

IRC RESIST-O-GUIDE

Handy vest-pocket color-code resistor guide for instant reference. Has 3 multicolored discs to quickly indicate value of any resistor color-coded to RETMA standards. 2 oz.
2 M 775. NET 15c

Ohmite Resistors

FAMOUS "BROWN DEVIL" WIRE-WOUND RESISTORS

For voltage dropping, bias units, bleeders, etc. Thick vitreous enamel coating—for excellent heat conduction and insulation. Resistors have welded high-strength alloy terminals. Resistance wire is welded to terminals for perfect electrical connection. Protected against humidity and mechanical damage. Single-layer winding permits fast heat dissipation. Accuracy, ±5%. Size: 5-watt units, 1x5/16"; 10-watt units 1¼x5/16"; 20-watt units, 2x7/16". 1½" tinned leads. Av. shpg. wt., 3 oz.

STOCK RANGES—SPECIFY VALUES

Ohms	Ohms	Ohms	Ohms	Ohms
1*	125*	1100*	7500	35,000
1.5*	150	1200	8000	40,000
2*	200	1250	8500*§	45,000
3*	225*	1500	9000*	50,000
4*	250	1750	10,000	55,000
5	300	1850†§	11,000*	60,000
7.5*	350	2000	12,000*	65,000
10	400	2250	12,500	70,000
12*	450*	2400†§	13,500*	75,000
15*	500	2500	14,300*	80,000
20*	600*	2750†§	15,000	85,000
25	650†§	3000	16,000*	90,000
30*	700	3500	17,500*	95,000
35*	750	4000	18,000*	100,000
40*	800	4500	20,000	
50	850†§	5000	22,500*	
75	900*	6000	25,000	
100	1000	7000	30,000	

5 WATT SIZE

Available in all values to 10,000 except those marked § in table above.

No.	Ohms	Each
1 MM 730	1 to 1000	39¢
1 MM 731	1100 to 5000	42¢
1 MM 732	6000 to 10,000	46¢

10 WATT SIZE

Available in all values to 50,000 except those marked † in table above.

No.	Ohms	Each
1 MM 700	1 to 1000	44¢
1 MM 701	1100 to 5000	47¢
1 MM 702	6000 to 10000	54¢
1 MM 703	11000 to 20000	61¢
1 MM 704	22500 to 25000	64¢
1 MM 705	30000 to 50000	72¢

20 WATT SIZE

Available in all values except those marked * in table above.

No.	Ohms	Each
1 MM 720	5 to 1000	56¢
1 MM 721	1200 to 5000	57¢
1 MM 722	6000 to 10000	66¢
1 MM 723	12500 to 20000	71¢
1 MM 724	25000 to 40000	80¢
1 MM 725	45000 to 60000	93¢
1 MM 726	65000 to 80000	1.08
1 MM 727	85000 to 100000	1.24

OHMITE TYPE FR FUSE RESISTOR

A highly dependable 7½-ohm fuse resistor. For replacement of any fuse resistor used in television. Has 1½" tinned wire leads. May be used with convenient, plug-in type bakelite mounting strip supplied, or wired directly into TV circuit. Length, 1 3/16". Shpg. wt., 3 oz.

2 M 063. NET 38c

HANDY OHM'S LAW CALCULATOR

Handy, easy-to-use Ohm's Law Calculator. Solves problems involving Ohm's Law or the DC power formula. Shows power, voltage, current when resistance is known. Setting two known values gives resistance, other unknown. Has slide-rule scales (A, B, C and D) and parallel resistance calculator. Size, 9x3".

2 M 780. Postpaid in U.S.A. 25c
2 M 781. Deluxe Plastic Model. Postpaid in U.S.A. 1.50

"DIVIDOHM" WIRE-WOUND ADJUSTABLE RESISTORS

Used for voltage-dividing networks in power supplies, adjustable dropping resistors, etc. Wire-wound on ceramic core with vitreous enameled coat. Accuracy ±5%. With slider and mounting brackets. Av. shpg. wt., ½ lb.

10 WATTS—1¾x5/16"

No.	Type	Ohms	Ma.	EACH
75 M 861	1006	10	1,000	86c
75 M 862	1009	25	632	
75 M 863	1010	50	447	
75 M 864	1011	75	365	
75 M 865	1012	100	316	
75 M 866	1013	150	258	
75 M 867	1015	250	200	
75 M 868	1019	500	141	
75 M 869	1021	750	115	
75 M 870	1023	1000	100	
75 M 871	1025	1500	79	90c
75 M 872	1028	2500	63	
75 M 873	1033	5000	43	
75 M 874	1036	7500	33	96c
75 M 875	1040	10,000	26	
75 M 883	EXTRA SLIDER			15¢

25 WATTS—2x9/16"

No.	Type	Ohms	Ma.	EACH
75 M 780	0368	100	500	1.10
75 M 781	0371	250	316	
75 M 782	0372	500	223	
75 M 783	0373	750	182	
75 M 784	0375	1000	158	
75 M 785	0376	1500	129	1.11
75 M 786	0377	2000	111	
75 M 787	0378	2500	100	
75 M 788	0379	3000	91	
75 M 789	0382	5000	70	
75 M 790	0384	7500	57	1.20
75 M 791	0385	10000	50	
75 M 792	0386	12000	42	1.23
75 M 793	0387	15000	34	
75 M 794	0388	20000	26	
75 M 795	0389	25000	21	1.34
75 M 880	EXTRA SLIDER			15¢

50 WATTS—4x9/16"

No.	Type	Ohms	Ma.	EACH
75 M 800	0568	250	447	1.39
75 M 801	0569	500	316	
75 M 802	0570	750	258	
75 M 803	0572	1000	223	
75 M 804	0573	1500	182	1.45
75 M 805	0574	2000	158	
75 M 806	0575	2500	141	
75 M 807	0578	5000	100	
75 M 808	0581	10000	70	1.55
75 M 809	0583	15000	57	1.67
75 M 810	0584	20000	48	1.67
75 M 811	0585	25000	41	1.81
75 M 812	0586	30000	36	
75 M 813	0587	40000	28	
75 M 814	0588	50000	23	1.94
75 M 815	0591	100000	12	2.30
75 M 880	EXTRA SLIDER			15¢

100 WATTS—6½x¾"

No.	Type	Ohms	Ma.	EACH
75 M 830	0962	1000	316	2.11
75 M 831	0964	5000	141	2.16
75 M 832	0965	10000	100	2.27
75 M 833	0966	15000	81	2.42
75 M 834	0967	20000	70	2.42
75 M 835	0968	25000	53	2.57
75 M 836	0969	30000	47	2.57
75 M 837	0970	40000	36	2.57
75 M 838	0971	50000	29	2.67
75 M 839	0972	75000	19	2.79
75 M 840	0973	100000	15	2.91
75 M 881	EXTRA SLIDER			25¢

200 WATTS—10½x1⅛"

No.	Type	Ohms	Ma.	EACH
75 M 850	1362	1000	447	2.57
75 M 851	1364	5000	200	2.62
75 M 852	1365	10000	141	2.76
75 M 853	1366	15000	115	2.89
75 M 854	1367	20000	100	2.89
75 M 855	1368	25000	89	2.96
75 M 856	1369	30000	81	2.96
75 M 857	1370	40000	61	2.96
75 M 858	1371	50000	49	3.04
75 M 859	1372	75000	33	3.19
75 M 860	1373	100000	25	3.33
75 M 882	EXTRA SLIDER			25¢

"LITTLE DEVIL" AB RESISTORS

Molded, insulated composition resistors. Meet MIL-R-11A specifications. Including salt water immersion and high humidity tests. Dissipate heat rapidly and can be used at their full wattage ratings at 158° F. Tinned copper leads, hardened at the resistor body. Breakdown ratings: ½ w., 350 v.; 1 w., 500 v.; 2 w., 1000 v.

SPECIFY VALUES DESIRED 10% TOLERANCE RESISTORS

Ohms	Ohms	Ohms	Megs	Megs
10	220	4,700	0.1	2.2
12	270	5,600	0.12	2.7
15	330	6,800	0.15	3.3
18	390	8,200	0.18	3.9
22	470	10,000	0.22	4.7
27	560	12,000	0.27	5.6
33	680	15,000	0.33	6.8
39	820	18,000	0.39	8.2
47	1,000	22,000	0.47	10.0
56	1,200	27,000	0.56	12.0
68	1,500	33,000	0.68	15.0
82	1,800	39,000	0.82	18.0
100	2,200	47,000	1.0	22.0
120	2,700	56,000	1.2	
150	3,300	68,000	1.5	
180	3,900	82,000	1.8	

No.	Watts	Tol.	EACH	5 for †
2 MM 040	½	±10%	10¢	39¢
2 MM 060	1*	±10%	15¢	44¢
2 MM 080	2	±10%	20¢	78¢

2 MM 041, ½ watt. Lots { Per 100 ..5.00†
2 MM 061, *1 watt. of 100 { Per 100 ..7.50†

†Applies to resistors of one value only.
*All values above, plus 2.7, 3.3, 3.9, 4.7, 5.6, 6.8 and 8.2 ohms.

5% TOLERANCE RESISTORS

Ohms	Ohms	Ohms	Megs	Megs
10	220	4,700	0.1	2.2
11	240	5,100	0.11	2.4
12	270	5,600	0.12	2.7
13	300	6,200	0.13	3.0
15	330	6,800	0.15	3.3
16	360	7,500	0.16	3.6
18	390	8,200	0.18	3.9
20	430	9,100	0.20	4.3
22	470	10,000	0.22	4.7
24	510	11,000	0.24	5.1
27	560	12,000	0.27	5.6
30	620	13,000	0.30	6.2
33	680	15,000	0.33	6.8
36	750	16,000	0.36	7.5
39	820	18,000	0.39	8.2
43	910	20,000	0.43	9.1
47	1,000	22,000	0.47	10.0
51	1,100	24,000	0.51	11.0
56	1,200	27,000	0.56	12.0
62	1,300	30,000	0.62	13.0
68	1,500	33,000	0.68	15.0
75	1,600	36,000	0.75	16.0
82	1,800	39,000	0.82	18.0
91	2,000	43,000	0.91	20.0
100	2,200	47,000	1.0	22.0
110	2,400	51,000	1.1	
120	2,700	56,000	1.2	
130	3,000	62,000	1.3	
150	3,300	68,000	1.5	
160	3,600	75,000	1.6	
180	3,900	82,000	1.8	
200	4,300	91,000	2.0	

No.	Watts	Tol.	EACH	5 for †
2 MM 045	½	±5%	20¢	.78
2 MM 065	1	±5%	30¢	1.18
2 MM 085	2	±5%	40¢	1.57

†Applies to 5 resistors of one value only.

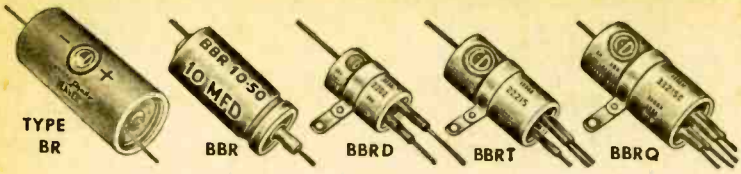
"LITTLE DEVIL" ASSORTMENTS

NO CHARGE for Plastic Cabinet

Selected supply of 150 ½-watt or 125 1- or 2-watt resistors in most-often-needed values. Complete with handsome plastic cabinet which is included at no extra charge. Cabinet has 5 drawers and 40 compartments. Wt., 7 lbs.

No.	Type	Description	Each
2 M 761	CAB-10	150 ½-watt resistors	14.70
2 M 754	CAB-2	125 1-watt resistors	18.37
2 M 762	CAB-3	125 2-watt resistors	24.50

Cornell-Dubilier Capacitors



TYPE BR — BBR — BBRD — BBRT — BBRQ

"BLUE BEAVER" TUBULAR ELECTROLYTICS

"Blue Beaver" electrolytic capacitors are specifically designed for service replacement applications. All are sealed in aluminum cans. All have wax impregnated cardboard outer insulating sleeves except Type BBR. Types BR and BBR have solid, tinned-copper, wire leads with negative terminal grounded to can. Types BBRD, BBRT, BBRQ have 7" flexible leads covered with vinylite insulation. Types BBRD, BBRT, BBRQ have common negative terminals and color-coded positive leads. All types are for operation at temperatures up to +85° C except 500 VDC, +65° C. *Indicates can size. Add 1/16" to diameter and 1/16" to length for overall size of capacitors with sleeves. Av. shpg. wt., 4 oz.

TYPE BR SINGLE SECTION

No.	Type	Mfd	W.V.	*Size	NET
19 L 215	450	4	500	5/8x1 11/16"	.71
14 L 000	850	8	500	3/4x1 11/16"	.76
14 L 001	1650	16	500	1x2"	.88
14 L 002	2050	20	500	1x2"	.94
14 L 003	3050	30	500	1x2 1/2"	1.03
14 L 008	145	1	450	5/8x1 1/16"	.65
14 L 009	245	2	450	5/8x1 1/16"	.65
14 L 010	445	4	450	5/8x1 7/16"	.68
14 L 011	845	8	450	3/4x1 7/16"	.73
14 L 012	1045	10	450	3/4x1 11/16"	.76
14 L 013	1245	12	450	3/4x1 11/16"	.79
14 L 014	1645	16	450	7/8x2"	.82
14 L 015	2045	20	450	7/8x2"	.91
14 L 016	3045	30	450	1x2 1/2"	1.00
14 L 017	4045	40	450	1x2 1/2"	1.06
14 L 004	6045	60	450	1 1/8x2 5/8"	1.38
14 L 005	8045	80	450	1 1/8x3 1/4"	1.65
14 L 020	435	4	350	5/8x1 7/16"	.62
14 L 021	835	8	350	5/8x1 11/16"	.71
14 L 022	1235	12	350	3/4x1 11/16"	.76
14 L 023	1635	16	350	7/8x1 11/16"	.82
14 L 018	2035	20	350	7/8x1 11/16"	.85
14 L 019	3035	30	350	1x2"	.97
14 L 026	4035	40	350	1x2 1/2"	1.03
14 L 030	425	4	250	5/8x1 1/16"	.59
14 L 031	825	8	250	5/8x1 7/16"	.68
14 L 032	1225	12	250	5/8x1 11/16"	.73
14 L 033	1625	16	250	3/4x1 11/16"	.76
14 L 034	2025	20	250	3/4x1 11/16"	.79
14 L 035	4025	40	250	7/8x2"	.91
14 L 040	415	4	150	5/8x1 1/16"	.59
14 L 041	815	8	150	5/8x1 1/16"	.62
14 L 042	1215	12	150	5/8x1 7/16"	.65
14 L 043	1615	16	150	5/8x1 7/16"	.68
14 L 044	2015	20	150	5/8x1 7/16"	.71
14 L 045	3015	30	150	3/4x1 7/16"	.76
14 L 046	4015	40	150	3/4x1 11/16"	.79
14 L 047	5015	50	150	7/8x1 11/16"	.82
14 L 039	8015	80	150	7/8x2"	.94
14 L 056	10015	100	150	1x2 1/2"	1.03
14 L 057	15015	150	150	1x3"	1.12
14 L 050	550	5	50	5/8x1 1/16"	.59
14 L 051	105	10	50	5/8x1 1/16"	.59
14 L 052	205	20	50	5/8x1 1/16"	.59
14 L 053	255	25	50	5/8x1 1/16"	.62
14 L 054	505	50	50	5/8x1 11/16"	.71
14 L 060	102	10	25	5/8x1 1/16"	.59
14 L 061	202	20	25	5/8x1 1/16"	.59
14 L 062	252	25	25	5/8x1 1/16"	.59
14 L 063	502	50	25	5/8x1 1/16"	.65

TYPE BBR SINGLE SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 200	25-3	25	3	3/8x1 1/16	.50
19 L 201	50-3	50	3	3/8x1 1/16	.56
19 L 202	5-6	5	6	3/8x1 1/16	.47
19 L 203	25-6	25	6	3/8x1 1/16	.50
19 L 204	50-6	50	6	3/8x1 1/16	.56
19 L 205	100-6	100	6	1/2x1 1/16	.71
19 L 206	250-6	250	6	1/2x1 7/16	.79
19 L 207	100-15	100	15	1/2x1 1/16	.73
19 L 216	10-25	10	25	3/8x1 1/16	.59
19 L 217	20-25	20	25	3/8x1 1/16	.59
19 L 218	25-25	25	25	3/8x1 1/16	.59
19 L 219	50-25	50	25	1/2x1 1/16	.65
19 L 208	100-25	100	25	1/2x1 7/16	.79
19 L 209	1-50	1	50	3/8x1 1/16	.53
19 L 210	2-50	2	50	3/8x1 1/16	.53
19 L 211	4-50	4	50	3/8x1 1/16	.59
19 L 222	5-50	5	50	3/8x1 1/16	.59
19 L 223	10-50	10	50	3/8x1 1/16	.59
19 L 224	25-50	25	50	1/2x1 1/16	.62
19 L 212	10-90	10	90	1/2x1 1/16	.65
19 L 213	16-90	16	90	1/2x1 7/16	.65
19 L 214	4-150	4	150	1/2x1 1/16	.59
19 L 249	8-150	8	150	1/2x1 1/16	.62
19 L 226	10-150	10	150	1/2x1 1/16	.62
19 L 247	12-150	12	150	1/2x1 1/16	.65
19 L 248	16-150	16	150	1/2x1 7/16	.68
19 L 225	20-150	20	150	1/2x1 7/16	.71
19 L 227	4-250	4	250	1/2x1 1/16	.59
19 L 228	8-250	8	250	1/2x1 7/16	.68
19 L 229	12-250	12	250	1/2x1 7/16	.73

TYPE BBRD DUAL SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 220	2202	20-20	25	3/4x1 1/16	.82
19 L 250	115	10-10	50	3/4x1 1/16	.82
19 L 251	2115	20-10	150	5/4x1 7/16	.91
19 L 252	2215	20-20	150	3/4x1 11/16	.97
19 L 253	3215	30-20	150	7/8x1 11/16	1.00
19 L 254	3315	30-30	150	7/8x1 11/16	1.06
19 L 255	4215	40-20	150	7/8x1 11/16	1.03
19 L 256	4315	40-30	150	7/8x2	1.06
19 L 257	4415	40-40	150	7/8x2	1.09
19 L 258	5315	50-30	150	7/8x2	1.15
19 L 259	5515	50-50	150	1x2	1.23
19 L 260	8415	80-40	150	1x2 3/16	1.32
19 L 261	16825	16-8	250	3/4x2	1.00
19 L 262	16D25	16-16	250	7/8x2	1.06
19 L 263	2225	20-20	250	1x1 11/16	1.09
19 L 264	7V225	75-20	250	1x3	1.53
19 L 265	8D45	8-8	450	7/8x1 11/16	1.00
19 L 266	16845	16-8	450	1x2 3/16	1.18
19 L 267	16D45	16-16	450	1x2 1/2	1.32
19 L 268	2245	20-20	450	1x3	1.47
19 L 221	4445	40-40	450	1x4 1/16	2.00

TYPE BBRT TRIPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 230	22215	20-20-20	150	7/8x1 11/16	1.29
19 L 231	32V215	30-25-20	150	7/8x2	1.32
19 L 232	33315	30-30-30	150	1x2	1.38
19 L 233	42215	40-20-20	150	1x1 11/16	1.32
19 L 234	43215	40-30-20	150	1x2	1.38
19 L 235	44215	40-40-20	150	1x2	1.38
19 L 236	44415	40-40-40	150	1x2 3/16	1.44
19 L 237	2215C	20-20,20	150,25	7/8x1 11/16	1.21
19 L 238	3315C	30-30,20	150,25	7/8x2	1.29
19 L 239	4215C	40-20,20	150,25	1x1 11/16	1.26
19 L 240	4315C	40-30,20	150,25	1x1 11/16	1.29
19 L 241	4415C	40-40,20	150,25	1x1 11/16	1.32
19 L 242	4415X25	40-40,250	150,10	1x2 3/16	1.53
19 L 243	5315C	50-30,20	150,25	1x1 11/16	1.38
19 L 244	5515C	50-50,20	150,25	1x2 3/16	1.47
19 L 245	8415C	80-40,20	150,25	1x2 1/2	1.56
19 L 246	3215C10	30-20,100	150,25	1x2	1.38
19 L 275	5315X20	50-30,200	150,10	1x2 3/16	1.50
19 L 276	5315C10	50-30,100	150,25	1x2 3/16	1.44
19 L 277	8215C10	80-20,100	150,25	1x2 1/2	1.62
19 L 278	2225C	20-20,20	250,25	1x2	1.32
19 L 279	4225C	40-20,20	250,25	1x2 3/16	1.50
19 L 280	4425C	40-40,20	250,25	1x2 11/16	1.71
19 L 281	7V4125	75-40-10	250	1 1/8x3	2.03
19 L 282	16T45	16-16-16	450	1 1/8x3	1.82
19 L 283	2245C	20-20,20	450,25	1x3	1.71

TYPE BBRQ QUADRUPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 290	33215C	30-30-20,20	150,25	1x2	1.71
19 L 291	42215C	40-20-20,150	20,25	1x2	1.68
19 L 292	53215C	50-30-20,150	20,25	1x2 1/2	1.79
19 L 293	44315C	40-40-30,150	20,25	1x2 1/2	1.76
19 L 294	55515C	50-50-50,150	20,25	1x3	2.03
19 L 295	22245C	20-20-20,20	450,25	1 1/8x3 3/16	2.38

TYPE KR ELECTROLYTICS SCREW-NECK ALUMINUM CAN

Type KR. Single-hole mounting units. Etched foil, dry electrolytic capacitors in aluminum cans. 8" leads. Av. shpg. wt., 6 oz.

600 Volts DC Working

No.	Type	Mfd	Size	NET
14 L 161	608C	8	1 3/8x4 3/8"	1.85
14 L 162	616C	16	1 3/8x4 3/8"	2.20

We can supply the complete line of Cornell-Dubilier capacitors. You'll find extensive listings of these capacitors on pages 108-111. Write for prices and delivery on any C-D capacitors not listed.

TYPE TAN "SUB-MINIATURE" TANTALUM ELECTROLYTIC CAPACITORS

A newly developed line of remarkably small sub-miniature size Tantalum electrolytic capacitors. Especially well suited for applications in transistor circuits and other uses demanding tiny, compact physical size. These sub-miniature units are only 3/16" long and have a diameter of only 3/16". Operating temperature range is from −55° C. to +85° C. Standard capacitance tolerance is ±20% (except *maximum capacitance for that voltage). Power factor and frequency characteristics are excellent even at their lowest rated operating temperature. Leakage current: Max., .07 microamps per mfd per volt. at room temperature. Terminals are solid, tinned-wire leads 1 1/2" long. Av. shpg. wt., 2 oz.

No.	Type	Mfd	Volts	NET
19 L 300	TAN 76	1.0	3	1.62
19 L 301	TAN 68	2.0	3	1.62
19 L 302	*TAN 77	8.0	3	2.20
19 L 303	TAN 65	4.0	4	1.62
19 L 304	TAN 60A	1.0	6	1.62
19 L 305	*TAN 78	4.0	6	2.20
19 L 306	TAN 69	0.5	10	1.62
19 L 307	TAN 56A	1.0	10	1.62
19 L 308	TAN 58A	2.0	10	2.20
19 L 309	*TAN 79	3.0	10	2.79
19 L 310	*TAN 59A	2.0	15	2.79
19 L 311	TAN 70	0.25	20	1.62
19 L 312	*TAN 80	1.75	25	3.38
19 L 313	*TAN 81	1.5	30	3.38
19 L 314	TAN 71	0.1	40	1.62
19 L 315	*TAN 82	1.0	40	3.38
19 L 316	*TAN 83	0.8	50	3.38
19 L 317	*TAN 84	0.2	150	2.79

TYPE BRHV HIGH-VOLTAGE TUBULAR DRY ELECTROLYTICS

Dependable and compact high-voltage electrolytic capacitors—perfect for power supply filter applications in television sets, oscilloscopes, transmitters, etc. All are hermetically sealed in aluminum tube containers and covered with sturdy, wax-impregnated cardboard sleeves. Surge voltages rated at 150 volts above working voltages. Strong, bare tinned copper wire leads provide self-support to permit easy mounting in any circuit. Shpg. wt., 4 oz.

No.	Type	Mfd	W.V.	Size	NET
14 L 538	708	8	700	15/16x3 3/16"	.88
14 L 539	710	10	700	1 1/16x3 3/16"	.91
14 L 540	712	12	700	1 1/16x3 11/16"	.94
14 L 541	716	16	700	1 1/16x4 3/16"	1.03
14 L 534	608	8	600	15/16x3 3/16"	.82
14 L 535	610	10	600	15/16x3 3/16"	.85
14 L 536	612	12	600	1 1/16x3 3/16"	.88
14 L 537	616	16	600	1 1/16x3 3/16"	.97
14 L 530	850	8	500	1 1/16x3 3/16"	.76
14 L 531	1050	10	500	1 1/16x3 3/16"	.79
14 L 532	1250	12	500	15/16x3 3/16"	.82
14 L 533	1650	16	500	1 1/16x3 3/16"	.88

TYPE BRH HIGH-CAPACITY LOW-VOLTAGE ELECTROLYTICS

Compact etched-foil electrolytic capacitors. For all applications requiring high capacity units operating in low voltage DC circuits. Hermetically sealed in aluminum cans with external cardboard insulating sleeve. Complete with mounting strap. Average shpg. wt., 4 oz.

No.	Type	Mfd	WV	Size	NET
14 L 580	601	100	6	5/8x1 1/16"	.71
14 L 581	6025	250	6	5/8x1 7/16"	.79
14 L 582	605A	500	6	3/4x1 11/16"	.91
14 L 583	610	1000	6	7/8x2"	1.12
14 L 585	620	2000	6	1x2 1/2"	1.35
14 L 586	121A	100	12	5/8x1 1/16"	.71
14 L 587	1225A	250	12	3/4x1 11/16"	.85
14 L 588	125A	500	12	7/8x2"	1.00
14 L 589	151A	100	15	5/8x1 1/16"	.73
14 L 590	1525A	250	15	3/4x1 11/16"	.91
14 L 591	155A	500	15	7/8x2"	1.03
14 L 596	1510	1000	15	1x2"	1.35
14 L 597	1520	2000	15	1x3"	1.88
14 L 592	251A	100	25	5/8x1 7/16"	.79
14 L 593	2525A	250	25	7/8x1 11/16"	1.00
14 L 594	255A	500	25	1x2"	1.35
14 L 595	501	100	50	3/4x2"	.82
14 L 598	5050	500	50	1x3"	1.41

Cornell-Dubilier Capacitors

TWIST PRONG ELECTROLYTIC CAPACITORS

TYPES UP AND UPE

Small, easy-to-mount electrolytic capacitors, supplied with bakelite insulating washer and metal mounting washer. Dependable in operation over a wide range of temperatures with minimum capacity change. Units are specially designed for use in equipment where extremely high temperatures, voltage surges and ripple currents are encountered. Particularly popular as replacement capacitors for all standard television receivers. Hermetically sealed in seamless aluminum cans with positive lugs on bakelite insulating base. Lugs are molded into terminal block for extra strength and rigidity. Can acts as common negative with projecting tongues for mounting on metal chassis. Temperature range up to and including 475 working volts DC: +85 degrees centigrade. Above 475 working volts DC: +65 degrees centigrade. All are UP types except UPE type specially designed for use in selenium rectifier circuits; have etched anode and cathode units to prevent capacity drop from high ripple and surge currents normally encountered in selenium rectifier circuits. Av. shpg. wt., 5 oz.

SINGLE SECTION

No.	Type	Mfd	W.V.	Size	NET
14 L 426	A052	10	500	1x2"	.94
14 L 427	A053	20	500	1x2½"	1.09
19 L 451	A058	25	500	1x2½"	1.15
14 L 511	A055	40	500	1x3⅝"	1.47
14 L 428	A056	80	500	1⅛x3⅝"	1.88
19 L 389	A057	90	500	1⅛x3⅝"	2.06
19 L 384	A043	10	450	1x2"	.91
19 L 385	A044	10	450	¾x2"	.91
19 L 386	A045	15	450	1x2"	1.00
19 L 387	A046	20	450	1x2"	1.06
14 L 322	A047	30	450	1x2½"	1.15
14 L 408	A048	40	450	1x3"	1.21
19 L 388	A049	50	450	1x3⅝"	1.38
19 L 450	A050	60	450	1⅛x2½"	1.53
14 L 323	A051	80	450	1⅛x3"	1.78
14 L 409	A018	30	150	¾x2"	.91
14 L 400	A020	50	150	1x2"	.97
19 L 383	A025	120	150	1⅛x2"	1.23
19 L 381	A014	100	50	¾x2"	.97
19 L 382	A016	500	50	1⅛x2"	1.56
14 L 320	A017	1000	50	1⅛x3⅝"	2.20
19 L 380	A013	1000	25	1⅛x2"	2.09
19 L 377	A006	1000	15	1x2½"	1.50
19 L 378	A007	2000	15	1⅛x2½"	2.03
19 L 379	A008	3000	15	1⅛x3"	2.07

DUAL SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 359	B049	10-10	500	1x2½"	1.15
14 L 486	B050	20-20	500	1⅛x2½"	1.68
19 L 452	B052	30-10	500	1⅛x2½"	1.53
14 L 449	B053	40-40	500	1⅛x3⅝"	2.53
19 L 360	B054	60-40	500	1⅛x3⅝"	2.70
14 L 420	B037	10-10	450	1x2"	1.12
19 L 453	B082	15-10	450	1x2½"	1.21
19 L 396	B038	15-15	450	1x2½"	1.32
14 L 448	B039	20-10	450	1x2½"	1.32
14 L 421	B040	20-20	450	1x3"	1.50
14 L 326	B041	30-10	450	1x3"	1.47
14 L 447	B043	30-30	450	1⅛x2½"	1.79
14 L 514	B044	40-20	450	1⅛x2½"	1.76
14 L 422	B045	40-40	450	1⅛x3"	2.03
19 L 357	B047	80-10	450	1⅛x3"	2.12
19 L 358	B048	80-40	450	1⅛x3⅝"	2.56
19 L 393	B030	20-20	350	1x2½"	1.35

DUAL SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 394	B031	30-30	350	1x3"	1.71
19 L 395	B033	80-80	350	1⅛x3⅝"	2.76
19 L 392	B027	80-80	300	1⅛x3"	2.38
14 L 418	B021	20-20	250	1x2"	1.12
19 L 391	B025	150-150	250	1⅛x4⅛"	3.03
14 L 324	B010	30-20	150	1x2"	1.03
19 L 390	B011	30-30	150	1x2"	1.09
14 L 424	B012	40-20	150	1x2"	1.06
14 L 325	B013	40-30	150	1x2"	1.09
14 L 425	B015	50-30	150	1x2"	1.18

TRIPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
14 L 334	C038	10-10-10	500	1x3"	1.59
19 L 455	C039	30-20-20	500	1⅛x3"	2.49
19 L 456	C040	40-10-10	500	1⅛x3"	2.29
19 L 373	C041	40-40-10	500	1⅛x3⅝"	2.97
19 L 339	C118	40-40	500		
		100	200	1⅛x4⅛"	3.44
19 L 454	C156	40-30-30	475	1⅛x3⅝"	3.03
14 L 432	C024	10-10-10	450	1x2½"	1.53
14 L 430	C091	10-10	450		
		20	25	1x2"	1.41
19 L 364	C025	15-15-10	450	1x3"	1.73
19 L 337	C094	15-15	450		
		20	25	1x2½"	1.62
19 L 365	C026	20-10-10	450	1x3"	1.73
14 L 487	C027	20-20-20	450	1⅛x2½"	2.12
14 L 458	C099	20-20	450		
		20	25	1x3"	1.79
19 L 366	C028	30-20-20	450	1⅛x3"	2.26
19 L 367	C030	30-30-30	450	1⅛x3"	2.56
19 L 368	C031	30-60-10	450	1⅛x3⅝"	2.65
19 L 369	C032	40-10-10	450	1⅛x3"	1.97
19 L 370	C033	40-30-20	450	1⅛x3"	2.53
19 L 371	C034	40-40-10	450	1⅛x3"	2.44
14 L 329	C035	40-40-40	450	1⅛x3⅝"	2.88
19 L 338	C109	40-40	450		
		100	50	1⅛x3⅝"	2.53
19 L 372	C036	60-20-20	450	1⅛x3⅝"	2.70
14 L 513	C037	80-40-20	450	1⅛x4⅛"	3.18
19 L 363	C022	20-20-10	350	1x3"	1.73
19 L 375	C078	20-10	350		
		20	25	1x2"	1.50
19 L 376	C080	20-20	350		
		20	25	1x2½"	1.65
19 L 361	C008	40-30-20	150	1x2"	1.47
14 L 434	C009	40-40-40	150	1x2½"	1.53
14 L 459	C057	50-30	150		
		100	25	1x2½"	1.59
19 L 374	C058	50-50	150		
		20	25	1x2½"	1.56

TRIPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 362	C011	60-40-20	150	1x2½"	1.62
14 L 512	C012	80-40-20	150	1x2½"	1.71

QUADRUPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
14 L 336	D018	10-10-10			
		10	500	1⅛x2"	2.06
19 L 340	D007	4-4-4-4	450	1⅛x2"	1.71
14 L 450	D009	10-10-10			
		10	450	1⅛x2"	1.97
14 L 445	D048	10-10-10	450		
		20	25	1⅛x2"	1.85
19 L 341	D012	20-10-10			
		10	450	1⅛x2½"	2.18
14 L 451	D013	20-20-20			
		20	450	1⅛x3"	2.76
19 L 342	D017	40-20-10			
		10	450	1⅛x3"	2.62
14 L 478	D024	40-40-30	150		
		20	25	1⅛x2"	1.82
19 L 343	D030	60-40-20	150		
		200	10	1⅛x2"	2.06
19 L 344	D033	80-40-40	150		
		100	25	1⅛x2½"	2.20

SELENIUM RECTIFIER UPE TYPES

SINGLE SECTION

No.	Type	Mfd	W.V.	Size	NET
14 L 510	XA013	30	500	1x3"	1.18
14 L 403	XA012	125	350	1¼x3"	2.15
19 L 349	XA008	40	250	1x2"	1.06
19 L 348	XA007	150	200	1⅛x2½"	1.65
19 L 345	XA001	40	150	¾x2"	.94
19 L 346	XA002	80	150	1x2"	1.09
14 L 414	XA003	100	150	1x2½"	1.18
14 L 321	XA004	150	150	1x3"	1.26
19 L 347	XA005	300	150	1⅛x3"	1.65

DUAL SECTION

No.	Type	Mfd	W.V.	Size	NET
19 L 352	XB011	40-40	250	1x3"	1.50
14 L 517	XB001	20-20	150	1x2"	1.00
14 L 429	XB002	40-40	150	1x2"	1.12
14 L 417	XB003	50-50	150	1x2½"	1.26
14 L 443	XB004	80-40	150	1x2½"	1.35
19 L 350	XB006	100-100	150	1⅛x2½"	1.91
19 L 351	XB007	150-150	150	1⅛x3"	2.06

TRIPLE SECTION

No.	Type	Mfd	W.V.	Size	NET
14 L 327	XC001	20-20-20	150	1x2"	1.38
14 L 452	XC002	40-20-20	150	1x2"	1.41
14 L 442	XC009	40-40	150		
		20	25	1x2"	1.82

CAPACITOR MOUNTING HARDWARE

Stock No.	Description	Per Pkg of 2
19 L 468	(A) Mtg. Ring; 1" dia. cans	11¢
19 L 469	(A) Mtg Ring; 1⅛" dia. cans	11¢
19 L 470	(A) Mtg. Ring; 1½" dia. cans	17¢
19 L 471	(A) Mtg. Ring; 1¾" dia. cans	21¢
19 L 472	(A) Mtg. Ring; 2" dia. cans	27¢
19 L 473	(A) Mtg. Ring; 2½" dia. cans	27¢
19 L 474	(A) Mtg. Ring; 3" dia. cans	27¢
19 L 475	(A) Mtg. Ring; 3½" dia. cans	27¢
19 L 476	(B) Mtg. Ring; 1" dia. cans	11¢
19 L 477	(B) Mtg. Ring; 1⅛" dia. cans	11¢
19 L 478	(B) Mtg. Ring; 1¼" dia. cans	11¢
19 L 479	(B) Mtg. Ring; 1⅜" dia. cans	11¢
19 L 480	(B) Mtg. Ring; 1½" dia. cans	17¢
19 L 481	Mtg. Clip; ¾" dia. cans	17¢
19 L 482	Mtg. Clip; 1" dia. cans	17¢
19 L 483	Mtg. Clip; 1⅛" dia. cans	17¢
19 L 484	"C" Clamp; ⅝-¾" cans	17¢
19 L 485	"C" Clamp; 7/8-1" cans	17¢
19 L 486	Mtg. Strap; I.D. 7/16"	9¢
19 L 487	Mtg. Strap; I.D. ½"	9¢
19 L 488	Mtg. Strap; I.D. 9/16"	9¢
19 L 489	Mtg. Strap; I.D. ⅝"	9¢
19 L 490	Mtg. Strap; I.D. 11/16"	9¢
19 L 491	Mtg. Strap; I.D. ¾"	9¢
19 L 492	Mtg. Strap; I.D. 7/8"	9¢
	UNIVERSAL CLIPS	
19 L 493	For ½-9/16" dia. cans	15¢
19 L 494	For ½-9/16" dia. cans	15¢
19 L 495	For ⅝-11/16" dia. cans	15¢
19 L 496	For ¾-13/16" dia. cans	15¢
19 L 497	For 7/8-15/16" dia. cans	15¢
19 L 498	For 1-1 1/16" dia. cans	15¢
19 L 499	For 1⅛-1 7/16" dia. cans	15¢

TLA & TNAD DYKANOL TRANSMITTING CAPACITORS

Mount inverted style in single ¾" hole. Dykanol dielectric and impregnation. * Have two 10-32 screw terminals and ground lug; others have one terminal. 2⅞x1½" dia., except †4½x 1½" dia. With mounting hardware. Av. shpg. wt., 2 lbs.

No.	Type	Mfd	Volts	NET
73 L 630	TLA6020	2	600	2.70
73 L 632	†TLA6040	4	600	3.70
73 L 633	*†TNAD6040	4	600	4.17
73 L 636	*†TNAD10020	2	1000	3.70
73 L 640	*TNAD15005	0.5	1500	3.44

FB HIGH-CAPACITY LOW-VOLTAGE TYPES

Highly dependable capacitors in cardboard sleeved aluminum cans. Designed for high capacity, low voltage applications. Especially popular as replacements in motion picture sound equipment and other low voltage circuits. Ruggedly built for long life. Temperature range to 85 degrees centigrade. Av. shpg. wt., 6 oz.

No.	Type	Mfd	W.V.	Size	NET
19 L 320	FB 5005	500	50	1⅛x3⅛"	2.29
19 L 321	FB 5010	1000	50	1⅛x4⅛"	4.12
19 L 322	FB 5020	2000	50	1¼x4⅛"	5.35
19 L 323	FB 5040	4000	50	2½x4⅛"	7.35
19 L 355	FB 2510	1000	25	1⅛x3⅛"	2.82
19 L 356	FB 2520	2000	25	1⅛x4⅛"	3.38
19 L 318	FB 2540	4000	25	2x4⅛"	5.59
19 L 319	FB 2550	5000	25	2½x4⅛"	6.47
19 L 353	FB 1520	2000	15	1⅛x3⅛"	2.76
19 L 354	FB 1560	6000	15	2x4⅛"	5.88

NEW QC PLUG-IN ELECTROLYTICS

These new electrolytics feature 4-pin, octal bases to permit speedy installation in standard octal tube socket. Ideal where quick capacitor changes are required. For experimental work, juke boxes, government communications receivers, etc. Capacitors are hermetically sealed in aluminum containers. Ground lugs for cathode connection are furnished with all multiple-section units. Temperature range to +85° C., except 500 v. units to +65° C. Average shpg. wt., 6 oz.

SINGLES

Stock No.	Mfrs. Type	Mfd	D.C. W.V.	Size	NET
19 L 328	QC 4050	40	500	1⅛x2½"	2.94
19 L 324	QC 1045	10	450	1⅛x2½"	2.38
19 L 325	QC 2045	20	450	1⅛x2½"	2.53
19 L 326	QC 4045	40	450	1⅛x2½"	2.68
19 L 327	QC 8045	80	450	1⅛x3½"	3.26

DUALS

Stock No.	Mfrs. Type	Mfd	D.C. W.V.	Size	NET
19 L 333	QC 2250	20-20	500	1⅛x2½"	3.12
19 L 329	QC 1145	10-10	450	1⅛x2½"	2.56
19 L 330	QC 2245	20-20	450	1⅛x2½"	2.97
19 L 331	QC 3345	30-30	450	1⅛x3"	3.26
19 L 332	QC 4445	40-40	450	1⅛x3½"	3.47

TRIPLES

Stock No.	Mfrs. Type	Mfd	D.C. W.V.	Size	NET
19 L 336	QC11150	10-10-10	500	1⅛x2½"	3.12
19 L 334	QC11145	10-10-10	450	1⅛x2½"	3.00
19 L 335	QC22245	20-20-20	450	1⅛x3"	3.59

For other listings of Cornell-Dubilier capacitors see pages 108-111. We can supply on special order any C.D. capacitors not listed. Write for quotations, specifying manufacturer's type no. and quantity desired.

Cornell-Dubilier Capacitors

"CUB" PLASTIC TUBULAR CAPACITORS

For general replacement service; extremely durable and very compact. Have high insulation resistance, low power factor and exceptional capacitance stability. Molded in extra hard, non-inflammable bakelite; resistant to moisture, high temperature and shock. Excellent dielectric strength. Dry assembled and sealed after impregnation to insure long life. Extra strong copper-weld leads eliminate breakage during installation. Leads are solder sealed securely to the capacitor. 200 and 400-volt units are impregnated with special HT compound; 600-volt units and higher are oil impregnated. Temperature range: 200 and 400-volt units, −40 to +90° C.; 600 volt units and up, −55 to +100° C. *ST types in ceramic case. Av. shpg. wt., 4 oz.

200 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
19 L 000	2S2	.02	⅜x1"	15¢
19 L 001	2S47	.047	7/16x1¼"	15¢
19 L 002	2S5	.05	7/16x1¼"	15¢
19 L 003	2P1	.10	7/16x1¼"	21¢
19 L 004	2P15	.15	9/16x1½"	21¢
19 L 005	2P22	.22	11/16x1⅞"	24¢
19 L 006	2P25	.25	11/16x1⅞"	24¢
19 L 007	2P47	.47	11/16x1⅞"	35¢
19 L 008	2P5	.50	11/16x1⅞"	35¢
19 L 009	2W1	1.0	¾x2¼"	53¢

400 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
19 L 010	4S1	.01	⅜x1"	15¢
19 L 011	4S2	.02	7/16x1¼"	15¢
19 L 012	4S22	.022	7/16x1¼"	15¢
19 L 013	4S47	.047	7/16x1¼"	18¢
19 L 014	4S5	.05	7/16x1¼"	18¢
19 L 015	4S68	.068	9/16x1½"	21¢
19 L 016	4P1	.10	9/16x1½"	21¢
19 L 017	4P15	.15	11/16x1⅞"	21¢
19 L 018	4P22	.22	11/16x1⅞"	24¢
19 L 019	4P25	.25	11/16x1⅞"	24¢
19 L 020	4P5	.50	¾x2¼"	35¢
19 L 021	4W1*	1.0	1x2⅞"	53¢

600 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 022	6T1	.0001	⅜x1"	15c
19 L 023	6T25	.00025		
19 L 024	6T4	.0004		
19 L 025	6T5	.0005		
19 L 026	6D1	.001		
19 L 027	6D15	.0015		
19 L 028	6D2	.002		
19 L 029	6D22	.0022		
19 L 030	6D3	.003		
19 L 031	6D4	.004		
19 L 032	6D47	.0047		
19 L 033	6D5	.005		
19 L 034	6D6	.006	7/16x1¼"	
19 L 035	6D68	.0068	7/16x1¼"	18c
19 L 036	6S1	.01		
19 L 037	6S15	.015		
19 L 038	6S2	.02		
19 L 039	6S22	.022		
19 L 040	6S3	.03	7/16x1¼"	21c
19 L 041	6S4	.04	9/16x1½"	
19 L 042	6S47	.047	9/16x1½"	24c
19 L 043	6S5	.05	9/16x1½"	
19 L 044	6S6	.06	11/16x1⅞"	
19 L 045	6P1	.10	11/16x1⅞"	26¢
19 L 046	6P25	.25	¾x2¼"	32¢
19 L 047	6P5*	.50	1x2⅞"	47¢

NEW BC "PLUG-IN" TUBULARS

Excellent for use with printed circuits. Phenolic-cased paper tubular capacitors. Have leads that may be plugged directly into printed circuits and dip soldered. Provide extremely dependable service. Polykane fill securely anchors leads and provides an excellent moisture barrier. Leads are soldered directly to extended foils to assure low resistance. Will withstand high soldering temperatures without damage. Tolerance: ±20% except *±10% and †+20%, −10%. Av. shpg. wt., 4 oz.

200 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
19 L 182	BC2S15	.015	⅜x1¼"	26¢
19 L 183	BC2S47	.047	½x1¼"	29¢
19 L 184	BC2P1	.10	½x1½"	32¢

400 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
19 L 185	BC4D1	.001	⅜x1"	24¢
19 L 186	BC4D47	.0047	⅜x1"	24¢
19 L 187	BC4S1	.01	⅜x1"	24¢
19 L 188	BC4S47*	.047	½x1¼"	29¢
19 L 189	BC4P22	.22	⅝x1⅞"	38¢

600 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
19 L 190	BC6S1	.01	⅜x1¼"	26¢
19 L 191	BC6S47†	.047	½x1½"	32¢
19 L 192	BC6S47*	.047	½x1½"	32¢

1000 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 072	10T5	.0005	⅜x1"	29c
19 L 073	10D1	.001	⅜x1"	
19 L 074	10D15	.0015	⅜x1"	
19 L 078	10D2	.002	⅜x1"	
19 L 079	10D22	.0022	½x1"	
19 L 081	10D3	.003	½x1"	29c
19 L 082	10D4	.004	7/16x1¼"	
19 L 083	10D47	.0047	7/16x1¼"	
19 L 084	10D5	.005	7/16x1¼"	
19 L 088	10D68	.0068	7/16x1¼"	
19 L 089	10S1	.01	7/16x1¼"	29c
19 L 090	10S15	.015	9/16x1½"	
19 L 091	10S2	.02	9/16x1½"	
19 L 092	10S22	.022	9/16x1½"	
19 L 093	10S3	.03	9/16x1½"	
19 L 094	10S35	.035	11/16x1⅞"	29¢
19 L 095	10S47	.047	11/16x1⅞"	35¢
19 L 096	10S5	.05	11/16x1⅞"	35¢
19 L 097	10S68	.068	11/16x1⅞"	38¢
19 L 098	10P1	.10	¾x2¼"	44¢

1600 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 050	16T5	.0005	7/16x1¼"	38c
19 L 051	16D1	.001		
19 L 052	16D15	.0015		
19 L 053	16D2	.002		
19 L 054	16D22	.0022		
19 L 055	16D3	.003		
19 L 056	16D33	.0033		
19 L 057	16D4	.004		
19 L 058	16D47	.0047		
19 L 059	16D5	.005		
19 L 060	16D6	.006		
19 L 061	16D68	.0068		
19 L 062	16D7	.007	9/16x1½"	
19 L 063	16D75	.0075		
19 L 064	16D8	.008		
19 L 065	16S1	.01	9/16x1½"	41c
19 L 066	16S15	.015		
19 L 067	16S2	.02	11/16x1⅞"	
19 L 068	16S22	.022	11/16x1⅞"	
19 L 069	16S3	.03	11/16x1⅞"	
19 L 070	16S4	.04	⅞x2¼"	
19 L 071	16S5	.05	⅞x2¼"	

6000 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 075	60T5	.0005	9/16x1½"	79c
19 L 076	60D1	.001	9/16x1½"	
19 L 077	60D5	.005	11/16x1⅞"	

10,000 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 080	100T5	.0005	11/16x1⅞"	88¢

12,500 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
19 L 085	125T25	.00025	11/16x1⅞"	1.00

TYPE MP "PUP" METAL END-CAP CARDBOARD TUBULARS

Self-healing, metallized cardboard tubulars. Light-weight, compact, and made to last. Wax-impregnated and dip-sealed against humidity. Bare wire leads firmly anchored in metal end-caps. Temperature range: −40° to +60° C. Extended foil construction; non-inductively wound. High insulation resistance, low power factor and low capacity change. Tolerance, ±20%. Av. shpg. wt., 2 oz.

200 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
14 L 928	2S5	.05	⅜x⅝"	.38
14 L 929	2P1	.10	⅜x⅝"	.41
14 L 930	2P25	.25	15/32x⅝"	.53
14 L 931	2P5	.5	15/32x1⅛"	.62
14 L 932	2W1	1.0	9/16x1⅛"	.76
14 L 924	MP2W2	2.0	⅝x1⅝"	1.06

600 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
14 L 942	6S1	.01	⅜x⅝"	.41
14 L 945	6S5	.05	15/32x⅝"	.47
14 L 946	6P1	.1	15/32x1⅛"	.53
14 L 947	6P25	.25	⅝x1⅛"	.65
14 L 948	6P5	.5	21/32x1⅝"	.85
14 L 949	6W1	1.0	21/32x2⅛"	1.06

TJU-TJL DYKANOL TRANSMITTING CAPACITORS

Quality capacitors for highly dependable power supply filter applications in industrial, laboratory and transmitting equipment. Dykanol dielectric impervious to age or heat. Hermetically sealed steel containers. All are type TJU with universal mounting strap (illustrated), except* are type TJL with L-shaped bracket which grips rim and clamps capacitor to mounting surface. Av. shpg. wt., 5 lbs.

600 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 604	.5	2⅛x1 13/16x1 1/16"	2.76
73 L 600	6010	2⅛x1 13/16x1 1/16"	3.41
73 L 601	6020	2⅞x1 13/16x1 1/16"	4.20
73 L 602	6040	3⅛x2½x1 3/16"	5.35
73 L 664	6050	5	4¾x1 13/16x1 1/16"	6.14
73 L 603	6080	8	3 13/16x3¼x1¼"	7.94
73 L 650	6100	10	4⅝x3¼x1¼"	8.91

1000 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 609	.1	2x1 13/16x1 1/16"	2.44
73 L 613	100025	.25	2⅛x1 13/16x1 1/16"	2.76
73 L 614	10005	.5	2⅛x1 13/16x1 1/16"	2.91
73 L 605	10010	1	2⅞x1 13/16x1 1/16"	3.73
73 L 606	10020	2	4x1 13/16x1 1/16"	4.85
73 L 607	10040	4	4⅝x2½x1 3/16"	6.14
73 L 608	10080	8	4¾x3¼x1¼"	8.91
73 L 651	10100	10	4⅝x3¼x1¼"	9.88
73 L 665	10150	15	4¾x3¼x2½"	11.82

1500 DC VOLTS WORKING

No.	Mfd	Size	NET
73 L 610	15010	1	4x1 13/16x1 1/16"	4.38
73 L 611	15020	2	4⅛x2½x1 3/16"	6.00
73 L 612	15040	4	4⅝x3¼x1¼"	8.26
73 L 652	*15100	10	4¾x3¾x3 3/16"	14.73

2000 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 618	20001	.1	2⅛x1 13/16x1 1/16"	3.88
73 L 619	20005	.5	2⅞x1 13/16x1 1/16"	4.38
73 L 615	20010	1	3⅛x2½x1 3/16"	5.35
73 L 616	20020	2	4x3¼x1¼"	6.32
73 L 617	20040	4	3 13/16x3¼x2¼"	8.91
73 L 653	*20100	10	4¼x3¼x4 5/16"	17.96

2500 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 620	25010	1	3¼x3¾x1¾"	7.76
73 L 621	25020	2	4¼x3¾x1¾"	12.61
73 L 654	*25040	4	4x3¾x4 5/16"	17.64
73 L 655	*25100A	10	6¼x3¾x4 5/16"	44.16

3000 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 666	30001	.1	2x2½x1 3/16"	8.26
73 L 667	300025	.25	2½x2½x1 3/16"	8.73
73 L 668	30005	.5	3⅞x2½x1 3/16"	9.88
73 L 625	30010	1	3 13/16x3¾x2¼"	11.82
73 L 626	*30020	2	4½x3¾x3 3/16"	14.73
73 L 656	*30040	4	4¾x3¾x4 5/16"	21.67

4000 VOLTS DC WORKING

No.	Mfd	Size	NET
73 L 657	40010	1	5x3¾x2¼"	17.05
73 L 658	*40020	2	5x3¾x4 5/16"	22.93
73 L 659	*40040A	4	8x3¾x4 5/16"	39.31

TYPE DYR METAL SHELL PAPER CAPACITORS

Operate efficiently even under severe heat and humidity conditions. Meet "F" characteristics of JAN-C-5. For RF and AF by-pass, AF coupling, and AC circuits. Tolerance, ±10%. Filled with Dykanol "G". Av. wt., 6 oz.

600 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
14 L 620	6005	.05	1 13/16x1x¾"	1.71
14 L 621	6010	.1	1 13/16x1x¾"	1.73
14 L 622	6025	.25	1 13/16x1x¾"	1.82
14 L 623	6050	.5	1 13/16x1x⅞"	1.94
14 L 624	6100	1.0	2x1¼x⅞"	2.20
14 L 625	6200	2.0	2x2x1⅛"	2.94
14 L 626	60055	.05-.05	1 13/16x1x¾"	2.15
14 L 627	6011	.1-.1	1 13/16x1x¾"	2.18
14 L 628	6022x	.25-.25	1 13/16x1x⅞"	2.20
14 L 629	6055	.5-.5	2x1¼x⅞"	2.53
14 L 630	6110	1.0-1.0	2x2x1⅛"	3.12
14 L 631	6111	.1-.1-.1	1 13/16x1x¾"	2.47
14 L 632	6222	.25-.25-.25	2x1¼x1 3/16"	2.79
14 L 633	6555	.5-.5-.5	2x2x1⅛"	3.38

1000 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
14 L 613	10005	.05	1 13/16x1x¾"	1.79
14 L 614	10010	.1	1 13/16x1x¾"	1.85
14 L 615	10025	.25	1 13/16x1x¾"	1.91
14 L 616	10050	.5	2x1¼x1 3/16"	2.09
14 L 617	100055	.05-.05	1 13/16x1x¾"	2.26
14 L 618	10011	.1-.1	1 13/16x1x¾"	2.35
14 L 619	10022	.25-.25	2x1¼x1 3/16"	2.47

Cornell-Dubilier Capacitors

MOLDED MICA CAPACITORS

Molded units with India ruby mica dielectric; special wax-treated stack, brown bakelite case. Adapted to serve many functions in radio circuits. Individually tested for accuracy. Tinned brass wire leads. Values are ±20%. Rated at 500 WVDC, 1000 v. DC test, except *300 WVDC, 600 v. DC test. Shpg. wt., 2 oz.

TYPE 5W

Size, 5/64 x 15/32 x 7/32". With 1¼" tinned leads.

No.	Type	Mfd	EACH
14 L 111	5W5V5	.000005	15c
14 L 112	5W5Q1	.00001	
14 L 113	5W5Q2	.00002	
14 L 100	5W5Q25	.000025	
14 L 101	5W5Q3	.00003	
14 L 102	5W5Q4	.00004	12c
14 L 103	5W5Q5	.00005	
14 L 114	5W5Q7	.00007	
14 L 104	5W5T1	.0001	
14 L 105	5W5T15	.00015	
14 L 106	5W5T2	.0002	
14 L 107	5W5T25	.00025	15c
14 L 110	5W5T3	.0003	
14 L 108	5W5T4	.0004	
14 L 109	5W5T5	.0005	

TYPE 1W

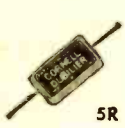
Size, 13/16" square x ¼". With 1¼" tinned leads.

No.	Type	Mfd	EACH
14 L 131	1W5T6	.0006	15c
14 L 132	1W5T7	.0007	
14 L 120	1W5T8	.0008	
14 L 136	1W5T82	.00082	
14 L 133	1W5T9	.0009	15¢
14 L 137	1W5T91	.00091	15¢
14 L 121	1W5D1	.001	18¢
14 L 122	1W5D15	.0015	18¢
14 L 123	1W5D2	.002	24¢
14 L 124	1W5D25	.0025	26¢
14 L 125	1W5D3	.003	29¢
14 L 126	1W5D4	.004	32¢
14 L 127	1W5D5	.005	35¢

TYPE 1D

Size, 13/16" square x 5/16". With 1¼" tinned leads.

No.	Type	Mfd	EACH
14 L 128	1D5D6	.006	44¢
14 L 138	1D3D75*	.0075	59¢
14 L 129	1D3D8*	.008	59¢
14 L 139	1D3D82*	.0082	59¢
14 L 135	1D3D9*	.009	59¢
14 L 130	1D3S1*	.01	71¢



"SILVER MIKE" HIGH-STABILITY MICA CAPACITORS

Silvered mica capacitors molded in low-loss red bakelite. Excellent for use in high-Q circuits where it is essential that frequency stability and high efficiency be maintained. Tolerance, ±5%. 500 volts DC working. 1000 v. DC test. Tinned leads. Av. shpg. wt., 2 oz.

TYPE 5R

Size, 11/16 x 7/16 x 3/16". With 1¼" tinned leads.

No.	Type	Mfd	NET
14 L 390	5R5T1	.0001	24¢
14 L 391	5R5T15	.00015	26¢
14 L 392	5R5T2	.0002	26¢
14 L 393	5R5T25	.00025	26¢
14 L 394	5R5T3	.0003	32¢
14 L 395	5R5T4	.0004	38¢
14 L 396	5R5T5	.0005	41¢

TYPES 1R AND 1DR

Size: Type 1R, 1 13/16" square x ¼"; Type 1DR, 1 13/16" square x 5/16".

14 L 341	1R5T75	.00075	.56
14 L 342	1R5T82	.00082	.56
14 L 343	1R5D1	.001	.65
14 L 380	1R5D15	.0015	.79
14 L 381	1R5D2	.002	.79
14 L 382	1R5D25	.0025	1.06
14 L 383	1R5D3	.003	1.21
14 L 384	1R5D4	.004	1.26
14 L 385	1DR5D5	.005	1.32
14 L 344	1DR3D68*	.0068	1.47
14 L 345	1DR3D75*	.0075	1.47
14 L 346	1DR3D82*	.0082	1.47
14 L 347	1DR3S1*	.01	1.47

TYPE 22R "SILVER MIKE" MIDGET MICA CAPACITORS

Highly stable micas. Recommended for use in circuits where accuracy and stability of capacity are of prime importance. Tolerance, ±5%. All rated 500 WVDC; tested at 1000 VDC. In low-loss red bakelite shell. Fully protected against atmospheric conditions. Size: ½ x 19/64 x 3/16". 1½" tinned leads. Av. shpg. wt., 2 oz.

No.	Type	Mfd.	EACH
14 L 850	22R5Q1	.00001	24c
14 L 851	22R5Q15	.000015	
14 L 852	22R5Q2	.00002	
14 L 853	22R5Q22	.000022	
14 L 854	22R5Q24	.000024	
14 L 855	22R5Q27	.000027	24c
14 L 856	22R5Q3	.00003	
14 L 857	22R5Q33	.000033	
14 L 859	22R5Q39	.000039	
14 L 861	22R5Q47	.000047	
14 L 862	22R5Q5	.00005	24c
14 L 863	22R5Q51	.000051	
14 L 864	22R5Q56	.000056	
14 L 865	22R5Q62	.000062	
14 L 866	22R5Q68	.000068	24c
14 L 867	22R5Q75	.000075	
14 L 868	22R5Q82	.000082	
14 L 870	22R5T1	.0001	
14 L 872	22R5T12	.00012	26c
14 L 873	22R5T13	.00013	
14 L 874	22R5T15	.00015	
14 L 889	22R5T16	.00016	
14 L 890	22R5T18	.00018	
14 L 875	22R5T2	.0002	26c
14 L 876	22R5T22	.00022	
14 L 891	22R5T24	.00024	
14 L 877	22R5T25	.00025	

"SUPER MICADON" ENCAPSULATED MOLDED MIDGET MICAS

Newly designed "Super Micadon" molded midget mica capacitors. Highly stable over temperature range from —55° to +130° C. Lead placement ideally suited for printed circuit mounting. Offer increased life, reduced inductance, high "Q", plus a high degree of accuracy. All are rated 500 WVDC. Hermetic sealing provides a superior humidity resistance.

TYPES 1A AND 1AD

Size: Type 1A, 53/64" square x 9/32"; Type 1AD, 53/64" square x 11/32". Tolerance ±5%. No. 18 leads spaced ½". Shpg. wt., 2 oz.

No.	Type	Mfd.	NET
14 L 998	1A5D39	.0039	1.29
14 L 979	1A5D51	.0051	1.32
14 L 980	1A5D68	.0068	1.47
14 L 981	1A5D82	.0082	1.47
14 L 982	1A5S1	.01	1.47
14 L 983	1A5S15	.015	1.79
14 L 984	1AD5S2	.02	2.09

TYPE 5A

Size, 15/32 x 51/64 x 7/32". Tolerance ±5% or 1 mmfd, whichever is greater. No. 20 leads spaced ⅜". Shpg. wt., 2 oz.

No.	Type	Mfd.	NET
14 L 995	5A5D15	.0015	.79
14 L 996	5A5D2	.002	.79
14 L 997	5A5D3	.003	1.21

TYPE 22A

Size, 5/16 x 35/64 x 7/32". Tolerance, ±5%. No. 22 leads spaced 7/16". Shpg. wt., 2 oz.

No.	Type	Mfd.	EACH
19 L 400	22A5Q1	.00001	24c
19 L 401	22A5Q15	.000015	
19 L 402	22A5Q24	.000024	
19 L 403	22A5Q39	.000039	
19 L 404	22A5Q47	.000047	
19 L 405	22A5Q56	.000056	24c
19 L 406	22A5Q68	.000068	24c
19 L 407	22A5Q75	.000075	24c
19 L 408	22A5Q82	.000082	24c
19 L 409	22A5T15	.00015	26c
19 L 410	22A5T18	.00018	26c
19 L 411	22A5T2	.0002	26c
19 L 412	22A5T33	.00033	32c
19 L 413	22A5T47	.00047	41¢
19 L 414	22A5T68	.00068	50

CERAMIC CAPACITORS

A complete new selection of Disc, Tubular, and High-Voltage ceramic capacitors for all electronic applications. Temperature range: to +85° C. Av. shpg. wt., 2 oz.

SINGLE SECTION 600 WVDC

Sizes, *¼ x 5/32", †⅛ x 5/32", ‡1 9/32 x 5/32", §¼ x 5/32". Tolerance, ±20%.

No.	Type	Mfd.	EACH
19 L 543	G011*	.000005	15c
19 L 544	G018*	.00001	
19 L 520	G024*	.000022	
19 L 521	G033†	.000047	
19 L 522	G034†	.00005	
19 L 523	G036†	.000056	15c
19 L 524	G042†	.0001	
19 L 525	G014‡	.00012	
19 L 526	G046‡	.00015	
19 L 527	G049‡	.00018	
19 L 528	G050‡	.0002	15c
19 L 529	G053‡	.00025	
19 L 530	G054‡	.00027	
19 L 531	G056‡	.00033	
19 L 532	G058‡	.00039	
19 L 533	G060‡	.00047	15c
19 L 534	G061‡	.0005	
19 L 535	G065‡	.00068	
19 L 536	G067‡	.00082	
19 L 537	G069§	.001	
19 L 538	G071§	.0015	

SINGLE SECTION 600 WVDC

Sizes, *¼ x 5/32", †⅛ x 5/32", ‡1 9/32 x 5/32", §¼ x 5/32". **Guaranteed minimum capacity.

No.	Type	**Mfd.	EACH
19 L 539	K061*	.0005	15c
19 L 500	K067*	.00082	
19 L 501	K069*	.001	
19 L 502	K071†	.0015	
19 L 503	K072‡	.002	
19 L 504	K076‡	.003	
19 L 505	K078‡	.004	
19 L 506	K080‡	.005	
19 L 507	K082§	.01	18¢
19 L 508	K085§	.02	35¢

DUAL SECTION 600 WVDC

Sizes, ‡1 9/32 x 5/32", §¼ x 5/32". **Guaranteed minimum capacity is indicated.

No.	Type	**Mfd.	EACH
19 L 540	DK069‡	2 x .001	24¢
19 L 541	DK078§	2 x .004	26¢
19 L 542	DK082§	2 x .01	29¢

SINGLE SECTION 1600 WVDC

Sizes, †⅛ x 5/32", ‡1 9/32 x 5/32", §¼ x 5/32". Tolerance, ±20%.

No.	Type	Mfd.	EACH
19 L 509	MCV4.7†	.0000047	18¢
19 L 510	MCQ47‡	.000047	18¢
19 L 511	MCT47‡	.00047	26¢
19 L 512	MCD1§	.001	32¢

SINGLE SECTION DISC—3000 WVDC

Sizes, †⅛ x 7/32", ‡1 9/32 x 7/32", §¼ x 7/32". Tolerance, ±20% except **guaranteed minimum capacity.

No.	Type	Mfd.	EACH
19 L 545	V3V4.7†	.0000047	24c
19 L 546	V3Q1†	.00001	
19 L 547	V3Q47†	.000047	
19 L 548	V3T1†	.0001	
19 L 549	V3T47‡	.00047	
19 L 550	V3D1§	.001	35¢
19 L 551	V3D4§	.004**	35¢

SINGLE SECTION DISC—5000 WVDC

Sizes, †⅛ x ¼", ‡1 9/32 x ¼", §¼ x ¼". Tolerance, ±20%.

No.	Type	Mfd.	EACH
19 L 552	V5V47†	.0000047	26¢
19 L 553	V5Q47‡	.000047	26¢
19 L 554	V5T1‡	.0001	26¢
19 L 555	V5T47§	.00047	35¢

TUBULAR 600 WVDC

Sizes, *15/32 x 7/32", †¾ x 7/32", ‡⅞ x 5/32", §1 3/16 x ¼". Tolerance, −20% except **guaranteed minimum capacity indicated.

No.	Type	Mfd.	EACH
19 L 515	TP34*	.0001	15¢
19 L 516	TP46†	.00047	15¢
19 L 517	TP52†	.001	15¢
19 L 518	TP64‡	.005**	18¢
19 L 519	TP67§	.01**	18¢

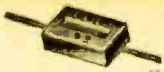
HI-V UNIVERSAL CAPACITORS

Used extensively in TV high voltage supplies. With 6 screw-in terminals for any type mounting. MMU20T5 20,000 WVDC, 15/16 x 15/16" dia. MMU30T5 30,000 WVDC, 1¼ x 1⅛" dia. Tolerance, +50%, −20%.

No.	Type	Mfd.	EACH
19 L 513	MMU20T5	.0005	1.09
19 L 514	MMU30T5	.0005	1.76

Sangamo Mica Capacitors


C


K


KR

TYPES K, C AND KR PIGTAIL MICAS

Molded mica capacitors designed for high temperature and high voltage applications. Excellent for use in television receivers, power amplifiers and transmitters. For coupling, blocking and by-pass use. These capacitors are fabricated from India ruby mica which is rigidly tested to assure long life and high safety factor. Mica stacks are molded in "Humiditite" for high resistance to moisture absorption. All have .032" wire leads, each a minimum of 1 1/8" long. DC working voltages indicated are conservative; all types are tested at twice their rated voltage. Type K and Type C capacitors are made to standard tolerance; within ±20% of capacity ratings indicated. Type KR silvered capacitors are specially designed for use in circuits requiring extreme frequency stability. Type KR have tolerance of ±5%. Av. shpg. wt., 3 oz.

TYPES K and C

500 WVDC—except *300 WVDC.

No.	Type	Mfd	Size	EACH
74 L 066	K-1550	.000005	23/32x15/32 x3/16"	15c
74 L 067	K-1410	.00001		
74 L 068	K-1420	.00002		
74 L 069	K-1425	.000025		
74 L 081	K-1430	.00003		
74 L 083	K-1450	.00005	23/32x15/32 x3/16"	12c
74 L 070	K-1482	.000082		
74 L 085	K-1310	.0001		
74 L 086	K-1315	.00015		
74 L 087	K-1320	.0002		
74 L 088	K-1325	.00025	23/32x15/32 x3/16"	15c
74 L 071	K-1327	.00027		
74 L 089	K-1330	.0003		
74 L 072	K-1339	.00039		
74 L 090	K-1340	.0004		
74 L 091	K-1350	.0005		
74 L 175	C-1360	.0006	53/64x53/64 x9/32"	
74 L 073	C-1368	.00068		
74 L 178	C-1390	.0009		
74 L 179	C-1210	.001	53/64x53/64 x9/32"	18¢
74 L 180	C-1215	.0015		18¢
74 L 181	C-1220	.002		24¢
74 L 075	C-1222	.0022		24¢
74 L 182	C-1225	.0025		26¢
74 L 076	C-1227	.0027		26¢
74 L 183	C-1230	.003		29¢
74 L 077	C-1233	.0033		29¢
74 L 074	C-1247	.0047	53/64x53/64 x1 1/32"	32¢
74 L 185	C-1250	.005		35¢
74 L 078	C-1256	.0056		35¢
74 L 186	C-1260	.006		38¢
74 L 187	C-06270	.007*		50¢
74 L 080	C-06082	.0082*		59¢
74 L 190	C-06110	.01*		71¢

TYPE KR SILVERED—500 WVDC

No.	Type	Mfd	Size	EACH
74 L 221	KR-1550	.000005	23/32x15/32 x3/16"	23c
74 L 222	KR-1410	.00001		
74 L 223	KR-1412	.000012		
74 L 224	KR-1415	.000015		
74 L 225	KR-1418	.000018		
74 L 226	KR-1420	.00002		
74 L 227	KR-1422	.000022		
74 L 228	KR-1424	.000024	23/32x15/32 x3/16"	23c
74 L 229	KR-1427	.000027		
74 L 230	KR-1430	.00003		
74 L 231	KR-1433	.000033		
74 L 232	KR-1436	.000036		
74 L 233	KR-1439	.000039		
74 L 234	KR-1443	.000043		
74 L 235	KR-1447	.000047	23/32x15/32 x3/16"	23c
74 L 236	KR-1450	.00005		
74 L 237	KR-1451	.000051		
74 L 238	KR-1456	.000056		
74 L 239	KR-1462	.000062		
74 L 240	KR-1468	.000068		
74 L 201	KR-1475	.000075		
74 L 202	KR-1482	.000082	23/32x15/32 x3/16"	23c
74 L 203	KR-1491	.000091		
74 L 204	KR-1310	.0001		
74 L 205	KR-1315	.00015		
74 L 206	KR-1318	.00018		
74 L 207	KR-1320	.0002	23/32x15/32 x3/16"	26c
74 L 208	KR-1322	.00022		
74 L 209	KR-1324	.00024		
74 L 210	KR-1325	.00025		
74 L 211	KR-1327	.00027	23/32x15/32 x3/16"	32¢
74 L 212	KR-1330	.0003		32¢
74 L 213	KR-1336	.00036		35¢
74 L 214	KR-1339	.00039		38¢
74 L 215	KR-1340	.0004		38¢
74 L 216	KR-1343	.00043	23/32x15/32 x3/16"	38¢
74 L 217	KR-1347	.00047		38¢
74 L 218	KR-1350	.0005		41¢
74 L 219	KR-1351	.00051		41¢
74 L 220	KR-1356	.00056		41¢
74 L 241	KR-1360	.0006		41¢
74 L 242	KR-1362	.00062		42¢
74 L 243	KR-1368	.00068	23/32x15/32 x3/16"	45¢
74 L 244	KR-1370	.0007		44¢
74 L 245	KR-1375	.00075		45¢
74 L 246	KR-1380	.0008		47¢
74 L 247	KR-1382	.00082		48¢
74 L 248	KR-1391	.00091		51¢
74 L 249	KR-1210	.001		53¢

TYPE C—1000 WVDC

No.	Type	Mfd	EACH
74 L 525	C-2215	.0015	38¢
74 L 540	C-2222	.0022	50¢
74 L 541	C-2233	.0033	62¢

1500 WVDC

74 L 536	C-3382	.00082	44¢
74 L 537	C-3210	.001	47¢
74 L 538	C-3215	.0015	65¢
74 L 539	C-3220	.002	79¢

2000 WVDC

74 L 533	C-4350	.0005	38¢
74 L 534	C-4356	.00056	38¢
74 L 535	C-4368	.00068	41¢

2500 WVDC

74 L 529	C-5325	.00025	32¢
74 L 530	C-5327	.00027	32¢
74 L 531	C-5333	.00033	35¢
74 L 532	C-5347	.00047	42¢

3000 WVDC

74 L 526	C-6315	.00015	32¢
74 L 527	C-6318	.00018	35¢
74 L 528	C-6325	.00025	41¢

TYPE K—1000 WVDC

74 L 587	K-2315	.00015	21¢
74 L 588	K-2318	.00018	21¢
74 L 589	K-2333	.00033	23¢
74 L 590	K-2347	.00047	26¢
74 L 591	K-2350	.0005	26¢
74 L 592	K-2356	.00056	29¢
74 L 593	K-2362	.00062	29¢
74 L 594	K-2368	.00068	33¢

1500 WVDC

74 L 574	K-3482	.000082	18¢
74 L 575	K-3310	.0001	21¢
74 L 576	K-3312	.00012	21¢
74 L 577	K-3315	.00015	21¢
74 L 578	K-3318	.00018	21¢
74 L 579	K-3320	.0002	23¢
74 L 580	K-3322	.00022	23¢
74 L 581	K-3325	.00025	26¢
74 L 582	K-3327	.00027	26¢
74 L 583	K-3330	.0003	29¢
74 L 584	K-3333	.00033	29¢
74 L 585	K-3336	.00036	29¢
74 L 595	K-3339	.00039	32¢
74 L 586	K-3347	.00047	35¢

2000 WVDC

74 L 566	K-4447	.000047	18¢
74 L 567	K-4456	.000056	21¢
74 L 568	K-4468	.000068	21¢
74 L 569	K-4320	.0002	29¢
74 L 570	K-4322	.00022	29¢
74 L 571	K-4325	.00025	32¢
74 L 572	K-4327	.00027	32¢
74 L 573	K-4330	.0003	35¢

2500 WVDC

74 L 557	K-5422	.000022	18¢
74 L 558	K-5433	.000033	21¢
74 L 559	K-5447	.000047	21¢
74 L 560	K-5456	.000056	21¢
74 L 561	K-5482	.000082	26¢
74 L 562	K-5310	.0001	26¢
74 L 563	K-5312	.00012	29¢
74 L 564	K-5315	.00015	32¢
74 L 565	K-5318	.00018	35¢

3000 WVDC

74 L 542	K-6550	.000005	18¢
74 L 543	K-6410	.00001	16¢
74 L 544	K-6412	.000012	18¢
74 L 545	K-6415	.000015	21¢
74 L 546	K-6418	.000018	21¢
74 L 547	K-6420	.00002	21¢
74 L 548	K-6424	.000024	21¢
74 L 549	K-6427	.000027	21¢
74 L 550	K-6430	.00003	23¢
74 L 551	K-6433	.000033	23¢
74 L 552	K-6439	.000039	26¢
74 L 553	K-6447	.000047	26¢
74 L 554	K-6450	.00005	29¢
74 L 555	K-6456	.000056	29¢
74 L 556	K-6468	.000068	32¢


A


H

TYPES A AND H MICAS

Mica stacks molded in bakelite. Type A has 6-32 screw terminals, 1 1/4" mtg. centers; 1 1/4 x 1 5/16 x 1 5/32", except *2 3/32". Type H has lug terminals, 1 3/16" insulated mtg. centers; 1 5/8 x 1 1/8 x 2 3/64", except †2 5/64". Tolerance: ±10%. Wt., 3 oz.

TYPE A			TYPE H	
600 WVDC				
Mfd	Stock No.	EACH	Stock No.	EACH
.00005	74 L 000	.85	74 L 100	.71
.0001	74 L 001	.85	74 L 101	.71
.0002	74 L 003	.85	74 L 102	.71
.0005	74 L 005	.85	74 L 106	.71
.001	74 L 006	.85	74 L 107	.71
.002	74 L 008	.97	74 L 109	.76
.003	74 L 009	1.09	74 L 111	.85
.005	74 L 011	1.23	74 L 113	.91
.01	74 L 014	1.65	74 L 116	1.26
.015	74 L 020	1.79	74 L 117†	1.56
.02	74 L 016	2.09	74 L 118†	1.79
.025	74 L 017	2.56	74 L 119†	2.12
.03	74 L 018	2.68	74 L 120†	2.62
.05*	74 L 019	4.17		
1200 WVDC				
.00005	74 L 030	.94	74 L 130	.94
.0001	74 L 031	.94	74 L 131	.94
.0002	74 L 032	.94	74 L 132	.94
.0005	74 L 034	.94	74 L 134	.94
.001	74 L 035	1.12	74 L 135	1.06
.002	74 L 036	1.47	74 L 136	1.41
.003	74 L 044	1.73	74 L 137	1.79
.005	74 L 038	1.94	74 L 139†	1.94
.01	74 L 041	2.76	74 L 142†	3.00
.015*	74 L 045	3.41		
.02*	74 L 046	4.15		
.03*	74 L 048	4.76		
2500 WVDC				
.00005	74 L 050	1.12	74 L 150	1.12
.0001	74 L 051	1.12	74 L 151	1.12
.0002			74 L 152	1.12
.00025	74 L 053	1.26	74 L 023	1.29
.0003			74 L 024	1.32
.0004			74 L 025	1.35
.0005	74 L 054	1.50	74 L 154	1.41
.001	74 L 055	1.71	74 L 155	1.65
.0015			74 L 026	2.09
.002	74 L 056	2.50	74 L 156†	2.44
.003	74 L 057	3.00	74 L 157†	2.88
.004			74 L 027	3.32
.005*	74 L 058	3.65	74 L 159†	3.76
.01*	74 L 059	4.29		
.015*	74 L 065	4.73		

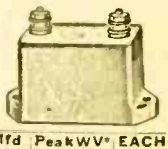
TYPE E "HAM" TRANSMITTING MICAS

High voltage, heavy-duty mica condensers. For Amateur transmitting equipment. Std. tolerance: 20%. Size: 3 1/2 x 4 1/16 x 2 1/8". Mtg. centers: 3 5/16". Terminals 3/4" long 12-24 thrd. studs, spaced 1 1/2" apart. *Max. voltage rating for Amateur use. Av. shpg. wt., 1/2 lb.

No.	Type	Mfd	Volts*	EACH
74 L 616	E-723	.003	7,000	8.26
74 L 617	E-711	.01	7,000	12.38
74 L 597	E-1023	.003	10,000	10.61
74 L 598	E-1024	.004	10,000	11.20
74 L 599	E-1025	.005	10,000	11.79
74 L 596	E-1235	.0005	12,500	6.47
74 L 126	E-1221	.001	12,500	6.47
74 L 127	E-1222	.002	12,500	8.82
74 L 618	E-1223	.003	12,500	11.79
74 L 619	E-1225	.005	12,500	12.97

TYPE F INDUSTRIAL MICAS

High-voltage mica condensers for industrial use. Sizes: F1, 1 13/16 x 2 13/16 x 1 3/16"; F2, 2 1/4 x 3 1/8 x 1 1/4"; F3, 3 7/8 x 2 7/16 x 4". Tolerance: 5%. *Continuous duty rating. Av. wt., 1/2 lb.



No.	Type	Mfd	PeakWV*	EACH
74 L 631	F2-1515	.1	500	10.17
74 L 632	F2-0501	.05	1500	11.29
74 L 620	F1-335	.0005	3000	7.41
74 L 621	F1-321	.001	3000	
74 L 622	F1-322	.002	3000	
74 L 629	F2-325	.005	3000	10.17
74 L 623	F2-532	.0002	5000	
74 L 624	F2-533	.0003	5000	
74 L 625	F2-535	.0005	5000	
74 L 626	F2-521	.001	5000	
74 L 627	F2-522	.002	5000	
74 L 628	F2-523	.003	5000	
74 L 633	F3-835	.0005	8000	19.72
74 L 634	F3-821	.001	8000	23.08
74 L 635	F3-822	.002	8000	23.08
74 L 636	F3-825	.005	8000	28.58

Specify Manufacturer's Type No. and Capacitance on Capacitor Orders

Sprague Capacitors

TVL MIDGET CAN ELECTROLYTICS

Famous "Twist-Lok" Aluminum Can Exact Replacement Capacitors

"Twist-Lok" aluminum can capacitors for exact replacement in Admiral, Dumont, Emerson, Motorola, Philco, Stromberg-Carlson, RCA, Zenith and other television receivers. Engineered to withstand extremely high temperatures, ripple currents and surge voltages encountered in TV circuits. Self-mounting, with twist-prong tabs that go through chassis or connect to washer for above-chassis mounting. Terminals are welded to capacitor cathode and tinned for easy soldering. Supplied with bakelite insulating washer and metal washer for secure mounting. Capacity and voltage clearly printed on tubular casing to eliminate replacement error. Can common negative. Av. wt., 6 oz.

SINGLE SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
16 L 510	TVL-1940	10	500	1 x2"	1.00
15 L 756	TVL-1810	30	475	1 x3"	1.18
15 L 757	TVL-1820	40	475	1⅛x2"	1.47
15 L 758	TVL-1850	90	475	1⅛x3½"	2.06
15 L 470	TVL-1705	10	450	1 x2"	.91
16 L 206	TVL-1709	15	450	1 x2"	1.00
15 L 886	TVL-1714	20	450	1 x2"	1.06
15 L 887	TVL-1720	30	450	1 x2½"	1.15
15 L 473	TVL-1725	40	450	1 x3"	1.21
16 L 217	TVL-1735	80	450	1⅛x2½"	1.79
15 L 755	TVL-1760	125	450	1⅛x4"	2.26
15 L 885	TVL-1675	80	400	1⅛x3"	1.73
16 L 509	TVL-1621	40	350	1 x2"	1.18
15 L 754	TVL-1630	80	350	1⅛x3"	1.68
15 L 799	TVL-1638	125	350	1⅛x3½"	2.32
16 L 204	TVL-1573	80	300	1 x3½"	1.50
15 L 753	TVL-1578	100	300	1 x4"	1.71
16 L 508	TVL-1580	125	300	1⅛x3½"	2.06
16 L 205	TVL-1584	150	300	1⅛x3½"	2.06
15 L 797	TVL-1509	20	250	1 x2"	.94
16 L 502	TVL-1516	30	250	1 x2"	1.00
16 L 503	TVL-1519	40	250	1 x2"	1.06
16 L 504	TVL-1522	50	250	1 x2½"	1.15
16 L 203	TVL-1525	60	250	1 x3"	1.21
16 L 505	TVL-1530	80	250	1 x3½"	1.27
16 L 506	TVL-1535	100	250	1 x3"	1.59
15 L 798	TVL-1540	150	250	1⅛x2½"	1.82
16 L 201	TVL-1405	20	150	1 x2"	.85
16 L 202	TVL-1412	40	150	1 x2"	.94
15 L 794	TVL-1415	50	150	1 x2"	.97
15 L 750	TVL-1420	80	150	1 x2½"	1.09
16 L 501	TVL-1421	80	150	1⅛x2"	1.09
16 L 218	TVL-1428	140	150	1 x3"	1.26
15 L 795	TVL-1430	150	150	1⅛x3"	1.26
16 L 219	TVL-1431	200	150	1⅛x4"	1.44
15 L 796	TVL-1434	300	150	1⅛x3½"	1.65
15 L 793	TVL-1330	500	50	1⅛x2½"	1.56
16 L 500	TVL-1320	150	50	¾x2½"	1.06
15 L 463	TVL-1215	100	25	¾x2"	.94
15 L 792	TVL-1220	500	25	1 x2"	1.50
16 L 220	TVL-1230	1000	25	1⅛x2"	2.09
15 L 791	TVL-1168	2000	15	1⅛x2"	2.03
16 L 200	TVL-1115	2000	6	1⅛x2"	1.50

DUAL SECTION

15 L 768	TVL-2830	40-40	475	1⅛x3"	2.53
15 L 480	TVL-2750	10-10	450	1 x2"	1.12
15 L 896	TVL-2752	15-10	450	1 x2½"	1.32
15 L 481	TVL-2755	20-20	450	1 x3"	1.50
15 L 897	TVL-2759	30-30	450	1⅛x2½"	1.79
15 L 477	TVL-2764	40-40	450	1⅛x3"	2.03
16 L 209	TVL-2770	60-40	450	1⅛x3½"	2.32
15 L 898	TVL-2776	80-10	450	1⅛x3"	2.12
16 L 524	TVL-2735	40-10	450-350	1⅛x2½"	1.53
16 L 523	TVL-2675	80-40	400	1⅛x4"	2.41
16 L 208	TVL-2663	30-10	400	1 x3"	1.38
16 L 520	TVL-2660	15-15	400	1 x2½"	1.33
16 L 519	TVL-2627	30-20	350	1 x3½"	1.53
16 L 518	TVL-2621	30-30	350-300	1 x3½"	1.56
16 L 515	TVL-2568	15-15	300	1 x2"	1.12
16 L 517	TVL-2582	80-40	300	1⅛x2½"	2.09
15 L 762	TVL-2585	80-80	300	1⅛x3½"	2.38
16 L 514	TVL-2555	20-20	300-25	1 x2"	1.09
16 L 207	TVL-2515	20-20	250	1 x2"	1.12
15 L 894	TVL-2520	40-40	250	1 x3½"	1.47
16 L 513	TVL-2460	40-40	200	1 x3"	1.35
15 L 483	TVL-2415	20-20	150	1 x2"	1.00
15 L 890	TVL-2422	30-30	150	1 x2"	1.09
15 L 468	TVL-2425	40-20	150	1 x2"	1.09
15 L 891	TVL-2428	40-40	150	1 x2½"	1.12
15 L 469	TVL-2432	50-30	150	1 x2½"	1.18
15 L 484	TVL-2435	50-50	150	1 x2½"	1.26
15 L 892	TVL-2438	60-60	150	1 x3½"	1.38
15 L 893	TVL-2442	80-40	150	1⅛x2½"	1.35
16 L 221	TVL-2444	200-5	150	1⅛x3"	1.59
16 L 512	TVL-2445	200-125	150	1⅛x3½"	2.20
16 L 511	TVL-2320	50-50	50	1 x2"	1.00
15 L 761	TVL-2160	1000-1000	15	1 x3½"	2.59

TRIPLE SECTION

15 L 781	TVL-3835	10-10-10	475	1 x3"	1.59
15 L 969	TVL-3840	30-30-20	475	1⅛x3"	2.62
16 L 559	TVL-3843	40-30-30	475	1⅛x4"	3.03
16 L 558	TVL-3820	20-20-60	475-475-400	1⅛x3½"	2.82
15 L 478	TVL-3776	10-10-10	450	1 x3"	1.53
15 L 964	TVL-3778	15-15-10	450	1 x3½"	1.73
15 L 965	TVL-3780	20-20-20	450	1⅛x2½"	2.12
15 L 966	TVL-3782	30-30-30	450	1⅛x3½"	2.56
15 L 778	TVL-3785	40-40-10	450	1⅛x3½"	2.44
15 L 967	TVL-3787	40-40-40	450	1⅛x3½"	2.88
16 L 554	TVL-3789	60-20-20	450	1⅛x3"	2.70

TRIPLE SECTION (cont'd)

Stock No.	Mfr's Type	Mfd	DC Wkg. V.	Size	NET EACH
16 L 555	TVL-3790	60-30-10	450	1⅛x3"	2.65
16 L 556	TVL-3792	80-40-10	450	1⅛x4"	2.97
16 L 553	TVL-3772	40-10-10	450-450-350	1⅛x3"	1.94
16 L 551	TVL-3765	15-10-120	450-450-300	1⅛x3½"	2.76
15 L 773	TVL-3761	40-10-80	450-450-200	1⅛x3"	2.29
15 L 963	TVL-3764	40-40-100	450-450-200	1⅛x4"	2.91
15 L 962	TVL-3758	40-40-40	450-450-150	1⅛x3½"	2.44
16 L 549	TVL-3749	10-10-40	450-450-50	1 x2½"	1.47
16 L 550	TVL-3753	30-15-150	450-450-50	1⅛x3"	2.18
16 L 547	TVL-3729	10-10-10	450-450-25	1 x2½"	1.41
15 L 490	TVL-3731	10-10-20	450-450-25	1 x2½"	1.41
16 L 548	TVL-3733	15-15-20	450-450-25	1 x3"	1.59
15 L 960	TVL-3737	20-15-20	450-450-25	1 x3½"	1.71
16 L 213	TVL-3735	20-10-20	450-450-25	1 x3"	1.59
15 L 485	TVL-3739	20-20-20	450-450-25	1 x3"	1.79
15 L 961	TVL-3741	30-30-20	450-450-25	1⅛x2½"	2.09
16 L 545	TVL-3725	60-20-20	450-350-350	1⅛x3½"	2.53
16 L 543	TVL-3722	20-80-100	450-350-50	1⅛x3½"	2.65
16 L 542	TVL-3719	10-10-20	450-350-25	1 x2½"	1.35
16 L 544	TVL-3723	30-40-50	450-350-25	1 x4"	2.18
16 L 223	TVL-3712	10-80-80	450-250-250	1⅛x4"	2.44
16 L 222	TVL-3706	40-40-130	450-150-50	1⅛x3"	2.18
16 L 541	TVL-3690	10-10-10	400	1 x2½"	1.41
15 L 772	TVL-3684	80-40-150	400-400-50	1⅛x4"	3.09
16 L 540	TVL-3675	15-15-40	400-400-25	1 x3"	1.65
15 L 426	TVL-3678	20-20-20	400-400-25	1 x3"	1.68
16 L 539	TVL-3665	10-40-10	400-300-150	1⅛x2"	1.71
16 L 538	TVL-3640	60-40-20	350	1⅛x4"	2.50
16 L 537	TVL-3628	10-10-20	350-350-25	1 x2"	1.91
15 L 957	TVL-3630	15-10-20	350-350-25	1 x2½"	1.47
16 L 212	TVL-3632	15-15-20	350-350-25	1 x2½"	1.59
15 L 958	TVL-3634	20-10-20	350-350-25	1 x2½"	1.50
15 L 959	TVL-3636	30-20-20	350-350-25	1 x3½"	1.82
15 L 771	TVL-3623	40-20-10	350-300-200	1⅛x2"	1.94
16 L 211	TVL-3620	30-30-20	350-300-25	1 x3"	1.85
16 L 533	TVL-3580	10-10-10	300	1 x2"	1.41
16 L 534	TVL-3585	120-50-40	300	1⅛x4"	3.44
16 L 532	TVL-3573	40-20-20	300-300-25	1⅛x2"	1.82
16 L 531	TVL-3534	30-15-10	250	1 x2½"	1.60
15 L 955	TVL-3540	40-20-20	250	1 x3½"	1.71
16 L 529	TVL-3513	30-30-20	250-250-25	1 x3"	1.65
15 L 493	TVL-3433	20-20-20	150	1 x2½"	1.35
15 L 952	TVL-3437	40-20-20	150	1 x2½"	1.41
15 L 421	TVL-3440	40-40-40	150	1 x3½"	1.53
15 L 953	TVL-3442	50-50-50	150	1 x3"	1.76
16 L 527	TVL-3446	80-80-80	150	1⅛x3"	2.21
16 L 528	TVL-3448	120-80-40	150	1⅛x3½"	2.23
16 L 224	TVL-3450	200-100-60	150	1⅛x3½"	2.68
16 L 526	TVL-3417	30-20-20	150-150-25	1 x2"	1.32
15 L 950	TVL-3419	30-30-20	150-150-25	1 x2"	1.35
16 L 210	TVL-3422	40-20-20	150-150-25	1 x2½"	1.35
15 L 422	TVL-3424	40-30-20	150-150-25	1 x2"	1.38
15 L 420	TVL-3427	50-30-100	150-150-25	1 x3"	1.59
15 L 951	TVL-3430	50-50-20	150-150-25	1 x3"	1.56
16 L 525	TVL-3210	20-20-20	25	1 x2"	1.15

QUADRUPLE SECTION

15 L 787	TVL-4830	10-10-10-10	475	1⅛x2"	2.06
15 L 788	TVL-4840	40-20-10-10	475	1⅛x3"	3.00
16 L 587	TVL-4827	50-30-10-20	475-475-475-300	1⅛x3½"	3.29
16 L 586	TVL-4822	40-20-10-10	475-475-475-25	1⅛x3"	2.85
16 L 585	TVL-4815	15-15-80-40	475-475-300-50	1⅛x3"	2.82
16 L 584	TVL-4811	10-60-30-125	475-450-400-50	1⅛x4"	3.26
16 L 583	TVL-4800	20-40-100-80	475-300-50-25	1⅛x3"	2.62
15 L 488	TVL-4760	10-10-10-10	450	1⅛x2"	1.97
15 L 979	TVL-4763	20-20-20-20	450	1⅛x3"	2.76
15 L 980	TVL-4769	30-30-15-10	450	1⅛x3½"	2.76
16 L 582	TVL-4750	10-10-10-10	450-450-450-150	1⅛x2"	1.85
16 L 581	TVL-4747	40-40-10-100	450-450-450-100	1⅛x3½"	3.26
16 L 579	TVL-4742	30-30-15-30	450-450-450-50	1⅛x3"	2.67
16 L 580	TVL-4745	40-40-10-25	450-450-450-50	1⅛x3½"	2.76
15 L 495	TVL-4723	10-10-10-20	450-450-450-25	1⅛x2"	1.85
16 L 577	TVL-4729	40-15-10-20	450-450-450-25	1⅛x3"	2.41
15 L 978	TVL-4734	40-30-10-20	450-450-450-25	1⅛x3½"	2.65
16 L 578	TVL-4736	40-40-10-20	450-450-450-25	1⅛x3½"	2.76
16 L 216	TVL-4739	40-40-40-40	450-450-450-25	1⅛x4"	3.23
15 L 889	TVL-4732	40-20-20-40	450-450-450-25	1⅛x3"	2.73
16 L 576	TVL-4710	80-10-30-40	450-400-300-150	1⅛x4"	3.09
16 L 575	TVL-4707	10-60-40-25	450-350-350-25	1⅛x4"	2.70
16 L 573	TVL-4704	10-100-20-20	450-300-300-200	1⅛x3"	2.97
16 L 574	TVL-4705	10-10-60-100	450-300-200-50	1⅛x3"	2.23
16 L 571	TVL-4675	80-10-10-10	400	1⅛x3½"	2.76
16 L 215	TVL-4667	20-20-20-20	400-400-400-25	1⅛x2½"	2.26
16 L 570	TVL-4641	80-40-20-10	400-300-300-300	1⅛x4"	3.26
16 L 569	TVL-4628	40-40-40-150	350-350-350-50	1⅛x4"	3.32
16 L 568	TVL-4620	20-10-5-10	350-350-350-25	1⅛x2"	1.82
16 L 567	TVL-4605	40-40-20-20	350-300-300-25	1⅛x3½"	2.65
16 L 565	TVL-4575	40-40-40-20	300-300-300-150	1⅛x3"	2.88
16 L 564	TVL-4524	80-60-40-20	250-250-250-150	1⅛x4"	3.00
16 L 563	TVL-4516	100-40-10-100	250-250-250-50	1⅛x3½"	3.02
16 L 562	TVL-4470	40-20-10-20	200-200-200-25	1⅛x2"	1.88
16 L 561	TVL-4415	30-30-30-40	150-150-150-25	1⅛x2"	1.82
15 L 975	TVL-4420	40-10-30-20	150-150-150-25	1⅛x2"	1.82
15 L 976	TVL-4425	50-50-50-20	150-150-150-25	1⅛x2"	2.09

Sprague Capacitors

TVA AND TU ATOMS—MIDGET ELECTROLYTICS

Very compact, metal-cased dry electrolytics. Engineered especially for replacements in tough TV applications—such as power supplies, decoupling circuits, cathode bypass circuits, etc. Will withstand the high surge voltages and high ripple currents commonly encountered in television circuits. Operate efficiently at temperatures as high as 85° C. *Separate negative lead. Av. shpg. wt., 6 oz.

Fig. A—SINGLE-SECTION ATOMS

No.	Type	Mfd	W.V.	Size	EA.
15 L 175	TVA-1902	8	500	⅞x1 11/16"	.76
15 L 176	TVA-1905	16	500	13/16x2 3/16"	.88
15 L 177	TVA-1906	20	500	1x2 3/16"	.94
15 L 170	TVA-1702	4	450	9/16x1 11/16"	.68
15 L 171	TVA-1704	8	450	11/16x1 11/16"	.74
15 L 225	TVA-1705	10	450	11/16x1 11/16"	.76
15 L 172	TVA-1706	12	450	¾x1 11/16"	.79
15 L 173	TVA-1708	16	450	¾x2 3/16"	.82
15 L 174	TVA-1709	20	450	¾x2 3/16"	.91
15 L 169	TVA-1711	30	450	⅞x2 3/16"	1.00
15 L 178	TVA-1712	40	450	⅞x2 11/16"	1.06
15 L 991	TVA-1713	50	450	⅞x3 3/16"	1.24
15 L 985	TVA-1716	80	450	1x3 11/16"	1.65
15 L 181	TVA-1603	8	350	⅝x1 11/16"	.71
15 L 184	TVA-1608	20	350	13/16x1 11/16"	.85
15 L 983	TVA-1611	40	350	⅞x2 7/16"	1.03
15 L 984	TVA-1613	60	350	1x2 7/16"	1.15
15 L 185	TVA-1501	4	250	7/16x1⅝"	.59
15 L 186	TVA-1503	8	250	½x1⅝"	.68
15 L 187	TVA-1505	12	250	9/16x1 11/16"	.74
15 L 188	TVA-1507	16	250	½x1 11/16"	.76
15 L 189	TVA-1508	20	250	11/16x1 11/16"	.79
15 L 190	TVA-1511	40	250	⅞x2 3/16"	.91
15 L 192	TVA-1402	4	150	⅜x1¼"	.59
15 L 193	TVA-1405	8	150	⅜x1¼"	.62
15 L 226	TVA-1406	10	150	⅜x1⅜"	.62
15 L 194	TVA-1407	12	150	⅜x1¼"	.65
15 L 195	TVA-1409	16	150	9/16x1 11/16"	.68
15 L 196	TVA-1410	20	150	9/16x1 11/16"	.71
15 L 197	TVA-1412	30	150	⅝x1 11/16"	.76
15 L 198	TVA-1413	40	150	¾x1 11/16"	.79
15 L 199	TVA-1414	50	150	13/16x1 11/16"	.82
15 L 240	TVA-1422	150	150	1x2 3/16"	1.12
15 L 878	TVA-1418	80	150	⅞x1 15/16"	.94
15 L 870	TVA-1300	1	50	⅜x1¼"	.53
15 L 871	TVA-1301	2	50	⅜x1¼"	.53
15 L 200	TVA-1303	5	50	⅜x1¼"	.59
15 L 201	TVA-1304	10	50	⅜x1¼"	.59
15 L 202	TVA-1306	25	50	7/16x1 7/16"	.62
15 L 203	TVA-1308	50	50	9/16x1 11/16"	.71
15 L 876	TVA-1310	100	50	⅝x1 11/16"	.82
15 L 858	TVA-1311	150	50	¾x1 11/16"	.91
15 L 859	TVA-1312	250	50	13/16x1 11/16"	1.03
15 L 207	TVA-1203	5	25	½x1⅛"	.59
15 L 205	TVA-1204	10	25	⅜x1¼"	.59
15 L 206	TVA-1205	25	25	½x1¼"	.59
15 L 208	TVA-1206	50	25	⅝x1 5/16"	.65
15 L 867	TVA-1207	100	25	5/16x1 11/16"	.79
15 L 868	TVA-1208	250	25	¾x1 11/16"	1.00
15 L 869	TVA-1209	500	25	⅞x2 3/16"	1.35
16 L 236	TVA-1160	100	15	¾x1 3/16"	.74
16 L 237	TVA-1161	250	15	⅞x1 11/16"	.91
16 L 238	TVA-1162	500	15	11/16x2 3/16"	1.03
16 L 239	TVA-1163	1000	15	⅞x2 3/16"	1.35
16 L 234	TVA-1130	100	12	9/16x1 3/16"	.71
15 L 862	TVA-1131	250	12	⅞x1 11/16"	.85
15 L 863	TVA-1132	500	12	¾x1 11/16"	1.00
16 L 235	TVA-1133	1000	12	13/16x2 3/16"	1.32
15 L 981	TVA-1100	50	6	½x1¼"	.56
16 L 230	TVA-1101	100	6	½x1½"	.71
16 L 231	TVA-1102	250	6	⅝x1 7/16"	.79
16 L 232	TVA-1103	500	6	⅞x2 3/16"	.91
15 L 860	TVA-1104	1000	6	11/16x2 3/16"	1.12
16 L 233	TVA-1105	1500	6	13/16x2 11/16"	1.23
15 L 861	TVA-1106	2000	6	13/16x2 15/16"	1.35

Fig. B—DUAL-SECTION ATOMS

No.	Type	Mfd	W.V.	Size	EA.
15 L 220	TVA-2720	8-8	450	⅞x1 11/16"	1.00
15 L 221	TU-88	*8-8	450	11/16x3½"	1.26
15 L 222	TVA-2725	16-8	450	⅞x2 3/16"	1.18
15 L 884	TVA-2722	10-10	450	⅞x1 13/16"	1.09
15 L 215	TU-1616	*16-16	450	1⅛x3½"	1.65
15 L 227	TVA-2730	20-20	450	⅞x2 13/16"	1.47
15 L 986	TVA-2735	30-30	450	1x3 3/16"	1.76
15 L 987	TVA-2740	40-40	450	1x3 15/16"	2.00

Fig. B—DUAL-SECTION ATOMS (cont.)

No.	Type	Mfd	W.V.	Size	EA.
15 L 245	TVA-2415	8-8	150	⅞x1 7/16"	.88
15 L 254	TVA-2420	16-16	150	⅞x1 7/16"	1.06
15 L 246	TVA-2425	20-12	150	⅞x1 7/16"	.94
15 L 247	TVA-2428	20-20	150	⅞x1 7/16"	.97
15 L 248	TU-220	*20-20	150	1x2⅛"	1.21
15 L 253	TVA-2421	30-20	150	⅞x1 11/16"	1.00
15 L 252	TVA-2438	40-20	150	⅞x1 11/16"	1.03
15 L 251	TVA-2434	30-30	150	⅞x1 11/16"	1.06
15 L 249	TU-420	*40-20	150	1 1/16x2⅝"	1.29
15 L 250	TVA-2442	40-30	150	⅞x1 15/16"	1.06
15 L 243	TVA-2445	40-40	150	⅞x1 15/16"	1.09
15 L 244	TVA-2450	50-30	150	⅞x1 15/16"	1.15
15 L 305	TVA-2453	50-50	150	⅞x2 7/16"	1.23
15 L 306	TVA-2460	80-30	150	⅞x2 7/16"	1.29
15 L 255	TVA-2315	10-10	50	⅞x1 7/16"	.82

Fig. C—TRIPLE-SECTION ATOMS

No.	Type	Mfd	W.V.	Size	EA.
15 L 307	TVA-3440	20-20-20	150	⅞x1 11/16"	1.29
15 L 311	TVA-3444	30-30-30	150	⅞x2 3/16"	1.38
15 L 308	TVA-3448	40-30-20	150	⅞x2 3/16"	1.38
15 L 309	TVA-3451	40-40-40	150	1x2 7/16"	1.44
15 L 327	TVA-3455	80-40-20	150	1x2 15/16"	1.62
15 L 990	TVA-3716	12-12 20 25	450	1x2⅜"	1.35
15 L 988	TVA-3415	20-20 20 25	150	⅞x1 7/16"	1.21
15 L 989	TVA-3419	30-30 100 12	150	⅞x1 15/16"	1.35
15 L 312	TVA-3423	40-30 20 25	150	⅞x1 15/16"	1.29
15 L 328	TVA-3427	40-40 100 25	150	⅞x2 7/16"	1.44
15 L 313	TVA-3430	50-30 20 25	150	⅞x2 3/16"	1.38
15 L 329	TVA-3433	50-30 200 25	150	1x2 3/16"	1.62
15 L 314	TVA-3436	50-50 20 25	150	15/16x2 3/16"	1.47

"BLACK BEAUTY" TELECAPS

Hi-temp plastic tubulars. Highly resistant to heat and moisture; mechanically rugged; completely insulated. Special molded construction for maximum dependability. 600-6000 v. types are oil impregnated. Average shpg. wt., 3 oz.

200 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
15 L 120	2TM-S2	.02	⅜x1¼"	15¢
15 L 149	2TM-S47	.047	⅜x1¼"	15¢
15 L 121	2TM-S5	.05	⅜x1¼"	15¢
15 L 122	2TM-P1	.1	7/16x1¼"	21¢
15 L 145	2TM-P15	.15	½x1½"	21¢
15 L 146	2TM-P22	.22	⅝x1⅞"	24¢
15 L 147	2TM-P25	.25	⅝x1⅞"	24¢
15 L 148	2TM-P47	.47	⅝x1⅞"	35¢
15 L 123	2TM-P5	.5	⅝x1⅞"	35¢
15 L 124	2TM-M1	1.0	¾x2¼"	53¢

400 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
15 L 125	4TM-S1	.01	5/16x1"	15¢
15 L 126	4TM-S2	.02	⅜x1½"	15¢
15 L 013	4TM-S22	.022	⅜x1½"	15¢
15 L 014	4TM-S47	.047	7/16x1¼"	18¢
15 L 127	4TM-S5	.05	7/16x1¼"	18¢
15 L 015	4TM-S68	.068	½x1½"	21¢
15 L 128	4TM-P1	.1	½x1½"	21¢
15 L 011	4TM-P15	.15	⅝x1⅞"	21¢
15 L 012	4TM-P22	.22	⅝x1⅞"	24¢
15 L 129	4TM-P25	.25	⅝x1⅞"	24¢
15 L 010	4TM-P5	.5	¾x2¼"	35¢

600 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
16 L 250	6TM-T1	.0001	5/16x1"	15c
16 L 251	6TM-T25	.00025		
16 L 252	6TM-T4	.0004		
16 L 253	6TM-T5	.0005		
15 L 070	6TM-D1	.001		
15 L 084	6TM-D15	.0015		
15 L 071	6TM-D2	.002		
15 L 092	6TM-D22	.0022	⅜x1"	
15 L 072	6TM-D3	.003	⅜x1"	
15 L 073	6TM-D4	.004	⅜x1"	
15 L 093	6TM-D47	.0047	⅜x1"	
15 L 074	6TM-D5	.005	⅜x1¼"	
15 L 075	6TM-D6	.006	½x1¼"	
16 L 254	6TM-D68	.0068	⅜x1¼"	18c
15 L 076	6TM-S1	.01	⅜x1¼"	
15 L 094	6TM-S15	.015	⅜x1¼"	
15 L 077	6TM-S2	.02	⅜x1¼"	
16 L 255	6TM-S22	.022	7/16x1¼"	
15 L 078	6TM-S3	.03	7/16x1¼"	21¢
15 L 079	6TM-S4	.04	½x1½"	21¢
15 L 098	6TM-S47	.047	½x1½"	24¢
15 L 080	6TM-S5	.05	½x1½"	24¢
15 L 081	6TM-S6	.06	⅝x1⅞"	24¢
15 L 082	6TM-P1	.1	⅝x1⅞"	26¢
15 L 083	6TM-P25	.25	¾x2¼"	32¢
16 L 260	6TM-P5	.5	1x2⅝"	47¢
16 L 261	TC-10	1.0	1x2⅝"	73¢

1000 VOLTS DC WORKING

No.	Type	Mfd.	Size	EA.
15 L 928	10TM-T5	.0005	5/16x1"	29c
15 L 929	10TM-D1	.001		
15 L 930	10TM-D15	.0015		
15 L 931	10TM-D2	.002		
15 L 932	10TM-D22	.0022		
15 L 933	10TM-D3	.003	⅜x1¼"	29c
15 L 934	10TM-D4	.004		
15 L 935	10TM-D47	.0047		
15 L 936	10TM-D5	.005		
15 L 937	10TM-D68	.0068		
15 L 938	10TM-S1	.01	⅜x1¼"	29c
15 L 939	10TM-S15	.015	7/16x1¼"	
15 L 940	10TM-S2	.02	½x1½"	
15 L 941	10TM-S22	.022	½x1½"	
15 L 942	10TM-S3	.03	½x1½"	
15 L 943	10TM-S35	.035	½x1½"	
15 L 944	10TM-S47	.047	⅝x1⅞"	35¢
15 L 945	10TM-S5	.05	⅝x1⅞"	35¢
15 L 946	10TM-S68	.068	⅝x1⅞"	38¢
15 L 947	10TM-P1	.1	¾x2¼"	44¢

1600 VOLTS DC WORKING

No.	Type	Mfd	Size	EA.
16 L 270	MB-T5	.0005	⅜x1¼"	38c
16 L 271	MB-D15	.0015	⅜x1¼"	
15 L 158	MB-D2	.002	⅜x1¼"	
16 L 272	MB-D22	.0022	⅜x1¼"	
15 L 159	MB-D3	.003	7/16x1¼"	
16 L 273	MB-D33	.0033	7/16x1¼"	
15 L 160	MB-D4	.004	7/16x1¼"	
16 L 274	MB-D47	.0047	7/16x1¼"	
15 L 161	MB-D5	.005	7/16x1¼"	
15 L 162	MB-D6	.006	½x1½"	
16 L 275	MB-D68	.0068	½x1½"	
15 L 163	MB-D7	.007	½x1½"	
15 L 164	MB-D75	.0075	9/16x1¼"	
15 L 165	MB-D8	.008	½x1½"	
15 L 166	MB-S1	.01	½x1½"	41c
15 L 167	MB-S15	.015	⅝x1⅞"	
15 L 168	MB-S2	.02	⅝x1⅞"	
16 L 276	MB-S22	.022	⅝x1⅞"	
16 L 277	MB-S3	.03	⅝x1⅞"	
16 L 278	MB-S4	.04	¾x2⅛"	
16 L 280	TR-15	.05	¾x2⅛"	
16 L 281	TR-215	2X .015	¾x2"	47¢

6000 VOLTS DC WORKING

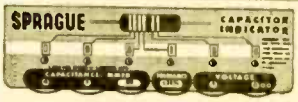
15 L 853 is rated at 10,000 DC wkg. volts.

No.	Type	Mfd	Size	EA.
15 L 850	TVM-356	.0005	½x1½"	79¢
15 L 851	TVM-216	.001	½x1½"	79¢
15 L 852	TVM-256	.005	⅝x1⅞"	79¢
15 L 853	TVM-351	.0005	⅝x1⅞"	88¢

TYPE 68P PAPER MIDGETS

Ideal replacement midget-size units. May be used in portable and auto radios—where space is at a premium. Reliable at temperatures as high as 85 degrees centigrade. Highly resistant to humidity. Av. shpg. wt., 2 oz.

No.	Type	Mfd	W.V.	Size	EA.
15 L 820	68P26	.001	600	¼x1 11/16"	21¢
15 L 821	68P27	.002	600	¼x1 11/16"	21¢
15 L 822	68P28	.003	600	9/32x1 11/16"	21¢
15 L 823	68P29	.004	600	9/32x1 3/16"	21¢
15 L 824	68P30	.005	600	9/32x1 3/16"	24¢
15 L 825	68P31	.006	600	5/16x1 3/16"	24¢
15 L 826	68P32	.008	600	5/16x1"	24¢
15 L 827	68P33	.01	600	5/16x1"	26¢
15 L 828	68P34	.02	600	11/32x1"	29¢
15 L 829	68P35	.05	600	13/32x1⅛"	32¢
15 L 830	68P36	.1	600	⅜x1⅛"	41¢
15 L 832	68P40	.2	600	⅝x1 11/16"	47¢
15 L 831	68P37	.25	600	⅜x2"	47¢
15 L 800	68P1	.001	400	¼x1 11/16"	21¢
15 L 802	68P3	.003	400	¼x1 11/16"	21¢
15 L 803	68P4	.004	400	¼x1 11/16"	21¢
15 L 804	68P5	.005	400	¼x1 3/16"	21¢
15 L 805	68P6	.006	400	¼x1 3/16"	21¢
15 L 806	68P8	.01	400	5/16x1 3/16"	24¢
15 L 807	68P9	.02	400	5/16x1"	26¢
15 L 808	68P10	.05	400	11/32x1"	29¢
15 L 843	68P21	.1	400	13/32x1⅛"	38¢
15 L 844	68P38	.2	400	⅜x1⅛"	41¢
15 L 845	68P22	.25	400	⅜x1⅜"	44¢
15 L 846	68P23	.5	400	⅝x2 5/16"	50¢
15 L 809	68P11	.005	200	¼x1 11/16"	21¢
15 L 810	68P12	.006	200	¼x1 11/16"	21¢
15 L 811	68P14	.01	200	9/32x1 11/16"	24¢
15 L 812	68P15	.02	200	9/32x1 3/16"	26¢
15 L 813	68P16	.05	200	5/16x1"	29¢
15 L 814	68P17	.1	200	13/32x1"	35¢
15 L 836	68P18	.2	200	15/32x1⅛"	38¢
15 L 837	68P24	.25	200	17/32x1⅛"	41¢
15 L 838	68P25	.5	200	⅝x1⅜"	47¢
15 L 815	68P19	.25	100	19/32x1⅛"	41¢
15 L 816	68P20	.5	100	⅝x1⅛"	47¢



CAPACITOR INDICATOR

Type C-751. Read color codes directly in capacitance, tolerance, and voltage. Wt., 2 oz.
37 K 076 ..... 15c

Sprague Capacitors

TYPE 96P SUBMINIATURE PAPER CAPACITORS

Subminiature paper oil-impregnated capacitors designed to meet very stringent operating conditions. Positive hermetic closure is assured by glass-to-metal, solder-seal terminals. Rated for use up to 125 degrees Centigrade. Wt., 4 oz.

100 VOLTS DC WORKING

No.	Type	Mfd	Size	NET
15 L 926	10491	.1	5/16x 7/8"	2.40
15 L 925	47491	.47	5/16x1 1/4"	2.81

200 VOLTS DC WORKING

15 L 924	10492	.1	13/32x 7/8"	2.50
15 L 923	47492	.47	9/16x1 1/8"	3.01

400 VOLTS DC WORKING

15 L 922	10494	.1	13/32x1 1/8"	2.68
15 L 920	22494	.22	5/16x1 1/8"	3.01
15 L 921	47494	.47	11/16x1 7/8"	3.49

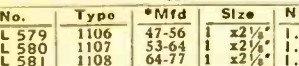
600 VOLTS DC WORKING

15 L 900	10296	.001	15/64x3/4"	2.33
15 L 901	22296	.0022	15/64x3/4"	2.33
15 L 902	47296	.0047	15/64x3/4"	2.40
15 L 903	68296	.0068	15/64x3/4"	2.40
15 L 904	10396	.01	5/16x1/8"	2.46
15 L 905	22396	.022	5/16x 7/8"	2.49
15 L 906	47396	.047	13/32x1 1/8"	2.62
15 L 907	68396	.068	13/32x1 1/8"	2.75
15 L 908	10496	.1	5/16x1 1/8"	2.91
15 L 909	22496	.22	5/16x1 1/8"	3.23
15 L 910	47496	.47	3/4x2 1/8"	3.78

MOTOR-STARTING CAPACITORS TYPE AM

Electrolytic capacitors for 110 volt capacitor-start AC motors. Screw or solder connections. *Min.-max. Av. shpg. wt., 10 oz.

No.	Type	*Mfd	Size	NET
15 L 579	1106	47-56	1 x2 1/8"	1.23
15 L 580	1107	53-64	1 x2 1/8"	1.26
15 L 581	1108	64-77	1 x2 1/8"	1.32
15 L 582	1109	72-88	1 x2 5/8"	1.35
15 L 583	1110	88-108	1 x2 5/8"	1.53
15 L 584	1113	108-130	1 1/8x2 5/8"	1.68
15 L 585	1116	124-149	1 1/8x2 5/8"	1.73
15 L 586	1119	130-156	1 1/8x2 5/8"	1.73
15 L 587	1122	145-175	1 1/8x2 5/8"	1.88
15 L 588	1125	161-193	1 1/8x2 5/8"	1.91
15 L 570	1128	189-227	1 3/8x2 5/8"	2.21
15 L 571	1130	200-240	1 1/8x3 1/8"	2.29
15 L 572	1131	216-259	1 1/8x3 1/8"	2.38
15 L 573	1134	233-280	1 3/8x3 1/8"	2.65
15 L 574	1137	243-292	1 1/8x4 1/8"	2.76
15 L 575	1140	270-324	1 1/8x4 1/8"	2.79
15 L 576	1142	324-388	1 1/8x4 1/8"	3.18
15 L 577	1143	340-408	1 1/8x4 1/8"	3.26
15 L 589	1146	378-440	1 1/8x4 1/8"	3.53
15 L 578	1149	400-480	1 3/4x4 1/8"	3.56

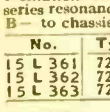


RESONANT PAPER CAPACITORS

Type 72-P. Prevent IF regeneration and self-oscillation. Have special inductive design for series resonance at about 455 kc. Connect from B— to chassis. Shpg. wt., 3 oz.

No.	Type	Mfd	W.V.	Size	NET
15 L 361	72P51	.05	400	1/2x1 1/8"	29c
15 L 362	72P52	.1	400	1/2x1 5/8"	38c
15 L 363	72P53	.2	400	9/16x1 7/8"	41c

SPRAGUE CP-53 JAN-C-25



Non-inductively wound oil-filled bathtub capacitors. Hermetically sealed in drawn metal can. Tolerance, ±10%. Av. wt., 5 oz.

No.	Mfd	W.V.	Size	NET
15 L 736	.1	600	1 13/16x1x1 1/4"	1.91
15 L 737	.25	600	1 13/16x1x1 1/4"	2.00
15 L 738	.5	600	1 13/16x1x1"	2.15
15 L 739	1.0	600	2x1 1/4x1"	2.44
15 L 740	2.0	600	2x2x1 1/8"	3.23
15 L 741	.1-.1	600	1 13/16x1x3 1/4"	2.41
15 L 742	.25-.25	600	1 13/16x1x1"	2.44
15 L 743	.5-.5	600	2x1 1/4x1"	2.79
15 L 744	.1-.1-.1	600	2x1 1/4x7/8"	2.70
15 L 745	.25	1000	1 13/16x1x7/8"	2.12
15 L 746	.25-.25	1000	2x1 1/4x7/8"	2.70
15 L 747	.5	1000	2x1 1/4x7/8"	2.29
15 L 748	1.0	1000	2x2x1 1/8"	2.85

"CERA-MITE" DISC CERAMIC CAPACITORS

Ultra-compact ceramic disc capacitors. In popular values as well as RETMA values. High by-pass efficiency in critical circuits. Moisture-proof coating. Tolerances: 500 WVDC types, ±20%; 1000 WVDC types, thru 680 mmf, ±10%; thru .0033 mfd, ±20%; thru .01 mfd, min.; 3000 WVDC types 4.7 mmf, ± .5 mmf; thru 68 mmf, ±10%; thru 500 mmf, ±20%. Shpg. wt., 2 oz.

500 VOLTS DC WORKING

No.	Type	Cap.	EACH
16 L 300	5GA-V5	5 mmf	15c
16 L 301	5GA-V6	6 mmf	
16 L 302	5GA-V75	7.5 mmf	
16 L 303	5GA-V8	8 mmf	
16 L 304	5GA-Q1	10 mmf	
16 L 305	5GA-Q12	12 mmf	
16 L 306	5GA-Q15	15 mmf	
16 L 307	5GA-Q18	18 mmf	
16 L 308	5GA-Q2	20 mmf	
16 L 309	5GA-Q22	22 mmf	
16 L 310	5GA-Q25	25 mmf	
16 L 311	5GA-Q27	27 mmf	
16 L 312	5GA-Q3	30 mmf	
16 L 313	5GA-Q33	33 mmf	
16 L 314	5GA-Q39	39 mmf	
16 L 315	5GA-Q47	47 mmf	
16 L 316	5GA-Q5	50 mmf	
16 L 317	5GA-Q56	56 mmf	
16 L 318	5GA-Q68	68 mmf	
16 L 319	5GA-Q75	75 mmf	
16 L 320	5GA-Q82	82 mmf	
16 L 321	5GA-Q91	91 mmf	15c
16 L 322	5GA-T1	100 mmf	
16 L 323	5GA-T12	120 mmf	
16 L 324	5GA-T13	130 mmf	
16 L 325	5GA-T15	150 mmf	
16 L 326	5GA-T18	180 mmf	
16 L 327	5GA-T2	200 mmf	
16 L 328	5GA-T22	220 mmf	
16 L 329	5GA-T24	240 mmf	
16 L 330	5GA-T25	250 mmf	
16 L 331	5GA-T27	270 mmf	
16 L 332	5GA-T3	300 mmf	
16 L 333	5GA-T33	330 mmf	
16 L 334	5GA-T35	350 mmf	
16 L 335	5GA-T36	360 mmf	
16 L 336	5GA-T39	390 mmf	
16 L 337	5GA-T4	400 mmf	
16 L 338	5GA-T47	470 mmf	
16 L 339	5GA-T5	500 mmf	
16 L 340	5GA-T56	560 mmf	
16 L 341	5GA-T6	600 mmf	
16 L 342	5GA-T68	680 mmf	
16 L 343	5GA-T75	750 mmf	
16 L 344	5GA-T8	800 mmf	
16 L 345	5GA-T82	820 mmf	
15 L 670	5GA-D1	.001 mfd	
16 L 347	5GA-D12	.0012 mfd	
16 L 348	5GA-D13	.0013 mfd	
15 L 671	5GA-D15	.0015 mfd	
16 L 350	5GA-D16	.0016 mfd	
16 L 351	5GA-D18	.0018 mfd	
16 L 352	5GA-D2	.0020 mfd	15c
16 L 353	5GA-D22	.0022 mfd	
16 L 354	5GA-D25	.0025 mfd	
16 L 355	5GA-D27	.0027 mfd	
16 L 356	5GA-D3	.0030 mfd	
16 L 357	5GA-D33	.0033 mfd	
16 L 358	5GA-D39	.0039 mfd	
16 L 359	5GA-D4	.0040 mfd	
16 L 360	5GA-D43	.0043 mfd	
16 L 361	5GA-D47	.0047 mfd	18c
16 L 362	5GA-D5	.005 mfd	

SINGLE AND DUAL HIGH-K TYPES

15 L 672	5HK-D2	.002 mfd	15¢
15 L 673	5HK-D5	.005 mfd	15¢
15 L 674	5HK-S1	.010 mfd	18c
15 L 675	5HK-2D1	2 x .001 mfd	24¢
15 L 676	5HK-2D15	2 x .0015 mfd	24¢
15 L 677	5HK-2D2	2 x .002 mfd	24¢
15 L 678	5HK-2D4	2 x .004 mfd	26¢

TYPE NPO CERAMICS

Zero temperature-coefficient capacitors. 500 WVDC. Discs, except *rectangular. 2 oz.

No.	Type	Mmf	EACH
16 L 450	5TCCB-V1*	1.0	29c
16 L 451	5TCCB-V15*	1.5	
16 L 452	5TCCB-V22*	2.2	
16 L 453	5TCCB-V33*	3.3	
16 L 454	5TCCB-V47*	4.7	
16 L 455	5TCCB-V68*	6.8	
16 L 456	5TCC-Q1	10.0	
16 L 457	5TCC-Q15	15.0	
16 L 458	5TCC-Q2	20.0	
16 L 459	5TCC-Q22	22.0	
16 L 460	5TCC-Q25	25.0	
16 L 461	5TCC-Q33	33.0	
16 L 462	5TCC-Q39	39.0	32c
16 L 463	5TCC-Q47	47.0	
16 L 464	5TCC-Q5	50.0	
16 L 465	5TCC-Q68	68.0	
16 L 466	5TCC-Q75	75.0	
16 L 467	5TCC-T1	100.0	
16 L 468	5TCC-T12	120.0	35c
16 L 469	5TCC-T15	150.0	
16 L 470	5TCC-T175	175.0	
16 L 471	5TCC-T22	220.0	41c
16 L 472	5TCC-T27	270.0	47c

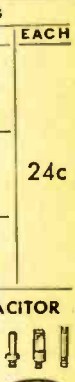
1000 VOLTS DC WORKING

No.	Type	Cap.	EACH
16 L 400	10GA-V47	4.7 mmf	18c
16 L 401	10GA-Q1	10 mmf	
16 L 402	10GA-Q15	15 mmf	
16 L 403	10GA-Q18	18 mmf	
16 L 404	10GA-Q22	22 mmf	
16 L 405	10GA-Q27	27 mmf	
16 L 406	10GA-Q33	33 mmf	18c
16 L 407	10GA-Q39	39 mmf	
16 L 408	10GA-Q47	47 mmf	
16 L 409	10GA-Q68	68 mmf	
16 L 410	10GA-Q75	75 mmf	
16 L 411	10GA-Q82	82 mmf	
16 L 412	10GA-T1	100 mmf	18c
16 L 413	10GA-T15	150 mmf	
16 L 414	10GA-T18	180 mmf	
16 L 415	10GA-T2	200 mmf	
16 L 416	10GA-T22	220 mmf	
16 L 417	10GA-T25	250 mmf	
16 L 418	10GA-T27	270 mmf	18c
16 L 419	10GA-T3	300 mmf	
16 L 420	10GA-T33	330 mmf	
16 L 421	10GA-T39	390 mmf	
16 L 422	10GA-T47	470 mmf	
16 L 423	10GA-T5	500 mmf	
16 L 424	10GA-T56	560 mmf	29c
16 L 425	10GA-T68	680 mmf	
16 L 426	10GA-D1	.001 mfd	
16 L 427	10GA-D12	.0012 mfd	
16 L 428	10GA-D15	.0015 mfd	
16 L 429	10GA-D22	.0022 mfd	
16 L 430	10GA-D33	.0033 mfd	
16 L 431	10HK-D47	.0047 mfd	
16 L 432	10HK-D68	.0068 mfd	35c
16 L 433	10HK-S1	.01 mfd	

3000 VOLTS DC WORKING

No.	Type	Mmf	EACH
16 L 370	30GA-V47	4.7	24c
16 L 371	30GA-Q1	10	
16 L 372	30GA-Q15	15	
16 L 373	30GA-Q25	25	
16 L 374	30GA-Q3	30	
16 L 375	30GA-Q5	50	
16 L 376	30GA-Q68	68	
16 L 377	30GA-T1	100	
16 L 378	30GA-T12	120	
16 L 379	30GA-T15	150	
16 L 380	30GA-T18	180	
16 L 381	30GA-T2	200	
16 L 382	30GA-T22	220	
16 L 383	30GA-T25	250	
16 L 384	30GA-T27	270	
16 L 385	30GA-T3	300	
16 L 386	30GA-T5	500	

20DK-T5 "DOORKNOB" CAPACITOR



Unusually versatile high-voltage, plastic capacitor. Threaded ends take a wide variety of screw-in terminals, for easy replacement use in all types of TV sets. Moisture-resistant, thermosetting molded plastic. Molded guard rings lengthen surface creepage path. Working voltage rating, 20,000 volts, DC. Capacity, 500 mmf. Size, 1" diameter, 3 1/32" long. Supplied in sets of 2, in clear plastic box. Each set includes 12 screw-in terminals. 3 oz.

15 L 599. NET PER SET OF 2 ..... 2.17

TYPE N750 CERAMICS

A negative temperature coefficient capacitor with a negative change of 750 parts per million per degree Centigrade. 500 WV DC. Discs, except *rectangular. Shpg. wt. 2 oz.

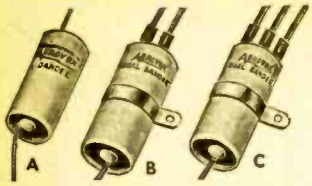
No.	Type	Mmf	EACH
16 L 480	5TCUB-V5*	5	29c
16 L 481	5TCU-Q1	10	
16 L 482	5TCU-Q15	15	
16 L 483	5TCU-Q2	20	
16 L 484	5TCU-Q22	22	
16 L 485	5TCU-Q25	25	29c
16 L 486	5TCU-Q33	33	
16 L 487	5TCU-Q47	47	
16 L 488	5TCU-Q68	68	
16 L 489	5TCU-Q75	75	
16 L 490	5TCU-T1	100	29c
16 L 491	5TCU-T15	150	
16 L 492	5TCU-T2	200	
16 L 493	5TCU-T22	220	
16 L 494	5TCU-T33	330	

NEW "T-C" CALCULATOR

Handy slide-rule. Determines values of NPO and N750 ceramics to be connected in parallel to equal a capacitor of desired intermediate temperature coefficient with required capacity. Shpg. wt., 4 oz.

37 K 103. NET 15c

Aerovox Capacitors



TYPE PRS MINIATURE ELECTROLYTICS

Extremely compact dry electrolytic capacitors in aluminum cans with cardboard insulating sleeves. Etched foil design and high purity aluminum construction. Vented for excessive gas pressures. All are conservatively rated and will give maximum performance at temperatures up to 85° C. Complete selection includes electrolytics for new equipment design as well as for general replacement purposes. Their small size makes them ideal for compactly designed equipment such as TV receivers, portable radios, phonographs, mobile receivers and transmitters, etc. Single, double, and triple-section units, plus triple-section units with dual working voltages, cover practically any capacity and working voltage employed in present-day equipment. Negative leads are connected to aluminum cans. Dual and triple-section units have common negative leads. Single-section units have solid wire, bare leads. Dual and triple-section units have flexible, stranded wire leads and insulating sleeves; and are supplied with mounting bracket. Av. shpg. wt., 4 oz.

Fig. A—SINGLE SECTION

No.	Mfd	Volts	Size	NET
13 L 639	8	700	15/16x3 1/16"	.88
13 L 640	10	700	1 1/16x3 1/16"	.91
12 L 623	12	700	1 1/16x3 5/16"	.94
13 L 642	16	700	1 1/16x3 9/16"	1.03
13 L 632	8	600	15/16x3 1/16"	.83
13 L 633	10	600	15/16x3 1/16"	.85
13 L 634	12	600	1 1/16x3 1/16"	.88
13 L 635	16	600	1 1/16x3 9/16"	.97
12 L 617	1	450	9/16x1 1/4"	.65
12 L 618	2	450	9/16x1 1/4"	.65
13 L 385	4	450	11/16x1 1/2"	.68
13 L 386	8	450	13/16x1 1/2"	.73
13 L 394	10	450	13/16x1 3/4"	.76
13 L 387	12	450	15/16x1 1/2"	.79
13 L 388	16	450	15/16x1 3/4"	.82
13 L 389	20	450	11/16x1 3/4"	.91
13 L 395	30	450	1 1/16x2 1/4"	1.00
13 L 396	40	450	1 1/16x2 1/2"	1.06
12 L 619	50	450	1 x3"	1.23
12 L 620	60	450	1 1/16x3 1/4"	1.38
12 L 621	80	450	1 1/16x3 3/4"	1.65
12 L 622	100	450	1 1/16x3 3/4"	1.88
12 L 612	10	350	13/16x1 3/4"	.73
13 L 403	16	350	13/16x1 3/4"	.82
13 L 404	24	350	15/16x1 3/4"	.91
12 L 613	30	350	13/16x2 1/4"	.97
12 L 614	40	350	15/16x2 1/4"	1.03
12 L 615	50	350	1 1/16x2 1/4"	1.09
12 L 616	60	350	1 1/16x2 1/2"	1.15
13 L 410	4	250	11/16x1 1/4"	.59
13 L 411	8	250	11/16x1 1/2"	.68
13 L 412	12	250	11/16x1 3/4"	.73
13 L 413	16	250	13/16x1 1/2"	.76
13 L 414	20	250	13/16x1 1/2"	.79
12 L 608	30	250	13/16x2 1/4"	.85
12 L 609	40	250	13/16x2 1/4"	.91
12 L 610	50	250	15/16x2 1/4"	1.00
12 L 611	60	250	15/16x2 1/4"	1.06
13 L 430	4	150	9/16x1 1/4"	.59
13 L 431	8	150	11/16x1 1/4"	.62
13 L 425	10	150	11/16x1 1/4"	.62
13 L 432	12	150	11/16x1 1/4"	.65
13 L 433	16	150	11/16x1 1/2"	.68
13 L 443	20	150	11/16x1 1/2"	.71
13 L 434	24	150	11/16x1 3/4"	.73
13 L 435	30	150	13/16x1 1/2"	.76
13 L 436	40	150	13/16x1 1/2"	.79
13 L 441	50	150	15/16x1 3/4"	.82
12 L 607	60	150	15/16x1 3/4"	.88
13 L 426	80	150	15/16x2 1/4"	.94
13 L 427	100	150	15/16x2 1/4"	1.03

Fig. A—SINGLE SECTION (cont.)

No.	Mfd	Volts	Size	NET
13 L 428	150	150	1 1/16x3"	1.12
13 L 450	10	50	9/16x1 1/2"	.59
13 L 856	20	50	11/16x1 1/4"	.59
13 L 451	25	50	11/16x1 1/4"	.62
13 L 452	50	50	11/16x1 3/4"	.71
13 L 453	100	50	13/16x1 3/4"	.82
12 L 605	150	50	15/16x1 1/2"	.91
12 L 606	250	50	15/16x1 3/4"	1.03
13 L 460	10	25	9/16x1 1/4"	.59
13 L 858	16	25	9/16x1 1/4"	.59
13 L 461	25	25	9/16x1 1/4"	.59
13 L 462	50	25	11/16x1 1/2"	.65
13 L 463	100	25	13/16x1 1/2"	.79
12 L 604	250	25	15/16x2 1/4"	1.00
13 L 857	500	25	1 1/16x2 1/2"	1.35
13 L 861	100	12	11/16x1 1/2"	.71
13 L 860	250	12	13/16x1 1/4"	.85
13 L 859	500	12	15/16x2 1/4"	1.00
12 L 603	1000	12	1 1/16x3 1/4"	1.32
12 L 600	100	6	11/16x1 1/4"	.71
12 L 601	250	6	11/16x1 3/4"	.79
13 L 864	500	6	13/16x1 1/4"	.91
13 L 863	1000	6	15/16x2 1/4"	1.12
12 L 602	1500	6	1 1/16x2 1/4"	1.23
13 L 862	2000	6	1 1/16x2 1/4"	1.35

Fig. B—DOUBLE SECTION

13 L 391	8-8	450	13/16x2 1/4"	1.00
13 L 392	8-16	450	15/16x2 1/4"	1.18
13 L 397	10-10	450	15/16x2 1/4"	1.09
12 L 638	16-16	450	1 1/16x2 1/4"	1.32
12 L 639	20-20	450	1 1/16x3 1/4"	1.47
12 L 640	30-30	450	1 1/8x2 1/4"	1.76
12 L 641	40-20	450	1 1/8x2 1/4"	1.73
13 L 851	40-40	450	1 1/8x3 1/4"	1.97
12 L 642	50-30	450	1 1/16x4"	2.00
12 L 634	8-16	250	13/16x1 3/8"	.97
12 L 635	10-10	250	13/16x1 3/4"	.97
12 L 636	16-16	250	13/16x2 1/4"	1.00
13 L 852	20-20	250	15/16x2 1/4"	1.09
12 L 637	30-30	250	15/16x2 1/4"	1.32
12 L 631	8-8	200	11/16x1 1/2"	.88
12 L 632	8-16	200	11/16x2 1/4"	.94
12 L 633	30-30	200	15/16x2 1/4"	1.26
13 L 437	8-8	150	11/16x1 1/4"	.88
12 L 624	20-10	150	13/16x1 1/2"	.91
13 L 439	20-20	150	13/16x1 1/4"	.97
12 L 625	20-30	150	13/16x2 1/4"	1.00
12 L 626	20-40	150	15/16x1 3/4"	1.03

Fig. B—DOUBLE SECTION (cont.)

No.	Mfd	Volts	Size	NET
12 L 627	30-30	150	15/16x1 3/4"	1.06
12 L 628	40-30	150	15/16x2 1/4"	1.06
13 L 442	40-40	150	15/16x2 1/4"	1.06
12 L 629	40-80	150	15/16x2 3/4"	1.29
13 L 853	50-30	150	15/16x2 1/4"	1.15
13 L 854	50-50	150	15/16x2 1/4"	1.23
12 L 630	100-100	150	1 1/16x3 1/2"	1.88

Fig. C—TRIPLE SECTION

12 L 650	10-10-10	450	11/16x2 1/4"	1.44
12 L 665	20-20, 20	450, 25	1 1/16x2 1/4"	1.71
13 L 855	20-20-20	150	15/16x1 3/4"	1.29
13 L 870	30-20-10	150	15/16x1 3/4"	1.26
12 L 643	30-30-20	150	1 1/16x1 3/4"	1.35
12 L 644	30-30-30	150	15/16x2 1/4"	1.38
13 L 871	40-20-20	150	15/16x2 1/4"	1.32
12 L 645	40-30-20	150	15/16x2 1/4"	1.38
12 L 649	40-40-20	150	1 1/16x2 1/4"	1.38
13 L 872	40-40-40	150	1 1/16x2 1/4"	1.44
12 L 646	50-30-10	150	1 1/16x2 1/4"	1.38
12 L 647	50-30-20	150	1 1/16x2 1/4"	1.44
12 L 648	80-40-20	150	1 1/16x2 1/4"	1.62
12 L 657	20-20, 20	150, 25	13/16x1 3/4"	1.21
12 L 658	30-20, 20	150, 25	15/16x1 3/4"	1.29
12 L 651	30-20, 100	150, 25	15/16x2 1/4"	1.29
12 L 659	40-20, 20	150, 25	15/16x1 3/4"	1.29
12 L 652	40-30, 20	150, 25	15/16x2 1/4"	1.29
12 L 660	40-40, 20	150, 25	1 1/16x1 3/4"	1.32
12 L 661	40-40, 100	150, 25	1 1/16x2 1/4"	1.44
12 L 656	40-40, 250	150, 10	1 1/16x2 1/4"	1.53
12 L 662	50-30, 20	150, 25	1 1/16x1 3/4"	1.38
12 L 653	50-30, 100	150, 25	1 1/16x2 1/4"	1.50
12 L 654	50-30, 250	150, 25	1 1/16x2 1/4"	1.82
12 L 655	50-50, 20	150, 25	1 1/16x2 1/4"	1.47
12 L 663	80-20, 100	150, 25	1 1/16x2 1/4"	1.62
12 L 664	80-40, 20	150, 25	1 1/16x2 1/4"	1.56

TYPE PR ELECTROLYTICS

For direct replacement of single-ended electrolytics in many Hallicrafters and Crosley TV receivers. Compact, dry electrolytic capacitors with the same qualities and characteristics as Type PRS above, but with all leads extending from one end. PR4-100 is 1 1/2x4", PR1-100 is 1 3/4x3 3/4", PR2-100 is 1x4". Av. shp. wt., 4 oz.

No.	Type	Mfd.	Volts	NET
12 L 666	PR4-100	140-5 200-30	300 150	3.03
12 L 667	PR1-100	140	300	1.85
12 L 668	PR2-100	200-5	150	1.59

MICA CAPACITORS

Molded-in-bakelite mica capacitors are designed for critical service in transmitting circuits, buffer stages, power amplifiers, laboratory equipment, etc. Non-magnetic parts are used to reduce RF losses to a minimum. Intended for point-to-point wiring, being supported entirely by soldered connections. Av. shpg. wt., 1 oz.

FIG. D—TYPE 1467LS—500 V

Stock No.	Mfd	Size	NET
13 L 058	.0005	5 3/64x5 3/64x5/32"	15¢
13 L 059	.001		18¢
13 L 060	.0015		18¢
13 L 061	.002		24¢
13 L 062	.0025		26¢

FIG. D—TYPE 1467LS-HV—1500 V

Stock No.	Mfd	Size	NET
13 L 126	.0005	5 3/64x5 3/64x21/64"	41¢
13 L 127	.00075		47¢
13 L 128	.001		53¢

FIG. E—TYPE 1468LS—500 V

Stock No.	Mfd	Size	EACH
13 L 070	.00004	29/64x45/64x3/16"	12c
13 L 071	.00005		
13 L 072	.000075		
13 L 073	.0001		
13 L 074	.00015		
13 L 075	.0002		
13 L 076	.00025	29/64x45/64x3/16"	15c
13 L 077	.00035		
13 L 078	.0005		

TYPE AEP PLUG-IN ELECTROLYTIC CAPACITORS

Plug-in type, 1, 2 and 3 section electrolytic capacitors. Designed to meet requirements of continuous service applications. Permit fast change required in commercial and professional equipment. Plug-in mounting style simplifies installation and testing. Insulated, tube-type bases fit standard octal tube sockets. Bases have keyed guide pins to assure correct installation and proper polarization. Replacement is as simple as changing a tube. Feature high capacity in ultra-compact cans. Non-corrosive, etched aluminum foil internal construction throughout. Vented for safety. Rugged, heavy duty. Av. shpg. wt., 5 oz.

SINGLE SECTION

No.	Type	Mfd.	W. V.	Size	NET
13 L 035	2J	10	450	1 9/32x2 1/2"	2.38
13 L 037	4J	20	450	1 9/32x2 1/2"	2.53
13 L 038	6J	30	450	1 9/32x2 1/2"	2.62
13 L 039	8J	40	450	1 9/32x2 1/2"	2.68
13 L 040	16J	80	450	1 3/8x3 1/2"	3.26
13 L 041	2L	10	600	1 1/8x4 1/4"	2.47

DUAL SECTION

No.	Type	Mfd.	W. V.	Size	NET
13 L 044	22J	10-10	450	1 9/32x2 1/2"	2.59
13 L 045	44J	20-20	450	1 3/8x2 1/2"	2.97
13 L 046	88J	40-40	450	1 3/8x3"	3.52

TRIPLE SECTION

No.	Type	Mfd.	W. V.	Size	NET
13 L 047	222J	10-10-10	450	1 9/32x2 1/2"	3.00
13 L 048	444J	20-20-20	450	1 3/8x3"	3.59

TYPE 30 HYVOL CAPACITORS

Hermetically sealed, immersion-proof bathtub style. Oil-impregnated, oil-filled, drawn-metal case. Bakelite insulators riveted to case. Built for severe operating conditions, as in aircraft, police, marine, and similar equipment. Av. shpg. wt., 8 oz.

600 V. SINGLE SECTION

No.	Mfd	Size	NET
13 L 950	.05	1 3/4x1x3/4"	1.68
13 L 951	.1	1 3/4x1x3/4"	1.71
13 L 952	.25	1 3/4x1x15/16"	1.82
13 L 953	.5	1 3/4x1x1"	1.94
13 L 954	1.0	2x1 3/4x1"	2.20
13 L 955	2.0	2x2x1 3/16"	2.94

600 V. DUAL-SECTION

13 L 956	.05-.05	1 3/4x1x1 3/16"	2.15
13 L 957	.1-.1	1 3/4x1x7/8"	2.18
13 L 958	.25-.25	1 3/4x1x1"	2.20
13 L 959	.5-.5	2x1 3/4x7/8"	2.53
13 L 960	1.0-1.0	2x2x1 3/16"	3.12

600 V. TRIPLE-SECTION

13 L 964	.05-.05-.05	1 3/4x1x1 3/16"	2.38
13 L 965	.1-.1-.1	1 3/4x1x15/16"	2.47
13 L 966	.25-.25-.25	2x1 3/4x7/8"	2.79

NEW ROTATOR CAPACITORS

Replacement AC motor capacitors. Used extensively in Alliance and other rotators. Both are rated 70 mfd., 50 VAC. Size, 7/8x3"*, solder lugs. †5" leads. Shpg. wt., 5 oz.

12 L 670. †Type XA4098A.
12 L 669. *Type XA4283. NET EACH . . 73¢

Aerovox Metallized Capacitors

TYPE P92ZN METALLIZED PAPER TUBULARS

High-quality capacitors of Aerolene-impregnated metallized-paper. Modified plastic tubular type. Paper cases with Duranite end seals. P92ZN capacitors are ideally suited for original or replacement use in radio and television receivers, amplifiers and other electronic equipment. Will withstand high temperatures. Operating range is −30 degrees C to +100 degrees C. Tolerance of ±20% in all capacities and voltages. Sizes given are diameter and length. Av. shpg. wt., 2 oz.

200 VOLTS

Stock No	Mfd	Size	NET
12 L 700	.01	3/16x3/16"	.35
12 L 701	.02	1/4x11/16"	.35
12 L 702	.03	1/4x11/16"	.35
12 L 703	.05	1/4x21/32"	.38
12 L 704	.1	9/32x27/32"	.41
12 L 705	.25	3/8x27/32"	.53
12 L 706	.5	13/32x15/32"	.62
12 L 707	1.0	9/16x15/32"	.76
12 L 708	2.0	5/8x1 1/2"	1.06

400 VOLTS

12 L 709	.01	1/4x11/16"	.41
12 L 710	.02	5/16x11/16"	.38
12 L 711	.03	3/8x11/16"	.38
12 L 712	.05	3/8x27/32"	.41
12 L 713	.1	3/8x15/32"	.47
12 L 714	.25	5/16x15/32"	.59
12 L 715	.5	5/8x1 3/8"	.68
12 L 716	1.0	11/16x1 7/8"	.94
12 L 717	2.0	13/16x2 1/8"	1.29

600 VOLTS

12 L 718	.01	9/32x11/16"	.41
12 L 719	.02	3/8x11/16"	.41
12 L 720	.03	13/32x11/16"	.47
12 L 721	.05	13/32x27/32"	.47
12 L 722	.1	13/32x15/32"	.53
12 L 723	.25	5/8x15/32"	.65
12 L 724	.5	11/16x1 1/2"	.85
12 L 725	1.0	13/16x1 7/8"	1.06
12 L 726	2.0	15/16x2 1/8"	1.47

TYPE P30ZN METALLIZED-PAPER "BATHTUB" CONDENSERS

Ruggedly constructed, dependable condensers of Aerolene metallized paper. In "bathtub" type metal housings. Vitrified ceramic or glass terminal seals offer high insulation. Operating temperature range from −55 degrees C to +100 degrees C at full rating. Can be operated at +125 degrees C at 75 per cent of voltage rating. Standard tolerance of ±20%. Av. shpg. wt., 4 oz.

150 VOLTS

Stock No.	Mfd	Size (LWH)	NET
12 L 750	3.0	1 3/4x1x3/4"	4.76
12 L 751	4.0	1 3/4x1x3/4"	5.09
12 L 752	5.0	1 3/4x1x7/8"	5.26
12 L 753	6.0	1 3/4x1 1/4x7/8"	5.38
12 L 754	8.0	2x1 3/4x1 3/4"	7.41
12 L 755	10.0	2x1 3/4x3/4"	8.56
12 L 756	12.0	2x2x7/8"	9.70
12 L 757	15.0	2x2x1"	11.67

200 VOLTS

12 L 758	.1		2.32
12 L 759	.25		2.50
12 L 760	.5	1 3/4x1x3/4"	2.91
12 L 761	1.0		3.15
12 L 762	2.0		3.94

400 VOLTS

12 L 763	.1	1 3/4x1x3/4"	2.85
12 L 764	.25	1 3/4x1x3/4"	2.97
12 L 765	.5	1 3/4x1x3/4"	3.15
12 L 766	1.0	1 3/4x1x7/8"	3.50
12 L 767	2.0	2x1 3/4x1 13/16"	4.32
12 L 768	3.0	2x1 3/4x1 5/16"	5.73
12 L 769	4.0	2x2x1"	6.94
12 L 770	5.0	2x2x1 1/4"	7.76

600 VOLTS

12 L 771	.1	1 3/4x1x3/4"	3.09
12 L 772	.25	1 3/4x1x3/4"	3.15
12 L 773	.5	1 3/4x1x3/4"	3.76
12 L 774	1.0	1 3/4x1 1/4x7/8"	4.32
12 L 775	2.0	2x2x7/8"	5.53
12 L 776	3.0	2x2x1 1/8"	6.85
12 L 777	4.0	2x2x1 1/4"	7.88

TYPE P123ZG ULTRA-COMPACT METALLIZED PAPER CAPACITOR

New, ultra-compact tiny capacitors. Extremely small size makes units ideal for military and aircraft applications where minimum size and weight with maximum durability is required. Units are also well suited for replacement and original use in radio, television and electronic equipment. In hermetically sealed metal cans to withstand moisture and heat. Temperature range, −50° to +50° C., at full voltage rating; to +95° C. at lower voltages. Tol., ±20%. Wt., 2 oz. **Type ZNG, for higher temperature applications, available on special order.**

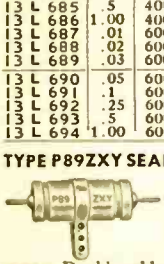
No.	Mfd	Volts	Size	NET
13 L 900	.001	200	11/64x7/16"	1.20
13 L 901	.002	200	11/64x7/16"	1.20
13 L 902	.003	200	11/64x7/16"	1.20
13 L 903	.005	200	11/64x7/16"	1.20
13 L 904	.01	200	11/64x7/16"	1.20
13 L 905	.047	200	15/64x2 3/32"	1.23
13 L 906	.050	200	15/64x2 3/32"	1.23
13 L 907	.068	200	5/16x2 3/32"	1.26
13 L 908	.10	200	5/16x2 3/32"	1.26
13 L 909	.22	200	5/16x1 1/32"	1.38
13 L 910	.25	200	5/16x1 11/32"	1.38
13 L 911	.47	200	13/32x1 11/32"	1.41
13 L 912	.68	200	9/16x1 11/32"	1.56
13 L 913	1.0	200	9/16x1 7/32"	1.56
13 L 914	2.0	200	9/16x1 21/32"	2.32
13 L 915	.0005	400	11/64x7/16"	1.23
13 L 916	.001	400	11/64x7/16"	1.23
13 L 917	.002	400	11/64x7/16"	1.23
13 L 918	.003	400	11/64x9/16"	1.23
13 L 919	.02	400	11/64x2 1/32"	1.26
13 L 920	.022	400	5/16x2 1/32"	1.26
13 L 921	.033	400	5/16x2 1/32"	1.29
13 L 922	.040	400	5/16x2 1/32"	1.29
13 L 923	.047	400	13/32x2 1/32"	1.29
13 L 924	.050	400	13/32x2 1/32"	1.29
13 L 925	.068	400	13/32x1 1/32"	1.32
13 L 926	.10	400	13/32x1 1/32"	1.44
13 L 927	.15	400	1/2x1 1/32"	1.44
13 L 928	.22	400	9/16x1 1/32"	1.44
13 L 929	.25	400	9/16x1 1/32"	1.62
13 L 930	.33	400	9/16x1 7/32"	1.62
13 L 931	.47	400	9/16x1 21/32"	1.62
13 L 932	.68	400	21/64x1 23/32"	1.79
13 L 933	1.0	400	23/64x2 7/32"	1.79
13 L 934	.01	600	5/16x2 1/32"	1.26
13 L 935	.02	600	5/16x2 3/32"	1.29
13 L 936	.10	600	1/2x1 1/32"	1.35
13 L 937	.25	600	9/16x1 11/32"	1.59
13 L 938	.50	600	21/64x1 23/32"	1.76
13 L 939	1.0	600	3/4x2 7/32"	2.15

TYPE P82Z AEROLITE METALLIZED TUBULARS

Light weight metallized-paper tubular capacitors. Hyvol K impregnated units in moisture-resistant wax-impregnated cardboard cases. Have "self-healing" characteristics for protection against surge voltages. Low power factor, less than 1%. Operate from −40° C to 50° C. Av. shpg. wt., 2 oz.

No.	Mfd	Volts	Size	NET
13 L 670	.01	200	1/8x3/8"	.35
13 L 671	.02	200	1/8x3/8"	.35
13 L 672	.03	200	1/8x3/8"	.35
13 L 673	.05	200	1/8x3/8"	.38
13 L 674	.1	200	1/8x5/8"	.41
13 L 675	.25	200	15/32x5/8"	.53
13 L 676	.5	200	15/32x1 1/8"	.62
13 L 677	1.00	200	9/16x1 1/8"	.76
13 L 678	2.00	200	5/8x1 5/8"	1.06
13 L 679	.01	400	1/8x3/8"	.38
13 L 680	.02	400	1/8x3/8"	.38
13 L 681	.03	400	1/8x3/8"	.38
13 L 682	.05	400	15/32x3/8"	.41
13 L 683	.1	400	15/32x1 1/8"	.47
13 L 684	.25	400	9/16x1 1/8"	.59
13 L 685	.5	400	5/8x1 5/8"	.68
13 L 686	1.00	400	13/32x2 1/8"	.94
13 L 687	.01	600	1/8x3/8"	.41
13 L 688	.02	600	1/8x3/8"	.41
13 L 689	.03	600	13/32x3/8"	.47
13 L 690	.05	600	15/32x5/8"	.47
13 L 691	.1	600	15/32x1 1/8"	.53
13 L 692	.25	600	5/8x1 1/8"	.65
13 L 693	.5	600	13/32x1 5/8"	.85
13 L 694	1.00	600	13/32x2 1/8"	1.06

TYPE P89ZXY SEALED METAL TUBULARS



Tubular Aerolites in hermetically sealed metal cases. Hyvol K or M impregnated. "Self-healing" characteristic offers protection against voltage surges. Double-rubber bakelite terminal seals. For hard use under extreme conditions. Tolerance: ±20%. Negative lead not connected to metal case. Av. shpg. wt., 2 oz.

No.	Mfd	Volts	Size	NET
12 L 728	.05	200	3/8x1"	.82
12 L 729	.1	200	7/16x1"	.85
12 L 730	.25	200	1/2x1"	.94
12 L 731	.5	200	1/2x1 5/16"	1.00
12 L 732	1.0	200	5/8x1 1/2"	1.23
12 L 733	2.0	200	5/8x2"	1.53
12 L 734	.03	400	3/8x1"	.82
12 L 735	.05	400	7/16x1"	.85
12 L 736	.1	400	7/16x1 5/16"	.94
12 L 737	.25	400	5/8x1 3/16"	1.06
12 L 738	.5	400	5/8x2"	1.18
12 L 739	1.0	400	3/4x2 1/2"	1.47
12 L 740	2.0	400	1x2 1/2"	2.12
12 L 741	.01	600	3/8x1"	.82
12 L 742	.02	600	3/8x1"	.85
12 L 743	.03	600	7/16x1"	.88
12 L 744	.05	600	1/2x1"	.91
12 L 745	.1	600	1/2x1 1/2"	1.00
12 L 746	.25	600	5/8x1 5/8"	1.18
12 L 747	.5	600	3/4x2"	1.41
12 L 748	1.0	600	13/16x2 1/2"	1.76
12 L 749	2.0	600	1 1/4x2 1/2"	2.35

TYPE P83Z MICROMINIATURES METALLIZED-PAPER TUBULARS

Ultra-small (resistor size); metallized dielectric. For replacement and original use as coupling and bypass capacitors in radio, TV and electronic equipment. Hyvol K impregnated, in moisture-resistant cases. Improved metallized foil serves as both dielectric and electrodes. Av. shpg. wt., 2 oz.

No.	Mfd	W.V.	Size	EACH
13 L 885	.005	200	3/16x7/16"	26c
13 L 886	.01	200		
13 L 887	.002	400		
13 L 888	.003	400		
13 L 889	.01	400	1/4x9/16"	32¢
13 L 890	.0005	600	3/16x7/16"	26c
13 L 891	.001	600		
13 L 892	.002	600	1/4x9/16"	32c
13 L 893	.0022	600		
13 L 894	.0047	600		
13 L 895	.005	600		
13 L 896	.0068	600		

SRE BANTAM ELECTROLYTICS METAL CASED TUBULARS

Extremely small dry electrolytic capacitors for portable and miniature equipment. Sealed-in tubular aluminum cases are protected by external wax-impregnated cardboard insulating tubes. Shpg. wt., 2 oz.

No.	Mfd	Volts	Size	NET
13 L 830	5	150	3/8x1"	59¢
13 L 831	10	150	3/8x1 5/8"	62¢
13 L 832	15	150	1/2x1 1/8"	68¢
13 L 819	20	150	1/2x1 5/8"	71¢
13 L 833	25	150	1/2x1 5/8"	73¢
13 L 847	1	50	3/8x1"	53¢
13 L 848	2	50	3/8x1"	53¢
13 L 849	5	50	3/8x1"	59¢
13 L 827	10	50	3/8x1"	59¢
13 L 828	15	50	3/8x1 1/8"	59¢
13 L 829	25	50	1/2x1"	62¢
13 L 844	5	25	3/8x1"	59¢
13 L 845	10	25	3/8x1"	59¢
13 L 846	20	25	3/8x1"	59¢
13 L 824	25	25	3/8x1"	59¢
13 L 825	50	25	1/2x1"	65¢
13 L 826	100	25	1/2x1 5/8"	79¢
13 L 821	50	12	3/8x1 1/8"	59¢
13 L 822	100	12	1/2x1"	71¢
13 L 823	200	12	1/2x1 5/8"	79¢
13 L 841	5	6	3/8x1"	47¢
13 L 842	25	6	3/8x1"	50¢
13 L 838	50	6	3/8x1"	56¢
13 L 820	100	6	1/2x1 1/8"	71¢
13 L 843	250	6	1/2x1 5/8"	79¢
13 L 839	25	3	3/8x1"	50¢
13 L 840	50	3	3/8x1"	56¢
13 L 834	100	3	3/8x1"	65¢
13 L 835	200	3	3/8x1 5/8"	68¢
13 L 836	300	3	1/2x1 1/8"	76¢
13 L 837	500	3	1/2x1 5/8"	82¢

See page 118 for additional listings of Aerovox tubular capacitors.

Quality Capacitors

NEW AEROVOX TYPE P-88N BLUE DURANITE MOLDED CAPACITORS

85° TYPE. Duranite capacitors are entirely new—in design, impregnating compound, processing and casing. For RF bypass and coupling circuits. Have high stability and dielectric strength. Will operate through an exceptional temperature range from subzero to over 212° F. Can be exposed to temperatures as high as 250° F. without impairing performance or life expectancy. Duranite casing is rock hard, will not develop cracks or fissures. Tight fitting contacts and seals make capacitors moisture proof. Pigtail leads are firmly imbedded; will not pull out or work loose even under high temperature conditions. Av. shpg. wt., 4 oz.

200 VOLTS

Stock No.	Mfd	Size	NET EA.
12 L 501	.33	2x²1/32"	29¢
12 L 502	.47	2x²1/32"	35¢
12 L 503	.5	2x²1/32"	35¢

400 VOLTS

Stock No.	Mfd	Size	NET EA.
12 L 504	.001	1⅛x1 1/32"	15¢
12 L 505	.0068	1⅛x1 1/32"	15¢
12 L 506	.0075	1⅛x1 1/32"	15¢
12 L 507	.01	1⅛x1 1/32"	15¢
12 L 508	.015	1⅜x1 3/32"	15¢
12 L 509	.02	1⅜x1 3/32"	15¢
12 L 510	.022	1⅜x1 3/32"	18¢
12 L 511	.025	1⅜x1 3/32"	18¢
12 L 512	.03	1⅜x1 3/32"	18¢
12 L 513	.033	1⅜x1 3/32"	18¢
12 L 514	.04	1⅜x1 5/32"	18¢
12 L 515	.047	1⅜x1 5/32"	18¢
12 L 516	.05	1⅜x1 5/32"	18¢
12 L 517	.068	1⅝x1 7/32"	21¢
12 L 518	.1	1⅝x1 7/32"	21¢
12 L 519	.15	2x²1/32"	24¢
12 L 520	.22	2x²1/32"	24¢
12 L 521	.25	2x²1/32"	24¢
12 L 522	.5	¾x2 1/4"	35¢
12 L 523	1.0	1x2 1/4"	53¢

600 VOLTS

Stock No.	Mfd	Size	NET EA.
12 L 524	.00025	1⅛x1 1/32"	15c
12 L 525	.0004	1⅛x1 1/32"	
12 L 526	.0005	1⅛x1 1/32"	
12 L 527	.001	1⅛x1 1/32"	
12 L 528	.0015	1⅛x1 1/32"	
12 L 529	.002	1⅛x1 1/32"	15c
12 L 530	.0022	1⅛x1 1/32"	
12 L 531	.003	1⅛x1 1/32"	
12 L 532	.0033	1⅛x1 1/32"	
12 L 533	.004	1⅛x1 1/32"	
12 L 534	.0047	1⅛x1 1/32"	15c
12 L 535	.005	1⅛x1 1/32"	
12 L 536	.006	1⅛x1 1/32"	
12 L 537	.0068	1⅛x1 3/32"	
12 L 538	.007	1⅛x1 3/32"	
12 L 539	.0075	1⅜x1 3/32"	18c
12 L 540	.01	1⅜x1 3/32"	
12 L 541	.015	1⅜x1 3/32"	
12 L 542	.02	1⅜x1 7/32"	
12 L 543	.022	1⅜x1 3/32"	
12 L 544	.025	1⅜x1 5/32"	21c
12 L 545	.03	1⅜x1 5/32"	
12 L 546	.033	1⅜x1 5/32"	
12 L 547	.04	1⅜x1 5/32"	
12 L 548	.047	1⅜x1 7/32"	21¢
12 L 549	.05	1⅜x1 7/32"	24¢
12 L 550	.06	2x²1/32"	24¢
12 L 551	.068	2x²1/32"	24¢

600 VOLTS (Cont'd.)

Stock No.	Mfd.	Size	NET EA.
12 L 552	.075	2x²1/32"	26¢
12 L 553	.1	2x²1/32"	26¢
12 L 554	.15	2x²1/32"	29¢
12 L 555	.22	¾x2 1/4"	32¢
12 L 556	.25	¾x2 1/4"	32¢
12 L 557	.5	1x2 1/2"	47¢

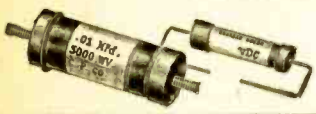
1000 VOLTS

Stock No.	Mfd.	Size	NET EA.
12 L 558	.001	1⅛x1 1/32"	29c
12 L 559	.0015	1⅛x1 1/32"	
12 L 560	.002	1⅛x1 1/32"	
12 L 561	.0022	1⅛x1 1/32"	
12 L 562	.003	1⅜x1 3/32"	
12 L 563	.0033	1⅜x1 3/32"	29c
12 L 564	.004	1⅜x1 3/32"	
12 L 565	.0047	1⅜x1 3/32"	
12 L 566	.005	1⅜x1 3/32"	
12 L 567	.006	1⅜x1 3/32"	
12 L 568	.0068	1⅜x1 3/32"	29c
12 L 569	.0075	1⅜x1 3/32"	
12 L 570	.01	1⅜x1 5/32"	
12 L 571	.015	1⅜x1 5/32"	
12 L 572	.02	1⅝x1 7/32"	
12 L 573	.022	1⅝x1 7/32"	29¢
12 L 574	.025	1⅝x1 7/32"	29¢
12 L 575	.03	1⅝x1 7/32"	29¢
12 L 576	.033	1⅝x1 7/32"	35¢
12 L 577	.04	2x²1/32"	35¢
12 L 578	.047	2x²1/32"	35¢
12 L 579	.05	2x²1/32"	35¢
12 L 580	.068	2x²1/32"	41¢

1600 VOLTS

Stock No.	Mfd.	Size	NET EA.
12 L 581	.001	1⅜x1 3/32"	35c
12 L 582	.0015	1⅜x1 3/32"	
12 L 583	.002	1⅜x1 3/32"	
12 L 584	.0022	1⅜x1 3/32"	
12 L 585	.003	1⅜x1 3/32"	
12 L 586	.0033	1⅜x1 3/32"	35¢
12 L 587	.004	1⅜x1 3/32"	
12 L 588	.0047	1⅜x1 5/32"	
12 L 589	.005	1⅜x1 5/32"	
12 L 590	.006	1⅜x1 5/32"	35¢
12 L 591	.0068	1⅜x1 5/32"	38¢
12 L 592	.007	1⅝x1 7/32"	38¢
12 L 593	.0075	1⅝x1 7/32"	38¢
12 L 594	.008	1⅝x1 7/32"	38c
12 L 595	.01	1⅝x1 7/32"	
12 L 596	.015	1⅝x1 7/32"	
12 L 597	.02	2x²1/32"	
12 L 598	.022	2x²1/32"	38¢
12 L 599	.025	2x²1/32"	38¢
12 L 672	.03	2x²1/32"	38¢
12 L 673	.033	2x²1/32"	41¢

CONDENSER PRODUCTS



ASG SILICONE-FILLED GLASSMIKES

Silicone impregnated and filled capacitors. For precision applications. Glass tube case. Metal ferrules soldered to silver end bands. Tolerance, ±10%. Temperature range, to 85°C. 8-32 screw terminals. *Tinned copper leads. 150% test voltage rating. Av. shpg. wt., 6 oz.

No.	Type	Mfd	W.V.	Size	NET
10 L 900	502-1M*	.005	1000	1 3/16x1 9/32"	.88
10 L 901	103-1M*	.01	1000	1 3/16x1 9/32"	.94
10 L 902	203-1M*	.02	1000	1 3/16x1 9/32"	1.00
10 L 903	503-1M	.05	1000	1¾x¾"	1.09
10 L 904	104-1M	.1	1000	2¼x¾"	1.26
10 L 905	254-1M	.25	1000	2½x2 9/32"	1.47
10 L 906	202-2M*	.002	2000	1 3/16x1 9/32"	1.12
10 L 907	502-2M*	.005	2000	1 3/16x1 9/32"	1.21
10 L 908	103-2M*	.01	2000	1 3/16x1 9/32"	1.32
10 L 909	203-2M*	.02	2000	1 9/16x1 9/32"	1.47
10 L 910	503-2M	.05	2000	1¾x¾"	1.65
10 L 911	104-2M	.1	2000	2¼x¾"	1.88
10 L 912	254-2M	.25	2000	2½x2 9/32"	2.18
10 L 913	102-3M*	.001	3000	1 3/16x1 9/32"	3.03
10 L 914	202-3M*	.002	3000	1 3/16x1 9/32"	3.09
10 L 915	502-3M*	.005	3000	1 3/16x1 9/32"	3.18
10 L 916	103-3M*	.01	3000	1 9/16x1 9/32"	3.29
10 L 917	203-3M	.02	3000	1¾x¾"	3.44
10 L 918	503-3M	.05	3000	2¼x2 9/32"	3.62
10 L 919	104-3M	.1	3000	2¼x1⅛"	3.82
10 L 920	102-5M*	.001	5000	1 3/16x1 9/32"	3.82
10 L 921	103-5M	.01	5000	1¾x¾"	4.26
10 L 922	203-5M	.02	5000	2¼x¾"	4.50
10 L 923	503-5M	.05	5000	2¼x2 9/32"	4.79
10 L 924	104-5M	.1	5000	3½x1⅛"	5.35
10 L 925	102-8M*	.001	8000	1 9/16x1 9/32"	4.12
10 L 926	202-8M*	.002	8000	1 9/16x1 9/32"	4.26
10 L 927	502-8M	.005	8000	1¼x¾"	4.44
10 L 928	103-8M	.01	8000	2¼x¾"	4.79
10 L 929	203-8M	.02	8000	2¼x2 9/32"	5.44
10 L 930	503-8M	.05	8000	2½x1⅛"	6.76
10 L 931	104-8M	.1	8000	3½x1⅛"	8.47
10 L 932	204-8M	.2	8000	7x1½"	11.52
10 L 933	501-10M*	.0005	10,000	1½x1 9/32"	4.29
10 L 934	102-10M*	.001	10,000	1½x1 9/32"	4.41
10 L 935	202-10M*	.002	10,000	1½x1 9/32"	4.59
10 L 936	502-10M	.005	10,000	1¾x1 3/16"	5.29
10 L 937	103-10M	.01	10,000	3½x2 9/32"	6.17
10 L 938	203-10M	.02	10,000	2¼x1⅛"	7.35
10 L 939	303-10M	.03	10,000	2¼x1⅛"	8.82
10 L 940	501-20M*	.0005	20,000	2¼x1 9/32"	11.47
10 L 941	102-20M	.001	20,000	3½x¾"	12.05
10 L 942	202-20M	.002	20,000	3½x1 3/16"	12.94
10 L 943	502-20M	.005	20,000	3½x1⅛"	14.11

SPRAGUE CAPACITORS

HYPASS 3-TERMINAL NETWORK CAPACITORS

Feed-through type VHF bypass capacitors. Perform efficiently up to 150 mc. Reduce vibrator hash and harmonic radiation. Type 48P18 is for reduction of voltage regulator noise in mobile applications; leads rated at 40 amps. Type 80P3 leads rated at 20 amps. 48P18 and 80P3 have screw terminals. Wt., 2 oz.

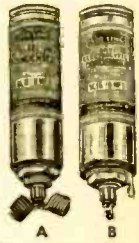
No.	Type	Mfd	DC WV	Size	NET
15 L 688	48P18	.5	50	1x1 1/16"	2.23
15 L 682	46P6	.001	600	¼x1⅜"	1.26
15 L 683	46P12	.002	600	¼x1⅜"	1.26
15 L 691	46P8	.005	600	¼x1⅜"	1.26
15 L 692	47P6	.01	600	7/16x1¼"	1.38
15 L 684	47P8	.02	600	7/16x1½"	1.41
15 L 685	48P8	.1	600	11/16x1 13/16"	1.53
15 L 689	80P3	.1	600	11/16x1 13/16"	1.73
15 L 686	48P12	.25	600	1x1 13/16"	1.62
15 L 687	48P16	.5	600	1x2¼"	2.06
15 L 693	47P12	.005	1000	7/16x1¼"	1.41
15 L 694	47P13	.01	1000	7/16x1½"	1.53
15 L 695	47P14	.005	2500	1x1 5/16"	1.71
15 L 696	47P15	.01	2500	1x1 5/16"	1.82
15 L 697	47P16	.002	5000	1x1 5/16"	1.88

CAN-TYPE DRY ELECTROLYTICS

FIG. A—PLS TINY MIKE

525 Volts Surge

450 Volts Wkg.



Aluminum can-type dry electrolytic condensers. For replacement and original equipment filter use. Etched-foil construction. Common negative leads. Inverted screw-can mounting. Will replace large, old-style or standard-size units. With mounting hardware. Average shpg. wt., 6 oz.

No.	Type	Mfd	Size	NET
15 L 700	PLS-4	4	1⅜x2 7/16"	1.18
15 L 701	PLS-8	8	1⅜x2 7/16"	1.29
15 L 702	PLS-12	12	1⅜x2 7/16"	1.41
15 L 703	PLS-16	16	1⅜x2 7/16"	1.44
15 L 709	PLS-20	20	1⅜x2 7/16"	1.59
15 L 710	PLS-25	25	1⅜x3 7/16"	1.71
15 L 711	PLS-30	30	1⅜x3 7/16"	1.76
15 L 712	PLS-40	40	1⅜x3 13/16"	1.85
15 L 704	PLS-48	4–8	1⅜x2 13/16"	1.73
15 L 705	PLS-88	8–8	1½x2 15/16"	1.76
15 L 706	PLS-888	8–8–8	1½x2 15/16"	2.94
15 L 707	PLS-816	8–16	1½x2 15/16"	1.94
15 L 708	PLS-216	16–16	1½x3 15/16"	2.09

FIG. B—LS INVERTED SCREW CAN

525 Volts Surge—450 Volts Wkg.

Negative can. Av. shpg. wt., 6 oz.

No.	Type	Mfd	Size	NET
15 L 020	LS-8	8	1⅜x2 15/16"	1.29
15 L 021	LS-12	12	1⅜x2 15/16"	1.41
15 L 022	LS-16	16	1⅜x2 15/16"	1.44
15 L 025	LS-20	20	1⅜x2 15/16"	1.59
15 L 026	LS-25	25	1⅜x3 7/16"	1.71
15 L 027	LS-30	30	1⅜x3 7/16"	1.76
15 L 028	LS-40	40	1⅜x3 13/16"	1.85
15 L 023	LS-88	8–8	1⅜x2¼"	1.76

FIG. B—SC INVERTED SCREW CAN

600 Volts Surge—475 Volts Wkg.

Threaded bushing mount. Negative can. Insulating washer. Av. shpg. wt., 6 oz.

15 L 320	SC-4	4	1x3 7/16"	1.50
15 L 321	SC-8	8	1⅜x4 7/16"	1.62
15 L 323	SC-12	12	1⅜x4 7/16"	1.73
15 L 324	SC-16	16	1½x4 7/16"	1.85
15 L 325	SC-88	8–8	1⅜x4¼"	2.41

FIG. A—CL INVERTED SCREW CAN

600 Volts Surge—475 Volts Wkg.

Like "SC" but can insulated from filter section. Separate pos. and neg. leads. Wt., 8 oz.

15 L 720	CL-8	8	1⅜x4 7/16"	1.62
15 L 721	CL-16	16	1½x4 7/16"	1.85
15 L 722	CL-88	8–8	1½x4 13/16"	2.41

FIG. B—WR REPLACEMENTS FOR WET ELECTROLYTICS

600 Volts Surge—500 Volts Wkg.

High-voltage dry electrolytics. Specifically designed to replace wet types. Withstand high peak voltages. Lug terminals; can is negative. With insulating washers. Inverted screw can mountings. Av. shpg. wt., 8 oz.

No.	Type	Mfd	Size	NET
15 L 040	WR-8	8	1⅜x3 15/16"	1.68
15 L 041	WR-16	16	1⅜x4 7/16"	1.94
15 L 042	WR-25	25	1½x5 7/16"	2.21

FP AND WP ELECTROLYTIC CAPACITORS

For use in filter circuits, audio by-pass circuits and TV applications. Capacitors feature complete stability under heavy ripple current, high surge voltages and high temperatures. Units are encased in compact, rubber-sealed aluminum cases. FP types have the exclusive Mallory Fabricated Plates—anodes specially constructed of metalized cotton gauze. WP types have etched-plate anodes. Special internal design lowers RF impedance and permits a minimum of coupling between plates. Up to 150 WVDC, capacity tolerance is −10% to +100%. Above 150 WVDC, tolerance is −10% to +50%. Can is negative except *. Insulating washer supplied. For mounting hardware, see page 121. Average shpg. wt., 6 oz.

SINGLE SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. Volts	Size	NET EACH
18 L 471	FP171	10	500	1x2"	.94
18 L 472	FP173	20	500	1x2"	1.09
18 L 473	FP175	30	500	1x2½"	1.18
18 L 474	FP177	40	500	1x3"	1.47
18 L 475	FP187	90	500	1⅜x3"	2.06
17 L 360	FP142	10	450	¾x2"	.91
17 L 364	FP143	15	450	1x2"	1.00
17 L 361	FP144	20	450	1x2"	1.06
17 L 367	FP145	30	450	1x2½"	1.15
17 L 362	FP146	40	450	1x2½"	1.21
18 L 469	FP148	60	450	1⅜x2½"	1.65
17 L 368	FP149	80	450	1⅜x2½"	1.79
18 L 470	FP150	100	450	1⅜x3"	2.03
17 L 370	FP137	50	350	1x2½"	1.23
18 L 468	FP137.2	60	350	1x3"	1.29
17 L 759	FP138	80	350	1⅜x2½"	1.68
17 L 371	FP140	125	350	1⅜x3"	2.32
18 L 465	FP128	80	300	1x3"	1.50
18 L 466	FP129.1	100	300	1x3"	1.71
18 L 467	FP131	150	300	1⅜x3"	2.06
17 L 372	FP115	50	150	1x2"	.97
17 L 373	FP116	100	150	1x2½"	1.18
18 L 463	FP116.5	120	150	1x3"	1.21
17 L 799	FP117	150	150	1x3"	1.26
18 L 464	FP118	200	150	1⅜x2½"	1.44
17 L 836	FP119	300	150	1⅜x3"	1.65
17 L 835	WP063	4	50	¾x2"	.73
17 L 350	WP065	500	50	1⅜x2"	1.56
17 L 258	WP068	1500	50	1⅜x4"	2.26
17 L 257	WP052	40	25	¾x2"	.79
18 L 350	WP057	500	25	1x2½"	1.50
17 L 352	WP059	1000	25	1¾x2"	2.09
17 L 353	WP039	1000	15	1x2½"	1.50
17 L 354	WP041	2000	15	1⅜x2½"	2.03
17 L 256	WP042	3000	15	1⅜x3"	2.06

DUAL SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. Volts	Size	NET EACH
18 L 458	FP284	30-30	500	1⅜x2½"	1.91
17 L 286	FP288	40-40	500	1⅜x3"	2.53
17 L 284	FP277	60-80	500-150	1⅜x3"	2.20
17 L 842	FP258	15-15	475	1x2½"	1.38
18 L 455	FP259	30-10	475	1x3"	1.53
17 L 843	FP262	40-40	475	1⅜x3"	2.53
18 L 352	FP255	20-100	475-300	1⅜x3"	2.32
17 L 282	FP260	40-10	475	1⅜x3"	1.82
18 L 456	FP263	60-40	475	1⅜x4"	2.68
18 L 457	FP264.5	80-40	475	1⅜x4"	2.97
17 L 283	FP266	80-50	475	1⅜x4"	3.06
17 L 375	FP231	10-10	450	1x2"	1.12
18 L 476	FP230.6	10-100	450-350	1⅜x3"	2.35
18 L 477	FP231.3	20-10	450	1x2½"	1.29
17 L 376	FP234	20-20	450	1x3"	1.50
17 L 765	FP237	30-30	450	1⅜x2½"	1.79
17 L 430	FP238	40-40	450	1⅜x3"	2.03
17 L 383	FP239	50-40	450	1⅜x3"	2.15
17 L 766	FP240*	50-50	450	1⅜x3"	2.26
18 L 478	FP242.5	60-60	450	1½x4"	2.65
17 L 431	FP245	80-10	450	1⅜x3"	2.12
18 L 454	FP245.2	80-20	450	1⅜x3"	2.29
17 L 281	FP245.3	80-30	450	1⅜x4"	2.45
17 L 838	FP230	20-50	450-250	1x3"	1.65
18 L 356	FP244	80-50	450-50	1⅜x3"	2.06
17 L 883	FP229	35-100	400-50	1x3"	1.53
18 L 453	FP229.5	120-40	400	1⅜x4"	3.09
17 L 432	FP225	15-15	350	1x2"	1.32
17 L 630	FP227	20-20	350	1x2½"	1.35
17 L 265	FP227.3	30-30	350	1x3"	1.71
18 L 354	FP218	120-20	300	1⅜x3"	2.35
18 L 355	FP217.9	75-75	300	1⅜x3"	2.23
17 L 377	FP217	20-20	250	1x2"	1.12
17 L 837	FP221	40-40	250	1x3"	1.47
18 L 353	FP217.7	150-150	250	1⅜x4"	3.03
17 L 760	FP208	20-20	150	1x2"	1.00
17 L 379	FP211	30-30	150	1x2"	1.09
17 L 761	FP210	40-20	150	1x2"	1.06
17 L 762	FP212	40-40	150	1x2½"	1.12
17 L 763	FP213	50-30	150	1x2"	1.18
17 L 380	FP214	50-50	150	1x2½"	1.26
17 L 764	FP216	80-40	150	1x3"	1.35
17 L 395	FP215	125-100	150	1⅜x2½"	2.00
17 L 261	FP214.5	75-75	150	1⅜x2"	1.53
17 L 995	FP216.1	200-5	150	1⅜x2½"	1.59
17 L 263	FP216.4	200-200	150	1⅜x4"	2.37
17 L 260	WP206	50-150	150-25	1x2½"	1.29
18 L 451	WP202.1	50-50	50	1x2"	1.00
18 L 452	WP202.5	100-100	50	1x2"	1.23
18 L 450	WP201.1	40-40	25	1x2"	.91
17 L 433	WP200	1000-1000	15	1⅜x2½"	2.59
17 L 356	WP204	250-1000	10-6	1⅜x2"	1.68

TRIPLE SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. Volts	Size	NET EACH
17 L 713	FP398	10-40-40	500-450-450	1⅜x3"	2.44
17 L 864	FP394	10-10-10	475	1x3"	1.59
17 L 865	FP396	30-30-20	475	1⅜x3"	2.62

TRIPLE SECTION (cont'd)

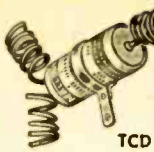
Stock No.	Mfr's Type	Mfd	DC Wkg. Volts	Size	NET EACH
17 L 698	FP396.2	40-10-10	475	1⅜x2½"	2.26
17 L 699	FP397	40-35-10	475	1⅜x3"	2.68
17 L 697	FP391.1	20-20-60	475-475-450	1⅜x4"	2.85
17 L 696	FP387.1	10-10-150	475-475-50	1x3"	1.76
18 L 361	FP386	10-10-5	475-475-25	1x2½"	1.44
17 L 695	FP385	10-40-100	475-450-200	1⅜x3"	2.47
17 L 857	FP377	40-40-40	450	1⅜x4"	2.88
17 L 858	FP378	80-40-20	450	1⅜x4"	3.18
17 L 665	FP375.8	10-10-10	450	1x2½"	1.53
17 L 666	FP376.1	15-15-10	450	1x3"	1.73
17 L 667	FP376.3	20-10-10	450	1x3"	1.71
17 L 668	FP376.5	20-20-20	450	1⅜x2½"	2.12
17 L 669	FP376.8	40-40-10	450	1⅜x3"	2.44
17 L 664	FP370	40-10-80	450-450-200	1⅜x3"	2.29
17 L 855	FP375	40-40-100	450-450-200	1⅜x4"	2.91
17 L 663	FP369.1	40-40-40	450-450-150	1⅜x3"	2.44
17 L 853	FP366	20-10-50	450-450-50	1x3"	1.68
17 L 597	FP345.2	10-10-20	450-450-25	1x2"	1.41
17 L 598	FP345.5	15-15-40	450-450-25	1x2½"	1.62
17 L 599	FP345.8	20-20-20	450-450-25	1x3"	1.79
17 L 444	FP346	40-40-20	450-450-25	1⅜x3"	2.32
17 L 593	FP343.4	20-15-15	450-350-350	1x3"	1.91
17 L 594	FP343.6	20-40-10	450-350-350	1⅜x2½"	2.06
18 L 360	FP341	40-90-50	450-150-150	1⅜x3"	2.35
17 L 428	FP330.5	10-10-10	350	1x2"	1.41
17 L 429	FP330.7	30-20-10	350	1x3"	1.91
17 L 434	FP331.3	80-60-60	350	1⅜x4"	3.26
17 L 427	FP330.3	20-10-5	350-350-250	1x2"	1.50
17 L 386	FP328	15-10-20	350-350-25	1x2"	1.47
17 L 442	FP330	30-20-20	350-350-25	1x3"	1.82
17 L 346	FP331	30-30-20	350-300-25	1x3"	1.85
17 L 846	FP335	100-60-20	300-250-250	1⅜x3"	2.88
17 L 425	FP320	40-20-20	250	1⅜x2"	1.71
17 L 358	FP319	80-40-50	250-150-50	1⅜x2½"	1.94
17 L 289	FP311.2	20-20-20	150	1x2"	1.35
17 L 337	FP311.4	40-20-20	150	1x2½"	1.41
17 L 338	FP311.5	40-40-40	150	1x3"	1.53
17 L 339	FP311.7	80-40-20	150	1⅜x2"	1.71
17 L 340	FP311.9	120-120-40	150	1⅜x3"	2.38
17 L 387	FP306	40-20-20	150-150-25	1x2"	1.35
17 L 767	FP307	40-20-100	150-150-25	1x2½"	1.47
17 L 437	FP304	40-20-200	150-150-25	1x2½"	1.59
17 L 768	FP310	40-40-20	150-150-25	1x2½"	1.41
17 L 438	FP309	50-30-100	150-150-25	1x2½"	1.59
17 L 344	FP311	50-50-20	150-150-25	1x3"	1.56
17 L 844	FP314	40-40-200	150-150-25	1x3"	1.65
17 L 288	FP302.7	80-30-300	150-150-10	1⅜x2"	1.85
17 L 287	WP302.1	15-15-1200	150-150-2	1x2"	1.76
17 L 357	WP520	40-40-40	25	1x2"	1.26

QUADRUPLE SECTION

Stock No.	Mfr's Type	Mfd	DC Wkg. Volts	Size	NET EACH
18 L 462	FP495	40-40-8-8	500	1⅜x4"	3.35
18 L 459	FP474.5	20-20-10-10	475	1⅜x2½"	2.56
18 L 460	FP475	20-20-20-20	475	1⅜x3"	3.06
18 L 461	FP475.5	40-10-10-10	475	1⅜x3"	2.73
17 L 880	FP474	10-10-10-10	475	1⅜x2"	2.06
17 L 994	FP476	40-20-10-10	475	1⅜x3"	3.00
18 L 370	FP456.5	10-60-30-125	475-450-400-50	1⅜x4"	3.26
18 L 369	FP456	25-20-40-100	475-450-300-50	1⅜x3"	2.91
17 L 876	FP461	15-15-80-40	475-475-300-50	1⅜x3"	2.82
17 L 992	FP455	10-50-30-30	475-450-450-25	1⅜x3"	2.79
17 L 422	FP434	10-10-10-10	450	1⅜x2"	1.97
17 L 423	FP444	20-20-20-20	450	1⅜x3"	2.76
17 L 893	WP433.6	5-5-5-5	450	1⅜x2"	1.76
17 L 894	FP434.5	20-10-10-10	450	1⅜x2"	2.18
17 L 895	FP444.4	30-15-15-15	450	1⅜x3"	2.62
17 L 896	FP444.8	30-30-20-20	450	1⅜x3"	3.06
17 L 897	FP444.9	30-30-30-15	450	1⅜x4"	3.12
17 L 898	FP445	35-35-10-5	450	1⅜x3"	2.70
17 L 899	FP447	40-40-20-20	450	1⅜x4"	3.26
17 L 891	FP432.4	40-40-30-10	450-450-450-200	1⅜x4"	3.15
17 L 873	FP437	20-20-20-100	450-450-450-50	1⅜x2½"	2.68
17 L 890	FP431.4	60-40-10-25	450-450-450-50	1⅜x4"	3.09
17 L 421	FP424	15-15-10-20	450-450-450-25	1⅜x2"	2.06
17 L 830	FP431	40-10-15-25	450-450-450-25	1⅜x2½"	2.41
17 L 887	FP430.2	40-20-20-25	450-450-450-25	1⅜x3"	2.70
17 L 872	FP436	40-20-20-40	450-450-450-25	1⅜x3"	2.73
17 L 449	FP429	40-30-10-20	450-450-450-25	1⅜x3"	2.65
17 L 888	FP430.6	40-40-40-40	450-450-450-25	1⅜x4"	3.23
17 L 448	FP426	20-15-20-20	450-450-25-25	1⅜x2"	2.03
17 L 886	FP428.4	40-40-30-30	450-450-350-350	1⅜x4"	3.47
18 L 367	FP423.4	10-40-100-100	450-350-250-50	1⅜x3"	3.26
17 L 834	FP413 X	40-40-40-20	450-300-300-150	1⅜x3"	2.88
17 L 885	FP427.5	10-10-60-100	450-450-200-50	1⅜x2½"	2.26
17 L 819	FP426.9	40-40-125-125	450-450-150-25	1⅜x4"	3.35
18 L 365	FP419.3	40-40-20-20	350-350-350-25	1⅜x3"	2.73
17 L 868	FP419	200-20-100-20	300-250-50-25	1⅜x4"	3.41
17 L 746	FP412.2	40-40-50-80	250-250-150-50	1⅜x2½"	2.41
17 L 730	FP412	100-80-60-40	150	1⅜x3"	2.73
17 L 447	FP409	40-40-30-20	150-150-150-25	1⅜x2"	1.82
17 L 716	FP409.4	50-20-20-200	150-150-150-25	1⅜x2"	2.06
18 L 362	FP410	50-50-50-20	150-150-150-25	1⅜x2½"	2.09
17 L 717	FP411	80-40-30-100	150-150-150-25	1⅜x2½"	2.18
17 L 718	FP411.3	80-40-40-20	150-150-150-25	1⅜x2½"	2.06
17 L 729	FP411.7	125-125-40-100	150-150-150-25	1⅜x4"	2.85
17 L 715	FP408	60-40-20-200	150-150-150-10	1⅜x2"	2.03
17 L 714	FP405	20-20-160-40	150-150-25-25	1⅜x2"	1.88

Mallory Capacitors


TC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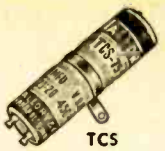
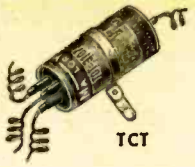

TCS


TCT

METAL-CASED ELECTROLYTICS

Metal-cased electrolytics. All units have external insulating sleeves. Type TC has 3" tinned copper leads; TCD, 8" insulated wire leads. TCS, soldering lugs. Shpg. wt., 4 oz.

TYPE TC SINGLE CAPACITORS

No.	Type	Mfd	W.V.	Size	EA.
17 L 450	92	10	600	1 1/16x2 15/16"	1.73
17 L 245	81	10	500	13/16x1 3/4"	.79
17 L 451	82	10	500	1 1/16x2 15/16"	1.59
17 L 246	83	20	500	1 1/16x1 3/4"	.94
17 L 247	84	30	500	1 1/16x2 1/4"	1.03
17 L 452	70	5	450	1 1/16x1 3/4"	.71
17 L 619	71	8	450	1 3/16x1 3/4"	.73
17 L 620	72	10	450	1 3/16x1 3/4"	.76
17 L 638	73	12	450	15/16x1 3/4"	.79
17 L 622	74	16	450	1 3/16x1 3/4"	.82
17 L 453	75	20	450	1 1/16x1 3/4"	.91
17 L 454	77	30	450	1 1/16x2 1/4"	1.00
17 L 508	78	40	450	1 1/16x2 1/4"	1.06
17 L 634	60	5	350	1 1/16x1 3/4"	.62
17 L 635	61	8	350	1 3/16x1 3/4"	.71
17 L 455	62	10	350	1 3/16x1 3/4"	.73
18 L 341	63	12	350	1 3/16x1 3/4"	.76
17 L 637	64	16	350	15/16x1 3/4"	.82
17 L 456	65	20	350	15/16x1 3/4"	.85
17 L 244	68	60	350	1 1/16x2 1/4"	1.15
17 L 626	50X	5	250	1 1/16x1 1/4"	.62
17 L 627	51	8	250	1 1/16x1 3/4"	.68
17 L 457	52	10	250	1 1/16x1 3/4"	.71
18 L 340	53	12	250	1 3/16x1 3/4"	.73
17 L 629	54	16	250	1 3/16x1 3/4"	.76
17 L 505	55	20	250	1 3/16x1 3/4"	.79
17 L 633	58	40	250	1 1/16x1 3/4"	.91
17 L 243	59	50	250	1 1/16x1 3/4"	1.00
17 L 249	1265	100	550	1x3"	1.44
17 L 458	40	5	150	3/8x1 3/16"	.59
17 L 624	41	8	150	3/8x1 13/16"	.62
17 L 459	42	10	150	3/8x1 13/16"	.62
17 L 625	43	12	150	3/8x1 13/16"	.65
17 L 608	44	16	150	1 1/16x1 1/2"	.68
17 L 502	45	20	150	13/16x1 1/2"	.71
17 L 610	47	30	150	1 3/16x1 1/2"	.76
17 L 611	48	40	150	15/16x1 3/4"	.79
17 L 504	49	50	150	15/16x1 3/4"	.82
17 L 640	492	80	150	15/16x2"	.94
17 L 242	495	150	150	1 1/16x2 1/4"	1.12
17 L 639	302	2	50	7/16x1 3/16"	.53
17 L 623	30	5	50	9/16x1 1/2"	.59
17 L 603	32	10	50	9/16x1 9/16"	.59
17 L 604	36	25	50	1 1/16x1 1/4"	.62
17 L 605	39	50	50	1 3/16x1 1/4"	.71
17 L 641	3501	100	50	1 1/16x1 3/4"	.82
18 L 342	50025	250	50	1 5/16x1 1/4"	1.03
17 L 600	22	10	25	7/16x1 3/16"	.59
17 L 601	26	25	25	3/8x1 3/16"	.59
17 L 602	29	50	25	9/16x1 1/2"	.65
17 L 500	2501	100	25	1 1/16x1 3/4"	.79

TYPE TC SINGLE CAPACITORS

No.	Type	Mfd.	W.V.	Size	EA.
17 L 466	2505	500	25	1 1/16x2 1/4"	1.35
17 L 460	1505	500	15	15/16x2"	1.03
17 L 642	1502	200	15	13/16x1 1/2"	.82
17 L 461	605	500	6	1 3/16x1 3/4"	.91
17 L 462	610	1000	6	15/16x2"	1.12
17 L 463	310	1000	3	1 5/16x1 3/4"	1.00

TCD COMMON-NEGATIVE DUALS

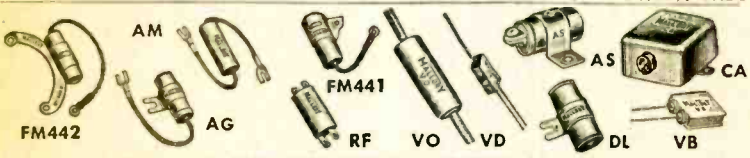
17 L 470	71	8-8	450	15/16x2"	1.00
17 L 507	72	10-10	450	1 1/16x2"	1.09
17 L 471	74	15-15	450	1 1/16x3 1/8"	1.29
17 L 472	75	20-20	450	1 1/16x3 1/8"	1.47
17 L 468	78	40-40	450	1 1/16x4"	2.02
17 L 473	62	10-10	350	15/16x2"	1.00
17 L 474	65	20-20	350	1 1/16x3 1/8"	1.32
17 L 475	52	10-10	250	15/16x2"	.97
17 L 476	55	20-20	250	1 1/16x2"	1.09
17 L 503	45	20-20	150	1 3/16x1 3/4"	.97
17 L 477	47	30-30	150	1 3/16x1 3/4"	1.06
17 L 480	485	40-20	150	1 3/16x1 3/4"	1.03
17 L 478	48	40-40	150	1 1/16x2"	1.09
17 L 482	497	50-30	150	15/16x2"	1.15
17 L 481	49	50-50	150	1 1/16x2 1/4"	1.23
18 L 344	498	80-50	150	1 1/16x2 1/4"	1.38
17 L 479	26	25-25	25	1 3/16x1 3/4"	.82

TCS SEPARATE-SECTION DUALS

17 L 485	71	8-8	450	1 1/16x2 3/8"	1.26
17 L 486	74	15-15	450	1 1/16x2 7/8"	1.62
17 L 487	75	20-20	450	1 1/16x3 1/2"	1.85
17 L 490	52	10-10	250	15/16x2 1/8"	1.23
17 L 491	55	20-20	250	1 1/16x2 7/8"	1.38
18 L 335	44	15-15	150	1 3/16x2 1/8"	1.18
17 L 493	45	20-20	150	1 1/16x2 1/8"	1.23
18 L 336	47	30-30	150	1 1/16x2 3/8"	1.32
17 L 495	48	40-40	150	1 1/16x2 7/8"	1.38

TCT TRIPLE COMMON NEGATIVE

18 L 377	3094	50-30	150	1 1/16x2 7/8"	1.62
		200	25		
18 L 372	3112	20-20	150		
		20	150	1 1/16x1 3/4"	1.26
18 L 373	3113	30-30	150		
		30	150	1 1/16x2 1/4"	1.38
18 L 374	3114	40-20	150		
		20	150	1 1/16x2 1/4"	1.32
18 L 375	3115	40-40	150		
		40	150	1 1/16x2 7/8"	1.44
18 L 376	3116	40-40	150		
		20	150	1 1/16x2 1/4"	1.38
18 L 371	3107	50-30	150		
		20	25	1 1/16x2 1/4"	1.38



AUTO RADIO NOISE SUPPRESSOR & BUFFER CAPACITORS

For suppressing radio interference caused by auto generators, aircraft, marine equipment, etc. All are wax impregnated cartridges except VO which is oil impregnated. Various style housings as illustrated. Buffer capacitors are extremely compact, with long leads for easy installation. *AG* and *AS*, for generator, ammeter spark suppression; *AM*, for ammeter and gauges; *FM*, for Ford generators; *DL*, dome light suppressor; *RF*, vibrator hash and general noise suppression (very low RF impedance); *CA*, bathtub type for general noise suppression in marine and aircraft units; *VB*, *VD* and *VO*, vibrator buffer capacitors. All are rated at DC working volts except §500 volts AC-DC. ‡Has shielded leads. **Dual section buffer (.0008-.0008 mfd. 1600 v.) for use in Motorola sets. †Metal case; cartridge and leads are insulated from case. *Midget aircraft motors. Av. shpg. wt., 3 oz.

No.	Type	Mfd	W.V.	Size	NET
17 L 720	AG442*	0.05	100	3/4x1 1/4"	.47
17 L 670	AG443	0.05	100	7/16x1 3/16"	.59
17 L 671	AG444	0.25	200	5/8x1 3/4"	.35
17 L 672	AG450	.5-.5	100	7/8x2"	.88
17 L 673	AG451	0.5	200	1/4x2"	.38
17 L 674	AG452	1.0	200	1x2 3/16"	.53
17 L 675	AG453‡	0.5	200	3/4x2"	.88
17 L 721	AS125	0.01	100	1 1/16x1 5/16"	.71
17 L 722	AS145	0.1	100	1 1/16x1 3/8"	.82
17 L 723	AS165	0.25	100	1/4x1 1/2"	.88
17 L 724	AS185	0.5	100	1x1 5/8"	1.03
17 L 725	AS525	0.01	500§	1 1/16x1"	.79
17 L 726	AS545	0.1	500§	1x2 1/2"	.94

No.	Type	Mfd	W.V.	Size	NET
17 L 727	AS565	0.25	500§	1x2 1/2"	1.18
17 L 676	AM454	0.5	200	1 1/16x2"	.38
17 L 678	FM442	0.5	160	1 1/16x1 7/8"	.38
17 L 677	FM441	0.5	100	1 1/16x1 7/8"	.50
17 L 679	DL445X	0.4	200	1x2 3/8"	1.32
17 L 680	RF480	0.5	100	1 3/16x1 3/16"	.47
17 L 681	RF481	0.5	50	3/4x1 1/8"	.53
17 L 682	RF482	1.0	50	7/8x1 5/8"	.68
17 L 728	CA275X	4.0	50	2x2x1"	1.76
17 L 659	VB470†	.0075	1600	9/16x3/8x7/8"	65c
17 L 660	VB471†	.01	1600	9/16x5/8x7/8"	68c
17 L 099	VD491	**	1600	9/16x5/8x1 1/16"	38c
17 L 661	VO480	.5	120	9/16x1/4x2 1/8"	38c

PLASCAP TRI-SEALED TUBULARS

For use in RF bypass and coupling circuits. Triple-sealed—with moisture-free Mallocene. Exceed RETMA requirements on humidity and immersion tests. Feature stable capacity, low power factor, and high insulation resistance. Will operate continuously at 85° C. "Fastite" tinned copper leads are permanently fastened and sealed with Mallocene, which is impervious to soldering iron heat. Av. shpg. wt., 2 oz.

400 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
17 L 901	PT411	.01	3/8x1"	15c
17 L 902	PT412	.02	3/8x1 1/4"	
17 L 906	PT4122	.022	3/8x1 1/2"	18c
17 L 903	PT413	.03	7/16x1 1/2"	
17 L 907	PT4133	.033	7/16x1 1/2"	
17 L 908	PT4147	.047	1/2x1 1/2"	
17 L 904	PT415	.05	1/2x1 1/4"	
17 L 905	PT401	.1	1/2x1 1/2"	21c
18 L 320	PT4015	.15	5/8x1 7/8"	24c
18 L 321	PT402	.2	5/8x1 7/8"	26c
18 L 322	PT4022	.22	5/8x1 7/8"	26c
17 L 900	PT4025	.25	5/8x1 7/8"	26c
18 L 323	PT4047	.47	3/4x2 1/8"	35c
17 L 909	PT405	.5	3/4x2 1/8"	35c
17 L 910	PT41	1.0	1 3/16x2 1/16"	73c

600 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
17 L 915	PT621	.001	5/16x1"	15c
17 L 916	PT622	.002	5/16x1"	
17 L 928	PT6222	.0022	5/16x1"	
17 L 917	PT623	.003	5/16x1"	
17 L 929	PT6233	.0033	5/16x1"	
17 L 918	PT624	.004	3/8x1"	
17 L 930	PT6247	.0047	3/8x1"	
17 L 919	PT625	.005	3/8x1"	
17 L 920	PT626	.006	3/8x1"	
17 L 921	PT611	.01	3/8x1 1/4"	18c
17 L 937	PT6115	.015	3/8x1 1/4"	18c
17 L 922	PT612	.02	7/16x1 1/4"	18c
17 L 931	PT6122	.022	7/16x1 1/4"	18c
17 L 923	PT613	.03	1/2x1 1/4"	21c
17 L 932	PT6133	.033	1/2x1 1/4"	21c
17 L 924	PT614	.04	1/2x1 1/2"	21c
17 L 933	PT6147	.047	1/2x1 1/2"	24c
17 L 925	PT615	.05	1/2x1 1/2"	24c
17 L 926	PT616	.06	1/2x1 1/2"	24c
17 L 927	PT601	.1	5/8x1 7/8"	26c
18 L 330	PT602	.2	3/4x2 1/8"	41c
18 L 331	PT6022	.22	3/4x2 1/8"	41c
17 L 934	PT6025	.25	3/4x2 1/8"	32c
18 L 332	PT6047	.47	7/8x2 11/16"	47c
17 L 935	PT605	.5	1 3/16x2 11/16"	47c
17 L 936	PT61	1.0	1x3"	73c

1600 VOLTS DC WORKING

No.	Type	Mfd	Size	EACH
17 L 940	PT1621	.001	3/8x1"	32c
17 L 941	PT1622	.002	3/8x1 1/4"	
17 L 955	PT16222	.0022	3/8x1 1/4"	
17 L 942	PT1623	.003	3/8x1 1/4"	
17 L 956	PT16233	.0033	7/16x1 1/2"	
17 L 943	PT1624	.004	7/16x1 1/4"	
17 L 957	PT16247	.0047	7/16x1 1/4"	
17 L 944	PT1625	.005	7/16x1 1/4"	
17 L 945	PT1626	.006	1/2x1 1/4"	
17 L 946	PT1627	.007	1/2x1 1/4"	
17 L 947	PT16275	.0075	1/2x1 1/4"	
17 L 948	PT1628	.008	1/2x1 1/4"	35c
17 L 949	PT1611	.01	1/2x1 1/2"	
17 L 950	PT16115	.015	5/8x1 7/8"	
17 L 951	PT1612	.02	5/8x1 7/8"	
17 L 958	PT16122	.022	5/8x1 7/8"	
17 L 959	PT1613	.03	5/8x1 7/8"	
17 L 960	PT1614	.04	3/4x2 1/8"	41c
17 L 952	PT1615	.05	3/4x2 1/8"	41c
17 L 953	PTD-16115	.015-.015	5/8x1 7/8"	47c

TZ TRANSMITTING CAPACITORS

For filter and bypass circuits in power amplifiers, TV and transmitting equipment. Oil impregnated type in round containers for upright or inverted mounting. Internally insulated from case. 1 3/8" units have two solder lug terminals. 2" units have special standoff insulated terminals. Supplied with mounting brackets. Ample insulation exceeds RETMA voltage rating requirements. For circuits requiring compact capacitors of long life. Av. shpg. wt., 4 oz.

No.	Type	Mfd	W. V.	Size	EA.
18 L 380	TZ383	4.0	600	2x2"	3.65
18 L 381	TZ385	2.0	1000	1 3/8x4 1/8"	3.20
18 L 382	TZ386	.5	1500	1 1/8x3 1/8"	2.97
18 L 383	TZ389	4.0	1000	2x4"	4.26
18 L 384	TZ387	1.0	1500	2x2 3/8"	3.20

Mallory Capacitors

OT METAL-CASED TUBULARS

For vibrator buffer, coupling, and other high voltage circuits. In hermetically sealed aluminum containers, externally insulated. 2⅜" leads. With clip. Av. shpg. wt., 4 oz.

600 VOLT DC WORKING

Stock No.	Mfr's Type	Mfd	Size	NET
17 L 700	101	.01	⅝x1 3/16"	.56
17 L 701	103	.02	⅝x1 3/16"	.62
17 L 702	106	.05	11/16x1⅜"	.65
17 L 703	110	.1	11/16x1 11/16"	.73
17 L 704	113	.25	13/16x2⅛"	1.00
17 L 705	116	.5	1 1/16x2¼"	1.29

1000 VOLT DC WORKING

Stock No.	Mfr's Type	Mfd	Size	NET
17 L 706	301	.01	⅝x1 3/16"	65¢
17 L 707	303	.02	11/16x1⅜"	71¢
17 L 708	306	.05	11/16x2 3/16"	76¢
17 L 709	310	.1	13/16x2 7/16"	88¢

1600 VOLT DC WORKING

Stock No.	Mfr's Type	Mfd	Size	NET
17 L 035	370	.002	⅝x1⅜"	71¢
17 L 036	377	.003	⅝x1⅜"	71¢
17 L 037	371	.005	⅝x1⅜"	71¢
17 L 038	372	.008	⅝x1⅜"	71¢
17 L 039	373	.01	11/16x1⅜"	71¢
17 L 041	375	.015	11/16x1 11/16"	73¢
17 L 042	376	.02	11/16x1 11/16"	76¢
17 L 712	380	.05	1 1/16x2 7/16"	82¢

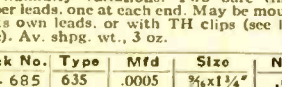
2000 VOLT DC WORKING

Stock No.	Mfr's Type	Mfd	Size	NET
17 L 043	459	.005	11/16x1 1/16"	73¢
18 L 316	475	.006	11/16x1 1/16"	73¢
17 L 044	460	.0075	11/16x1⅝"	73¢
17 L 045	461	.01	11/16x1⅝"	73¢
17 L 049	464	.02	11/16x2"	79¢
17 L 097	467	.05	13/16x2 9/16"	85¢

OW 6000 V OIL-IMPREGNATED TV TUBULAR PAPER CAPACITORS

Oil-impregnated; wax-sealed. Provide extra safety factor for high-voltage applications. For use in RF bypassing and other radio and electronic circuits requiring small capacitors. High dependability under severe temperature and humidity variations. Two bare tinned-copper leads, one at each end. May be mounted by its own leads, or with TH clips (see hardware). Av. shpg. wt., 3 oz.

Stock No.	Type	Mfd	Size	NET
17 L 685	635	.0005	9/16x1¼"	.65
17 L 686	621	.001	11/16x1¼"	.65
17 L 687	622	.002	23/32x1¼"	.65
17 L 688	623	.003	1x1¼"	.68
17 L 689	625	.005	27/32x2½"	.68
17 L 690	6275	.0075	15/16x2½"	.71
17 L 691	611	.01	1 1/32x2½"	.71
17 L 692	612	.02	1 7/32x3"	.73
17 L 693	613	.03	1¼x3¼"	.73
17 L 694	615	.05	1⅜x4⅛"	1.03



MINIATURE METAL TUBULARS

MT miniature metal tubular capacitors—ideal for use in hearing aids, personal radios, radio-controlled model airplanes—and other applications where very small tubulars are required. 600-volt units are ideal for use in TV sets. Oil-impregnated 600-volt units; 100-volt types are wax-impregnated. Tinned-copper leads. Av. shpg. wt., 2 oz.

No.	Type	Mfd	W.V.	Size	NET
17 L 129	105	.001	100	9/32x½"	53¢
17 L 130	107	.002	100	9/32x½"	53¢
17 L 131	115	.005	100	9/32x½"	53¢
17 L 132	125	.01	100	9/64x½"	53¢
17 L 133	127	.02	100	9/64x1 1/16"	56¢
17 L 134	135	.05	100	9/64x1 1/16"	56¢
17 L 135	145	.1	100	5/16x1¾"	59¢
17 L 136	605	.001	600	9/32x1 9/16"	56¢
17 L 137	607	.002	600	9/32x1 9/16"	56¢
17 L 138	615	.005	600	9/32x1 9/16"	56¢
17 L 139	625	.01	600	21/64x1 9/16"	56¢

AC MOTOR-STARTING CAPACITORS

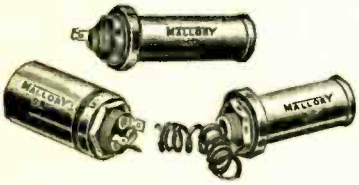
Type PS non-polarized dry electrolytics. For intermittent duty in starting 110 volt AC motors. *For 330 v. AC motors. †Type EP, motor-starting, in aluminum can. §For 165 v. AC. motors. Screw type terminals. Av. shpg. wt., 10 oz.

No.	Type	Mfd	Size	NET
18 L 403	2730*	27	1 13/16x3¼"	3.82
17 L 550	5310	53	1 7/16x3⅛"	1.26
17 L 551	6410	64	1 7/16x3⅛"	1.32
17 L 552	7010	70	1 7/16x3⅛"	1.41
17 L 553	7510	75	1 7/16x3⅛"	1.50
18 L 404†	8130*	81	2 9/16x4⅛"	6.76
17 L 554	8610	86	1 7/16x3⅛"	1.56
17 L 555	9710	97	1 7/16x3⅛"	1.65
17 L 556	10810	108	1 7/16x3⅛"	1.68
18 L 405†	10830*	108	2 9/16x4⅛"	8.06
17 L 557	12410	124	1 7/16x3⅜"	1.73
17 L 558	13010	130	1 7/16x3⅜"	1.73
17 L 559	14510	145	1 7/16x3⅜"	1.88
18 L 400	15810	158	1 13/16x3⅜"	1.91
17 L 561	16110	161	1 7/16x3⅜"	1.91
17 L 563	19410	194	1 7/16x3¼"	2.29
17 L 565	21610	216	1 13/16x3¼"	2.38
17 L 566	24310	243	1 13/16x3¼"	2.76
18 L 402	24365§	243	2 1/16x4⅜"	5.06
17 L 567	27010	270	1 13/16x4⅜"	2.79
18 L 401	28210	282	1 13/16x4¼"	2.85
17 L 568	32410	324	1 13/16x4¼"	3.18
17 L 569	34010	340	1 13/16x4⅜"	3.26
17 L 570	37810	378	2 1/16x4⅜"	3.53
17 L 571	40010	400	2 1/16x4⅜"	3.56

PL & HB HARDWARE FOR ABOVE

Plastic end caps and horizontal mounting brackets for motor-starting capacitors above. P.E.C. indicates plastic end cap. Av. shpg. wt., 3 oz.

No.	Type	Description	Size	NET
18 L 390	PL-3	P.E.C., on motor	1 7/16"	12¢
18 L 391	PL-6	P.E.C., on motor	1 13/16"	15¢
18 L 392	PL-8	P.E.C., on motor	2 1/16"	18¢
18 L 393	PL-3A	P.E.C., off motor	1 7/16"	12¢
18 L 394	PL-6A	P.E.C., off motor	1 13/16"	15¢
18 L 395	PL-8A	P.E.C., off motor	2 1/16"	18¢
18 L 396	HB-4	Horiz. bracket	3⅛"	18¢
18 L 397	HB-8	Horiz. bracket	4⅜"	21¢



ALUMINUM CAN THREADED NECK DRY ELECTROLYTICS

Threaded neck units for replacement of wet or dry electrolytics. Upright mounting types. With special hardware to facilitate replacement of original units. For sub-chassis mounting, see TH clips at right. RS, HS and RM types have 8" leads. *Has common positive and separate negative terminals. Type SR638 is lug-type dual. Av. shpg. wt., 7 oz.

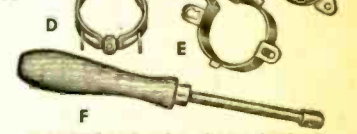
No.	Type	Mfd	W.V.	Size	NET
17 L 058	HS693	8	600	1⅜x4"	1.85
17 L 064	HS696	20	600	1⅜x4¼"	2.26
17 L 220	RS213	8	450	1x2¼"	1.29
17 L 801	RS212	8	450	1⅜x3"	1.29
17 L 059	HD684	10	450	1x3"	1.35
17 L 221	RS215	12	450	1x2¼"	1.41
17 L 802	RS214	12	450	1⅜x3"	1.41
17 L 803	RS217	16	450	1⅜x3"	1.44
17 L 222	RS216	16	450	1x3½"	1.44
17 L 231	RS219	20	450	1⅜x3"	1.59
17 L 232	RS223	30	450	1⅜x3"	1.76
17 L 233	RS224	40	450	1⅜x3"	1.85
17 L 327	SR638	8-8	450	1⅜x2¼"	1.76
17 L 334	SR645	*8-8	450	1⅜x2¼"	1.76
17 L 236	RM262	8-8	450	1⅜x3"	1.76
17 L 237	RM265	8-8-8	450	1⅜x4¼"	2.94
17 L 226	RS207	30	250	1x3½"	1.21

For other listings of Mallory buffer and Auto Radio Noise Suppressor Capacitors, see page 120.

HIGH CAPACITY ELECTROLYTICS

Plastic case electrolytics for all high-capacity, low-voltage uses—dry disc rectifier filters, movie equipment, etc. †Type 1060A has aluminum case and is especially designed for fence control. *Non-polarized types — for intermittent AC use only. All others are polarized type HC. **For photoflash. Have screw terminals at one end except § lugs. Av. wt., 10 oz.

No.	Type	Mfd	W.V.	Size	NET
17 L 810	4505*	50	450	1 13/16x3⅜"	4.41
17 L 811	4510*	100	450	2 1/16x4⅜"	6.82
17 L 820	45003**	300	450	2 1/16x4⅜"	6.17
18 L 426	45052**	525	450	2 1/16x4⅜"	13.23
18 L 428	3003*	15	300	1 7/16x3⅜"	2.20
17 L 808	3014*	100	300	1 13/16x4⅜"	3.97
17 L 588	3025*	200	300	2 1/16x4⅜"	5.58
17 L 592	20005	500	200	2 1/16x4⅜"	5.76
17 L 591	15010	1000	150	2 1/16x4⅜"	6.17
18 L 427	1235*	300	125	2 1/16x4⅜"	3.38
17 L 804	1225*	200	125	1 13/16x4⅜"	2.94
17 L 805	1255*	500	125	2 1/16x4⅜"	4.41
17 L 585	5005	500	50	1 7/16x3⅜"	2.29
17 L 586	5010	1000	50	1 13/16x3⅜"	3.76
17 L 590	5020	2000	50	1 13/16x4⅜"	5.14
18 L 431	4040	4000	40	2 1/16x4⅜"	5.59
17 L 582	2510	1000	25	1 7/16x3⅜"	2.85
17 L 583	2520	2000	25	1 13/16x3⅜"	3.38
17 L 584	2540	4000	25	1 13/16x4⅜"	3.97
18 L 430	2060	6000	20	2 1/16x4⅜"	5.09
17 L 580	1520	2000	15	1 7/16x3⅜"	2.75
17 L 581	1540	4000	15	1 13/16x3⅜"	3.23
17 L 589	1560	6000	15	1 13/16x4⅜"	3.71
17 L 576	1020	2000	10	1 13/16x3⅜"	2.32
17 L 577	1040	4000	10	1 13/16x3⅜"	2.88
17 L 579	1060A†§	6000	10	1½x4⅛"	3.26
18 L 429	10100	1000	10	2 1/16x4⅜"	4.85



HARDWARE FOR CAPACITORS

For FP or WP capacitors use MP, BP, PS and MW-100 units listed below. For TC, FP, WP and other tubular capacitors use VR brackets for vertical mtg., or TH spring clips for horizontal mtg. *Metal. †Phenolic. Av. wt., 3 oz.

No.	Type	Fig.	Size	NET
17 L 531	PS-4	C	1"	.41
17 L 532	PS-6	C	1⅜"	.53
17 L 402	VR-1	E	1 to 1 1/16"	.09
17 L 413	VR-3	E	1⅛ to 1 3/16"	.09
17 L 414	VR-4	E	1½ to 1 9/16"	.12
17 L 415	VR-6	E	1¾ to 1 13/16"	.15
17 L 416	VR-8	E	2 to 2 1/16"	.18
17 L 412	TH-25	D	1⅜ to 1 7/16"	.06
17 L 417	MW-100	F	Mtg. Wrench	1.03

Items below in packages of 3.

No.	Type	Fig.	Size	Per Pkg.
18 L 414	MP-2	A*	¾"	9c
18 L 415	MP-4	A*	1"	
18 L 416	MP-6	A*	1⅛"	
18 L 417	BP-2	B†	¾"	
18 L 418	BP-4	B†	1"	
18 L 419	BP-6	B†	1⅛"	
18 L 420	TH-13	D	⅜"	
18 L 421	TH-15	D	½ to 9/16"	9c
18 L 422	TH-17	D	⅝ to 11/16"	
18 L 423	TH-19	D	¾ to 13/16"	
18 L 424	TH-21	D	⅞ to 15/16"	
18 L 425	TH-23	D	1 to 1 1/16"	

Type "MSU" for P, HC and NP capacitors.

No.	Type	Description	Size	EACH
18 L 406	115-1	Top cap	1⅜"	12c
18 L 407	116-1	Top cap	2"	
18 L 408	118-1	Bottom cap	1⅜"	
18 L 409	119-1	Bottom cap	2"	
18 L 410	121-1	Bracket	1⅛x3 1/16"	21c
18 L 411	122-1	Bracket	1⅛x4¼"	
18 L 412	123-1	Bracket	2x3⅛"	
18 L 413	124-1	Bracket	2x4⅛"	

INSULATING SLEEVES

Fiber insulating sleeves for FP type capacitors. Closed end. Av. shpg. wt., 2 oz.

No.	Type	Size	EACH
17 L 510	CE-1	¾x2"	6c
17 L 511	CE-3	1 x2"	
17 L 512	CE-4	1 x3"	
17 L 513	CE-5	1⅛x2"	
17 L 514	CE-6	1⅛x3"	
17 L 515	CE-7	1 x2½"	
17 L 516	CE-8	1 x4"	9c
17 L 517	CE-9	1⅛x2½"	6c
17 L 518	CE-10	1⅛x4"	9c

Centralab Ceramic Capacitors

A B C

CERAMIC TRIMMERS

Full capacity range with 180° rotation. 600 working v. DC. Power factor less than 0.2% at 1 mc. Type numbers followed by N indicate negative temperature coefficient; Z, zero temp. coef. Silver stator and rotor fired to ceramic. Both rotor and stator surfaces are ground optically flat to insure dependability and accurate retrace. Av. shpg. wt., 1 oz.

Type 820. Fig. A. Ceramic. ⅝x²7/32".

No.	Type	Mmf	No.	Type	Mmf
11 L 381	820-D	1-3.5	11 L 383	820-B	5-20
11 L 382	820-A	2.5-6	11 L 384	820-C	7-35

NET EACH ..... 44¢

Type 822. Fig. B. Steatite. 27/32x²1/32".

No.	Type	Mmf	No.	Type	Mmf
11 L 123	822-AN	8-50	11 L 127	822-AZ	4.5-25
11 L 124	822-BN	7-45	11 L 128	822-BZ	2.5-13
11 L 125	822-CN	4.5-25	11 L 129	822-CZ	2-7.5

NET EACH ..... 88¢

Type 829. Fig. C. Tubular ceramic. 7/32x¼".

No.	Type	Mmf	No.	Type	Mmf
11 L 400	829-3	.5-3	11 L 403	829-7	1-7.5
11 L 401	829-4	1-4	11 L 404	829-10	1.5-10
11 L 402	829-6	1-6			

NET EACH ..... 29¢

20KV TRANSMITTING CAPACITORS

Type 859. Rated at 20,000 wkg. volts DC. Handle 30 amperes or greater at 30 mc (based on 30° C. heat rise). Tolerance, ±10%. Terminal ends tapped for 10-32 mounting screws. 2⅞x2" dia. Av. shpg. wt., 5 oz.

No.	Type	Mmf	Coeff.	EACH
11 L 395	859S-50Z	50	NPO	44.10
11 L 396	859S-100Z	100	NPO	
11 L 397	859S-250N	250	N750	
11 L 398	859S-500N	500	N2200	

FT MFT

FEED-THROUGH HI-KAPS

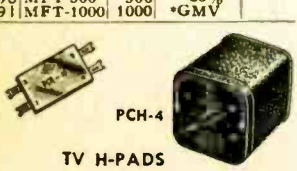
Tiny ceramics, designed for single-hole mounting where capacity ground to chassis or shield is required. Special construction virtually eliminates lead inductance. Rating, 500 volts DC working. FT—with mounting nut. *Guaranteed minimum value. Wt., 2 oz.

TYPE FT

No.	Type	Mmf	Tolerance	EACH
11 L 390	FT- 500	500	±20%	59c
11 L 391	FT-1000	1000	±20%	
11 L 392	FT-1500	1500	−20+50%	
11 L 393	FT-1800	1800	−20+50%	
11 L 394	FT-2300	2300	−20+50%	

TYPE MFT MINIATURES

No.	Type	Mmf	Tolerance	EACH
11 L 488	MFT-50	50	±10%	29c
11 L 489	MFT-100	100	±10%	
11 L 490	MFT-500	500	±20%	
11 L 491	MFT-1000	1000	*GMV	



PCH-10 PCH-4

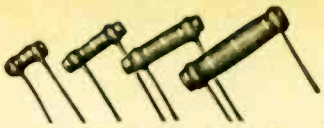
TV H-PADS

For use where TV signal requires attenuation to secure optimum performance. H-pad has 4 terminals. Installed in series with 300 ohm antenna lead-in. 1¼x1 3/16x3/16". Shpg. wt., 3 oz.

No.	Type	Attenuation	EACH
11 L 190	PCH-10	10 db	47c
11 L 191	PCH-20	20 db	
11 L 192	PCH-30	30 db	
11 L 193	PCH-40	40 db	

11 L 194. PCH-100. Set of 4 H-Pads, one each of above, in plastic box. **NET** 1.76

11 L 454. PCH-4. Switch with H-Pads above. With mounting bracket. **NET** 4.41



BC TUBULAR D-6 HI-KAPS

Compact, moisture-proof Hi-Kaps for use in bypass and coupling circuits. High mechanical strength plus small size—ideal replacements for mica and paper capacitors. Ceramic construction assures long life—withstand vibration and high temperatures. Leads are 1½" long. 600 wkg. v. DC. 1500 v. flash test. Tolerance: ±10%, except § ±20%; *Guaranteed minimum value. Av. shpg. wt., 2 oz.

Stock No.	Type	Mmf	Size
11 L 545	030	3	
11 L 546	050	5	
11 L 547	100	10	
11 L 548	120	12	
11 L 549	150	15	
11 L 550	180	18	
11 L 551	200	20	
11 L 552	220	22	
11 L 553	250	25	
11 L 554	270	27	
11 L 555	330	33	
11 L 556	390	39	
11 L 557	470	47	
11 L 558	500	50	13/32x1 3/64"
11 L 559	560	56	
11 L 560	680	68	
11 L 561	750	75	
11 L 562	820	82	
11 L 563	910	91	
11 L 564	101	100	
11 L 565	121	120	
11 L 566	151	150	
11 L 567	181	180	
11 L 568	201	200	
11 L 569	221	220	
11 L 570	251	250	
11 L 571	271	270	
11 L 572	301	300	
11 L 573	331	330	
11 L 574	391	390	
11 L 575	401	400	
11 L 576	471	470	
11 L 577	501	500	¾x7/32"
11 L 578	561	560	
11 L 579	601	600	
11 L 580	681	680	
11 L 581	751	750§	
11 L 582	821	820§	13/32x1 3/64"
11 L 583	102	1000§	
11 L 584	122	1200§	
11 L 585	152	1500§	
11 L 586	182	1800§	
11 L 587	202	2000§	¾x7/32"
11 L 588	222	2200§	
11 L 589	252	2500*	
11 L 590	272	2700*	
11 L 591	302	3000*	
11 L 592	332	3300§	
11 L 593	402	4000*	7/8x¼"
11 L 594	472	4700*	
11 L 595	502	5000*	
11 L 596	562	5600*	
11 L 597	682	6800§	1 3/16x5/16"
11 L 598	752	7500§	
11 L 599	103	10,000*	

Lots of 5 or more, one value, EACH ... 12c
EACH ..... 20¢

DK-200 CERAMIC CAPACITOR KIT

200 popular-value BC tubular Hi-Caps. Metal storage cabinet. All capacitors are in clearly marked envelopes. Listing below shows the 24 different types included in kit and quantity of each. All are rated 1000 wkg. v. DC. Size, 8x6x6¼". Shpg. wt., 8 lbs.

No.	Mmf	No.	Mmf	No.	Mmf
5	10	5	150	15	500
5	25	5	200	5	680
5	33	5	220	15	1000
5	39	15	250	10	1500
5	47	5	270	5	2000
15	50	5	330	5	4700
20	100	5	390	15	5000
5	120	5	470	15	10000

58 L 451. Cabinet and Capacitors. List, $40.00. **NET** 23.52

MDK-200 Kit. Same assortment as above, but MD-type, molded disc ceramics. **58 L 452.** List, $60.00. **NET** 35.28

TYPE TC TEMPERATURE COMPENSATING CAPACITORS

Comply with JAN-C-20A specs. Type TCZ is negative-positive-zero (NPO); capacity remains essentially constant over a wide temperature range (−20° C. to +85° C.) Type TCN changes capacity with temperature and has a negative coefficient; N750, or 750 parts/million/°C. A variety of other coefficients may be achieved by hooking up both types in parallel. DC voltage rating, 600; surge, 1200. *Tolerance. Shpg. wt., 2 oz.

TC CAPACITOR SIZES

TYPE TCZ Cap. Mmf	TYPE TCZ Size	TYPE TCN Cap. Mmf	TYPE TCN Size
5 to 24	½x2½"	10 to 62	½x2½"
27 to 56	½x4 5/64"	68 to 160	½x4 5/64"
62 to 120	1 5/64x½"	180 to 330	1 5/64x½"
130 to 180	9/32x1 11/64"	360 to 510	9/32x1 11/64"
200 to 300	9/32x1½"	560 to 750	9/32x1½"

TYPE TCZ NEGATIVE-POSITIVE—ZERO(NPO)

No.	Mmf	Tol.*	No.	Mmf	Tol.*
11 L 200	.5	±.25 mmf	11 L 203	1.5	±.25 mmf
11 L 201	.68		11 L 204	2.2	
11 L 202	1.0		11 L 205	3.3	

NET EACH ..... 29¢

No.	Mmf	Tol.*	No.	Mmf	Tol.*
11 L 206	4.7	±.5 mmf	11 L 210	15	±.5 mmf
11 L 207	6.8		11 L 211	18	
11 L 208	10		11 L 212	20	
11 L 209	12				
11 L 213	22	±2½%	11 L 226	75	±2½%
11 L 214	24		11 L 227	82	
11 L 492	25		11 L 228	91	
11 L 215	27		11 L 229	100	
11 L 216	30		11 L 230	110	
11 L 217	33		11 L 231	120	
11 L 218	36		11 L 232	130	
11 L 219	39		11 L 233	150	
11 L 220	43	±5%	11 L 234	160	±5%
11 L 221	47		11 L 235	180	
11 L 493	50		11 L 236	200	
11 L 222	51		11 L 237	220	
11 L 223	56		11 L 238	240	
11 L 224	62		11 L 239	270	
11 L 225	68		11 L 240	300	

NET EACH ..... 29¢

TYPE TCN—NEGATIVE (N750)

No.	Mmf	Tol.*	No.	Mmf	Tol.*
11 L 241	5	±.5 mmf	11 L 252	15	±.5 mmf
11 L 250	10		11 L 253	18	
11 L 251	12		11 L 254	20	

NET EACH ..... 29¢

No.	Mmf	Tol.*	No.	Mmf	Tol.*
11 L 255	22	±2½%	11 L 273	120	±5%
11 L 256	24		11 L 274	130	
11 L 494	25		11 L 275	150	
11 L 257	27		11 L 276	160	
11 L 258	30		11 L 277	180	
11 L 259	33		11 L 278	200	
11 L 260	36		11 L 279	220	
11 L 261	39		11 L 280	240	
11 L 262	43		11 L 281	270	
11 L 263	47		11 L 282	300	
11 L 495	50		11 L 283	330	
11 L 264	51		11 L 284	360	
11 L 265	56		11 L 285	390	
11 L 266	62		11 L 286	430	
11 L 267	68		11 L 287	470	
11 L 268	75		11 L 288	510	
11 L 269	82		11 L 289	560	
11 L 270	91		11 L 290	620	
11 L 271	100		11 L 291	680	
11 L 272	110	±5%	11 L 292	750	

NET EACH ..... 29¢

DF FLAT PLATE HI-CAPS

For use as bypass and filter capacitors. Unusually thin. 600 wkg. v. DC; 1200 v. DC test. Tol., GMV (Guar. min. value) except *+80%, −20%. Shpg. wt., 3 oz.

No.	Type	Mfd	Size	EACH
11 L 245	DF-104*	.1	1 7/16x1 5/16x1 9/64"	47¢
11 L 246	DF-753	.075	1 7/16x1 5/16x1 9/64"	47¢
11 L 247	DF-503	.05	1 7/16x1 5/16x7/32"	41¢
11 L 248	DF-403	.04	1 7/16x1 5/16x7/32"	41¢
11 L 249	DF-303	.03	1 7/16x1 5/16x7/32"	41¢

Centralab Printed Circuits—Ceramics

TYPE DD DISC CERAMICS

For bypass-coupling in HF circuits. 1000 VDCW except ‡600 v. Sizes range from ¼" to ¾" dia. Tolerance ±20% except †±.5 mmf, *±10% and §GMV (guaranteed minimum value). ** −20% +80%. All units are UL Approved for AC lines except †. Average shpg. wt., 2 oz.

No.	Type	Mmf.	No.	Type	Mfd.
II L 406	3R3†	3.3	II L 426	251	.00025
II L 407	050†	5	II L 427	271	.00027
II L 408	6R8†	6.8	II L 428	301	.0003
II L 409	100*	10	II L 429	331	.00033
II L 410	150*	15	II L 430	391	.00039
II L 411	200*	20	II L 431	471	.00047
II L 412	250*	25	II L 432	501	.0005
II L 413	330*	33	II L 433	561	.00056
II L 414	390*	39	II L 434	681	.00068
II L 415	470*	47	II L 435	751	.00075
II L 416	500*	50	II L 436	801	.0008
II L 417	560*	56	II L 437	102	.001
II L 418	680*	68	II L 438	152	.0015
II L 419	750*	75	II L 439	202	.002
II L 420	101*	100	II L 440	302	.003
II L 421	121*	120	II L 441	472	.0047
II L 422	151*	150	II L 037	502§	.005
II L 423	181*	180	II L 455	103§	.01
II L 424	201*	200			
II L 425	221	220			

EACH 12c

II L 106	1032	.01 mfd	II L 042	203‡§	.02
II L 442	5022	.005 mfd			

EACH 18c

DD16 1600 VOLTS

No.	Type	Mfd.	EACH
II L 456	302§	.003	21c
II L 370	402§	.004	
II L 371	502§	.005	
II L 372	602§	.006	
II L 457	702§	.007	
II L 373	752§	.0075	
II L 374	802§	.008	
II L 375	103§	.01	
II L 376	153**	.015	35¢

DD60 6000 VOLTS

No.	Type	Mmf
II L 458	DD60-100	10
II L 459	DD60-120	12
II L 460	DD60-150	15
II L 461	DD60-220	22
II L 462	DD60-250	25
II L 463	DD60-270	27
II L 464	DD60-300	30
II L 465	DD60-330	33
II L 466	DD60-390	39
II L 467	DD60-470	47
II L 468	DD60-500	50
II L 469	DD60-560	56
II L 470	DD60-680	68
II L 471	DD60-750	75
II L 472	DD60-820	82
II L 473	DD60-101	100
II L 474	DD60-121	120
II L 475	DD60-151	150
II L 476	DD60-181	180
II L 477	DD60-201	200
II L 478	DD60-221	220
II L 479	DD60-251	250
II L 480	DD60-271	270
II L 481	DD60-301	300
II L 482	DD60-331	330
II L 483	DD60-391	390
II L 484	DD60-401	400
II L 485	DD60-471	470
II L 486	DD60-501	500
II L 487	DD60-561	560
II L 443	DD60-681	680
II L 444	DD60-751	750
II L 445	DD60-102	1000
II L 446	DD60-122	1200
II L 447	DD60-152	1500
II L 448	DD60-202	2000
II L 449	DD60-222	2200

NET EACH 29c

Save On Industrial Quantities

TYPE DD 500 V DISC CERAMICS

Selected popular values of capacitors listed below. 500 VDCW. Box of 100 is minimum quantity of one value; may be assorted in 500 and 1000 lots—but only in boxes of 100 per value. Tolerance, 10% except *20%. †GMV.

Stock No.	Mmf	Lots of 100 Per 100	Lots of 500 Per 100	Lots of 1000 Per 100
II L 500	5	8.20	6.30	5.70
II L 501	50	8.20	6.30	5.70
II L 502	100	8.20	6.30	5.70
II L 503	250*	8.20	6.30	5.70
II L 504	470*	10.00	7.80	7.00
II L 505	500*	10.00	7.80	7.00
II L 506	1000†	7.75	5.95	5.40
II L 507	1500†	7.75	5.95	5.40
II L 508	5000†	7.75	5.95	5.40
II L 509	10000†	7.75	5.95	5.40

PRINTED ELECTRONIC CIRCUITS (P.E.C.)

Each PEC contains a complete piece of electronic circuitry—resistors, capacitors, conductors—bound to a ceramic base and sealed against moisture, temperature change and shock. Results in exceptional stability, small size and uniform performance. For use in radio and TV. Speeds service and eliminates need to find exact component failure; simply replace entire circuit with PEC unit. Average shpg. wt., 2 oz.

37 L 071. NEW PRINTED CIRCUIT GUIDE NO. 3. Contains complete data on all Centralab PEC units. Includes PEC replacement guide for radio and TV sets listed by 119 manufacturers. **NO CHARGE** when requested with your next order.

PRINTED CIRCUIT UNITS

No.	Type	Description	EACH	No.	Type	Description	EA.
II L 147	PC-50	Filpec	35¢	II L 158	PC-150	Audet Output Stage	59¢
II L 148	PC-51	Filpec	35¢	II L 170	PC-151	Audet Output Stage	68¢
II L 167	PC-52	Filpec	35¢	II L 359	PC-154	Audet Output Stage	59¢
II L 353	PC-60	Resistor-Capacitor	29¢	II L 360	PC-157	Audet Output Stage	59¢
II L 354	PC-61	Resistor-Capacitor	29¢	II L 361	PC-158	Audet Output Stage	68¢
II L 150	PC-70	Triode Couplate	41¢	II L 362	PC-159	Audet Output Stage	68¢
II L 151	PC-71	Triode Couplate	41¢	II L 171	PC-160	Pendet	73¢
II L 152	PC-80	Triode Couplate	44¢	II L 172	PC-165	Pendet	79¢
II L 153	PC-81	Triode Couplate	44¢	II L 363	PC-175	Special	59¢
II L 355	PC-82	Special	44¢	II L 173	PC-176	Special	44¢
II L 165	PC-84	Triode Couplate	44¢	II L 450	PC-177	Special	59¢
II L 154	PC-90	Pentode Couplate	53¢	II L 451	PC-178	Special	44¢
II L 155	PC-91	Pentode Couplate	53¢	II L 364	PC-179	Special	53¢
II L 166	PC-92	Pentode Couplate	59¢	II L 365	PC-184	Special	44¢
II L 156	PC-100	Vertical Integrator	65¢	II L 366	PC-185	Special	44¢
II L 157	PC-101	Vertical Integrator	73¢	II L 367	PC-186	Special	44¢
II L 356	PC-104	Vertical Integrator	65¢	II L 368	PC-260	Sync Takeoff Couplate	73¢
II L 357	PC-105	Vertical Integrator	65¢	II L 369	PC-262	Sync Takeoff Couplate	73¢
II L 358	PC-106	Vertical Integrator	59¢	II L 380	PC-263	Sync Takeoff Couplate	73¢
II L 168	PC-110	Filplate	44¢				

AMPEC AUDIO AMPLIFIER

3-stage audio amplifier no bigger than a book of paper matches. Operates on 22½ v. "B" battery and 1.5 v. "A" battery. Response 300-5000 cps. Gain of 4500 at 1 kc. Type PC-201 complete with tubes: One CK548AX; two CK512-AX. Wt., 8 oz. Type PC-200 same but less tubes. Wt., 4 oz. Type B16-228 volume control and switch for use with either Ampec unit. ¾" dia. ½" deep with knob. Complete with detailed instructions.

II L 160. Type PC-201. NET 14.70
II L 159. Type PC-200. NET 8.82
30 M 419. Type B16-228. NET 2.35

PRINTED CIRCUIT KITS

Model PCK-18. Contains 18 printed electronic circuits selected from the 9 most popular types. Packed in handy, hinged plastic box 8¼x4¼x1¼". Replace 42 resistors and 52 capacitors. Each unit contains complete, ready-to-function section of an electronic circuit. Ideal for servicemen, experimenters and engineering laboratories. Shpg. wt., 12 oz.
58 L 460. List, $15.00. NET 8.82

Model PCK-45. As above but contains 45 PEC units, 21 types. Shpg. wt., 1¼ lbs.
58 L 461. List, $40.00. NET 23.52

TYPE MD MOLDED DISC CERAMIC HI-KAPS

Low-inductance molded discs for bypass, coupling and general applications in high-frequency circuits (such as in TV and FM). Priced like tubulars but much smaller. Completely insulated with "Centrathene." Electrical properties constant to 3000 mc. Insulation resistance, 300,000 megohms. Breakdown voltage to ground, 2500 volts DC. Can be placed against chassis or next to high-voltage leads without danger of flashover or breakdown. Capacity and voltage ratings permanently labeled on each unit. Fungus resistant. Will not become brittle at —55° C. Unaffected by ozone, salt water or any known solvent at room temperature. 100% flash tested at double rated voltage. For operation to 85° C. Values to .004 mfd. rated 1000 WVDC; others rated 600 WVDC. No. 22 tinned copper leads, 1½" long. Tolerance, 10% except *20%. †GMV (guaranteed min. value). Size, 11/16" dia. x 11/16". Shpg. wt., 2 oz.

No.	Type	Mfd.	No.	Type	Mfd.
II L 300	050	.000005	II L 327	391	.00039
II L 301	100	.00001	II L 328	401	.0004
II L 302	120	.000012	II L 329	471	.00047
II L 303	150	.000015	II L 330	501	.0005
II L 304	180	.000018	II L 331	561	.00056
II L 305	200	.00002	II L 332	601	.0006
II L 306	220	.000022	II L 333	681	.00068
II L 307	250	.000025	II L 334	751	.00075*
II L 308	270	.000027	II L 335	821	.00082*
II L 309	330	.000033	II L 336	102	.001*
II L 310	390	.000039	II L 337	122	.0012*
II L 311	470	.000047	II L 338	152	.0015*
II L 312	500	.00005	II L 339	182	.0018*
II L 313	560	.000056	II L 340	202	.002*
II L 314	680	.000068	II L 341	222	.0022*
II L 315	750	.000075	II L 342	252	.0025*
II L 316	820	.000082	II L 343	272	.0027*
II L 317	101	.0001	II L 344	302	.003*
II L 318	121	.00012	II L 345	332	.0033*
II L 319	151	.00015	II L 346	402	.004†
II L 320	181	.00018	II L 347	472	.0047†
II L 321	201	.0002	II L 348	502	.005†
II L 322	221	.00022	II L 349	562	.0056†
II L 323	251	.00025	II L 350	682	.0068†
II L 324	271	.00027	II L 351	752	.0075†
II L 325	301	.0003	II L 352	103	.01†
II L 326	331	.00033			

NET EACH 15c

HI-VO-KAPS FOR TV

500 mmf hi-voltage ceramics for filter, coupling and HV bypass service. §Rated 12,500 wkg. v. DC. 1x½". *20,000 wkg. v. DC. 1x1". †30,000 wkg. v. DC. 1½x1¼". Shpg. wt., 3 oz.

No.	Type	Terminals	EA.
II L 073	§TV1-501	Rod	59c
II L 074	§TV2-501	Slot-tap	
II L 075	§TV3-501	Tap-thread	
II L 076	*TV1-502	Rod	.88
II L 024	*TV3-502	Tap-thread	.88
II L 040	*TV2-502	Slot-tap	.88
II L 041	†TV1-503	Rod	1.76
II L 018	*TV4-502	Dual male thr.	.88
II L 019	*TV5-502	Dual female tap	.88
II L 452	*TV7-502	Male, 5/32-5/32	.88
II L 453	†TV8-503	Male, 2-5/32	1.76

Electronic RETMA Color Code Calculator. Up-to-date; for resistors, capacitors, etc.
37 K 114. Shpg. wt., 8 oz. ..... 25¢

TV 207 HI-KAP KIT

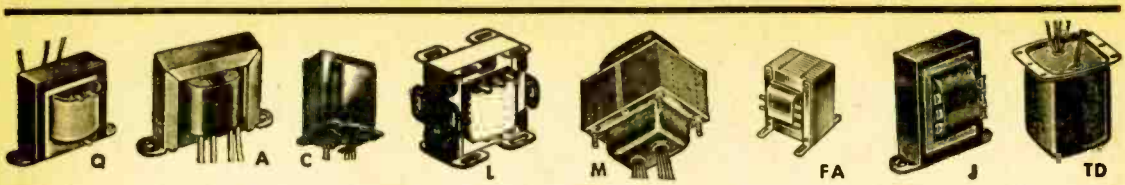
Contains 1 TV-20 Hi-Vo Kap and complete set of attachable terminals. For TV replacement. Capacitor rated 500 mmf at 20,000 WVDC. Terminal set has 1 each—slotted rod, short male and long male; 2 each—female thread and male thread. Terminals seat without air gap—capacitor will not strip. Shpg. wt., 5 oz.
II L 016. NET 1.09

850S HIGH-VOLTAGE CERAMICS

High quality capacitor for RF power circuits. Has negative temperature coefficient of 750 parts/million/°C., except *zero temperature coefficient. Contains silver electrodes fired to ceramic. Low power factor. ±10% tolerance. 6-32 mounting screw. ⅝x1 13/16" dia. (†Type 858S, same size and style). Wt., 2 oz.

No.	Mmf	Wkg. Volts DC	EACH
II L 100	25*	7500	1.76
II L 101	50*	7500	
II L 102	50	7500	
II L 103	75	7500	
II L 104	100	5000	
II L 107†	500	5000	
II L 108†	1000	5000	

Stancor Transformers



UNIVERSAL OUTPUT TRANSFORMERS

For single or push-pull plates to voice coil. All have wire leads on primary and lugs on secondary, except *lugs on both primary and secondary. All are Fig. Q except *Fig. J. Secondary: †500 ohms; §500, 333, 200, 125, 50 ohms; others match any voice coil to rated primary.

Stock No.	Type	Primary	Watts	Size	Lbs.	NET
64 G 294	A3250§	5K; 10, 20K CT	(15 ma)	2x3¼x1¾"	1	2.91
64 G 005	A3822	7-10K	4	1⅜x2⅜x1½"	¾	1.62
64 G 026	A3823	4-14K CT	8	1⅝x2⅞x1½"	¾	2.06
64 G 242	A3824	6-10K	8	2x3¼x2"	1½	2.91
64 G 002	A3825	1.5-4.5K	8	2x3¼x1⅝"	1¼	2.32
64 G 028	A3830*	3-10K CT	20	2 11/16x3 9/16x2¼"	2	3.18
64 G 293	A3841*†	2.5, 4.5, 6.7	10	2 11/16x3 9/16x2¼"	1½	4.41
64 G 023	A3849	1.5-10K	10	1⅝x2⅞x1½"	1	1.97
64 G 024	A3850*	4-14K CT	8	2x2⅜x1½"	1	2.32
64 G 027	A3852*	4-14K CT	18	2 5/16x2⅞x2"	1½	2.56
64 G 025	A3856	4-14K CT	4	1⅜x2½x1⅜"	¾	1.91
64 G 029	A3870	4-14K CT	18	2x3¼x2"	1½	2.91
64 G 292	A3880	4-14K CT	15	2¼x3⅜x2¼"	1¾	3.50

FIXED IMPEDANCE OUTPUT TRANSFORMERS

Deliver maximum audio frequency power from amplifier to load. All are Fig. A mounting type, except *Fig. C. Type A3337 is similar to Fig. J, but has leads. Type A3330 has 4.5% primary tap used in B+ filter network for hum reduction.

No.	Type	Primary	Secondary	Watts	Ctrs.	Lbs.	NET
64 G 013	A2312	14,000CT	4	10	2⅛"	1¼	2.06
64 G 245	A2313	7,000	8	10	2 11/16"	1	2.00
64 G 033	A3304*	7M CT	500/15/8/4	25	2x1 11/16"	2¼	5.67
64 G 297	A3311*	10M CT	500/15/8/4	25	2¼x2"	3½	5.35
64 G 296	A3327	25K	4	5	2"	½	1.44
64 G 244	A3328	4,000	3.5	3	1¾"	½	1.21
64 G 246	A3329	8,000	3.5	3	1¾"	½	1.12
64 G 299	A3330	2K	3.5	5	2"	1	1.62
64 G 243	A3332	2,000	3.2	3	1¾"	½	.94
64 G 295	A3337	5K	6-8	10	2¼"	1	1.79
64 G 020	A3800*	5,000 CT	500/250/15/8/4	30	2¼x2"	4	5.44
64 G 021	A3801*	6,600 CT	500/250/15/8/4	35	2½x2 5/16"	5¼	6.53
64 G 298	A3831	10K CT	8/4/2	5	2½"	1	1.97
64 G 015	A3857	25M CT	4	5	2"	¾	1.50
64 G 001	A3876	2,000	4	5	2"	¾	1.12
64 G 004	A3877	5,000	4	5	2"	¾	1.18
64 G 006	A3878	7,000	4	5	2"	¾	1.15
64 G 010	A3879	10,000	4	5	2"	¾	1.12
64 G 519	A8114	7,600	3.2	5	2"	½	1.56

FILAMENT TRANSFORMERS

High-quality, single-secondary transformers. Secondaries center-tapped except P-6469. *Has 6.3 v. primary and secondary for filament isolation. All others for 117 volts, 60 cycles.

No.	Type	Fig.	Volts	Amps.	Insul.	Lbs.	NET
64 G 141	P6133	.....	2.5	5.0	7,500	1½	3.35
64 G 301	P3060	BV	2.5	10.0	10,000	2¼	4.20
64 G 262	P6467	A	5.0	3.0	2,500	1½	2.82
64 G 255	P3062	BV	5.0	6.0	2,500	2¼	3.73
64 G 308	P6134	A	6.3	1.2	3,000	1	1.71
64 G 584	P8190	A	6.3	1.2	5,000	1	2.23
64 G 585	P8191*	A	6.3	1.2	5,000	1	2.41
64 G 263	P6466	A	6.3	3.0	2,500	1½	2.73
64 G 309	P5014	BV	6.3	3.0	2,500	2¼	3.20
64 G 256	P4019	C	6.3	4.0	2,500	2½	4.23
64 G 264	P4089	C	6.3	6.0	2,500	3½	4.85
64 G 312	P3064	BV	6.3	6.0	2,500	2¼	3.67
64 G 313	P6308	.....	6.3	10.0	2,500	3¼	4.41
64 G 265	P6309	.....	6.3	20.0	2,500	6¾	8.35
64 G 314	P5015	BV	7.5	4.0	2,500	3	3.73
64 G 257	P5016	BV	10.0	4.0	2,500	4½	4.50
64 G 318	P6139	.....	10.0	8.0	2,500	5	5.47
64 G 258	P4097	C	10.0	8.0	2,500	4¾	5.94
64 G 142	P8130	A	12.6	2.0	1,500	1½	3.03
64 G 143	P6469	A	25.2	1.0	1,500	1½	2.88

PUSH-PULL AUDIO INPUT TRANSFORMERS

For single plate to push-pull grids except *single plate to single grid; for 7000-20,000 ohm plate impedances. All others, 7000-15,000 ohm plate impedance. Maximum primary DC, 10 ma. All are Fig. A.

Stock No.	Type	Ratio	Size	Lbs.	NET
64 G 079	A52C	1:2	1⅜x2⅜x1⅜"	¾	1.62
64 G 090	A53*	1:3	1⅜x2⅜x1½"	¾	1.56
64 G 081	A53C	1:3	1⅜x2⅜x1⅜"	¾	1.59
64 G 082	A63C	1:3	1⅝x2⅞x1½"	¾	1.79

DRIVER TRANSFORMERS

Single plate (10,000 ohms primary impedance) to push-pull grids. All are Fig. A mounting type.

Stock No.	Mfr's Type	Pri. to ½ Sec. Ratio	Pri. Ma.	Size	Wt., Lbs.	NET
64 G 076	A4713	2:1	3	1⅝x2⅞x1½"	1	1.76
64 G 038	A4723	3:1	30	1⅝x2⅞x1½"	1	1.76
64 G 039	A4752	2/1.5/1:1	40	2x3¼x1¾"	1½	2.59

POWER TRANSFORMERS

8400 Series—For 6.3 Volt Tubes. All secondaries center-tapped, except PS-8415 and PA8421. *For use with 6AX5, 6X4, 6X5 or selenium rectifiers. All are Fig. M, except Type PC is Fig. C and Type PS is Fig. A. §Has extra winding: 6.3 v. @ 3A. C.T. Primary, 117 volts, 60 cycle AC.

Stock No.	Mfr's Type	Plate VCT	Plate Ma	Rect. V	Rect. A	Fil. 1 V	Fil. 1 A	Overall Size	Wt. Lbs.	NET
64 G 162	PS -8415	125	15	*	...	6.3	.6	2⅜x1⅜x2"	¾	1.85
64 G 078	PA-8421	125	50	*	...	6.3	2.0	2¼x3¼x2⅛"	1½	3.09
64 G 216	PS -8416	250	25	*	...	6.3	1.0	2 5/16x2¼x1¾"	1	2.32
64 G 077	PC-8418	460	50	*	...	6.3	2.5	3 1/16x2⅜x2⅞"	2¾	3.85
64 G 154	PM-8401	470	40	5	2	6.3	2.0	2½x3x2⅝"	2¼	3.97
64 G 176	PC -8401	470	40	5	2	6.3	2.0	3 3/16x2⅝x2⅝"	2¼	3.97
64 G 170	PM-8402	480	55	5	2	6.3	2.0	2¾x2½x3"	2½	4.41
64 G 177	PC -8402	480	55	5	2	6.3	2.0	3 1/16x2⅝x2¾"	2½	4.41
64 G 175	PM-8419	480	70	*	...	6.3	3.0	2⅞x2½x3"	2¼	4.41
64 G 215	PC -8419	480	70	*	...	6.3	3.0	3 3/16x2⅝x2⅞"	2¼	4.41
64 G 171	PM-8403	500	70	5	2	6.3	2.5	3¼x2½x3"	3¼	4.94
64 G 178	PC -8403	500	70	5	2	6.3	2.5	3 3/16x2⅝x3⅛"	3¼	4.94
64 G 179	PC -8404	520	90	5	2	6.3	3.0	3⅝x3x3½"	4	5.56
64 G 160	PM-8404	520	90	5	2	6.3	3.0	2⅞x3⅛x3⅝"	4	5.56
64 G 172	PM-8405	540	120	5	3	6.3	3.5	3½x3⅛x3¾"	4½	6.14
64 G 183	PC -8405	540	120	5	3	6.3	3.5	4x3¼x3½"	4½	6.14
64 G 157	PM-8406	650	40	5	2	6.3	2.0	2½x3x2¼"	2½	4.06
64 G 155	PM-8407	650	55	5	2	6.3	2.0	2½x3x3⅛"	3¼	4.47
64 G 217	PC -8406	650	40	5	2	6.3	2.0	3 1/16x2⅝x2¼"	2¼	4.06
64 G 184	PC -8407	650	55	5	2	6.3	2.0	3 1/16x2⅝x3⅛"	3½	4.47
64 G 164	PC -8408	680	70	5	2	6.3	2.5	3⅜x3⅝x3"	4	5.06
64 G 156	PM-8408	680	70	5	2	6.3	2.5	2⅞x3⅜x3½"	4	5.06
64 G 158	PM-8409	700	90	5	2	6.3	3.0	2⅞x3⅜x3¼"	4½	5.64
64 G 185	PC -8409	700	90	5	2	6.3	3.0	3⅝x3x3⅝"	4¼	5.64
64 G 159	PM-8410	720	120	5	3	6.3	3.5	3½x3¾x3¾"	5½	6.23
64 G 186	PC -8410	720	120	5	3	6.3	3.5	4x3¼x3¾"	5½	6.23
64 G 173	PM-8411	750	150	5	3	6.3	4.5	3⅞x3½x4⅛"	5½	7.47
64 G 187	PC -8411	750	150	5	3	6.3	4.5	4 5/16x3⅝x4⅛"	5½	7.47
64 G 161	PM-8412	800	200	5	3	6.3	5.0	3¾x4½x3⅞"	8½	8.41
64 G 163	PC -8412	800	200	5	3	6.3	5.0	4x4x4¾"	8¼	8.41
64 G 169	PC -8414§	1200	200	5	3	6.3	3.0	4¼x4¾x4"	8½	10.61

FILTER CHOKES

All ratings are with maximum DC in winding. All are Fig. A, mounting type, except *Fig. L, †Fig. TD, §Fig. C; like Fig. J, but with leads. All are rated 1500 v. rms except **2000, ††3000.

Stock No.	Type	Hys.	Ma.	Ohms	Size	Lbs.	NET
64 G 057	C1001††	10.5	110	225	2⅝x4x2¼"	2½	2.62
64 G 056	C1002	15.0	75	400	2¼x3¼x2⅛"	1¼	1.91
64 G 055	C1003	16.0	50	580	2x3¼x1¾"	1½	1.56
64 G 065	C1080	3.5	50	200	1⅝x2⅞x1½"	¾	1.26
64 G 075	C1279	8.5	50	400	1⅝x2⅞x1½"	¾	1.29
64 G 067	C1355*	8.0	75	290	2 1/16x2 5/16x1¾"	1½	1.79
64 G 063	C1410§††	4.0	175	100	3 3/16x2⅝x2⅝"	2½	3.70
64 G 466	C1411§††	4.5	200	80	3⅝x3 x3⅛"	3½	4.20
64 G 455	C1412§††	4.0	250	60	3⅝x3x3½"	4½	6.20
64 G 068	C1420§	16.0	80	360	3 5/16x2⅝x2⅝"	2½	3.18
64 G 465	C1421§††	7.0	140	165	3 1/16x2⅝x2⅝"	2½	3.62
64 G 058	C1515	20.0	15	900	1⅝x2⅞x1½"	1	1.29
64 G 050	C1706	4.5	50	300	1⅞x2⅛x1⅛"	¾	1.09
64 G 051	C1707	7.0	50	550	1⅞x2⅛x1⅛"	¾	1.15
64 G 052	C1708	13.0	65	500	2 x3¼x1¼"	1	1.79
64 G 053	C1709	8.0	85	250	2 x3¼x2"	1¾	2.00
64 G 054	C1710	7.0	150	200	2⅝x4 x2¼"	2¼	2.91
64 G 069	C1721††	8.5	200	120	3⅞x3⅛x3"	4½	5.09
64 G 456	C1722††	8.0	300	80	4⅝x3⅜x3½"	7½	8.44
64 G 059	C2303**	2.5	130	100	2 x3¼x1¼"	1½	1.82
64 G 060	C2304	2.3	150	60	2 x3¼x1¼"	1½	1.88
64 G 061	C2305†	5.0	100	300	2 11/16x2¾x2 3/16"	1½	2.76
64 G 064	C2308§††	8.0	300	80	4¾x4 x3⅞"	7¼	8.53
64 G 457	C2309**	3.0	150	90	2¼x3¾x2¼"	1¼	2.26
64 G 505	C2325	2.0	200	60	3¾x2¼x2¼"	2	2.26
64 G 520	C2326	1.0	300	43	3¼x2¼x2¼"	1¾	2.56
64 G 073	C2327	1.5	200	85	1⅝x2⅞x1½"	¾	1.44
64 G 458	C2328	.8	375	25	2½x3¾x2"	1½	2.97
64 G 459	C2334	2.8	300	60	2⅞x2¼x4"	2½	2.50

LINE-TO-VOICE COIL TRANSFORMERS

All have style J frame and terminal lugs except * in Q case. Type A3837 is auto-transformer; operates one or more speakers in parallel. A-8102 and A-8103 are RETMA 70.7 volt types. †Power steps in watts.

No.	Type	Primary Imp.	Secondary Imp.	Watts	Ctrs.	Lbs.	NET
64 G 087	A3818	1500/1000/500	15/8/4	25	3⅛"	2½	3.20
64 G 088	A3837	500/1000 1500/2000 2500/3000	.06 to 8, .12 to 16 .18 to 24, .24 to 32 .30 to 40, .36 to 48	15	2 13/32"	1¼	3.23
64 G 098	A3883	500	15/8/6/4	25	2⅛"	1¼	2.78
64 G 085	A7947*	2000/1500/ 1000/500	6-8/3.2	8	2⅛"	1¼	1.88
64 G 086	A7949	2000/1500/ 1000/500	6-8/3.2	12	2⅛"	1¼	2.50
64 G 089	A8101*	500	3.2/6-8	5	2"	¾	1.38
64 G 091	A8102	8/4/2/1/0.5†	4/8/16	8	2"	¾	2.65
64 G 092	A8103	16/8/4/2/1/.5†	4/8/16	16	2 13/16"	1¾	3.70
64 G 099	A8104	3000/2000/ 1500/1000/500	16/8/4	10	2⅛"	1½	3.59

Stancor Transformers


HG


HJ


TS


HA


HE


DF


N


TC

TELEVISION REPLACEMENT TRANSFORMERS, YOKES AND FOCUS COILS

Top-quality transformer-inductor type TV replacement components. All are electrically identical to original part. Horizontal output transformers are exact duplicate, electrical and physical replacements. The Stancor Television Components Replacement Guide gives original part numbers and replacements for transformers and coils. There is no charge for the Replacement Guide; ask for 37G037 with your next order.

HORIZONTAL OUTPUT TRANSFORMERS

Stock No.	Type	Fig.	Original Mfrs. Part Nos.	NET
64 G 210	A-8128	HJ	Admiral 79C23-3, 79C28-1 Airline 22E42 Dumont 20-375, 20004261 Hoffman 5123, 5134 Majestic C9.240-1	6.41
64 G 281	A-8129	.....	Muntz TO-0024	6.26
64 G 546	A-8130	HG	General Electric 77J1	5.88
64 G 221	A-8131	.....	Emerson 738047/48/53/60	3.82
64 G 559	A-8132	.....	Muntz TO-0031	6.17
64 G 211	A-8133	HA	Admiral 79C30-1, 79C30-3	6.17
64 G 551	A-8134	HA	Admiral 79C30-2, 79C30-4, 79C38-1, 79D38-1	6.17
64 G 572	A-8135	.....	Admiral 79D41-1, 79D41-2	6.32
64 G 573	A-8136	.....	Philharmonic 80-263/-265/-2	5.88
64 G 320	A-8137	.....	Hoffman 5035	5.88
64 G 268	A-8138	.....	Emerson 738079, 738084	5.88
64 G 369	A-8139	.....	Emerson 738096, 738100	5.59
64 G 321	A-8220	.....	Philco 32-8565	6.26
64 G 322	A-8221	.....	Philco 32-8555	6.61
64 G 323	A-8222	.....	Philco 32-8533, 32-8534	6.29
64 G 324	A-8223	.....	Philco 32-8572	5.67
64 G 325	A-8224	HE	Motorola 24C711265/A, 24C721290	7.70
64 G 326	A-8225	HE	Motorola 24K712193	7.70
64 G 327	A-8226	HE	Motorola 24K721301/C, 24K721517C	7.70
64 G 328	A-8227	HJ	Sylvania 241-0003	4.23
64 G 329	A-8228	HJ	Sylvania 241-0005, 241-0006	4.53
64 G 330	A-8229	HJ	Sylvania 241-0007	4.76
64 G 331	A-8230	.....	Air King, CBS/Columbia, Firestone and Silvertone 10104/07/08/10/26/35	6.17
64 G 332	A-8231	.....	Air King, CBS/Columbia, Firestone and Silvertone 10136B/37/38/59	6.17
64 G 333	A-8232	.....	Emerson 738067/68/69/73/74/75/82	6.17
64 G 284	A-8236	.....	Westinghouse V-11548-1/-2/-3/-4	6.61
64 G 285	A-8237	.....	Westinghouse V-9904-1, V-10213-1	5.73
64 G 286	A-8238	.....	Westinghouse V-9904-2, V-10204-1, V-10214-1	5.73
64 G 279	A-8239	.....	Motorola 24K792753, 24K701099	5.88
64 G 283	A-8240	.....	Muntz TO-0036	5.88
64 G 222	A-8241	.....	Crosley 157820 Hallicrafters 55D251	4.76
64 G 282	A-8242	.....	Muntz TO-0028/29	5.29
64 G 218	A-8245	.....	Airline and Sentinel 22E57	5.88
64 G 219	A-8246	.....	Airline and Sentinel 22E67	5.88
64 G 220	A-8247	.....	Airline and Sentinel 22E75	8.27
64 G 223	A-8248	HE	Crosley 154069/-1, 154990/2/3 Hallicrafters 55D197	8.27
64 G 224	A-8249	.....	Dumont 20005021	5.29
64 G 266	A-8250	.....	Dumont 20004361	5.29
64 G 267	A-8251	.....	Dumont 20006731	5.73
64 G 209	A-8252	.....	Arvin E24989 Dumont 20008061, 20008402 Hoffman 5156, 5160 Olympic TR-2771-1 Packard Bell 89435/7/8/8B Silvertone N24989, PMC-56002 Stromberg-Carlson 161035, 161042, 161043/-1, 161046 Techmaster T-25T1	5.29
64 G 212	A-8253	.....	Admiral 79D48-1	5.73
64 G 213	A-8254	HA	Admiral 79C60-1	4.03
64 G 214	A-8255	HA	Admiral 79C60-1, 79C60-2	4.76
64 G 272	A-8256	.....	General Electric RTO-101	5.88
64 G 273	A-8257	.....	General Electric RTO-104	5.88
64 G 275	A-8258	.....	General Electric RTO-125/6/7	5.73
64 G 276	A-8259	.....	General Electric RTO-129, RTO-130	5.29
64 G 274	A-8260	.....	General Electric RTO-109	6.03
64 G 278	A-8261	.....	Majestic and Muntz C9.253/1/-2/-E	5.88
64 G 277	A-8262	.....	General Electric RTO-131/-141/-163-3	5.73
64 G 208	A-8263	.....	Crosley 158481-1, 158481-2 158481-5 Hallicrafters 55B253, 55D262 55D266	5.44
64 G 287	A-8267	HJ	Zenith S-15911/2, S-16566, S-17130/40, S-17233, S-17245/265/435, S-17646/767/811 S-17927 S-20908	5.52
64 G 288	A-8268	HJ	Zenith S-15015/202/709, S-15710, S-16006, S-16191/204, S-17244/669/X, S-20866	5.52
64 G 289	A-8269	HJ	Zenith S-18487, S-18537, S-18802	5.29
64 G 290	A-8270	HJ	Zenith S-18567, S-18990, S-19728	5.29
64 G 291	A-8271	HJ	Zenith S-19032	5.29
64 G 368	A-8272	HJ	Zenith S-20993	5.29

VERTICAL BLOCKING OSCILLATOR TRANSFORMERS

Provide 60-cycle pulse voltage. Turns ratio pri./sec. of 1:4.2, except: A-8124, Sec. No. 1, 1:0.48, sec. No. 2, 1:1; and A-8126, 1:15.

No.	Type	Fig.	Size	Lbs.	NET
64 G 501	A-8111	A	1½x2½x1½"	½	1.59
64 G 504	A-8121	TD	1¼x2 5/16x1½"	½	2.18
64 G 543	A-8122	TS	1 9/16x1 3/16x1 9/16"	½	2.47
64 G 549	A-8124	A	1⅞x2⅞x1⅞"	½	2.44
64 G 558	A-8125	A	2 3/16x1¼x1 3/16"	½	1.59
64 G 471	A-8126	.....	1¾x1½x2"	½	1.62

TELEVISION REPLACEMENT PARTS GUIDE

37 G 037. Shows original and Stancor replacement part No. No charge with order.

VERTICAL DEFLECTION TRANSFORMERS

Like Fig. A on page 124 except *like Fig. N. †Autoformer type.

Stock No.	Mfr's Type	DC Res. Pri.	In Ohms Sec.	Size	Wt. Lbs.	NET
64 G 522	A-8112	1300	10	2x3¼x1¾"	1	2.56
64 G 523	A-8113	700	12	2x3¼x1¾"	1	2.62
64 G 502	A-8115*	600	7	3 1/16x2½x2½"	2½	3.88
64 G 516	A-8116*	525	7	3 1/16x2½x2¼"	2½	3.56
64 G 547	A-8123†	1200	11	2x3¼x1¾"	1½	2.38
64 G 554	A-8140*	400	0.3	2½x2½x3 1/16"	3	4.03
64 G 557	A-8141†	1650	4.5	2¼x3⅛x2⅛"	1½	3.44
64 G 460	A-8142*	540	10.5	2⅝x2⅛x3"	2½	3.00
64 G 461	A-8143	625	14	2¼x2⅛x3⅝"	2	2.56
64 G 462	A-8144	540	15	2¼x1¾x3⅝"	1½	2.26
64 G 463	A-8145*	540	14	2⅝x2⅛x2½"	2	3.38
64 G 464	A-8146†	375	10	2x1⅞x3¼"	1½	2.35
64 G 472	A-8147†	300	9	2x1⅞x3¼"	1	2.06
64 G 473	A-8148†	375	6.5	2x1⅞x3¼"	1½	2.50
64 G 474	A-8149†	330	8.5	2x1⅞x3¼"	1	2.75

HORIZONTAL BLOCKING OSCILLATOR TRANSFORMERS

No.	Type	Fig.	Size	Lbs.	NET
64 G 500	A-8110	A	1½x2½x1½"	½	1.79
64 G 503	A-8120	TD	1¼x2 5/16x1½"	½	2.53

TELEVISION POWER TRANSFORMERS

All plate windings CT. All are Fig. M except †Fig. C. *With copper shorting band to reduce external magnetic field. For 117 volts, 60 cycles.

Stock No.	Mfr's Type	Plate V	Plate Ma	Rect. V	Rect. A	Fil. V	Fil. A	Overall Size	Wt. Lbs.	NET
64 G 510	P-8154	750	230	5	3	5/6.3	2/5.6	4¼x4¾x4½"	9½	11.47
64 G 517	P-8156*	730	340	5	6	5/12.6 CT	2/5	6⅝x3 11/16x4¾"	16¼	18.17
64 G 518	P-8157	770 470	195 105	5 2	3 .	6.3/ 6.3/5	7.65/ .6/2	4¼x3¾x4½"	11½	15.64
64 G 576	P-8159*	720	290	5	3	5/6.3/6.3	2/8/.6	5⅝x3 11/16x4¾"	10½	14.64
64 G 577	P-8160	716 332	185 65	5	3	6.45	12	4¼x3¾x4½"	10	12.61
64 G 548	P-8163*	740	250	5	3	6.3/6.3	7.75/1.2	5⅝x3 11/16x4¾"	10½	14.99
64 G 578	P-8164*	600	70	5	3	6.3	9.0	4½x3 7/16x4½"	7½	11.82
64 G 580	P-8166*	680	360	5	6	6.3/6.3/6.3	2.5/5.0/5.0	6x3 11/16x4¾"	13	17.38
64 G 583	P-8169*	760	250	5	3	6.3/6.3/6.3	1.2/5/7	4⅝x3¾x4½"	10½	13.91
64 G 599	P-8171*	750	250	5	3	6.3/6.3	2.0/9.0	5x3¾x4½"	10½	13.88
64 G 413	P-8331*	620	240	5	3	6.3/6.3	6.4/3	4½x3⅝x4½"	9	11.67
64 G 414	P-8332*	560	260	5	3	6.3/6.3/6.3	7.1/1.2/.9	4¾x3¾x4½"	11	12.91
64 G 415	P-8333*	590	225	5	3	6.3/6.3	11.4/.9	4¾x3¾x4½"	10	12.14
64 G 416	P-8334*	550	305	5	5	6.3/6.3	8.5/1.2	5½x3¾x4½"	13	14.08
64 G 417	P-8335*	600	325	5	6	6.3/6.3	8.8/1.5	5x3¾x4½"	13	14.08
64 G 418	P-8336*	117	280		.	6.3/6.3/6.3	9.5/.6/1.2	4¼x3¾x4½"	8	9.97
64 G 419	P-8337	630	225	5	3	6.3	8.25	4½x3¾x4½"	8½	12.49
64 G 420	P-8338*	630	310	5	6	6.7/6.4	10/1.6	5¼x3⅝x4¾"	12½	12.91
64 G 421	P-8339†	650	255	5	3	12.6 CT	5.25	4⅞x3¾x5"	8½	10.44
64 G 422	P-8340*	710	270	5	6	6.3/6.3/6.3	9.5/1.65/2.4	4¼x3¾x4½"	12	13.23
64 G 423	P-8341*†	720 440	175 110	5 2	3 .	12.6 CT	5.45	4⅞x3¾x4⅞"	11	12.49
64 G 424	P-8342*	730	260	5	6	6.3/6.3	8.85/1.2	5¼x3¾x4½"	13	12.79

DEFLECTION YOKES

For magnetically deflected direct-view kinescopes. 70° deflection. §53° deflection. All have networks and extra long leads. Molded nylon coil forms. Ferrite cores and cosine windings. except †. Wt., 1½ lbs.

No.	Type	Fig.	Coil Induct. in Mh Horiz.	Coil Induct. in Mh Vert.	Coil Ohms Horiz.	Coil Ohms Vert.	EACH
64 G 538	DY-1A§†	.....	8.3	50	13.5	66	4.65
64 G 595	DY-2A	DF	10.3	50	14.5	66	5.88
64 G 539	DY-8A	DF	8.5	50	14.5	52.5	5.88
64 G 590	DY-9A	DF	13.5	50	17.5	53.5	5.88
64 G 589	DY-10A	DF	30.0	3.5	45	3.5	5.88
64 G 596	DY-11A	DF	20	50	23	50	5.88
64 G 597	DY-12A	DF	30	50	34	50	5.88
64 G 370	DY-14A	DF	30	3.5	45	3.5	6.03
64 G 371	DY-15A	DF	25	50	35	50	5.88

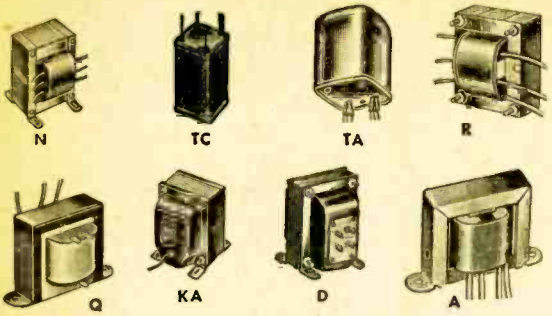
WIDTH AND LINEARITY CONTROLS

Replacement width and linearity controls. *Width coil. †Tapped linearity coil. §Width coil with keyed winding. **Width coil and/or linearity coil. ‡Width coil with AGC. Shpg. wt., ½ lb.

Stock No.	Type	Inductance In Mh	Resis. In Ohms	AGC Inductance In Mh	AGC Res. In Ohms	NET EACH
64 G 491	WC-1*	.050-.50	.53	.....	.....	.73
64 G 492	WC-2†	.55-4.6	8.3	.....	.....	.73
64 G 493	WC-4*	.170-.610	1.0	.....	.....	.71
64 G 494	WC-5**	4-39	32.0	2.7-7.6	19.5	1.23
64 G 495	WC-6†	1.3-4.1	5.6	.....	.....	.76
64 G 496	WC-7*	.5-3.5	2.3	.....	.....	.73
64 G 497	WC-8*	1.0-10.0	8.0	.....	.....	.88
64 G 498	WC-9§	3.2-9	28.0	.16-70	1.0	.94
64 G 499	WC-10‡	4.0-28	32.0	2.6-7.5	1.2	1.03

Transformers

STANCOR QUALITY TRANSFORMERS



VIBRATOR TRANSFORMERS

For New Equipment. *6-volt DC and 115-volt AC primary. Others 6-volt DC primary only. All are like Fig. A, except P6166, Fig. TC.

Stock No.	Mfr's Type	Sec. DC to Filter Volts	Sec. DC to Filter Ma	Sec. AC Volts	Size	Wt. Lbs.	NET
64 G 753	P4062	260	65	300-0-300	3⅛x2½x2⅝"	2½	4.21
64 G 126	P4061	250	50	290-0-290	3⅛x2½x2⅝"	2½	3.82
64 G 752	P4060	225	40	240-0-240	3⅛x2½x2⅝"	2½	3.97
64 G 125	P6301	150	40	210-0-210	2⅝x2⅛x1¼"	1½	3.06
64 G 127	P6166*	Fil. 6.3 V. @ 2.25 amps.	135	350-0-350	4¼x4x3⅝"	7½	9.91

Exact Replacements. For original equipment. Av. shpg. wt., 2 lbs.

No.	Type	Fig.	Original Mfr's. Part Nos.	NET
64 G 754	P4064	TC	Delco 7240519	6.91
64 G 755	P4065	TC	Delco 7255881	6.41
64 G 756	P6470	.....	Regal 140-111	4.49
64 G 757	P6471	TA	Motorola 25B472533 Colonial-Detrola D71014	4.47
64 G 758	P6472	TA	Colonial, Bendix, Detrola, Motorola C217020, C71014, 25B70950	4.47
64 G 759	P6473	TA	Zenith 95-1073	5.09
64 G 760	P6474	TA	Zenith 95-1066	4.65
64 G 761	P6476	TA	Colonial, Detrola, Motorola C70267, D70267	4.59
64 G 762	P6477	.....	Motorola 25C500189	2.73
64 G 763	P6478	R	Motorola 25C501644	2.97
64 G 764	P6479	.....	Philco 65-0358	3.70
64 G 765	P6480	.....	Philco 65-0347	3.15
64 G 766	P6481	.....	Philco 32-831 3-1	3.35
64 G 767	P6482	TC	Delco 6060	5.14
64 G 768	P6483	.....	Farnsworth VE-169	4.65
64 G 769	P6484	TA	Motorola 25B70950-E	4.94
64 G 770	P6485	TA	Zenith 95-1071	5.12
64 G 771	P6486	TA	Motorola 25C472586-C	5.44
64 G 772	P6487	TA	Motorola 25B-23103	4.14
64 G 773	P6488	.....	Motorola 25C521454	3.47
64 G 774	P6489	R	Delco 6067	2.94

POLY-PEDANCE MODULATION TRANSFORMER

Fig. D. Type A3893. Multi-tapped, 60-watt modulation transformer. Primary and secondary each will match loads from 2,000 to 20,000 ohms. Max. DC, primary and secondary, 180 ma. each. 4x3¼x4⅛". 7 lbs.
64 G 478. NET EACH 11.61

ISOLATION TRANSFORMERS

Primaries tapped for 125, 115 and 105 v. with 115 v. secondary (except P-6415). Excellent for correction of high and low line voltages. P-6415 has 117 v. primary and tapped secondary with 3 standard output receptacles for 105, 115 and 125 v.; electrostatically shielded.

No.	Type	Fig.	Watts	Size	Lbs.	NET
64 G 449	P-6410	.....	50	3⅝x2⅛x3⅛"	4	6.06
64 G 443	P-6160	KA	100	4⅛x4x3⅛"	7	11.85
64 G 444	P-6415	.....	350	5⅛x4½x5⅛"	17	18.79
64 GZ448	P-6298	KA	500	7⅝x6⅛x7⅛"	28	34.84

TUBE CHECKER TRANSFORMER

Type P-1834-3. Multiple secondary transformer. Pri.: 125/115/105 v., 60 cycles. Secondary output volts: 1.1/1.4/1.5/2.0/2.5/3.0/3.3/5.0/6.3/7.0/7.5/12/25/30/35/50/70/85/110/117. Size, 2⅝x4x2". "A" style mounting. With data sheet. Shpg. wt., 2½ lbs.
64 G 139. NET EACH 8.35

INTERCOM AND TRANSCEIVER TRANSFORMERS

Type A3833 is used in transceiver applications; 200 ohm primary for carbon mike. A4744 voice coil to grid input. Both A style mounting.

No.	Type	Application	Pri.	Sec.	Size	Lbs.	NET
64 G 031	A3833	Transceiver	200,5K	60K	1⅝x2⅞x1½"	1	2.53
64 G 030	A4744	Intercom	4	50K,25K	1⅝x2⅛x1½"	¾	1.65

MICROPHONE TRANSFORMERS

Type A4350 is for mike to line or line to line. Others for mike, pickup or line to grid. A4350 and A4352 are Fig. Q. A4705 is Fig. A. A4351 is Fig. TD (p. 124). 500 and 200 ohm primary sections are center-tapped.

No.	Type	Primary Imp.	Secondary Imp.	Mtg. Ctrs.	Lbs	NET
64 G 094	A4350	500/333/200/125/50	500/333/200/125/50	2 1/16"	1	3.82
64 G 097	A4351	500/333/200/125/50	89,000	2⅝x1½"	1½	4.09
64 G 093	A4352	500/333/200/125/50	89,000	2 1/16"	1	3.56
64 G 096	A4705	200/70	80,000	2"	½	1.88

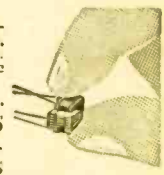
STANCOR HIGH-FIDELITY TRANSFORMERS

Economical audio output transformers designed for true high-fidelity performance. Excellent power handling capacity and wide frequency response make them suitable for use in amplifiers where a high degree of audio fidelity is required. Frequency response, flat, ±1 db, from 20-20,000 cycles, at 25 watts. All units conservatively rated at maximum of 50 watts. Designed to match most of the popular tubes to speaker or line impedances. Types A-8054 and A-8072 may be used in Williamson amplifiers. Units employ interleaved "triflar" windings, extremely tight coupling and careful balancing. Size, 4⅝x3⅝x4¼". Shpg. wt., 7 lbs.

Stock No.	Type	Pri. Imp. (P-P)	Sec. Imp.	Max. Pri. DC Per Half	NET EACH
64 G 563	A-8053	5000	8, 16	150 ma	12.02
64 G 570	A-8056	6600	8, 16	125 ma	12.02
64 G 564	A-8054	9000	8, 16	100 ma	12.02
64 G 574	A-8072	7600	4, 8, 16	100 ma	14.70

CHASSIS SET WM-8. Two completely punched and finished chassis for the ultra-linear Stancor-Williamson Amplifier (using A-8072 transformer) and power supply. Diagram and parts lists. Shpg. wt., 3½ lbs.
64 G 269. NET PER PAIR 5.63

TRANSISTOR TRANSFORMERS



Ultra-miniature iron-core audio transformers. Useful range, below 1 mw level. Extremely fine wire, wound on nylon bobbins. Nickel steel laminations. Actual wt., 1/10 oz. All are ⅜x⅜x⅜", except Type UM110, ¼x⅜x⅜". Shpg. wt., 2 oz.

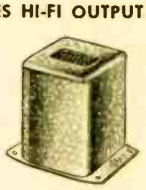
64 G 237. Type UM-110. Interstage. Imp.: pri., 20,000; sec., 1000 ohms. DC res.: pri., 1675; sec., 285 ohms. **NET** 5.59

64 G 238. Type UM-111. Output or Matching. Imp.: pri., 1000; sec., 50/60 ohms. DC res.: pri., 120; sec., 9.0 ohms. **NET** 3.82

64 G 239. Type UM-112. High-Imp. Mic. Input. Imp.: pri., 200,000; sec., 1000 ohms. DC res.: pri., 4,000; sec., 195 ohms. **NET** 6.17

64 G 240. Type UM-113. Interstage. Imp.: pri., 20,000; sec., 1000 ohms. DC res.: pri., 1350; sec., 205 ohms. ⅜x⅜x⅜". **NET** 4.26

ACROSOUND 300 SERIES HI-FI OUTPUT TRANSFORMERS


TO-300


TO-330

Model TO-300. Hi-fidelity audio output transformer for use with Ultra Linear Acrosound and other Williamson type amplifier circuits. Provides a much higher audio output level at very low distortion. Excellent linearity gives uniform response. 7-section concentric symmetrical coil permits small compact construction. Can be used in converting many popular amplifier circuits to Ultra Linear operation. 20 watts of undistorted power from 20 to 30,000 cps; 40 watts of undistorted power from 30 to 20,000 cps. *Primary impedance:* 6600 ohms. *Output impedance:* 4, 8 and 16 ohms. *Frequency response:* ±1 db from 10 to 100,000 cps. *Permissible feedback:* 30 db. *Primary shunt inductance:* 150 henries minimum. *Maximum DC per primary:* 75 ma. 10" color-coded leads. Seamless steel flanged case with gray Hammertone finish. Size: 4⅛x3⅝x3¼". Shpg. wt., 7 lbs.
63 G 993. NET 24.75

Model TO-310. Hi-fidelity audio output transformer, similar to TO-300 above, but recommended for 12 watt circuits. Excellent for converting amplifiers using type 6V6 tubes for Ultra Linear operation. Primary impedance: 8000 ohms. *Output impedance:* 4, 8 and 16 ohms. 10 watts of undistorted power output from 20 to 30,000 cps; 20 watts of undistorted power output from 30 to 20,000 cps. *Frequency response:* ±1 db from 10 to 100,000 cps. *Permissible feedback:* 30 db. *Primary shunt inductance:* 85 henries minimum. *Maximum DC per primary:* 75 ma. 10" color coded leads. Seamless steel flanged case. Size: 4¼x3⅝x3¼". Shpg. wt., 6 lbs.
63 G 994. NET 18.75

Model TO-305. Hi-fidelity audio output transformer, similar to TO-300, above, but has 4, 8, 16, 125 and 500 ohm output impedances. Primary impedance, 6600 ohms. Matches push-pull type 6L6 or 5881 tubes for Ultra Linear operation. 20 watts of undistorted power from 20 to 30,000 cps; 40 watts undistorted power from 30 to 20,000 cps. 10" color coded leads. Size: 4¼x3⅝x3¼". Shpg. wt., 8 lbs.
63 G 995. NET 30.75

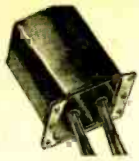
Model TO-315. Hi-fidelity audio output transformer, similar to TO-310, above, but has 4, 8, 16, 125 and 500 ohm output impedances. Primary impedance 8000 ohms. Matches push-pull type 6V6 tubes for Ultra Linear operation. 10 watts undistorted power from 20 to 30,000 cps; 20 watts from 30 to 20,000 cps. 4¼x3⅝x3¼". Shpg. wt., 7 lbs.
63 G 996. NET 24.75

Model TO-330. Designed for high-power, push-pull parallel Ultra-Linear operation of Acrosound or Williamson type amplifier circuits. Can be used with push-pull paralleled type 807 or KT-66 tubes to provide 50 watts of undistorted power from 20 to 30,000 cps; 100 watts of undistorted power from 30 to 20,000 cps. *Primary impedance:* 3300 ohms. *Output impedance:* 4, 8, 16 ohms. *Frequency response:* ±1 db 10 cps to 100 kc. *Permissible feedback:* 30 db. *Primary shunt inductance:* 85 henries minimum. *Insertion loss all taps:* .5 db maximum. *DC per primary maximum:* 150 ma. *Permissible DC unbalance:* 15%. Fully protected—potted in folded steel case. Gray Hammertone finish. Top and bottom mounting facilities. Mtg. centers are 3x3⅝". Size: 5¼x4x4⅝". 10" color-coded leads. Shpg. wt., 15 lbs. *Also available with output impedance of 125 or 500 ohms on special order.*
63 G 997. NET 39.75

Chicago Transformers


H


S


C


B


NSI


IS

Case No.	Depth	Width	Height	Case No.	Depth	Width	Height	Case No.	Depth	Width	Height
12	2 1/2"	2 1/2"	2 11/16"	16	2 7/8"	2 11/16"	3 1/2"	20	3 11/16"	3 5/16"	4 5/16"
13	2 1/2"	2 1/2"	2 15/16"	17	2 7/8"	2 11/16"	3 3/4"	21	3 11/16"	3 5/16"	4 11/16"
14	2 1/2"	2 5/8"	3 1/16"	18	3 1/4"	3"	3 7/8"	22	4 9/16"	4 1/8"	5 5/16"
15	2 1/2"	2 5/8"	3 5/16"	19	3 1/4"	3"	4 1/4"	24	5 9/16"	4 13/16"	6 1/16"

TRANSFORMERS AND CHOKES

A complete selection of power transformers, filament transformers and filter chokes designed for modern electronic equipment. Three types are available to meet every requirement—hermetically sealed, semi-sealed and compound sealed. All units have high grade magnet wire coils wound on non-aging, silicon steel cores. Housed in seamless, drawn steel cases.

The hermetically sealed units, Fig. H, meet the rigid standards of Grade I, JAN-T-27 specifications. Semi-sealed units, Fig. S, have steel base covers fitted with phenolic terminal boards and numbered solder lugs. Compound sealed units, Fig. C, have fiber board covers and 10" color-coded leads. Power units have 117 v., 50-60 cycle primaries.

POWER TRANSFORMERS FOR CAPACITOR INPUT SYSTEMS

Fig. H. Hermetically Sealed				Fig. S. Semi-Sealed				Fig. C. Compound Sealed				Specifications						
												Plate		Rect.		Fil.		Wt.
Stock No.	Mfr's Type	Case No.	NET EACH	Stock No.	Mfr's Type	Case No.	NET EACH	Stock No.	Mfr's Type	Case No.	NET EACH	V.CT	Ma	V	A	V.CT	A	Lbs.
64 G 600	PHC-55	17	12.88	64 G 607	PSC-55	17	9.11	64 G 614	PCC-55	16	5.38	540	55	5	2	6.3	2	3 1/2
64 G 601	PHC-70	19	14.26	64 G 608	PSC-70	19	10.29	64 G 615	PCC-70	18	6.62	670	70	5	2	6.3	3	4 1/2
64 G 603	PHC-105	21	16.29	64 G 610	PSC-105	21	11.61	64 G 617	PCC-105	20	8.29	690	105	5	2	6.3	3.5	6 1/2
64 G 604	PHC-120	21	17.23	64 G 611	PSC-120	22	12.23	64 G 618	PCC-120	22	9.32	750	120	5	3	6.3	4	9 1/2
64 G 606	PHC-200	22	24.49	64 G 613	PSC-200	22	17.20	64 G 620	PCC-200	22	12.44	770	200	5	3	6.3	4.5	
																6.3	1	12

POWER TRANSFORMERS FOR CHOKE INPUT SYSTEMS

64 G 621	PHR-55	17	12.73	64 G 629	PSR-55	17	9.26	64 G 637	PCR-55	16	5.59	700	55	5	2	6.3	2	3 1/4
64 G 622	PHR-70	19	13.79	64 G 630	PSR-70	19	10.14	64 G 638	PCR-70	18	6.32	850	70	5	2	6.3	3	4 1/2
64 G 627	PHR-200	22	22.46	64 G 635	PSR-200	22	18.52	64 G 643	PCR-200	22	11.47	1040	200	5	3	6.3	4.5	
																6.3	1	12 1/4
64 G 628	PHR-300	24	30.66	64 G 636	PSR-300	24	26.17	64 G 644	PCR-300	24	17.93	1100						
												740				6.3	5	
												150	300	5	6	6.3	1	17 1/2

FILTER CHOKES

Fig. H. Hermetically Sealed				Fig. S. Semi-Sealed				Fig. C. Compound Sealed				Specifications					
Stock No.	Mfr's Type	Case No.	NET EACH	Stock No.	Mfr's Type	Case No.	NET EACH	Stock No.	Mfr's Type	Case No.	NET EACH	Hys.	Ma	Ohms	Test Volts	Wt. Lbs.
64 G 645	RH-1540	12	6.12	64 G 657	RS-1540	12	3.53	64 G 669	RC-1540	12	2.50	15	40	475	2,500	1 1/2
64 G 646	RH-1055	13	6.32	64 G 658	RS-1055	13	3.91	64 G 670	RC-1055	12	2.91	10	55	230	2,500	1 1/4
64 G 647	RH-1555	13	6.32	64 G 659	RS-1555	13	4.12	64 G 671	RC-1555	12	3.06	15	55	420	2,500	2
64 G 648	RH-1085	14	6.70	64 G 660	RS-1085	15	4.12	64 G 672	RC-1085	14	3.45	10	85	175	2,500	2 1/2
64 G 649	RH-1585	14	6.70	64 G 661	RS-1585	15	4.97	64 G 673	RC-1585	14	3.70	15	85	285	2,500	2 1/4
64 G 650	RH-8105	17	7.85	64 G 662	RS-8105	17	5.59	64 G 674	RC-8105	16	4.11	8	105	100	2,500	3 1/4
64 G 651	RH-12105	17	7.85	64 G 663	RS-12105	17	5.59	64 G 675	RC-12105	16	4.32	12	105	170	2,500	4
64 G 652	RH-8150	18	9.00	64 G 664	RS-8150	19	6.47	64 G 676	RC-8150	18	5.67	8	150	100	2,500	5 1/4
64 G 653	RH-12150	19	9.00	64 G 665	RS-12150	19	6.67	64 G 677	RC-12150	18	5.73	12	150	150	2,500	5 1/2
64 G 654	RH-8200	20	10.58	64 G 666	RS-8200	21	7.64	64 G 678	RC-8200	20	6.67	8	200	85	2,500	7
64 G 655	RH-12200	20	10.58	64 G 667	RS-12200	21	8.08	64 G 679	RC-12200	20	6.76	12	200	140	2,500	7
64 G 656	RH-8300	22	16.17	64 G 668	RS-8300	22	11.61	64 G 680	RC-8300	22	9.35	8	300	60	3,500	12 1/2

FILAMENT TRANSFORMERS

Fig. H. Hermetically sealed, 115-230 v., 50-60 cycle primaries.

No.	Type	Case	NET	Sec.V.CT	Amps.	Test V.	Lbs.
64 G 721	FH-615	12	7.94	6.3	1.5	2,500	1
64 G 722	FH-63	14	9.38	6.3	3	2,500	2
64 G 693	FH-65	16	10.91	6.3	5.5	2,500	3
64 G 695	FH-610	19	15.43	6.3	10	2,500	5
64 G 697	FH-104	17	11.20	10	4	2,500	3 1/4

Fig. S. Semi-sealed, 115-230 v., 50-60 cycle primaries.

No.	Type	Case	NET	Sec. V.CT	Amps.	Test V.	Lbs.
64 G 682	F-210	17	9.55	2.5	10	5,000	3
64 G 686	F-54	15	6.38	5	4	2,500	2 1/4
64 G 688	F-58	17	10.88	5	10	2,500	3 1/2
64 G 692	F-530	22	16.61	5	30	2,500	10 1/2
64 G 723	F-615	12	5.14	6.3	1.5	2,500	1
64 G 724	F-63	14	6.17	6.3	3	2,500	2
64 G 694	F-65	17	7.50	6.3	5.5	2,500	3
64 G 696	F-610	19	10.29	6.3	10	2,500	5
64 G 698	F-104	17	8.23	10	4	2,500	3 1/4

ISOLATION TRANSFORMERS

Fig. IS. For faster, safer, easier servicing. Chassis ground is isolated from line ground, eliminating shock hazard. Primary slide switch selects high, medium and low secondary voltages. Electrostatic shielding, 8' line cord, female output receptacle. For 50-60 cycle AC operation.

Stock No.	Mfr's Type	Case No.	NET EACH	Primary Volts	Secondary Volts	Watts Cont.	Wt. Lbs.
64 G 726	IS-50	21	8.08	105/115/125	125/115/105	50	5
64 G 727	IS-100	22	11.61	105/115/125	125/115/105	100	8 1/2
64 G 728	IS-150	24	13.82	105/115/125	125/115/105	150	12 1/2
64 G 729	IS-250	24	16.31	105/115/125	125/115/105	250	18 1/4

HI-FI MINIATURE AUDIO TRANSFORMER

Type TT-11. Similar to Fig. B. For mike, pickup or line to single grid. Primary impedance: 50, 200/250, 500/600. Response: 1 db, 30-15,000 cps. Max. level, 0 db. 50K ohms secondary impedance. Size 7/8" square x 1 1/4" height. Shpg. wt., 2 oz.
64 G 591. NET 8.32

Fig. B—OUTPUT TRANSFORMERS

Response, 30-20,000 cycles, averaging ±0.5 db. Power: BO-1, 22 mw; BO-2, 1 w.; BO-5, 5 w.; BO-9, 15 w.; BO-12, 10 w. Williamson circuit. Special "sealed-in-steel" construction. *Extra 150/4 ohm secondary. BO-13 is 20 w. ultra-linear type. §Case number.

No.	Type	Pri. Imp.	Sec. Imp.	Application	Lb.	§	NET
62 G 522	BO-1	15,000	600/150CT	Single plate to line	2 1/4	14	9.96
64 G 734	BO-2	20,000 CT	600/150CT	PP plates to line	3	16	13.23
64 G 735	BO-5*	10,000 CT	600/16/8CT	PP pl. to line, or V.C.	4	18	15.99
64 G 738	BO-9*	5000/3000CT	600/16/8CT	PP pl. to line or V.C.	6	20	16.90
64 G 747	BO-12	10,000 CT	600/16/8	PP pl. to line or V.C.	9	22	17.49
64 G 748	BO-13	10,000 CT	16/8/4	Ultra-lin. PP pl. to V.C.	7	21	17.49

Fig. S—COMMUNICATIONS INPUT TRANSFORMERS

Frequency response, ±1 db, 200-3500 cps. In drawn steel cases. Size, 2 1/4x1 1/2x1 1/2. Shpg. wt., 1/4 lbs.

Stock No.	Type	NET	Impedance Primary	Impedance Secondary	Application
64 G 745	CIS-1	10.29	600/150 CT	100,000 CT	Low level line to single or PP grids
64 G 746	CIS-2	6.17	125/50 80 MA	125,000 CT	Low level SB, DB carbon mike to single or PP grids

PA & COMMUNICATIONS OUTPUT TRANSFORMERS

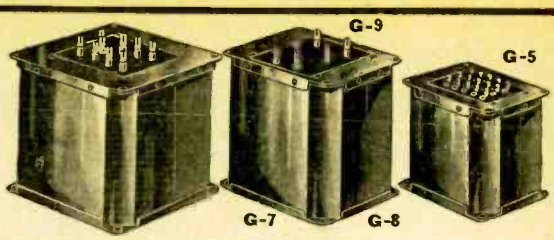
PCO-80 has response within ±0.5 db from 50-10,000 cycles. COS-2 is designed for communications use. Particularly adapted for receiving and transmitting equipment. Frequency response, within ±1 db from 200-3,500 cycles. PCO-80 has tertiary winding for 10% inverse feedback.

Stock No.	Type	NET	Impedance Primary	Impedance Secondary	Watts	Wt. Lbs.	Fig.	Case
64 G 739	PCO-80	7.94	5000 CT	600/150/16/8/4	20	6 1/2	C	20
64 G 744	COS-2	7.35	8000	600/150/16/8/4	5	2 1/4	S	14

Fig. NSI—DYNAMIC NOISE SUPPRESSOR CHOKES

High-Q chokes designed specifically for use in noise suppressor circuits, widely used where high Q is required. Inductance values are accurate within ±5% with up to 15 ma. DC. Minimum Q of 20. With noise suppressor schematic. 1 21/32x2 5/8x1 13/32". Shpg. wt., 1/2 lb.
62 G 520. Type NSI-1 Inductance, 0.8 hys.
62 G 521. Type NSI-2 Inductance, 2.4 hys. NET EACH 7.35

UTC Transformers



UTC SPECIAL SERIES AUDIO AND POWER TRANSFORMERS

Special series transformers are specifically designed for Amateur and PA amplifier service. Finish is in commercial gray enamel. Vacuum-impregnated and compound-filled. Power transformers carry ICAS ratings for intermittent service.

Case	Height	Width	Depth	Shpg. Wt.	Case	Height	Width	Depth	Shpg. Wt.	Case	Height	Width	Depth	Shpg. Wt.
G-2	2 5/16"	3 1/8"	1 15/16"	1½ lbs.	G-5	3¼"	3¼"	4½"	4½ lbs.	G-10	5⅞"	6⅛"	6⅜"	24 lbs.
G-3	2½"	3¼"	2 5/32"	2 lbs.	G-7	4⅝"	4⅝"	5½"	8 lbs.	G-11	5⅞"	6½"	7⅛"	31 lbs.
G-4	2 15/16"	4⅛"	2 5/16"	3 lbs.	G-8	4⅝"	5⅛"	5⅛"	12 lbs.	G-12	10¼"	7⅛"	9¼"	52 lbs.
					G-9	5⅛"	5⅛"	6¼"	21 lbs.					

CLASS A INPUTS

Stock No.	Type	NET	Ratio	Application	Case
62 G 754	S-1	3.92	3½:1	Plate to grid	G-2
62 G 755	S-2	4.90	2:1, 4:1	Plate to 2 grids	G-2
62 G 758	S-5	3.92	16:1	Single or double button mike, or line to grid	G-2

UNIVERSAL DRIVERS

Stock No.	Type	NET	Application	Case
62 G 761	S-8	5.39	Single driver plate to pp grids	G-3
62 G 762	S-9	6.37	PP pl. to grids of class B tubes	G-4
62 G 763	S-10	5.39	PP pl. to 2A3's, 6L6's, etc.	G-3

UNIVERSAL OUTPUTS—To Line and Voice Coil

Secondary impedances: 500, 15, 8, 2 ohms.

Stock No.	Type	NET	Primary Impedance	Watts	Case
62 G 764	S-14	5.88	2500, 4000, 7000, 10,000	10	G-2
62 G 765	S-15	5.39	PP tubes: 4000, 5000, 10,000	12	G-2
62 G 766	S-16	6.86	PP 3000, 6000, 9000-10,000	30	G-4
62 G 767	S-17	8.82	PP 3800, 4500-5000	55	G-5

SINGLE SECONDARY FILAMENT TRANSFORMERS

All primaries tapped at 105 and 115 Volts—50/60 Cycles. *Tapped.

Stock No.	Type	NET	Sec. V. (CT)	Sec. Amps.	Insulation	Case
62 G 703	S-53	4.61	2.5	10	1500 V.	G-3
62 G 704	S-54	4.61	5	4	2500 V.	G-3
62 G 705	S-55	4.61	6.3	3	1500 V.	G-3
62 G 706	S-56	4.61	7.5	3	1500 V.	G-3
62 G 707	S-57	7.35	2.5	10	10,000 V.	G-5
62 G 708	S-58	7.84	2.5	20	10,000 V.	G-5
62 G 709	S-59	7.35	5-5.25	13	5000 V.	G-5
62 G 710	S-60	10.78	5-5.25	22	10,000 V.	G-7
62 G 711	S-61	7.84	7.5*, 6.3	10	3000 V.	G-5
62 G 712	S-62	7.35	10	10	3000 V.	G-5
62 G 713	S-63	12.25	14*, 12, 11	10	5000 V.	G-7

MULTIPLE SECONDARY FILAMENT TRANSFORMERS

Primary tapped 105, 115 volts, 50/60 cycles. Insulation, 3000 v., except S-71, 10,000 v. and S-72, 5000 v. All in G-5 case except *G-7 case.

Stock No.	Type No.	NET	Fil. 1		Fil. 2		Fil. 3	
			Volts	Amps	Volts	Amps	Volts	Amps
62 G 714	S-64	8.33	2.5 CT	5	2.5 CT	5	5 CT	6
62 G 715	S-65	8.33	2.5 CT	5	5 CT	4	6.3 CT	3
62 G 717	S-67	8.33	5 CT	6	6.3 CT	5	.....	.....
62 G 718	S-68	8.33	5 CT	3	6.3 CT	4	7.5 CT	5
62 G 720	S-70	8.33	6.3 CT	5	6.3 CT	5	.....	.....
62 G 721	*S-71	11.76	2.5 CT	6	2.5 CT	6	2.5 CT	12
62 G 722	S-72	8.82	5 CT	3	5 CT	3	5 CT	6

OUNCER AUDIO UNITS

Weigh only 1 ounce—for all compact applications. Response characteristics are: ±1 db 30-20,000 cps, except 0-14, 0-15, and units carrying DC, which are for voice from 150 to 4,000 cps. Maximum operating level, 0 db. Sealed in aluminum housings. ⅞" dia., 1 3/16" high. Mount by two 2-56 screws on 1 1/16" centers opposite terminals. Shpg. wt., 5 oz.

Stock No.	Type	NET	Primary Impedance	Secondary Imp.
62 G 780	0-1	6.86	50, 200-250, 500-600	50,000
62 G 781	0-2	6.86	50, 200-250, 500-600	50,000 CT
62 G 782	0-3	6.37	7.5-30	50,000
62 G 783	0-4	5.88	15,000	60,000
62 G 784	0-5	5.88	15,000 DC in Pri.	60,000
62 G 785	0-6	6.37	15,000	95,000 CT
62 G 786	0-7	6.37	15,000 DC in Pri.	95,000 CT
62 G 787	0-8	6.86	15,000	50, 200-250, 500-600
62 G 788	0-9	6.86	15,000 DC in Pri.	50, 200-250, 500-600
62 G 789	0-10	7.35	30,000 plate to plate	50, 200-250, 500-600
62 G 790	0-12	7.35	50, 200-250	50, 200-250, 500-600
62 G 793	0-13	5.39	Audio choke: 300 hys. at 0 DC; 50 hys. at 3 ma DC, 6000 ohms.	
62 G 791	0-14	6.86	200	½ megohm
62 G 792	0-15	6.86	15,000	1 megohm
62 G 794	0-16	8.82	250 CT	50,000

MATCHING TRANSFORMERS

Stock No.	Type	NET	Application	Primary	Sec.	Case
62 G 769	S-12	4.90	Line to spkr, 15w	500, 2000	2, 4, 8	G-2
62 G 770	S-13	6.86	Line to spkr, 30w	4000	15	G-4

FILTER, SWINGING AND AUDIO CHOKES

Stock No.	Type	NET	Henrys	Ma	Ohms	Insul.	Case
62 G 776	S-23	3.72	500	5	6000	1500 V.	G-2
62 G 725	S-24	4.41	500CT	3	4000	1500 V.	G-2
62 G 726	S-25	3.43	30	30	900	1500 V.	G-2
62 G 727	S-26	3.43	15	60	230	1500 V.	G-2
62 G 728	S-27	4.41	30	75	350	1500 V.	G-4
62 G 729	S-28	4.41	20	100	350	1500 V.	G-4
62 G 730	S-29	4.41	10	175	95	1500 V.	G-4
62 G 731	S-30	4.41	5/25	175	95	1500 V.	G-4
62 G 732	S-31	5.88	20	225	120	2700 V.	G-5
62 G 733	S-32	5.88	5/25	225	120	2700 V.	G-5
62 G 751	S-33	8.33	20	300	90	4000 V.	G-7
62 G 734	S-34	8.33	5/25	300	90	4000 V.	G-7
62 G 735	S-35	11.76	20	400	85	5000 V.	G-8
62 G 736	S-36	11.76	5/25	400	85	5000 V.	G-8
62 G 737	S-37	13.72	20	550	60	6000 V.	G-8
62 G 738	S-38	13.72	5/25	550	60	6000 V.	G-8

PLATE TRANSFORMERS—115 V., 50/60 Cycles

Stock No.	Type	NET	AC High Voltage	DC Ma	Case
62 GZ 744	S-44	21.56	575-525-0-525-575	500	G-9
62 G 745	S-45	16.66	900-750-0-750-900	200	G-8
62 GZ 746	S-46	20.58	1000-750-0-750-1000	300	G-9
62 GZ 748	S-47	26.46	1500-1250-1000-0-1000-1250-1500	300	G-10
62 GZ 749	S-48	33.32	Same as above.	500	G-11
62 GZ 750	S-49	32.34	2100-1800-1500-0-1500-1800-2100	300	G-11
62 GZ 700	S-50	49.00	3000-2500-0-2500-3000	300	G-12

POWER TRANSFORMERS—115 V., 50/60 Cycles

62 G 739. S-39. H.V.: 490-400-0-400-490, at 175 ma. Rect. fil., 5V-3A; fil. No. 1, 2.5 VCT-6A; fil. No. 2, 6.3 VCT-4A. Case G-7. EA.... 14.70

62 G 740. S-40. H.V.: 525-425-0-425-525, at 250 ma. Rect. fil., 5V-3A; fil. No. 1, 6.3 VCT-3A; fil. No. 2, 6.3A. VCT-3A. Case G-7. EA.... 14.70

62 G 741. S-41. H.V.: 600-0-600, at 200 ma. Rect. fil., 5V-3A; fil. No. 1, 7.5V tapped, 6.3V-3A; fil. No. 2, 6.3 VCT-2A. Case, G-7. EA.... 14.70

62 G 742. S-42. H.V.: 600-525-0-525-600, 300 ma. Rect. fil., 5V-6A; fil. 1, 7.5 V tapped, 6.3V-3A; fil. 2, 6.3VCT-3A. Case, G-8. EA..... 16.66

UNIVERSAL MODULATION TRANSFORMERS

Stock No.	Type	NET	Audio Power	Case
62 G 771	S-18	5.88	12 watts	G-3
62 G 772	S-19	7.84	30 watts	G-4
62 G 773	S-20	12.74	55 watts	G-5
62 G 774	S-21	17.64	110 watts	G-7
62 GZ 775	S-22	27.44	250 watts	G-9

SUB AND SUB-SUBOUNCER TRANSFORMERS

"Tiny" transformers for miniature equipment. Frequency response, ±3 db from 200 to 5000 cps. Sub-ouncers size 9/16x5/8x7/8". Weight ½ oz. Sub-sub-ouncers size 7/16x3/4x3/8". Weight ½ oz. †Fixed imp. ratio; 1250:1 for SO-1 and SSO-1; 1:50 for SO-3 and SSO-3. *SO-5, 3000 ohms DC resistance; SSO-5, 4400 ohms. Wt., 2 oz.

SUB-OUNCER TRANSFORMERS

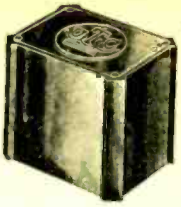
No.	Type	Use	Pri. Imp.	Pri. DC	Sec. Imp.	NET
62 G 210	†SO-1	Input	200, 50	0	250K. 62.5K	3.92
62 G 211	SO-2	Audio, 1:3	10,000	0-.25 ma	90K	3.53
62 G 212	†SO-3	Pl. to line	10K. 25K	3, 1.5 ma	200, 500	3.53
62 G 213	SO-4	Output	30,000	1 ma	50	3.53
62 G 214	SO-5	Reactor	50 hys @ 1 ma DC*			2.94
62 G 215	SO-6	Output	100,000	.5 ma	60	3.92

SUB-SUBOUNCER TRANSFORMERS

62 G 236	†SSO-1	Input	200, 50	0	250K. 62.5K	4.12
62 G 237	SSO-2	Audio, 1:3	10,000	0-.25 ma	90K	4.41
62 G 238	†SSO-3	Pl. to line	10K, 25K	3, 1.5 ma	200, 500	3.63
62 G 239	SSO-4	Output	30000	1 ma	50	3.63
62 G 240	SSO-5	Reactor	50 hys @1 ma DC*			3.63
62 G 241	SSO-6	Output	100,000	.5 ma	60	3.63
62 G 235	SSO-7	Transistor	10K. 20K	.5 ma	800, 1200	2.94

UTC Transformers


LS-1


LS-2


LS-3


H-1


A

LINEAR STANDARD TRANSFORMERS

Designed to serve the extreme demands of equipment for broadcast service. These audio units have a guaranteed response of ±1 DB of listed ranges. HIPERM-ALLOY, a stable nickel iron alloy core of very high initial permeability, and multiple section interleaved windings arranged in a semi-toroidal coil structure, give uniform frequency response at both low and high frequencies. Special winding methods and insulations assure a minimum of distributed capacity and leakage reactance. Minimum hum pickup is achieved with a hum balanced coil structure which provides maximum neutralization of external fields. All units have high-conductivity outer cases for maximum shielding. For very low level applications, units with type number ending in X employ multiple alloy shielding, making possible a transformer with extremely low inductive pickup. Multiple-tap windings make possible a wide combination of impedance terminations without impairing fidelity or efficiency. Housed in rugged die-cast cases with reversible mounting to permit above-chassis or sub-chassis wiring.

Case	Height	Width	Length	Mounting	Shpg. Wt.
H-1	3⅛"	1 15/16"	2⅛"	1 9/32x1 13/16"	2½ lbs.
A	2"	1½"	1½"	1 9/32x1 9/32"	1 lb.

INTERSTAGE AUDIO TRANSFORMERS

20-20,000 cps, ±1 db. except §10-20,000 CPS. ±1 db. LS-1 case. *LS-2 case.

Primary Impedance, 15,000 ohms. For Single Plate.

No.	Type	NET	Use	Secondary	Max. Lev.
62 G 835	LS-19	15.68	To PP grids.	95,000 ohms; 1¼:1	+12 db
62 G 837	§LS-21	14.70	To PP grids.	135,000 ohms; 3:1	+10 db

Primary Impedance, 30,000 ohms. P. to P. for Push-Pull Plates

62 G 838	*LS-22	21.56	To PP grids.	80,000 ohms; 1.6:1	+18 db

OUTPUT TRANSFORMERS—To Line and Voice Coil

Response, ±1 db. 7-50,000 cps, except †10-50,000 cps. All in LS-2 case except *in LS-3 case.

No.	Type	NET	Pri. P. to P.	Secondary	Watts
62 G 845	LS-52	18.62	8,000	1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500	15
62 G 847	LS-55	18.62	5,000 & 3,000		20
62 G 849	LS-58*†	37.24	2,500 & 1,500		40
62 G 850	LS-61	18.62	10,000 & 6,000		15
62 G 851	LS-6L1*	29.40	9,000		30
62 G 846	LS-54	14.70	8,000	1.2, 2.5, 5, 7.5, 10, 15, 20,30	20
62 G 848	LS-57	14.70	5,000 & 3,000		20
62 G 855	LS-63	14.70	10,000 & 6,000		15
62 G 852	LS-6L3*	19.60	9,000		30
62 G 856	LS-60A*	23.52	4,600	1.2 to 15 ohms	30

MIXING TRANSFORMERS

For mixing; for feeding low impedance mike, pickup or multiple line to multiple line. Maximum unbalanced DC in primary: LS-30, .5 ma; LS-30X, .3 ma. Primary and secondary have 6 taps: 50, 125-150, 200, 250, 333, 500-600 ohms. In LS-1 case.

LS-30. Maximum level, +15 DB. Relative hum-pickup reduction compared to uncased type, −74 DB. Response, ±1 db, 7-50,000 cps.
62 G 840. NET 15.68

LS-30X Maximum level, +15 DB. Multiple alloy shield gives relative hum-pickup reduction of −92 DB. Response, ±1 db, 20-20,000 cps.
62 G 841. NET 18.62

HIGH-LEVEL MATCHING TRANSFORMER

Type LS-33. Primary 50, 125, 200, 250, 333, 500-600 ohms. Secondary, 1.2, 2.5, 5, 7.5, 10, 15, 20, 30, 50, 125, 200, 250, 333, 500-600 ohms. Max. level 15 watts. Response ±1 db, 10-40,000 cps. Housed in LS-2 case.
62 G 800. NET 17.64

ULTRA-COMPACT HIGH-FIDELITY AUDIOS

Shielded; hum-balanced coils. Level, +7db, 1½x1½x2". Shpg. wt., 1 lb. 2 oz. *Multiple-alloy shield. In A case.

No.	Type	NET	Pri. Imp.	Sec. Imp.	±2 db
62 G 820	A-10	10.78	50, 125-150, 200-250,333,500-600	50,000	20-20,000
62 G 821	A-11*	9.[illegible]	50, 200, 500	50,000 P.P.	50-20,000
62 G 822	A-12	10.78	50, 125-150, 200-250,333,500-600	80,000 2 sect.	20-20,000
62 G 824	A-16	8.82	15,000	60,000 2:1	40-20,000
62 G 825	A-18	10.78	15,000	80,000 P.P. 2.3:1	40-20,000
62 G 826	A-19	10.78	15,000—8 ma DC	80,000 P.P. 2.3:1	40-20,000
62 G 827	A-20	10.78	50, 125-250, 200-250,333,500-600	Same as pri.	10-50,000
62 G 828	A-21*	10.78	50, 200-250, 500-600	Same as pri.	30-30,000
62 G 777	A-24	10.78	15,000	50, 125-150, 200-250, 333, 500-600	20-40,000
62 G 778	A-25	9.80	15,000—8 ma DC	Same as above	40-20,000
62 G 779	A-26	10.78	30,000 P. to P.	Same as above	20-40,000

MICROPHONE CABLE TRANSFORMERS

Permit long, low-impedance mike lines. Ruggedly built to withstand mechanical abuse. 1½" diam., 2½" long. 12 oz.

MC-1. Pri. tapped 30-50 ohms and 200-250 ohms; secondary to grid. 60-8500 cycles. Less cable.
62 G 818. NET 8.82

MC-2. High quality type, 40-12,000 cycles. Primary winding tapped 30-50 ohms and 200-250 ohms; secondary to grid. Less cable.
62 G 819. NET 9.80

LOW-IMPEDANCE-TO-GRID TRANSFORMERS

For low-impedance mike, pickup, or multiple line. LS-10, LS-10X to single grid; LS-12, LS-12X to PP grids. "X" indicates alloy magnetic shield for minimum hum pickup. *Total impedance. In LS-1 case.

Primary Impedance 50, 125-150, 200, 250, 333, 500-600 ohms

No.	Type	NET	*Sec. Imp.-Ohms	±1 db	Max. Level
62 G 829	LS-10	14.70	60,000, 2 sections	20-20,000	+10 db
62 G 830	LS-10X	18.62	50,000, 2 sections	20-20,000	+10 db
62 G 831	LS-12	16.66	120,000, 2 sect.	20-20,000	+10 db
62 G 867	LS-12X	19.60	80,000, 2 sections	20-20,000	+10 db

PLATE-TO-LINE TRANSFORMERS

LS-50, single plate to multiple line. LS-51, for push-pull low-level plates to multiple line. Secondary impedances: 50, 125-150, 200, 250, 333, 500-600 ohms. In LS-1 case.

No.	Type	NET	Primary	±1 db From:	Max. Level
62 G 843	LS-50	15.19	15,000 ohms	10-40,000 cps	+15 db
62 G 844	LS-51	18.62	30,000 ohms	10-40,000 cps	+16 db

POWER TRANSFORMERS

Type LS-70. For high-power amplifier service. Primary taps range from 100-125 volts (50-60 cycles). High voltage, 425-375-0-375-425 at 250 ma and 70-0-70 at 50 ma. Five filament windings: 5 V.C.T.-3A; 5 V.C.T.-2A; 2.5 V.C.T.-10A; 6.3 V.C.T.-1A; 6.3 V.C.T.-3A. In LS-3 case.
62 G 803. NET 39.20

Type LS-74. For push-pull 6L6's, KT-66's, 6B4's. 115 volt primary. High voltage, 415-395-0-395-415 at 275 ma. Filament, 5 v. at 6 amps, 6.3 V.C.T. at 5 amps. LS-3 case.
62 G 857. NET 34.30

HIPERM-ALLOY TRANSFORMERS

UTC Hiperm-alloy audio transformers are specifically designed for portable and compact service. Although light in weight, neither dependability nor fidelity is sacrificed. The frequency characteristic of these units is uniform throughout their range. They incorporate a Hiperm-alloy nickel iron core and hum balanced coil structure. The rugged die cast case is of high conductivity alloy. Gray finish. Terminals are mounted on low-absorption bakelite and arranged in a circular layout so that a round chassis hole will clear all terminals.

PLATE-TO-LINE TRANSFORMERS

Six secondary taps cover 50, 125-150, 200, 250, 333, 500-600 ohms ±1 db from 30-40,000 cps in H-1 case.

No.	Type	NET	Application	Primary	Level
62 G 816	HA-113	11.76	Plate to mult. line	15,000 ohms	+12 db
62 G 869	HA-133	16.66	Plate to mult. line	15,000 ohms	+15 db
62 G 817	HA-114	13.72	PP plates to line	30,000 ohms	+16 db

LOW-IMPEDANCE-TO-GRID AND MIXING TRANSFORMERS

Six taps on primary cover 50, 125-150, 200, 250, 333, 500-600 ohms. Uniform response of ±1 db from 30-20,000 cps. except HA-108X, 20-50,000 cps. Maximum level, +10 db. Maximum unbalanced DC in primary, .5 ma. All units have 2-section secondaries, except HA-108X, which has single section secondary with six taps to cover 50, 125-150, 200, 250, 333, 500-600 ohms. Units are housed in type H-1 case.

No.	Type	NET	Application	Secondary
62 G 805	HA-100	12.74	Mike, pickup or line	60,000 ohms
62 G 806	HA-100X	14.70	Same, with tri-alloy shield	60,000 ohms
62 G 810	HA-108X	14.70	Mixing, mike, pickup or multiple line; tri-alloy shield	Same as Primary

INTERSTAGE AUDIO TRANSFORMERS

Incorporate Hiperm-alloy nickel iron core and hum balanced coil structure. Frequency response is ±1 db from 30 to 20,000 cps. HA-106 has +12 db maximum level and is designed for shunt-fed driver stages (no DC in primary). HA-107 has +20 db maximum level and .25 ma DC maximum in primary. Both have 2 section secondaries. Both have type H-1 case.

No.	Type	NET	Application	Pri. Imp.	Sec. Imp.
62 G 813	HA-106	12.74	Single plate to PP grids	15,000 ohms	135,000 ohms 3:1*
62 G 866	HA-107	19.60	PP plates to PP grids	30,000 ohms	80,000 ohms 1.6:1*

UTC Transformers and Inductors


CGE-1A


CG-50

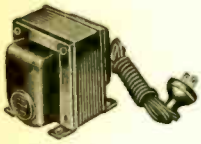

R-113


M


MQL

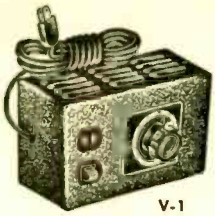

VIC


BMI


R-46


R-87


R-88


V-1


V-1-M

TRANSFORMERS, TOROIDS, FILTERS, VOLTAGE CONTROLS AND INDUCTORS

HIGH-FIDELITY COMPONENTS

UNIVERSAL INTERSTAGE EQUALIZER

Type CGE-1A. Interstage tone equalizer. Works from low or medium impedance source (0 to 20,000 ohms) to a high impedance (500,000 ohms or open grid). Provides continuously variable equalization over a 30 db range at either end of frequency spectrum, with only 18 db total insertion loss. 2½" deep; 2⅞x3½" panel. Shpg. wt., 3 lbs.
62 G 875. NET **17.64**

DYNAMIC NOISE SUPPRESSOR DUAL INDUCTOR

Type CG-50. Highly effective suppression of surface and needle noise when used in proper automatic gate circuit. Diagram of an efficient, tested circuit supplied with each unit. Separate High-Q choke sections rated at 2.4 and 0.8 henries. Round, drawn case, 2½" high with 1⅜x1⅜" base. Shpg. wt., 2 lbs.
62 G 870. NET **9.31**

POWER TRANSFORMER

Type R113. 400-0-400 v. at 200 ma secondary. 5 v. at 3 amps; 6.3 v. CT at 6 amps filament windings. Size, 4⅝x3⅞x4¼". Primary, 110-120 volts, 50-60 cycles. Shpg. wt., 9 lbs.
62 G 895. NET **9.41**

FILTER CHOKES

Ideal for PA equipment. Used in the UTC 10 and 20-watt Williamson amplifier kits. Can be used in any other quality-type, high-fidelity amplifier application. Shpg. wts.: *3 lbs.; †7 lbs.; §12 lbs.

Stock No.	Mfrs. Type	Hy.	DC Ma	DC Res.	Test V.	NET EA.
62 G 861*	CG-48C	75	50	2200	1750	5.88
62 G 862†	CG-100	12	150	110	2500	6.37
62 G 863§	CG-102	12	250	100	3000	9.31

STEP-DOWN AUTOTRANSFORMERS

Extra-large capacity autotransformers to step down 220-240 volts, 50 or 60 cycle AC to 110-120 volts. For operating radios, recorders and appliances. Type R-46 is rated at 1200 watts; Type R-64 rated at 2500 watts. R-64 is less cord.
63 G 002. R-46. Wt., 18 lbs. **NET** **24.50**
63 GZ 003. R-64. Wt., 30 lbs. **NET** **41.16**

TYPE R VOLTAGE BOOSTERS

Ideal for TV sets and air conditioners where line voltage is low. These autotransformers are designed to operate from 95 to 110 volts, 50-60 cycles. Voltage boost is 10%.

No.	Type	Rating	Size	Wt.	NET
62 G 752	R-87	3A, 350W	3⅜x2x2⅛"	2	5.88
62 G 753	R-88	18A, 2KW	3⅞x4⅛x4⅝"	12	17.15

V-1 VARITRAN VOLTAGE CONTROLS

Autotransformers with turns arranged on one layer and insulation removed so that every turn is exposed and may be used as a tap of the winding. A special non-fusing contact can be moved to any position on the winding, permitting the exact voltage desired to be obtained. Easily mounted on any panel, chassis or laboratory service bench. Maximum current available from 0-20 volts and 95-130 volts. From 20-95 volts current capacity tapers off (60% maximum at 65 volts). Rated at 5 amps, 570 watts. Output is independent of load. For 110-120 volts 50-60 cycles. Model V-1, 4⅞x8x3⅝", 12 lbs.; Model V-1-M, 4⅞x9⅞x3⅝", 14 lbs.
62 G 201. NET EACH **19.60**

Model V-1-M. As above, but equipped with 0-150 v. meter.
62 G 202. NET EACH **34.30**

TYPE M TOROIDS

Coils conform to MIL-T-27 specifications. Inductance is virtually independent of frequency, temperature and vibration. Extremely low hum pickup. Very high Q available. Typical Q values: MQE-7 max. Q, 130 @ 8 kc; MQA-10, 150 @ 5 kc; MQB-5, 250 @ 3 kc and 50 @ 250 cycles. Lab. adjusted to 1% tol. DC currents shown will drop coil inductance 5%. Shpg. wts., MQE, 3 oz; MQA, 4 oz; MQB, 1 lb.

No.	Type	Inductance	Max. Ma.	NET EACH
	TYPE MQE—1 1/16x1 7/32x½"			
62 G 945	MQE-1	7 mhy	135	5.39
62 G 946	MQE-2	12 mhy	100	5.39
62 G 947	MQE-3	20 mhy	80	5.88
62 G 948	MQE-4	30 mhy	65	5.88
62 G 949	MQE-5	50 mhy	50	6.37
62 G 975	MQE-6	70 mhy	40	6.37
62 G 976	MQE-7	100 mhy	35	6.86
62 G 977	MQE-8	150 mhy	30	7.35
62 G 978	MQE-9	.25 hy	22	7.84
62 G 979	MQE-10	.4 hy	17	8.33
62 G 980	MQE-11	.6 hy	14	8.82
62 G 981	MQE-12	.9 hy	12	9.31
62 G 982	MQE-13	1.5 hy	9	9.31
62 G 983	MQE-14	2 hy	8	9.80
62 G 984	MQE-15	2.8 hy	7.2	10.78
	TYPE MQA—1 9/32x1 23/32x1 1/16"			
62 G 985	MQA-1	7 mhy	250	6.37
62 G 986	MQA-2	12 mhy	200	6.37
62 G 987	MQA-3	20 mhy	150	6.37
62 G 988	MQA-4	30 mhy	125	6.86
62 G 989	MQA-5	50 mhy	100	7.35
62 G 990	MQA-6	70 mhy	80	7.35
62 G 991	MQA-7	120 mhy	60	8.33
62 G 992	MQA-8	.2 hy	50	8.82
62 G 993	MQA-9	.3 hy	40	9.31
62 G 994	MQA-10	.5 hy	30	9.31
62 G 995	MQA-11	.7 hy	25	9.31
62 G 996	MQA-12	1 hy	20	9.80
62 G 997	MQA-13	1.5 hy	17	9.80
62 G 998	MQA-14	2.5 hy	13	10.78
62 G 999	MQA-15	4 hy	10	11.76
62 G 967	MQA-16	6 hy	9	12.74
62 G 968	MQA-17	10 hy	7	13.72
62 G 969	MQA-18	15 hy	5	14.70
62 G 970	MQA-19	22 hy	4	19.60
	TYPE MQB—2 5/16x2 13/16x1 5/16"			
62 G 953	MQB-1	10 mhy	400	12.74
62 G 954	MQB-2	30 mhy	250	12.74
62 G 955	MQB-3	70 mhy	170	12.74
62 G 956	MQB-4	120 mhy	120	13.72
62 G 957	MQB-5	.5 hy	60	13.72
62 G 958	MQB-6	1 hy	40	13.72
62 G 959	MQB-7	2 hy	30	14.70
62 G 962	MQB-8	3.5 hy	22	14.70
62 G 963	MQB-9	7.5 hy	16	15.68
62 G 964	MQB-10	12 hy	11	16.66
62 G 965	MQB-11	18 hy	9	17.64
62 G 973	MQB-12	25 hy	8	18.62

LOW-FREQUENCY HIGH "Q" COILS

Specially constructed coils of laminated permalloy to provide high Q at low frequencies. Q of 45 at 100 cycles. Exceptional temperature stability. Inductance values laboratory adjusted to 2% tolerance at 1 volt, 60 cycles. Very low hum pickup assured by heavy Hipermalloy shielding and laminated structure. Two identical windings brought out to 4 terminals permit series, parallel, center-tapped, or transformer type connections. Requires 1" cutout. Size, 2" dia. x 2⅜". Shpg. wt., 1 lb.

No.	Type	Series Hy	Parallel Hy	EACH
62 G 896	MQL-1	10	2.5	19.60
62 G 897	MQL-2	20	5	19.60
62 G 898	MQL-3	200	50	20.58
62 G 899	MQL-4	400	100	21.56

VIC VARIABLE INDUCTORS

Professional high-quality inductors for use in tuned audio circuits. Have wide application in oscillators, tuned amplifiers, equalizers, filters, etc. Vacuum-sealed against humidity. Special impregnating materials prevent corrosion. *Inductance is variable by set screw from +85% to −45% of the mean value shown. Setting is positive. Housed in die-cast, enameled, inverted-mounting style case providing complete magnetic shielding. Virtually eliminates hum pickup. Size, 1 7/16x1¼x1 11/32". Mtg. ctrs., 1 3/16x25/32". Wt., 8 oz.

Stock No.	Mfr's Type	Mean Hys.*	Max. Ma	NET EACH
62 G 900	VIC-1	.0085	75	5.88
62 G 901	VIC-2	.013	60	
62 G 902	VIC-3	.021	50	
62 G 903	VIC-4	.034	40	
62 G 904	VIC-5	.053	35	
62 G 905	VIC-6	.084	30	
62 G 906	VIC-7	.13	25	
62 G 907	VIC-8	.21	21	6.37
62 G 908	VIC-9	.34	18	
62 G 909	VIC-10	.54	15	
62 G 910	VIC-11	.85	12	
62 G 911	VIC-12	1.3	10	
62 G 912	VIC-13	2.2	8	
62 G 913	VIC-14	3.4	7	
62 G 914	VIC-15	5.4	6	6.86
62 G 915	VIC-16	8.5	5	
62 G 916	VIC-17	13.	4	
62 G 917	VIC-18	21.	3.5	7.35
62 G 918	VIC-19	33.	3	
62 G 919	VIC-20	52.	2	
62 G 920	VIC-21	83.	1.5	7.84
62 G 921	VIC-22	130.	1	10.78

INTERSTAGE AND LINE FILTERS

Quality band-, high- and low-pass filters, identified by initial letter in type number (B H or L). Last letter indicates interstage (I) or line filter (L). Impedance: interstage, 10,000 ohms; line, 500/600 ohms. Shielded to reduce hum pickup to 150 mv. per gauss at 60 cycles. In hermetically sealed cases. Size, 1 3/16x1 11/16x1⅝", except *1 3/16x1 11/16x2½". Av. shpg. wt., 9 oz.

No.	Type	Cycles	EACH
62 G 950	BMI-60	60	24.50
63 G 004	BMI-100	100	
63 G 005	BMI-120	120	
62 G 951	BMI-400	400	
63 G 006	BMI-500	500	
63 G 007	BMI-750	750	24.50
62 G 952	BMI-1000	1000	
63 G 008	BMI-1500	1500	
63 G 009	BMI-3000	3000	
63 G 015	BMI-10,000	10,000	
62 G 960	BML-400	400	24.50
62 G 974	BML-1000	1000	
63 G 016	*HMI-200	200	
63 G 017	*HMI-500	500	
63 G 018	*HMI-1000	1000	
63 G 019	*HMI-3000	3000	24.50
62 G 966	*HML-200	200	
63 G 052	*HML-500	500	
63 G 053	*HML-1000	1000	
62 G 971	LMI-200	200	
63 G 020	LMI-500	500	24.50
63 G 021	LMI-1000	1000	
63 G 022	LMI-2000	2000	
63 G 023	LMI-2500	2500	
62 G 972	LMI-3000	3000	
63 G 024	LMI-5000	5000	24.50
63 G 051	LMI-10,000	10,000	
63 G 054	*LML-1000	1000	
63 G 055	*LML-2000	2000	
63 G 056	*LML-2500	2500	
63 G 057	*LML-4000	4000	24.50
63 G 058	*LML-8000	8000	
63 G 059	*LML-10,000	10,000	
63 G 063	*LML-12,000	12,000	

Triad and Knight Transformers


A


X


HSM

TRIAD TRANSFORMERS

Triad transformers feature top-quality construction throughout. The finest quality laminations are used to assure very high efficiency. Laminations on power transformers are permanently bonded to prevent chatter. All windings are specially impregnated to provide high dependability under extreme moisture conditions. Type HSM meets spec. MIL-T-27. Suffix letter in manufacturer's type no. indicates style, except hermetically sealed units with prefix letters HSM.

TYPE T UNCASED TRIJETS

Ultra-small transformers—shorter than a paper clip and less than half an ounce in weight. Weather-proofed windings. Size, ⅝x¾x⁹⁄₁₆".

Stock No.	Mfrs Type	Application	Impedance Primary	Impedance Secondary	NET EACH
64 G 940	T-1	Line or mike to grid	600/250/50	50,000	3.47
64 G 941	T-2	Line or mike to grid	600/250/50	250,000	3.53

TYPE HSM HI-FI TRANSFORMERS

Triad "HSM" series output transformers for fine audio equipment. Interleaved coil structures. 1 db. 7-50,000 cycles. *Split primary. HSM-81, 3¹⁄₁₆x3⁹⁄₁₆x3⅞"; HSM-189, 3⅜x3¹⁵⁄₁₆x4⁹⁄₁₆". Av. shpg. wt., 7 lbs.

Stock No.	Mfr's Type	Application	Impedance Pri.	Impedance Sec.	Max. Watts	NET EACH
64 G 960	HSM 81	P.p. to V.C.	8000*	16/8/4	15	17.93
64 G 964	HSM-189	P.p KT66's, 807's, etc.—for Williamson circuit	10,000/ 2500*	16/8/4	25	23.23

Type HSM-225. Filament Transformer. Primary volts, 105-115-125. Secondary, 6.3 CT, 2 amps. Insulation test voltage, 2500 v. Size, 1¹⁵⁄₁₆x 1¹³⁄₁₆x2¼". 1 lb.
64 G 971. NET EACH 8.82

TYPE A AUDIO TRANSFORMERS

Designed for amateur and public address use. Type A-1X suggested for carbon mike to grid transformer in mobile radiotelephone equipment. Type A-21X is extremely popular for small portable transceivers. Type A-81X is excellent for use in battery powered audio amplifiers.

Stock No.	Mfr's Type	Description	Ratio	Size	Wt. Lbs.	NET EACH
64 G 989	A-1X	Line or mike to grid	1:31.4	1⅜ x2⅛x1⅛"	½	1.62
64 G 934	A-21X	Transceiver	....	1⁵⁄₁₆x2¼ x1¼"	¼	1.76
64 G 991	A-31X	Plate to single or p. p. grids	1:3	1⅛ x2⅜x1⅜"	½	1.62
64 G 992	A-75J	Choke for cathode equalizer	....	1¼ x1⅜x1⅜"	¼	5.73
64 G 993	A-81X	Driver transformer. PrimaryDC, 15 ma.	2.66:1	1¹³⁄₁₆ x2⅛x1⅛"	¼	1.65

TYPE F FILAMENT TRANSFORMERS

Stock No.	Mfr's Type	Secondary Volts	Secondary Amperes	Test Volts	Size	Wt., Lbs.	NET EACH
64 G 953	F-13X	6.3	.6	1500	1⅞ x2⅜ x1⅞"	½	1.62
64 G 954	F-14X	6.3CT	1.2	1500	1¹⁵⁄₁₆x2¹³⁄₁₆x1⅜"	¾	1.65
64 G 955	F-16X	6.3CT	3	1500	1¹⁵⁄₁₆x3¼ x2"	1¼	2.44
64 G 956	F-18A	6.3CT	6	1500	3⅛ x2⅜ x2⅜"	2½	4.26
64 G 957	F-21A	6.3CT	10	1500	3⅝ x3 x3¼"	3½	4.56
64 G 958	F-22A	6.3CT	20	2000	4x3¼x4¹³⁄₁₆"	7	7.94
64 G 959	F-25X	12.6CT	1.5	1500	1¹³⁄₁₆x3¾x2"	1¼	2.29
64 G 974	F-40X	24	1	1500	1¹⁵⁄₁₆x3¼x2"	1¼	2.35
64 G 973	F-36A	6.3CT /3.5A/ 6.3V /3.5A	6.3V/3.5A 6.3V/3.5A	1500	4x3¼x3⁹⁄₁₆"	5	6.82
64 G 935	F-23U	10CT	7	1500	3⅛x2¹³⁄₁₆x3⅛"	4	4.71

PLATE AND FILAMENT POWER TRANSFORMERS

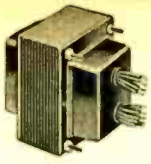
Combined plate and filament transformers. Finished in baked gray enamel. Copper foil static shields.
*All center tapped.

Stock No.	Mfr's Type	Plate Supply Volts	Plate Supply Ma	Filaments V	Filaments A	Filaments V*	Filaments A	Size (HWD)	Wt., Lbs.	NET EACH
64 G 936	R-3A	500CT	20	....	....	6.3	2	2¼x2⅜x2⅜"	1¾	3.62
64 G 976	R-4A	500CT	40	....	....	6.3	2	2¼ x2⅜x2¼"	1¾	3.67
64 G 977	R-5A	600CT	65	....	....	6.3	2.7	3⁵⁄₁₆x2⅝x2⅝"	2¼	4.32
64 G 978	R-7A	600CT	50	5	2	6.3	2	3⁵⁄₁₆x2⅝x2⅝"	2¼	4.65
64 G 979	R-9A	600CT	75	5	2	6.3	3	3⁹⁄₁₆x3x3⅜"	3½	5.41
64 G 986	R-11A	700CT	90	5	3	6.3	3.5	3⁹⁄₁₆x3x3⅜"	4¼	6.03
64 G 987	R-14A	700CT	125	5	3	6.3	4.5	4x3¼x3¹³⁄₁₆"	6	6.76
64 G 988	R-21A	800CT	200	5	3	6.3	6	4⁵⁄₁₆x3⅝x5"	9⅛	10.35
64 G 937	R-26A	880CTor 720CT	200	5 6.3	3 1	6.3 6.3	8 3	4¾x3⅞x4¾"	12	12.65

TYPE M MODULATION TRANSFORMERS

Tube to RF load. Frequency response. 300 to 3000 cps. Primary impedance, 10,000CT. M-1X is 1⅜x2⅛x1¼"; M-3X is 2¼x3¹⁄₁₆x2⅛".

Stock No.	Mfr's Type	Application	Secondary Imp.	Audio Watts	Wt., Lbs.	NET EACH
64 G 938	M-1X	For 19, 1J6, 6N7, 6A6, etc.	5000/8000/ 10,000	5	¼	2.23
64 G 939	M-3X	For 6N7, 6A6, 6F6's, etc.	3000/5000/ 8000	20	1½	3.29


A


B


C

KNIGHT QUALITY TRANSFORMERS

FIG. A—REPLACEMENT POWER TRANSFORMERS

High-quality, low-priced units for set replacement, for kit building, etc. Fully shielded; heavy-duty 5" flexible coded leads. All plate and Fil. 1 windings center-tapped. 110-120 volt 50-60 cycle primaries.

FOR 6.3 VOLT TUBES

Stock No.	No. of Tubes	Plate Volts	Plate Ma	Rect. V	Rect. A	Fil. 1 V	Fil. 1 A	Mtg. Centers	Wt. Lbs.	NET EACH
62 G 034	4	480	40	5	2	6.3	2	2 x2½"	3	3.16
62 G 041	5-6	650	40	5	2	6.3	2	2 x2½"	3	3.26
62 G 042	6-7	650	70	5	3	6.3	3.5	2 x2½"	5	3.76
62 G 043	8-10	700	90	5	3	6.3	3.5	2¼x2¹³⁄₁₆"	5¼	4.04
62 G 044	10-13	700	120	5	3	6.3	4.7	2½x3⅛"	7	4.92
62 G 045	12-15	750	150	5	3	6.3	5	2½x3⅛"	7¼	6.25
62 G 033	12-15	800	200	5	3	6.3	5	3 x3¾"	10	6.96

FIG. B—UNIVERSAL OUTPUTS

CT primary, 6 taps on sec. Match single or push-pull tubes to speaker voice coil. *Universal line (500-3000 ohms) to 3.2, 8, 16 ohms VC.

No.	Impedances	Watts	Size	Ctrs.	Lbs.	NET
62 G 023	Pri., 4000-14,000 ohms. Sec., VC *Line-VC	4	1⅛x2⅜x1¼"	2"	1	1.34
62 G 021		8	1⅝x2¹³⁄₁₆x1½"	2⅜"	1	1.46
62 G 022		18	2¼x2⅞x1⅞"	2⅞"	1¼	1.94
62 G 076		20	3⅝x2½x3⅛"	3⅛"	2½	3.31

FIG. B—70.7 VOLT LINE-TO-VOICE COIL OUTPUTS

Secondaries: 4, 8, 16 ohms, except *3.2-4, 6-8.

No.	Watt Taps	Watts	Size	Ctrs.	Lbs.	NET
62 G 081	5, 2.5, 1.25, .62, .31	*5 Max.	1⅝x2⅜x1½"	2"	¾	1.58
62 G 077	10, 5, 2.5, 1.25, .62	10 Max.	1⅝x2¹³⁄₁₆x1½"	2⅜"	1	1.80
62 G 078	18, 9, 4.5, 2.25, 1.12, .56	18 Max.	2¼x2⅞x1⅞"	2⅜"	1¼	2.46
62 G 079	24, 12, 6, 3, 1.5, .75	24 Max.	2¼x3¹¹⁄₁₆x2⅛"	3⅛"	1¾	2.98

FIG. C—STANDARD OUTPUTS

For coupling plate or plates of the output stage to the speaker voice coil. Designed specifically for class A amplifiers. *CT; for PP use.

Stock No.	Primary Imp.	Primary Ma	Sec. Imp.	Audio Watts	Size	Mtg. Ctrs.	Wt. Lbs.	NET EACH
62 G 064	5,000	40	3.2	3	1⅜x1⁷⁄₁₆x⅞"	1⅛"	¼	.79
62 G 063	2,500	50	3.2	3	1⅜x1⁷⁄₁₆x⅞"	1⅛"	¼	.79
62 G 093	8,000	20	3.2	3	1⅜x1⅞x1"	1⅛"	¼	.79
62 G 065	2,000	50	3.2	5	1⁵⁄₁₆x2⅛x1⁷⁄₁₆"	2"	¼	.89
62 G 095	5,000	40	3.2	5	1⁵⁄₁₆x2⅜x1⁷⁄₁₆"	2"	¼	.92
62 G 094	*25,000	10	3.2	5	1⅜x2⅞x1¼"	2"	½	1.17
62 G 066	7,000	30	3.2	5	1⁵⁄₁₆x2⅛x1⁷⁄₁₆"	2"	¼	.92

FIG. C—AUDIO TRANSFORMERS

No.	Description	Ctrs.	Lbs.	NET
62 G 025	Sgl. or dble. button carbon mike to grid	2⅜"	1	1.82
62 G 062	1:3 step-up. Single plate to single grid	2"	1	1.34

FIG. C—FILTER CHOKES

No.	Hys.	Ma	Ohms	Size	Ctrs.	Lbs.	NET
62 G 135	5.5	50	330	1⅝x2⅜ x1½"	2"	½	.97
62 G 136	8.5	50	400	1⅝x2¹³⁄₁₆x1½"	2⅜"	1	1.08
62 G 137	16	50	550	2 x3¼x1⅝"	2¹³⁄₁₆"	1½	1.22
62 G 138	15	75	400	2¼x3¹¹⁄₁₆x2⅛"	3⅛"	2	1.60
62 G 139	10.5	110	220	2⁹⁄₁₆x4x2¼"	3⁹⁄₁₆"	2½	2.14

FIG. C—CENTER-TAPPED FILAMENT TRANSFORMERS

Primaries, 105-125 volts, 50-60 cycle AC.

No.	Volts	Amps	Size	Ctrs.	Lbs.	NET
62 G 030	6.3	1	1⅝x2¹³⁄₁₆x1½"	2⅜"	1⅛	1.46
62 G 031	6.3	3	2 x3¼x1⅞"	2¹³⁄₁₆"	1½	2.18
62 G 028	5	6	2¼x3¹¹⁄₁₆x1⅞"	3⅛"	2¼	2.54

230 TO 115 VOLT AUTOFORMERS

Husky, well-built step-down autoformers for reduction of 220-250 volts, 50-60 cycles AC down to 110-125 volts. For operating radios, amplifiers, small appliances, etc. Shielded construction. Smooth black enamel finish. Four hole corner mounting. With 8-foot cord and plug. Female receptacle on side of case.

No.	Watts	Size	Mtg. Ctrs.	Lbs.	NET
62 G 510	80	3½x2¹⁵⁄₁₆x3"	2¼x1⅞"	4	4.88
62 G 511	150	3⅞x3⅜x3⅝"	2½x2½"	6	6.70
62 G 512	250	4⅝x3¹³⁄₁₆x4"	3 x3"	9¼	8.80
62 G 513	500	4⅝x3¹³⁄₁₆x4⅜"	3 x3½"	11	11.20

Thordarson Transformers


BAV


FGV


RTV


GGV


CAV


PUV


AGF

OUTPUT TRANSFORMERS

Compact, high grade output transformers—for single and push pull plates to voice coil; output to line and voice coil; universal tubes to multiple voice coils; universal tubes to line; line to voice coil, etc. Fig. BAH (see page 133). †Fig. BHH (see page 133). *Fig. GGV. Av. shpg. wt., 2½ lbs.

Stock No.	Type	Primary	Secondary	Watts	NET
63 G 775	22S45	1500-3000	3.2-4	5	1.76
63 G 776	22S46	3000-6000	3.2-4	5	2.05
63 G 777	22S47	6000-9000 CT	3.2-4	5	2.05
63 G 778	22S48	12,000-16,000 CT	3.2-4	5	2.05
63 G 779	22S56	8000/10,000 CT	3.2-4, 6-8	10	2.94
63 G 780	22S58	5,000/7,000 CT	3.2-4, 6-8	8	2.94
63 G 781	22S60	2500/4000 CT	3.2-4, 6-8	10	2.94
63 G 782	†22S62	Univ. Plate	1-30	8	2.94
63 G 783	*22S64	10,000 CT	3.2-4, 6-8, 15, 250, 500	25	5.59
63 G 784	*22S66	8000 CT	3.2-4, 6-8, 15, 250, 500	25	5.59
63 G 785	*22S68	6500 CT	3.2-4, 6-8, 15, 250, 500	25	5.29
63 G 786	*22S70	5000 CT	3.2-4, 6-8, 15, 250, 500	25	5.29
63 G 790	*22S78	3300 CT	3.2-4, 6-8, 15, 250, 500	60	7.64
63 G 788	†22S74	Universal CT	1 to 30	25	4.70
63 G 796	22S86	Universal CT	3.2-4, 6-8	3	2.35
63 G 797	22S87	Universal CT	3.2-4, 6-8	6	2.65
63 G 798	22S88	Universal CT	3.2-4, 6-8	8	2.94
63 G 759	*22S93	9500 CT	3.2-4, 6-8, 15-16	10	6.47
63 G 774	*22S95	5,000 CT-3,000 CT	3.2-4, 6-8, 15-16	15	7.05
63 G 799	*22S97	6,000 CT	3.2-4, 6-8, 15.250.500	25	7.35
63 G 772	24S60	4000/7000/8000/10,000/14,000 CT	0.1-30	4	2.06
63 G 773	24S61	4000/7000/8000/10,000/14,000 CT	0.1-30	8	2.35

FILAMENT TRANSFORMERS

Primaries for 117 v. 50-60 cycle AC, except 26F65 6.3 v., 21F26 115-230 v. All have 2500 v. insulation, except 21F02 and 21F05 10,000 v., 21F26 8500 v., 21F27 3000 v., 26F65 5000 v. *1 secondary. †Tapped primary.

Stock No.	Type	Fig.	Volts	Amps.	Lbs.	NET
63 G 665	21F00	BAV	2.5 CT	5	1	2.94
63 G 666	21F01	BAV	2.5 CT	10	1½	3.53
63 G 667	21F02	CAV	2.5 CT	10	2¾	4.70
63 G 668	21F03	BAV	5 CT	3	1½	2.94
63 G 669	21F04	CAV	5 CT	8	3	4.41
63 G 681	21F05	CAV	5 CT	3	2½	4.70
63 G 670	21F06	CAV	5 CT	13	3¼	4.41
63 G 671	21F07	CAV	5 CT	21	5¾	7.05
63 G 672	21F08	BAV	6.3 CT	1	1	1.71
63 G 604	21F09	BAH	6.3 CT	1.2	1	1.76
63 G 673	21F10	BAH	6.3 CT	3	1	2.94
63 G 674	21F11	CAV	6.3 CT	6	2¾	4.70
63 G 675	21F12	CAV	6.3 CT	10	3¼	4.41
63 G 676	21F14	BAH	*6.3/5/2.5	2.5	1¾	2.94
63 G 677	21F15	BAV	7.5 CT	4	2	3.82
63 G 678	21F16	CAV	7.5 CT	8	3¼	4.70
63 G 682	21F17	CAV	7.5 CT	12	5	6.17
63 G 679	21F18	CAV	10 CT	5	2¾	4.70
63 G 680	21F19	CAV	†10 or 11 CT	12 or 11	6	7.05
63 G 605	21F26	.....	7.5 CT	51	15	23.52
63 G 606	21F27	BAH	26.5 CT	.6	1½	2.94
63 G 607	26F65	BAH	6.3 CT	1.2	1½	2.35
63 G 608	26F66	.....	5 CT	15	3½	5.59

PLATE TRANSFORMERS

Primaries for 115 volts, 50-60 cycles. †For two full-wave rectifier systems, or one rectifier at combined current output. All type GGV.

Stock No.	Type	DC Volts	DC Ma.	Lbs.	NET
63 G 657	21P87	650-500	300	10	12.05
63 G 658	21P89	400	175	6½	7.94
63 G 660	21P93†	1000, 400	95, 125	10	13.23

CLASS "B" AND "AB" DRIVERS

For use in modulators or high-powered audio amplifiers. *Indicates single plate to PP grids. Others can be used as single or PP plates to PP grids.

Stock No.	Mfr's Type	Fig.	Max. Ma DC	Pri. to ½ Sec.	Mtg. Ctrs.	Shpg. Wt., Lbs.	NET EACH
63 G 690	20D75*	BAH	5	2.4:1	2"	1	2.06
63 G 691	20D76*	BAH	15	5.2:1	2"	1	2.06
63 G 692	20D77*	FGV	30	2.5:1	2⅛"	2	3.23
63 G 693	20D78	GGV	40	4.0:1	1¾x2"	3	5.00
63 G 694	20D79	FGV	30	5.2:1	2⅛"	2	4.11
63 G 609	20D87	BAH	30	5.2:1	2⅛"	1¾	3.23

See page 281 for photoflash transformers.

AUDIO INPUT TRANSFORMERS

Electrostatic shielded. *Response, 250-3500 cps. †Response, 60-7500 cps; hum-bucking construction. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Turns Ratio	Application	Mtg. Ctrs.	NET
63 G 760	*20A00	BAH	1:10	Line or mic to sgl. or PP grids	2"	2.06
63 G 761	†20A01	FGV	1:20	Line or mic to sgl. grid.	2⅛"	3.53
63 G 764	*20A04	BAH	1:80	Voice coil or mic to grid	2"	1.76
63 G 616	20A10	BAH	1:20	Line or mic to sgl. grid.	2⅞"	2.65
63 G 610	20A11	BAH	1:20	Line or mic to sgl. or PP grids.	2⅞"	2.94

AUDIO INTERSTAGE TRANSFORMERS

Primary current, 8 ma. Type T20A25 has split secondary, hum-bucking coil and core. *Has wire leads. Av. shpg. wt., 1¼ lbs.

Stock No.	Mfr's Type	Fig.	Ratio	Application	Mtg. Ctrs.	NET
63 G 750	*20A16	BAH	1:2	Sgl. plate to sgl. or PP grids.	2"	1.76
63 G 751	*20A17	....	1:2	Sgl. plate to sgl. or PP grids	1⅞"	3.82
63 G 752	20A19	BAH	1:3	Plates to grids, sgl. or PP	2⅛"	2.35
63 G 753	20A22	BAH	1:3	Sgl. plate to sgl. or PP grids.	2⅞"	2.94
63 G 754	20A23	FGV	1:3	Sgl. plate to sgl. or PP grids.	2⅛"	3.82
63 G 755	20A24	FGV	1:3	PP plates to PP grids	2⅛"	4.11
63 G 756	20A25	RTV	1:1.41	Plates to grids, sgl. or PP	1⅝"	7.35
63 G 748	20A29	BAV	1:1:1:1	Univ. car radio interstage	2"	2.35

TUBE-TO-LINE TRANSFORMERS (LOW LEVEL)

Primary for single or PP plates. Sec. to line, 60-15,000 cps. 63 G 611 has hum-bucking construction. Shpg. wt., 1¼ lbs.

Stock No.	Type	Fig.	Pri.	Sec.	Mtg. Ctrs.	NET
63 G 740	22S90	FGV	20,000 CT	125, 200, 500	2⅛"	3.53
63 G 611	22S91	BAH	20,000 CT	125, 200, 500	2⅛"	2.65

MODULATION TRANSFORMERS

No.	Type	Fig.	Watts	Pri. Imp.	Sec. Imp.	Lbs.	NET
63 G 801	21M52	FGV	10	10K CT	3, 3.75, 4.5K	1½	3.53
63 G 615	21M53	BAH	10	10K CT	3, 3.75, 4.5K	1½	2.94
63 G 802	21M54	GGV	25	6600 CT	4000	3¼	5.00

Multi-Match Type. With taps to permit proper impedance match between modulator power tubes and RF final load. Split Secondary.

Stock No.	Type	Fig.	Watts	Prim. Ma. Each Side	Sec. Ma. Ser.	Sec. Ma. Par.	Lbs.	NET EACH
63 G 812	21M61A	GGV	60	125	125	250	6½	12.93
63 G 813	21M62A	GGV	125	210	160	320	15	16.46
63 G 612	21M67	GGV	25	10K CT	3, 5, 6.5, 8K		3	4.88
63 G 613	21M68	BAV	10	10K CT	4,5.7.5,10.12K		1½	2.35

FILTERING AND COUPLING CHOKES

T20C58 is speech-frequency tuned audio choke for impedance coupling. T20C50 is plate impedance coupling choke. Others universal for both input and smoothing use. *Inductance at rated milliamp. load.

Stock No.	Type	Fig.	*Hys.	Rated Ma	Resis. Ohms	Insul. Test	Lbs.	NET EACH
63 G 725	20C50	BAH	350	5	5500	2000	1½	2.94
63 G 726	20C51	BAH	35	15	1850	1200	¼	1.47
63 G 727	20C52	BAH	8	40	450	1200	¼	1.47
63 G 728	20C53	BAH	12	80	375	2000	1½	2.05
63 G 729	20C54	GGV	8	150	145	2700	3	3.82
63 G 730	20C55	GGV	6	200	75	2700	3¾	4.70
63 G 731	20C56	GGV	8	250	60	3500	6¼	6.47
63 G 733	20C58	BAH	0.75	10	30	1100	¼	1.76

DUAL TONE CONTROL COMPONENTS

Type 20C74. Reactor. For tone compensating system to boost or attenuate bass or treble independently. Similar to Fig. RTV, but wire leads. Use with R1068X below. Hum-bucking. Inductance, 22 hys. DC resistance, 220 ohms. 2"x1⅜" dia. Wt., 12 oz.
63 G 734. NET EACH 3.53

Type R1068X. Dual Control. Use with reactor above. Size. 1⅞" dia. x 1¾" overall length. Shaft, ¾" long. With hdwe. and diagram. Two required for complete bass-treble system. Shpg. wt., ½ lb.
63 G 165. NET EACH 2.35

OSCILLOSCOPE TRANSFORMER

Type 22R40. Fig. GGV. For use in oscilloscopes, CRT applications and test equipment. Primary, 117 volts 60 cycles. Plate, 1800 volts AC at 2 ma. Rectifier fil., 2.5 volts at 1.8 amps. Fil. 1, 6.3 volts at .6 amps.; tapped at 2.5 volts, 2.1 amps. Overall size: 3½x3¼x3 1/16". M tg. centers, 2½x2 7/16". Shpg. wt., 5¾ lbs.
63 G 717. NET EACH 10.58

UNIVERSAL TV POWER TRANSFORMER

Type 26R00. Fig. AGF. Replacement unit for power transformers in over 2000 TV sets. Multi-tapped 295 ma secondary. Primary: 117V., 50-60 cyc. AC. Tapped hi-voltage secondary: 850 v. CT, 720 v. CT, 600 v. CT. Filament windings: Two 5 v. @ 3A, and four 6.3 v. at 3A. Dual electrostatic shielding. Universal mtg. 3¼x4½x4⅞". Shpg. wt. 11 lbs.
63 G 820. List, $25.00. NET EACH 14.70


AGF


BAH


BHH

THORDARSON TRANSFORMERS

"22R" SERIES POWER TRANSFORMERS

Fig. AGF. Highest quality. Adjustable brackets permit flush, vertical or horizontal mounting. RETMA color-coded. 117 volt, 50-60 cycle primaries. All Fil. 1 windings center-tapped. *Has additional 2.5 volt CT winding, at 3.5 amps. †Has additional 2.5 volt, 5 amp center-tapped winding.

Stock No.	Mfr's Type	NET EACH	Plate Volts	Plate Ma	Rect. V	Rect. A	Fil. 1 V	Fil. 1 A	Mtg. Ctrs.	Wt. Lbs.
63 G 700	22R00	4.70	500 CT	40	5	2	6.3	2.0	2x2½"	2½
63 G 701	22R01	4.70	550 CT	50	5	2	6.3	2.5	2x2½"	3
63 G 702	22R02	5.88	600 CT	70	5	2	6.3	3.0	2x2½"	3½
63 G 703	22R04	6.17	600 CT	90	5	2	6.3	3.5	2¼x2 13/16"	3¾
63 G 704	22R05	6.76	600 CT	120	5	3	6.3	5.0	2½x3⅛"	5½
63 G 705	22R06	7.06	650 CT	150	5	3	6.3	5.0	2½x3⅛"	6¼
63 G 706	22R07	8.82	700 CT	200	5	3	6.3	6.0	3x3¼"	8½
63 G 708	22R09	5.29	550 CT	50	5	2	2.5	7.5	2x2½"	3
63 G 709	22R10*	8.23	650 CT	85	5	2	2.5	9.0	2½x3⅛"	4¼
63 G 710	22R11†	8.82	650 CT	120	5	3	2.5	12.5	2½x3⅛"	6¼

GENERAL PURPOSE "22R" POWER TRANSFORMERS

Fig. GGV. (See page 132.) 117 volt, 50-60 cycle primaries. All Fil. 1 windings CT. Standard RETMA color-coded leads, ends stripped and tinned for easy soldering. *Has additional 6.3 volt, 3-amp CT winding.

Stock No.	Mfr's Type	NET EACH	Plate Volts	Plate Ma	Rect. V	Rect. A	Fil. 1 V	Fil. 1 A	Mtg. Ctrs.	Wt. Lbs.
63 G 711	22R30	5.88	550 CT	50	5	2	6.3	2.5	2x2¼"	3½
63 G 712	22R31	7.05	720 CT	80	5	2	6.3	2.5	2x2 11/16"	5½
63 G 713	22R32*	7.94	700 CT	110	5	2	6.3	3.0	2¼x2 11/16"	6¼
63 G 714	22R33	9.41	750 CT	160	5	3	6.3	5.0	3x2 13/16"	9
63 G 715	22R34	11.76	770 CT	225	5	3	6.3	5.0	3x3 5/16"	11¼
63 G 716	22R35	12.93	800 CT	340	5	6	6.3	7.0	3x4¼"	13
63 G 719	22R36	10.58	1200 CT	200	5	3	6.3	5.0	3x3 5/16"	8½

ECONOMY "24" SERIES POWER TRANSFORMERS

Low-cost, high-quality power transformers. Types ending with U are for upright mounting (see GGV, page 132). Others have adjustable brackets to permit flush, vertical or horizontal mounting (see AGF above). Both types have 110-120 volt, 50-60 cycle primaries. Fil. 1 windings are center-tapped. All units are RETMA color-coded.

Stock No.	Mfr's Type	NET EA.	Plate Volts	Plate Ma	Rect. V	Rect. A	Fil. 1 V	Fil. 1 A	Mtg. Centers	Wt. Lbs.
63 G 319	24R00	4.41	480 CT	40	5	2	6.3	2.0	2x2½"	2
63 G 320	24R00-U	4.41	480 CT	40	5	2	6.3	2.0	2x1 9/16"	2
63 G 321	24R01	4.70	650 CT	40	5	2	6.3	2.0	2x2½"	2¼
63 G 322	24R01-U	4.70	650 CT	40	5	2	6.3	2.0	2x1 11/16"	2¼
63 G 323	24R02	5.29	700 CT	70	5	2	6.3	2.5	2¼x2 13/16"	4
63 G 324	24R04	5.88	700 CT	90	5	3	6.3	3.5	2¼x2 11/16"	4½
63 G 325	24R04-U	5.88	700 CT	90	5	3	6.3	3.5	2¼x2¼"	4¼
63 G 326	24R05	6.47	700 CT	120	5	3	6.3	4.7	2½x3⅛"	5¼
63 G 327	24R05-U	6.47	700 CT	120	5	3	6.3	4.7	2½x2 11/16"	5¼
63 G 328	24R06	7.05	750 CT	150	5	3	6.3	4.7	2¾x3 7/16"	6½
63 G 329	24R06-U	7.05	750 CT	150	5	3	6.3	4.7	2¾x2 13/16"	6½
63 G 330	24R07	8.23	800 CT	200	5	3	6.3	5.0	3x3¼"	9½
63 G 331	24R07-U	8.23	800 CT	200	5	3	6.3	5.0	3x3 5/16"	9½

ECONOMY "24" SERIES OUTPUT TRANSFORMERS TUBE-TO-VOICE COIL

Fig. BAH. Designed for economical replacement service. Available in popular ratings to meet a wide variety of radio servicing needs. All have single 3.2-ohm secondaries and are rated Class A.

Stock No.	Mfr's Type	NET EACH	Primary Impedance	Pri. Ma	Watts	Mtg. Ctrs.	Wt. Lbs.
63 G 742	24S48	1.17	4,000-5,000	10	5	1¾"	½
63 G 743	24S49		7,000-8,000	10	5	1¾"	½
63 G 768	24S50		2,000	55	5	2"	½
63 G 769	24S51		5,000	40	5	2"	½
63 G 770	24S52		7,000-10,000	30	5	2"	½
63 G 771	24S54		15,000-25,000	10	5	2"	½

UNIVERSAL LINE-TO-VOICE COIL

Fig. BHH. Secondary taps marked with impedance values. *Also marked for 70 v. power distribution service.

Stock No.	Mfr's Type	NET EACH	Primary Impedance	Sec. Imp.	Watts	Wt. Lbs.
63 G 791	22S80	3.23	500, 600	3.2,8,16	8	2½
63 G 792	22S82	5.00	2000/1500/1000/500		25	2½
63 G 793	22S83	3.53			15	2½
63 G 794	22S84	3.23			5	2½
63 G 795	22S85	3.23			3	2½
63 G 744	24S66	2.94	2000, 1500, 1000, 500	3.2, 8	10	1½
63 G 745	24S62*	3.82	3000, 2500, 2000, 1500, 1000, 500	.06-48	10	2½


Q


F


X

ALTEC-LANSING PEERLESS TRANSFORMERS

HIGH-QUALITY OUTPUT TRANSFORMERS

Feature high power-handling capacity throughout wide frequency ranges. *The 20-20 line; recognized as a standard of quality. Frequency response, ±1 db, 20-20,000 cps. Less than 3 db down (at 20 cps) at rated power. †New "20-20 Plus" line, designed for highest quality performance. Frequency response, ±1 db, 10-100,000 cps. Less than 2 db down (at 20 cps) at rated power. §New, Super-Standard line; response, ±1 db, 20-30,000 cps; less than 3 db down (at 25 cps) at rated power.

No.	Type	NET	Pri. P. to P.	Second.	Watts	Lbs.
63 G 825	S-226-Q†	22.34	6600/1650 CT	16-12-8-4	20	3½
63 G 826	S-256-Q†	29.40	5000 CT	16-12-8-4	40	6½
63 G 828	S-265-Q*	27.93	10,000/2,500 CT	16-8-4-2	40	10
63 G 829	S-240-Q*	16.17	5000 CT	16-8-4-2	20	6
63 G 830	S-227-Q*	16.46	10,000 CT	16-8-4-2	20	6
63 G 831	S-510-F§	10.00	10,000/8,000 CT	16-8	10	2
63 G 832	S-526-F§	12.35	6600/5000 CT	16-8-4	20	3
63 G 833	S-542-F§	15.29	5000/4000 CT	16-8-4	40	5½

MINIATURIZED POWER TRANSFORMERS

Compact electrostatic shielded units. 117 volt, 50-60 cycle primaries. Sizes: R-340-F, 4⅛x3 1/16x2¼"; R-490-F, 5 5/16x3 5/16x3⅛"; R-562-F, 5 5/16x3 1/16x3⅜".

Stock No.	Type	NET EACH	Plate Volts	Plate Ma	Rec. V	Rec. A	Fil. V	Fil. A	Wt. Lbs.
63 G 834	R-340-F	10.88	650 CT	100	5	3	6.3	5	3½
63 G 835	R-490-F	13.52	700 CT	200	5	3	6.3	6	5½
63 G 836	R-562-F	17.64	800 CT	220	5	3	6.3	6	6½

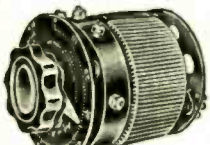
FILTER CHOKES

No.	Type	NET	Hys.	Ma	Ohms	Size	Lbs.
63 G 839	C-325-F	6.91	10	120	240	3¼x3 1/16x2¼"	2¼
63 G 840	C-390-F	9.29	10	200	150	4 13/16x3 5/16x3 1/16"	6
63 G 841	C-315-X	3.06	3	225	80	2⅜x3¼x2½"	1¼

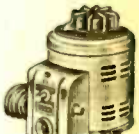
IMPEDANCE MATCHING TRANSFORMERS

Line to speaker transformers. ±1 db 30-15,000 cps. Insertion loss 0.6 db. E-374-X, 4 watts. E-383-X, 10 watts. E-386-E, 24 watts.

No.	Type	NET	Primary	Second.	Lbs.
63 G 842	E-374-X	6.91	10,000 CT-7500, 5,000 CT-2500-1250	16-12-8-4-2	1¼
63 G 843	E-383-X	11.02	4000 CT, 2000 CT, 1500; 1000 CT, 500, 250, 125	16-12-8-4-2	2½


300BU

STANDARD ELECTRIC AUTO-TRANS-FORMERS


500B

TYPE 300BU VARIABLE AUTOFORMER

Moderately priced autoformer for laboratory and industrial use. Mounts behind panel with 3, ¼-20 screws. Terminals for clockwise or counter-clockwise rotation. Output at 0-115 or 0-135 v. Maximum current of 3 amps may be drawn at any voltage setting. Supplied with black bakelite knob and etched dial plate. Rugged, die-cast aluminum frame with bakelite base; in gray wrinkle finish. For 115 v. 50-60 cycle AC. Can be operated from 25 cycle current at 50% of maximum rating. 0.4 KVA maximum load rating. 4" diameter x 3 1/16" depth behind panel. Wt., 6 lbs.

62 G 580. NET 12.25

TYPE 500B AND 500BU AUTOFORMERS

Extremely popular for laboratory and industrial voltage regulation. Type 500B is cased, 6 1/16x4⅝" dia. Supplied with line cord, plug, receptacle, pilot light, on-off switch and fuse. Constructed of die-cast aluminum, finished in gray wrinkle. Type 500BU is uncased, designed for panel mounting. Size: 4⅜x4⅝" dia. Both units for 115 v., 60 cycle AC input. Av. shpg. wt., 12 lbs.

Stock No.	Mfr's Type	Output Volts	Output Amperes	Output KVA	NET EACH
62 G 581	500B	0-135	7.5	.86/1.0	22.54
62 G 582	500BU	0-115/0-135	7.5	.86/1.0	17.64

TYPE 1500B VARIABLE AUTOFORMER

Sturdy, highly dependable autoformer for 2 KVA power applications. Ideal for heavy-duty operation. Rotor and frame of die-cast aluminum, equipped with dust shield. Unique design allows autoformer to be either bench or panel mounted. Nameplate is deep etched; knob has attractive nickel-plated pointer. Voltage output range is 0-135 v. Maximum current output is 15 amperes. Has 115 v., 60 cycle AC input. Driving torque is 30 to 60 ounces. Size: 8 1/16x5 11/16" dia. Shpg. wt., 25 lbs.

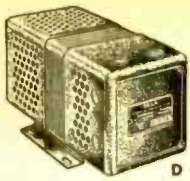
62 GZ 589. NET 45.08

Special-Purpose Transformers


A


B


C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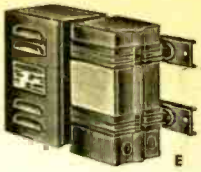

E

SOLA CONSTANT-VOLTAGE TRANSFORMERS

Fig. A—CVE TRANSFORMERS

Replace ordinary power transformers. Stabilize plate and filament voltages within ±3% with line variations from 100-130 volts. Supplied with Pyranol input filter condensers and mtg. bracket. For 100-130 v., 60 cycles AC only.

Type 7104. DC input to filter, 275 v @ 50 ma. Fil., 6.3 v CT @ 2½A; 5 v @ 2A. Shpg. wt., 6 lbs. Size, 4 13/16x4 1/16x3 5/16x3⅛".
62 G 669. NET.....10.15

Type 7106. Same as above, but delivers 385 volts DC to filter @ 110 ma. Filaments, 6.3 v. CT @ 3A; 5 v @ 2A. 75 VA. Shpg. wt., 9 lbs. Size, 4 13/16x4 1/16x3⅛".
62 G 670. NET.....12.60

Type 7107. As above, but 380 v DC to filter @ 250 ma. Fil., 6.3 v @ 4A; 6.3 v @ 8A (unreg.); 5 v @ 3A. 210 VA. Shpg. wt., 19 lbs. Size, 7x5x4½".
62 G 671. NET.....19.60

CVL ADJUSTABLE AC SUPPLIES

For adjustable, regulated, harmonically neutralized AC. Two outlet receptacles supply ±1% regulated voltage. One fixed, 115 v.; other variable, 0-130 v. Two panel jacks (for leads) provide additional 0-130 v. output. Outputs can be used simultaneously. Harmonic distortion, less than 3%. Regulating response time, 1.5 cycles or less. Sizes: 50105 is 12⅝x7½x12⅝"; 50106 is 13⅛x7½x14⅜". For 95-125 volts, 60 cycle AC.

No.	Type	Amps	VA	Lbs.	NET
62 GZ 672	50105	3	250	50	110.00
62 GZ 673	50106	7.5	500	70	153.00

CV TRANSFORMERS

Static, magnetic voltage regulating transformers. Designed to provide constant voltage output unaffected by changes in input voltage over the ranges indicated. Completely automatic—no manual adjustments required. Output voltage constant, ±1%. All inputs rated 60 cycles, single phase AC. *Input voltages:* §190 to 250, **95 to 125 and 190 to 250, ††190 to 250 and 380 to 500; others have 95 to 125 v. inputs. *Output voltages:* *6, †6.3, ‡230; others have 115 v. outputs. Units designed for 25 or 50 cycle operation can be obtained on special order. Write for quotations, giving full details of your requirements.

Stock No.	Mfr's Type	Fig.	Cap. VA	Wt. Lbs.	NET EACH
62 G 650	30488*	B	15	6	16.00
62 G 649	30492†	B	15	6	16.00
62 G 656	30498	B	15	6	16.00
62 G 651	30881†	....	25	12	17.00
62 G 617	30882†	....	50	13	24.00
62 G 657	30804	C	30	12	18.00
62 G 658	30805	C	60	13	25.00
62 G 659	30806	C	120	17	33.00
62 G 618	30888	C	150	19	40.00
62 G 619	30885	....	60	13	25.00
62 G 620	30886	....	120	19	33.00
62 GZ 660	20-13-125	D	250	30	52.00
62 GZ 621	20-20-125§	D	250	30	52.00
62 GZ 661	20-13-150	D	500	40	81.00
62 GZ 622	20-20-150§	D	500	40	81.00
62 GZ 662	20-13-210	....	1000	115	135.00
62 GZ 623	20-20-210§	....	1000	115	135.00
62 GZ 663	30811	....	2000	205	245.00
62 GZ 624	30M811§	....	2000	205	245.00
62 GZ 625	30968‡	....	2000	205	245.00
62 GZ 664	301706**	....	3000	350	345.00
62 GZ 626	301707††	....	3000	350	345.00
62 GZ 627	301704**	....	4000	440	435.00
62 GZ 666	301702**	....	5000	525	515.00
62 GZ 628	301703†††	....	5000	525	515.00
62 GZ 629	301700††	....	10000	1025	990.00
62 GZ 630	301701†††	....	10000	1025	990.00

Fig. E—CVH TRANSFORMERS

Provide stabilized source of voltage with extremely low distortion. Harmonic-neutralized type. For the most exacting applications in general laboratory work, instrument calibration, or any other equipment which may be affected by harmonic frequencies of the power source. Less than 3% harmonic content in output. Have regulated sine wave output constant within ±1%. Types 5003 and 5004 supplied with power cord and receptacle; others have knockout boxes. For 95-125 v., 60 cycles. Types 5005 and 5006 illustrated.

Stock No.	Mfr's Type	Sec V.	Cap. VA	Wt. Lbs.	NET
62 GZ 644	5003	115	60	35	35.00
62 GZ 645	5004	115	120	45	44.00
62 GZ 646	5005	115	250	60	70.00
62 GZ 647	5006	115	500	70	105.00
62 GZ 648	5008	115	1000	160	175.00
62 GZ 642	5010	115	2000	320	310.00

CVA PLUG-IN TV TRANSFORMERS

Type 7202. Designed to reduce or eliminate distortion and flicker in television screens due to variations in line voltage. Can be used with any TV receiver with power consumption no less than 165 watts and no greater than 285 watts. Keeps voltage constant within 3%, despite line voltage variations up to 30%. Turns on and off with TV. Line cord and receptacle. 9⅛x4½x7¼". 95-130 v., 60 cycle AC. 26 lbs.
62 GZ 667. NET.....32.00

Type 7201. For 110 to 175 watt sets. 19 lbs.
62 G 631. NET.....29.60

LINE ADJUSTER AND ISOLATION TRANSFORMERS

MALLORY LINE VOLTAGE ADJUSTER & ISOLATION TRANSFORMER

Model LVA-2. For Radio-TV shops, labs and industrial service shops requiring line voltage adjustment, line isolation or a low-voltage, heavy-current output. Provides continuously variable AC line adjustment from 90-130 v. at 1200 watts; and electrostatically shielded, isolated and continuously variable low voltage AC from 0-40 v. at 4 amps; and an electrostatically shielded and isolated continuously variable 90-130 v. AC output at 350 watts fed to 2-standard AC outlets. AC meter indicates output. In metal case. 7¼x5⅝x6⅞". Shpg. wt., 16 lbs.
62 G 549. NET.....41.11

RCA WP-25A TV ISOTAP

Isolation and autotransformer. For quick, safe radio-TV servicing. Valuable for detecting intermittents and faulty components, and for checking TV sets at high, medium and low voltage. Isolation-transformer feature eliminates shock hazards when checking transformerless receivers. Protects test equipment. Seven-position switch in primary selects 105-130 volts in 5-volt steps. Outputs: 105, 115 and 130 v. @ 500 VA from autotransformer winding; 105, 115 and 130 v. @ 275 VA from isolated secondary. Switch provides intermediate steps of output voltage. For operation from 50-60 cycle AC. Gray steel case. 5x5¼x4⅛". With 5 ft. line cord. Shpg. wt., 15 lbs.
62 G 516. NET.....17.59

REGENCY VOLTAGE BOOSTER

For TV Receivers

Model VB-1. Autoformer voltage booster. Adjustable to 117-volt output with line voltage variations of 90-130 volts. Essentially an auto transformer with tapped primary, the VB-1 may be used in high voltage area to decrease the line voltage—as well as for boosting the input voltage in low voltage areas. For TV sets up to 350 watts. Size, 4⅞x3⅞x4½". For 90-130 volts. 60 cycle AC. Wt., 7 lbs.
62 G 616. List, $19.95. NET.....11.73

SERVICE INSTRUMENTS CO. LB2 "UP-DOWN" VOLTAGE REGULATOR

New, voltage regulator for increasing low line voltage or decreasing high line voltage. Will raise or lower line voltage 10 volts by simply flicking a switch. Can be used with any television receiver or appliance which has a power consumption of 300 watts or less. Restores proper picture width. Size: 2½x3⅞x3⅞". Shpg. wt., 3 lbs.
63 G 985. NET.....5.85

Type LB2 (N). Same as type LB2 described above, but has neon indicator which operates when output voltage is too high—indicates when regulator should be turned off. Indicator light goes on when output voltage of regulator reaches 126 volts. Simplifies operation.
63 G 987. List, $11.95. NET.....7.03


A B

KNIGHT VARIABLE VOLTAGE TRANSFORMERS

Fig. A. COMBINATION TRANSFORMER. Isolation and variable voltage unit. Separate primary and secondary. 150 watts. Delivers 115 v. output from line source of 90-250 volts. 6 pri. taps. Useful in adapting 115 volt equipment to 230 or 250 volts. For 50-60 cycle. Mounting centers. 3x3¼". 6 ft. cord and plug. Shpg. wt., 9 lbs.
62 G 080. NET.....12.25

Fig. A. SET-TESTING AUTOFORMER. Time-saving device for use in radio service shop. Tests potential failure in sets by voltage overload method. Helps to quickly locate hard-to-find, intermittent components. 7-tap switch calibrated in output volts, 90-150 (in 10 volt steps). Rated 150 watts. For 115 volts, 50-60 cycle AC. With 6 ft. cord and plug, output receptacle. Mounting centers. 2½x2¾". Shpg. wt., 6½ lbs.
62 G 085. NET.....10.60

Fig. B. ISOLATION TRANSFORMERS. Valuable additions to radio and television service shops. Vertical-shell, 1:1 ratio transformers for isolating test units. Reduce shock hazard. 100 watt transformer, 4¼x3⅝x3¼". 250 watt transformer, 4⅝x3 13/16x4⅞". For operation from 115v., 50-60 cycle AC. Complete with cord and receptacle.
62 G 086. 100 watt. 7 lbs. NET.....10.30
62 G 087. 250 watt. 12½ lbs. NET....16.75

Quality Voltage Controls

"SUPERIOR" LUXTROL LIGHT CONTROL

Type WBD360-P2-K1. Wall-box dimmer switch designed to replace ordinary on-off wall switches. Simple to install—easily wired into new or existing circuits. Permits complete control of light intensity from darkness to full lamp brightness. Operation is smooth, silent and without flicker. Has switch incorporated to shut off entire circuit. No external switch is necessary. Can be used with one or more lamps up to 360 watt load. Lamps may be removed from line without affecting brightness of others. Essentially an autoformer with movable brush riding on winding. Protected by fuse and thermal overload. U. L. Approved. 8¼x6½x3 11/16". Wt., 6 lbs.

62 G 547. NET 30.00

T10306 T8394M

ACME VARIABLE VOLTAGE ADJUSTERS

Highly efficient, constant-duty voltage regulators. Used as step-up or step-down transformers to correct for either low or high line voltage. Easily adjusted by manually turning 7-position rotary switch until built-in voltmeter reads 115 volts output. Type T8394M has input switch positions for 95, 100, 105, 110, 115, 120, 125 volts, at 50-60 cycles. All others for 65, 75, 90, 100, 115, 130 and 145 volts. Features simple, "plug-in" installation. (built-in AC receptacle and 8 ft. line cord). Ideal for localities with fluctuating voltage supplies, to assure correct performance of electrical appliances.

150-750 WATT MODELS

Type T8394M. Especially designed for use with television sets. Rated, 300 watts. 4¾x4x5". Wt. 9 lbs.

62 G 514. NET 11.55

Type T10306. Rated, 150 watts. Size, 4⅝x3⅞x5¾". Shpg. wt., 7 lbs.

62 G 501. NET 13.50

Type T10307. Rated, 350 watts. Size, 5⅜x4¼x6½". Shpg. wt 10½ lbs.

62 G 562. NET 16.80

Type T10308. Rated, 500 watts. Size, 5⅜x4¼x7". Shpg. wt., 12 lbs.

62 G 563. NET 20.70

Type T10309. Rated, 750 watts. Size, 5¾x4¼x7⅛". Shpg. wt., 14 lbs.

62 G 564. NET 25.20

1000-5000 WATT MODELS

Heavy-duty voltage adjusters, ruggedly constructed to handle higher wattages. Include all the features of units described above, but have knockouts for direct conduit connection, instead of plug connections. Constructed for maximum circulation of air.

Type T10318. Rated, 1000 watts. 10¾x5¾x11¾". Shp. wt., 27 lbs.

62 GZ 565. NET 67.28

Type T10319. Rated, 1500 watts. Size, 12x5¾x13". Shpg. wt., 34½ lbs.

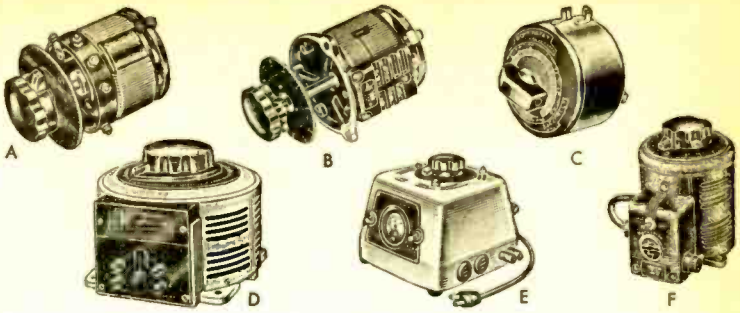
62 GZ 566. NET 89.18

Type T10320. Rated, 3000 watts. Size, 13¼x9¼x14½". Shpg. wt., 58 lbs.

62 GZ 567. NET 111.15

Type T10321. Rated, 5000 watts. Size, 17½x9¼x18½". Shpg. wt., 91 lbs.

62 GZ 568. NET 180.53



"SUPERIOR" VARIABLE VOLTAGE CONTROLS

POWERSTAT VARIABLE AUTOTRANSFORMERS

Deliver adjustable output voltage from AC line—output variable from zero to above line voltage. Negligible voltage change from no load to full load. Current ratings apply over full range of output voltage. Zero waveform distortion. Rated for 50° C. temperature rise under full load. *For 110-120 v. AC inputs. †For 240 volt inputs. For 50-60 cycles, except §60 cycles only. 2PF-136 has standard 2-blade plug and receptacle. 3PF-136 has 3-blade plug and receptacle; third wire is connected to Powerstat frame. Gang assemblies: 1156-2P and 1256-2P consist of two paralleled units operated from a common shaft. 1156-3P and 1256-3P consist of three units operated from a common shaft. 1156-3V consists of three units operated from a common shaft, wired for three-phase wye-connected operation. Sizes shown on gang types are height and diameter. Mountings: P, panel; and U, general utility. Sizes shown: P types, distance back of panel and diameter; U types, overall height and diameter. Types 116 and 216 have on-off switch, line cord and plug, fuse and output receptacle.

Stock No.	Mfr's Type	Fig.	OUTPUT Volts	Amps	KVA	Mtg.	Size	Wt. Lbs.	NET EACH
62 G 536	10*§	C	0–132	1.25	.165	P	2 13/16x2 1/16"	2.5	8.50
62 G 531	20*§	A	0–140	3.0	0.4	P	3 11/16x3 11/16"	6	12.50
62 G 525	116*	F	0–140	7.5	1.0	U	4 21/32x6½"	12	23.00
62 G 524	116U*	B	0–140	7.5	1.0	P	4⅜x8 13/16"	11	18.00
62 GZ 543	136*	D	0–140	20.0	2.8	U	7¾x6 1/16"	25	50.00
62 GZ 545	2PF-136*	.....	0–140	20.0	2.8	U	7¾x6 1/16"	26	65.00
62 GZ 546	3PF-136*	.....	0–140	20.0	2.8	U	7¾x6 1/16"	26	65.00
62 GZ 529	1156*	.....	0–140	45.0	6.3	U	8 13/32x14⅞"	80	118.00
62 G 527	216†	F	0–280	3.0	.84	U	6½x4 21/32"	12	26.00
62 GZ 544	236†	.....	0–280	9.0	2.5	U	4 15/16x4⅜"	25	50.00
62 GZ 530	1256†	.....	0–280	28.0	7.8	U	8 13/32x14⅞"	80	118.00
62 GZ 537	1156-2P*	.....	0–140	90.0	12.6	U	17⅛x14⅞"	170	269.00
62 GZ 538	1156-3P*	.....	0–140	135.0	18.9	U	25x14⅞"	295	418.00
62 GZ 539	1256-2P†	.....	0–280	56.0	15.7	U	17⅛x14⅞"	170	269.00
62 GZ 540	1256-3P†	.....	0–280	84.0	23.5	U	25x14⅞"	295	418.00
62 GZ 541	1156-3V§	.....	0–280	45.0	21.8	U	25x14⅞"	280	394.00

FIG. E MODEL UCIM VOLTBOX

For industrial and electrical, chemical and physics laboratory installations and radio-television servicing. One compact unit provides AC source for variable AC voltage testing. Has a variable voltage transformer, voltmeter, fuse, line switch, two five-way binding posts and three output receptacles. Delivers continuously adjustable output voltage up to 17% above line voltage to all output receptacles and binding posts. Rated at 7.5 amp. Input 120 v. 50-60 cycles. Output, 0-140 volts. In gray enamel finish aluminum case. Size, 3x8x6". Shpg. wt., 17 lbs.

62 GX 533. NET 53.00

Model UC2M. As above but for 240 volts. Output, 0-280 volts at 3 amps.

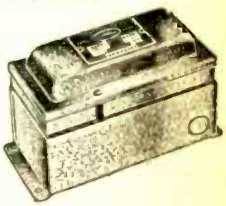
62 GX 542 ..... 55.00

OTHER "SUPERIOR" EQUIPMENT

ALLIED can supply all Superior Powerstat equipment for commercial, industrial, laboratory and special-purpose applications. Available on special order are motor-driven powerstats, oil-cooled powerstats, explosion-proof powerstats and powerstat line correctors; Stabiline automatic voltage regulators, including instantaneous electronic and electro-mechanical regulators; Voltbox AC power supplies; Varicell DC power supplies; and all other Superior voltage-regulating equipment. Stabiline regulators are ideal for voltage regulation in radio and TV stations. Luxtrol light controls are available in manually-operated and motor-driven non-interlocking models, interlocking types, and as packaged assemblies in numerous capacities and ratings. Write for FREE Superior Bulletin (Stock No. 37 G 102).

RAYTHEON VR VOLTAGE STABILIZERS

Stabilize Varying Line Voltages to Within ±½%



Fully automatic magnetic-type AC line voltage stabilizers. For applications requiring accurate voltage stabilization. Maintain absolutely constant output of 115 volts, within ½% despite input voltage fluctuations as great as 15%. Quick response corrects for fluctuations so rapidly that no indication can be noticed on an ordinary AC voltmeter. Can be used in parallel for greater power-handling capacity where load is greater than rated capacity of single unit. Require no adjustment. *Case has flat top instead of style illustrated. †In 2 sections, mounted as single unit. For 95-130 v., 60 cycle AC. *Available in ratings to 2000 watts on special order.*

Stock No.	Mfr's Type	Watts	Size	Mtg. Ctr.	Shpg. Wt.	NET
62 G 675	VR-6110*	15	5¼x2 11/16x3½"	5 1/16"	6 lbs.	16.00
62 G 676	VR-6111	30	7½x3⅜x4⅛"	6⅞x2¼"	7 lbs.	18.00
62 G 677	VR-6112	60	7½x3⅜x4 7/16"	6⅞x2¼"	10 lbs.	25.00
62 G 678	VR-6113	120	7½x3⅜x5 15/16"	6⅞x2¼"	17 lbs.	33.00
62 GZ 679	VR-6114	250	12⅞x5x7⅝"	11 9/16x3½"	29 lbs.	52.00
62 GZ 680	VR-6115	500	12⅞x5x9⅛"	11 9/16x3½"	52 lbs.	81.00
62 GZ 681	VR-6116†	1000	14 7/16x13 3/16x9⅝"	12⅞x11 5/16"	128 lbs.	135.00

CONNECTING ASSEMBLIES FOR VOLTAGE STABILIZERS

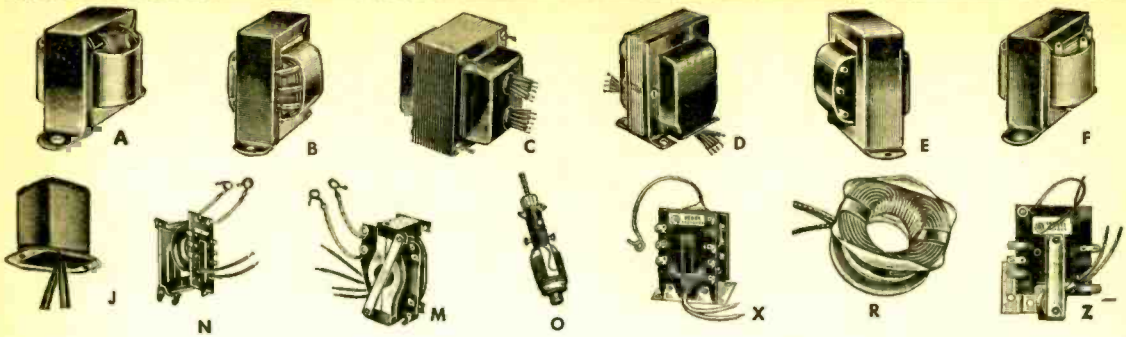
51-590G1. Cord, plug, socket and mounting plate assembly for VR-6111, VR-6112, VR-6113. Shpg. wt., 2 lbs.

62 G 684. NET 2.25

51-590G2. Cord, plug, socket and mounting plate assembly for VR-6114 and VR-6115. Shpg. wt., 2 lbs.

62 G 685. NET 3.00

Merit Transformers



RADIO AND TV REPLACEMENT TRANSFORMERS

TYPE 1000 TV CONVERSION KIT

Contains components for converting TV sets designed for small picture tubes to 70° deflection so that they may be used with 14" to 24" tubes. Includes 1 each of the following components: HVO-7 Horizontal Sweep Transformer (Fig. N); MWC-1 4-29 mh Width Linearity Control with AGC winding (Fig. O); MDF-70 Deflection Yoke (Fig. R). With complete instructions. Shpg. wt., 2 lbs.

62 G 199. List. $25.25. NET 13.63

UNIVERSAL OUTPUT TRANSFORMERS

Single or push-pull. Primary impedance, 4000-7000-8000-10000-14000 ohms CT. Secondary impedance, .17 to 32 ohms. Av. shpg. wt., 1 lb.

No.	Type	Watts	Pri. Ma	Mtg. Ctrs.	Size	Fig.	NET
62 G 444	A-2900	4	35	2"	1 3/8x2 3/8x1 1/4"	F	1.62
62 G 445	A-2901	8	40	2 3/8"	1 5/8x2 13/16x1 1/2"	F	1.76
62 G 446	A-2904	18	40	2 7/8"	2 1/4x2 7/8x1 7/8"	E	2.35

UNIVERSAL LINE TRANSFORMERS

For line-to-voice coil. *For 70.7 v. line; rated power furnished on lowest tap; others reduce power in steps of 3 db. Av. shpg. wt., 8 oz.

No.	Type	Primary Impedance	Sec. Imp.	Watts	Fig.	NET
62 G 447	A-2906	500-1000-1500-2000	3.2, 6-8	10	F	1.91
62 G 450	A-3005	500	3.2, 6-8	5	A	1.32
62 G 451	A-3013*	1000-2000-4000-8000-16000	3.5, 7	5	F	1.91
62 G 452	A-3014*	500-1000-2000-4000-8000	4-8-16	10	F	2.35

POWER TRANSFORMERS

For 115 V., 50-60 cycles AC. *For TV boosters. †Has rectifier socket. All Fig. C except §, D. RETMA color-coded leads.

Stock No.	Type	Plate Volts	Plate Ma	Rec. V	Rec. A	Fil. V	Fil. A	Mtg. Ctrs.	Wt. Lbs.	NET
62 G 383	P-2830	506 CT	300	5	6	6.3	1.25			
						6.3	6			
						6.3	6	3x3 1/4"	11	13.24
62 G 384	P-2831	662 CT	250	5	3	6.3	13			
		422 CT	90	5	2			3x3 1/4"	13	13.82
62 G 379	P-2833	610 CT	300	5	6	6.3	.9			
						6.3	1.95			
						6.3	6.4			
						6.3	6.4	3x3 1/4"	13 1/2	13.24
62 G 380	P-2834	720 CT	225	5	6	6.3	1.2			
						6.3	3			
						6.3	9	3x3 1/4"	12	14.70
62 G 381	P-2835	840 CT	250	5	3	6.3	1.2			
						6.3	3			
						6.3	8	3x3 1/4"	12	14.70
62 G 382	P-2836	600 CT	250	5	4	6.3	1.2			
						6.3	11.7	2 1/4x3 7/16"	10	13.24
62 G 190	P-3059	720 CT	250	5	2	6.3	2.7			
				5	3	6.3	9	3x3 1/4"	14 1/2	14.70
62 G 193	P-3067	800 CT	220	5	3	6.3	10			
		424 CT	90	5	3					
				5	2	6.3	2.6	3x3 1/4"	13 1/4	14.70
62 G 140	P-3069†	700 CT	225	5	3	6.3	10			
						6.3	2.7	3x3 1/4"	9 1/4	13.23
62 G 255	P-3078	720 CT	275	5	3	6.3	9			
						6.3	1.5			
						6.3 or 5	2.7	3x3 1/4"	12	13.82
62 G 273	P-2952	700 CT	90	5	3	6.3	3.5	2 1/4x2 1 7/16"	5	5.00
62 G 272	P-2951	650 CT	70	5	3	6.3	3.5	2x2 1/2"	3 1/3	4.56
62 G 271	P-2950	650 CT	40	5	2	6.3	2	2x2 1/2"	3	3.97
62 G 257	P-3045*	120	50			6.3	2	3 1/8"	1 1/2	2.94
62 G 145	P-3046*	150	25			6.3	.5	2"	1	1.91
62 G 281	P-3048	520 CT	90			6.3	4.7	2x2 1/2"	3	4.56
62 G 282	P-2953	700 CT	120	5	3	6.3	4.7	2 1/2x3 1/8"	6	5.73
62 G 191	P-3063	720 CT	250	5	3	6.3	9			
				5	2	6.3	1.2	3 3/16x4 1/16"	12 1/4	13.23
62 G 283	P-3148§	520 CT	90			6.3	4.7	2x2 3/16"	3 1/3	4.12

FILTER CHOKES

Type C-2991 has 2000 volt insulation. Others rated at 1500 volts.

No.	Type	Hys.	Ma	Ohms	Size	Lbs.	Fig.	NET
62 G 177	C-2973	1.5	10	95	1 3/16x1 7/16 x1"	1/4	A	1.03
62 G 178	C-2991	2	250	53	2 1/4x3 11/16x2 1/2"	1 1/2	A	2.59
62 G 179	C-2994	1.5	200	90	1 5/8x2 13/16x1 5/8"	3/4	A	1.32
62 G 180	C-2995	8.0	100	375	2x3 1/4x1 5/8"	1	A	1.76
62 G 181	C-2996	1.0	300	60	2 1/4x3 11/16x2"	1 1/2	A	2.06

Ask for free TV Replacement Guide, 37 G 073 with your next order.

FILAMENT AND AUTOTRANSFORMERS

Type P-3074 is a low current (isolation) filament transformer. Type P-3097 transformer isolates damper tube from other filaments.

No.	Type	Pri. Volts	Secondary Volts	Secondary Amps	Wt., Lbs.	Fig.	NET
62 G 259	P-3074	115	6.3	1.2	1 1/2	A	2.20
62 G 260	P-3097	6.3	12.6 or 6.3	1 1.2	1 1/2	A	2.18
62 G 286	P-2944	115	6.3 CT	1	3/4	A	1.76
62 G 242	P-2946	115	6.3 CT	3	1 1/2	A	2.65
62 G 243	P-2947	115	6.3 CT	6	2 1/4	B	3.38

VERTICAL OUTPUT TRANSFORMERS

Separate primary and secondary, except †autoformer type.

Stock No.	Type	Turns Ratio Pri. to Sec.	Size	Wt. Lbs.	Fig.	NET
62 G 151	A-3036	10:1	2x3 1/4x2"	1 1/2	A	2.50
62 G 152	A-3037†	11.4:1	2x3 1/4x1 5/8"	1	A	2.50
62 G 270	A-3038	10:1	2 1/4x3 11/16x2 1/4"	1 1/2	A	3.23
62 G 154	A-3039†	18:1	2 1/4x3 11/16x2 1/8"	1 1/2	A	3.23

HORIZONTAL OUTPUTS—WIDTH/LINEARITY CONTROLS

*Indicates exact replacement physically and electrically.

No.	Type	Tube	Equivalent	Lb.	Fig	NET
62 G 161	HVO-3	10BP4	RCA 211T3	2	M	4.70
62 G 162	HVO-5	16AP4	RCA 211T5	2 1/2	M	5.88
62 G 157	HVO-7	10" to 24"	GE 77J1	1 1/4	N	7.06
62 G 158	HVO-8	10" to 24"	Air Core	1/2	...	3.82
62 G 198	MWC-1	4-29 mh	None	1/4	O	1.32
62 G 263	MWC-3	20-60 mh	None	1/4	O	1.12
62 G 264	HVO-9	17" to 24"	RCA 230T1	1 1/4	X	5.88
62 G 275	HVO-10	10" to 21"	Fast Retrace	1 1/2	N	5.88
62 G 276	HVO-11	10" to 19"	ZEN. S-16204	1	Z	5.29
62 G 389	HVO-24*	16" to 24"	Admiral 79C30-1/-3	1 1/2	...	6.17
62 G 391	HVO-26*	16" to 24"	CBS A10104/07/08/10	1 1/2	...	6.17
62 G 390	HVO-27*	16" to 24"	CBS A10136/37/59	1 1/2	...	6.17
62 G 385	HVO-31*	16" to 24"	Muntz T0-0031/-1/-2	1 1/2	...	6.17
62 G 386	HVO-32*	24" to 27"	Muntz T0-0036/-1/-2	2	...	6.47
62 G 387	HVO-36*	24" to 27"	RCA 235T1	2	...	6.47
62 G 388	HVO-37*	17" to 27"	Crosley 157820/-5/-1	1 1/2	...	5.00

Fig. R—DEFLECTION YOKES

No.	Type	Def.	Hor. Mh.	Ver. Mh.	Lbs.	NET
62 G 146	MD-12	53°	8	48	1	5.29
62 G 148	MDF-74	70°	28	3	1 1/4	5.88
62 G 173	MDF-70	70°	10	45	1 1/4	5.88
62 G 267	MD-13	53°	30	48	1 1/2	5.29
62 G 268	MDF-71	70°	30	50	1 1/4	5.88
62 G 392	MDF-75	70°	25	42	1 1/2	5.88
62 G 393	MDF-76	70°	30	3.6	1 1/2	5.88
62 G 394	MDF-91	90°	11.5	42	2	7.35

BLOCKING OSCILLATOR TRANSFORMERS

Vertical blocking oscillator transformers for replacement purposes. Av. shpg. wt., 6 oz. *Similar to J.

No.	Type	Ratio	Mtg. Ctrs.	Size	Fig.	NET
62 G 182	A-3000	1:4.2	2"	1 1/2x2 1/8x1 1/4"	A	1.56
62 G 196	A-4000	1:4.2	1 15/16"	1 1/4x2 5/16x1 1/2"	J	1.91
62 G 280	A-3003	1:4.2	1 3/4"	1 3/16x2 1/8x7/8"	A	1.47
62 G 378	A-3004	1:15	1 3/4"	1 3/4x2x1 1/2"	B	1.62
62 G 252	A-4003	1:4.2	1 3/16"	1 9/16x1 3/16x1 3/16"	*	1.91

OUTPUT TRANSFORMERS

To couple plates of output tubes to speaker voice coil. Secondary impedance, 3.2 ohms. *Push-pull. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Primary Imp.	Pri. Ma	Max. Watts	Size	Fig.	NET
62 G 434	A-3025	2500	50	3	1 3/16x2 1/16x7/8"	A	.97
62 G 435	A-3026	5000	40	3	1 3/16x2 1/16x7/8"	A	.97
62 G 436	A-2927	8000	20	3	1 1/8x1 7/8x1"	B	1.01
62 G 437	A-2928	2000	60	5	1 1/8x2 1/8x1 1/4"	A	1.12
62 G 440	A-2932	10000	30	5	1 1/8x2 1/8x1 1/4"	A	1.18
62 G 441	A-2936	10000*	75	10	1 5/8x2 13/16x1 1/2"	A	1.76

RCA Television Components

RCA TV COMPONENTS

A wide selection of high-quality replacement components for all television receivers. This list can be used as a suggested inventory for TV servicemen, since it consists of the most-often-needed replacement parts. Complete descriptive literature for these and any other RCA TV components available on request. ALLIED can supply any RCA replacement TV components. When ordering please state RCA type number.

TV POWER TRANSFORMERS

For 117 v., 60 cyc. operation. Finest quality laminations. Exact replacements for most TV sets.

Stock No.	RCA Type	Plate VCT	Plate Ma	Fil. 1 V	Fil. 1 A	Fil. 2 V	Fil. 2 A	Fil. 3 V	Fil. 3 A	Wt., Lbs.	NET EACH
62 G 550	201T7	770	230	5	3	6.3	9.0	5.0	2.0	13	13.72
62 G 551	201T8	720	250	5	3	6.3	8.0	5.0	2.0	13	12.41
77 G 689	201T9	730	260	5	6	6.3	8.85	5.0	2.0	13	13.72
62 G 553	201T10	730	260	5	6	6.3	8.85	6.3	1.2	13	13.72

HORIZONTAL OUTPUT AND HIGH VOLTAGE TRANSFORMERS

*For RCA TV Eye Camera Unit. Av. Shpg. wt., 1½ lbs.

Stock No	Type	Volts	Description	NET
62 G 559	211T2	33 KV	Projection type for 5TP4 50°	12.41
62 G 560	211T3	9 KV	Isolated-secondary type. 57°	5.88
77 G 594	230T1	18 KV	Auto-transformer type. 70°	5.88
77 G 596	232T1	10-16 KV	Auto-transformer type. 50-70°	5.73
77 G 257	*233T1	Low-imp.	Horiz. output for RCA 6198	16.61
77 G 639	235T1	18 KV	Auto-transformer type. 90°	6.76

VERTICAL OUTPUT TRANSFORMERS

*For RCA TV Eye Camera Unit.

Stock No.	Type	Ratio	Pri. Ω	Sec. Ω	Lbs.	EACH
62 G 506	204T2	10:1	590	6.9	2½	3.53
62 G 555	204T9	10:1	521	6.9	2	3.23
77 G 576	222T1	11.4:1	1200	11.0	1¼	2.50
77 G 589	226T1	18:1	1600	4.4	1¾	3.38
77 G 258	*234T1	3:1	700	70.0	2½	3.58

VERTICAL BLOCKING OSCILLATOR TRANSFORMERS

Stock No.	Type	Ratio	Pri.Ω	Sec.Ω	Lbs.	EACH
62 G 507	208T2	1.4:2	244	1310	½	1.91
62 G 558	208T9	1.4:2	244	1310	¾	2.35
77 G 692	209T1	1.4:2	208	1060	¾	1.62

HORIZONTAL BLOCKING OSCILLATOR TRANSFORMER

Stock No.	Type	Ratio	Pri. Ω	Sec. Ω	Lbs.	EACH
62 G 556	208T1	1:2	3.5	8.5	¾	2.56

DEFLECTION YOKES

Stock No.	Type	Mh	Ohms	Angle	Lbs.	NET
77 G 595	201D12	8.3	64.6	57°	1¼	5.29
77 G 580	207D1	8.4	70	57°	1¼	5.88
77 G 549	206D1	10.3	48.7	70°	1¼	5.29
77 G 545	205D1	12.5	68.8	57°	1¼	5.88
77 G 587	209D1	13.3	48	70°	1¼	5.88
77 G 597	211D2	13.3	48	70°	1¼	5.15
77 G 694	222D1	18.5	48	70°	1¼	5.88
77 G 695	214D1	28.5	3.3	70°	1¼	5.76
77 G 259	237D1	12	45	90°	1¼	5.88

HORIZONTAL LINEARITY AND WIDTH CONTROLS

Stock No.	RCA Type	Description	Wt. Lbs.	NET EA.
77 G 506	201R1	Width Control (0.054-0.245 mh)	¼	.59
77 G 507	201R3	Horizontal Linearity Control (5.5-20 mh)	¼	.73
77 G 531	201R4	Width Control (0.17-0.61 mh)	¼	.59
77 G 535	201R5	Horizontal Linearity Control (0.55-2.30 mh)	¼	.73
77 G 546	206R1	Width Control (0.47-1.7 mh)	¼	.73
77 G 573	208R1	Width Control for 16GP4 (.51-1.7 mh)	¼	.62
77 G 574	209R1	Horizontal Linearity Control. (1.3-4.1 mh)	¼	.73
77 G 598	211R1	Width Control (1.65-9.2 mh)	¼	.88
77 G 599	212R1	Width Control (2.9-16 mh)	¼	.88
77 G 635	213R1	Horizontal Linearity Control (1.5-8.3 mh)	¼	.73
77 G 697	214R1	Width Control (1.75-10.5) For AGC/AFC.	¼	.73
77 G 698	215R1	Width Control (3.9-22)	¼	.73

ION TRAPS AND FOCUS COILS

77 G 509	202D1	Focus Coil. 120 ma; 247 ohms.	2	4.90
77 G 532	202D2	Focus Coil. 90-104 ma; 470 ohms.	2	7.20
77 G 696	203D1	Double-Pole, field-coil ion trap, 200 ma.	½	3.82
77 G 534	203D3	Ion Trap. (Universal PM Type)	½	1.23

HORIZONTAL OSCILLATOR AND SYNC COILS

Stock No.	RCA Type	Description	Wt. Lbs.	NET EA.
62 G 508	208T8	6-Term. Discr. ("630" type).	¼	1.44
77 G 533	203R1	3-Term. 2-coil Synchro-Guide.	¼	1.12
77 G 582	205R1	4-Term. 3-coil Synchro-Guide.	¼	1.41

UNIVERSAL OUTPUT AND HI-VOLTAGE TRANSFORMER

Type 231T1. Supplies up to 15 kilovolts. Ideal for general replacement as well as conversion use in TV receivers employing pulse-operated transformers having isolated secondary windings for yoke connections. Universal mounting brackets fit most sets. Transformer has 7 secondary taps—provides connections to match any commonly used driver tube to yoke having horizontal-coil inductances from 8 to 30 mh. For 50 to 66° deflection angles. Tapped primary matches any output tube and B supply. Shpg. wt., 2 lbs.

77 G 593. NET **5.47**

RCA-VICTOR TV RECEIVER SERVICE PARTS

Parts listed below are exact duplicate replacement parts for RCA TV receivers with part numbers as given in RCA servicing and replacement manuals. ALLIED can supply all original RCA replacement components not listed below. When ordering, be sure to specify RCA's original type number. Av. shpg. wt., 6 oz., except *15 lbs., †1½ lbs., §3 lbs.

Stock No.	RCA Type	Component	EACH
77 G 167	71440	Height Control	.71
77 G 168	71441	Linearity Control	.71
77 G 169	75215	Hor.-Vert. Hold Control	1.73
77 G 170	75216	Pix & Brt. Control	1.76
77 G 171	75513	Vol. & Tone Control	2.20
77 G 172	75514	Pix & Bright Control	2.35
77 G 173	75516	Width Control	.65
77 G 174	76441	Width Control	1.13
77 G 175	76442	Linearity Control	.79
77 G 176	76444	AGC Control	1.23
77 G 177	76445	Picture Control	1.03
77 G 178	76483	Linearity Control	.65
77 G 179	76484	Width Control	1.42
77 G 180	76803	Vol. & On-Off Switch	.91
77 G 181	77641	Brightness Control	2.11
77 G 182	77655	Brightness Control	2.60
77 G 183	78208	Pix & Vol. Control	2.25
77 G 184	73591	Antenna Matching Coil	1.18
77 G 185	74144	Vert. Blocking Oscillator	1.76
77 G 146	74588†	Horizontal Output & HV Transf.	9.70
77 G 186	74586*	Power Transformer	13.82
77 G 188	74950†	Vert. Defl. Output Transf.	3.23
77 G 149	74951†	Horiz. Output & HV Transf.	3.67
77 G 190	75212	IF Transformer	1.47
77 G 191	75213	Horiz. Oscillator	1.47
77 G 192	75508*	Power Transformer	12.94
77 G 193	75519†	Horiz. Output & HV Transf.	3.53
77 G 194	75520†	Audio Output Transformer	1.41
77 G 195	75645*	Power Transformer	14.41
77 G 196	76440	Horizontal Oscillator	1.76
77 G 197	76501†	Horiz. Output & HV Transf.	7.01
77 G 198	76795†	Horiz. Output & HV Transf.	5.88
77 G 199	76980	IF Transformer	.85
77 G 250	76981	IF Transformer	1.96
77 G 251	76984*	Power Transformer	17.05
77 G 252	77112	IF Transformer	2.25
77 G 253	77635*	Power Transformer	13.38
77 G 254	78201†	Horiz. Output & HV Transf.	9.80
77 G 255	76653§	Deflection Yoke	10.04
77 G 256	77697§	Deflection Yoke	7.06
77 G 166	76317	PM Ion Trap	.82
77 G 260	71449	Horiz. Lin. Control	.73
77 G 261	74048	Vol. Control	2.18
77 G 262	74945	Width Control	1.85
77 G 263	74952§	Deflection Yoke	5.76
77 G 264	74974§	12" Speaker	5.82
77 G 265	75162	Detent and Shaft	1.47
77 G 266	75221	Selenium Rectifier	1.82
77 G 267	76141	Ion-trap Magnet	.71
77 G 268	76168†	Focus Magnet	7.01
77 G 269	76375	Centering Magnet	1.01
77 G 277	76433	I.F. Transformer	.65
77 G 278	76452	Selenium Rectifier	2.23
77 G 279	76652†	Focus Magnet	6.57
77 G 280	76675	Crystal Diode	.56
77 G 281	77000§	5" Speaker	2.57
77 G 282	78278§	Deflection Yoke	8.82
77 G 283	79144	Width Coil	1.08
77 G 284	79145†	Flyback Transformer	10.53
77 G 285	79161	Horiz. Osc. Transformer	.91
77 G 286	79733	Ant. Matching Transformer	4.95
77 G 287	79869*	Power Transformer	18.33
77 G 288	79966	Horiz. Osc. Transformer	1.27

TYPE 201Y1 CONVERKIT

An excellent kit for conversions using kinescopes up to 21" size. Contains 231T1 "Universal" transformer and Type 211D2 "Anastigmatic" deflecting yoke. Yoke has 66-70° deflection and separate horizontal coil neutralizing RC network for use with either isolated secondary type horizontal deflection transformer or auto-type transformers. Universal-type transformer has 7 taps for all usual yoke inductances, damper tube and linearity coil arrangements. Shpg. wt., 5 lbs.

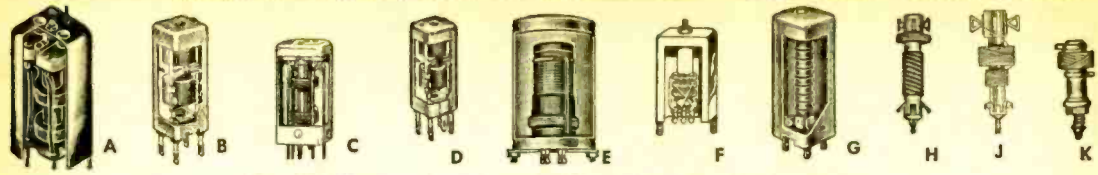
77 G 592. NET **10.61**

RCA SP-2001A SERVICE PARTS GUIDE

Complete listings of proper replacement parts for RCA TV sets. Lists all important RCA replacement numbers by function for all RCA TV chassis. Excellent for quick reference. Extremely helpful for the serviceman—helps identify the exact RCA replacement part.

37 G 068 ..... **NO CHARGE WITH ORDER**

J. W. Miller Coils and Chokes



IF TRANSFORMERS, RF AND BROADCAST COILS

FIG. A—REPLACEMENT 455 KC IF TRANSFORMERS

Double-tuned, air-core, universal input, interstage or output transformers. Universal wound primary and secondary tuned by mica insulated compression-type trimmers. RETMA leads. Size, 1⅝x1⅝x2⅝". Shpg. wt., 4 oz.

No.	Type	Use	EA.
60 H 739	512-C1	Input IF	1.41
60 H 740	512-C2	Interstage IF	
60 H 741	512-C3	Full-wave output IF	
60 H 512	512-C4	Half-wave output IF	

FIG. B—MINIATURE IF TRANSFORMERS

Molded plastic frame with built-in condensers. Tunable powdered iron cores. *Built-in diode filter condensers. Aluminum shielded ¾" sq. x 2". With mtg. hdwe. Shpg. wt., 4 oz.

No.	Type	Freq.	Use	Net
60 H 727	12-C1	455 kc	IF Input	1.29
60 H 728	12-C2	455 kc	IF Output	1.29
60 H 787	12-C6	455 kc	IF Output*	1.38
60 H 716	12-C7	455 kc	Input (Batt.)	1.29
60 H 717	12-C8	455 kc	Output (Batt.)	1.29
60 H 718	12-C9	455 kc	Input (AC-DC)	1.29
60 H 719	12-C10	455 kc	Output (AC-DC)	1.29
60 H 729	12-H1	262 kc	IF Input	1.47
60 H 731	12-H2	262 kc	IF Output	1.47
60 H 788	12-H6	262 kc	IF Output*	1.56
60 H 732	1463	10.7 mc	Input or Inter.	1.62
60 H 733	1464	10.7 mc	Discriminator	1.94
60 H 734	1465	10.7 mc	Ratio Detect.	1.94
60 H 789	6203	4.5 mc	Input or Inter.	1.62
60 H 790	6204	4.5 mc	Discriminator	1.94
60 H 791	6205	4.5 mc	Ratio Detect.	1.94

FIG. C—MIDGET IF TRANSFORMERS

Air-core mica trimmer tuned IF's. Excellent gain and selectivity. 6-32 spade-bolt mtg. 1⅛x1⅛x2". *With filter. Shpg. wt., 4 oz.

No.	Type	Freq'cy	Use	EA.
60 H 735	112-C1	455 kc	Input	1.41
60 H 736	112-C2	455 kc	Interstage	
60 H 737	112-C3	455 kc	CT Output	
60 H 738	112-C4	455 kc	Output	
60 H 855	112-H1	262 kc	Input	
60 H 856	112-H2	262 kc	Interstage	
60 H 857	112-H3	262 kc	CT Output	
60 H 858	112-H4	262 kc	Output	
60 H 859	112-H6	262 kc	Output*	1.56

FIG. D—SUBMINIATURE 455 KC IF TRANSFORMERS

New, extremely small IF coils featuring excellent gain and bandwidth characteristics. Ferrite shell cores provide high efficiency. Mica trimmer tuned primary and secondary. Only ½" square by 1¼" high. Shpg. wt., 3 oz.

60 H 860. Type 10-C1. Input. NET
60 H 861. Type 10-C2. Output. EA. ... 1.47

FIG. E—DELUXE BANK-WOUND COILS

Shielded antenna, RF and bandpass coils. Will cover 540-1740 kc with 365 mmf condenser. Two-bank Litz secondaries. High impedance primaries. 1⅞x3" high. Wt., 4 oz.

60 H 783. Type 242-A. Ant. NET
60 H 784. Type 242-RF. RF. EACH ... 1.03
60 H 797. Type 242-BP. Bandpass. NET 88¢

FIG. F—UNIVERSAL ADJUSTABLE BROADCAST BAND COILS

Compact, variable-inductance iron-core coils for replacement use. Used with 250-450 mmf condenser. Oscillator coils have tapped secondary. Unshielded, 2x⅞" dia. Wt., 4 oz. Shielded, 1⅝x1⅜x2½". Wt., 5 oz.

SHIELDED TYPE

No.	Type	Use	KC Range	EACH
60 H 748	73-A	Antenna	500-1800	1.62
60 H 749	73-RF	RF	500-1800	
60 H 752	73-OSC	Oscillator	100-550	

UNSHIELDED TYPE

60 H 745	72-A	Antenna	500-1800	1.29
60 H 746	72-RF	RF	500-1800	
60 H 747	72-OSC	Oscillator	100-550	

FIG. G—MINIATURE RF COILS

Shielded iron-core coils for compact receivers. Use with 365 mmf tuning condensers. ¾" square by 2" high. *Required series pad. Shpg. wt., 4 oz.

No.	Type	Use	KC Range	EACH
60 H 798	X-121-A	Antenna	140-425	1.23
60 H 785	X-121-RF	RF	140-425	
60 H 786	X-121-C	Osc.	*120 mmf	
60 H 706	A-121-A	Antenna	540-1700	1.03
60 H 707	A-121-RF	RF	540-1700	
60 H 708	A-121-C	Osc. 455 kc	*400 mmf	
60 H 709	A-121-H	Osc. 262 kc	*600 mmf	

FIG. H—HIGH "Q" BROADCAST RF COILS

High-efficiency, unshielded, iron-core coils. For replacement purposes or for new receiver design. Adjustable core for tracking desired frequency range. Range indicated obtained using 365 mmf variable condenser. Coils mount in ¼" hole. *Padder values shown are for 455 kc IF. Size: ⅞x2". Shpg. wt., 4 oz.

No.	Type	Use	KC Range	EACH
60 H 862	A-5495-A	Antenna	550-1700	1.18
60 H 863	A-5495-RF	RF	550-1700	
60 H 864	A-5495-C	Std. Osc.	*400 mmf	
60 H 865	A-5496-C	Tapp'd Osc.	*400 mmf	

FIG. J—MINIATURE ADJUSTABLE RF COILS

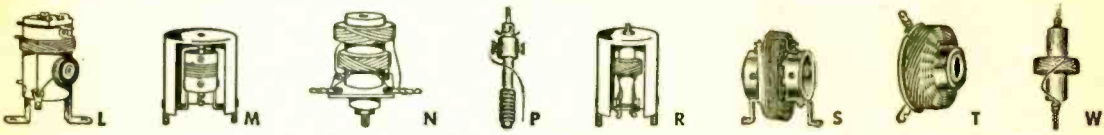
Small, variable-inductance RF coils. Use with tuning condensers of 250 to 450 max. capacity. Type 70-OSC coil has tapped secondary. 70 series installed self-supported. 71-OSC has 2-tap primary. Both track 100 to 550 kc IF. Max. size: ⅝x1½" high. Av. shpg. wt., 4 oz.

No.	Type	Use	KC Range	NET
60 H 866	70-A	Antenna	540-1600	.88
60 H 867	70-RF	RF	540-1600	.88
60 H 868	70-OSC	Osc.	540-1600	.88
60 H 869	71-OSC	Osc.	500-1800	1.18

FIG. K—ADJUSTABLE CERAMIC RF INDUCTORS

Small, adjustable coils designed for the most exacting requirements. Silicone-impregnated ceramic forms. Tuned by powdered iron core. Types 4502 to 4506 are single-layer wound. Types 4507 to 4509 are twin-pi wound. Others are honeycomb wound. Mount in 3/16" hole. Form size: ¼x⅞" high. Av. shpg. wt., 2 oz.

No.	Type	Microhenries	NET
60 H 870	4500	Form only	.88
60 H 871	4502	1.0- 1.6	1.18
60 H 872	4503	1.6- 2.8	1.23
60 H 873	4504	2.8- 5	1.29
60 H 874	4505	5 - 9	1.35
60 H 875	4506	9 - 16	1.41
60 H 876	4507	16 - 24	1.47
60 H 877	4508	24 - 35	1.47
60 H 878	4509	35 - 60	1.47
60 H 879	4511	60 -120	1.47
60 H 880	4512	110 -200	1.53
60 H 881	4513	190 -330	1.53
60 H 882	4514	320 -500	1.53



COILS AND CHOKES

FIG. L—CAPACITY-OPERATED RELAY COIL

For alarm systems, window displays, etc. With diagram. 7/8x2¼" high. Shpg. wt., 4 oz.
60 H 589. Type 695. NET ... 1.62

FIG. M—BANDPASS COUPLING COIL

Negative mutual coupling coil for hi-fi TRF receivers. 1⅞x2". Shpg. wt., 4 oz.
60 H 761. Type EL-56. NET ... 73c

FIG. N—MIDGET OSCILLATOR COILS

Cover 540-1600 kc with 365 mmf condenser. Series 5480 for pentagrid converters. 5481 series have single tapped coil for 6SA7 and similar tubes. Size: 1x1". Shpg. wt., 4 oz.

No.	Type	IF	Padder	EACH
60 H 742	5480-K	175 kc	.001 mfd	68c
60 H 884	5480-H	262 kc	.0006 mfd	
60 H 743	5480-C	455 kc	.0004 mfd	
60 H 744	5481-C	455 kc	.0004 mfd	
60 H 885	5481-H	262 kc	.0006 mfd	

FIG. P—FERRITE ANTENNA COIL

Cover 540-1700 kc with condensers having 350 to 450 mmf max. capacity. Adjustable core. Mount in 3/16" hole. ⅞"x2¼". Wt., 4 oz.
60 H 883. Type 6300. NET ... 73c

FIG. R—ANTENNA AND RF COILS

Untuned. Broadly self-resonant from 540 to 1700 kc. No tuning condenser needed. Aluminum can. 2½x1⅝". Shpg. wt., 4 oz.
60 H 758. Type 472-UA. Ant. NET ... 1.23
60 H 759. Type 472-UT. RF. NET ... 1.53

FIG. S—DUO-LATERAL FILTER CHOKES

Effective line filters. Duo-lateral wound for low distributed capacity. Ideal for use in AC lines to filter RF or noise pulses from Amateur or commercial transmitters; from power supplies, sign flashers, diathermy equipment, farm lighting plants, signal systems, oil burners and all types of intermittent switching systems. Type 7825 is 1⅞x1¾" wound on bakelite form. Others are 2½x4" wound on ceramic forms. Av. shpg. wt., 12 oz.

No.	Type	Amps	Ohms	Mh	NET
70 H 185	7825	2	.6	.600	.97
60 H 886	7826	5	.28	.570	2.59
60 H 887	7827	10	.15	.370	2.91

FIG. T—CENTER-TAPPED CHOKE

Duo-lateral wound, single-section RF chokes. Ceramic dowels. Rated: 20 mh. 100 ohms. 125 ma. 1⅛x⅝" high. Shpg. wt., 4 oz.
60 H 588. Type 691T. NET ... 65c

FIG. W—VIDEO PEAKING & FILAMENT CHOKE COILS

Type 6175 is filament choke. Reduces stray coupling, feedback, etc. Others are video peaking coils for proper bandwidth and wave shape of video signals. Coils without shunt resistor wound on plastic forms; shunt types wound on resistor. *7/8x3/32" dia.; all others. ⅛x3/16" dia. Av. shpg. wt., 2 oz.

No.	Type	μhys.	Shunt	EACH
60 H 792	6172	73	None	35c
60 H 889	6153	120	None	
60 H 793	6173	250	22 K	
60 H 794	6174	500	None	
60 H 776	6175*	0.8	None	29c
60 H 888	6152	20	None	
60 H 777	6176	36	None	
60 H 778	6177	93	None	35c
60 H 779	6178	120	22 K	
60 H 780	6179	180	39 K	
60 H 781	6180	180	None	
60 H 890	6154	200	None	
60 H 782	6181	250	None	
60 H 891	6155	300	None	

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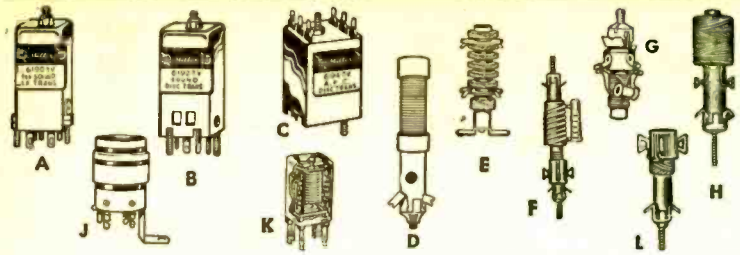
Coils, Transformers & Coil Forms



J. W. MILLER COILS, INDUCTORS & TRANSFORMERS

TV COILS AND TRANSFORMERS

Fig. A—SOUND IF TRANSFORMERS

Permeability tuned. Types 6190 and 6191 for 21.25 mc in TV sets with separate picture and sound IF channels. 1466 for 4.5 mc in sets with inter-carrier system. Provide high gain and adequate bandwidth for high fidelity sound. Primary adjustable from top of aluminum can; secondary from bottom. Spade bolt mounting. *7/8x7/8x2¼" high. †1⅛x1⅛x2⅛" high. Wt., 5 oz.

No.	Type	Description	NET
60 H 762	6190*	1st IF sound	1.41
60 H 763	6191*	2nd IF sound	1.41
60 H 764	1466†	Input or Interstage	1.41
60 H 705	1470†	Sound Trap. 4.5mc	.73

Fig. B—SOUND DETECTOR AND OSCILLATOR TRANSFORMERS

High quality TV components. Types 6192 and 6184 are for TV receivers with separate 21.25 mc sound IF Channel. Types 1467 and 1468 are for 4.5 mc IF in sets using inter-carrier sound system. 6192 and 1467 are the Foster-Seely type and are normally preceded by one or two limiter stages. 6184 and 1468 are for use in ratio detector circuits. Type 6182 has tapped coil for horizontal oscillator Syncro-guide circuit. Type 6183 dual windings for Sync. Freq. and Phase circuit. Aluminum shields with 6-32 spade bolt mounting. *1⅛x1⅛x2½". †1⅛x1⅛x2⅛". §1 7/16x1 7/16x2½". Wt., 5 oz.

No.	Type	Description	NET
60 H 765	6192*	Discriminator	1.62
60 H 766	6184*	Ratio detector	1.94
60 H 764	6182§	Hor. Osc.	1.32
60 H 799	6183§	Hor. Osc.	1.62
60 H 767	1467†	Discriminator	1.76
60 H 768	1468†	Ratio detector	1.94

Fig. C—HORIZONTAL OSCILLATOR AFC DISCRIMINATOR TRANSFORMER

Type 6194. For horizontal sweep oscillator circuits using "synchro-lock" automatic frequency control system. Two coupled permeability tuned windings; one, tapped for use in horizontal blocking oscillator tank circuit; the second, center-tapped for phase discrimination. Housed in aluminum shield with adjustment for horizontal frequency at top and horizontal phase at bottom. 6-32 spade bolt mounting. 1 7/16x1 7/16x2½" high. Wt., 5 oz.
60 H 769. NET 1.62

Fig. D—HORIZONTAL LINEARITY AND WIDTH CONTROL

Iron core variable inductance coils for use in horizontal sweep circuits. *Have AGC winding. Mounting clip fits 5/16" hole. 6300 series are ½x2¼" long on phenolic forms. 6100 series are ⅜x2½" long on bakelite forms. Shpg. wt., 4 oz.

No.	Type	Millihenries	NET
60 H 770	6195	.185- 1.000	.73
60 H 771	6196	.054- 0.245	.65
60 H 897	6196-A	.054- .50 tapped	.73
60 H 772	6197	.550- 2.300 tapped	.73
60 H 773	6198	.170- 0.610	.65
60 H 774	6199-A	1.300- 4.100 tapped	.76
60 H 775	6199-B	.500- 1.700	.73
60 H 826	6313	.5 - 5	.88
60 H 827	6314	2.0 -18	1.03
60 H 828	6315	4.0 -30	1.06
60 H 829	6316*	4.0 -30	1.32
60 H 830	6317*	3.2 - 9	1.32
60 H 831	6318	.2 - 3	.88
60 H 832	6319	15.0 -60	1.32
60 H 833	6320	.2 - 3 tapped	.88
60 H 834	6321	1.0 - 5 tapped	.88
60 H 835	6322	1.5 -10	1.03
60 H 836	6323	.5 - 5 tapped	.88
60 H 898	6324	60 -130 tapped	1.32

Fig. E—HIGH VOLTAGE RF POWER SUPPLY TRANSFORMERS

Type 4525. RF power supply transformer for TV receivers and 'scopes. Up to 5,000 v. DC. Size, 3¼x1¼" dia. Shpg. wt., 4 oz.
60 H 754. NET 4.85

Type 4526. Up to 10,000 v. DC. (30,000 in rectifier-tripler circuit). Size 6x2¼" dia. Shpg. wt., 4 oz.
60 H 757. NET 8.08

TV PICTURE IF TRANSFORMERS

Fig. F—20 MC RANGE PICTURE IF COILS

Popular shielded and unshielded permeability tuned picture IF transformers single and bifilar wound. Type 6247 has single tuned circuit and cathode trap. Type 6248 employs single winding. Types 6251 and 6252 are shielded. Unshielded coils have mounting clip for 3/16" hole. Maximum dimensions: ¼" O.D. by 2½" long. *Bifilar wound. Av. shpg. wt., 5 oz.

No.	Type	IF Mc	Trap Mc	NET
60 H 840	6245	25.5	27.25	1.47
60 H 841	6246	22.0	21.20	1.47
60 H 842	6247	21.25	.....	1.47
60 H 843	6248	24.5	.....	.88
60 H 844	6249*	21-25	.....	.88
60 H 845	6250*	25-29	.....	.88
60 H 846	6251*	21-25	.....	1.32
60 H 847	6252*	25-29	.....	1.32
60 H 848	6253*	21-30	20-23	1.62
60 H 849	6254*	22-32	24-29	1.62

Fig. G—PICTURE CHANNEL IF INDUCTORS

Unshielded permeability tuned inductors. Can be used with shielded IF transformers above in stagger-tuned video IF amplifier of full 6 mc bandwidth. Coils wound on bakelite forms with mounting clip for 7/16" hole. Excellent for replacement purposes or new circuit design. Size: ½x1⅛" long. Shpg. wt., 4 oz.

No.	Type	Frequency, Mc	NET
60 H 810	6188	3rd Pix IF, 25.2	.73
60 H 811	6189	Video Det. IF, 23.4	.73
60 H 812	6193	Cathode Trap, 21.25	1.18
60 H 813	6171	Tunable Choke, 21-25	.73
60 H 814	6171-A	Tunable Choke, 25-29	.73

Fig. H—SYNC STABILIZER (RINGING) COIL

Has bakelite form with 7/16" mtg. clip. 16-42 mh range. ¾x2½". Shpg. wt., 2 oz.
60 H 820. Type 6210. **NET** 1.32

Fig. J—TYPE 20 ECONOMY TRF COILS

Unshielded tuned radio frequency coils for AM broadcast band, 540 to 1750 kc. For use with 365 mmf variable capacitor. L mtg. bracket. Low impedance primary on adjustable sleeve over secondary. 1⅛x2" high. Wt. 3 oz.
60 H 753. 20-A. Antenna Coil. **NET** 50c
60 H 590. 20-RF. RF Coil. **NET** 50c

Fig. K—TRANSISTOR IF TRANSFORMER

Type 2041. High-quality IF transformer for ultra-miniature transistor receivers. Designed for use with transistor types CK760 and CK761. Frequency, 455 kc. Primary, 25,000 ohms; secondary 600. Replaces Automatic No. EX03015. Size, ¼" high x ½" sq. Shpg. wt., 2 oz.
60 H 896. NET 1.62

Fig. L—TRANSISTOR OSCILLATOR COIL

Type 2020. For receivers with a transistor-oscillator. Supplies the local oscillator energy to the mixer stage. Use with a 365 mmf variable capacitor. Intermediate frequency 455 kc. With clip for mounting in 5/16" diameter hole. Size, 1⅛x5/8" dia. Shpg. wt., 3 oz.
60 H 895. NET 1.17

NEW LOOP ANTENNAS

MILLER FERRITE ROD ANTENNA

Type 705A. Newly developed rod loop antenna for universal replacement use. Uses a highly efficient design for outstanding performance. Improves reception of distant stations. Extremely easy to adjust. Simply slide the coil along the ferrite rod to peak the antenna. Completely non-directional—it allows convenient placement of the set in any desired position. Equally good reception from any direction. Replaces any loop antenna. Size, 3¼x9½". Shpg. wt., 5 oz.
60 H 893. NET 1.62

TRANSISTOR LOOP ANTENNA

Type 2000. A new loop antenna specially designed for transistor receivers. Has a fixed inductance loop with a large pick up field to insure adequate signal to the first stage. Inductor is tapped to match the 600 ohm input impedance of the transistor. Frequency range is 540-1650 kc when used with a 365 mmf variable capacitor. Slender styling for compact installation. Size 1¼x9½". Shpg. wt., 3 oz.
60 H 894. NET 1.62

POPULAR ICA COIL FORMS

RIM TYPE COIL FORM

Low-loss forms with high dielectric strength. Molded rim handle. Prong spacings fit standard sockets. Very handy for experimenters and builders. Used in home-built communications receivers, transmitters, etc. 1¼" dia., 2¼" high. Shpg. wt., 2 oz.

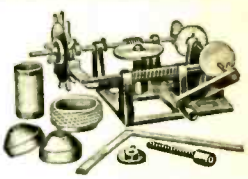
Stock No.	Type	Prongs	NET
60 H 700	1108B	4	34¢
60 H 701	1113B	5	36¢
60 H 702	1114B	6	37¢

4-PRONG COIL KITS

Complete plug-in coil kits. Precision made coils accurately wound on low-loss bakelite forms. Ranges as indicated with 140 or 150 mmfd condensers. Fit 4-prong tube sockets. 2 windings—1 for grid and 1 for tickler or antenna. Size, 1¼x2¼". Shpg. wt., 8 oz.

Type 1471. Short-Wave Kit. 4 coils. 9.5 to 217 meters.
60 H 680. NET 2.20

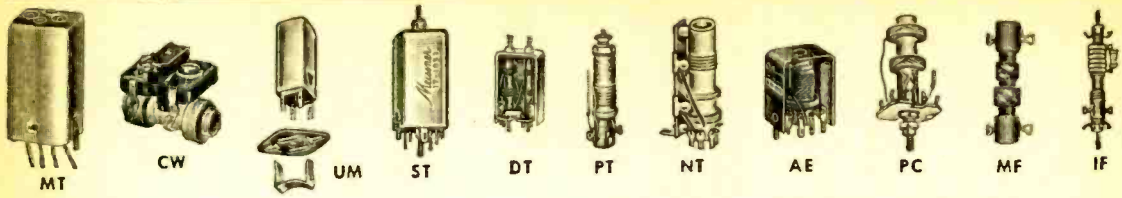
Type 1473. Broadcast Kit. 2 coils. 190 to 550 meters.
60 H 681. NET 1.76



MORRIS COIL WINDER

You'll be able to wind efficient, commercial-looking honeycomb, spiderweb and solenoid coils with this very versatile, but economical coil winder. It's a real time saver for the Amateur and experimenter and gives your work a more professional appearance. Just set up the winder for the type of coil you require and turn the handle—dial indicator counts the turns for you. May be used for winding RF coils, oscillator coils, loop antennas, coils for low-power transmitters, chokes, filter inductors, parasitic suppressors, TVI traps, etc. Handles up to No. 16 wire, making it suitable for almost all coil requirements in receivers, test equipment and small transmitters. Unit is supplied with two-piece wood spool for holding honeycomb and solenoid coils, plus cast pegholders and four 6⅛" wooden pegs for spiderweb coils. Winder is mounted on rugged cast-iron base with holes for bench mounting. With extension shaft for winding solenoid coils up to 3¼" long, less wire and forms. Base size, 4⅜x5". Shpg. wt., 3 lbs.
83 P 520 NET 4.95

Meissner IF's and Coils



IF TRANSFORMERS

Fig. MT—LOW COST PLASTICS

Air core IF's at low cost. Double-tuned trimmers. Size, 2½x1¼x1¼". *Bandwidth in kc. †Iron core. §1⅛x1⅛x2½". Wt., 6 oz.

Stock No.	Mfr's Type	Use	Frequency Range, kc	Selectivity* 2X	Selectivity* 10X	NET EACH
60 H 192	16-6649	Input	140-200	6.0	17.5	1.17
60 H 193	16-6651	Output	140-200	11.5	29.5	1.17
60 H 194	16-6652	Input	200-310	9.5	24.7	1.03
60 H 195	16-6654	Output	200-310	20.5	52.1	1.03
60 H 196	16-6658	Input	400-550	18.8	46.6	1.03
60 H 197	16-6659	Interstage	400-550	12.5	33.0	1.03
60 H 198	16-6660	Output	400-550	17.5	50.5	1.03
60 H 070	16-6666§	Input	400-600	14.1	37.5	1.29
60 H 071	16-6667§	Output	400-600	18.0	49.5	1.29
60 H 139	16-6662†	Input	380-600	11.2	30.0	1.47
60 H 144	16-6663†	Output	380-600	11.2	30.0	1.47

Fig. MT—STANDARD GENERAL REPLACEMENTS

General replacements for most receivers. Double-tuned mica trimmers. Size, 3x1⅜x1⅜". *Bandwidth in kc. at 2X and 10X down. Av. wt., 4 oz.

Stock No.	Mfr's Type	Use	Frequency Range, kc	Selectivity* 2X	Selectivity* 10X	NET EACH
60 H 077	16-5700	Input	121-234	6.5	17.7	1.47
60 H 080	16-5712	Input	425-650	11.1	27.7	
60 H 081	16-6133	Interstage	435-1000	14.5	36.5	
60 H 082	16-5714	Output	425-650	12.3	37.2	
60 H 079	16-3731	Output CT	121-255	9.8	23.2	
60 H 083	16-3736	Output CT	255-550	23.2	60.0	

Fig. MT—HIGH-Q IRON CORE REPLACEMENTS

Same as above, except coils have Hi-Q powdered iron cores. *Bandwidth in kc. †1¾x1⅜x3½"; §¾x¾x2". ‡For battery radios.

Stock No.	Mfr's Type	Use	Frequency Range, kc	Selectivity* 2X	Selectivity* 10X	NET EACH
60 H 181	16-5740†	Input	360-600	8.4	20.0	1.76
60 H 190	16-5742†	Output	360-600	13.8	38.0	1.76
60 H 199	16-6668§	Input‡	350-550	22.5	54.3	1.41
60 H 143	16-6669§	Output‡	350-550	22.5	58.0	1.41
60 H 104	16-6678§	Input/Output	375-550	16.6	41.1	1.41

Fig. CW—"CARTWHEEL" IF TRANSFORMER

60 H 095. Type 16-6661. Input, interstage or output. Freq. range. 380-600 kc. Size, 1⅜x1x1¼". Dual trimmers. Wt., 5 oz. NET.... 1.06

Fig. UM—¾" PERMEABILITY TUNED IF's

Tuned top and bottom by adjustable iron cores. Silvered mica condensers. Size, 2x¾x¾". With mtg. plates. *Bandwidth in kc. at 2X and 10X down. †With diode filters. Wt., 4 oz.

Stock No.	Mfr's Type	Use	Frequency Range, kc	Selectivity* 2X	Selectivity* 10X	NET EACH
60 H 152	16-6758	Input/Output	400-500	28	60	1.29
60 H 153	16-6770†	Output	400-550	30	65	1.35
60 H 157	16-6754†	Output	245-275	18	45	1.47
60 H 154	16-6752	Input	245-275	12	35	1.41

Fig. MT—TWEET FILTER OUTPUT IF TRANSFORMER

Type 16-6670. Frequency, 456 kc. 2½x1¾x1¾". RETMA color-coded leads, 4" long. Wt., 4 oz.
60 H 145. NET.... 1.59

Fig. DT—AM-FM IRON CORE IF

Type 16-6675. Contains a 455 kc AM and 10.7 mc FM transformer. Each circuit tunes by powdered iron cores. 2½x1⅜x1¾". Wt., 7 oz.
60 H 068. NET.... 2.94

10.7 MC FM IF TRANSFORMERS

Permeability tuned. Stable shunt capacities. For replacement, or original construction use. Shpg. wt., 5 oz.

No.	Type	Fig.	Description	Mounting	Size	NET
60 H 069	17-3487	ST	Ratio Det., 400 KC	1½"	1⅜x1⅜x2½"	1.94
60 H 097	16-6665	ST	Input or interstage	1½"	⅞x ⅞x1¾"	2.06
60 H 098	17-3484	ST	Discrim., 400 KC	1½"	1½x ⅞x1¾"	1.94
60 H 158	16-3487	UM	Input or interstage	Var. ¾x1½"	¾x ¾x2"	1.47

Fig. PT—SHORTWAVE ADJUSTABLE INDUCTANCE COILS

Adjustable Hi-Q iron cores. Tune with 292 mmf condenser. Inexpensive universal replacements. Single ¼" hole mounting. ¾x1¾". Shpg. wt., 4 oz.

No.	Type	Coil type	Freq. Range	Dimensions	NET
60 H 146	14-1061	Antenna	1.7-5.3 mc	¾x1¾"	1.32
60 H 147	14-1062	R.F.	1.7-5.3 mc		
60 H 148	14-1063	Osc. (for 6SA7)	1.7-5.3 mc		

Fig. NT—MULTIPLE BAND COILS

Engineered for custom set builders, experimenters, etc. For use with 456 kc IF. Single bracket mounting. With instructions. Wt., 5 oz.

No.	Type	Coil type	Frequency	Size	NET
60 H 149	14-2860	Antenna	530-1660 kc, 5.8-19 mc	1x1¼x3¼"	2.94
60 H 124	14-2862	Osc.	530-1660 kc, 5.8-19 mc	1x1½x2¼"	

RF, ANTENNA AND TV COILS

REPLACEMENT COILS

Air core type. High impedance primary. Litz wire secondary. Tune 545-1620 kc. with 360 mmf tuning condenser. *Shielded. †456 kc IF frequency; 350 mmf padder required. Shpg. wt., 5 oz.

No.	Type	Fig.	Function	Dimensions	NET
60 H 000	14-1010	NT	Antenna	1¼x2½"	73¢
60 H 001	14-1011	NT	RF	1¼x2½"	73¢
60 H 005	14-1004*	AE	Antenna	1¾x1¾x2½"	1.03
60 H 006	14-1005*	AE	RF	1¾x1¾x2½"	1.03
60 H 150	14-1022	NT	Antenna	⅞x2⅛"	65¢
60 H 151	14-1023	NT	RF	1⅛x2⅛"	73¢
60 H 075	14-2436*	AE	Antenna	1⅜x1⅜x2"	88¢
60 H 076	14-2437*	AE	RF	1⅜x1⅜x2"	88¢
60 H 161	14-4034†	PC	Oscillator	1x1x1⅛"	73¢
60 H 166	14-4243*†	AE	Oscillator	1½x1½x1¾"	88¢

Fig. MF—MINIATURE IRON CORE COILS

Broadcast permeability tuned. With leads. Shpg. wt., 3 oz.

No.	Type	Use	For	Size	NET
60 H 167	14-1071	Ant.	AC sets	1½x⅜"	1.03
60 H 168	14-1072	RF	AC sets	1½x⅜"	
60 H 169	14-1073	Osc.	AC sets	1x⅜"	
60 H 183	14-1074	Osc.	Batt. sets	1x⅜"	

Fig. PT—PENTAGRID OSCILLATOR BROADCAST COILS

Type 14-1033. Tapped type for 6SA7, 12SA7, etc. 456 kc. Single ¼" hole mounting. ¾" diam. 1" long. Use 420 mmf padder. Wt., 4 oz.
60 H 170. NET.... 65c

Type 14-1063. Oscillator coil. 455 kc. Same as above but requires cut section padder. 162 mmf. Single ¼" hole mounting. ¾" diam. Wt., 4 oz.
60 H 118. NET.... 65¢

UNIVERSAL ADJUSTABLE INDUCTANCE COILS

†For battery-operated sets. *For IF frequencies between 175 and 520 kc. Single hole mountings. Screwdriver adj. Broadcast band. Wt., 5 oz.

No.	Type	Fig.	Coil type	Size	NET
60 H 060	14-1040	PT	Osc. 456 IF	⅝x1⅞"	1.47
60 H 125	14-1060†	PT	Osc. 456 IF	¾x1¼"	1.47
60 H 135	14-1026	PC	Antenna	1⅛x1⅛x1¾"	1.29
60 H 136	14-1027	PC	RF	1⅛x1⅛x1¾"	1.29
60 H 137	14-1028*	PC	Oscillator	1⅛x1⅛x1¾"	1.29
60 H 171	14-1056	PT	Antenna	¾x1⅞"	
60 H 172	14-1057	PT	RF	¾x1⅞"	
60 H 173	14-1058*	PT	Oscillator	¾x1⅞"	

Type 16-2866. Adjustable wave trap. Not illustrated. 456 kc. 4 oz.
60 H 126. NET.... 88¢

TV IF TRANSFORMERS

Replacement units for TV receivers. Permeability tuned. Mounting centers: *1⅛; §single 5/16" hole; ‡1⅜". ST type primary tunes from top; secondary from bottom. Wt., 6 oz.

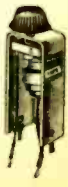
No.	Type	Fig.	Function	Freq. Mc.	Size	NET
60 H 127	17-1013*	ST	Discriminator	21.25	1⅛x1⅛x1¾"	1.62
60 H 128	17-1023*	ST	Discriminator	4.5	1⅛x1⅛x3"	1.76
60 H 129	17-1033*	ST	Ratio Det.	4.5	1⅛x1⅛x2½"	1.94
60 H 132	17-1043*	ST	Ratio Det.	21.25	1⅛x1⅛x1¾"	1.94
60 H 133	17-3493*	ST	Ratio Det.	4.5	1⅛x1⅛x2½"	1.94
60 H 134	17-4500§	IF	Converter, IF Coil, Trap	Tune 43.1 Trap 41.6	⅞x2½"	1.47
60 H 114	17-4501§	IF	1st Pix. IF Trans/Trap	Tune 42.5 Trap 40	⅞x2⅝"	1.47
60 H 115	17-4502§	IF	2nd Pix. IF Trans/Trap	Tune 45.75 Trap 47.25	⅞x2⅝"	1.47
60 H 116	17-4503‡	ST	3rd Pix. IF Trans/Trap	Tune 43.2 Trap 40.0	1 3/16x1 3/16x 2¼"	1.76
60 H 117	17-4504‡	ST	4th Pix. IF Trans/Trap	Tune 44.2 Trap 47.5	1 3/16x1 3/16x 2¼"	1.76
60 H 033	19-1021§	IF	Tunable Choke	21.25	½x1⅛"	.59

MINIATURE ADJUSTABLE PEAKING COILS

Adjustable inductance coils. Exact adjustment of frequency response in video amplifier stages. Mount by leads. Powdered iron cores. Wt., 4 oz.

No.	Type	Fig.	Inductance Range	Size	NET
60 H 034	19-1920	MF	65-115 Microhenries	1x1½"	71c
60 H 035	19-1921	MF	115-195 Microhenries		
60 H 036	19-1922	MF	195-325 Microhenries		
60 H 037	19-1923	MF	325-500 Microhenries		

PHONO-OSCILLATOR COIL



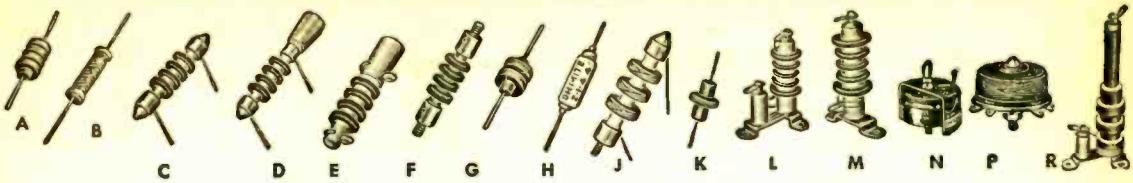
Type 17-9373. For use in building either wireless or direct connected phono-osc. units. Permits record reproduction through any radio receiver. Knob adjustment allows selection to any clear frequency. Size, 3½x1⅜x1⅜". Wt., 4 oz.
60 H 096. NET.... 2.20

BFO COIL

Type 17-6753. Beat frequency oscillator coil. For receivers having IF's between 290 and 650 kcs. Supplies "beat" note necessary to receive CW. 3x1⅜x1⅜". Shpg. wt., 6 oz.
60 H 230. NET.... 1.76

See Page 141 for Listings of RF Chokes

RF Chokes—Coils and Capacitors



POPULAR RF CHOKES FOR EVERY PURPOSE

Chokes below may be used in transmitters, receivers, test equipment, etc. 71 H 160 is recommended for transmitters with plate supply of up to 3,000 volts modulated or 4,000 volts unmodulated. It may be used on all bands from 80 through 10 meters. R-33 series chokes are two-section; R-50 series chokes are 3 and 4-section. 71 H 149 choke is hermetically sealed in glass. National suffix "U" following type number indicates removable stand-off insulator at one end. Ohmite chokes listed are wound to specific frequency ranges for use as traps. Max. imp. is within freq. range listed. 60 H 825 is a low-priced choke wound on ceramic form. National chokes wound on isolantite forms; Meissner, on specially treated dowels, except *iron-core type. †Shielded. The four highest frequency Ohmite chokes are wound on low power factor plastic cores; the other three units are wound on steatite tubes. Millen and National current ratings are max. ma. The single layer winding employed is designed to avoid adverse harmonic effects within the recommended operating range—also prevents breakdown from high RF potentials. §Mounted on standoff insulator for vertical mounting. ‡Millihenries, **Microhenries. Av. shpg. wt., 2 oz.

No.	Mfr.	Type	Fig.	‡Mh	Ma	Ohms	NET
60 H 795	J. W. Miller	4532	J	1.5	200	21	53¢
60 H 825	ICA	277	C	2.5	150	32	36¢
71 H 150	National	R-100	C	2.5	125	50	40¢
71 H 188	National	R-100	C	5	75	50	40¢
71 H 189	National	R-100	C	10	75	50	40¢
71 H 152	National	R-300	C	1	300	10	44¢
71 H 151§	National	R-100U	D	2.5	125	50	48¢
71 H 186§	National	R-100U	D	5	75	50	48¢
71 H 187§	National	R-100U	D	10	75	50	48¢
71 H 153§	National	R-300U	D	1	300	10	48¢
71 H 161§	National	R-100S	E	2.5	125	50	48¢
71 H 178§	National	R-100S	E	5	75	50	48¢
71 H 179§	National	R-100S	E	10	75	50	48¢
71 H 162§	National	R-300S	E	1	300	10	48¢
71 H 174	National	R-100ST	F	2.5	125	50	46¢
71 H 197	National	R-100ST	F	10	75	50	46¢
71 H 164	National	R-300ST	F	2.5	300	10	46¢
71 H 159	National	R-33	G	10**	100	1.0	40¢
71 H 158	National	R-33	G	50**	100	4.0	40¢
71 H 163	National	R-33	G	100**	100	5.5	40¢
71 H 148	National	R-33	G	1**	100	.06	40¢
71 H 149	National	R-33	G	750**	10000	17	40¢
71 H 198	National	R-50	G	2.5	100	41.5	40¢
71 H 250	National	R-50	A	.5	100	16.2	40¢
71 H 251	National	R-50	A	1	100	22	40¢
71 H 252	National	R-50-1	A	10	100	30	61¢
71 H 253	National	R-60	B	2**	1700	.....	40¢
71 H 155	National	R-154	L	1	600	6	2.01
71 H 156	National	R-154U	M	1	600	6	1.61
71 H 160	National	R-175A	R	.225	800	6	3.56
60 H 026†	Meissner	19-5584	N	5.5	20	62	76¢
60 H 027†	Meissner	19-5588	N	8.0	30	77	76¢
60 H 030†	Meissner	19-5592	N	30.0	20	165	88¢
60 H 031†	Meissner	19-5594	N	60.0	16	318	1.17
60 H 032†	Meissner	19-5596	N	80.0	16	342	1.17
60 H 010	Meissner	19-1994	P	2.5	20	40	53¢
60 H 011	Meissner	19-4551	P	5.5	20	57.5	53¢
60 H 012	Meissner	19-2078	P	8.0	20	75	53¢
60 H 013	Meissner	19-8770	P	10.0	20	82.5	54¢
60 H 014	Meissner	19-1995	P	16.0	20	108	59¢
60 H 015	Meissner	19-2330	P	30.0	20	159	76¢
60 H 016	Meissner	19-3247	P	60.0	20	258	82¢
60 H 017	Meissner	19-2709	P	80.0	16	372	82¢
60 H 040*	Meissner	19-6834	P	2.5	20	22.5	68¢
60 H 041*	Meissner	19-6840	P	10.0	20	51.4	85¢
60 H 042*	Meissner	19-6842	P	30.0	20	114	1.00
60 H 043*	Meissner	19-6844	P	60.0	12.5	247.5	1.14
60 H 044*	Meissner	19-6846	P	80.0	15	258	1.27
60 H 045*	Meissner	19-6848	P	125.0	75	330	1.64
72 H 040	Millen	34100	D	2.5	250	52.5	48¢
72 H 073	Millen	34101	J	2.5	250	52.5	42¢
72 H 067	Millen	34103	C	2.5	250	52.5	42¢
72 H 076	Millen	34106	J	1	300	13.5	42¢
72 H 004	Millen	34140	.....	1.4	500	6.25	1.14
72 H 134	Millen	34300-100	K	100**	250	6.7	42¢
72 H 135	Millen	34300-250	K	250**	250	11.	42¢

No.	Mfr.	Type	Fig.	**uh	Ma	Mc	NET
74 M 410	Ohmite	Z-460	H	0.2	1000	320–520	23¢
74 M 411	Ohmite	Z-235	H	0.84	1000	160–350	23¢
74 M 412	Ohmite	Z-144	H	1.8	1000	80–200	23¢
74 M 413	Ohmite	Z-50	H	7.0	1000	35–110	23¢
74 M 414	Ohmite	Z-28	.....	21	600	20–60	31¢
74 M 415	Ohmite	Z-14	.....	44	600	7–35	48¢
74 M 416	Ohmite	Z-7	.....	84	1000	3–20	1.10

CAMBRIDGE THERMIONIC CERAMIC SLUG-TUNED COIL FORM KIT

This kit of ceramic, slug-tuned coil forms meets coil requirements encountered by development labs, Amateurs and experimenters. Includes 15 coil forms (3 each of 5 different types), 19 powdered iron slugs, 5 silver-plated brass slugs, and complete set of mounting hardware. Coils covering 50 kc to 200 mc can be wound with the coil forms and slugs supplied. Diameter of forms range from 3/16" to 1/2"; mounted heights from 13/32" to 1 11/16". Shpg. wt., 13 oz.

72 H 280. NET 11.82

CAMBRIDGE THERMIONIC CORPORATION SLUG-TUNED COILS

For broadband RF amplifiers; TV traps, general HF circuits, etc. Coil bodies of LSM, LS3 and LS4 are HF paper base phenolic; LS5 and LS6 are ceramic. LS3 has larger slug and greater bandpass. LS4 for larger inductance and Q. Slugs tunable from either end. Locking feature. Sizes: LSM, 27/32x1/4" dia.; LS3, 1 1/8x3/8" dia.; LS4, 2x1/2" dia.; LS5, 1 1/16x3/8" dia.; LS6, 21/32x1/4" dia. Shpg. wt., 4 oz.

Stock No.	Type	Description	NET
72 H 294	LS3	Coil Form	55¢
72 H 295	LS3	1 Mc Coil	1.03
72 H 296	LS3	5 Mc Coil	97¢
72 H 297	LS3	10 Mc Coil	94¢
72 H 298	LS3	30 Mc Coil	92¢
72 H 299	LS3	60 Mc Coil	92¢
72 H 282	LSM	Coil Form	55¢
72 H 283	LSM	1 Mc Coil	1.03
72 H 284	LSM	5 Mc Coil	97¢
72 H 293	LSM	10 Mc Coil	93¢
72 H 286	LSM	30 Mc Coil	92¢
72 H 287	LSM	60 Mc Coil	92¢
72 H 288	LS4	Coil Form	74¢
72 H 289	LS5	Coil Form	72¢
72 H 292	LS6	Coil Form	65¢

IRC INSULATED HF CHOKES

Insulated wire-wound chokes. Molded plastic housings for protection against high humidity. Color-coded for easy identification. 1000 volts insulation breakdown to ground. Values below .82 uh., ±15%; above, ±10%. "Q" rises with frequency. *Type CLA, 23/32" long x 1/4" dia. †Type CL-1, 1 1/4" x 1/4" dia. 2 oz.

Stock No.	Micro-henries	Stock No.	Micro-henries
74 M 420*	0.47	74 M 435†	1.0
74 M 421*	0.56	74 M 437†	1.5
74 M 422*	0.68	74 M 438†	1.8
74 M 424*	1.0	74 M 439†	2.2
74 M 425*	1.2	74 M 440†	2.7
74 M 426*	1.5	74 M 441†	3.3
74 M 427*	1.8	74 M 442†	3.9
74 M 428*	2.2	74 M 443†	4.7
74 M 429*	2.7	74 M 444†	5.6
74 M 430*	3.3	74 M 445†	6.8
74 M 431†	0.47	74 M 446†	8.2
74 M 434†	0.82	74 M 447†	10.0

NET EACH 21c

JFD PISTON-TYPE VARIABLE TRIMMER CAPACITORS

Small variable trimmer capacitors with one-piece spring-loaded piston. Provide extremely high accuracy in settings without backlash. Types VC5, VC11 are quartz; VC11G, VC30G, glass. Insulation resistance, 10,000 megs. Minimum air gap. Operate efficiently up to 125° C with glass and 200° C with quartz. Dielectric strength, 1,000 volts. 1" long. 5 oz.

16 H 000. Type VC5. .5 to 5 mmf.
16 H 001. Type VC11. 1 to 10 mmf.
NET EACH 3.97

16 H 002. Type VC11G. 1 to 12 mmf.
NET 2.35

16 H 004. Type VC30G. 1 to 30 mmf.
NET 3.26

E. F. JOHNSON MINIATURE VARIABLE CONDENSERS

For VHF and UHF use. Low-loss steatite insulation. Mount in 1/4" panel hole; 3/4x3/8" panel mtg. space. Slotted shaft takes 3/16" knob. 1250 volts approximate peak break-down. Nickel-plated. Av. shpg. wt., 2 oz.

Fig. S—SINGLE

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
75 H 175	5M11	5.1	1.5	5	1.00
75 H 176	9M11	8.7	1.7	9	1.05
75 H 177	15M11	14.6	2.1	15	1.20
75 H 178	20M11	19.7	2.6	21	1.35

Fig. T—BUTTERFLY

75 H 179	3MB11	3.3	1.7	7	1.40
75 H 180	5MB11	5.1	2.1	13	1.60
75 H 181	9MB11	8.5	2.7	22	1.80
75 H 182	11MB11	11.0	3.2	31	2.00

TRANSMITTING CAPACITORS

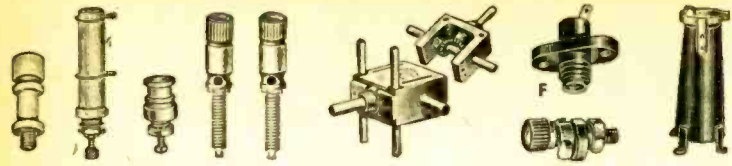
Unusually sturdy, compact transmitting capacitors. Ideal for use in antenna tuning units, medium power tank circuits, etc. Stator at top to reduce capacity to ground. .032" aluminum plates. Spacing: .075". Approximate peak breakdown: 3000 v. Steatite insulation. 1/4" aluminum tie-rods for rigidity.

Type 100E30. Single-section. Capacity: Max. 100 mmf; min., 11 mmf. Shpg. wt., 2 1/2 lbs.
75 H 183. NET 5.45

Type 100ED30. Dual section. Capacity per section: max., 99 mmf; min., 10 mmf. Shpg. wt., 3 1/4 lbs.
75 H 184. NET 8.65

See pages 142-144 for listings of other variable capacitors.

Millen Components



"DESIGNED FOR APPLICATION" COMPONENTS

Components for original equipment and for replacement purposes in existing equipment. Made to exacting specifications to insure dependable service in all applications. Terminals are located so as to provide shortest possible lead lengths. Mounting feet are designed for easy insertion of screws. For listings of Millen high-quality RF chokes, see page 141 of this Catalog. Component listing below covers most popular Millen types. ALLIED can supply all Millen components, test instruments and equipment. Specify Millen type numbers when ordering items not listed in ALLIED catalogs. Millen's Component Parts Catalog (Stock No. 37 H 010) is available free upon request. Ask for a copy with your next order. *Indicates item is not illustrated. Coil dimensions are winding lengths. See manufacturers' index on page 320 for location of other Millen products in this Catalog.

Stock No.	Mfr's Type	Fig.	Description	NET
72 H 046	10008	*	Instrument Dial, 3½" dia., 0-100	1.14
72 H 085	10012	E	Right Angle Drive	4.20
72 H 087	10050	G	Dial Lock	.51
72 H 099	10061	*	Shaft Lock, for ⅛" Bushing; ¼" shafts	.42
72 H 088	10062	*	Shaft Lock with Knurled Nut	.51
72 H 027	21100	*	Steatite Ultra-Midget Condenser, 100 mmf	4.14
72 H 162	32150	*	Insulated Feed-Through Bushing, ¼". Pkg. of 5	.30
72 H 069	36002	*	Steatite Tube Cap, ⅛" For Standard Tubes	.24
72 H 140	36004	*	Steatite Tube Cap, ¼"	.24
72 H 036	37001	F	High Voltage Terminal and Thru-Bushing, Black	.45
72 H 037	37001	F	High Voltage Terminal and Thru-Bushing, Red	.48
72 H 056	37201	*	Bakelite Discs (2) for 37222 below	.24
72 H 057	37202	*	Bakelite Plates (2) for 37222 below, Black	.33
72 H 138	37212	*	Double Banana Plug, Black	.78
72 H 059	37222	D	Binding Posts (2) for 37212 above	.45
72 H 163	37302	*	Steatite Terminal Strip, 2 Terminals	.69
72 H 164	37303	*	Steatite Terminal Strip, 3 Terminals	.78
72 H 165	37304	*	Steatite Terminal Strip, 4 Terminals	.90
72 H 166	37305	*	Steatite Terminal Strip, 5 Terminals	1.05
72 H 167	37306	*	Steatite Terminal Strip, 6 Terminals	1.14
72 H 139	37412	*	300 ohm Transmission Line Plug	.24
72 H 129	39023	*	Insulated Shaft Extension	1.35
72 H 121	64161	*	IF Transformer, 1600 Kc Interstage	3.45
72 H 119	64454	*	456 Kc Diode Coil	3.45
72 H 118	64456	*	IF Transformer, 456 Kc Interstage	3.45
72 H 122	65163	*	1600 Kc, BFO Coil	3.45
72 H 120	65456	*	456 Kc, BFO Coil	3.45
72 H 130	69041	C	Steatite Slug-tuned Coil Form, 1½x½", Copper Slug	.84
72 H 131	69043	A	Steatite Slug-tuned Coil Form, ¼x⅜", Iron Core	.84
72 H 084	69045	B	Steatite Slug-tuned Coil Form, ½x1 1/16", Copper Slug	1.05
72 H 132	69046	*	Steatite Slug-tuned Coil Form, ½x1 1/16", Iron Core	1.05
72 H 161	69047	*	Steatite Slug-tuned Coil Form, ¼x⅜", Copper Slug	1.05
72 H 133	69048	*	Steatite Slug-tuned Coil Form, ¼x⅜", Iron Core	1.05
72 H 150	80042	H	Nicoloi Shield for 2AP1 and 2BP1 2" CR Tubes	5.85
72 H 151	80043	*	Nicoloi Shield for 3AP1 and 3BP1 3" CR Tubes	6.75
72 H 152	80045	*	Nicoloi Shield for 5BP1	11.76
72 H 177	80055	*	Nicoloi Shield for 5CP1	11.76
72 H 153	80072	*	Bezel, Cushion and Filter for 2" CR Tube	1.44
72 H 154	80073	*	Bezel, Cushion and Filter for 3" CR Tube	4.35
72 H 155	80075	*	Bezel, Cushion and Filter for 5" CR Tube	8.40

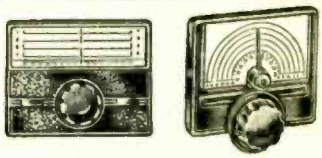
VARIABLE CAPACITORS

Fig. J. Series 20000 Ultra-Midgets. Top-quality, steatite-insulated variables. All are single-bearing type with .015" air gap (rated 600 volts peak), except *double-bearing type with .045" air gap (rated 1400 volts peak). All have ¼" round shafts, 1" long. 3/16"-32 thread mounting bushing. Lengths given include shaft. Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	Overall Length	NET EACH
72 H 030	20015	20	2.8	1 29/32"	1.77
72 H 044	20025	28.5	3.0	2 1/32"	1.86
72 H 032	20050	56	3.5	2 7/32"	2.04
72 H 033	20100	111	5.2	2 21/32"	2.43
72 H 045	21935*	39.5	6.7	3 7/32"	4.08

Fig. K. Series 19000. Open Frame Midgets. Steatite insulated. All are double-bearing type with .064" air gap (rated at 1700 volts peak). Have ¼" round shafts, ½" long. 3/8"-32 thread bushing ⅝" long. Lengths given include shaft. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	Overall Length	NET EACH
72 H 156	19025	30.5	5.7	2⅝"	2.97
72 H 157	19050	58	6.5	2 13/16"	3.09
72 H 158	19100	107	8.2	3"	3.36
72 H 159	19200	232.5	11.7	3½"	3.90



MULTI-SCALE DIALS

Fig. L. Type 10035. Multi-Scale Dial. Illuminated slide-rule dial. Two built-in pilot lights provide even illumination over dial. Large finger-grip knob control. Has 12 to 1 drive ratio. Has 4 blank scales for calibration and one 0-100 logging scale. Cardboard scale supplied can be used on both sides. Clear plastic, full-view dial window. Ample panel space provides room for 2 small controls. Escutcheon removable without disturbing the mechanism, for easy scale calibration. Escutcheon size, 8½x6½". Attractive black finish. Shpg. wt., 2½ lbs.
72 H 123. NET 6.75

Fig. M. Type 10039. Midget Panel Dial. Economy model. Excellent for small-size transmitters, receivers and measurement equipment. Drive ratio is 8 to 1. Totally self-contained mechanism eliminates back-of-panel interference; quick, easy installation. Compact design. Comfortable, finger-grip knob. Has 5 blank scales for calibration and one 0-100 logging scale. Easily calibrated without disturbing mechanism. Black finish. Size, 4x3¼". Shpg. wt., 13 oz.
72 H 050. NET 3.00

TYPE 90901 1" SCOPE

Ultra-compact, basic 1" scope for Amateur and industrial use. Occupies about same panel space as panel-type meter! A dependable modulation-linearity-tuning indicator for AM phone transmitters—shows wave-envelope (see ARRL Handbook) or trapezoidal pattern.
Other uses: Null indicator, Lissajous frequency comparator, phase shift indicator, etc. Sensitivity: Vertical, 1.7 rms v/millimeter; horizontal, 2.5 rms v/millimeter. Requires 600-950 v. DC @ 3.2 ma and 6.3 v. @ 0.6 amp. Controls: Intensity, Vertical Centering, and Horizontal Centering. Uses 1CP1 fixed focus CRT (supplied). 2¼x2¼x4⅝" deep. Wt., 2 lbs.
84 F 907. NET 38.25

MINIATURIZED COUPLINGS

These miniaturized couplings are designed for use in compact equipment and for limited space applications. M003 is solid brass. M006 (illustrated) is universal joint style made of nickel plated brass with steatite insulation and spring fingers. M008 is an insulated coupling with brass inserts. 39003 is solid brass for ¼" shafts; all others are for ⅛" shafts. Av. shpg. wt., 2 oz.

Stock No.	Type	Description	NET
72 H 172	M003	Solid brass coupling	30¢
72 H 170	M006	Univ. joint coupling	75¢
72 H 171	M008	Insulated coupling	48¢
72 H 090	39003	Solid brass coupling	24¢

FLEXIBLE COUPLINGS

Popular 39000 series of flexible couplings. Designed to provide higher flexibility, no backlash, high break-down voltages, smaller diameter and accurate alignment. 39006 for "out-of-line" shaft operation. 39016 has insulating barrier diaphragm. All fit ¼" shafts. Av. wt. 2 oz.

Stock No.	Type	Description	EA.
72 H 034	39001	Insulated universal joint	48c
72 H 176	39002	Insulated	
72 H 054	39005	Universal joint	
72 H 094	39006	Insulated slide action	
72 H 175	39016	Insulated barrier	

DRIVE MECHANISMS

Type 10000 Worm Drive. A ruggedly constructed drive mechanism offering a 16 to 1 step-down ratio. Cast aluminum frame drilled for secure mounting on panel or chassis base. Spring loaded split gears for smooth operation and minimum backlash. ¼" left and right hand shafts. 3x2x2⅜". Shpg. wt., 6 oz.
72 H 173. NET 7.50

Type A012 Right Angle Drive. Compact single-hole bushing mount type drive mechanism. Has 1 to 1 ratio. ⅛" left and right hand drives can be used together. 1¼x1¼x⅜". Shpg. wt., 4 oz.
72 H 174. NET 3.90

33087 TUBE BASE CLAMPS

Ruggedly constructed polished spring steel tube base clamps. For securing tubes in sockets. Excellent for mobile equipment and for reducing mechanical vibration of oscillator tubes. Av. wt., 2 oz.

Stock No.	Type	Diameter	EACH
72 H 178	33087A	1.125"	36c
72 H 179	33087B	1.165"	
72 H 180	33087C	1.250"	
72 H 181	33087D	1.275"	
72 H 182	33087E	1.375"	
72 H 183	33087F	1.156"	
72 H 184	330871	1.000"	

MOLDED COIL FORMS

Type 45004. Molded mica phenolic base type coil forms. Four-prong type. For shortwave receivers and low-power transmitters. Size: 1" diameter; 1 13/32" winding length; 2¾" overall. Shpg. wt., 2 oz.
72 H 124. NET 51c

Type 45005. Same as 45004, but has 5 prongs. Shpg. wt., 2 oz.
72 H 125. NET ..... 51¢

Type 45000. As above, without prongs. Screw mounting. Shpg. wt., 2 oz.
72 H 128. NET ..... 39¢


TMS


TMC

TM TRANSMITTING CAPACITORS

Compact, rigid construction. Steatite insulation. Provisions for panel, chassis or standoff insulator mounting. Air Gap and Peak Voltage: TMS types, .026", 1000 volts; TMC types, .077", 3000 volts. Lengths: *3"; †3" to 6"; §4⅝" to 9¼". 180° rotation. Av. shpg. wt., 1 lb.

TYPE TMS—SINGLE STATOR*

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET Each
71 H 000	TMS-100	100	9.5	2.99
71 H 001	TMS-150	150	11	3.22
71 H 002	TMS-250	250	13.5	3.80
71 H 003	TMS-300	300	15	4.37

TYPE TMS—DOUBLE STATOR*

71 H 004	TMS-50D	50-50	6-6	3.45
71 H 005	TMS-100D	100-100	7-7	3.68
71 H 013	TMS-125D	125-125	8-8	3.89

TYPE TMC—SINGLE STATOR†

71 H 015	TMC-50	50	10	4.14
71 H 016	TMC-100	100	13	4.89
71 H 017	TMC-150	150	17	6.04
71 H 018	TMC-250	250	23	6.56

TYPE TMC—DOUBLE STATOR§

71 H 020	TMC-50D	50-50	9-9	5.00
71 H 021	TMC-100D	100-100	11-11	6.84
71 H 022	TMC-200D	200-200	18.5-18.5	8.34

TYPE ST CAPACITORS

Top-quality, dependable units with straight-line wavelength plates. 180° rotation. Steatite insulation. *Airgap, .026", 1000 volts. All others have airgap of .018", 600 volts. All have threaded bushing for quick, convenient panel mounting. Av. shpg. wt., 7 oz.

SINGLE BEARING

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
71 H 030	STHS-15	15	3	1.90
71 H 031	STHS-25	25	3.25	2.19
71 H 032	STHS-50	50	3.5	2.42

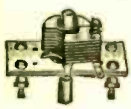
DOUBLE BEARING

71 H 033	ST-35*	35	6	2.13
71 H 034	ST-50*	50	7	2.19
71 H 035	ST-75*	75	8	2.30
71 H 036	ST-100*	100	9	2.42
71 H 037	ST-140*	140	10	2.65
71 H 038	ST-150*	150	10.5	2.65
71 H 039	STH-200	200	12	2.88
71 H 040	STH-250	250	13.5	3.11
71 H 041	STH-300	300	15	3.34
71 H 042	STH-335	335	17	3.57

SPLIT STATOR DOUBLE BEARING

71 H 043	STD-50*	50-50	5-5	4.14
71 H 044	STHD-100	100-100	5.5-5.5	4.49

UM MINIATURE CAPACITORS



180° rotation. Straight-line-capacity plates. .017" air gap. ¼" diameter shafts; protrude to permit ganging. Exceptionally low minimum capacity. Ceramic base for 4-hole mounting or single ⅜" hole. Size, 1x2¼x2⅝". 5 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET Each
71 H 275	UM-15	15	1.5	1.17
71 H 276	UM-35	35	2.5	1.32
71 H 277	UM-50	50	3	1.43
71 H 278	UM-75	75	3.5	1.67
71 H 279	UM-100	100	4.5	1.84

RIGHT ANGLE DRIVE

Type RAD. For front panel control of variable capacitors, switches, potentiometers, etc., positioned at right angles to the panel. Use of a right angle drive often permits more compact parts layout and efficient utilization of space. Die-cast zinc housing and gears. Drive unit is ½x1¼x2" long with a 2½x¼" removable shaft. May be used to drive two units. Shpg. wt., 6 oz.
71 H 014. NET.....4.31


ACN


ICN


SCN


MCN

CALIBRATED AND UNCALIBRATED DIALS

VERNIER DIALS FOR INDIVIDUAL CALIBRATION

Popular blank dials. Feature the famous "Velvet Vernier" with 5:1 drive ratio. Pointers are clear plastic, with centered hairlines and pinholes for easy, accurate calibration of each scale. All have one 0-100 logging scale. MCN has 3 blank scales; others have 5. Large, polished bakelite knobs. Black, wrinkle-finished escutcheons. Clear-view plastic windows. With instructions, extra scales, hardware, and hub for ¼" shafts.

Type ACN. The famous original of this type. Large size vernier dial. 5" high, 7¼" wide. Shpg. wt., 1¼ lbs.
71 H 090. NET.....3.80

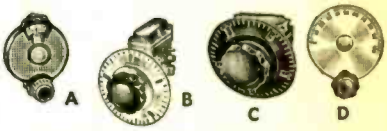
Type ICN. Large illuminated vernier dial, 5⅛" high, 7¼" wide. Lights in upper corners. With standard bayonet sockets and mounting screws. Less lamps. Shpg. wt., 1¼ lbs.
71 H 087. NET.....6.90

Type SCN. Intermediate size vernier dial. 4⅜" high, 6¼" wide. Ideal for applications where space is limited. Wt., 1 lb.
71 H 088. NET.....3.45

Type MCN. Small size vernier dial, only 2¾" high, 3⅞" wide. Perfect for mobile installations and other small units. Mechanism extends ¼" below frame. Wt., 10 oz.
71 H 089. NET.....3.11

CALIBRATED DIALS

Famous National quality dials—outstanding favorites for accuracy, dependability and smooth action. The models listed below are universally recommended for all types of equipment. We can supply *any* National dial promptly. Simply specify type number for models not listed in this catalog. *Not illustrated.


A B C D

Stock No.	Type	Fig.	Description	EA.
71 H 072	AM-2	*	Dial—Ratio 5:1. 180° Rotation. Scale, 0-100. 3" dia.	
71 H 073	AM-3	*	Dial—Ratio 5:1. 180° Rotation. Scale, 100-0. 3" dia.	
71 H 076	AM-4	*	Dial—Ratio 5:1. 270° Rotation. Scale, 150-0. 3" dia.	2.59
71 H 077	AM-5	*	Dial—Ratio 5:1. 360° Rotation. Scale, 200-0. 3" dia.	
71 H 078	AM-6	*	Dial—Ratio 5:1. 270° Rotation. Scale, 0-150. 3" dia.	
71 H 067	BM-1	A	Dial—Ratio fixed. 180° Rotation. 0-100-0. 3" dia.	2.42
71 H 068	BM-2	A	Dial—Ratio fixed. 180° Rotation. 0-100. 3" dia.	2.42
71 H 069	BM-5	A	Dial—Ratio fixed. 360° Rotation. 200-0. 3" dia.	2.42
71 H 091	K	D	Dial—ODD vernier drive. 180°. Scale. 0-100. 3½" dia.	1.73
71 H 063	N-5	*	Dial—Vernier reader. Planetary 5:1. 200-0. 4" dia.	5.18
71 H 083	NPW-O	C	Precision Dial—Drive shaft perpendicular to panel	20.45
71 H 084	PW-O	B	Precision Dial—Drive shaft parallel to panel	25.74


E F G H J K

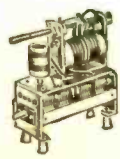
EQUIPMENT DESIGN COMPONENTS

We can supply all National components. A free copy of National's Components Catalog (Stock No. 37 H 002) will be sent upon request. *Not illustrated.

Stock No.	Type	Fig.	Description	NET
71 H 064	AN	*	Vernier Mechanism; 5:1 ratio. Fits ¼" shaft	2.07
71 H 167	FWA	*	Binding Post. Takes wire, lug, or banana plug	.23
71 H 166	FWC	*	Insulator for FWA or FWE. Mica-filled bakelite. (Per Pair)	.28
71 H 168	FWE	*	Jack. Nickel-plated brass	.17
71 H 173	FWH	H	Terminal Strip—Binding Post. (Also takes banana plugs)	.76
71 H 176	FWJ	*	Terminal Strip—(Same as FWH, but has jacks only)	.62
71 H 157	FWT	*	Plug for FWG, FWH and FWJ terminal strips	1.14
71 H 208	HR	F	Knob, Black. HRS type without chrome skirt; white dot.	.35
71 H 209	HR	F	Knob, Gray; same specs as above	.35
71 H 204	HRB	*	Lever Knob; bright zinc alloy	.52
71 H 086	HRK	*	Knob. Black. 2⅛" dia. Set screw; for ¼".	.66
71 H 071	HRP-P	*	Bar knob with pointer, as on dial. Model R. 1¼"x½"	.28
71 H 058	HRS-3	E	Knob, Black; 1⅛" dia. chrome. 0-10; 300°; Set screw; for ¼"	.58
71 H 059	HRS-3	E	Knob, Gray; same specs as above	.58
71 H 218	HRS-4	*	Knob. Black. Same as HRS-3, but single pointer line	.58
71 H 219	HRS-4	*	Knob, Gray. Same as HRS-3, but single pointer line	.58
71 H 056	HRT	*	Knob, Black; chrome trim. Set screw; for ¼" shaft, 2⅛" dia.	.86
71 H 057	HRT	*	Knob, Gray; chrome trim. Same specs. as above	.86
71 H 082	O	*	Dial, nickel-silver. 0-100; 180°; 3½" dia. Set screw; for ¼"	1.15
71 H 085	ODD	*	Vernier drive unit for Type O dial	.48
71 H 199	OSR	*	100 kc. Osc. Coil; for superregens, etc. 1¼" dia., 1½" high	2.07
71 H 070	R	G	Dial, silver; 0-10; 180°; 1⅝" dia.; set screw for ¼"	.69
71 H 116	TPB	J	Threaded Polystyrene Bushing	.07
71 H 228	XR-50	K	Coil Form, slug tuned. Mica-filled bakelite	1.04
71 H 229	XR-60	*	Coil Form, slug tuned. Ceramic	1.32
71 H 122	XS-6	*	Steatite Bushing	.14

MULTI-BAND TANK ASSEMBLIES

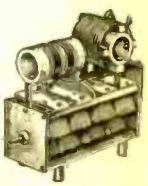
TYPE MB-40SL



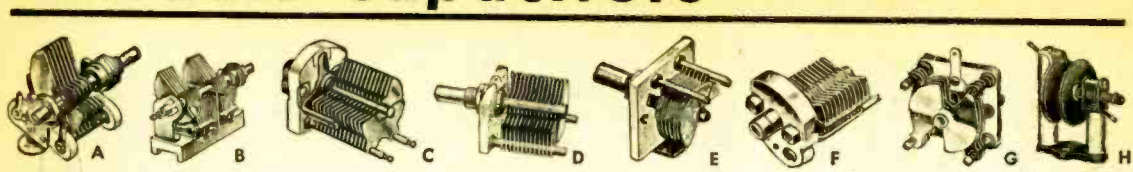
Low-power version of MB-150 at right. Excellent for final tank in low-power transmitters or for grid circuit in transmitter using MB-150 in final. Has same frequency coverage. Shielded swinging link minimizes harmonics. Handles up to 40 watts with output link loaded; 20 watts no load. 3 output link impedances. 5⅝x2¼x6¼".
Shpg. wt., 1¾ lbs.
71 H 045. NET.....17.75

TYPE MB-150

Tunes all frequencies from 80 through 10 meters with no coil change. Constant L/C ratio maintained on all bands. Rated at 150 watts; handles 1500 v. peaks. Consists of 3 coils, 4-gang tank condenser, RF choke. For balanced or single-ended amplifiers using link or capacity coupling. Size. 8¼x3x9". Shpg. wt., 4 lbs.
71 H 046. NET.....21.56



Variable Capacitors



HAMMARLUND CAPACITORS FOR AMATEUR, INDUSTRIAL AND MILITARY APPLICATIONS

FIG. A—MC MIDGETS

Isolantite-insulated. Cadmium-plated brass plates. Panel or chassis mounting. *Straight-line capacity characteristic; others have straight-line frequency characteristic. Air gap: M and S types, .0245"; MX and SX types, .0715". Tested at 1000 v. and 1750 v. (60 cycle rms) respectively. Capacity increases with clockwise rotation. All have rotor stop. Shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 425*	MC-20-S	20	5.5	2.64
72 H 426*	MC-35-S	35	6.0	2.79
72 H 427*	MC-50-S	50	6.5	2.88
72 H 428	MC-50-M	50	6.3	2.88
72 H 429*	MC-75-S	80	8.0	3.06
72 H 430	MC-75-M	80	7.3	3.06
72 H 431*	MC-100-S	100	8.3	3.15
72 H 432	MC-100-M	100	7.7	3.15
72 H 433	MC-140-M	140	9.0	3.39
72 H 434*	MC-140-S	140	10.0	3.39
72 H 435	MC-200-M	200	10.3	3.63
72 H 436	MC-250-M	250	12.0	3.87
72 H 437	MC-325-M	320	13.5	4.23

DOUBLE-SPACED MIDGETS

72 H 451*	MC-20-SX	20	6.8	2.82
72 H 452*	MC-35-SX	32	8.5	2.97
72 H 453	MC-35-MX	32	7.8	2.97
72 H 454*	MC-50-SX	53	11.5	3.15
72 H 455	MC-50-MX	53	10.5	3.15
72 H 456*	MC-100-SX	100	16.5	3.93

FIG. B—MCD DUAL MIDGETS

Panel-mount type. Isolantite base; cadmium-plated brass plates. Tested at 1000 v. *Straight-line capacity characteristic; others straight-line frequency characteristic. Shpg. wt., 11 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 465	MCD-50-M	50	5.5	4.44
72 H 466	MCD-100-M	100	6.3	4.89
72 H 467*	MCD-100-S	100	7.0	4.89
72 H 468	MCD-140-M	140	7.8	5.28

DOUBLE-SPACED MIDGETS

72 H 469	MCD-35-MX	31	6.0	4.62
72 H 470*	MCD-35-SX	31	6.8	4.62

FIG. C—MAPC MIDGETS

Midget padding, trimming and general-purpose capacitors. Similar to type APC, but smaller. Ideal for small space applications. Gap, .0135". Rotors and stators are nickel-plated brass. Nickel-plated phosphor-bronze wiper contact. Tapped (4-40 thread) brass studs in steatite base permit mounting without grounding rotor. Tested at 600 volts rms, 60 cps. Size: 25/32" wide, 13/16" high. Slotted shafts for screwdriver. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 208	MAPC-15	15	2.3	1.17
72 H 209	MAPC-25	25	2.6	1.20
72 H 210	MAPC-35	36	2.9	1.23
72 H 211	MAPC-50	49	3.2	1.32
72 H 212	MAPC-75	75	3.9	1.44
72 H 213	MAPC-100	99	4.5	1.71

FIG. D—HFA MIDGETS

Sturdy capacitors, similar to type HF, but larger plates and wider air gaps. For general-purpose and transmitting applications. Single-hole panel mounting. Also bracket for base mounting. End letter A in type no. denotes .02" air gap, B—.03", E—.07". 800, 1200 and 1750 test volts respectively. Shpg. wt., 1 lb.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 224	HFA-10B	9	2.3	1.92
72 H 225	HFA-15B	16	2.8	1.98
72 H 229	HFA-15E	16	4.0	2.14
72 H 226	HFA-25B	25	3.0	2.07
72 H 227	HFA-50B	50	4.3	2.25
72 H 228	HFA-100B	100	7.5	3.18
72 H 222	HFA-100A	102	4.5	2.37
72 H 223	HFA-140A	145	6.0	2.79

MAC MIDGETS

(Not illustrated.) Extremely small variables; excellent as VHF trimmers. Steatite base; only ¾x⅝". Screwdriver adjustment. Threaded sleeve for panel mounting. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 255	MAC-5	5.0	1.4	1.14
72 H 256	MAC-10	8.7	1.7	1.17
72 H 257	MAC-15	14.2	2.2	1.23
72 H 258	MAC-20	19.6	2.7	1.32

FIG. E—HF MICROS

Ideal for tuning or trimming critical high-frequency circuits. Isolantite insulation. *Double-spaced units. Shpg. wt., 6 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 215	HF-15	17.5	2.8	1.26
72 H 216	HF-35	36	3.2	1.29
72 H 217	HF-50	52	3.7	1.32
72 H 218	HF-100	102	5.3	1.53
72 H 219	HF-140	142	6.3	1.80
72 H 220	*HF-15-X	15	3.6	1.35
72 H 221	*HF-30-X	30	5.2	1.47

HFD SPLIT-STATOR MICROS

72 H 230	HFD-50	52	3.6	3.63
72 H 231	HFD-100	102	5.0	4.17
72 H 232	HFD-140	142	6.0	4.62
72 H 233	*HFD-15-X	16	3.8	3.57
72 H 234	*HFD-30-X	28.5	5.0	3.96

FIG. F—APC MICROS

Compact high-quality variables. Isolantite base. Screwdriver adjustment. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
72 H 250	APC-25	25	3.0	1.17
72 H 251	APC-50	50	3.9	1.23
72 H 252	APC-75	75	4.6	1.32
72 H 253	APC-100	99	5.5	1.44
72 H 254	APC-140	140	6.7	1.71

FIG. G—BFC BUTTERFLY TYPES

Straight-line capacity type; 90° minimum to maximum. Spacing .03". Tested at 1200 v. rms., 60 cycles between rotor and each stator. Tapped (6-32 thread) studs in steatite base permit mounting the capacitor without grounding the rotor. Silver contact. Shpg. wt., 1 lb.

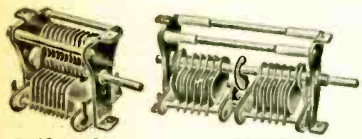
No.	Type	Max.	Min.	NET
72 H 262	BFC-12	14.5	3.5	1.65
72 H 263	BFC-25	27.5	5.0	1.86
72 H 264	BFC-38	40.5	6.3	2.19

FIG. H—NEUTRALIZING CONDENSER

Type NZ-10. Rated, 3000 v. DC peak. Fine adjustment. Capacity, 2.3-10 mmf. 2⅞x1 13/16x 2 15/16". Shpg. wt., 1 lb.

72 H 249. NET.....3.48

BUD VARIABLE CAPACITORS



JC-1525 JC-1550A

JUNIOR SINGLE-SECTION TYPES

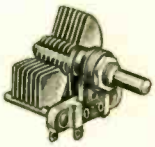
Very sturdy, expertly designed transmitting capacitors. Cadmium-plated brass plates. Smooth, positive rotor contact. Top and bottom brackets for chassis mounting; also accommodate tank coil. *.051" air gap; all others have .078" air gap. Av. shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
61 H 165	JC-1525*	50	4	4.85
61 H 166	JC-1526*	100	7	5.66
61 H 167	JC-1527*	145	9	6.05
61 H 168	JC-1528*	250	12	7.28
61 H 169	JC-1529*	340	15	8.08
61 H 170	JC-1532	55	8	5.50
61 H 171	JC-1534	110	10	6.17
61 H 172	JC-1536	190	15	8.08

DUAL-SECTION TYPES

61 H 173	JC-1550A*	20	3	7.60
61 H 174	JC-1551A*	50	5	8.15
61 H 175	JC-1553A*	100	7	8.90
61 H 176	JC-1554A*	145	9	9.70
61 H 177	JC-1556A*	250	12	11.32
61 H 178	JC-1572A	55	8	7.28
61 H 179	JC-1561A	110	10	10.57
61 H 180	JC-1562A	150	11	12.29

"MC" MIDGETS



Single- and double-bearing types; *double-bearing types. Mount in ¾" hole. Electro-soldered cadmium brass plates, semi-circular in shape. Steatite insulation. Double-spaced units have .060" airgap; others, .024". Shpg. wt., 7 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	No. of Plates	NET EACH
61 H 142	1850*	15	3	3	1.62
61 H 143	1852*	33	4	5	1.62
61 H 144	1853*	50	5	7	1.88
61 H 145	1855*	100	7	14	2.06
61 H 146	1856*	140	7	19	2.38
61 H 147	1858*	190	9	27	2.53
61 H 148	1859*	235	10	33	2.91
61 H 149	1860*	300	12	43	3.12
61 H 150	1870	15	3	3	1.24
61 H 151	1872	33	4	5	1.38
61 H 152	1873	50	5	7	1.47
61 H 154	1875	100	7	14	1.62
61 H 155	1876	140	8	19	1.80

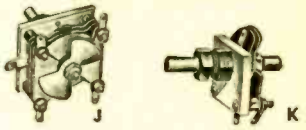
DOUBLE-SPACED

61 H 153	1879	15	4	5	1.62
61 H 160	1880	35	5	11	1.71
61 H 161	1881	50	7	15	1.82

MIDGET TRIMMER

Type MT-833. For antenna coupling, interstage coupling and tracking applications. 3 to 36 mmf. Ceramic base. Shpg. wt., 2 oz.

60 H 335. NET.....15c



CARDWELL CAPACITORS

FIG. J—VHF BUTTERFLY CAPACITORS

90-degree capacitors with butterfly rotor plates. Electrical symmetry; low inductance; no moving contacts. Isolantite insulation. Removable plates. Air gap, .030". Shpg. wt., 10 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET
75 H 001	PL-6076	5	1.5	1.58
75 H 002	PL-6077	7	2.0	1.65
75 H 003	PL-6078	13	3.0	2.40
75 H 004	PL-6113	13	10.4	1.88

FIG. K—TRIM-AIR MIDGETS

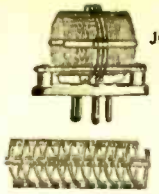
Universal mounting. Isolantite insulation. Shaft has rear extension for ganging; except*, †Air gap, .02"; others .03". Shpg. wt., 7 oz.

Stock No.	Mfr's Type	Max. Mmf	Min. Mmf	NET EACH
75 H 010	PL-6000	10	1.2	1.13
75 H 011	PL-6001	15	1.5	1.43
75 H 012	PL-6002	25	2.0	1.65
75 H 013	PL-6003	35	2.5	1.89
75 H 014	PL-6004	50	2.8	1.95
75 H 015	PL-6016†	75	2.7	1.80
75 H 016	PL-6017†	100	3.0	1.88
75 H 017	*PL-6018†	140	5.0	3.15

B & W Amateur Components

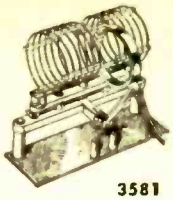
BTCL TURRET

BCL



JCL

3001



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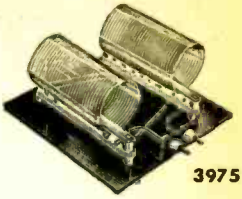
TA



3975

BARKER-WILLIAMSON AIR INDUCTORS

5-BAND TURRETS

Center and end link coil and switch turret type assemblies. Mounted on bandswitch with ¼" shank for single-hole panel mounting. For 80, 40, 20, 15 and 10 meters. Tune with 50 mmf. BTCL, JTCL and BCL are center-tapped. BTEL, JTEL and BEL are untapped. Shpg. wt., 1½ lbs.

No.	Type	Watts	Link	NET
75 H 474	BTCL	35	Center	10.14
75 H 473	BTEL	35	End	10.14
75 H 469	JTCL	75	Center	11.25
75 H 470	JTEL	75	End	11.25
75 H 471	BCL	150	Center	14.01
75 H 472	BEL	150	End	14.01

Dial Plate. For B&W turrets. Marked 3, 5, 7, 14, 21, 28 mc. White on black. 2¼" dia. Shpg. wt., 3 oz.
75 H 364. NET.....30¢

TA ANTENNA COILS

Provide extremely high efficiency as link-coupled antenna coils. Have fixed center links for coupling to either fixed or variable link final tank circuits through a low impedance line. Wound with tinned copper wire to simplify tapping feeders to coil; two tinned clips supplied with each coil. For use with transmitters rated up to 500 watts power input. Av. shpg. wt., 1 lb.

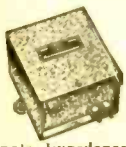
75 H 492. 10 meters. NET EACH..... 3.45
75 H 491. 20 meters. NET EACH..... 3.57
75 H 490. 40 meters. NET EACH..... 3.96
75 H 489. 80 meters. NET EACH..... 4.38

Type 3321 Jack Bar Assembly. For above coils. Shpg. wt., 10 oz.
75 H 362. NET.....1.25

TYPE 3975 BALUN COIL

Bifilar inductors for efficiently matching 75-ohm unbalanced output to either 75-ohm or 300-ohm balanced lines. Excellent for use with transmitters having Pi-network output. Two coils are required to construct highly efficient matching network for all-band use (80-10 meters). With instructions, less base and connectors. Shpg. wt., each, 12 oz.
75 H 594. NET EACH.....3.75

1-KW SINGLE BAND BALUNS



Series 710. 1-KW Baluns designed for half-wave folded-dipole antennas fed with 300-ohm line. Precision components; high grade insulation. Housed in heavy-gauge, weather-proofed steel cases, fitted with coax input connectors and ceramic feed-through output terminals. Impedance: 75 ohms unbalanced to 300 ohms balanced. 3½x3½x4". Shpg. wt., 2 lbs.

Stock No.	Model	Band-Meters	EACH
75 H 425	710	10	16.50
75 H 426	711	15	
75 H 427	712	20	
75 H 428	713	40	
75 H 429	714	80	

B&W "CC-50" COAXIAL CONNECTOR

Provides weatherproof, strong cable connections to half-wave doublet antennas and also serves as center insulator. Water-tight aluminum housing. Antenna elements connect to forged steel eye-bolts. Internal soldering connections for coax cable. Rubber sleeve for small diameter cable. Includes cement, eye-bolts rubber sleeve, screws, 2 housing sections, and instructions. Shpg. wt., 1 lb.
75 H 593. NET.....5.85

PLUG-IN COILS

Rugged, efficient and inexpensive coils for use in buffer and final amplifier stages where input power does not exceed 150 watts. Steatite base and plug-in jack mounting for maximum efficiency and flexibility. All types are center-tapped except BEL, 150 watt units. Link is at end and 4 plugs are provided. Type BCL coils have link, center tap and 5 plugs. *Capacity required to resonate at low frequency end of band.

"BEL" 150 WATT END LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 475	160BEL	100	10 oz.	4.11
75 H 476	80BEL	36	10 oz.	3.81
75 H 477	40BEL	36	10 oz.	3.39
75 H 478	20BEL	33	10 oz	2.97
75 H 337	15BEL	21	9 oz.	2.97
75 H 479	10BEL	21	9 oz.	2.91

75 H 361. Jack Bar Assembly for BEL coils. Shpg. wt., 10 oz. NET.....85¢

"BCL" 150 WATT CENTER LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 381	160BCL	100	10 oz.	4.11
75 H 366	80BCL	39	10 oz.	3.81
75 H 367	40BCL	37	11 oz	3.39
75 H 368	20BCL	34	10 oz.	2.97
75 H 338	15BCL	21	10 oz.	2.97
75 H 369	10BCL	20	10 oz.	2.91

75 H 361. Jack Bar Assembly for BCL coils. Shpg. wt., 10 oz. NET.....85¢

"BVL" 150 WATT SWINGING LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 385	160BVL	100	11 oz.	3.45
75 H 386	80BVL	46	11 oz.	3.12
75 H 387	40BVL	29	11 oz.	2.73
75 H 388	20BVL	25	10 oz.	2.40
75 H 339	15BVL	25	10 oz.	2.40
75 H 389	10BVL	14	12 oz	2.31

75 H 395. BVL Jack Bar Assembly with swinging link. Wt., 14 oz. NET.....3.44

"TCL" 500 WATT CENTER LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 375	160TCL	100	1½ lbs.	4.71
75 H 376	80TCL	55	1¼ lbs.	4.38
75 H 377	40TCL	34	1¼ lbs.	3.96
75 H 378	20TCL	21	1 lb.	3.57
75 H 345	15TCL	21	1½ lbs.	3.57
75 H 379	10TCL	19	1¼ lbs.	3.45

75 H 362. Jack Bar Assembly for TCL coils. Shpg. wt., 8 oz. NET.....1.25

"TVL" 500 WATT SWINGING LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 400	160TVL	100	1½ lbs.	3.72
75 H 401	80TVL	39	1¼ lbs.	3.57
75 H 402	40TVL	29	1¼ lbs.	3.12
75 H 403	20TVL	22	1 lb.	2.73
75 H 346	15TVL	22	1½ lbs.	2.73
75 H 404	10TVL	17	1¼ lbs.	2.64

75 H 396. TVL Base Assembly with swinging link. Shpg. wt., 2 lbs. NET.....5.50

"HDVL" 1 KW SWINGING LINK

Stock No.	Band & Type	*Cap. Mmf.	Shpg. Wt.	NET EACH
75 H 434	160HDVL	100	2 lbs.	8.67
75 H 435	80HDVL	41	2 lbs.	7.41
75 H 436	40HDVL	33	2 lbs.	6.60
75 H 437	20HDVL	18	1½ lbs.	6.21
75 H 348	15HDVL	16	1½ lbs.	6.21
75 H 438	10HDVL	16	1½ lbs.	5.37

75 H 440. HDVL Base Assembly with swinging link. Shpg. wt., 3½ lbs. NET.....6.88

75 WATT JUNIORS

Rated: 75 watts—850 DC volts. Tune with 15 mmf to 100 mmf. Supplied in fixed end (JEL), fixed center (JCL) or variable center (JVL) link types. All fit standard 5-prong sockets. 3 1/16 x1 15/16" Shpg. wt., 5 oz.

BAND	JEL	JCL	JVL	EACH
160	75 H 320	75 H 330	75 H 340	1.65
80	75 H 321	75 H 331	75 H 341	
40	75 H 322	75 H 332	75 H 342	
20	75 H 323	75 H 333	75 H 343	
15	75 H 349	75 H 354	75 H 355	
10	75 H 324	75 H 334	75 H 344	
6	75 H 444	75 H 445	75 H 446	

25 WATT "BABY" PLUG-IN COILS

Very compact coils for exciters and low-power transmitters. Only 1¼x1½". MC—CT, no link. MEL—end link; MCL—center link. Tune with 50 mmf (except 100 mmf for 160M). Fit standard 5-prong sockets. Wt., 3 oz.

BAND	MC	MEL	MCL	EACH
160	75 H 380	75 H 300	75 H 310	1.26
80	75 H 359	75 H 301	75 H 311	
40	75 H 370	75 H 302	75 H 312	
20	75 H 371	75 H 303	75 H 313	
15	75 H 358	75 H 357	75 H 356	
10	75 H 372	75 H 304	75 H 314	

"MINIDUCTORS"

Easily cut polystyrene insulated air-wound coils for RF use. 1" diameter coils are 3" long, all others 2". Shpg. wt., 5 oz.

4 Turns Per Inch			8 Turns Per Inch		
Dia.	No.	Type	No.	Type	NET
½"	75 H 305	3001	75 H 306	3002	36¢
⅝"	75 H 309	3005	75 H 316	3006	45¢
¾"	75 H 319	3009	75 H 325	3010	54¢
1"	75 H 328	3013	75 H 329	3014	60¢
16 Turns Per Inch			**32 Turns Per Inch**		
½"	75 H 307	3003	75 H 308	3004	36¢
⅝"	75 H 317	3007	75 H 318	3008	45¢
¾"	75 H 326	3011	75 H 327	3012	54¢
1"	75 H 335	3015	75 H 336	3016	60¢

SHIELDED LINKS

Faraday shielded links for use with Barker-Williamson swinging link base assemblies and jack bar assemblies. (3581 illustration shows link installed.) Effectively reduce TVI and BCI caused by harmonic or spurious signal radiations. Only link arm and link required with BVL, TVL, TVH and HDVL swinging link base assemblies. Link, link arm and hinge required to convert HDEL, TCL, BCL and BEL jack bar assemblies (use HDVL coil with HDEL jack bar assembly; TVL coil with TCL assembly; BVL coil with BCL and BEL assemblies). *For 50 ohm line; †75 ohm line; §higher impedance lines. HDVL coils require 1000 watt link; others, 500 watt link.

500 WATT LINKS

Stock No.	Type	Turns	Wt.	EACH
75 H 583*	3581	1	7 oz.	5.10
75 H 584†	3582	2		
75 H 585§	3583	3		

75 H 586. Type 3588. Link arm assembly for above. Shpg. wt., 5 oz. NET.....2.40

75 H 587. Type 3589. Link arm and hinge for above. Shpg. wt., 6 oz. NET.....2.70

1000 WATT LINKS

Stock No.	Type	Turns	Wt.	EACH
75 H 588*	3781	1	9 oz.	5.40
75 H 589†	3782	2		
75 H 590§	3783	3		

75 H 591. Type 3788. Link arm assembly for above. Shpg. wt., 6 oz. NET.....2.70

75 H 592. Type 3789. Link arm and hinge for above. Shpg. wt., 8 oz. NET.....3.00

Variable Capacitors and Accessories

RECEIVER TYPE VARIABLE CAPACITORS

TRF TYPE CAPACITORS


A

Fig. A. 2-Gang. For use in superhets without RF stage or in 2-stage TRF receivers. Each section has 29 plates. Range of 13.5 to 452.3 mmf. Counter-clockwise rotation. With trimmers for each section. End plates slotted for easy tracking. Spring brass wipers. Requires series padder for oscillator use. ¼" dia. shaft. Use extender No. 60 H 366 (at right) for conversion to ¼". See pages 138 to 140 for coils. Size, 1⅝x1 11/16x2 3/16". Shpg. wt., 10 oz.
61 H 059. NET 1.03

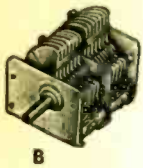

B

Fig. B. 365 Mmf Capacitors. Compact TRF variables. Have trimmers on side of frame. Outer rotor plates are slotted for tracking adjustment. Tapped holes in frame provide secure mounting. Range: 10 to 365 mmf. Shaft diameter, ⅜". 2 gang: 2 3/16x1 11/16x1⅝". 3 gang: 3 3/16x1 11/16x1⅝". Shpg. wt., each, 6 oz.
60 H 725. 2-gang. NET 95c
60 H 726. 3-gang. NET 1.47

SUPERHET CAPACITOR SPECIAL

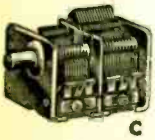

C

Fig. C. Two-section superhet variable. 19 plate oscillator section with 170.7 max.—8.7 min. mmf.; has one 2-17 mmf. trimmer. 27 plate RF section with 431 max.—11.0 min. mmf.; has one 2-17 mmf. trimmer. Provides 455 kc frequency difference in combination with osc. coil and loop below. Counterclockwise rotation. 1⅝x1⅞x2 3/16". Shaft, ¼" dia., ¾" long. 10 oz.
61 H 065. NET 98c
55 H 507. Oscillator Coil. NET 36c
51 C 040. Loop Antenna. NET 53c

MIDGET TYPES


D

Fig. D. Midget Superhet. Miniature size without sacrifice of performance makes these 2-gang variables perfect for portable and midget sets. Capacity: RF section, 10.5 to 364 mmf. 27 plates; osc. section, 7.6 to 132.6 mmf. 15 plates. Capacity increases with counter-clockwise rotation. For use with 455 kc IF. With trimmers. Size, 1¾x1½x1⅝". ¼" dia. shaft extends 1" beyond frame. Ball-bearing mounted shaft. Shpg. wt., 6 oz.
61 H 008. NET 95c

61 H 011. Smaller version of above. RF sec., 10.8 mmf to 221.6 mmf. Osc. sec., 8.5 mmf to 97.8 mmf. 1 5/16x1⅜x1 3/16". NET 90c


E

Fig. E. Midget TRF. 27-plate, single-gang condenser. Variable from 13.8 to 374.2 mmf. Capacity increases as shaft is rotated clockwise. ¼" diameter shaft mounted in ball bearings. Size: 1¼" deep, 1⅜" wide, 1¼" high. Shaft extends ¾" beyond frame. A well-built, compact condenser. Particularly adaptable to one, two, and three-tube receivers. Shpg. wt., 5 oz.
61 H 009. NET 73c

FLUTED KNOBS

High quality black bakelite. For use on ¼" shafts. Have metal inserts. Av. wt., 4 oz.


F

Fig. F. Pointer Type
55 H 085. 1⅛". NET .40c
55 H 088. 1⅜". NET .42c
55 H 086. 1⅝". NET .46c
55 H 087. 2⅛". NET .62c


G

Fig. F. Less Pointer
55 H 095. 1⅛". NET .24c
55 H 094. 1⅜". NET .26c
55 H 096. 1⅝". NET .30c
55 H 097. 2⅛". NET .44c

Fig. G. Flange Type
55 H 092. 1⅛". NET .42c
55 H 090. 2 1/16". NET .54c

CRONAME "ON-OFF" SWITCH PLATE

Etched aluminum with black background, polished aluminum letters and border. 1 11/16x1 11/16". 2 oz.
60 H 338. NET 12c
20 or More, EACH 10c

G-C DIAL POINTERS

Will fit most radio sets. Can be cut shorter for small dials.

60 H 449. Type 6810. Kit of 10 pointers in plastic case. Shpg. wt., 4 oz. NET 1.91

60 H 446. Fig. H. Type 6802. 5" rotary for ¼" shaft. Gold and red. Wt., 1 oz. EA. ... 24c

60 H 445. Fig. J. Type 6801. 3" rotary for ¼" shaft. Gold. Wt., 1 oz. EACH 24c

60 H 448. Fig. K. Type 6804. 2" slide pointer. White enamel. Shpg. wt., 1 oz. EA. ... 24c

60 H 447. Fig. L. Type 6803. 2½" slide pointer. Red translucent. Wt., 1 oz. EA. ... 24c


M

ICA DIALS


N

Fig. M. Type 2164. Miniature. Chrome-silver dials with black etched numerals and black knob. 10-0 in 180° rotation. 1⅝" dia. Set screw bushing for standard ¼" shafts. Shpg. wt., 3 oz.
55 H 340. NET 62c

Type 2165. As above but 10-0 in 270°.
55 H 341. NET 62c

Fig. N. Precision Vernier. Have chrome-silver dial plates. Black numerals and calibrations. 0 to 100 in 180° or 325°. Dial sets to a fraction of division. Flanged knob. For ¼" shafts. Wt., 7 oz.

Stock No.	Type	Dia.	Degrees	NET
55 H 350	2170	2¼"	325	1.47
55 H 351	2171	2¼"	180	1.47
55 H 352	2168	4"	325	1.96
55 H 353	2169	4"	180	1.96

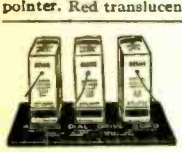
TRIMMERS AND PADDERS

Mica trimmer and padder capacitors. Treated for resistance to humidity and permanence of capacity settings. Low-loss ceramic base. Clear India mica. Adjusting plates rigidly constructed to permit bending soldering lugs without affecting capacity. Size, 1 7/32x¾x⅛". Mtg. ctrs., 1 7/32". Ranges below are mmf. from 3 turns open trimmer to tight setting. Av. shpg. wt., 2 oz.

No.	Mmf	Net	No.	Mmf	Net
60 H 340	2-30	13c	60 H 344	45-380	20c
60 H 341	4-80	13c	60 H 345	70-480	22c
60 H 342	9-180	15c	60 H 346	100-580	24c
60 H 343	25-280	18c			

WALSCO DIAL ACCESSORIES

THRIFTY DIAL CORD RACK



An economical and convenient supply of dial cord. Contains 200 ft. of the most popular dial cord types: 50 ft. of type 34—Medium; 100 ft. of type 35—Special Thin; and 50 ft. of type 39—Standard. Dustproof, dispenser-type box. Shpg. wt., 1¼ lbs.
86 N 053. NET 4.95

POPULAR SERVICE SPOOLS

The following cords cover 80% of the replacement demand. Constructed with fiberglass or linen core and pre-stretched. Nylon-braided sleeves. Av. shpg. wt., 4 oz.

No.	Type	Diam.	Strgth.	Lgth.	EA.	No.	Type	Diam.	Strgth.	Lgth.	EA.
60 N 490	34-Med.	.040"	35 lbs.	25 ft.	82c	43 N 197	34-Med.	.040"	35 lbs.	100 ft.	2.91
60 N 491	35-Thin	.025"	15 lbs.	25 ft.		43 N 195	35-Thin	.025"	15 lbs.	100 ft.	
60 N 492	39-Std.	.032"	20 lbs.	25 ft.		43 N 196	39-Std.	.032"	20 lbs.	100 ft.	

HAMMARLUND COUPLINGS

Type FC-46S. Insulated coupling for providing flexible linkage between angularly misaligned shafts. No backlash. Maximum torque that can be handled is limited only by holding power of set screws. For ¼" shafts. Shaft clearance, 5/32". Ceramic insulation. Flash voltage, 6000 v. Size. 1¼x 13/16". Wt., 3 oz.
72 H 496. NET 75c

Type FNC-46S. As above, but non-insulated. Durable, plated metal construction. Shpg. wt., 3 oz.
72 H 497. NET 75c

INSULATED COUPLING

For coupling drive shafts to condensers, gang switches, etc. Bakelite insulation. Hubs drilled to fit ¼" shafts; set-screws hold rigidly. Shpg. wt., 2 oz.
60 H 395. NET 49c

LOW-LOSS CERAMIC COUPLING

Similar in construction to above, but for high-voltage use. Shpg. wt., 2 oz.
60 H 396. NET 57c


Coupling


Extender

SHAFT FITTINGS

Couplings for extending shafts of volume controls, switches, condensers, etc., or for ganging single units, even when shafts are not of same diameter. Insulated types are made of black phenolic. Extenders for decreasing or increasing shaft diameter and for extending shaft length. 60 H 367 has ¼" opening; ⅛" shaft. 60 H 366 has ⅜" opening, ¼" shaft. Shaft length on all extenders, ⅝"; overall length, 1⅛". Av. shpg. wt., 4 oz.

Brass	Insulated	Kind	Size
60 H 360	60 H 350	Coupling	¼ to ¼"
60 H 361	.....	Coupling	⅛ to ⅛"
60 H 362	60 H 352	Coupling	¼ to ⅛"
60 H 365	60 H 355	Ext.	¼ to ¼"
60 H 366	.....	Ext.	⅛ to ¼"
60 H 367	.....	Ext.	¼ to ⅛"

NET EACH 18c
10 or More, EACH 16c

B. F. JOHNSON FLEXIBLE SHAFTS

Non-rusting phosphor-bronze flexible shafts with ¼" hubs. Ideal for connecting out-of-line shafts together. Handy accessory for Amateurs, experimenters, labs, etc. Permit up to 90 degrees angular control. Shpg. wt., 2 oz.

73 H 290. 115-253. Length 3". NET 40c
73 H 291. 115-254. Length 6". NET 55c

PANEL BEARING ASSEMBLY

For use with rigid or flexible couplings for mounting volume controls, etc., away from the panel. Made of brass. Take panels up to 7/16" thick. For standard ¼" shafts. Supplied with 2 fiber insulating washers. Shpg. wt., 3 oz.

60 H 385. Overall length 3". NET 29c
60 H 386. Overall length 6". NET 34c
60 H 390. Bearing only. NET 6c

ICA ALUMINUM IDLER PULLEYS

High-quality, lightweight aluminum. Meet servicing requirements. Sturdy construction, easy-operating. Hole diameter, 0.128" to fit ⅛" idler shafts. Take all standard dial cords. Average shpg. wt., 8 oz.
In pkgs. of 4 only.

Stock No.	Mfr's Type	O.D.	Trough Dia.	Pkg. of 4, Ea. Pkg.
41 H 310	601	⅜"	¼"	15c
41 H 311	602	7/16"	5/16"	17c
41 H 312	603	½"	⅜"	17c
41 H 313	604	⅝"	½"	19c
41 H 314	605	¾"	⅝"	22c

A B C

DIAL PLATES

Fig. A. Satin-finished, chrome-silver dial plates. In 2", 3½", and 4" sizes. 0-100 clockwise black scale. Center hole of 2" dial, 2¾"—others have ¾" hole. Av. shpg. wt., 2 oz.

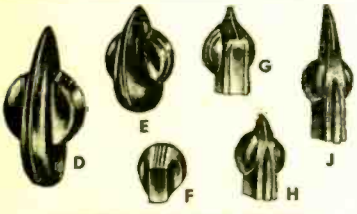
180 Degrees			325 Degrees		
No.	Dia.	NET	No.	Dia.	NET
55 H 120	2"	57c	55 H 128	2"	.57
55 H 121	3½"	90c	55 H 129	3½"	.90
55 H 122	4"	98c	55 H 130	4"	1.01

Fig. B. CRONAME ANODIZED ALUMINUM NAMEPLATES. Aluminum plate with etched black scales. Size, 2⅜x2⅝", with ½" center hole. Shpg. wt., 2 oz.

No.	Type	Description
55 H 160	448	Treble, 0-10
55 H 161	447	Bass, 0-10
55 H 137	429	Treble, 5-0-5
55 H 136	428	Bass, 5-0-5
55 H 164	416	Microphone, 1, 0-10
55 H 165	417	Microphone, 2, 0-10
55 H 126	415	Microphone, 0-10
55 H 170	413	Master Gain, 0-10
55 H 124	412	Gain, 0-10
55 H 127	422	Gain, 5-0-5
55 H 123	411	Tone, 0-10
55 H 134	426	Volume, 0-10
55 H 125	414	Record, 0-10
55 H 135	427	Fader, 5-0-5
55 H 138	430	Expansion, 0-10
55 H 139	446	Phono, 0-10
55 H 131	423	Increase, with arrow
55 H 172	410	No title, 0-10

NET EACH 29c
10 or More, EACH 26c

Fig. C. CRONAME ROUND DIAL PLATES. Diameter 1¾". Aluminum scale with black background. Type 25 has clockwise arrow labeled "Volume." Type 569 graduated 0-100 over 180° clockwise. Type 905 graduated 0-100 over 270° clockwise. Use with 1¼" bar knobs (see below). Shpg. wt., 2 oz.
55 H 140, Type 569.
55 H 108, Type 905.
55 H 141, Type 25. NET EACH 18c
10 or More, EACH 16c



POINTER AND BAR KNOBS

Molded of high-quality plastic. Fit ¼" round or flat shafts. Slotted set screws. Figs. D, E and F are Croplastic types by Croname. *Brass inserts. †13/32" diameter recess in rear for close panel mounting. All black, except red. Shpg. wt., 2 oz.

Stock No.	Fig.	Size	NET EACH	10 or More, EA.
55 H 065*	D	2¼"	36¢	32¢
55 H 063*	E	1¼"	26¢	23¢
55 H 067*†	F	1 1/16"	36¢	32¢
55 H 074	G	1¼"	11¢	10¢
55 H 072	H	1¼"	11¢	10¢
55 H 078*	H	1¼"	16¢	14¢
55 H 073§	H	1¼"	11¢	10¢
55 H 071§	J	2"	21¢	19¢
55 H 070	J	2"	21¢	19¢
55 H 079*	J	2"	26¢	23¢

LEVER TYPE KNOBS

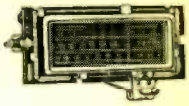
Black molded bakelite knobs with heavy brass inserts. For standard ¼" diameter shafts. Secured by set screws. Shpg. wt., 2 oz.

Stock No.	Fig.	Lgth.	NET EACH	10 or More, EA.
55 H 006	K	1⅝"	19¢	17¢
55 H 005	L	2½"	23¢	21¢

CRONAME HIGH-QUALITY TUNING ASSEMBLIES

CROFLEX "TAILORED TO THE CHASSIS" UNITS

Handsome "Croflex" dials are "tailored" to fit any average chassis and are exceptionally easy to install. The tuning knob can be located to suit your preference—at either end of the dial or along its lower edge. Simply choose the location you like best, drill a hole for the knob shaft, and attach the knob shaft assembly. Condenser pulley furnished with each tuner slips onto condenser shaft and is connected to rest of dial mechanism by drive cable. Take clockwise or counter-clockwise condenser with ¼" shaft. Have modern "3-dimension" edge-lighted glass scales, calibrated horizontally. Complete with gold-bronze finished aluminum escutcheon and two clip-on miniature base, screw-type pilot light sockets (less bulbs).



CR-1

Type CR-1 AM-Shortwave. Small size tuning assembly. Requires 1 13/16x4⅝" cutout. Pointer travels 3¼". Tuning ratio of 9 to 1. Dial scale calibrated for 550-1700 kc broadcast and 6-18 mc shortwave bands. Also has 0-100 logging scale. Shpg. wt., 1 lb.
55 H 317, NET 4.97

CR-2A

Type CR-1A AM-FM. Same as CR-1 but with dial scale calibrated for 550-1700 kc AM broadcast and 88-108 mc FM broadcast band. Shpg. wt., 1 lb.
55 H 318, NET 4.97

Type CR-1B AM Broadcast. Same as above but with dial scale calibrated for 550-1700 kc band only. Shpg. wt., 1 lb.
55 H 319, NET 4.97

Type CR-2 AM-Shortwave. Medium size tuning assembly. Requires 1 13/16x7⅝" cutout. Pointer travels 6¼". Tuning ratio 17 to 1. Scale calibrated for 550-1700 kc broadcast and 6-18 mc shortwave bands. Has 0-100 logging scale for accurate resetting and station logging. Shpg. wt., 1 lb.
55 H 322, NET 6.15

CR-3A

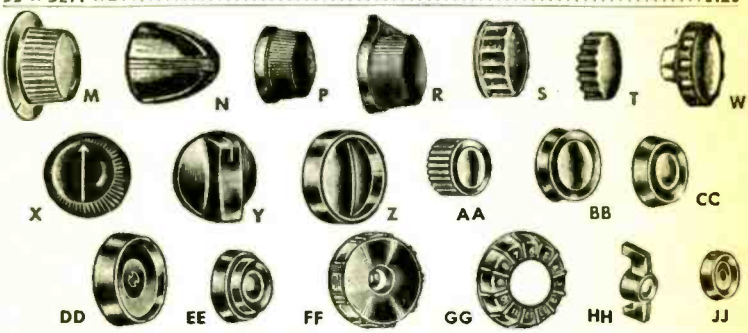
Type CR-2A AM-FM. Same as CR-2 but with dial scale calibrated for 550-1700 kc AM broadcast and 88-108 mc FM broadcast bands. Shpg. wt., 1¼ lbs.
55 H 323, NET 6.15

Type CR-2B AM Broadcast. Same as above but with dial scale calibrated for 550-1700 kc band only. Shpg. wt., 1¼ lbs.
55 H 324, NET 6.15

Type CR-3 AM-Shortwave. Large size tuning assembly. Requires 2x8½" cutout. Pointer travels 7⅛". Tuning ratio of 18 to 1. Dial scale calibrated for 550-1700 kc broadcast and 6-18 mc shortwave bands. Also has 0-100 logging scale. Shpg. wt., 1½ lbs.
55 H 325, NET 8.20

Type CR-3A AM-FM. Same as CR-3 but with dial scale calibrated for 550-1700 kc AM broadcast and 88-108 mc FM broadcast bands. Shpg. wt., 1½ lbs.
55 H 326, NET 8.20

Type CR-3B AM Broadcast. Same as above but with dial scale calibrated for 550-1700 kc AM broadcast band only. Shpg. wt., 1½ lbs.
55 H 327, NET 8.20



POPULAR MOLDED KNOBS FOR EVERY REQUIREMENT

Plastic knobs, attractively shaped and beautifully finished. Replace those on most radio sets. N and P are adaptable as midget set knob replacements. *For knurled shafts only. Others have setscrews for round or flat shafts. †With arrow. §Has pointer. Figs. Z, AA, BB, CC, EE and HH are gold-metal inlay knobs. All knobs fit standard ¼" shafts. Av. shpg. wt., 2 oz.

Stock No.	Fig.	Diam.	Color	NET EA.	10 or More, EA.	Stock No.	Fig.	Diam.	Color	NET EA.	10 or More, EA.
55 H 031	M	1½"	Black	19¢	17¢	54 H 980	S	1⅛"	Walnut	10¢	9¢
55 H 032	M	1½"	Red	21¢	19¢	54 H 981	S	1⅛"	Ivory	10¢	9¢
55 H 022	N	⅞"	Black	13¢	12¢	54 H 982	T	1"	Walnut	10¢	9¢
55 H 025	N	¾"	Black	9¢	8¢	54 H 983	T	1"	Ivory	10¢	9¢
55 H 027	N	¾"	Walnut	10¢	9¢	55 H 024	W	⅞"	Black	10¢	9¢
55 H 028*	N	¾"	Walnut	6¢	5¢	55 H 050	W	1¼"	Black	20¢	18¢
55 H 029	N	¾"	Ivory	11¢	10¢	55 H 150†	X	1½"	Black	24¢	22¢
55 H 043*	P	11/16"	Black	5½¢	5¢	55 H 018	Y	1⅛"	Black	13¢	12¢
55 H 035	P	11/16"	Black	9¢	8¢	55 H 019	Y	1⅛"	Red	15¢	13¢
55 H 036	P	11/16"	Walnut	9¢	8¢	54 H 960*	Z	1⅜"	Walnut	24¢	22¢
55 H 023	P	1"	Black	11¢	10¢	54 H 964*	AA	1 3/16"	Walnut	17¢	15¢
55 H 040§	R	11/16"	Black	9¢	8¢	54 H 965*	AA	1 3/16"	Ivory	17¢	15¢
55 H 042*	R	11/16"	Black	5½¢	5¢	54 H 962*	BB	1½"	Walnut	23¢	21¢

TELEVISION REPLACEMENT KNOBS

Fit receivers using dual controls and tuners made by Standard Coil, Sarkes-Tarzian, etc. Used on all popular TV sets such as RCA, Bendix, Westinghouse, Admiral, etc. Walnut pattern with plated gold finish inlay on face. *¼" knurl shaft. †¼" flatted shaft. ‡1/5" flatted shaft. §.265" keyway shaft. **⅜" flatted shaft. 2 oz.

No.	Fig.	Diam.	Use	EACH	No.	Fig.	Diam.	Use	EACH
54 H 966*	CC	1 5/16"	Front dual	26¢	54 H 974**	FF	2⅜"	Rear dual	26¢
54 H 967†	CC	1 5/16"	Front dual	29¢	54 H 973†	GG	2¼"	Front dual	73¢
54 H 968‡	CC	1 5/16"	Front dual	29¢	54 H 971†	HH	2"	Front dual	53¢
54 H 969§	DD	1⅝"	Rear dual	17¢	54 H 972**	JJ	1 5/32"	Rear dual	17¢
54 H 970†	EE	1⅝"	Comb. dual	44¢					

All-Purpose Tube Sockets

E. F. JOHNSON TUBE SOCKETS

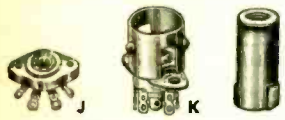
SPECIAL SOCKET TYPES

73 H 997. (A) Type 122-244. 4-pin steatite wafer for "super jumbo" base tubes. Takes 8008, BR6, SC22, 5C22, GL146, GL152, GL159, GL169, RO585, RH507, SR50, SR53, SK60. ½ lb. **NET** 1.43

73 H 998. (A) Type 122-275. Steatite wafer socket for tubes with giant 5-pin base. Takes 4-125A, 4-250A, RK28, RK48, 125M, 803. Shpg. wt., 10 oz. **NET** 1.45

73 H 194. (B) Type 122-234. Steatite base, silver-plated contacts. For W.E. 5D21, 705A, 715A & B, and Raytheon RK72. Shpg. wt., 10 oz. **NET** 2.20

73 H 245. (C) Type 122-101. 7-pin steatite wafer with base shield and retainer springs. For use with 4-65A, 826, 829, 832, etc. Provision for isolating grid leads. Shpg. wt., ½ lb. **NET** 2.20



MINIATURE SERIES

40 H 290. (J) Type 120-267. 7-pin steatite socket with silver-plated phosphor bronze contacts. For 9000 series and miniature tubes 1R5, 1S5, 6CB6, etc. ⅝" mtg. hole. Shpg. wt., 3 oz. **NET** 33c

73 H 186. (K) Type 120-277. As above, but with metal mtg. frame and shield base. Shpg. wt., 3 oz. **NET** 49c

73 H 244. (L) Type 133-278-6 Shield. For use with Type 120-277B socket. With spring. Cadmium plated steel. Height, 1¾". Shpg. wt., 3 oz. **NET** 15c

73 H 187. (L) Type 133-278-8 Shield. As above but 2¼" high. With spring. Shpg. wt., 3 oz. **NET** 22c

Fig. D—STANDARD WAFERS

Steatite wafer sockets for receiving and low-power transmitting tubes. Cadmium-plated contacts are reinforced with plated steel springs and recessed in wafer to prevent movement. Metal parts are countersunk and mounting holes bossed to prevent shorting when mounted on metal. Size, 2⁵⁄₁₆"x1 11⁄₁₆". Mtg. centers, 1 13⁄₁₆" to 1 15⁄₁₆". Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Prongs	NET
73 H 238	122-224	4	41¢
73 H 239	122-225	5	44¢
73 H 240	122-226	6	48¢
73 H 241	122-227	7	52¢
73 H 243	122-228	Octal	55¢

Fig. E—JUMBO WAFERS

Type 122-237. Steatite wafer for transmitting tubes with "giant" 7-pin base. Takes 813, 8001, 3D22, 4E27, HK257 tubes. Construction features same as standard wafers above. 2⅝" square. 4 mtg. holes. 1¼" between centers. Shpg. wt., ½ lb. **73 H 188. NET** 79c

Type 122-247. Steatite "giant" 7-pin wafer socket as above, with etched aluminum base shield. For tubes 825, 826, etc. Shpg. wt., ½ lb. **73 H 189. NET** 95c

BAYONET SOCKETS

Type 123-209. Porcelain base socket for tubes with 4 prong "UX" base. Has phosphor bronze contacts, aluminum shell. Takes 852, 860, 866 tubes, etc. High-voltage spacing between contacts and shell. 4 mtg. holes. 2⅝" between ctrs. Wt., 10 oz. **73 H 195. NET** 1.25

Type 123-211. Porcelain base socket for use with "jumbo"-type, 4 pin tubes. Takes 211, 872 tubes, etc. Mounting centers are 2 13⁄₁₆ inches. Shpg. wt., 1 lb. **73 H 191. NET** 1.60

EBY JAN-APPROVED MINIATURE SOCKETS AND SHIELDS

The Eby JAN miniature sockets and shields listed below have been developed in conjunction with Army, Navy and Air Force engineers. They are manufactured in accordance with military standards and are warranted to comply with JAN-S28 A and JAN-S28 A1 specifications. Bayonet-type locking shields and sockets. Highest quality materials and workmanship used in the construction. Years of experience, intensive research and experimentation have been combined to produce this line of sockets and shields. Wt., 3 oz.

Stock No.	JAN No. S-28 A	JAN No. S-28 A1	Eby No.	Description	NET EACH
40 H 263	TSE 7T 102	TS 102C 01	9715	7-Pin Shield Base, Ceramic	41¢
40 H 264	TSE 7T 101	TS 102P 01	9736	7-Pin Shield Base, Mica-filled	29¢
40 H 265	TSE 9T 102	TS 103C 01	9717	9-Pin Shield Base, Ceramic	56¢
40 H 266	TSE 9T 101	TS 103P 01	9718	9-Pin Shield Base, Mica-filled	41¢
40 H 267	TSF OT 101	TS 102U 01	9700	7-Pin Tube Shield, 1⅜"	15¢
40 H 268	TSF OT 102	TS 102U 02	9701	7-Pin Tube Shield, 1¾"	15¢
40 H 269	TSF OT 103	TS 102U 03	9702	7-Pin Tube Shield, 2¼"	19¢
40 H 270	TSF OT 104	TS 103U 01	9703	9-Pin Tube Shield, 1½"	19¢
40 H 271	TSF OT 105	TS 103U 02	9704	9-Pin Tube Shield, 1 13⁄₁₆"	20¢
40 H 272	TSF OT 106	TS 103U 03	9710	9-Pin Tube Shield, 2¾"	24¢
40 H 286	TSB 8T 102	TS 101C 01	9756	Octal, Saddle, Ceramic	62¢
40 H 287	TSB 8T 101	TS 101P 01	9753	Octal, Saddle, Mica-filled	40¢

EBY ABOVE-CHASSIS SOCKETS

One-piece molded bakelite construction. Contact designations molded in base. For top-chassis or panel mounting. Mounting centers, 1 11⁄₁₆". 2 oz.

Stock No.	Type	Prongs	NET
40 H 254	12-4	4	29¢
40 H 255	12-5	5	30¢
40 H 256	12-6	6	32¢
40 H 261	12-7-N-O	7L&7S	34¢
40 H 258	12-8	8 Octal	35¢

JAMES MILLEN TUBE SOCKETS

Recommended for UHF use. Higher steatite body gives longer leakage path between contacts. Mounting centers, 1¼". Shpg. wt., 4 oz.

Stock No.	Type	Prongs	EACH
72 H 060	33004	4	36c
72 H 061	33005	5	
72 H 062	33006	6	
72 H 064	33008	8	

EBY TV TUBE SOCKET

Type 49-13DD. Laminated bakelite, duo-decal TV picture tube socket. For magnetic or electrostatic focusing tubes. Has plastic cover for complete insulation. 12" leads attached for quick installation. Wt., 4 oz. **40 H 291. NET** 47c

EBY CRT TEST SOCKET ADAPTER

Type 1000. TV picture tube socket adapter. Has external lugs to permit checking all voltages present at CRT base connections while set is in operation. An excellent aid for on-the-spot servicing. Valuable addition to any TV serviceman's repair kit. Simple to install and remove—no wiring or soldering required—just insert adapter between CR tube base and its socket. Makes all connections accessible to meter test leads. Eliminates necessity of removing chassis to check picture tube voltages. Shpg. wt., 3 oz. **40 H 273. List, $1.60. NET** 96c

VECTOR SOCKETS

Fig. F—SOCKET-TURRETS

Components mount on mica-filled phenolic form. Turrets are ½" dia. Octal units mount in 1" hole; miniatures, ⅝" hole. Av. wt., 3 oz.

2½" Turrets. Have 9 terminals in two rings spaced 1⅛" apart.

Stock No.	Type	Socket	NET
40 H 211	10-O-9T	Octal	55¢

2" Turrets. Have 9 terminals in two rings spaced 1" apart.

Stock No.	Type	Socket	NET
40 H 212	8-O-9T	Octal	51¢
40 H 217	8-M-9T	7-Pin Miniature	60¢
40 H 233	8-N-9T	9-Pin Noval	63¢

1½" Turrets. Have 6 terminals in 1 ring only.

Stock No.	Type	Socket	NET
40 H 213	6-O-6T	Octal	47¢
40 H 218	6-M-6T	7-Pin Miniature	54¢
40 H 234	6-N-6T	9-Pin Noval	57¢

Shield Bases. For miniature sockets above. Fasten above chassis on socket mtg. ctrs. Use with standard bayonet type shield. Wt., 2 oz.
40 H 235. S7. For 7-pin sockets. **NET** ..... 8¢
40 H 236. S9. For 9-pin sockets. **NET** ..... 9¢

Fig. G—PLUG-IN UNITS

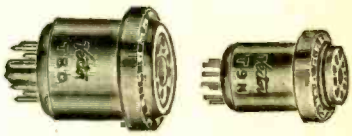
Consist of standard tube socket, tubular terminal post, octal plug and shield can. Can sizes: B10M and B10N, 1.37" square, 2.5" long; C10M and C10N 2" square, 2.5" long. Av. shpg. wt., 5 oz.

Stock No.	Type	Description	NET
40 H 237	B10M	7-Pin Miniature	1.55
40 H 238	B10N	9-Pin Noval	1.60
40 H 241	C10M	7-Pin Miniature	1.86
40 H 239	C10N	9-Pin Noval	1.90

Fig. H—SOCKET KITS

Kit No. 1. Assortment of socket-turrets as listed above for experimenters, designers and Amateurs. Consists of 20 socket-turrets for octal, loctal, miniature, and noval tubes in various styles and sizes. Special and standard types included. Shpg. wt., 1¼ lbs. **40 H 280. NET** 10.00

Kit No. 2. Assortment of 7 plug-in turrets with octal, miniature, and noval sockets, 8 and 11 prong plugs. Shpg. wt., 1½ lbs. **40 H 281. NET** 10.00



VECTOR TUBE ADAPTER TEST KIT

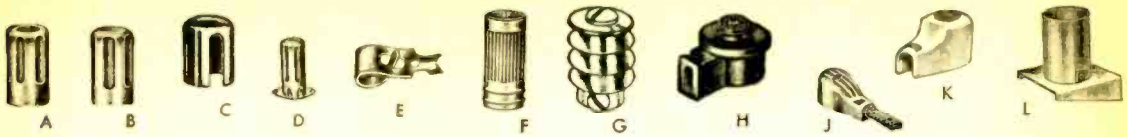
Type T-789. Ideal for making voltage, resistance and wave form measurements from tube side of electronic equipment without disturbing chassis. Set contains 1—7 pin, 1—9 pin miniature, and 1—octal adapter in plastic carrying case. Adapters simply inserted between tube and socket. Recessed tabs for finger protection. ½" dia. holes in tabs for test prod points. Adapters will fit into tube shield bases. Shpg. wt., 6 oz.
40 H 210. List, $9.60. NET 5.75

NATIONAL SOCKETS

Type CIR. Ruggedly dependable, low-loss steatite sockets for VHF or UHF use. Universal mtg. ring permits installation in any of 6 positions to permit convenient wiring. Mtg. ctrs. 1 27⁄₃₂". Mounting plates are nickel-plated brass; contacts are silver-plated phosphor bronze. Wt. 4 oz.

Stock No.	Prongs	NET EACH
71 H 100	4	60¢
71 H 101	5	69¢
71 H 102	6	69¢

Sockets, Shields, Caps, Connectors



RECEIVING AND TRANSMITTING GRID CAPS AND SHIELDS

RECEIVING TUBE GRID CAPS AND SHIELDS

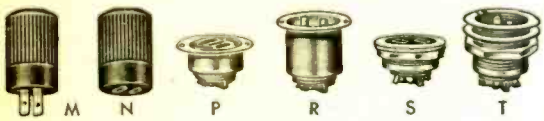
A complete selection of grid caps and shields for receiving type tubes. Shields are sturdily constructed of aluminum; tube caps assure positive contact. Av. shpg. wt., each, 3 oz.

Stock No.	Fig.	Description and Application	Quan. Per Pkg.	NET Per Pkg.
42 N 510	A	Goat G1332-3 tube shield for GT tubes. 2⅝" high, ⅞" hole.	4	19¢
42 N 511	B	Goat G1332-5A. Same as 42 N 510, but with closed top.	4	19¢
42 N 513	C	ICA 1552 metal tube grid shield. Slot for grid lead.	2	21¢
42 N 512	D	Goat G1700 tube shield for miniature T5½ with G1710-B base. .865"x1⅞".	3	20¢
42 N 514	E	National type 24. For standard tubes. ⅜" dia. grid caps.	5	23¢
42 N 515	E	National type 8. For octal tubes. ¼" diameter grid caps.	5	23¢
42 N 507	F	Goat G1222K tube shield for all GT types. 1¼" dia., 2²³⁄₃₂" high.	4	19¢
42 N 509	F	Goat G1222L tube shield for loktal type tubes. 1⁹⁄₃₂" dia., 2⁷⁄₁₆" high.	4	19¢
42 N 508	....	(Not illustrated). Goat G1004 ground clip for grounding shields on octal tubes.	10	9¢
42 N 506	....	(Not illustrated). Goat G1307-2 double clip for octal base tubes (fits on tube socket).	5	14¢

TRANSMITTING TUBE CAPS AND SHIELDS

Popular type heat dissipating connectors, plate and grid caps and shields for transmitting tubes. *For wire leads. All others are cap type. Average shpg. wt., each, 3 oz.

Stock No.	Fig.	Description and Application	Quan. Per Pkg.	NET Per Pkg.
42 P 093	G	Eimac HR-3* heat dissipating cap for 35T, 250TH, etc. .070" hole.	1	.60
42 P 096	G	Eimac HR-6 heat dissipating cap for 4-250A,304TH,etc. .359"hole.	1	.80
73 P 000	G	Bud TC-488* heat dissipating cap for HK24. .052" hole.	1	.47
73 P 001	G	Bud TC-489* heat dissipating cap for 35T, HK54, etc. .072" hole.	1	.41
73 P 002	G	Bud TC-1920 heat dissipating cap for 100T, 807, etc. .375" hole.	1	.47
73 P 003	G	Bud TC-1921 heat dissipating cap for 866, T125, etc. .570" hole.	1	.53
72 N 082	H	Millen 36011 industrial snap-action plate cap. ⅝".	1	.69
71 N 246	J	National SPP-9 ceramic insulated grid and plate cap. ⅝".	1	.24
42 N 518	E	National 12 transmitting grid and plate cap. ⅝".	3	.29
72 N 068	K	Millen 36001 steatite plate cap for 866, etc. ⅝".	1	.24
72 N 071	L	Millen 80009 aluminum shield and 5-prong socket for 807.	1	1.05
72 N 070	L	Millen 80010 aluminum shield only for 807.	1	.48



HART AND HEGEMAN MIDGET CONNECTORS

Midget bakelite 2-prong cord connectors and receptacles. Rated 10 amps, 250 volts. 1-inch hole required for all receptacles. ⅜" contact spacing. Terminals are exposed; threaded cover. *With plate for screws. †With plate and lock ring. §Fits all receptacles. Sturdily constructed. Av. shpg. wt., each, 3 oz.

Stock No.	Mfr's. Type	Fig.	Description	NET EACH
52 N 721	80324	M	Male cable connector.	49¢
52 N 722	80325	N	Female cable connector.	49¢
52 N 723	80332	.....	Cord connector.	81¢
52 N 724	80330§	.....	Terminal cover.	18¢
52 N 725	80326*	P	Female flush receptacle.	55¢
52 N 726	80328*	R	Male flush receptacle.	65¢
52 N 727	80327†	S	Female flush receptacle.	81¢
52 N 728	80329†	T	Male flush receptacle.	81¢
52 N 729	80331†	.....	Female flush receptacle, recessed.	81¢

TWIN JACK STRIPS AND ADAPTER

Fig. W. ICA Type 2443 Jack. For use with headphones, speakers, test equipment, etc. Use with standard phone tips. 1⁹⁄₁₆" wide, 2" long, 1⅛" mounting centers. Bakelite strip. Shpg. wt., 2 oz.
41 H 381. NET ..... 15¢
10 or More, EACH ..... 13½¢

Fig. X. E. F. Johnson Type 105-401 Molded Black Bakelite Twin Jack. Has single mounting screw molded into bakelite. Size, 2x1⅛". For cord tips. Twin jacks spaced ⅞". Shpg. wt., 2 oz.
41 H 392. NET 45c

Fig. Y. JFD Type 2-449 Continental Adapter. Male-female adapter. Permits using standard flat-prong American plugs in Continental Europe outlets designed for round prongs. Shpg. wt., 2 oz.
49 E 536. NET 29c

REELEX TUBE PILOTS

Phenolic wafers with center metal pilot studs. Fit over miniature tube pins for easy insertion into sockets.

Type 7TP9-16. Box of 15 for 7-pin miniatures. 4 oz.
40 H 282. NET 44c
Type 7TP9-C. Box of 100 for 7-pin miniature tubes. 10 oz.
40 H 283. NET 2.79
Type 9TP9-12. Box of 12 for 9-pin tubes. Wt., 4 oz.
40 H 284. NET ..... 44¢
Type 9TP9-C. Box of 100 for 9-pin tubes. Wt., 10 oz.
40 H 293. NET 2.79

WAFER TYPE SOCKETS

Sturdily constructed, low-cost, wafer-type sockets. For above or below chassis mounting. Laminated bakelite construction. Insulated top. One-piece contacts are full floating and self-aligning. Contacts are tinned to assure easy soldering. Av. shpg. wt., each, 2 oz.

Stock No.	Mtg. Cntrs.	Description	NET EACH	10 or More, EA.
40 H 224	1½"	4 Prong	5¢	4½¢
40 H 225	1½"	5 Prong	6½¢	6¢
40 H 226	1½"	6 Prong	7¢	6½¢
40 H 229	1½"	7 Prong, large	9¢	8¢
40 H 227	1½"	7 Prong, small	7½¢	6½¢
40 H 228	1½"	8 Prong	6¢	5½¢
40 H 230	1½"	Loktal	11¢	10¢
58 H 004	1"	7 Prong, sub-panel, min. tubes	5¢	4½¢

AMPHENOL TYPE "CP" PLUGS

Molded bakelite plugs. Nickel-plated prongs. For use as chassis connectors. Use plate below for replacement mounting in present equipment. With mounting ring for 1¹¹⁄₁₆" holes except *1.328" keyed hole. 9 and 11-prong plugs are octal style. Wt., 2 oz.

No.	Type	Prongs	NET	No.	Type	Prongs	NET
40 H 015	86-CP4	4	11¢	40 H 019	86-CP7S	7-Small	12¢
40 H 016	86-CP5	5	11¢	40 H 020	86-CP8	Octal	11¢
40 H 017	86-CP6	6	11¢	40 H 021	86-CP9	9	12¢
40 H 018	86-CP7L*	7-Large	14¢	40 H 022	86-CP11	11	13¢

Adaptor Plate. Nickel-plated steel. 1½" to 1⅞" ctrs.
40 H 023. NET 2c

RAY-PAR ANTI-CORONA SOCKETS

An 8-prong octal socket for mounting type 1B3 high-voltage rectifier tube. Features shield ring under socket which minimizes corona effects to provide higher efficiency and greater stability in horizontal deflection circuits. Made of laminated bakelite. Designed to mount on high-voltage filter condenser with screw-top terminal, or can be mounted directly on chassis. Shpg. wt., 3 oz.
40 H 446. NET 34c

9-Pin Anti-Corona Socket. Same as above but for Types 1AX2, 1X2A, etc., high voltage rectifier tubes.
40 H 447. NET 34c

AMPHENOL TUNING INDICATORS

Type MEA-6. Sensitive tuning eye indicator. For use in custom-built AM or FM chassis and tuners, test instruments, etc. For use with 6-prong tuning eye indicator tubes. Easily installed in any receiver which has AVC. Less tube. With hood escutcheon. Wt., 6 oz.
45 H 855. NET 1.12

Type MEA-8. As above, but for octal-type magic eye tubes. Less tube. Shpg. wt., 6 oz.
45 H 856. NET 1.53

For Complete Product and Manufacturers Index, See Pages 317-320

Amphenol Sockets, Plugs

POPULAR STANDARD SOCKETS

MIP. Bakelite body with molded-in steel plate. 1½" mtg. cntrs. *Requires 1⅛" hole. †Requires 1 9/32" hole. All others mount in 1 5/32" hole. §Mica filled bakelite socket. 2 oz.

Stock No.	Mfr's Type	Prongs	EACH
40 H 024	77MIP4	4	8¢
40 H 025	77MIP5	5	9¢
40 H 026	77MIP6	6	11¢
40 H 027	77MIP7S	7S	11¢
40 H 029	†77MIP7L	7L	12¢
40 H 028	77MIP8	Octal	9¢
40 H 126	*88-8	Octal	9¢
40 H 030	*88-8X	Loktal	15¢
40 H 034	§77MIP8T	8	11¢
40 H 032	77MIP9	9	11¢
40 H 033	77MIP11	11	13¢

S. High dielectric molded bakelite body. All mount in 1 11/64" hole except 40 H 059, which requires 1 21/64". With retainer ring. 2 oz.

Stock No.	Mfr's Type	Prongs	EACH
40 H 054	78S4	4	8¢
40 H 055	78S5	5	9¢
40 H 056	78S6	6	10¢
40 H 057	78S7S	7 Small	11¢
40 H 059	78S7L	7 Large	14¢
40 H 058	78S8	Octal	10¢
40 H 062	78S9	9	12¢
40 H 060	78S8L	Loktal	12¢

RS. Same as Type S but with removable mounting plate. 40 H 009 mounts in 1 21/64" hole, others in 1 11/64" hole. Mounting plates are nickel-plated steel. Slotted mounting holes to fit centers from 1½ to 1⅞". Av. shpg. wt., 2 oz.

Stock No.	Mfr's Type	Prongs	EACH
40 H 004	78RS4	4	10¢
40 H 005	78RS5	5	11¢
40 H 006	78RS6	6	12¢
40 H 007	78RS7S	7S	13¢
40 H 009	78RS7L	7L	19¢
40 H 008	78RS8	Octal	12¢
40 H 010	78RS8L	Loktal	17¢
40 H 012	78RS9	9	13¢

RSS. Ultra-low loss steatite sockets for high frequency transmitters, and amplifiers. Contacts are separated by raised barriers. Universal type. Removable mounting plate with slotted holes 1½ to 1⅞". Mounting hole, 1¼" except 40 H 079, which requires 1 21/64". Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Prongs	EACH
40 H 074	49RSS4	4	29¢
40 H 075	49RSS5	5	31¢
40 H 076	49RSS6	6	32¢
40 H 077	49RSS7S	7 Small	35¢
40 H 079	49RSS7L	7 Large	35¢
40 H 078	49RSS8	Octal	29¢

SPECIAL OCTAL, AND MAGNAL SOCKETS

Type 59-355. Octal Zip-in. Molded of low-loss "Ethylon-A" insulating material. High "Q" factor. For applications where temperature is below 125° F. May be mounted above or below chassis. Requires 1 3/16" hole. 8-contact. Two 5/32" mounting holes on 1½" centers. Shpg. wt., 2 oz.
40 H 182. NET.....20c

Type 77-MIP8FK. Floating Octal. Live rubber grommets in enlarged mounting holes of sturdy steel plate. Mounts in 1 3/16" hole with two ¼" holes on 1½" centers. With grommets, mtg. screws, nuts and washers. 2 oz.
40 H 043. NET.....22c

Type 168-015. Saddle Type. Below chassis mounting. Black bakelite, octal. Sturdy steel plate is molded directly into black bakelite body—cannot come loose or vibrate. For 1" hole. 9/64" mtg. holes on 1 5/16" ctrs. Shpg. wt., 2 oz.
40 H 118. NET.....8c

Type 49-SS11L. Magnal. Has 1 1/16" pin circle to accept magnal 11-prong cathode-ray tubes. Made of low-loss steatite. Has steel retaining ring for quick assembly. Requires 1⅜" mounting hole. Shpg. wt., 4 oz.
40 H 090. NET.....62c

MINIATURE SOCKETS AND SHIELDS

BAKELITE AND STEATITE SOCKETS

High-grade miniature sockets and shields. 147 series mount in ⅝" chassis hole; ⅞" mtg. ctrs., with ⅛" screw holes. 59 series mount in ¾" chassis hole and have 1⅛" mtg. ctrs., with .095" rivet holes. *Steatite. ‡Black bakelite. †Mica-filled bakelite. Av. shpg. wt., 2 oz.

FIG. A—BOTTOM-MOUNTING TYPE

Stock No.	Type	No. Contacts	NET
40 H 191	‡147-500	7	15¢
40 H 192	*147-501	7	24¢
40 H 199	†147-505	7	15¢
40 H 193	‡ 59-409	9	20¢
40 H 167	† 59-410	9	20¢

FIG. B—TOP-MOUNTING TYPE
Have tube shield base for shields below.

Stock No.	Type	No. Contacts	NET
40 H 194	‡147-905	7	22¢
40 H 195	*147-925	7	26¢
40 H 175	†147-913	7	23¢
40 H 176	† 59-407	9	28¢
40 H 196	‡ 59-406	9	25¢

FIG. C—TUBE SHIELDS FOR 7-CONTACT BASES

Stock No.	Type	Height	NET
40 H 197	5-401	1⅜"	7¢
40 H 198	5-402	1¾"	7¢

FOR 9-CONTACT BASES

Stock No.	Type	Length	NET
40 H 188	5-405	1½"	9¢
40 H 189	5-408	1 15/16"	11¢
40 H 190	5-409	2⅛"	11¢

7 AND 9 PIN SOCKETS

Zip-in type tube sockets. Molded of low-loss "Ethylon-A". Insulating material with high "Q" factor. For applications where temperature is below 125° F. 7-pin sockets require 2 7/32" holes; 9-pin, 1 5/16" holes. Mounting holes, 9/64" diameter on 1 5/16" centers. Av. shpg. wt., 2 oz.

FIG. D—WITHOUT TUBE SHIELD BASE

Stock No.	Type	Pins	NET
40 H 184	59-357	7	15¢
40 H 185	59-359	9	20¢

FIG. E—WITH TUBE SHIELD BASE

Stock No.	Type	Pins	NET
40 H 186	59-367	7	21¢
40 H 187	59-369	9	26¢

Fig. F—RETAINER RING SOCKETS
Mount in ⅝" round or "D" shaped chassis hole with retainer ring provided. May also be used with 91-MPM series plugs (page 151). Av. shpg. wt., 2 oz.

BLACK BAKELITE

Stock No.	Mfr's Type	No. Prongs	NET EACH
40 H 131	78-S3S	3	8¢
40 H 115	78-S4S	4	8¢
40 H 122	78-S5S	5	11¢
40 H 130	78-S6S	6	11¢
40 H 120	78-7P	7	12¢

MICA-FILLED

40 H 124	78-7PT	7	13¢

TELEVISION TUBE SOCKET

Type 59-402. Duodecal socket for cathode-ray tubes with 12 equally spaced pins on circle dia. of 1.063". Bakelite body and removable cap eliminate shock hazard. Shpg. wt., 3 oz.
40 H 100. NET.....68c

TYPE "S" MINIATURE SOCKETS

For modernizing any electronic equipment. Mount in standard 1 11/64" chassis holes by means of retainer ring. High-dielectric molded bakelite. 2 oz. With retainer ring.

40 H 113. 78-A7P. 7 Pin. NET.....21¢
40 H 114. 78-A9P. 9 Pin. NET.....26¢

ACS SOCKET SHELLS

Light-weight aluminum shells for type "RSS", "RS" and "S" type sockets at left and above. Permit extension of sockets 1 3/16" above or below chassis surface. Size, 1 3/16" high x 1 11/16" body dia. Base dia., 2 3/16". 3 mtg. holes take screws up to 9/64" dia. Mts. in 1¾" hole. Less socket.

40 H 127. **Type 23-1S.** For any socket except Types S7L, S7C, RS7L, RS7C and RSS7L. Shpg. wt., 2 oz. NET.....9c

40 H 128. **Type 23-1L.** For S7L, S7C, RS7L, RS7C and RSS7L. Shpg. wt., 2 oz. NET.....9c

INDUSTRIAL SOCKETS

Barrier Types. Meet N.E.M.A. and U.L. requirements. Max. RETMA working voltage, 2,000 DC. Rated 8 amps. each contact. Inter-electrode capacitance, 2.6 mmf. Eight screw-type tie points. Bronze cloverleaf contacts; four full lines of contact. Insulating barriers. Size, 6 3/64 x 1 15/16 x 2 5/8". Mtg. ctrs., 1 11/16". Above or below chassis mtg. Shpg. wt., 5 oz.

Type 146-103. Octal. Socket with screw terminals, less tie inserts. Top mounted.
40 H 180. NET.....97c

Type 146-104. Octal. Complete with screw terminals and four molded-in threaded inserts for tie points. Top mounted.
40 H 181. NET.....1.26

Type 146-111. 7-pin. Miniature Button. Above or below mounting.
40 H 149. NET.....1.38

HIGH VOLTAGE 4-CONTACT SAFETY SOCKET

Type 77A-4T. For hi-voltage small-base TV rectifier tubes. Takes all 4-pin types with 1.156" base diameter such as 2X2A. Socket is set at bottom of deep molded bakelite shell. 5/32" dia. holes, 1⅞" mtg. centers. Requires 1½" dia. hole. 2 oz.
40 H 147. NET.....44c

COIL FORMS

Low-loss polystyrene coil forms. Plug-in type for all RF applications. Excellent for receivers, low-power transmitters, VHF and UHF equipment, etc. Rigidly anchored pins, sturdy construction. *No prongs—6-32 screw mtg. hole in base. Shpg. wt., 2 oz

No.	Type	Description	Size	Net
71 H 723	24-5H	5-Prong Min.	1 3/16 x 1¾"	24¢
71 H 711	24-6H	6-Prong Min.	1 3/16 x 1¾"	24¢
71 H 713	24-4 P	4-Prong Std.	2¼ x 1¼"	24¢
71 H 714	24-5 P	5-Prong Std.	2¼ x 1¼"	24¢
71 H 724	24-6 P	6-Prong Std.	2¼ x 1¼"	24¢
71 H 712	24	Coil Form only*	1 3/16 x ¾"	9¢

TYPE 71 PLUGS

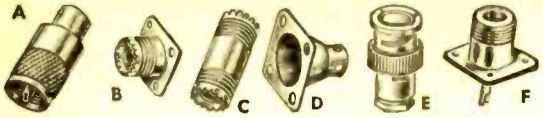
Compact, high dielectric plugs. Ideal for all plug-in connections where space is limited. With molded finger grip. Plated brass prongs are deeply recessed to prevent shorts caused by pulled back insulation. Fit miniature sockets at left. Average shpg. wt., 2 oz.

No.	Type	Prongs	NET
40 H 177	71-3S	3	7¢
40 H 169	71-4S	4	8¢
41 H 149	71-5S	5	9¢
40 H 179	71-6S	6	10¢

ALLIED Can Supply All the Above Items in Quantity Lots—Write for Prices

Amphenol Connectors

RF CABLE CONNECTORS



TYPE "83" COAXIAL CABLE CONNECTORS

Coaxial type low-loss connectors and adapters for use with all RG type cables. Meet rigid government specifications. Rugged construction. Die cast zinc and machined brass shells are silver plated. *Polystyrene insulation. †Low-loss mica-filled insert. ‡For twin coax. RG-22/U and RG-22A/U cable. *Any Amphenol RF connectors not listed are available on special order.* Av. shpg. wt., 3 oz.

UHF SMALL SINGLE CONTACT

Stock No.	Military No.	Type	Fig.	For RG/U Cables	NET
40H 357	UG-106/U, M-360	83-1H	D	8,9,10,11,12,13,63	.29
40H 360	UG-175/U	83-185	.....	Reducing Adapter, 29, 55	.18
40H 359	UG-176/U	83-168	.....	Reducing Adapter, 59, 62	.18
40H 351	UG-177/U	83-765	D	29, 55, 58A/U	.29
40H 373	UG 203/U, 49482	83-776	A	29, 55, 58A, 59, 62, 63, 71	.88
40H 356	UG-365/U, PL-274	83-1F*	.....	Feed-thru connector	1.77
40H 353	UG 646/U, M-359	83-1AP*	.....	Right Angle Plug Adapter	1.65
40H 354	M-358, 49199	83-1T*	.....	"T" Adapter	1.88
40H 355	PL-258, 49191	83-1J*	C	Straight Adapter	1.00
40H 350	PL-259, 49190	83-1SP†	A	8,9,10,11,12,13	.76
40H 372	PL-259A, 49195	83-1SPN	A	8, 9, 10, 11, 12, 13, 63, 65	.88
40H 352	SO-239, 49194	83-1R†	B	Receptacle, chassis type	.71
40H 358	.....	83-1AC	.....	Cap and chain	.53

UHF SMALL TWIN CONTACT

Stock No.	Military No.	Type	Fig.	Description	NET
40H 361	UG-102/U, PL-284	83-22SP‡	A	Straight plug, 22/U	1.00
40H 362	UG-103/U, SO-264	83-22R‡	B	Chassis receptacle	1.12
40H 374	UG-104/U, PL-293	83-22AP‡	.....	Right-angle adapter	1.88

Fig. E—BNC TYPE CONNECTORS

Small, lightweight, weatherproofed connectors. Low voltage, single contact types for use with 50 ohm RG-55/U and RG-58/U cables except *for use with 70 ohm RG-59/U, RG-62/U and RG-71/U. 3 oz.

Stock No.	Military No.	Mfr's Type	Description	NET EACH
40H 391	UG-88/U	31-002	Plug	1.29
40H 393	UG-89/U	31-005	Jack	1.29
40H 396	UG-260/U	31-012*	Plug	1.35
40H 397	UG-261/U	31-015*	Jack	1.59
40H 395	UG-262/U	31-011*	Panel Jack	1.41
40H 392	UG-290/U	31-003	Receptacle	1.29
40H 399	UG-291/U	31-001	Panel Jack	1.41
40H 394	UG-306/U	31-009	Right Angle Adapter	2.47
40H 398	UG-657/U	31-102	Receptacle	1.71

TYPE N AND HN CONNECTORS

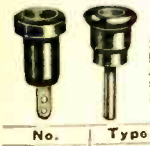
Fig. F—TYPE N

Low-voltage, constant-impedance connectors for microwave applications. Weatherproofed. Designed for medium size 50 ohm cables except *70 ohm impedance. All have Teflon insulator. Av. shpg. wt., 3 oz.

40H 313	UG-21B/U	82-61	Plug, 8, 9, 10/U	2.06
40H 314	UG-22B/U	82-62	Panel Jack, 8, 9, 10/U	2.06
40H 315	UG-23B/U	82-63	Jack, 8, 9, 10/U	1.59
40H 312	UG-58/U	82-24*	Receptacle	1.35
40H 316	UG-94A/U	82-84*	Plug, 11, 12, 13/U	2.53

Not illustrated. **TYPE HN**

40H 375	UG-59A/U	82-38	Plug, 8, 9, 10/U	2.59
40H 317	UG-59B/U	82-804	Plug, 8, 9, 10/U	3.18
40H 318	UG-560/U	82-805	Receptacle	2.65



SOCKETS AND PLUGS

Single-contact sockets and plugs. Molded bakelite bodies. Sockets mount in 3/8" hole. Supplied with Amphenol 2-11 retainer ring. Contacts recessed 1/8" to prevent shorts. *In package of one type only. Shpg. wt., 2 oz. 4 per package.

No.	Type	Description	PER PKG.*
41 H 147	71-1L	Plug. Red. For 5/32" socket.	12c
41 H 148	71-1L	Plug. Black. Same as above.	
41 H 145	71-1M	Plug. Red. For 1/8" socket.	
41 H 146	71-1M	Plug. Black. Same as above.	
41 H 194	71-1S	Plug. Red. For 3/32" socket.	
41 H 195	71-1S	Plug. Black. Same as above.	
41 H 189	78-1L	Socket. Red. For 5/32" plug.	21c
41 H 197	78-1L	Socket. Black. Same as above.	
41 H 196	78-1M	Socket. Red. For 1/8" plug.	
41 H 188	78-1M	Socket. Black. Same as above.	
41 H 190	78-1P	Socket. Red. Std. .080" phone tip.	
41 H 191	78-1P	Socket. Black. Same as above.	
41 H 192	78-1S	Socket. Red. For 3/32" plug.	
41 H 193	78-1S	Socket. Black. Same as above.	

PRINTED CIRCUIT CONNECTORS

New connectors for use in printed circuit networks. Printed circuit board acts as male part of connector. For computers, telephone equipment, military gear, etc. Blue dielectric; gold-plated contacts. Accept .061" to .071" printed circuit boards. Av. shpg. wt., 2 oz.

40 H 500. Type 143-015-01. 15 contacts. NET 1.82
40 H 501. Type 143-018-01. 18 contacts. NET 1.96
40 H 502. Type 143-022-01. 22 contacts. NET 2.17

AC PLUGS AND RECEPTACLES

U. L. Approved. All items rated at 15 amps, 110 v., or 10 amps. 250 v. High-dielectric black bakelite Fig. G mounts with retainer ring. Requires 1 1/8" hole. Fig. H has mtg. plate. Requires 1 1/8" hole, mtg. centers, slotted 1 1/2" to 1 7/8". Fig. J is recessed type. Requires 1 3/8" hole, mtg. centers, 1 3/4". Fig. K is shielded type with clamp. *For standard or polarized plugs. Average shpg. wt., 3 oz.

RETAINER RING TYPE

Stock No.	Mfrs. Type	Fig.	Description	NET EACH
40 H 675	61-M	G	2-Pole Male Standard	20¢
40 H 676	61-MP	G	2-Pole Male Polarized	20¢
40 H 081	60-M	G	3-Pole Male Polarized	25¢
40 H 677	61-F	G	2-Pole Female Universal*	19¢
40 H 082	60-F	G	3-Pole Female Polarized	22¢

WITH SEPARATE MOUNTING PLATE

40 H 680	61-M1	H	2-Pole Male Standard	22¢
40 H 681	61-MP1	H	2-Pole Male Polarized	22¢
40 H 083	60-M1	H	3-Pole Male Polarized	28¢
40 H 682	61-F1	H	2-Pole Female Universal*	22¢
40 H 084	60-F1	H	3-Pole Female Polarized	25¢

WITH BELOW-SURFACE SHELL

40 H 685	61M10	J	2-Pole Male Standard	28¢
40 H 686	61MP10	J	2-Pole Male Polarized	28¢
40 H 687	61F10	J	2-Pole Female Universal*	27¢

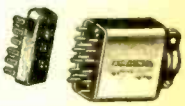
SHIELDED CABLE TYPE

40 H 690	61M11	K	2-Pole Male Standard	33¢
40 H 691	61MP11	K	2-Pole Male Polarized	33¢
40 H 692	61F11	K	2-Pole Female Universal*	31¢
40 H 693	60M11	K	3-Pole Male Polarized	38¢

Type 61-M1P-61F. Female receptacle. Like Fig. H above, but has molded-in plate. 1 1/2" mtg. centers. Takes all 2-pole plugs.
40 H 085. NET 19c

Type 61-61. Shell only. Converts all Fig. G. male or female plugs or receptacles to Fig. J. Shpg. wt., 2 oz.
40 H 086. NET 8c

MULTI-CONTACT PLUGS AND SOCKETS



Versatile, shielded connectors with 11, 15 and 20 contacts. Two types—cable and chassis. May be combined for "pull-out" rack mounting, inter-connecting several units, and extending conductors. Mica-filled phenolic plastic. Contacts are silver plated with .00002" hard gold shell. Rated at 900 v., 60 cycles, AC. *Insert only; all others with can. Cable type, 4 oz., chassis type, 2 oz.

Stock No.	Mfr's Type	Total Contacts	Contacts No. 16	Contacts No. 20	Description	NET EACH
40 H 530	26-804*	11	2	9	Chassis plug	1.04
40 H 531	26-805*	11	2	9	Chassis socket	.82
40 H 532	26-809	11	2	9	Cable plug	1.65
40 H 533	26-808	11	2	9	Cable socket	1.41
40 H 534	26-151*	15	3	12	Chassis plug	1.26
40 H 535	26-150*	15	3	12	Chassis socket	.86
40 H 536	26-152	15	3	12	Cable plug	1.91
40 H 537	26-153	15	3	12	Cable socket	1.52
40 H 538	26-806*	20	4	16	Chassis plug	1.79
40 H 539	26-807*	20	4	16	Chassis socket	1.47
40 H 540	26-811	20	4	16	Cable plug	2.56
40 H 541	26-810	20	4	16	Cable socket	2.23

MULTI-WIRE CONNECTORS

Consists of Amphenol "S" type socket and "CP" plug. Take cables up to 7/16" O.D. For chassis-mounting sockets, see page 150. Size, 1 1/16 x 1 1/32". Av. shpg. wt., 2 oz.

Contacts	MALE Stock No.	MALE Type	MALE EACH	FEMALE Stock No.	FEMALE Type	FEMALE EACH
4	40 H 504	86-PM4	20¢	40 H 524	78-PF4	18¢
5	40 H 505	86-PM5	20¢	40 H 525	78-PF5	19¢
6	40 H 506	86-PM6	21¢	40 H 526	78-PF6	20¢
7S	40 H 507	86-PM7S	21¢	40 H 527	78-PF7S	21¢
8 octal	40 H 508	86-PM8	20¢	40 H 528	78-PF8	20¢
9	40 H 512	86-PM9	21¢	40 H 516	78-PF9	22¢
11	40 H 513	86-PM11	22¢	40 H 517	78-PF11	23¢

AMPHENOL CABLE CLAMP, TYPE 79-CC4. For use with above connectors. Relieves strain on soldered connections. Shpg. wt., 5 oz.
40 H 670. NET 5c

MINIATURE CABLE CONNECTORS

Last letter in Type No. indicates long (1 3/16"), or short (1 1/16"). Last fig. in Type No. denotes contacts. PCG—chassis type. 1 1/16" O.D. Figs. L and N are female types; Fig. M. male. 2 oz.

No.	Type	Fig.	NET	No.	Type	Fig.	NET
40 H 320	91-MPF3L	L	27¢	40 H 574	91-MPM4S	M	23¢
40 H 571	91-MPF3S	L	27¢	40 H 570	91-MPM5L	M	26¢
40 H 321	91-MPF4L	L	29¢	40 H 328	91-MPM6L	M	27¢
40 H 572	91-MPF4S	L	27¢	40 H 330	78-PCG3	N	16¢
40 H 325	91-MPM3L	M	24¢	40 H 331	78-PCG4	N	16¢
40 H 573	91-MPM3S	M	23¢	40 H 332	78-PCG5	N	19¢
40 H 326	91-MPM4L	M	24¢	40 H 333	78-PCG6	N	19¢

Amphenol AN Connectors


AN 3100A


AN 3101A


AN 3102A


AN 3106A


AN 3106B


AN 3108A


AN 3108B

MEET ARMY-NAVY SPECIFICATIONS

These Amphenol "AN" connectors meet Army-Navy specs for use in power, signal and control circuits in aircraft and electronic equipment. Compact, dependable, and simple in design to assure the best possible performance under a wide variety of the most demanding operating conditions. **Explanation of type nos.:** E.g. Type 3102A-20-7P. The letter "A" after the first 4 digits indicates solid shell construction (the letter "B" would indicate split back shell). -20- indicates shell size in 16th's of an inch; -20- equals 20/16" or 1¼". The suffix "P" indicates male contacts (the suffix "S" would indicate female contacts). Av. shpg. wt., 6 oz. *Write for quantity prices.*

Size 8S

Stock No.	"AN" Type	Contacts	NET
39H700	3102A-8S-1P	1	.50
39H701	3106A-8S-1P	1	.40
39H702	3108A-8S-1P	1	.53
39H703	3102A-8S-1S	1	.25

Size 10S

Stock No.	"AN" Type	Contacts	NET
39H704	3102A-10S-2P	1	.42
39H705	3102A-10S-2S	1	.42
39H706	3106A-10S-2S	1	.60
39H707	3108B-10S-2S	1	.87

Size 10SL

Stock No.	"AN" Type	Contacts	NET
39H708	3106A-10SL-4S	2	.70
39H709	3100A-10SL-3P	3	.80
39H710	3101A-10SL-3P	3	.68
39H711	3102A-10SL-3P	3	.52
39H712	3106A-10SL-3S	3	.75
39H713	3102A-10SL-4P	2	.45
39H714	3108A-10SL-4S	2	1.20
39H715	3108B-10SL-4S	2	.95

Size 12SL

Stock No.	"AN" Type	Contacts	NET
39H716	3106A-12SL-844S	4	1.22

Size 12S

Stock No.	"AN" Type	Contacts	NET
39H717	3102A-12S-3P	2	.42
39H718	3106A-12S-3P	2	.70
39H719	3108A-12S-3P	2	1.18
39H720	3100A-12S-3S	2	.65
39H721	3102A-12S-3S	2	.45
39H722	3106A-12S-3S	2	.73
39H723	3108A-12S-3S	2	1.22
39H724	3108B-12S-3S	2	.97
39H725	3102A-12S-4P	1	.43
39H726	3106A-12S-4S	1	.73
39H727	3108B-12S-4S	1	.97

Size 14

Stock No.	"AN" Type	Contacts	NET
39H728	3102A-14-3P	1	.67

Size 14S

Stock No.	"AN" Type	Contacts	NET
39H729	3102A-14S-1P	3	.57
39H730	3106A-14S-1P	3	.87
39H731	3102A-14S-1S	3	.60
39H732	3106A-14S-1S	3	.90
39H733	3108A-14S-1S	3	1.42
39H734	3108B-14S-1S	3	.87
39H735	3102A-14S-2P	4	.57
39H736	3106A-14S-2P	4	.87
39H737	3106B-14S-2P	4	1.17
39H738	3108A-14S-2P	4	1.38
39H739	3100A-14S-2S	4	.87
39H740	3101A-14S-2S	4	.90
39H741	3102A-14S-2S	4	.65
39H742	3106A-14S-2S	4	.95
39H743	3106B-14S-2S	4	1.25
39H744	3108A-14S-2S	4	1.47
39H745	3108B-14S-2S	4	.92
39H746	3102A-14S-4S	4	.50
39H747	3101A-14S-5P	5	.92
39H748	3102A-14S-5P	5	.67
39H749	3106A-14S-5P	5	.97
39H750	3100A-14S-5S	5	.92
39H751	3102A-14S-5S	5	.70
39H752	3106A-14S-5S	5	1.00
39H753	3106B-14S-5S	5	1.30
39H754	3108A-14S-5S	5	1.52
39H755	3108B-14S-5S	5	.97
39H756	3102A-14S-6P	6	.77

Size 14S

Stock No.	"AN" Type	Contacts	NET
39H757	3106A-14S-6S	6	1.07
39H758	3108B-14S-6S	6	1.04
39H759	3102A-14S-7P	3	.57
39H760	3106A-14S-7P	3	.87
39H761	3101A-14S-7S	3	.85
39H762	3102A-14S-7S	3	.60
39H763	3106A-14S-7S	3	.90
39H764	3108A-14S-7S	3	1.42
39H765	3108B-14S-7S	3	.87
39H766	3101A-14S-9P	2	.77
39H767	3102A-14S-9P	2	.52
39H768	3106A-14S-9P	2	.81
39H769	3102A-14S-9S	2	.55
39H770	3106A-14S-9S	2	.85
39H771	3108B-14S-9S	2	.81

Size 16

Stock No.	"AN" Type	Contacts	NET
39H772	3106A-16-10P	3	1.10
39H773	3101A-16-11P	2	.93
39H774	3102A-16-11P	2	.57
39H775	3106A-16-11S	2	.99
39H776	3106A-16-12P	1	1.33

Size 16S

Stock No.	"AN" Type	Contacts	NET
39H777	3101A-16S-1P	7	1.02
39H778	3102A-16S-1P	7	.72
39H779	3106A-16S-1P	7	1.05
39H780	3108B-16S-1P	7	1.35
39H781	3100A-16S-1S	7	.93
39H782	3102A-16S-1S	7	.70
39H783	3106A-16S-1S	7	1.04
39H784	3106B-16S-1S	7	1.40
39H785	3108B-16S-1S	7	1.33
39H786	3102A-16S-5P	3	.54
39H787	3106A-16S-5S	3	.98
39H788	3106A-16S-6P	3	.93
39H789	3102A-16S-8P	5	.65
39H790	3102A-16S-8S	5	.68
39H791	3106A-16S-8S	5	1.02

Size 18

Stock No.	"AN" Type	Contacts	NET
39H792	3102A-18-1P	10	1.02
39H793	3106A-18-1P	10	1.44
39H794	3108B-18-1P	10	1.82
39H795	3100A-18-1S	10	1.30
39H796	3102A-18-1S	10	1.08
39H797	3106A-18-1S	10	1.50
39H798	3106B-18-1S	10	1.98
39H799	3108A-18-1S	10	2.42
39H800	3108B-18-1S	10	1.89
39H801	3102A-18-3P	2	.68
39H802	3106A-18-3S	2	1.26
39H803	3102A-18-4P	4	.72
39H804	3106A-18-4P	4	1.13
39H805	3102A-18-4S	4	.81
39H806	3106A-18-4S	4	1.23
39H807	3102A-18-8P	8	.95
39H808	3106A-18-8P	8	1.37
39H809	3102A-18-8S	8	1.10
39H810	3106A-18-8S	8	1.52
39H811	3102A-18-9P	7	.92
39H812	3106A-18-9P	7	1.33
39H813	3100A-18-9S	7	1.26
39H814	3106A-18-9S	7	1.47
39H815	3102A-18-11P	5	.95
39H816	3106A-18-11P	5	1.37
39H817	3106A-18-12P	6	1.25
39H818	3102A-18-12S	6	.95
39H819	3106A-18-12S	6	1.37
39H820	3102A-18-15S	4	2.48
39H821	3102A-18-16S	1	1.02

Size 20

Stock No.	"AN" Type	Contacts	NET
39H822	3102A-20-4P	4	.90
39H823	3106A-20-4S	4	1.58
39H824	3102A-20-7P	8	1.00

Size 20

Stock No.	"AN" Type	Contacts	NET
39H825	3106A-20-7P	8	1.45
39H826	3101A-20-7S	8	1.49
39H827	3102A-20-7S	8	1.10
39H828	3106A-20-7S	8	1.55
39H829	3102A-20-9P	8	1.08
39H830	3106A-20-11P	13	1.67
39H831	3102A-20-11S	13	2.16
39H832	3102A-20-15P	7	1.13
39H833	3106A-20-15P	7	1.58
39H834	3102A-20-15S	7	1.65
39H835	3102A-20-16P	9	.99
39H836	3106A-20-16P	9	1.44
39H837	3102A-20-18P	9	1.12
39H838	3102A-20-18S	9	1.30
39H839	3102A-20-27P	14	1.30
39H840	3106A-20-27P	14	1.75
39H841	3106B-20-27P	14	2.16
39H842	3108B-20-27P	14	2.23
39H843	3100A-20-27S	14	1.58
39H844	3102A-20-27S	14	1.35
39H845	3106A-20-27S	14	1.80
39H846	3106B-20-27S	14	2.22
39H847	3108A-20-27S	14	2.95
39H848	3108B-20-27S	14	2.28
39H849	3102A-20-29P	17	1.47
39H850	3106A-20-29P	17	1.92
39H851	3102A-20-29S	17	1.49
39H852	3106A-20-29S	17	1.94

Size 22

Stock No.	"AN" Type	Contacts	NET
39H853	3102A-22-5P	6	1.00
39H854	3106A-22-5S	6	1.95
39H855	3100A-22-14P	19	1.87
39H856	3102A-22-14P	19	1.57
39H857	3106A-22-14P	19	2.08
39H858	3108B-22-14P	19	2.57
39H859	3100A-22-14S	19	2.05
39H860	3102A-22-14S	19	1.75
39H861	3106A-22-14S	19	2.27
39H862	3106B-22-14S	19	2.84
39H863	3108A-22-14S	19	3.47
39H864	3108B-22-14S	19	2.75
39H865	3106A-22-18P	8	1.70
39H866	3102A-22-18S	8	1.22
39H867	3102A-22-19P	14	1.40
39H868	3102A-22-19S	14	1.45
39H869	3106A-22-19S	14	1.97
39H870	3106A-22-23P	8	2.60
39H871	3102A-22-23S	8	1.87

Size 24

Stock No.	"AN" Type	Contacts	NET
39H872	3106A-24-5P	16	2.15
39H873	3102A-24-5S	16	1.75
39H874	3106A-24-5S	16	2.43
39H875	3108B-24-5S	16	2.77
39H876	3106A-24-7P	16	2.15
39H877	3100A-24-7S	16	1.97
39H878	3106A-24-7S	16	2.40
39H879	3108B-24-7S	16	2.73
39H880	3106A-24-9P	2	2.25
39H881	3102A-24-9S	2	1.73
39H882	3106A-24-12P	5	2.37
39H883	3106A-24-20P	11	1.95
39H884	3102A-24-20S	11	1.38
39H885	3101A-24-28P	24	2.03
39H886	3102A-24-28P	24	1.58
39H887	3106A-24-28P	24	2.27
39H888	3100A-24-28S	24	2.32
39H889	3102A-24-28S	24	2.07
39H890	3106A-24-28S	24	2.75
39H891	3106B-24-28S	24	3.06

Size 28

Stock No.	"AN" Type	Contacts	NET
39H892	3102A-28-11P	22	2.05
39H893	3106A-28-11P	22	2.84
39H894	3102A-28-11S	22	2.32
39H895	3106A-28-11S	22	3.10
39H896	3106B-28-11S	22	3.40
39H897	3102A-28-12P	26	1.89
39H898	3106A-28-12P	26	2.67
39H899	3100A-28-12S	26	2.84

Size 28

Stock No.	"AN" Type	Contacts	NET
39H900	3102A-28-12S	26	2.39
39H901	3106A-28-12S	26	3.17
39H902	3106B-28-12S	26	3.47
39H903	3102A-28-15P	35	2.63
39H904	3106A-28-15P	35	3.42
39H905	3102A-28-15S	35	2.80
39H906	3106A-28-15S	35	3.58
39H907	3102A-28-16P	20	1.77
39H908	3106A-28-16S	20	2.79
39H909	3106A-28-20P	14	2.53
39H910	3106A-28-20S	14	2.95
39H911	3102A-28-21P	37	2.72
39H912	3106A-28-21P	37	3.50
39H913	3102A-28-21S	37	2.88
39H914	3106A-28-21S	37	3.67

Size 32

Stock No.	"AN" Type	Contacts	NET
39H915	3106A-32-7P	35	4.02
39H916	3106B-32-7P	35	3.93
39H917	3102A-32-7S	35	3.43
39H918	3106A-32-7S	35	4.59
39H919	3102A-32-13P	23	2.87
39H920	3102A-32-13S	23	2.87

Size 36

Stock No.	"AN" Type	Contacts	NET
39H921	3106B-36-5P	4	4.57
39H922	3102A-36-5S	4	4.30

DUST CAPS

Provide protection against live circuits and from dirt and dust when connector is not in use. With internal threads for use on all receptacles listed. Have soft rubber gasket and flexible beaded chain.

Stock No.	Mfr. Type	Fits Shell	NET
39H923	9760-8	8S	.42
39H924	9760-10	10S, 10SL	.43
39H925	9760-12	12, 12S	.47
39H926	9760-14	12SL, 14, 14S	.55
39H927	9760-16	16, 16S	.67
39H928	9760-18	18	.70
39H929	9760-20	20	.73
39H930	9760-22	22	.77
39H931	9760-24	24	.80

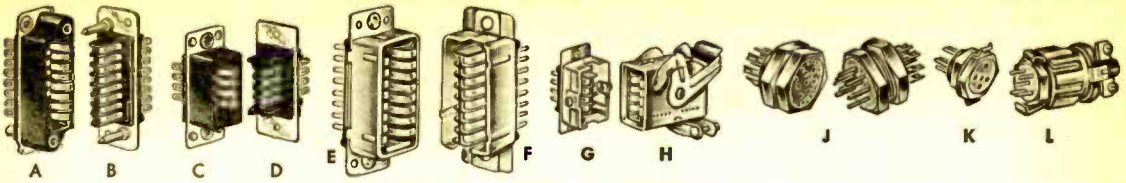
CABLE CLAMPS

Sturdy cable clamps to support wire or cable at the plug or receptacle and prevent twisting or pulling at the soldered connections. Die-cast aluminum for strength and light weight. Screws and washers plated to prevent corrosion.

Stock No.	"AN" Type	Fits Shell	NET
39H932	3057-3	8 S, 10S	.34
39H933	3057-4	10SL, 12, 12S	.36
39H934	3057-6	14, 14S	.39
39H935	3057-8	16, 16S	.41
39H936	3057-10	18	.44
39H937	3057-12	20, 22	.47
39H938	3057-16	24, 28	.52
39H939	3057-20	32	.90
39H940	3057-24	36	.95

ALLIED'S Technical Service Department will be glad to advise on special connector problems.

Amphenol Connectors



TYPE 26 BLUE RIBBON CONNECTORS

Amphenol Type 26 Blue Ribbon connectors for heavy duty operation. Provide an excellent solution to multi-circuit connection, switching and re-routing problems. Unique, self-cleaning spring contacts maintain continuity even under conditions of severe vibration. Do not require visual alignment—ideal for use in hidden, hard-to-reach locations. Positive polarization prevents mismating of connectors. Feature low insertion and withdrawal force, but provide exceptionally firm, positive contact. Exclusive spring-tension contacts are heavily silver base plated and gold finished; will not tarnish or corrode. Plug contacts are supported their full length on the dielectric. Dielectric configuration makes it impossible to overstress or fatigue contacts and individual protective barrier between each spring member insures proper spacing. Bodies are diallyl phthalate blue dielectric and meet government specifications. Have high insulation resistance and stability. Mounting plates are made of corrosion-resistant stainless steel and are molded into the body. 4301 Series has end cable outlet; 4501 Series has side cable outlet. S in type No. indicates socket contacts; P indicates plug contacts. For wire size up to No. 16. Rated, 5 amperes % 600 v., DC. Av. shpg. wt., 5 oz.

Figs. A and B—PIN POLARIZATION TYPES

MALE				FEMALE		
Contacts	Stock No.	Mfr's. Type	EACH	Stock No.	Mfr's. Type	EACH
16	40 H 544	26-159-16	1.76	40 H 545	26-190-16	2.20
24	40 H 546	26-159-24	2.14	40 H 547	26-190-24	2.67
32	40 H 548	26-159-32	2.51	40 H 549	26-190-32	3.14

Figs. C and D—BARRIER POLARIZATION TYPES

MALE				FEMALE		
Contacts	Stock No.	Mfr's. Type	EACH	Stock No.	Mfr's. Type	EACH
8	40 H 542	26-182	.80	40 H 543	26-183	1.48
8	40 H 660	26-4100-8P	1.28	40 H 664	26-4200-8S	1.59
16	40 H 661	26-4100-16P	2.11	40 H 665	26-4200-16S	2.59
24	40 H 662	26-4100-24P	2.53	40 H 666	26-4200-24S	2.83
32	40 H 663	26-4100-32P	3.05	40 H 667	26-4200-32S	3.93

Figs. E and F—BARRIER POLARIZED CONNECTORS WITH KEYED SHELLS

MALE				FEMALE		
Contacts	Stock No.	Mfr's. Type	EACH	Stock No.	Mfr's. Type	EACH
8	40 H 650	26-4101-8P	1.50	40 H 671	26-4201-8S	2.14
16	40 H 651	26-4101-16P	2.44	40 H 672	26-4201-16S	3.24
24	40 H 652	26-4101-24P	2.85	40 H 673	26-4201-24S	3.60
32	40 H 653	26-4101-32P	3.23	40 H 674	26-4201-32S	4.79

Figs. G and H—BARRIER POLARIZED CONNECTORS WITH KEYED LATCH SHELLS

PLUGS (H)				MATING RECEPTACLES(G)		
Contacts	Stock No.	Mfr's. Type	EACH	Stock No.	Mfr's. Type	EACH
8	40 H 610	26-4301-8S	5.40	40 H 618	26-4401-8P	2.60
8	40 H 614	26-4501-8P	5.10	40 H 619	26-4401-8S	2.90
16	40 H 611	26-4301-16S	6.95	40 H 620	26-4401-16P	3.53
16	40 H 615	26-4501-16P	6.43	40 H 621	26-4401-16S	4.01
24	40 H 612	26-4301-24S	7.73	40 H 622	26-4401-24P	3.94
24	40 H 616	26-4501-24P	7.43	40 H 623	26-4401-24S	4.36
32	40 H 613	26-4301-32S	9.37	40 H 630	26-4401-32P	4.46
32	40 H 617	26-4501-32P	8.50	40 H 631	26-4401-32S	5.66

MINIATURE RACK PANEL & CABLE CONNECTORS

Miniature type. Rated 7½ amps., 500 v. *Fig. J. with hex nuts for panel mtg. †Fig. K, for use with hood and clamp type. §Fig. L, hood and cable clamp type. All 3 types interchangeable. Av. shpg. wt., 5 oz.

MALE CONNECTORS										
Contacts	Stock No.	Mfr's. Type*	EACH	Stock No.	Mfr's. Type†	EACH	Stock No.	Mfr's. Type§	EACH
5	40 H 632	26-010	.76	40 H 638	26-216	.82	40 H 644	26-217	1.38
7	40 H 634	26-191	1.14	40 H 640	26-197	.98	40 H 646	26-195	1.52
9	40 H 636	26-012	.98	40 H 642	26-219	1.04	40 H 648	26-220	1.59
FEMALE CONNECTORS									
5	40 H 633	26-011	1.20	40 H 639	26-218	1.26	40 H 645	26-223	1.79
7	40 H 635	26-192	1.71	40 H 641	26-198	1.73	40 H 647	26-196	2.29
9	40 H 637	26-013	2.07	40 H 643	26-221	2.12	40 H 649	26-222	2.65

SERIES 165 AN-TYPE CONNECTORS

The Amphenol Series 165 electrical connectors feature compact design and complete dependability. Two sizes are available—a small size with 5, 9 or 12 contacts and a large size with 11, 14 or 24 contacts. All connectors are available with either male or female inserts installed in plug or receptacle. Connectors remain waterproof whether mated or apart. Bronze contacts are gold plated over a silver base and shells are made of aluminum. Small receptacles mount in 1 3/16" hole and are secured through 4, .125" equally spaced holes on the flange. Flange is only 1 1/16" square. Large receptacles mount in 1 1/16" hole and are secured through 4, .125" equally spaced holes on a 1 5/16" square flange. Plugs are approximately 2 1/16" long. Small sized plug is 5/64" diameter and large sized plug is 19/64" diameter. All Series 165 AN-type connectors are rated at 500 v. rms except *600 v. rms. All plugs have built-in, strain-relief, cable clamps. Average shpg. wt., 3 oz.

SMALL SHELL—5 No. 20 AWG

Stock No.	Type No.	Contacts and Ampere Rating	Description	NET EACH
40 H 595	165-33	*5 @ 7.5	Male Plug	3.33
40 H 596	165-34	*5 @ 7.5	Female Plug	3.92
40 H 597	165-35	*5 @ 7.5	Male Receptacle	2.25
40 H 598	165-36	*5 @ 7.5	Female Receptacle	2.84

SMALL SHELL—9 No. 20 AWG

40 H 579	165-13	9 @ 7.5	Male Plug	3.53
40 H 580	165-14	9 @ 7.5	Female Plug	4.34
40 H 581	165-15	9 @ 7.5	Male Receptacle	2.45
40 H 582	165-16	9 @ 7.5	Female Receptacle	3.29

SMALL SHELL—12 No. 20 AWG

40 H 575	165-9	12 @ 7.5	Male Plug	3.98
40 H 576	165-10	12 @ 7.5	Female Plug	4.75
40 H 577	165-11	12 @ 7.5	Male Receptacle	2.61
40 H 578	165-12	12 @ 7.5	Female Receptacle	3.69

LARGE SHELL—4 No. 16 & 7 No. 20 AWG

Stock No.	Type No.	Contacts and Ampere Rating	Description	NET EACH
40 H 583	165-17	4 @ 17; 7 @ 7.5	Male Plug	5.00
40 H 584	165-18	4 @ 17; 7 @ 7.5	Female Plug	5.99
40 H 585	165-19	4 @ 17; 7 @ 7.5	Male Receptacle	3.24
40 H 586	165-20	4 @ 17; 7 @ 7.5	Female Receptacle	4.28

LARGE SHELL—14 No. 16 AWG

40 H 591	165-29	14 @ 17	Male Plug	5.11
40 H 592	165-30	14 @ 17	Female Plug	6.39
40 H 593	165-31	14 @ 17	Male Receptacle	3.40
40 H 594	165-32	14 @ 17	Female Receptacle	4.77

LARGE SHELL—24 No. 20 AWG

40 H 587	165-25	24 @ 7.5	Male Plug	5.74
40 H 588	165-26	24 @ 7.5	Female Plug	7.61
40 H 589	165-27	24 @ 7.5	Male Receptacle	4.01
40 H 590	165-28	24 @ 7.5	Female Receptacle	5.94

Quantity Prices: Special quantity prices are available to manufacturers on all Amphenol connectors, cables, sockets and other industrial components. Write to ALLIED giving the quantities needed. You'll receive a prompt quotation.

Complete Amphenol Line: ALLIED can promptly supply all Amphenol components. Order items not listed by giving manufacturer's Type Number or write for literature and prices. ALLIED'S complete stock assures fast service.

POMONA SOCKET SAVER

Protects tube tester sockets from wear caused by repeated tube insertions and does away with time consuming socket replacement. Prevents original socket from developing loose, worn contacts which cause innaccurate test readings. No wiring is necessary—the socket saver easily plugs into the original socket. An excellent tube tester accessory, available for 7, 8 and 9 pin sockets. Av. shpg. wt., 3 oz.

40 H 668. SS-7. For 7-pin miniature sockets.
40 H 669. SS-8. For 8-pin octal sockets.
40 H 678. SS-9. For 9-pin miniature sockets.
NET EACH 1.91

TV COAX CABLE CONNECTORS

Low-cost solderless coaxial cable connectors for use with RG-59/U and other ¼" diameter cable. Low-loss insulation. Silver-plated for high conductivity. Av. shpg. wt., 2 oz.

Fig. M. Male Connector. Fits units below.
40 H 300. NET 48c

Fig. N. Female Receptacle. ⅝" threaded stem. Chassis type.
40 H 301. NET 48c

Fig. P. Cable Junction. Feed-through. Both ends fit 40 H 300.
40 H 302. NET 60c

Cinch—Jones Connectors

FANNING STRIPS

Newest improvement in terminal wiring. Fanning strips and barrier-type terminal connectors, when used together, insure correct, positive, firm connections. Ideal for cable or harness wiring. These units simplify assembly—connections can be made through the fanning strip at any convenient point away from the barrier strip, and then slipped into the assembly. Soldering can be accomplished without unnecessary complications. Also assure correct connection when unit is being reconnected after servicing. Last letter of type no. indicates right or left mounting hole position. Fanning strips are laminated bakelite; barrier strips are molded bakelite. Terminals are .032" thick brass, cadmium-plated. Mounting holes at ends. Av. shpg. wt., 3 oz.

160L SERIES FANNING STRIPS

The following Fanning Strips fit 140 series barrier terminals at right. Terminals are mounted on 9/32" bakelite, 1/2" wide and on 3/8" centers.

No.	Type	Term.	NET	No.	Type	Term.	NET
41 H 808	2-160L	2	8¢	41 H 814	6-160L	6	23¢
41 H 809	3-160L	3	12¢	41 H 817	8-160L	8	30¢
41 H 812	4-160L	4	15¢	41 H 818	10-160L	10	37¢
41 H 813	5-160L	5	19¢	41 H 819	12-160L	12	45¢

160R SERIES FANNING STRIPS

The following Fanning Strips fit the 140 series barrier terminals.

40 H 956	2-160R	2	8¢	40 H 960	6-160R	6	23¢
40 H 957	3-160R	3	12¢	40 H 961	8-160R	8	30¢
40 H 958	4-160R	4	15¢	40 H 962	10-160R	10	37¢
40 H 959	5-160R	5	19¢	40 H 963	12-160R	12	45¢

161L SERIES FANNING STRIPS

The following Fanning Strips fit the 141 series barrier terminals at right. Terminals are mounted on 9/32" bakelite, 5/8" wide and on 7/16" centers.

41 H 822	2-161L	2	8¢	41 H 828	6-161L	6	24¢
41 H 823	3-161L	3	13¢	41 H 829	8-161L	8	30¢
41 H 824	4-161L	4	16¢	41 H 832	10-161L	10	38¢
41 H 827	5-161L	5	20¢	41 H 833	12-161L	12	45¢

161R SERIES FANNING STRIPS

The following Fanning Strips fit the 141 series barrier strips at right. Terminals mounted on 9/32" bakelite, 5/8" wide and on 7/16" centers.

40 H 964	2-161R	2	8¢	40 H 968	6-161R	6	24¢
40 H 965	3-161R	3	13¢	40 H 969	8-161R	8	30¢
40 H 966	4-161R	4	16¢	40 H 970	10-161R	10	38¢
40 H 967	5-161R	5	20¢	40 H 971	12-161R	12	45¢

162L SERIES FANNING STRIPS

The following Fanning Strips fit the 142 series barrier terminals at right. Terminals are mounted on 9/32" bakelite, 5/8" wide and on 9/16" centers.

41 H 834	2-162L	2	10¢	41 H 846	6-162L	6	25¢
41 H 843	3-162L	3	14¢	41 H 847	8-162L	8	32¢
41 H 844	4-162L	4	17¢	41 H 848	10-162L	10	40¢
41 H 845	5-162L	5	21¢	41 H 849	12-162L	12	47¢

162R SERIES FANNING STRIPS

The following Fanning Strips fit the 142 series barrier strips at right. Terminals are mounted on 9/32" bakelite, 5/8" wide and on 9/16" centers.

40 H 972	2-162R	2	10¢	40 H 976	6-162R	6	25¢
40 H 973	3-162R	3	14¢	40 H 977	8-162R	8	32¢
40 H 974	4-162R	4	17¢	40 H 978	10-162R	10	40¢
40 H 975	5-162R	5	21¢	40 H 979	12-162R	12	47¢

CABLE CLAMPS

Cable clamps for fanning strips above. Made of nickel-plated brass, with 6-32 round head screws. Serve as strain relief and anchor cable securely. Sizes shown are I.D. Wt., 2 oz.

No.	Type	Size	NET	No.	Type	Size	NET
41 H 852	CC-161-4	1/4"	8¢	41 H 857	CC-161-10	5/8"	8¢
41 H 853	CC-161-6	3/8"	8¢	41 H 858	CC-161-12	3/4"	8¢
41 H 854	CC-161-8	1/2"	8¢	41 H 859	CC-161-14	7/8"	8¢

SERIES 101 PLUG AND SOCKET

Low-loss plug and socket for hi-freq. RF connections. For coax or shielded 1-cond. Cadmium-plated brass; prong, contacts, silver-plated. Wt., 4 oz.

40 H 825. Type P-101-1/4" Plug. Length 1 1/4". NET..... 46c
40 H 835. Type S-101 Socket. Overall diameter 7/8". NET..... 41c

SERIES 202 PLUGS AND SOCKETS

Fig. A. P-202-CCT Plug. 2-contact. Cadmium-plated brass; bakelite insulation. For use with sockets below. Polarized. Knurled nut, 3/4"-27 thread. With cable clamp. 3 oz.
40 H 980. NET..... 58c

Fig. B. S-202-B Socket. For base mounting. Socket mtg. holes, No. 30 drill on 1" centers. 3/4"-27 thread. Shpg. wt., 3 oz.
40 H 982. NET..... 68c

Fig. C. S-202-CCT-THR Socket. Makes ideal extension connection when used with P-202-CCT plug. 3/4"-27 thread. With cable clamp. Shpg. wt., 3 oz.
40 H 981. NET..... 78c

ALLIED can supply all other Howard B. Jones connectors and terminal strips, plugs and sockets on special order. Order by the manufacturer's Type Number or write for descriptive literature and prices.

BARRIER TERMINALS

Barriers between each terminal provide increased insulation. Excellent for industrial and experimental applications. Barriers follow edge of strips and terminate at base. Make a long leakage path and prevent direct shorts caused by frayed wires at the terminals. Base is molded bakelite, with mounting holes at ends. Eyelets and binder screws of nickel-plated brass; terminals of hot tin-finish brass. Barrier-type terminals and fanning strips, when used together, insure positive contact and firm connections. No. 140 terminal strips have 5-40x3/16" binder head screws, 1/4" metal-to-metal spacing. No. 141 terminal strips have 6-32x1/4" binder head screws, 1/8" metal-to-metal spacing. No. 142 terminal strips have 8-32x3/16" binder head screws, 3/16" metal-to-metal spacing. Av. shpg. wt., 5 oz.

140 SERIES BARRIER TERMINALS

Metal-to-metal spacing over bakelite 1/4". Base dimensions 7/8" wide x 1 9/32" high. 1/8" terminal centers. Use with 160 series fanning strips.

No.	Type	Term.	NET	No.	Type	Term.	NET
41 H 580	1-140	1	9¢	41 H 806	12-140	12	.66
41 H 800	2-140	2	14¢	41 H 584	13-140	13	.72
41 H 801	3-140	3	20¢	41 H 585	14-140	14	.77
41 H 803	4-140	4	24¢	41 H 586	15-140	15	.82
41 H 807	5-140	5	30¢	41 H 587	16-140	16	.87
41 H 802	6-140	6	34¢	41 H 588	17-140	17	.92
41 H 581	7-140	7	40¢	41 H 589	18-140	18	.98
41 H 804	8-140	8	45¢	41 H 590	19-140	19	1.03
41 H 582	9-140	9	51¢	41 H 591	20-140	20	1.08
41 H 805	10-140	10	56¢	41 H 592	21-140	21	1.14
41 H 583	11-140	11	61¢				

141 SERIES BARRIER TERMINALS

Metal-to-metal spacing over bakelite 1/8". Base dimensions, 1 1/8" wide x 1/2" high. 7/16" terminal centers. Use with 161 series fanning strips.

41 H 835	2-141	2	19¢	41 H 840	10-141	10	.72
41 H 836	3-141	3	24¢	41 H 841	12-141	12	.84
41 H 837	4-141	4	31¢	41 H 876	14-141	14	.98
41 H 842	5-141	5	38¢	41 H 877	16-141	16	1.12
41 H 838	6-141	6	44¢	41 H 878	18-141	18	1.25
41 H 839	8-141	8	58¢	41 H 879	20-141	20	1.38

142 SERIES BARRIER TERMINALS

Metal-to-metal spacing over bakelite 3/16". Base dimensions, 1 5/16" wide x 5/8" high. 9/16" terminal centers. Use with 162 series fanning strips.

41 H 670	2-142	2	22¢	41 H 680	12-142	12	1.04
41 H 671	3-142	3	30¢	41 H 881	13-142	13	1.12
41 H 672	4-142	4	38¢	41 H 882	14-142	14	1.20
41 H 673	5-142	5	46¢	41 H 883	15-142	15	1.28
41 H 674	6-142	6	54¢	41 H 884	16-142	16	1.36
41 H 676	8-142	8	71¢	41 H 886	17-142	17	1.44
41 H 678	10-142	10	87¢				

REPLACEMENT SOLDER TERMINALS

3/4W and Y solder terminals for replacement purposes on barrier strips listed above. Made of brass; hot tin finish. Assure firm, positive solder connections; simplify cable or harness wiring. Fasten securely under binder head screws. Fig. D is Y type—Fig. E is 3/4W type. Av. shpg. wt. per 10, 3 oz.

TYPE 3/4 W				TYPE Y			
No.	Type	For	Pkg. of 10	No.	Type	For	Pkg. of 10
41 H 887	3/4W-140	140	26¢	41 H 891	Y-140	140	26¢
41 H 888	3/4W-141	141	35¢	41 H 892	Y-141	141	35¢
41 H 889	3/4W-142	142	43¢	41 H 893	Y-142	142	43¢

TYPE 170 TERMINAL STRIPS

Terminal strips with extra-heavy solder terminals. Ideal for industrial users, experimental labs, etc. Black molded bakelite insulation. 3/16" wide, 1/4" thick. Terminals are mounted on 1/8" centers. Mounting holes are 1/8" from center of end terminals. Terminals are .032" brass, tin plated. Double-notched solder terminals for rapid soldering or wrap-around connections. Compact, sturdy units. Av. shpg. wt., 5 oz.

No.	Type	Term.	NET	No.	Type	Term.	NET
40 H 990	1-170	1	14¢	40 H 995	6-170	6	30¢
40 H 991	2-170	2	17¢	40 H 996	7-170	7	32¢
40 H 992	3-170	3	20¢	40 H 997	8-170	8	36¢
40 H 993	4-170	4	23¢	40 H 998	9-170	9	39¢
40 H 994	5-170	5	26¢	40 H 999	10-170	10	42¢

"2000" TERMINALS

Terminals are made of .019" brass, tin-plated, and spaced on 3/16" centers. Molded bakelite insulation. Mounting brackets are made of cadmium-plated steel. Mounting holes at each end of bracket. Average shpg. wt., 2 oz.

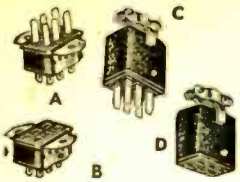
Stock No.	Mfrs. Type	Term.	Mtg. Ctrs.	NET EACH	Stock No.	Mfrs. Type	Term.	Mtg. Ctrs.	NET EACH
41 H 687	2002	2	1"	6¢	41 H 691	2006	6	2 1/4"	9¢
41 H 688	2003	3	1 3/16"	7¢	41 H 693	2008	8	2 7/8"	11¢
41 H 689	2004	4	1 5/8"	8¢	41 H 695	2010	10	3 1/2"	13¢
41 H 690	2005	5	1 13/16"	9¢	41 H 697	2012	12	4 1/8"	15¢

2R2 CHASSIS TYPE AC SOCKET

For chassis mounting in radio sets, amplifiers, etc. Molded bakelite with solder lug terminals. For 10 amps. 250 volts, or 15 amps. 125 volts. 2 screw mounting. 7/8x3/4" mounting hole. Overall size 1 1/2x1 1/8x1/2". Shpg. wt., 2 oz.
40 H 830. NET EACH..... 15c

Plugs, Sockets and Connectors

CINCH-JONES PLUGS AND SOCKETS



SERIES 300 PLUGS & SOCKETS

Compact, multi-circuit connectors. Rated at 730 rms volts at 10 amps. Black, crystal-finish metal caps encase bakelite body. Phosphor-bronze "knife-switch" type socket contacts engage both sides of flat plug contacts. All units are polarized; plugs with 24 and more contacts have positioning pin. Plug contacts are 5/32" wide by 3/64" thick. *Round shell; others rectangular. Av. shpg. wt., 3 oz.

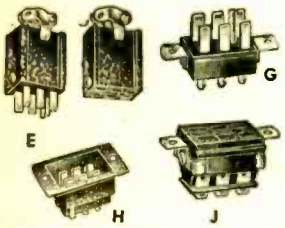
TYPE AB WITH ANGLE BRACKETS

Contacts	PLUGS, FIG. A Stock No.	Type	NET	SOCKETS, FIG. B Stock No.	Type	NET
2	40 H 870*	P-302-AB	.19	40 H 880*	S-302-AB	.21
3	40 H 871	P-303-AB	.24	40 H 881	S-303-AB	.24
4	40 H 872	P-304-AB	.25	40 H 882	S 304-AB	.28
6	40 H 873	P-306-AB	.31	40 H 883	S-306-AB	.34
8	40 H 874	P-308-AB	.37	40 H 884	S-308-AB	.43
10	40 H 875	P-310-AB	.40	40 H 885	S-310-AB	.51
12	40 H 876	P-312-AB	.48	40 H 886	S-312-AB	.59
15	40 H 816	P-315-AB	.63	40 H 864	S-315-AB	.73
18	40 H 817	P-318-AB	.78	40 H 865	S-318-AB	.88
21	40 H 818	P-321-AB	.98	40 H 866	S-321-AB	1.09
24	40 H 819	P-324-AB	1.19	40 H 867	S-324-AB	1.29
27	40 H 820	P-327-AB	1.41	40 H 868	S-327-AB	1.50
30	40 H 821	P-330-AB	1.59	40 H 869	S-330-AB	1.71
33	40 H 822	P-333-AB	1.79	40 H 877	S-333-AB	1.91

TYPE CCT WITH CABLE CLAMP

Con.	PLUGS, FIG. C			SOCKETS, FIG. D		
2	40 H 802*	P-302-CCT	.43	40 H 852*	S-302-CCT	.44
3	40 H 803	P-303-CCT	.46	40 H 853	S-303-CCT	.48
4	40 H 804	P-304-CCT	.51	40 H 854	S-304-CCT	.51
6	40 H 806	P-306-CCT	.56	40 H 856	S-306-CCT	.59
8	40 H 808	P-308-CCT	.62	40 H 858	S-308-CCT	.68
10	40 H 810	P-310-CCT	.69	40 H 860	S-310-CCT	.76
12	40 H 812	P-312-CCT	.76	40 H 862	S-312-CCT	.85
15	40 H 805	P-315-CCT	.98	40 H 850	S-315-CCT	1.09
18	40 H 807	P-318-CCT	1.19	40 H 851	S-318-CCT	1.29
21	40 H 809	P-321-CCT	1.40	40 H 855	S-321-CCT	1.50
24	40 H 811	P-324-CCT	1.65	40 H 857	S-324-CCT	1.77
27	40 H 813	P-327-CCT	1.87	40 H 859	S-327-CCT	1.97
30	40 H 814	P-330-CCT	2.18	40 H 861	S-330-CCT	2.28
33	40 H 815	P-333-CCT	2.33	40 H 863	S-333-CCT	2.44

SERIES 400 AND 2400 PLUGS & SOCKETS



Highly dependable, heavy-duty multiple-circuit type plugs and sockets. Series 400 rated at 1100 rms volts, 15 amps; series 2400 rated at 1700 rms volts, 15 amps. All have polarizing pins. Plug contact prongs are 1/4" wide by 1/16" thick. Bodies are molded bakelite. Phosphor-bronze "knife-switch" type socket contacts engage both sides of flat plug contact prongs to minimize contact resistance. Series 2400 improved design offers longer leakage path permitting use on higher operating voltages. Metal caps are finished in black crystal, equipped with fiber inner lining. 2400 series plugs and sockets can be mated with 400 series. *Similar to Fig. J. †Take type CCT. (Fig. F) sockets. Shpg. wt., 5 oz.

TYPE CCT WITH CABLE CLAMP

Contacts	PLUGS, FIG. E Stock No.	Type	NET	SOCKETS, FIG. F Stock No.	Type	NET
2	40 H 910	P-402-CCT	.73	40 H 920	S-402-CCT	.79
4	40 H 911	P-404-CCT	.88	40 H 921	S-404-CCT	.99
6	40 H 912	P-406-CCT	1.04	40 H 922	S-406-CCT	1.20
8	40 H 913	P-408-CCT	1.19	40 H 923	S-408-CCT	1.40
10	40 H 914	P-410-CCT	1.34	40 H 924	S-410-CCT	1.62
12	40 H 915	P-412-CCT	1.49	40 H 925	S-412-CCT	1.81
2	40 H 833	P-2402-CCT	.90	40 H 840	S-2402-SB*	.70
4	40 H 834	P-2404-CCT	1.01	40 H 841	S-2404-SB*	.81
6	40 H 836	P-2406-CCT	1.14	40 H 842	S-2406-SB*	.95
8	40 H 837	P-2408-CCT	1.20	40 H 843	S-2408-SB*	1.08
10	40 H 838	P-2410-CCT	1.38	40 H 844	S-2410-SB*	1.22
12	40 H 839	P-2412-CCT	1.52	40 H 845	S-2412-SB*	1.35

TYPE AB FOR CHASSIS MOUNTING

Con.	PLUGS, FIG. G			SOCKETS, FIG. J		
2	40 H 890	P-402-AB	.47	40 H 900	S-402-AB	.52
4	40 H 891	P-404-AB	.56	40 H 901	S-404-AB	.68
6	40 H 892	P-406-AB	.68	40 H 902	S-406-AB	.82
8	40 H 893	P-408-AB	.78	40 H 903	S-408-AB	.98
10	40 H 894	P-410-AB	.88	40 H 904	S-410-AB	1.15
12	40 H 895	P-412-AB	.98	40 H 905	S-412-AB	1.29

Fig. H—TYPE DB RECESSED PLUGS FOR CHASSIS MOUNTING†

Contacts	Stock No.	Type	NET Each	Contacts	Stock No.	Type	NET Each
2	40 H 950	P-402-DB	.56	8	40 H 952	P-408-DB	1.04
4	40 H 955	P-404-DB	.73	10	40 H 953	P-410-DB	1.20
6	40 H 951	P-406-DB	.88	12	40 H 954	P-412-DB	1.35

ALLIED can supply all other Cinch-Jones "Series 400" and "Series 2400" plugs and sockets. Write for literature and prices.

CINCH-JONES SUB-MINIATURE SOCKETS

Used extensively for miniature radios and transmitters, hearing aids and other electronic equipment employing subminiature tubes. Molded from mica-filled low-loss bakelite. Silver-plated beryllium copper contacts. 4-prong tubes and G.E. transistors G11 and G11A fit 2H5 socket. All 7/32" deep. Wt., 2 oz.

Stock No.	Type	Contacts	Size	NET
40 H 245	2H5	5	15/32x11/32x7/32"	27¢
40 H 246	2H6	6	13/32x7/32x3/32"	28¢
40 H 247	2H7	7	31/64x7/32x3/32"	30¢
40 H 242	8SM	8	13/32x7/16"	52¢

Transistor Types. 5-contact sockets for transistors. Use type 5PC for printed circuits and 5WC for wired circuits. Av. shpg. wt., 2 oz.

Stock No.	Type	Size	For	NET
40 H 249	5WC	3/8x7/32x17/64"	Raytheon CK721 & CK722	.39
40 H 252	5PC	13/32x17/64x1/2"	Raytheon CK721 & CK722	.36
40 H 253	.....	13/32x5/64"	W.E. A1698 & A1768	1.48

TYPE 8PB 8-CONTACT PLUG

For making up to 8 connections between chassis. Molded black bakelite. Fit any octal socket. Use with 16F shield, (below). 2 oz.
40 H 846. NET 22c

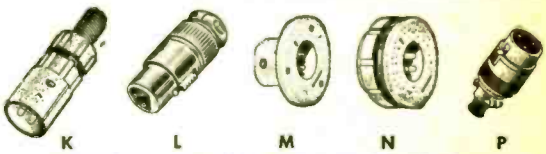
Type 11PB 11-Contact Plug. Same as above but with 11 contacts.
40 H 847. NET 24c

TYPE 16F STEEL SNAP-ON SHIELD

Cadmium-plated, durable steel shield. Designed to snap on 8PB and 11PB sockets. Rubber grommet with 25/64" hole protects cable. Wt., 2 oz.
40 H 848. NET 28c

TYPE 11RB 11-CONTACT SOCKET

For use with 11PB 11-contact plug, (above). Molded from high-dielectric, black bakelite. Hot solder-dipped tinning on brass contact terminals for making quick, positive solder connections. Can be mounted on 1/16" thick chassis using retaining ring. Can also be used with 16F snap-on shield, (above) on extension cables. Keyed to assure correct alignment. Shpg. wt., 2 oz.
40 H 849. NET 28c



CANNON PLUGS AND CONNECTORS

TYPE XL CONNECTORS

Matched family of small 3-contact connectors for low-level sound circuits. 3/16" dia. Fig. K, grip and strain relief spring. Fig. L, steel shell cable clamp. 15 amp contacts, No. 14 wire. Working voltage, 250. Flash-over point, 1500 v. 4 oz.

STRAIGHT CORD PLUGS

Stock No.	Type	Fig.	Description	EACH
40 H 714	XL-3-12	K	Male (pin insert)	88¢
40 H 713	XL-3-11	K	Female (socket insert)	91¢
40 H 788	XL-3-11SC	L	Female (socket insert)	2.00
40 H 789	XL-3-12SC	L	Male (pin insert)	1.97

CHASSIS MOUNT RECEPTACLES

40 H 716	XL-3-14	M	Male (pin insert)	71¢
40 H 715	XL-3-13	M	Female (socket insert)	91¢

PANEL MOUNT RECEPTACLES

40 H 718	XL-3-14N	N	Male (pin insert)	85¢
40 H 717	XL-3-13N	N	Female (socket insert)	91¢

TYPE P CONNECTORS

3-contact receptacles and cable connectors for audio circuits. For any size wires up to No. 10. 15 amp. contact capacity. Black phenolic insulation. Plugs have steel shells and zinc cable clamps. Av. wt., 4 oz.

No.	Type	Fig.	Description	EA.
40 H 707	P3-13	....	Panel mount, female (socket)	3.15
40 H 757	P3-14	....	Panel mount, male (pin)	1.65
40 H 724	P3-CG-11S	P	Cable plug, female (socket)	3.70
40 H 701	P3-CG-12S	P	Cable plug, male (pin)	3.03
40 H 709	P3-35	....	Wall receptacle, female for 40 H 701	5.38

TYPE UA "ULTIMATE" AUDIO CONNECTORS

(Not illustrated.) Latest type 3-contact fittings. Splash-proof and shock-proof. Gold-plated contacts for low-loss and noise-free operation. Shape of shell assures correct polarization. 1 3/4" rubber sleeve handle for firm easy grip. 15 amp capacity. Wt., 3 oz.

No.	Type	Description	EACH
40 H 758	UA-3-11	Cable plug, female (socket)	3.15
40 H 759	UA-3-12	Cable plug, male (pin)	2.59
40 H 760	UA-3-13	Panel mount, female (socket)	2.41
40 H 761	UA-3-14	Panel mount, male (pin)	1.47

We can supply every type of Cannon Electric connector made. Write us for literature and quotations on types not listed on this page.

Plugs and Jacks

SWITCHCRAFT PLUGS AND JACKS

Fig. A—"LITTEL PLUGS"

Fit standard ¼" phone jacks, except 41H614 and 41H615 which have .2065" dia. sleeves for Revere Recorders, etc. Overall. 2⁵⁄₃₂" long, ½" dia. Dual-purpose terminal serves as cable anchor. Sleeve threaded into terminal and staked. Solder connections. Wt., 3 oz.

41 H 611. Type 250. 2-conductor. Black Tenite handle. **NET**.....41¢
41 H 616. Type 267. 3-conductor. Black Tenite handle. **NET**.....62¢
41 H 612. Type 255. 2-conductor. Red Tenite handle. **NET**.....41¢
41 H 613. Type 280. 2-cond. Nickeled brass handle. **NET**.....59¢
41 H 617. Type 297. 3-conductor. Shielded handle. **NET**.....76¢
41 H 717. Type 1230. (Fig. B.) Shielded ext. jack for 297. **NET** 1.15
41 H 614. Type S-250. 2-conductor. Black Tenite handle. **NET**...44¢
41 H 615. Type S-128. (Fig. B.) Ext. cable jack for S-250. **NET**..88¢

MILITARY TYPE PLUGS AND JACKS

Jacks are Fig. C; plugs are not illustrated. Shpg. wt., 4 oz.

41 H 618. Type 440. 2-cond. plug. Screw term. Black plastic handle. Military No. PJ-055B. Supersedes Army No. PL-55. 2²⁵⁄₃₂" long; handle, 1⁹⁄₁₆" long, ½" dia. Sleeve, ¼" dia. **NET**.....82¢
41 H 619. Type 820. Fig. B. 2-cond. ext. jack. Screw term. 2¾" handle. Military No. JJ-026. Supersedes Army JK-26. **NET**.....1.18
41 H 602. Type 480. 3-cond. plug. Screw term. Black plastic handle. Length. 3¹³⁄₁₆". Sleeve dia., .2065". JAN PJ-068. **NET**.....2.12
41 H 603. Type MT331. JAN JJ-086 jack. Diagram I. **NET**.....88
41 H 604. Type MT332A. JAN JJ-024 jack. Diag. II. **NET**....1.00
41 H 606. Type MT332B. JAN JJ-022 jack. Diag. III. **NET**...1.00

Fig. D—FLAT PLUG

Type 220. Radically new design. Very small. Removable black handle only 1x1¼". ¼" dia. sleeve. 1⁹⁄₁₆" long. 2-conductor type with screw terminals; marked for identification. Shpg. wt., 4 oz.
41 H 621. NET.....44c

Fig. F—ADAPTER/CONNECTOR

Type 44. Simplifies connection of equipment with different connectors. Used to adapt Amphenol Type 75-MCIF or 75-MCIF-A connectors for use with 2-conductor phone jack (¼" sleeves). 3 oz.
41 H 657. NET EACH.....29c

Fig. E—"LITTEL-JAX" PHONE JACKS

Full line of improved jacks. Many are military equivalents. Size, ¼" diameter; overall length, 1½". For ¼" diameter sleeve plugs. *O.C. indicates open circuit; S.C., closed circuit. See page 157 for diagrams. Wt., 2 oz.

No.	Type	Description*	Diagram	JAN Type	NET
41 H 622	11	O.C.-2 cond.	I		24¢
41 H 623	C11	O.C.-2 cond.	I	JJ-034 Old (JK-34A)	35¢
41 H 624	12A	S.C.-2 cond.	II		26¢
41 H 631	C12A	S.C.-2 cond.	II	JJ-089	44¢
41 H 632	12B	O.C.-3 cond.	III		32¢
41 H 633	C12B	O.C.-3 cond.	III	JJ-033 Old (JK-33A)	41¢
41 H 634	13B	S.C.-3 cond.	IV		44¢

41 H 607. Type S11. O.C. 2-cond. Use with S250 plug. 2 oz. **NET**..26¢

SHIELDED ADAPTERS

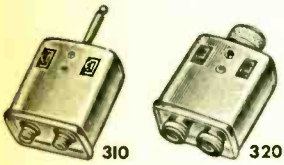
For quick adaptation of any type plug to any other type jack on recorders, amplifiers, etc. Nickel-plated brass housing. 1½" body diameter. *Dia. is sleeve I.D. or plug O.D. Av. shpg. wt., 6 oz.

No. Stock	Mfr's No.	Fig.	Input Description	Input *Dia.	Output Description	Output *Dia.	NET
41 H 636	332	G	Phone jack	¼"	Fem. mike conn.	.....	1.03
41 H 637	334	H	Phono jack	⅛"	Fem. mike conn.	.....	.86
41 H 638	336	J	Phone jack	¼"	Phono plug	⅛"	.86
41 H 639	338	K	Male mike conn.	⅝"-27	Phono plug	⅛"	.86
41 H 609	342	....	Post/Banana jack	⅛"	Phone plug	¼"	1.53
41 H 645	344	L	Phono jack	⅛"	Phone plug	¼"	.86
41 H 649	346	M	Tip jacks	.....	Phone plug	¼"	1.26
41 H 608	348	N	Phono jack	⅛"	Phono jack	⅛"	.82

Fig. P—MICROPHONE CONTROL ADAPTER

Type 329. Provides handy volume control attachment on hi-impedance mikes using 1-cond. shielded cable. Employs std. mike connectors—connects between mike and mike cable. 6 oz.
41 H 946. NET.....4.09

"MINI-MIX" AUDIO MIXERS



Miniature, 2-input audio mixers. Small, inexpensive units for greatly increasing the flexibility of recording equipment. Accommodate 2 high impedance inputs. Allow mixing of 2 mikes, contact mike and record player, etc., with independent volume controls. 2¹⁄₁₆x1¹³⁄₁₆x1¹⁄₁₆". 4 oz.

Model 310 Mixer. Has phone jack inputs with phone plug output. Fits std. jacks. Connects directly to equipment—no external cables.
41 H 953. NET EACH.....4.67

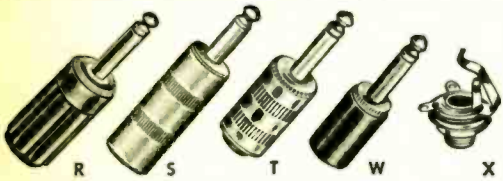
41 H 699. Type 8266. Recessed Jack Adapter. For 310 above. With 1-ft., 2-cond. cable. Shpg. wt., 4 oz. **NET**.....2.20

Model 320 Mixer. Has microphone connector inputs, and output mating with standard microphone connectors.
41 H 954. NET EACH.....4.67

Two new additions to "Mini-Mix" line of miniature audio mixers. Provide same functions as other "Mini-Mix" units, but have special connectors to cover other commonly used sound and recording equipment connections. Accommodate 2 high impedance inputs. Connect directly to equipment—no external cables. Minimum lead lengths inside shielded housing reduce stray pickups. Allow mixing of two mikes, contact mike and record player, tuner and microphone, etc., with independent volume control of each. 2¹⁄₁₆x1¹³⁄₁₆x 1¹⁄₁₆". Shpg. wt., 4 oz.

Model 315 Mixer. Has phone jack inputs with mike connector output mating with std. mike connectors or No. 44 Adapter (above, left).
41 H 658. NET EACH.....4.67

Model 325 Mixer. For use with recorders and amplifiers using Jones-type connectors. Fits recessed connectors on Webcor tape recorders, etc.
41 H 686. NET EACH.....5.85



POPULAR ICA PHONE PLUGS AND JACKS

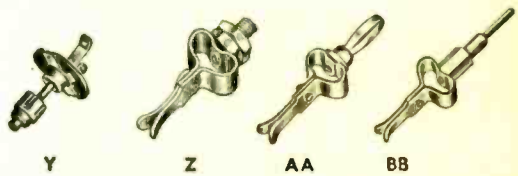
Fig. R. Type 24 Standard Plug. Bakelite barrel. ¼x1½". 2¼" long overall. Sleeve. ¼" dia. With screw connections. Shpg. wt., 3 oz.
41 H 600. Black. } **10 for 2.97.**
41 H 601. Red. } **NET EACH**.....33¢

Fig. S. Type 25 Shielded Plug. Nickeled brass. 1¹⁄₁₆x2" barrel. 3¼" overall. Sleeve. ¼" dia. Screw term. Shpg. wt., 3 oz.
41 H 605. 10 for 5.31. NET EACH.....59¢

Fig. T. Type 27 Stubby Shielded Plug. 1¹⁄₁₆x1" barrel. 2⅜" overall. Sleeve. ¼" dia. Screw terminals. Shpg. wt., 3 oz.
41 H 610. 10 for 4.30 NET EACH.....48¢

Fig. W. Type 29 Midget Plug. Very small. ⅝x1⅜" bakelite barrel. 2⁷⁄₁₆" overall. Sleeve. ¼" dia. Solder lugs. Shpg. wt., 3 oz.
41 H 625. Black. } **10 for 2.97.**
41 H 626. Red. } **NET EACH**.....33¢

Fig. X. ICA Miniature Jacks. Precision-made. For use where space is limited. Fits all ¼" sleeve phone plugs. Shpg. wt., 3 oz.
41 H 627. Type 1870. Open circuit. **10 for 2.34. NET EACH**....26¢
41 H 628. Type 1871. Closed circuit. **10 for 2.70. NET EACH**...30¢
41 H 629. Type 1872. 3-way mike. **10 for 3.06. NET EACH**.....34¢



PHONO PIN PLUG AND JACK, TEST CLIPS

Fig. Y. Shielded Phono Pin-Plug and Jack. For auto radios, record players, etc. Pin plug fits standard phono jack on radio. Pin plug dia. ⅛", length ⁹⁄₁₆". Single prong jack on ⅛" bakelite disc. 1¹⁄₁₆" mtg. centers. Av. wt., 1 oz.
46 H 212. Pin Plug. 10 Pkgs.....1.26. **Pkg. of 3**.....14c
46 H 213. Jack. 10 Pkgs.....1.80. **Pkg. of 3**.....20¢

Fig. Z. Grayhill Panel Mount Test Clips. Type 2-O. Spring clip for installation on test board; for quick attachment to pigtail leads of resistors, condensers, etc. Low resistance, (.003 ohm). 8-32 stud mounting. Hex nut included. 1⁹⁄₁₆". Shpg. wt., 2 oz.
45 H 182. NET.....15c

Type 2-4. Threaded Stud Test Clip. (Not illustrated—similar to Fig. Z.) Threaded stud with insulating washers. Shpg. wt., 3 oz.
45 H 185. NET.....30¢

Fig. AA. Type 2-1. Banana Plug Test Clip. Shpg. wt., 2 oz.
45 H 183. NET.....30¢

Fig. BB. Type 2-6. Pin Plug Test Clip. Shpg. wt., 2 oz.
45 H 184. NET.....30¢

MALLORY PLUGS, JACKS, EXTENSIONS

¼" PHONE AND MICROPHONE PLUGS

41 H 641. Type 75. Two-conductor plug with tie-cord anchor and insulated phenolic shell. Brass terminals for either phone tips or wire. Overall length, 2¾". Handle, 1½" long. Shpg. wt., 3 oz. **NET** ....38¢

41 H 640. Type 75N. Two-conductor plug with tie-cord anchor and polished, shielded nickel shell. Brass screw terminals. Overall length, 2 1/16". Handle, 1⅜" long. Shpg. wt., 4 oz. **NET**....59¢

41 H 937. Type 75A. Two-conductor plug with tie-cord anchor and highly polished, shielded nickel shell and built-in cable clamp. Brass, screw terminals. Overall length, 3 1/16". Handle, 1 13/16" long. Shpg. wt. 4 oz. **NET**....97¢

41 H 941. Type 76. Three-conductor mike plug with insulated phenolic shell. Silver-plated lug terminals. Overall length, 2 1/16". Handle, 1⅜" long. Similar to Type 75. Shpg. wt., 3 oz. **NET**....59¢

41 H 942. Type 76A. Three-conductor mike plug in highly polished, shielded nickel shell with built-in cable clamp. Silver-plated lug terminals. Overall length, 3". Handle, 1 13/16" long. Similar to type 75A. Shpg. wt., 4 oz. **NET**....1.15

EXTENSION JACK TYPES

41 H 938. Type 100. Two-way extension jack for No. 75 plug. Fiber shell. 2¾" long. Overall length, 3¼". Shpg. wt., 4 oz. **NET**....76¢

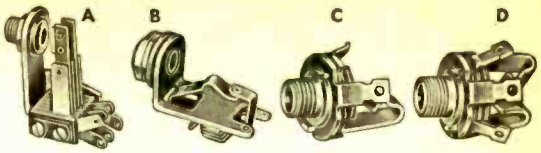
41 H 939. Type 100N. Two-way extension jack for No. 75N plug. Highly polished, shielded nickel shell. Overall length, 3 5/16". Shpg. wt., 6 oz. **NET**....97¢

41 H 940. Type 100A. Two-way extension jack for No. 75A plug. Shielded nickel shell with built-in cable clamp. Overall length, 3 5/16". Shpg. wt., 5 oz. **NET**....1.35

MALLORY LONG-FRAME JACKS

Nos. 1, 2, 2A and 5 mount in 7/16" hole in panels to ¼" thick, require 3¼" behind panel. XP types have plain bushings and mounting plates, require 2 15/16" behind panel. Mount with nut and screw. Wt., 4 oz.

No.	Fig.	Type	Description	Diagram	NET
34 H 440	E	1	Open Circuit	I	38¢
34 H 441	E	2	Short-Circuiting	VII	47¢
34 H 442	E	2A	Closed Circuit	II	47¢
41 H 055	E	6	Closed Circ. Make-Break	IX	71¢
34 H 445	F	XP1	Open Circuit	I	53¢
41 H 644	F	XP2B	3-Circuit Mike	II	59¢
34 H 446	F	XP3B	3-Circuit. Make-Break	VIII	76¢



MALLORY JUNIOR AND MIDGET JACKS

Fig. A—JUNIOR JACKS

Small, compact junior jacks—extend only 1 5/16" behind panel. Nickel-plated brass frames and bushings. Phosphor-bronze springs. Silver contacts. Take standard plugs. Mount in single 7/16" hole in panels up to ¼" thick. With mounting nut and washer. Av. shpg. wt., 2 oz.

41 H 054. Type 701. Open circuit jack. Diagram I. **NET**....32¢

41 H 058. Type 702B. 2-circuit jack. For type 76 and 76A Mike Plugs. at left. Diagram III. **NET**....44¢

41 H 052. Type 703. Open circuit jack with additional "make" circuit. Diagram V. **NET**....50¢

41 H 059. Type 703B. 3-circuit jack; 1-circuit transfer. Diagram IV. **NET**....50¢

41 H 060. Type 704B. 4-circuit jack; 2-circuit transfer. Diagram VI. **NET**....59¢

Fig. B—MIDGET JACKS

Extremely small "Midget" and "Infant" type jacks for limited space applications. Midget type jack extends 1 5/32" behind panel; Infant type jack, ⅞". Same quality construction as Junior Jacks above. Mount in single 7/16" hole in panels up to ¼" thick. With hdwe. Av. wt., 3 oz.

41 H 050. (Not Shown.) Type A-1. Infant Open Circuit Jack. Fits standard plugs. Diagram I. **NET**....18¢

41 H 051. Type A-2. Midget Shorting Type Closed Circuit Jack. Diagram VII. **NET**....29¢

41 H 053. Type A2A. Midget Closed Type 2-Circuit Jack. Diagram II. **NET**....32¢

41 H 056. Type A3A. Midget Closed Circuit, Make-Break Jack. Diagram VIII. **NET**....47¢

MILITARY TYPE JACKS

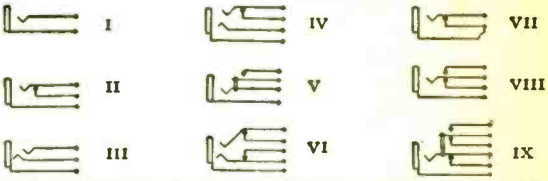
High quality phone and microphone jacks designed to military specifications. Nickel-plated brass bushings, ⅜" diameter, 1/32" thick. Require only 1 1/16" behind panel.

41 H 642. Fig. C. Type SC-1A. Open Circuit Jack. Equivalent to military jack No. JJ-034. Fits Mallory plug No. 75; Western Electric Nos. 47A and 47B; Military No. PL-47, PL-48, PL-55, PL-148, PL-155. Shpg. wt., 2 oz. Diagram I. **NET**....32¢

41 H 643. Fig. D. Type SCA-2B. Two-Circuit Jack. Equivalent to Military Jack No. JJ-033. Fits W.E. plug 109 and Military PL-46, PL-68 and PL-168. Shpg. wt., 2 oz. Diagram III. **NET**....38¢

JACK SCHEMATIC DIAGRAMS

Diagrams shown below illustrate circuits of jacks listed on pages 156-157.



AUDIO DEVELOPMENT JACK PANELS, PLUGS AND PATCH CORDS

BROADCAST TYPE JACK PANELS

Professional quality jack panels for use in broadcast stations, paging systems, theaters, recording studios, and in any other installation requiring efficient distribution, switching and control of audio signals. Molded bakelite panels have closed circuit jacks. Jacks have standard spacing for use with any double plug. Pairs of holes so spaced that plug cannot be inserted to connect one side of each of two circuits. Easily inserted designation card strips. Fit standard 19" relay rack.

Type PJ341. Double row jack panel complete with 48 (24 pairs) closed circuit jacks. Width, 2⅛". Shpg. wt., 5 lbs.
86 HX 802. NET....45.00

Type PJ343. Single row jack panel complete with 24 (12 pairs) closed circuit jacks. Width, 1¾". Shpg. wt., 3¼ lbs.
86 HX 803. NET....26.46

PATCH CORD SETS

One Patch Cord and two Double Plugs. Tinned-copper, 2-conductor, insulated wire. Heavy braid overall. Bakelite and brass plugs. Have polarizing identifications. Wt., 9 oz.

41 H 661. Type PJ12. Patch Cord Set. 2-ft. long. **NET**....7.41
41 H 662. Type PJ13. Patch Cord Set. 3-ft. long. **NET**....7.59
41 H 664. Type PJ15. Patch Cord Set. 5-ft. long. **NET**....8.07
41 H 666. Type PJ1. Double Plug Only. **NET**....2.76

Replacement Cords. Same fine quality 2-conductor cords as used on patch cord sets above. Insulated tinned copper. Heavy protective braid. Fit all makes of standard plugs. Average shpg. wt., 6 oz.

41 H 667. Type PJ22. Replacement Cord. 2-ft. long. **NET**....1.65
41 H 668. Type PJ23. Replacement Cord. 3-ft. long. **NET**....1.74
41 H 669. Type PJ24. Replacement Cord. 4-ft. long. **NET**....1.80
41 H 659. Type PJ25. Replacement Cord. 5-ft. long. **NET**....1.89

Fig. G—MINIATURE PLUG-JACK

Only 1⅜" long, ½" wide, ⅜" thick. Two-conductor type. Black bakelite case. Shpg. wt., 3 oz.
43 H 260. Plug. NET....35¢
43 H 261. Jack. NET....47¢

Fig. H—BATTERY BINDING POST

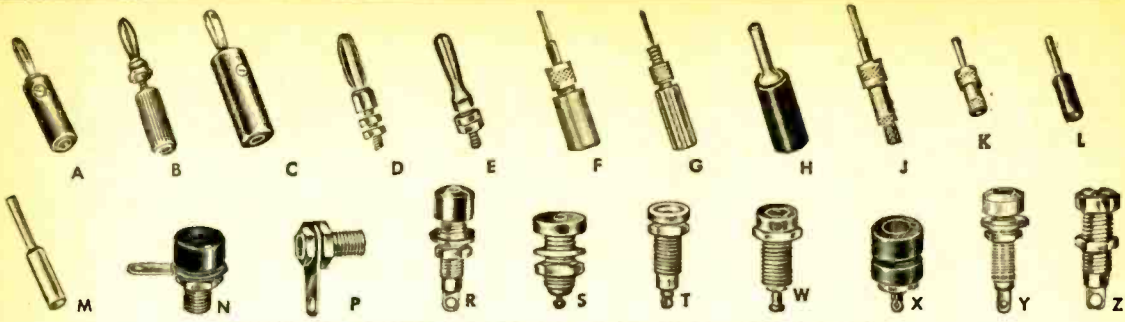
Universal storage battery binding post. Shpg. wt., 5 oz.
41 H 785. NET EACH....36¢

GENERAL RADIO DOUBLE PLUG

Type 274-MB. Dual plug for standard banana jacks. Molded as a unit on ¼" centers. Recessed top forms double jack, allowing units to be used in tandem. Banana plug prongs. Holes in body accept phone tips or wires up to No. 12; terminal screws clamp conductors securely. Black polystyrene. 15 amp rating. DC leakage, 100 million megohms. 1 5/16" wide, 1 11/16" long. Shpg. wt., 3 oz.
41 H 242. NET....65¢

For Complete Product and Manufacturers Index, See Pages 317-320

Plugs, Jacks & Tie Points



BANANA PLUGS, TIP PLUGS AND MATCHING JACKS

BANANA PLUGS

Fig. A. Spring Type Solderless Plugs. 1" handle. Overall length, 1¾". Shpg. wt., per 10, 5 oz.
41 H 405. Red Handle.
41 H 410. Black Handle.
41 H 402. Yellow Handle.
41 H 403. Green Handle.
NET EACH **15c**
10 for...1.35 100 for....12.15

Fig. B. Silver Plated Spring Plugs. Solder type. 1⅛" tenite handle. L. 1 13/16". Wt., per 10, 5 oz.
41 H 407. Red Handle.
41 H 408. Black Handle.
NET EACH **30c**
10 for...2.70 100 for...24.30

Fig. C. Split Type Plugs. Solderless connection. Overall length, 1½". Shpg. wt., per 10, 5 oz.
41 H 425. Red Handle.
41 H 430. Black Handle.
41 H 412. Yellow Handle.
41 H 413. Green Handle.
41 H 414. Blue Handle.
NET EACH **15c**
10 for...1.35 100 for...12.15

Fig. D. All-Metal Plug. Spring type. 1 3/16" L. Wt., per 10, 4 oz.
41 H 400. NET EACH..... **12c**
10 for....1.08 100 for...9.72

Fig. E. All-Metal Plug. Split type. 1¼". Wt. per 10, 4 oz.
41 H 420. NET EACH..... **12c**
10 for....1.08 100 for...9.72

INSULATED TIP PLUGS

Fig. F. Solderless. Fit standard phone tip jacks. Overall length, 2". Shpg. wt., per 10, 5 oz.
41 H 250. Red Handle.
41 H 255. Black Handle.
41 H 415. Yellow Handle.
41 H 416. Green Handle.
41 H 417. Blue Handle.
NET EACH **14c**
10 for...1.26 100 for...11.34

INSULATED TIP PLUGS

Fig. G. Solderless Locking Phone Tip Plugs. For 41H435 and 41H436 jacks. Insulated barrel. Overall length, 1⅞". Length of tip, ⅜". Shpg. wt., per 10, 5 oz.
41 H 418. Red Handle.
41 H 419. Black Handle.
NET EACH **18c**
10 for...1.62 100 for...14.58

Fig. H. Solder Type Tip Plugs. For standard tip jacks. Insulated tip. Length, 1⅛". Shpg. wt., per 10, 5 oz.
41 H 260. Red Handle.
41 H 261. Black Handle.
NET EACH **10c**
10 for....90¢ 100 for....8.10

NON-INSULATED TIP PLUGS

Fig. J. Solderless Screw-On Connector. 1⅞" L. Shpg. wt., per 10, 5 oz.
41 H 240. NET EACH..... **10c**
10 for....90¢ 100 for....8.10

Fig. J. Locking Type Solderless Screw-On Connector. For use with 41H435 and 41H436 jacks. 1¾". Shpg. wt., per 10, 6 oz.
41 H 409. NET EACH..... **14¢**
10 for...1.26 100 for..11.34

Fig. K. Solderless screw-on connector. 1⅞". Wt., per 10, 4 oz.
41 H 230. NET EACH..... **10c**
10 for...90¢ 100 for....8.10

Fig. L. Standard cord tip. Widely used for instruments and test panels. Also used for general radio requirements. Lgth., 1". Wt., per pkg., 5 oz. **10 per pkg.**
41 H 200. Per Pkg...... **18c**
10 pkgs. for..... **1.62**

Fig. M. Cord tip for heavy duty use. Accurately machined. Solid metal tips. Fits all standard phone tip jacks. 1". Wt., per pkg., 5 oz. **10 per pkg.**
41 H 125. Per Pkg...... **24c**
10 pkgs. for..... **2.16**

BANANA AND TIP JACKS

Fig. N. Insulated Banana Jacks. With solder lugs and removable insulated tops. Fit all banana plugs on this page. For ¼" holes on panels up to ⅜". Ht., ¾". Wt., per 10, 5 oz.
41 H 475. Red.
41 H 480. Black.
41 H 422. Yellow.
41 H 423. Green.
41 H 424. Blue.
NET EACH..... **12c**
10 for...1.08 100 for....9.72

Fig. P. All-Metal Banana Jack. With solder lug and nut. For ¼" hole. Wt. per 10, 5 oz.
41 H 470. NET EACH..... **9c**
10 for....81¢ 100 for....7.29

Fig. R. Insulated Tip Jacks. For standard phone tips. One-piece spring contacts. Removable insulated tops. For mounting in ¼" holes on panels up to ¼" thick. Overall height, 1 3/16". Shpg. wt., per 10, 3 oz.
41 H 110. Red.
41 H 115. Black.
41 H 432. Yellow.
41 H 433. Green.
41 H 434. Blue.
NET EACH..... **12c**
10 for....1.08 100 for...9.72

Fig. S. Insulated Locking Type Tip Jacks. Bakelite insulated jack with internal thread in brass body, for 41 H 418, 41 H 419 and 41 H 409 tips. Twist of phone tip locks it in place. May be used with standard tips as well as with locking types. Phosphor bronze spring contacts. Mounting hole, 5/16". Overall size, 1 3/16" long x ½" dia. Shpg. wt., per 10, 5 oz.
41 H 435. Red.
41 H 436. Black.
NET EACH..... **19c**
10 for...1.71 100 for..15.39

Fig. T. Molded Tip Jacks. All molded tip jack for mounting on panels up to 5/16" thick. Mounting hole, ¼". Size, 1" long x ½" dia. Shpg. wt., per 10, 5 oz.
41 H 442. Red.
41 H 443. Black.
41 H 444. Yellow.
41 H 445. Green.
41 H 446. Blue.
NET EACH..... **21c**
10 for...1.89 100 for...17.01

Fig. W. Miniature Nylon Tip Jacks. All-insulated jacks molded from low-loss nylon. Silver plated contacts. Overall size, ⅞" long x ¾" dia. Shpg. wt., per 10, 5 oz.
41 H 495. Red.
41 H 496. Black.
41 H 497. Yellow.
41 H 498. Green.
41 H 499. Blue.
NET EACH..... **25c**
10 for...2.25 100 for...20.25

Fig. X. High-Voltage Nylon Tip Jacks. 10,000 volt breakdown. Complete with snug-fitting insulating washer. Mounting hole, ¼". Overall size, 1 1/16" long x 3/16" dia. Shpg. wt., each, 2 oz.
41 H 140. Black.
41 H 141. Red.
41 H 429. Natural.
NET EACH..... **44c**

Fig. Y. Combination Jacks. Will accommodate both tip plugs and banana plugs. Mount in ¼" holes in panels up to ½" thick. Overall length, 1⅛". Shpg. wt., per 10, 5 oz.
41 H 130. Red.
41 H 135. Black.
NET EACH..... **15c**
10 for...1.35 100 for...12.15

Fig. Z. Metal Tip Jack. Mount in ¼" holes in panels up to ⅛" thick. Wt., per 10, 3 oz.
41 H 100. NET EACH..... **9c**
10 for....81¢ 100 for....7.29

TIE POINTS AND TERMINAL STRIPS

Fig. AA—STANDARD BAKELITE TIE-POINTS

Terminals riveted to 1/16" thick bakelite on ¼" centers. *Have one mounting lug; others have two. Mounting centers, 4-terminal, 1⅞"; 6-terminal, 1⅞". Average shpg. wt., pkg. of 10, ½ lb. **10 per pkg.**

No.	Terminals	Per Pkg.	No.	Terminals	Per Pkg.
41 H 500	2*	21¢	41 H 503	5*	41¢
41 H 501	3*	25¢	41 H 504	6	53¢
41 H 502	4	41¢			

Fig. BB—SINGLE-LUG TIE-POINTS

Terminals riveted to 1/16" thick high-quality bakelite. One mounting lug. Tinned solder lug. Shpg. wt., pkg. of 10, 4 oz. **10 per pkg.**
41 H 515. Per Pkg...... **15c**

Fig. CC—TERMINAL STRIPS

Excellent for cabled sub-assemblies, to simplify chassis removal. 1/16" thick bakelite terminal strips. Cadmium-plated screw terminals and tinned solder lugs. Av. shpg. wt., pkg. of 5, 1 lb. **5 per pkg.**

No.	Terminals	Per Pkg.	No.	Terminals	Per Pkg.
41 H 505	2	29¢	41 H 508	5	69¢
41 H 506	3	44¢	41 H 509	6	83¢
41 H 507	4	59¢			

Fig. DD—MINIATURE TIE-POINTS

Consist of .025" tinned brass terminals on 1/16" thick laminated phenolic. Ground lug included. Average shpg. wt., per pkg., 8 oz. **10 per pkg.**

No.	Terminals	Per Pkg.	No.	Terminals	Per Pkg.
41 H 510	2	15¢	41 H 513	5	31¢
41 H 511	3	21¢	41 H 514	6	35¢
41 H 512	4	25¢			

Fig. EE—HEAVY-DUTY STRIPS

Black 1/32" bakelite. Cadmium-plated screw terminals. Tinned solder lugs. For ant.-ground connection on receivers, etc. Av. wt., 4 oz.

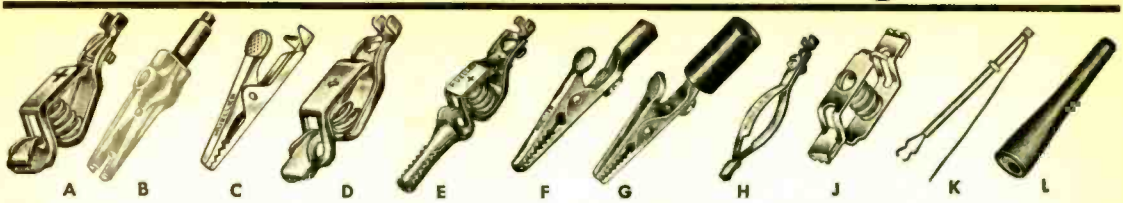
No.	Term.	EACH	10 For	No.	Term.	EACH	10 For
41 H 875	2	13¢	1.17	41 H 895	6	34¢	3.06
41 H 880	3	18¢	1.62	41 H 897	7	41¢	3.69
41 H 885	4	23¢	2.07	41 H 898	8	46¢	4.14
41 H 890	5	28¢	2.52				

TERMINALS—CONNECTORS

10 per pkg.

Stock No.	Fig.	Description	Per Pkg.
41 H 757	FF	Single hole mount. For ¼" dia. fuses	12¢
41 H 767	GG	Terminal lugs. Make your own strips	49¢
41 H 777	HH	Black insulated pin-plug. 1/8" dia. pin	71¢

Alligator Clips, Binding Posts



MUELLER UNIVERSAL CLIPS AND FLEXIBLE INSULATORS

A wide variety of clips for positive, highly dependable electrical contact. For batteries, high-frequency work, transmitting apparatus, electroplating, test equipment, and countless other applications. Quality springs maintain secure, firm grip. New "Mini-Gator" clips, (Fig. C.) are designed specifically for use on miniaturized equipment—weigh only 1/20th of an ounce. Have 3/16" jaw spread and 11/64" O.D. tip.

Fig. A—MESH TEETH TEST CLIPS

Stock No.	Mfr's. Type	Amp.	Size	NET EA.	10 or more, EA.
45 N 000	§45	5	1½"	7¢	5¢
45 N 005	*45C	10	1½"	12¢	8¢
45 N 010	§48B	10	2"	9¢	6¢
45 N 078	*48C	10	2"	14¢	9½¢
45 N 087	‡†50C	10	2¼"	24¢	18¢

*Solid copper. ‡Solid bronze.
§Steel, cadmium-plated.
†Needle in jaw pierces insulation.

Fig. A—LEAD-PLATED BATTERY CLIPS

45 N 020	24A	25	2⅞"	18¢	12¢
45 N 030	21A	50	4"	35¢	24¢
45 N 040	11A	100	6"	86¢	61¢

Fig. A—SOLID COPPER CLIPS

45 N 025	24C	50	2⅞"	.30	.22
45 N 035	21C	100	4½"	.81	.57
45 N 045	11C	200	6"	1.51	1.06
45 N 050	33C	300	7¼"	2.94	2.06

Fig. B—INSULATED ALLIGATOR CLIPS

Completely covered, with insulation material.

45 N 140	§63	.....	2⅛"	29¢	21¢
45 N 141	*63C	.....	2⅛"	32¢	23¢

Fig. C—"MINI-GATOR" CLIPS

45 N 142	§30	.....	1⅛"	7¢	5¢
45 N 143	*30C	.....	1⅛"	8¢	6¢

Fig. D—3-SIDED MESH TEETH CLIPS

Stock No.	Mfr's. Type	Amp.	Size	NET EA.	10 or more, EA.
45 N 015	§27	20	2⅞"	11¢	8¢
45 N 097	*27C	40	2⅞"	20¢	14¢

§Steel, cadmium-plated. *Copper.

Fig. E—CROCODILE CLIPS

No.	Type	Size	Description	EA.	10 or more, EA.
45 N 060	§5	2½"	Screw Connection	8¢	5½¢
45 N 062	*85C	2½"	Screw Connection	16¢	11¢
45 N 098	‡85T	2½"	Tip-Clip	20¢	14¢

*Solid copper. ‡Std. phone tip on one jaw.

Fig. F—ALLIGATOR CLIPS

45 N 200	†60	2"	Fit banana plugs	7¢	5¢
45 N 065	60S	2"	Fit banana plugs	8¢	6¢
45 N 080	*60CS	2"	Fit banana plugs	13¢	9¢

*Made of solid copper. Others are of steel.
†Solder type. "S" indicates screw connectors.

Fig. G—INSULATED ALLIGATOR CLIPS

45 N 070	60HS	2 11/32"	Ins'd red handle	14¢	9½¢
45 N 075	60HS	2 11/32"	Ins'd blk. handle	14¢	9½¢
45 N 090	*60CHS	2 11/32"	Ins'd red handle	18¢	12¢
45 N 095	*60CHS	2 11/32"	Ins'd blk. handle	18¢	12¢

*Solid copper; others cadmium-plated steel.

Fig. H—NON-FERROUS R.F. TEST CLIP

45 N 055	88	1 11/16"	Ideal for coils	22¢	15¢

Fig. J—TWIN CLIPS

Type 22. Cadmium-plated steel clip with jaws at both ends. Jaws may be opened separately or together. Ideal for quick splices and temporary repairs, electroplating, hanging articles for display, etc. 2" long. Jaw spread, ½". Shpg. wt., 2 oz.
58 N 010. NET EACH.....10c
10 or more, EACH.....7¢

Fig. K—SNAPPER TOOL

Type 99. Insulated, prod-type test clip. Unique tool—test clip, contact prod and screw and nut holder. Lead attaches to post at end. Thumb button opens, closes spring contact, solid bronze jaws. 7" long. 2 oz.
46 N 101. NET.....71c

Fig. L—FLEXIBLE INSULATORS FOR MUELLER CLIPS

Sold in pkgs. of 2, one red, one black per pkg.

No.	Type	For Clip	Per Pkg.	5 Pkgs. or more, Per Pkg.
45 N 167	13	11C, 11A	1.51	1.06
45 N 164	23	21A, 21C	.82	.57
45 N 163	26	24C, 24A	.49	.35
45 N 166	29	27, 27C	.33	.24
45 N 144	32	30, 30C	.22	.15
45 N 162	35	33C	4.16	2.94
45 N 160	47	45, 45C	.14	.10
45 N 161	49	48,B.48C,50C	.20	.14
45 N 165	62	60, 60S, 60CS	.14	.10
45 N 168	87	85, 85T, 85C	.14	.10
45 N 169	93	88	.20	.14

SPRING CLIPS AND BINDING POSTS

FAHNESTOCK SPRING CONTACT CLIPS

Positive contact clips. *Made of bronze. All others brass. Wt., 10, 3 oz. 10 clips per pkg.

Stock No.	Mfr's Type	Fig.	Length	Width	Max. Wire	Mtg. Hole	Per Pkg.	10 Pkgs. or more, Per Pkg.
41 H 700	2	M	1"	⅛"	#10	#8	.12	.11
41 H 702	3	M	1 1/16"	⅜"	#10	#8	.17	.15
41 H 705	10	M	¾"	5/16"	#14	#6	.10	.09
41 H 703	5	N	1 1/16"	⅜"	#10	#8	.23	.21
41 H 707*	15	N	½"	7/32"	#16	#4	.10	.09
41 H 704	9	P	2 1/16"	⅜"	#10	#8	.52	.47
41 H 710	9C	P	1¾"	⅜"	#10	#8	.79	.71
41 H 715	18	P	1½"	5/16"	#14	#6	.63	.57
41 H 708*	36	R	1⅝"	⅜"	#10	lug	1.13	1.02
41 H 709	45	S	¾"	⅜"	#12	#6	.17	.15

Fig. T. Superior Binding Posts. Take spade lugs, banana plugs, phone tips, lugs, or wire. Capacity, 30 amps. For panels 1/16" to ¼". Wt., 4 oz.
41 H 177. Type DF30BC. Black.
41 H 178 Type DF30RC. Red.
10 or more, EACH.....36c NET EACH.....40c

Fig. W. EBY. Type 30. Non-removable screw top binding posts. ½" dia. 6-32x½" screw, with nut. Wt., 2 oz.
41 H 350. 10 or more, EACH.....19¢ NET EACH.....21c

BINDING POSTS

Fig. X. SINGLE POSTS. Solidly constructed of molded bakelite. 5/16" diameter head with brass threaded insert. Nickel-plated 8-32 screw and knurled locking nut. Length overall, 1 5/16". Wt., 2 oz.
41 H 369. Black.
41 H 370. Red....10 or more, EACH...13¢ NET EACH..15c

Fig. Y. COMBINATION. For banana plug or phone tip. Std. banana jack in head. 8-32 screw. Length, 1⅛". Wt., 2 oz.
41 H 330. Red.
41 H 335. Black. 10 or more, EACH....22¢ NET EACH .24c

Fig. Z. METAL POST. For heavy-duty use and low resistance connections. Nickel-plated brass. 5/16" dia. 1 5/16" long. Wt., 2 oz.
41 H 371. 10 or more, EACH....19¢ NET EACH 21c

Fig. AA. Vise-grip binding posts. When tightened, a flat slide closes down across full inserted length of wire. Holds even finest strands. Head knurled for firm grip. 1" high, 7/16" diameter. 8-32 female thread for mounting with screw (not supplied). Wt., 2 oz.
41 H 358. 10 or more, EACH.....30¢ NET EACH.....33c

Same as above but has 8-32 threaded stud ¾" long for mounting with nut (not supplied). Shpg. wt., 2 oz.
41 H 357. 10 or more, EACH.....35¢ NET EACH.....39c

INSULATED CLIPS

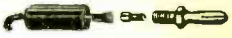
Special plastic insulated clips; spring-loaded contact. Shpg. wt., per 10, 5 oz.

No.	Fig.	Color	Description	Length	EACH	10 or more, EA.
41 H 300	BB	Red	With tip plug adapter	1 11/16"	29¢	26¢
41 H 305	BB	Black	With tip plug adapter	1 11/16"	29¢	26¢
41 H 482	CC	Red	Screw-type terminal	2⅛"	47¢	42¢
41 H 483	CC	Black	Screw-type terminal	2⅛"	47¢	42¢

GRAYHILL INSULATED TEST CLIPS

Completely insulated clip. Even the hinge pin is covered with nylon tubing! Silver contact points. Clips may touch without shorting. Molded phenolic insulation. Contact resistance, .0015 ohms. 2 oz.
45 H 180. Type 16-B. Black.
45 H 181. Type 16-R. Red. NET EACH.....73c

SOLDERLESS BANANA PLUGS



Standard split-head banana plugs with screw-on plastic case. Wt., 10, 4 oz.
41 H 427. Black.
41 H 428. Red. EACH....18¢ 10 or more, EACH.....16c

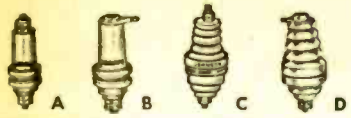
NU-WAY SNAPS, STUDS AND LUGS

Make and break contacts for temporary or permanent connections. A quick, simple way to join wires together. Snaps may be cascaded together for multiple connections—wires are secured by clamping terminal prongs over stripped wire and soldering. Nickel-plated brass. Fig. DD. has solderlug; Fig. FF. has hole for 6-32 screw. 100, 12 oz. 100 per pkg.

No.	Fig.	Description	Size	Per Pkg.	10 Pkgs. or more, Per Pkg.
44 N 450	DD	Snaps for lugs and studs	7/16" Dx⅛" L	5.75	4.00
44 N 452	EE	Stud for panel or chassis mtg.	6-32x½"	2.85	2.00
44 N 451	FF	Lug for flush mounting	½x5/16x¾"	2.85	2.00

Insulators, Jacks and Plugs

FAMOUS E. F. JOHNSON QUALITY PRODUCTS



Thru-Panel Insulators. High mechanical strength; long leakage paths. All are white glazed porcelain except †steatite. *With jacks as listed at right below. Shpg. wt., 12 oz.

Stock No.	Mfr's Type	Fig.	Top Ht.	Panel Hole	Hardware	NET
73 H 225	135-40†	A	1⅛"	7/16"	10-32	.28
73 H 226	135-40-2	B	1⅛"	7/16"	740*	.36
73 H 227	135-42†	A	⅞"	13/32"	10-32	.27
73 H 228	135-42-2	B	⅞"	13/32"	740*	.35
73 H 229	135-44†	A	⅝"	5/16"	6-32	.20
73 H 230	135-45	C	1⅜"	½"	10-32	.35
73 H 231	135-45-2	D	1⅜"	½"	740*	.43
73 H 233	135-46	A	2¼"	11/16"	¼-20	.95
73 H 235	135-47	A	4½"	21/32"	¼-20	1.35
73 H 223	135-48	C	2"	11/16"	10-32	.53
73 H 224	135-48-2	D	2"	11/16"	740*	.66

Lead-In Bushings. Have many applications in transmitter and antenna installations. Ideal as power supply and high voltage terminals. 50, 51, 52, 55 are steatite, with nickeled brass rod and nuts; 53 and 54 are porcelain, less hardware. Av. shpg. wt., 8 oz.

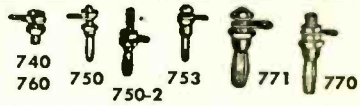
Stock No.	Mfr's Type	Fig.	Top Ht.	Dia.	Panel Hole	NET
73 H 160	135-50	M	½"	¾"	13/32"	27¢
73 H 161	135-51	M	1 3/16"	1¼"	27/32"	44¢
73 H 162	135-52	M	1⅛"	1¾"	1 7/32"	65¢
73 H 163	135-53	K	1¾"	2½"	1 27/32"	29¢
73 H 164	135-54	J	4"	3½"	2 11/16"	68¢
73 H 165	135-55	L	¼"	¾"	15/32"	25¢

Ultra-Steatite Cone Insulators. Ideal for mounting coils, condensers, etc. Threads tapped directly into steatite. With screws, and washers. Width is max. Shpg. wt., 5 oz.

No.	Type	Height	Width	NET
73 H 150	135-500	21/32"	⅝"	22¢
73 H 151	135-501	1 1/32"	¾"	27¢
73 H 152	135-502	1 5/16"	1"	47¢
73 H 153	135-503	2 1/16"	1⅛"	54¢
73 H 154	135-504	3 1/16"	1½"	94¢

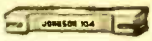
Stand-Off Insulators. High glaze porcelain (except §steatite). Ideal for transmitter applications, etc. Feature long leakage path, low capacity and freedom from moisture absorption. Heavy breakage-resistant bases. Nickel-plated brass hardware. Types 65, 65-2, 68, 68-2 are ribbed; rest have drawn bases. †With jacks as listed below. *Like Fig. G but square base. Wt., 1 lb.

Stock No.	Mfr's Type	Fig.	Body Ht.	Hardware	NET
73 H 120	135-20§	E	1 9/16"	10-32	17¢
73 H 121	135-20-2	F	1 9/16"	740†	22¢
73 H 122	135-22§	E	1"	8-32	14¢
73 H 123	135-22-2	F	1"	740†	18¢
73 H 139	135-24	E	⅝"	6-32	11¢
73 H 125	135-60	*	4½"	¼-20	75¢
73 H 126	135-62	*	2¾"	¼-20	40¢
73 H 127	135-65	G	1⅜"	10-32	23¢
73 H 128	135-65-2	G	1⅜"	740†	32¢
75 H 129	135-66	H	2¾"	¼-20	60¢
73 H 130	135-66-2	H	2¾"	760†	82¢
73 H 131	135-67	H	4½"	¼-20	78¢
73 H 136	135-68	*	2 1/16"	10-32	38¢
73 H 137	135-68-2	*	2 1/16"	740†	46¢



Jacks & Plugs. A complete line of highest quality jacks and plugs. Designed to make easy, positive contact. Banana type plugs have nickel-silver springs; jacks are nickeled brass with phosphor bronze spring sleeves. Type 771 plugs have long screw for mounting on ceramic or steatite plug-in coil forms. Supplied with all hardware. Average shpg. wt., 2 oz.

Stock No.	Mfr's Type	Fits	Lgth.	NET
73 H 200	108-740	750, 750-2, 753	⅝"	11¢
73 H 201	108-750	740	1½"	12¢
73 H 202	108-750-2	740	1½"	13¢
73 H 203	108-753	740	15/16"	12¢
73 H 204	108-760	770, 771	1"	29¢
73 H 205	108-770	760	1 25/32"	27¢
73 H 206	108-771	760	1⅛"	30¢



ANTENNA INSULATORS

Types 107 and 112 are wet-process porcelain; 800 lbs. breaking strength. Type 104 is dry-process porcelain; 400 lbs. breaking strength.

No.	Type	Size	Wt.	NET
73 H 215	136-104	4"x5/8" sq.	4 oz.	17¢
73 H 216	136-107	7"x1" dia.	10 oz.	83¢
73 H 217	136-112	12"x1" dia.	1¼ lb.	1.05

FEEDER SPREADERS

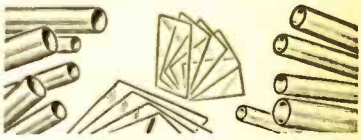
General purpose feeder spreaders for lowest leakage loss. For constructing open-wire feeders and transmission lines, with impedances of approximately 200 to 600 ohms. Unglazed porcelain bars, ⅛x½", treated with "Silaneal," a silicone product—impervious to moisture. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Length	NET EACH
73 C 111	136-122	2"	13¢
73 C 112	136-124	4"	19¢
73 C 113	136-126	6"	24¢

NYLON TIP JACKS

Completely insulated .081" tip jacks. Head and body of molded low-loss nylon. Silverplated beryllium-copper contacts. Hot tin-dipped solder terminal. Mating plug firmly engages jack—assures low contact resistance. Jack body threaded ¼"-32, mounted by single nut. DC breakdown, 11,000 volts. Length, 29/32". Diameter, ⅜". Wt., 2 oz.

Stock No.	Mfr's Type	Color	EACH
73 H 250	105-601-1	White	25c
73 H 251	105-602-1	Red	
73 H 252	105-603-1	Black	
73 H 253	105-604-1	Green	



POLYSTYRENE SHEETS, RODS AND TUBING

Polystyrene sheets, rods and tubing ideal for AC, DC and RF applications as well as VHF, UHF and SHF. Excellent material for insulators, coil forms, shields, etc. Extremely low-loss factor at ultra-high frequencies. High dielectric strength. Excellent arc resistance and insulating properties. No moisture absorption. Highly stable under varying climatic conditions. Completely transparent except tubing, which has satin finish.

POLYSTYRENE SHEETS

No.	Size	Thickness	Wt.	NET
71 H 865	12x12"	1/16"	8 oz.	3.43
71 H 866	12x12"	1/32"	10 oz.	3.67
71 H 867	12x12"	⅛"	12 oz.	4.16
71 H 868	12x12"	3/16"	1 lb.	4.90
71 H 869	12x12"	¼"	1½ lbs.	5.63
71 HX 870	12x24"	1/16"	1 lb.	6.71
71 HX 871	12x24"	1/32"	1¼ lbs.	7.10
71 HX 872	12x24"	⅛"	1½ lbs.	8.18
71 HX 873	12x24"	3/16"	2 lbs.	9.70
71 HX 874	12x24"	¼"	3 lbs.	11.12

12" POLYSTYRENE RODS

No.	Diameter	Shpg. Wt.	NET EACH
71 H 875	⅛"	2 oz.	.03
71 H 876	3/16"	3 oz.	.07
71 H 877	¼"	5 oz.	.12
71 H 878	5/16"	6 oz.	.18
71 H 879	⅜"	6 oz.	.25
71 H 880	½"	6 oz.	.47
71 H 881	⅝"	8 oz.	.71
71 H 882	¾"	8 oz.	.98
71 H 883	⅞"	8 oz.	1.39
71 H 884	1"	8 oz.	1.86

12" TUBING (Satin Finish)

No.	O. D.	I. D.	Shpg. Wt.	NET EACH
71 H 885	¼"	⅛"	2 oz.	.10
71 H 886	5/16"	3/16"	3 oz.	.14
71 H 887	⅜"	¼"	3 oz.	.18
71 H 888	½"	⅜"	3 oz.	.25
71 H 889	⅝"	½"	4 oz.	.31
71 H 890	¾"	⅝"	4 oz.	.39
71 H 891	1"	¾"	6 oz.	.55

ANTENNA INSULATORS

51 C 223. Fig. N. Glazed porcelain insulator, 2½" long. Shpg. wt., 2 oz. 4 per pkg.
10 or More Pkgs., Per Pkg...19¢
Per Pkg.....21c

51 C 224. Fig. P. White porcelain strain insulator, 1¾x⅞" dia. 2 oz. 4 per pkg.
10 or More Pkgs., Per Pkg...26¢
Per pkg.....29c

51 C 225. Fig. R. Standard nail knob. 1¾x1⅛" dia. Shpg. wt., 4 oz. 4 per pkg.
10 or More Pkgs. Per pkg...15¢
Per Pkg.....17c

51 C 226. Fig. S. Porcelain insulator for 300 ohm twin-lead. Shpg. wt. 5 oz. 4 per pkg.
10 or More Pkgs., Per Pkg...23¢
Per Pkg.....25c

NATIONAL STAND-OFF INSULATORS

Molded steatite insulators for use in RF circuits. Glazed to prevent moisture absorption. Base and terminal assembly removable to form single-screw type pillar mount. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Body Ht.	Dia.	NET EACH
71 H 125	GS-1	1⅜"	½"	27¢
71 H 126	GS-2	2⅛"	½"	35¢
71 H 127	GS-3	2⅞"	¾"	69¢

AMPHENOL POLYSTYRENE SHEET STOCK AND CEMENT

Extremely low-loss, 4x8" polystyrene sheets. Excellent for use in AC, DC and RF applications including VHF, UHF and SHF. Perfect where safe, clear insulation is needed. High dielectric strength. Colorless; does not deteriorate under varying climatic conditions. Retains original dimensions—does not stretch or warp. No moisture absorption. Also fine for dial and gauge glass use. Easy to cut and fit to any size. Can be drilled and tapped.

Stock No.	Mfr's Type	Size	Shpg. Wt.	NET EA.
71 H 738	19-0628	4x8x1/16"	3 oz.	20¢
71 H 739	19-0938	4x8x3/32"	4 oz.	24¢
71 H 746	19-1258	4x8x⅛"	5 oz.	37¢
71 H 749	19-1878	4x8x3/16"	6 oz.	46¢
71 H 748	19-2508	4x8x¼"	8 oz.	50¢

POLYWELD "912" CEMENT

Type 53-912-2. Securely bonds or "welds" polystyrene sheets. Rapid drying. Ideal for coil coating where polystyrene forms are used. Has negligible loss factor. With brush applicator. 2 oz. bottle. Shpg. wt., 3 oz.
43 N 139. NET.....35c

AMPHENOL CEMENT THINNER

Type 53-916-2T. For thinning Polyweld cement listed above. Does not change loss factor of cement. Rapid acting. Extends useful life of cement. 2 oz. bottle. Shpg. wt., 3 oz.
43 N 141. NET.....35c

KNIGHT ready-to-use SOUND SYSTEMS

3 EASY STEPS TO OPERATE:

1. **Microphone plugs into the amplifier.**
2. **Speakers plug into the amplifier.**
3. **Amplifier is plugged into the nearest AC outlet. That's all there is to it!**

Your Best Buy for Every Public Address Need

ALL KNIGHT AMPLIFIERS ARE GUARANTEED FOR 1 FULL YEAR

Every Knight amplifier is *unconditionally guaranteed for one full year* against defects in material or workmanship. We can make this iron-clad guarantee with absolute confidence because we know that each Knight amplifier delivers:

Highest Usable Output—you get the full power we claim—*usable* power, for maximum area coverage.

Top Fidelity—you get wide-range, perfectly balanced tone—even with our lowest-priced systems.

Rugged Dependability—always ready to serve you, under any conditions.

Underwriters' Approved. Knight 15 to 80 watt amplifiers meet U.L specifications for complete safety under any operating conditions.

Knight Systems are "Ready-to-Use." The system you buy comes to you complete—ready to use. Plugs and cables are attached to speakers and microphones—there's nothing more to buy, nothing to add.

Features That Count. A Knight exclusive—now the 25, 30 and 80-watt amplifiers have built-in preamp to permit use with G.E. and other hi-fi magnetic phono cartridges—all-weld amplifier cabinet construction with new, pull-out carrying handles (except 8-watt) and new color styling—maximum ventilation of cabinet for "cool running"—extra-large output transformer for clean, high power—heavy-duty SJ type AC cable—an output impedance for every speaker application—mike and phono mixing; all add up to "performance-plus" for you.

It's Easy to Select the System You Need. We show the approximate audience and area coverage of each Knight System. You can tell at a glance which system is best for your needs. In case your requirements are more complex, ALLIED's staff of Sound experts will help you make the proper selection. Simply give us full details, including approximate noise level, and a rough sketch of area to be covered. Our careful recommendations will be promptly made.

Buy a Complete System and Save. A Knight Sound System costs less than the total of the established prices for individual components. You save money by buying our complete, recommended systems.

Your "Best Buy" in Sound. The Knight P.A. line now is better than ever. You get new color and functional styling, highest usable output, top-quality accessories and completely satisfying performance.

Buy on Easy Terms. Any Knight amplifier or complete public address system selling for $45.00 or more may be purchased on easy terms. Use the equipment while you are paying for it. For full details of ALLIED's Easy Payment Plan, see page 315.

KNIGHT P.A. MONEY-BACK GUARANTEE AND 15-DAY TRIAL OFFER

We guarantee absolute satisfaction or your money back. Order any Knight Sound System and try it under your own operating conditions. If you don't agree that your Knight equipment meets every claim we make for it, send it back—any time within 15 days—and we'll refund every penny you paid, less only transportation charges. In addition to this money-back guarantee, every Knight Amplifier is unconditionally guaranteed against defects in material or workmanship for One Full Year, and every other component in a Knight System carries the 90-day warranty of the Radio-Electronics-Television Manufacturers' Association. Knight Sound Systems and amplifiers give you the most for your money in efficient design, smart appearance, quality construction and guaranteed performance.

—ALLIED RADIO CORP.

FAMOUS KNIGHT 30-WATT COMPLETE SOUND SYSTEMS

Knight 30-Watt Deluxe Portable Sound System

The most popular Knight P.A. system—used in thousands of church and school auditoriums, small theaters, lecture halls, etc., now ready for genuine hi-fi music reproduction at no increase in cost! To assure the finest reproduction of recorded music, a hi-fi magnetic cartridge may be used without the addition of an external preamplifier—the magnetic preamp stage is built-in. Equalized for G.E. or other high-fidelity magnetic cartridges, this outstanding feature establishes a new standard of realism for recorded music from P.A. equipment. And it's yours at no extra cost with the Knight systems!

FAMOUS KNIGHT 30-WATT AMPLIFIER. The heart of this system is a Knight amplifier famous for power and versatility. Provides full 30 watts of usable power. It gives you 3 inputs, 1 for mike, 1 for mike or magnetic phono, and 1 for crystal phono, each with individual volume control. By simply flipping a switch at rear panel on the microphone input (MIC 2), a built-in magnetic preamp, equalized for G.E. or other hi-fi magnetic cartridges, is automatically connected into the circuit. Case has new, pull-out carrying handles on top and die-drawn ends for extra strength. Smartly styled in two-tone blue, the amplifier looks good in any setting. U.L. Approved. *Unconditionally guaranteed for one full year.*

MATCHED COMPONENTS. Top-notch performance is assured by *matched components.* Uni-directional Electro-Voice "Cardax" mike reduces acoustic feedback problems—picks up from front only, back is dead. The 2 heavy-duty speakers have 14.5 oz. Alnico V magnets for greater audio output. Both are "Safused" for protection against accidental overload.

COMPACT PORTABLE CASE. A marvel of convenience and efficiency, the sturdy case has a place for everything. Amplifier is mounted on baseboard which slides into case; clips hold mike stand stem, with a bolt for securing the base; special pocket holds mike and cable. Pyroxylin-coated, maroon fabric covering will withstand the rigors of portable use. Houses both speakers; one in each half of split case. Gray flocked speaker grilles.

COMPLETE PORTABLE SYSTEM. Includes: Knight 30-Watt Amplifier (less phono top); Electro-Voice Cardax crystal mike (Fig. A) with 20-ft. shielded cable and plug; 3-section adjustable floor stand; two 12" PM speakers, each with 30-ft. cable and plug; portable carrying case as illustrated. Size, 16¾x12¾x25". Full operating instructions. For 110-130 volts, 60 cycle AC. Carrying wt., 59 lbs. Shpg. wt., 78 lbs.

93 PA 686. Complete system, less phono top. NET 124.25

93 PA 786. System with 3-speed phono top. NET 141.70

Add $16.00 for above system with Electro-Voice 636 "Slimoir" dynamic microphone (Fig. B), instead of the Cardax crystal mike (Fig. A). See page 173 for complete description of the Electro-Voice 636 "Slimoir" dynamic mike.

3-SPEED PHONO TOP. Record playing unit for Knight 30-watt amplifier. Heat and humidity-proof ceramic cartridge with dual-tip turnover stylus. Quickly and easily installed. For 110-130 v., 60 cycle AC. Shpg. wt., 10 lbs.

93 SX 667. NET 17.45

Knight 30-Watt Amplifier Only

GUARANTEED FOR ONE FULL YEAR

The new Knight 30-watt amplifier—re-designed and smartly styled to give you more for your P.A. dollar. First and only P.A. amplifier to offer a built-in magnetic preamplifier circuit *at no increase in cost!* No external preamplifier has to be added to this versatile unit. Magnetic preamp circuit is equalized for G.E. and other hi-fi magnetic cartridges. This exclusive feature establishes a new standard of music and voice realism for public address equipment. Other new features include latest circuit; new color styling in smart, two-tone blue; new pull-out handles on top of the cabinet for maximum ease and safety in carrying. Replace your old amplifier and bring your P.A. system up-to-date with this unbeatable value champion!

SPECIFICATIONS

POWER OUTPUT: Full 30 watts of usable power. (Hum is inaudible; 79 db below rated output).

EXTENDED FREQUENCY RESPONSE: ±2 db from 40 to 20,000 cps on phono and microphone channels.

OUTPUT IMPEDANCES: 4, 8, 16, 250 and 500 ohms, plus new 70 volt output. INPUTS: Three—one for high-impedance microphone; one for high-impedance microphone or magnetic phono; one for crystal phono. Each input has individual volume control. Built-in magnetic preamplifier stage, equalized for G.E. or other hi-fi cartridges. Slide switch preamp control on rear panel. GAIN: 130 db on each microphone channel; 80 db on phono channel.

TONE CONTROL: Attenuates treble 15 db at 10,000 cps. TUBES: 3—6SC7, 2—6L6G; 5U4G rectifier. SIZE: 14⅝x8⅜x11¼". LINE DRAIN: 118 watts. Tapped power transformer for optimum results over wide range of line voltages. In striking two-tone blue with matching knobs. Illuminated control panel. Complete with full set of plugs for mike, phono and speaker sockets; instructions. U.L. Approved. For 110-130 volts, 60 cycle AC. Shpg. wt., 32 lbs.

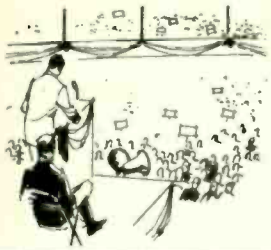
93 SZ 682. NET 56.50

30-watt amplifier as above, but with 3-speed phono top installed. Shpg. wt., 44 lbs.

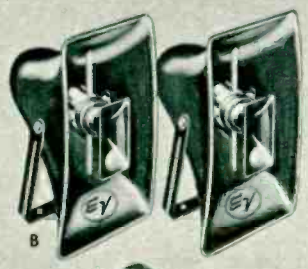
93 SZ 782. NET 73.95

KNIGHT Public Address Equipment Is Available on ALLIED's Easy Payment Plan

MORE FOR YOUR MONEY IN POWER AND QUALITY



Area coverage up to 20,000 square feet



B

A

30-Watt Trumpet Systems

Area Coverage up to 100,000 Square feet

Fig. A—COMPLETE SYSTEM WITH REFLEX TRUMPETS. Featuring the re-designed Knight 30-watt amplifier with exclusive, built-in magnetic preamp. this compact and versatile system is now ready to deliver outstanding music reproduction from record players equipped with G.E. or other high-fidelity magnetic phono cartridges.

For maximum power and coverage, we recommend this Knight 30-watt system with 20" reflex trumpets. These trumpets have 4 to 5 times the efficiency of cone speakers, and are ideal for plant and outdoor paging where noise level is high or where large areas must be covered.

The complete system includes: New Knight 30-watt amplifier (described on opposite page); 2— University Model PH 20" weatherproof reflex trumpets with 25-watt driver units; Electro-Voice "Cardax" crystal microphone equipped with "on-off" switch, 20-foot shielded cable and plug; desk stand; complete set of plugs for speakers and record player; full instructions. Amplifier is Underwriters Laboratories' Approved and unconditionally guaranteed for one year. Less cable for speaker lines (use any 2-conductor cable). See optional 3-speed phono top described on opposite page. For operation from 110-130 volts, 60 cycle AC. Shpg. wt., 75 lbs.

93 PA 688. NET **138.75**

Fig. B—SYSTEM WITH ELECTRO-VOICE PROJECTORS. Same as above but includes 2 Electro-Voice Model 848 compound diffraction projectors instead of University-type trumpets. Extended high-frequency response. For full details on E-V projectors, see page 180. Shpg. wt., 135 lbs.
Complete system, less phono top.

93 PA 689. NET **138.75**

30-Watt System for Permanent Installations

Here is the ideal all-purpose Knight Sound System—designed to fill a wide variety of requirements for medium-powered permanent sound installations. Particularly recommended for installation in moderate-size auditoriums, schools, churches, clubs, and entertainment spots. Delivers a full 30 watts of *usable* power. The new Knight amplifier, now with built-in magnetic preamplifier, is U.L. Approved. In addition, it is unconditionally guaranteed for one full year. For power, dependability, top value—it's the versatile Knight 30-watt system.

REMARKABLE PERFORMANCE. You get exceptional results with the Electro-Voice "Cardax" unidirectional crystal microphone—reduces feedback and acoustical howl. Properly designed wood baffles provide handsome enclosures for the powerful heavy-duty 12" PM speakers. For completely versatile service, you can add the optional matched 3-speed phono top described on opposite page. The carefully selected components of this Knight system assure top-quality performance under all operating conditions. We believe no 30-watt system of comparable quality is available today at so low a price.

COMPLETE PERMANENT SYSTEM. Includes: New Knight 30-watt amplifier with built-in preamp and magnetic phono input; 1—Electro-Voice "Cardax" crystal microphone with 20-ft. shielded cord and plug; 1—adjustable floor-type mike stand; 2—heavy-duty 12" PM Dynamic speakers (14.5 oz. Alnico V magnets) "Safused" for protection, and equipped with 30-foot cables and plugs; 2—handsome inclined-front wood wall baffles finished in walnut. Complete with instructions. Easy to install and operate. For operation from 110-130 volts, 60 cycle AC. Shpg. wt., 68 lbs.

93 PA 687. Complete System, less phono top. **NET** **119.75**

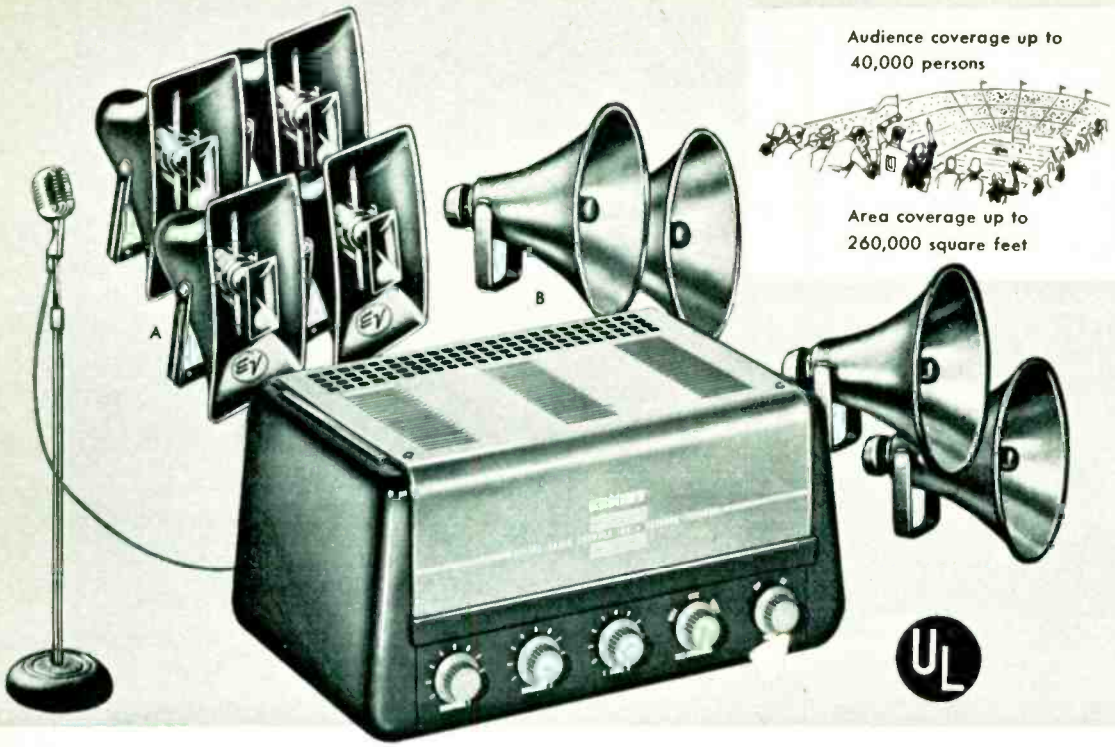
Add $16.00 for above Sound System equipped with Electro-Voice 636 "Slimair" dynamic microphone instead of the Cardax crystal microphone. For description of the 636 "Slimair" mike, see page 173.

Accessories for Knight 30-Watt Systems are listed on page 164.

Maximum Convenience

All Knight amplifiers, (except 8-watt units) are now equipped with new, pull-out carrying handles. This new, top-convenience feature assures maximum carrying ease and safety, particularly on amplifiers with phono tops installed. Finished in same color as amplifier case, these handles are completely inconspicuous when not in use, and in no way detract from the trim, distinctive appearance of the new Knight units.

KNIGHT 80-WATT SUPER-POWER SOUND SYSTEM



Knight 80-Watt Super-Power Complete Sound System

Here's the Super-Power King of Sound Systems—the Knight 80-Watt Trumpet System! You get more power, greater value and more new features with this system—than with any other high-power system in this price bracket. Compare features, compare prices—and buy Knight!

IDEAL FOR INDUSTRIAL APPLICATIONS. You can't beat the Knight 80-Watt System for such applications as high-power paging, music distribution in industrial plants, etc. Wherever large areas need to be covered—wherever high noise conditions prevail—the Knight 80-watt System is the answer. The full 80 watts of usable power gives you coverage of 260,000 square feet—and up to 40,000 persons. With this system, you can easily blanket an entire factory or industrial area, a large stadium, auditorium or amusement park. It's the one dependable, super-power system that meets all the sound requirements of large indoor and outdoor areas.

EXCLUSIVE NEW FEATURES. You get the very latest in circuit and cabinet design, plus smart, new color styling. The Knight 80-Watt System is the only high power P.A. system with a built-in magnetic preamplifier circuit, equalized for G.E. and other high-fidelity magnetic phono cartridges. Provides a matchless standard of realism in recorded voice and music reproduced through P.A. equipment. For greater ease and safety in carrying, the amplifier cabinet now includes new pull-out carrying handles. And the distinctive appearance of this Knight system is further enhanced by attractive, two-tone blue color styling. *You cannot buy better!*

COMPLETE SYSTEM WITH REFLEX TRUMPETS. (Fig. B). Includes: 1—Knight 80-watt amplifier; 1—Shure Model 55S "Unidyne" dynamic microphone with 20-ft. cable and plug; 1—adjustable floor-type mike stand; 4—University type PH 20" dia. reflex trumpets, mtg. brackets and type MA-25 25-watt driver units; full instructions. Less speaker cable (see below). For operation from 110-130 volts, 50-60 cycle AC. Shpg. wt., 140 lbs.

93 PA 698. NET 291.25

COMPLETE SYSTEM WITH ELECTRO-VOICE PROJECTORS. (Fig. A). As above but 4 E-V Model 848 compound diffraction projectors instead of University trumpets. For complete description of projectors, see page 180. Shpg. wt., 135 lbs.

93 PA 699. NET 291.25

Speaker Cable, Transformers and Volume Controls

INDOOR SPEAKER WIRE. 2-cond., rubber covered. 100', 3 lbs.

48 T 760. POSJ. brown. 100 ft. or more, PER 100 FT. 2.33

48 T 769. POT. white. 100 ft. or more, PER 100 FT. 2.13

OUTDOOR SPEAKER WIRE. Belden 8204. 2-cond., white, weatherproof.

47 T 639. Wt., 100', 3 lbs. 100 ft. or more, PER 100 FT. 3.38

SPEAKER MATCHING TRANSFORMERS. Required only if speakers are more than 100 ft. away from amplifier. *Sealed construction for outdoor use.

95 G 154*. Type CTR-20. For University trumpets. 3 lbs. NET 8.82

81 G 492*. Type E-V 876. For E-V 848 projectors. 4 lbs. NET 9.70

62 G 078. 18-watt, 70-volt type. 1¼ lbs. NET 2.46

SPEAKER VOLUME CONTROLS. T-pad type. Shpg. wt., 7 oz.

29 M 872. Mallory T15. For 16-ohm speakers.

29 M 871. Mallory T8. For 8-ohm speakers. NET EACH 2.50

Knight 80-Watt Amplifier Only

GUARANTEED FOR ONE FULL YEAR

Use this new super-power amplifier as the heart of your present P.A. installation. Or, build a new system around it to meet your particular sound requirements. Uses two 807 transmitter-type tubes in final stage for high power. Built-in magnetic preamplifier circuit allows use of G.E. or other hi-fi magnetic cartridges for unexcelled speech and music reproduction from records. Also includes 600-ohm ungrounded output winding on driver transformer—for phone lines or driving another amplifier.

POWER OUTPUT: Full 80 watts *usable* power. Hum inaudible—76 db below rated output. OUTPUT IMPEDANCES: 4, 8, 16, 250 and 500 ohms, plus 70.7-volt output. INPUTS: Four: 1—mike, 1—mike or magnetic phono, 2—crystal phono. Individual controls for each mike input; crystal phono inputs on fader. RESPONSE: ±2 db, 30-20,000 cps on phono *and* mike channels. GAIN: On mike, 115 db; on phono, 83 db—only ¼-volt phono input for full output. CONTROLS: Mike 1, Mike 2, (slide switch for magnetic phono preamp on rear panel) Bass-Treble Tone, and On-Off. Size. 8⅜" high, 17" wide, 11¼" deep. Finished in two-tone blue. With plugs for mike, speaker jacks, instructions. U. L. Approved. For 110-130 volts, 50-60 cycle AC. Shpg. wt., 40 lbs.

93 SZ 695. NET 132.50

ACCESSORY EQUIPMENT

NEW V-M 1225 4-SPEED AUTOMATIC CHANGER ON BASE. Plays 7", 10" and 12" records at 16⅔, 33⅓, 45 or 78 rpm. Ceramic cartridge with turnover stylus. Cord and plug. For 60 cycle AC operation only. Shpg. wt., 14 lbs.

96 RX 855. NET 32.66

SHURE DISPATCHER MICROPHONE. Grip-to-talk switch on stand. 20-ft. cord, plug. 8 lbs.

99 S 612. NET 22.64

MIKE EXTENSION. 25 ft., shielded, single-conductor with two 75-MCIF connectors. Wt., 2 lbs.

41 S 911. NET 3.15

PENTRON MIKE MIXER. Professional. 5 lbs.

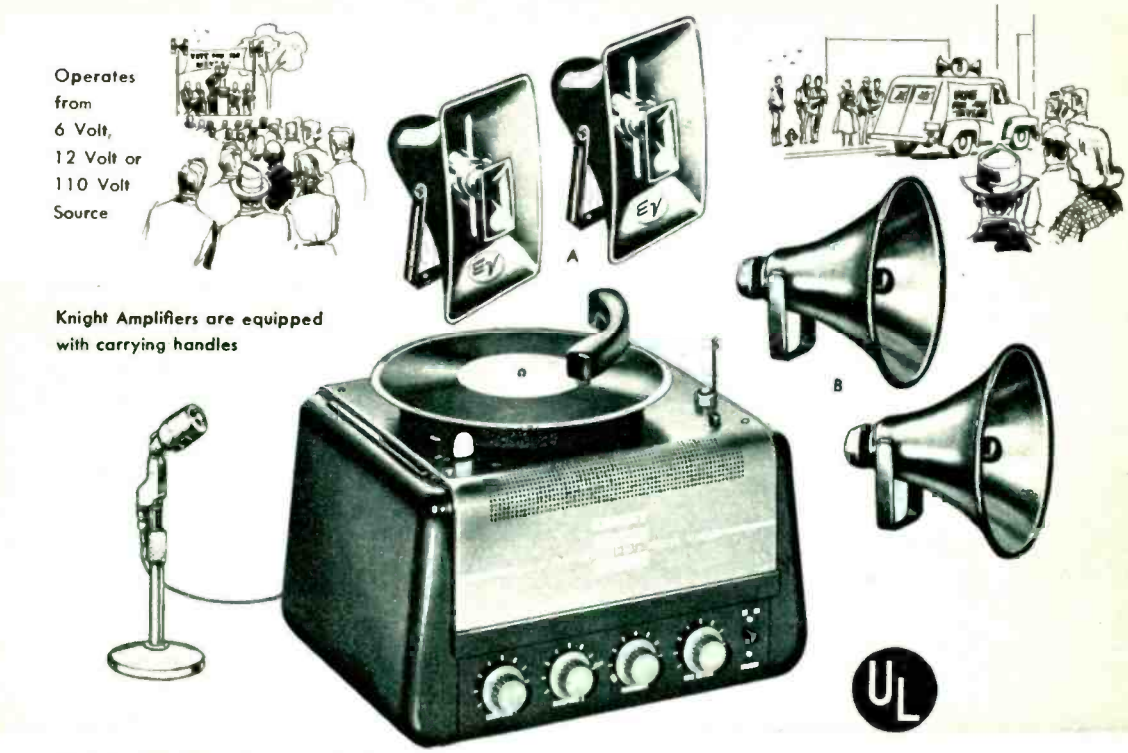
93 S 285. Type MM4. NET 35.70

"MINI-MIX" MIKE MIXER. Miniature. Wt., 4 oz.

41 H 954. Type 320. NET 4.67

For Aid in Selecting the PA System to Meet Your Needs, Write to Our Sound Division

KNIGHT 25-WATT MOBILE 6V-12V-110V SOUND SYSTEMS



Knight 25-Watt Universal 6V-12V-110V Mobile Sound Systems

Here's a Universal Sound System that has won the acclaim of PA users everywhere—now re-designed to include additional "bonus" features with no increase in cost! Exclusive new circuit designed with built-in magnetic preamplifier, equalized for G.E. and other high-fidelity magnetic cartridges. Smart, new two-tone blue color styling. It's engineered and built right for the most rugged mobile or stationary service. Provides powerful coverage of areas up to 85,000 square feet. Just check the features, the ease of operation—the ruggedness and quality of this Knight 25-Watt Universal Sound System. We believe it to be the finest universal system ever offered at this price.

WORKS ANYWHERE. Operate it from any 6-volt or 12-volt automobile storage battery; or from 110-130 volts, 50-60 cycle AC. Whichever way you use it, we guarantee full 25 watts *usable* output. Use it indoors or outdoors—you can't beat this system for versatility!

MAXIMUM FLEXIBILITY. Two hi-impedance mike inputs (1 mike; 1 mike or magnetic phono), and 1 phono input. Instant control over "mixing" and "fading." Optional built-in record player. Wide selection of speaker output impedances. Tone control for simple acoustical correction.

RUGGED DEPENDABILITY. Uses quality parts for years of trouble-free service. Electro-Voice dynamic mike—built for rough handling. University type PH all-metal, all-weather trumpets (20" bell diameter) and 25-watt driver—or the new Electro-Voice fiberglas Model 848 projectors. You can count on this Knight 25-watt system to serve you dependably, anytime, anywhere.

COMPLETE, READY FOR QUICK INSTALLATION. You get everything you need for immediate installation and operation—in any car or truck, or indoors. Built-in converter to operate phono tops from 6 or 12-volt DC source. Arranged for quick switch-over from mobile to indoor operation or vice versa. Convenient, new pull-out handles on top of cabinet for ultra-safe and easy carrying.

AMPLIFIER "PLUS" FEATURES. Change from 6 or 12 to 110 volts in a jiffy—just change plugs at rear of amplifier. Economizer switch saves power during stand-by periods. Wide-range response: 40 to 15,000 cycles, ±2 db. Two speaker outlets. Speaker output impedances: 4, 8, 16, 250, 500 ohms, and 70.7 v. output. Separate volume controls for 2 microphones and 1 record player. U.L. Approved.

COMPLETE SYSTEM WITH REFLEX TRUMPETS (Fig. B). Includes: Knight 25-watt, 6-12 volt-110 volt amplifier with all tubes; AC and 6-12-volt cables; 2 University type PH all-metal reflex trumpets, complete with 25-watt driver units; E-V 630 mike with table stand and 20-foot cord and plug. See listing of optional phono tops at right. With instructions, and 50 feet of speaker cable. For 6 or 12 volts DC and 110-130 volts, 50-60 cycle AC. Shipg. wt., 73 lbs.

93 PA 643. Complete system, less phono top. NET 191.50

COMPLETE SYSTEM WITH ELECTRO-VOICE PROJECTORS (Fig. A). Same as above but includes 2 Electro-Voice Model 848 compound diffraction projectors instead of University-type trumpets. The Model 848 is a radically new projector using co-axial horns and is made of spun fiberglas. Extended high-frequency response. For full details, see page 180. Shipg. wt., 75 lbs.

93 PA 647. Complete system, less phono top. NET 191.50

25-Watt Mobile Amplifier Only

GUARANTEED FOR ONE FULL YEAR

Perfect for P.A. systems on sound trucks, in band shells, carnivals, etc., and indoor use. Compact, versatile and easy to use. Operates from 6 or 12 volts DC and 110-130 volts, 50-60 cycle AC. Quick changeover from 6 or 12 volt operation is accomplished by slide switch at rear of amplifier cabinet.

SPECIFICATIONS

POWER OUTPUT: Full 25 watts of *usable* power (31 watts peak power). Hum is inaudible—75 db below rated output. **RESPONSE:** ±2 db, 40 to 15,000 cycles. **GAIN:** On microphone stages, 130 db; on phono stage, 80 db. **INPUT CHANNELS:** Three—one for high-impedance mike, one for mike or magnetic phono, one for crystal phono. **OUTPUT IMPEDANCES:** 4, 8, 16, 250, 500 ohms and 70.7-volt output. **TONE CONTROL:** Attenuates treble 15 db at 16,000 cycles. **POWER DRAIN:** 120 watts on AC, 20 amperes on DC. Fuse-protected. **POWER REQUIREMENTS:** Operates from 6 or 12 volts DC, or 110-130 volts, 50-60 cycle AC.

Rugged steel case with die-drawn ends, finished in attractive two-tone blue. Size, 14⅝" w, 8⅛" h, 11¼" deep. U.L. Approved. *Unconditionally guaranteed against defects in material and workmanship for one full year.* Shipg. wt., 30 lbs.

93 SZ 645. NET 108.75

CHOICE OF PHONO TOPS

STANDARD PHONO TOP. For Knight 25-watt amplifier. Plays standard 78 rpm records. For mobile or stationary use. Ceramic cartridge and precious metal-point needle. No extra charge for installation when purchased with amplifier. For 60 cycle AC operation only except when used on 25-watt amplifier. Shipg. wt., 10 lbs.

93 SX 669. NET 15.45

3-SPEED PHONO TOP. Plays 78, 33⅓, and 45 rpm records. Has constant-speed motor, pickup with ceramic cartridge and turnover stylus. For use with Knight 25-watt amplifier in stationary applications. Installed on amplifier when purchased together. For 60 cycle AC operation only except when used on 25-watt amplifier. Shipg. wt., 6 lbs.

93 SX 667. NET 17.45

For Full Details on ALLIED's Easy Payment Plan, See Page 315

KNIGHT 15-WATT TOP VALUE SOUND SYSTEMS

AUDIENCE COVERAGE UP TO 2,000 PERSONS

AREA COVERAGE UP TO 10,000 SQUARE FEET

Knight 15-Watt Portable Sound System

This system gives you more watts, greater convenience, and greater performing dependability for your money. It's ideal for lectures, auctions, taverns, small traveling orchestras (fine for use with electric guitars); perfect as a rental system. Covers audiences up to 2,000 and areas up to 10,000 sq. ft.

OUTSTANDING FEATURES: The amplifier is U. L. Approved and unconditionally guaranteed for one full year. You get full rated output—15 usable watts. The Shure mike is unidirectional—keeps acoustic feedback at a minimum. Three-section floor stand with 2 clutches telescopes to very small size. The heavy-duty 12" speaker (with 14.5 oz. magnet) is "Safused" for protection against accidental overload. Ingenious portable case is handsome and practical. Brackets, clips, grooves, etc., provide a secure place for every component. Case is covered in tough, plastic-coated maroon fabric, and has gray flocked speaker grille.

COMPLETE PORTABLE SYSTEM—READY TO OPERATE. Everything you need is supplied—there's nothing more to buy. Included are: 1—Knight 15-watt amplifier with new, pull-out carrying handles and two-tone blue color styling; 1—Shure 737A crystal mike (Fig. A), 20-ft. shielded cord and plug; 1—mike floor stand; 1—12" "Safused" PM dynamic speaker with 30-ft. cord and plug; carrying case. Size: 16¾x12¾x25". For 110-130 volts, 50-60 cycle AC. Carrying wt., 56 lbs. Shpg. wt., 78 lbs.

93 PA 654. Complete system, less phono top. NET **97.50**

93 PA 656. System as above, but with 2—8" PM speakers, instead of single 12" speaker. Provides same coverage, with better sound "spread." Carrying weight, 56 lbs. Shpg. wt., 75 lbs. NET **97.50**

Either system available with new Shure 55S "Unidyne" dynamic unidirectional mike (Fig. B), instead of the 737A crystal mike—at additional $19.00 cost. Model 55S is recommended for conditions of high humidity and temperature. See page 171 for complete description of the 55S.

Knight 15-Watt System for Permanent Installation

You'll find exceptional value in this Knight 15-watt system designed for permanent installations. Covers audiences up to 2,000 and areas up to 10,000 square feet. Recommended for small auditoriums, lodges, country clubs, office and factory paging, etc. Supplied 100% complete. The 15-watt, U. L. Approved amplifier is unconditionally guaranteed for one full year.

COMPLETE PERMANENT SYSTEM. Includes: 1—Knight 15-watt amplifier with pull-out carrying handles and two-tone blue color styling; 1—Shure 737A crystal microphone, with 20 ft. shielded cord and plug; 1—adjustable mike floor stand; 2—heavy-duty 12" "Safused" PM dynamic speakers, each with 30-ft. cable and plug; 2—inclined-front wood wall baffles finished in walnut. For 110-130 volts, 50-60 cycle AC. Shpg. wt., 65 lbs.

93 PA 657. Complete system, less phono top. NET **108.00**

93 PA 658. System as above, but with 2—8" PM speakers and 8" baffles instead of the 12" speakers and 12" baffles. Shpg. wt., 58 lbs. NET **89.50**

Either system is available with the Shure Model 55S "Unidyne" dynamic unidirectional microphone instead of the 737A crystal mike—at an additional cost of $19.00. See page 170 for complete description of the 55S.

Knight 15-Watt Amplifier Only

GUARANTEED FOR ONE FULL YEAR

An ideal replacement for obsolete units—perfect as the heart of a system to meet your special requirements. An outstanding value—built for top performance and dependable service. Covers up to 50,000 square feet when used with trumpet-type speakers. Housed in a streamlined case of one-piece, all welded steel construction, with die-drawn ends. New pull-out carrying handles assure safe, easy handling. Top and bottom are removable. Invisible ventilating louvers at bottom. Control panel is illuminated.

SPECIFICATIONS

OUTPUT: Full 15 watts usable power. (Hum is inaudible; 74 db below rated output.) FREQUENCY RESPONSE: ±2 db from 40 to 10,000 cps on phono and microphone channels. OUTPUT IMPEDANCES: 4, 8, 16, 250 and 500 ohms, plus 70.7 volt output. INPUTS: Two—one for high-impedance microphone; one for phono. Each input has individual volume control. GAIN: 121 db on microphone channel; 76 db on phono. More than enough gain for any high-impedance mike and crystal pickup. TONE CONTROL: Attenuates treble 16 db at 10,000 cps. TUBES: 1—6SJ7, 1—6SC7; 2—6V6GT; 5Y3GT rectifier. SIZE: 14⅝x8¾x11¼". LINE DRAIN: 74 watts. Power transformer has tapped primary for optimum results from 110 or 130 volt line.

Large fluted controls. Finished in eye-catching two-tone blue. Size, 14⅝x8⅜x11¼". With full set of plugs for mike, phono, and speaker sockets. Full operating instructions. For 110-130 volts, 50-60 cycle AC. Shpg. wt., 26 lbs. U. L. Approved. *Unconditionally guaranteed for one full year.*

93 SZ 655. NET **44.75**

3-SPEED PHONO TOP. Plays *all* records—33⅓, 45 and 78 rpm. Complete with constant-speed motor, pickup with turnover stylus and heat and humidity-proof ceramic cartridge. Includes switch, arm-rest, and plug-in connections. Supplied installed on amplifier when purchased together. For 110-120 volt, 60-cycle AC operation only. Shpg. wt., 10 lbs.

93 SX 667. NET **17.45**

POWERFUL 15-WATT TRUMPET SYSTEM

Covers up to 50,000 square feet. Trumpet has 4-5 times the efficiency of a cone speaker; ideal for paging use outdoors or where noise level is high. Complete system includes: 1—Knight 15-watt amplifier; 1—University PH 20" weatherproof trumpet (see page 179) with 25-watt driver; 1—Shure "Dispatcher" magnetic mike on grip-to-talk stand, with 20-ft. cord and plug (see page 170); all necessary plugs. Full instructions. Less speaker cable (see speaker cable on page 164). For 110-130 volts, 50-60 cycle AC. Amplifier is U.L. Approved and guaranteed for one year. Shpg. wt., 52 lbs.

93 PA 659. NET **97.50**

For Full Details on ALLIED's Easy Payment Plan, See Page 315

SPECIAL P. A. VALUE!

Quality at Economy Prices!

KNIGHT 8-WATT AMPLIFIER AND SOUND SYSTEMS

COVERAGE:

UP TO 5000 SQ. FT.

UP TO 1000 PERSONS

Knight 8-Watt Amplifier Only

GUARANTEED FOR ONE FULL YEAR

This amazingly powerful, compact amplifier features low initial cost combined with economy in service. An unbeatable value for small P.A. installations. Covers up to 20,000 square feet when used with trumpet speaker (see below right). Separate input controls permit blending or mixing microphone and phono. With 2 speaker sockets.

SPECIFICATIONS

OUTPUT: Full 8 watts usable power. (Hum is inaudible; 70 db below rated output.) FREQUENCY RESPONSE: ±2 db from 70 to 9,000 cps on microphone and phono channels. OUTPUT IMPEDANCES: 4 and 8 ohms. INPUTS: Two—one for high-impedance microphone; one for phono. Each input has individual volume control. GAIN: 76 db on phono channel; 123 db on microphone. More than enough gain for any high-impedance mike, and crystal pickup. TONE CONTROL: Attenuates treble 19 db at 10,000 cps. TUBES: 1—6SL7GT, 1—6L6, 1—5Y3GT rectifier. LINE DRAIN: 68 watts. Power transformer has tapped primary for optimum results from 110 or 130 volt line. SIZE: 7⅛x10¼x7¼".

Bull's-eye indicates "on-off"; AC switch is on tone control. Trim design; all-steel construction, finished in handsome light blue. Size: 7⅛x10¼x7¼." Complete with full set of plugs for mike, phono and speaker sockets; instructions. For 110-130 volts, 50-60 cycle AC. Shpg. wt., 13 lbs. *Unconditionally guaranteed for one full year.*

93 SZ 690. NET **28.50**

Knight 8-Watt Permanent System

Here's the "Little Giant" in a complete, low-cost system that's ideal for all those smaller permanent installations. Covers audiences up to 1000 and areas up to 5000 sq. ft. Has all the fine features described above. Provided with wall baffle for permanent type mounting. The complete system includes the Knight 8-watt amplifier; the Shure "Slim-X" all-purpose, lightweight crystal microphone with 20-foot cable and plug and S38 desk stand (see page 170 for description). 8" PM dynamic speaker with 30-foot cable and plug attached; attractive leatherette-covered inclined wall baffle to house speaker; complete instructions. For 110-130 volts, 50-60 cycle AC. Shpg. wt., 22 lbs.

93 PA 692. NET **46.75**

Knight 8-Watt "Little Giant" Portable System

There's more for your money than ever in the popular "Little Giant"—the ideal sound package for those smaller installations. You get the same quality you'll find in the larger Knight Systems, the same unconditional one year guarantee on the amplifier—the same full rated power delivery and completely dependable performance. Here's the system that's a natural for sales demonstrations, auctions, lodges, clubs, classrooms, churches, stores, cafes— the perfect low-cost equipment for hundreds of applications covering audiences up to 1,000 and areas up to 5,000 square feet.

READY TO USE. Complete—nothing more to add or buy. Sets up in a jiffy. Just plug mike and speaker cables into amplifier—plug amplifier into AC outlet—and you're ready to operate. That's all there is to it. You couldn't ask for anything simpler—it's the last word in Portable Public Address Convenience.

"BIG SYSTEM" FEATURES. Completely portable in a single convenient case that holds everything. Has built-in, quality 8" PM Dynamic speaker (with 6.8 oz. Alnico V magnet). Uses the Shure "Slim-X" all-purpose, lightweight crystal microphone, and S38 desk stand (see page 171 for description). Amplifier has two inputs to take any high-impedance microphone and record player; separate input controls permit blending or mixing mike and phono as desired. With special outlet for adding an extra dynamic speaker. Includes tone control. The carrying case is covered in rich maroon Pyroxylin-treated fabric with gray-flocked speaker grille; case includes pocket which stores mike and desk stand.

COMPLETE SYSTEM. Includes: Knight 8-watt amplifier finished in light blue; 1—microphone with 20-foot shielded cable and plug attached; 1—8" PM dynamic speaker (Quam heavy duty type 8A6) and 30-foot cable with plug attached; attractive carrying case covered with tough, weatherproof fabric (only 16½x 11x8¼"). The 8-watt "Little Giant" Portable System is supplied with full instructions. For operation from 110-130 volts, 50-60 cycle AC. Total carrying weight is only 21 lbs. Shpg. wt., 26 lbs.

93 PA 691. NET **53.50**

99 S 639. Lavaller cord for suspending mike around neck. **NET** **53c**

Complete Knight 8-Watt Trumpet System

Covers up to 20,000 Sq. Ft.

This is the most powerful small system we know of. You get amazing output and widest coverage with the reflex-type trumpet which has from four to five times the efficiency of a cone speaker. Complete system includes: 1—Knight 8-watt amplifier; 1—University Model 1B8 8" weather-proof reflex trumpet with a 90° dispersion angle, plus a built-in 12-watt driver unit (see page 179 for description); 1—Shure "Slim-X" all-purpose, lightweight crystal microphone with S38 desk stand, nylon-lined A25 swivel and 20-foot cable and plug (see page 170 for description); plugs for speaker and phonograph; complete operating instructions. Less speaker cable (see 2-conductor speaker cable listed on page 164). For operation from 110-130 volts, 50-60 cycle AC. *Amplifier is fully guaranteed for one year.* Shpg. wt., 36 lbs.

93 PA 693. NET **62.50**

KNIGHT LOW-COST CENTRALIZED SCHOOL SOUND

48-Room Control Amplifier

U. L. Approved—Guaranteed for One Full Year

The Knight centralized 30-watt school sound system offers unusual versatility at low cost. It is ideal as a school paging system for making announcements to classrooms; for carrying on two-way conversations between classroom and central office; for distribution of voice and music from radio tuner, record player or tape recorder. The "heart" of this school system is a 30-watt centralized control amplifier equipped with push-buttons to permit routing sound to any one room, any group of rooms, or every room in the system. Two models of this amplifier are available; one which distributes sound up to 24 classrooms, and another with 48-room capacity. An "All-Call" switch provides instantaneous emergency communication to every room simultaneously. A combination speaker-microphone unit, for use in the central office, is supplied with the amplifier. Calls from the control amplifier are transmitted to 6" or 8" speakers installed in classrooms. Classrooms can also talk back through these speakers in replying to calls, and by using a special accessory switch (see right), can originate calls to the central office.

OTHER FEATURES. Volume-level indicator for correct sound level of voice or music heard in classrooms. Inputs provided for microphone (at control unit or remote location), phono and auxiliary. Mike input for broadcasting speeches; phono input for any record player with crystal or ceramic cartridge. Auxiliary may be used for additional phono or tape recorder, and for "piping-in" radio programs.

SPECIFICATIONS. *Output:* 30 watts. *Inputs:* Microphone; phono; auxiliary (radio, tape, additional phono, etc.). *Controls:* Output volume (for mike, phono, aux.); incoming volume (for incoming calls). *Switches:* 4-pos. selector (mike, normal, phono and aux.); talk-listen (intercom); "All-Call." Handsome two-tone blue cabinet, 8¾x23⅜x11⁷⁄₁₂". Recommended room speakers: 6" for average size classroom; 8" for auditorium, gymnasium, etc. Requires 2-conductor cable to each speaker—additional pair to each origination switch (see below). With detailed instruction manual. For 110-120 v., 50-60 cycle AC.

24-ROOM CONTROL AMPLIFIER. Provides push-button facilities for up to 24 rooms. With desk-type speaker-mike. 40 lbs.
93 SZ 798. NET 157.50

48-ROOM CONTROL AMPLIFIER. As above, but with push-buttons for up to 48 rooms. Shpg. wt., 50 lbs.
93 SZ 799. NET 198.50

SPEAKERS AND SYSTEM ACCESSORIES

6" ROOM SPEAKER. In brown-finish, plastic coated wall baffle. 500-ohms impedance. Can be painted to match room. 4 lbs.

Stock No.	NET EACH		
	1 to 14	15 to 29	30 or more
93 PA 793	7.95	7.50	7.12

ORIGINATION SWITCH. One required for each room that is to originate calls to central unit. Shpg. wt., 1 lb.
93 S 792. NET 2.80

8" ROOM SPEAKER. Impedance, 500 ohms. In baffle as described at left. For large rooms, auditorium, gym, etc. 6 lbs.

Stock No.	NET EACH		
	1 to 14	15 to 29	30 or more
93 PA 794	9.45	8.98	8.53

2-CONDUCTOR CABLE. For room speakers and origination switch. No. 22 solid tinned copper; twisted pair. 100', 1¾ lbs.
48 W 890. NET, Per 100' 1.85

BUY ON EASY TERMS. Use the Knight Centralized School Sound System while you are paying for it. For full details of ALLIED's Easy Payment Plan, see page 315.

A

B

Bell Model 2195 Transcription Player

Professional-quality transcription player designed for double-duty service. Serves as a variable-speed phonograph or powerful 10 watt PA system.

DELUXE FEATURES. Entire unit is contained in a single portable case. One half of case serves as a speaker baffle; may be placed up to 25 feet from amplifier and turntable. Speaker is 12", heavy-duty PM type. External 4-ohm speaker jack. Turntable speed can be varied continuously between 30 to 80 rpm. 16" pick-up arm, with twin crystal cartridge. Separate bass and treble controls. Two mike inputs with individual gain controls permit mixing voice and music; mike inputs may also be used for instrument pickups. Tone of one mike input is unaffected by tone controls; permits controlling tone of instrument pickup or phono without affecting mike operation.

SPECIFICATIONS. *Output:* 10 watts with less than 3% distortion. *Response:* ±1 db 30 to 15,000 cps. *Hum:* 60 db below 10 watts. *Controls:* Two mike gain; phono gain; bass, treble-AC-off-on; speed selector; motor off-on. *Two Inputs:* Mike or instrument pickups. *Tubes:* 2—6SJ7, 2—6SL7GT, 2—6V6GT; 5Y3GT rectifier. *Size:* 12½x18x17½". With 25' speaker cable; less mike. For 110-120 v., 50-60 cycle AC. Shpg. wt., 40 lbs.
99 RZ 040. List. $245.75. NET 154.33

V-M Record Playing Accessories

Fig. A. MODEL V-M 960 3-SPEED PORTABLE CHANGER. Ideal portable changer for above centralized school system, or any Knight amplifier. Uses V-M "Tri-o-matic" changer to play 78, 33⅓ and 45 rpm records. Automatic tone arm setdown. 10" and 12" records of same speed can be intermixed. Changer shuts off after last record. Dual-needle, turnover crystal cartridge. Simple, centralized controls. Sturdy carrying case covered in mahogany wood-grain simulated leather. With AC line cord, 6-ft. shielded lead and plug. Size, 13½x15½x8½". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 18 lbs.
96 RX 730. List. $64.50. NET 41.92

Fig. B. MODEL V-M 120 4-SPEED RECORD PLAYER ATTACHMENT. Small, lightweight 4-speed record player attachment. Plays all 4 speeds. (16⅔, 33⅓, 45 and 78 rpm) in 7, 10, and 12" records. Has turntable speed control. Semi-precious metal needle. Free-floating tone arm. Carrying case of new Styron 475 material. Rich maroon finish. Case measures only 10¹⁄₁₆x8x6¹⁄₁₆". U.L. Approved. With 6-ft. power cord and 4-ft. phono cord. May be quickly attached to any amplifier. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 6½ lbs.
96 R 641. List. $19.95. NET 14.00

Letter Z in Stock Number Indicates Express Shipment Only

ASTATIC MICROPHONES FOR ALL APPLICATIONS

Fig. A. SYNABAR UNIDIRECTIONAL CARDIOID CRYSTAL MIKE. For high-quality reproduction and minimum noise pickup. Sintered metal filter provides 15 db front-to-back ratio at all frequencies. Response. 50-10,000 cps. Response selector switch provides choice of crisp voice frequencies or full range voice and music. Output level. −54 db. High impedance. Crystal element has metal-seal protection. 18 feet of detachable shielded cable. Satin chrome finish. 4½" H, 3½" W. 3½" D. Shpg. wt., 2½ lbs.

MODEL DR-10-S. With on-off Switch.
99 S 421. List. $39.95. NET 23.49

MODEL DR-10. Less On-off Switch.
99 S 420. List. $37.25. NET 21.90

Fig. B. DK-1 CRYSTAL MIKE. Small-size and inconspicuous non-directional mike. Excellent frequency range. High impedance. Output. −55 db. Crystal is coated against moisture. Chrome finish. 1 13/16" dia.; 5 9/16" long. 5/8"-27 thread. With 10-ft. cable. Shpg. wt., 2 lbs.
99 S 643. List. $22.00. NET 12.94

MODEL DK-1-S. With On-off switch.
99 S 642. List. $24.70. NET 14.52

Fig. C. JT-30 CRYSTAL MICROPHONE. For Amateurs, PA systems, home recorders, etc. Frequency response. 30 to 10,000 cycles. Output level. −52 db; provides ample output for use with low-gain amplifiers. Completely equipped with 10 feet of shielded, detachable cable and a desk stand. The stand stem unlocks from base to make hand mike. Handle may be removed and mike may be used on any stand with 5/8"-27 thread. Opalescent gray with chrome grille. Overall height. 8"; grille dia., 2 5/16"; depth, 3 1/16". Shpg. wt., 2½ lbs.
99 S 302. List. $16.95. NET 9.97

MODEL JT-30C. As above, but with ceramic element. Unaffected by heat or moisture. Ideal for outdoor public-address applications. Output. −57 db. With 5-ft. cable. Shpg. wt., 2½ lbs.
99 S 422. List. $16.15. NET 9.50

Fig. D. "VELVET VOICE" MODEL 200 CRYSTAL MIKE ON STAND. Head fixed at convenient angle. Response. 30-10,000 cps. Output level. −52 db. High impedance. With built-in handle and separate "quick-lock" detachable base. Standard 5/8"-27 thread. With 10 feet of shielded cable. Height. 8"; grille dia., 2½". Gold-finish, with chrome grille; enamel base. Wt., 2 lbs.
99 S 314. List. $13.95. NET 8.20

Fig. E. T-3 CRYSTAL MIKE. Response is 30-10,000 cps. Output. −52 db. Tilting head. Has metal-sealed element. Chrome finish case. With 15-ft. detachable, shielded cable. Less stand. Shpg. wt., 2 lbs.
99 S 300. List, $27.35. NET 16.08

MODEL GT-3. As above, but on 8¼" "Grip-to-talk" desk stand, with built-in switch. 6-ft. cable. Shpg. wt., 3¼ lbs.
99 S 301. List. $40.40. NET 23.76

Fig. F. 54M3 CRYSTAL MIKE. High output crystal microphone. Excellent for all low cost general applications—public address, home recording, etc. Output. −51 db. Range: 30-10,000 cps. Non-directional in vertical position (when used as shown in illustration—Fig. F). Locks in base by inserting and turning ½-turn. In rich brown baked enamel finish. Base adapter threaded, 5/8"-27. With 5-ft. shielded cable. Ht., 7½"; base diameter. 5". Shpg. wt., 2 lbs.
99 S 426. List. $12.75. NET 7.50

Fig. G. "DN-HZ" DYNAMIC MIKE. Unaffected by temperature or humidity. Response. 50 to 7,000 cps. Output. −55 db. Tilting head. An excellent mike for general, public-address applications. Ruggedly constructed. Gray case; chrome plated grille. 6 7/8x4 5/8x2 5/8". 10-ft. detachable cable. 5/8"-27 thread. High-impedance output. For paging use with stand below. Wt., 2½ lbs.
99 S 304. List. $29.50. NET 17.35

MODEL G STAND. Grip-to-talk. For DN, T-3, D-104 mikes. Switch shorts mike and controls relay leads. Chrome on gray base. 8¼x5½". 6-ft. cable. 2¼ lbs.
94 S 011. List. $18.50. NET 10.88

Fig. H. "CARDINAL" CX CRYSTAL MIKE. Response. 30-10,000 cps. Output. −52 db. Attractive gold finish case. May be used on standard floor stand with addition of adapter below. Less adapter. 3 7/8x2½x1¼". 10-ft. cable. Wt., 1½ lbs.
99 S 317. List. $9.75. NET 5.73

MODEL CB DESK STAND BASE. Brown plastic. For above. Shpg. wt., 8 oz.
99 S 390. List. $1.00. NET 59c

MODEL SA FLOOR STAND ADAPTER. For above. 6 oz.
99 S 391. List. 35c. NET 21c

Fig. J. D-104 CRYSTAL MIKE. Built especially for speech range. 500 to 4,000 cps. High output of −45 db; requires only a low-gain speech amplifier. Chrome finish. 3½x1 1/16". 5-ft. cable. Shpg. wt., 1¾ lbs.
99 S 309. List. $24.60. NET 14.46

Fig. K. MODEL M302 CRYSTAL MIKE. Wide response. 30-10,000 cps. Output. −47 db. Crystal element has metal seal protection. Zinc die-cast housing. 8' cable and easel type stand. Shpg. wt., 2 lbs.
99 S 440. List. $10.50. NET 6.17

MODEL M301 CERAMIC MIKE. As above, but has ceramic element. Unaffected by temperature and humidity. Output. −54 db. Response. 30-8,000 cps.
99 S 441. List. $10.00. NET 5.88

Fig. L. MODEL M102 CRYSTAL MIKE. Excellent performance—low-cost. Response. 30-10,000 cps. Output, −46 db. 5' cable. Tan plastic housing. Wt., 1½ lbs.
99 S 442. List. $7.25. NET 4.26

MODEL M101 CERAMIC MIKE. As above, but has ceramic element. Response. 30-8,000 cps. Output. −53 db.
99 S 443. List. $7.00. NET 4.12

Fig. M. MODEL 788 "METRO" DYNAMIC MIKE. Ideally suited for indoor or outdoor PA, recording or TV use. Converts from hand to stand to lavalier. Omni-directional, "pop" and blast-proof diaphragm. Response: 60-13,000 cps. Output level: −55 db. Simple change at cable end for hi- or low-impedance. With built-in On-Off switch, desk-floor stand adapter (5/8"-27 thread), lavalier cord and assembly, belt clip and 20 ft. cable. Die-cast alloy, in non-reflecting black, brushed gold color trim. 9 11/16" long; 1 3/8" dia. Shpg. wt., 12 oz.
99 S 413. List. $79.50. NET 46.74

Fig. N. MODEL 888 "TEMPO" DYNAMIC MIKE. New, omni-directional hi-fi dynamic mike. Its careful design and unusual styling make it an excellent choice for any studio or deluxe installation. Shock and weather-proof diaphragm and cartridge assembly. For hand, desk or lavalier use. Response: 50-15,000 cps. Output level: −56 db. Multi-impedance (50-150-250 and Hi-Z) selection by simple plug and socket terminal. In non-reflecting, satin-black and brushed-chrome finish. 9 7/8" long; 1 9/32" dia. Supplied in case with desk-floor stand adapter (5/8"-27 thread), lavalier cord and assembly, belt clip, 20 ft. cable and Cannon XLJ-R connector. Shpg. wt., 1½ lbs.
99 S 414. List. $116.50. NET 64.68

MODEL 888-S. As above, with On-Off switch.
99 S 415. List. $116.50. NET 68.50

Fig. P. MODEL 988 "VOGUE" DYNAMIC MIKE. New, professional high-fidelity dynamic mike for the most exacting radio-TV studio requirements. Omni-directional. Slim and graceful design. "Pop" and blast-proof—eliminates resonance and boominess when held close to mouth. Special, shock-proof diaphragm. Response: 40-20,000 cps. Output level: −57 db. Multi-impedance (50-150-250 and Hi-Z) selection by plug and socket terminal. 10 3/32" long; 1 9/32" dia. Same accessories as Model 888 above. Shpg. wt., 1½ lbs.
99 S 416. List. $150.00. NET 88.20

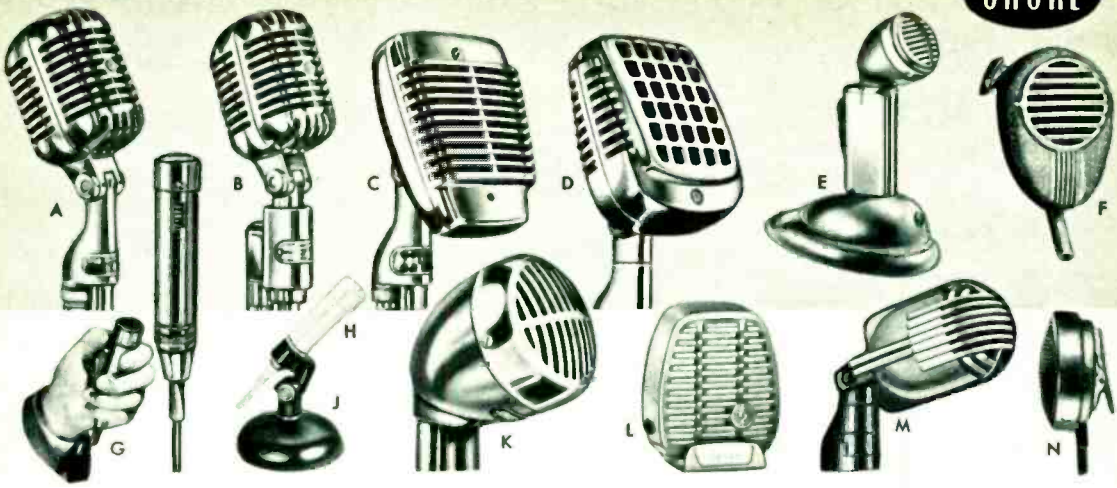
Fig. R. MODEL A-8 "FUTURA" MIKE DESK STAND. Streamlined, ultra-modern desk stand for use with Models 788, 888 and 988 microphones. Tilt-proof die-cast base in handsome, non-reflecting satin black. With 5/8"-27 threaded adapter coupling. 1 lb.
94 S 031. List. $12.00. NET 7.06

Fig. S. MODEL M-350 ALL-PURPOSE "DYNA-MIKE." New, wide-range, omni-directional dynamic mike. High impedance. Excellent for general broadcast and recording use. Amateur station, etc. Special, weatherproof plastic diaphragm; "pop-proof" head. Response: 50-10,000 cps. Output level: −56 db. Diecast housing in satin black, brushed chrome grille. With 18 ft. cable, 5/8"-27 adapter. Shpg. wt., 1 lb.
99 S 418. List. $39.95. NET 23.49

MODEL M-350S. As above, with On-Off switch.
99 S 419. List. $42.70. NET 25.11

SHURE MICROPHONES FOR EVERY PURPOSE

SHURE



POPULAR "UNIDYNE" MICROPHONES

Fig. A. MODEL 55S. Smaller, restyled version of the famous Shure "55" series of unidirectional dynamic microphones. An excellent choice for high-quality recording, public address, broadcast and fixed-station use. Moving coil unit is rubber-mounted to prevent shock noises. Smooth, peak-free response from 40-15,000 cycles at front—dead at rear. Simple screwdriver adjustment gives choice of output impedances: 35-50 ohms, 150-250 ohms or Hi-Z. Output level at Hi-Z, −60.5 db. Swivel mounting permits tilting head 90°. Satin-chrome. Size, 3⅝" H, 2⅜" W, 3⅛" D. ⅝"-27 thread. With 20-ft. cable and Amphenol MC connector. Wt. 3¼ lbs.

99 S 395. List, $76.50. NET **44.98**

Fig. B. MODEL 556S. Same appearance and characteristics as Model 55S above, but engineered to finest broadcast studio, TV and professional recording requirements. With vibration-isolation unit, 20-ft. cable and Cannon connector. Shpg. wt., 3½ lbs.

99 S 396. List, $110.00. NET **64.68**

Fig. C—MODEL 51 "SONODYNE"

Popular, low-cost dynamic mike. Provides outstanding reproduction of voice and music. Widely used by bands, tape recording fans, etc. Multi-impedance switch for matching any input: 30 to 50 ohms, 150 to 250 ohms or Hi-Z—screwdriver adjustment. Single microphone can be used on long lines or connected to input of any amplifier, regardless of input impedance. Response 60-10,000 cps. Output, −52 db at Hi-Z, −53 db at Low-Z. 15-ft. shielded, detachable cable with microphone plug attached. ⅝"-27 thread. Satin chrome finish. Shpg. wt., 3⅛ lbs.

99 S 378. List, $47.50. NET **27.93**

Fig. D—MODEL 737A "MONOPLEX"

High-output crystal, super-cardioid unidirectional mike, incorporating the Shure "Uniphase" principle. For public address use, recording, etc. Wide-angle front response. Phase-shifting network reduces sound from rear by 15 db. Pickup of random sound is reduced by 73%. Greatly reduces effects of room reverberation or echo. Practically eliminates problems of feed-back. Head pivots at rear—can be pointed toward source of sound, or turned upward for horizontal pickup. Response, 60-10,000 cps. Output, −54 db. Satin-chrome head, ⅝"-27 thread, 4" high, 3½" wide, 1⅞" thick. 15-ft. shielded cable. Shpg. wt., 2½ lbs.

99 S 380. List, $42.50. NET **24.99**

Fig. E—MODEL 520SL "DISPATCHER"

Low-cost desk stand, reluctance microphone. Ideal as fixed-station mike for transmitters, paging or dispatch systems. Ruggedly built to withstand hard use. Grip-to-talk, slide-to-lock switch operates mike and relay circuit. High impedance. Response, 100-7000 cps. Output, −52.5 db. Chrome and green finish. Ht., 9½"; base, 5". 7-ft., 2-conductor cable. Shpg. wt., 3½ lbs.

99 S 388. List, $38.50. NET **22.64**

MODEL 520 "GREEN BULLET." As above, but less stand and switch. Shpg. wt., 1½ lbs.

99 S 383. List, $19.50. NET **11.47**

Fig. F—MODEL 505 "RANGER" MICROPHONES

Very popular, ruggedly built, hand-type microphone. An excellent choice for communications, public address and paging applications. Controlled-reluctance magnetic design for highly dependable performance despite excessive heat and humidity. Frequency response, 100-9000 cps. Has heavy-duty, push-to-talk, DPST switch. In high-impedance and low-impedance models. Outputs: Hi-Z, −50.5 db; Low-Z, −47 db. 5-ft. cable. Shpg. wt., 1¾ lbs.

MODEL 505-B. 150-250 ohms (Low-Z).

99 S 392. List, $29.50. NET EACH **17.35**

MODEL 505-C. High-impedance. (Hi-Z).

99 S 389. List, $29.50. NET EACH **17.35**

Fig. G—MODEL 777 "SLIM-X" MICROPHONES

"Pencil" type crystal microphone. May be suspended by neckstrap, hand-held, or used with stand. A perfect "walk-around" mike for audience participation shows, carnivals, home recording, etc. Supplied with nylon stand adapter for vertical mounting of mike in S-38 base below, or any stand with ⅝"-27 thread. May also be used as adjustable-angle, desk-top mike when used with A-25 swivel adapter and S-38 base below. Response; 50-10,000 cps. Output, −59 db. Size, 1" diameter and 4½" long. With nylon stand adapter, neckstrap, and 7-ft. cable. Shpg. wt., 8 oz.

99 S 616. List, $21.00. NET **12.35**

MODEL 777S. Same as Model 777 described above, but equipped with On-Off switch. Shpg. wt., 8 oz.

99 S 617. List $23.00. NET **13.52**

Fig. J. MODEL S-38 BASE. For vertical desk-top mounting of "Slim-X" mike; or adjustable swivel mounting of mike when used with A-25 below. Wt., 2 lbs.

94 S 038. List, $3.30. NET **1.94**

Fig. H. MODEL A-25 SWIVEL ADAPTER. For desk-top, swivel mounting of "Slim-X" mike when used with S-38 base above. Nylon-lined clamp permits quick, noise-free removal of mike. Wt., 8 oz.

94 S 039. List, $5.50. NET **3.23**

Fig. K—MODEL 707A CRYSTAL MIKE

Widely used for low-cost public address, paging and communications applications. Response, 100-9000 cps. High output level, −51 db. Fits stands with ⅝"-27 thread, 2⅜" dia. and 3¼" long. With 7-ft. cable. Shpg. wt., 1¼ lbs.

99 S 361. List, $16.95. NET **9.97**

POPULAR LOW-COST MICROPHONES

Fig. L. "REX" CRYSTAL MICROPHONES. Excellent for low-cost public address systems, Amateur stations, etc. High speech intelligibility. Response, 60-9000 cps. High output; −50 db. With adapter for desk or floor stand and 5-ft. shielded cable. Red metallic finish. 2⅔x3¼x1¼".

MODEL 710S. With Off-On switch. Shpg. wt., 1½ lbs.

99 S 387. List, $12.95. NET **7.61**

MODEL 710A. Less Off-On switch. Shpg. wt., 1¼ lbs.

99 S 386. List, $10.95. NET **6.44**

Fig. L. "HERCULES" CONTROLLED RELUCTANCE MAGNETIC MICROPHONES. Unaffected by heat and humidity. Frequency response, 100-7000 cps. Output level, −52.5 db. With stand adapter for use with any standard desk or floor stand. High Z. 2⅔x3¼x1½". With 5-ft. shielded cable. Diecast case; green metallic finish.

MODEL 510S. With On-Off switch. Shpg. wt., 1¼ lbs.

99 S 385. List, $17.00. NET **10.00**

MODEL 510C. Less switch. Shpg. wt., 1½ lbs.

99 S 384. List, $15.00. NET **8.82**

Fig. M—MODEL 708A "STRATOLINER"

An expensive-looking, reliable crystal mike at moderate cost. For conferences, group work, lectures, etc. Placed horizontally, the 708A is semi-directional; used vertically, it becomes non-directional. Swivel permits 90° tilting. Response, 70 to 8000 cps. Output level, −51 db. Diecast case; gray finish. Length, 4⁷⁄₁₆". 2½" dia., ⅝"-27 thread. With 7-ft. cable and plug assembly. 2 lbs.

99 S 363. List, $29.50. NET **17.35**

Fig. N—MODEL 76B LAPEL MIKE

Specially designed, compact crystal microphone for attaching to the lapel. Extremely light in weight; only 1½ ounces. Frequency response, 30 to 6,000 cycles for quality speech reproduction. High output. Pressure-actuated, diaphragm-type Bimorph crystal. Output level, −57 db. With 20 feet of featherweight cable and lapel clip. 1⅞" dia. Gray finish. Shpg. wt., ½ lb.

99 S 372. List, $27.00. NET **15.88**

See Page 176 for Shure Microphone Stands and Accessories

SHURE PROFESSIONAL MIKES

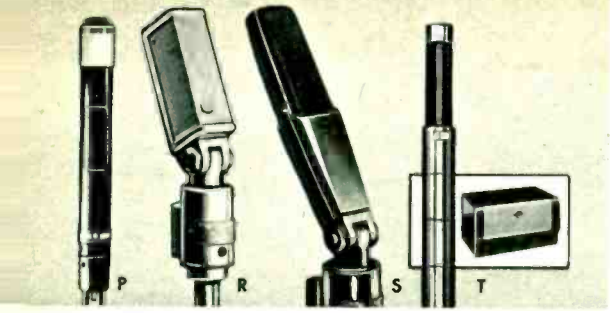


Fig. P. "CONCERT-LINE" MODEL 525. Exceptionally fine, probe-type, broadcast-quality microphone. Dynamic; omni-directional. Precision, moving-coil design. Excellent response from 40-15,000 cps. "Duracoustic" diaphrapm withstands physical shock, heat and cold. New, multi-impedance switch selects 50-150-250 ohm or high impedance output. Output level: −61 db at all impedances. Diameter, 1"; length, 8 17/32". 5/8"-27 thread. Attractive baked bronze finish. With swivel adapter, lavalier assembly (cord and clip), belt clip assembly, and 20-ft. rubber-covered cable equipped with Cannon connector. Shpg. wt., 3¾ lbs.
99 S 454. List, $200.00. NET **117.60**

Fig. P. "SLENDYNE" MODEL 530. Probe-type, omni-directional, dynamic mike. Response, 60-15,000 cps. Employs Shure's "Duracoustic" diaphragm for high resistance to physical shock and extreme heat and cold. Impedance switch selects 50-250 ohm or high-impedance output. Output level: 50-250 ohms, −59 db; high-impedance, −58 db. Dia. 1"; length, 7 11/32". Standard 5/8"-27 thread. Beautiful black and gold finish. With swivel adapter, adjustable lavalier assembly (cord and clip), belt clip assembly, Type A-500 On-Off switch plate assembly (requires no wiring), and 20-ft. cable with Cannon connector. Shpg. wt., 4¼ lbs.
99 S 455. List, $110.00. NET **64.68**

Fig. R. "CONCERT-LINE" MODEL 333. Uni-directional, ribbon mike. Unusually rugged—withstands roughest handling. For broadcast and TV stations, recording studios, and other exacting applications. Ultra-cardioid pattern reduces pickup of random noise by 73%. Response, ±2.5 db from 30-15,000 cps. Has vibration-isolation unit mounted in live rubber. Blast filter. New, multi-impedance switch and voice-music switch. Impedances: 50-150-250 ohms, and high-impedance. Output: 50 ohms, −60 db; 150-250 ohms, −59 db; high-impedance, −56 db. Size: 1⅛" wide, 3 9/16" high, 1¾" deep. Standard 5/8"-27 thread. Attractively styled, baked bronze finish. 20-ft. cable with Cannon connector. Shpg. wt., 4 lbs.
99 S 456. List, $250.00. NET **147.00**

Fig. S—BI-DIRECTIONAL GRADIENT MICROPHONES

"Figure 8" pattern cuts pick-up from sides—permits operation at higher levels. Switch selects low, medium or high impedance. Blast filter. Unaffected by temperature and humidity. Tilts to 90°.

"CONCERT-LINE" MODEL 300. High-fidelity broadcast mike. Features outstanding directional characteristic—permits placing mike at greater distance from performer than is possible with omni-directional types. Exceptionally smooth, peak-free response, 40 to 15,000 cycles. Output, −57 db. Has "Voice-Music" switch. Special vibration-isolation unit mounted in live rubber. 5/8"-27 thread. Cannon connector and 20-ft. cable. 6" high; 1 7/16" wide; 1 31/32" deep. Baked bronze finish. Shpg. wt., 3¾ lbs.
99 S 397. List, $135.00. NET **79.38**

MODEL 315. General-purpose mike; similar to Model 300, above. Permits sound system to be operated at level almost 6 db higher than possible with omnidirectional mikes. Response, 50-12,000 cps. Output, −57 db. Standard 5/8"-27 thread. Shure 3-prong "positive-lock" connector and 20-ft. cable. Shpg. wt., 3¼ lbs.
99 S 398. List, $79.50. NET **46.75**

MODEL S33 DELUXE DESK STAND. (Not illustrated.) For Models 300, 333 and 525 mikes. 6x5½". Shpg. wt., 3 lbs.
94 S 034. List, $15.00. NET **8.82**

Fig. T—SHURE "VAGABOND 88" WIRELESS MICROPHONE

Sensational, portable wireless microphone system for broadcast and TV studios, night clubs, etc. Allows performers complete freedom of movement—no cables to pull across floors. Permits use of mike with no connecting cables to amplifier. Transmitting antenna housed in microphone case—transmits to remotely located amplifier. Receiver unit can be used with any conventional audio amplifier. Plugs into any AC outlet. Operates on 2 megacycles (FM). No permit or special licensing needed. Peak-free frequency response of 50-10,000 cps for excellent voice or music reproduction. Output level, −50 db. Signal from receiver can also be fed to tape recorders, broadcast station transmitters, etc. Operating area, 1000 sq. ft. Uses 2 hearing aid batteries (25-hr. minimum life) and 5 hearing aid tubes: 3—CK526AX AF-RF; 2—CK512AX AF. Sizes: Receiver, 15½x11½x9"; mike, 12" L, 1¼" dia. With batteries, mike (enclosing antenna-transmitter unit) stand adapter, lavalier cord and clip, and receiver. Shpg. wt., 20 lbs.
99 SZ 618. NET **686.00**

QUALITY TURNER MICROPHONES

Fig. A. MODEL 80 CRYSTAL MICROPHONE. Slender, attractively-styled crystal mike for all general applications. Tiny enough to be hidden in palm of hand, yet has performance of larger sized units. Can be used on stand or as a "walk-around" mike, indoors or out. Non-directional pickup pattern. Frequency response, 80-7000 cps. Output level, −58 db. Diecast zinc alloy, satin chrome finished. With 7-ft. cable. Size, 4¼x7⅛". Shpg. wt., 9 oz.
99 S 525. List, $15.95. NET **9.38**

Fig. B. MODEL C-4 STAND. Matching stand for Turner Model 80 microphone. Diecast zinc alloy overlaid with satin chrome plate. Pivots microphone in 135° arc for any operational angle. Mike is firmly held by positive-action hinge; moves smoothly to any desired position. Size (with mike), 6⅞" length, 1½" dia. 5/8"-27 thread. Shpg. wt., 12 oz.
94 S 081. List, $5.75. NET **3.38**

Fig. C. MODEL ADA95D DYNAMIC MICROPHONE. Slender, jet-shaped dynamic mike at a popular price. Combines rugged, dependable performance with very low cost. Excellent sound characteristics for PA and recording work. Slim shape lets speaker be seen as well as heard. Maximum sensitivity to voice and music. Frequency response, 70-10,000 cps. Output level, −58 db. Standard 5/8"-27 coupler swings mike in 60° arc. Satin chrome finish. High impedance. Equipped with 20-foot removable shielded cable set. Size, 7¾x1⅛". Shpg. wt., 1¾ lbs.
99 S 526. List, $35.00. NET **20.58**

MODEL 3H "THIRD HAND." (Not illustrated.) Slips over head and holds mike close to mouth. Insures correct speaker-mike spacing. Allows freedom of vision and hands—as natural to wear as a necktie. Can be used with long lines. 6¾" flexible gooseneck; 5/8"-27 thread. In black enamel. Shpg. wt., 2½ lbs.
94 S 080. List, $5.00. NET **2.94**

Fig. D. MODEL L-100 LAPEL MICROPHONE. New, lightweight crystal lapel mike with swivel clip. Mike itself weighs just 1 ounce! Offers unusually clear speech reproduction. High-quality Bimorph, moisture-sealed crystal. Response: 50-10,000 cps. Output level: −52 db. Size: 1 1/16x2" dia. Light gray plastic. With 20-ft. shielded cable. Shpg. wt., ½ lb.
99 S 527. List, $12.50. NET **7.35**

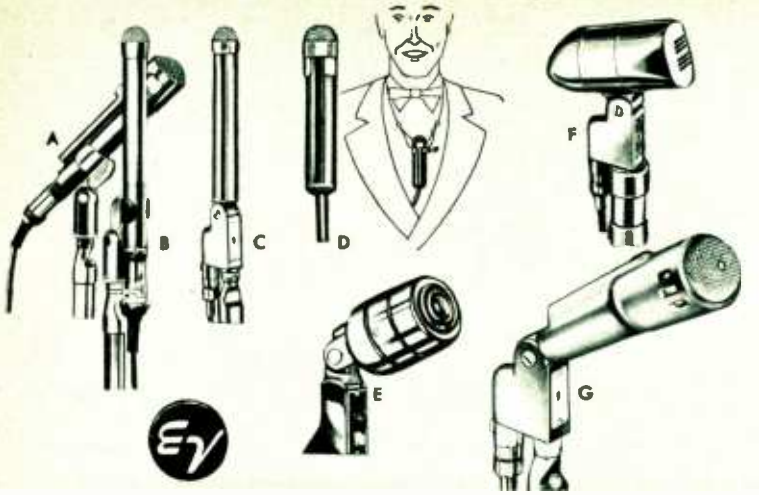
MODEL L-100C CERAMIC MIKE. As above, but uses ceramic element. Response: 80-9,000 cps. Output level: −63 db.
99 S 528. List, $12.50. NET **7.35**

RCA Professional Microphones

MODEL BK-1A PRESSURE MIKE. High-fidelity "Commentator" pressure microphone designed for broadcast use in AM, FM and TV stations. Rugged, insensitive to wind and mechanical vibration. An excellent microphone for outdoor use where constant handling is necessary. Smooth, extended frequency response of 60-10,000 cps. Output level, −52 dbm. Microphone is easily removable from ball and socket swivel base. Output impedances, 30, 150 and 250 ohms. ½" thread fitting. Supplied complete with 30-ft. cable. Size, 7¾" long and 1⅞" diameter. Shpg. wt., 1¼ lb.
99 S 434. NET **79.50**

MODEL 44-BX VELOCITY MIKE. Primarily designed for studio use and other critical applications where highest quality reproduction must be achieved. Bi-directional pattern. Shock mounted to reduce undesirable vibrations. Adjustable frequency response for best voice or music pickup. Unaffected by humidity or air pressure. Frequency response, 50-15,000 cps. Output level, −55 dbm. Output impedances, 30, 150 and 250 ohms. Attractively finished in satin chrome and neutral gray. Supplied with 30-ft. cable. Size, 12x4¾x3⅜". Shpg. wt., 9 lbs.
99 SX 435. NET **129.00**

ELECTRO-VOICE QUALITY MICROPHONES



Television, Broadcast and PA Dynamic Microphones

Fig. A. MODEL 666 VARIABLE "D" DYNAMIC. For the most exacting broadcast and TV applications—indoors and out. Exclusive Variable "D" (variable distance) construction produces true cardioid pattern at all frequencies. Wide response; lightweight (11 oz.) pencil-slim design; virtually impervious to mechanical shock, temperature extremes, and humidity.
Substantially flat from 40-15,000 cps; maintains cardioid pattern at all frequencies within this range. Average front-to-back ratio 24 db (no less than 14 db at any frequency). Free of proximity effect; no bass "boominess" when speaking close to mike. Easily accessible terminals provide choice of 50, 150 or 250 ohms output. Output level, −55 db.
Gray finish. With detachable, clamp-on adapter for ½" and ⅝"-27 stands, 20-ft. 2-conductor cable, and Cannon UA-3 connector. Size: 7½" long, 1¾" barrel diameter. Shpg. wt., 1 lb.
99 S 593. List, $245.00. NET...**144.06**

MODEL 346 SHOCK MOUNT. For Model 666.
94 S 046. List, $13.00. NET.....**7.64**

MODEL 512 WIND SCREEN. For Model 666.
94 S 047. List, $10.00. NET.....**5.88**

Fig. B. MODEL 655C "SLIM TRIM" TV DYNAMIC. Hi-fi mike. Pencil-thin profile ideally suited for TV. Audio response, 40 to 20,000 cycles. Output level, −55 db. Omnidirectional. Imp., 50, 150 and 250 ohms; easily changed. With clamp-on adapter for ½" and ⅝"—27 stands. 10½x1". 18' cable; UA-3 connector. Wt., 1¼ lb.
99 S 579. List, $200.00. NET.....**117.60**

Fig. C. MODEL 654 "SLIM TRIM" BROADCAST DYNAMIC. Omnidirectional hi-fidelity mike. Ideal for recording and high quality public address. Frequency response, 50-16,000 cps, substantially flat. Output level, −55 db. Acoustalloy diaphragm. Recessed switch for selection of 50 or 250 ohms output. Cannon XL-3 connector. ⅝"-27 stand thread. With 18-ft. cable. 10" long. 1" dia. Shpg. wt., 15½ oz.
99 S 583. List, $95.00. NET.....**55.86**

MODEL 420 DESK STAND. For Models 666, 655, 646 and 647, or any other mike with 1" dia. barrel. Heavy cast-iron base with handsome gray finish. With clamp attachment. Shpg. wt., 4 lbs.
94 S 056. List, $20.00. NET.....**11.76**

MODEL 366 BOOM SHOCK-MOUNT. Extremely light, boom-suspension shock-mount for Model 666, 655, 646, and 647, or any other mike with 1" diameter barrel. Lightweight design minimizes boom overswing—combined weight of 366 and 666 only 17 oz. Highly effective rubber shock absorbers. Shpg. wt., ¼ lb.
94 S 057. List, $40.00. NET.....**23.52**

Fig. D. MODEL 646 LAVALIER DYNAMIC. Omnidirectional TV and broadcast lavalier-type dynamic microphone. Very clean, extended response. Frequency response uniform from 40-10,000 cps. Recessed screw in grill permits adjustment of high frequency response to suit application. Output, −55 db. Has exclusive Electro-Voice acoustalloy non-metallic diaphragm. Has "pop-proof" mesh head. Impedance: 50 ohms. Supplied with neck cord and clip and 30' cable. 6¼x1". *Also available in 150 or 250 ohms—on special order.* Shpg. wt., 1 lb.
99 S 584. List, $140.00. NET.....**82.32**

MODEL 647 LAVALIER DYNAMIC. PA type similar to above. Size, 5x1". Response, 60-13,000 cps. Hi-Z output, −57 db. Supplied with neck cord, clip and 18' cable. *Also available in 150 ohms—on special order.* Shpg. wt., 1½ lbs.
99 S 585. List, $80.00. NET.....**47.04**

MODEL 416 DESK STAND. (Not illustrated.) Black rubber; converts Model 646 or 647 (above) to desk mike. Size: 3⅛" diameter, 1" high. Shpg. wt., 4 oz.
94 S 058. List, $5.00. NET.....**2.94**

Fig. E. MODEL 635 DYNAMIC. Hi-fi microphone for broadcast use. Has omnidirectional pattern. Features wide-range response, high output and sturdy construction. Non-metallic acoustalloy diaphragm provides 60 to 13,000 cycles response. Output, −55 db. Imp., 50 or 250 ohms. Recessed switch permits impedance selection. Cannon XL-3 connector. Head tilts. Satin-chrome finish. ⅝"-27 thread. 6¼x2". 18' cable. Shpg. wt., 1½ lbs.
99 S 327. List, $75.00. NET.....**44.10**

Fig. F. MODEL 650 DYNAMIC. Hi-fi broadcast dynamic. Has omnidirectional pattern. Unusually high output, −48 db. Frequency response, 40-15,000 cps. Dual type external shock mount. Acoustalloy diaphragm, tiltable head. Cast case with satin chrome finish. Switch selects 50 or 250 ohms. 2¼x4⅝x5¼". With 18-ft. cable and ⅝"-27 coupler. Shpg. wt., 3 lbs.
99 S 573. List, $150.00. NET.....**88.20**

Fig. G. MODEL 665 VARIABLE "D" DYNAMIC. Similar in design and function to Model 666, but for less exacting applications. Exceptionally fine cardioid pattern at all frequencies, wide response and pencil-slim design. Frequency response is substantially flat from 50-14,000 cps. Acoustalloy diaphragm is practically indestructable and provides extremely smooth response. Free of proximity effect. 50 or 250 ohms output, easily changed. Output level −55 db. Satin chrome finish, built in swivel mount for desk or floor stand. With Cannon XL-3 connector and 18 ft. cable. Size: 7 3/16x1⅞". Shpg. wt., 2 lbs.
99 S 530. List, $130.00. NET.....**76.44**

Cardioid Unidirectional Mikes

The Model 950 "Cardax" and Models 726 and 731 "Cardyne" microphones listed below, feature Electro-Voice's "Mechanophase" unidirectional principle. Provides true cardioid performance for wide-angle pickup from the front with high reduction of sound from rear. Minimizes possibility of feedback—simplifies microphone and speaker placement and permits operating amplifier at substantially higher volume level. Tiltable heads. Satin-chrome finish. New Model 664 is the finest PA cardioid made by EV. Features new Variable "D" principle. Produces true cardioid pattern over a wide frequency range with only one moving element. Has high resistance to mechanical shock. Virtually no proximity effect; no bass "boominess" when speaking close to mike. Fit ⅝"-27 stands.

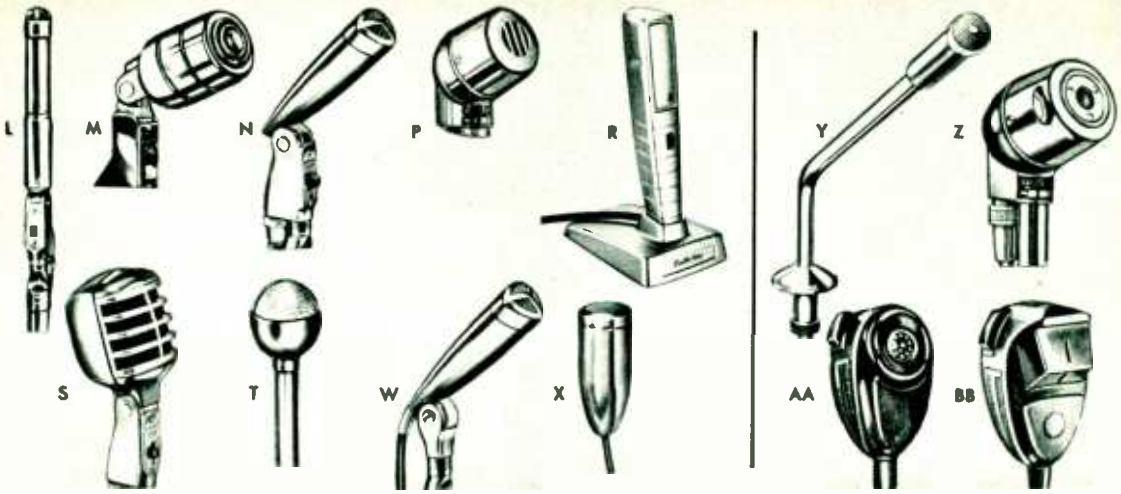
Fig. H. MODEL 950 "CARDAX" CRYSTAL. For PA, recording, remote broadcasting and communications. An excellent value. Dual frequency response; flat response for music reproduction and high-frequency boost for very crisp voice reproduction. Screwdriver adjustment for response selection. Output: flat response, −57 db; boosted, −50 db. Off-On switch. Tiltable head, satin-chrome finish. Built-in MC-1 cable connector. 18-ft. cable. 2½x2⅞x6¼". Wt., 2¾ lbs.
99 S 348. List, $42.50. NET.....**24.99**

Fig. J. MODEL 726 "CARDYNE I" DYNAMIC. High quality dynamic mike for PA, recording and communications. Response is essentially flat from 50-8,000 cps. Output level, −55 db. Recessed switch gives selection of high or low impedance. Has on-off slide switch. Satin-chrome finish. Has Acoustalloy diaphragm; magnetic assembly is sealed against dirt and stray iron particles. Tiltable head. Supplied with MC-3 connector and 18-ft. cable. Size: 2¾x3x8". Shpg. wt., 4 lbs.
99 S 341. List, $75.00. NET.....**44.10**

MODEL 731 "CARDYNE II" DYNAMIC. Same as above, but: response, 40-10,000 cps; output, −52 db; external shock mount; Cannon XL-3 connector. Wt., 4 lbs.
99 S 550. List, $95.00. NET.....**55.86**

Fig. K. MODEL 664 VARIABLE "D" DYNAMIC. Similar to Model 666, but designed specifically for PA. Permits close talking with no bass accentuation. Blast filter minimizes wind effect. Acoustalloy diaphragm shielded from dust and magnetic particles. Response 60-13,000 cps. Output, −55 db. On-off switch. 150 ohm and high impedance output, easily changed by moving one wire in MC-4 connector. Pressure cast case with satin-chrome finish. Supplied with MC-4 cable connector and 18-ft. cable. Size: 7 3/16x 1⅞". Shpg. wt., 2 lbs.
99 S 531. List, $79.50. NET.....**46.75**

THERE IS AN ELECTRO-VOICE MIKE FOR EVERY APPLICATION



Quality Dynamic and Crystal Microphones

Fig. L. MODEL 636 "SLIMAIR" DYNAMIC. PA dynamic mike of exceptional quality. Excellent for high-fidelity PA staging. Wide-range response. Acoustically-treated grille head stops wind rumble and "pop" of sound percussion. Response, 60-13,000 cps. Acoustalloy diaphragm. High and low impedance outputs, changed within connector. Output level, −55 db. Omnidirectional. Uses Alnico V magnet. Tiltable head. Type MC-4 connector. ⅝"-27 stand thread. Satin chrome finish case. Complete with On-Off switch. Size, 10¼x1 1/16"; 18' cable. Shpg. wt., 2 lbs.

99 S 581. List, $70.00. NET.....**41.16**

Model 636G. As above, but gold finish.

99 S 591. List, $80.00. NET.....**47.04**

Fig. M. MODEL 630 DYNAMIC. High-output dynamic microphone. Excellent for industrial and transportation depot paging, dispatcher service, and all communications uses. Can be used for PA and high fidelity recording. Features exceptional mechanical strength. Special acoustalloy diaphragm assures smooth frequency response over the range of 60-11,000 cps. Omnidirectional pick-up pattern. Output, −55 db. Built-in cable connector. Head tilts through a 90° arc. Satin chromium finish. On-Off side switch and 18' cable. Shpg. wt., 3 lbs.

99 S 336. High Impedance.

99 S 347. 250 Ohms.

List Each, $47.00. NET EACH.....**27.64**

Fig. N. MODEL 623 SLIM DYNAMIC. High-quality, moderately priced, dynamic mike. A fine choice for PA, recording and general-purpose applications. Very smooth response characteristics. Omnidirectional pick-up pattern. Can be used on stand, or as hand mike. Acoustalloy diaphragm. Response, 65-9000 cps. Output, −55 db. High or low-impedance output. Off-On switch. Built-in MC-4 connector. Tiltable head. Cast case with satin-chrome finish. ⅝"-27 thread. 7½x1 5/16". 18-ft. cable. 2 lbs.

99 S 592. List, $29.50. NET.....**17.35**

Fig. P. MODEL 605 DYNAMIC. High-quality, general-purpose dynamic microphone at very moderate cost. Smooth response from 65 to 7500 cps. Omnidirectional becoming directional above 1000 cps. Acoustalloy diaphragm. High impedance output. Output level, −55 db. ⅝"-27 thread. 18-ft. cable. Shpg. wt., 1 lb.

99 S 592. List, $29.50. NET.....**17.35**

Fig. S. MODEL 911 "MERCURY" CRYSTAL. Widely used crystal mike for low-cost PA installations, home recording, and Amateur communications. Excellent for improving the performance of home type tape recorders. Will reproduce music and voice clearly and without excessive peaks. Quality construction and smooth response. Rugged, Acoustalloy diaphragm. Response, 50-8000 cps. Output, −50 db. High impedance output. Has omnidirectional pick-up pattern. Moisture-sealed crystal. Tiltable head. Exceptionally attractive pressure cast case, finished in satin-chrome. Size, 2⅜x3⅛x 6¼". Fits stands with standard ⅝"-27 thread. On-Off switch. Built-in cable connector. Supplied complete with 18-ft. cable. Shpg. wt., 2½ lbs.

99 S 554. List, $27.50. NET.....**16.17**

Fig. T. MODEL 920 "SPHEREX" CRYSTAL. A highly popular, very reasonably priced, crystal microphone. Designed specifically for conference and group pick-up where sound source may come from any angle. Features 360° pick-up pattern and essentially flat response from 60-7000 cycles. Output, −50 db. High impedance output. High capacity crystal, protected against moisture. Coupling threaded for standard ⅝"-27 stands. Satin chromium finish. With 18-ft. cable. Shpg. wt., 1 lb.

99 S 578. List, $22.50. NET.....**13.23**

Fig. W. MODEL 926 SLIM CRYSTAL. Carefully designed, general-purpose mike; delivers excellent results in PA, paging, home recording and Amateur applications. Small, slim size is inconspicuous and easy to handle. Very clean response from 70-8000 cps. Output, −60 db. High impedance output. Has omnidirectional pick-up pattern. Tiltable head. Cast case finished in handsome satin chrome. Standard ⅝"-27 thread. Size 6¾x1 5/16". Complete with 18-ft. cable. Shpg. wt., 1½ lbs.

99 S 596. List, $24.50. NET.....**14.41**

Fig. X. MODEL 924 LAVALIER CRYSTAL. Crystal-type lavalier mike at very moderate cost. For PA, paging, home recording and Amateur use. Permits free movement of hands. Excellent response; 70 to 8000 cps. Wire mesh head minimizes wind and breath blasts. Output, −60 db. High impedance output. Has omnidirectional pick-up pattern. 3 5/32x1 7/32" diameter. With 18-ft. cable, neck-cord and clip. Lustrous, satin-chrome finish. Shpg. wt., 12 oz.

99 S 594. List, $18.00. NET.....**10.58**

Fig. R. NEW MODEL 927 SLIM CRYSTAL. A high quality, low priced crystal microphone with attractive new styling. Designed for PA, recording and general use. Response, 50 to 6000 cps. Output, −55 db. High impedance output. Omnidirectional pick-up pattern. Has Acoustalloy diaphragm and crystal sealed against moisture. Brushed chrome and gray finish. With attractive stand and 5-ft. cable. Size: 7⅞x1½x1¼". Shpg. wt., 1½ lbs.

99 S 532. List, $16.50. NET.....**9.70**

Differential and Special Mikes

Fig. AA. MODEL 600TR TRANSISTOR MIKE. Dynamic mike with built-in, 1 stage transistor amplifier. Has sensitivity of a carbon mike, smooth response of a dynamic. Output, −21 db. Output Impedance, 150 ohms. Amplifier gain approximately 34 db. Equipped with press-to-talk switch. Size: 2¼x2x4". Black phenolic case. 5-ft. spiral cord. Shpg. wt., 1½ lbs.

99 S 533. List, $80.00. NET.....**47.04**

MODEL 602TR TRANSISTOR MIKE. Same as above, but for close talking, noise cancelling operation.

99 S 534. List, $90.00. NET.....**52.92**

Fig. Y. MODEL 648 INTERCOM MICROPHONE. Broadcast and TV dynamic with built-in boom for desk or panel mounting. Omnidirectional. Response, 100-6000 cps. Output, −57 db. Size: 6¼x1⅛" dia. Impedance: 50 ohms. Wt., 1 lb.

99 S 535. List, $65.00. NET.....**38.22**

Fig. Z. MODEL 606-20 DIFFERENTIAL DYNAMIC MICROPHONE. Close-talking, noise-cancelling dynamic microphone. Response, flat, 100-6,000 cps. Output, −55 db. Acoustalloy diaphragm. Head fixed at 22° angle. High impedance. Attractive satin-chrome finish. Built-in connector. ⅝"-27 thread. Size, 2x 3¼x2½". 18' cable. Shpg. wt., 2 lbs.

99 S 564. List, $45.00. NET.....**26.46**

Fig. AA. MODEL 600-D DYNAMIC. Extra-rugged, hand-held dynamic microphone. High-impedance. For mobile PA and communications. Press-to-talk switch for microphone and relay control. Response is substantially flat from 100-6000 cps. Rugged, Acoustalloy diaphragm. Black phenolic case. Size, 2¼x 2x4". 5-ft. cable. Shpg. wt., 1 lb.

99 S 323. List, $38.50. NET.....**22.64**

MODEL 600-DL. Same as Model 600-D above, but has switch lock.

99 S 324. List, $40.00. NET.....**23.52**

MODEL 602. Same as Model 600-D, but features close-talking, noise-cancelling, differential design.

99 S 562. List, $49.50. NET.....**29.11**

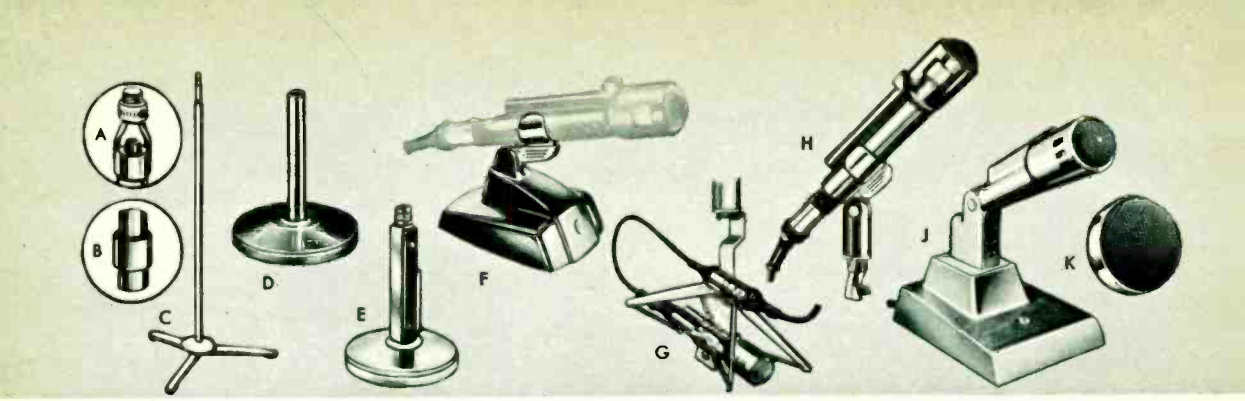
MODEL 210KK CARBON. (Not illustrated.) Rugged, carbon microphone. Designed for mobile communications use. Provides highly intelligible speech transmission. Includes press-to-talk switch for controlling relay. Rugged, black phenolic case. Complete with 5-ft. coiled cord. Shpg. wt., 1 lb.

99 S 589. List, $32.50. NET.....**19.11**

Fig. BB. MODEL 205KK DIFFERENTIAL CARBON. Single-button microphone for use where background noise presents a problem. Features close-talking, noise cancelling differential design. Output, —50 db. Rugged, black phenolic case. Size, 2¼x2¼x4". Push-to-talk switch. Complete with 5-ft. coiled cord. Shpg. wt., 1 lb.

99 S 590. List, $42.50. NET.....**24.99**

For Additional Electro-Voice Mikes, Mike Stands and Accessories, See Page 174



Electro-Voice Mike Stands & Accessories

Fig. A & C. MODEL 425 FLOOR STAND. Deluxe stand, with single-button control of shaft height. When button is released, shaft locks automatically. Adjustable from 37" to 66". Button is just below mike. Legs fold back for storing and carrying. Satin chrome finish. Base has 17" spread. Has standard ⅝"-27 thread. Shpg. wt., 9 lbs.
94 SX 049. List, $27.50. NET 16.17

Fig. B & C. MODEL 430. Similar to Model 425 above, but with button on lower section for height adjustment from 36" to 65". 3-leg spread, 17". Legs fold back for storing and carrying. Shpg. wt., 9 lbs.
94 SX 048. List, $17.00. NET 10.00

Fig. D. MODEL 427A DESK STAND. Modern, sturdy die-cast base, at a very low price. Equipped with 5" stem riser. Rests firmly on desk or table. Has standard ⅝"-27 thread. Finished in handsome satin chromium. 4⅝" diameter base. Shpg. wt., 1¼ lbs.
94 S 054. List, $3.50. NET 2.06

Fig. E. MODEL 428 TOUCH-TO-TALK STAND. Fits any mike with ⅝"-27 thread. Lever-type switch opens and closes with very slight pressure. Locking-latch keeps mike circuit in "talk" position. 6¼" SPDT switch unit is easily removed from die-cast base. Satin chrome finish. Ht., 7" with base. Shpg. wt., 2 lbs.
94 S 053. List, $16.00. NET 9.41

Fig. F. MODEL 420 DESK STAND. For Models 666, 655C, 646 and 647 mikes, or any other mike with 1" dia. barrel. Heavy cast-iron base. With handsome gray finish. Has clamp attachment. Shpg. wt., 4 lbs.
94 S 056. List, $20.00. NET 11.76

Fig. G. MODEL 366 BOOM SHOCK-MOUNT. Extremely light, boom-suspension shock-mount for any mike with 1" diameter barrel. Lightweight design minimizes boom overswing. Highly effective rubber shock absorbers. Shpg. wt., ¾ lbs.
94 S 057. List, $40.00. NET 23.52

Fig. H. MODEL 300 DETACHABLE MICROPHONE CLAMP. Mounts mike on stand. Quick detachment of mike for hand use. Fits 1" dia. mikes. ½" pipe thread or adapter for ⅝"-27 thread. Shpg. wt., 3 oz.
94 S 042. List, $10.00. NET 5.88

Fig. J. MODEL 418 DESK STAND. For microphones using small-type stud. Fits Models 611, 623, 630, 635, 636, 911 and 950. Die-cast iron base. Shpg. wt., 3 lbs.
94 S 059. List, $15.15. NET 8.91

Fig. J. MODEL 419 DESK STAND. Same as above, but for mikes with large-type studs. Fits models 650, 654, 726, 731, 664 and 665. Shpg. wt., 3 lbs.
94 S 082. List, $15.15. NET 8.91

Fig. K. MODEL 335 BLAST FILTER. A highly effective remedy for annoying wind and breath blasts, percussion "pop," etc. For EV microphones, models 630, 635 and 628. Shpg. wt., 1 lb.
94 S 055. List, $5.50. NET 3.23

Electro-Voice Low-Cost Mikes

Fig. L. "CENTURY" CRYSTAL CERAMIC AND DYNAMIC MIKES. For PA, paging, home recording and Amateur communications use. Can be used as hand-held mike or on stand. Have inner insulated element for safe use in AC-DC circuits. Satin-chrome finish. Size 3x2 13/16x1". Supplied with 5-ft. cable and ⅝"-27 stand adapter. Shpg. wt., 1 lb.

MODEL 915 "CENTURY" CRYSTAL. Has moisture-sealed cartridge. Frequency response, 60-7000 cps. Output level, −50 db.
99 S 567. List, $11.25. NET 6.61

MODEL 915-S. Same as Model 915 above, but equipped with slide-to-talk, shorting-type switch.
99 S 582. List, $13.00. NET 7.64

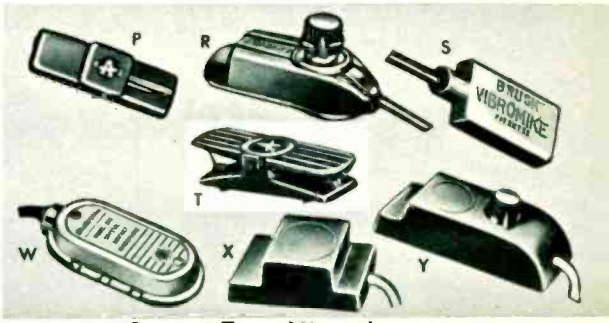
MODEL 715 "CENTURY" CERAMIC. Ceramic element withstands heat, humidity. Response, 80-7000 cps. Output, −55 db.
99 S 586. List, $11.25. NET 6.61

MODEL 615 "CENTURY" DYNAMIC. High-impedance. Withstands heat, humidity. Response, 100-6000 cps. Output, −55 db.
99 S 549. List, $19.50. NET 11.47

Fig. M. MODEL 415 DESK STAND. For "Century" mikes above. Holds mike at 15° tilt. Satin-chrome. Shpg. wt., 6 oz.
94 S 050. List, $1.70. NET 1.00

STAND ADAPTER. Adapts mikes for ⅝"-27 stands. Wt., 3 oz.
94 S 052. NET 13c

Fig. N. MODEL 912. High-output crystal microphone at very low cost. Moisture-sealed. Output, −50 db. Response, 60-7500 cycles. Insulated inner element for safe use in AC-DC circuits. Complete with 5 ft. of cable. Shpg. wt., 1 lb.
99 S 598. List, $8.25. NET 4.85



Contact-Type Microphones

Attach to musical instruments for sound amplification through amplifier. See pages 161-167 for Knight Sound systems.

Fig. P. AMPERITE MODEL SKH. Hi-imp. magnetic. Response, 40-9000 cps. Output, −40 db. ¾x3x1". 12-ft. cable. Wt., 10 oz.
99 S 406. List, $12.00. NET 7.06

Fig. R. MODEL KKH. As above, but has volume control.
99 S 408. List, $18.00. NET 10.58

Fig. T. FOOT VOLUME CONTROL. For all models. Wt., 1 lb.
41 S 900. List, $18.00. NET 10.58

KONTAK STRAP. Not illus. For flat-top guitars. Wt., 4 oz.
41 S 902. NET EACH 59c

Fig. S. BRUSH MODEL VM-1 VIBROMIKE. Response, 30-6000 cps. Sealed crystal. Output, .05 to .1 volt. Size, 1½x¾x⅜". With 25-ft. cable. Shpg. wt., 13 oz.
99 S 483. List, $19.50. NET 11.47

Fig. W. ELECTRO-VOICE MODEL 805. Response, 40-8000 cps. Output, .1 to 1 volt. With 15-ft. cable and clip. Hi-Z. Wt., 10 oz.
99 S 319. List, $19.75. NET 11.61

Fig. X. KNIGHT CONTACT MICROPHONE. An unusual value in a wide-response contact microphone. Frequency response, 50-10,000 cps. High impedance magnetic type. Output 15 millivolts. With 12 ft. cable and MC1F connector. Connector fits mike input on Knight PA amplifiers. Shpg. wt., 1 lb.
99 S 517. NET 5.95

Fig. Y. As above, with built-in volume control.
99 S 516. NET 7.50

For Complete Listing of Electro-Voice Microphones, see Pages 172 and 173

Knight Quality Floor Stands

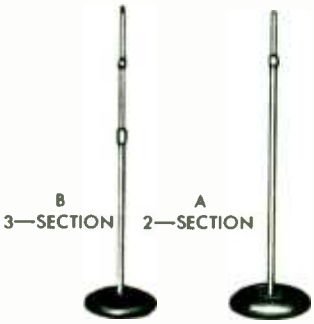
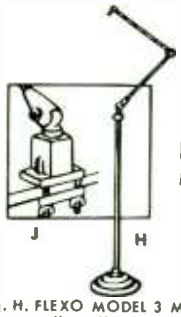


Fig. A. ECONOMY MODEL. Here's an unusual value in a floor-type microphone stand. Two-section type—minimum height of 35"; maximum height of 64". Can be quickly and easily adjusted to any intermediate height. Stem is heavily chrome-plated. Handsome, attractive appearance makes it an excellent choice for auditorium, church or orchestra use. Heavy, tip-proof base, made of die-cast iron. Diameter of base, 10". Gray crackle-finish on base resists scuff marks. An ideal choice for permanent installations. Has standard ⅝"-27 thread. Shpg. wt., 12 lbs.
94 SX 004. NET..... .....5.85

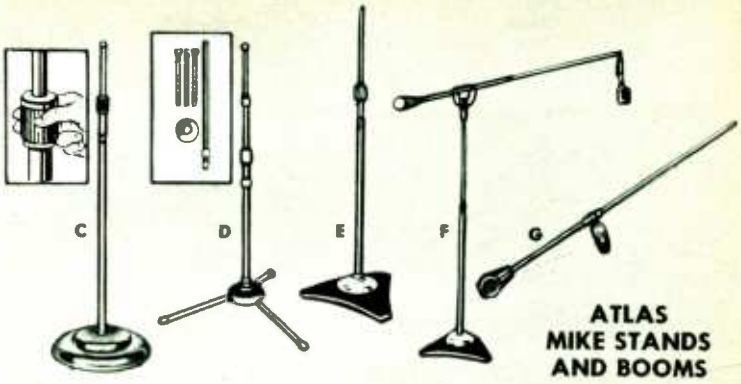
Fig. B. THREE-SECTION MODEL. An extremely compact mike stand with a convenient carrying height of only 25". Ideal for portable applications. The same high-quality mike stand used in the Knight portable PA systems. Readily adjustable from 25" to 61". Two smooth-operating clutches provide wide up-and-down adjustment for exact height required. Stem is heavily chrome-plated for long wear and handsome appearance. Sturdy, die-cast iron base. Gray, wrinkle-finish on base resists scuffing. 10" diameter base is weighted to prevent tipping. Has standard ⅝"-27 thread. Shpg. wt., 9 lbs.
94 SX 001. NET..... .....7.35



Flexo Mike Stand

Fig. H. FLEXO MODEL 3 MIKESTER. Extremely versatile mike stand. Has a 40" floor stand and two 18" swinging arms. Arms can be adjusted to hold the microphone at any angle or distance, up to 36" in any direction. Has 3 joints to allow maximum flexibility, including a swiveling device at the mike connection. Each joint has a compression spring and a torsion spring to allow smooth swiveling and sure adjustment to desired position. Constructed of shockproof, noise-reducing alloy castings. Heavily weighted cast-iron base with attractive spun-steel cover. Base dia., 13½". Stem finished in baked-on gray enamel. For mikes weighing up to 4 lbs. ⅝"-27 thread. Shpg. wt., 23 lbs.
94 SZ 043. List. $26.50. NET.....15.58

Fig. J. MODEL 1 MIKESTER. As above, less floor stand. Has 2 bolts which clamp unit firmly to any surface up to 3" thick. Bolts are removable if screw fastening is desired. Shpg. wt., 4¾ lbs.
94 SX 044. List. $13.00. NET 7.64



ATLAS MIKE STANDS AND BOOMS

Atlas "Velvet Action" Microphone Stands

Fig. C. MODEL MS-11C FLOOR STAND. Fully chrome plated. 2-section floor stand. Adjustable from 35" to 65". Features the "Full Grip" clutch for smooth adjustment of height. Extended-length clutch permits a secure hand grip. 10" base is weighted around the edge. Tip-proof construction of base includes shock-absorbing pads which are self-leveling for maximum balance. ⅝"-27 thread. Shpg. wt., 12 lbs.
94 SX 012. List. $13.00. NET.....7.64

Fig. D. MODEL CS-33 FLOOR STAND. Three-sections. Easily carried. Legs removable and stem collapsible to length of only 22½". Ideal for portable use and for all installations where storage space is limited. Adjusts from 26" to 64". Fully chrome-plated. Rubber-tipped legs. ⅝"-27 thread. Shpg. wt., 5 lbs.
94 SX 016. List. $11.75. NET... ...6.91

Fig. E. MODEL MS-25 "AIR-LOCK" FLOOR STAND. Features "air-lock" cushion. Controlled flow of air allows only slow, quiet collapse into lower section. Extra-rugged. Uses oversize telescoping tube. "Full Grip" clutch and shock-absorbing base. Tip-proof base has shock-absorbing pads and rubber-tipped legs. ⅝"-27 thread. Adjustable from 37" to 66". Base dia., 17". Chrome stem. Shpg. wt., 20 lbs.
94 SZ 029. List. $22.50. NET. . 13.23

Fig. F. MODEL BS-36 PROFESSIONAL BOOM STAND. Versatile boom on sturdy floor stand. "Air-lock" safety cushion in vertical section prevents accidental or sudden slippage of upright section. Cushioned on air; controlled escapement of air allows only smooth and quiet collapse of upright tube. Gyromatic swivel joint is provided at the microphone end of the boom for accurate, secure hanging adjustment. "Snap-On" mike hangers. Shock-mounted, chrome pads for gliding over floor surfaces with minimum friction. Boom length, 72". Adjustable vertical extension from 48" to 72". Base dia., 17". Chrome-plated stem. ⅝"-27 thread. Shpg. wt., 33 lbs.
94 SZ 021. List. $60.00. NET ...35.28

Fig. G. MODEL BB-1 "BABY BOOM" ATTACHMENT. Quickly converts any floor stand to a professional boom-type stand. Permits a quick, fixed positioning of microphone anywhere within a five-foot circle. All swivel parts are precision die castings—for smooth operation and secure positioning. Attaches easily to any stand with standard ⅝"-27 thread. Heavily chrome plated boom attachment is 32" long. Gray crackle-finish castings. Counter-balance weight can be adjusted easily for use with any mike. Shpg. wt., 4½ lbs.
94 SX 019. List. $7.50. NET.. ... ..4.41

Atlas Table Stands and Duplex Mike Mount

Fig. K. MODEL DS-5 DESK STAND. Low-cost desk stand. Chrome-plated stem, 4" high. Cast-iron base, diameter, 6". Rubber base pads. ⅝"-27 thread. Shpg. wt., 2 lbs.
94 S 077. List. $3.00. NET..... . ..1.76

Fig. L. MODEL DS-7 ADJUSTABLE DESK STAND. Height adjustable from 8" to 13". Uses full-sized clutch mechanism for quick, smooth change of stand height. 2-section stem uses ⅝" and ⅞" tube combination. All tubular sections finished in chrome. Gray crackle base, 6" diameter. Rubber base pads prevent scratches Standard ⅝"-27 thread. Shpg. wt., 3 lbs.
94 S 014. List. $5.00. NET.....2.94

Fig. M. MODEL TS-6 ADJUSTABLE BANQUET STAND. Completely finished in "super-chrome" to create a smart appearance at banquet table. Smooth adjustment from 13⅝ to 25¼ inches. 8" padded base. ⅝"-27 threads. Shpg. wt., 5½ lbs.
94 S 024. List. $9.00. NET. . 5.29

Fig. N. MODEL DS-10 STREAMLINER DESK STAND. Modern, functional design. Cable concealed in slot underneath center section of chrome trim. Firmly anchors cable. Very neat appearance. Space under base for installation of on-off or press-to-talk switch. 5/8"-27 thread. 1½ lbs.
94 S 073. List. $5.00. NET... . .2.94

Fig. P. MODEL TB-1 DUPLEX MIKE MOUNT. Duplex mike mount with removable desk attachment. Permits use of 2 mikes on a single stand. Microphones properly spaced to keep the speaker "on the mike." Convenient desk attachment holds written material for ready reference during the speech. Finished in chrome and cadmium plating. 9x11" desk of molded composition. ⅝"-27 thread. Shpg. wt., 2½ lbs.
94 S 072. List. $10.00. NET 5.88

MODEL TS-7 BANQUET STAND. For use with TB-1 duplex mount, above. All chrome. Base dia., 10". Shpg. wt., 11 lbs.
94 S 074. List. $10.00. NET. 5.88

See Page 176 For Other Microphone Accessories

Shure Microphone Accessories

Fig. A. TYPE S36A STAND. Streamlined desk stand. Fits all Shure-connector-type mikes. Excellent stand for use with Shure Model A88A, grip-to-talk, slide-to-lock switch. Removable button permits installation of ⅜" bushing switch or volume control. Handsome pearl gray finish. Base size. 2½x5x7". Shpg. wt., 1½ lbs.
94 S 035. List. $6.00. NET **3.53**

Fig. B. TYPE A88A GRIP-TO-TALK, SLIDE-TO-LOCK SWITCH. Heavy-duty, smooth operating switch. Fits all Shure connector-type microphones. No soldering necessary—simply plug in. Excellent for use on Shure S31A desk stand. Rich, satin-chrome finish. Standard ⅝"-27 thread. Shpg. wt., 1 lb.
41 S 929. NET **6.91**

Fig. C. TYPE A84B PRESS-TO-TALK SWITCH. Momentary press-to-talk. On-Off switch. Quickly attached to all Shure connector-type mikes. No soldering necessary. ⅝"-27 thread. Shpg. wt., 10 oz.
41 S 931. NET **5.00**

Fig. D. TYPE A83B ROTARY SWITCH. No wiring necessary—simply screw on. Smooth-operating switch. Quickly attached to all Shure connector-type microphones. Connections made by internal plug. Fits all stands with ⅝" 27 thread. Shpg. wt., 10 oz.
41 S 930. NET **5.00**

Fig. E. TYPE A86A CABLE-TYPE TRANSFORMER. For matching 35-50 ohm and 150-250 ohm microphones to high-impedance inputs. Completely enclosed solder terminals. Shielded. With 2-ft. cable. Size. 2⅞" long; 1⅝" diameter. Shpg. wt., 1½ lbs.
41 S 917. List. $17.50. NET **10.29**

Fig. F. TYPE R5 MAGNETIC MICROPHONE CARTRIDGE. Controlled reluctance microphone cartridge. Permits easy modification of almost any crystal microphone to magnetic type. Excellent frequency response characteristics. Diameter of adapter ring. 2¼"; thickness. 3/16". Cartridge is ⅞" deep. Shpg. wt., 4 oz.
41 S 934. List. $10.00. NET **5.88**

Fig. G. TYPE R7 CRYSTAL MICROPHONE CARTRIDGE. Replacement for Shure 707A and 708A series and most other crystal microphones. High output and very smooth response. Output. −48 db. Supplied with rubber mounting rings. Shpg. wt., 5 oz.
41 S 945. List. $7.75. NET **4.56**

Fig. H. TYPE C15C RETRACTING MIKE CORD. Heavy, rubber-covered 4-conductor coiled cable for use in mobile transmitters, telephones, etc. Extends to length of 6 ft.; only 1 ft. long when retracted. Color-coded wires with tinned and trimmed ends. Shpg. wt., ½ lb.
41 S 932. List. $5.75. NET **3.38**

For Complete Listing of Shure Microphones, See Page 170

Atlas Microphone Stand Fittings

Fig. J. MODEL BC-1 BRACKET CLAMP. 6" chrome stem, gray clamp. ⅝"-27 thread. Shpg. wt., 1 lb.
94 S 028. List. $3.50. NET **2.06**

Fig. K. MODEL GN-13 FLEXIBLE GOOSE NECK. Attaches to stand. ⅝"-27 thread. Chrome; 13" long. Wt., 1 lb.
94 S 027. List. $2.75. NET **1.62**
94 S 075. 19" long. 1½ lbs. List. $3.75. NET **2.20**

Fig. L. MODEL SO-1 SNAP-ON MIKE ATTACHMENT. 1 section attaches to mike—other fastens to stand. ⅝"-27 thread. Wt., ½ lb.
94 S 017. List. $2.75. NET **1.62**

Fig. M. MODEL CH-1 CABLE HANGER. Fits on all tubes to 1¼" dia. All chrome. Shpg. wt., ½ lb.
94 S 076. List. $3.00. NET **1.47**

MODEL SW-1 GYROMATIC SWIVEL. (Not illustrated.) Permits mike to be locked at any desired angle. 4½" long. ⅝"-27 male threads for mike. ⅝"-27 female threads for mike stand. Wt., 1½ lbs.
94 S 067. NET **2.35**

Fig. N. MODEL AD1 MIKE STAND ADAPTER. Adapts RCA mikes to standard stands. ½" male to ⅝"-27 female. Shpg. wt., 2 oz.
41 S 928. NET **50c**

Fig. P. MODEL AD2. ⅛" pipe female to ⅝"-27 male. Wt., 2 oz.
94 S 060. NET **35c**

Fig. R. MODEL AD3. ⅛" pipe female to ⅝"-27 female. Wt., 2 oz.
94 S 061. NET **35c**

Fig. P. MODEL AD4. ¾" long. ⅝"-27 male running thread. 2 oz.
94 S 062. NET **18c**

Fig. R. MODEL AD5. ⅝"-27 to ⅝"-27 female. coupling. Wt., 2 oz.
94 S 063. NET **35c**

Fig. S. MODEL AD7 EXTENSION ROD. 3" long tube. ⅝"-27 male each end. Shpg. wt., 3 oz.
41 S 913. NET **35c**

Fig. S. MODEL AD8 EXTENSION ROD. 6" long tube. ⅝"-27 male each end. Shpg. wt., 4 oz.
41 S 907. NET **41c**

Fig. T. MODEL AD10. For adapting W. E. mikes to standard stands. ⅝"-24 female to ⅝"-27 female. Shpg. wt., 2 oz.
94 S 066. NET **71c**

MIKE BASE FLANGES. ⅝"-27 thread. Wt., 6 oz.

Fig. W. MODEL AD11. Female flange.
41 S 906. NET **35c**

Fig. X. MODEL AD12. Male flange.
41 S 905. NET **35c**

Amphenol Microphone Connectors

SERIES 75. SINGLE-CONTACT TYPES. Standard connectors. ⅝"-27 threads; ⅛" mounting holes. Av. wt., 3 oz.

Stock No.	Type	Fig.	NET	Description
41 H 958	75-MC1F	AA	31¢	Cable plug
41 H 955	75-MC1M	BB	21¢	Cable jack
41 H 965	75-PC1M	CC	23¢	Chassis receptacle, non-shorting
41 H 962	75-MC1P	DD	30¢	Phone plug adapter
41 H 959	75-MC1FA	EE	62¢	90° angle cable plug
41 H 967	75-CL-PC1M	FF	33¢	Chassis receptacle, closed circuit

SERIES 80. SINGLE AND DOUBLE CONTACT TYPES. For shielded mike cables, concentric lines, photo-cell leads and similar uses. Center contacts are pin and socket type. *Single-contact type. †Double-contact type. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	NET	Description
42 H 080	*80-F	GG	37¢	Female cable jack
42 H 084	*80-C	HH	34¢	Female chassis receptacle
42 H 081	*80-M	JJ	42¢	Male cable plug
42 H 082	†80-MC2F	GG	39¢	Female cable jack
42 H 085	†80-PC2F	HH	36¢	Female chassis receptacle
42 H 083	†80-MC2M	JJ	44¢	Male cable plug

TYPE 75-CCC1 CAP AND CHAIN. (Not illustrated.) For dust-sealing chassis-mounted, Series 75 and 80 receptacles. Wt., 3 oz.
40 H 381. NET **24c**

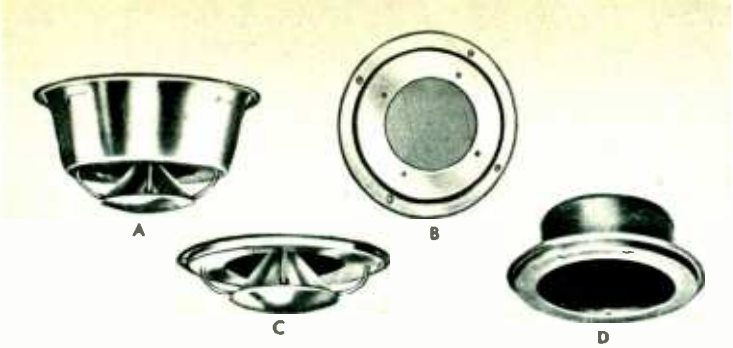
SERIES 91. 3- AND 4-CONTACT TYPES. Microphone connectors for portable equipment. Polarized. Clamps eliminate stress on soldered connections. *3 contact type. †4-contact type. Shpg. wt., 3 oz.

Stock No.	Type	Fig.	NET	Description
41 H 970	*91-MC3F	KK	64¢	Female cable jack
41 H 972	*91-PC3F	LL	51¢	Female chassis receptacle
41 H 971	*91-MC3M	MM	64¢	Male cable plug
41 H 977	†91-MC4F	KK	67¢	Female cable jack
41 H 978	†91-PC4F	LL	52¢	Female chassis receptacle
41 H 976	†91-MC4M	MM	66¢	Male cable plug

NEW "QWIK" SERIES 91. 3- AND 4-CONTACT TYPES. Highly convenient, dependable, mike connectors. Streamlined design. Simply pushed together; released by slight thumb pressure on lock button and pulling outward. Gold-plated (over silver) bronze contacts. Polarized. Satin-nickel plated, zinc-alloy shells. *3-contact type. †4-contact type. Av. shpg. wt., 3 oz.

Stock No.	Type	Fig.	NET	Description
42 H 065	*91-853	NN	.91	Male cable plug
42 H 066	*91-854	PP	1.12	Female cable plug
42 H 067	*91-855	RR	.68	Male chassis receptacle
42 H 068	*91-856	SS	1.35	Female chassis receptacle
42 H 069	†91-857	NN	.91	Male cable plug
42 H 070	†91-858	PP	1.23	Female cable plug
42 H 071	†91-859	RR	.68	Male chassis receptacle
42 H 072	†91-860	SS	1.50	Female chassis receptacle

For Cannon Microphone and Cable Connectors, See Page 155



Lowell Ceiling and Wall Baffles

Fig. A. SURFACE MOUNTING TYPE. Recommended for all types of ceilings. Can be installed quickly. Provide efficient sound dispersion. Feature floating conical diffuser action and heavy jute loading to cancel metallic resonance. Provide 360° coverage. Heavy gauge aluminum with clear lacquer coating. For normal-height ceilings.

MODEL BL6-A. For 6" speakers. Size: 12¼" dia. x 7¼". Shpg. wt., 7½ lbs.
95 DX 223. List. $13.00. NET ... **7.64**

MODEL BL8-A. For 8" speakers. Size: 14¾" dia. x 8⅛". Shpg. wt., 9½ lbs.
95 DX 224. List, $22.00. NET **12.94**

MODEL BL12-A. For 12" speakers. Size: 18⅜" dia. x 9¼". Wt., 11½ lbs.
95 DZ 225. List. $27.00. NET.....**15.88**

Fig. B. LOWELL FLUSH MOUNTING WALL BAFFLES. Baffles are aluminum with ½" mounting flange. Have satin aluminum finish. Furnished with perforated metal grille, and four screws to mount speaker and grille to trim ring. Baffle mounts to Lowell type CP or XCP enclosures listed below, if speaker protection is desired.

MODEL RS6-A. For 6" speakers. Size: 10" dia. x 7/16". Shpg. wt., ¾ lb.
95 DX 240. List. $5.00. NET.....**2.94**

MODEL RS8-A. For 8" speakers. Size: 12⅜" dia. x ½". Shpg. wt., 1 lb.
95 DX 238. List. $5.55. NET..... **3.26**

MODEL RS12-A. For 12" speakers. Size: 16½" dia. x ½". Shpg. wt., 1½ lbs.
95 DX 239. List. $7.60. NET. **4.47**

Fig. C.—FLUSH MOUNTING CEILING BAFFLE

Use where speaker can be recessed into ceiling. Require can and plaster ring assembly, below and right.

MODEL AL6-A. For 6" speakers. Size: 10¾" dia. Shpg. wt., 5 lbs.
95 DX 226. List. $7.50. NET.....**4.41**

MODEL AL8-A. For 8" speakers. Size: 12¼" dia. Shpg. wt., 7 lbs.
95 DX 227. List. $12.15. NET.....**7.14**

MODEL AL12-A. For 12" speakers. Size 16½" dia. Shpg. wt., 9 lbs.
95 DX 228. List. $15.30. NET.....**9.00**

Fig. D.—CAN & PLASTER RING ASSEMBLY FOR FLUSH MOUNTING BAFFLES

For recessed mounting of Lowell baffles in wall or ceiling. Consists of strong steel speaker can with ring attached for mounting in plaster. Interior treated to prevent metallic resonance. Have ¾" knockouts for wiring. With all mounting hardware.

MODEL CP6. For Model AL6A and RS6A assembly in new construction. Size, 7" ID x 4" deep x 11¼" O.D. Shpg. wt., 4½ lbs.
95 DX 235. List. $7.28. NET . **4.28**

MODEL CP8. For Model AL8A and RS8A assembly in new construction. Size, 8½" ID x 4¼" deep x 13" OD. Shpg. wt., 5 lbs.
95 DX 236. List. $9.00. NET... **5.29**

MODEL CP1012. For Model AL12A and RS12A assembly in new construction. Size, 12½" ID x 7" deep x 17⅛" OD. Wt., 7 lbs.
95 DX 237. List. $12.33. NET.....**7.25**

MODEL XCP6. For Model AL6A and RS6A assembly in existing construction. Size, 7" dia x 4" deep. Shpg. wt., 4½ lbs.
95 DX 232. List. $6.41. NET.....**3.77**

MODEL XCP8. For Model AL8A and RS8A assembly in existing construction. Size, 8½" dia. x 4¼" deep. Shpg. wt., 5 lbs.
95 DX 233. List. $8.05. NET.. . .**4.73**

MODEL XCP1012. For Model AL12A and RS 12A assembly in existing construction. Size, 12½" dia. x 7" deep. Shpg. wt., 7 lbs.
95 DX 234. List. $10.86. NET.....**6.39**

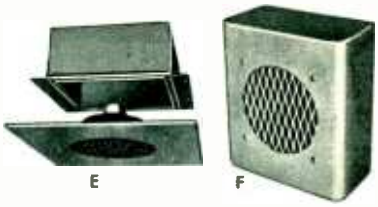


Fig. F—Bud Silver Sonance Speaker Enclosures

Type CS speaker enclosures. Holes in cabinet permit direct mounting on wall or outlet box. Bi-lateral feature permits sound distribution from front and back of enclosure. Beautiful silver-gray hammertone finish. With hardware for installation of speaker. Less adjustable mnunting bracket, listed below.

Stock No.	Type	Speaker	H. W. D.	Lbs.	NET
86 P 820	2241	5" to 6"	8¼x7½x4"	3¼	4.06
86 P 821	2242	6" or 8"	10 9/16x9½x5 1/16"	5	7.35
86 PX 822	2243	10" or 12"	15 1/32x13½x7 3/16"	9½	9.41

Finished with primer coat only, for easy painting to match walls.

Stock No	Type	Speaker	H. W. D.	Lbs.	NET
86 P 823	2271	5" to 6"	8¼x7½x4"	3¼	3.82
86 P 824	2272	6" or 8"	10 9/16x9½x5 1/16"	5	7.06
86 PX 825	2273	10" or 12"	15 1/32x13½x7 3/16"	9½	8.97

BRACKETS FOR UNIVERSAL-TYPES

Permit versatile, swivel-type, wall mounting of above enclosures. Also permit ceiling mounting. Hole for ½" conduit. May be mounted on outlet box; see CP-2255 cover plate below.

Stock No.	Type	Used with	Wt., Lbs.	NET
86 P 826	AB-2251	2241. 2271	1¼	1.12
86 P 827	AB-2252	2242. 2272	1½	1.38
86 P 828	AB-2253	2243. 2273	3	1.62

CP-2255 OUTLET BOX COVER PLATE. For installing brackets (above) directly on outlet box. 4¼x2¼". Shpg. wt., ½ lb.
86 P 829. NET **73c**

Fig. E—CEILING and WALL ENCLOSURES

For recessed installation of 8" speaker in ceiling or wall. Have adjustable mounting brackets. Heavy-gauge steel. Overall size, 14x14x4 1/16". Shpg. wt., 10 lbs.
TYPE CS-2244. Hammertone grille. Primer-coated housing.
86 PX 830. NET **8.82**
TYPE CS-2274. Primer coating on grille and housing.
86 PX 831. NET **8.68**

Microphone Accessories

Fig. G. AMPHENOL 75-MC1S SWITCH. Push-to-talk, slide-to-lock switch. May be connected to any mike equipped with 75-PC1M or similar receptacle. Standard ⅝"-27 thread. No soldering necessary simply screws on. Shpg. wt., 6 oz.
41 H 950. NET. **1.09**

Fig. H. Y—TYPE MICROPHONE CONNECTOR. Two males and one female for connecting two mikes in parallel to one mike input. Wt., 2 oz.
41 S 996. NET.. . . . **1.03**

DOUBLE MALE MICROPHONE CONNECTOR. (Not illus.) For connecting mike extension cables having standard female couplers. A time-saving accessory for P.A. installations. Wt., 2 oz.
41 S 997. NET **42c**

Fig. J. DOUBLE FEMALE MICROPHONE CONNECTOR. With coupling nuts. For connecting extension cables equipped with standard male couplers. Securely locks cables in place and prevents accidental disconnection. Wt., 2 oz.
41 S 998. NET. **48c**

Figs. K AND L. MIKE STAND THREADING TOOLS. Standard ⅝"-27 tap and die for stands, connectors, and other mike fittings. Invaluable aids for servicing sound equipment, new installations, etc. For chasing worn threads or threading stands and adapters. High-quality tool steel, heat-treated and hardened. Shpg. wt., 5 oz.
46 N 187. Tap. NET..... .. .**2.94**
46 N 188. Die. NET. **4.70**

Fig. M. ASTATIC TYPE MC-151 CRYSTAL MICROPHONE CARTRIDGE. Replacement crystal cartridge for the following Astatic microphones: CX, JT-30, T-3, W-40, 200, 200-S, W-30 and 600. Output, −52 db. Supplied with rubber mounting ring and installation instructions. Shpg. wt., 2 oz.
41 S 960. List. $7.00. **NET**..... . ...**4.12**

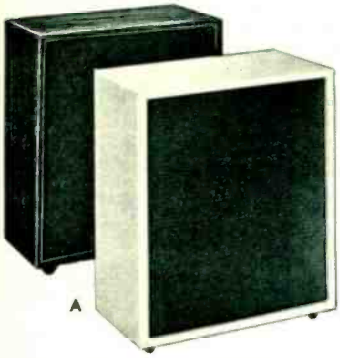
Fig. N. SAVE-UR-MIKE COVER. Handsome, plastic-coated white celanese mike cover for all mikes. Especially recommended for use with outdoor PA systems. Protects mikes from dust and moisture. An inexpensive, but highly valuable accessory. Fits microphones to 3⅞" dia. Shpg. wt., 2 oz.
41 S 995. NET. **69c**

Microphone Mixers

Fig. P. KNIGHT COMPACT MIKE MIXER. For use with all Knight PA amplifiers. Mixes 3 high impedance mikes or instruments, each with its own gain control. Hi-Z output. .33" shielded cord and connector. Exceptionally small size, 1½x3⅝x7¾". Shpg. wt., 1 lb.
93 S 282. List. $15.00. **NET**... . **8.82**

Fig. R. PENTRON "AUDIO-MIX" ELECTRONIC MIXER. Professional-type mixer for use with tape, wire or disc recorders. 8 db gain on mike inputs compensates for insertion losses. Has 22 db gain on phono inputs. Extremely low hum level. Compact, rugged construction assures long life. Permits blending 4 channels. 6 hi-imp inputs: 4 for mike and 2 for phono. Response, 20-20,000 cps. 2 12AX7 tubes and selenium rectifier. 8x6x5". For 105-125 v., 60 cyc AC. Shpg. wt., 5 lbs.
93 S 285. List. $47.50 **NET** **35.70**

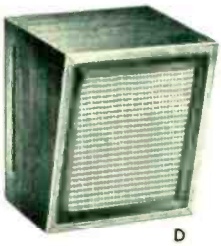
Speaker Baffles and Portable Carrying Cases


A


B


C


E


D


F


G

ARGOS SPEAKER ENCLOSURES

Fig. A. BASS REFLEX ENCLOSURE. May be used with 12" or 15" woofer and a tweeter, 12" or 15" coaxial speaker, or as straight bass reflex or infinite baffle with either a 12" or 15" speaker. Made of ½" five-ply wood covered with durable plastic-coated fabric with simulated wood finish. Smart two-tone woven plastic grille cloth. 4.3 cubic ft. capacity, interior acoustically padded. HWD, 29x24x15". With adapter plate and hardware. Shpg. wt., 38 lbs.

95 DZ 425. DBR-2. Mahog. NET
95 DZ 426. DBR-2. Blonde. EACH . . 34.10

Fig. B. BASS REFLEX CORNER ENCLOSURE. Handsomely styled, low-cost baffles for corner mounting of 8" or 12" speakers. Incorporate bass-reflex design and utilize walls of room to enhance performance. Deliver rich, full-toned reproduction and provide excellent sound coverage. Ideal for PA use, music distribution systems, plants, etc. Rigidly constructed of reinforced plywood and hardboard; covered with plastic-coated fabric with simulated wood grain finish.

FOR 8" SPEAKERS. Size, 14" high x 12⅝" wide x 6½" deep. Shpg. wt., 5 lbs.
95 DX 431. CB-8B. Brown. NET
95 DX 432. CB-8B. Blonde. EACH . . 6.91

FOR 12" SPEAKERS. Size, 20¼" high x 17⅝" wide x 9" deep. Shpg. wt., 9 lbs.
95 DZ 433. CB-12B. Brown. NET
95 DZ 434. CB-12B. Blonde. EACH . 9.55

FIG. C—ARGOS WALL BAFFLES

Made of wood and hardboard; finished in durable plastic-coated fabric with simulated wood grain finish. Plastic grille. For mounting hardware see Baffle Mounting Kit, at right above.

FOR 4"-5" SPEAKERS. Size, 6" high x 6" wide x 4⅝" deep. Shpg. wt., 1½ lbs.
95 D 435. WB-4/5B. Brown. NET
95 D 436. WB-4/5B. Blonde. EACH . 2.42

FOR 6" SPEAKERS. Size, 8½" high x 7½" wide x 5⅛" deep. Shpg. wt., 2 lbs.
95 D 437. WB-6B. Brown. NET
95 D 438. WB-6B. Blonde. EACH . . . 2.94

FOR 8" SPEAKERS. Size, 10½" high x 9⅜" wide x 6½" deep. Shpg. wt., 3 lbs.
95 D 439. WB-8B. Brown. NET
95 D 440. WB-8B. Blonde. EACH . . 3.53

FOR 10" SPEAKERS. Size, 12¼" high x 11½" wide x 7¾" deep. Shpg. wt., 4 lbs.
95 DX 441. WB-10B. Brown. NET
95 DX 442. WB-10B. Blonde. EACH 4.12

FOR 12" SPEAKERS. Size, 14" high x 13½" wide x 9" deep. Shpg. wt., 5 lbs.
95 DX 443. WB-12B. Brown. NET
95 DX 444. WB-12B. Blonde. EACH 4.85

FIG. D—ARGOS WOOD BAFFLES

Deluxe-quality, moderately priced wood baffles for 8" and 12" speakers. Ruggedly constructed of plywood and solid oak or walnut front frames. Available in either lime finished oak or walnut finished mahogany. Excellent for all indoor installations, paging systems, school rooms, offices, stores, etc. Attractive acoustic plastic grille enhances appearance of baffle without affecting sound dispersion.

FOR 8" SPEAKERS. Size, 10½" high, 9⅜" wide, 6½" deep. Shpg. wt., 3 lbs.
95 DX 400. DWB-8. Walnut.
95 DX 401. DWB-8. Limed Oak.
NET EACH 5.35

FOR 12" SPEAKERS. Size, 14" high, 13½" wide, 9" deep. Shpg. wt., 5 lbs.
95 DX 402. DWB-12. Walnut.
95 DX 403. DWB-12. Limed Oak.
NET EACH 7.50

BAFFLE MOUNTING KIT. For convenient mounting of baffles on walls. Two screw eyes and wall hooks. Will hold any of above baffles securely. Shpg. wt., 3 oz.
45 D 845. NET 15c

FIG. E—FABRIKOID-COVERED BAFFLES

Quality-built, attractive, non-resonant baffles. Ideal for all indoor installations: paging systems, school rooms, stores, offices, auditoriums, etc. Wall-mounting type. Provide coverage over wide angle. Made of strong plywood, covered with durable dark brown leatherette.

12" SPEAKER BAFFLE. 17x13½x8" D. Shpg. wt., 6 lbs.
93 DX 520. NET 3.25

8" SPEAKER BAFFLE. 11x9¾x6" D. Shpg. wt., 4 lbs.
93 DX 522. NET 2.50

FIG. G—SPEAKER CASES

Exceptionally well-built carrying cases for one or two 12-inch speakers. Excellent for portable sound systems where a means of carrying additional speakers is desired. Constructed of plywood covered with dark brown leatherette. Have speaker openings of harmonizing brown flocking on rigid metal screen. Removable covers fitted with sturdy trunk-type clasps. With durable leather carrying handles.

SINGLE SPEAKER CASE. Will accommodate one 12-inch speaker. Inside dimensions: 12¾x12¾x9½". Shpg. wt., 9 lbs.
93 DX 601. NET 7.25

DUAL SPEAKER CASE. Will accommodate two 12-inch speakers. Divides into two convenient separate units which serve as baffles. Rugged plywood construction with durable dark brown leatherette covering. Inside dimensions: 20 15/16x12¾x9½". Shpg. wt., 25 lbs.
93 DZ 600. NET 9.25

FIG. F—SPEAKER-AMPLIFIER CASES

These extremely popular combination speaker-amplifier cases provide the ultimate in convenience and efficiency. They are ruggedly built and designed to house every component used in a PA system, including mike, stand and cable.

Larger case will accommodate two 12" speakers and amplifier measuring about 14⅝x8¾x11¼", similar to Knight 15- or 30-watt models. Smaller case will accommodate one 8" speaker and amplifier measuring about 7⅜x10¼x7¼". Sturdy plywood construction. Attractive burgundy red leatherette covering. Speaker openings attractively covered with gray flocking on strong metal screen.

All components are held securely in place and are ready for instant use when case is opened. Interiors have windup brackets for speaker cable and leatherette pocket for carrying microphone. Have metal corner plates to provide extra strength and rigidity. With leather carrying handles. An outstanding choice for virtually any portable PA system.

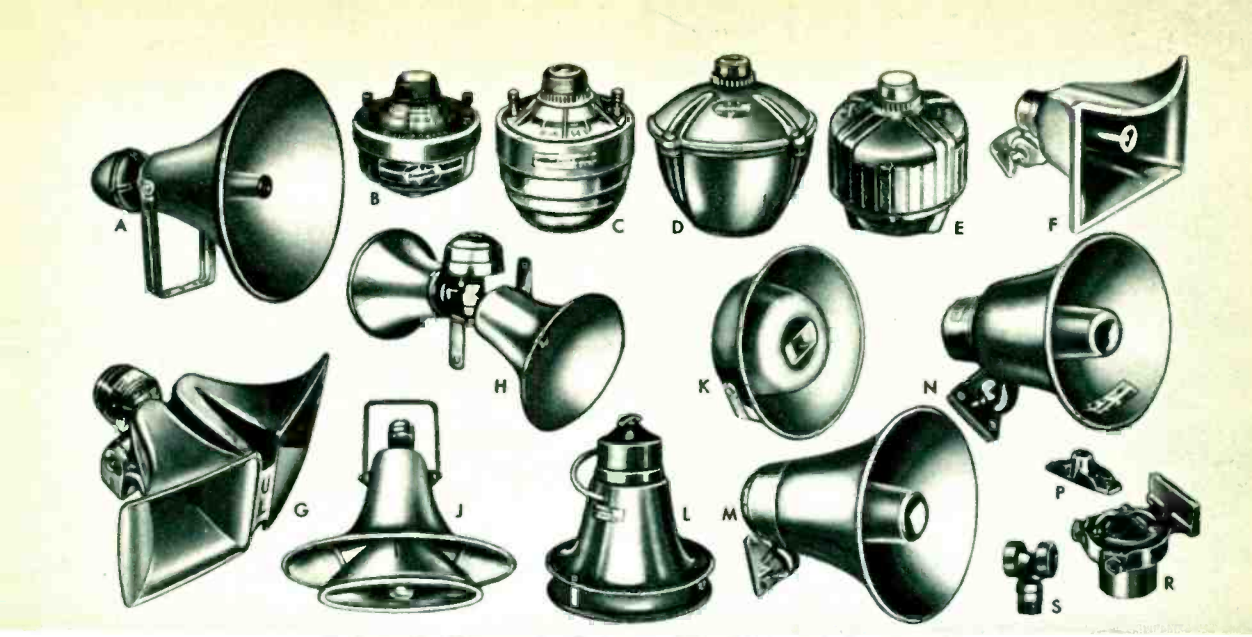
LARGE CASE. For system using two 12" speakers. Divides into 2 units which serve as speaker baffles. Has clasp and screw mount for mike stand and base, and slide-in shelf for mounting amplifier. Inside dimensions: 24" high, 16" wide, and 12⅝" deep. Shpg. wt., 25 lbs.
93 SZ 613. NET 17.95

SMALL CASE. For system using one 8" speaker. Inside dimensions: 16" high, 10⅜" wide, and 8⅛" deep. Shpg. wt., 9 lbs.
93 SX 612. NET 9.85

CAR-TOP SPEAKER PLATFORM

Platform-type speaker mounting base for use with mobile Public Address Systems. Simplifies installation of trumpets, projectors, and loudspeakers. Exceptionally sturdy wood platform will easily support even the largest speakers. Speakers may be permanently attached to wood platform for convenience in handling or storing. Platform can be installed on car-top or removed in a matter of minutes. Four non-slip vacuum cups keep platform from moving on car-top. Secured with adjustable straps to rain-gutters over car doors. Weather-resistant varnish finish. Measures 7½x46". Shpg. wt., 9 lbs.
93 DX 220. NET 5.91

See Pages 161-174 for P.A. Amplifiers and Microphones



University Trumpets, Drivers, Speakers and Accessories

Fig. A. REFLEX LOUDSPEAKER TRUMPETS. For use with driver units below. Fully weatherproof. Heavy-gauge metal. Model GH with 6½' air column and a low-frequency cutoff at 85 cps is ideal for music. Models LH and PH have higher cutoff for general use. Model SMH is for voice only. With "U" mounting bracket, less driver unit.

Stock No.	Mfr's Type	Bell Dia.	Overall Length	Low Cutoff	Wt. Lbs.	List	NET EACH
95 DZ 158	GH	30⅞"	27⅞"	85 cyc.	22¾	$65.00	38.22
95 DZ 155	LH	25⅝"	19"	120 cyc.	20	44.50	26.17
95 DZ 156	PH	20¼"	15¾"	150 cyc.	12¼	31.00	18.21
95 DX 157	SMH	16½"	12"	200 cyc.	9	26.00	15.29

BREAKDOWN-PROOF DRIVER UNITS. PM dynamic type, hermetically sealed units for reflex-type trumpets and radial-reflex projectors. Corrosion-proof—molded phenolic diaphragms. Excellent fatigue characteristics. Exclusive "rim centering" construction insures rigidity of assembly. Thread, 1⅜"-18. MA-25 is rugged general purpose unit. SA-HF is wide-range unit.

Stock No.	Mfr's Type	Fig.	Range C.P.S.	Watts Rating	Ohms Imp.	Wt. Lbs.	List	NET EACH
81 D 573	MA-25	B	90- 6,000	25	16	4	$27.50	16.17
81 D 571	SA-HF	C	90-10,000	25	16	6	35.00	20.58

Fig. D. PA-30 HEAVY-DUTY DRIVER UNIT. For general-purpose use and for broadcasting chime music from church steeples. Range, 80 to 10,000 cps. Features built-in line matching transformer; has five taps marked for both the RETMA 70-volt system, and standard impedances. All terminals are located on driver base for maximum convenience. Power capacity, 30 watts. Inputs, 16, 165, 250, 500, 1000, 2000 ohms; constant voltage taps, 30, 20, 10, 5 and 2½ watts. Speaker V.C., 16 ohms. Wt., 7 lbs.
81 D 574. List, $50.00. NET **29.40**

Fig. E. SA-30 HEAVY-DUTY DRIVER UNIT. For rugged PA and industrial use. Range, 90-10,000 cps. Has built-in universal transformer, designed for both the 70-volt systems and regular impedance-matched circuits. Input terminals: 45 (for intercom circuits), 165, 250, 500, 1000 and 2000 ohms; constant-voltage taps, 30, 20, 10, 5, and 2.5 watts. Weather-proof die-cast aluminum head and housing. V. C. impedance, 16 ohms. Length overall, 6⅞". Power capacity, 30 watts. Shpg. wt., 5 lbs.
81 D 582. List, $45.00. NET **26.46**

Fig. F. CI8-8 REFLEX SPEAKER. Wide angle paging and talk back speaker. Steel reinforced fiberglas bell. Capacity, 12 watts. Response, 300 to 13,000 cps. Horizontal dispersion, 120°, vertical, 60°. Impedance, 8 ohms. Size, 7⅛x14x12". Shpg. wt., 6 lbs.
95 DX 199. List, $40.00. NET **23.52**

CMIL-8 REFLEX SPEAKER. As above but, capacity 3 watts; response 400 to 13,000 cps; size 6⅞x9¼x8⅞". Shpg. wt., 4 lbs.
95 D 149. List, $28.75. NET **16.90**

Fig. G. COBREFLEX-2 REFLEX TRUMPET. Wide-angle trumpet for use with any University heavy-duty driver, such as MA-25, SA-HF, PA-30 and SA-30. Provides sound pattern over horizontal angle of 120° and vertical angle of 60°. A fine choice for highpower PA and industrial applications. 250-cycle low-end cutoff assures very high penetration and minimizes reverberation effects. Takes 2YC connector, at right, to permit use with two drivers for greater power handling capacity. Size: 9¼" high, 18½" wide, 10¼" deep. Less driver. Shpg. wt., 12 lbs.
95 DX 184. List, $35.00. NET **20.58**

Fig. H. 2W-25 WIDE-ANGLE SPEAKER. Dual horns 180° opposed. Have single driver. Dispersion, 120° each horn. Power handling capacity, 25 watts. Response, 350-6000 cps. Impedance, 16 ohms. 20½x8" dia. Shpg. wt., 10 lbs.
95 DX 179. List, $48.00. NET **28.22**

Fig. J. MODEL RPH RADIAL REFLEX TRUMPET. 14" high, yet provides 4-ft. air column with low-frequency cutoff at 140 cps. Rubber loading minimizes vibrations. Dia., 25⅜". For driver units listed at left. Use of 2YC "Y" connector (Fig. S) permits use with two drivers. Use of PMA adapter (Fig. P) permits mounting on ½" pipe fitting. With "U" bracket. Less driver. Shpg. wt., 24 lbs.
95 DZ 162. List, $45.00. NET **26.46**

Fig. K. NEW MODEL BLC HIGH-FIDELITY COAXIAL. Exceptionally fine weatherproof coaxial. Full-range voice and music reproduction; high intelligibility; wide dispersion. For bandshells, stadiums, auditoriums, and other indoor or outdoor applications. Low-frequency driver in compression-type aluminum horn. Coaxially mounted tweeter. 2000-cycle crossover network. Response, 70-15,000 cps. Dispersion, 120°. Capacity, 25 watts. Impedance, 8 ohms. 22½" dia., 9" deep. With adjustable "U" mounting bracket. Shpg. wt., 20 lbs.
95 DZ 186. List, $75.00. NET **44.10**

MODEL WLC. Larger version of above. Response, 50-15,000 cps. Dispersion, 90°. Power capacity, 30 watts. Impedance, 8 ohms. 33½" dia., 20" deep. Shpg. wt., 80 lbs.
95 DZ 181. List, $250.00. NET **147.00**

INDUSTRIAL PAGING SPEAKERS

Reflex type air-column reproducers with built-in hermetically sealed PM dynamic driver units. Corrosion-proof finish. For locations where maximum penetrating power is required.

Fig. L. MODEL 1BR. Radial reflex trumpet with built-in 12-watt PM driver unit. 360° distribution. For voice frequencies. Range, 300-10,000 cps; input imp., 8 ohms. Size, 9¾" dia. x 11" high. With top-suspension ring for quick, convenient mounting from ceiling. Shpg. wt., 7 lbs.
81 DX 576. List, $39.00. NET **22.93**

Fig. M. MODEL 1B8. Reflex-type with built-in 12-watt driver unit. 90° dispersion angle. Range, 300-13,000 cps. Input impedance, 8 ohms. Size, 8½" bell dia. x 9" long. Has adjustable wall mounting bracket. Shpg. wt., 7 lbs.
81 DX 575. List, $32.50. NET **19.11**

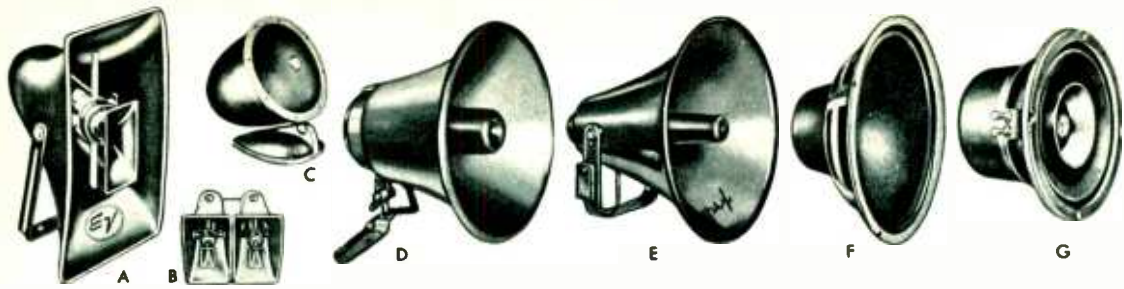
Fig. N. MODEL MIL. Reflex-type for low-power use. Screw-in 3-watt driver unit; high efficiency at speech frequencies. Range, 400-13,000 cps. Dispersion angle, 120°. Impedance, 8 ohms. 6⅛" dia. x 7" high. Adjustable mounting bracket. Shpg. wt., 5 lbs.
95 D 163. List, $25.00. NET **14.70**

Fig. P. PMA ADAPTER. Attachable to "U" bracket for mounting trumpets on ½" pipe fittings. Shpg. wt., 2½ lbs.
95 D 160. NET **88c**

Fig. R. CTR-20 25-WATT MATCHING TRANSFORMER. In waterproof case. Meets every mtg. requirement. Pri.: 45, 500, 1,000, 1,500, 2,000 ohms; Sec.: 4, 8, and 16 ohms. Shpg. wt., 3 lbs.
95 G 154. List, $15.00. NET **8.82**

Fig. S. 2YC "Y" CONNECTOR. For greater power handling capacity with a single trumpet. Permits connection of two driver units to any of the trumpets listed on this page, including the Cobreflex-2 and the Model RPH. Shpg. wt., 1 lb.
95 D 159. List, $10.00. NET **5.88**

For Additional University Speakers, See Pages 28 and 29



Projectors, PA Speakers and Ceiling Baffles

Fig. A—ELECTRO-VOICE CDP PROJECTOR

MODEL 848. Unique coaxial PA projector with single driver. Features: Virtually indestructible spun fiberglas construction; greater coverage; wide, smooth frequency response for full range music reproduction.

Two horns are employed; large horn for low frequencies—175-1000 cps; small horn for highs—1000-10,000 cps. Low-end response is augmented by 100 cps horn taper, insuring at least one-half octave added bass. Horns are coupled to opposite sides of driver diaphragm, providing dispersion from both sides of projector.

Maximum polar coverage, 120°. Power handling capacity, 25 watts. Impedance, 16 ohms. Weatherproof, splash-proof and blast-proof. Finished in gunmetal gray. Size: 20½x10½" mouth; 20" deep. Shpg. wt., 17 lbs.
81 DZ 490. List, $69.50. NET ... **40.87**

MODEL 876 25-WATT LINE MATCHING TRANSFORMER. Mounts on rear of Model 848 projector. Primary taps for 25, 10, 5, and 2.5 watts with 70-volt line. Impedance taps of 45, 200, 500, 1000, and 2000 ohms. Size, 3½"x5¼" dia. Shpg. wt., 4 lbs.
81 G 492. List, $16.50. NET **9.70**

MODEL 877 LINE MATCHING TRANSFORMER. Same as Model 876 except with thermal bimetallic relay for overload protection. Size, 3½x5¼" dia. Shpg. wt., 4 lbs.
81 G 493. List, $17.50. NET **10.29**

MODEL 878 BASS AND THERMAL OVERLOAD PROTECTOR. Prevents distortion due to frequencies below Model 848 Horn cutoff. Reduces power to driver when over 25 watts. Size, 3½x5¼" dia. Shpg. wt., 4 lbs.
81 D 494. List, $16.50. NET **9.70**

MODEL 879 JOINING KIT. For assembling two or more Model 848 projectors (as shown in Fig. B.) in multiple arrays. One kit required for each additional projector. Shpg. wt., 1 lb.
81 D 495. List, $2.75. NET **1.62**

Fig. C—JENSEN MODEL AP-10 SPEECHMASTER

High-quality 5-inch PM speaker—completely enclosed in a streamlined, acoustically designed enclosure. Enclosure has smart, professional appearance; protects speaker from damage; keeps out dust. A fine choice for low-power PA amplifiers; also for use with receivers. Smooth-operating tilt adjustment. For desk-top or wall mounting; holes for wall-mounting screws in base. Internal mounting bracket for small output transformer. Power handling capacity, 5 watts. Voice coil impedance, 4 ohms. Size: 6¾" high; 5⅛" deep. Hammered gray finish with lustrous chrome trim. Supplied with 36" rubber-covered cord. Shpg. wt., 6 lbs.
82 D 040. List, $19.30. NET **11.35**

JENSEN HYPEX PROJECTORS

Complete with driver units and adjustable brackets. Reflex design reduces length to a minimum. Four to five times the efficiency of cone speakers for paging purposes. Weatherproof, aluminum construction. Use VH-15 and VH-91 for speech reproduction only; VH-20 for speech and music; VH-24 for best music reproduction.

Fig. E. MODEL VH-24. Response, 110-6,000 cps. 25 watts. 75° coverage. 16-ohm VC. 22⅜x25" dia. Shpg. wt., 32 lbs.
95 DZ 024. List, $89.50. NET ... **52.63**

Fig. E. MODEL VH-20. Response, 140-6,000 cps. 25 watts. 80° coverage. 16-ohm VC. 20¼x21" dia. Shpg. wt., 25 lbs.
95 DZ 023. List, $76.00. NET ... **44.69**

Fig. E. MODEL VH-15. Response, 180-6,000 cps. 15 watts. 90° coverage. 8-ohm VC. 15x16" dia. Shpg. wt., 18 lbs.
95 DZ 025. List, $56.50. NET ... **33.22**

Fig. D. MODEL VH-91. For paging and intercom systems. 15 watts. 100° coverage. Locks with single wing nut. 8-ohm VC. 7⅝x8⅞" dia. Shpg. wt., 15 lbs.
95 D 035. List, $35.80. NET **21.05**

Fig. F—GENERAL ELECTRIC PA SPEAKERS

High-quality, very popular PM speakers. Non-warping, aluminum-base voice coils are virtually unaffected by extreme humidity. Excellent magnet structures with Alnico V magnets assure very high efficiency and clean, authentic reproduction. Voice coil impedance, 8 ohms.

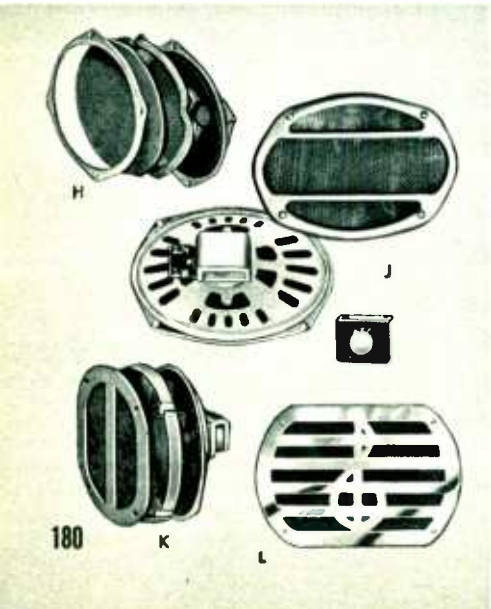
MODEL 818-D 8". Frequency response, 80 to 10,000 cps. Cone resonance, 100 cps. Magnet weight 6.8 oz. Power handling capacity, 12 watts. Shpg. wt., 2¾ lbs.
81 D 481. List, $12.00. NET **7.06**

MODEL 1218-D 12". Frequency response, 60 to 8000 cps. Cone resonance, 75 cps. Magnet weight, 6.8 oz. Power handling capacity, 12 watts. Shpg. wt., 4½ lbs.
81 DX 486. List, $14.19. NET **9.32**

MODEL S1201A 12". Widely used in deluxe PA installations. Frequency response, 50 to 13,000 cps. Cone resonance, 70 cps. Employs extra-heavy magnet and large voice coil for extremely high efficiency and unusually clean reproduction. Rigid, "All-Weld" construction maintains optimum flux density. Voice coil diameter, 1¼". Magnet weight, 14.5 oz. Power capacity, 25 watts. Shpg. wt., 6 lbs.
81 DX 510. List, $33.95. NET **19.95**

Fig. G—ELECTRO-VOICE SP8-B

High-fidelity 8" speaker, widely used for voice and music distribution in plants and restaurants. Delivers remarkably clean, wide range response for outstanding reproduction. Extra-large Alnico V magnet provides unusually high flux density. Famous Radax-type construction and high-frequency whizzer give excellent, wide-angle dispersion. Cone resonance, 65 cps. Frequency response, ±6 db, 35-13,000 cps. Power handling capacity, 15-20 watts. Impedance, 16 ohms. Uses mechanical crossover at 6000 cps. Depth, 4⅜" behind mounting panel. Shpg. wt., 8 lbs.
81 D 277. List, $47.50. NET **27.93**



Rear Deck Auto Speaker Selection

Fig. H. AUTONE MODEL 600. For rear deck installation in automobiles. Three-way control switch permits operation of front or rear speaker independently, or both simultaneously. Consists of 6" PM Alnico V speaker with 1.47-oz. magnet and protected basket. Has 3.2-ohm voice coil. Gray finish grille. Complete with 15-ft. 2-conductor cable, 2-ft. 3-conductor cable. Shpg. wt., 2 lbs.
81 D 670. List, $7.50. NET **4.41**

Fig. J. LOWELL MODEL R5-K 5x7" KIT. Includes 5x7" PM speaker, attractive gray metal grille, 3-way speaker switch, 15' cable, all hardware and full instructions. Shpg. wt., 2½ lbs.
95 D 244. List, $7.50. NET **4.41**

CHROME MODEL. Same as above, but with chrome finished grille.
95 D 245. List, $8.50. NET **5.00**

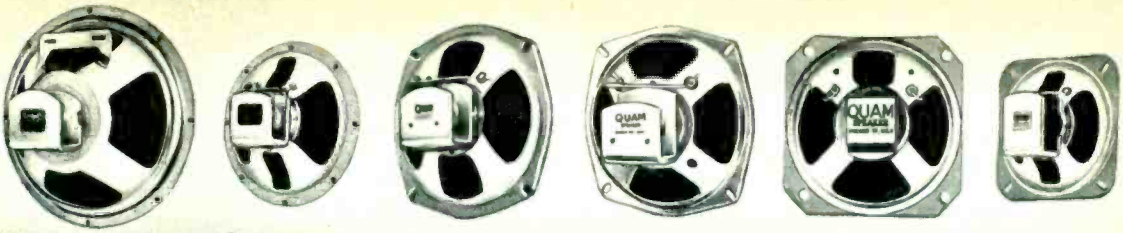
Fig. J. LOWELL MODEL R7-K 6x9" KIT. Similar to Model R5-K above, but with 6x9" PM speaker. Shpg. wt., 3½ lbs.
95 D 246. List, $10.00. NET **5.88**

CHROME MODEL. Same as above, but with chrome finished grille.
95 D 247. List, $11.00. NET **6.47**

Fig. K. QUAM MODEL AS-2. Deluxe rear-deck speaker kit, featuring a Quam 6x9" Adjust-A-Cone speaker. Uses 2.15 oz., Alnico V magnet. Imp., 3.2 ohms. 3-position switch mounts on dash. With cable and hardware. Wt., 3½ lbs.
81 D 390. List, $13.95. NET **8.20**

Fig. K. QUAM MODEL AS-3. Same as Quam Model AS-2 above, but with 5x7" speaker. Has 1.47 oz. Alnico V magnet. Shpg. wt., 2¼ lbs.
81 D 140. List, $11.95. NET **7.03**

Fig. L. D & M MODEL SG69C. Chrome grille for 6x9" speaker. With flocked screen and mounting hardware (less speaker and switch). Shpg. wt., 1 lb.
95 D 243. List, $3.95. NET **2.32**



Famous Quam Adjust-A-Cone Speakers

Quam speakers feature two exclusive engineering developments. One is the U-shaped field coil pot feature which provides an unbroken flux path of sufficient cross section to carry the full energy of the magnetic field. The second feature is the Quam Adjust-A-Cone suspension consisting of a clamping ring securely fastening the spider to the basket by means of two machine screws rather than cementing the spider. This assures precision centering of the voice coil. Quam speakers employ Alnico V magnets in the PM units. Special pot material is selected for low carbon content and high magnetic properties. All models are carefully dust-proofed. Quam 3½" to 6½" units are furnished with a universal mounting bracket which may be attached to any two of the four mounting holes in the pot. All are high efficiency speakers with improved response.

PERMANENT MAGNET SPEAKERS

Quam permanent magnet speakers are dependable, quality units for replacement in home receivers, auto receivers, television sets, phonographs and intercommunications systems. Built to RETMA standard dimensions. Fully dustproofed and finished in baked aluminum enamel. All models use Alnico V magnets and have 3.2-ohm voice coils. All 4" to 6½" speakers have 4 holes in pot for easy mounting.

Stock No.	Model No.	Size	Max. Watts	Magnet Weight	Wt. Lbs.	NET EACH
81 D 346	3AO7	3½"	2.5	.68 oz.	½	2.35
81 D 309	4AO6	4"	2.5	.58 oz.	½	1.73
81 D 320	4AO7	4"	3.0	.68 oz.	½	2.35
81 D 321	4A1	4"	3.0	1.0 oz.	¾	2.50
81 D 322	4A15	4"	3.0	1.47 oz.	¾	2.76
81 D 347	46AO7	4x6"	3.5	.68 oz.	¾	2.62
81 D 371	46A4	4x6"	3.5	1.0 oz.	1	2.79
81 D 372	46A15	4x6"	3.5	1.47 oz.	1	3.03
81 D 323	5AO7	5"	3.5	.68 oz.	¾	2.47
81 D 324	5A1	5"	3.5	1.0 oz.	1	2.62
81 D 325	5A15	5"	3.5	1.47 oz.	1	2.85
81 D 803	52A1	5¼"	4.0	1.0 oz.	1	2.73
81 D 317	52A21	5¼"	4.0	2.15 oz.	1¼	3.35
81 D 348	57A1	5x7"	5.0	1.0 oz.	1	3.17
81 D 334	57A15	5x7"	5.0	1.47 oz.	1	3.41
81 D 339	57A21	5x7"	5.0	2.15 oz.	1¼	3.79
81 D 326	6A1	6½"	5.0	1.0 oz.	1	2.82
81 D 327	6A15	6½"	5.0	1.47 oz.	1	3.06
81 D 328	6A21	6½"	5.0	2.15 oz.	1¼	3.44
81 D 332	6A31	6½"	6.0	3.16 oz.	1½	3.97
81 D 373	69A2	6x9"	8.0	1.4 oz.	1½	4.41
81 D 374	69A3	6x9"	10.0	3.2 oz.	1¾	5.26
81 D 331	7A21	7"	6.0	1.4 oz.	1	4.26
81 D 387	7A31	7"	9.0	3.16 oz.	2	5.00
81 D 329	8A21	8"	7.0	2.15 oz.	1½	4.23
81 D 330	8A31	8"	9.0	3.16 oz.	2¼	5.00
81 D 388	10A31	10"	9.0	3.16 oz.	2¾	6.17
81 D 804	10A4A	10"	10	4.64 oz.	3¼	6.88
81 D 805	10A6A	10"	12	6.8 oz.	3½	8.00
81 DX 333	12A31	12"	10.0	3.16 oz.	3¼	6.67
81 DX 806	12A4A	12"	12	4.64 oz.	4	7.44
81 DX 807	12A6A	12"	14	6.8 oz.	4½	8.53

All of the Quam speakers listed on this page can be supplied with special voice coil impedances and special field coil resistances. Speakers with special voice coils are available at 15c extra; special field coils are available at no extra charge.

ELECTRO-DYNAMIC SPEAKERS

Field coils made from carefully tested materials. 3.2-ohm voice coil impedance. Wattage ratings are conservative. 4", 5", 5¼", 5x7", 6½" and 4x6" speakers have 4 tapped holes in coil pot for chassis mounting plus universal mounting brackets. †Equipped with hum-bucking coils.

Stock No.	Model No.	Size	Field Ohms	Max. Watts	Wt. Lbs.	NET EA.
81 D 350	4E45	4"	450†	3.0	1	2.59
81 D 375	46E45	4x6"	450†	3.5	1¼	3.12
81 D 351	5EV6	5"	6-V.	3.5	1¼	2.70
81 D 352	5E45	5"	450†	3.5	1	2.70
81 D 353	5E10	5"	1000	3.5	1	2.70
81 D 354	5E18	5"	1800	3.5	1¼	2.70
81 D 356	6EV6	6½"	6-V.	5.0	1½	3.18
81 D 357	6E10	6½"	1000	5.0	1½	3.18
81 D 358	6E18	6½"	1800	5.0	1½	3.18
81 D 378	69EV6	6x9"	6 V.	8.0	2	4.41
81 D 368	7EV6	7"	6-V.	7.0	2	3.97
81 D 361	8E10	8"	1000	7.0	1½	3.97
81 DX 386	12E60	12"	600†	12.0	5	7.44
81 DX 364	12E10	12"	1000†	12.0	5	7.44

INTERCOM SPEAKERS

PM type speakers designed for exact replacement in intercommunications systems. Voice coil impedance is 45 ohms.

No.	Type	Size	Magnet	Shpg. Wt.	NET
81 D 808	3AO7Z45	3"	.68 oz.	½ lb.	2.50
81 D 809	4A1Z45	4"	1.0 oz.	¾ lb.	2.65
81 D 810	5A1Z45	5"	1.0 oz.	1 lb.	2.76

OUTDOOR THEATER SPEAKERS

Recommended for installations that must withstand excessive moisture. All equipped with moisture-resistant cones and Alnico V magnets; air gap surfaces and frame are weatherproofed. Voice coil impedance, 3.2 ohms. Quam outdoor theater speakers not listed below are available on special order. You can save by buying in large quantities. Write for quotations.

Stock No.	Mfrs. Type	Size	Max. Watts	Magnet	Wt. Lbs.	NET EA.
81 D 308	3AO7OT	3½"	2.5	.68 oz.	½	2.35
81 D 393	4A1OT	4"	5	1.0 oz.	1	2.50
81 D 305	4A15OT	4"	3	1.47 oz.	¾	2.76
81 D 306	5A15OT	5"	3.5	1.47 oz.	1	2.85
81 D 307	6A21OT	6"	5	2.15 oz.	1¼	3.44

Heavy-Duty Public Address Permanent Magnet Speakers

These heavy-duty, permanent magnet speakers are specifically designed to deliver highly dependable service in public address installations. Offer high power handling capacity, excellent tonal quality, and rugged construction throughout. Complete dust-proofing and rigid welding assure permanent alignment of integral parts. Incorporate Quam's Adjust-A-Cone suspension for precision centering of spider assembly and cone. Excellent frequency response characteristics for very smooth, clean reproduction of voice and music. All have 6-8 ohm voice coils.

See Page 31 for Quam Hi-Fi Speakers and Tweeters

Stock No.	Model No.	Size	Max. Watts	Magnet Wt., Oz.	Wt. Lbs.	NET EA.
81 D 335	8A4	8"	12	4.64	2¾	6.00
81 D 336	8A6	8"	12	6.8	3¼	7.11
81 D 394	10A4	10"	14	4.64	3½	6.88
81 D 395	10A6	10"	14	6.8	3½	8.00
81 DX 337	12A4	12"	15	4.64	4	7.44
81 DX 338	12A6	12"	15	6.8	4½	8.53
81 DX 340	12A10	12"	25	10.0	4¾	11.17

General Electric Replacement Speakers

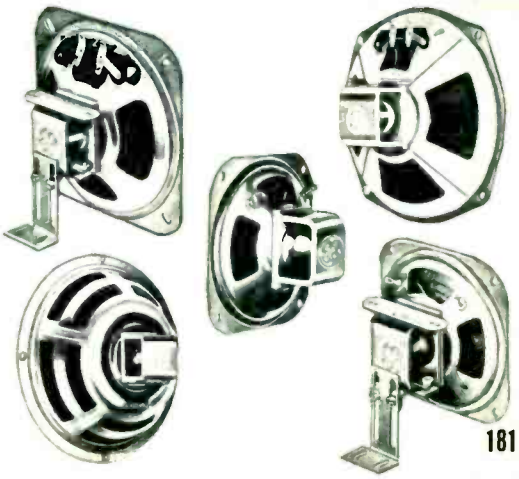
Years of manufacturing experience and the best of materials go into the construction of these loudspeakers. All feature Alnico V magnets and aluminum-base voice coils—unaffected by moisture and temperature changes. All speakers have 3.2 ohm voice coils. *Specially designed for outdoor theatre use; have water-resistant cones, waterproof gaskets and special metal finish.

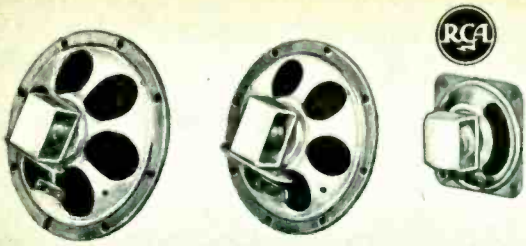
Stock No.	Model No.	Size	Max. Watts	Magnet Wt., Oz.	Shpg. Wt.	NET EA.
81 D 470	400D	4"	4	1.3	10 oz.	2.46
81 D 471	403D	4"	4	.68	8 oz.	2.09
81 D 472	500D	5"	4	1.3	12 oz.	2.57
81 D 473	503D	5"	4	.68	10 oz.	2.20
81 D 474	525D	5¼"	4	1.3	12 oz.	2.60
81 D 475	526D	5¼"	4	1.0	12 oz.	2.45
81 D 476	527D	5¼"	4	.68	12 oz.	2.43
81 D 477	625D	6½"	4	1.3	14 oz.	2.99
81 D 478	626D	6½"	4	1.0	14 oz.	2.77
81 D 479	703D	6x9	8	1.47	1¼ lbs.	4.16
81 D 480	810D	8"	12	6.8	2½ lbs.	6.94
81 D 483	1012D	10"	12	3.16	3½ lbs.	6.08
81 DX 485	1212D	12"	12	3.16	4¼ lbs.	5.69
81 D 487	*400C22	4"	4	1.3	10 oz.	2.35
81 D 488	*525C18	5¼"	4	1.3	12 oz.	2.53

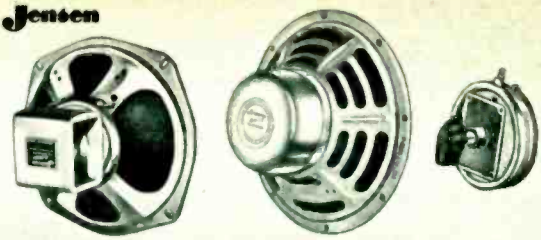
RPK008 BRACKET KIT. Chassis mounting brackets for 4, 5 and 5¼" speakers listed above.
81 D 514. NET 24c

See pages 30 and 180 for listings of G.E. PA and Hi-Fi Speakers.

For Complete Index, see Pages 317-320







Quality Speakers and Speaker Equipment

RCA "GOLD LABEL" PM DYNAMIC SPEAKERS

Ideal speaker replacements. Have felted cones and Alnico V magnets. All 4", 4x6" and 5" types with mounting brackets for transformer and speaker. Voice coils 3.2 ohms, except *12 ohms and †6-8 ohms. §Include leads for Ford, Mercury and Lincoln cars.

Stock No.	RCA Type	Size	Watts	Magnet Weight	Wt. Lbs.	NET EACH
81 D 126*	222S1	2¾"	¼	1 oz.	½	2.88
81 D 456*	214S1	2x3"	⅛	1 oz.	½	2.79
81 D 119	216S1	3"	2	1 oz.	1	2.18
81 D 127	231S1	3"	2	1.47 oz.	1	2.56
81 D 128	223S1	4"	3	0.68 oz.	1	2.23
81 D 457	304S2	4"	3	1 oz.	1	2.35
81 D 462	404S2	4"	3	1.47 oz.	1	2.55
81 D 129	227S1	4x6"	3	1 oz.	1½	2.65
81 D 452	246S2	4x6"	3	0.68	1½	2.47
81 D 453	446S2	4x6"	3	1.47 oz.	1½	2.79
81 D 120	205S2	5"	3	0.68 oz.	1	2.35
81 D 137	228S1	5"	3	1 oz.	1	2.56
81 D 451	405S2	5"	3	1.47 oz.	1	2.70
81 D 121	217S1	5¼"	4	1 oz.	1½	2.35
81 D 138	233S1	5x7"	6	2.15 oz.	2	3.79
81 D 139	232S1	5x7"	7	3.16 oz.	2	4.12
81 D 141	229S1	6½"	4	1 oz.	2	2.88
81 D 142	224S1	6½"	5	1.47 oz.	2	3.09
81 D 125	230S1	6½"	6	3.16 oz.	2	3.97
81 D 124	238S1	6x9"	6	2.15 oz.	2	4.59
81 D 459	257S1	5x7"	6	1.47 oz.	1½	3.38
81 D 143§	235S1	6x9"	8	2.33 oz.	2	5.29
81 D 466	208S2	8"	8	2.15 oz.	2¼	4.23
81 D 460†	208S4	8"	8	2.15 oz.	2¼	4.41
81 D 144	225S1	8"	8	3.16 oz.	2¼	4.97
81 D 145	234S1	8"	9	6.8 oz.	2½	6.91
81 DX 146	236S1	10"	7	2.15 oz.	4	5.53
81 DX 147	237S1	10"	8	3.16 oz.	4	6.12
81 DX 467†	215S1	10"	10	6.8 oz.	4½	7.79
81 DX 454	112S1	12"	12	2.15 oz.	4	6.17
81 DX 148	226S1	12"	12	2.9 oz.	4½	6.35
81 DX 455	412S6	12"	12	6.8 oz.	4½	8.08
81 DX 458†	412S7	12"	12	6.8 oz.	4½	8.82

JENSEN "STANDARD SERIES" PM DYNAMICS

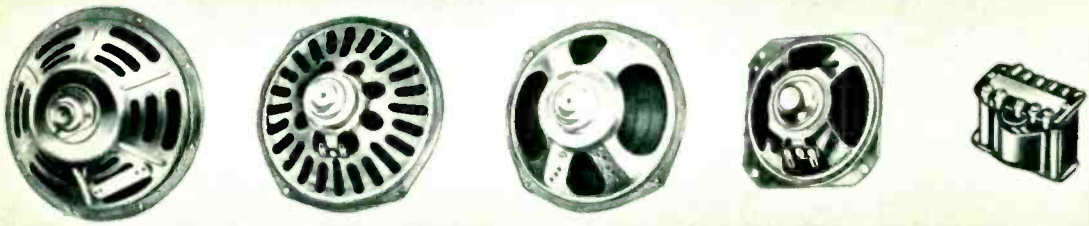
High-quality speakers for replacements or original equipment. Provision for mounting matching transformers on frames. All with Alnico V magnets. All units have 3.2 ohm voice coils except *16 ohms—for Regency transistor radio.

Stock No.	Jensen Type	Size	Mtg. Centers	Watts	Wt. Lbs.	NET EACH
82 D 171*	P275-V	2¾"	.....	15	¼	3.67
82 D 173	P4-X	4"	4 11/16"	2.0	1½	2.73
82 D 174	P5-X	5"	4 11/16"	2.5	1¼	2.85
82 D 176	P5-V	5"	4 11/16"	3.5	1¼	3.12
82 D 177	P6-X	6"	6 3/16"	3.0	2	2.91
82 D 179	P6-V	6"	6 3/16"	4.0	2	3.23
82 D 181	P6-T	6"	6 3/16"	6.0	2	3.97
82 D 195	P69-V	6x9"	6 9/16x4 5/8"	5.0	2½	3.97
82 D 182	P8-V	8"	7 11/16"	5.0	2½	4.09
82 D 183	P8-U	8"	7 11/16"	6.0	2½	4.85
82 D 184	P8-T	8"	7 11/16"	7.0	2¼	5.41
82 D 185	P8-S	8"	7 11/16"	8.0	3¼	6.35
82 D 187	P10-T	10"	9 5/8"	8.0	5	6.17
82 D 188	P10-S	10"	9 5/8"	9.0	5	7.88
82 DX 190	P12-T	12"	11 7/8"	9.0	5	8.00
82 DX 191	P12-S	12"	11 7/8"	10.0	6	8.67

JENSEN SPEAKER VOLUME CONTROLS

L-pads for volume control at individual speakers—no effect on volume of other speakers in system. Smooth, gradual control. Excellent for use in PA, intercom and home music systems. With knob and on-off dial. Shpg. wt., 5 oz.

Catalog No.	Type No.	Ohms	Watts	NET
33 M 942	ST-760	3-4	5	1.97
33 M 940	ST-276	6-8	5	1.76
33 M 941	ST-411	6-8	15	2.76
33 M 938	ST-837	15-16	15	2.76
33 M 939	ST-761	500-600	15	3.65



JENSEN "VIKING" SPEAKERS

These low-cost speakers are specially designed for universal replacement. Also excellent for installation in original equipment. Feature extra-compact design to fit even the most crowded sets. Extra-shallow depth simplifies installation. Ideal replacements for speakers in AC, AC-DC, auto and portable sets, as well as small table radios, etc. Cost less than the price of a re-coning job. Voice coil impedance of all speakers listed is 3-4 ohms, a correct match for output transformers used in most sets. Diameter of voice coils is 9/16" for 3½" to 6" and 4x6" speakers; ¾" dia. for 7" and 8" and for 5x7" and 6x9" speakers; and 1" dia. for 10" and 12" speakers. *Takes mounting bracket CTM-1, Stock No. 81 D 187. Bracket attaches speaker to chassis and can accommodate output transformer. No charge for mounting bracket (81 D 187) when ordered with speaker.

Stock No.	Jensen Type	Size	Mtg. Centers	Max. Watts	Wt., Lbs.	NET EACH
81 D 174	3J6*	3"	2 25/64"	2	½	2.07
81 D 188	35J6*	3½"	2 25/32"	2	½	2.02
81 D 189	4J6*	4"	4¼"	2	½	2.02
81 D 190	5J6*	5"	4⅞"	2.5	½	2.26
81 D 191	525J6*	5¼"	5¾"	3	¾	2.33
81 D 192	6J6*	6"	6 5/16"	3.5	¾	2.45
81 D 180	7J9	7"	5¾x4¼"	4.5	1	3.49
81 D 181	8J9	8"	7 11/16"	5	1¼	3.49
81 D 193	10J10	10"	9 11/16"	7	2¼	5.61
81 DX 194	12J10	12"	11 11/16"	9	3¼	6.24
81 D 184	46J6*	4x6"	4⅝x3¾"	3	½	2.63
81 D 185	57J9	5x7"	4 11/32x4 11/32"	4	1	3.29
81 D 186	69J9	6x9"	4⅝x6 9/16	5	1¼	3.65

See listing at right for Jensen "Standard Series" speakers, accessories, and transformers.

JENSEN MATCHING TRANSFORMERS

Jensen adjustable impedance transformers are specifically designed for coupling all types of speakers to widely different impedance requirements. All impedance values are clearly identified opposite each jack connector on a bakelite terminal strip. Adjustments are easily made with flexible lead and pin plug. Moisture-protected by heavy wax impregnation. Uncased. May be mounted directly on speaker.

Type "ZY" for Matching Line

Impedances: 500, 1000, 1500, 2000 ohms to voice coil. Pin jacks for quick connection. Permit matching to 500-ohm line. Use when speaker is over 100 ft. from amplifier.

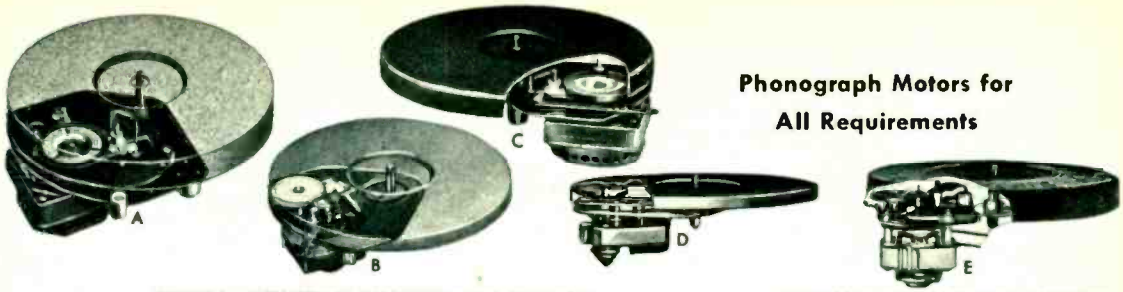
Stock No.	Jensen Type	Mounting Centers	Sec.	Watts	Wt. Lbs.	NET EACH
64 G 812	ZY-2003	3⅛"	6-8	16	2	6.06
64 G 806	ZY-2002	2 13/16"	6-8	10	1½	4.23
64 G 820	ZY-4002	2⅛"	3-4	6.5	1	2.82

Types "ZP" and "ZL" for Plate or Line

Solder Lug Terminals. Adjustable impedance. Types ZP1023 and ZP1024 are plate transformers for 4500, 7000, 10,000 and 14,000 ohms. Type ZP1025 is plate transformer for 1500, 2000 and 2500 ohms. Type ZL2021 is line transformer for 500, 1000, 1500, 2000 ohms. *Center-tapped.

Stock No.	Jensen Type	Mounting Centers	Sec.	Watts	Wt. Lbs.	NET EACH
64 G 821	ZP-1023	2"	3-4	3.5	¾	1.82
64 G 823	ZP-1025	2"	3-4	3.5	¾	1.82
64 G 824	ZL-2021	2"	3-4	3.5	¾	1.82
64 G 822	*ZP-1024	2⅛"	3-4	6.5	1	2.12

For G. E. and Quam Replacement Speakers, See Page 181



Phonograph Motors for All Requirements

GENERAL INDUSTRIES PHONOGRAPH MOTORS

Fig. A. MODEL DSS 3-SPEED DELUXE. Rim-drive 4-pole motor with 10" turntable. Recommended for high-fidelity systems. Provides an absolute minimum of stray field radiation—ideal for use with all types of pickups. Speeds of 33⅓, 45 and 78 rpm. Turning to "Off" position disengages idler wheel from motor shaft. Prevents wear. Features constant speed, precision construction, oilless motor and turntable bearings, dynamically balanced rotor. Complete with speed indicator dial, 10" turntable, 45 rpm record adapter, off-on switch. Size, less turntable: 6 1/16" long, 6 5/8" wide, 4 23/64" high, 2 21/32" deep (below base plate). For 110-120 volts, 60 cycle, AC. Shpg. wt., 6½ lbs.

85 R 275. List, $24.50. NET 14.70

MODEL SS 3-SPEED. Low-cost, three-speed motor. Two pole. Rim-drive. With 8" turntable, mounting plate, dial, 45 rpm adapter. Size: 4¾" long, 4 23/32" wide, 3 5/16" high, 2 13/32" deep (below base plate). 110-120 v., 60 cycle AC. Shpg. wt., 4 lbs.

85 R 276. List, $10.95. NET 6.57

Fig. B. MODEL TR 3-SPEED. Rim-drive 2-pole motor with 9" turntable. 33⅓, 45 and 78 rpm. Motor is constant-speed, induction type. Mounting plates, spindle adapter for 45 rpm records and speed indicator dial are included. Size: 3⅛" long, 2¼" wide, 3 21/64" high, 2 9/16" deep (below base plate). For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.

96 R 367. List, $12.10. NET 7.26

Fig. C. MODEL DR 78 and 33⅓ RPM. Rim-drive, dual-speed unit with 10" turntable. For quality installations where only 33⅓ and 78 rpm speeds are required. Heavy-duty, 4-pole motor with simple and positive speed-shifting mechanism. External push-pull lever changes speed instantly. At slow speed the idler wheel engages small diameter of motor shaft; at higher speed it engages larger diameter. Designed to comply with U.L. requirements. For replacement use or construction of new phonograph units. Operates at uniform speed under widely varying loads. Fan cooling permits installation in partially closed cabinets. Size: 6" long, 5⅝" wide, 4 23/64" high, 2⅝" deep (below base plate). With turntable and mounting plate. For 110-120 v., 60 cycle AC. Shpg. wt., 6½ lbs.

85 R 241. List, $21.75. NET 13.05

MODEL AX. ECONOMY 78 RPM. Low-priced phono-motor for 78 rpm records. 2-pole, rim-drive motor, excellent for portable and table models. Constant speed under varying loads. Motor resiliently mounted for quiet operation and extra-long life. Furnished with 8" turntable and mounting plate; ready for quick installation. Rugged construction and low cost make this an ideal unit for a child's phonograph. For 110-120 volts, 60 cycle AC. 5 1/64" long, 4 15/32" wide, 3 1/32" high, 1⅞" deep (below base plate). Shpg. wt., 3 lbs.

95 R 999. List, $6.15. NET 3.69

ALLIANCE PHONOGRAPH MOTORS

Fig. D. MODEL JP8 SINGLE SPEED 78 RPM. For playing all standard-speed 78 rpm records. A friction-drive motor with 9" turntable. Excellent regulation assures uniform speed at all times. Rubber-shock-mounted motor and idler plate virtually eliminate vibration. Forced-air ventilation maintains cool temperature in any installation. Ideal unit for portable and table model players. Dynamically balanced motor handles all records up to 12" size without loss of speed—holds "wow" to minimum. Base plate maintains correct turntable height regardless of mounting board thickness. Depth below base plate, 2⅛". For 110-120 volts, 60 cycle AC. Shpg. wt., 3 lbs.

85 R 410. List, $6.80. NET 4.00

Fig. E. MODEL JPT8 3-SPEED. For 33⅓, 45 and 78 rpm records. Features quiet operation and compact size. Designed to hold wow and rumble to a minimum. Ideal as replacement unit or for installation in new phonograph equipment where low cost and lightweight are required. Friction drive type with 8" turntable. Selector lever engages proper idler for desired speed. Spindle adapter for accommodating RCA 45 rpm records. Motor is rubber-shock-mounted; designed to meet Underwriters' Laboratories requirements. Mounts in cut-out hole approximately 4⅛x5¼". 2½" deep below base plate. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 3½ lbs.

85 R 440. List, $10.95. NET 6.44

Bud Wireless Phono Oscillator

MODEL WO-6A. A compact phono-oscillator. Easily converts any standard record player to wireless operation. "Broadcasts" from record player to radio sets up to 50 feet away. Eliminates the need for interconnecting wires between player and radio. Matches any crystal pickup.

Extremely simple to install. Just connect the leads from the cartridge in the pickup arm to the Bud wireless oscillator. Plug the oscillator into any wall outlet, and the "broadcaster" is ready to operate. Play a record and tune it in on the radio.

A single Bud oscillator permits the playing of records through any number of radios simultaneously. Tone and volume can be individually regulated at each radio. Oscillator operates over range of approximately 1100-2150 kc. Covers the upper half of the regular broadcast band. Can be tuned to a frequency not used by commercial radio stations. Signal will be picked up by radio, just like a regular broadcast.

Finished in dark gray hammertone. Size, 4½x2½x2⅛". For operation from 110-120 volts DC or 50-60 cycle AC. Shpg. wt., 3 lbs.

60 R 336. NET 8.82

New Ronette "Fonofluid" Phono Cartridges

MODEL RA-284-OV. Single-stylus crystal cartridge of exceptionally fine quality. Utilizes the new "Fonofluid" type of construction to achieve smooth response over a wide frequency range. An excellent choice for modernization of phonographs and radio-phonograph consoles. Greatly improves the reproduction of record players using crystal cartridges. A direct replacement for RCA-type cartridges used in 33⅓ and 45 rpm players. Response, 50-10,000 cps.

Provides greater listening pleasure. Intermodulation distortion is reduced to an extremely low level. Stylus does not jump grooves even on very loud passages. Good tracking is assured by the high compliance and small mass of the moving parts.

Rated for stylus pressure of 4-6 grams. Low stylus pressure assures minimum record wear. Provides .7 volt output. Load resistance, 500,000 ohms. With .001" sapphire stylus for MG records. Shpg. wt., 4 oz.

65 R 015. List $7.25. NET 4.35

REPLACEMENT STYLUS. For Model RA-284-OV and TO-284-OV cartridges. .001" sapphire tip. Shpg. wt., 2 oz.

65 R 017. List, $2.00. NET 1.20

MODEL TO-284-OV. New, dual-stylus, turnover-type crystal cartridge with .001" and .0025" standard sapphire tips. Designed for the modernization of 3-speed phonographs and radio-phonographs using turnover crystal cartridges. Improves the performance of standard 3-speed players by providing smooth, faithful response. "Fonofluid" construction assures excellent reproduction over a wide frequency range. Response, 50-10,000 cps.

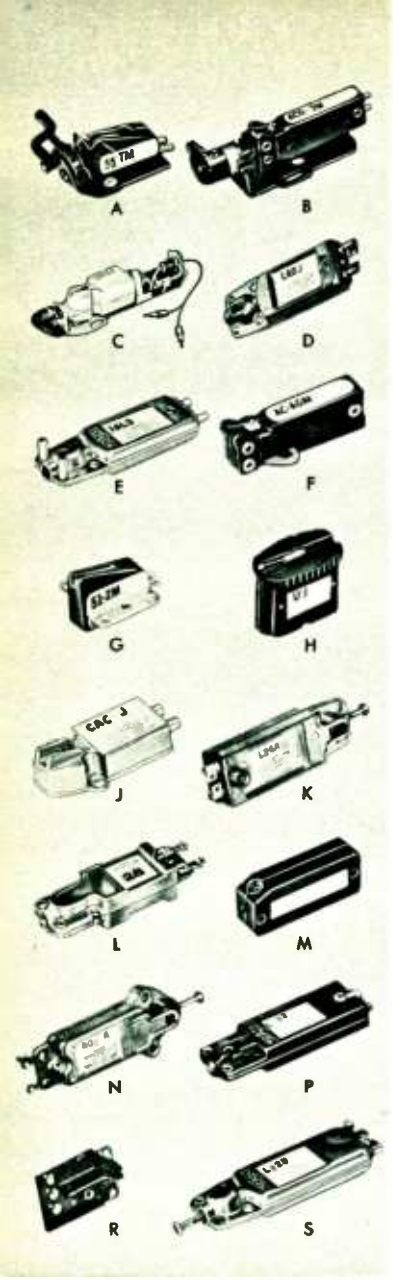
Has all the fine features of the single-speed Ronette cartridge, but can be used for records of all speeds. Each stylus works independently of the other stylus. Stylus not in use does not vibrate or interfere with the action of the acting stylus.

Excellent tracking characteristics—stylus faithfully follows the grooves. Stylus pressure 4-6 grams. 0.7 volt output. Ample output for high-fidelity amplifiers. Complete with mounting hardware and sapphire styli. Shpg. wt., 2 oz.

65 R 016. List, $9.00. NET 5.40

REPLACEMENT STYLUS. .0025" sapphire tip. For TO-284-OV cartridge. Wt., 2 oz.

65 R 018. List, $2.00. NET 1.20



Astatic Replacement Cartridges and Pickups

TURNOVER CRYSTAL CARTRIDGES—78, 45 & 33⅓ RPM RECORDS

High quality turnover-type crystal cartridges for direct replacement in most popular record players. A convenient lever provides quick, positive selection of the proper stylus for standard or microgroove records. All have sapphire styli except †osmium. *Indicates less turnover lever. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	List	NET EACH
65R 236	LQD-1J	D	LQD-1M, LQD-1JM	$9.50	5.59
65R 216	CAC-DJ	C	CAC DM, CAC-DJM	10.50	6.17
65R 240	ACD-2J	B	ACD-2M, ACD-2JM, ACD-1J, ACD-1M, ACD-1JM	10.00	5.88
65R 239	ACD-J*	B	ACD-2M, ACD-2JM, ACD-1J, ACD-1M, ACD-1JM	9.50	5.59
65R 577	66-TMY†	D	LT-4D1, 14L3-DM	8.50	5.00
65R 578	68-TMY†	D	12L3, 15L3-DM	8.50	5.00
65R 576	57-J*	A	57-TM	9.50	5.59

ALL-GROOVE CRYSTAL CARTRIDGES—78, 45 & 33⅓ RPM RECORDS

All are Rochelle salts crystals except *ceramic type, unaffected by heat and humidity. †Also fits RCA 45 rpm changer arms. All have .002" sapphire styli for both microgroove and standard records, except ‡less styli; have screw-type chuck for standard shank styli. See page 187 for suitable styli. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	List	NET EACH
65R 242	AC-AG-J	F	AC-AG-M	$6.50	3.82
65R 571	51-2J*†	G	GC-AG-J GC-AG-M	7.40	4.35
65R 209	LT-4AG-J	P	LT-4AG-M	7.00	4.12
65R 134	CAC-AG-J	J	CAC-AG-M	7.50	4.41
65R 229	L-29‡	S		6.00	3.53
65R 559	16L3‡	E		6.00	3.53

MICROGROOVE CRYSTAL CARTRIDGES—33⅓ & 45 RPM RECORDS

All are Rochelle salts crystal type except *ceramic type, unaffected by heat and humidity. †Also fit RCA 45 rpm changer arms. §Equalized for Columbia 33⅓ rpm records; has adapter for RCA 45 rpm changer arms. All have .001" sapphire styli for microgroove records. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replace Astatic Discontinued Models	List	NET EACH
65R 241	AC-J	F	AC-M	$6.50	3.82
65R 233	U-J	H	U-M	8.90	5.23
65R 234	51-1J *†	G	GC-J, GC-M	7.40	4.35
65R 245	CAC-J §†	J	CAC-M	7.50	4.41

STANDARD-GROOVE CRYSTAL CARTRIDGES—78 RPM

Replacements for popular record players. All are crystal except *ceramic; replaces Admiral No. 1372. †Fits RCA 45 rpm changer arm. ‡Have sapphire stylus; §Osmium. All others supplied less stylus; see page 187. Screw type chucks take any standard-shank stylus. L-12-U is universal replacement cartridge supplied with condenser harness for either high or low output. Av. shpg. wt., 4 oz.

Stock No.	Model No.	Fig.	Replaces Astatic Models	List	NET EACH
65R 237	AC-78-J‡	F	AC-78-M	$6.50	3.82
65R 156	L-26-A	K	L-22-A, L-27-A, L-32-A	5.00	2.94
65R 153	L-40-A	L	L-41-A	5.00	2.94
65R 572	28	L	M-22, M-23	5.55	3.26
65R 158	B-2	M	B-1, B-3, B-4	5.55	3.26
65R 167	401-A†	N		5.00	2.94
65R 163	L-70-A	P	L-25-A, L-70, L-71, L-75, L-76	5.55	3.26
65R 165	L-72-A	P	L-46-A, L-50-A	6.65	3.91
65R 231	L-82-A	P	L-24-A, L-36-A	5.55	3.26
65R 573	51-3J‡	G	GC-78, QC-M, QC-J	7.40	4.35
65R 238	L-92		L-92-A	6.00	3.53
65R 149	402-M*§	R		6.90	4.06
65R 198	CAC-78-J‡	J	CQ-78-J, CQ-78-M, CAC-78-M	7.50	4.41
65R 226	L-12	S		5.00	2.94
65R 227	L-12-U	S		5.50	3.23

For Replacement Needle Listings See Page 187.

Complete Selection of Quality Pickups

PICKUPS WITH TURNOVER CARTRIDGES

Lightweight aluminum pickups for playing microgroove or standard recordings. Convenient lever selects proper stylus for any type record. Adjustable mount for various turntable heights. 400-CAC-D is 16" transcription arm. All have .001" sapphire and .003" osmium styli. Shpg. wt., 1½ lbs.

Stock No.	Model No.	Cartridge	List	NET EACH
65 R 220	7D	ACD-1	$15.90	9.35
65 R 219	400-CAC-D	CAC-D	25.50	14.99
65 R 218	7-CAC-D	CAC-D	16.40	9.64

MODEL P SERIES PICKUPS

Quality pickups featuring Type P anti-friction swivel-base arms for records up to 12" diameter. *Supplied less stylus; screw type chuck takes any conventional shank stylus, see page 187. †Has sapphire microgroove stylus; ‡has all-purpose osmium stylus. Av. shpg. wt., 1 lb.

Stock No.	Model No.	Cartridge	List	NET EACH
65 R 551	P-12*	L-12	$6.00	3.53
65 R 553	P-CAC†	CAC-J	10.75	6.32
65 R 554	P-LT-4AG‡	LT-4AG	9.50	5.59

REPLACEMENT FOR WEBCOR

MODEL 8D. (Not illustrated). Replacement for Webster-Chicago changer arms. With improved dual-needle cartridge. Replaces pickups in W C Models 246, 255, 256, 262, 264, 346, 355, 356, 357, 362, and 364. With styli. Shpg. wt., 12 oz.

65 R 221. List. $11.50. NET.....**6.76**

REPLACEMENT FOR V-M

MODEL 9D. (Not illustrated.) Replacement pickup for the following V-M record changer models: 950, 951, 955 and 956. Has "Twin CAC" cartridge with .001" microgroove sapphire-tip and .003" standard osmium-tip styli. Shpg. wt., 1 lb.

65 R 217. List. $11.50. NET.....**6.76**

Shure Replacement Cartridges and Pickups

TURNOVER CRYSTAL & CERAMIC CARTRIDGES FOR 78, 45 & 33⅓ RPM

*Crystal; .001" sapphire. .0027" osmium styli. †ceramic; .001" and .0027" osmium styli. ‡ceramic; .001" and .0027" sapphire styli. Shpg. wt., 4 oz.

Stock No.	Model	Fig.	Replace Shure Models	List	NET
65 R 342	W22AB*	B	P72, P72AF, P72AFV, P76, P76AF, P76AFV, P76V, P77, P77AV, P77V, P79	$9.50	5.59
65 R 321	WC24†	B	PC41, PC72V, WC22AB	8.75	5.14
65 R 320	WC24T†	E	PC40CT, PC40T, PC41T, WC22ABT	9.25	5.44
65 R 338	W22ABT*	E	P72AFT, P72T, P76AT, P76AFT, P76T, P77AT, P77T, P79T	10.00	5.88
65 R 313	WC10‡	H	PC2, PC4	9.50	5.59

ALL-GROOVE CRYSTAL & CERAMIC CARTRIDGES FOR 78, 45 & 33⅓ RPM

All have .002" all-purpose needle. §Sapphire, all others are osmium. †ceramic; all others are crystal. Shpg. wt., 4 oz.

Stock No.	Model	Fig.	Replace Shure Models	List	NET
65 R 345	W26A §	C	P71A, P71CA, P81A, P81CA, P81D	8.50	5.00
65 R 346	W26B	C	P71, P71A, P71B, P71C, P81	7.50	4.41
65 R 348	W66B	D	P81AD, P81C, P81E, P37	7.00	4.12
65 R 334	W36B	F	PS20	6.50	3.82
65 R 319	WC38†	F	PC10, PC12, WC36B	6.50	3.82

MICROGROOVE CRYSTAL & CERAMIC CARTRIDGES FOR 33⅓ & 45 RPM

All have .001" osmium needle. ‡Ceramic; all others are crystal. Shpg. wt., 4 oz.

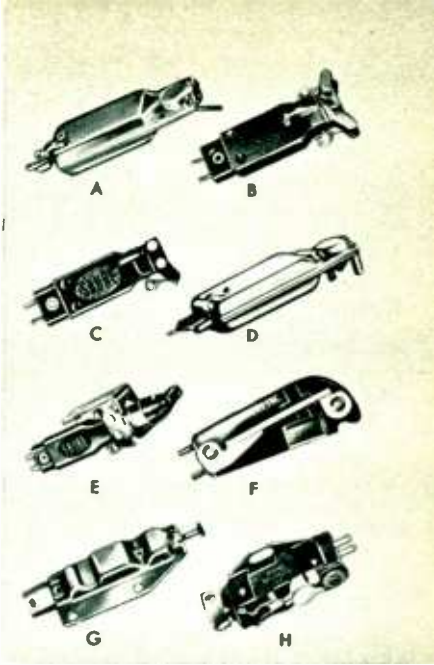
65 R 331	W21F	C	P75, P75A, P80	7.75	4.56
65 R 364	W53MG	A	P93MG	8.50	5.00
65 R 332	W31AR	F	P73, P73A, P73AR, P73R, W21A, W21AR	6.50	3.82
65 R 333	WC31AR‡	F	PC11, PC13	6.50	3.82

STANDARD-GROOVE CRYSTAL CARTRIDGES—78 RPM RECORDS

**Less stylus. ††Osmium stylus. ‡‡Stelite cutting and osmium playback stylus. Wt., 4 oz.

Stock No.	Model	Fig.	Replace Shure Models	List	NET
65 R 590	W78**	A	W42B, W42BH, W42H, W56A, W57A, W58A, W59A	5.55	3.26
65 R 591	W68††	D	W60A, W60B, W61B	7.50	4.41
65 R 592	W70**	G	Webster-Racine CX types	4.95	2.91
65 R 349	W56N‡‡	D	Playback-cutter type for Wilcox-Gay	8.50	5.00

For Replacement Needle Listings See Page 187.



CRYSTAL PICKUPS FOR STANDARD AND MICROGROOVE RECORDS

Fig. J. GLIDER MODEL 99DV. Lightweight dual-voltage crystal pickup for standard 78 rpm records. Replaces Models 93A and 96A pickups. Curved and balanced to provide optimum tracking. Furnished with plug-in condenser; output is 2 v. with condenser, and 4 v. without. Employs new Shure W78 cartridge (listed above). Response, to 6000 cps. Needle pressure, 1⅛ oz. Uses any conventional-shank phono needle. With instructions; less stylus. Shpg. wt., 1½ lbs.
65 R 589. List, $8.50. NET.....**5.00**

Fig. K. MODEL 92H STANDARD PICKUP. For 78 rpm records. With W42H cartridge. Response, to 5,000 cycles. Supplied less needle (see p. 187). Shpg. wt., 9 oz.
65 R 316. List, $5.50. NET.....**3.23**

Fig. K. MODEL 92U ALL-PURPOSE PICKUP. Supplied with Unipoint W66B cartridge and all-purpose osmium needle. Standard output, 2.3 v., MG output, 2 v. Needle pressure, 8 grams. Response, to 4,500 cycles. Shpg. wt., 9 oz.
65 R 317. List, $9.75. NET.....**5.73**

Fig. L. MODEL 901D PICKUP WITH TURNOVER CARTRIDGE. For standard and MG records of up to 12". With Shure W22AB turnover crystal "vertical drive" cartridge; high needle point compliance, low mass. Lightweight, die-cast aluminum arm is curved and balanced to minimize tracking error. With .001" sapphire and .0027" osmium needle. Response, to 10,000 cycles. Pressure, 7 grams. Shpg. wt., 1 lb.
65 R 311. List, $16.25. NET.....**9.55**

For complete listings of General Electric, Fairchild, Pickering, Livingston, Audax and other hi-fi cartridges, see pages 38-40.

RCA Phono Components

REPLACEMENT CARTRIDGES

Fig. M. TYPE 9890 MAGIC TONE CELL CRYSTAL CARTRIDGE. For cartridge replacement in 69 RCA models, including: 6QU, 7QV5, U8, U9, U10, VA21, 0-50, U-50, QU56C, R60, QU68, R93F, R100, V100, V101, R103S, V105, and Radiola 560P. Has replaceable sapphire-tip stylus. Output, 1½ volts. With hardware and full installation instructions. Shpg. wt., 5 oz.
65 R 269. List, $7.80. NET **4.59**

Fig. N. TYPE 70338-A SILENT SAPPHIRE CARTRIDGE. Crystal cartridge for standard 78 rpm records. For modernization of old RCA and many other radio-phonos. Interchangeable with 70 different crystal cartridges. Has replaceable sapphire-tip needle; "bumpers" protect needle. Minimum needle chatter and surface noise. Output, 1½ volts. With instructions. Shpg. wt., 5 oz.
65 R 270. List, $7.25. NET **4.26**

Fig. P. TYPE 77779 CRYSTAL CARTRIDGE. For RCA 6T84, 6T86, 6T87, 9T89, A91, and A108. With stylus. Wt., 5 oz.
65 R 255. List, $9.20. NET.....**5.41**

Fig. R. TYPE 74067 CRYSTAL CARTRIDGE. For RCA 9JV, 9JVM, 9EV3, 9EVM3, 9V7, 9EV35, 9EV36, 9V51, 9W101, 9W102, 9W103, 9W105, 9TW333, 9TW390, 45J, and 45EV. With stylus. Wt., 5 oz.
65 R 253. List, $6.40. NET **3.76**

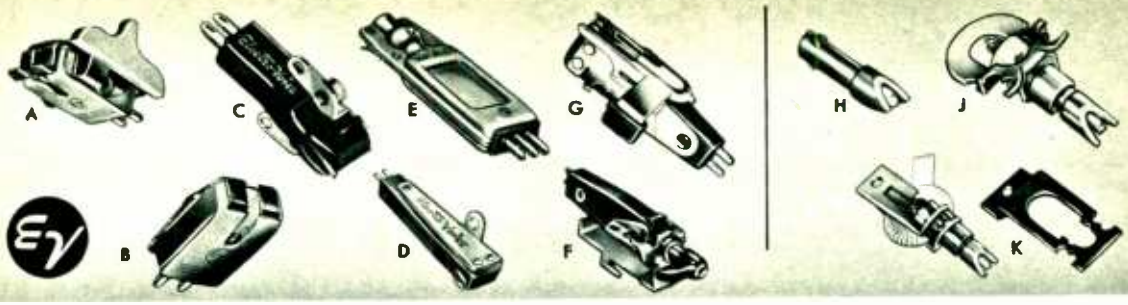
TYPE 75575 CRYSTAL CARTRIDGE. (Not illustrated.) For RCA 2T81, 6T86 and 9V-510. With stylus. Shpg. wt., 5 oz.
65 R 254. List, $6.40. NET **3.76**

TYPE 76257 CRYSTAL CARTRIDGE. (Not illustrated.) For RCA 45 rpm changers. With stylus. Shpg. wt., 5 oz.
65 R 215. List, $8.50. NET.....**5.00**

RCA PHONO SWITCHES

Fig. S. TYPE 240X1 RADIO-PHONO SWITCH. For operation of record players through radio receivers without phono inputs. Permits instant change-over from radio to phonograph. Does not introduce hum or affect tone. Neat back-of-cabinet mounting. Supplied complete with 15" length of shielded cable, phono plug, jack and instructions. Shpg. wt., 6 oz.
69 R 505. List, $2.50. NET **1.47**

Fig. T. TYPE 202W1 RECORD PLAYER SELECTOR SWITCH. Simplifies using two record players with one radio or amplifier. Excellent for radio-phono combinations to which an external 45 rpm player has been added. Provides easy change-over from one player to the other. Back-of-cabinet mounting. Shpg. wt., 6 oz.
69 R 506. List, $5.65. NET.....**3.33**



Electro-Voice Replacement Phono Cartridges

Fig. A. MODEL 16-TT "TWILT" CARTRIDGE. Crystal. For all records. Twin-tipped (.001" sapphire, .003" osmium) stylus. Tracks at 6-8 gm. Output, 1 v. ½" mtg. ctrs. With stylus and tilt mechanism. Wt., 4 oz.
65 R 432. List. $10.00. NET **5.88**

MODEL 16. Same as above, but less "twilt" mechanism.
65 R 560. List. $9.00. NET **5.29**

Fig. B. MODEL 12 CRYSTAL CARTRIDGE. Replaces 80% of all 78 rpm cartridges. Output, 1.5 v. Tracks 6-8 gm. ½" mtg. ctrs. 13/16" mtg. for RCA or W.E. side mtg. .003" osmium stylus. Shpg. wt., 4 oz.
65 R 431. List. $7.50. NET **4.41**

Fig. B. MODEL 14 CRYSTAL CARTRIDGE. For microgroove. Wide-range, uniform output. Response, 30 to 10,000 cps. Tracks at 6 grams. Output, 1 v. With .001" osmium stylus. ½" mtg. ctrs. Shpg. wt., 3 oz.
65 R 561. List. $7.50. NET **4.41**

MODEL 14-S. Same as Model 14 above, but has sapphire stylus.
65 R 562. List. $8.50. NET **5.00**

Fig. C. MODEL 44 CERAMIC CARTRIDGE. For MG. Moisture resistant. Tracks at 6 gm. Output, 0.8 v. ½" and ⅝" mtg. ctrs. With .001" osmium stylus. Wt., 3 oz.
65 R 324. List. $6.50. NET **3.82**

MODEL 44-S. Same as Model 44 above, but has sapphire stylus.
65 R 563. List. $7.50. NET **4.41**

Fig. C. MODEL 34 CRYSTAL CARTRIDGE. For 45 and 33⅓ rpm players. Output, 1.2 v. ½" and ⅝" mtg. ctrs. With .001" osmium stylus. Shpg. wt., 3 oz.
65 R 434. List. $6.50. NET **3.82**

MODEL 34-S. Same as Model 34 above, but has sapphire stylus.
65 R 564. List. $7.50. NET **4.41**

Fig. D. MODEL 43 CERAMIC CARTRIDGE. For microgroove or standard; has all-purpose .002" osmium stylus. Moisture and heat-resistant. Tracks 6-8 grams. Output, .8 and 1 volt. ½" mtg. ctrs. Wt., 3 oz.
65 R 565. List. $6.50. NET **3.82**

MODEL 43-S. Same as Model 43 above, but has sapphire stylus.
65 R 566. List. $7.50. NET **4.41**

Fig. D. MODEL 33 CRYSTAL CARTRIDGE. With .002" all-purpose osmium stylus. For all records. Response to 10,000 cps. Tracks at 6-8 gm. Av. output, 1.4 volts. ½" mtg. centers. Shpg. wt., 3 oz.
65 R 433. List. $6.50. NET **3.82**

MODEL 33-S. Same as Model 33 above, but has sapphire stylus.
65 R 567. List. $7.50. NET **4.41**

Fig. E. MODEL 60 DUO-VOLT CARTRIDGE. Crystal. For standard records. Has terminals for 2 or 4 v. output. Response to 6,000 cps. Use with any standard-shank stylus. ½" mounting centers. Aluminum case. Less stylus. Shpg. wt., 3 oz.
65 R 422. List. $4.95. NET **2.91**

Fig. F. MODEL 46-T CERAMIC CARTRIDGE. Turnover type. Uses ceramic element for moisture and heat protection. Response to 8,000 cps. Output, 0.8 volt, ample for most replacements. With .003" osmium and .001" sapphire styli. Shpg. wt., 3 oz.
65 R 425. List. $10.00. NET **5.88**

MODEL 46. Same as above, but less turnover mechanism.
65 R 568. List. $9.00. NET **5.29**

Fig. F. MODEL 96-T TURNOVER CARTRIDGE. Response to 10,000 cps. Output, 1 volt. Tracking force, 6-8 grams. With .003" osmium std. and .001" sapphire MG needles. Shpg. wt., 3 oz.
65 R 424. List. $10.00. NET **5.88**

MODEL 96. Same as above, but less turnover mechanism.
65 R 569. List. $9.00. NET **5.29**

Fig. G. MODEL 47 CERAMIC CARTRIDGE. New side-arm mechanism selects proper needle for standard or microgroove records. Output, .5 volt. Response, 30-15,000 cps. Tracks, 6-8 grams. With .003" osmium standard and .001" microgroove sapphire styli. Shpg. wt., 3 oz.
65 R 323. List. $9.00. NET **5.29**

REPLACEMENT PHONO-CARTRIDGE GUIDE. Compact, easy-to-use guide. Shows E-V replacements for popular crystal and ceramic cartridges. Ask for one with your next order.
37 R 104 ..... **NO CHARGE**

New Electro-Voice "Power Point" Transducers

Revolutionary, new stylus-cartridge. "Power Points" have jewel stylus connected directly to ceramic element. After installation of mount, requiring only a screwdriver, "Power Points" simply slip in. Output, 1 volt. Response from 20 cps to beyond 10 kc and usable to 17 kc. Holes on mounting plate for 7/16", ½" or ⅝" centers. *Has stylus on each side—after first stylus wears, simply turn over and re-insert to bring new stylus into position. Av. shpg. wt., 3 oz.

Fig. K. MODEL 56T. Turnover type, with mechanism. .001" and .003" sapphire styli.
65 R 504. List. $6.00. NET **4.70**

Fig. H. MODEL 56. Repl. Power Point for above.
65 R 509. List. $5.00. NET **3.92**

Fig. J. MODEL 51P. Single point MG. With mtg. hdwe. and .001" sapphire stylus.
65 R 505. List. $4.50. NET **3.53**

Fig. H. MODEL 51. Replacement Power Point for above.
65 R 513. List. $4.00. NET **3.14**

Fig. J. MODEL 52P. Single all-purpose point for MG and standard. With mtg. hdwe. and .0023" sapphire stylus.
65 R 506. List. $4.50. NET **3.53**

Fig. H. MODEL 52. Repl. Power Point for above.
65 R 514. List. $4.00. NET **3.14**

Fig. J. MODEL 53P. Single point standard. With .003" sapphire stylus; mounting hardware.
65 R 507. List. $4.50. NET **3.53**

Fig. H. MODEL 53. Replacement Power Point for above.
65 R 517. List. $4.00. NET **3.14**

Fig. J. MODEL 51-1P. *Reversible double point microgroove. With mtg. hardware and two .001" sapphire styli.
65 R 508. List. $5.50. NET **4.31**

Fig. H. MODEL 51-1. Replacement Power Point for above.
65 R 518. List. $5.00. NET **3.92**

Sonotone Ceramic Phono Cartridges and Replacement Styli


L


M


N

PHONO-CARTRIDGES. High-quality ceramic cartridges for exact replacement in many popular extended range phonographs. Also make excellent replacements for crystal cartridges having similar output voltages. Ceramic elements are unaffected by heat and high humidity.

Fig. L. MODEL 7590-2M "PLAYAL" CARTRIDGE. With .002" truncated-cone osmium stylus. For microgroove or standard records. Output, .75 volt. Response, 50 to 10,000 cps. ½" mounting centers. Tracking pressure, 9 grams. Shpg. wt., 3 oz.
65 R 535. List. $7.50. NET **4.41**

Fig. M. MODEL 2TS. Turnover-stylus ceramic cartridge with .001" sapphire stylus for microgrooves and .003" sapphire stylus for standard grooves. High compliance for extremely accurate tracking. Only the stylus assembly moves when selector is operated; cartridge is stationary. Output, .7 volt. Pressure, 9 grams. Response, 50 to 10,000 cps. ½" mounting centers. Shpg. wt., 3 oz.
65 R 533. List. $9.50. NET **5.59**

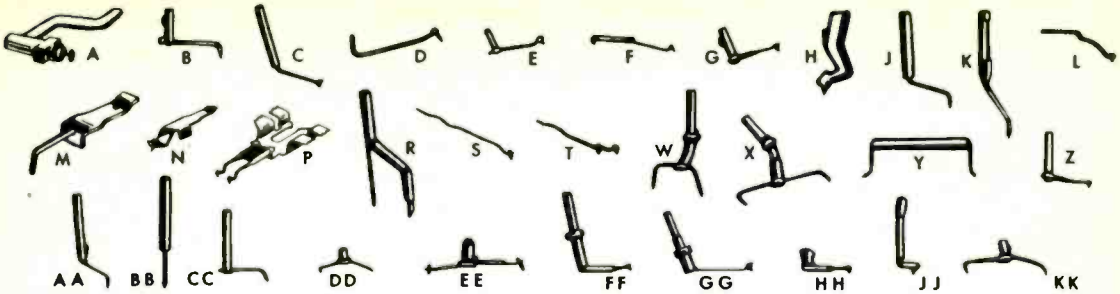
Fig. N. MODEL 2TLBS. Same as above but less mounting brackets. For pressure-type mounting.
65 R 528. List. $9.50. NET **5.59**

REPLACEMENT STYLI FOR "SONOTONE" CERAMIC PHONO CARTRIDGES. Precision made replacement styli for cartridges at left. Turnover-type supplied with selection lever; complete styli-lever assembly can be installed without removing cartridge.

MODEL 7552-2M STYLUS. .002" truncated-cone replacement stylus for Sonotone Model 7590-2M "Playal" cartridge. Osmium tip. Shpg. wt., 1 oz.
65 R 537. List. $1.50. NET **88c**

MODEL N-2TS TURNOVER STYLUS AND LEVER ASSEMBLY. Replacement dual-stylus and stylus-selection lever for Model 2TS or 9980-S turnover cartridge. .001" and .003" sapphire tips. Shpg. wt., 1 oz.
65 R 534. List. $3.50. NET **2.06**

MODEL N-2T-SD TURNOVER STYLUS AND LEVER ASSEMBLY. As above, but has .001" diamond tip and .003" sapphire tip.
65 RC 529. List. $28.00. NET **16.46**



Jensen Exact Replacement Phonograph Needles

The symbols after Type Nos. indicate tip material. *Sapphire, §diamond, †diamond microgroove and sapphire standard, ‡diamond microgroove and standard, ††sapphire microgroove and standard. No symbol indicates osmium tip. To make a selection when cartridge is not listed, match your needle with an illustration and order by the Stock No. for that illustration. Tip radius: Standard, .003"; microgroove (MG), .001"; all-purpose, .002". Shpg. wt., 2 oz. Any needle with sapphire tip can also be supplied with diamond tip. To order, give type number of needle and specify "diamond tip." Single tip, NET, 14.70; twin tip, NET, 29.40.

FOR ASTATIC CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
65 R 681	A-68††	A	57-TJ, 57-TM	Twin	2.06
65 R 680	A-71††	A	55-TJ, 55-TM, GC-DJ, GC-DM	Twin	2.06
65 R 675	A-70	B	14L3-78, 14L3-D, 15L3-78, 15L3-D	Std	.88
65 R 676	A-70LP	B	14L3, 14L3-D, 15L3, 15L3-D	MG	.88
65 R 677	A-702	B	14L3-AG, 15L3-AG	All	.88
65 R 742	A-73*	C	LT-3D, LT-4D, LT-4D1	Std	1.47
65 R 748	A-73LP*	C	LT-3D, LT-4, LT-4D, LT-4D1	MG	1.47
65 R 749	A-732*	C	LT-4AG, LT-5AG	All	1.47
65 R 757	A-74*	D	GC78J, GC78M, 53-2J, 402M	Std	1.47
65 R 756	A-74LP*	D	GCJ, GCM, GC1J, GC1M, 51-1J	MG	1.47
65 R 758	A-742*	D	GC-AGJ, GC-AGM, MG-AGM	All	1.47
65 R 752	A-75*	E	AC78J, AC78M, AC-C78J, AC-C78M, ACD, 10L3, 11L3	Std	1.47
65 R 751	A-75LP*	E	ACJ, ACM, AC-CJ, AC-CM, ACD, 10L3, 11L3	MG	1.47
65 RC 696	A-75LPD §	E	Same as above	MG	14.70
65 R 753	A-752*	E	AC-AGJ, AC-AGM, AC-C-AGJ, AC-C-AGM	All	1.47
65 R 750	A-76	E	66-TY, 68-TY	Std	.88
65 R 805	A-76LP	E	66-TY, 68-TY	MG	.88
65 R 806	A-762	E	66-TY, 68-TY	All	.88
65 R 761	A-78LP*	F	U-J, U-M	MG	1.47
65 R 703	A-81*	G	QTJ, QTM, QT2J, QT2M, QT3J, QT3M, LQD, LQD-1, CAC, 403J	Std	1.47
65 R 704	A-81LP*	G	QT-33J, QT-33M, CQ-J, CQ-M, LQD, LQD-1, CAC	MG	1.47
65 RC 698	A-81LPD §	G	Same as above	MG	14.70
65 R 760	A-812*	G	CQ-AGJ, CQ-AGM, CAC-AGJ, CAC-AGM	All	1.47
65 R 763	A-82S*	H	Nylon 1J, Nylon 1M	Std	1.47
65 R 707	A-86	J	LT1-M, LT2-M, LT3-M	Std	.88
65 R 708	A-86LP	J	LT-33	MG	.88

FOR ELECTRO-VOICE CARTRIDGES

65 R 729	E-90*	S	10, 30, 40, 12, 32, 42, 36, 46, 96, 82S, 47	Std	1.47
65 R 730	E-90LP*	S	10, 30, 40, 14, 34, 44, 36, 46, 96, 84S, 47	MG	1.47
65 R 838	E-902*	S	33, 43, Admiral 409A13-1	All	1.47
65 R 731	E-91††	T	16TT, 22TT	Twin	2.06

FOR WEBSTER-CHICAGO CARTRIDGES

65 R 736	NE-215	W	21P247, 21P402, 21P403	Twin	2.35
65 R 737	NE-368	X	21P404	Twin	2.35

FOR MAGNAVOX CARTRIDGES

65 R 739	M-46	DD	560133, 560133-4	Twin	1.47
65 RC 655	M-46D‡	DD	Same as above	Twin	29.40
65 RC 656	M-46SD†	DD	Same as above	Twin	17.64
65 R 839	M-49††	EE	560151-6	Twin	2.06

FOR SHURE CARTRIDGES

Stock No.	Type No.	Fig.	For Cartridge Numbers	Tip	NET
65 R 774	J-15LP	K	P93MG, P95MG, W53MG	MG	.88
65 R 710	JPS-30*	L	P30, P57, P70, P72, P76, P77, P79, P85, P88, P89, P94, PN30, W22A, W22AB, WC22AB, W23A, W23B, W26B, W60A, W60B, W60HS, W60PN, W61B, W65B, W66B, Admiral 409A11	Std	1.47
65 R 712	JPS-30LP*	L	PC41V, P72V, P73, P76V, P77, W21A, W21AR, W22A, W22AB, WC22AB, Admiral 409A11	MG	1.47
65 RC 699	JPS-30LPD §	L	Same as above	MG	14.70
65 R 765	JPS-312*	L	P37, P71, P81AD, W26A, W26B, W66B	All	1.47
65 R 807	JPS-32*	M	WC33B, WC24, PC40, PC9	Std	1.47
65 R 808	JPS-32LP*	M	W31AR, WC31AR, WC24, PC40, PC11	MG	1.47
65 R 809	JPS-322*	M	W36B, WC36B, PC10	All	1.47
65 R 814	JPS-33*	N	PC14	Std	1.47
65 R 828	JPS-33LP*	N	PC13	MG	1.47
65 R 829	JPS-332*	N	PC12, WC38	All	1.47
65 R 833	JPS-35††	P	PC-2, PC-3, WC-10	Twin	2.06
65 R 834	JPS-36††	P	PC-4, PC-5, ML-44	Twin	3.50
65 R 783	WG-652	R	W56N, W56R, W65N	All	1.47

FOR WEBSTER-ELECTRIC CARTRIDGES

65 R 715	W-05	Y	F14, F14-1, F14-2, F14-3, F14-4	Twin	1.47
65 R 716	W-14*	Z	A1, A2, A3, A4, A5, A6, A7, A8, A1M, A1M-1, A2M, A5M, A6M, A7M, AX	Std	1.47
65 R 717	W-15*	Z	Same as above	MG	1.47
65 R 721	W-412	AA	Q3, A9, F13	All	.88
65 R 774	J-15LP	K	F7, F7-1, F7-2, Q2, F13, AJ4	MG	.88
65 R 722	W-422	BB	C9	All	.88
65 R 724	W-72	CC	F15, F15-1, F16, F16-1, F16-2, F-18, F19	Std	.88
65 R 725	W-73	CC	Same as above	MG	.88
65 R 710	JPS-30*	L	F10, F11, F11-1	Std	1.47
65 R 712	JPS-30LP*	L	F11, F11-1	MG	1.47

FOR RCA CARTRIDGES

65 R 740	M-70*	FF	70338, 70339, 72551	Std	2.32
65 R 858	M-70LP*	FF	74067	MG	.94
65 RC 657	M-70LPD §	FF	74067	MG	14.70
65 R 795	M-74*	GG	75475, 77779	Std	1.47
65 R 796	M-74LP*	GG	75475, 74625, 75575, 76318, 77779	MG	1.47
65 RC 658	M-74LPD §	GG	Same as above	MG	14.70

FOR PHILCO CARTRIDGES

65 R 744	M-60LP*	HH	45-1609, 45-1612	MG	.88
65 R 745	PH-10*	JJ	Dynamic Reproducer, 76-1622	Std	1.32
65 R 747	PH-12	KK	76-4649	Twin	1.47

CONVENTIONAL-SHANK PHONO NEEDLES

Fig. LL. "CONCERT" J-10. For standard records. Flexible shank. Durosmium tip. Wt., 2 oz.
65 R 659. NET **59c**

Fig. MM. "CLASSIC" NYLON. High-quality nylon needles with Durosmium tips. Made to rigid specifications. Shpg. wt., 2 oz.

TYPE NY-151. For 33⅓ and 45 rpm microgroove records.
65 R 689. NET **88c**

TYPE NY-152. .002" all-purpose tip for microgroove records and standard records.
65 R 690. NET **88c**

TYPE NY-153. For standard.
65 R 691. NET **88c**

Fig. MM. "ROYAL" NYLON. Nylon needles with sapphire tips. 2 oz.

TYPE NY-251. For 33⅓ and 45 rpm microgroove records.
65 R 692 NET **1.47**

TYPE NY-252. .002" all-purpose tip for MG and standard.
65 R 693. NET **1.47**

TYPE NY-253. For standard.
65 R 694. NET **1.47**

Fig. NN. TYPE J-152. Low-cost, all-purpose Durosmium tip needle.
65 R 798. NET **88c**

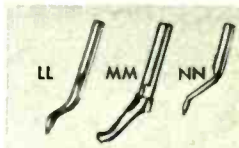
TYPE J-15LP. (Not illustrated.) Low-cost, Durosmium-tip needle for 33⅓ and 45 rpm MG. 2 oz.
65 R 774. NET **88c**

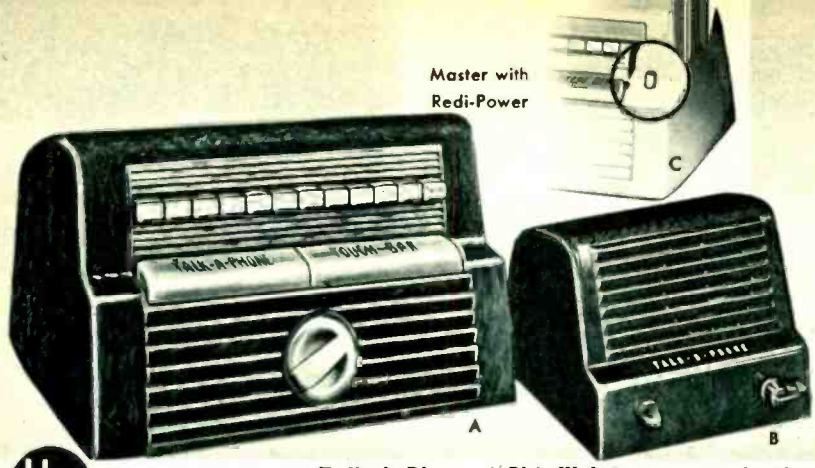
Fig. RR—JENSEN "SILCLOTH"

Anti-static record-wiping cloth. Removes, and prevents records from attracting noise-producing lint and grit. Anti-static effect of one wiping lasts through repeated playings. In plastic pouch. Shpg. wt., 4 oz.
65 R 531. NET **73c**

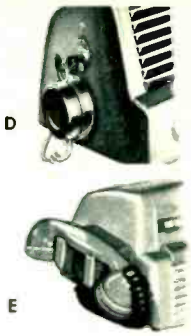
Fig. SS—STYLUS MICROSCOPE

Pocket-size stylus inspection microscope. For checking phono needle tips to detect signs of wear. Approximately 50-power magnification. Has groove for convenient centering of needle in microscope field. Metal barrel. 3¾x½" dia. Imported from Japan. Shpg. wt., 8 oz.
65 RC 440. NET **3.00**

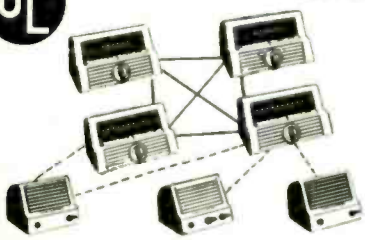




Optional Features



Talk-A-Phone "Chief" Intercommunication Systems—U.L. Approved



MEETS EVERY INTERCOM NEED. The "Chief" is the ultimate in a completely flexible, deluxe intercom system. It meets all possible intercommunication needs in every type of office, factory, institution, etc. "Dynasonic" design permits expansion or modification of systems to meet new situations—without discarding original "Chief" equipment. Ruggedly built, for dependable, day-in and day-out operation. Economical to operate—only Masters are connected to power lines. Easy to install.

SAVES TIME AND EFFORT. A great time-saver, the "Chief" soon pays for itself. Avoids needless trips; reduces load on busy switchboards. Provides instantaneous communication between executives and key personnel.

BEAUTIFUL STYLING. Both Masters and Staffs are housed in molded bakelite cabinets and finished in rich walnut or executive gray. Streamlined, compact design—ideal for use in any surroundings.

MAXIMUM FLEXIBILITY. The "Chief's Dynasonic" design permits any kind of combination: An all-Master Station system; a single Master with Staffs; Masters inter-mixed with Staffs. The possible number of stations in any system is virtually unlimited. Six, 12, 20, 40 and 50 station Masters can be used within the same system. Masters may talk with any other Master in the system and with any Staff. Staffs may answer all Masters and originate calls to as many as 6 Masters, depending upon the Staff's capacity.

STANDARD FEATURES: "Chief" systems give you (in addition to "Dynasonic" design): (1) Multi-Magic Selector, which permits selection of up to 40 stations with only 12 push-buttons; (2) Uni-Trans, which locks the push-to-talk bar in "Talk" position for convenience in dictating; (3) Hold-A-Matic Conference Control, which holds down several buttons at once for conferences.

Fig. A—"CHIEF" UNIVERSAL MASTER STATIONS

Chief Masters with 6, 12, 20, 30, 40 and 50 station capacity. Operate from 110-120 volts, 50-60 cycle AC, or 110-120 volts DC. Plastic Push-to-Talk bar and volume control knob. Pilot light illuminates volume control knob when intercom is "On." Complete with junction box and instructions. Walnut-finish bakelite cabinets. Overall size, 12" wide, 7" high, 9¼" deep.

C-4906. 6-station capacity Master. Shpg. wt., 13 lbs.
95 RX 885. List, $89.50. NET PER STATION 52.50

C-4912. 12-station capacity Master. Shpg. wt., 14 lbs.
95 RX 887. List, $106.00. NET PER STATION 62.25

C-4920. 20-station capacity Master. Shpg. wt., 17 lbs.
95 RX 888. List, $125.00. NET PER STATION 73.50

C-4930. 30-station capacity Master. Shpg. wt., 20 lbs.
95 RZ 889. List, $144.00. NET PER STATION 84.50

C-4940. 40-station capacity Master. Shpg. wt., 23 lbs.
95 RZ 861. List, $163.00. NET PER STATION 95.50

C-4950. 50-station capacity Master. Shpg. wt., 26 lbs.
95 RZ 862. List, $182.00. NET PER STATION 107.00

Fig. A—"CHIEF" REDI-POWER MASTER STATIONS

"Redi-Power" masters can be included in any "Chief" system. Built-in amplifier provides a maximum of 20 watts which may be divided among as many as 10 stations—or concentrated on 1 station. Just press the Redi-Power button (Fig. C)! For high-power paging use C-20 or HP-3 sub-station (see p. 189). AC only; other features same as for the Universal Masters described above.

C-RP-5912. Redi-Power Master; 12-station capacity. 18 lbs.
95 RX 882. List, $160.00. NET PER STATION 94.00

C-RP-5920. Redi-Power Master; 20-station capacity. 21 lbs.
95 RZ 883. List, $179.00. NET PER STATION 105.25

C-RP-5911. New Redi-Power Master. Features single-button paging of pre-selected stations—in addition to serving as a Master intercom. To page *all* stations in paging circuit, merely press the "Page" button. 11-station capacity. Shpg. wt., 18 lbs.
95 RX 892. List, $190.00. NET PER STATION 112.00

"CHIEF" STAFF STATIONS

For use with Masters at left. May be connected "non-privately" to permit persons at Staff Stations to answer from a distance, without operating controls; or "privately," to require operation of Staff Talk-Listen switches. No current is consumed by Staffs.

Fig. B. TYPE C-41 STAFF STATION. For originating calls to one Master. Walnut finish molded bakelite cabinet. Size, 6¼" high, 8" wide, and 7½" deep. Shpg. wt., 5 lbs.
95 RX 886. List, $22.00. NET PER STATION 12.95

TYPE C-41M STAFF STATION. (Not Illustrated.) Same as C-41 except in metal cabinet with brown wrinkle finish. 6¼x8x7½" deep. 3 lbs.
95 R 863. List, $22.00. NET PER STATION 12.95

Fig. B. TYPE C-42 STAFF STATION. For originating calls to two Masters. Walnut finish molded bakelite cabinet. Size, 6¼" high, 8" wide, and 7½" deep. Shpg. wt., 5 lbs.
95 RX 890. List, $29.00. NET PER STATION 17.00

TYPE C-42M STAFF STATION. (Not illustrated.) Same as C-42 except in metal cabinet with brown wrinkle finish. 7x6x4" 3 lbs.
95 R 864. List, $29.00. NET PER STATION 17.00

TYPE C-46 PUSH-BUTTON STAFF STATION. (Not illustrated.) For originating calls to six Masters. Walnut finish molded bakelite cabinet. Size, 7" high, 12" wide, and 9¼" deep. Wt., 9 lbs.
95 RX 891. List, $65.00. NET PER STATION 38.00

HOW TO DETERMINE CABLE REQUIREMENTS

Where Master Stations are inter-connected, measure from first Master to second Master only, from second to third Master only, etc., and then total these measurements. The 20-station C-4920 (or C-RP-5920) requires 2 lengths of 6224 cable; C-4930 requires 3 lengths of 6224, etc.; C-4912 (or C-RP-5911 or C-RP-5912) requires only 1 length of 6224 cable. For cable between Masters and Staffs, measure from Staff Station to each Master to which the Staff originates calls. Repeat for each Staff Station.

49 W 606. Type 6212. Cable for inter-connecting C-4906.
Per Foot 14c

49 W 608. Type 6224. Cable for Masters C-4912, C-RP-5911, C-RP-5912, C-4920, C-RP-5920, C-4930, C-4940, C-4950. Per Ft. 28c

49 W 607. Type 6204. Cable for any Staff Station. Per Foot.. 6c

Talk-A-Phone "Built-in" Optional Features

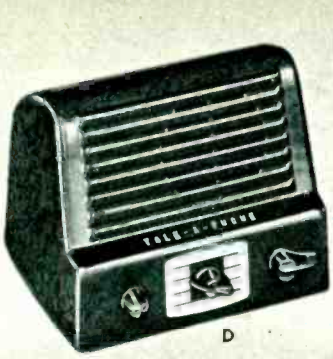
PRIVACY EARPHONE. (Fig. D.) For all stations listed on this and opposite page. In brown only. Add $12.00 per station.

CRADLE PHONE. (Fig. E.) For all Masters and bakelite-case Staffs and Sub-stations listed on this and opposite page. Add $26.45 per station.

LONG-DISTANCE ADAPTER. For all Masters on this page. Permits communications between Masters over cables of 10,000 feet or greater. One adapter required for each Master; add $11.75 per station.

BUSY SIGNAL. For all Masters on this page. Add $7.00 per station.

EXECUTIVE GRAY. All Masters and bakelite-cabinet Staff stations listed on this page are available in Executive Gray. Add $2.50 per station for Masters and C-46 Staffs. Add $1.50 per station for others.



Talk-A-Phone Deluxe Intercommunication Systems—U.L. Approved

SUPER-SELECTIVE SYSTEMS

An unusually versatile, low-cost intercommunication system offering complete privacy of conversation. Consists entirely of Master Station units so that several separate two-way conversations may be carried on simultaneously without cross-talk. (No sub-stations can be used in a Super-Selective system.) Any one Master Station may talk to any other Master Station at will with absolute privacy. Masters may call one another regardless of whether station being called has power "on." Silencing feature eliminates all sound pickup when stations are not in use. Up to 2,000 feet of cable may be used between stations. Walnut color bakelite cabinet. 8¼x6¼x7½". For 110-120 volt AC-DC. With instructions. Shpg. wt., 7 lbs.

Fig. D. LS-5 MASTER. For up to 5 stations.
95 RX 875. List. $45.00.
NET EACH 26.45

Fig. D. LS-10 MASTER. For up to 10 stations.
95 RX 874. List. $58.00.
NET EACH 34.00

TYPE 5506 CABLE. 6-conductor cable for Model LS-5 above.
49 W 605. Per Foot 7½c

TYPE 9911 CABLE. 11-conductor cable for Model LS-10 above.
49 W 603. Per Foot 14c

EXECUTIVE GRAY CABINETS. All Master Stations and bakelite-cabinet Sub-Stations in the Talk-A-Phone Super-Selective, Combination, and Master-Selective intercommunication systems are available in executive gray. Add $1.50 per station.

COMBINATION SYSTEMS

A combined system of Masters and Subs. Ideal for installations requiring several Masters in communication with all other stations. Subs can answer any Master but do not originate calls. Combine Masters and Subs to suit your needs. For systems of up to 5 stations, use CL-5 Masters. For systems with a total of up to 10 stations, use CL-10 Masters. LR-2 and LR-2M Subs work with CL-5 or CL-10 Masters. Subs require no power. Masters feature choice of private or non-private operation, volume control and Talk-Listen switch. Masters and LR-2 Subs are in walnut-color bakelite cabinets. 8¼x6¼x7½". LR-2M is in brown, rectangular metal cabinet, 7x5¾x3½"; may be wall mounted. Shpg. wts.: CL-5, 7 lbs.; CL-10, 8½ lbs.; LR-2, 5 lbs.; LR-2M, 3 lbs. With instructions. For 110-120 v., AC-DC.

Fig. D. CL-5 MASTER. For 5 station systems.
95 RX 842. List. $55.00.
NET EACH 32.35

Fig. D. CL-10 MASTER. For 10 station systems.
95 RX 843. List. $74.00.
NET EACH 43.50

Fig. E. LR-2 SUB-STATION.
95 RX 844. List. $15.95. NET EACH 9.35

LR-2M SUB-STATION. Metal cabinet.
95 R 847. List. $15.95. NET EACH .. 9.35

TYPE 6212 CABLE. 6-pair cable for interconnecting CL-5 Masters.
49 W 606. Per Foot 14c

TYPE 6224 CABLE. 12-pair cable for interconnecting CL-10 Masters.
49 W 608. Per Foot 28c

TYPE 6902 CABLE. 2-conductor cable for connecting LR-2 or LR-2M Subs to CL-5 or CL-10 Masters.
49 W 613. Per Foot 2c

MASTER-SELECTIVE SYSTEMS

Consist of one Master and up to 10 Subs. Four Master-Selective systems: Normal-Output LM-5 Master with up to five LR-3 or LR-3M Subs; normal output LM-10 Master with up to ten LR-3 or LR-3M Subs; high-output AC-5406 Master with up to five AR-3 or AR-3M Subs; high-output AC-5411 Master with up to ten AR-3 or AR-3M Subs. High-output Masters are specifically for use in large areas and noisy locations; deliver about 10-times greater volume. Master may call subs individually or simultaneously. Subs may call Master only. Operate with as much as 2000 feet of cable between stations. Sounds from Subs are cut out when system is not in use, yet calls may be received. Persons may answer from up to 50 feet from Sub. Subs require no power. Only single Master can be used in each system. Masters and Subs (except LR-3M and AR-3M) are in walnut-color bakelite cabinets. 8¼x6¼x7½". LR-3M and AR-3M are in brown, rectangular metal cabinets, 7x5¾x3½". Metal cabinets may be wall mounted. With instructions. Models AC-5406 and AC-5411 for 110-120 volts, 50-60 cycle AC; all others for AC or DC. Shpg. wts.: Masters, 7 lbs.; bakelite Subs, 5 lbs.; metal Subs, 3 lbs.

Fig. D. LM-5 MASTER. For up to 5 subs.
95 RX 870. List. $45.00. NET EACH 26.45

Fig. D. LM-10 MASTER. For up to 10 subs.
95 RX 869. List. $58.00. NET EACH 34.00

Fig. E. LR-3 SUB-STATION.
95 RX 871. List. $15.95. NET EACH .. 9.35

LR-3M SUB-STATION. Same as LR-3 except in brown metal case.
95 R 846. List. $15.95. NET EACH ... 9.35

Fig. D. AC-5406. HIGH-OUTPUT MASTER. For up to 5 subs. AC operation only.
95 RX 807. List. $55.00. NET EACH. 32.35

Fig. D. AC-5411 HIGH-OUTPUT MASTER. For up to 10 subs. AC operation only.
95 RX 808. List. $68.00. NET EACH. 39.95

Fig. E. AR-3 SUB-STATION. For use with Model AC-5406 or AC-5411 Masters.
95 RX 838. List. $16.95. NET EACH .. 9.95

AR-3M SUB-STATION. Same as AR-3 except in brown metal case.
95 R 839. List. $16.95. NET EACH ... 9.95

TYPE 5303 CABLE. 3 conductors.
49 W 604. Per Foot 3c

TALK-A-PHONE ACCESSORY EQUIPMENT

Fig. A. C-20 TRUMPET-TYPE HIGH-POWER SUB-STATION. 9", weather-proof re-entrant horn for use in "Chief" and Master-Selective systems. Provides greater volume—excellent for outdoor use, large rooms, and noisy locations. Delivers especially good results with "Chief" Redi-Power or Master-Selective AC-5406 or AC-5411 Masters. Rated, 15 watts. Shpg. wt., 8 lbs.
95 RX 878. List. $44.95. NET 26.50

Fig. B. HP-3 HIGH-POWER SUB-STATION. 8" speaker housed in brown, wrinkle-finish wall baffle. Same applications as C-20 Trumpet-Type Sub-Station above, but for indoor use. Size, 12x12x8". Rated, 5 watts. Shpg. wt., 8 lbs.
95 RX 849. List. $25.00. NET 14.70

Fig. C. WALL SWITCHES. Smooth operating wall switches for use with C-20 trumpet or HP-3 speaker above. Shpg. wt., 2 lbs.

S-100 SWITCH. For Master-Selective system. Connects C-20 or HP-3 to originate calls to Master station.
95 R 845. List. $5.00. NET 2.95

S-101 SWITCH. For "Chief" systems. Connects C-20 or HP-3 to originate calls to one master.
95 R 841. List. $5.00. NET 2.95

S-102 SWITCH. For "Chief" systems. Connects C-20 or HP-3 to originate calls to either of two Masters.
95 R 848. List. $9.00. NET 5.25

HOW TO DETERMINE CABLE NEEDS

SUPER-SELECTIVE SYSTEMS: Measure from first Master Station to 2nd Master Station only, 2nd to 3rd only, etc.

COMBINATION SYSTEMS: For Master cable, measure from Master Station to Master Station; for Sub-Station cable, measure from each Sub-Station to nearest Master only.

MASTER-SELECTIVE SYSTEMS: Measure from Master Station to each Sub-Station.

See Page 190 for Other Talk-A-Phone Intercom Systems

FIG. A—2-STATION WIRELESS SYSTEM

Wireless intercom—uses power line as transmitting medium. Has the exclusive "Sonic Gate Circuit" which, together with the Talk-A-Phone "Squelch," effectively suppresses line noises and hum while system is in actual operation as well as when in standby position. No cables or wiring required—simply plug in units to nearest electrical outlet. Economical, efficient and easily installed. Excellent for any application where a change of location may be desired or where permanent installations may not be practical. Has grounding lug for ground transmission when necessary. Stations may be added to system at any time—all stations will receive messages transmitted from any other station. Beautifully styled in sturdy bakelite cabinets. For 110-120 volts AC or DC. Size, 8¼" long, 6¼" wide, and 7½" high. U.L. Approved. Shpg. wt., 14 lbs. per pair.

LC-33. Two stations. Walnut cabinets.
95 RX 821. List. $120.00. NET... **69.95**

LC-33G. Two stations. Gray cabinets.
95 RX 822. List. $125.00. NET..... **72.95**

LC-17. Additional station in walnut.
95 RX 823. List, $60.00. NET..... **35.00**

LC-17G. Additional station in gray.
95 RX 824. List, $62.50. NET..... **36.50**

FIGS. A & B—DELUXE COMBINATION WIRELESS SYSTEM

Newly developed, versatile 6-station selective wireless system. Highly effective, noise-free "Sonic-Gate" Circuit provides unusually clear voice transmission. Eliminates all need for cable and wiring—stations are simply plugged into any convenient wall outlet. A complete wireless paging system can be based on this outstanding equipment. Since any number of staff stations can be used, there is no outgrowing of the system—additional staff stations are plugged in as requirements increase. Each station is a combination transmitter and receiver. Each Master can call and talk with any other station selectively. Up to six, 6-channel Master stations, each with selector pushbuttons, may be used.

A 6-station, all-master system can handle up to 3 separate 2-way conversations simultaneously. Staff stations can reply to Masters, but can not originate calls. Staff stations available in 6 single-channel models, listed at right. Handsomely styled in lustrous walnut or executive gray. U.L. Approved. For operation from 110-120 volts, AC or DC.

Fig. B—WIRELESS MASTER STATIONS

MODEL LCM-8806. 6-station, selective wireless Master station. Size: 7" H, 12" W, 9" D. Walnut. Shpg. wt., 12½ lbs.
95 RX 826. List, $110.00. NET... **64.00**

As above, in Executive Gray.
95 RX 827. List. $114.00. NET..... **66.50**

Fig. A—WIRELESS STAFF STATIONS

Wireless staff stations in walnut. 7½x8½x6¼". Shpg. wt., each, 7 lbs.

95 RX 828. MODEL LCS-801. Receives and replies on Channel 1 only.

95 RX 829. MODEL LCS-802. Receives and replies on Channel 2 only.

95 RX 831. MODEL LCS-803. Receives and replies on Channel 3 only.

95 RX 832. MODEL LCS-804. Receives and replies on Channel 4 only.

95 RX 833. MODEL LCS-805. Receives and replies on Channel 5 only.

95 RX 834. MODEL LCS-806. Receives and replies on Channel 6 only.
List. $60.00. NET PER STATION..... **35.00**

FIGS. C & D—LOW-COST WIRED SYSTEM

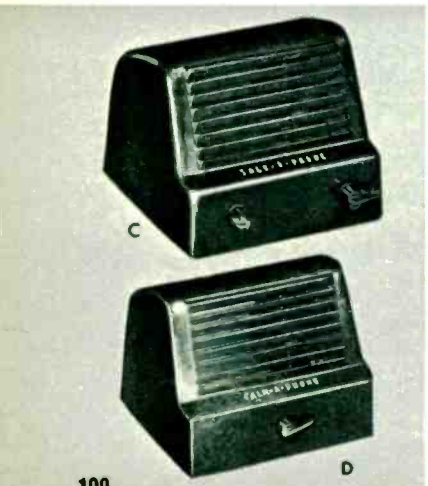
Intercom systems at exceptionally low cost. Presented in smartly styled matching cabinets, sturdily made of durable molded bakelite. Choice of walnut or gray finish. Provides voice communication between any two points in the home, farm, professional office, store, or other locations. Consists of one Master unit, a Substation, and fifty feet of cable. Up to 2000 feet of cable can be used. When connected "privately" the Master unit cannot listen in on the Substation. Either station may originate calls. When connected "non-privately" the Master station can listen in on the Substation. Master unit has a volume control. For 110-120 volt AC-DC. U.L. Approved. Size of cabinets, 8¼x6¼x7½". Shpg. wt., for the 2-station system, 11 lbs.

LC-2. 2-STATION SYSTEM. Walnut cabinets.
95 RX 840. List. $51.00. NET.... **29.95**

LC-2G. 2-STATION SYSTEM. Gray cabinets.
95 RX 857. List. $56.00. NET..... **32.95**

TYPE 5303. Extra 3-conductor cable.
49 W 604. Per Foot..... **3c**

See pages 188-189 for complete Talk-A-Phone listing.



Bogen 2-Station Intercoms

WIRELESS "TWIN" SYSTEM

MODEL 2CW-1. Wireless 2-station intercom for the home, office, farm or factory. Uses power line as transmitting medium. Each station contains a transmitter and receiver operating at 175 kc. Operation at this frequency minimizes the possibility of interference with radios, TV receivers and other electrical devices and appliances. Adjustable squelch circuit eliminates line noises, permitting clear, noise-free reception at all times.

Stations can be locked in "transmit" position if desired, as when used in nurseries, industrial, institutional and other applications where aural supervision is required. Excellent for "remote" minute-taking at meetings or dictation. Virtually no limit to number of stations which can be used. Conversations will be heard by all—excellent for conferences.

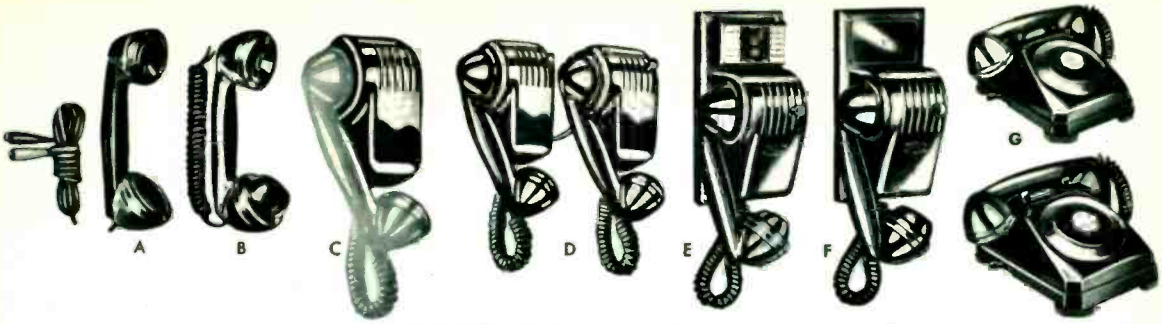
Simple internal adjustment permits using two or three separate systems in the same office or factory without interference between systems. To install—just plug units into electrical outlets powered from the same meter. Pre-set at factory for operation under normal conditions. Includes simple screwdriver adjustment for optimum performance under high-noise conditions. Attractive gray polystyrene cabinets. Size, 6x6½x7½". For operation from 110-120 volts, AC-DC. Underwriters' Laboratories Approved. Shpg. wt., 10 lbs.
95 RX 911. List. $95.00. NET.... **57.00**

MODEL "CHALLENGER 200" SYSTEM

A highly efficient, 2-station intercom system. Master and Remote stations are attractively styled in gray, polystyrene cabinets with contrasting ivory knobs. Provide streamlined, eye-pleasing appearance—combine flexibility of use with simplicity of installation. Complete 2-station system consists of: Master station, Remote station and 50 feet of cable. Simple to install—no wires to cut, splice or solder. Master plugs into electrical outlet. Remote placed in desired location, connecting cable plugged together and the system is ready to use. Supplied complete—ready to use—nothing else to buy.

An outstanding feature of the "200" is the "Dual-Duty" volume control on Master; can be set to eliminate use of press-to-talk bar at Remote; permits Master to hear all activities and announcements originating in vicinity of Remote. Volume control can also be set to silence Remote unless its press-to-talk bar is operated. In either system, Master answers by operating its press-to-talk bar. This versatility permits the "200" to serve practically every 2-station intercom requirement.

Sturdy gray, impact-resistant polystyrene cabinets. Size: 6" high, 6½" wide and 7½" deep. For operation from 110-120 volts, AC-DC. Underwriters' Laboratories Approved. Shpg. wt., 10 lbs.
95 RX 910. List. $43.95. NET.... **26.35**



Wheeler Sound-Powered Telephones

INDIVIDUAL HANDSETS AND HOLDERS

Fig. A. MODEL SPT-102 HANDSET. Self-contained, self-powered telephone handset. Requires no batteries or supply line voltage. For distances to 20 miles. Up to 12 units may be connected in parallel. With 3½-ft. cable and clips, less wire. Uses 2-conductor, twisted-pair wire. 1½ lbs.
59 J 350. List, $13.75. NET EACH... 9.62

Fig. B. MODEL SPT-123 HI-LEVEL HANDSET. Extra-sensitive handset for use where background noise is particularly high. Up to 12 units may be connected in parallel. Use 2-cond. twisted-pair cable for hookup. Shpg. wt., 1½ lbs.
59 J 360. List, $15.40. NET EACH... 10.78

MODEL SPT-150. Same as SPT-123 but with insulated clips.
59 J 361. List, $16.00. NET EACH... 11.20

Fig. C. MODEL F-5308 HANDSET HOLDER. Wall mount handset holder with switch hook and terminal board for SPT-102, SPT-150 and SPT-123 handsets. For installations where separate ringing systems are to be used. 2⅞x5¾x3". 1½ lbs.
59 J 355. List, $14.00. NET EACH... 8.40

MODEL F-4182 HANDSET HOLDER WITH BELL. As above, with bell. For SPT-123 handsets. Has lever to ring bell at other end of line. Up to 3 may be used in a common ringing system. 1½ lbs.
59 J 356. List, $19.48. NET EACH... 11.69

MODEL B-5446 HANDSET HOOK. Not illus. Fastens to wall, side-of-desk, etc. 3 oz.
59 J 420. List, $1.50. NET EACH... 1.18

MULTI-SERVICE INTERCOM SYSTEMS

Wheeler phones and intercom systems provide clear communication over distances to 25 miles—without batteries or other outside power. Current for transmission is generated by the voice; bell-ringing current is genrated by bell-ringing lever.

TELEPHONE INTERCOM SYSTEM

There are 2 types of telephone intercom systems; both are selective-ringing, common-talking. *All-Master System:* Consists of up to 12 SPS-205-MI master phones (Fig. E). Any master can ring and communicate with any other master, or up to 6 stations may be used on a conference basis. *Master-Sub System:* Consists of 1 SPS-205-MI master phone and up to 11 SPS-205-SI sub-station phones (Fig. F). The master can ring and communicate with any sub-station; subs can ring and communicate with the master directly and can reach other sub-stations by having the master ring the desired sub-station. Up to 6 stations may be used for conference. *Cable Requirements:* All-Master system, 2 common wires and 1 additional wire for each station; measure from 1st to 2nd station, 2nd to 3rd, etc Master-Sub System, 3 common wires, and 1 wire from each sub to the master station.

Fig. E. MODEL SPS-205-MI MASTER PHONE. Shpg. wt., 5 lbs.
59 J 353. List, $61.60. NET EACH. 36.96

Fig. F. MODEL SPS-205-SI SUB-STATION PHONE. Shpg. wt., 5 lbs.
59 J 354. List, $52.25. NET EACH... 31.35

EXECUTIVE TYPE PHONE SYSTEM

Suitable for desk mounting applications as part of a pair-phone system or three-phone, common ringing, common-talking system. For office-to-stockroom, etc. Systems can be of one SPS-405 desk set of two cradle phones, or a combination of cradle-phone and one SPS-205 wall instrument.

DURABLE CONSTRUCTION

The generator, ringer and handset are completely enclosed in high-quality, molded black plastic case with a rugged metal sub-base. Cradle base utilizes shock-absorbing pads. Installation is simple—complete instructions are included with each instrument. Standard cup-type mouth-piece provides true speech reproduction, unaffected by static or other electrical noises. All metal parts are made of corrosion-resistant materials. Impregnated, moisture-proof coils. Uses 2-conductor, twisted-pair cable. The set is provided with an 8-ft., 2 conductor neoprene insulated cable and 3-point terminal board with cover. Size of base, 5¾" wide, 9" deep. Shpg. wt., per two-phone system, 7½ lbs.

Fig. G. MODEL SPS-405. Consists of two "Executive" model, cradle-type phones. List, $93.00.
59 JX 358. NET PER SET... 55.80

MODEL SPS-205, SPS-405. Consists of one SPS-205 wall-mounting phone; one SPS-405 cradle-type phone. List, $83.08.
59 JX 359. NET PER SET... 49.85

TELEPHONE INTERCOM SYSTEMS

Fig. D. MODEL SPS-205 TWO-PHONE. Each has lever for ringing bell at other end of line. Uses twisted-pair (2 conductor) wire. Less cable. Shpg. wt., 7 lbs.
59 J 351. List, $73.15. Per System. 43.89

MODEL SPS-205-3 THREE-PHONE. As above, but has 3 handset stations. 10 lbs.
59 JX 352. List, $109.72. Per System 65.83

MODEL SPS-205-H. Similar to SPS-205 but delivers higher voice level. 3-cond. wire.
59 J 362. List, $86.00. Per System... 51.60

CABLE FOR WHEELER PHONES

2-CONDUCTOR. No. 19, weatherproof. Shpg. wt., 100 feet, 2½ lbs.
48 W 826. Per Foot... 4c
100' or more, Per 100'... 3.24

1-CONDUCTOR CABLE. No. 18. 100', 12 oz.
47 T 901. 100-Ft. Coil... 1.62

12-CONDUCTOR. Vinyl-covered cable. Shpg. wt., 100 ft. 4¾ lbs.
48 W 893. Per Foot... 7c
100' or more, Per 100'... 6.13

3-CONDUCTOR. No. 19 solid 3-cond. cable for intercom or telephone wire, interior or exterior use. Wt., 100 feet. 4 lbs.
48 W 825. Per Foot... 5½c
100' or more, Per 100'... 4.86

For additional wire and cable listings, see pages 231 to 234.

Feiler Port-A-Phone Intercom

MODEL W1-100-2. Compact, wireless intercom system. Each station is a complete radio receiver and transmitter. No wiring—just plug stations into electrical outlets. A basic system consists of 2 stations—can be expanded to include 20 or more stations to form a complete communication network.

In regular operation, all stations in a system receive all transmissions originating from any other station in the system. Each station has a special adjustment to change its operating frequency, permitting 2 or 3 groups of stations to be used on the same power-line transformer circuit with individual group privacy. Has special booster circuit for use when stations are long distance apart. Operation over distances up to 2½ miles is possible if all stations in the system operate from same power-line circuit. Adjustable "Hush-O-Matic" silencer circuit eliminates line noises. In plastic cabinets, 6x8¼x5⅝"; mottled mahogany finish. U.L. Approved. For 110-120 volts, AC-DC.

TWO-STATION SYSTEM. Shpg. wt., 12 lbs.
96 RX 646. List, $84.50. NET... 59.15

ADDITIONAL STATIONS. Shpg. wt., 6 lbs.
96 RX 645. List, $42.25. NET EACH... 29.57

WHEELER PORTABLE PHONE UNIT

MODEL SPS-600 "COMMUNIPAK". New, self-contained and portable reel-type communication package. Lightweight and specially designed for use by Civilian Defense, emergency and radio-TV service crews. Requires no batteries or outside power supply. Provides unusually clear speech reproduction. User can carry on conversation while cable is being strung out. Complete "Communipak" consists of 2 Wheeler sound-powered Hi-Level telephone handsets, each with 4-ft. neoprene retractile coil-cord and locking-type receptacles; 250 ft. of 2-conductor heavy-duty neoprene cable; special reel with knob handle for re-winding. Shpg. wt., 30 lbs.
59 JZ 363. List, $166.00. NET... 99.60

S-38D

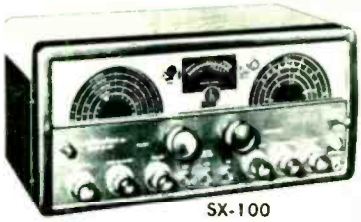
S-53A

S-85

hallicrafters

the Radio Man's Radio

SX-96



SX-100

S-38D LOW-COST RECEIVER

Latest version of the world-famous S-38 Amateur-SWL receiver. Features sensitive voice and code reception. Has smartly styled cabinet with easy-to-read, wide-vision, slide rule type dial. Tunes the standard AM broadcast band and all short-wave frequencies to 32 mc, for thrilling reception of police, aircraft, Amateur, foreign and domestic shortwave and ship-to-shore transmissions.

4-BAND COVERAGE. 4-position range selection switch. Range 1: 540 to 1650 kc; Range 2: 1650 kc to 5.1 mc; Range 3: 5 to 14.5 mc; Range 4: 13 to 32 mc. Separate bandspread dial simplifies tuning the crowded short-wave bands.

AC-DC SUPERHET CIRCUIT. Up-to-the-minute, high sensitivity superhet circuit employing four tubes and rectifier. 5" PM speaker gives excellent tonal quality for music reproduction. 2 watts audio output. Tip jacks on rear apron for use when headphone reception is desired. Standby-receive switch for use when transmitting (cuts B-plus voltage but keeps tube filaments on). AM-CW switch for reception of code or AM phone transmissions. Gray steel cabinet, 12⅞x7x7¼". For operation from 105-125 volts, 50-60 cycle AC or DC. Shpg. wt., 13 lbs.

98 SX 709. NET **49.95**

220-VOLT ADAPTER CORD. For above. Permits 220 v. AC operation. 5 oz.

49 T 531. NET **2.00**

POPULAR S-53A RECEIVER

True professional performance in a low-cost communications receiver. Highly sensitive and selective circuit provides thrilling world-wide shortwave reception at maximum performance. Covers: 6 Amateur bands, Police, Aircraft, Marine, Foreign and domestic shortwave broadcasts and other services as well as standard broadcast programs. Has excellent stability and high signal-to-noise ratio. Built-in 5" PM speaker gives excellent tonal reproduction.

TUNES TO 54.5 MC. Range 1, 540-1630 kc; Range 2, 2.5-6.3 mc; Range 3, 6.3-16 mc; Range 4, 14-31 mc; Range 5, 48-54.5 mc. Provides excellent Amateur 6-meter reception on Range 5. Edge-illuminated slide-rule dial. All panel controls clearly identified: Main Tuning, Bandspread, Bandswitch, Volume-On-Off, Sensitivity-Phono, Standby, Tone, Automatic Noise Limiter, and Phone-Code switch. Electrical bandspread tuning control separates stations on crowded bands. Speaker-Headphone switch, headphone and phono jacks on rear panel.

MODERN SUPERHET CIRCUIT. Uses: 1—6C4 osc. (temperature-compensated for minimum drift), 1—6BA6 mixer, 2—6BA6 IF's, 1—6H6 detector-AVC-noise limiter, 1—6SC7 BFO-1st AF, 1—6K6GT output (2.5 watts). Rectifier is 5Y3GT/G. 5" PM speaker. Satin black steel cabinet with brushed chrome trim. Size, 12⅞x7x7¾" deep. Piano-hinge top. For 105-125 volts, 50-60 cycles AC. Shpg. wt., 20 lbs.

97 SZ 573. NET **89.95**

FAMOUS S-85 RECEIVER

Popular S-85 communications receiver. Supersedes the renowned S-40 series. Completely restyled for improved operating ease and greater tuning accuracy. Puts world-wide communications at your finger tips. Tunes 540 kc to 34 mc continuously in 4 ranges.

FEATURES: Bandspread dial calibrated for 80, 40, 20, 15, 11 and 10 meters. RF amplifier; 2—IF amplifiers; BFO with variable pitch control; automatic noise limiter; 3-position tone control; built-in 5" PM speaker; 4 tuning ranges—standard broadcast plus 3 shortwave.

TUBES USED: 6SG7 RF amplifier, 6SA7 converter, 2—6SK7 IF amplifiers, 6SC7 BFO and audio amplifier, 6K6GT audio output, 6H6 ANL-AVC detector; rectifier is 5Y3GT.

FRONT PANEL CONTROLS: Sensitivity, band selector switch, volume, main tuning, bandspread, AVC on-off, noise limiter on-off, AM-CW, tone (high-medium-low) and AC on-off, pitch control, standby-receive. Panel jack for headphones.

Steel cabinet finished in gray and black. 8⅞x18½x10". For 105-125 v. 50-60 cycle AC. Shpg. wt., 36 lbs.

98 SZ 711. NET **119.95**

S-86. Same as S-85 in design and appearance, but for 105-125 v., 50-60 cycle AC or DC. Shpg. wt., 32 lbs.

98 SZ 712. NET **119.95**

SX-96 SELECTABLE SIDE-BAND RECEIVER

The SX-96 is an advanced-design communications receiver incorporating dual-conversion and selectable single side-band reception. Precision engineered with the latest circuit refinements for years of dependable operation. Designed to meet the exacting requirements of Amateurs, short-wave enthusiasts and engineers. Covers 540 kc to 33 mc in four ranges.

FEATURES: RF stage; dual conversion (50 kc IF system, for high selectivity); mixer type second detector; crystal controlled second conversion oscillator; selectable sideband operation; full precision gear drive mechanisms used on both main tuning and bandspread dials. Carrier level meter calibrated in S units to S9 and to 100 db over S9.

TUBES AND FUNCTIONS: 6CB6 RF amplifier, 6AU6 1st converter, 6C4 HF oscillator, 6BA6 2nd converter, 12AT7 dual crystal second conversion oscillator, 2—6BE6 50 kc IF amplifiers, 6BE6 50 kc mixer type 2nd detector, 6AL5 AVC-noise limiter, 6SC7 1st audio and BFO, 6K6 audio output; 5Y3GT rectifier and VR150 voltage regulator.

CONTROLS: Sensitivity, Band selector, Volume, Main tuning, AVC on-off, Noise limiter on-off, AM-CW, Selectivity, Bandspread, Pitch control, Reception, Standby-Receive Headphone jack, 500 and 3.2 ohm speaker outputs.

Cabinet finished in gray and black with brushed chrome trim. Size: 8½x18¾x10⅝". For 105-125 volts, 50-60 cycles AC. Less speaker. (Use R-46B, page 193.) Shpg. wt., 43 lbs.

98 SZ 713. NET **249.95**

NEW SX-100 SELECTABLE SIDE-BAND RECEIVER

The new SX-100 deluxe communications receiver offers an array of outstanding features. In addition to selectable side-band operation and double conversion, this exceptionally fine receiver features a 50 kc "Tee-Notch" system of selectivity. This advanced system substantially improves IF skirt selectivity, permits remarkable heterodyne rejection, and also provides increased effectiveness of exalted carrier AM reception. Covers 538 to 1530 kc and 1720 kc to 34 mc in 4 ranges.

OTHER FEATURES: 100 kc crystal calibrator, antenna trimmer, logging scale on main tuning and band spread dials, precision gear drive dial mechanism on main and band spread tuning, and crystal controlled 2nd conversion oscillator.

TUBES AND FUNCTIONS: 6CB6 RF amplifier, 6AU6 1st converter 6C4 HF oscillator, 6BA6 2nd converter, 12AT7 dual crystal 2nd conversion oscillator, 2—6BE6 50 kc IF, 6BE6 50 kc mixer 2nd detector, 6AL5 AVC-noise limiter, 6SC7 1st audio and BFO, 6K6 audio output, 6CU6 tee-notch coupler, 6AU6 100 kc calibrator; 5Y3GT rectifier and OA2 voltage regulator.

CONTROLS: Antenna Trimmer, Notch Frequency, Notch Depth, Calibrator on/off, Sensitivity, Band Selector, Volume, Tuning, AVC on/off, Noise Limiter on/off, Bandspread, Selectivity, Pitch, Reception, Standby, Headphone and 3.2 ohm output.

Gray and black cabinet, 8½x18⅜x10⅝". For 105-125 v., 50-60 cycle AC. Less speaker. (Use R46B, page 193.) Wt., 43 lbs.

98 SZ 769. NET **295.00**

HT-30

HT-31

SX-62A

"S" METER KIT

R-46B

SX-99

HT-30 SINGLE SIDE-BAND EXCITER

Transmitter-exciter for SSB suppressed carrier and AM-CW transmissiun. 35 watts peak output. TVI-proofed.

LATEST DESIGN: RF selective filter system; built-in VFO and provision for crystal; 64:8:1 ratio gear drive system; band-switching for 80, 40, 20, and 10 meters; function control for AM, CW, upper or lower side-band; full metering; high-gain preamplifier. Hum and noise —40 db; unwanted side-band —40 db; undesired beat —60 db. TVI-suppressed—filtered control circuits and AC power lines. Provisions for external relays controlled by voice operated system. Provision for fixed frequency operation. Bias supply for an external final amplifier. Tubes: 12AX7 1st audio-voice control, 2—12AX7 audio amplifiers. 12AT7 voice-control-anti-trip. 6BH6 mixer. 2—6BY6 balanced modulators. 6BH6 SSB filter amplifier. 12AT7 crystal oscillator (50 kc). 6CB6 1725 kc conversion mixer. 12AT7 upper or luwer side-band oscillator. 6AH6 VFO mixer. 6CB6 VFO. 6U8 triode oscillator—pentode quadrupler on 11-10 meters. 6AH6 1st RF amplifier. 12BY7 driver. 2—807 final; OB2 voltage regulator. 5R4G high voltage rectifier. 5V4G low voltage rectifier.

Steel cabinet finished in gray and black with brushed chrome trim. Size: 9x18¾x12⅞". For operation from 105-125 volts. 50-60 cycle AC. Shpg. wt., 51 lbs.

97 SZ 571. NET **495.00**

NEW HT-31 LINEAR POWER AMPLIFIER

The new HT-31 puts the equivalent "talk-power" of a 1 kw conventional AM transmitter right on your operating table. It can be driven by the HT-30 (left), similar SSB exciters, or any conventional AM or CW low power transmitter.

FEATURES: Continuous coverage from 3.4 to 30 mc; pi-network output for efficient harmonic suppression; major TVI suppression built-in; requires only 10-watts drive un 80 meters, slightly more on higher frequencies; meter shows power input in watts.

CIRCUIT. Two parallel 811-A triode amplifiers; two 866-A rectifiers. Input system designed to be fed with 50-70 ohm unbalanced line. Turret-type grid tank selector has overlapping bands; output tank is continuously variable—also provides complete coverage of frequencies between Amateur bands.

SPECIFICATIONS. *Power Input*, 500 watts P.E.P. with 10-watt drive; 450 watts CW with 9-watt drive. *Power Output*, 330 watts P.E.P.; 275 watts CW.

CONTROLS. Grid range, grid tuning, meter (plate/grid/ input watts), AM-SSB/CW, B+ off — on, power off — on, PA tuning, antenna loading fine, antenna loading coarse.

Satin black steel cabinet with chrome trim. 20x12¼x17¼". For 105-125 v., 50-60 cycle AC. Shpg. wt. 100 lbs.

98 SZ 759. NET **395.00**

SX-62A ALL-WAVE RECEIVER

The SX-62A offers peak performance on AM broadcast, short wave and Hi-Fi FM. Precision built to meet the most exacting standards—incorporates every modern refinement in all-wave receiver engineering. Six bands: 540-1620 kc; 1620 kc-4.9 mc; 4.9-15 mc; 15-32 mc; 27-56 mc (AM-FM); 54-109 mc (AM-FM). A beautifully styled instrument that brings the all-wave listener everything.

HIGH FIDELITY AUDIO. A push-pull 6V6 output stage furnishes a full 10 watts of audio power. Bass boost and four-position tone control. Phonograph input jack.

FOR SWL'S AND DX FANS. Red dots identify proper settings of controls for AM and SW reception; green dots for FM. Wide-vision slide-rule dial. 60-to-1 ratio tuning knob. 500 kc calibrating crystal, with dial pointer for pin-point reset accuracy. With BFO for code signals.

MODERN CIRCUIT. Three IF and two RF stages provide maximum usable sensitivity. Crystal filter provides 6-step selectivity. Separate RF and AF gain controls; AVC; BFO; ANL; temperature-compensated, voltage-regulated oscillator. 300-ohm antenna input. 3.2, 8 and 500 ohm outputs.

Black steel cabinet with gray panel. Size, 10¼x20x16". Less speaker. (See R-46B, left, below.) For 105-125 volts, 50-60 cycles AC. Wt., 77 lbs.

97 SZ 540. NET **349.95**

"S" METER KIT

A handsome, easily installed "S" meter for panel mounting. For use with the Hallicrafters S40B, S20R, S40, S40A, SX62, S77, S77A, etc., as well as communications receivers of other manufacturers. Can be installed in any R.F. or I.F. stage with AVC action. Attractively styled 3" square meter has black dial with white translucent markings with provision for internal back lighting. Two scales; reads in microvolts from 0 to 20,000; "S" units to S-9 at midscale and then in db up to 50 db over S-9. Essential to the Amateur operator for giving accurate signal strength reports. Requires 2¾" diameter round hole for meter barrel and four ⅛" holes for mounting studs. Can be separately mounted in individual meter case (see page 239). Kit consists of 0 to 5 milliampere meter, 500-ohm potentiometer for electrical zero set, one 82-ohm ½-watt 10% resistor, one 330 ohm ½-watt 10% resistor, and complete installation instructions covering all recent Hallicrafters communications receivers. Shpg. wt., 1 lb.

97 S 740. NET **9.50**

NEW R-46B MATCHING SPEAKER

The R-46B speaker is a 10", high efficiency, permanent magnet type. Housed in a rugged metal cabinet finished in black with silver trim to match Hallicrafters receivers. Has power handling capability more than adequate for even the SX-62A. Also for use with SX-96, SX-88, SX-99, SX-100 and any other receiver having 3.2 ohm output. Cabinet measures 10⅞" high, 15" wide, and 8½" deep. Shpg. wt., 15 lbs.

98 SX 758. NET **17.95**

TOP-VALUE SX-99 RECEIVER

An outstanding value in a medium-priced communications receiver. Offers features usually found only in high priced communications receivers. Crystal filter—Calibrated electrical bandspread—"S" meter. Also features RF and AF gain controls; large illuminated, easy-to-read dials.

FREQUENCY COVERAGE: Full coverage of all frequencies from 540 kc to 34 mc in 4 ranges; the standard AM broadcast band plus 3 short-wave ranges. Provides thrilling reception of broadcasts from all over the world.

FEATURES: Bandspread dial calibrated for 80, 40, 20, 15, 11 and 10 meter Amateur bands for excellent tuning accuracy; "S" meter is calibrated in units of 6 db to S9 and in db above S9 for accurate signal reports; Crystal filter for razor-sharp selectivity; RF stage and two IF stages for very high sensitivity; Terminals for 3.2-ohm or 500-ohm speaker. Separate BFO with pitch control; automatic noise limiter and 3-position tone control. 7 tubes; plus rectifier.

CONSTRUCTION: The SX-99 has the famous Hallicrafters precision construction and expert craftsmanship—known the world over. Use of high-quality components assures years of dependable performance. Beautifully styled steel cabinet is attractively finished in gray and black with brushed chrome trim.

Size: 8½x18¾x11" deep. For operation from 105-125 volts, 50-60 cycles AC. Less speaker (see R-46B matching speaker at left). Shpg. wt., 36 lbs.

98 SZ 714. NET **149.95**

NC-98

NC-125

FAMOUS NATIONAL RECEIVERS

SW-54

NC-88

NATIONAL NC-98 RECEIVER

One of the most sensational values ever offered in a communications receiver! The outstanding NC-98 includes an array of features never expected in a unit priced so low. Has crystal filter, S meter, separate HF oscillator, plus other features usually found only in higher priced equipment. Unusual stability, selectivity and sensitivity. Tunes from 550 kc to 40 mc in four ranges; provides complete broadcast band as well as shortwave coverage. Calibrated bandspread for 80-75, 40, 20, 15 and 11-10 meter Ham bands.

Features include: tuned RF stage for high sensitivity; antenna trimmer to permit peaking of RF stage for maximum gain at any portion of tuning range; one non-crystal and two crystal selectivity positions; crystal phasing; noise limiter; RF gain control and tone control. BFO with pitch control for CW reception. Provision for headphones. Crystal phono input for record reproduction.

Tubes used: 6BA6, 6BE6, 6C4, 2—6BD6, 6AL5, 12AX7, 6AQ5; 5Y3GT rectifier. Accessory socket on rear apron takes NFM-83-50 NBFM adapter (listed under HRO-Sixty next page) and remote standby-receive switch. Edge-lighted lucite dials. Gray cabinet, 8¾" high x 16½" wide x 10½" deep. For 105-125 volts, 50-60 cycle AC. Less speaker (listed below). Shpg. wt., 30 lbs.

98 SZ 732. NET **149.95**

MODEL NC-98SW. Same deluxe features, design and construction as above, but bandspread dial is calibrated for 17, 19, 25, 31 and 49 meter international shortwave broadcast bands.

98 SZ 720. NET **149.95**

MODEL NC-98TS SPEAKER. Designed for use with above models. 6" PM speaker in matching cabinet. Shpg. wt., 8 lbs.

98 SX 722. NET **11.00**

NATIONAL NC-88 "WORLD MASTER"

The "World Master" offers famous National performance at moderate cost. Brings in stations from every corner of the world. For SWL's and Amateurs. Phone and CW reception. Covers 540 kc to 40 mc in 4 ranges for reception of all Amateur bands from 160 to 10 meters, standard broadcast, police, aircraft, ships-at-sea, and other services. Has electrical bandspread calibrated for 80-75, 40, 20, 15 and 11-10 meter Amateur bands; also logging scale.

CIRCUIT: Highly stable separate local oscillator. Tuned RF stage and 2 IF stages give high sensitivity and selectivity for communications and general shortwave listening. Bandwidth is 11 kc at 20 db down. Series-valve type automatic noise limiter effectively reduces ignition and similar interference.

TUBE COMPLEMENT: 6BA6 RF amplifier, 6BE6 mixer, 6C4 local oscillator, 2—6BD6 IF amplifiers, 6AL5 2nd detector and AVC limiter, 12AX7 1st audio and BFO, 6AQ5 audio output; 5Y3GT rectifier.

CONTROLS: Main tuning, bandspread tuning, band selector, sensitivity, off-on-volume, receive-standby switch, ANL off-on switch, tone switch (low-high), BFO pitch, antenna trimmer, and CW-AM switch.

FEATURES: Input jack on rear for crystal phono pickup. Built-in 5" speaker provides crisp, full-toned record reproduction. Tone control with settings for high or low frequency attenuation. Amplifier delivers 1.5 watts power output. Phone jack on the front panel for headphone reception. Jack can also be used for external speaker. Dial scales are each 6" wide, easy-to-read, edge-illuminated lucite. Steel cabinet finished in gray hammertone enamel. Hinged cover provides easy access to top of chassis. Size: 8¾" high, 16½" wide and 10½" deep. For operation from 105-125 volts, 50-60 cycle AC. Shpg. wt., 30 lbs.

98 SZ 731. NET **119.95**

POPULAR LOW-COST NATIONAL SW-54 RECEIVER

Smart, ultra-compact communications receiver at low cost. Perfect for the beginning Amateur or short wave listener. A real DX-getter! Provides sensitive, selective reception.

WIDE-RANGE COVERAGE. Offers full coverage of the frequencies between 540 kc and 30 mc. Receives standard AM broadcasts, police, foreign and domestic shortwave broadcasts, ships, aircraft and Amateur signals. Single knob drives main and bandspread dials. All important channels are clearly marked on the well illuminated main tuning dial. Bandspread dial simplifies tuning of the crowded shortwave stations; has 0-100 scale which makes it easy to reset dial or log setting for stations received with high accuracy. Receives voice or code.

FEATURES: Sensitive and selective modern superhet circuit employs miniature tubes: 12BE6 converter, 12BA6 CW oscillator-IF amplifier, 12AV6 2nd detector-1st audio amplifier and automatic volume control, 50C5 audio output; 35Z5 rectifier. Has built-in 5" PM speaker; pin jacks for headphone reception.

CONTROLS: Main tuning, bandspread tuning, AC off-on switch, volume, receive-standby switch, bandswitch, AM-CW switch, and speaker-headphones switch. National gray enamel finish steel cabinet is 7" high, 11" wide and 7" deep. With instructions. For operation from 105-125 volts, 50-60 cycle AC or DC. Shpg. wt., 15 lbs.

97 SX 711. NET **49.95**

NATIONAL NC-125 RECEIVER

The NC-125 has attained tremendous popularity among Amateurs and SWL's who want real communications receiver performance. Covers 550 kc to 36 mc in 4 ranges— with calibrated electrical bandspread on all Amateur bands.

INCORPORATES SIMPLIFIED SELECT-O-JECT CIRCUIT. Filter circuit gives 45 db rejection, variable over audio range of 100-12,000 cycles. Overall boost for CW operation is 38 db.

EXCELLENT FREQUENCY RESPONSE. Overall response is excellent for communications use, with sharp attenuation above 2,500 cycles. Audio amplifier is essentially flat to 10,000 cycles. Excellent for use as phono amplifier. Has phono jack and delivers 3 watts of audio output. Separate audio and RF gain controls.

FAMOUS NATIONAL ENGINEERING. Sensitivity is 2 microvolts for 10 db signal to noise ratio on 10 meter band. "S" meter reads S9 on 50 microvolt signal. Modern features include AVC, ANL, antenna trimmer, variable CW pitch control, accessory socket crystal or ceramic phono, voltage regulator for stabilized oscillator, and headphone jack. Power socket on rear takes batteries for portable or emergency service.

CALIBRATED BANDSPREAD. Covers 550 kc to 36 mc in four ranges with calibrated electrical bandspread on Amateur bands, including the 15-meter band. Tube complement: 6SG7 RF amplifier; 6SB7Y converter; two 6SG7 IF amplifiers; 6H6 detector, AVC, and ANL; 6SL7 BFO and first audio amplifier; two 6SL7 Select-O-Ject audio; 6V6GT audio amplifier. Rectifier is 5Y3GT; VR-150 voltage regulator. Gray enamel cabinet measures 16½x11¾x8¼". For operation from 105-125 volts, 50-60 cycles AC. Less speaker (see below). Shpg. wt., 36 lbs.

97 SZ 727. NET **199.95**

NC-125TS SPEAKER. High-quality 6" PM speaker. Gray enamel matching cabinet. With cord and connectors. Wt., 10 lbs.

97 SX 728. NET **11.00**

Letter Z in Stock Number Indicates Express Shipment Only

NC-183D

HQ-140X

HRO-60

PRO-310

NATIONAL NC-183D

Double-conversion communications receiver superseding the renowned NC-183. Features razor-sharp selectivity, extreme sensitivity and "solid-as-a-rock" stability. Tunes from 540 kc to 31 mc and 47-55 mc in 5 ranges; calibrated electrical bandspread for 80-75, 40, 20, 15, 11-10 and 6 meter Amateur bands.

RAZOR-SHARP SELECTIVITY. Double-conversion. 3 IF stages and 16 tuned circuits from 4.4-55 mc. Single-conversion and 12 tuned IF circuits below 4.4 mc. Six selectivity positions; 5 crystal and 1 non-crystal. Selectivity: sharpest position, 80 cycles at 6 db and 7.0 kc at 60 db. Image rejection: 55 db at 10 meters.

EXTREME SENSITIVITY. Better than 1.5 microvolt sensitivity for 6 db signal-to-noise ratio throughout entire tuning range.

ADVANCED CIRCUIT. Tubes: 2—6BA6 RF, 6BE6 1st converter, 6BE6 2nd converter, 3—6BA6 IF, 6AL5 2nd detector-AVC, 6AH6 AVC amp., 6SJ7 BFO, 6AL5 noise limiter, 6SJ7 1st audio, 6SN7 phase inverter, 2—6V6GT/G output; plus OB2 voltage regulator and 5U4G rectifier. Push-pull audio output stage delivers a very clean 8 watts. Has edge-illuminated lucite dials; accessory socket (*takes NFM-83-50 adapter for narrow-band FM reception; listed under HRO-Sixty below*); auxiliary power socket; phono input; headphone jack and output for 500 or 8 ohm speakers. In gray cabinet, 10¼x19¾x16¾". For 110-120 or 220-240 volts, 50-60 cycles AC. Less speaker. Shpg. wt., 65 lbs.

97 SZ 666. NET **399.50**

NC-183DTS. 10" PM speaker in metal cabinet. Wt., 12 lbs.

97 SX 663. NET **16.00**

NATIONAL HRO-SIXTY

The latest version of the great HRO receivers—up-to-the-minute with dual-conversion! The new HRO-Sixty provides virtually image-free reception, has superb "weak signal" sensitivity, remarkable selectivity, plus extreme stability.

TUNING RANGE. Plug-in coil units supplied, provide general coverage from 1.7-30 mc or bandspread on 80, 40, 20 and 11-10 meter Amateur bands. Famous National dial mechanism.

OUTSTANDING CIRCUIT. Dual-conversion above 7 mc; 2 RF stages. Sensitivity: 1 μv. or better at 6 db signal-to-noise ratio. IF frequencies are 1990 kc and 456 kc. 12 permeability-tuned IF circuits plus 6-step crystal filter. Selectivity: from 80 cycles to 3.5 kc at 6 db. Current-regulated heaters in HF osc. and 1st converter; voltage-regulated HF osc., S-meter amp. and BFO; operation is drift-free after brief warm-up.

Features include: ANL with threshold control; S-meter; phono input; auxiliary power socket; accessory socket; provision for crystal calibrator and NBFM adapter; headphone jack; 8 and 500 ohm output. Tubes 2—6BA6 RF, 6BE6 mixer, 6C4 HF osc., 6BE6 2nd conv., 3—6SG7 IF, 6H6 det-AVC, 6H6 ANL, 6SJ7 audio, 6SN7 phase inv. and S-meter amp., 6SJ7 BFO and 2—6V6GT output; 5V4G rect., OB2 VR tube and 4H4C current regulator. Gray cabinet, 19¼x10½x17⅞". With coils, less speaker. For 115 or 230 volts, 50-60 cycles AC. Shpg. wt., 84 lbs.

97 SZ 722. NET **533.50**

HRO-60-TS. 10" Speaker. Matching gray cabinet. Shpg. wt., 10 lbs.

97 SX 721. NET **16.00**

97 S 717. HRO-60-XCU-2. 100/1000 kc crystal cal. NET **27.50**

97 S 719. NFM-83-50. NBFM Adapter. NET **26.75**

97 S 789. HRO-60-AC. 21.0-21.5 mc coil. NET **27.50**

98 S 048. HRO-60-E. 900-2050 kc coil. NET **27.50**

98 S 049. HRO-60-F. 480-960 kc coil. NET **27.50**

Hammarlund Receivers

HQ-140X COMMUNICATIONS RECEIVER

The HQ-140X communications receiver supersedes the renowned HQ-129X, retaining the features that have made the "HQ's" famous for quality and performance. Its high selectivity and first-rate electrical and mechanical stability make it an ideal receiver for Amateur operators as well as the avid shortwave listener.

Covers 540 kc to 31 mc in six ranges. Electrical bandspread is calibrated for the 80, 40, 20, 15 and 10 meter Amateur bands. Uses Hammarlund-patented crystal filter; provides extreme selectivity for high attenuation of adjacent interfering signals. Six selectivity positions: 3 phone crystal positions, 2 CW crystal positions and crystal "Off" position. Advanced-type series noise limiter has minimum effect on modulation. Antenna trimmer for peaking RF stage. Audio output, 3 watts. "S" meter. Antenna input for single-wire or balanced line. Tubes: 6BA6 RF, 6BE6 mixer, 6C4 oscillator, 3—6BA6 IF, 6AL5 2nd det-AVC-ANL 12AU7 BFO-audio, 6V6GT output; 5U4G rectifier and OC3/VR105 voltage regulator.

Two-tone gray cabinet, 11x20⅝x13½" deep. Less speaker (see below). For operation from 110-120 volts, 50-60 cycles, AC. Shpg. wt., 75 lbs.

98 SZ 766. NET **264.50**

HQ-140X. (RACK MODEL). As above, but for rack mounting. Less cabinet.

98 SZ 772. NET **274.50**

SPEAKER. 8" PM, in matching cabinet. Wt., 12 lbs.

97 SX 757. NET **14.50**

PRO-310 DUAL-CONVERSION RECEIVER

The Pro-310 offers every feature essential to an extremely high order of sensitivity, selectivity and stability; plus unusual operating ease. Provides continuous coverage of the frequencies from 540 kc to 34 mc in six ranges. Up-to-the-minute design with printed circuit RF section and sectionalized construction for compactness and stability.

PRECISION TUNING: Differential tuning system combines electrical and mechanical bandspread for extremely accurate logging. Bandspread effectively magnifies any 10% section of main dial ten times. Bandspread is readable to .02% (1 part in 5000).

DELUXE FEATURES: Rotary turret bandswitch for short leads in critical circuits. Two tuned RF circuits, one RF stage and dual conversion provide exceptionally high sensitivity and image rejection without amplification of noise. 1 microvolt CW signal produces a 10 to 1 signal-to-noise ratio. IFs at 1802 and 52 kc with crystal controlled second conversion oscillator for high stability. Normal and high level BFO output for CW and single side band reception. Other features include: 3-position selectivity switch—250, 1750, 3500 cps at 3 db down. Antenna trimmer permits peaking antenna for band in use. Highly effective series noise limiter.

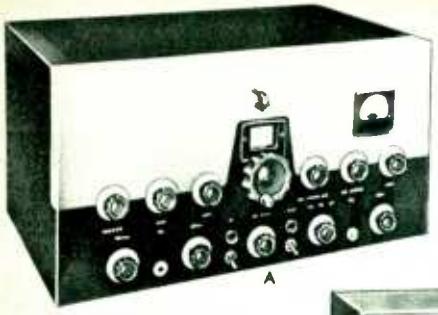
TUBES: 3—6BA6, 2—6BE6, 2—6C4, 2—6AL5, 12AX7, 6V6GT/G, 6AN8; 5U4G rectifier and OB2 voltage regulator.

Modern cabinet has slant panel with wrist-high placement of knobs. Smooth black finish with gold trim. Size: 8¾x17⅞x15½". For 105-115 volts, 50-60 cycle AC. Shpg. wt., 45 lbs.

98 SZ 770. NET **595.00**

MATCHING SPEAKER. 6½" PM in matching cabinet. Size: 7¼x11x7¼". Shpg. wt., 4½ lbs.

98 S 771. NET **18.50**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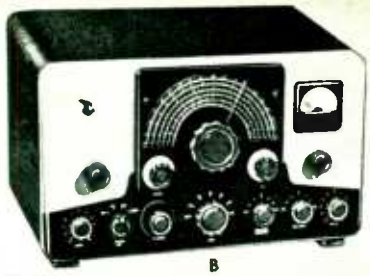
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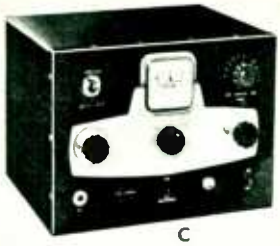
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Johnson Amateur Equipment


D


E


F

Fig. A. 240-102 VIKING II TRANSMITTER KIT. 135 watts input on phone; 180 on CW. Covers 160, 80, 40, 20, 15 and 11-10 meters. Provision for 10 crystals and external VFO. TVI-proofed: Copper-plated steel cabinet with phosphor-bronze bonding strip; filters with low-inductance chokes and disc ceramics; filter in AC line; Pi network provides 30 db 2nd harmonic attenuation. Has 6AU6 crystal osc., 6AQ5 buffer doubler, 2 parallel 6146 final, 6AU6 speech, 6AU6 driver, PP 807's mod.; 6AL5 bias rect., 2—5R4GY HV rect., 5V4G LV rect., meter with switching circuit. Takes crystal or dynamic mike. 11⅜x15x21". With tubes; less crystal, key and mike. For 105-125 v., 50-60 cycle AC. Shpg. wt., 91 lbs.

98 SZ 057. NET **279.50**

240-102-2. As above, but wired.

98 SZ 058. NET **337.00**

MODEL 240-102-15 VIKING II-CD. Civil Defense version of Model 240-102-2. FDCA approved. Factory wired and tested. Less crystal, key and microphone.

99 SZ 038. NET **398.00**

Fig. B. 240-161 "RANGER" TRANSMITTER KIT. Latest model of this 7-band, phone-CW transmitter. Includes extremely effective TVI proofing. Highly stable, built in VFO with large, accurately calibrated dial; 9" of dial scale on 10 meters; and sequence grid-block keying. 75-watt CW and 65-watt phone input. Timed-sequence, grid-block CW keying. 100% AM modulation. Pi-network output matches 50 to 500 ohm lines. Bandswitching on 160, 80, 40, 20, 15, 11 and 10 meters. Meter switching. Tube complement: 6AU6 VFO, 6CL6 crystal osc., 6CL6 buffer, 6146 final amp., 6AQ5 clamper, 12AX7 speech amp., 12AU7 audio driver, 2—1614 push-pull mod.; OA2 reg., 6AX5 and 5R4GY rectifiers. Less crystal, key and mike. Size: 15x11¹¹⁄₁₆x9". For 105-125 v. 50-60 cycle AC. Wt., 54 lbs.

99 SZ 037. NET **214.50**

240-161-2. As above, but wired.

99 SZ 036. NET **293.00**

Fig. C. 240-181-1. "ADVENTURER" TRANSMITTER KIT. Here is the ideal rig for the Novice, as well as confirmed "Brass Pounders" who want an ultra-compact low-power CW transmitter. 50 watts input to 807. Has 6AG7 oscillator and 5U4G rectifier. Features: Bandswitching on 80, 40, 20, 15, and 11-10 meters; grid and plate metering; crystal and VFO inputs; shielding and filtering for suppression of TVI; Pi output; and heavy-duty power supply. Pi output permits use with even the simplest antenna. Receptacle for using built-in power supply (450 v. DC at 150 ma and 6.3 v. at 2 amps) with other equipment. Oscillator and final keyed simultaneously. Keying is crisp and clean. Meter switch selects 807 grid or plate. Controls: Oscillator tuning, band selector, plate tuning, and output coupling. Jacks for key, VFO and crystal. Coaxial antenna connector. With tubes and instructions. Less crystal and key. Size: 7⅜x10⅜x8⅛". For 105-125 v., 50-60 cycle AC. Shpg. wt., 15 lbs.

99 SZ 024. NET **54.95**

Fig. D. 240-141 MOBILE TRANSMITTER KIT. Up to 60 watts input on 75, 40, 20, 15, 11-10 meter bands. Bandswitching; gang tuning; 4 position crystal selector with additional position for external VFO (see Fig. H on next page); provision for push-to-talk operation. 52 ohm output. Meter with switching circuit indicates current at osc. plate, buffer plate, final grid, final plate and modulator plates. "Transmit-Receive-Tune" switch controls entire mobile installation—mutes receiver. Tubes: 6BH6 osc., 6AQ5 buffer-doubler, 807 final, 6BH6 speech, 6BH6 driver and PP 807's mod. Requires: 300-600 v. DC at 200-240 ma and 6.3 v. at 4 amps. 7⅛x6⅞x10⁵⁄₁₆". With all parts; less tubes and mike. Instructions supplied are completely illustrated for simplified assembly. Control wiring specifications and antenna suggestions are included. Can be wired for operation from either 6-volt or 12-volt systems. Shpg. wt., 16 lbs.

98 S 056. NET **99.50**

Fig. E. 250-23 "MATCHBOX" ANTENNA COUPLER. Performs all transmission line matching and switching functions required in low or medium power Amateur stations. For Amateur bands from 3.5-30 mc. Matches balanced antennas from 25 to 1200 ohms and unbalanced or single wire antennas from 25 to 3000 ohms. Nominal input impedance 52 ohms, rated at 250 watts. A built-in transmit/receive relay grounds receiver antenna terminals when in "transmit" position. Independent adjustment for matching antenna to receiver input. Has RF probe to actuate CW keying monitor. Coaxial input and seven-terminal receiver and relay strip. Fully shielded. Maroon and gray. 9⅞x10½x7". Shpg. wt., 7 lbs.

99 SX 026. NET **49.85**

Fig. F. 240-122 VFO KIT. An expertly engineered, very stable VFO. For use with Johnson Viking, or any other transmitter. For 160, 80, 40, 20, 15 and 11-10 meters. Output frequency ranges: 1.75-2 mc for 160-40 meters; 7-7.425 mc for 40-10 meters; 6.7-7 mc for 11 meters. Output: 5.5 to 8 volts. Excellent isolation between grid and output circuit and temperature compensation. Keys cleanly for "break-in" operation. Requires 250-300 volts DC at 15 ma, and 6.3 volts at .3 amps. With 6AU6, OA2. Size. 7x6⅞x6⁹⁄₁₆". Shpg. wt., 7 lbs.

99 S 013. NET **45.50**

240-122-2. As above, but wired.

99 SX 014. NET **69.75**

DYNAMOTOR BASE ASSEMBLY KITS. Mounting for PE-103's or units below. With dropping resistor for low voltage stages; fuse holders and receptacles. Size: 2½x7⅛x7⅛". Shpg. wt., 4 lbs.

99 S 030. 239-101, 6 volt. **NET** **16.50**

99 S 031. 239-103, 12 volt. **NET** **17.40**

CARTER GENEMOTORS. For use with Johnson mobile transmitter kit. Output: 500 v. DC at 200 ma. Size: 4¾x3½x7⅛" long. Shpg. wt., 12 lbs.

99 S 032. Type 520AS for 6 v. **NET** **51.45**

99 S 033. Type 520BS for 12 v. **NET** **52.18**

New Viking "Kilowatt" Amplifier and Accessories

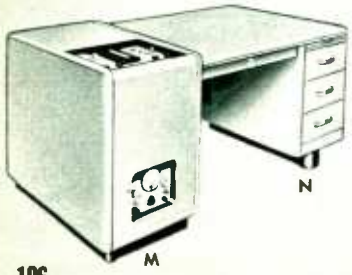
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Fig. M. VIKING "KILOWATT" POWER AMPLIFIER. New, superbly engineered 1000-watt power amplifier. Ready for use with CW exciter, AM audio driver, or SSB exciter. Single switch selects AM, CW or SSB operation. Continuous coverage from 3.5 to 30 mc; wide-range antenna matching. Mounted in pedestal with convenient desk-top controls. Excitation requirements: 30 watts RF; 15 watts audio for AM; 2-3 watts P.E.P. for SSB. Two 4-250A in RF amplifier; two 810 modulators. 29½" H, 19¾"W, 32⅞"D. Wired and lab-tested. *Write for brochure.* For 210-240 v., 50-60 cycle AC. Shpg. wt., 400 lbs.

99 SZ 035. NET **1595.00**

Fig. N. 251-101 MATCHING DESK TOP AND 3-DRAWER PEDESTAL. Specify right or left hand pedestal. Width (with amplifier) 63½". *Net, f.o.b. Chicago or Corry, Pa., whichever is nearer.* Shpg. wt., 155 lbs.

99 SZ 034. NET **123.50**

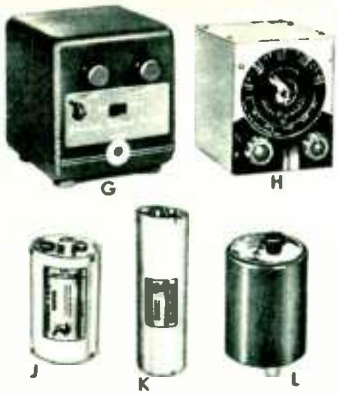
250-29 POWER REDUCER. Permits using 100-150 watt transmitters to excite Viking "Kilowatt." 3½x2½" dia. 1 lb.

99 S 015. NET **13.95**

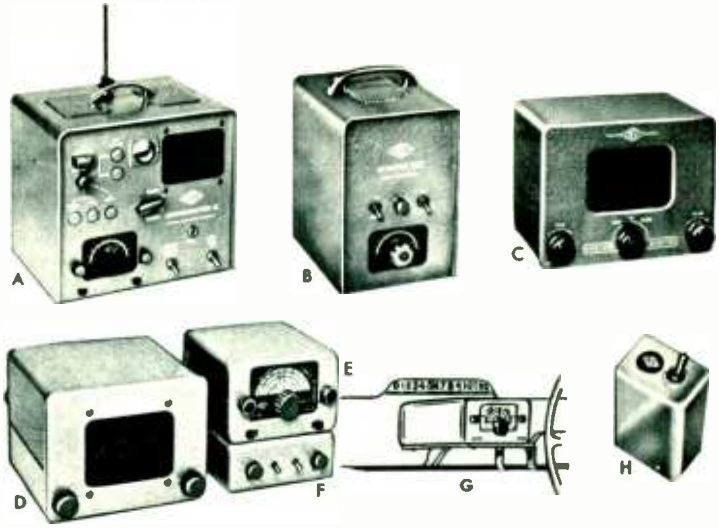
KILOWATT "MATCHBOX" COUPLER. New, bandswitching antenna coupler. For balanced and unbalanced loads at kilowatt. 10⅞x17¼x12⅛". Wt., 27 lbs.

99 SZ 016. NET **124.50**

See Next Page for Additional E. F. Johnson Products



Johnson Equipment



Gonset Communications Equipment

Fig. G. 250-25 SIGNAL SENTRY. Covers all bands. No tuning. For convenient monitoring of either phone or CW transmissions. Consists of audio oscillator keyed by RF, detector and gated amplifier. Can also be used as code practice oscillator. Installation is simple. Plug provided fits headphone jack of receiver; headphones plug into jack on Signal Sentry. RF probe coupled loosely to transmitter provides signal. Mutes receiver output. Requires: 250 v. DC @ 5 ma. 6.3 v. @ .6 amp. Size. 3⅞x3⅝x3⅜". Uses 12AX7 and 12AU7. Unit is supplied factory wired and tested and complete with tubes. Full instructions and all cables and connectors for installation are included. Shpg. wt., 3 lbs.
99 S 017. NET.....18.95

Fig. H. 240-152 MOBILE VFO KIT. Compact VFO. Very stable. Edge lighted dial accurately calibrated for 3.75-4.0 mc., 7.05-7.45 mc., 14.1-14.7 mc., 21.2-21.7 mc., 28.2-29.8 mc. Vernier tuning ratio. 7 to 1. 6BH6 osc., 6BH6 amp.-multiplier; OA2 VR. Requires: 6.3 v. at .3 amps. or 12.6 v. at .15 amps. and 250-300 v. DC at 20 ma. With cable, connectors, all parts and instructions; plus tubes. Size: 4x4¼x5". Wt., 3 lbs.
99 S 018. NET.....33.95

240-152-2. As above, but wired.
99 S 019. NET.....49.95

Fig. J. 250-24 STANDING WAVE RATIO BRIDGE. A valuable aid in the adjustment of antenna coupler and transmission line and for maximum efficiency. Helps minimize standing wave ratio to assure effective operation of low-pass filter. 52 ohm input (can be changed by replacing resistor). For use with 0-1 ma meters (not supplied). 2⅜x 4½". Wt., 1 lb.
99 S 028. NET.....9.75

Fig. K. 250-20 LOW-PASS FILTER. 4 shielded sections. For Viking I and II or any other Amateur transmitter. Handles 1 kw. 100%-modulated. 75 db or more attenuation of harmonics above 54 mc. Teflon insulated fixed capacitors. Coax connectors. Supplied completely wired and pretuned. Impedance: 52 ohms. 2¼" diameter x 9¾". Shpg. wt., 3 lbs.
98 S 055. NET.....13.50

Fig. L. 250-26 "WHIPLOAD 6." High-efficiency, bandswitching mobile antenna loading coil. For bandswitching on 75, 40, 20, 15, 11 and 10 meters. Variable capacitor shunts coil on 75 meters for tuning entire band. Dial scale for accurate calibration. High "Q" airwound coil with polystyrene support strips. Fiberglass housing protects unit against shock and exposure without sacrificing high "Q" and efficiency. For use with 10 meter whips. With mounting hardware and complete installation instructions. Shpg. wt., 3 lbs.
98 C 396. NET.....19.50

COMMUNICATOR TRANSCEIVER

Fig. A. MODEL 3025 COMMUNICATOR. Complete 2-meter station in one portable case. Operates from power line or storage battery. Adjustable squelch, phone jack, dial light switch. Transmitter: AM; 5-7 watts output; crystal or carbon mike; uses 8 mc crystals. Receiver: Tunes 144-148.3 mc; cascode RF stage; 3 IF stages; highly effective noise limiter; PM speaker. With 19" whip for receiving and transmitting. Less mike and crystal. Gray steel cabinet. 9¼x 10⁵⁄₁₆x7¹³⁄₁₆". For 110-120 v., 50-60 cycle AC or 6 v. DC. Shpg. wt., 24 lbs.
83 SZ 820. NET.....229.50

MODEL 3057. As above, but for 110-120 v. AC or 12 v. DC.
83 SZ 828. NET.....229.50

MODEL 3049. Same as Model 3025, but for 6 meters. Uses 8 mc crystals.
83 SZ 830. NET.....229.50

2-METER VFO-AUDIO PREAMPLIFIER

Fig. B. 3024 VFO-AUDIO PREAMPLIFIER. 2-meter VFO with self-contained, voltage regulated power supply. For use with either 3025 or 3057 Communicator, above, or similar 2-meter rigs. Highly stable. Clapp type oscillator circuit. Dial has 0 to 100 logging scale in addition to 2-meter band calibration. Output at 24 mc with special filter circuits to minimize spurious radiations. Output is plugged into crystal socket of 3025 Communicator and is actuated by main transmit-receiver switch. "Spotting" switch for "zeroing in" on received signal. Built-in preamp provides added gain for increased pickup with crystal microphone. For 110-120 v., 50-60 cycle AC. An outlet, controlled by Off-On switch, supplies AC power for the Communicator. Size: 9¼x 6⁵⁄₁₆x7¹³⁄₁₆". Wt., 10 lbs.
83 SX 819. NET.....84.50

MONITOR & CODE PRACTICE OSCILLATOR

Fig. C. MODEL 3022 MONITONE. Combination code practice oscillator and phone or CW monitor. An excellent unit for the beginner and a valuable station accessory. Transformer-type power supply. Has built-in speaker and provision for headphones. Separate tone and volume controls. Beginners can use the "Monitone" for code practice while learning; and later in the station as a keying or speech monitor. Uses length of wire as RF pickup link. The RF it picks up on CW is rectified and operates a built-in audio oscillator. Size. 5¼x6¾x4". For operation from 110-120 volts 50-60 cycle AC. Shpg. wt., 4 lbs.
83 S 829. NET.....19.50

MOBILE CONVERTERS

Fig. E. 3030 "SUPER SIX." Mobile converter covers 75 to 10 meter Ham bands including 19 and 49 meter SW bands. Excellent signal-to-noise ratio. Controls, Antenna Trimmer, On-Off, Band Selector, RF gain control, Oscillator Compensator and hi-lo impedance antenna switch on rear panel. Output, 1430 kc. Complete with cables. Gray metal case. 5¼x3½x5¼". Requires 80-135 volts DC at 10 ma. 6 volts at .9 amp. Shpg. wt., 5 lbs.
84 S 913. NET.....52.50

Fig. E. 3002 3-30 MC CONVERTER. General-purpose mobile converter. Offers continuous coverage from 3 to 30 mc in 3 ranges. Has high sensitivity on short whip antenna. Excellent for all-band mobile installations. Power requirements: 10 ma at 135 volts and 6 volts DC at 0.75 amp. 1500 kc output. With cables, and instructions. Gray case. 5¼x3½x5¼". Shpg. wt., 5 lbs.
84 S 954. NET.....44.75

Fig. D & F. 3041 MOBILE SUPER-CEIVER. IF-audio strip for use with "Super 6" or other converter for high selectivity. Built-in vibrator power supply furnishes voltage-regulated power to converter and BFO. Xtal control, 8 tuned circuits (262 kc), adjustable squelch, BFO, AF-RF controls, noise clipper and speaker, 1430 kc input. 6¾x5¼x6⅞". Control head 2" high. With crystal, cables and power supply. Supplied wired for 6 volt DC operation, but can quickly and easily be converted for 12 volt DC use. Shpg. wt., 8 lbs.
84 S 914. NET.....119.50

FM TUNERS AND ACCESSORIES

Fig. E. FM TUNERS. Compact tuners for mobile or stationary installations. Squelch circuit. Easily connected to AM receiver. Require 14 ma. 150 v. DC; 1.8 A. 6.3 v. 5¼x3½x5¼". *Less squelch. Supplied with complete instructions. Shpg. wt., 5 lbs.
83 S 822. Type 3009. 30-40 mc.
83 S 823. Type 3010. 40-50 mc.
84 S 925.* Type 3011. 88-108 mc.
83 S 824. Type 3012. 152-162 mc.
NET EACH.....69.50

Fig. D. 3034 AUDIO AMPLIFIER, POWER SUPPLY AND SPEAKER. For any Gonset tuner. For 6 volt DC. 6¼x7x6¼". Wt., 8 lbs.
83 S 826. NET.....44.50

Fig. G. TYPE 3006 STEERING POST MOUNTING BRACKET. For neat, convenient mounting all Gonset converters and tuners. Can be mounted on either left or right side of steering post. Shpg. wt., 1 lb.
84 S 994. Type 3006. **NET.....3.90**

Fig. H. TYPE 3001 CLIPPER NOISE LIMITER. For reduction of interference. Greatly reduces ignition and similar types of interference having comparatively low repetition rates and short pulse lengths. Easily installed on any receiver having conventional diode second detector circuit. Size: 2x4x1½". Complete with 9006 tube, cables and instructions. Shpg. wt., 2 lbs.
60 S 596. NET.....9.25

Knight VFO Kit

The Knight VFO kit offers high-quality performance at incomparably low cost. It's a complete VFO with built-in, transformer-type power supply. Features extremely high stability, excellent oscillator keying characteristic for fast break-in, highly effective TVI suppression, easy tuning, and ultra-compact construction. Simple to use—plugs into crystal socket of transmitter. Calibrated for 80, 40, 20, 15, 11 and 10 meters; output on 80 and 40. Plenty of output to excite oscillator stage of any transmitter.

Frequency stability is assured by careful circuitry and rigid mechanical construction. Drift-free, series-tuned Clapp oscillator employs 1% silver mica capacitors. Tubes can be changed without affecting output frequency. Separate mounting of the power supply chassis, away from the oscillator chassis, keeps the heat from the frequency-determining components. Ample ventilation.

Excellent voltage-regulation maintains stable output, unaffected by any changes in the line voltage. Rugged mechanical construction—oscillator chassis is flange-welded for rigidity. Heavy ceramic coil form, ceramic wafer-type bandswitch. Large band-spread dial and vernier drive mechanism contribute to ease of tuning.

Employs 6BH6 Clapp oscillator, 6BH6 buffer-doubler, 6X4 rectifier and OA2 voltage regulator. Calibrate-Standby-Transmit switch for "no swish" tuning. Extra switch contacts for operation of relays or other equipment.

Supplied with tubes and all other parts, plus clearly written instruction manual. 24-page manual includes step-by-step instructions, schematic diagram, and easy-to-follow pictorial wiring diagrams. Attractively styled gray and blue steel cabinet. Handy, compact size, 6x6x8¾". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.

83 S 725. NET **27.50**

Harvey-Wells Bandmasters

Fig. A. MODEL T-90 90 WATT TRANSMITTER. New, ultra-compact, bandswitching and TVI-suppressed, 70-watt AM phone and 90-watt CW transmitter. Has built-in VFO using stable, voltage-regulated and temperature compensated circuits. For 80, 40, 20, 15, 11 and 10 meters. Choice of break-in or multiplier keying. Provides VFO tuning without carrier on. Selector switch allows metering of PA grid, PA cathode and modulator currents. Pi antenna—matching network. Clamp tube control of final amplifier screen voltage. Takes carbon or crystal mike; provision for push-to-talk operation. Size: 6¾x12⅜x10½" deep. Less power supply, crystals, key and mike. Shpg. wt., 18 lbs.

99 SX 041. NET **179.50**

MODEL APS/T-90 AC POWER SUPPLY. For 110-120 v., 50-60 cycle AC operation. Shpg. wt., 35 lbs.

99 SZ 043. NET **79.50**

MODEL VPS/T-90 MOBILE POWER SUPPLY. Vibrator supply; 6 or 12-volt DC input. Shpg. wt., 21 lbs.

99 SZ 044. NET **89.50**

Fig. B. R-9°9-TUBE RECEIVER. Companion unit to the T-90 transmitter, above. Use together to make up a complete Amateur station. For 80, 40, 20, 15, 11 and 10 meter Amateur bands. Double conversion on all bands. 3 tuned circuits on each band in RF section. All coils slug-tuned for high "Q". Minimum frequency drift for phone or CW operation assured by stabilized HF oscillators and BFO. Built-in power supply. Less speaker; see below. 6¾x12⅜x10½". For 110-120 v., 50-60 cycle AC. Wt., 18 lbs.

99 SX 042. NET **159.50**

MODEL VPS-R9 MOBILE POWER SUPPLY. For 6 or 12-volt use. Shpg. wt., 12 lbs.

99 SX 045. NET **30.50**

MODEL FS-1 MATCHING SPEAKER. For fixed use. 12¼x5¾x7¾". Shpg. wt., 5 lbs.

99 SX 046. NET **11.50**

MODEL MS-1 MATCHING SPEAKER. For mobile use. 8¼x6½x4⅜". Wt., 3 lbs.

99 SX 047. NET **8.25**

Fig. C. BANDMASTER DELUXE. Compact all-band, 50-watt phone-CW transmitter. Features instant bandswitching, 80 through 2 meters. No coil changing. 100% break-in operation on CW and a high-activity oscillator. Pi-section tank matches loads from 50 to 600 ohms (link for 2 meters). Has DC milliammeter with 0-10 and 0-200 scales. Panel frequency calibration chart. Uses APS-50 power supply described below. Tubes: 6AQ5 osc., 6AQ5 multiplier, 807 final. Speech amplifier for crystal mike has 2—6AU6's; 1—12AU7 phase inverter; 2—6L6's modulator. Less power supply. Attractive case finished in black. Size, 13¼x9x7½". Less crystal and microphone. Shpg. wt., 20 lbs.

97 SZ 792. NET **137.50**

BANDMASTER SR. 50-watt phone-CW transmitter. Same as Bandmaster Deluxe, but modulator does not have high-gain speech amplifier. Requires single-button carbon microphone. Supplied with tubes and operating instructions; less crystal and power supply (use APS-50 power supply described below). Shpg. wt., 20 lbs.

97 SZ 791. NET **111.50**

Fig. D. BANDMASTER VFO. Designed specifically for Bandmasters. Covers 80/75, 40, 20, 15, 11/10 meters. Power requirements: 6.3 v. at 0.65 amp., 300 v. at 30 ma. Sloping front panel with slide-rule dial. Uses 6AG7 and OB2 regulator. Size, 9x11½x4". Shpg. wt., 9 lbs.

98 SX 043. NET **47.50**

Fig. E. APS-50 AC POWER PACK. For use with Bandmaster transmitters. Delivers 425 volts of well-filtered DC at 275 ma; 6.3 volts at 4 amps. With two 5U4G rectifiers. For 105-125 volts, 50-60 cycle AC. 11x6⅞x 18¾". Shpg. wt., 27 lbs.

97 SZ 698. NET **39.50**

Fig. F. REMOTE CONTROL PANEL. For mobile Bandmaster installation with transmitter mounted in car trunk. Complete with 25' microphone cable and 25' power cable with matching plugs and spade terminals. Size, 5½" long x 2" high. Shpg. wt., 5 lbs.

98 S 063. NET **22.50**

Sonar 35-Watt Marine Radiotelephone

SONAFONE M35W. Portable, crystal-controlled, marine radiotelephone. This extremely reliable equipment greatly adds to the safety of sailing any vessel. Range 25-150 miles. 35 watts input. Can also be used as 17-watt PA amplifier. Covers 5 channels plus the broadcast band—2 for ship-to-ship, 2 for ship-to-shore and the emergency frequency, 2182 kc. Features instantaneous push-to-talk, built-in noise limiter, modulator and RF indicator. Has low-pass filters for over 60 db attenuation of harmonics. Excellent audio intelligibility is assured by the use of high-level speech clipping. Transmitting crystal and matching receiving crystal supplied for the emergency frequency and a ship-to-ship channel. *Crystals for other frequencies available on special order at $10.00 per pair.* FCC permit easily obtained. With self-contained 6-volt rechargeable battery, antenna and mike. Ready to use—no installation. Mahogany marine-plywood case. 12x7¼x12½". Shpg. wt., 40 lbs.

83 SZ 836. NET **339.50**

TELEPHONE HANDSET. For above. Shpg. wt., 2 lbs.

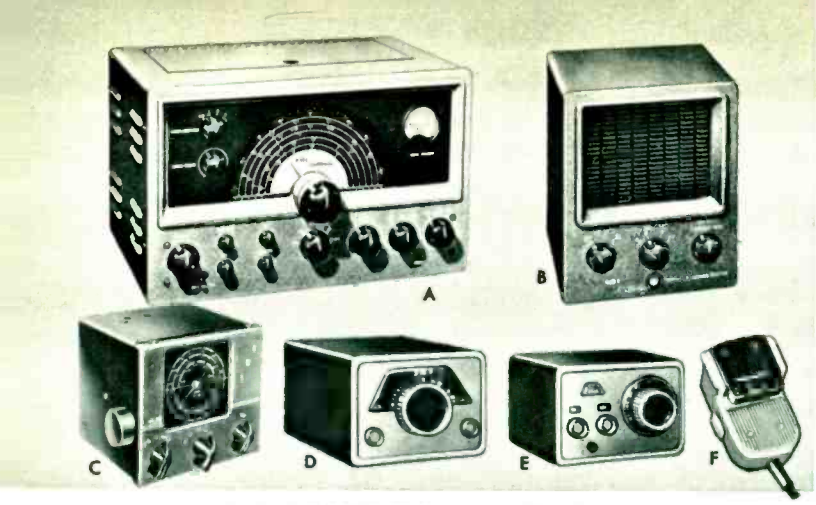
83 S 837. NET **18.00**

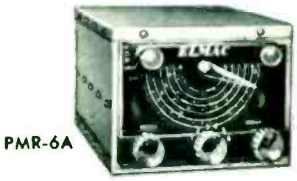
6 VOLT CHARGER. Recharges 6 volt battery from 110-120 v. AC. Shpg. wt., 5 lbs.

83 S 838. NET **19.95**

ZIPPER BAG. Waterproof canvas bag for Sonafone. Shpg. wt., 1½ lbs.

83 S 840. NET **3.95**





Latest RME E-V Amateur Equipment

Fig. A—MODEL 4300 RECEIVER

New Amateur receiver with provision for SSB adapter. (See Model 4301 below.) Many deluxe features usually found only in higher-priced receivers. Extremely high sensitivity, selectivity and ease of tuning. Choice of 4 positions of selectivity, bandwidth at 60 db down is 14.3 kc. High sensitivity of 2 microvolts for 10 db signal-to-noise ratio. Excellent image rejection. Crystal filter circuit with phasing control provides an extremely high order of selectivity. Calibrated "S" meter.

Specifically designed for Amateur communications. Covers all Amateur bands, 160-10 meters. Ranges: 1.7 to 2.03 mc; 3.48 to 4.08 mc; 6.9 to 7.32 mc; 13.8 to 14.55 mc; 20.88 to 21.57 mc; 26.9 to 29.9 mc. Temperature-compensated. Drift only .01% for first 20 minutes with practically zero drift after warm-up. Rugged mechanical construction. Heavy, welded steel chassis. Triple-spaced tuning capacitor.

Smooth tuning action. Large 8½" evenly graduated dial with differential, ball planetary type tuning mechanism. Concentric knob provides choice of 50:1 or 1:1 ratios BFO pitch control and control for BFO injection voltage. Front panel controls for calibration and RF gain. Also has S meter adjustment and antenna trimmer for peaking RF stage for different antennas. Two coaxial jacks for SSB adapter and 4-ohm speaker terminals at rear of chassis. Connections provided for doublet and Marconi-type antennas. Transmitter relay and "break-in" terminals.

Tubes: 2—6CB6, 2—6U8, 6T8, 6AQ5; SY3 rectifier and OA2 voltage regulator. Less speaker. Sturdy metal case with rounded corners; finished in attractive instrument-gray. Size, 10¼x16½x10¼". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 32 lbs.

99 SZ 022. NET 194.00

Fig. B—MODEL 4301 SIDEBAND DETECTO R-SELECTOR

New sideband detector-selector, for outstanding, easy-to-tune SSB reception. Plugs directly into RME 4300 receiver listed above. Easily connected to any other communications receiver. Inserts between IF and audio stages.

Has built-in power supply, extremely stable BFO, balanced detector circuit, accurate phase shift network, adder and subtractor circuits. Selector switch for upper or lower sideband, double sideband exalted carrier reception or normal receiver operation. Instantaneous switching between upper or lower sideband with 40 db attenuation of unwanted sideband.

Improves selectivity and SNR for SSB or standard AM and CW reception. 10¼x8½x10¼". Cables supplied for quick connection to RME 4300 receiver. For 110-120 v., 50-60 cycle. Shpg. wt., 16 lbs.

99 SX 023. NET 75.00

Fig. C—MODEL MC-55 CONVERTER

Five-band mobile converter for 80-75, 40, 20, 15, 11-10 meters. Ranges: 26.5-30 mc; 21-21.45 mc; 14-14.3 mc; 7-7.3 mc; 3.5-4 mc. Features high sensitivity, 1.25 microvolts on all bands. 4 tuned circuits in IF output stage assure excellent signal to noise ratio. Output frequency, 1550 kc.

Low power requirements, easily available from car radio. Requires only 25 ma. at 150-180 volts for plates. Heaters can be operated from 6 or 12 volts. 25-to-1 worm-gear dial assembly; large, edge-illuminated dial.

Built-in noise limiter, with cut-out switch for broadcast reception. Automatic antenna-switching. Uses 6AK5 RF amplifier, 12AT7 oscillator and detector, 6BJ6 IF amplifier, 6AL5 noise limiter. Gray metal cabinet, 4⅞x5¾x5¼". With cables and bracket for convenient underdash mounting. Shpg. wt., 7 lbs.

98 S 032. NET 69.50

Fig. D—MODEL DB-23 PRESELECTOR

Tremendously boosts the gain and signal-to-noise ratio of Amateur receivers. Covers 80-75, 40, 20, 15, and 11-10 meter bands. Average overall gain, 25 db. Operation is simple. Controls: Off-On, Band Selector and Antenna Peaking. Tubes: 3—6J6's plus rectifier. Blue-gray steel case, 5x7⅝x6". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 6½ lbs.

98 S 751. NET 49.50

Fig. E—MODEL 100 SPEECH CLIPPER

Valuable accessory for phone transmitters. Clips audio peaks to permit a considerably higher average percentage of modulation. Output feeds speech amplifier. Filter eliminates harmonics resulting from clipping and attenuates frequencies above 3000 cps. Frequencies below 200 cps also are attenuated. Clipping level control (3-20 db); Off-On switch and In-Out control. With 6SC7 and 6H6; 6X5GT rectifier. 7⅝x5x6". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 6½ lbs.

98 S 750. NET 39.50

Fig. F—MODEL 208 ELECTRO-VOICE CARBON MICROPHONE

Noise-cancelling, single-button, carbon mike. Blast-proof and shock-resistant. Response: 100-4000 cps. Output: −50 db. Press-to-talk switch. With 5 ft. cable. Size, 2¼x1½x1⅛". Shpg. wt., 8 oz.

99 S 587. List. $16.50. NET 9.70

Multi-Elmac Equipment

AF-67 TRANS-CITER

Highly versatile, low-powered transmitter for fixed-station or portable use. Also excellent as exciter and speech amplifier for high-power amplifier. Power input, 60 watts on AM, CW or NBFM. Bandswitching on 160, 80/75, 40, 20, 15 and 11/20 meters.

Built-in, temperature-compensated VFO. Provision for crystal operation. Pi-network output. 5-circuit metering. Tubes: 6146 power amplifier, 6AQ5 driver, 6AG5 multiplier, 6AK6, oscillator, 6BJ6 reactance modulator, OB2 voltage regulator, 6AU6 speech amplifier, 12AU7 speech driver, 2—5881 modulators.

Requires 475 v. DC at 170 ma and 225 v. DC at 60 ma. Filaments require 6 or 12 v. DC or AC. Simple jumper connection used to change from 6 to 12 volt operation. Size, 7x11½x11¼". Shpg. wt., 20 lbs.

98 SZ 091. NET 177.00

PS-2V 115V. AC POWER SUPPLY. For AF-67. Shpg. wt., 30 lbs.

98 SZ 760. NET 49.50

CFS-1 CONNECTING CABLE. Connects PS-2V and AF-67. Shpg. wt., 8 oz.

98 S 761. NET 4.75

PMR-6A MOBILE RECEIVER

9-tube, dual-conversion, communications receiver. Covers 160, 80, 40, 20, 15 and 10 meter bands, as well as broadcast band; in 6 ranges. Double conversion plus 10 tuned circuits including RF stage for excellent sensitivity, selectivity and image rejection. 1 μv signal for 3½ watts output. Voltage-regulated oscillator and BFO for high stability. Noise limiter circuit. 50-ohm coax input. Tubes: 2—6BJ6, 2—6BE6, 6C4, 6AL5, 12AT7, 6BK5; OB2. Gray cabinet, 4½x6x8½". Requires 6 v. at 3.3 amps and 250 v. at 90 ma. Less 3-4 ohm speaker and power supply. Shpg. wt., 8 lbs.

98 S 089. NET 134.50

PMR-6A (12V.). As above, but for 12-volt operation.

98 S 799. NET 134.50

PSR-6 6-VOLT POWER SUPPLY. For the PMR-6A receiver. With cables and plugs. 6x4½x5". Shpg. wt., 8 lbs.

98 S 090. NET 24.50

PSR-12 12-VOLT POWER SUPPLY. Same as PSR-6 above, but 12 v. input.

98 S 069. NET 24.50

WE'RE TRADING HIGH ON HAM GEAR

If you've been shopping for a big trade-in allowance on your old receiver or transmitter, be sure to drop a card to ALLIED's Communications Equipment Division. Tell us the model number of the unit you'd like to trade and the new equipment you want. You'll not only be given a terrific trade-in allowance, but you'll be able to take advantage of our Easy Payment Plan. Your old equipment should more than cover the down payment and you can pay the balance while enjoying the very latest in station gear. You'll go easy on the budget and derive full enjoyment from Amateur Radio when you do business at ALLIED.

Collins Amateur Gear

NEW 75A-4 RECEIVER

Outstanding Amateur receiver achieves remarkable performance on AM, CW, SSB and RTTY. Covers all Amateur frequencies from 160 through 10 meters in 8 ranges. Superior image rejection of 50 db or better is obtained by the use of double conversion. Precision dial calibration and extremely high stability provided by the hermetically sealed Collins VFO and crystal controlled first IF. Has fast attack, slow release AVC with response fast enough to act on first few cycles of transmission. Slow release AVC ideal for CW reception. AVC does not require presence of carrier—perfect for SSB. Separate detectors for AM and SSB assure minimum intermodulation distortion. Passband tuning system permits moving signals to any point on IF curve with no change in CW beat note—interfering signals can be pushed off edge of passband. Bridged-T rejection notch filter has deep narrow notch for removing heterodynes. Noise limiter clips both positive and negative peaks. Built-in 100-kc. crystal calibrator. Complete with 3.1 kc. mechanical filter. Provision for additional filters for 800 cps and 6 kc. Sensitivity. 1μv for 6 db SNR. Less speaker (see below). 20 tubes plus rectifier and voltage regulator. For 110-120 volts, 50-60 cycle AC. Size. 10½x17¼x15½". Shpg. wt., 70 lbs.

98 SZ 767. NET **595.00**

10" MATCHING SPEAKER. PM speaker matches above. Wt., 34 lbs.

97 SZ 776. NET **20.00**

800 CYCLE MECHANICAL FILTER. Provides increased selectivity for CW reception. Plugs into Collins 75A-4 receiver. Shpg. wt., 2 lbs.

98 S 773. NET **35.00**

NEW KWS-1 TRANSMITTER

Bandswitching Amateur transmitter for SSB, CW, and AM operation. Covers 80-75, 40, 20, 15, 11, and 10 meters. 1 kw peak envelope power on SSB, 1 kw on CW, AM emission is carrier plus one sideband; equivalent to 1 kw when using narrow-bandwidth receiver. Incorporates 70E-23 VFO with dial calibration of 1 kc per division on all bands. Extreme stability obtained through use of low frequency VFO and crystal controlled beat oscillators. Mechanical filter on SSB provides 50 db rejection of unwanted sideband, and limits audio passband to 3000 cps. Balanced modulator and mechanical filter reduce carrier 60 db. Linear RF power amplifier uses two 4X150A's in Class AB1. RF feedback for improved linearity. High and low-voltage power supplies, bias and grid-block keying supply housed in cabinet which serves as transmitter base. Size: transmitter section, 10½x17⅜x15½" deep; power supply, 30x17⅜x15½" deep. With tubes and crystals. For 110-120 v., 50-60 cycle AC. Shpg. wt., 210 lbs.

98 SZ 774. NET **1995.00**

ALLIED can supply the complete Collins line. Write for details.

James Amateur Mobile Power Supply

New dual-vibrator mobile power supply for transmitter and receiver. Provides high and low transmitter voltages as well as receiver "B" voltage. By simple transformer tap changes any combination of three voltages from 150 to 450 can be obtained. Typical combination: Transmitter, 450 volts at 170 ma and 225 at 60 ma; receiver, 225 volts at 60 ma. Oversize filter circuit assures hash-free receiver voltage. Includes receiver muting relay for automatic receiver control during transmitting periods. Has standard TV type selenium rectifiers and standard 4-prong, 6-volt vibrators. Size: 6½x8x6". For 6/12 v. DC. Shpg. wt., 13 lbs.

80 P 156. Factory-wired and tested. NET **48.95**

83 PX 112. Kit Form. NET **39.15**

Barker and Williamson Amateur Gear

Fig. A. MODEL 5100S TRANSMITTER. New version of the highly dependable 5100. Designed for operation on all Amateur bands 80 through 10 meters. Rapid bandswitching. Output: Rated at 100 watts AM, 125 watts CW, 150 watts peak SSB input when used with 51SB SSB generator below. Incorporates extremely stable VFO, accurately calibrated for 6 bands. Provision for crystal control. 80 meter crystals (not supplied) cover all Amateur bands from 80 thru 10 meters. All external leads by-passed to prevent radiation. Pi-section output and built in lo-pass filter provides more than 85 db attenuation for maximum TVI suppression. Has built-in, heavy-duty power supply. Modulator designed for crisp, clear speech. All controls conveniently arranged for simplified operation. Meter indicates final screen grid, final plate and modulator current. 75 ohm unbalanced output. Tubes: 3—6BJ6 VFO and crystal oscillator, 4—6AQ5 RF multipliers, 2—6146 power amplifiers, 6U8 speech amplifier, 2—5R4GY and 1—5V4 rectifiers. VR-150 and VR-105 voltage regulators. Complete unit housed in heavy-gauge copper-plated steel cabinet with hinged top for easy access to tubes. Finished in blue-gray. Panel is etched aluminum. Size: 11½x22x14¾". For 110-120 v., 50-60 cycle AC. Shpg. wt., 90 lbs.

98 SZ 768. NET **467.50**

Fig. B. MODEL 51SB SINGLE SIDEBAND GENERATOR. Converts Model 5100S, or any other transmitter with provision for linear operation to single sideband suppressed carrier operation. Requires 1½ to 2 volts of RF drive from low powered multiplier stage of B & W 5100S, or by any other low-power exciter, or VFO—unique design eliminates need for any special injection frequencies. 50 volts RF output of generator drives final amplifier of transmitter. Bandswitching from 80 thru 10 meters. Consists of a 90-degree RF phase shift network, double balanced modulator stage, and two class "A" RF voltage amplifiers. Speech amplifier circuit has low-pass filter with cutoff frequency of 3500 cps. Meter indicates final amplifier grid current and output level for balancing out carrier. Choice of upper or lower sideband. Voice-operated and push-to-talk controls, speaker deactivating. TVI suppressed. Uses crystal or dynamic mike. Cabinet and panel match 5100S transmitter. Tubes: 6—12AT7, 1—6CL6, 1—6AL5, 1—6V6 and 1—5Y3G. Size: 11½x10x14¾". For 110-120 v., 50-60 cycle AC. Shpg. wt., 45 lbs.

98 SZ 779. NET **279.50**

Fig. C. MODEL 550 COAXIAL SWITCH. 5-position coaxial selector switch. Designed to switch coaxial lines from or to antennas, VFO's, exciters, or other RF equipment. Has 6 type SO-239 RF connectors. Rated at 1 KW, AM phone. Standing wave ratio practically 1:1. Negligible insertion loss. Less than −45 db cross-talk at 30 mc. Perfect for switching antenna to any one of 5 transmitters. Sturdy, machined aluminum case. 2¾" diameter. Shpg. wt., 2 lbs.

98 S 780. NET **13.65**

Fig. D. MODEL 650 MATCHMASTER. Extremely versatile instrument for checking transmitter output and adjusting antennas. Non-inductive resistor loads transmitter for power output measurements. RF wattmeter reads power directly in watts. Range: 0-125 watts. Permits tuning transmitter without radiating a signal. SWR bridge permits adjusting antennas for maximum radiation. For 52 ohm coaxial line. Size: 8x8x6". Shpg. wt., 9 lbs.

98 SX 777. NET **47.50**

MODEL 651. As above, but for 73 ohm line.

98 SX 778. NET **47.50**

MODEL 380 T-R SWITCH. New broadband, electronic, antenna changeover switch. Permits the use of a single antenna for transmitting and receiving without the use of a conventional coaxial type relay or manual switch. Operates on all Amateur bands from 80 through 10 meters. Antenna changeover is automatic and instantaneous. Perfect for use on break-in CW, AM phone and voice operated SSB. Negligible insertion loss. Will handle up to 1 KW of RF. Cabinet matches B & W Model 5100S transmitter. Coaxial connectors mounted on front of panel. Requires Amphenol 83-T fitting. 3⅞x3½x5". Shpg. wt., 2 lbs.

98 S 775. NET **23.70**

Letter Z in Stock Number Indicates Express Shipment Only


A


C


B


D


E

Eldico Amateur Gear

Fig. A. MODEL SSB-100 TRANSMITTER-EXCITER. Bandswitching AM, CW, SSB, transmitter-exciter with VFO. Has voice-controlled carrier and receiver muting circuits. Includes built-in oscilloscope. Covers 80, 40, 20, 15, 10 meter amateur bands. Has extremely stable VFO. Drift, within 300 cps after 5 minutes. Dial accuracy, within 1 kc after calibration. Scope gives voice-intensity modulated trapezoidal pattern for monitoring. 60 watts input AM; 144 watts peak SSB. Pi-section output. Size, 21x13½x12½". For 110-120 v., 50-60 cycle AC. Shpg. wt., 70 lbs.
99 SZ 053. NET **695.00**

Fig. B. MODEL TR-75TV TRANSMITTER KIT. Popular 60-watt CW transmitter. Covers 80, 40, 20, 15, 11, 10 meter Amateur bands with plug-in coils. Has built-in antenna tuner. 6AG7 crystal oscillator and 1625 final amplifier. 5U4 rectifier. Complete with tubes, all parts, instructions and material to wind 1 set of coils for any one of the above Amateur bands. Less key and crystal. 10x17x9". For 110-120 v., 50-60 cycle AC. Shpg. wt., 42 lbs. (See below for modulator and VFO.)
97 SZ 953. NET **64.95**

Fig. B. MODEL AM-40 MODULATOR KIT. Complete AM modulator with built-in power supply. For any transmitter with up to 80 watts input. Designed as companion unit to the TR-75TV (above); housed in the matching cabinet. For crystal mike. Uses PP 6L6's 6SN7GT, 6SJ7 and 5U4. With all parts and tubes. 8½x17x9". For 110-120 v. 50-60 cycles AC. Shpg. wt., 40 lbs.
99 SZ 052. NET **59.95**

MODEL VFO-2 VFO TUNING HEAD. Converts oscillator of TR-75TV for variable frequency operation. In gray Hammertone case, with large 6" dial. Gives complete coverage on 80, 40, 20, 15, 11 meter Amateur bands. Size, 5x6x5". Shpg. wt., 4 lbs.
98 S 045. NET **29.95**

Fig. C. A-300 ANTENNA TUNER KIT. 300-watt antenna coupler. Couples any conventional antenna feedline, (regardless of impedance), to any conventional tank circuit. Uses BW TVL coils (not supplied; see p. 145). Case, 8x10x8". Shpg. wt., 9 lbs.
98 SX 040. NET **26.95**

Fig. D. FS-100 FREQUENCY STANDARD. 100 kc self-contained frequency standard, gives accurate frequency markers every 100 kc. Smaller than a pack of cigarettes (including battery). Transistor for long battery life. With battery. Size, 2¾x2x⅞". 1 lb.
98 S 046. NET **18.95**

Fig. E. ANTENNASCOPE. An impedance measuring instrument for obtaining maximum antenna efficiency. Impedance range of 10-500 ohms. Operates to 200 mc. Bridge circuit for utmost accuracy. Size, 6x2¾x2⅜". With instructions. Shpg. wt., 3 lbs.
97 S 769. Factory wired. NET **34.95**
97 S 770. Kit. NET **29.95**


F


H


G

J

Central Electronics SSB Gear

Fig. F. MULTIPHASE EXCITERS. Extremely versatile, voice-controlled all-band SSB exciters or transmitters. Choice of either sideband. Cover 160 through 10 meters. Also operate on AM, PM or CW. Available in 2 models, listed below. Over 40 db suppression of unwanted sideband. Mute receiver during transmission and provide blocking bias for external power amplifier during reception. Requires VFO or crystal for injection excitation. Modified BC-458 command set makes excellent multiband VFO. (See conversion kit listed below.) Gray steel case with top door. Size, 14¾x10x8¾". Shpg. wt., 34 lbs. For 110-120 v., 50-60 cycles AC.

MODEL 20A EXCITER. 20-watt peak output, bandswitching transmitter-exciter with "magic eye" tube for carrier null and peak modulation indication.
83 SZ 811. Factory wired. NET **249.50**
83 SZ 810. Kit. NET **199.50**

MODEL 10B EXCITER KIT. 10-watt peak output, transmitter-exciter kit. Uses plug in coils. Complete with 80 meter coil set.
83 SZ 813. NET **129.50**
83 SZ 814. Factory wired. NET **179.50**
83 S 808. 40 meter coil set. NET **3.95**
83 S 809. 20 meter coil set. NET **3.95**

458-K CONVERSION KIT. Convert BC-458 to VFO for use with above exciters. Contains dial, all components. 2 lbs.
83 S 815. NET **15.00**

QT-1 ANTI-TRIP UNIT. Plugs into 20A or 10B. Prevents loud signals, heterodynes from tripping break-in circuit. Shpg. wt., 2 lbs.
83 S 812. NET **12.50**

Fig. G. MODEL 600L BROADBAND LINEAR AMPLIFIER. 500-watt DC input linear amplifier. Bandswitching from 160-10 meters. Has single 813 in Class AB_1. Amplifier is broadband and does not require tuning. Large meter reads power input, RF amperes, reflected power and grid current. TVI suppressed. 17⅝x13x8¾". Gray steel cabinet. For 110-120 v., 60 cycles AC. 95 lbs.
83 SZ 816. NET **349.50**

Fig. H. MODEL B SIDEBAND SLICER. Converts receivers with 450 to 500 kc IF's for selective SSB reception. Either sideband selected with flip of switch. Has built in Q multiplier (shown below) for greatly increased selectivity and interference rejection. 5½x8¾x13". For 110-120 v., 60 cycle AC. Shpg. wt., 17 lbs.
83 SX 817. NET **99.50**

Fig. J. MODEL DQ "Q" MULTIPLIER. Tunable IF electronic filter—provides increased receiver selectivity for peaking or rejecting a signal on SSB, AM or CW. Variable selectivity from 60 cycles to IF pass band of receiver. Up to 50 db attenuation of heterodynes. Requires 225-300 v. DC at 12 ma and 6.3 v. at 0.6 amps. Size: 4x5x5½" without knob. 4x5x6" with knob. Shpg. wt., 5 lbs.
83 S 818. NET **29.50**

Morrow Mobile Equipment

Fig. K. 5BRF CONVERTER. All-band deluxe mobile converter. For use with the FTR receiver. Covers 80-75, 40, 20, 15 and 10 meters. 1525 kc output. Coils on poly forms for improved signal to noise ratio. Compensated Clapp oscillator and mixer for high stability. 3-gang tuning with separate coils for each band in RF, mixer and oscillator. Slide-rule dial shows frequency at a glance; 20:1 ratio. 4x5⅝x7". With hardware and cables. Takes voltages from FTR. Shpg. wt., 5 lbs.
84 S 908. NET **66.59**

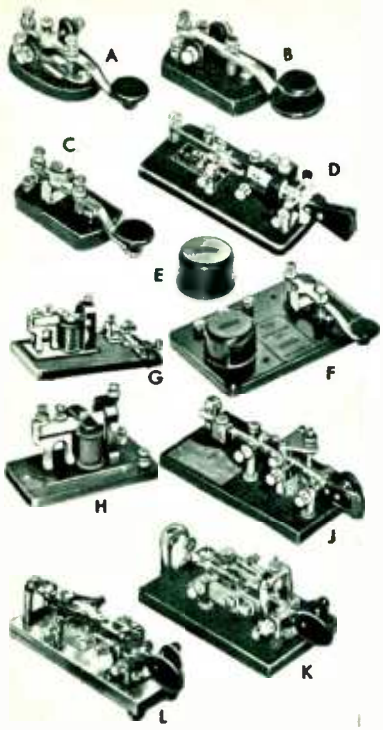
MODEL 5BR-1. As above, but for use with auto radio. Has noise limiter and switch to connect antenna to auto radio when converter is not in use. Requires 6/12 volts and 200 volts at 20 ma.
84 S 934 NET **73.45**

Fig. L. FTR IF AND AUDIO AMPLIFIER. Mobile fixed frequency receiver. Companion unit for the 5BRF (left), or any other converter with 1525 kc output. 10 tube circuit. Features: 1 μv sensitivity, 3 kc bandwidth at 6 db down, excellent stability for SSB reception. Has crystal controlled mixer. 200 kc IF, 3 stage audio amplifier, noise balance squelch, "S" meter. Has separate 6 v. DC power supply; isolates receiver from heat and vibration. With cables and mounting hardware. Less PM speaker. 4x5⅝x7". Shpg. wt., 8 lbs.
84 SX 909. NET **125.83**

GC-10 GENERATOR NOISE FILTER. For 10-meter mobile use. Minimizes generator noise. Tunable. Shpg. wt., ½ lb.
84 S 933. NET **3.68**
84 S 911. GC-20, 20 meter filter. NET **3.68**


K


L



Quality Amateur Code Equipment

JOHNSON SPEED-X KEYS AND BUZZERS

Fig. A. STANDARD MODEL 114-310. Precision-built key. Die-cast base in black wrinkle. Nickel-plated mechanical parts. ⅛" silver contacts. Adjustable spacing and tension. Shpg. wt., 2 lbs.
76 P 055. NET **3.00**

Fig. B. HEAVY-DUTY MODEL 114-320. Deluxe key built to rigid specs. Large, chrome-plated key arm suspended from hardened steel bearings. ¼" silver contacts. Adjustable spacing and tension. Heavy brass connector concealed under base. Black die-cast base. Shpg. wt., 2 lbs.
76 P 058. NET **4.70**

Fig. C. PRACTICE MODEL 114-300. General purpose key for the beginner. Brown bakelite base with knob. Holes for mounting. Complete with beginners code card. Shpg. wt., 8 oz.
76 P 053. NET **2.00**

Fig. D. SEMI-AUTOMATIC MODEL 114-520. Deluxe key with adjustable speed control. Chrome-plated hardware and reed. Lock-nut adjustments. ⅛" silver contacts. Heavy, die-cast base finished in black wrinkle enamel. With circuit closing switch. Shpg. wt., 4 lbs.
76 P 065. NET **13.25**

Fig. E. HIGH-FREQUENCY BUZZER MODEL 114-400. Use with key for code practice. Requires 3 v. battery. Shpg. wt., 5 oz.
76 P 060. NET **1.85**

Fig. F. CODE PRACTICE SET MODEL 114-450. Code practice system for beginners. Consists of key and high-frequency buzzer on brown bakelite base. With binding posts. Req. 3 v. DC (2—1½ v. batteries). Wt., 2 lbs.
76 P 059. NET **4.90**

Fig. G. LEARNER MODEL 114-110. Morse code practice set. Brass sounding bar; lacquered steel sounder plate. Bar frame steel; black enamel bridge. Adjustable, nickel-plated key. Mahogany finished wood base. Brass binding posts. Complete with key and 4-ohm sounder. Shpg. wt., 2 lbs.
76 P 066. NET **10.95**

Fig. H. TELEGRAPH SOUNDER MODEL 114-112. High-quality telegraph sounder. Designed for instant response. Brass sounder provides strong, clear signal. Steel bar frame with black enamel finish. Brass bridge and adjustment screws with lacquer finish. Black lacquered steel sounder plate. On mahogany finished wood base. Non-slip rubber mounting feet. Sounder has 4 ohms resistance. Shpg. wt., 3 lbs.
76 P 067. NET **7.70**

VIBROPLEX SEMI-AUTOMATIC KEYS

Fig. J. THE "CHAMPION." Inexpensive, semi-automatic key for radio-telegraph use. Chrome mechanism; black crackle finish base. Less cord, wedge. 4 lbs.
76 P 036. NET **15.95**

Fig. L. THE "BLUE RACER" STANDARD. Small and lightweight. Rugged construction. Adjustable weights set speed. Chrome-plated mechanism. Black finish base. Non-slip rubber feet. Complete with cord and wedge. Shpg. wt., 4 lbs.
76 P 045. NET **19.95**

"BLUE-RACER" DELUXE. As above. With jeweled bearings. Chrome-plated base. Shpg. wt., 4 lbs.
76 P 046. NET **23.95**

Fig. K. "ORIGINAL" VIBROPLEX. A precision-built, semi-automatic key for all speeds. Minimum effort for smooth, rapid sending. Preferred and used by commercial operators. Chrome-plated mechanism. Black finish cast-iron base. Supplied with cord and wedge. Shpg. wt., 5 lbs.
76 P 035. NET **19.95**

DELUXE "ORIGINAL" VIBROPLEX. Similar to above. With jeweled bearings and chrome base. Shpg. wt., 5 lbs.
76 P 038. NET **23.95**

CARRYING CASE. Fits all Vibroplex keys except "Blue Racer." With lock and key. Shpg. wt., 1 lb.
76 P 037. NET **6.75**

CODE PRACTICE OSCILLATORS

Fig. M. BUD CPO-128A CODEMASTER. Code practice oscillator; when used with RF pickup link, serves as CW or modulation monitor. Built-in speaker. Takes up to 20 pairs of earphones. Keys may be paralleled. Volume and pitch controls. External speaker may be plugged into headphone jack. Gray hammertone finish. 6½x5½x3½". For 110-120 v. AC or DC. Wt., 5 lbs.
73 P 044. NET **15.43**

BUD CPO-130A CODEMASTER. (Not illustrated.) Has same features as CPO-128 Codemaster, but less built-in speaker. Shpg. wt., 4½ lbs.
73 P 045. NET **13.82**

Fig. N. ICA 4300 AUDIO OSCILLATOR. Deluxe code practice set. Excellent as CW keying monitor and audio source for transmitter modulation tests. Has volume control and 3-position tone switch. Built-in speaker delivers adequate volume for group instruction. Keys and headphones can be connected in parallel for class instruction. 8x4½x4¼". For 105-125 v. AC or DC. Shpg. wt., 3½ lbs.
73 P 430. NET **15.43**

MODEL 4301 AUDIO OSCILLATOR. Incorporates deluxe features of 4300, but without speaker. 4½x4x4". Shpg. wt., 3 lbs.
73 P 431. NET **13.23**

Fig. P. AMECO CPS-WT DELUXE CODE PRACTICE OSCILLATOR. Deluxe practice oscillator with built-in 4" speaker. Produces steady tone—"key-click" filter for smooth, clean keying. Features variable tone and volume controls. Excellent for code class use. Converts to excellent CW monitor. Gray hammertone finish. Size, 6½x5x3½". For operation from 110 120 v. AC or DC. Shpg. wt., 3 lbs.
77 P 629. NET **14.75**

CODE COURSE RECORDS

Fig. R. AMECO CODE COURSE. Use with any 78 rpm phonograph. Choice of three courses. *Jr. Code Course:* For Novice or Technician Amateur exams. 5—10" records (10 sides). Code speed from start to 7½ wpm. *Advanced Code Course:* Continuation of Jr. Code Course. Speeds from 8½ to 18 wpm. for General Class and Commercial exams. 6—10" records (12 sides). *Senior Code Course:* Combines Junior and Advanced Code Courses. 11—10" records (22 sides total). Courses include album and 28-page manual with FCC-type exams.

JR. CODE COURSE. Wt. 3½ lbs.
77 P 616. NET **7.95**

ADVANCED CODE COURSE. Shpg. wt., 4 lbs.
77 P 619. NET **6.95**

SENIOR CODE COURSE. Shpg. wt., 6 lbs.
77 P 617. NET **12.95**

Fig. S. ICA CODE COURSE. Simple method of learning code at home. Consists of 5—10" high-quality, 78 rpm break-resistant vinylite records recorded on each side. Can be played on any 78 rpm phonograph. Speed progresses from 2 to 15 wpm in 10 lessons. Includes sturdy record album and instructions. Shpg. wt., 6 lbs.
89 P 950. NET **7.95**

ELDICO INDIVIDUAL CODE RECORDS ONLY. 12" vinyl, 3-speed, universal records. Code speeds are at 33⅓, 45 and 78 rpm respectively. ½ hr. playing time at 33⅓ rpm per record. Shpg. wt., 1 lb.

77 P 630. 6, 9 and 14 wpm.
77 P 631. 8, 13 and 21 wpm.
77 P 632. 10, 15 and 23 wpm.
77 P 633. 11, 16 and 26 wpm.
77 P 634. 13, 17 and 30 wpm.
} **NET EACH 3.95**

Amateur Station Accessories

QUALITY FREQUENCY METERS

Fig. A. TRIPLETT 3256 ABSORPTION FREQUENCY METER. Bandswitching type. Covers 5 Amateur bands. Checks: Fundamental freq. of oscillating circuits; parasitic oscillations; harmonics. Germanium crystal and DC milliammeter for sensitivity. Direct panel calibration. Mc bands: 3.5 to 4, 7 to 7.3, 14 to 14.4, 20 to 21.5, 28 to 30. 7½x2½x2¼". Gray enamel finish. Shpg. wt., 1 lb.
66 F 005. NET **17.15**

Fig. B. BUD FCC-90A FREQUENCY CALIBRATOR. Determines band edges. Consists of 100 kc crystal oscillator and trimmer condensers. With power supply. Beat note gives 100 kc check points across all bands up to 30 mc. With on-off switch, stand-by switch, 50C5 tube; 35W4 rectif. 100 kc crystal. 5¼x3x2¼". For 105-125 v., AC or DC. Shpg. wt., 2 lbs.
73 P 043. NET **16.90**

Fig. C. MILLEN ABSORPTION FREQUENCY METERS. Indicate frequency, harmonics, parasitics. Size: 2⅝x1⅞x4". Wt., 10 oz.

Stock No.	Type	Mc Range	EACH
72 H 142	90605	3–10	7.50
72 H 143	90606	9–23	
72 H 144	90607	23–60	
72 H 145	90608	50–140	

24-HOUR STATION CLOCKS

Fig. D. TD-2400 24-HOUR STATION CLOCK. For Amateur or commercial stations or short wave listener. Calibrated 0001 to 2400 (GMT). Sweep-second hand. 6" inner dial shows time in world zones. 10" dia. Synchronous, self-starting motor. 110-120 volts, 60 cycle AC. Shpg. wt., 3 lbs. *Prices include excise tax.*
78 B 325. NET **13.75**

Fig. E. 24-HOUR NUMERAL STATION CLOCK. Separate hour, minute and second scales. Self-starting synchronous motor. Shows time at a glance. 4x7⅞". Height. 3⅞". Plastic case. For 110-120 volts, 60 cycle AC. 4 lbs. *Prices include excise tax.*
78 B 341. Ivory. NET **15.84**
78 B 340. Ebony. NET **14.85**

AMATEUR TVI FILTERS

Fig. F. BARKER-WILLIAMSON TYPE 425 LOW-PASS FILTERS. For 52 ohms imp. Safely handles 1 kw RF when SWR is not excessive. Consists of 2 "M" derived end sections; 4 constant "K" type center sections. 85 db attenuation through TV channels. .25 db insertion loss to 35 mc. 11x3x2". Shpg. wt., 1½ lbs.
77 C 613. NET **14.85**

MODEL 426. Same as above, but for 72 ohms imp.
77 C 614. NET **14.85**

Fig. G. ELDICO LINE FILTERS. Type TVL Brute Force. 2-section filter for use in AC lines of Amateur transmitters. Helps prevent BCI and TVI. Shielded. With cord, plug and AC outlet. Wired or in kit form. *Assembled and tested. †Kit.

Stock No.	Type	Rating	Lbs.	NET
77 C 610†	TVL-1 kw	1 kw	3½	11.95
77 C 562*	TVL-1 kw	1 kw	3½	15.95
77 C 609†	TVL-2.5 kw	2.5 kw	6	18.95
77 C 608*	TVL-2.5 kw	2.5 kw	6	24.95

Fig. H. BUD LF-601 LOW-PASS FILTER. For Amateur transmitters. Minimizes TVI-producing harmonics. For 52 or 72 ohm coax lines; handles 1 kw. Cut-off at 42 mc. Min. attenuation, 85 db on all freq. above 54 mc. 93 db above 70 mc. 12x2½x2¼". Shpg. wt., 2½ lbs.
73 C 047. NET **13.23**

Fig. J. BUD HF-600 HIGH-PASS FILTER. Extremely effective high-pass filter for installation at TV receiver. Rejects signals to 42 mc. Eliminates or greatly reduces picture interference caused by transmitters, diathermy, ignition, etc. Easily installed at antenna input. For 300-ohm twin line. Aluminum case. 3¼x2⅛x1⅛". 6 oz.
73 C 046. NET **3.50**

Fig. K. AMECO LN-2 LOW-PASS FILTER. Installed at transmitter to suppress TVI-producing VHF harmonics. Suppresses all harmonic and spurious frequencies above 40 mc. Uses constant K circuit. Easily handles up to 200 watts of RF power. Negligible insertion loss. For 52 to 72 ohm coaxial cable. Has 2—SO-239 coaxial connectors, bracket and complete instructions. Housed in protective aluminum case. Quickly and easily installed. Size. 4⅝x2⅜x1¾". Shpg. wt., 1 lb.
77 C 675. NET **3.45**

TYPE LN-1 LOW-PASS FILTER. As above, but has RCA-type phono jacks. Housed in protective metal case.
77 C 674. NET **1.95**

Fig. L. AMECO HP-45 HIGH-PASS FILTER. Attenuates all signals below 45 mc. Effective in suppressing or greatly reducing Amateur transmitter TV interference. Used in series with TV receiver antenna. 40 db attenuation at 14 mc and below; 20 db attenuation at 10 meters. Negligible insertion loss. Uses balanced constant K circuit. For use with 300-ohm twinline. Size. 1⅛x⅞x¾". Extremely simple to install. Complete with easy-to-follow instructions. Shpg. wt., 3 oz.
77 C 673. NET **89c**

OTHER AMATEUR ACCESSORIES

Fig. M. EIMAC CONTACT FINGER STOCK. Silver plated alloy stripping. A valuable aid in TVI-proofing transmitters. Provides excellent electrical contact—prevents RF leakage from doors on equipment cabinets. Secured mechanically or by soft-solder. Wt., 12 oz.
42 P 086. 3' long; 17/32" wide. NET **4.95**
42 P 087. 3' long; 31/32" wide. NET **5.40**
42 P 088. 3' long; 1 7/16" wide. NET **6.00**

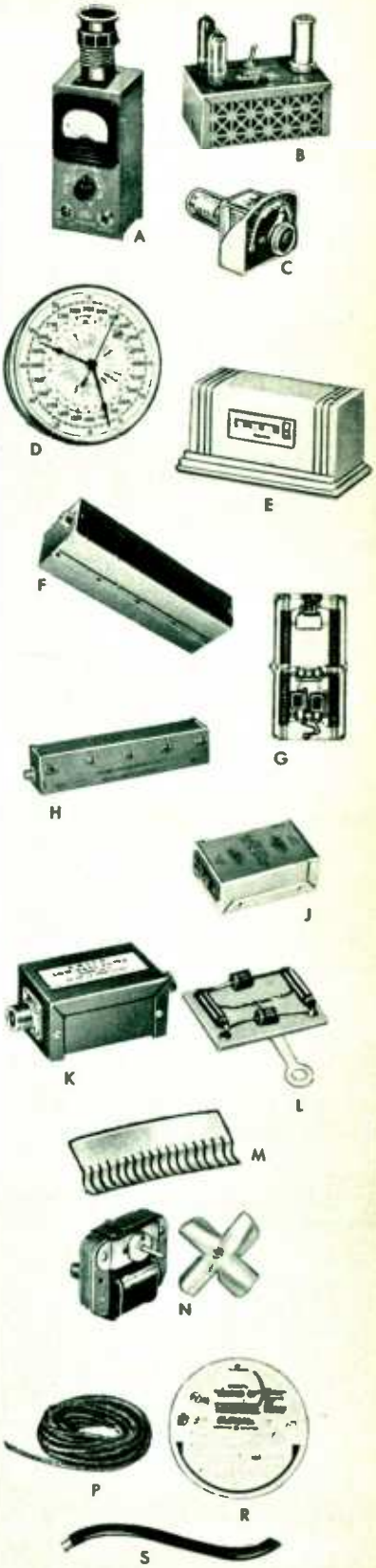
Fig. N. TUBE COOLING MOTOR AND FAN. Shaded-pole-induction motor. 2400 rpm. 2 19/32x2 11/32x2⅛". 4-blade fan 2½" dia. For 110-120 v., 50-60 cyc. Wt., 1¼ lb.
72 P 715. NET **2.19**

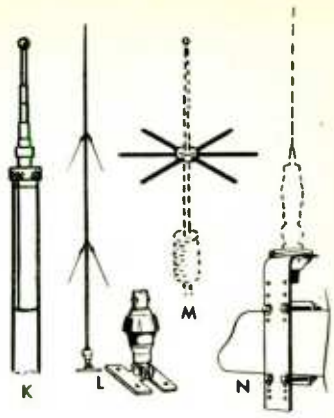
AMPHENOL TYPE 14-076 TRANSMITTING TWIN-LINE. 300-ohm air core tubular. 7/26 bare copper conductors. Rated 1 kw. RF. Wt., 100 ft., 3½ lbs. 100 ft. min.
49 T 416. 100 ft. coil. NET **6.23**
49 W 409. Over 100 ft. Per 100 ft. **6.23**

Fig. P. METEX TVI-20-S SHIELDING STRIP Flexible, knitted RF shielding gasket material. Made of multiple-loop monel wire. Excellent for TVI-proofing transmitter enclosures. May be used to seal openings at doors and coverplates; makes joint RF tight. Knitted mesh may be secured mechanically or "sewed" into place. Supplied in handy 20 ft. lengths. ⅛" sq. cross-section. Shpg. wt., 8 oz.
42 P 089. NET **3.95**

Fig. R. E-V'S "2ND OP" DX COMPUTER. Aid for Amateur DX'ers. Rotary chart gives: Call letter prefixes; beam headings; DX zones, locations; QSO and QSL records; etc. Covers every country. 10½" dia.
37 K 991. Postpaid in U.S.A. **1.00**

Fig. S. AMPHENOL 14-023 TRANSMITTING 75 OHM TWIN LINE. Handles up to 1 kw RF power. 71% propagation factor. Attenuation per 100 ft. at 28 mc. 1.40 db. Shpg. wt., 100 ft., 4 lbs.
49 W 495. NET PER FOOT **6c**
100 feet or more, Per 100 ft. **5.59**





High-Quality Amateur Antennas and Accessories

MASTER MOBILE ANTENNAS AND MOUNTS

Fig. A. 88-60 MOBILE ANTENNA. High-gain whip antenna. When used with Hi-"Q" coils listed below, becomes Hi-"Q" AB precision-quality mobile antenna. In 2 sections to permit all band operation; comes apart to insert new Hi-"Q" 20, 40 or 75 meter loading coils for very efficient operation. Serves as 10-meter antenna when used without coils. Features: air-spaced coil windings; requires little or no tuning. Antenna has ⅛" threaded stud to fit mounts listed below. Length, 108". Less mount. Shpg. wt., 6 lbs.
98 CX 359. NET **9.70**

HI-"Q" COILS. Offer excellent characteristics when used with Model 88-60 antenna (above). Glyptol-coated windings.

75 METER COIL. 7½x2⅜". Wt., 12 oz.
98 C 355. NET **6.81**

40 METER COIL. 6½x2⅜". Wt., 11 oz.
98 C 364. NET **6.81**

20 METER COIL. 3½x2⅜". Wt., 8 oz.
98 C 365. NET **6.81**

"ALL BANDER" 666 COIL. Hi-"Q" variable antenna coil. Tunes 10 to 75 meters with 60" whip. 13¼x2⅜". Wt., 1½ lbs.
97 C 167. NET **14.65**

Fig. B. 113 VHF ROOF-TOP ANTENNA. 2-meter coaxial type (140 to 165 mc). Mounts in 5/16" hole. 10' coax cable. 1 lb.
97 CX 148. NET **3.88**

Fig. C. 114 COAXIAL ANTENNA. As above, but mounted on support rod. Threaded to fit body or bumper mounts. Wt., 5 lbs.
97 CX 149. NET **9.75**

100 96S-96" WHIP ANTENNA. Stainless steel ⅛" threaded stud. Less mount. Wt. 2 lbs.
97 CX 155. NET **5.14**

92 18" WHIP EXTENSION. ⅛" threaded stud on one end and collet at other. Wt., 1 lb.
97 CX 154. NET **3.43**

9-96T LOW-COST 96" WHIP. Cadmium-plated. ⅛" threaded stud. Less mount. Shpg. wt., 3 lbs.
98 CX 302. NET **3.67**

BODY AND BUMPER MOUNTS. For antennas with ⅛" threaded stud. Av. wt., 3 lbs.

Fig. E. 132C. Double-taper spring, swivel-base body mount; with coax fitting.
97 C 151. NET **8.57**

Fig. E. 132XC. Heavy-duty type 132C.
97 C 157. NET **9.65**

Fig. E. 132JC. Economy type 132C.
98 C 300. NET **5.07**

Fig. E. 132XSSC. Heavy-duty, stainless steel version of 132C.
98 C 304. NET **14.65**

Fig. F. 140J. Economy bumper mount.
98 C 301. NET **4.09**

Fig. F. 104X. Heavy-duty bumper mount.
97 C 160. NET **7.79**

Fig. D. MODEL GP-4 "GROUND PLANE". 2-meter antenna. Impedance, 52 ohms. Coax connector. Shpg. wt., 1 lb.
98 CX 356. NET **5.83**

Fig. G. MODEL 300 "MASTER PLANE." 2-meter antenna. 4 drooping and 4 straight radials for low angle radiation. Imp., 52 ohms. Shpg. wt., 3 lbs.
98 CX 357. NET **12.69**

Fig. H. "MASTER-FLEX-R". Strain-relief spring. Mounts above coil; supports top of whip. 4½x⅞". Shpg. wt., 1 lb.
92 C 222. NET **1.91**

MODEL 10-H "TENAHOLD." Ties down end of whip to clear garage roofs, etc. Fastens to car gutter. Shpg. wt., 3 oz.
92 C 223. NET **98c**

Fig. J. MODEL 2495-6 "MASTER-MATCHER." Remote antenna tuner for any mobile, loaded whip from 160-10 meters. Dashboard control of loading inductance for peaking antenna to any frequency in an Amateur band. Field strength meter on dash unit. Inductor box, 6¼x4¼x4¼". Dash control, 4½x3¼x2¾". For 6-v. DC. Shpg. wt., 2 lbs.
92 C 220. NET **24.65**

MODEL 2495-12. For 12-volt systems.
92 C 221. NET **24.65**

WEBSTER "BAND SPANNER" ANTENNA

Fig. K. Mobile antenna features operation on 75, 40, 20, 15, 11 and 10 meter bands with no external taps, projections, or coils. Band change is accomplished by raising or lowering top whip to pre-calibrated setting corresponding to band selected. Essentially an effective, center-loaded antenna with loading inductor wound on upper portion of fiberglas support column. Inductor has sufficient turns to permit resonance at lowest frequency band (75-meter), with top whip used. Unique design allows a portion of each coil turn to be internally exposed. Whip has circular contactor fixed to lower end which makes contact between bottom end of whip and internally exposed loading coil turns.

Continuous adjustment of loading inductor permits resonating anywhere within a given band. Contact arrangement holds whip firmly in any preset position. Top whip is stainless steel and has factory-calibrated mid-band markings. Support column is fiberglas. Top whip telescopes for storage or door clearance. Has ⅛" threaded mounting stud. Shpg. wt., 2 lbs.
98 CX 149. NET **29.50**

NEW ALPAR VERTICAL RADIATOR KITS

Fig. L. Complete vertical antenna kits for 40, 80, and 20-40-80 meter operation. Offer highly efficient, low-angle radiation pattern. Telescoping lengths of tough aluminum tubing are used for high conductivity combined with strength and light weight. Each kit is supplied with adequate guy wire for 120° guying, sufficient strain insulators for breaking guys into less than 10 foot lengths, glazed porcelain base insulator with hinged feet, tube clamps, guy clamps, anti-corona plug for top mast, and turnbuckles for guys.

MODEL 33 40-METER KIT. Height, 33'. Three sections: 1", 1⅛", and 1¼" diameter. With accessories listed above. Wt., 17 lbs.
92 CX 230. NET **37.50**

MODEL 66 80-METER KIT. Height, 66'. Six sections: ⅝", ¾", ⅞", 1", 1⅛", and 1¼" diameter. With accessories listed above. Shpg. wt., 34 lbs.
92 CX 231. NET **79.50**

MODEL 44 20-40-80 METER KIT. Height, 44'. Four sections; ⅞", 1", 1⅛", and 1¼" diameter. Operates as vertical extended zepp working against ground on 20 meters. With accessories. Wt., 23 lbs.
92 CX 232. NET **57.50**

MORROW MODEL TH "TOP HAT"

Fig. M. Capacity loading unit for improved performance of mobile whip antennas. Raising or lowering "Top Hat" on whip provides resonance at high or low end of band. 9" spikes. Shpg. wt., 4 oz.
51 C 031. NET **2.45**

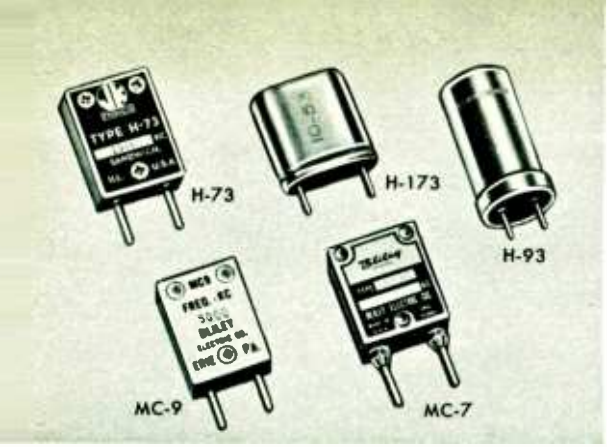
MOBILE UNIVERSAL BUMPER MOUNT

Fig. N. Heavy-gauge, cadmium-plated steel bumper mount for whip antennas. Clamps on bumper. Adjustable for various bumper widths. Shpg. wt., 8 lbs.
51 C 085. NET **6.95**

Amphenol Folded Dipoles

Folded dipole antenna kits for transmitting and receiving. Cover the 4 most popular Amateur bands. Excellent broadband characteristics. Antenna sections use high-strength 300-ohm twin-line with copper-clad steel conductors. With 75 feet standard 300-ohm twin-line feeder. *May be cut for 9- or 12-mc SW broadcast bands. For 15-meter operation use 20-meter dipole; instructions included for cutting. Less end insulators. With installation instructions.

Stock No.	Type	Meters	Length, Ft.	Wt., Lbs.	NET
98 C 318	139-010	10	18	3	5.23
98 C 319	139-020	20	35	3	5.88
98 C 320*	139-040	40	70	4	7.64
98 C 321	139-080	80	135	4½	11.02



Complete Selection of Quality Crystals

JAMES KNIGHTS "STABILIZED CRYSTALS"

Unaffected by moisture, dust particles, vibrations. X-ray oriented, optically lapped and stabilized to insure high activity and very low drift. Very accurately calibrated. Average shpg. wt., 3 oz.

TYPE H-73. Crystals for Amateur frequencies. Pressure-mounted. Pin spacing, .486" (approx. ½"). Pin diameter, .093". In military-type FT-243 miniature phenolic holder. Only 1⅛x1 3/16x7/16". Specify frequency. Supplied ±5 kc (except * ±30 kc) of frequency specified. Tolerance, ±.03%. *H-73 crystals are available on special order for any specific frequency from 1800 kc to 20,000 kc. Order under Stock No. 99 P 257 at $4.80 EACH. Specify frequency wanted. Allow 30 days for delivery.*

99 P 253. 1.8 to 2.0 mc
99 P 266. 3.5 to 4.0 mc
99 P 254. 6.25 to 6.82 mc (for mult. to 6 or 11 meters).
99 P 267. 7.0 to 7.5 mc
99 P 259. 8.0 to 8.222 mc (for multiplication to 2 meters)
99 P 296. 8.34 to 9.0 mc (for multiplication to 6 meters)..
99 P 255. 13.48 to 13.615 mc (for mult. to 11 meters)*.
99 P 268. 14.0 to 14.8 mc*
} EACH 2.95

TYPE H-73 NOVICE CRYSTALS. For the Novice transmitter. Military type holder in black phenolic. Pin spacing, .486 (½"). Specify frequency. Supplied ±5 kc of frequency specified. Tol., ±.03%.

99 P 294. 80 meters, 3.7 to 3.75 mc } NET
99 P 295. 40 meters, 7175 kc to 7200 kc } EACH 2.95

TYPE H-173. High-quality crystals, silver-plated, hermetically sealed in metal holders. Dust and moisture-proof. Wire-mounted. Pin spacing .486" (½"). Pin diameter, .050". ¾x¾x¼". Designed for use in oscillator circuits with low crystal current. *Available on special order only. Allow 30 days for delivery. Specify frequency.*

99 P 263. 21 to 40 mc. (Tolerance, ±15 kc.) NET 4.95
99 P 264. Over 40 to 54 mc. (Tolerance, ±25 kc.) NET 5.95

TYPE H-93. Highly stable crystals. Excellent for basic units of Secondary Frequency Standard. Wire-mounted, silver plated crystal. 2x1⅛" diameter. Tolerance, better than ±.005%. Pin spacing .486" (½"). Pin diameter .093".

99 P 284. 100 kc. } NET
99 P 287. 1000 kc. } EACH 6.95

TYPE H-7 AIRCRAFT CRYSTAL. 3023.5 kc. ±.005% tolerance. For aircraft transmitting equipment. Pin spacing, .486" (½"); diameter, .093". Size: 1⅛x1 3/16x7/16". Pressure mount.

99 P 289. NET 4.95

TYPE H-17L TV ALIGNMENT CRYSTAL. 4.5 mc. ±.005% tolerance. For use in signal generators for TV receiver alignment. Hermetically sealed, wire-mounted, silver-plated crystals. Size: ¾x2 3/32x5/16". Pin spacing, .486" (½"); diameter, .093".

99 P 286. NET 4.80

TYPE H-17L RADIO CONTROL CRYSTAL. 27.255 mc on 3rd overtone. ±.03% tolerance. For radio control of model aircraft, trains, boats, cars, etc. Construction and size same as H-17L above.

99 P 258. NET 4.95

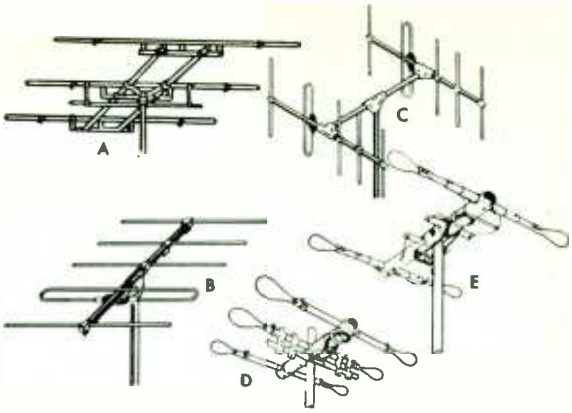
BLILEY SPECIALIZED SERVICE CRYSTALS

TYPE MC-9 ALIGNMENT CRYSTAL. 5.0 mc. ±.02% tolerance. For use as marker in sweep generators or for calibration purposes. Phenolic holder, 1 11/64x1 3/16x7/16". Pin spacing, .486" (½"); diameter, .093". Pressure mounted crystal, acid-etched to prevent frequency change due to aging. Shpg. wt., 3 oz.

99 P 143. NET 3.95

TYPE MC-7 SHIP-TO-SHORE CRYSTALS. Available in ship-to-shore frequencies from 2.0 to 3.5 mc. Highest temperature stability for maintenance of extremely close tolerance of ±.02% from 0° to 50° C. Compact, precision holder measures 1 39/64x1⅛x2 1/32". Pin spacing is .750" (¾"). Pin diameter is .125" (⅛"). Specify particular frequency or geographical location of shore station. *Available on special order only. Allow 30 days for delivery.* Shpg. wt., 3 oz.

99 P 165. NET 7.50



Amateur Antennas

HY-LITE 3-ELEMENT ROTARY BEAM

Fig. A. TYPE 3E20T 20-METER BEAM. Ruggedly constructed, all aluminum, beam-type antenna for 20-meter operation. 3-element construction of ⅞" and 1" tubing supported on heavy steatite insulators with rubber-covered clamps for secure, proper positioning. "T" match has 300-ohm impedance. Elements spaced .075 and .1 wavelength. 1" aluminum dual-booms. With 6-ft. mast; less transmission line. Shpg. wt., 30 lbs.

97 CZ 497. NET 64.95

ELINCOR 2-METER BEAMS

Fig. B. MODEL 200EA. 5-element, beam-type antenna for 2-meter operation. Consists of folded-dipole driven element, 3 directors and a reflector; spaced .1 and .15 wavelength respectively. All aluminum construction with elements of ⅜" tubing supported on a boom of 1" tubing. Mounting bracket (supplied) for positioning beam in either vertical or horizontal plane. For 52-ohm transmission line. Shpg. wt., 3 lbs.

97 CX 487. NET 9.06

Fig. C. MODEL 210EA. 2-bay, vertically polarized, stacked array for 2-meter operation. Consists of 2 Model 200EA beams, plus "T" brackets and ⅝" stacking boom 1 wavelength long, 5-ft. mast and hardware. Less transmission line. Shpg. wt., 10 lbs.

97 CX 495. NET 21.02

TELREX BEAMED POWER ARRAYS

Fig. D. MODEL 503-A 3-ELEMENT 20-METER BEAM. Precision machined and calibrated for easy assembly with no measuring. 16' 6"x3" diameter boom. 1½" telescoping elements. New antistatic, broad-banding loop element ends. "T" match and ½-wave balun for optimum coupling to 52 ohm line. 8.9 db gain. Less 2" diameter mast. Wt. of array, 49 lbs. Shpg. wt., 60 lbs.

92 CZ 217. NET 136.20

MODEL 503. As above, less loop element ends.

92 CZ 201. NET 120.00

Fig. E. MODEL 520-B 2-ELEMENT 20-METER "MINI-BEAM." For restricted space installations. 6'10"x2" diameter boom. 23' driven element; 24' reflector. With new anti-static, broad-banding loop element ends. "T" match and ½-wave balun for efficient match to 52 ohm line. 4.6 db gain. Calibrated for quick assembly. Less 1½" diameter mast. Shpg. wt., 12 lbs.

92 CZ 216. NET 62.50

MODEL 520. Coil resonated array. 18½' dipoles. Shpg. wt., 15 lbs.

92 CZ 202. NET 55.50

Popular Crystal Sockets and Adapters

MILLEN CRYSTAL SOCKETS

TYPE 33102. Low-loss steatite sockets for crystal holders with ½"-spaced pins of .093" diameter. Phosphor-bronze contacts. Tinned solder lugs. 2-screw mounting. Shpg. wt., 2 oz.

72 H 035. NET 36c

TYPE 33302. As above, but for .050" diameter pins.

72 H 075. NET 24c

TYPE 33002. Same as sockets above, but for holders with ¾" spaced pins of .125" diameter. Shpg. wt., 2 oz.

72 H 029. NET 36c

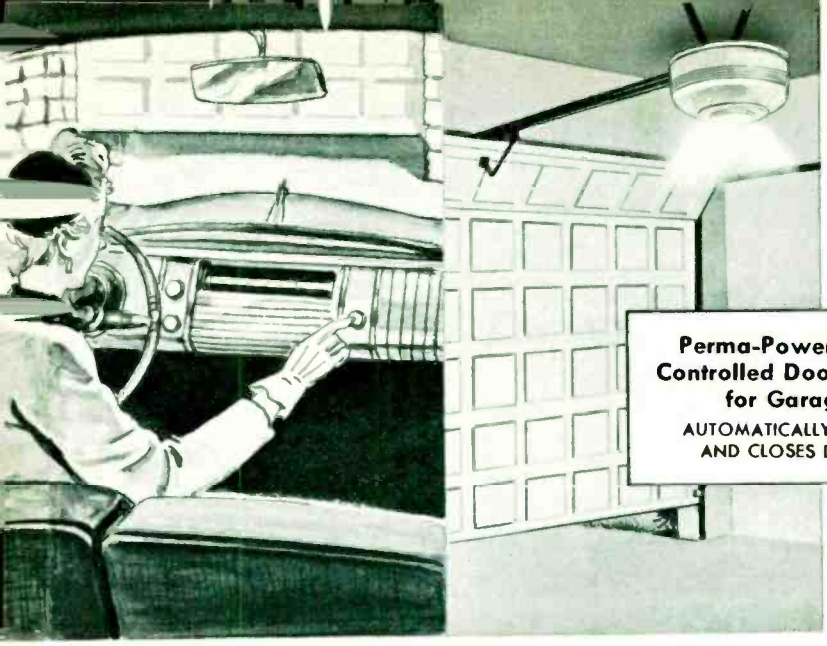
MOSLEY ADAPTERS

TYPE 75-5. Polystyrene base with phosphor-bronze contacts and low resistance pins. Adapts holders with ¾" spaced pins to ½" spaced sockets. Shpg. wt., 2 oz.

72 H 707. NET 35c

TYPE 5-75. Same construction as above, but adapts holders with ½" spaced pins to ¾" spaced crystal sockets. Shpg. wt., 2 oz.

72 H 708. NET 35c



Perma-Power Radio Controlled Door Opener for Garages

AUTOMATICALLY OPENS AND CLOSES DOORS

NEW PERMA-POWER GARAGE DOOR OPENER. Improved radio-controlled garage door opener. Just touch a pushbutton on the car's dashboard and the garage door rolls up! Use the same pushbutton control to close and lock the door securely without stepping out of the car. A tremendous convenience in bad weather. Protection for members of the family coming home late at night. All equipment needed for a complete installation is supplied—plus easy-to-follow instructions for a quick, simplified installation.

Advanced features assure dependable, safe operation. Mechanism shuts power off if an obstruction is in the path of door travel. Motor automatically reverses after each stop. Has thermal overload switch—For complete electrical protection.

Fits overhead, residential garage doors up to 18 ft. wide, 8 ft. high and having a horizontal or curved roller track. For either 1-piece or sectionalized doors. Clearance required between ceiling and high arc of door travel, 2 inches.

Employs an underhood transmitter operated by a dashboard pushbutton, plus a receiver, motor and door-raising mechanism. Receiver is concealed in a streamlined, brushed-aluminum case with built-in overhead light. Diameter of case, 15". Low-voltage control system operates on 24 volts. A 24 v. pushbutton with 18' of wire is supplied to permit motorized operation of the door without radio control. Detachable connecting arm allows manual operation of door in the event of power failure.

The transmitter sends out a signal when pushbutton on dashboard is pressed. Receiver in the garage picks up the signal, turns on the overhead light and starts the motor to operate the lifting mechanism. The next time the button is pressed, the motor will reverse to close the door and lock it securely. Crystal-controlled operation on FCC-authorized frequency of 27.255 mc.

Transmitter has an extremely stable, dependable circuit. Switch for either 6 or 12 volt operation to operate transmitter from any car battery. Tube heater warms up when ignition switch is turned on. Transmits instantly when the pushbutton is actuated.

Two-tube receiver is accurately tuned to the frequency of the transmitter. Motor and receiver operate from 110-120 volts, 50-60 cycle AC. Complete system includes door mechanism, ¼ h.p. motor, transmitter, receiver, antennas, manual pushbutton, all hardware, tubes, wire and instructions. Supplied completely assembled for quick installation. Shpg. wt., 95 lbs.

77 PZ 290. List, $199.00. NET..... **139.50**

EXTRA TRANSMITTER. A great convenience for 2-car families. Permits operation of door opener from either car. With antenna, all necessary hardware and instructions. Shpg. wt., 7 lbs.

77 PX 272. NET..... **24.50**

KEY SWITCH. Key turns switch to operate mechanism. With 2 keys. Wt., 8 oz.

77 P 291. NET..... **4.20**

Conversion Unit for Present Electrically Operated Garage Door Openers

This conversion kit permits radio control of any electrically operated garage door opener. Provides ultra-convenient remote control of garage door by simply depressing pushbutton on dashboard of car. Operates efficiently at distances up to 300 ft. Ideal for modernizing electric garage door openers not yet equipped for remote control operation.

Consists of a complete transmitter, complete receiver, transmitting antenna rod, cable and bracket, 1 receiving antenna, 1 transmitting power cable, 1 pushbutton switch and bracket, hardware and complete instructions.

Transmitter is extremely stable. Crystal-controlled and tone-modulated. Operates on frequency of 27.255 mc. Meets all FCC requirements—does not radiate TV interference. Mounts under engine compartment of car. Transmitter antenna is out of sight under the car. Compact receiver mounts in garage.

Quickly and easily installed; no special tools needed. Complete instructions are supplied. Receiver operates from 110-120 volts, 50-60 cycle AC. Transmitter operates from either 6 volt or 12 volt car battery. Control relay rated for 3 amps at 115 volts. Shpg. wt., 10 lbs.

77 PX 275. List, $80.00. NET..... **56.00**

New Knight Geiger Counter Kit

An outstanding value in a portable Geiger counter kit. Extremely sensitive; actually outperforms far more costly instruments. All materials are supplied. Only a few, simple connections are necessary. Just follow the step-by-step instructions to build this practical, uranium detector—at a fraction of the cost of factory-wired instruments of comparable sensitivity. Detailed instructions for quick assembly.

An ideal unit for uranium prospecting. Convenient and simple to operate. Just turn it on and occasionally flip the high-voltage switch. As radioactive source is approached, clicks in headphone rapidly increase.

A radioactive sample is supplied with the kit, for testing and use as a reference point. The Knight Geiger counter is so sensitive that it reacts even to radiation from the sun, about one click a second. Near a radioactive source the clicks sound like a stream of continuous static.

Employs the same Geiger-Mueller tube (1B85) used in professional-quality detectors. Active length, 2.75 inches; 30 mg. per sq. cm. window. Tube has a thin aluminum wall to permit a high order of response to beta and gamma radiation. A unique high-voltage circuit builds up a voltage of 900 v. from inexpensive, low-voltage batteries.

Circuit designed for extremely long battery life. 1½ and 22½-volt batteries can easily be replaced and are available anywhere. Supplied with neat black and gray case with handle, leather shoulder strap, 3V4 and 1B85 tubes, batteries, AEC booklet, radioactive sample and headphone. Simple, easy-to-follow instructions include pictorial wiring and schematic diagrams. 6¼x5¼x 2¼. Shpg. wt., 2½ lbs.

83 S 242. NET..... **15.95**

EXTRA BATTERY KIT. Shpg. wt., 4 oz.

80 J 663. NET..... **1.07**

See Pages 53-64 for Complete Listing of Knight Kits.

A Wide Selection of Radioactivity Detectors

PRECISION RADIATION UNITS

MODEL 111B SCINTILLATOR. Deluxe, ultra-sensitive scintillation counter, featuring direct readings in uranium percentages. For uranium surveys from plane, car or on foot. Extremely high sensitivity is assured by use of a large detecting element, a 1½" x1" thallium-activated sodium iodide crystal.

Detecting crystal is coupled to RCA 6199 photomultiplier. Efficient 8-tube circuit provides a counting rate of 250,000 counts per minute in a 1 milliroentgen field. Accuracy, 95%; sensitivity, .01 M.E.V. 6 ranges: .025, .05, .25, .5, 2.5 and 5 milliroentgens per hour.

Simple operation. Only 2 controls, range switch and time constant switch. 3" "per cent" meter and tubes are housed in gun-type probe, 3¾x13½". Compact battery box, 5⅝x4⅝x3". Tubes: 6199, 5841, 3—6007, 3—CK526AX. Waterproof and tropicalized. With batteries, leather case, shoulder strap and calibrated radioactive sample. Shpg. wt., 14 lbs.

77 PX 221. NET **495.00**

EXTRA BATTERY KIT. Shpg. wt., 3 lbs.
80 J 660. NET **6.92**

MODEL 111 SCINTILLATOR. Standard model. As above, but has smaller (1x1") detecting crystal. Shpg. wt., 14 lbs.

77 PX 225. NET **395.00**

MODEL 107C "PROFESSIONAL." Extra-sensitive Geiger counter. Meets AEC standards. Accuracy 90% on all ranges. Detects beta and gamma particles; uses sliding shield if only gamma ray response is desired. 3 indicators: Neon flasher, earphone and "per cent" meter with .04, .2, 2 and 20 milliroentgens per hour scales. Calibration control can be adjusted in the field. 900-volt Geiger tube, the 1B85, in directional probe. Has 3—6007 tubes. With batteries, earphone, leather carrying case and belt, and radioactive sample. Wt., 8 lbs.

77 PZ 220. NET **149.50**

EXTRA BATTERY KIT. Shpg. wt., 2½ lbs.
80 J 661. NET **4.26**

MODEL 117B SCINTILLATOR. "Special" model scintillator with a 1x½" detecting crystal. Moderately priced, yet has higher sensitivity than Geiger counters. Probing elements and batteries housed in one convenient case. Same ranges as Model 111B. Accuracy 95% on all ranges except 5 MR/hr range. Thallium-activated sodium iodide crystal, coupled to an RCA 6199 photomultiplier. Other tubes, 2—CK533AX, CK526AX, 5841, 1U5. With batteries, calibrated sample, leather carrying case, strap. 4½x7¼x7". 10½ lbs.

77 PX 222. NET **299.50**

EXTRA BATTERY KIT. Shpg. wt., 3 lbs.
80 J 668. NET **4.52**

MODEL 106C "LUCKY STRIKE." Extremely compact, portable Geiger counter. Completely self-contained in a weatherproof case. Circuit features are similar to Model 107C at left, but does not use separate probe. The "Lucky Strike" is designed for field prospecting under rugged conditions. Employs low-drain type tube for exceptionally long battery life. Built-in Geiger tube with 30 mg. per sq. cm. window section. Accurate calibration control. Uses 1B85 GM tube, 2—1AF4, 1U5, 3½x4½x6½". With batteries, earphone, calibrated sample, leather case, belt. Shpg. wt., 5 lbs.

77 PX 224. NET **99.50**

EXTRA BATTERY KIT. Wt., 2½ lbs.
80 J 661. NET **4.26**

MODEL 108 "SNOOPER." Low-cost radioactivity detector. So small it fits into hip pocket, yet as sensitive as many larger instruments. Simple to operate. Series of loud clicks in headphones when brought near radioactive material. Number of clicks increases as source is approached. Employs 1B86 Geiger tube. Uses only one hearing aid type 22½ volt battery (lasts 6 months to a year) and one flashlight cell. Supplied with headset, batteries and radioactive sample. 1½x3x5". Shpg. wt., 2 lbs.

77 P 075. NET **29.95**

EXTRA BATTERY KIT. Shpg. wt., 9 oz.
80 J 662. NET **1.07**

ELECTRONIC-DEVELOPMENT DETECTOR

MODEL 101 "RA-LOC". Practical uranium detector. Make money prospecting with this low-priced unit. Cash in on Government rewards for finding radioactive minerals with this portable "Geiger Counter." Detects medium energy beta and gamma radiations. Built primarily for location of uranium ores. Can also be used in laboratories for detection of contaminated areas, and for training purposes.

Only one control: Simple on-off switch. Clicking sound in headphones and flash of neon bulb increase in frequency as source is approached. In one compact case. Employs D76 Geiger tube. Convenient clip for wearing on belt. Built-in amplifier and high-voltage vibrator supply. Powered by two ordinary flashlight cells, available anywhere. With batteries, radioactive sample, headphones and government pamphlet. 7¼x4⅜x2¼". Shpg. wt., 4 lbs.

77 P 231. NET **49.50**

EXTRA BATTERIES. Shpg. wt., 2 oz.
53 J 009. NET EACH **11c**

NUCLEAR-CHICAGO RADIATION DETECTOR

MODEL 2613 "ORACLE." Laboratory-standard Geiger counter, ruggedized for trouble-free field service. Retains the excellent temperature-resistance of Geiger counters but is 15 to 50 times more sensitive! Employs unique pack of 10 Geiger-Mueller tubes. Can still be operated even if one or more Geiger tubes fail. Has calibration control to readjust the counter if a tube fails in the field.

Low-drain circuit assures extremely long battery life—over 250 hours. Hearing-aid type tubes used. 2—CK6088, plus NE51 pilot light and voltage regulator. Special Geiger tubes have lead walls for added sensitivity. Large meter with 3 ranges: .02, 0.2 and 2 milliroentgens per hour.

Entire unit is housed in one waterproofed aluminum case 10x5x6". Tropicalized. With batteries, sealed uranium sample, earphones, carrying strap and U. S. government manual. Wt., 14 lbs.

77 PX 229. NET **395.00**

EXTRA BATTERY KIT. Shpg. wt., 3 lbs.
80 J 669. NET **6.30**

CLARKSTAN 501 ALPHA COUNTER

Portable device sensitive to Alpha particles. Uses an optical system focused on a phosphor screen. Excellent for lectures and classroom demonstrations. With case, quencher, radioactive sources and instructions. Shpg. wt., 8 oz.

77 P 062. NET **7.35**

PROSPECTING FOR URANIUM

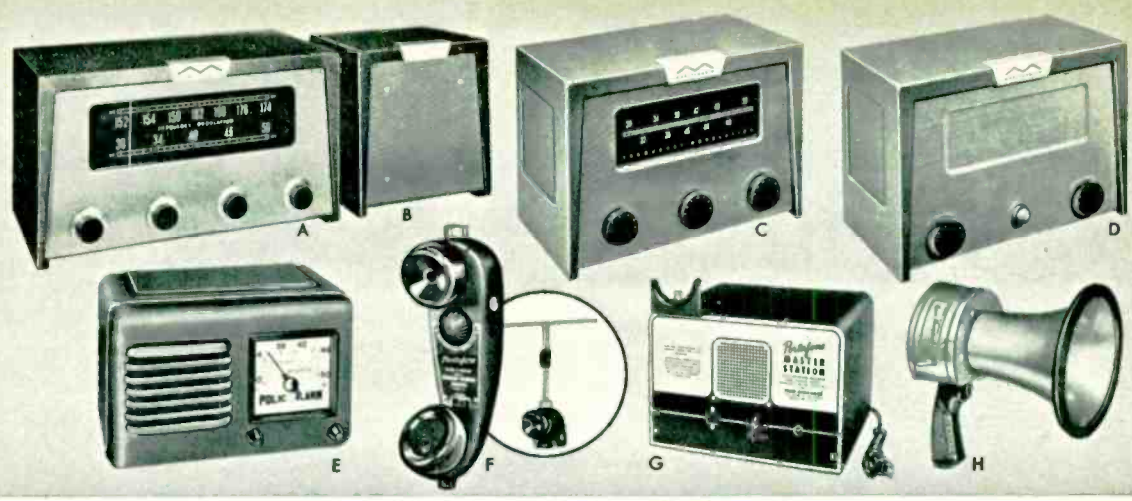
Popular official publication of U. S. Atomic Energy Commission and Geological Survey. Answers most often asked questions and includes a glossary. Typical chapters: The Uranium-Bearing Minerals, Where to Look For Uranium, Testing for Uranium, Prospecting with Radiation Detection Instruments, Laws and Regulations. 123 pages. 4¼x5¼".

37 K 892. Postpaid in U.S.A. **55c**

RADIOACTIVE MATERIAL

Radioactive source useful for testing radioactivity detection equipment. Will give a positive indication if the detection unit is operating correctly. Radioactivity is at a perfectly safe level. Excellent for use in classroom demonstrations and lectures. Embedded in plastic disc, 2" in diameter, for convenient handling. Shpg. wt., 3 oz.

77 P 069. NET **1.00**



Industrial Communications Equipment

MONITORADIO FM RECEIVERS

Fig. A. MODEL DR-200 2-BAND FM RECEIVER. Excellent for central installations with very weak outlying stations. Ranges: 30-50 mc and 152-174 mc. Dual-conversion and separate front-end for each range. Provision for 2 crystal-controlled receiving frequencies (less crystals); one in each range. Squelch circuit. Sensitivity for 20 db quieting: 30-50 mc, 1 microvolt; 152-174 mc, 2 microvolts. Tubes: 4—6BJ6, 2—6BK7, 3—6U8, 6CB6, 6BN6, 6AL5, 12AX7, 6AQ5; 5V3GT rectifier. Brown cabinet with gray panel. 8x14¼x9½". Less speaker. For 110-120 v., 60 cycle AC. Shpg. wt., 21 lbs. *Crystals for fixed frequency reception available on special order at $15.75 each. Specify frequency.*

97 SZ 939. NET 149.95

Fig. B. 6" MATCHING SPEAKER. For above. Shpg. wt., 5¾ lbs.
97 SX 949. NET 14.95

MODEL CA-2 COAXIAL ANTENNA. For above. Shpg. wt., 1 lb.
99 S 000. NET 5.00

MODEL A-30 WHIP ANTENNA. For above. Shpg. wt., 1 lb.
99 S 001. NET 6.50

Fig. C. SINGLE-BAND FM RECEIVERS. New, moderately-priced FM receivers for powerful reception on either the 30-50 mc or the 152-174 mc band. 3 to 3.5 μv sensitivity for 10 db signal to noise ratio. Tuned RF stage for excellent image rejection of 50-65 db. Squelch adjustment for absolute quieting. Illuminated slide-rule dial. Transformer-type power supply. Tubes: 6BC5, 6U8, 2—6BJ6, 6AL5, 12AX7, 6AK6; 6X4 rectifier. Attractive, two-tone metal cabinets, 7⅞x11¼x6½". For operation from 110-120 volts, 60 cycle AC. With built-in 5" speaker. Underwriters' Laboratories Approved. Shpg. wt., 14 lbs.

MODEL MR-10 FM RECEIVER. For 152-174 mc.
99 SX 002. NET 64.50

MODEL MR-33 FM RECEIVER. For 30-50 mc.
99 SX 003. NET 64.50

Fig. D. CRYSTAL-CONTROLLED, SINGLE FREQUENCY FM RECEIVERS. New, highly sensitive FM receivers, crystal-controlled for very stable operation. Available for any single frequency within the 147-174 mc or 25-54 mc bands. 2.5 μv sensitivity for 10 db signal-to-noise ratio. Tuned RF stage; electronic squelch adjustable from front panel; transformer-type power supply; pilot light. Tubes: 6BC5, 6U8, 6CB6, 2—6BJ6, 6AL5, 12AX7, 6AK6; 6X4 rectifier. Metal cabinet with built-in 5" speaker. Size, 7⅞x11¼x6½". 110-120 volts, 60 cycle AC. U.L. Approved. Shpg. wt., 14 lbs. *Price includes crystal. Specify receiving frequency when ordering.*

MODEL MRC-10. For single frequency between 147-174 mc.
99 SX 004. NET 84.50

MODEL MRC-33X. For single frequency between 25-54 mc.
99 SX 005. NET 84.50

Fig. E. "POLICE-ALARM" FM RECEIVERS. Versatile, low-cost FM units for dependable reception of police dispatches and similar services. Superhet with ratio detector; drift compensation; 10 microvolt sensitivity; 100 kc selectivity. 5" PM speaker. Uses: 12AT7, 2—6BJ6, 19T8, 35B5; rectifier is 35W4. Size, 6⅛x10½x6¼". For operation from 110-120 volts, AC or DC. Shpg. wt., 8 lbs.

MODEL PR-31, 30-50 MC BAND. For police, fire, emergency calls. Requires 6-8 ft. vertical antenna for best reception. Use type RG59/U 72 ohm shielded lead-in line. See pages 222 and 236 for antennas; pages 232 and 234 for coaxial line.
97 SX 907. NET 49.95

MODEL PR-9. 152-174 MC BAND. For taxicab calls and similar services. With vertically mounted 16" stub antenna.
97 SX 908. NET 49.95

STEWART WARNER COMMUNICATIONS EQUIPMENT

Fig. F. MODEL 9173B PORTAFONE. Citizens 2-way AM radio system. Transmitter and receiver built into telephone-type handset. Transmits a mile or more along line-of-sight; hundreds of yards where obstructions exist. Operates at 465 mc. Convenient knob for tuning built-in receiver. Station license easily obtained from FCC by any applicant who is over 18 years old; operator's license not required. Uses printed circuits, miniature tubes, superregenerative receiver for efficient operation and compact size. Neon glow lamp indicator for battery voltage check. Horizontal dipole antenna is the collapsible, plug-in type. Shipped in fabric carrying case which holds antenna and batteries. 10½" high—17" with antenna. Less power supply. Use Central Station Power Pack for operation from 110-120 v., 50-60 cycle AC outlet, or Battery Pack for portable operation. Order one Model 9173B for each station desiring 2-way communication. Shpg. wt., 6 lbs.
93 S 885. NET EACH (*Add $3.50 Federal Excise Tax.*) 129.95

CENTRAL STATION POWER PACK. For Model 9173B, above. Operates from 110-120 volt, 50-60 cycle AC. Shpg. wt., 6 lbs.
93 S 883. NET 34.65

PORTAFONE HANDY BATTERY PACK. Special flat pack. Fits Portafone carrying case. Contains all necessary A, B and C batteries. Socket connection accommodates plug of Portafone power cord. Size, 6½x8x1½". Shpg. wt., 4 lbs.
93 S 882. NET 6.45

Fig. G. MODEL 9179 PORTAFONE MASTER STATION. The 9179 Master Station is a broadband superhet receiver designed to pick up any Portafone transmission between 464.5 and 465.5 mc. 10 microvolt sensitivity. Excellent loudspeaker reception. Provides continuous monitoring of Portafone operating channel yet leaves hands free for transcription or other work. Ideal for use at central station to monitor transmissions from portable units in the field. Loudspeaker reproduction attracts operator's attention to incoming transmission. Master Station contains a built-in power pack to operate separate Model 9173B Portafone (not supplied). Special switch-hook holds Portafone in standby position with filaments on, ready for use. Lifting Portafone from hook cuts the loudspeaker and applies high voltage to Portafone for instant 2-way communication. Maroon and gray metal case. 10x12x14". For operation from 110-120 v., 50-60 cycle AC. With detachable dipole antenna. Shpg. wt., 36 lbs.
93 SZ 884. NET (*Add $8.50 Federal Excise Tax*) 199.50

Fig. H. PORTABLE POWER MEGAPHONE. Completely self-contained, portable, power megaphone. Very convenient operation. Single unit contains batteries, microphone and efficient horn-type speaker. Transmits voice crisply and clearly over substantial distances and to large groups of people.

Range up to one quarter mile, depending on noise conditions. Invaluable for handling crowds, Civil Defense work, athletic events, emergency traffic control, fire fighting, freight loading, and many other uses. Light in weight. Has pistol grip and trigger switch. Instant action—no warmup required. Powered by six flashlight batteries. Life of batteries is 120 to 150 hours.

Extremely economical operation. Batteries can easily be purchased anywhere at very low cost. Ruggedly constructed and well balanced for easy carrying. Efficiently designed for dependable performance. Has a large horn diameter of 8½". Includes shoulder strap for easy carrying, and perforated microphone cover to keep out moisture and dust. Easily cleaned mouthpiece made of washable plastic. Handsome, baked-on gray enamel finish. A complete set of batteries included. Shpg. wt., 7 lbs.
81 DX 565. NET 58.75

Extra Batteries. Burgess No. 2 cells for use in above units. Six required. Shpg. wt., 6 oz.
53 J 009. NET EACH 11c

For Full Details on ALLIED's Easy Payment Plan, See Page 315

hallicrafters

Civil Patrol Receivers

Two high-performance FM receivers for excellent reception on public service or commercial frequencies. Model S-94 provides full coverage of all frequencies from 30 to 50 mc. Model S-95 covers all frequencies within the range of 152-173 mc. Both models are carefully designed to assure exceptionally high sensitivity throughout their tuning range. Circular dial is calibrated in megacycles and principal service channels.

SERVICES COVERED. These compact, easy-to-operate units cover police, fire, taxicab, inter-city bus, railroad, private telephone mobile, forestry, petroleum and other industrial and emergency-service communications.

FEATURES. Have minimum drift and high signal-to-noise ratio. Supersensitive—better than 1½ microvolts sensitivity. Employ 2 IF stages. IF frequency, 10.7 mc. Circuit refinements include: Low-noise, grounded-grid RF amplifier; separate high-gain DC amplifier for squelch system and wide-impedance range antenna input system for optimum performance with any antenna.

Designed for very low oscillator radiation to prevent interference with neighboring TV or radio sets. Adjustable, built-in, relay-type squelch system silences entire audio system until signal is received— permits quiet standby operation. Audio output, 1.5 watts.

CONTROLS AND CONNECTIONS. Tuning control with special logging scale assures accuracy in relocating stations. Controls for Off-On/Volume and Squelch-Off. Phone tip jacks and terminals for single or twin lead antenna. Switch for speaker or headphones. Antenna input impedance, 300 ohms. (External antenna provided.) Headphone output impedance, 100 ohms. Optimum results with low-impedance phones. May also be used with high-impedance phones.

TUBES. Eight tubes plus selenium rectifier. 6AB4, grounded-grid, low-noise RF amplifier; 12AT7 high-frequency oscillator-mixer; 12BA6 1st amplifier; 12BA6 2nd IF amplifier; 12AL5 ratio detector; 6BH6 audio amplifier; 50L6GT audio output; 12AU7 squelch.

With built-in 5" PM speaker. In professional-type gray steel cabinet with silver trim panel and clearly visible red pointer. Modern, trim styling. Size, 7" high, 12⅞" wide and 7¼" deep. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 12½ lbs.

MODEL S-94. For 30-50 mc.
98 SX 708. NET **59.95**

MODEL S-95. For 150-173 mc.
98 SX 721. NET **59.95**

For Complete Listing of Hallicrafter Communications Receivers, See Pages 192 and 193.

THE AMAZINGLY USEFUL

RCA TV EYE

Low Cost TV Transmission System Extends Human Vision—Offers Unlimited Use In Industry, Commerce, Business and Home

An amazingly compact TV camera and an ingenious control unit—a closed-circuit television chain ready to serve in any application where extension of human vision is the goal.

USES. *Factories:* Remote observation of production processes and equipment; guarding plant entrances and exits. *Schools:* Remote viewing of lab experiments, microscope slides, etc., by large groups; up to now, such instructional material has been limited to individual viewing. *Transportation:* Remote railroad car checking; recording of car numbers at coal mine tipples; improvement of safety control in rail yards, at rail crossings, airports, piers, docks, etc. *Retail Stores:* Sales promotion, through increase of store traffic, graphic point-of-sale action demonstrations of merchandise. *Hospitals:* Observation of patients where continuous attendance is necessary; large-group viewing of surgery by interns, medical students and nurses. *Penal Institutions:* More effective surveillance by the untiring, ever-alert TV Eye. *Banks:* Instantaneous comparison of signatures with original in record room. *Homes:* Remote observation of the nursery, play-yard, swimming pool, estate entrances, etc.

TYPE HA-1 "TV EYE" CAMERA. Compact—only 10" long, 5" high and 3¾" wide. Connects to any standard TV receiver for remote viewing. No alteration of receiver required. Remote-controlled by operator at control unit chassis. With lens listed below, sensitivity is adequate to permit televising scenes with 100-200 foot-candle illumination. Base tapped for ¼"-20 bolt—for mounting on tripod. Maximum distance between camera and control unit, 500 feet. Obtains power from control unit.

MODEL HC-1 CONTROL UNIT. Has all controls for adjusting camera signal contrast, brilliance and focus. TV Eye system can be cut out to permit operation of TV receiver for regular broadcast channels. Maximum distance from receiver, 300 feet. Size, 11x8x7½". Cable requirements: 1—RG58/U, 1—RG59/U and 1—12-conductor cable (see below). Connects to TV receiver with any twin line or coax cable.

TV EYE CAMERA AND CONTROL UNIT. Must be used together. Supplied with all receiving-type tubes and cable connectors; less Vidicon tube, lenses, tripod and cable (see listings below). For 110-120 volts, 60 cycle AC. Power consumption, 90 watts. Shpg. wt., 20 lbs.
98 SZ 561. NET **635.00**

VIDICON CAMERA TUBE. For HA-1 camera. Shpg. wt., 3 lbs.
EZ1-6198. NET **315.00**

WOLLENSACK "C" MOUNT f1.5 LENSES. Shpg. wt., 8 oz.
98 SC 555. 2" lens. **NET** **117.00**
98 SC 556. 1" lens. **NET** **79.22**
98 SC 557. ½" lens. **NET** **101.86**

TYPE HT-1 TRIPOD. Fully adjustable. Shpg. wt., 7 lbs.
98 SX 564. NET **47.00**

BELDEN TYPE 8282 CABLE. Coaxial cable and 12-conductor line in same sheath. Shpg. wt., 100 ft., 10 lbs.
47 W 556. Per Ft .27c 100' or more, Per 100' **24.25**

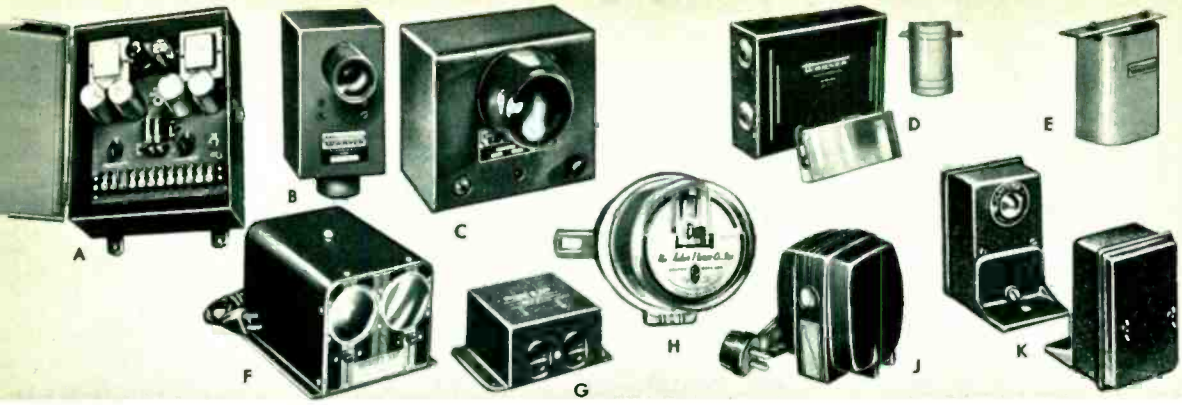
INDUSTRY: Remote observation of production processes and equipment, guarding plant entrances and exits. An alert "eye."

TRANSPORTATION: For remote railroad car inspection, recording of car numbers, safety control in railroad yards, piers, etc.

INSTITUTIONS: Used in schools and hospitals for remote viewing of lab experiments, microscope slides, surgery, etc.

THE HOME: For remote observation of play areas, swimming pools, child nurseries, estate entrances, and similar applications.

Write to our Industrial Sales Division for Additional Information on the "TV Eye" and Accessories



Photoelectric Systems and Accessories

WORNER INDUSTRIAL "FOTOLECTRIC" SYSTEM

Consists of Electronically Operated Relay (either Model 63, 63-A or 63-B), Model 33 Exciter Lamp and Model 23 Photo-cell Receiver. Model 33 has general-purpose (interchangeable) lens which provides a straight, directional beam; may be placed up to 15 feet from Model 23 to detect objects of about 4" square or larger. Both exciter lamp and photo-cell units are housed in identical heavy-duty solid cast-metal case to withstand dampness. Lenses for specific applications are also available. ALLIED can supply the complete Worner "Fotolectric" line. Free literature is available on request.

Fig. A. MODEL 63 ELECTRONICALLY OPERATED DPDT RELAY. Responds to current from photocell. Contacts rated at 5 amps. non-inductive; 2 amps inductive at 110 v., 50-60 cycle AC. Operates up to 600 times per minute on complete or partial change of light intensity. Steel case. 9¼x11½x5". For operation from 110-120 v., 50-60 cycle AC. Shpg. wt., 22 lbs.
77 PZ 085. NET 84.52

MODEL 63-A. As above, but with time delay circuit; variable from 0-45 seconds.
77 PZ 084. NET 110.25

MODEL 63-B. Same as Model 63, but extra sensitive.
77 PZ 094. NET 110.25

Fig. B. MODEL 33 EXCITER LAMP. Light source. Projects beam 15 feet. Gray cast-iron case. Size, 4¼x2¾x2¾". For 6 v. operation. Takes power from Model 63, 63-A or 63-B relay. Shpg. wt., 3 lbs.
77 P 087. NET 11.76

MODEL 23 PHOTO-CELL RECEIVER. Housed in same type of case as Model 33. Shpg. wt., 3 lbs.
77 P 090. NET 15.88

WORNER "FOTOLECTRIC" BURGLAR ALARM SYSTEM

Fig. C. MODEL 5150 BURGLAR ALARM. For interior use. Consists of light source (not illustrated) and receiver-amplifier (Fig. C). Has removable infra-red filter. Receiver-amplifier has on-off switch, lock-controlled warning signal and SPDT relay rated to 5 amps. Alarm can be turned off only by possessor of key. Beam may be reflected in a "V" pattern from a mirror (not supplied) on opposite wall. Range, 150 feet with infra-red. Steel cases. 7x6¼x4¼". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.
77 PX 019. NET 83.79

MODEL 301-A BELL ALARM. 6 volts DC heavy-duty bell. Weather-proof housing. 18-gauge welded steel case. 10x10x4". Wt., 9 lbs.
77 P 093. NET 27.64

MODEL 301-M MIRROR. For use with any photo-cell system. Adjustable mounting bracket. Size, 8x4x2½". Shpg. wt., 2¾ lbs.
77 P 001. NET 7.16

WORNER MODEL 61 "FOTOLECTRIC" ANNOUNCER

Fig. D. Sounds pleasant chime when light beam is intercepted. Announces entrance of persons or vehicles through doorways, passages, driveways, etc. System consists of "Fotolectric" unit, mirror and chime. "Fotolectric" unit has exciter lamp and sensitive photo-cell. Projects beam across passage and receives reflected beam from mirror; may be placed from 3 to 10 feet from mirror. Chime may be mounted wherever desired. Overall size of case, 10¾x7½x2¾". Chime has attractive gray Hammerloid finish. For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 8 lbs.
77 P 028. NET 25.58

REPLACEMENT BULB. 32-candlepower, 2000-hour 6-volt bulb. For Model 33 Exciter Lamp, Model 5150 Burglar Alarm and Model 61 "Fotolectric" Announcer. Shpg. wt., 5 oz.
77 P 023. NET 44c

Fig. E. REPLACEMENT CHIME. For Model 61 Announcer. May also be used with Detect-O-Ray photoelectric system at right or with any other 6-volt AC power supply. Excellent as warning device for home or store. Shpg. wt., 2 lbs.
77 P 035. NET 2.58

DETECT-O-RAY EQUIPMENT

Fig. F. MODEL L-162C PHOTOELECTRIC SWITCH. Universal photoelectric system useful as an "unseen light" burglar alarm, counter, sorter, announcer; for motor and safety control, etc. Housed in a single small case, only 5x6¼x7½". Includes: Light which projects a conventional beam; a filter controlled by a lever which can be shifted to the front of the light if an "unseen" beam is desired; a photo-cell receiver; an amplifier, and a relay capable of actuating an alarm or similar device. Also built into the case is a switch to permit choice of intermittent or continuous operation of the actuated device. System is installed on one side of an area to be controlled, and an adjustable mirror (included) is installed on the opposite side. Range: 50 feet, white beam; 35 feet, "unseen" beam. Black wrinkle case. Terminals for any 5 or 6 volt AC device using up to ¾ amp or to the heavy-duty relay listed below. For 110-120 v., 50-60 cycle AC. Indoor use only. Shpg. wt., 6 lbs.
77 P 060. NET 32.93

Fig. G. MODEL L-205C POWER RELAY. For use with above when operating heavy-duty equipment that draws up to 1,000 watts on 110 volts AC. SPDT. 110 v., 60 cycle AC switch with convenience outlets for normally on or normally off functions. Steel case. Black crackle finish. 4¼x2½x2½". Shpg. wt., 1¼ lbs.
77 P 061. NET 8.17

Fig. H—FISHER-PIERCE MODEL 63305C BEACON LIGHT CONTROL

For control of aircraft obstruction lights. Turns lighting systems on or off when outdoor light intensity changes. Has time delay of 7-10 seconds to prevent actuation by lightning, rotating beacons, or any short duration light source. Controls up to 3000 watts. Rating applies to incandescent, mercury or sodium vapor lights. Operates at 120 v., 50-60 cycles. Tested for an inrush current to steady state current ratio of 10 to 1. Turns on lights at 35 foot-candles illumination and off at 55 foot-candles in accordance with CAA operating requirements. Turn-on point is adjustable from 25 to 45 foot-candles. Turn-off point is 20 foot-candles higher. Lights remain on in event of circuit failure. Shpg. wt., 9½ lbs.
77 P 048. NET 53.90

FISHER-PIERCE MODEL 63300C STREET LIGHT CONTROL. Same as above except turns on light at 0.5 to 5.0 foot-candles. Turn-off point 1.0 foot-candle above turn-on. Shpg. wt., 9½ lbs.
77 P 054. NET 50.96

Fig. J—FISHER-PIERCE MODEL 6501 NITELIGHTER

Photoelectronic automatic light switch, turns lights on at dusk, off at dawn. Operation is completely automatic. Used to control home lights, it guarantees that home is always illuminated—discourages prowlers. Simplest possible installation—just plug unit into 110-120 volt AC socket and plug lamp or appliance into Nitelighter adapter plug. Housed in attractive sturdy brown bakelite case. Has bracket for flat surface mounting if needed. Handles a maximum load of 300 watts. Size: 3½" wide, 4½" high, and 3½" deep. Complete with 8 foot cord set with adapter plug. For interior use only. Also excellent for window displays, garages, poultry houses, yards, electrical signs, etc. Shpg. wt., 4½ lbs.
77 P 055. NET 15.63

Fig. K—AUTOTRON MODEL S1A-L1A COUNTING EYE

For industrial counting. Consists of light source and photoelectric control housed in rugged cast-aluminum cases. Light source unit is placed at one side of conveyor or passage and photoelectric control is mounted directly opposite (up to 6 feet apart). When used with electric counter (p. 211) will count anything intercepting beam. Provides dependable performance under continuous duty at high speeds. Built to heavy-duty industrial standards, these units feature splashproof and dustproof enclosures, rubber-based tube sockets, adjustable mounting brackets, and "fail-safe" circuit protection. SPDT relay; contacts rated at 5 amps, 115 v. AC. Each case, 5x3¾x3". For operation from 115/230 volts, 50-60 cycle AC. Shpg. wt., 6 lbs.
77 P 079. NET 53.05

Electronic Components for Industrial Application

KEPRO ETCHED CIRCUIT KITS

Fig. A. PROFESSIONAL KIT. New etched circuit kit designed to produce printed circuits of commercial quality. A negative of the desired layout can be produced photographically, or manually with the negative materials supplied. A sensitized sheet of of copper-clad XXXP phenolic is exposed through the prepared negative, then developed and etched. Very fine detail and exact reproduction are assured when using this photographic process. Kit contains: 2 sheets of 1/16" copper-clad phenolic 6x3"; 2 pieces negative mask; 1 printing frame glass; 2 printing frame clamps; 1 bottle developer; 2 bottle etching solution; 1 aluminum developing tray; 1 polystyrene etching tray; 1 cleaning pad; and complete instructions. Shpg. wt., 2½ lbs.

43 N 068. NET.....5.29

Fig. B. STANDARD KIT. New etching kit for manually producing etched copper circuits. Ideal for experimental layout and single pieces of equipment. Simple to use—just draw the desired circuit on the copper-clad XXXP phenolic using the etch-resistant coating supplied. Excess (unprotected) copper is removed with etching solution. Kit contains: 2 sheets of 1/16" copper-clad phenolic 6x3"; 1 bottle etch-resistant solution; 1 etching tray; 1 bottle etching solution; 1 cleaning pad; 1 brush; and instructions. Shpg. wt., 1½ lbs.

43 N 069. NET.....3.38

Fig. C—PRINTED CIRCUIT KIT

Develop miniature equipment and paint your own radio circuits. Kit holds everything required to apply "micro-circuit" techniques to your own circuits. Consists of silver conducting paint and low, medium, high and very high resistance paints, insulating lacquer, solvent and brush cleaner. Includes manual "Design and Repair of Printed Circuits." With this kit you can make resistors, capacitors, connecting wires, etc. With brush. Shpg. wt., 1¾ lbs.

43 N 070. NET.....10.24

PRINTED CIRCUIT TECHNIQUES. A general treatise on printed circuit techniques published by the United States Department of Commerce.

37 K 893. Postpaid in U.S.A.....40c

Fig. D—MONTGOMERY PROGRAM CLOCK

MODEL M-24 SINGLE-CIRCUIT CLOCK. For dependable automatic operation of buzzers, bells or horns, on a 24-hour schedule. Clock has standard 12-hour face. Signal schedule is set by inserting pins in time-slots of 24-hour mechanism. 288 time-slots permit actuating signal at up to 5 minute intervals. Signal duration adjustable from 4 to 20 seconds. Switch for automatic silencing of signals during any days or nights of the week. May be manually operated without disturbing schedule. Timer contacts rated 10 amperes. Gray enameled steel case. 11x8x4". For 110-120 volts, 60 cycle AC. Shpg. wt., 12 lbs.

78 BX 351. NET.....87.71

Fig. E—G.E. TOWER LIGHTS

CAA-approved-type tower and obstruction lights. For 125 volts, 60 cycle AC.

PS40/45. 500 WATT. For top and middle of tower. Mogul pre-focused base. 8 oz.

52 E 366. NET.....2.00

A-21/TS. 100 WATT. For radio tower lighting, airfield border lights, etc. Medium screw base. Shpg. wt., 6 oz.

52 E 367. NET.....37c

Fig. F—G. E. BINARY SCALER

TYPE 4SN1A4. For industrial counting, interval timing, repeat cycling, nucleonic applications, etc. A multivibrator having 2 stable states. Large numbers can be cascaded for binary scaling and counting to corresponding powers of 2; no intermediate stages required. Four may be used for decade operation by introducing feedback. Triggers up to 200 kc per second. Two pulse resolution is 4 microseconds. Input: 20-75 v. negative with rise time of 1.0 microseconds or less. Output: 90 v. peak to peak (square-wave). Uses 5963 twin-triode with 10,000-hour heater. Fits octal socket. Requires 210 v. DC at 7 ma and 6.3 v. at 0.3 amp. Size. 3⅞" long x 1⅜" D. With 5963 tube. Shpg. wt., 12 oz.

84 F 819. NET.....16.95

Fig. G—SELECTOHM POTENTIOMETER

100,000 ohm, 25 watt, calibrated, wire-wound potentiometer of laboratory quality. An ideal precision resistance substitute for use as a decade box, voltage divider or a bridge circuit component. Dial calibrated in 200 divisions. Over 15 inches of scale length. 15.8 ma capacity. 6" x 3¾". Shpg. wt., 2 lbs.

84 M 323. NET.....8.82

Fig. H—TUBE CHARTS

New, 20-sheet graph pads of tube characteristics. Include plate, screen, positive grid, mu, gm, and rp curves; plus physical and electrical data for all equivalent tube types. Graphs have 1, 2, or 5 units per scale div. for simplified readings. **Postpaid in U.S.A.**

Stock No.	Tube Types (and Equivalents)
39 K 200	12AU7, 5814, 5963, 6C4, 6135, 6189, 6100
39 K 201	12AT7, 6AB4, 6201, 12AZ7
39 K 202	12AX7, 6AV6, 6BK6
39 K 212	6AQ5, 6005, 6V6GT, 6CM6, 7C5, 5871, 6287, 5992 (triode)
39 K 203	As above, pentode connected
39 K 204	6SN7, 6J5, 6CG7, 1633, 7A4, 5692, 7N7, 12G4, 12H4
39 K 205	6SL7, 6SU7GTY, 5691, 7F7, 6188
39 K 206	6L6, 5932, 1631, 5881 (triode)
39 K 211	As above, pentode connected
39 K 207	5965
39 K 208	5687
39 K 209	5751
39 K 210	5718

Above charts. NET EACH.....89c

PRODUCTION INSTRUMENT CO. ELECTRIC COUNTERS

MERCURY MODERATE-DUTY COUNTERS

Small, low-cost electric counters ideally suited for built-in applications on coin-operated equipment and industrial equipment where counting duty is moderate. Extensively used on coin-operated amusement equipment and vending machines, such as automatic phonographs, soft-drink dispensers, and pin ball games. Also used for light-duty production counting, laboratory counting, and photo-electric counting. Actuated by any type of switch or relay with minimum closed period of .04 second and minimum open period of .06 second. Tested at 600 counts per minute. 4 digits, except Type MEA-N5, has 5 digits. Completely enclosed in tamper-proof case with plastic window. Approx. LWH. 1²³/₃₂x1⁹/₁₆x2¹³/₃₂". Power required, 3 watts. Operated on 60 cycles AC. Types are available for other voltages, and for DC operation. Also available with impregnated coils and other special features. Write for literature and prices. Av. shpg. wt., 1 lb.

Fig. J—MDB-S4 PANELMOUNT (RESET)

Stock No.	Mfr's Type	Volts	NET
77 P 044	MDB-S4-6A	6 v. AC	13.50
77 P 099	MDB-S4-24A	24 v. AC	13.50
77 P 049	MDB-S4-115A	115 v. AC	13.50

Fig. K—MEA-N5 (NON-RESET)

Stock No.	Mfr's Type	Volts	NET
77 P 032	MEA-N5-6A	6 v. AC	5.00
77 P 033	MEA-N5-115A	115 v. AC	5.00

Fig. L—MDA-S4 (RESET)

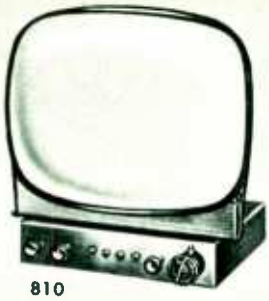
Stock No.	Mfr's Type	Volts	NET
77 P 042	MDA-S4-6A	6 v. AC	11.50
77 P 097	MDA-S4-24A	24 v. AC	11.50
77 P 043	MDA-S4-115A	115 v. AC	11.50

Fig. M—SUPER WIZARD ECS-9 COUNTER

Six-digit industrial type for heavy duty applications. Built to withstand the vibration and strain of large machinery. Any part, article, motion, or operation that can be made to operate an electrical switch or photo-electric relay can be counted with Wizards. May be grouped on panels and located at any distance from the machine to which attached. Tested at 1,000 counts per minute. Resets to zero by one complete turn of knob. All working parts completely enclosed. Has bakelite number wheels with large white figures on black background. Design permits minimum "make" duration of .024 second; minimum "break" duration of .036 second. Power consumption only 5 watts. Coils designed for continuous operation. Operates in any position. For 115 volts, 60 cycle AC. Overall size. 3⅝"x4¹⁵/₁₆x5¹³/₃₂". Shpg. wt., 3 lbs.

77 P 036. NET.....38.50

Types with proper impedances for direct connection into electronic switch plate circuits are available on special order; write for literature and prices.



Conrac Fleetwood Custom TV Chassis

MODEL 800 REMOTE-CONTROL TV RECEIVER. Provides the ultimate in luxurious TV reception. High-fidelity picture quality plus the ease of remote control. Convenient, all-electronic, chairside tuning system. Ideal for custom installations. Designed to play through high-fidelity sound systems or through its own audio amplifier and external speaker.

Remote tuner may be operated 40 feet or more from the picture chassis. One tuner can be used to control and feed signal into as many as 6 picture chassis. All necessary controls operate from the remote location. Tuner is super-cascode type with interchangeable strips for easy adaptation to UHF. Full set of numerals for channels 2 to 83 are supplied.

Features new definition control to permit variation of picture texture. 4 megacycle IF bandwidth provides a superior picture with amazingly sharp detail. Has keyed AGC. 4 stages video IF, separate cathode followers for audio and video circuits. 2 low-level audio outputs, high-impedance and cathode follower.

For 21, 24 or 27" picture tubes. 90° deflection. Sizes (HWD) with: 21" tube, 21¼x21x21⅛"; 24" tube, 23¾x23¼x22¼"; 27" tube, 26¼x26x24". Remote unit, 7x11½x9". With tuner chassis, picture chassis, 27 tubes, 40-ft. control cable and escutcheon. Less picture tube and speaker. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 65 lbs.

99 SZ 066. NET **299.50**

MODEL 84 REMOTE TUNER CABINET. Size, 8x12x9½". Shpg. wt., 4 lbs.

99 SX 067. MAHOGANY. NET **19.95**

99 SX 068. BLONDE. NET **21.95**

MOUNTING KITS. For mounting picture tubes on chassis 800, 810, except *for model 610 only.

Stock No.	Type	For Tube	Lbs.	NET
99 SX 093	807B	27EP4	5	6.00
99 S 094	804B	24CP4A	3	6.00
99 S 095	801B	21AMP4A	2	6.00
99 S 054	*601C	21APW4	2	3.00

MODEL 810 SINGLE CHASSIS TV RECEIVER For the very best in picture quality. All the luxury features of the Model 800 (at left) but tuner, controls and picture circuits are on same chassis. A superior television receiver—on a par with professional TV station monitors. An excellent choice for hi-fi custom systems. Can be installed in built-ins, custom cabinets or a favorite antique. All controls are readily accessible from the front panel.

High-impedance output for direct connection of audio to a high-fidelity amplifier. Also has built-in audio amplifier with output for a 3-4 ohm speaker. 4 controls: Channel selector and fine tuning; off-on-volume-contrast; brightness; definition. Once brightness control is set, keyed AGC automatically adjusts brightness to the correct level for any channel. Keyed AGC greatly reduces airplane flutter and similar interference.

Super-cascode tuner is easily adapted for UHF with simple interchange of strips. Video circuits designed to assure maximum picture detail. Full 4 mc bandwidth. 4 stages video IF. Finished in attractive gray and black.

For 21", 24" or 27" picture tubes requiring 90° deflection. Takes same picture tubes as Model 800 at left. Chassis is same size as Model 800. Supplied with 24 tubes including rectifiers and 4 knobs. Less picture tube, speaker, tube mounting bracket. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 50 lbs.

99 SZ 069. NET **229.50**

MODEL 610. As above, but takes 21" rectangular 70° tube. Size (using 12AWP4) 21¼x21x24". Shpg. wt., 50 lbs.

99 SZ 058. NET **199.50**

ACCESSORY KITS. Frame, safety glass and tube mask. *This tube for Model 610 only.

Stock No.	Type	For Tube	Size	Lbs.	NET
99 SZ 096	827BF	27EP4	24x30"	25	29.50
99 SX 097	824BF	24CP4A	20½x25"	18	29.50
99 SX 098	821BF	21AMP4A 21AWP4*	18x24"	15 15	19.50 19.50

Famous Tech-Master Gold Medal Series TV Chassis

MODEL 2430. Dependable, big-picture television chassis for extra-fine picture quality. An ideal set for fringe area reception. Combines latest engineering developments with time-proven RCA 630-type circuit. Makes a beautiful custom installation. Also an excellent choice for replacement use. Chassis is plated in gleaming nickel. For use with 17", 21" and 24" picture tubes.

ADVANCED TV ENGINEERING. Cascode turret type tuner; high sensitivity of 5 microvolts. Adapts for UHF with simple interchange of tuner strips. Horizontal and vertical blanking. Syncro-strip intercarrier design. Modified intercarrier system of picture-sound synchronization. Designed for optimum tuning of picture and sound simultaneously. New high-sweep autotransformer for outstanding brilliance.

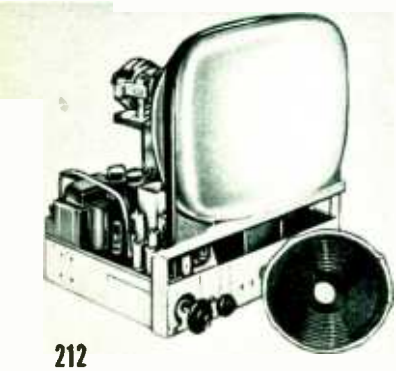
EXTRA CIRCUIT FEATURES. Full 4 mc bandwidth for maximum picture detail. Quick-action, keyed AGC assures stable contrast and minimizes airplane flutter. Ferrite core high-voltage transformer for excellent horizontal linearity and retrace. "Picture-expander" provides extra width under low line-voltage conditions. Area control switch adjusts set for best reception in weak or strong signal area.

VERSATILE AUDIO. Has built-in audio amplifier and 12" speaker. Also a convenient audio take-off jack permits playing TV sound through a hi-fi system. Has crystal phono input; switch "blacks out" picture tube when records are played. Supplied with 26 tubes, 3 rectifiers, universal picture tube mounting bracket and 12" PM speaker. Less picture tube. Size (HxWxD): with 17BP4A, 18¾x21¾x20½"; with 21EP4A, 23x22x24½"; with 24AP4, 30x25x23⅝". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 70 lbs.

97 SZ 961. NET **189.50**

MODEL B-15 AM TUNER. For neat, compact installation under picture tube of the Tech-master Gold Medal chassis described above. Provides excellent AM reception. Shpg. wt., 2½ lbs.

98 S 027. NET **19.95**



New Tech-Master TV Kit

MODEL 630-9. Tech-Master's finest TV kit. Features improved RCA 630-type circuit. Uses a high-gain cascode turret tuner. Highly efficient tuner assures excellent sensitivity of 5 microvolts. High signal to noise ratio. Ideal receiver for weak signal areas. Provides outstanding TV reception at a cost less than that of comparable commercial sets. For 21-27" picture tubes, 90° deflection.

Engineered for amazingly easy construction. Used by leading schools for comprehensive television training. All major components are mounted on chassis ready for wiring. Easy to assemble—anyone with some knowledge of radio can build this kit. Pictorial diagrams guide each wiring step. Employs keyed AGC circuit, 2-stage video amplifier, 4-stage picture IF and separate IF strips for picture and sound. 4 mc bandwidth for complete picture definition. 16 kv high-voltage power supply provides outstanding picture brilliance. 12-channel cascode turret tuner. Adapts for UHF by interchanging tuner strips.

With 26 tubes, 3 rectifiers, all parts and instructions. Chassis is 21¾" wide, 15¾" deep without picture tube. Less picture tube, mask, wire and solder. For 110-120 v., 60 cycle AC. Shpg. wt., 62 lbs.

98 SZ 566. NET **159.50**

Picture Tubes for the Above TV Chassis Are Listed on Page 65. Escutcheons and Mounting Accessories for Techmaster TV Chassis Listed on Page 230.

UHF Television Converters

Fig. A. MALLORY 88 CONVERTER. Economical converter for reception of UHF television stations on VHF receivers. For all UHF channels, 14 through 83. Entirely self-contained. Easy to install. Connects directly to antenna input of VHF TV sets. Has large, 4" slide-rule dial for station selection. Front control turns TV set on and off, and permits instant changeover from UHF to VHF antenna. Broadband output permits use of channels 5 or 6 of TV set as IF. Input and output impedances, 300 ohms. Maroon plastic cabinet, 7½x4⅝x5¼". Tubes: 6AF4 or 6T4, 6CB6; crystal diode and selenium rectifier. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 6½ lbs.

98 S 588. List. $29.95. NET.....**22.46**

Fig. B. BLONDER-TONGUE BTU-2 CONVERTER. High-gain, low noise UHF TV converter. Fully shielded tuner, 3-gang continuous tuning on all UHF channels, 14 through 83. Self-contained, with built-in power supply for easy installation. Antennas and TV receiver connect to converter. Broadband output uses channels 5 or 6 of TV set as IF. Terminals for VHF and UHF antenna lines; 300-ohm input and output impedance. Compensated oscillator eliminates drift. Highly selective, double-tuned RF stage for interference rejection. Automatic on-off controlled by TV set power. Instant changeover from UHF to VHF. Mahogany-finish plastic cabinet. With 6AB4, 6AF4 or 6T4, selenium rectifier and crystal diode. Size, 6¼x4¼x4¾". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs.

98 S 099. List. $39.95. NET.....**27.44**

ASTATIC CB-1-A CONVERTER-BOOSTER. Combination UHF converter and VHF TV booster. Permits continuous tuning through all UHF channels (14-83) on VHF TV sets and provides additional gain for greatly improved reception of the VHF channels (2-13). Consists of 2 tuned preselectors, a 6AF4 (or 6T4) oscillator and 1N82 diode mixer. Uses two-stage neutralized push-pull amplifier with 6J6 driving 6BQ7A grounded-grid amplifier. 4-position control knob for "straight through VHF," boost on low VHF channels, boost on high VHF channels, and UHF operation. Converter output on VHF channels 3, 4, 5 or 6. UHF input is 300 ohms, VHF input and output 300 or 75 ohms. Terminal connections for UHF and VHF antennas. Housed in handsome brown and gold metal cabinet. Size, 9x6x5¾". For 110-120 volts, 60 cycle AC. Shpg. wt., 7½ lbs.

98 S 098. List. $59.50. NET.....**34.99**

Popular Television Booster and Distribution Systems

Fig. C. ASTATIC CT-1 VHF "SCANAFAR." Here's the latest version of the highly popular, very effective "Scanafar" 2-stage TV booster. Provides improved picture over 7 mc bandwidth on any of the 12 VHF television channels. Gives excellent results in primary areas with indoor antenna and in fringe areas with outdoor antenna.

Features high-gain, low-noise 6BQ7A tube, driven by a 6J6. Balanced, cascaded circuit provides an extremely high signal-to-noise ratio. Controls: Channel Selector, Off-Low Band-High Band. Can be used with either 72- or 300-ohm lines.

Housed in smart metal cabinet with mahogany wood grain finish. Size, 6½" wide x 4¾" high x 7⅞" deep. For 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs.

97 T 244. List. $35.00. NET.....**20.58**

Fig. D. REGENCY DB-550 VHF BOOSTER. Expertly designed booster. Tremendously improves sensitivity and signal-to-noise ratio on all 12 VHF TV channels. Provides an average boost in gain of 17.5 db. Excellent for use in weak signal areas.

Simple single-knob tuning. Advanced, triple-tuned circuit employs two stages in cascade and features both capacitive and inductive neutralization for maximum stability. First stage uses 6J6 dual-triode in push-pull; second stage is 12AT7 grounded-grid, push-pull amplifier. Has self-contained power supply with power transformer for isolation of unit from power line.

Off-on switch controls both booster and television set. Input and output impedance: 300-ohms. Housed in attractive, mahogany-finish plastic cabinet. Size, 4½x6x4½". With instructions. U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 5 lbs.

98 T 363. List. $37.50. NET.....**22.05**

Fig. E. BOGEN MODEL BB1-A VHF BOOSTER. VHF booster with an advanced circuit for improved picture and sound. This compact unit is ideal for fringe area installations. Two separate 6J6 dual triodes operate in independent push-pull circuits. Separate circuits for high and low bands assure very high efficiency. Built-in power supply with selenium rectifier.

Push-pull circuits provide high gain (18 db) with broad bandwidth and high signal-to-noise ratio. Bandwidth of 6 mc is more than ample to reproduce fine picture detail. Excellent signal-to-noise ratio assures maximum signal gain with no increase of "snow."

One control tunes continuously from channel 2 to 13. "Off" position connects TV set directly to antenna for channels not requiring booster. Power for booster is turned on and off automatically with the TV set. Precision-tooled, gear-driven tuning assembly, for positive tuning without backlash. Housed in brown plastic cabinet, 8x4⅞x4¾". For 110-120 volts, 60 cycle AC. U.L. Approved. With 4 feet of 300-ohm twin line. Shpg. wt., 4½ lbs.

98 T 360. List. $32.50. NET.....**19.50**

Fig. F. JERROLD DSA-132 VHF PREAMPLIFIER. The "De-Snower TV preamplifier" offers unusually high gain without stepping up "snow." Antenna mounting permits amplifying TV signal without amplifying noise picked up in antenna lead-in line. High signal-to-noise ratio.

Power supply mounts on back of receiver and connects to 110-120 volt, 60 cycle AC line. Supplies low voltage, 24-28 volts, to operate the preamp. The same antenna line is used to bring power up to the preamp and the signal down to the set. Input for channels 2 to 13. Optional inputs for low band only (channels 2 to 6) or high band only (7 to 13). Choice of 72 or 300 ohm impedances at input and output to provide a correct match for any TV antenna line or TV receiver input.

Employs 3—6BQ7A, 6AK5, 6CB6. Automatic on-off switch for control by TV set or continuous 24 hour operation. Gain: 25 db on channels 2 to 13. Frequency response: ±1 db, channels 2 to 13. Noise level: 6 db, channels 2 to 6; 7.5 db, channels 7 to 13. Preamp has "Iridite" weatherproof case, 5x5x10¼". Power supply, 2½x5½x7¼." Shpg. wt., 12¾ lbs.

92 TX 095. List. $109.50. NET...**65.70**

Fig. G. BOGEN MODEL UHB UHF BOOSTER. Newly designed, highly efficient UHF TV booster covering channels 14 through 83. Excellent for UHF fringe areas and locations where heavy interference is encountered. Extremely high sensitivity and excellent signal-to-noise ratio. Offers 13½ db gain on lower frequencies; 8 db on higher frequencies. Uses simple, single knob, continuous tuner over entire UHF band. Coaxial-type tuning system employs low-noise 6AN4 UHF amplifier tube. Booster automatically turns on and off with TV receiver—uses high-quality thermal-type relay. Has selenium rectifier power supply. Housed in attractive mahogany metal cabinet. Size, 4¾x8x5¼". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.

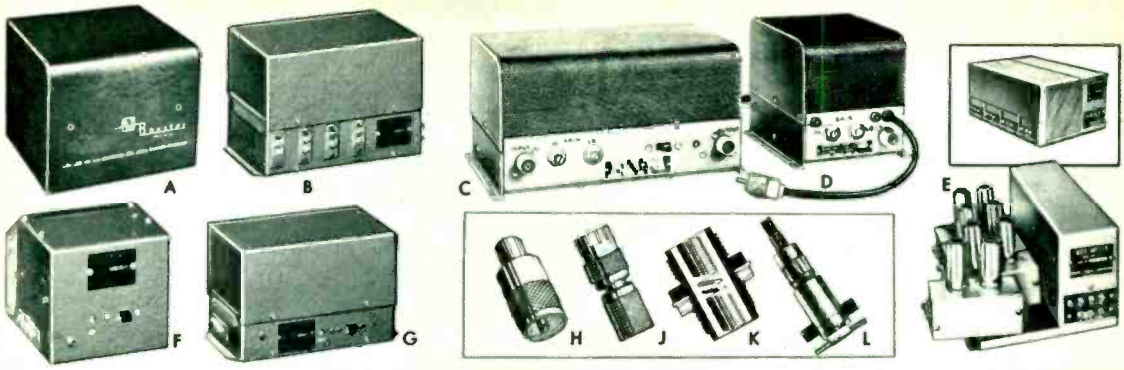
98 T 395. List. $41.00. NET.....**24.60**

Fig. H. WALDOM MODEL DA-2000 DISTRIBUTION AMPLIFIER. The "Duo-Tenna"—a 2-set electronic TV distribution amplifier. Signal delivered to each set is an average of 3 db better than the signal available directly from the antenna. 300-ohm inputs for both VHF antenna and UHF converter. Outputs: 2-300 ohm twin-lead connections to TV sets. Uses 2-6BK7A as separate and independent broad-band amplifiers. UHF distribution input converts both sets to UHF reception with a single UHF converter. Size, 8x5⅜x2¾", in gray metal cabinet. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 3 lbs.

98 T 473. List. $39.50. NET.....**23.23**

MODEL DA-1010. "Ten-Tenna." Distribution amplifier similar to Model DA-2000 above but for use with up to 10 TV sets. Uses 1-6BK7A, 3-6J6 tubes. Size, 12½x3¼x7¼". For operation from 110-120 v., 60 cycle AC. Shpg. wt., 8 lbs.

98 T 494. List. $89.50. NET.....**52.63**



Blonder-Tongue Television Booster "Antensifiers" and Distribution Systems

BLONDER-TONGUE VHF ANTENSIFIERS

Two powerful TV boosters. Model HA-3 is for use with one TV receiver. Model CA-1 is for distribution systems and deluxe home installations. Both units are fully automatic.

Fig. A. MODEL HA-3. Broadband booster featuring an advanced 3-stage, push-pull cascade circuit. Designed primarily for home operation of single receivers. Signal boost of greater than 16 db on all 12 VHF channels. No knobs, no tuning and no channel switching. Booster switches on and off with TV set. Employs three 6J6 low-noise, dual-triode tubes. Excellent signal-to-noise ratio. Attenuator switch prevents overload on channels requiring no amplification. 5x5¾x4". For 105-125 v., 60 cycles AC. Shpg. wt., 4 lbs.
98 T 221. List. $47.00. NET.... 27.64

Fig. B. MODEL CA-1. Powerful commercial TV VHF preamp with gain of 24 db. May be used at any point of any distribution system. Ideal as line amplifier in master TV systems or community installations. Has precision-engineered matching transformers for use with 75 and 300 ohm lines. Dual-triodes used for best signal-to-noise ratio. Uniform response over entire TV band. Ventilated metal cabinet. 8x4½x5". With 2—6J6's and 2—6BQ7A's. For 105-125 v., 60 cycles AC. Shpg. wt., 7 lbs.
98 T 218. List. $79.50. NET.... 46.75

MLA VHF TV SIGNAL AMPLIFIER

Fig. C. The new 'Masterline' is an unusually effective VHF TV signal amplifier. Provides a signal boost of not less than 37 db to tremendously improve reception in fringe and other weak signal areas. Also, excellent where very long transmission lines weaken signal. May be installed in coax line going to single TV set, or used with Blonder-Tongue DA2-1 or DA8-1 antenna distribution systems (described at far right), in installations feeding 2 or more TV sets from 1 antenna. Several "Masterlines" may be placed in cascade when extremely long transmission lines are used. May be used with MAGC unit (below), to virtually eliminate signal fluctuation. Offers maximum fidelity for color TV. Gain is adjustable on high and low bands. Response flat within ±.5 db over any 6 mc channel. Cascode amplifying circuits assure minimum noise level. Coax input and output connectors. 9x6x5" deep. In perforated gray metal cabinet. For 110-120 v., 60 cycle AC. Shpg. wt., 9 lbs.
92 T 090. List $124.00. NET.... 72.91

MAGC AUTOMATIC GAIN CONTROL

Fig. D. For use only with the Model MLA above. Maintains a constant output level of the amplifier, even with 20 db variation in signal strength. Effective from 14,000 to 140,000 microvolts. Also compensates for AC line variations. Radiation-resistant coax connectors. Takes operating voltages from Model MLA. Features controls to independently adjust signal levels on high and low bands. Gray hammertone. Size: 6x4x5". Shpg. wt., 6 lbs.
92 T 091. List. $71.00. NET.... 41.75

MODEL MA4-1 MIXER-AMPLIFIER

Fig. E. TV signal mixer, for up to five antennas. Amplifies and mixes up to five input signals into a common output. For either individual or master antenna systems. Permits the use of four separate high-gain Yagi antennas and one broadband antenna. Requires no rotators or boosters. Provides maximum ghost-free reception because each antenna can be individually oriented to the particular TV station desired when installed. Output can be fed directly to TV receiver or to a distribution amplifier. May be connected in series for any number of antennas. Uses channel strips listed below. New VHF and UHF antennas can be accommodated at any time with plug-in VHF strips and plug-in UHF converter strips. One input is broadband for signals requiring no preamplification. Remaining 4 single-channel inputs use separate plug-in strip assemblies with gain in excess of 17 db. Impedance: 75- and 300-ohms at all terminals. Size of chassis with self-contained power supply, 4x6x8¾". For 105-125 volts, 60 cycle AC. Less plug-in strips (see listing of VHF and UHF strips below). Gray case. Shpg. wt., 7 lbs.
98 T 305. List. $64.15. NET.... 37.73

STRIPS & CONVERTERS FOR ABOVE

MODEL CS-1 VHF CHANNEL STRIPS. Plug-in strips. For use with Model MA4-1 mixer-amplifier above. One strip used for each channel, for gain exceeding 17 db. Each plug-in channel strip has its own 75 and 300 ohm input terminals. Carefully designed and rigidly constructed in fully enclosed plated steel chassis. Polarized four-prong plug at one end for positive contact. Bakelite terminal strip at other end with binder-head screw terminals for antenna connections. Tubes fully shielded for reduction of noise pickup. Complete with tubes and two tinned spade lugs for low-resistance antenna connection. Tubes employed are 1—6AB4 and 1—6CB6, fixed-tuned for individual channels. Shpg. wt., 1 lb.

No.	Chan.	No.	Chan.
98 T 306	2	98 T 312	8
98 T 307	3	98 T 313	9
98 T 308	4	98 T 314	10
98 T 309	5	98 T 315	11
98 T 310	6	98 T 316	12
98 T 311	7	98 T 317	13

List. $27.00. NET EACH.... 15.88

MODEL UC-1 UHF CONVERTER UNITS. Three-tube, high-gain, plug-in converter units with 17 db gain. Unusually stable and sensitive. For UHF reception on VHF receivers using MA4-1 mixer-amplifier, above. Converts UHF signals to VHF. Uses 2 input sockets to permit use of 3 additional antennas. 300-ohm input. Employs 6AF4, 6BK7A, 6CB6 tubes; 1N72 germanium crystal diode. Shpg. wt., 1½ lbs.

NOTE: Available on special order; when ordering, specify UHF channel and unused VHF channel to be used as IF.
NET EACH.... 52.92

VHF DISTRIBUTION SYSTEMS

Combination booster and isolation-distribution units. Two models—for either a two- or eight-outlet system. Both models provide full electronic isolation between outlets without any loss of gain. Units may be interconnected to serve from 2 to 2000 TV sets. All terminals have both 75- and 300-ohm connectors, except line output terminals, which are for 75-ohms only.

Fig. F. MODEL DA2-1 2-OUTLET UNIT. Provides two electronically isolated outlets from one antenna connection. Amplifies as it isolates—so that a full strength signal reaches each set. Fully automatic. Matches 75- and 300-ohm lines. Easily installed. Housed in shockproof metal cabinet, 4x5x4". With 2—6BC5 tubes. For 105-125 volts 60 cycles AC. Shpg. wt., 3 lbs.
98 T 219. List. $39.50. NET.... 23.23

Fig. G. MODEL DA8-1 8-OUTLET UNIT. Provides eight TV set outlets at lowest cost per outlet. Minimum of 35 db isolation between outlets. Amplifier with gain control assures full-strength signals. Correct impedance match for 75- and 300-ohm lines. Screw terminals assure faster installation. With 3—6J6's and 1—6BC5. Ventilated metal cabinet, 5¾x9x5½". For 105-125 volts, 60 cycles AC. Shpg. wt., 7 lbs.
98 T 220. List. $89.50. NET.... 52.63

CONNECTORS, COUPLER & TAPOFFS

Fig. H. MODEL MP-59 CONNECTOR. Male fitting for use on "Masterline" Model MLA or MAGC signal amplifiers. Provides correct 75-ohm impedance match. MP-59 is for RG-59/U coax cable. Shpg. wt., 3 oz.
51 C 113. List. $1.30. NET EACH.... 76c

MODEL MP-11 CONNECTOR. As above, but for RG-11/U coax cable.
51 C 114. List. $1.15. NET EACH.... 68c

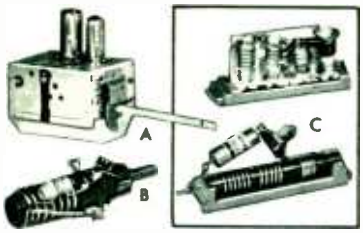
MODEL MTP-75 TERMINATING PLUG. Terminates unused 75-ohm chassis receptacles. To terminate either RG-11/U or RG-59/U cable, use with Model MC coupler and MP-11 or MP-59 cable connector. Shpg. wt., 5 oz.
51 C 115. List. $2.50. NET EACH.... 1.47

Fig. J. MODEL MK-59A MINIATURE CABLE CONNECTOR. Matched 75-ohm male fitting, designed for use with MTO-59 indoor tapoff. Shpg. wt., 3 oz.
51 C 116. List. $1.30. NET EACH.... 76c

Fig. K. MODEL MC-1 COAX COUPLER. Provides correct 75-ohm match in splicing, adapting or terminating RG-11/U and RG-59/U cable. Shpg. wt., 5 oz.
51 C 117. List. $2.50. NET EACH.... 1.47

Fig. L. MODEL MTO-11 OUTDOOR CABLE TAPOFF. Spliceless, weatherproof tap from RG-11/U cable. Uniform 17 db isolation, lowest shunt capacity and positive electrical protection through blocking capacitor. Less than ½ db line loss. Wt., 6 oz.
51 C 118. List. $7.50. NET EACH.... 4.41

MODEL MTO-59 INDOOR CABLE TAPOFF. Similar to above—spliceless tap from RG-59/U cable. Complete with mounting plate, installing tool.
51 C 119. List. $7.50. NET EACH.... 4.41



Standard Coil TV Tuners

Fig. A. TYPE TV2232 "SUPER" CASCODE TUNER. Improved VHF TV front-end tuner assembly. Particularly effective in fringe areas. Direct replacement in sets with split-sound or inter-carrier IF systems. (For split-sound use XM-752 coil below.) Requires 250 volt supply for tubes. IF is factory set at 21.25 mc audio and 25.75 mc video. Instructions cover adjustment of IF to any frequency in the 19-26 mc range. Size. 5⅝" H (2¼" above chassis), 3⅛" W and 5" D. With set of VHF strips. Shpg. wt., 2¾ lbs.

60 G 280. List, $34.50. NET.....**24.01**

Fig. A. TYPE TV1532 "PENTODE" TUNER. An excellent turret-type tuner for strong signal areas and exact TV replacement. Covers channels 2-13. VHF strips supplied. UHF coils (series H) may easily be installed. Balanced 300-ohm input circuit. IF outputs: 21.25 mc sound, 25.75 mc video. Oscillator adjustment screw for each channel. Size. 4⅝x3¼x6¼" high. 3" above chassis. With data sheet. Shpg. wt., 4 lbs.

60 G 246. List. $32.50. NET.....**22.49**

Fig. B TYPE XM-752 SOUND TAKE-OFF COIL. For use with above tuners in sets having separate sound and video IF's. 2 oz.

60 G 276. NET.....**1.12**

Fig. C. UHF TYPE 31G-200 TV TUNER STRIPS. Permit reception of UHF stations with VHF receivers using Standard Coil tuners. Replace unused VHF strips. Complete set for UHF channel consists of antenna strip and a matching oscillator segment to adapt tuner for new channels. *Tuner-Series in table refers to identifying letter stamped on both oscillator and antenna strip of TV set tuner. These letters designate various tuner models made by Standard Coil Co. *Specify UHF channel number and series letter of strips being replaced—allow 30 days for delivery.* With instructions. Wt., 6 oz.

Stock No.	*For Tuner Series
60 GG 232	Series F/G
60 GG 234	Series K
60 GG 235	Series Q
60 GG 236	Series M/R
60 GG 237	Series H

NET PER SET.....**7.35**

VHF TYPE 31M-213 TV TUNER STRIPS. Replace original VHF strips used in Standard Coil tuners. Set includes antenna and oscillator strip. Available for any VHF channel, 2 to 13. *When ordering, specify channel number required and tuner series letter stamped on original strips.* Shpg. wt., 4 oz.

Stock No.	For Tuner Series
60 GG 322	Series F
60 GG 323	Series H
60 GG 324	Series K
60 GG 325	Series Q
60 GG 326	Series R
60 GG 327	Series Q/R
60 GG 328	Series U

NET PER SET.....**1.47**

TUNER REPLACEMENT PARTS KIT

MODEL 1011. For Standard Coil Co. TV "front end" tuners. Includes parts required for series TV-200, TV-1500, TV-2000 and TV-2200 tuners. Contains fine tuning parts, detent springs, rollers, IF coil assemblies, etc. A total of 104 parts. Carton label gives description, number and quantity for quick reference. 12x8½x3½". 2¾ lbs.

60 G 239. NET.....**22.05**

C-D-R Television Antenna Rotators

Latest Models by Cornell-Dubilier-Radiart

Figs. A AND C—MODEL TR-2

Heavy-duty remote control antenna rotator for clear, sharp pictures and dependable performance. Orients antenna in any direction. Aids in receiving maximum signal strength on desired channel. Has built-in thrust bearing to handle installations weighing as much as 150 lbs. Uses 12 heavy-duty bearings in 2-6½" dia. ball-bearing races. Accommodates upper and lower antenna masts from ⅞" to 2" in diameter.

Control box has compass-type dial. As antenna rotates, the letters N, E, S, W light up to show antenna direction. 375° rotation with positive stops at ends. Heavy-duty, smooth operating motor for instantaneous stop, start, reverse. Weather-proof aluminum housing—life-time sealed lubrication. Mast brackets have convenient guy wire lugs. Less cable; uses 8-conductor cable listed below. With complete installation instructions. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 16 lbs.

97 TX 463. List. $44.95. NET.....**26.43**

8-CONDUCTOR CABLE. For above. 100-ft. coil. Wt., 5 lbs.

47 T 586. 100-ft. Coil. NET.....**4.35**

47 W 593. Over 100', PER 100'.....**4.35**

Figs. A AND D—MODEL TR-4

Highly efficient, heavy-duty remote control antenna rotator and control box unit. Orientates antenna in any desired direction for pin-point reception of any individual channel. Built-in thrust bearing handles antenna arrays weighing as much as 150 lbs. Accommodates any antenna mast from ⅞" to 2" O.D. 375° rotation with positive stops—no drift or coast. Employs rugged, sturdy motor for start, stop and reverse. Remote unit housed in attractive plastic cabinet with instant finger-tip control lever. Letters N, E, S, W and N on meter indicate antenna direction. Mechanism is enclosed in weather-proof die-cast aluminum housing. Factory-sealed, lifetime lubricated. Mast brackets fitted with convenient guy wire lugs. With thrust bearing and cabinet control unit. Less only cable; uses 4-conductor cable listed below. With installation instructions. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 16 lbs.

98 TX 393. List. $48.95. NET.....**28.78**

4-CONDUCTOR CABLE. For above rotator. 100 feet. wt., 3 lbs.

97 T 365. 100-ft. Coil. NET.....**2.48**

47 W 576. Over 100', PER 100'.....**2.48**

Figs. B AND D—MODEL TR-12

Exceptionally rugged, highly efficient remote control unit and rotating mechanism with powerful thrust bearing. Will support and turn any antenna array—even 4-stack types. Takes antenna masts up to 1½" O.D.; fits standard towers. Remote unit housed in plastic cabinet, with simple finger-tip lever control. Letters N, E, S, W and N on meter show antenna direction. Heavy-duty motor and long-life gears. Rotating mechanism enclosed in waterproof die-cast housing; factory-lubricated for life. Less cable; uses 4-conductor cable listed below. With thrust bearing, control unit, instructions. For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

98 TX 392. List. $42.95. NET.....**25.25**

MODEL TR-11. As above, but less thrust bearing bracket. For antennas weighing up to 20 lbs. Shpg. wt., 10½ lbs.

98 TX 390. List. $39.95. NET.....**23.49**

Figs. B & E—MODEL AR-2

Completely automatic antenna rotator. Place pointer on control unit to desired position. Antenna begins traverse and dial lights up while rotation takes place. When antenna reaches predetermined position, entire unit automatically turns itself off. Clock-wise and counter-clockwise rotation. Unique brake design prevents drifting. Takes antenna masts up to 1½" O.D. Mounts on pipe up to 2" O.D. 360° rotation; makes complete revolution in 45 seconds. With control unit and thrust bearing. Less cable; uses cable listed below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 13½ lbs.

98 TX 414. List. $47.95. NET.....**28.19**

MODEL AR-1 ROTOR. Similar to above. Less thrust bearing bracket. Takes antenna arrays up to 20 lbs. See below for Type TA-6 thrust bearing. Less cable; uses 4-conductor cable below. For 110-120 v., 50-60 cycle AC. Shpg. wt., 12 lbs.

98 TX 415. List. $44.95. NET.....**26.43**

TYPE TA-6. THRUST BEARING. For use with Model TR-11 and Model AR-1 rotators to increase weight capacity equal to that of TR-12. Shpg. wt., 2 lbs.

98 T 391. List. $4.95. NET.....**2.91**

4-CONDUCTOR CABLE. For use with TR-12, TR-11, AR-1 or AR-2 rotator above. 100 ft., wt., 3 lbs.

97 T 365. 100-ft. Coil. NET.....**2.48**

47 W 576. Over 100', PER 100'.....**2.48**

Figs. A AND E—NEW MODEL AR-22 AUTOMATIC

New, heavy-duty fully automatic rotor for handling TV antenna arrays weighing up to 150 lbs. For mast, tower or platform mounting. Employs 12 large ball bearings in two 6½" ball bearing races. Quickly and accurately positions antenna for best reception. Heavy-duty, gear-driven motor reverses instantly—no drag or coasting.

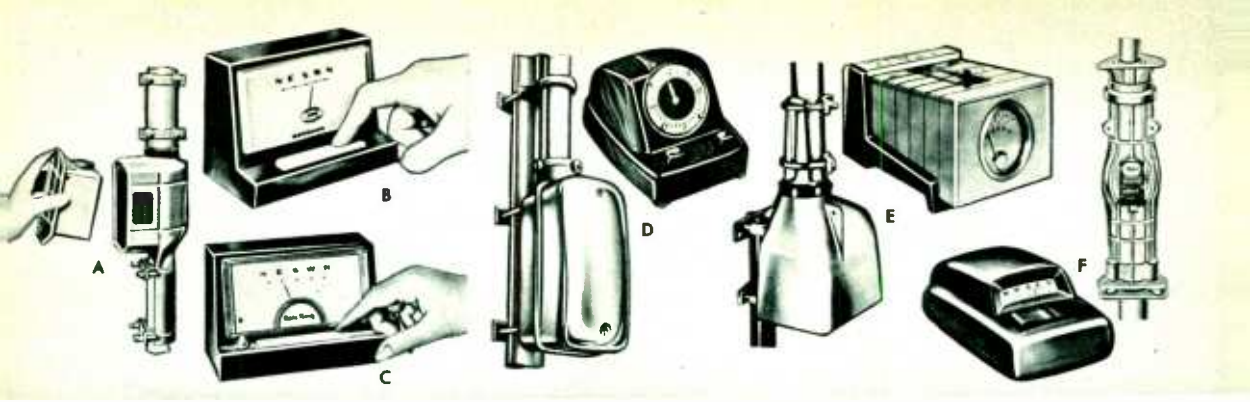
Operation is simplicity itself—pointer on control unit is turned to desired position. Antenna then rotates to this position. When antenna reaches this point, unit automatically turns itself off. Unique, mechanical brake is released magnetically when rotor begins its traverse; as position is reached, brake closes to prevent drift and over-travel. Reinforced rotor housing employs streamline design—weather-sealed and factory-lubricated for life. Reversible clamps on rotor unit takes masts from ⅞" to 2" O.D. Control cabinet dial face is marked off in points of compass: N, S, W, E, NW, NE, SW and SE. Rubber feet prevent marring of TV cabinet surface. In brown plastic. Complete rotor with instructions. Less cable; see below. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 14 lbs.

92 TX 150. List. $49.95. NET.....**29.37**

4-CONDUCTOR CABLE. For above rotator. Shpg. wt., 100 ft., 3 lbs.

97 T 365. 100-ft. Coil. NET.....**2.48**

47 W 576. Over 100', PER 100'.....**2.48**



Latest High-Quality Television Rotators and Antenna Masts

POPULAR JFD ANTENNA ROTATORS

Figs. A and B. MODEL RT100-M. Unique new antenna rotator. Features piano key control bar and panoramic dial indicator. Shows direction of antenna at all times. Automatic thermal switch—rotor turns on and off with TV set. Straight in-line construction permits carrying TV antenna arrays of any size. Dynamic-action friction brake prevents drift and overdrive. 390° rotation. Cartridge-type detachable power drive unit can be removed without dismantling antenna. Circuit employs automatic voltage compensation for stability of indication under line voltage fluctuations. Built-in thrust bearing. Control unit in mahogany plastic. Weather-sealed aluminum alloy housing. With U-channel clamps and complete instructions. Less cable; uses cable listed below. For 110-120 volts. 60 cycle AC. Shpg. wt., 12 lbs.

98 TX 416. List. $55.95. NET.... **34.80**

MODEL RT100-V. As above, but ivory control unit.

92 TX 125. List. $55.95. NET..... **34.80**

Figs. A and B. MODEL RT500-M. Employs all the same features of the RT100-M, less the constant panoramic dial indicator. Shows direction of antenna only when the control bar is depressed.

92 TX 146. List. $49.95. NET.... **31.15**

MODEL RT500-IV. As above, but control unit is styled in ivory plastic.

92 TX 147. List. $49.95. NET.... **31.15**

4-CONDUCTOR CABLE. For above rotators. Shpg. wt., 100 ft., 3 lbs.

97 T 365. 100-ft. Coil. NET..... **2.48**

47 W 576. Over 100', PER 100'..... **2.48**

Fig. D—ALPRODCO RR-2 ROTATOR

New "Miti-Mite" lightweight rotator and control unit. Employs unique and extremely accurate. Selsyn-type, self-calibrating compass dial on control box for exact indication of antenna direction. Rotator employs electrical limit switches—stops at end of full 360° rotation. Built-in "no-coast" brake and thermo overload switch. Worm gear in rotor is tempered brass with tough nylon hub; withstands loads of 500 inch lbs. of friction. Ball thrust bearings for smooth rotation. Output of 50 inch-lbs. of torque in continuous duty—more than enough power for ordinary TV antenna installations. Rotor box is all aluminum with built-in moisture drain. Takes antenna masts up to 1¾" O.D. Fastens to mast by 2 built-in U-bolts.

Attractively styled control box in brown plastic has 360° compass dial, calibrated in 5° steps and N, E, S, W positions. Gives precise indication of antenna direction. Rotation is clockwise and counter-clockwise, accomplished by two push buttons. With four rubber feet.

Supplied complete with 75 ft. of 6-conductor cable, (pre-wired to control unit and rotor mechanism) and installation instructions. For 110-120 volts. 50-60 cycle AC. Shpg. wt., 8½ lbs.

92 TX 155. List. $34.95. NET... **24.50**

6-CONDUCTOR CABLE. For above. Shpg. wt., 100-ft., 2 lbs.

47 W 597. NET PER FOOT..... **3c**

Figs. A and C. MODEL RT400-M. New, carefully engineered antenna rotator featuring a pin-point control system and 390° rotation. Has constant direction-indicating meter. Separate Off-On switch permits use with low-wattage TV sets and Amateur gear which do not draw sufficient power to actuate a thermal switch. Mahogany plastic control unit has fingertip piano control tuning bar. Finely calibrated dial face gives instant indication of antenna's position. Provides 390-degree continuous rotation in either direction.

Powerful, balanced in-line construction supports the heaviest multi-element TV antennas. Instant, strain-free position stop at any desired point. Dynamic-action friction brake prevents drifting and overtravel even in high winds. Instantly reversible split-capacitor type motor—lubricated for life. Compact, close-tolerance gear drive is machined within .002" for highly efficient power transmission. Motor and gear assembly houses in weather-sealed die-cast aluminum case. Cartridge-type detachable drive unit is removable in seconds by loosening two screws. With complete instructions; less control cable—uses 4-conductor cable listed below. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 12 lbs.

92 TX 148. List. $55.95. NET... **34.80**

MODEL RT400-IV. Same as above, but control unit is styled in ivory plastic.

92 TX 149. List. $55.95. NET..... **34.80**

4-CONDUCTOR CABLE. For above rotators. Shpg. wt., 100 ft., 3 lbs.

97 T 365. 100-ft. Coil. NET **2.48**

47 W 576. Over 100', PER 100'..... **2.48**

Fig. E—CROWN CAR-6B ROTATOR

Fine antenna rotator for quick, remote-control positioning of TV, FM, Amateur or other UHF-VHF antennas weighing up to 175 pounds. Makes one complete (365°) rotation in 60 seconds. Hardened steel shaft and machine-cut, long-life gears. Electrical brake stops antenna instantly—no coasting or over-travel. Drive mechanism has cast aluminum weather-sealed housing. Built-in end thrust ball bearing for smoothest movement. Streamlined remote-control unit has finger-tip switch for precision control. Illuminated dial is marked in points of the compass (N, E, S, W, N)and from 0-25. No fluctuation regardless of voltage changes—automatic indicator compensation. Pushbutton on-off switch. Housed in sturdy, attractive, two-tone brown bakelite cabinet. Antenna secured by U-bolts. For all antenna masts up to 2" in diameter. Less four conductor cable (see listing below). For 110-120 volt, 60 cycle AC. Shpg. wt., 11 lbs.

97 TX 488. List. $47.95. NET..... **28.19**

4-CONDUCTOR CABLE. For use with above rotator. Shpg. wt., 3 lbs./100 feet.

97 T 365. 100-ft. Coil. NET..... **2.48**

47 W 576. Over 100', PER 100'... **2.48**

CROWN MODEL GR-1 ROLLER BEARING GUY RING. For smooth rotation of guyed antenna masts up to 1¾" dia. With hardware. Shpg. wt., 2 lbs.

97 C 468. List. $5.95. NET..... **3.50**

Fig. F—VEE-D-X VBM ROTATOR

An exceptionally rugged TV antenna rotator. Used to orient antenna in any direction for maximum signal strength on desired channel and to eliminate interference. Useful in VHF-UHF TV areas for improvement in picture quality. Sintered steel thrust bearing. Motor bearings are silicone-lubricated. Advanced in-line design for greater load handling capacity (up to 200 lbs.). Heavy-duty 3-jaw, chuck-type clamps on top and bottom. Moves in forward or reverse directions—motor has automatic built-in mechanical braking action. Handsome mahogany-finish plastic control box with fingertip control lever. Dial scale marked N, E, S, W, N; also numerical reference points. Uses control cable below. Rotation speed; 1½ rpm. With instructions. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 11 lbs.

98 TX 293. NET..... **24.95**

4-CONDUCTOR CABLE. For above. Shpg. wt., 100 ft., 3 lbs.

97 T 365. 100-ft. Coil. NET..... **2.48**

47 W 576. Over 100', PER 100'..... **2.48**

JFD "ZOOM-UP" ANTENNA MASTS

MODEL TM-12345. Heavy-duty antenna mast. Ideal for any UHF-VHF antenna array. Simplifies installing. Husky thumb screws engage tube nuts. Lock sections at any height. Pre-assembled. Constructed of 16-gauge telescoping tubing with .003" hot-dip zinc galvanizing inside and out. Consists of: Base section #1-10 foot 1¼" OD; base section #2-10 foot 1½" OD; base section #3-10 foot 1¾" OD; base section #4-10 foot 2" OD; base section #5-10 foot 2¼" OD. With guy rings, clamps and necessary hardware. Instructions. Maximum height, 50 feet. Shpg. wt., 57 lbs.

92 CZ 103.
List. $34.75. NET..... **20.43**

MODEL TM-1234. Consists of base sections nos. 1, 2, 3 and 4. Height, 40 feet. Wt., 41 lbs.

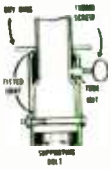
92 CZ 102.
List. $26.65. NET..... **15.67**

MODEL TM-123. Consists of base sections numbers 1, 2 and 3. Total maximum height, 30 feet. Shpg. wt., 28 lbs.

92 CZ 101.
List. $18.60. NET..... **10.94**

MODEL TM-12. Consists of base sections numbers 1 and 2. Height, 20 feet. Shpg. wt., 18 lbs.

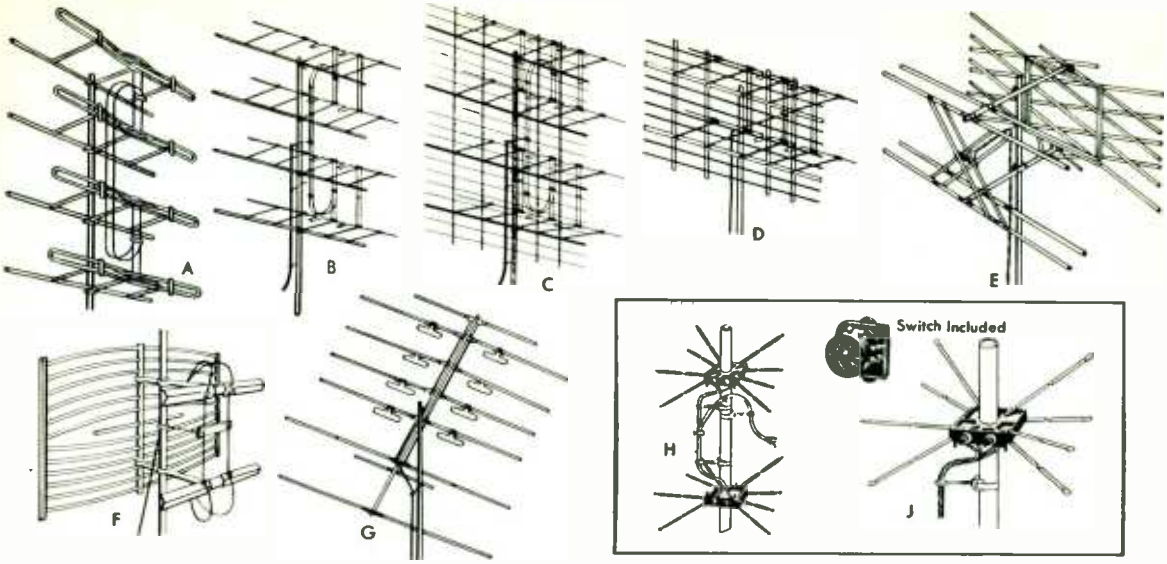
92 CZ 100.
List. $11.10. NET..... **6.53**



MODEL ZUB—2¼. UNIVERSAL BASE AND ROOF MOUNT. Swivel base mount for above "Zoom-Up" masts. For any surface—flat, slanted and peak roofs or walls. Heavy-gauge steel. Shpg. wt., 2½ lbs.

97 C 120.
List. $3.05. NET.... **1.79**

Letter Z in Stock Number Indicates Express Shipment Only



Newest UHF-VHF Television Antennas—Ideal For Efficient Fringe Reception

FINCO UHF-VHF ANTENNAS

Fig. A. MODEL F4. New Finco super-fringe VHF antenna with exclusive "Fidelity-Phasing." Superb performance on both high and low bands—channels 2 through 13. Excellent reception even at locations 200 miles from TV stations. Highly suitable for color-TV reception—has less than 1 db variation in frequency response on any channel. 4 driven low-band, in-phase, folded dipoles, plus 12 driven high-band, in-phase, folded dipoles form a highly effective colinear array. Precise phasing eliminates need for matching harnesses; permits easier, more weatherproof installations. Extremely high sensitivity and directivity. Rugged, lightweight, aluminum construction, pre-assembled for quick, easy installation. Less mast and 300-ohm twin line. Shpg. wt., 13 lbs.
92 CZ 072. List, $46.00. NET....**27.05**

Fig. B. MODEL 400-A. An outstanding double co-lateral UHF-VHF antenna. Features 32 driven elements providing remarkably high gain and directivity and superior signal-to-noise ratio. Provides excellent reception on VHF at distances of 135 miles and more under average receiving conditions. Lightweight construction simplifies installation on high towers and masts—weighs only 8 pounds. Requires 10' mast. Less mast and 300-ohm twin line. Shpg. wt., 14 lbs.
97 CZ 104. List, $42.00. NET....**24.70**

MODEL 12, UHF CONVERSION KIT. Converts old Model 400 to new Model 400-A. Shpg. wt., ¾ lb.
98 C 134. List. $3.15. NET.....**1.85**

MODEL 14S. "FRO-BAC" SCREEN REFLECTOR KIT. Use with Model 400 or 400-A antennas. Produces 80 sq. ft. of reflector surface. Shpg. wt., 5 lbs.
98 CX 389. List. $15.00. NET.....**8.82**

Fig. C. MODEL 400-SA. Same as Model 400 A but with "Fro-Bac" full screen reflector. Special screen results in maximum signal gain plus extremely high front-to-back ratio. Eliminates rear interference signals and "ghosting" in fringe areas. Requires 10' mast. Less mast and 300-ohm twin line. Shpg. wt., 16½ lbs.
98 CZ 388. List, $54.50. NET....**32.05**

Fig. D. MODEL 200-SA. Same design as Finco 400-SA with "Fro-Bac" reflector screen, but has 16 driven elements. This 2-bay unit provides maximum signal gain and extremely high front-to-back ratio in close-in and semi-fringe areas. Features 40 sq. ft. of reflector surface. Less mast and 300-ohm twin line. Shpg. wt., 10 lbs.
98 CZ 488. List. $27.25. NET.....**16.02**

MODEL 200-A. As above, but less "Fro-Bac" screen reflector. Shpg. wt., 7 lbs.
98 CZ 487. List. $21.00. NET.....**12.35**

Fig. E—RADELCO "DRAGNET" ANTENNA

MODEL DN2. Designed for fringe-area reception of both low- and high-band VHF channels, as well as excellent results on all UHF channels. Actual field tests show good reception up to 190 miles. Consists of stacked high-band elements backed up by colinear high band reflectors, which in turn are backed up by an extremely efficient "Diamond-Type" reflector. Transmission line interconnecting harness arranged in the form of an "X"; provides very close coupling between horizontal bays. Extremely high, uniform response over the VHF channels. Rejection of rear and side signals is exceptional. Constructed entirely of aluminum alloy. Boom is 1" dia., front elements ½" and reflectors ⅜". Less mast and 300-ohm twin line. Shpg. wt., 16 lbs.
92 CZ 080. List. $34.95. NET.... **20.55**

DN2 ANTENNA KIT. Consists of: DN2 "Dragnet" antenna; 100 ft. of 300-ohm lead-in; 5 screw-eye standoffs; 3 mast standoffs; two 5-ft. 1¼" dia. mast sections; 1 arrester; 2 guy rings. Shpg. wt., 27 lbs.
92 CZ 081. List. $51.25. NET..... **30.13**

Fig. F—DAVIS UHF-VHF ANTENNA

MODEL SV-ZR-1 "ZIP-RIG". Provides outstanding fringe area VHF reception; excellent UHF reception in primary signal areas. Delivers 12 db or more average gain on high channels. Features electronic dipole separators. With 2 sets of matching harness—enables user to peak antenna on weakest channel and still maintain excellent all-channel coverage. Less mast and 300-ohm line. Shpg. wt., 12 lbs.
92 CX 210. List. $29.95. NET.....**17.61**

MODEL SK-1 STACKING KIT. For horizontal or vertical stacking of SV-ZR-1. 1½ lbs.
51 CX 054. List. $3.25. NET.....**1.91**

Fig. G—TACO "TRAPPER" ANTENNAS

MODEL 1890 "SUPER TRAPPER." Unique new antenna for outstanding performance in deep-fringe areas. Features five, in-phase driven elements operating with equal efficiency on both high and low bands. Directors connected to driven elements are equipped with phase-reversing radiators (traps). Signal energy is always combined in phase regardless of channel being used. High uniform gain across all channels makes it an excellent antenna for long-distance reception and color-TV signals. Extremely high front-to-back ratio. 1¼" dia. crossarm; fiberglas insulators. Uses spring-loaded, tension-booster locks—elements snap into place without tools. Tough aluminum alloy construction. Less mast and 300-ohm twin line. Shpg. wt., 9 lbs.
92 CZ 030. List. $32.50. NET.....**19.11**

MODEL 1892 STACKING KIT. For stacking two 1890 antennas for extra high-band gain. Shpg. wt., ¼ lb.
92 CX 031. List. $1.50. NET.....**88c**

MODEL 1893 STACKING KIT. For stacking two 1890 antennas for extra low-band gain. Shpg. wt., 7 oz.
92 CX 032. List. $3.75. NET.....**2.20**

MODEL 1880 "TRAPPER." Similar to the Model 1890 but employs 3 driven elements. For medium signal areas. Less mast and 300-ohm twin line. Shpg. wt., 7 lbs.
92 CZ 033. List. $18.20. NET.....**10.70**

MODEL 1882 STACKING KIT. For stacking two 1880 antennas. Offers extra gain on both high and low bands. Wt., ¼ lb.
92 CX 034. List. $1.50. NET.....**88c**

MODEL 1883 STACKING KIT. Two-bay stacking kit for extra low-band gain. ½ lb.
92 CX 035. List. $3.75. NET.....**2.20**

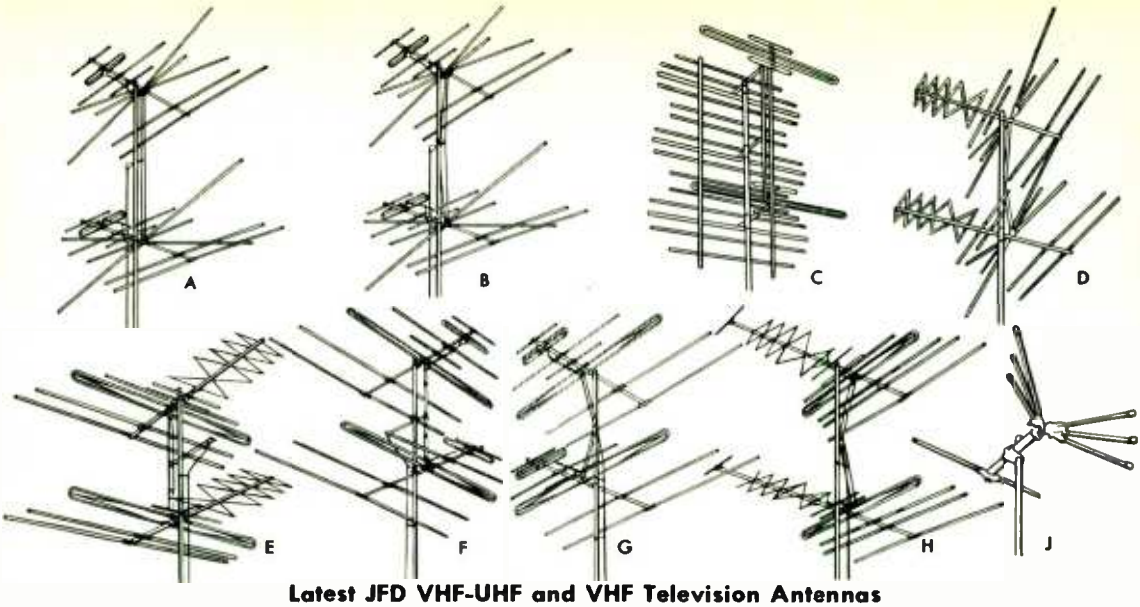
FAMOUS ALL-CHANNEL UHF-VHF TV ANTENNAS

Fig. H. THE RIVIERA. Latest version of these extremely powerful UHF-VHF antennas. Receives perfect pictures up to 200 miles from VHF stations. For clear signal reception in outer and deep-fringe areas. Features 9-position, ceramic switch at set for electronically "rotating" antenna without moving it. Switch selects the proper element combination for best reception from channel desired. Excellent signal-to-noise ratio. Construction utilizes 16 elements—each element of ½" aluminum tubing (with dowel inserts), 60" long. 4 solid aluminum stacking bars, 45" long. Low loss, pre-assembled switch-to-set coupler. Insulators are triple-strength to support the unusually heavy aluminum elements. With 2, 7½" stand-off insulators and instructions. Less mast and 4-conductor polymicalene transmission cable. (See right, below). Shpg. wt., 10 lbs.
98 CZ 495. List. $36.75. NET....**22.05**

Fig. J. "SURBURBAN" ANTENNA KIT. Consists of special 8-element All-Channel antenna with low-loss insulator; doweled aluminum elements 45" long and ⅜" in dia.; switch-to-set coupler; 9-position ceramic switch; 2 mast stand-offs; 2 screw-type insulators; 70 ft. of 4-cond. polyethylene cable. 60 mile reception. Less mast. Wt., 5 lbs.
92 CX 060. List. $21.50. NET.....**12.90**

"METROPOLITAN" ANTENNA KIT. Same kit as above, except with 4 elements. Ideal for attic installations and metropolitan areas where stations are up to 40 miles away. Less mast. Wt., 4¼ lbs.
92 CX 061. List. $18.50. NET.....**11.10**

4-CONDUCTOR POLYMICALENE CABLE. For use with Riviera antenna. Shpg. wt., 100 ft., 2 lbs.
47 TX 589. 100-ft. Coil. NET.....**8.90**
47 W 599. Over 100', PER 100'.....**8.90**



Latest JFD VHF-UHF and VHF Television Antennas

Fig. A. MODEL 213S. UHF-VHF stacked array for fringe areas. Provides exceptionally high gain on TV channels 2 to 13. Dual reflectors provide flat response on low channels. Conical-type driven elements for broad bandwidth. High band sections consist of 2 driven elements and 2 directors each—spaced and phased for peak performance. Supplied complete with quarter-wave stacking bars. Entirely pre-assembled for easy installation. 1" square, rugged aluminum boom. Less mast and 300-ohm line. Shpg. wt., 18 lbs.
98 CZ 465. List. $41.40. NET.... **24.34**

MODEL 213. Same as Model 213S antenna, above, but single-bay array. Shpg. wt., 8½ lbs.
98 CZ 464. List. $19.85. NET..... **11.67**

Fig. A. MODEL 513S. UHF-VHF antenna. Each high-band section has 2 driven elements and 2 directors. Features "Jet-action" pre-assembled construction. Heat-treated solid aluminum dowels. Economically priced, easy to install, yet powerful in performance. Ideal for fringe areas. Less mast and 300-ohm line. Shpg. wt., 13 lbs.
92 CZ 104. List. $28.75. NET..... **16.90**

MODEL 513. Same antenna as above, but single bay. Less mast and 300-ohm line. Shpg. wt., 7 lbs.
92 CZ 105. List. $13.90. NET..... **8.17**

Fig. B. MODEL 213S-5. This exceptional one-half wave wide-stacked Super-Power-Jet antenna provides extra high gain on all UHF-VHF TV channels. Excellent for the deep fringe areas where all the antenna gain possible is needed. Up to .5 db more gain on the low bands and 2 db more gain on the high bands over conventional ¼ wave antenna arrays. Precision construction assures maximum performance. Complete with properly spaced, mast-supported stacking transformers. Less 300-ohm twin line and 1¼" mast. Shpg. wt., 18 lbs.
92 CZ 106. List $43.35. NET..... **25.49**

Fig. C. MODEL SC302S. The "Super Dodo" high-gain VHF antenna. Wide-spaced bays (½ wave) for increased gain and exceptional reception even in deep fringe areas. Employs 6-dipole construction, with 15 reflector elements and ½-wave matching jumpers. Provides peaked gain on channels 2 to 6; excellent gain on all VHF channels. High front-to-back ratio. Pre-assembled, all-aluminum construction. Takes masts to 1⅜". Less mast and 300-ohm twin line. Shpg. wt., 17 lbs.
98 CZ 467. List. $47.25. NET.... **27.78**

Fig. C. MODEL C302S. VHF fringe antenna. As above, but with standard spaced bays (¼ wave) and 10 reflectors. Less mast and twin line. Shpg. wt., 14 lbs.
98 CZ 466. List. $35.40. NET..... **20.82**

Fig. D. MODEL 913S-5. One of the most powerful UHF-VHF arrays. Excellent performance in deep fringe and other poor signal areas. Consists of 2 wide-spaced bays incorporating the sensational new flat plane helical concept with flat plane conical design. Flat no-dip gain varies less than ½ db across any channel. High directivity minimizes ghosts and reduces co-channel interference. Pre-assembled, all-aluminum construction. With aluminum, mast-supported jumper harness. Less 300-ohm line and mast. Shpg. wt., 17 lbs.
92 CZ 109. List. $55.00. NET.... **32.34**

Fig. D. MODEL 913S. A high quality stacked 2-bay deep fringe antenna array. New flat-plane helical coupled with flat-plane conical design gives superior performance on low- and high-band VHF. Has fine response on UHF as well. Pre-assembled. All-aluminum construction. Fits masts up to 1⅜" O.D. Less 300-ohm twin line and mast. Shpg. wt., 16 lbs.
92 CZ 110. List. $52.50. NET.... **30.87**

MODEL JET 913. Same construction as Model 913S above, but single bay. Wt., 8 lbs.
92 CZ 111. List. $25.50. NET..... **14.99**

Fig. G. MODEL FB500S-96. The special stacked "Fireball." 2-bay. broadband array for extreme fringe area VHF as well as local UHF reception. Very wide, 96" spacing (¾ wave length) provides added gain and improves low-frequency response for improved low-band reception. Separate low and high-band folded dipoles with individual reflectors and directors provide high directivity—plus excellent front-to-back and front-to-side rejection of unwanted signals. Greatly reduces troublesome co-channel and adjacent channel interference and "ghosts". Rust-proof aluminum construction. Requires 10 ft. mast. Less mast and twin line. Shpg. wt., 9 lbs.
92 CZ 128. List. $38.60. NET.... **22.70**

Fig. F. MODEL FB500S. The "Fireball" broadband array for deep fringe VHF and local UHF coverage. Offers extremely high gain on both low and high VHF TV bands. Separate folded dipoles for low and high bands with individual reflectors and directors give high directivity—plus excellent front-to-back and front-to-side rejection of unwanted signals. Greatly reduces troublesome co-channel and adjacent channel interference and "ghosts." Lightweight construction simplifies installation on high towers. Constructed of corrosion-resistant, rust-proof aluminum—pre-assembled for quick installation. "Hi-Tension" brackets hold elements in position. No screws or bolts to tighten. Requires 10 foot mast. Less mast, twin line. Wt., 8½ lbs.
92 CZ 123. List. $36.65. NET..... **21.55**

MODEL FB500. Same as FB500S above, but single bay. Shpg. wt., 4 lbs.
92 CZ 122. List. $17.35. NET..... **10.20**

Fig. E. MODEL SX711S. The "Star-Helix" VHF TV antenna. Features helical individual collectors—each tuned for maximum performance on one channel. Highly efficient half-wave folded-dipole low-band collector aids on high-band by adding in-phase current. High-gain stacking transformers permit close spacing, yet maintain high efficiency. Pre-assembled construction with "Hi-Tension" brackets to lock elements in position. Requires 10 foot mast. Less mast and 300-ohm twin line. Shpg. wt., 9 lbs.
92 CZ 112. List. $52.50. NET.... **30.87**

MODEL SX711. Same as SX711S above, but single bay. Shpg. wt., 5 lbs.
92 CZ 113. List. $25.50. NET..... **14.99**

Fig. H. MODEL SX13S. The "Super Star-Helix" VHF antenna. Has same construction as SX-711S, above—plus an added director and reflector for improved channel 13 performance. Shpg. wt., 9 lbs.
92 CZ 129. List. $72.50. NET.... **42.63**

MODEL SX13. Same as SX13S above, but single bay. Shpg. wt., 5 lbs.
92 CZ 130. List. $35.00. NET..... **20.58**

MODEL TP JET 160 VHF. Conical Tenna-Pak. Complete installation kit and antenna. Consists of: 1—JeTenna all-aluminum Jet 160 single conical VHF antenna (listed below); 2—2'7" long x 1¼" OD electro-galvanized fitted-joint masts; 1—all-angle base mount; 60' 300-ohm twin line; 4—screw-eye stand-offs; and 2—insulated stand-offs. Shpg. wt., 8 lbs.
98 CZ 158. List. $17.35. NET..... **10.20**

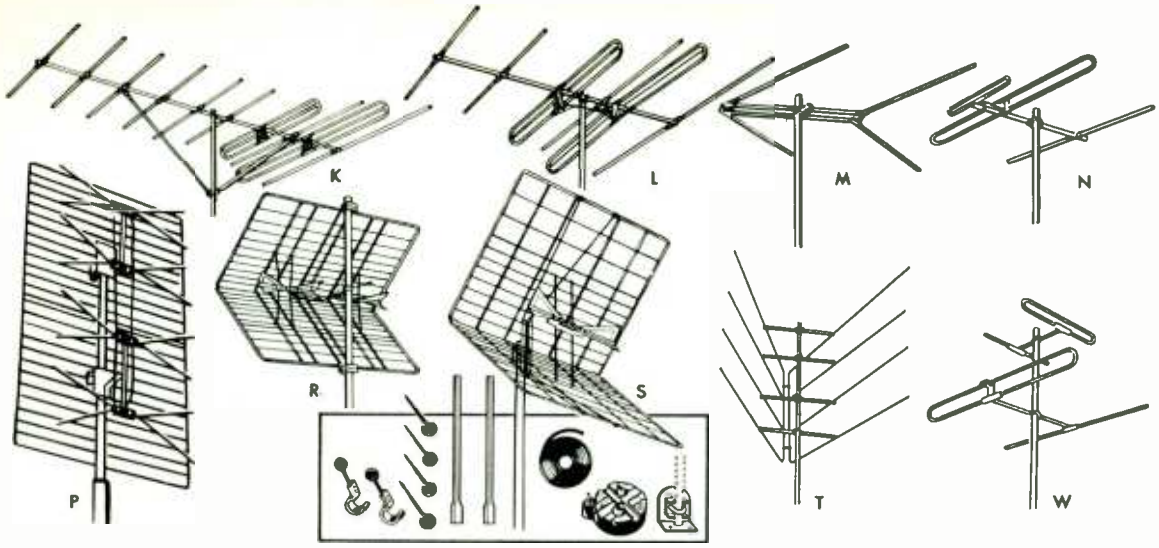
MODEL TP JET 161. Same as above, but with 2-bay, stacked JeTenna conical (Jet 161 listed below) and 4—2'7" electro-galvanized masts. Shpg. wt., 13 lbs.
98 CZ 157. List. $32.40. NET..... **19.05**

Fig. J. JET 160. SINGLE CONICAL JETENNA. Pre-assembled all-channel fan conical. Features "umbrella" action—elements literally pop into place in guided keys. Aluminum elements and fiberglass inserts. Less mast and 300-ohm line. Shpg. wt., 3 lbs.
98 CZ 183. List. $11.55. NET..... **6.79**

MODEL JET 161 2-BAY CONICAL JETENNA. Same antennas as above, stacked for greater gain. Up to 12.5 db gain on all VHF channels. For fringe locations or remote areas. For masts up to 1⅜" O.D. Less mast and 300-ohm twin line. Wt., 6 lbs.
98 CZ 184. List. $24.75. NET..... **14.55**

MODEL JET 164 4-BAY CONICAL JETENNA. With 4 jumper bars and mast-supported harness. Fits masts to 1⅜" O.D. Less mast and 300-ohm line. Wt., 15 lbs.
98 CZ 185. List. $53.60. NET..... **31.52**

For Listings of Transmission Line, Masts and Antenna Accessories, See Pages 222-229



Famous JFD VHF-UHF Television Antennas

BALINE YAGI ANTENNAS

Yagi antennas are noted for their excellent fringe area gain characteristics and exceptionally sharp directivity. Light weight and minimum wind resistance make them excellent for rotator use. All antennas listed below have seamless, aluminum 1" O.D. crossarms. To stack any series of yagi antennas listed below, order two bays; and request stacking harness on your order. All necessary stacking equipment will be sent from the factory at no additional charge. Less mast and 300-ohm twin line.

Fig. K. SINGLE CHANNEL 10-ELEMENT TYPES. Provide 52% more signal gain than conventional 5-element type yagis. Very sharp directivity. Av. shpg. wt., 9 lbs.

No.	Type	Chan.	List	EACH
98 CZ 231	10B2	2	$33.35	19.61
98 CZ 232	10B3	3	33.35	19.61
98 CZ 233	10B4	4	29.85	17.55
98 CZ 234	10B5	5	29.85	17.55
98 CZ 235	10B6	6	27.10	15.93
98 CZ 236	10B7	7	13.95	8.20
98 CZ 237	10B8	8		
98 CZ 238	10B9	9		
98 CZ 239	10B10	10		
98 CZ 240	10B11	11		
98 CZ 241	10B12	12		
98 CZ 242	10B13	13		

Fig. L. SINGLE CHANNEL 5-ELEMENT TYPES. Wide-spaced, single-driven-element yagis. Consists of 3 directors, 1 reflector and 1 folded dipole. Av. shpg. wt., 5 lbs.

No.	Model	Chan.	List	EACH
98 CZ 322	5B2	2	$17.60	10.35
98 CZ 323	5B3	3	17.60	10.35
98 CZ 324	5B4	4	16.65	9.79
98 CZ 326	5B5	5	16.65	9.79
98 CZ 327	5B6	6	16.65	9.79
98 CZ 328	5B7	7	7.65	4.50
98 CZ 329	5B8	8		
98 CZ 331	5B9	9		
98 CZ 332	5B10	10		
98 CZ 333	5B11	11		
98 CZ 334	5B12	12		
98 CZ 335	5B13	13		

CASCODE MULTI-CHANNEL TWIN-DRIVEN TYPES. Offer high-gain coverage of all low-band or all high-band channels with a single antenna. Uni-directional response.

Fig. K. MODEL 10B26. 10 element baline for channels 2 through 6. Wt., 9 lbs.
98 CZ 455. List, $40.95. NET....**24.08**

Fig. K. MODEL 10B713. 10 element baline for channels 7 through 13. Wt., 9 lbs.
98 CZ 459. List. $20.85. NET **12.26**

Fig. L. MODEL 5B26. 6-element wide-spaced baline for channels 2 through 6. Excellent performance in areas of medium signal strength. Shpg. wt., 7 lbs.
98 CZ 450. List, $22.05. NET.....**12.97**

Fig. M. MODEL Q800. Vee-Beam VHF antenna. Engineered for increased gain, especially on upper band. "Quick-Rig" pre-assembled design—entire array slides out of package ready for flip-assembly and tightening. Features aircraft aluminum construction throughout. Supplied with ½" boom. Less mast and 300-ohm twin line. Shpg. wt., 3½ lbs.
98 CZ 166. List, $6.25. NET.....**3.67**

MODEL Q801. Stacked Vee-Beam with 2 bays for additional 3 db gain. Includes half wavelength, mast-supported jumper harness. Less mast, twin line. Wt., 7 lbs.
98 CZ 167. List, $13.50. NET.....**7.94**

Fig. N. MODEL TPQ-150. VHF Tenna-Pak. In-line folded dipole design provides powerful all-channel reception. Has elements for both high and low bands and reflector. Elements made of ½" aircraft aluminum alloy. Unfolds and locks in exact alignment for easy installation. Complete with 5 ft. of seamless fitted-joint mast tubing, all-angle base-mount, 60 feet of 300-ohm twin line, 4 screw-eye insulators, and 2 clip-on mast insulators. Shpg. wt. 9 lbs.
92 CZ 114. List, $15.85. NET.....**9.32**

MODEL Q150 VHF IN-LINE ANTENNA. Compact, Hi-Lo folded dipole array as described in TPQ-150. Less mast, twin line, and accessories. Shpg. wt., 5 lbs.
97 CZ 075. List, $10.00. NET.....**5.88**

MODEL TPQ-151. Stacked In-line Tenna-Pak. Similar to TPQ-150, but two-bay array for greatly increased gain. Complete with aluminum jumpers and twin-lead phasing harness. With 10 ft. mast and complete Tenna-Pak kit. Shpg. wt., 17 lbs.
92 CZ 115. List, $29.05. NET.....**17.08**

MODEL Q151. Stacked In-line Antenna. Same as TPQ 151, less mast, twin line, and accessories. Shpg. wt., 11 lbs.
97 CZ 085. List. $21.40. NET.....**12.58**

Fig. P. UHF204. 4-bow UHF array with reflector for high gain and reduction of snow and troublesome reflections. Features new "Custom-Channel" calibrator for peaking antenna to the particular channels you want. For masts up to 1½" O.D. Less mast and twin line. Shpg. wt., 6 lbs.
92 CX 116. List, $11.10. NET.....**6.53**

Fig. R. UHF2411. New twin corner reflector-type UHF array for super-sensitive deep fringe performance. Side-by-side stacking of bowties gives "Double-Drive" for an ascending gain of from 12 to 17 db across the UHF band. Angled multi-grids reflect signal to bowties for added gain. Preassembled—flips open like a book. All-welded construction. With hardware. Less mast and twin line. Shpg. wt., 5 lbs.
92 CX 131. List, $11.65. NET.....**6.85**

MODEL UHF411. Same as above, but single bowtie. Shpg. wt., 3 lbs.
92 CX 132. List, $6.40. NET.....**3.76**

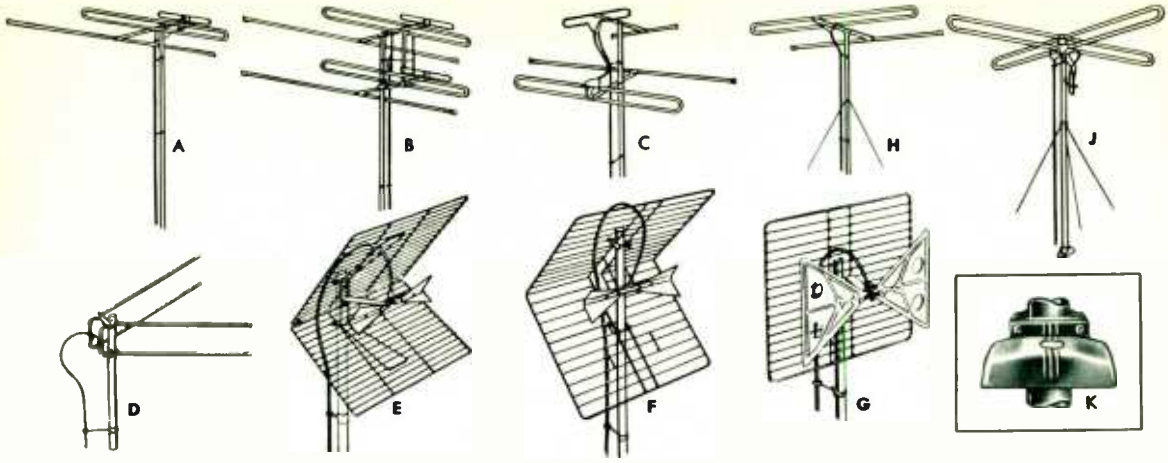
Fig. S. MODEL TPUHF415. For channels 14 through 83. Gain averages 8 to 12 db across the UHF spectrum. Braced 5 ways for maximum rigidity. Large channel-type heavy-gauge steel anchor bracket. Extra-large grid reflectors provide optimum beam width for peak fringe reception. Neatly and compactly pre-assembled, flips open like a book for quick, easy installation. Elements cadmium plated against corrosion. With complete "Tenna-Pak": Includes 5 ft. seamless fitted-joint mast, all-angle base mount, 60 ft. 300-ohm twin lead, 4 screw-eye standoff insulators, and 2 clip-on mast standoff insulators for securing twin line. Shpg. wt., 7 lbs.
92 CZ 117. List, 17.10. NET.....**10.05**

MODEL UHF415 CORNER REFLECTOR. Same fine antenna as TPUHF 415, but less mast tubing, twin lead, and Tenna-Pak accessories. Supplied with mast mounting bracket. Shpg. wt., 3 lbs.
92 CZ 118. List, $9.60. NET.....**5.64**

Fig. T. UN104. For channels 2 to 83. Newly designed all-channel UHF-VHF antenna array. Double stacked for extra gain on channels 2 to 83 without any loss-producing coupler. Features Redwood crossarms plus economy and simplicity. Pre-assembled. Simply swing sections open and tighten. Has anti-rust, anti-corrosion protection of finest all-aluminum construction. Power-packed for added signal sensitivity needed in fringe areas and weak signal areas. High horizontal directivity minimizes "ghosts" and interference. Less twin line and mast. Shpg. wt., 5½ lbs.
92 CZ 107. List, $9.50. NET.....**5.59**

MODEL UN-102. Same fine construction as antenna above, but single stack. Mechanical compactness of a single unit with the gain of a stacked array. Complete high gain coverage on all channels from 2 to 83. No loss-producing coupler. Only one lead to TV set. Less 300-ohm twin lead and mast. Shpg. wt., 3 lbs.
92 CZ 108. List, $4.95. NET.....**2.91**

Fig. W. MODEL Q5. Time-proven all-channel VHF "Piggy-back" Hi-Lo antenna array. Ideal for installation in areas where low and high-band channels are available, but originate from different directions. Antenna consists of separate low and high band folded dipoles with individual reflectors. Each dipole can be oriented separately, eliminating the necessity for two antennas or for a rotator. Low-band dipole is cut to proper length to peak reception on channels 2 to 6. High-band dipole is peaked for reception of channels 7 to 13. Constructed of corrosion-proof aircraft aluminum throughout. Factory preassembled elements flip into position. Supplied with mounting brackets. Less mast and twin lead. Shpg. wt., 5 lbs.
97 CZ 078. List. $10.25. NET.....**6.03**



Famous Amphenol TV and FM Antennas

Fig. A—INLINE VHF ANTENNA

MODEL 114-005. Covers all 12 VHF channels. Unusually broad frequency response. Uni-directional pattern and excellent impedance match on high and low-bands reduces stray reflections and "ghosts." Unique design permits large folded dipole (for 54-88 mc band) to operate as reflector for the smaller dipole (174-216 mc band). Includes one 5'x¾" mast, guy ring, mounting bracket, hardware, stand-off insulators, 75 feet of 300-ohm twin line, and instructions. Shpg. wt., 7 lbs.
97 CZ 438. List, $19.50. NET.....**11.47**

MODEL 114-009. Same antenna as above but less 300-ohm line. Shpg. wt., 6 lbs.
97 CZ 439. List, $17.00. NET.....**10.00**

MODEL 114-040. Similar to 114-005 but less mast, twin line and stand-off insulators. Shpg. wt., 5 lbs.
97 CZ 492. List, $13.50. NET.....**7.94**

Fig. B—INLINE STACKED ARRAY

MODEL 114-322. Properly phased for all 12 VHF channels. Each bay consists of 2 folded dipoles and low-band reflector element. Low-band folded dipole of each bay acts as reflector for high-band dipole. Matching section has correct impedance for 300-ohm twin line. Easily installed. With all elements, hardware and instructions, 100 feet of 300-ohm twin line and 2—5' masts. Shpg. wt., 20 lbs.
97 CZ 261. List, $38.50. NET...**22.64**

MODEL 114-324. Same as 114-322, but less masts. Shpg. wt., 13½ lbs.
98 CZ 422. List, $32.50. NET.....**19.11**

MODEL 114-302. Same as 114-322, but less 300-ohm twin line. Shpg. wt., 15 lbs.
97 CZ 422. List, $35.00. NET.....**20.58**

MODEL 114-314. Same as 114-322, but less twin line and masts. Shpg. wt., 12 lbs.
97 CZ 454. List, $29.00. NET.....**17.05**

MODEL 114-291. STEEL EXTENSION MAST. For above antenna. 5'x1¼" diameter. Shpg. wt., 3 lbs.
97 CZ 421. List, $3.00. NET.....**1.76**

Fig. C—"PIGGY-BACK" VHF ANTENNA

MODEL 114-026. Separate high-band and low-band antennas permit independent orientation for best signal reception. One folded dipole and reflector are tuned to 54-88 mc band and one folded dipole and reflector are tuned to 174-216 mc band. Each antenna consists of a folded dipole and reflector. Steel mast. 5'x¾" O.D. With antenna elements, clamps, guy ring, isolating transmission harness, mounting support, stand-off insulators, 75 feet of 300-ohm twin line, and instructions. Shpg. wt., 10 lbs.
97 CZ 360. List, $19.50. NET.....**11.47**

MODEL 114-029. Same as 114-026 above but less 300-ohm twin line. Shpg. wt., 9 lbs.
97 CZ 361. List, $17.00. NET.....**10.00**

Fig. D—ADJUSTABLE STACKED V ANTENNA

MODEL 114-059. Designed to receive all UHF-VHF channels from 2 to 83. Angle between elements can be adjusted to 3 positions to permit reception of UHF, VHF or a combination of both. Aluminum elements and spacers. Completely preassembled for quick installation on any ¾" to 1½" O.D. mast. Supplied with 2 U-bolts. Less mast and lead-in. For 300-ohm twin line. Shpg. wt., 2½ lbs.
98 CZ 411. List, $9.75. NET.....**5.73**

Fig. E—UHF CORNER REFLECTOR

MODEL 114-058. Designed for high gain over channels 14 to 83. Excellent horizontal and vertical directivity characteristics reduce "ghosts" and interference. Ascending signal gain of 8 to 13 db across the entire UHF range. Impedance matches 300-ohm twin line. Electro-galvanized steel reflectors designed for maximum efficiency. Takes mast up to 1½" O.D. Complete with two mounting U bolts. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs.
97 CZ 263. List, $12.50. NET.....**7.35**

MODEL 114-067 STACKING HARNESS. For vertically stacking two Model 114-058 corner reflectors. Gain increases from 12.9 db at 470 mc to 17.3 db at 890 mc. Shpg. wt., ¼ lb.
98 C 409. List, $1.95. NET.....**1.15**

Fig. F—UHF CORNER REFLECTOR

MODEL 114-093. UHF corner reflector type, high-gain antenna. Gain of 8 to 12½ db across UHF channels. Highly directive; effective in areas troubled with ground reflections. Completely preassembled for easy installation. One-piece construction; antenna swings open when screens are extended. Steel reflectors are electro-galvanized to withstand severe weather. For masts up to 1½" O.D. Less mast and 300-ohm line. Shpg. wt., 3¼ lbs.
98 CX 445. List, $9.85. NET.....**5.79**

MODEL 114-067 STACKING HARNESS. For stacking two 114-093 antennas for extra gain. Shpg. wt., ½ lb.
98 C 409. List, $1.95. NET.....**1.15**

Fig. G—BO-TY UHF ANTENNA

MODEL 114-062. Redesigned and improved high-gain UHF antenna. New, larger aluminum elements and dielectric material produce sharp pictures and excellent sound in primary and fringe areas. Signal gain average 8.3 db across entire UHF spectrum. Sharp horizontal and vertical directivity prevents signal pickup off back or sides. Pre-assembled. Takes up to 1⅛" masts. Each Bo-Ty supplied with one stacking rod; 2 antennas contain all parts for two-bay array. Less mast and 300-ohm twin line. Shpg. wt., 4 lbs.
97 CX 262. List, $5.75. NET.....**3.38**

Fig. H—FM DIPOLE ANTENNA

MODEL 114-008. Excellent FM dipole and reflector for optimum reception of 88-108 mc band. Lightweight, durable tubular aluminum construction. Easily installed unit consists of dipole reflector, 5'x¾" O.D. steel mast, 75 feet of 300-ohm twin line, low-loss insulators, universal mounting bracket, hardware, and instructions. Shpg. wt., 7 lbs.
97 CX 433. List, $16.25. NET.....**9.55**

Fig. J—FM DOUBLE DIPOLE

MODEL 114-010. Highly desirable all-direction FM dipole for reception of FM broadcasts. Provides crystal-clear reception over the entire FM broadcast band without rotating antenna. Furnished with quarter-wave phasing stub for maximum signal gain. Consists of two folded dipoles matched to give a circular radiation pattern—excellent signal pickup from all directions. Hinged mounting plate supplied permits simplified mounting of mast on flat or sloping roofs. Supplied with 75 feet of 300-ohm twin line, all hardware, 5'x¾" O.D. steel mast, assembly and installation instructions. Shpg. wt., 7 lbs.
97 CZ 434. List, $16.25. NET.....**9.55**

MODEL 114-300. EXTENSION MAST. Sturdily constructed of steel. 5' length, ¾" O.D. Has one tapered end and one flared end to permit easy stacking for greater height. Shpg. wt., 2½ lbs.
97 CX 423. List, $3.00. NET.....**1.76**

Fig. K—ANTENNA COUPLERS

Antenna coupling networks. Eliminate antenna switching and separate lead-in lines. Permit using a single 300-ohm line to separate high and low-band VHF antennas and VHF and UHF antennas. Each coupler listed below consists of an efficient isolation filter for effectively isolating one antenna from the other; preserves the gain to assure good picture quality. No interaction between antennas. Easily installed on antenna masts. Housing of high strength butyrate plastic finished in gray. Sloping top sheds water; skirt overhang protects terminal board connections. Supplied with hardware and installation instructions. Shpg. wt., 1½ lbs.

MODEL 114-094 "DUONET." Couples separate high-band VHF antenna with a separate low-band VHF antenna on single 300-ohm line.
51 C 283. List, $3.50. NET.....**2.06**

MODEL 114-061 "ISONET." VHF-UHF coupling network. Permits using a single 300-ohm line to separate VHF and UHF antennas.
51 C 273. List, $3.75. NET.....**2.20**

MODEL 114-074 "TRISONET." For coupling three antennas (low-band VHF, high-band VHF and UHF) to a single 300-ohm transmission line.
51 C 277. List, $4.50. NET.....**2.65**

Television Accessories Are Available on ALLIED's Easy Payment Plan—See Page 315

Telrex High Performance Television Antennas

Fig. A—T-120 VHF YAGI ANTENNA

New, powerful all-channel VHF antenna for deep fringe areas. All-in-line "beamed power" array for maximum signal reception. Has 10 elements and 5 phasing loops. Highly directional. Element functions are duplexed by variable-impedance phasing loops to achieve high gain on both high and low-channel VHF bands. T-match provides excellent isolation between high and low-channel signals. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs.

92 CZ 208. List, $23.60. NET.....**13.88**

MODEL T-122 STACKED ARRAY. As above, but 2-bay array for ultra-high gain. 14 lbs.

92 CZ 209. List. $48.60. NET....**28.58**

Fig. B—T-100 VHF YAGI ANTENNA

All-in-line "beamed power" array for deep fringe areas. Resembles the Model T-120, but incorporates use of 8 elements and 4 phasing loops; semi-H matching network. Extremely sharp directivity. Special decoupling system separates high and low VHF channel signals; maximum signal energy is delivered to receiver terminals without phase-shift within any channel. All-aluminum. Less mast. 300-ohm twin line. Shpg. wt., 8 lbs.

92 CZ 211. List, $23.60. NET.....**13.88**

MODEL T-102 STACKED ARRAY. As above, but 2-bay array for extra gain. 14 lbs.

92 CZ 212. List. $48.60. NET....**28.58**

Fig. C—T-130 VHF YAGI ANTENNA

For near-fringe and weak-signal areas. Yagi "beamed power" design provides excellent gain and directivity and high signal-to-noise ratio. Employs 7 elements with V-dipole and conical driver elements. 4 phasing loops and T-match network. Moderately priced, this highly directional antenna is excellent for use in near-fringe areas. Lightweight, all-aluminum construction for trouble-free installation. Less mast and 300-ohm twin line. Shpg. wt., 8 lbs.

92 CZ 213. List. $16.55. NET.....**9.73**

MODEL T-132 STACKED ARRAY. As above, but 2-bay array for extra gain. 14 lbs.

92 CZ 214. List. $34.45. NET.....**20.26**

FIG. D—4-BAY UHF "CONICAL-V-BEAM" ANTENNA

MODEL 84. Low-cost 4-bay UHF antenna of exceptionally compact design and light weight. For ultra-high gain over the entire UHF range with excellent signal-to-noise ratio. Stacked array provides sharp directivity with flat high-gain response for clean, snow-free, ghost-free reception. Has solid rod spline reflector elements permanently mounted by special clamping process which eliminates screws and nuts. All aluminum construction for ease of installation and rigidity under severe weather conditions. Less mast, twin line. Shpg. wt., 10 lbs.

92 CZ 203. List. $14.95. NET.....**8.79**

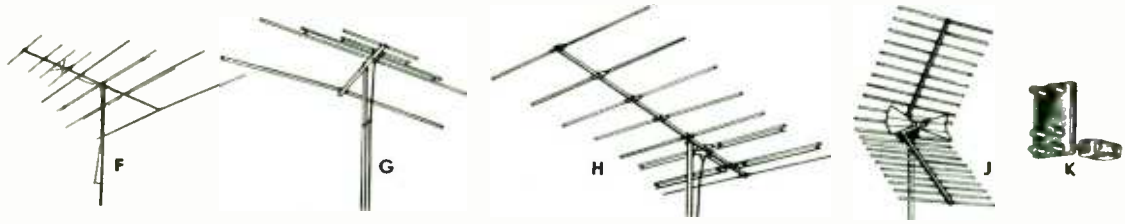
FIG. E — UNIVERSAL DUO-BAND 2-BAY "CONICAL-V-BEAM"

MODEL 440. Two-bay "Conical-V-Beam" for both UHF and VHF reception. One antenna and one transmission line for both bands. Offers uniformly high gain from channel 2 through 83. Has excellent directivity and high signal-to-noise ratio—minimizes ghosting and co-channel interference. All aluminum. Less mast, twin line. Shpg. wt., 9 lbs.

92 CZ 204. List. $25.50. NET.....**14.99**

MODEL 420. As above, but one bay only. Shpg. wt., 6 lbs.

92 CZ 205. List. $12.08. NET.....**7.10**



Popular Vee-DX Television and FM Antennas and Accessories

Fig. F—MODEL SP-11 VHF ANTENNA

High gain all-channel VHF antenna. Combines the desirable features of yagi type antennas with complete VHF channel coverage in a single antenna. Offers high forward gain and sharp directivity. Extremely high front-to-back signal ratio aids in eliminating interference from unwanted stations. Eight-element high-low yagi design: four elements cut for optimum reception of VHF channels 7 to 13, and four elements cut for coverage of low-band channels 2 to 6. High efficiency "T" matching of driven elements. High and low sections are maintained in proper phase by low-loss isolation circuit. All-aluminum construction for long service. One-piece drawn aluminum boom. Less mast and 300-ohm twin line. Shpg. wt., 7 lbs.

97 CZ 168. List. $25.50. NET.....**14.99**

MODEL SP-11 TWO-BAY ARRAY. Consists of two SP-11 single-bay arrays and stacking harness. Two-bay array gives 40% average increase in gain over single-bay array. Less mast and 300-ohm twin line. Shpg. wt., 16 lbs.

97 CZ 169. List, $52.00. NET...**32.34**

Fig. G—Q-TEE VHF ANTENNAS

MODEL QT SINGLE. One-bay array for high-gain reception in primary areas. Consists of a half-wave dipole and reflector for the low-frequencies, and a full-wave dipole with a half-wave director for the high-frequencies. Improved directivity and higher front-to-back ratio minimizes adjacent channel interference and noise pickup. Less mast and 300-ohm twin line. Wt., 2¼ lbs.

98 CZ 286. List $12.00. NET.....**7.06**

MODEL QT DOUBLE. Two-stack array for near fringe areas. Provides up to 40% increase in gain. Less mast and twin line. Shpg. wt., 4 lbs.

98 CZ 287. List. $26.00. NET....**15.29**

MODEL QTH HARNESS. For use with 2 QT Single's to make 2-bay array for higher gain in fringe areas. Shpg. wt., ½ lb.

98 C 430. List. $2.00. NET.....**1.18**

MODEL QTHQA STACKING HARNESS. For use with 2 QT Double's to make 4-stack array for fringe-area reception. Will give up to 100% increase in gain over single bay. Shpg. wt., ½ lb.

98C 288. List. $3.20. NET.....**1.88**

Fig. H—BBFM FM ANTENNA

New, 8-element broadband FM antenna. Designed for FM reception over 88-108 mc band. Fully field-tested. Unusually high front-to-back ratio of 14 to 27 db and sharp directional sensitivity assure excellent signal discrimination—eliminates interference from sides and rear. Highly suitable for: Fringe area reception of FM stations up to a distance of 100 miles; interference rejection and signal discrimination of close frequency stations in difficult reception areas. Gain response of 8 db across entire FM band. All aluminum; elements of drawn aluminum tubing. Less mast and 300-ohm twin line. Wt., 6 lbs.

92 CZ 070. NET.....**29.40**

TWO-BAY STACKED ARRAY. For long-distance reception in deep fringe areas. Provides 35% additional gain. Includes stacking harness and complete instructions. Shpg. wt., 12 lbs.

92 CZ 071. NET.....**61.74**

Fig. K—SOMM ANTENNA COUPLERS

MODEL SOMM-40 VHF-UHF. Permits using single 300-ohm line with separate VHF and UHF antennas. Multi-section isolation filters using printed circuits. Has weather-resistant polystyrene case 3¼x2¼x¼". Rust-proof brass terminals. With standoff insulator. Shpg. wt., 1 lb.

51 C 295. List. $4.15. NET.....**2.44**

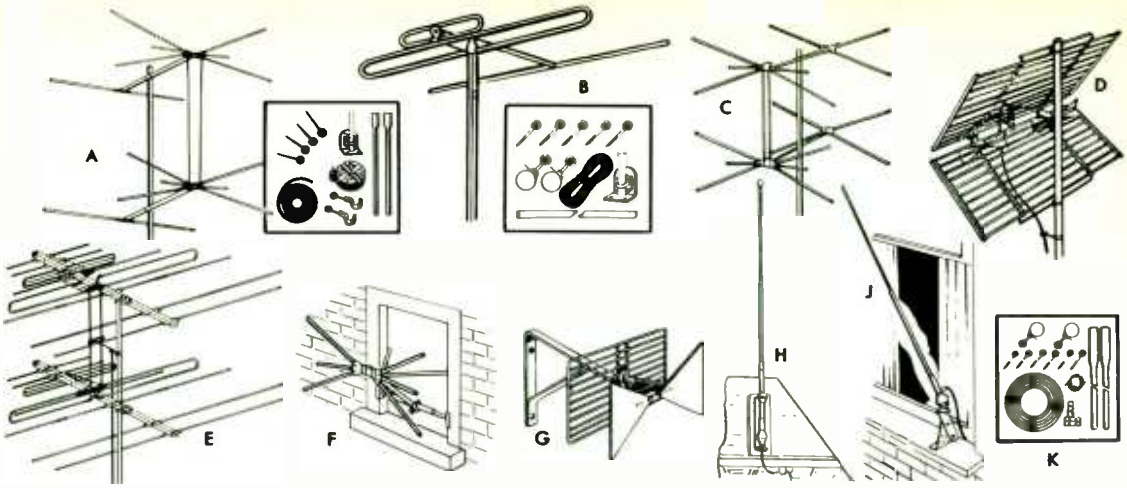
MODEL SOMM-25 —FOR VHF. As above, but for connecting separate high and low channel VHF antennas to a single transmission line. Size, 3¼x2¼x¼". Wt., 1 lb.

97 C 284. List. $4.15. NET.....**2.44**

Fig. J—MODEL COR-U UHF CORNER REFLECTOR

A high-quality, low-cost UHF antenna offering fine performance and quality of construction. Gives broadband, extremely high, uniform gain across the entire UHF spectrum, channels 14-83. Has excellent directivity with high front-to-back signal ratio. Considerably higher gain than single "Bow Tie" and equals or betters the gain of 2-bay "Bow Tie" array. Lightweight, yet very sturdily constructed. Small diameter, solid aluminum elements are very rigid and resist corrosion and icing. Fastens to mast with U-bolt and special clamp. Easily oriented to position on mast which affords best reception. An excellent antenna for use in areas where reflections and noise present a receiving problem. Less mast and 300-ohm twin line. Shpg. wt., 3 lbs.

98 CZ 296. List. $6.75. NET.....**3.97**



Television and AM Antennas and Accessories

KNIGHT VHF ANTENNAS

Fig. A. 2-BAY CONICAL KIT. An outstanding value in a conical, 2-bay antenna kit. Complete in every detail—there's nothing else to buy. Features a deluxe, preassembled, 2-bay conical plus all the accessories—10-ft., 1¼" OD corrosion-proof mast, lightning arrester, stacking harness, and 50 feet of heavy-web polyethylene twin-line. Also 3—3½" and 1—7" wall screw-eye standoffs, 2 mast standoffs, and all-angle base mount. Shpg. wt., 10 lbs.
92 CZ 133. NET **9.14**

SINGLE-BAY CONICAL KIT. Same as above, but single-bay conical and 5-ft., 1¼" mast. Shpg. wt., 7 lbs.
92 CZ 135. NET **5.44**

2-BAY CONICAL ONLY. Preassembled, 2-bay conical and stacking harness. Less kit accessories. Shpg. wt., 6 lbs.
92 CZ 134. NET **5.64**

SINGLE-BAY CONICAL ONLY. Preassembled, single-bay conical. Less kit accessories. Shpg. wt., 3 lbs.
92 CZ 136. NET **2.85**

STACKING KIT. For 2 Knight single-bay conicals. Shpg. wt., 8 oz.
97 CX 389. NET **56c**

STACKING KIT. For 2 Knight 2-bay conicals. Shpg. wt., 1¼ lbs.
97 CX 387. NET **1.52**

Fig. B. IN-LINE ANTENNA KIT. This kit includes all the items necessary for a complete TV antenna installation. It has the efficient, time-proven in-line VHF antenna. Also includes 5-ft. mast, base mount, 75 feet of 300-ohm twin-line, five 3½" wood-screw insulators and two mast stand-off insulators. Antenna has folded dipoles for low and high bands, plus low-band reflector; low-band dipole also serves as reflector for high band. Excellent front-to-back and front-to-side ratios assure rejection of ghosts and interference. Elements of sturdy, rust-resistant ½" seamless aluminum. Shpg. wt., 10 lbs.
92 CZ 041. NET **7.64**

IN-LINE ANTENNA ONLY. Same VHF antenna above. Less mast, twin-line and accessories. Shpg. wt., 5 lbs.
92 CZ 042. NET **4.77**

WALSCO VHF & UHF TV ANTENNAS

Fig. C. TYPE 4062-F. Extremely popular "Imperial" 2-bay VHF conical antenna for very high gain on all TV channels from 2 to 13. Re-designed insulator prevents soot, moisture, salt, corrosion, etc., from affecting gain. Excellent directivity. Simple assembly. Front end elements pre-assembled to holding plates which fasten to insulator with one wing nut. Just fold elements in place and tighten wing nut. Less 300-ohm line and mast. Shpg. wt., 8 lbs.
98 CZ 404. List. $22.40. NET **13.17**

TYPE 4060-F. Same antenna as above, but single bay. Shpg. wt., 4 lbs.
98 CZ 405. List. $10.50. NET **6.17**

TYPE 4005-7. Two-bay stacking kit for Type 4060-F antenna. Shpg. wt., ¾ lb.
98 CX 406. List. $1.50. NET **88c**

TYPE 4060A-1. Four-bay stacking kit for Type 4060-F antenna. 1½ lbs.
98 CX 407. List. $5.60. NET **3.29**

Fig. D. TYPE 4452-F. Corner reflector antenna for the UHF bands. Features extra high gain. New molded insulator with outstanding and lasting dielectric properties. All steel hardware plated for long, corrosion free service. Constructed of high conductivity aluminum alloy. For quick and easy installation. Less 300-ohm twin line and mast. Shpg. wt., 5 lbs.
98 CZ 408. List. $19.95. NET **11.73**

TYPE 4450. Same as above antenna, but single bay. Shpg. wt., 3 lbs.
98 CX 400. List. $9.95. NET **5.85**

WARD "INVADER" UHF-VHF ANTENNAS

Fig. E. MODEL TVS-356. New, high-gain 2-bay antenna for UHF-VHF. Excellent for use in fringe as well as primary areas. Gain variation across any VHF channel less than 1 db. Close stacking (29") makes neat compact installation. Easily used with antenna rotator. Sturdy all-aluminum construction. Preassembled. Less mast and twin line. Shpg. wt., 15¼ lbs.
92 CZ 021. NET **23.49**

MODEL TVS-355. As above, but single bay. Shpg. wt., 11 lbs.
92 CZ 022. NET **11.73**

WINDOW-TYPE VHF-UHF ANTENNAS

Fig. F. JFD MODEL C119 VHF. Low-cost, all-aluminum conical window antenna for strong signal reception in medium and high signal strength areas on channels 2-13. Ideal for apartment buildings, hotels, etc., or wherever rooftop installations are not allowed or impractical. Two low-band conical dipoles give powerful reception on channels 2 to 6. One high frequency dipole provides excellent reception on channels 7 to 13. Aluminum elements slide easily into place. Antenna is provided with window extension which acts as a horizontal jack. Fully adjustable from 32" to 42" in width. Easily fits on outer frames of most windows. Anchor brackets of antenna fit snugly and slide smoothly along extension bar. Antenna can be tilted to best receptive position. With complete mounting and installation instructions — less 300-ohm twin-line. Shpg. wt., 7 lbs.
97 CX 084. List. $8.95. NET **5.26**

Fig. G. TELCO MODEL A-9056. Four-way UHF "Window-Tenna." Easily installed, high-gain. Excellent for apartments, hotels, offices, etc., and anywhere a rooftop installation is impractical or impossible. Employs bowtie dipole and screen reflector for high gain and directivity on all channels. Features 4-way position for top performance in any location; can be adjusted to point up, down, to right or to left. Two-screw mounting bracket for quick, simple installation on any wooden window sash. Sturdy, weather-resistant construction throughout. Supplied with mounting hardware and complete instructions. Less 300-ohm twin-line. Shpg. wt., 3½ lbs.
98 CX 490. List. $4.65. NET **2.74**

ANTENNA INSTALLATION KITS

Fig. K. 2-MAST KIT. Designed to conveniently provide needed installation accessories for use with any TV antenna. Every item supplied in kit is of top-quality construction. Mast sections are electro-galvanized to resist corrosion. Low-loss UHF-VHF lead-in line, lightning arrester, No. 8 aluminum ground wire and insulators. Contains: 2—31½" mast sections; 60' of tubular twin-line; 1—lightning arrester; 2—mast standoffs; 6—screw-type standoffs; and 4' ground wire. With complete instructions. Shpg. wt., 4 lbs.
98 CX 372. List. $10.60. NET **6.23**

4-MAST KIT. Same as kit above, but with 4—31½" mast sections instead of 2. Shpg. wt., 6½ lbs.
98 CX 373. List. $13.05. NET **7.67**

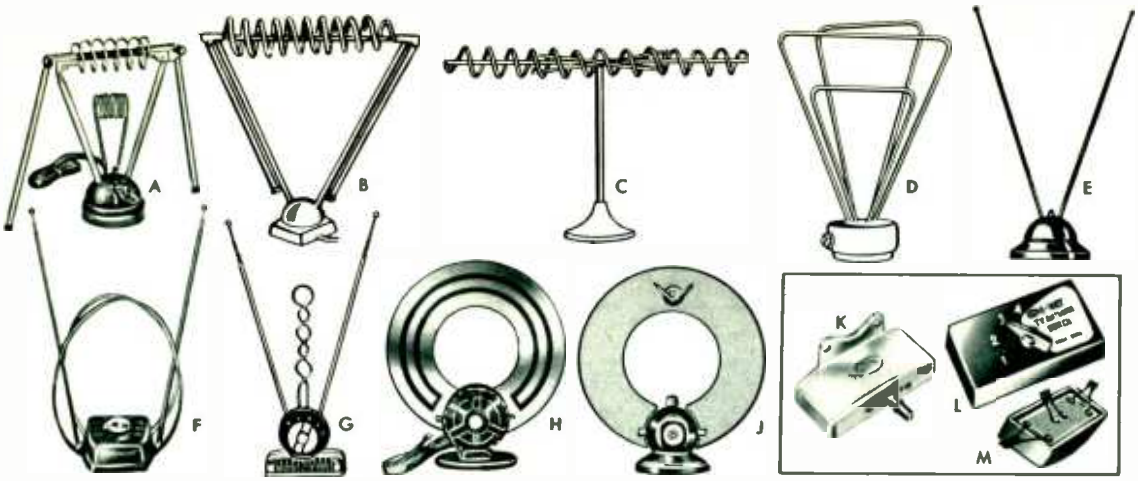
GUIDED BASE MOUNT ACCESSORY KIT. Designed for masts up to 1¼" in diameter. Contains: 1—universal foot mount; 1—1¼" guy ring; 2—guy wire hooks; and 50' 4/30 guy wire. All materials of the finest quality, ruggedly constructed for maximum service. Excellent for use in a variety of locations. Shpg. wt., 2½ lbs.
98 C 374. List. $1.95. NET **1.15**

MAST TYPE AM BROADCAST ANTENNAS

Fig. H. UNIVERSAL MAST. A complete, 4-section, 12-foot vertical antenna for mounting on roof, window sill, or wall. Sturdily made of rust-proof admiralty brass. For broadcast or short-wave sets. Universal bracket permits permanent and convenient installation on soil pipe, window sill, chimney, roof, gables, cornices, etc. Includes all accessories for universal mounting: lead-in wire, ground wire, brackets, lightning arrester, insulators, and hardware. Wt., 4½ lbs.
97 CX 425. NET **4.09**

Fig. J. WINDOW MAST. Easily installed window antenna. Sturdily made of rust-proof admiralty brass. Provides good reception for homes, apartments, hotels, etc. Adjustable base bracket for installing antenna in any position for best results. Telescope design—extends to 96". Three sections. Supplied ready to install. Includes mounting flange, insulator, and lead-in strip. Antenna is completely assembled. Excellent where space is at minimum. Shpg. wt., 3 lbs.
97 CX 452. NET **2.06**

See Pages 225-230 for Listings of Antenna Accessories



Television Indoor Antennas and Accessories

K-G DELTA-BEAM ANTENNAS

Fig. A. DELUXE UHF-VHF MODEL. Powerful indoor, all-channel antenna. Features 6-position impedance matching switch for optimum reception on each channel. Has double-rod, telescopic dipoles at each side of delta-match transformer. Adjustable dipoles easily set to best length and angle for sharpest picture. Reduces ghosts and interference. Plastic half-ball base has rubber pad to protect finish of TV cabinet. Strikingly smart gold finish complements any interior. Completely assembled. With 6 feet of 300-ohm twin-line, 9" high; each arm extends to 32". Shpg. wt., 1½ lbs.
92 C 010. List, $9.95. NET **5.85**

STANDARD UHF-VHF MODEL. Highly efficient economy version of Delta-Beam antenna above. Does not include small center coil or 6-position switch.
92 C 012. List, $5.95. NET **3.50**

Fig. B. VHF ANTENNA KIT. Economical, high-gain indoor TV antenna in kit form. Easily assembled without use of tools. Combines 4 antenna types—helix coil, folded dipole, straight dipole, and delta match transformer. Antenna parts are finished in attractive anodized silver. With 6 feet of 300-ohm twin-line. Shpg. wt., 2½ lbs.
92 CX 011. NET **3.63**

HI-LO "SPIRAL-TENNA" ANTENNAS

Fig. C. MODEL 202 UHF-VHF. Popular Hi-Lo "Spiral-Tenna." Provides all-channel UHF-VHF reception. Covers channels 2-13; 14-83. Has high signal gain—minimizes interference and ghosts. Employs extremely efficient helix coil principle. Requires no adjustment. Finished in gleaming gold. Mounted on sturdy base. Height, 14"; width (span), 32". With 6-foot length of 300-ohm twin-line, tipped with spade lugs. Shpg. wt., 2 lbs.
98 CX 449. List, $9.95. NET **5.85**

MODEL 101 VHF. Similar to Model 202 "Spiral-Tenna" described above but for VHF only. For channels 2-13.
97 CX 391. List, $9.95. NET **5.58**

WALSCO "STAR" UHF-VHF ANTENNA

Fig. D. This new indoor antenna combines smart styling, outstanding performance and convenient operation. Built-in control switch electrically "rotates" and tunes antenna. There's no need to rotate antenna to change its directivity. Simply turn control switch to select the right element, or combination of elements for optimum reception. Ghosts and interference are reduced or eliminated completely. Designed specifically for outstanding UHF-VHF reception in metropolitan and suburban areas. Decorator-styled in attractive sand and black color scheme. Durable plastic base and aluminum elements. Complete with 4 ft. of 300-ohm twin-line. Shpg. wt., 2½ lbs.
92 CX 015. List $12.95. NET **4.61**

KNIGHT VHF ANTENNA

Fig. E. An extremely popular indoor television antenna at unusually low cost. Features efficient, time-proven "rabbit ear" design. For use on VHF channels from 2 to 13—quickly and easily adjusted for peak performance. Minimizes ghosts and interference. Also excellent for FM reception. Uses sturdy, 3-section, brass-plated telescoping elements for convenient adjustment to desired length. Serrated grooves hold elements firmly in place in any selected position. Bakelite base is weighted to prevent tipping. Felt padding on base protects TV cabinet. With 3 ft. of 300-ohm twin-line. Shpg. wt., 2 lbs.
92 CX 025. NET **1.44**

ALL-CHANNEL REMBRANDT ANTENNA

Fig. F. The new "Rembrandt" UHF-VHF indoor antenna—features unique "radar loop" design plus all-angle telescoping dipoles to achieve powerful, unusually clear reception on all channels from 2 through 83. Incorporates a convenient 9-position orientation switch to adjust antenna for maximum efficiency on any channel and under a wide variety of receiving conditions. "Radar loops" are inductively coupled to the telescoping dipoles. Dipoles and loops can be adjusted to angle that provides best overall reception. Switch is highly effective in eliminating ghosts and interference. Switch has luminous numerals—easily visible in darkened room. Unusually attractive styling blends with any room decor. In choice of 3 handsomely finished bases. Wide rectangular construction of base prevents tipping. Shpg. wt., 3½ lbs.

MAHOGANY FINISH.
92 CX 062. List, $14.95. NET **9.95**

EBONY FINISH.
92 CX 064. List, $14.95. NET **9.95**

GOLD FINISH.
92 CX 063. List, $19.95. NET **12.95**

RADION UVTA-2 UHF-VHF ANTENNA

Fig. J. Efficient "Super-Bullseye" UHF-VHF antenna for indoor use in metropolitan installations or primary-to-moderate areas. Highly efficient, yet compact and attractive. Employs phased loop for excellent all-channel reception. Only ten inches high; weighs less than one pound. Attaches easily to any television set or converter. Antenna is then turned until the best reception angle is found. Smartly styled in rose-gold colored, anodized aluminum with mahogany phenolic base. Blends with any interior motif. Base is weighted and felt-padded—will not tip or scratch. Can be placed on or near set. A low-cost unit that combines handsome styling with exceptional performance. Quickly and easily installed. Complete with 5-foot length of 300-ohm twin-line. Size: 10" high, and 9" in diameter. Shpg. wt., 1 lb.
98 C 443. List, $6.95. NET **4.09**

JFD ANTENNAS

Fig. G. MODEL TA147. New UHF-VHF indoor antenna. With 6-position phasing switch to electrically adjust antenna for maximum efficiency on channel being received. Tip-proof weighted base. Adjustable 3 section brass dipoles have decorative ruby tips. With 5 ft. of 300-ohm twin-line and spade lug terminals for quick, simple attachment to TV set. Shpg. wt., 2 lbs.
92 CX 124. List, $9.95. NET **3.43**

Fig. H. MODEL TA-139 UHF. Economy-priced, "Ultra-Loop" UHF indoor antenna for clear signal reception on channels 14-83. Circular, wide loop dipole provides flat, high-gain response across entire UHF band. Patterned after short-wave radio direction finding loop antenna, with adaptations for UHF. Adjustable for highest gain—dipole can be moved from vertical to horizontal angles for peaking any point in the UHF spectrum. Rust-proof. Red-gold, anodized aluminum dipole, with mahogany bakelite base. Tip-proof base. With attached 4-ft. of 300-ohm twin-line. Ht., 9½"; dia., 9". Shpg. wt., 1½ lbs.
98 C 376. List, $4.95. NET **2.03**

JFD COUPLERS AND SWITCHES

Fig. K. AS1 ANTENNA SWITCH. New, smooth operating "Bat-Handle" 3-way switch. Enclosed in compact plastic housing. For up to 3 antennas. Shpg. wt., 2 lbs.
71 C 539. List, $3.75. NET **2.20**

Fig. L. AS3. ANTENNA SWITCH. Permits instant switching to any antenna in a multiple Yagi installation. Used with up to 3 antennas. Employs constant-impedance rotary switch with low-resistance silver-to-silver contacts. Size, 1¾x2x5". Screw terminals. Shpg. wt., 2 lbs.
71 C 540. List, $5.95. NET **3.50**

AS4 ANTENNA SWITCH. As above, but for up to 4 antennas.
71 C 541. List, $6.95. NET **4.09**

Fig. M. MODEL AC ANTENNA COUPLERS Antenna crossover networks for matching all 3 TV bands (low VHF, high VHF and UHF) to a single transmission line. Prevents interaction between antennas. Terminals marked for rapid connection. Couplers fasten to antenna mast by means of ring bolt. Maintain effective isolation between sets; no loss of signal strength on UHF or VHF frequencies. May be connected between separate VHF and UHF antenna systems. Provide excellent impedance match. In plastic case. Mounting hardware included. Shpg. wt., ¾ lb.

MODEL AC10. 6 terminals. Couples 2 antennas, low and high VHF.
51 C 269. List, $3.50. NET **2.06**

MODEL AC20. 6 terminals. Couples 2 antennas, VHF and UHF.
51 C 266. List, $3.75. NET **2.20**

MODEL AC30. 8 terminals. 3 antennas; low and high VHF, UHF.
51 C 267. List, $4.50. NET **2.65**

Alprodco Antenna Towers and Masts

ALUMINUM TOWERS

Lightweight, easy-to-install, 6-ft. triangular tower sections. Ruggedly made of high-grade spring-tempered aircraft aluminum alloys and aluminum aircraft rivets. 6-foot sections can be quickly and easily bolted together permitting installatinn of TV antennas as high as 120 feet. Ideal for extreme fringe areas. Light and strong—weighs slightly over 1 lb./ft. 120-foot maximum height tower will carry vertical static load of 300 lbs. and over 200 lbs. top loading in 100 mph wind. Tower has extremely low wind resistance of only 6 lbs./ft. in 100 mph wind. Utilizes built-in ladder bars for easy climbing. Tower requires guying every 24' with 3/16" thick galvanized 7-strand steel wire.

6-FOOT TOWER SECTION

MODEL T-6W. Standard triangular 6-foot antenna tower section. Units are shipped two-thirds factory pre-assembled. Measures 11¼" wide on each side. Special impact rivets for final assembly. Built-in ladder. 8 lbs.

97 CZ 072. NET **7.74**

STANDARD MAST KIT

MODEL MK-1W. 3 top trim pieces and 2 sets of brackets for attaching masts to tower. Shpg. wt., 2½ lbs.

97 C 073. NET **1.55**

GUYING BRACKET

MODEL GB-1. Bracket for attaching guy wire to tower—three required per guying station. One guy station is required every 24 feet. Shpg. wt., 2 oz.

97 C 381. NET EACH **9c**

ROTATOR ADAPTER KIT

MODEL RK-1W. All parts for installing rotator in tower at left. Permits rotator to be placed down inside the tower, placing wind thrust load on tower instead of rotator. Cnnsists of: 10 foot, 1¼" steel mast; 24" mast bearing; rotator adapter mounting plate (drilled for most popular in line or off-set type rotators); and Model MK-1W mast kit. Shpg. wt., 10 lbs.

97 CX 067. NET **7.10**

BASE PLATES

MODEL B-1W. Hinged aluminum. For vertical, horizontal or sloping surfaces. Wt., 3 lbs.

97 C 074. NET **1.70**

MODEL B-1WS. Self-supporting base of heavy, galvanized steel. Feet pivot to any angle. Shpg. wt., 18 lbs.

97 CX 161. NET **5.50**

Kuehne Antenna Towers

Self-Supporting—No Guying

Complete "free-standing" tower assemblies in 40 or 50-foot heights. "Controlled Sway" lateral loading bearing joints. Sections secure by bolts in welded-on, load-bearing sleeves (see illustration). These relieve joints of load and eliminate holes in tubing. Vertical sections are 16-gauge steel tubing zinc electroplated to resist corrosion. Heavy steel, one-piece cross ties are welded to outside of vertical tubing. Top section takes masts up to 1½" O.D. Special base for mounting in concrete. *Shipped F.O.B. Mattoon, Illinois. No C.O.D. shipments—please send full remittance to ALLIED with your order. Shipping charges will be collected on delivery.*

40-FOOT TOWER. In 5 sections. 174 lbs.

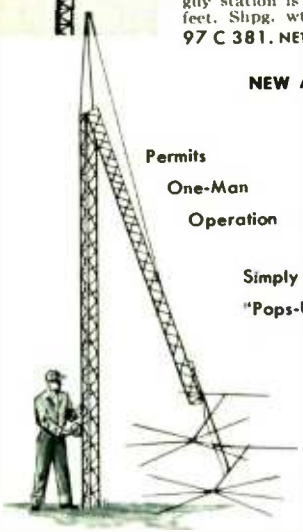
92 CZ 160. NET. **61.75**

50-FOOT TOWER. In 6 sections. 212 lbs.

97 CZ 299 ..... **77.75**

Write for literature covering towers from 20 to 100 ft. Give us your requirements—we'll recommend the correct tower.

NEW ALPRODCO "POP-UP" ANTENNA TOWERS



New "pop-up" antenna towers for one-man installation. Ideal for TV or Amateur antennas. Pre-assembled sections in one compact package. Av. size. 6x2x1'. Just bolt the sections together and easily push up bottom half. Then turn the crank and up goes the second half! Antenna, rotator and guy wire are attached from position on the ground. Tower easily lowers if antenna or rotator need repairs. Bottom half constructed of hot-dip galvanized steel. Upper half tower of strong aircraft aluminum. Withstands up to 90 mile wind load. With guying and installation instructions, hinged base, ground anchors, winch and cable, guy brackets, top trim, aluminum and steel towers, mast kit and 9 ft. telescoping aluminum mast. In 3 heights listed below.

TYPE P-M-42-9A. 49 ft. Wt., 90 lbs.

92 CZ 197. NET **53.25**

TYPE P-M-54-9A. 61 ft. Wt., 107 lbs.

92 CZ 198. NET **64.45**

TYPE P-M-66-9A. 73 ft. Wt., 123 lbs.

92 CZ 199. NET **75.65**

ALPRODCO STEEL SLIP-UP MASTS

Telescoping "Slip-Up" masts for installation of TV antennas. Made of heavy-gauge, hot-dip galvanized, tempered steel tubing. Available in 20, 30, 40, and 50-foot heights; in 2, 3, 4, and 5-section assemblies respectively. Inside tubings have nuts for thumb bolts of outer sections, for quick, finger-tip locking. Notched "bell bottom" and swedged top automatically align extended sections for a tight fit over "snap-in" joint clips. Top section can be slipped out for antenna mounting. Guy ring design permits rotating mast to orient antenna to position of best reception. Guy rings have guy wire holes for either three or four-wire guying.

TYPE M-20. 20-ft. slip-up mast. Two sections of tubing; 1½" and 1¼" O.D. Supplied with 2 guy rings and hardware. Less base. Shpg. wt., 12 lbs.

92 CZ 156. NET **5.92**

TYPE M-30. 30-ft. slip-up mast. Three sections of tubing; 1¾", 1½", and 1¼" O.D. With 3 guy rings and hardware. Less base. Shpg. wt., 22 lbs.

97 CZ 162. NET **9.39**

TYPE M-40. 40-ft. slip-up mast. Four sections of tubing; 2", 1¾", 1½" and 1¼". With 4 guy rings and hardware. Less base. Shpg. wt., 32 lbs.

97 CZ 163. NET **13.17**

TYPE M-50. 50-ft. slip-up mast. Five sections of tubing; 2¼", 2", 1¾", 1½" and 1¼". With 5 guy rings and hardware. Less base. Shpg. wt., 42 lbs.

97 CZ 164. NET **17.72**

TYPE MB-1 STANDARD BASE. For any of above masts. All-angle, full swivel; for flat or sloping roof. Shpg. wt., 1½ lbs.

97 C 165. NET **50c**

ANTENNA MAST SECTIONS

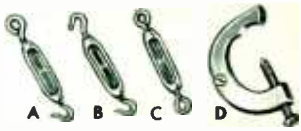
May be used as regular masts or to extend existing masts. Made of heavy-wall steel with electro-galvanized finish. Treated to prevent corrosion. *Seamless type; others are seamed. All have outside diameter of 1¼". Require no external couplings.

No.	Ht.	Wall	Wt.	NET
97 CZ 137	5 ft.	.035"	3 lbs.	.88
98 CZ 366*	5 ft.	.051"	4 lbs.	1.17
97 CZ 138	10 ft.	.035"	5 lbs.	1.76
98 CZ 367*	10 ft.	.051"	7 lbs.	2.59

MAST INSULATOR CLAMPS

Consist of metal strap and nut block, threaded to accept 10-32 machine screw type television lead-in stand-off insulators. (See page 226.) No need to drill hole in mast. Shpg. wt., per pkg., 5 oz. **3 per pkg.**

71 C 822. For 1" masts.
71 C 823. For 1¼" masts.
PER PKG. **14c**
10 or more pkgs., Per Pkg. **12c**



TURNBUCKLES AND CLAMPS

GUY WIRE TURNBUCKLES. Galvanized turnbuckles for use on guy wires. Malleable iron, clean-cut threads. Av. shpg. wt., ½ lb.

Stock No.	Fig.	Closed	Open	NET EA.	10 or more, EACH
44 C 790	A	5½"	7⅝"	15¢	13¢
44 C 791	A	6¼"	9¼"	25¢	22¢
44 C 792	A	7½"	10½"	38¢	34¢
44 C 793	B	5½"	7⅝"	15¢	13¢
44 C 794	B	6¼"	9¼"	25¢	22¢
44 C 795	B	7½"	10½"	38¢	34¢
44 C 796	C	5½"	7⅝"	15¢	13¢
44 C 797	C	6¼"	9¼"	25¢	22¢
44 C 798	C	7½"	10½"	38¢	34¢

Fig. D. MUELLER TYPE 58 GROUND CLAMP. Positive contact, rustproof ground clamp. Maximum opening, 1¼". 4 oz.

51 C 310. EACH **16c**
10 or more, EACH **14c**

Letter Z in Stock Number Indicates Express Shipment Only

TV Mounts and Accessories

TELCO LEAD-IN TUBES

Type 8641. Combination plastic lead-in tube and lightning arrester. Fits walls to 16" in thickness. Has lightning arrester on outside end; wall plug on inside. Simple installation—lead-in wire is fastened under teeth of lightning arrester and contact is made to inside. Requires ¾" mounting hole. Shpg. wt., 1 lb.
51 C 100. List, $2.95. NET 1.73

Type 8958. As above, less arrester and wall plug. Universal type lead-in tube for all types of UHF-VHF lead-in lines. Ideal for terminating open line outside and bringing standard line into house. Shpg. wt., ½ lb.
71 C 559. List, $1.95. NET 1.15

TELCO 9015 ANTENNA CLIP

A very handy accessory for servicemen. Clips 300-ohm lead-in to the antenna terminals of TV sets. Plastic clip, screw terminals. 3¾" long. Wt., 2 oz.
41 H 132. NET 15c

BMA-138

PRA-148

PENN TV MAST MOUNTS

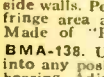
TV mast mounts for flat and sloping roofs and side walls. Permit one-man installation of tall, fringe area antennas. Lock in any position. Made of "Pennalloy," an aluminum alloy.

BMA-138. Universal roof mount. Will swivel into any position. Locked securely by special bearing. Adjustable top supports masts from 1" to 2" O.D. Shpg. wt., 2 lbs.
97 C 176. NET 2.50

BMA-136. Similar to above but for use with masts from 1" to 1¼" O.D. Wt., 1 lb.
97 C 175. NET 2.09

PRA-148. Universal peak roof mount with patented bearings for adjustment and locking at any angle. "Pennalloy" body. Adjustable top for masts from 1" to 2" O.D. Wt. 2 lbs.
97 C 177. NET 3.09

PENN FLOATING GUY RINGS



GRA-140. Cast aluminum, floating guy ring and collar. Fastens to mast with hardened steel set screw. Permits rotating antenna after guy wires are installed. Excellent for antennas with rotators. Specially lubricated to assure smooth rotation. For 3-guy or 4-guy installations. For masts to 1⅜". Shpg. wt., 8 oz.
97 C 178. NET 1.06

GRA-141. Same as GRA-140 but for masts up to 1¾" O.D. Shpg. wt., 9 oz.
97 C 179. NET 1.12

GRA-142. Same as GRA-140 but for masts up to 2" O.D. Shpg. wt., 10 oz.
97 C 180. NET 1.47

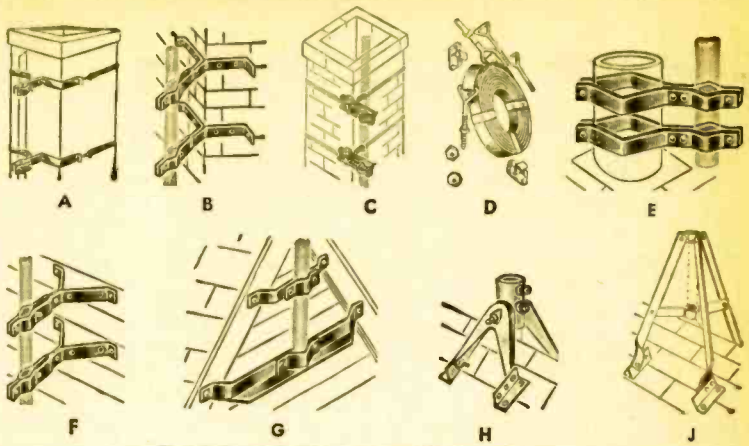
UNIVERSAL GUY LOCK

For tightening and locking guy wires on antenna masts. Mounts in any position. Cannot slip. Size, 2x1⅝x1⅞". Wt., 5 oz.
71C 550. NET 34c

COPPERWELD ANTENNA WIRE

High-quality, extremely dependable copperweld antenna wire. Features copper outer conductor and steel core for conductivity as well as very high tensile strength. May also be used for guying antenna towers.

No.	Gauge	Feet	Wt., Lbs.	EA.
49 T 133	12	100	2	2.44
49 T 134	12	250	5	5.73
49 T 140	14	100	1½	2.15
49 T 141	14	250	3	4.65
58 T 318	18	250	2	1.50
58 T 317	18	500	3	2.30
58 T 315	18	3000	18	12.32



TELCO GC TV ANTENNA MOUNTS

Fig. A—LOW-COST CHIMNEY MOUNT

Type 8005. Sturdy, low-cost chimney bracket. An excellent choice for economy antenna systems. Can be installed in a few minutes. Only one piece to handle with a minimum of loose parts. Made of extra heavy gauge steel. Zinc-plated and dichromate-dipped for long life. Brackets securely support antenna mast—even under high wind conditions. Easily adjusted to provide snug, firm grip. Will support masts up to 1¾" diameter. 12' straps and hardware included. Shpg. wt., 4 lbs.
97 C 065. List, $2.40. NET 1.41

Fig. B—SNAP-IN CHIMNEY MOUNT

Type 8930. Includes stainless steel strapping. An excellent chimney mount for quick, easy and dependable installation. Provides extremely strong mast support. Extra heavy construction for proper support even under high wind conditions. Simply snap the mast into the brackets and tighten the bolts. Easy to handle—no loose pieces. Makes antenna installation a one man job. Fits masts up to 1¾" diameter. 12' stainless steel strapping for long rust-free life. Brackets of extra heavy-gauge steel, zinc-plated and dichromate-dipped for maximum protection. Shpg. wt., 4 lbs.
97 C 027. List, $4.25. NET 2.50

Type 8610. As above, but has galvanized steel strapping.
97 C 028. List, $3.00. NET 1.76

Fig. C—RATCHET CHIMNEY MOUNT

Type 9218. Ratchet-type chimney mount. Both ends of strapping slip through slotted shaft. As ratchet is turned both ends of strapping are simultaneously tightened for even tension around chimney. Made of heavy-gauge channel steel for extra strength. Double plated with zinc and dichromate for utmost protection against weather, salt air, chemical and smoke fumes. Includes 2 brackets and two 12-ft. lengths of heavy-duty galvanized steel strapping. Shpg. wt., 3½ lbs.
71 C 555. List $4.25. NET 2.50

Type 9219. Same as above, but with extra-strong and corrosion-resistant stainless steel.
71 C 554. List $5.28. NET 3.11

Fig. D—CHIMNEY MOUNT REPAIR KIT

Type 8932. Stainless steel chimney mount repair kit. Contains stainless steel strapping, eye bolts, nuts and strap clamps. Replaces rusted or broken strapping on all types of chimney mounts. Heavy-gauge strapping for secure support. Stainless steel will resist weather, salt air and smoke fumes. Shpg. wt., 2 lbs.
71 C 558. List, $3.25. NET 1.91

Type 8931. Same as above, except constructed of galvanized steel. Zinc plated and dichromate dipped for rust protection.
71 C 556. List, $1.95. NET 1.15

Fig. E—VENT PIPE MOUNT

Type 8803. Easy-to-use vent pipe mount that will clamp on any pipe or vent from 4" to 6" in diameter. Perfect for antenna installations on roofs where chimney is inaccessible. Simple and easy to use. Only two pieces to clamp on with bolts. Made of extra heavy gauge steel. Handles all masts up to 1¾" in diameter. Securely supports antenna mast. Zinc plating and dichromate dipping provide protection from vent fumes and rust. Shpg. wt., 3 lbs.
98 C 480. List, $2.25. NET 1.32

Fig. F—SNAP-IN WALL MOUNT

Type 8306. Heavy-duty wall brackets for firmly mounting antenna mast to any flat vertical surface. Perfect for buildings with overhanging eaves. Mast snaps in place until nuts can be tightened. Permits one-man antenna installation. Constructed of heavy-gauge steel. Plated for resistance to moisture and harmful fumes. Holds mast 6" from wall. For masts up to 1¾" in diameter. Supplied complete with plated mounting screws. Shpg. wt., 2½ lbs.
98 C 481. List, $2.00. NET 1.18

Type 8308. Same as above, but holds mast 8" from wall. Shpg. wt., 4 lbs.
98 C 482. List, $3.25. NET 1.91

Fig. F—DELUXE SNAP-IN MOUNT

Type 8312. Extra heavy duty wall brackets. Supports mast from side of building. Legs of bracket are spaced 16" apart to match studs of homes. Side sway prevented by sturdy mounting legs. Vertical support (not shown) eliminates sag. 12" wall clearance. Shpg. wt., 5 lbs.
98 C 483. List, $3.50. NET 2.06

Type 8318. Same as above, but provides 18" wall clearance. Shpg. wt., 7 lbs.
98 CX 484. List, $4.50. NET 2.65

Type 8324. Same as Model 8312, but provides 24" wall clearance. Shpg. wt., 10 lbs.
98 CX 485. List, $6.10. NET 3.59

Fig. G—EAVE MOUNT

Type 8933. Designed for mounting antenna mast on eaves of buildings. Enables TV antenna to be installed without climbing hazardous, peaked roofs. Lower bracket is 48" long to straddle side of building. Upper bracket mounts close to peak of roof. Unusual strength achieved by angle iron construction of lower bracket. Weatherproof—zinc plated and dichromate dipped. With all hardware. For mast sections to 1¾" diameter. Shpg. wt., 7 lbs.
98 CX 486. List, $5.95. NET 3.50

Fig. H—"NO-GUY" ROOF MOUNT

Type 9060. A combination steel and cast iron base for mounting over the ridge of peaked roof or on a flat roof. Bolts clamp mast securely in position. Antenna can be rotated after installation by loosening bolts. Legs adjustable to roof angle. Will support average antenna on mast up to 10 feet without requiring guy-wires. Completely weather protected against adverse weather conditions. Takes masts up to 1½" diameter. Shpg. wt., 5 lbs.
98 C 493. List, $4.40. NET 2.59

Fig. J—ANTENNA BASE

Type 9063. New, sturdy antenna base. Supporting masts up to 10 feet or more. Eliminates guy-wires except where an unusually high mast is required. For masts to 1½" O.D. Set screws anchor mast and permit orientation. Double electro-galvanized and dichromated. Heavy-gauge steel. 2-ft. high. Wt., 6½ lbs.
92 CX 040. List, $5.95. NET 3.50

Type 9143. As above, but 3 feet high and constructed from 1" electro-galvanized steel tubing. Shpg. wt., 8½ lbs.
92 CX 043. List, $7.50. NET 4.41

Type 9144. Same as Model 9143 but 5 feet high. Shpg. wt., 15 lbs.
92 CX 044. List, $14.95. NET 8.79

TV Antenna Accessories

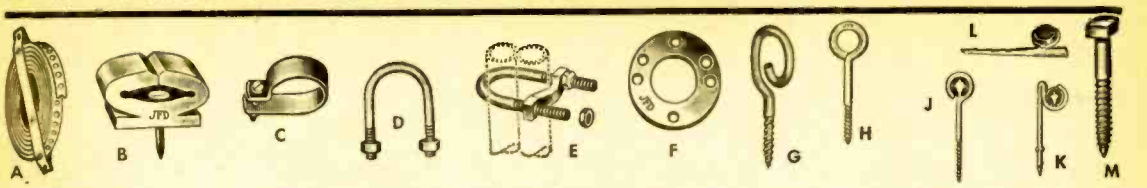


Fig. A. Hanger Strap. For mounting masts to odd-shaped objects. Made of ¾" galvanized steel strapping.
71 C 400. 12' coil. Wt., 1 lb. NET.....56¢
71 C 401. 100' coil. Wt., 5 lbs. NET....3.50

Fig. B. Wall Stand-Off Insulator. For securing twin lead to baseboards, etc. Tack-in type. Wt., per pkg., 10 oz. 10 per pkg.
71 C 608. Per pkg.....59¢

Fig. C. Ring Clamp. Supports guy wire ring, etc. Corrosion-resistant steel. Fits mast diameters (O.D.) shown below. Shpg. wt., per pkg., 3 oz. 5 per pkg.
71 C 609. ½"-1". Per pkg.....34¢
71 C 610. 1"-1¼". Per pkg.....34¢

Fig. D. U-Bolt. Galvanized steel. With nuts and washers. Fits up to 1½" (O.D.) masts. Shpg. wt., per pkg., 4 oz. 2 per pkg.
71 C 611. Per Pkg.....29¢

Fig. E. Mast Clamp. Serrated yoke. For 2 masts with max. O.D. of 1⅛" each. Galvanized steel. Wt., per pkg., 4 oz. 2 per pkg.
71 C 612. Per pkg.....47¢

Fig. F. Universal Guy Rings. Rest unanchored on ring clamp. Fit mast O.D. below. Shpg. wt., per pkg., 10 oz. 5 per pkg.
71 C 613. 1". Per pkg.....44¢
71 C 615. 1¼". Per pkg.....44¢
71 C 616. 1½". Per pkg.....44¢
71 C 617. 1½". Per pkg.....59¢
71 C 618. 2". Per pkg.....59¢

Fig. G. Guy Wire Hook Eye. Anchors guy wires firmly. Screws into wood. Galvanized steel. Shpg. wt., per pkg., 10 oz. 5 per pkg.
71 C 619. Per pkg.....24¢

Fig. H. Hook Eye. Provides an anchoring point for guy wires. Screws into wood. 3" long. Wt., per pkg., 8 oz. 5 per pkg.
71 C 620. Per pkg.....26¢

Fig. H. Hook Eye. Anchors guy wires. 5" long. Wt., per pkg., 10 oz. 5 per pkg.
71 C 621. Per pkg.....29¢

Fig. K. Drive-In Stand-Off Insulators. Universal. For flat, oval, tubular and coaxial TV lead-ins. Shpg. wt., per pkg., 5 oz. 5 per pkg.
71 C 626. 3½". Per pkg.....26¢

Fig. J. Universal Stand-off Insulators. For flat, oval, tubular, and coaxial TV lead-in line. Fasten securely by screwing into wood. Av. shpg. wt., per pkg., 10 oz. 5 per pkg.
71 C 622. 3½". Per pkg.....14¢
71 C 623. 5½". Per pkg.....24¢
71 C 624. 7½". Per pkg.....26¢
71 C 625. 12½". Per pkg.....59¢

Fig. L. Universal Hot Nail Stand-off Insulators. For flat, oval, tubular, and coaxial TV lead-in line. Hold securely when driven into wood, mortar, or brick. Length, 3½". Shpg. wt., per pkg., 4 oz. 5 per pkg.
71 C 627. Per pkg.....39¢

Fig. M. Heavy-Duty Lag Bolts. For rigidly securing mast mounts, tower bases, etc., to wood, brick or other surfaces. Have ¼" diameter shank. Tighten with wrench or pliers. Av. shpg. wt., per pkg., 5 oz. 10 per pkg.
71 C 604. 1". Per pkg.....53¢
71 C 605. 1½". Per pkg.....53¢
71 C 606. 2". Per pkg.....59¢
71 C 607. 3". Per pkg.....65¢

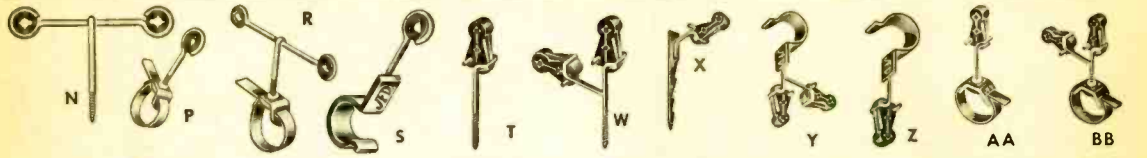


Fig. N. Double Stand-Off Insulators. Wood screw type. For flat, oval, tubular and coaxial lines. Av. shpg. wt., per pkg., 10 oz. 5 per pkg.
71 C 628. 3½". Per pkg.....71¢
71 C 629. 5½". Per pkg.....79¢
71 C 630. 7½". Per pkg.....84¢
71 C 631. 12½". Per pkg.....1.34

Fig. P. Threaded Universal Stand-offs. For flat, oval, tubular and coaxial lines. Mount on any mast. Shpg. wt., per pkg., 6 oz. 3 per pkg.
71 C 654. 3½". Per pkg.....33¢
71 C 655. 5½". Per pkg.....42¢
71 C 656. 7½". Per pkg.....44¢
71 C 657. 12½". Per pkg.....81¢

Fig. R. Double Universal Stand-Off Insulators. As above. For flat, oval, tubular and coaxial lines. Av. wt., per pkg., 8 oz. 3 per pkg.
71 C 633. 3½". Per pkg.....62¢
71 C 634. 7½". Per pkg.....71¢
71 C 635. 12½". Per pkg.....97¢

Fig. S. Snap-on Stand-Off Insulators. For flat, oval, tubular and coaxial lines. 3½" long. Fit masts (O.D.) below. Wt., per pkg., 8 oz. 3 per pkg.
71 C 636. 1". Per pkg.....18¢
71 C 637. 1 1/16". Per pkg.....18¢
71 C 638. 1¼". Per pkg.....18¢

Fig. T. Single Screw-type Stand-off Insulators. For any lead-in. Insulator swings out for insertion of lead-in. Snaps shut with finger pressure. Design assures isolation of lead-in from metal holder. Av. wt., per pkg., 9 oz. 5 per pkg.
71 C 639. 3½". Per pkg.....26¢
71 C 640. 5½". Per pkg.....29¢
71 C 641. 7½". Per pkg.....34¢
71 C 642. 12½". Per pkg.....64¢

Fig. W. Double Screw-type Stand-off Insulators. As above, but with two insulators for two lead-in lines. Keeps lead-ins well separated. Holds securely without crimping. Wt., per pkg., 11 oz. 5 per pkg.
71 C 643. 7½". Per pkg.....88¢

Fig. X. Hot Nail 3½" Stand-off Insulators. Can be hammered directly into mortar between bricks. No pre-drilling. Holds rigidly. With hinged insulator for holding tubular, flat, oval, rectangular or open wire lead-in. Shpg. wt., per pkg., 9 oz. 5 per pkg.
71 C 644. Per pkg.....73¢

Fig. Y. Dual Clip-on 7½" Stand-off Insulators. Fits pipe with outside diameter of 1¼". With 2 pivot-action-lock hinge insulators for two leads. Anti-corrosion plating. Shpg. wt., per pkg., 1 oz. 3 per pkg.
71 C 648. Per pkg.....58¢

Fig. Z. Clip-on Stand-off Insulators. For all single lead-in line applications, clips lead-in to pipe mast, etc. No bolts or screws to tighten. Holds lead-in firmly. With "Bronzidite"—special military specification anti-corrosion plating for protection agains rust. Shpg. wt., per pkg., 11 oz. 3 per pkg.
71 C 645. For 1" O.D. Per pkg.....26¢
71 C 646. For 1⅛" O.D. Per pkg.....26¢
71 C 647. For 1¼" O.D Per pkg.....26¢

Fig. AA. Single Strap-type Stand-off Insulators. For mounting stand-off insulators on masts. Easy installation; no loose parts. With polyethylene low-loss insulator design, electro-galvanized steel strap, and heavy gauge steel buckle. Bronzidite plating for maximum protection from corrosion. Installs quickly, no threading. Av. shpg. wt., per pkg., 11 oz. 3 per pkg.
71 C 649. 3½". Per pkg.....44¢
71 C 650. 5½". Per pkg.....46¢
71 C 651. 7½". Per pkg.....48¢
71 C 652. 12½". Per pkg.....88¢

Fig. BB. Dual Strap-type Stand-off Insulators. With two polyethylene pivot-action-lock insulators. Electro-galvanized steel strap. Will hold two lead-in lines or lead-in plus rotator cable. Length, 7½". Shpg. wt., per pkg., 13 oz. 3 per pkg.
71 C 653. Per pkg.....79¢

TV POWER CORDS AND CONNECTORS

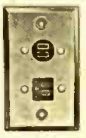
Fig. CC. TV Power Cord and Connector. Identical to original equipment on most TV sets. No. 18 conductor; rubber-covered; 6 feet long. Soft rubber plug. U.L. Approved. Shpg. wt., 8 oz.
49 T 237. NET.....24c

Same as above, but 9 feet long.
49 T 234. NET.....30¢

TV Power Cord and Connector. (Not illustrated.) Identical to original equipment on Zenith model TV sets. No. 18 conductor; rubber-covered cord 6 feet long. Durable, molded-on rubber plug. U.L. Approved. Shpg. wt., 10 oz.
49 T 239. NET.....38c

Fig. DD. Male Connector. Flush mounting; used on most TV sets. Shpg. wt., 2 oz.
49 N 238. NET.....14c

CINCH-JONES WALL PLATE



For terminating TV lead-in and rotator cables in standard wall outlet. Wall plates are chrome-plated. S-302 for antenna lead-in. S-302-4 for lead-in plus 4 rotator wires; S-302-8, for lead-in and 8 rotator wires. Shpg. wt., 7 oz.

WPC Style TV Wall Plates
41 H 646. S-302. NET.....1.12
41 H 647. S-302-4. NET.....1.36
41 H 648. S-302-8. NET.....1.47

CCT Style Plugs for Above
40 H 802. P-302 antenna plug. NET.....39¢
40 H 804. P-304 4-wire rotator plug.....46¢
40 H 808. P-308 8-wire rotator plug.....56¢

AMPHENOL TYPE 53-307 SILICONE COMPOUND

Semi-liquid silicone compound for wet-proofing TV and Amateur solid dielectric transmission lines. Maintains a constant impedance in transmission lines whether wet or dry for optimum performance of equipment. One tube covers hundreds of feet of standard 300 ohm twin line. 1 oz. tube. Shpg. wt., 4 oz.
43 N 135. List, $2.00. NET.....1.18

WALSCO 1551 LEAD-IN TUBE

Accommodates all types of TV lead-in wires, coaxial or twin line. 15" length, fits walls to 14" thickness. Provision for terminating open line on outside of bushing and connecting twin line. ¼" mtg. hole. Shpg. wt., 1 lb.
51 C 110. List, $1.95. NET.....1.15

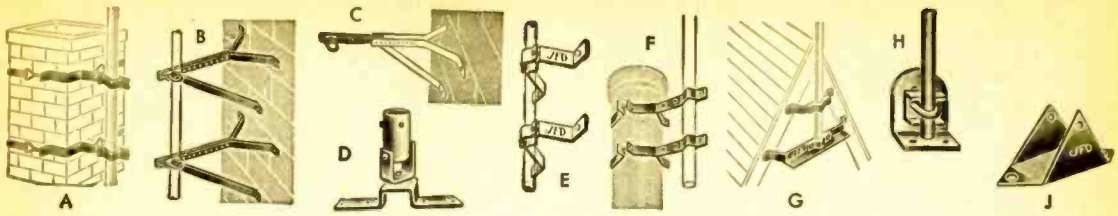
Type 1552-BR Wall Outlets. For any type of lead-in or rotator cable. Also fit over and fasten to inside flange of feed-thru bushing 1551 above. For 2-cond. wires. With matching plug. Brown finish. Shpg. wt., 5 oz.
51 C 111. List, $1.05. NET.....62c

Type 1553-BR. As above, for 5-cond. wires.
51 C 112. List, $1.50. NET.....88c

WALSCO TYPE 1555 WINDOW-THRU

Metal discs for capacitively coupling TV lead in through window to TV receiver. No need to drill holes in walls or window. Discs adhere to both sides of glass. Terminals for securing lead in With cement. Shpg. wt., 2 oz.
51 C 101. NET.....58c

TV Mounts—Twin Line—Accessories



JFD ANTENNA MOUNTS

Fig. A. BR2 Economy Chimney Mount. Dependable, high-quality chimney mount. Ruggedly constructed of corrosion-resistant steel. Securely holds masts of up to 1¼" O.D. Supplied complete with two 12' galvanized steel straps and all hardware. Easily adjusted. Shpg. wt., 3 lbs.
71 C 600. NET PER SET.....1.91

Fig. B. BR11 Adjustable Wall Brackets. Anchors ⅞" to 1½" (O.D.) masts to walls and chimneys. Constructed of heavy steel. Set of 2 brackets; permit locating mast 10 to 15" from mounting surface. U-bolts and hardware. Shpg. wt., 7 lbs.
97 CX 122. NET PER SET.....4.41

Fig. C. BR11X Wall Bracket Extension Bars. Extends BR11 adjustable wall brackets, listed above, to provide up to 24" wall clearance. Same high-quality construction as BR11. Easily attached to wall brackets for a solid mounting. Shpg. wt., 1½ lbs.
97 C 123. NET PER PAIR.....1.76

Fig. D. ZUB 2¼ Base Mount. Takes masts up to 2¼" (O.D.). Mounts easily on flat surfaces. Heavy-gauge steel construction. With hardware. Shpg. wt., 3 lbs.
97 C 120. NET EACH.....1.79

Fig. E. BR46 Economy Wall Mount. Holds 1-1½" (O.D.) masts securely. Heavy steel. For vertical surface mtg. Includes 2 brackets, all hdwe. Sizes below are distances brackets hold mast from wall. Av. shpg. wt., per set, 1½ lbs.
97 C 124. 3". NET PER SET.....1.00
97 C 125. 4". NET PER SET.....1.06
97 C 126. 7". NET PER SET.....1.21

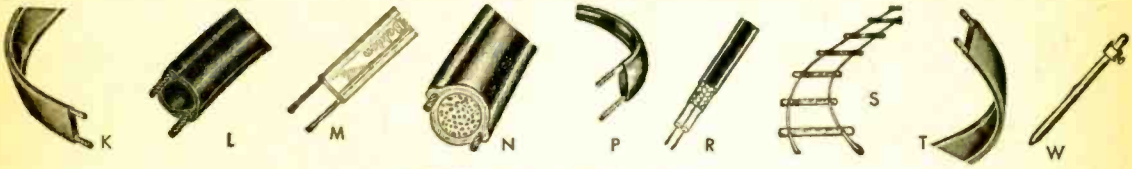
Fig. F. BR9 Vent Pipe Mount. For sturdy mounting of ½" to 1½" (O.D.) masts on most vent pipes. Easy-to-adjust clamps provide a solid grip on circular surfaces. Made of rust-resistant steel. Set of two brackets, with all necessary hardware. Shpg. wt., 3 lbs.
97 C 128. NET PER SET.....2.12

Fig. G. BR-46-10 Eave Mount. For peaked roofs. Complete with all mounting hardware. Shpg. wt., 4 lbs.
71 CX 601. NET PER SET.....2.32

Fig. H. BR13 All-Angle Mount. Dependable, low-cost mount. Sturdy, heavy-gauge steel construction. U-bolt holds ½" to 1¼" (O.D.) masts. Easily adapted to a variety of locations. Supplied with all mounting hardware. Shpg. wt., ½ lb.
97 C 129. EACH.....35c

Fig. J. BR14-1¼ Pivot Base Mount. Fastens anywhere. Excellent for installations where speed and economy count. Takes masts up to 1¼" dia. Shpg. wt., ½ lb.
71 C 602. NET.....38c

BR14-2 Pivot Base Mount. Same features as above, but accommodates masts up to 2" in diameter. Shpg. wt., ½ lb.
71 C 603. NET.....38c



TWIN LINE ACCESSORIES

AMPHENOL TWIN LINE

Fig. K. Type 14-056. Flat 300-ohm twin line. Low-loss dielectric. Extra-tough jacket of 56 mil web thickness, extruded of virgin brown polyethylene. Finest quality 7-28 stranded copper conductors. Production excellence insures top service and performance. Shpg. wt., 100 ft., 2 lbs.
49 T 437. 50' Coil. NET.....1.29
49 T 439. 75' Coil. NET.....1.76
49 T 441. 100' Coil. NET.....2.15
49 W 436. Over 100', Per 100'.....2.15

Fig. K. Type 14-100. Flat, highly efficient, 300-ohm twin line. Combines flexibility with ruggedness. 100-mil web thickness extruded of finest polyethylene. 7-28 stranded copper conductors. Shpg. wt., 100 ft., 2½ lbs.
49 T 417. 50' Coil. NET.....1.53
49 T 418. 75' Coil. NET.....2.12
49 T 413. 100' Coil. NET.....2.65
49 W 419. Over 100', Per 100'.....2.65

Fig. K. Type 14-185. Flat, heavy-duty, 300-ohm twin line. Thick jacket provides extra strength and high resistance to abrasion, weather and fumes. 185 mil web brown polyethylene. 7-26 bare stranded copper conductors. 100-ft. minimum. Shpg. wt., 100 ft., 5 lbs.
49 T 414. 100' Coil. NET.....6.23
49 W 426. Over 100', Per 100'.....6.23

Type 14-298. Four-Conductor Rotator Cable. Heavily ribbed for ease of handling. Extruded of finest brown virgin polyethylene. Quality 7-28 stranded copper conductors. Highly resistant to weather and fumes. Shpg. wt., 100 ft., 3 lbs.
49 T 423. 50' Coil. NET.....1.62
49 T 424. 75' Coil. NET.....2.31
49 T 415. 100' Coil. NET.....3.00
49 W 425. Over 100', Per 100'.....3.00

Fig. L. Type 14-271. Tubular 300-ohm twin line. Air-core spacing for extremely high efficiency—ideal for UHF. 7-28 copper conductors. 100-ft. minimum. Wt., 100 ft., 3 lbs.
49 T 444. 100' Coil. NET.....3.76
49 W 447. Over 100', Per 100'.....3.76

Type 14-076. Heavy-duty 300-ohm tubular twin line. Same low-loss air-core spacing as above, but heavier construction for extra durability. 7-26 bare copper conductors of high quality. 100-ft. minimum. Shpg. wt., 100 ft., 3½ lbs.
49 T 416. 100' Coil. NET.....6.23
49 W 409. Over 100', Per 100'.....6.23

BELDEN TWIN LINE

Fig. M. Type 8225. Flat 300-ohm twin line. Finest quality 7-28 stranded copper conductors. High-quality polyethylene jacket has 70 mil web thickness. Shpg. wt., 100 ft., 2 lbs.
49 T 385. 50' Coil. NET.....1.07
49 T 386. 75' Coil. NET.....1.47
49 T 389. 100' Coil. NET.....1.82
49 W 384. Over 100', Per 100'.....1.82

Type 8230. Weldohm twin-line. 300-ohm. 70-mil jacket. Conductor of 7-28 stranded copper-coated steel wire. Copper coating provides high conductivity; steel core for high strength. Shpg. wt., 100 ft., 2 lbs.
49 T 387. 50' Coil. NET.....1.08
49 T 388. 75' Coil. NET.....1.55
49 T 394. 100' Coil. NET.....1.96
49 W 383. Over 100', Per 100'.....1.96

Fig. N. Type 8275. 300-ohm UHF-VHF celluline. Has cellular plastic core, inert gas-filled. Brown polyethylene-plastic jacket. 7-28 copper-coated steel conductors. Shpg. wt., 100 ft., 2½ lbs.
49 T 396. 50' Coil. NET.....2.10
49 T 397. 75' Coil. NET.....3.05
49 T 395. 100' Coil. NET.....4.05
49 W 398. Over 100', Per 100'.....4.05

Fig. P. Type 8235. 300-ohm, oval twin-line. Very low loss; for UHF-VHF use. Copper-coated, 7-28 steel wire conductors. Extremely tough 185 mil web thickness. Flexible and strong. 100-ft. minimum. Shpg. wt., 100 ft., 5 lbs.
49 T 393. 100' Coil. NET.....4.12
49 W 399. Over 100', Per 100'.....4.12

Type 8224. 150-Ohm Twin Line. Extruded of finest brown polyethylene. Jacket of 70 mil web thickness. 7-28 stranded conductors. 100-ft. minimum. Shpg. wt., 100 ft., 1½ lbs.
49 T 391. 100' Coil. NET.....1.99
49 W 378. Over 100', Per 100'.....1.99

Type 8222. 72-Ohm Twin Line. High-quality brown polyethylene jacket. 70 mil web thickness. 100-ft. minimum. Shpg. wt., 100 ft., 1½ lbs.
49 T 392. 100' Coil. NET.....1.47
49 W 379. Over 100', Per 100'.....1.47

Fig. R. Federal Shielded 300-Ohm Line. Weatherproof. For high-interference areas. Shpg. wt., 100 ft., 8½ lbs.
49 W 498. Per Foot.....12c
100 ft. or more. Per 100 ft.....10.80

KNIGHT TWIN LINE

Fig. S. UHF-VHF Open Line. 300-ohm. Loss 0.5 db per 100 ft. at 200 mc. Finest copper conductors. In coil lengths listed below. Shpg. wt., 100 ft., 2¼ lbs.
47 T 578. 100' Coil. NET.....2.30
47 TX 579. 250' Coil. NET.....5.18

UHF-VHF Tubular Twin Line. 300-ohm cable. Shpg. wt., 100 ft., 2 lbs.
49 T 429. 100' Coil. NET.....2.48
49 W 428. Over 100', Per 100'.....2.48

Fig. T. 300-ohm VHF-TV Twin Line. High-quality twin line at very low cost. Tough, 72 mil web thickness. Dependable, low-loss polyethylene jacket. No. 20 stranded conductors, built for economy and service. Shpg. wt., 100 ft., 2 lbs.
49 T 448. 100' Coil. NET.....1.63
49 W 435. Over 100', Per 100'.....1.63

Fig. W. Type RT-34 Copperweld Ground Rod. Ground lead connector has ¼" bolt. Size, 4'x⅜". Shpg. wt., 2½ lbs.
97 CX 418. NET EACH.....82c

Fig. W. Type RT-46 Copperweld Ground Rod. Size, 6'x½". Shpg. wt., 4 lbs.
97 CX 199. NET EACH.....2.16

Type RT-24P Copperweld Ground Rod. Size, 4'x¼". Heavy-duty, 60" pigtail lead simplifies installation. Shpg. wt., 2½ lbs.
92 CX 049. NET EACH.....69c

Aluminum Ground Wire. No. 8 solid aluminum wire. For all grounding applications.

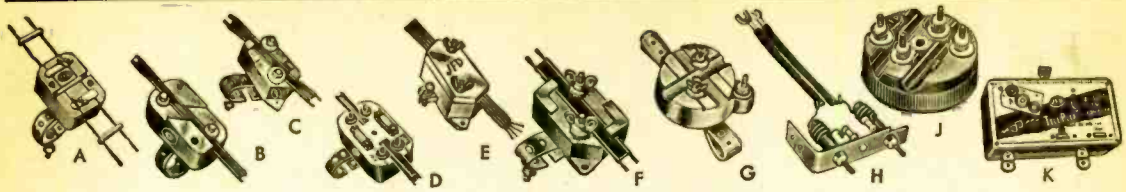
No.	Coil Length	Wt., Lbs.	NET
49 T 653	50-ft.	1½	.62
49 T 650	100-ft.	2¼	1.14
49 TZ 652	1000-ft.	26	11.02

No. 20 Galvanized Guy Wire. Six-strand, No. 20 steel wire. Available in 100-ft. or 1000-ft. rolls. Shpg. wt., 100 ft. roll, 2 lbs.
58 T 312. 100-Ft. Roll. NET.....62c
71 TZ 513. 1000-Ft. Roll. NET.....5.44

No. 18 Galvanized Guy Wire. Same as above, but for heavier-duty applications. In 100-ft. or 1000-ft. rolls. Wt., 100 ft., 2½ lbs.
51 T 319. 100-Ft. Roll. NET.....94c
71 TZ 545. 1000-Ft. Roll. NET.....8.33

For Complete Product and Manufacturers Index, See Pages 317-320

TV Antenna Accessories



JFD LIGHTNING ARRESTERS, COUPLERS, WAVE TRAPS

Fig. A. AT107 Lightning Arrester. For protection of all TV sets using open wire transmission lines. Makes positive contact. Stainless steel strap. With 4-ft. ground wire. Size, 2x3x 1½". U. L. Approved. Shpg. wt., 15 oz.
71 C 529. List, $3.50. NET.....2.06

Fig. B. AT102 Regular Flat Line Lightning Arrester. Underwriters' Laboratories Approved. Complete with stainless steel hanger strap, 4 ft. aluminum ground wire and hardware. Shpg. wt., 15 oz.
71 C 479. List, $2.25. NET.....1.32

Fig. B. AT103 Lightning Arrester. Like type AT102, described above, but for oval-jumbo and tubular twin lead-in line. U. L. Approved. Shpg. wt., 15 oz.
71 C 517. List, $2.25. NET.....1.32

Fig. C. AT105S Universal Arrester. Can be mounted on mast or pipe. Connections are made by saw-toothed screw terminals. For flat, tubular and open wire lead. With stainless steel hanger strap. U. L. Approved. Shpg. wt., 13 oz.
71 C 530. List, $1.50. NET.....88c

Fig. C. AT105. As above, less hanger strap. With ground lug and screws. Wt., 12 oz.
71 C 518. List, $1.25. NET.....73c

Fig. D. AT120 Lightning Arrester. Fused lightning arrester. For use with ribbon, tubular, and open wire lead-ins. Features patented strain-relief retainers. With ground wire and strap. U. L. Approved. Shpg. wt., 6 oz.
71 C 536. List $4.75. NET.....2.79

Fig. E. AT104 Lightning Arrester. For antenna rotator installations. Handles 4-wire lead-ins. 8 precision-spaced teeth make positive contact with conductors. U. L. Approved. With ground lug. Shpg. wt., 15 oz.
71 C 519. List, $1.50. NET.....88c

Fig. F. AT110 Lightning Arrester. For flat or open type transmission lines. Strain-relief lip for protecting both types of lead-in. Mounts on outside wall or window sill. With ground-lug. U. L. Approved. Shpg. wt., 15 oz.
71 C 531. List, $1.50. NET.....88c

Fig. F. AT110S. Similar to the type AT110 described above, but supplied with a stainless steel hanger strap. Shpg. wt., 15 oz.
71 C 532. List, $1.75. NET.....1.03

Fig. G. AT131 Lightning Arrester. For flat, tubular, oval, or open-wire transmission lines. Saw-tooth washers assure positive contact without cutting or stripping of wire. Constructed of low-loss material for full signal strength. With wood screw or strap (supplied). U. L. Approved. Shpg. wt., 10 oz.
71 C 537. List, 75c. NET.....44c

Fig. J. Model RA-2 Two-Set TV Antenna Coupler. For operating two TV receivers from the same antenna. Delivers full signal strength to both receivers. Gives efficient operation on all VHF and UHF channels. Maintains constant 300-ohm impedance. Extremely compact. Simple one-screw (supplied) mounting. Shpg. wt., 6 oz.
71 C 660. List, $1.65. NET.....97c

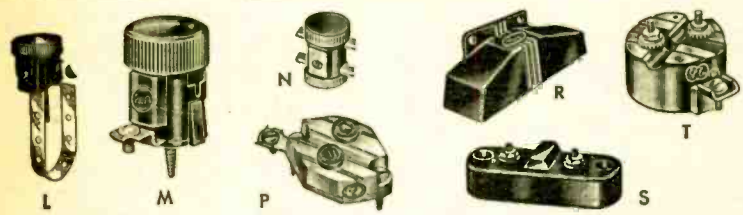
Fig. K. "Tele-Plex" TV Set Couplers. For operation of 2 to 4 TV receivers from a single antenna. Simply plug 300-ohm antenna lead-in into coupler input and plug in 300-ohm lead from each set. Bakelite case with built-in lightning arrester. *Less arrester. Size, 6x3x3". With mounting screws and complete instructions. Shpg. wt., 1 lb.

No.	Type	Used For	NET
98 C 140	TC2L	2 sets	7.03
71 C 658	SC2*	2 sets	6.44
98 C 141	TC4L	up to 4 sets	7.61
71 C 659	SC4*	up to 4 sets	7.03

Model TT2. Economy Coupler. 2-set TV coupler for low-cost jobs. As above, but has screw-type terminals for connecting twin lines. Less arrester. Wt., 1 lb.
98 C 143. List, $5.95. NET.....3.50

Fig. H. Model BR106-10-30 Wave Trap. Capacitive-inductive type wave trap for elimination of TV interference caused by signals originating on frequencies between 10 and 30 mc. Coils have adjustable, powdered-iron cores tunable to the interfering frequency. With mounting bracket and 5' twin lead with tinned lugs for connection to antenna input of TV receiver. Shpg. wt., 4 oz.
77 C 550. List, $2.75. NET.....1.62

Model BR106-80-110. As above, but for elimination of TV interference caused by FM between 80 and 110 mc.
77 C 551. List, $2.75. NET.....1.62



POPULAR LIGHTNING ARRESTERS AND COUPLERS

RCA ARRESTERS & COUPLERS

Fig. L. Type 235A1. Low loss UHF-VHF lightning arrester for installation without any splicing, stripping, or soldering. Screw cap type—forces antenna line against staple contacts which pierce insulation and make contact with conductors. Underwriters' Laboratories Approved. Strap type for mounting on mast or water pipe. Shpg. wt., 8 oz.
51 C 229. List, $1.40. NET.....82c

Fig. M. Type 234A1. As above, but screw-in type. For mounting on windowsills, etc. Standing wave ratio less than 2:1 at 800 mc. Resistance elements are made of a conductive rubber that is non-corrosive and impervious to moisture. Will accommodate almost all tubular, round, and oval UHF transmission lines without splicing. Shpg. wt., 8 oz.
51 C 228. List, $1.53. NET.....90c

Fig. N. Type 240A1. Set Coupler. For operating two or more TV sets from one antenna having a 300-ohm transmission line. Utilizes resistance elements only—does not affect impedance characteristics of transmission line. Reduces oscillator interference between sets. Easily installed. Save cost of additional antenna for that second set. Wt., 6 oz.
51 C 246. List, $1.95. NET.....1.15

Fig. S—PORCELAIN ARRESTER

General purpose gap-type arrester. Designed for single-wire lead-in of radios, etc. Made of high quality glazed porcelain. With barrier between terminals for maximum leakage path. Hex nut terminals and countersunk mounting holes. U.L. Approved. Shpg. wt., 6 oz.
51 C 280. NET.....21c

AMPHENOL ARRESTERS & COUPLERS

Fig. P. Type 114-328. UHF-VHF arrester. Universal lightning arrester. For flat, tubular, or open line. Knife-edge contacts, cut through insulation to make contact. Low loss, phenolic body. With screws for mounting. U.L. Approved. Shpg. wt., 5 oz.
51 C 247. List, $1.50. NET.....88c

Type 114-329. As above, with strap mount.
51 C 289. List, $1.60. NET.....94c

Fig. R. Amphenol Tele-Couplers. Highly efficient couplers for operating up to 4 TV sets from one VHF or UHF antenna. Bifilar wound coupling network provides high degree of isolation to prevent interaction between TV receivers. Also offers very low insertion loss to insure full strength signals to all sets. Weatherproof plastic case with protected screw-type terminals. May be installed indoors or outdoors. Shpg. wt. ½ lb.

Type 114-088. 2 set Telecoupler.
51 C 272. List, $3.75. NET.....2.20

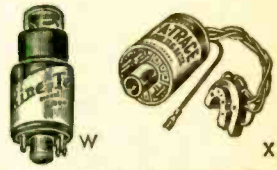
Type 114-089. For 2 sets, with ground lug.
51 C 290. List, $4.75. NET.....2.79

Type 114-090. Up to 4 set coupler.
51 C 274. List, $5.75. NET.....3.38

Type 114-091. For 4 sets, with ground lug.
51 C 291. List, $6.75. NET.....3.97

Fig. T—TELCO LIGHTNING ARRESTER

Type 8642. An all-weather lightning arrester. For use with round, oval, flat, or open lines without stripping insulation. Toothed circular contacts make firm contact. U.L. Approved. Mounts on walls. Shpg. wt., 6 oz.
51 C 242. List, $1.25. NET.....73c



VIDAIRE TV ACCESSORIES

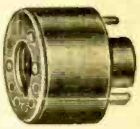
Fig. W. "Kine Test." Checks electro-magnetic picture tubes by substitution method. No need to remove picture tube or chassis. Just plug tester into picture tube socket. Electron-ray tube dynamically checks filament, bias, and 2nd anode voltages, video signal, etc. With instructions. 4⅛x1½". Shpg. wt., 6 oz.
84 F 017. List, $8.25. NET.....4.85

Fig. X. "Elim-A-Trace." Eliminates retrace lines in TV picture when brightness is advanced. Provides clearer picture on weak tubes. Plug-in installation. Shpg. wt., 8 oz.

Model TE-1. For grid modulated CRT.
51 C 076. List, $3.25. NET.....1.91

Model TE-2. For use with cathode modulated CRT.
51 C 077. List, $3.25. NET.....1.91

PERMA-POWER TV HORIZONTAL BAR GENERATOR



Type B101. Provides series of horizontal lines for checking picture linearity. Also for precise setting of deflection yoke and focus coil or magnet. Plugs in picture tube socket. Complete with instruction. Size, 1½x1½". Shpg. wt., 5 oz.
51 C 212. NET.....1.91

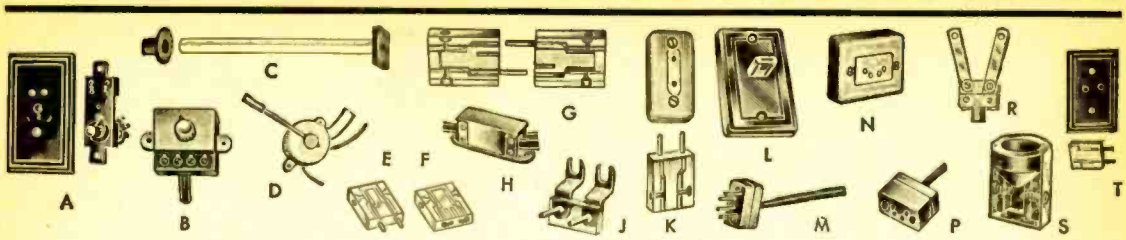
CLAROSTAT REGULATORS

Type TVA. Protects TV sets from line voltage surges. Reduces surge of 140 v., down to 110 v. Plug-in type. For sets using 200-300 watts. Shpg. wt., 5 oz.
31 E 085. NET.....1.46

Type TVB. For sets having a power consumption of 300 to 375 watts. Diameter, 1 1/16"; length, 3¾". Shpg. wt., 5 oz.
31 E 086. NET.....1.76

For Masts, Twin Line and Accessories, see Pages 224-227

Television Accessories



POPULAR MOSLEY TWIN LINE ACCESSORIES

Fig. A. Type F-10 3-Way Switch and Lead-In Socket. Switch and single twin-line socket in one flush mounted unit. With face-plate. Shpg. wt., 12 oz.
40 C 336. With Brown plate.
40 C 335. With Ivory plate.
NET EACH 2.20

Fig. B. Type F-40 2-Way Antenna Switch. Same as Type F-20 above, but for 2 antennas.
40 C 425. Brown Plastic Case.
40 C 426. Ivory Plastic Case.
NET EACH 1.15

Fig. C. Type 625 Wall-Thru Insulator. For twin line or RG-59/U coax. Fits any wall up to 13" thick. Includes polystyrene tube 14" long, inside plate and outside cap. Shpg. wt., 1 lb.
40 C 430. **NET** 1.15

Type 625PK. Same as Type 625 above, but with universal TV lead-in socket for inside wall plate. Shpg. wt., 1 lb.
40 C 441. **NET** 1.76

Fig. D. Type F-20 3-Way Antenna Switch. Selects any of 3 antennas. Constant impedance in all positions. Mounts on back of TV set. Shpg. wt., 12 oz.
40 C 338. Brown Plastic Case.
40 C 423. Ivory Plastic Case.
NET EACH 2.20

Fig. G. Type 321 Polarized Connector. Efficient twin-line connector consisting of 2 polystyrene plugs, each with one male and one female. Assures proper polarization. 1¾" long. Shpg. wt., 2 oz.
72 H 711. **PER PAIR** 35c

Fig. K. Type 344-PK Universal Transmission Line Receptacle. Provides constant impedance connection for 300-ohm twin-line. Can be used as tap or terminal receptacle. Sturdy plastic case can be mounted on baseboard or wall. With solderless twin-line socket and screws. Shpg. wt., 2 oz.
40 H 411. Brown Plastic Case.
40 H 410. Ivory Plastic Case.
NET EACH 62c

Type 343-PK Universal Transmission Line Socket. Similar construction to Fig. K. With solderless twin line plug and mounting screws. Shpg. wt., 2 oz.
40 H 413. Brown Plastic Case.
40 H 412. Ivory Plastic Case.
NET EACH 62c

Fig. L. Type 27-S Flat-Line Polystyrene Splicer. Strip wires, insert, and tighten set screws for positive electrical contact. Size, ¾x¾x¼". Shpg. wt., 2 oz.
72 H 706. **NET EACH** 11c
10 for ..... 99¢ **100 for** 8.91

Fig. N. Solderless Base Sockets. Precision molded polarized multi-wire connectors for 4, 5 and 8 wire flat or round cable. Use with line plugs listed below. Wt., 2 oz.

Stock No.	Type	Description	NET
40 C 437	354	For 4-wire cable	.80
40 C 439	358	For 8-wire cable	1.03

Fig. M. Line Plugs. Solderless; for 4 and 8 wire; take flat or round cable. 2 oz.

No.	Type	Description	NET
40 C 431	374	For 4-wire cable	44¢
40 C 433	378	For 8-wire cable	59¢

Fig. E. Type 301 Plug. Ideal for connecting TV antenna lead-in to set or booster. Made of polystyrene. ½" pin spacing (fits socket below). Shpg. wt., 2 oz.
72 H 705. **NET** 18c

Fig. F. Type 311 Socket. For use with twin-line plug above. Standard ½" spacing. Polystyrene insulation. Shpg. wt., 2 oz.
72 H 709. **NET** 18c

Fig. J. Type 304 Mosley Antenna Connector. For connection of lead-in to TV antenna terminal. Fits 72 H 709 socket. Shpg. wt., 2 oz.
40 H 339. **NET** 18c

Fig. H. Type 902 Dual-Match TV Coupler. Operates 2 TV sets from 1 antenna. For 300-ohm line. Wt., 3 oz.
40 C 424. **NET** 2.32

Fig. P. Line Sockets. Take line plugs at left. Polystyrene; for connecting or terminating multi-wire cable. 2 oz.

Stock No.	Type	Description	NET
40 C 434	364	For 4-wire cable	56¢
40 C 436	368	For 8-wire cable	73¢

Fig. R. Type 263S. New "Y-TV" for connecting all types of transmission lines to TV antenna elements. Solderless, screw connections. Shpg. wt., 6 oz.
40 C 443. 4" max. width. **NET** 47c
40 C 444. 263L. 6" max. width. **NET** ..... 47¢

Fig. S. Type 29-S Tubular To Flat-Line Splicer. For joining tubular or oval 300 ohm lines to standard flat lines. Clear polystyrene. Shpg. wt., 3 oz.
40 C 442. **NET** 12c

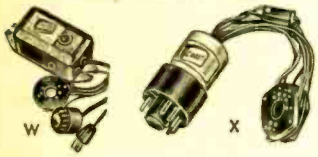
Fig. T. Type F-1PK Flush Socket and Wall Plate. For 300-ohm twin-line. Fits standard outlet box. Plastic plate. With plug and mtg. bracket. Wt., 6 oz.
40 H 419. Brown.
40 H 418. Ivory. **NET EACH** 1.15

Type F-11PK Dual Flush Socket and Wall Plate. Similar to above, but for 2 twin-line connections. Shpg. wt., 6 oz.
40 H 417. Brown.
40 H 416. Ivory. **NET EACH** 1.57

Type F-111PK Triple Flush Socket and Wall Plate. Similar to above, but for 3 twin-line connections. With plug. 6 oz.
40 C 427. Brown.
40 C 428. Ivory. **NET EACH** 1.57

Type F-14PK Combination Flush Socket and Wall Plate. Similar to above, but for 300-ohm twin-line and 4-wire rotator cable. Plastic plate. Wt., 6 oz.
40 H 415. Brown.
40 H 414. Ivory. **NET EACH** 2.07

Type F-114PK Combination Flush Socket and Wall Plate. Similar to above, but for 2 twin-lines and 4-wire rotator cable. With plug. 8 oz.
40 C 448. Brown Plastic.
40 C 449. Ivory Plastic. **NET EACH** .. 2.07



PERMA-POWER TUBE BRITENERS

Increase cathode emission, improving brightness level and extending useful life of picture tubes. Transformer types also isolate filament from cathode, permitting continued use of picture tubes with cathode-to-filament shorts. Fully automatic—turn on and off with TV set. For use with any tube 10" or larger, having duo-decal base as 10BP4, 16RP4, 20CP4, etc. Easily installed—no soldering required.

Fig. W. Model C-101 Transformer Type. 3 booster positions. Also has 6.3 v. position. For use in sets having either series or parallel-wired filaments. Shpg. wt., 1¼ lbs.
80 G 179. List, $9.75. **NET** 5.73

Model C-301 Transformer Type. As above, but has only one (7.8 v.) position, plus normal 6.3 v. position. Shpg. wt., 10 oz.
80 G 184. List, $4.45. **NET** 2.49

Fig. X. Model C-201 Autoformer Type. For use in sets having series- or parallel-wired filaments. 7.8 v. booster tap. Does not relieve cathode-filament shorts. Shpg. wt., 8 oz.
80 G 181. List, $3.45. **NET** 1.92

Model C-401 Autoformer Type. As above, but for sets having parallel-wired filaments only. Shpg. wt., 8 oz.
80 G 183. List, $1.98. **NET** 98c

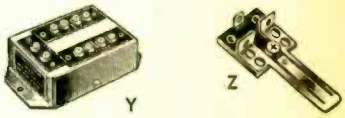
STANCOR TV TUBE BOOSTER

Model P8192. Self-contained unit adds life to aging picture tubes when dimness is due to low cathode emission. For all electro-magnetic pix tubes with parallel-connected filaments. Easily installed; mounts anywhere in set without soldering. Hi-Lo switch for two levels of tube brilliance. Simply remove tube connector, attach to booster. Connector plug of booster attaches to picture tube. 3½x1½". Shpg. wt., 8 oz.
80 G 182. List, $4.90. **NET** 2.88

"CLEAR-PIX" TELEVISION INTERFERENCE FILTERS

Designed to minimize or eliminate the common types of TV interference. Effective against 21 mc Amateur transmitters, diathermy machines, strong FM stations, ignition, and other high frequency sources. Do not affect signal strength. Quickly and easily installed with only a screwdriver. Mount at TV receiver antenna terminals. Brass lugs attach to same screws that hold antenna connections. These filters may be used with any model TV set using 300-ohm twin lead transmission line. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Interference Used For	NET EACH
51 C 043	CPH	21 mc Amateur	1.17
51 C 044	CPD	Diathermy machine	
51 C 046	CPF	Strong FM station	
51 C 045	CPI	Ignition or similar	



BLONDER-TONGUE LINE SPLITTER

Fig. Y. Model LS-4. Provides low-cost means of dividing 300 ohm twin-line into four branches from one input. Enables signal to be distributed to four TV sets. Maintains 300 ohm impedance match. Excellent for multiple installations such as in apartments, etc. Size, 2⅛x4¼x1". Wt. 8 oz.
51 C 287. List, $9.50. **NET** 5.59

Model LS4-1. As above, but for 75-ohm lines.
51 C 288. **NET** 5.59

BLONDER-TONGUE THERMO RELAY

Fig. Z. Model TR-3. Replacement relay used in boosters and converters which automatically turn on and off with TV set. Silver contacts adjustable for time delay of .1 to 4 seconds; will handle up to .5 amp @ 117 v. or ¼ amp @ 220 v., AC. Uniform operation over current range of .1-3 amps. 2¼x1x¾". Wt. 2 oz.
51 C 210. List, $1.85. **NET** 1.10

MILLER ANTENNA TRANSFORMERS

Permit use of low-loss 52 or 72 ohm coaxial cable on 300 ohm receiver inputs. 2 required; one at antenna, and one at receiver. Excellent where long 300-ohm line gives poor picture. May be used outdoors. Size, 1⅛x¾x¾". Tinned solder-lug terminals. Shpg. wt., 2 oz.
77 G 516. Type 6161. 52 Ohms.
77 G 517. Type 6162. 72 Ohms.
NET EACH 1.62

Television Accessories

COLORAMA TV LAMP-CLOCK

Glolite clock and lamp for top of TV cabinet. Colorful clock numerals add a note of interest to any room. Translucent ivory plastic cabinet emits soft glow to relieve eye fatigue. Self-starting. Rotating numerals give exact time in hours, minutes, and seconds. Numerals are in various colors—color combinations change with the time. For operation from 110-120 v., 60 cycle AC only. Size, 5x5½x3½". Shpg. wt., 2½ lbs.
78 B 338. NET..... 9.43

Walnut Model. As above, but with opaque walnut color cabinet.
78 B 328. NET..... 8.14

AMPHENOL HIGH-PASS FILTER

Model 114-330. High-pass filter for reducing TV interference from transmitters, diathermy, industrial devices, ignition, etc. Installed between lead-in and antenna terminals of TV set. Almost 60 db attenuation of interference below 50 mc. Employs 3-individually shielded filters. Completely enclosed. 1¾x4¼x3⅛". Shpg. wt., 6 oz.
51 C 279. List, $5.45. NET..... 3.20

J. W. MILLER HI-PASS FILTER

Model 6168. For use at the television receiver to reduce interference from medical, industrial, commercial and Amateur radio frequency signals below 40 mc. Insures clear pictures with a minimum of streaks or tearing. Passes all TV signals above 40 mc with practically no attenuation. Install at TV set antenna terminals. No tuning required. In aluminum case. 1⅞x1⅞x3½". Shield has convenient L-type bracket for mounting. For 300-ohm twin line. Shpg. wt., ½ lb.
70 G 191. NET..... 3.23

R. L. DRAKE TVI FILTERS

Feed-through, high-pass type interference filters for use at antenna terminals of TV receiver. Attenuate interference from 0 to 50 mc as much as 60 db. Effectively reduces signal from diathermy, radio stations, industrial equipment, etc. TV-72 for 72-ohm lines. TV-300 for 300-ohm lines. *For sets with 20 mc IF's. †For 20 and 44 mc IF's. Metal case 2x2x1⅛". Shpg. wt., ½ lb.

No.	Type	Ohms	NET
77 C 567	†TV-300-HP	300	3.50
77 C 555	*TV-300-50HP	300	2.91
77 C 556	†TV-72-HP	72	3.50

PRECISION CLARIFIER

Television picture "Clarifier." Easily adjusted to remove any antenna-fed interference causing picture distortion: FM, diathermy, SW, ignition, Amateur, adjacent channel, etc. Does not attenuate signal. Actually tunes out unwanted signal by means of control knobs. Matches any antenna. Brown metal case. 4x3¼x1½". 7 oz.
77 G 566. List, $7.50. NET..... 4.41

WALSCO CLEAN-O-MATIC

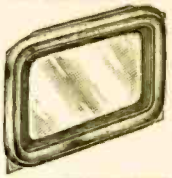
New, efficient, permanent contact cleaner for keeping contacts on all Standard Coil tuners clean and free from oxidation and noise. Quick and simple to install. The brass cover reduces radiation on all tuners in sets originally produced without tuner cover (1952 and earlier models). Wiping action as tuner is rotated during operation maintains clean contacts and noise-free service. Individually boxed. Each unit supplied with tube of Walsco "Tunerlub" and a piece of crocus cloth (for badly oxidized contacts). Complete instructions. Shpg. wt., 4 oz.
41 H 344. Type 1200. NET..... 1.47

TV TUBE DELUXE PLASTIC MASKS

Solid, optically clear, ⅛" thickness plastic safety masks for round and rectangular television picture tubes. Unbreakable—prevent tube breakage and guard against "implosion" and shattering. Gold metal luster finish border. Easy to install. Av. shpg. wt., 1¼ lbs.

Stock No.	For Tube	Size	NET
97 SX 919	14" Rect.	10½x13½"	4.15
97 SX 920	16" Rect.	13¼x16⅝"	5.35
97 SX 923	17" Rect.	13¼x16⅝"	5.35
97 SX 924	20" Rect.	15½x19½"	7.05
97 SX 913	21" Rect.	15¼x21½"	8.00
97 SX 912	24" Round	19¼x24½"	13.15
98 SX 592	24" Rect.	19¼x24½"	13.15
98 SX 593	27" Rect.	19½x25"	13.15

CRONAME TV MASK CONVERSION ASSEMBLIES



Ideal for custom TV installations. Have attractive gold-finished escutcheon, green-sprayed aluminum mask and protective glass. UL Approved ¼" tempered glass. 21" assembly has 3½° tilt to eliminate glare and light reflections. Av. shpg. wt., 7 lbs.

Stock No.	For Tube	Size	NET
97 SX 916	16" Rect.	13⅜x17⅛"	9.70
97 SX 917	17" Rect.	13⅜x17⅛"	9.70
97 SX 918	20" Rect.	17¼x21"	14.61
97 SX 914	21" Rect.	17½x21½"	17.35

TECHMASTER MOUNTING BRACKET KIT

Model 27B. New universal tube mounting bracket kit for mounting 21", 24" and 27" TV picture tubes on all 630-type chassis. Steel and aluminum construction. Consists of front-end and rear-yoke mounting sections, tube strap, all hardware, template dimensions for above sizes rectangular picture tubes and complete instructions. Adjusts to various heights and depths. Shpg. wt., 2 lbs.
40 SX 262. NET..... 9.90

TELEVISION FILTERS

Scientifically tinted (gray) to protect eyes. Effective in minimizing glare and improving picture contrast. These television filters may be used with any type of picture tube. All have square corners and may easily be cut as required. Av. shpg. wt., 1 lb.

No.	Used With	Size	NET
71 S 807	10" sets	8x11"	.69
71 S 808	12½-14" sets	10x13"	1.17
71 SX 814	16-17" sets	13x17"	2.19
71 SX 820	19-21" sets	16x21"	2.79
71 SX 821	24" sets	20x26"	4.35

EBY CRT EXTENSION HARNESS KIT

Model K302. Consists of 3 ft. anode extension harness; 4 ft. CRT socket harness for both electrostatic and magnetic tubes; 3 ft. yoke extension harness for sets using octal plug; and socket for extension. In plastic case. Wt., 10 oz.
41 H 348. List, $6.00. NET..... 3.53

Model K304. Similar to above. For all Philco TV sets from 1949-1954. Contains 8-wire yoke extension, 3 ft. anode extension harness, deflection extension, etc. Wt., 1 lb.
41 H 338. List, $8.10. NET..... 4.76

Model K311. For Philco "special" TV sets through 1954. Also 1955 Models 300, 350 and 400. 5 special harnesses and extensions. Shpg. wt., 1 lb.
41 H 339. List, $10.20 NET..... 6.00

Model K309. For most G.E. sets through 1954, plus early 1955 models. Includes anode extension harness, deflection extension, etc. Shpg. wt., 1 lb.
41 H 340. List, $10.20. NET..... 6.00

PERFECTION TV COMPONENTS

BEAMAJUSTER

Simplified control to permit quick, easy centering of television picture. Fits back cover of any type of standard yoke for any size tube. Constructed of aluminum with high-quality Alnico V ring magnet. Helps to eliminate neck shadows. Shpg. wt., 4 oz.
41 G 126. NET..... 1.03

BARKHAUSEN ELIMINATOR

Very effective in eliminating Barkhausen oscillations. These oscillations appear as dark vertical lines. Fits around the horizontal output tube. For use on 6BQ6, 6AU5, 6AV5, etc. Shpg. wt., 3 oz.
41 G 129. NET..... 73c

MILLER ADJUSTABLE ION TRAP

Model 6295. Universal single-magnet ion trap. Screw adjustment allows magnetic field to be varied between 32-55 gausses. Replaces any single-magnet trap within this gauss range. Greatly reduces your inventory. Extension spring permits easy installation. Shpg. wt., 6 oz.
60 H 796. List, $1.25. NET..... 73c

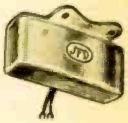
CRT HI-VOLTAGE CONNECTOR

Second anode connector. Silver plated, snap-button plug; makes perfect contact with picture tube. Well-insulated by 1⅛" diameter rubber cap. With 18" heavily insulated wire lead. Shpg. wt., 4 oz.
41 H 347. NET..... 29c

CINCH 3A1 CRT HI-V CONNECTOR

For diheptal-based, glass tubes such as 10CP4, 12JP4, 12QP4, 12RP4, 15AP4, 15DP4, etc. Cadmium-plated brass contact. Rubber insulator is ¾x1 1/16". Fits .096" pin. Shpg. wt., 2 oz.
40 H 800. NET..... 56c

NEW JFD INTERFERENCE FILTERS



Model WT2-6. For use at TV set. Reduces interference caused by diathermy, transmitters, TV set oscillators, etc. Attaches to set terminals. Uses 2-trimmer capacitors. Tunes out specific interference for clearer, sharper pictures. For channels 2 through 6. Complete with wood screws and installation instructions. Shpg. wt., 8 oz.
77 C 680. List, $4.50. NET..... 2.65

Model WT7-13. As above, but for channels 7-13.
77 C 681. List, $4.50. NET..... 2.65

REGENCY HP-45 HIGH-PASS FILTER

Regency HP-45 high-pass filter for attenuation of signals at frequencies below 55 mc. Provides simple but effective aid in elimination of TVI. Consists of constant "K" type filter with cutoff frequency of 45 mc in a 300 ohm balanced line. Approximately 20 db attenuation at 29 mc; 40 db or more at frequencies of 14 mc and below. Signals above 55 mc are passed through filter without loss. Simple installation; complete with mtg. bracket. 1¼x7¼". Wt., 2 oz.
77 C 569. List, $1.65. NET..... 97c

PERMA-POWER REGULATOR

Model D101. TV voltage regulator. Designed to insure maximum performance of any TV set by returning full height and width of picture when decreased by low line voltage. Eliminates intermittent sync and oscillator drift caused by low voltage. Regulator plugs into AC outlet; TV set plugs into regulator. 3-position selector switch for boosting or lowering voltage. 300-watt rating. Size, 4¼x4¼x2¼". Shpg. wt., 2¼ lbs.
80 G 186. List, $6.75. NET..... 3.97

SPECIAL PURPOSE CABLES

3 AND 4-WIRE INTERCOM CABLE

Type 8734. No. 22 tinned copper stranded (7x30) with plastic insulation. 3 cond.: 1 tinned copper shield, 2 unshielded. Chrome vinyl plastic jacket overall. For station-to-station and extension wiring. .184" O.D. Shpg. wt., 100 ft., 2¼ lbs.

48 W 875. PER FOOT 4½c
100 ft. or more, PER 100 FT. 3.82

Type 8732. No. 22 tinned copper, stranded (7x30) with polyethylene insulation. 4 conductors: 1 pair tinned copper braid shield, 1 pair unshielded. Chrome vinyl plastic jacket overall. Oval, .168"x.267" O.D. Shpg. wt., 100 ft., 3 lbs.

48 W 897. PER FOOT 5½c
100 ft. or more, PER 100 FT. 4.87

CATHODE-RAY TUBE CABLE

Type 8869. High voltage cable for CR tubes, power supplies and other applications where high-voltage cable is required. Features high dielectric strength, corona resistance and minimum surface leakage. No. 20 single conductor stranded (7x28) tinned copper, with flame retardant polyethylene insulation. .035" thick. .108" O.D. 10,000 volts. Shpg. wt., 100 ft., 1¾ lbs. **Lengths under 100' available only in 25 ft. coils.**

47 T 893. 25 ft. Coil. EACH 62c
47 T 895. 100 ft. Coil. EACH 1.70

Type 8868. As above but with .065" flame retardant polyethylene insulation; rated at 20,000 volts. .168" O.D. Shpg. wt., 100 ft., 2¼ lbs.

47 T 897. 25 ft. Coil. EACH 97c
47 T 896. 100 ft. Coil. EACH 3.09

DUPLEX LIGHTING CABLE

Weatherproof 2-cond. stranded copper wire. Outer jacket is chrome vinyl plastic. Flexible stranding. One brown and one red conductor parallel in plastic vinyl oval sheathing. Av. wt., 100 ft., 5 lbs.

Type 8677. No. 16 (19x29). O.D., .164"x.276".

47 W 405. PER FOOT 6c
100 ft. or more, PER 100 FT. 5.52

Type 8675. No. 14 (19x27). O.D., .189"x.326".

47 W 415. PER FOOT 8c
100 ft. or more, PER 100 FT. 7.20

Type 8673. No. 12 (19x25). O.D., .214"x.384".

47 W 425. PER FOOT 10½c
100 ft. or more, PER 100 FT. 9.34

SHIELDED GRID WIRE

Type 8885. No. 20 single stranded (10x30) tinned copper. .015" rubber insulation. Cellulose acetate yarn braid, fungus-resistant lacquer coating, tinned copper braid shield. Used in circuits where shielded grid return is required and to shield a circuit conductor from stray fields. Break-down voltage, 4000 volts. O.D., .117". Shpg. wt., 100 ft., 2 lbs. **Lengths under 100 ft. available only in coil sizes listed below.**

47 T 791. 15 ft. Coil. EACH 55c
47 T 792. 25 ft. Coil. EACH ..... 88¢
47 T 790. 100 ft. Coil. EACH 2.82
47 W 793. Over 100 ft., PER 100 FT. .. 2.82

Type 8431. No. 24 stranded (16x36) tinned copper, rubber covered, tinned copper shield, brown cotton. Phonograph pickup arm cable. Extremely limp and flexible. O.D., .095". Shpg. wt., 100 ft., 1 lb.

47 T 611. 10 ft. Coil. EACH 47c
47 T 612. 25 ft. Coil. EACH 1.02
47 T 610. 100 ft. Coil. EACH 3.09
47 W 613. Over 100 ft., PER 100 FT. .. 3.09

SHIELDED MICROPHONE CABLES

SINGLE CONDUCTOR

Mfr's Type	O. D.	Wt., 100 ft.
8401	.200"	3 lbs.
8410*	.245"	4 lbs.
8411	.144"	2¼ lbs.

High-quality Belden cables for all microphone requirements. Single No. 25, tinned, stranded conductor; 3x33 copper and 4x33 copper-coated steel. Covered with cellulose acetate yarn braid, polyethylene insulation, tinned copper shield and chrome plastic jacket. *Has rubber insulation and silver-gray rubber jacket. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type	15 ft. Coil		25 ft. Coil		50 ft. Coil		100 ft. Coil		Over 100 ft.,	
	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	PER 100'
8401	47 T 561	.87	47 T 562	1.26	47 T 563	2.28	47 T 560	4.26	47 W 564	4.26
8410*	47 T 447	1.32	47 T 448	2.05	47 T 449	3.81	47 T 446	7.32	47 W 444	7.32
8411	47 T 601	.64	47 T 602	.99	47 T 603	1.67	47 T 600	3.09	47 W 604	3.09

TWO-CONDUCTOR

Mfr's Type	O. D.	Wt., 100 ft.
8428	.295"	7 lbs.
8412	.268"	5½ lbs.
8422	.231"	4 lbs.

Type 8422 is No. 22 stranded (16x34) tinned copper with polyethylene insulation and chrome plastic outer jacket. Type 8412 is No. 20 stranded (26x34) cotton wrap, rubber insulation, silver gray rubber jacket. 8428 is No. 18 stranded (41x34) cotton wrap, silver gray rubber jacket. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type	15 ft. Coil		25 ft. Coil		50 ft. Coil		100 ft. Coil		Over 100 ft.,	
	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	PER 100'
8428	47 T 465	1.72	47 T 466	2.81	47 T 467	5.23	47 T 454	10.14	47 W 468	10.14
8412	47 T 457	1.43	47 T 458	2.26	47 T 459	4.14	47 T 453	7.97	47 W 464	7.97
8422	47 T 451	1.08	47 T 452	1.70	47 T 455	3.09	47 T 450	5.88	47 W 456	5.88

8205	.165"	2 lbs.
8204	.220"	3 lbs.

Unshielded, Weatherproof 2-Cond. Cable. For intercoms, speaker extensions, etc. 8205 is No. 22 stranded (7x30), rubber ins., black cotton braid; 8204 is No. 18 (16x30), rubber ins., white cotton braid.

8205	.....	.....	47 T 861	.85	.....	.....	47 T 860	2.65	47 W 862	2.65
8204	.....	.....	47 T 640	1.11	.....	.....	47 T 639	3.38	47 W 641	3.38

MULTIPLE CONDUCTOR

Mfr's Type	O.D.	Wt., 100 ft.
8423	.277"	5¼ lbs.
8424	.295"	7½ lbs.
8425	.323"	8 lbs.
8426	.349"	10¼ lbs.
8427	.360"	10¾ lbs.

For microphone and interconnecting power cable requirements. No. 20 stranded (26x34), tinned copper conductor, with cotton wrap and color-coded conductors. All have tinned copper braid shield, rubber insulation and silver-gray rubber outer jacket. Types 8423 and 8424 for all low-impedance mikes. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type No.	Conductors	Mmf. per foot	15 ft. Coil		50 ft. Coil		100 ft. Coil		Over 100 ft.,	
			Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	PER 100'
8423	3	85	47 T 461	1.56	47 T 462	4.62	47 T 460	8.82	47 W 463	8.82
8424	4	95	47 T 471	1.79	47 T 472	5.59	47 T 470	10.63	47 W 473	10.63
8425	5	58	47 T 481	2.15	47 T 482	6.61	47 T 480	12.37	47 W 483	12.37
8426	6	60	47 T 491	3.08	47 T 492	7.93	47 T 490	15.31	47 W 493	15.31
8427	7	56	47 T 507	2.75	47 T 508	8.50	47 T 510	16.41	47 W 509	16.41

MULTI-CONDUCTOR CABLES

RUBBER-COVERED

Mfr's Type	O. D.	Wt., 100 ft.
8453	.265"	5¼ lbs.
8454	.265"	5½ lbs.
8455	.280"	5½ lbs.

Rubber-jacketed, flexible cord for extension speakers, public address systems, analyzer test equipment, remote control circuits, press-to-talk intercom circuits, etc. Uniform quality. Bare copper flexible stranding; cotton wrap; rubber insulation; color-coded conductors; silver-gray rubber jacket. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type	Cond.	Wire Size	15 ft. Coil		50 ft. Coil		100 ft. Coil		Over 100 ft.,	
			Stk. No.	EA.	Stk. No.	EA.	Stk. No.	EA.	Stk. No.	PER 100'
8453	3	18 (41x34)	47 T 421	1.05	47 T 422	2.91	47 T 420	5.55	47 W 423	5.55
8454	4	18 (41x34)	47 T 431	1.22	47 T 432	3.49	47 T 430	6.69	47 W 433	6.69
8455	5	3-22(16x34) 2-18(41x34)	47 T 441	1.35	47 T 442	3.87	47 T 440	7.45	47 W 443	7.45

VINYL-COVERED PLASTIC-INSULATED CABLE

Mfr's Type	O.D.	Wt., 100 ft.
*8443	.140"	2 lbs.
*8444	.158"	2¼ lbs.
*8445	.170"	2½ lbs.
†8446	.212"	4 lbs.
†8447	.230"	4½ lbs.
†8448	.235"	4½ lbs.
†8449	.245"	5 lbs.

For permanent installation of speakers, etc. Conductors are tinned copper, flexible, stranded wire, with color-coded, plastic insulation; chrome vinyl plastic jacket overall. *All conductors are No. 22 stranded (7x30). †Have two conductors of No. 18 stranded (16x30); the others are No. 22 stranded. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type	Cond.	15 ft. Coil		25 ft. Coil		100 ft. Coil		Over 100 ft.	
		Stk. No.	EACH	Stk. No.	EACH	Stk. No.	EACH	Stk. No.	Per 100'
*8443	3	.....	.....	47 T 361	.82	47 T 360	2.50	47 W 362	2.50
*8444	4	.....	.....	47 T 371	1.03	47 T 370	3.09	47 W 372	3.09
*8445	5	.....	.....	47 T 381	1.14	47 T 380	3.61	47 W 382	3.61
†8446	6	47 T 311	1.03	.....	.....	47 T 310	5.20	47 W 312	5.20
†8447	7	47 T 321	1.09	.....	.....	47 T 320	5.79	47 W 322	5.79
†8448	8	47 T 331	1.18	.....	.....	47 T 330	6.28	47 W 332	6.28
†8449	9	47 T 341	1.28	.....	.....	47 T 340	6.90	47 W 342	6.90

PAIRED VINYL-COVERED CABLE

For intercom and telephone wiring. Size 22 solid tinned copper; color-coded vinyl plastic insulation. Conductors are cabled in twisted pairs; chrome vinyl plastic overall.

Stock No.	Mfr's Type	Conductors	O. D.	Shpg. Wt., 100 ft.	PER FOOT	100' or more, PER 100'
48 W 890	8740	2	.134"	1¼ lbs.	2c	1.85
48 W 891	8741	4	.185"	2½ lbs.	3½¢	3.02
48 W 892	8742	6	.220"	3½ lbs.	4½¢	4.00
48 W 893	8743	12	.265"	4¾ lbs.	7¢	6.13
48 W 894	8744	18	.320"	6½ lbs.	9½¢	8.47
48 W 898	8753	22	.360"	8 lbs.	13c	11.48
48 W 895	8745	30	.390"	10 lbs.	17¢	14.94
48 W 896	8746	54	.510"	17 lbs.	30¢	24.91

COPPER BRAID SHIELDING

Mfr's Type	I.D.
8660	1/8"
8668	11/64"
8661	3/16"
8669	1/4"
8662	25/32"

Flexible, braided and tinned copper for shielding and bonding. Braided in tubular form for slip-on installation over wires. Av. shpg. wt., per 50 ft., 1½ lbs. **Lengths under 50 ft. available only in 10 ft. coils.**

Mfr's Type	10 ft. Coil		50 ft. Coil		100 ft. or more	
	Stk. No.	EACH	Stk. No.	EACH	Stk. No.	Per 100'
8660	49 T 351	.44	49 T 350	1.70	49 W 352	3.06
8668	49 T 356	.59	49 T 355	2.14	49 W 357	3.86
8661	49 T 361	.67	49 T 360	2.43	49 W 362	4.38
8669	49 T 366	1.14	49 T 365	5.14	49 W 367	9.26
8662	49 T 381	1.56	49 T 380	7.28	49 W 382	13.11

Belden Cable and Wire

RUBBER SERVICE CORDS

Two-conductor flexible, stranded copper wire, in cotton wrap. Conductors are black and white, rubber insulated, 1/32" silver-gray rubber outer jacket. Types 8478 and 8452 are No. 18 stranded (41x34). 8472 is No.16 stranded (65x34). *SJ. †SV. **Lengths under 100 ft. available only in coil sizes listed below.**

Mfr's Type	O. D.	25 ft. Coil Stk. No.	25 ft. Coil EACH	50 ft. Coil Stk. No.	50 ft. Coil EACH	100 ft. Coil Stk. No.	100 ft. Coil EACH	Over 100 ft. Stk. No.	Over 100 ft. Per 100'	Lbs., 100 ft.
8452†	.245"	47 T 411	1.35	47 T 412	2.46	47 T 410	4.58	47 W 413	4.58	5
8478*	.299"	47 T 401	1.59	47 T 402	2.79	47 T 400	5.37	47 W 404	5.37	5¼
8472*	.325"	47 T 406	1.91	47 T 407	3.56	47 T 403	6.61	47 W 408	6.61	5½

SHIELDED WIRE

For long runs in speaker installations. 8209 and 8208 are 2-cond; 8206, 1-cond.; 8735, 3-cond. All No. 18 stranded copper conductor except 8735, No. 22 (7x30), cotton or paper wrap, rubber insulation (8735 plastic insul.) copper shield. 8209 in white weather-proof cotton outer jacket; 8208, 8735 chrome vinyl plastic; 8206 in copper braid. **Lengths under 100 ft. available only in coil sizes below.**

Mfr's Type	O. D.	15 ft. Coil Stk. No.	15 ft. Coil EACH	50 ft. Coil Stk. No.	50 ft. Coil EACH	100 ft. Coil Stk. No.	100 ft. Coil EACH	Over 100 ft. Stk. No.	Over 100 ft. Per 100'	Lbs. 100 ft.
8206	.155"	47 T 831	.70	47 T 832	1.78	47 T 830	3.20	47 W 833	3.20	2
8208	.260"	47 T 852	1.11	47 T 853	3.09	47 T 851	5.73	47 W 854	5.73	4
8209	.258"	47 T 847	1.03	47 T 848	2.87	47 T 850	5.37	47 W 849	5.37	3½
8735	.189"	48 T 872	.84	48 T 873	2.28	48 T 876	4.23	48 W 874	4.23	3

JUKE BOX CABLES

Mfr's Type	O.D.
8783	.240"
8782	.058"x.115"
8785	.195"x.300"

High-quality speaker and control cable for all juke box applications. Type 8782 oval is No. 24 stranded (7x32) 1 bare conductor, 1 tinned copper cond., chrome vinyl plastic insulation. Recommended for use as juke box speaker cable. 8783 and 8785 are for use as juke box control cable. 8783 is 3-cond., color coded. 1-No. 20 (10x30), 2-No. 16 (26x30) vinyl plastic insulation, chrome vinyl plastic jacket. Type 8785 oval is 5-cond., color-coded. No. 22 stranded (7x30) tinned copper with copper braid shield over 3 conductors, twisted pair unshielded, chrome vinyl plastic outer jacket.

Stock No.	Mfr's Type	NET Per ft.	NET Per 100 ft.	Wt., 100 ft.
48 W 867	8783	5½¢	4.59	4 lbs.
48 W 868	8782	1½¢	1.07	10 oz.
48 W 869	8785	6½¢	5.34	3 lbs.

BROADCAST AUDIO CABLES

Have 2 copper conductors (except *3-conductor) color-coded cabling and tinned copper braid shield. †Spiral-wrapped copper shield. 1—bare, 2—tinned. 3—solid. 4—stranded. 5—baked enamel film. 6—cotton wrap. 7—cellulose acetate wrap. 8—paper wrap. 9—rubber insulation. 10—cotton braid. 11—waxed. 12—acetate braid. 13—lacquer coating. 14—extra No. 22 copper ground wire. 15—vinyl jacket, A—chrome; B—black.

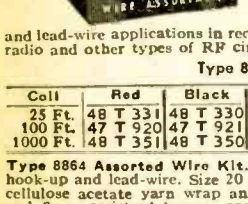
Stock No.	Mfr's Type	Construction (See Keys Above)	Ga. No.	O. D.	Lbs. 100 Ft.	Per Foot	100 Feet
48 W 882	8738	2, 3, 15	22	.130"	2	3¢	2.73
48 W 883	8739†	2, 3, 15A	22	.150"	2½	3½¢	2.92
48 W 884	8432	2, 4, 9, 10, 13	20	.225"	3½	6½¢	5.69
48 W 865	8789	2, 15 (7x26)	18	.205"	3	5¢	4.49
48 W 885	8799	1, 3, 5, 6, 10, 11	18	.165"	3	5¢	4.37
48 W 886	8437	2,3,5,7,10,11,14,15B	22	.222"	3½	6¢	5.08
48 W 866	8433*	2, 4, 9, 10, 13	20	.230"	5¼	8¢	7.13
48 W 887	8438	2, 3, 5, 6, 10, 11	20	.140"	2¾	4½¢	4.08
48 W 888	8439	2, 3, 7, 12, 13	20	.150"	2¾	5¢	4.56
48 W 878	8482	1, 3, 15 (Unshielded)	19	.115"	3½	2¢	1.28
48 W 879	8483*	1, 3, 15 (Unshielded)	19	.132"	1¾	2¢	1.76
48 W 877	8737†	2, 4, 15A	22	.160"	2½	4¢	3.43
48 W 889	8440†	2, 3, 5, 6, 10, 11, 15A	22	.185"	3	5¢	4.41
48 W 801	8758	2, 4, 15	20	.165"	2½	3½¢	3.22
48 W 802	8759†	2, 4, 15A	20	.185"	2¾	4½¢	3.82
48 W 803	8790†	2, 4, 15A	18	.225"	5	5½¢	4.85
48 W 804	8791*†	2, 4, 15A	18	.230"	5¼	6½¢	5.88
48 W 805	8486	1, 3, 15A(Unshielded)	19	.162"	3½	2½¢	1.79

RG HIGH-FREQUENCY CABLES

All cables have low-loss, flexible, polyethylene plastic inner jacket, covered with copper braid shield. All have black vinyl plastic outer jacket overall, except RG-9/U has gray plastic jacket and silver-coated copper conductor; RG-54A/U and RG-71/U have polyethylene plastic outer jacket. Impervious to acids, alkalis, oils and gasoline. RG-8/U and RG-9/U are medium-sized video and communications cable. RG-11/U is medium-sized 75-ohm video and communications cable. RG-58/U is ideal for radio frequency transmission, video, test equipment, etc. RG-59/U handles 680 watts at 30 mc; puncturing voltage, 20,000 v. *Solid copper; all others stranded. Belden RG-type cables are noted for their high resistance to physical abuse, aging and moisture under hardest transmission line service requirements. Provide excellent mechanical and electrical characteristics—conform to highest engineering standards. See page 151 for connectors.

Stock No.	RG No.	Mfrs Type	Imp.	Mmf/ft	O. D.	Lbs., 100 ft.	Per Ft.	100 Ft. For
47 W 511	8/U	8237	52	29.5	.405"	12	13½¢	11.91
47 W 512	9/U	8242	51	30.0	.420"	15¾	29¢	25.72
47 W 513	11/U	8238	75	20.5	.405"	11	12½¢	11.17
47 W 515	54A/U	8239	58	26.5	.250"	4½	8¢	7.20
47 W 516	58/U	8240*	53.5	28.5	.195"	3	6¢	5.13
47 W 517	58A/U	8259	50	29	.195"	3½	6¢	5.29
47 W 552	59/U	8241*	73	21	.242"	4½	6½¢	5.88
47 W 518	62/U	8254*	93	13.5	.242"	4	8¢	7.13
47 W 519	71/U	8257*	93	13.5	.250"	4½	12½¢	11.02

CELLULOSE ACETATE HOOK-UP WIRE



Single, tinned copper conductor, with heavy cellulose acetate yarn wrap and cellulose yarn braid. Fungus and flame resistant lacquer coating. Breakdown voltage, 1000 volts AC. DC insulation resistance is 200 megs or better. Stranded type conductor (Type 8943) is No. 20 (10x30) with O.D. of .076". Solid type conductor (Type 8941) has O.D. of .072". Especially suited for hook-up and lead-wire applications in receivers, transmitters, amplifiers, aircraft radio and other types of RF circuits. Av. shpg. wt., 12 oz. per 100 ft.

Type 8941—20 Solid

Coil	Red	Black	Blue	Green	Yellow	EACH
25 Ft.	48 T 331	48 T 330	48 T 332	48 T 333	48 T 334	.43
100 Ft.	47 T 920	47 T 921	47 T 922	47 T 923	47 T 924	1.40
1000 Ft.	48 T 351	48 T 350	48 T 352	48 T 353	48 T 354	10.88

Type 8864 Assorted Wire Kit. Contains six, 25-ft. coils of Type 8941 hook-up and lead-wire. Size 20 solid tinned copper conductor in heavy cellulose acetate yarn wrap and cellulose acetate yarn braid. Fungus and flame resistant lacquer coating. Coils are one each: Black, Blue, Green, Red, White and Yellow. Shpg. wt., 1 lb.
48 T 846, NET 2.56

Type 8943—20 Stranded

Coil	Red	Black	Blue	Green	Yellow	EACH
25 Ft.	48 T 361	48 T 360	48 T 362	48 T 363	48 T 364	.44
100 Ft.	47 T 940	47 T 941	47 T 942	47 T 943	47 T 944	1.55
1000 Ft.	48 T 381	48 T 380	48 T 382	48 T 383	48 T 384	11.76

Type 8865 Assorted Wire Kit. Contains six, 25-ft. coils of Type 8943 hook-up and lead wire. Size 20 stranded (10x30) tinned copper conductor in heavy cellulose acetate yarn wrap and cellulose acetate yarn braid. Fungus and flame resistant lacquer coating. Coils are one each: Black, Blue, Green, Red, White and Yellow. Shpg. wt., 1 lb.
48 T 847, NET 2.65

TYPE 8945—18 SOLID

47 T 900. Red.
47 T 901. Black.
47 T 902. Blue.
47 T 903. Green.
47 T 904. Yellow.
100 FOOT COILS NET EACH 1.62

TYPE 8947—18 STRANDED

47 T 910. Red.
47 T 911. Black.
47 T 912. Blue.
47 T 913. Green.
47 T 914. Yellow.
100 FOOT COILS NET EACH 1.76

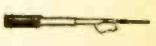
TYPE 8942—16 STRANDED

47 T 916. Black
47 T 917. Red
47 T 918. Green
100-Ft. Coils NET EACH 2.06

TYPE 8938—14 STRANDED

47 T 935. Red
47 T 936. Black
100-Ft. Coils NET EACH 2.58

RUBBER INSULATED PUSH-BACK WIRE



Type 8838, No. 20-Stranded. General-use hook-up wire. Also used as leads for transformers, etc. 10x30 stranded tinned copper conductor; cotton wrap; .010" unvulcanized rubber insulation; cellulose acetate yarn braid; fungus and flame resistant lacquer coating. .081" O.D. In 100-ft. coils. Shpg. wt., 13 oz.

Coil	Red	Black	Blue	Green	Yellow	EACH
100 Ft.	48 T 245	48 T 246	48 T 247	48 T 248	48 T 249	1.71

RUBBER-COVERED LEAD-IN

NO. 18 STRANDED—TYPE 8200

Flexible, tinned copper wire covered with .040" live rubber insulation. 7x27 stranded tinned copper conductor. Very easy to solder. Overall diameter, .126". Av. shpg. wt., 100-ft. coil, 1½ lbs.

47 T 745, 100 ft. spool. NET 1.36
47 T 746, 500 ft. spool. NET 5.44

NYLCLAD HEAVY MAGNET WIRE

Type HNC. This heavy-duty Nylclad copper magnet wire combines the most desirable features of Formvar wire with the toughness and solvent resistance of nylon enamel. Unexcelled for difficult and exacting windings of any type. Outstanding features include: ability to withstand winding abuse and forming operations; resistance to solvent action of insulating varnishes and all other types of thinners; resistance to softening and brittleness at extremes of temperatures; high dielectric strength; remarkably easy to wind; infinite resistance to moisture.

½ lb. Spool Stk. No.	Size	Feet	EACH	1 lb. Spool Stk. No.	Size	Feet	EACH
48 T 036	14	40	.59	48 T 086	14	80	1.05
48 T 037	16	63	.59	48 T 087	16	126	1.06
48 T 038	18	100	.59	48 T 088	18	199	1.09
48 T 039	20	157	.61	48 T 089	20	315	1.14
48 T 040	22	250	.65	48 T 090	22	501	1.20
48 T 041	24	396	.68	48 T 091	24	793	1.26
48 T 042	26	630	.73	48 T 092	26	1260	1.38
48 T 043	28	995	.81	48 T 093	28	1990	1.55
48 T 044	30	1570	.91	48 T 094	30	3140	1.73
48 T 045	32	2440	.97	48 T 095	32	4880	1.84
48 T 046	34	3930	1.09	48 T 096	34	7860	2.06
48 T 047	36	6200	1.31	48 T 097	36	12400	2.35
48 T 048	38	9700	1.71	48 T 098	38	19400	2.94
48 T 049	40	16050	2.79	48 T 099	40	32100	4.41

Hook-Up & Magnet Wire—Cable

BELDEN WIRE AND CABLE

TYPE MI6-W-76A SRIR THERMOPLASTIC HOOK-UP WIRE

A general purpose, thermoplastic insulated hook-up wire for applications at 1000 volts rms or less. Made to conform to stringent government specifications. Feature high dielectric strength, stability at high temperatures, flexibility at low temperatures and very low moisture absorption. Flame and fungus resistant. Vinyl thermoplastic insulation is virtually impervious to damage from solvents. Nominal diameters: Type 8530, .059"; Type 8524, .064"; Type 8529, .066"; Type 8523, .072". Vinyl thermoplastic insulation is .017" thick. All are tinned copper conductors. No. 22 stranded is 7x30; No. 20 stranded is 10x30. Av. shpg. wt., 100-ft. spool, 1¼ lbs. Av. shpg. wt., 1000-ft. spool, 14 lbs.

100 FOOT SPOOLS

Color	Type 8530 22 Solid	Type 8524 22 Stranded	Type 8529 20 Solid	Type 8523 20 Stranded
Black	49 T 800	49 T 820	49 T 810	49 T 830
Brown	49 T 801	49 T 821	49 T 811	49 T 831
Red	49 T 802	49 T 822	49 T 812	49 T 832
Orange	49 T 803	49 T 823	49 T 813	49 T 833
Yellow	49 T 804	49 T 824	49 T 814	49 T 834
Green	49 T 805	49 T 825	49 T 815	49 T 835
Blue	49 T 806	49 T 826	49 T 816	49 T 836
Violet	49 T 807	49 T 827	49 T 817	49 T 837
Gray	49 T 808	49 T 828	49 T 818	49 T 838
White	49 T 809	49 T 829	49 T 819	49 T 839
NET EA.	78c	90c	88c	1.06

Type 8856 Hook-Up Wire Kit. Six, 25-ft. coils of Type 8529 No. 20 solid, thermoplastic wire: Colors: Black, Blue, Green, Red, White, Yellow. Conform to government specs; excellent for all applications at 1000 volts rms or less. .066" O.D. Vinyl thermo-plastic insulation. Shpg. wt., 3 lbs.
49 T 848. NET 1.76

1000 FOOT SPOOLS

Color	Type 8530 22 Solid	Type 8524 22 Stranded	Type 8529 20 Solid	Type 8523 20 Stranded
Black	49 T 850	49 T 870	49 T 860	49 T 880
Brown	49 T 851	49 T 871	49 T 861	49 T 881
Red	49 T 852	49 T 872	49 T 862	49 T 882
Orange	49 T 853	49 T 873	49 T 863	49 T 883
Yellow	49 T 854	49 T 874	49 T 864	49 T 884
Green	49 T 855	49 T 875	49 T 865	49 T 885
Blue	49 T 856	49 T 876	49 T 866	49 T 886
Violet	49 T 857	49 T 877	49 T 867	49 T 887
Gray	49 T 858	49 T 878	49 T 868	49 T 888
White	49 T 859	49 T 879	49 T 869	49 T 889
NET EA.	5.00	6.11	5.85	7.50

Type 8857 Hook-Up Wire Kit. Consists of six, 25-ft. coils of Type 8523 No. 20 stranded, thermoplastic hook-up wire. Colors include: Black, Blue, Green, Red, White and Yellow. .072" O.D., 10x30 stranded, tinned copper conductor. Vinyl, thermoplastic insulation. Conforms to rigid government specifications. Shpg. wt., 3 lbs.
49 T 849. NET 2.03

POPULAR ANTENNA WIRE

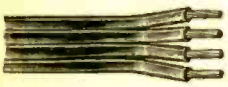
High conductivity copper wire. Ideal for all antenna requirements. Maximum tensile strength assures minimum stretch. *Nylclad insulation protects wire from corrosion. Supplied only in coil lengths listed below. Av. wt., per 100 ft. coil, 1 lb.

STRANDED BARE COPPER

Type 8000—7x22			Type 8002—7x24		
No.	Coil	NET	No.	Coil	NET
47 T 680	50 ft.	.76	47 T 654	50 ft.	.56
47 T 681	75 ft.	1.07	47 T 655	75 ft.	.76
47 T 682	100 ft.	1.36	47 T 656	100 ft.	.97
47 T 683	1,000 ft.	13.08	47 T 657	1,000 ft.	8.92

***SOLID NYLCLAD COPPER**

Type 8008 No. 12			Type 8009 No. 14		
47 T 670	100 ft.	2.07	47 T 740	100 ft.	1.42
47 T 735	200 ft.	3.94	47 T 741	500 ft.	6.24
47 T 736	500 ft.	9.48			



ANTENNA ROTOR CABLE

Type 8464. Flat 4-conductor antenna rotor cable. No. 20 stranded copper (7x28) conductor. 1 outer conductor tinned for polarity—has ridged insulation for identification. 4 conductors laid parallel. O.D., .070"x.390". In gray vinyl plastic insulation. Shpg. wt., 100 ft., 2¼ lbs.
47 T 695. 75-ft. Coil. EACH 2.25
47 T 696. 100-ft. Coil. EACH 3.00
47 W 694. Over 100 ft., PER 100 FT. 3.00

Type 8484. 4-cond. No. 20 stranded (7x28), color-coded, vinyl plastic insulation, gray vinyl plastic outer jacket. O.D., .170". 100', 3 lbs.
47 T 697. 100-ft. Coil. EACH 3.16
47 W 692. Over 100 ft., PER 100 FT. 3.16

Type 8488. 8-cond. No. 22 stranded (7x30), color-coded, vinyl plastic insulation, gray vinyl plastic jacket. O.D., .205". 100', 3½ lbs.
47 T 698. 100-ft. Coil. EACH 4.37
47 W 699. Over 100 ft., PER 100 FT. 4.37

CONSOLIDATED WIRE

THERMOPLASTIC HOOK-UP WIRE

Underwriters' Approved. Thermoplastic insulated hook-up wire. Strips clean. Easy to handle. Voltage breakdown test, 10,000 volts. Oil and acid resistant. Withstands temperatures up to 80° C. Suitable for high voltage circuits where low loss and proper insulation is essential. Shpg. wt., per 25 ft. coil, 4 oz.

20 SOLID		20 STRANDED	
48 T 455. Black. 48 T 456. Red. 48 T 457. Blue. 48 T 458. Green. 48 T 459. Yellow	25 FOOT COIL 35c EACH	48 T 460. Black. 48 T 461. Red. 48 T 462. Blue. 48 T 463. Green. 48 T 464. Yellow.	25 FOOT COIL 42c EACH

COLORED RUBBER STRANDED HOOKUP WIRE

No. 18 tinned soft drawn copper wire. Cotton wrap and colored rubber insulation overall. Shpg. wt., 25 ft., 5 oz.

Coil	Black	Red	Blue	Green	White	EACH
25 ft.	48 T 200	48 T 201	48 T 202	48 T 203	48 T 205	45¢

PUSH-BACK HOOK-UP WIRE

Highest quality tinned push-back hook-up wire, No. 20. Only evenly-drawn pure copper wire is used. Available in both solid and stranded type. Stranded wire is made up of carefully twisted strands of high tensile strength. Unusually flexible and durable. Double-cotton covered with paraffin-treated damp-proof braid. 5 different colors. Shpg. wts.: 25 ft., 4 oz.; 100 ft., 1 lb.

Stranded Type, 10x30

Coil	Red	Black	Yellow	Blue	Green	EACH
25 ft.	48 T 442	48 T 440	48 T 444	48 T 441	48 T 443	.35
100 ft.	48 T 447	48 T 445	48 T 449	48 T 446	48 T 448	1.23

Solid Type

Coil	Red	Black	Yellow	Blue	Green	EACH
25 ft.	48 T 472	48 T 470	48 T 474	48 T 471	48 T 473	.33
100 ft.	48 T 477	48 T 475	48 T 479	48 T 476	48 T 478	1.20

HIGH-GRADE MAGNET WIRE ON SPOOLS

Insulated copper wire of highest quality for all purposes. Supplied on handy spool as shown—saves time, prevents wire from tangling. Standard B. & S. Gauge. We can supply magnet wire in all sizes and types in larger quantities than listed below. Table below represents a listing of the more commonly used sizes and types. Write for quantity prices. Shpg. wts.: ½ lb. spool, 14 oz.; 1 lb. spool, 1½ lbs.

PLAIN ENAMELED ½ LB. SPOOLS

Stock No.	Size	Feet	NET	Stock No.	Size	Feet	NET
48 T 100	14	38	.59	48 T 111	26	640	.71
48 T 102	16	63	.58	48 T 112	28	1013	.76
48 T 104	18	101	.58	48 T 113	30	1602	.84
48 T 106	20	159	.59	48 T 114	32	2543	.85
48 T 108	22	253	.62	48 T 115	34	4042	.91
48 T 109	24	402	.67	48 T 116	36	6410	1.12

SINGLE COTTON ENAMELED 1 LB. SPOOLS

Stock No.	Size	Feet	NET	Stock No.	Size	Feet	NET
48 T 020	14	78	1.23	48 T 028	22	490	1.62
48 T 022	16	124	1.29	48 T 029	24	772	1.80
48 T 023	17	156	1.32	48 T 030	25	936	1.92
48 T 024	18	198	1.35	48 T 031	26	1209	2.04
48 T 025	19	248	1.40	48 T 032	28	1876	2.34
48 T 026	20	312	1.50	48 T 033	30	2780	2.87

HEAVY FORMVAR MAGNET WIRE IN 1 POUND SPOOLS

Copper magnet wire covered with Formvar, tough, sturdy, abrasion-resisting film. Stable dielectric is maintained under the cumulative drying and aging effects of heat; does not fail after two hours at 105° C. Completely impervious to the deteriorating effects of petroleum solvents; resists acid and alkali. Takes up less winding space. Infinite resistance to moisture. Spools can be stored indefinitely without corroding. Ideal for servicemen, experimenters, Amateurs, etc. Replaces enamel, paper, cotton, silk, and double cotton and double silk wire. Shpg. wt., per spool, 1½ lbs.

Stock Number	Size	Feet	NET EACH	Stock Number	Size	Feet	NET EACH
48 T 180	14	78	1.02	48 T 187	28	1999	1.52
48 T 137	15	99	1.02	48 T 144	29	2780	1.62
48 T 181	16	124	1.03	48 T 188	30	3200	1.71
48 T 138	17	156	1.05	48 T 145	31	4410	1.76
48 T 182	18	198	1.06	48 T 189	32	4900	1.81
48 T 139	19	246	1.08	48 T 146	33	6441	1.93
48 T 183	20	313	1.11	48 T 190	34	7950	2.03
48 T 140	21	397	1.14	48 T 147	35	9002	2.18
48 T 184	22	501	1.17	48 T 191	36	12,800	2.32
48 T 141	23	628	1.21	48 T 148	37	15,898	2.62
48 T 185	24	798	1.23	48 T 192	38	20,000	2.91
48 T 142	25	941	1.29	48 T 149	39	25,188	3.65
48 T 186	26	1200	1.35	48 T 193	40	31,700	4.38
48 T 143	27	1583	1.41				

Wire—BC & SW Antennas

POSJ AND POT TYPE LAMP CORD

Two-cond. No. 18 stranded copper wire. POSJ has color-coded cotton wrap with heavy rubber-jacket. POT has vinyl plastic insulation. Widely used for appliances. Shpg. wt., 3 lbs. per 100 ft. **Lengths under 100 feet available only in 25-ft. coil.**

Mfr's Type	Color	25 ft. Coil		100 ft. Coil		Over 100 ft.	
		Stk. No.	EA.	Stk. No.	EA.	Stk. No.	PER 100'
POSJ	Brown	48 T 761	63¢	48 T 760	2.33	48 W 763	2.33
POSJ	Black	48 T 771	63¢	48 T 770	2.33	48 W 773	2.33
POT	Brown	48 T 765	59¢	48 T 764	2.13	48 W 766	2.13
POT	White	48 T 768	59¢	48 T 769	2.13	48 W 767	2.13

LACQUERED TUBING ON SPOOLS

Flexible tubing, heavily varnished. Average dielectric strength, 5000 volts. For up to No. 10 wire. In 20-foot spools. Shpg. wt., 5 oz.

No.	Color	No.	Color	No.	Color	EA.
49 T 279	Red	49 T 281	Brown	49 T 283	Black	82c
49 T 280	Yellow	49 T 282	Green			

SPAGHETTI ASSORTMENT

Highly popular with experimenters and builders alike. Handy assortment of 26 pieces of cambric spaghetti tubing in various colors and diameters. In 8" lengths. Shpg. wt., 3 oz.

49 T 220. NET 20c

GIANT SPAGHETTI

For insulating power transformer, electrolytic condenser, etc., leads. Black cambric tubing. 1200 volts. ¼" I.D. 36" long. 2 oz.

49 T 210. NET 19c

10 or more, EA. 17c

VARNISHED SPAGHETTI TUBING

Widely used in industrial and electronic research laboratories, radio and television service shops, experimental laboratories, etc. Cut in handy 36" lengths, and five lengths to a package. Listed below are the most commonly used sizes, for practically all wire used in electronics. Standard grade varnished tubing. 4,000 volt av. dielectric strength. Meets V.T.S. and A.S.T.M. specifications. Shpg. wt., 2 oz.

Stock No.	Color	For Wire Size	Pkg. of 5 EACH PKG.	5 or More Pkgs. EACH PKG.
49 T 164	Black	20	54c	49c
49 T 165	Yellow	20		
49 T 166	Red	20		
49 T 167	Green	20		
49 T 169	Black	18	57c	51c
49 T 170	Yellow	18		
49 T 171	Red	18		
49 T 172	Green	18		
49 T 174	Black	16	58c	52c
49 T 175	Yellow	16		
49 T 176	Red	16		
49 T 177	Green	16		
49 T 179	Black	14	62c	56c
49 T 180	Yellow	14		
49 T 181	Red	14		
49 T 182	Green	14		
49 T 184	Black	12	67c	60c
49 T 185	Yellow	12		
49 T 186	Red	12		
49 T 187	Green	12		
49 T 189	Black	10	73c	66c
49 T 190	Yellow	10		
49 T 191	Red	10		
49 T 192	Green	10		

AMPHENOL RG COAXIAL CABLE

Amphenol RG coaxial cable is designed to meet the most rigid commercial and military specifications. Highest quality material and strict production control assure the utmost in efficiency and dependability. Have flexible, low-loss polyethylene inner jacket covered by copper shield, with tough vinyl or polyethylene outer jacket. Impervious to acids, alkalis, oils and gasoline. Easily installed—can even be buried in ground. RG-54A/U is excellent low-loss mike cable. RG-11/U and RG-58/U are widely used as TV antenna lead-in; these two types and RG-8/U and RG-58/U are very popular for transmitting applications. Max. RF power at 30 mc: RG-8/U, 2000 watts; RG-11/U, 1400 watts; RG-59/U, 680 watts; RG-58/U, 430 watts. RG-22/U is 2-conductor type. See pages 145, 151, 152, 153 and 155 for coaxial connectors. Write for special prices on 1000 ft. reels.

Stock No.	RG	Mfr's Type	Imp.	Mmf Per Ft.	O.D.	NET Per Ft.	100' or more, Per 100'
49 W 460	8/U	21-004	52.0	29.5	.405	14½¢	13.92
49 W 469	9/U	21-005	51	30.0	.420	31½¢	30.84
49 W 470	11/U	21-007	75.0	20.5	.405	13½¢	12.84
49 W 465	22/U	21-038	95.0	16.0	.405	18¢	17.00
49 W 480	54A/U	21-022	58.0	26.5	.250	9¢	8.33
49 W 485	58/U	21-024	53.5	28.5	.195	6¢	5.67
49 W 487	58A/U	21-199	50	29.0	.195	6¢	5.67
49 W 490	59/U	21-025	73.0	21.0	.242	7¢	6.42
49 W 488	62/U	21-026	93	13.5	.242	8¢	7.17
49 W 489	71/U	21-029	93	13.5	.250	13¢	12.50

AMPHENOL MINIATURE COAXIAL CABLE

New miniature coaxial cable. Similar in electrical and mechanical performance to full-sized coaxial cables. Designed specifically to meet the needs of designers and experimenters in miniaturized electronic equipment. Excellent for use in computers, meters, etc. All have Copperweld center conductor, stranded 7x.0063 except *7x.0056. Attenuation at 400 mc: Type 21-596, 22 db/100 ft.; Type 21-598, 19 db/100 ft.; Type 21-597, 11 db/100 ft. Braided copper shield. Tough vinyl plastic outer jacket, except Type 21-596 which has KEL-F, new, high-heat plastic. Av. shpg. wt., 100 ft., 1½ lbs.

Stock No.	RG	Mfr's Type	Imp., Ohms	Mmf Per Ft.	O.D.	NET Per Ft.	100' or more, Per 100'
49 W 471	.....	21-596	50	28	.100"	36½¢	35.00
49 W 473	174/U	21-598	50	30	.100"	6½¢	6.08
49 W 472	.....	21-597*	75	20	.140"	7½¢	6.33

TINNED SOLID COPPER WIRE

Fine quality, soft-drawn copper wire, tinned for easy soldering. Excellent for circuit wiring. Av. shpg. wt.: *3 lbs., †5 lbs.

*100-FT. COILS

Stock No.	Gauge	NET	Stock No.	Gauge	NET
47 T 523	16	1.30	47 T 530	12	2.31
47 T 520	14	1.59	47 T 540	10	4.03

†1000-FT. COILS

Stock No.	Gauge	NET	Stock No.	Gauge	NET
47 T 525	24	2.37	47 T 533	20	5.52
47 T 527	22	3.66	47 T 535	18	8.33

TELEPHONE WIRE

2-Conductor Interior. For interior use with telephones, intercoms, etc. No. 19, solid, tinned copper wire. ½" insulation and glazed-cotton braid. Shpg. wt., per 100 ft., 2½ lbs.

48 W 810. Per foot 4c

100 ft. or more. Per 100 ft. 3.56

2-Conductor Exterior. No. 19 solid copper conductors. Overall black, weatherproof braid. Each conductor insulated in tough, rubber sheath. Shpg. wt., per 100 ft., 3 lbs.

48 W 826. Per foot 4c

100 ft. or more. Per 100 ft. 3.24

3-Conductor Exterior. As above, but 3 conductors. Shpg. wt., per 100 ft., 4 lbs.

48 W 825. Per foot 5½c

100 ft. or more. Per 100 ft. 4.86

REPLACEMENT ANTENNA LOOP

Wound on rigid fiberboard form. Has lug terminals. Replaces antenna coil in battery and midget sets or portables. Turns may be removed to match loop being replaced. Overall size, 6x8¼". Shpg. wt., 8 oz.

51 C 040. NET EACH 53c

10 or more, EACH ..... 48¢

MINIATURE ANTENNA LOOP

For use where space is limited. Covers standard broadcast band with midget variable condensers 9x38. Litz wire for low loss. 214 microhenries; high Q of over 230. Two 4" leads. Overall size, 3⅛x5¼". Shpg. wt., 8 oz.

51 C 035. NET EACH 40c

10 or more, EACH ..... 36¢

TWISTED-PAIR ANTENNA LEAD-IN

High-quality, twisted-pair antenna lead-in wire. Designed especially for use as lead-in for noise reducing, doublet-type receiving antenna systems. Provides close impedance match to assure efficient signal transfer. An excellent choice for those requiring a dependable lead-in wire at low cost. Consists of two flexible and durable, No. 18 stranded-wire conductors, covered with tough, long-life, rubber insulation, ½" thick. Insulation is weatherproof; maintains high efficiency regardless of weather conditions and does not crumble or dry out during prolonged usage. Minimum signal leakage during rain and snow. Shpg. wt., per 100 ft., 3 lbs.

48 W 850. Per ft. 3c

100 ft. or more, Per 100 ft. 2.42

CABLE LACING CORD

Genuine Barbour's waxed linen twine. Hard-twist gray 8-cord twine. 50 lb. test. For binding cables in switchboards, transmitters, etc. Makes tracing of circuit simpler, and appearance of unit more professional. Ideal for industry and lab—as well as experimenter and builder. 1 pound spool—approximately 450 yards. Shpg. wt., 1¼ lbs.

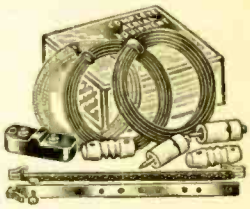
49 T 245. NET 3.08

BELDEN LITZ WIRE

Type 8817. 5x44 stranded Celenamel with one nylon wrap. For rewinding antenna primaries, hand-winding RF coils, and similar applications. Outside diameter; .008". 100 ft. coil. Shpg. wt., 2 oz.

48 T 981. NET 24c

DELUXE BC-SW ANTENNA KIT



Includes 100 ft., 7x26 bare copper antenna wire; 40 ft. rubber covered lead-in; 25 ft. rubber covered ground wire; 2 porcelain insulators; 1 window lead-in; 1 lightning arrester; 2 porcelain nail knobs; 1 ground clamp and full instructions. Shpg. wt., 2½ lbs.

83 C 101. NET 1.88

Standard BC-SW Antenna Kit. 50 ft., 7x26 bare copper wire; 25 ft. lead-in; 2 antenna insulators; 2 nail knob insulators; 1 window lead-in and 1 ground clamp. Shpg. wt., 1½ lbs.

83 C 100. NET 89c

WINDOW LEAD-IN

Fully weather resistant. 12" long by ½" wide. Duco varnished covering. Clips at both ends. Shpg. wt., 2 oz.

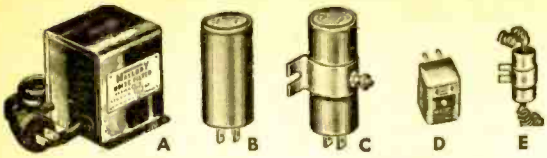
51 C 050. NET 9c

BELDEN INDOOR AERIAL WIRE

Type 8014. 25-ft. coil. No. 25 (13x36) extra flexible stranded. Plastic insulation. Wt., 2 oz.

47 T 930. NET 24c

47 T 933. 600 ft. Coil. Wt., 2 lbs. 2.58



MALLORY INTERFERENCE FILTERS

HEAVY-DUTY TYPES

Fig. A. Type LC5. Inductance-capacity filter for eliminating extremely severe interference. Has terminal for grounding to frame of motor or appliance. Rated 115-220 volts AC-DC, 5 amps. In rectangular housing with mounting flanges. Size, 2 15/16x3 1/16x3 9/16". Shpg. wt., 1¼ lbs.
70 B 328. List, $11.25. NET 6.61

Fig. A. Type LC10. Inductance-capacity filter as above but rated for motors and appliances drawing up to 10 amps. Size, 2 15/16x3 1/16x3 9/16". Shpg. wt., 2½ lbs.
70 B 320. List, $15.00. NET 8.82

PLUG-IN TYPES

Fig. B. Type X3. Capacitor type filter for use at radio or appliance. For eliminating light interference from electric fans, food mixers and grinders, etc. Plugs into any AC or DC outlet; has receptacle for appliance plug. Rated 110-220 volts AC or DC, 5 amps. Size, 1⅛" dia. x 2 3/16". Shpg. wt., 5 oz.
70 B 331. List, $1.80. NET 1.06

Fig. D. Type X6. Single capacity filter of special low impedance design for light interference. Housed in molded plastic case. To be used on cord plug of appliance causing interference. Rated at 125 volts AC or DC, 15 amps. Size, 1¼x 2x1". Shpg. wt., 6 oz.
70 B 332. List, $1.60. NET 94c

Fig. B. Type Z4. Dual inductance-capacity filter for severe interference from electric razors, barber clippers and household appliances. Use at radio or appliance plug. Rated 110-220 volts AC or DC, 3 amps. Size, 1⅛" dia. x2 3/16". Shpg. wt., 6 oz.
70 B 323. List, $2.50. NET 1.47

Fig. C. Type Z6. Dual inductance capacity filter for severe interference. For use on dishwashing machines, grinders and similar motor-driven heavy equipment. Can be used at radio or appliance plug. Rated 110-220 volts AC or DC, 3 amps. Size, 1¼x3¼". Shpg. wt., 8 oz.
70 B 329. List, $3.60. NET 2.12

WIRE LEAD TYPES

Fig. E. Type W7SP. Dual capacity filter designed for mounting directly on appliance. For suppression of interference from drink mixers, electric drills, calculating and bookkeeping machines, cash registers, etc. Size, ⅞" dia. x 2". With 6" insulated leads. For 110-220 volts AC or DC. Shpg. wt., 4 oz.
70 B 325. List, $1.80. NET 1.06

Fig. E. Type Z8A. Dual inductance-capacity filter for suppressing severe interference from electric fans, diathermy machines, fluorescent lamps, neon signs, etc. 6" wire lead connections. Size, 1 7/16" dia. x 2¾". Rated 110-220 volts AC or DC., 3 amps. Shpg. wt., 8 oz.
70 B 330. List, $3.00. NET 1.76

MEISSNER FILTERS AND WAVE TRAPS

LINE FILTER

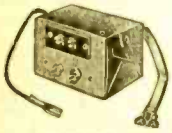
Type 15-7515. Combination inductor-capacitor type filter, which filters both sides of the line. Components selected for effective elimination of most types of radio interference. Rated at 110 volts AC or DC. Handles up to 3 amperes. For most radios and phono combinations, food mixers, electric razors, vacuum cleaners, office machines, etc. To be used at source of interference. Size: 4½x3 1/16x2". Shpg. wt., 8 oz.
60 G 242. List, $7.60. NET 4.47

WAVE TRAPS

High-Q tunable resonant circuits for elimination or reduction of signals interfering with FM or TV reception. Connect in antenna transmission line, at the receiver. "Tune out" unwanted signals from FM, taxicab, Amateur, commercial telephone, and other transmitters. When selecting wave trap from listing below, choose the type whose range includes the frequency of the interfering signal. All are designed for use with receivers having following balanced or unbalanced antenna inputs: 50, 72, 300, 400, and 500 ohms. 4⅜x3x2". Wt., 4 oz.

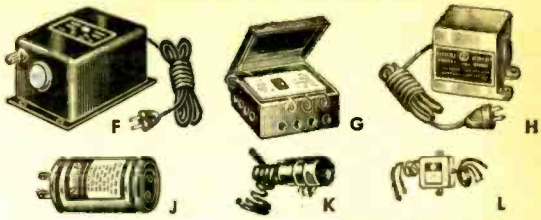
60 C 203. Type 15-7510. 6-13 mc.
60 C 204. Type 15-7511. 13-27 mc.
60 C 208. Type 15-7512. 27-54 mc.
60 C 209. Type 15-7513. 54-108 mc.
60 C 210. Type 15-7514. 108-216 mc.
List, $6.00. NET EACH 3.53

GENERAL ELECTRIC TV-FM WAVE TRAPS



Type RLW-005. FM wave trap designed especially to reduce television interference caused by strong FM broadcasting stations operating in the 88 to 108 mc channel. A complete unit, it is readily installed without special tools or equipment. Can be used on all TV sets having a 300 ohm input system. Size, 3x2x2". Shpg. wt., 8 oz.
60 C 244. List $4.25. NET 2.50

Type RLW-007. (Not illustrated.) IF wave trap designed to reduce or eliminate interference on TV sets caused by signals at frequencies from 41 to 47 mc—such as police, fire and other mobile radios. Such interference can be recognized by herringbone or cross-hatch pattern on screen, which cannot be tuned out. For IF of 41-47 mc. Size, 3¼x2¼x1¾". Shpg. wt., 8 oz.
60 C 243. List, $4.50. NET 2.65



CORNELL-DUBILIER "QUIETONE" FILTERS

FOR INSTALLATION AT RADIO, TV OR APPLIANCE

PLUG-IN TYPE

Fig. F. Type IF-18. An all-wave capacitive-inductive type filter for suppression of severe interference. Rated at 115 volts AC-DC, 5 amps. Bakelite case, 6x3¼x2½". With cord and plug. Shpg. wt., 4 lbs.
70 B 120. List, $9.20. NET 5.41

Fig. J. Type IF-4. For medium interference caused by fluorescent lights, electric shavers, and similar devices on small receivers such as AC-DC midget sets, etc. Rated at 115 volts AC-DC, 5 amps between power line and set or appliance. 1⅛" dia. x 2". Shpg. wt., 5 oz.
70 B 125. List, $1.25. NET 73c

Fig. J. Type IF-6. Plug type filter for moderate interference. Especially suitable for fluorescent lights, and similar sources of interference. Connects between power line and set or appliance. Rated at 115 volts AC-DC, 5 amps. Size, 1⅛" dia. x 2". Shpg. wt., 6 oz.
70 B 126. List, $1.95. NET 1.15

Fig. H. Type IF-19. Capacitive-inductive type filter for use where interference is severe. Rated 115 volts AC-DC, 5 amps. Bakelite case, 4x2¼x2⅞". Terminal for ground connection. Shpg. wt., 1½ lbs.
70 B 121. List, $7.70. NET 4.53

FOR INSTALLATION AT APPLIANCE

WIRED-IN TYPE

Fig. K. Type IF-24. Dual unit capacitive filter for eliminating noise from fluorescent lights. 115 v., AC-DC. Shpg. wt., 8 oz.
70 B 122. List, $1.25. NET 73c

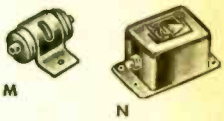
Fig. L. Type IF-54. General purpose capacitive-inductive filter for circuits of 2 amps or less. Rated 110-220 v., AC-DC. Wt., 8 oz.
70 B 114. List, $2.50. NET 1.47

Fig. G. Type IF-7A. Capacitive-inductive filter for severe interference caused by motors, oil-burners, etc. For single phase 110-220 v., AC-DC. 5 amps. Size, 6x6x4". Shpg. wt., 9 lbs.
70 B 124. List, $13.75. NET 8.08

SPRAGUE INTERFERENCE UNITS

Type IF. Compact multi-section interference filters for suppressing man-made radio and TV interference. Small and completely self-contained. For use on motors over 1 horsepower and up to 220 volts AC or DC. Easily installed. Av. shpg. wt., 8 oz.

Stock No.	Mfr's Type	Volts	Dia. x Length	Sections	List	NET EACH
70 B 100	IF-15	220	1x2 3/16"	Triple	$2.60	1.53
70 B 104	IF-11	220	1⅜x3½"	Dual	7.80	4.59
70 B 105	IF-21	220	1x2 1/16"	Dual	1.75	1.03
70 B 113	IF-S1	220	¾x2 1/16"	Single	1.15	.68
70 B 112	IF-37	220	1x2 7/16"	Triple	2.25	1.32



Type Filtorol. Designed for connection in series with power supply lines of interference-producing industrial devices. A 3-terminal network of matched chokes and coils with the case as one terminal. Filter should have higher rating than the continuous operating current of the device. Type 4 utilizes "Hypass" capacitor, provides added attenuation at frequencies above 5 megacycles. Types 1, 2, 3, fig. N. Type 4, fig. M. Av. shpg. wt., 1 lb.

Stock No.	Mfr's Type	Amps	Volts	Size	List	NET EACH
70 B 091	1	1	115	⅞x1¼x1¾"	$13.50	7.94
70 B 092	2	10	115	1¼x2x2"	14.80	8.70
70 B 093	3	35	115	1⅞x2⅞x3⅛"	27.40	16.11
70 B 094	4	20	115	1" dia.x1 13/16" long	3.05	1.79

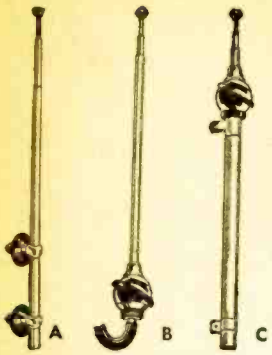
MILLER TV AND FM WAVE TRAPS

New high-Q series-resonant wave traps for elimination of interference and undesirable images in TV and FM receivers. Tune to the frequency of the interfering signal to reduce herringbone patterns, streaks, or tearing of the picture. With FM receivers, greatly reduces cross-talk from strong interfering station. Shpg. wt., 13 oz. Size, 1⅞" wide x 1⅞" long x 3⅛" high.

Stock No.	Mfr's Type	Freq. Range	List	NET EACH
60 H 211	6163	150-250 mc.	$4.40	2.59
60 H 212	6164	75-150 mc.		
60 H 213	6165	40-80 mc.		
60 H 214	6166	20-40 mc.		

Auto Antennas

WARD AUTO RADIO ANTENNAS



SIDE COWL MOUNTS

Fig. A—MODEL SC-6

"Air Queen." Chrome-plated, admiralty brass, side cowl antenna. Three sections—extends to 66". Low-loss 2-stanchion mount with bakelite and chrome insulators. Silver-to-silver contacts. New positive shielding eliminates use of shield can. High signal to noise ratio. Detachable 36" polyethylene insulated, vinylite covered, high "Q" lead-in. Includes complete conversion kit for irregular type car bodies. Shpg. wt., 1 lb.
97 CX 215. List $5.45. NET 3.20

Fig. A—MODEL SC-8

"Long Ranger" side cowl antenna. Popular in low signal areas where its extra length provides high sensitivity for better reception. Telescopes into four sections and extends to 100". 2-stanchion mount has smartly designed insulators with chrome caps. Silver-to-silver contacts. 36" vinylite-covered high "Q" lead-in is polyethylene insulated. With conversion kit for irregular type car bodies. Shpg. wt., 1¾ lbs.
97 CX 216. List, $7.65. NET 4.50

TOP COWL AND FENDER MOUNTS

Fig. B—MODEL TCF-3B

"Eight Ball" design top cowl antenna. Good sensitivity for low signal areas. Will fit any type of car perfectly. Has three sections—extends to 56". Constructed of sturdy, chrome-plated brass tubing for attractive appearance. 36" polyethylene-insulated, vinylite covered, high "Q" lead-in—includes coaxial connector for 100% shielding. Complete with mounting instructions. Shpg. wt., 1 lb.
97 CX 221. List, $5.90. NET 3.47

Fig. B—MODEL TCF-3C

Identical to the Model TCF-3B "Eight Ball" auto antenna described above, but supplied with 54" lead-in cable for convenient installation. Complete with mounting instructions. Shpg. wt., 1 lb.
97 CX 213. List, $6.15. NET 3.62

Fig. B—MODEL TA-3

The utmost in auto antenna economy! This new Ward high-quality, top-cowl auto antenna offers very attractive appearance and delivers exceptionally fine performance—at a price that makes it a value sensation. Fits top cowl of any model of car. Designed for quick, easy installation completely from outside of car. Has three sections; telescopes to 56". Constructed of sturdy, highly durable tubing; chrome plating provides high resistance to dust, grit and humidity. Has "Eight Ball" mounting insulator. Supplied with 36" polyethylene-insulated, vinylite-covered, high "Q" lead-in with coaxial-type connector. Wt., 1 lb.
92 CX 000. List, $3.95. NET 2.32

Fig. B—MODEL TB-3

Identical to the Model TA-3 above, but supplied with 54" antenna lead-in cable for convenient installation. Installation instructions. Mounts on any car. Shpg. wt., 1 lb.
92 CX 001. List, $4.15. NET 2.54

Fig. C—MODEL DCF-3A

"Phantom" type antenna with universal split-ball design for top cowl or fender mounting. Has three telescoping sections which extend to 56". When telescoped, antenna shortens to only 3½". Sturdily constructed of gleaming, chrome-plated brass tubing for handsome appearance. 54" polyethylene-insulated coaxial lead-in is vinylite covered. Complete with coaxial lead connector. Universal mounting bracket supplied for easy, non-slip attachment. May be mounted on any model car. Shpg. wt., 1¼ lbs.
97 CX 222. List, $7.95. NET 4.67

ANTENNA LEAD EXTENSION

Type C-8. 12" shielded extension cable for Ward auto radio antennas. For use with Models TCF-3B, DCF-3A and other fender-mounting models. Shpg. wt., 5 oz.
49 C 555. List, 90c. NET 53c

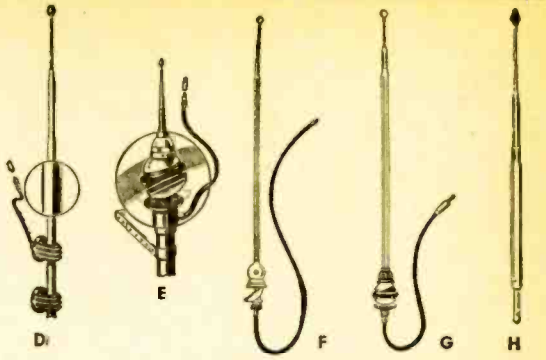
"DURA-RAMIC "AUTO ANTENNA

Model TGF-1. Completely new auto antenna—in choice of six modern colors to match latest car finishes. Constructed of opaque, corrosion-proof fiberglass. Extremely flexible; withstands severe bending. Very durable construction—the antenna elements are completely inbedded in protective fiberglass. Excellent sensitivity in low-signal areas. Incorporates highly efficient design; electrically equivalent to the best metallic-type antennas. Features "Eight-Ball" top cowl mounting. Can be adjusted to any desired angle. Special type of mounting permits installation on either a flat or curved surface. Will fit any car perfectly. Supplied with 54" vinylite covered, shielded lead-in. Length, 36". In six attractive opaque colors, to match popular car finishes. Shpg. wt., 1 lb.

92 CX 002. Red.	92 CX 005. Brown.
92 CX 003. Blue.	92 CX 006. White.
92 CX 004. Green.	92 CX 007. Yellow.

List, $7.95. NET EACH 4.67

Type C-42. Antenna Extension Cable. Permits rear mounting of "Dura-Ramic" antenna or any Ward cowl antenna. Shpg. wt., ½ lb.
49 C 556. List, $5.50. NET 3.23



NEMCO (ICA) AUTO RADIO ANTENNAS

Nemco auto antennas listed below feature chrome-plated Admiralty brass tubing, rattleproof construction, and low-loss shielded leads. Excellent for new cars and replacement use.

Fig. D—HEAVY-DUTY SIDE COWL ANTENNA

Type NCP63. 4-section telescopic type. Extends from 36" to 97". Extra large brass tubing, with heavy triple-chrome plating. Ideal 6 and 10-meter Ham antenna. Requires two holes for mounting. With 39" shielded cable. Shpg. wt., 2 lbs.
97 CX 021. NET EACH 4.09

Fig. E—DISAPPEARING TYPE ANTENNA

Type NF32. Streamlined "disappearing" antenna. Can be used on all model cars. 6½" exposed antenna extends to 54". Swivel base permits angle adjustment to match contours of car. Triple-chrome-plated brass. With shielded cable. Shpg. wt., 1¼ lbs.
97 CX 023. NET EACH 4.09

Fig. F—FENDER AND COWL MOUNT "BALL-TENNA"

This exceptionally versatile auto antenna can be mounted anywhere on any car, entirely from the outside. Universal application greatly simplifies mounting problems. Unique swivel-ball joint revolves in almost a complete circle. Quickly and easily installed. Simply insert, adjust rod to desired position, and secure. Excellent reception in all types of weather. Tubing of lustrous chrome-plated brass. Complete with 39" of low-loss, polyethylene-insulated cable.

Type NSF26. 2-Section. Extends to 49". Shpg. wt., 1 lb.
97 CX 017. NET EACH 2.91

Type NSF27. 3-Section. Extends to 60". Shpg. wt., 1 lb.
97 CX 018. NET EACH 3.50

Fig. G—FENDER AND COWL MOUNT ANTENNAS

A sectional top fender or cowl mount antenna designed for quick and easy installation on all types and makes of cars—old or new. Swivel base permits tilting to conform to car body lines. Ruggedly constructed of sturdy, heavy chrome-plated Admiralty brass. Snug fitting sections can be adjusted to desired height for maximum signal pickup. Mounts securely—once fastened in desired position will not vibrate loose. Complete with 39" weather-proof shielded lead-in cable.

Type NT60. 2-Section. Extends to 46". Wt. 1 lb.
92 CX 050. NET EACH 1.94

Type NT65. 3-Section. Extends to 58". Wt. 1½ lbs.
92 CX 051. NET EACH 2.54

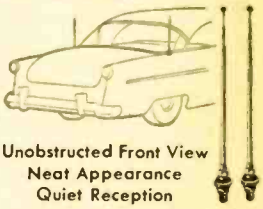
Type NT43. 4-Section. Extends to 85". Wt. 2 lbs.
92 CX 052. NET EACH 4.09

Fig. H—REPLACEMENT ANTENNA ROD

Type NA1500. Replaces windshield-mount antennas. Three telescopic sections. Extends 15" to 34". Chrome-plated brass. For Buicks, Hudsons, Packards. Shpg. wt., 14 oz.
97 C 024. NET 1.73

REAR MOUNT DUAL ANTENNA

Type NT50. Dual auto antenna for mounting on rear fenders, or any flat surface at rear of car. Remote location of antennas minimizes ignition interference. Allows unobstructed windshield vision. Has 2 three-section, telescoping antennas, 12½" closed, 27½" extended. Swivel-type antenna bases, chrome finished. 22 ft. coaxial cable (high "Q," low-loss type, polyethylene insulated). Instructions, cable clips, pin-plug adapter and Y-connector. Y-connector is supplied spliced to cable for speedy installation. Shpg. wt., 3 lbs.



Unobstructed Front View
Neat Appearance
Quiet Reception

92 CX 055. List, $11.95. NET 5.59

EXTENSION CABLES FOR AUTO ANTENNAS

Stock No.	Type No.	Description	Wt. oz.	NET
97 C 033	NL715	12" lead-in extension	4	.50
92 C 053	NL716	18" lead-in extension	5	.68
97 C 034	NL717	24" lead-in extension	5	.88
92 C 054	NL718	36" lead-in extension	8	1.09

MALLORY REPLACEMENT VIBRATORS

Mallory precision vibrators, backed by years of outstanding performance, offer the dependability, the long life and the trouble-free service required for all vibrator applications. These carefully designed, precision units provide the lowest cost-per-hour of actual use. Their springs are fabricated of high-grade clock-spring steel; held in perfect alignment by a rugged frame. 105-strand lead wire virtually defies vibration—connections stay firmly intact. If Mallory type number is not known, refer to Vibrator Guide listed below, or order from ALLIED, stating make, model, tube line-up of set, or part number of original vibrator. Average shpg. wt., 8 oz.

Stock No.	Mfr's Type	Volts	Size	List	NET EACH
56 P 000	4–4	6	1½x2⅞"	$ 2.50	1.47
56 P 042	273C	6	2x4½"	9.15	5.38
56 P 054	294	6	1½x3¼"	4.90	2.88
56 P 070	505P	6	1 5/16x3½"	4.90	2.88
56 P 120	509P	6	1½x2⅞"	4.15	2.44
56 P 077	716	6	1 5/16x3½"	7.70	4.53
56 P 079	725C	6	1½x3¼"	8.55	5.03
56 P 080	G725C	12	1½x3¼"	9.95	5.85
56 P 082	742	6	1½x2⅞"	7.70	4.53
56 P 123	W759	4	1½x2⅞"	8.25	4.85
56 P 085	825C	6	1½x3¼"	6.90	4.06
56 P 110	826C	6	1½x3¼"	6.35	3.73
56 P 086	F826C	32	1½x3¼"	7.70	4.53
56 P 111	G826C	12	1½x3¼"	7.70	4.53
56 P 092	854	6	1½x3¼"	4.90	2.88
56 P 113	859	6	1½x2⅞"	4.70	2.76
56 P 118	W859	4	1½x2⅞"	4.90	2.88
56 P 094	870	6	1½x2⅞"	$ 4.90	2.88
56 P 121	903M	6	1½x2⅞"	4.15	2.44
56 P 114	1100	6	1 5/16x2⅛"	4.90	2.88
56 P 127	T4002	2	1½x1½x2⅛"	10.70	6.29
56 P 128	T4003	2	1 5/16x2⅛"	9.80	5.76
56 P 135	4501	6	1½x2⅞"	6.35	3.73
56 P 140	M4501	24	1½x2⅞"	6.35	3.73
56 P 141	4512	6	1½x2⅞"	6.90	4.06
56 P 142	4513	6/12	1½x2⅞"	6.90	4.06
56 P 143	4514	6	1½x2⅞"	6.90	4.06
56 P 144	G4548	12	1½x3¼"	8.55	5.03
56 P 145	G4549	12	1½x3¼"	8.55	5.03
56 P 130	G874	12	3¼x1½"	4.90	2.88
56 P 131	G4501	12	1½x2⅞"	6.90	4.06
56 P 137	4546	6	1½x3¼"	7.70	4.53
56 P 138	4548	6	1½x3¼"	7.70	4.53
56 P 139	4549	6	1½x3¼"	7.70	4.53

SK-1 SOCKET ASSORTMENT

Set of five assorted vibrator sockets. Made of laminated bakelite with solid riveted construction for sturdy support of the heaviest vibrators. With perforated solder lug terminals for low resistance connections. Shpg. wt., 4 oz.

56 P 152. NET 1.22

TYPE GC7 GROUND CUP

For use with 1½" diameter vibrators. Provides excellent low impedance connection between shield can of vibrator and car frame for suppression of hash radiation. Shpg. wt., 2 oz.

56 P 151. NET 26c

4-4 6-VOLT VIBRATOR

One of the most popular, widely used replacement vibrators available. Incorporated as original equipment by many automobile radio manufacturers and an exact replacement for many others. Built to deliver long life and maximum current-carrying capacity. Every unit is individually tested under load conditions for output, starting voltage, etc. 4-prong. Size, 1½x2⅞". Shpg. wt., 5 oz.

56 P 000. List, $2.50. NET EACH, 1.47 5 or more, EACH .. 1.32

MALLORY VIBRATOR GUIDE

Complete guide for vibrator replacements. Listings by receiver name and model number. FREE with Mallory vibrator order. 50 pages. 8 oz.

37 P 012 NET 15c

ANTI-STATIC POWDER

Anti-Static Powder minimizes auto radio static interference caused by rotation of car wheels, brake drums and tires. Eliminates static electricity. Easy to use. Injector (listed below) simplifies getting powder inside of tire tube. Rotating action of wheel distributes powder throughout tube. Powder effective for life of tube.

Static Powder Packet. 5 individual packs, sufficient for 5 tires. Wt., 2 oz.
56 B 687. NET 48c

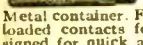
Static Powder Injector. Easy-to-use injector holds 1 pack of powder. Special tip fits tire tube valve stem. Injects powder when inflating tire. Shpg. wt., 10 oz.
56 B 686. NET 74c

ANTENNA CONNECTOR

Bayonet type connector for terminating auto antenna leads. With spring-loaded contact to insure low resistance connection and elimination of intermittent open. Matching caps prevent cable fraying. Easily installed with no special tools. Measures 1⅜" long x ⅝" diameter. Shpg. wt., 2 oz.

41 B 740. NET EACH 8c
10 or more, EACH ..... 7¢

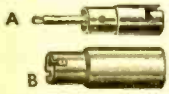
FUSE HOLDERS



Metal container. Fits 1¼" 3AG Fuses. Spring-loaded contacts for firm, sure, contact. Designed for quick access and simplest possible fuse replacement. Lightweight, does not require additional support bracket. Die-stamped for easy identification. Size, 2½x⅜". Wt., 2 oz.

41 B 735. NET EACH 11c
10 or more, EACH ..... 10¢

AUTO RADIO LEAD-IN ADAPTERS

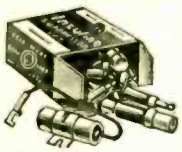


Convenient fittings for terminating auto radio antenna lead-in cables and all other metal-braid shielded coaxial conductors. Fit ¼" cable. Av. shpg. wt., 2oz.

Fig. A. Converts Delco bayonet fitting to Motorola type fitting.
46 N 215. NET EACH 28c

Fig. B. Converts Motorola pin-plug to Delco bayonet fitting.
46 N 217. NET EACH 7c

ICA TYPE SK INTERFERENCE SUPPRESSOR SETS



Assure noise-free auto radio reception and maximum efficiency for both radio and motor with these individually tailored sets. Designed with long resistors, minimum capacity, and best possible ratio of RF to DC resistance. Very strong mechanically, they will withstand vibration, heat, high voltage, and every weather condition. For all types of cars. Packaged as complete kits, with full instructions for installation. Contain necessary condensers, resistors, etc., for highly effective interference suppression. *Wire-wound resistors. Av. shpg. wt., 1 lb.

Type SK-2. For all 6 cylinder cars (except Fords).
56 B 663. NET 2.13

Type SK-8*. For all 8 cylinder cars.
56 B 677. NET 3.93

FRONT WHEEL NOISE SUPPRESSOR

ICA Type 4476B. Reduces static electricity generated in front wheels of car. Fits inside hub cap. Shpg. wt., 2 oz.

56 B 682. PKG. OF 2 ..... 19c
5 PKGS. PER PKG ..... 16¢

ICA DISTRIBUTOR SUPPRESSOR

Type 330. Carbon type. Has 10,000 ohms resistance. Low DC resistance assures full motor efficiency. For use on cars where only one suppressor is needed. Eliminates auto ignition noises—assures noise-free reception. Shpg. wt. 3 oz.

56 B 672. NET EACH 49c
10 or more, EA. ..... 45¢

CHROME-PLATED BRASS KNOB

Chrome-plated brass replacement knob. Complete with set screw. Perfect replacement for knobs on most auto radios. For ¼" shaft. Ideal for volume and tuning control shafts. Shpg. wt., 4 oz.

56 C 751. NET EACH 18c

CORNELL-DUBILIER "AUTRONIC EYE" & 12 VOLT VIBRATORS

Cornell-Dubilier replacement type vibrators for use in late model automobiles and for replacement in Autronic Eye circuits. Sturdily constructed to provide long, dependable service. Mounted in sponge rubber for quiet operation. Heavy-duty contacts for fast starting. Built to withstand severe roadshock and vibration. Individually tested under actual operating conditions. Shpg. wt., 8 oz.

Type 6326. Replacement for Philco radio Models 822 and 823. Used in Chrysler Crown Imperial automobiles. For 12-volt operation. Have 4-prong bases. Size, 1½x2⅞".
56 P 265. List, $5.50. NET 3.23

Type 6330. Replacement for Delco radio Models 8550 and 1220155. For Oldsmobile, Buick, Cadillac, and GMC trucks. For 12-volt operation. Have 3 prongs. Size, 1½x3⅛".
56 P 266. List, $4.90. NET 2.88

Type 6370. Replacement in Guide Lamp unit, No. 5944300. Especially designed for use in Autronic Eye circuits. Have 4-prong bases. For 12-volt operation. Size, 1½x3⅛".
56 P 267. List, $4.70. NET 2.76

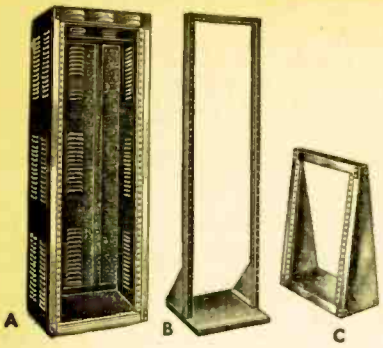
Type 5370. Replacement unit in Guide Lamp unit. No. 5943336. Supersedes No. 5520-4. Used in Autronic Eye circuits. Have 4-prong bases. For 6-volt operation. Size, 1½x3⅛".
56 P 268. List, $4.90. NET 2.88

INVERTER VIBRATORS

Custom-built replacement vibrators. Exact replacements for the interrupter vibrators used in the following equipment: 3077 for Cornell-Dubilier Powercon, 110RT15; 3079 for 110RT-35; 1315H for 110RT25; 4123 for 6R10; 6VB6 for Knight 25-watt mobile amplifier, 93SZ645; 2522 for 110PA5 and 110PB5 11028 for many early model Electronic Laboratory units. Sturdily constructed to provide long life and dependable performance even under extreme operating conditions. Shock mounted for quiet operation and reduced vibration. Av. Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Input Voltage	NET EACH
82 P 750	3077	110	8.56
82 P 751	3079	110	11.41
82 P 752	11028	110	7.19
82 P 753	6VB6	6	7.19
82 P 754	2522	45	5.09
82 P 756	4123	6	10.05
82 P 757	1315H	110	8.29

Bud Relay Racks and Cabinets



STURDY RELAY RACKS FOR ALL PURPOSES

Fig. A—DELUXE ENCLOSED RACKS

Ruggedly constructed racks. 16-gauge steel with 1/8" panel supports. Have sturdy bottom supports for fastening casters directly to base. All have chassis-type base. Gray wrinkle finish. Drilled and tapped for 19" panels. With panel mounting screws and cup washers.

Stock No.	Type	Overall Size	Panel Height	Wt., Lbs.	NET
98 PZ 843	CR-1771	47 5/16x22x17 1/4"	42"	95	38.53
98 PZ 844	CR-1772	66 5/16x22x17 1/4"	61 1/4"	122	51.01
98 PZ 845	CR-1773	82 5/16x22x17 1/4"	77"	150	60.25
98 PZ 808	CR-1774	42 1/16x22x17 1/4"	36 1/4"	90	33.65

SUPER DELUXE ENCLOSED CABINET RACKS

(Not illustrated.) Styling similar to Deluxe Cabinet Racks above, but feature adjustable panel mounting supports; can be positioned from 1" to 6" behind the cabinet front, at 1" intervals. Front and rear doors. 16-gauge steel with 1/8" panel supports. Welded bottom supports permit fitting casters directly to base. Attractive gray wrinkle finish. With hardware.

Stock No.	Type	Overall Size	Panel Height	Wt., Lbs.	NET
98 PZ 856	CR-2174	42 1/16x22x17 1/4"	36 1/4"	108	47.97
98 PZ 857	CR-2171	47 5/16x22x17 1/4"	42"	117	54.98
98 PZ 858	CR-2172	66 5/16x22x17 1/4"	61 1/4"	146	70.18
98 PZ 859	CR-2173	82 5/16x22x17 1/4"	77"	191	85.11

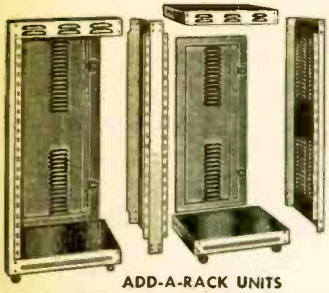
Fig. B—OPEN RELAY RACKS

Chassis-type base, except* has 1/8" iron angles and brackets for bolting to floor. Black wrinkle finish.

Stock No.	Type	Overall Size	Panel Height	Wt., Lbs.	NET
98 PZ 840	RR-1263	35 1/2x20x22"	31 1/2"	38	18.11
98 PZ 841	RR-1264	70 1/2x20x22"	66 1/2"	53	20.64
98 PZ 809	*RR-1265	72 1/2x20 1/4x15"	66 1/2"	100	47.86

Fig. C—DESK TYPE RACKS

Stock No.	Type	Overall Size	Panel Height	Wt., Lbs.	NET
98 PZ 848	RR-1248	24x20 1/4x12"	21"	15	6.96
98 PZ 849	RR-1249	31x20 1/4x12"	28"	17	8.62

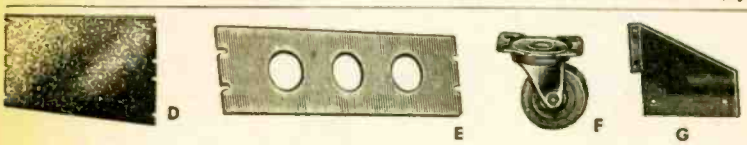


ADD-A-RACK UNITS

ADD-A-RACK SERIES

For addition of rack cabinets to deluxe, enclosed racks (Fig. A, above). Consist of four sections: top, bottom, door and coupling panel. Replace either side panel of deluxe racks with coupling panel; add new top and bottom; attach original side panel to new top and bottom. Placing new door on back completes assembly. Additional racks can be added at any time. RC7756 casters (not included) fit these racks. Same sizes and construction as deluxe racks. With hardware.

98 PZ 816. Type AR-1778 for CR-1774. Shpg. wt., 75 lbs. NET 31.90
98 PZ 817. Type AR-1775 for CR-1771. Shpg. wt., 77 lbs. NET 37.04
98 PZ 818. Type AR-1776 for CR-1772. Shpg. wt., 100 lbs. NET 46.31
98 PZ 819. Type AR-1777 for CR-1773. Shpg. wt., 127 lbs. NET 56.69



RELAY RACK ACCESSORIES

Fig. D—STEEL RACK PANELS

Attractive relay rack panels with standard RETMA notching. Made of high grade steel. 1/8" thick. All panels are 19" wide. Available in either black or gray crackle finish.

Black	Gray	Height	Lbs.	NET
98 PX 723	98 PX 738	1 3/4"	2	.74
98 PX 724	98 PX 739	3 1/2"	3	.84
98 PX 725	98 PX 740	5 1/4"	4	1.00
98 PX 726	98 PX 741	7"	6	1.12
98 PX 727	98 PX 742	8 3/4"	7	1.34
98 PX 728	98 PX 743	10 1/2"	8	1.65
98 PX 729	98 PX 744	12 1/4"	9	1.91
98 PX 733	98 PX 745	14"	10	2.21
98 PX 734	98 PX 746	15 3/4"	12	2.47
98 PX 735	98 PX 747	17 1/2"	13	2.78
98 PX 736	98 PX 748	19 1/4"	14	3.09
98 PX 737	98 PX 749	21"	15	3.40

Fig. D—ALUMINUM RACK PANELS

High quality aluminum panels. Standard RETMA notching. Made from 1/8" thick aluminum. All panels are 19" wide. Easy to cut. Available in black or gray finish.

Black	Gray	Height	Lbs.	NET
98 PX 864	98 PX 895	1 3/4"	1	.97
98 PX 865	98 PX 896	3 1/2"	2	1.19
98 PX 866	98 PX 897	5 1/4"	2	1.58
98 PX 867	98 PX 898	7"	2	1.94
98 PX 887	98 PX 899	8 3/4"	3	2.32
98 PX 888	98 PX 877	10 1/2"	3	2.78
98 PX 889	98 PX 878	12 1/4"	4	3.19
98 PX 890	98 PX 879	14"	4	3.92
98 PX 891	98 PX 861	15 3/4"	5	4.05
98 PX 892	98 PX 862	17 1/2"	5	4.16
98 PX 893	98 PX 863	19 1/4"	6	4.80
98 PX 894	98 PX 803	21"	7	5.45

Fig. E—STEEL METER PANELS

Neat-appearing rack panels. Speed construction. 2 13/16" dia. holes to fit 3" meters. 5 1/4" high. 19" wide. 1/8" thick. Available in black or gray finish. Shpg. wt., 3 1/2 lbs.

Black	Gray	Type	Holes	NET
86 PX 210	86 PX 211	PS-442	3	1.37
86 PX 212	86 PX 213	PS-443	5	1.91

Fig. F—SWIVEL TRUCK CASTERS

Type RC-7756. Heavy-duty type, for relay racks. 4 will carry 400 pounds. Hard rubber. Ball-bearing mounted. Wt., 10 oz.
86 P 264. NET EACH 88c

CHASSIS SUPPORTING ANGLES

Type SA-1349. Relay rack chassis runners 14 1/2" long, 3" wide. Afford ample support for a standard 17" width chassis or shelves below. Black finish. Shpg. wt., 5 lbs.
86 P 235. NET PER PAIR 1.71

HEAVY GAUGE STEEL RACK SHELVES

Slide in from rear of cabinet. Require chassis support angles above. Black crackle finish.

No.	Type	H.W.D.	Lbs.	NET
86 PX 231	CB-1976	1x19x15"	7	3.04
86 PX 232	CB-1977	1x19x12"	6	2.30

Fig. G—CHASSIS MOUNTING BRACKETS

Mount against rack. Formed of heavy gauge steel, cut away to provide clearance for flush mounting of chassis. Black enamel finish. For chassis 3" high, except *for 4" chassis.

No.	Type	Ht.	Depth	Lbs.	PAIR
86 P 219	MB-458	6 1/2"	8"	2	.88
86 P 220	MB-448	6 1/2"	10"	3	1.14
86 P 218	MB-459	6 1/2"	11"	3	1.23
86 P 221	MB-449	6 1/2"	12"	3	1.50
86 P 224	MB-460	6 1/2"	13"	3	1.39
86 P 222	MB-450	*8 1/2"	10"	3	1.65
86 P 223	MB-451	*8 1/2"	13"	4	1.75

TRIANGULAR PANEL BRACKETS

Panel-mounted chassis support. Heavy steel.

No.	Type	Ht.	Depth	Lbs.	PAIR
86 P 226	MB-1266	5"	5"	1	.82
86 P 227	MB-1267	7"	7"	2	.95
86 P 228	MB-1268	9"	9"	2	1.13

STEEL DOOR RACK PANEL

Type PS-616. 1/8" high-grade sheet steel. Black wrinkle enamel. Door opening, 15 3/8x 7 1/2". Size, 19x12 1/4". Shpg. wt., 10 lbs.
86 PX 175. NET 5.10

MINIATURE AMPLIFIER FOUNDATION

Type CA-1754. New, extremely compact, sturdily built amplifier foundation. Designed expressly to meet the needs of builders employing miniature tubes, small transformers and other miniaturized components. Chassis size is only 2" high, 7" wide, 5" deep.

With cover fastened in place, entire unit stands only 6" high! Removable cover includes a carrying handle mounted on top for comfortable hand grip and tireless carrying. Cover is perforated to allow sufficient ventilation of amplifier or other apparatus.

Entire unit is made from cold rolled steel—welded construction assures maximum strength and full protection of components. Cover is fastened to chassis sides by means of four self-tapping screws. In attractive, black-wrinkle finish. Shpg. wt., 2 lbs.
86 P 214. NET 3.60

RELAY RACK SLIDE DRAWER

Type SD-1717. Drawer for rack or cabinet equipment. Excellent as a record player mounting, base for portable typewriter, writing table, or handy drawer space. Easily and quickly assembled and installed in any standard rack or cabinet. Can't fall out or tilt. Chassis formed from one-piece 14-gauge aluminum, electrowelded. Support brackets of 1/8" aluminum. Slide rail fastens securely to chassis, slides easily on ball bearings in channel. Will support up to 50 pounds. Stop screw on slide rail prevents drawer from falling out of channel. Chassis and slide rail finished in gold-tone. Support brackets and channel finished in etched aluminum. Accurately punched to conform with standard panel mounting holes. Chassis size, 16 1/4x14x3", with 1/2" flange top and bottom. Less drawer plate. Shpg. wt., 5 lbs.
86 PX 256. NET 10.98

Type TP-1718. DRAWER PLATE. For use with slide drawer above. May be attached to top or bottom of chassis. Size, 16 1/4x14". Shpg. wt., 1 3/4 lbs.
86 PX 257. NET 2.04

Bud Metal Products

HEAVY-DUTY CHASSIS BASES

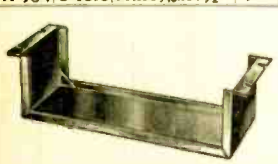
Ruggedly constructed chassis bases for heavy duty applications. Formed of one-piece heavy 1/16" steel. Corners are spot welded and sides are folded over at bottom. Electro-zinc plated. Complete with bottom plates and mtg. screws.

Stock No.	Type	H.W.D.	Lbs.	NET
86 PX 945	CB-1764	2x17x 8"	6½	3.28
86 PX 240	CB-1765	3x17x 8"	8	3.57
86 PX 241	CB-1766	2x17x11"	9	3.74
86 PX 242	CB-1767	3x17x11"	9½	4.14
86 PX 243	CB-1768	2x17x13"	10	4.51
86 PX 244	CB-1769	3x17x13"	10½	4.96
86 PX 946	CB-1770	4x17x13"	11½	5.49

SLOPING PANEL CABINETS

Very attractive, professionally styled, sloping panel steel cabinets. Hinged top for easy access to tubes and other top-of-chassis components. Removable front panel. Excellent for amplifiers, oscillators, test instruments, power supplies, etc. Handsome black-wrinkle finish.

Stock No.	Type	H. W. D.	Lbs.	NET
86 P 900	C-1584	6½x7 1/16x7 5/16"	3	3.23
86 P 901	C-1585	6½x9 1/16x7 5/16"	3½	3.67
86 P 902	C-1586	6½x11 1/16x7 5/16"	4	4.07
86 PX 903	C-1892	8x13 1/16x8½"	5¼	4.89
86 PX 904	C-1893	10x18 1/16x10½"	9	6.85



PANEL MOUNTING CHASSIS

Open-side aluminum chassis designed for mounting on standard 19" telephone-type relay racks, or horizontal mounting on panels. Made of .062" aluminum with reinforced corners. 1" flange on ends, with 4 elongated holes for mounting. Front flange has standard panel notching. All other edges have ⅝" flanges. Etched aluminum finish. All models are 17" wide, excluding flange, and 5 9/32" deep.

Stock No.	Type	Height	Lbs.	NET
86 PX 185	CB-1370	1¾"	1	1.96
86 PX 186	CB-1371	3½"	1½	2.21
86 PX 187	CB-1372	5¼"	1¾	2.32
86 PX 188	CB-1373	7	2¼	2.55
86 PX 189	CB-1374	8¾"	2½	3.06
86 PX 190	CB-1375	10½"	3	3.23
86 PX 191	CB-1376	12¼"	3¼	3.81
86 PX 192	CB-1377	14"	3½	4.12

NEW ALUMINUM METER CASES

New, lightweight aluminum meter cases. These very sturdy, well-built units are available for either 2" or 3" meters. Have sloping front with rounded top corner. Excellent as "S" meter case for use with Amateur receivers, compact measurement equipment and many other applications. Their aluminum construction makes them particularly valuable for use where meter accuracy must not be affected by case—case has no magnetic effect. Supplied less terminal feed-through insulators. Model CMA-2065 is for use with 2" meters; CMA-2066 is for use with 3" meters. Attractive, etched aluminum finish. Size: 4¼" high, 4" wide, 4" deep. Shpg. wt., ½ lb.

Stock No.	Mfr's Type	Hole Dia.	NET EACH
86 P 778	CMA-2065	2.334"	1.05
86 P 779	CMA-2066	2.835"	1.05

STANDARD CHASSIS BASES

High-quality, sturdily constructed chassis bases. Available in electro-zinc-plated steel and lightweight, etched-finish aluminum types. Carefully formed, one-piece construction; corners are reinforced and spot-welded. The four sides are folded at bottom to provide extra strength; bottom fold also permits easy addition of bottom plate. Aluminum types are spot-welded with government approved equipment; same as used for welding aluminum aircraft parts. Steel chassis gauges: *No. 22; †No. 20; §No. 18. Aluminum chassis gauges (aluminum gauge): ‡No. 18; **No. 16; ††No. 14. Less bottom plates (see page 240).

H. W. D., Inches	Zinc-Plated Steel				Aluminum			
	Stock No.	Type	Lbs.	NET	Stock No.	Type	Lbs.	NET
2x6x4					86 P 930	AC-431‡	¾	1.05
2x7x5	86 P 277	CB-629*	1¼	.96	86 P 112	AC-402‡	¾	.86
2½x9½x5	86 P 905	CB-645*	1½	1.02	86 P 113	AC-403‡	¾	1.02
1½x9½x5	86 P 906	CB-776*	1¼	.90				
3x6x4					86 P 932	AC-430‡	¾	1.05
3x7x5					86 P 933	AC-429**	1	1.08
3x9½x5					86 P 114	AC-421‡	1	1.22
3x10x5	86 P 271	CB-605*	1½	1.20	86 P 127	AC-404‡	1	1.27
3x13x5					86 P 934	AC-422‡	1	1.34
3x14x6	86 P 907	CB-756†	2	1.44				
3x17x6					86 PX 935	AC-433**	1½	1.94
2x7x7	86 P 272	CB-1191*	1¾	1.02	86 P 115	AC-405‡	¾	1.03
2x9x7	86 P 273	CB-1192*	1¾	1.20	86 P 116	AC-406‡	¾	1.11
2x11x7	86 P 274	CB-1193†	1¾	1.24	86 P 117	AC-407‡	1	1.23
3x12x7	86 P 275	CB-793†	2	1.41	86 P 118	AC-408‡	1¼	1.49
2x13x7	86 P 276	CB-1194†	2¼	1.35	86 P 119	AC-409‡	1	1.29
2½x13½x5	86 P 908	CB-1198†	2	1.47				
3x15x7	86 PX 909	CB-1189†	2¼	1.64	86 PX 936	AC-411**	1¾	2.10
3x15x8½	86 PX 910	CB-666†	2¼	1.86				
3x17x4	86 PX 911	CB-1066†	2½	1.47	86 PX 937	AC-432**	1½	1.88
2½x17x7	86 PX 912	CB-1199†	2¾	1.74				
3x17x7	86 PX 913	CB-758†	2	1.78	86 PX 938	AC-423**	1¼	2.11
2½x10x8	86 P 914	CB-702†	2¼	1.61				
2½x12x8	86 P 915	CB-704†	2¾	1.71				
3x12x8	86 P 916	CB-760†	2	1.61	86 P 939	AC-424**	1¼	1.89
2x17x8	86 PX 917	CB-774†	2¼	1.64	86 PX 940	AC-425**	1¾	1.96
3x17x8	86 PX 918	CB-775†	3½	1.74	86 PX 120	AC-412**	2	2.28
3x12x10	86 P 919	CB-1195†	3¼	1.71	86 P 121	AC-413**	1¾	2.11
3x14x10	86 P 920	CB-779†	4¼	1.80	86 P 941	AC-414**	2	2.47
2x17x10	86 PX 278	CB-769†	3½	1.80	86 PX 942	AC-415**	1½	2.29
3x17x10	86 PX 921	CB-1196§	5½	2.10	86 PX 943	AC-416**	2¼	2.67
3x23x10	86 PX 922	CB-1197§	6	2.63				
2x17x11	86 PX 923	CB-770§	4¼	2.25	86 PX 122	AC-426††	2½	2.69
3x17x11	86 PX 266	CB-771§	4¼	2.49	86 PX 123	AC-417††	3	3.09
2x17x12	86 PX 925	CB-661§	4¼	1.92				
3x17x12	86 PX 268	CB-662§	5¼	2.25	86 PX 128	AC-418††	3	3.27
2x17x13	86 PX 269	CB-772§	5½	2.65	86 PX 944	AC-419††	2¾	2.90
3x17x13	86 PX 270	CB-773§	6	2.87	86 PX 124	AC-420††	3	3.41
4x17x10	86 PX 926	CB-641§	7	2.30	86 PX 125	AC-427††	3¼	3.51
4x17x13	86 PX 927	CB-643§	8	3.38	86 PX 126	AC-428††	4	3.97
5x17x10	86 PX 928	CB-624§	8	4.12				
5x17x13	86 PX 929	CB-626§	8½	4.51				

DELUXE CABINET RACKS

Attractive, ruggedly constructed 16-gauge steel cabinet racks. Welded joints assure rigidity. Neat, professional styling enhances appearance of equipment. Ideal for commercial broadcast stations, Amateur transmitters, sound or test equipment, etc. Cabinets have rounded corners and smart, red inlaid chrome trim. All have recessed, hinged top doors, equipped with smooth-operating snap locks. Adequate ventilation is provided by means of louvered sides and a 2" opening in the bottom of the back, extending the entire width of the cabinet. Models CR-1743, CR-1744 and CR-1745 also have hinged back doors equipped with twist locks. Models CR-1740, CR-1741 and CR-1742 have welded back panels. All panel mountings are drilled for standard RETMA notched panels and tapped for 10-32 screws. Supplied with panel mounting screws and cup washers. Units are 14¾" in depth and 22" wide. "No-scratch" feet minimize marring of surfaces racks are placed on. Wrinkle finish.

Stock No. Gray	Stock No. Black	Mfr's Type	Ht.	Panel Space	Wt. Lbs.	NET EACH
86 PZ 729	98 PZ 835	CR-1741	10 9/16"	8¾"	28	12.35
86 PZ 730	98 PZ 804	CR-1740	12 5/16"	10½"	30	14.10
86 PZ 731	98 PZ 836	CR-1742	14 1/16"	12¼"	32	15.02
86 PZ 732	98 PZ 837	CR-1743	19 5/16"	17½"	38	19.76
86 PZ 733	98 PZ 838	CR-1744	28 1/16"	26¼"	48	23.16
86 PZ 734	98 PZ 839	CR-1745	36 1 3/16"	35"	60	25.63

METAL UTILITY CABINETS

General purpose cabinets for all types of electronic equipment. In welded steel or high grade sheet aluminum construction for rigidity. Cabinets have two removable sides for easy, quick access to interior. Sides attached to flange of cabinet frame with self-tapping screws. Variety of sizes makes these cabinets useful for all types of electronic equipment. Steel units are recommended for use where maximum strength is needed; aluminum units for lightweight applications. Excellent low-cost units for building receivers, monitors, frequency meters, VFO's, transmitters, and other equipment.

Well adapted for shielding of high-gain preamplifier stages, RF sections and other special circuits which must be isolated from other stages. Steel cabinets in handsome, durable black-wrinkle finish—aluminum cabinets have etched aluminum finish.

STEEL

Stock No.	Type	H.W.D.	Lbs.	NET
86 P 200	CU883	4x4x2"	1¼	.88
86 P 201	CU728	4x5x3"	1½	.98
86 P 202	CU729	6x5x4"	2½	1.23
86 P 203	CU1098	6x6x6"	3	1.34
86 P 204	CU1099	9x6x5"	4	1.92
86 P 205	CU879	10x8x7"	5	2.37
86 P 207	CU880	10x10x8"	8	2.99
86 P 206	CU1124	12x7x6"	5	2.54
86 P 208	CU881	12x11x8"	9	3.70
86 P 209	CU882	15x9x7"	9	4.22

ALUMINUM

Stock No.	Type	H.W.D.	Lbs.	NET
86 P 735	AU-1083	4x4x2"	¼	.93
86 P 736	AU-1028	4x5x3"	¼	1.05
86 P 737	AU-1029	6x5x4"	½	1.36
86 P 738	AU-1039	6x6x6"	¾	1.42
86 P 739	AU-1040	9x6x5"	1	2.03

ICA Metal Chassis

STEEL AND ALUMINUM CHASSIS BASES

One-piece steel chassis bases with reinforced welded corners. Sides have folded lips on the bottom for added strength and rigidity. Lips are drilled for attaching bottom plates listed below. Chassis bases up to and including 10x17x3" are 20 gauge; others, 18 gauge, except 6x14x3", 16 gauge. Aluminum bases are 16 gauge. *U-shaped chassis; two ends are open.

Size, H.W.D.	Zinc-Plated Stock No.	Zinc-Plated Type	Zinc-Plated NET	Black Ripple Stock No.	Black Ripple Type	Black Ripple NET	Wt., Lbs.	Aluminum Stock No.	Aluminum Type	Aluminum NET	Wt., Lbs.
1½x 8 x4½"*	86 P 500	1560	.75	86 P 650	4000	.75	1½	.....	.....	.....	.....
1½x 9½x5" *	86 P 501	1530	.76	86 P 651	4001	.76	1½	.....	.....	.....	.....
3 x 9½x5"	86 P 502	1565	1.06	86 P 652	4002	1.06	2	86 P 463	29002	1.15	¾
3 x13 x5"	86 P 504	1566	1.30	86 P 654	4003	1.30	2¼	86 P 472	29003	1.23	1
3 x10 x5½"	86 P 503	1582	1.15	86 P 653	4032	1.15	2	86 P 488	29004	1.40	1
3 x14 x6"	86 P 546	1518	1.23	86 P 677	4043	1.23	2¼	86 P 448	29034	1.76	1¼
2 x 7 x7"	86 P 505	1526	.88	86 P 655	4024	.88	1¾	86 P 464	29005	.97	½
2 x 9 x7"	86 P 506	1569	1.06	86 P 656	4004	1.06	2¼	86 P 473	29006	1.06	¼
2 x11 x7"	86 P 507	1570	1.10	86 P 657	4005	1.10	2½	86 P 474	29007	1.18	1
3 x12 x7"	86 P 508	1527	1.24	86 P 658	4006	1.24	2¾	86 P 465	29008	1.38	1¼
2 x13 x7"	86 P 509	1571	1.18	86 P 659	4007	1.18	3	86 P 466	29009	1.23	1
3 x17 x7"	86 PX 510	1528	1.54	86 PX 660	4009	1.54	3½	86 PX 489	29011	1.79	1¼
3 x12 x8"	86 P 522	1567	1.59	86 P 672	4013	1.40	3½	86 P 427	29012	1.68	1¼
2 x17 x8"	86 PX 512	1573	1.42	86 PX 662	4014	1.42	3¼	86 PX 432	29013	1.85	1¼
3 x17 x8"	86 PX 523	1575	1.55	86 PX 673	4035	1.55	3¼	86 PX 467	29014	2.18	1¼
3 x12 x10"	86 P 514	1520	1.47	86 P 664	4016	1.47	3½	86 P 449	29015	1.85	1¼
3 x14 x10"	86 P 515	1568	1.55	86 P 665	4017	1.55	3½	86 P 428	29016	2.35	1¼
3 x17 x10"	86 PX 516	1583	1.60	86 PX 666	4033	1.60	4¼	86 PX 429	29017	2.53	2
4 x17 x10"	86 PX 520	1580	1.99	86 PX 670	4030	1.99	4¼	86 PX 430	29025	2.91	2¼
3 x23 x10"	86 PX 517	1522	2.38	86 PX 667	4019	2.28	6	86 PX 433	29018	3.25	2¼
2 x17 x11"	86 PX 524	1577	2.13	86 PX 674	4027	1.96	4¼	86 PX 468	29019	2.32	1¼
3 x17 x11"	86 PX 544	1519	2.16	86 PX 675	4023	2.16	5¼	86 PX 469	29020	2.94	2
3 x17 x12"	86 PX 519	1578	1.98	86 PX 669	4028	1.98	4	86 PX 434	29022	3.12	2¼
2 x17 x13"	86 PX 545	1579	2.30	86 PX 676	4029	2.42	5¾	86 PX 470	29023	2.76	1¾
3 x17 x13"	86 PX 518	1524	2.50	86 PX 668	4021	2.50	6	86 PX 471	29024	3.29	2¼
4 x17 x13"	86 PX 521	1581	2.94	86 PX 671	4031	2.94	7	86 PX 431	29026	3.76	2½

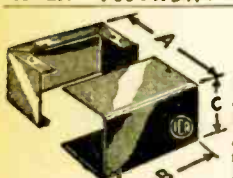
43 N 620. Volume Control Bracket. Punched right-angle bracket for above-chassis mounting of volume and tone controls. Wt., 3 oz. NET....6¢

BOTTOM PLATES FOR CHASSIS BASES

Bottom plates to fit the chassis bases listed above. In zinc-plated or black ripple heavy-gauge steel plate and aluminum. Four raised bosses in corners to prevent marring and scratching. Drilled for No. 6 self-tapping screws.

Size Inches	Zinc-Plated Stock No.	Zinc-Plated Type	Zinc-Plated NET	Black Ripple Stock No.	Black Ripple Type	Black Ripple NET	Wt., Lbs.	Aluminum Stock No.	Aluminum Type	Aluminum NET	Wt., Lbs.
5 x 9½	86 P 525	1601	.39	86 P 625	4051	.39	1	.....	.....	.....	.....
5 x13	86 P 527	1602	.56	86 P 627	4052	.56	1	86 P 580	8702	.78	¼
5½x10	86 P 526	1625	.49	86 P 626	4075	.49	1	86 P 581	8725	.72	¼
7 x 7	86 P 528	1623	.59	86 P 628	4073	.59	1	86 P 582	8723	.72	¼
7 x 9	86 P 529	1603	.56	86 P 629	4053	.56	1	86 P 583	8703	.75	¼
7 x11	86 P 530	1604	.64	86 P 630	4054	.64	1	86 P 584	8704	.85	¼
7 x12	86 P 531	1605	.67	86 P 631	4055	.67	1	86 P 585	8705	.90	¼
7 x13	86 P 532	1606	.67	86 P 632	4056	.67	1	86 P 586	8706	1.06	¼
7 x17	86 P 533	1608	.76	86 P 633	4058	.76	1	86 P 587	8708	1.11	¼
8 x12	86 P 543	1612	.76	86 P 643	4062	.76	1½	86 P 588	8712	1.06	½
8 x17	86 P 534	1613	.80	86 P 634	4063	.80	1½	86 P 589	8713	1.22	½
10 x12	86 P 535	1615	.80	86 P 635	4065	.80	1½	86 P 590	8715	1.20	½
10 x14	86 P 536	1616	.83	86 P 636	4066	.83	1½	86 P 591	8716	1.10	½
10 x17	86 P 537	1617	.98	86 P 637	4067	.98	1½	86 P 592	8717	1.44	½
10 x23	86 PX 538	1618	1.37	86 PX 638	4068	1.37	2	86 PX 593	8718	1.71	¾
11 x17	86 P 539	1622	1.08	86 P 639	4072	1.08	2	86 P 594	8727	1.71	¾
12 x17	86 P 540	1619	1.06	86 P 640	4069	1.06	2	86 P 595	8719	1.83	¾
13 x14	86 PX 542	1624	1.15	86 PX 642	4074	1.15	2	.....	.....	.....	.....
13 x17	86 PX 541	1620	1.39	86 PX 641	4070	1.39	2	86 PX 596	8720	1.93	¾

"FLEXI-MOUNT" ALUMINUM CASES



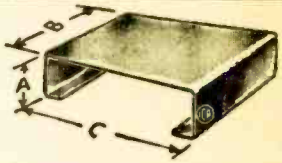
Two-piece aluminum cases designed especially to provide the maximum degree of accessibility. "Flexi-mount" cases offer the solution to numerous builder's problems demanding installation of many elements in a limited space. Highly practical for oscillators, phono preamplifiers, microphone mixers, amplifiers, power supplies, transmitting and receiving equipment, and other equipment requiring easy accessibility to parts. These cases provide complete protection from mechanical injury and are dust-proof. Accurately formed of 16 gauge aluminum. Supplied with hardware. Available in gray Hammertone or natural aluminum finish in sizes listed below.

Gray Hammertone No.	Type	AxBxC	Wt.	NET	Natural Aluminum No.	Type	AxBxC	Wt.	NET
86 P 435	29435	1⅝x2¼x2⅛"	4 oz.	.62	86 P 835	29335	1⅝x2¼x2⅛"	4 oz.	.56
86 P 436	29436	1⅝x3¼x2⅛"	4 oz.	.62	86 P 836	29336	1⅝x3¼x2⅛"	4 oz.	.56
86 P 437	29437	1⅝x4x2⅛"	6 oz.	.65	86 P 837	29337	1⅝x4x2⅛"	6 oz.	.59
86 P 438	29438	2¼x4x2¼"	6 oz.	.85	86 P 838	29338	2¼x4x2¼"	6 oz.	.76
86 P 439	29439	2¼x5x2¼"	6 oz.	.88	86 P 839	29339	2¼x5x2¼"	6 oz.	.82
86 P 440	29440	3x5x4"	8 oz.	.97	86 P 840	29340	3x5x4"	8 oz.	.91
86 P 441	29441	2⅛x5¼x3"	8 oz.	.94	86 P 841	29341	2⅛x5¼x3"	8 oz.	.88
86 P 442	29442	4x6x5"	1 lb.	1.21	86 P 842	29342	4x6x5"	1 lb.	1.12
86 P 443	29443	3x7x5"	1 lb.	1.35	86 P 843	29343	3x7x5"	1 lb.	1.23
86 P 444	29444	3½x8x6"	1 lb.	1.97	86 P 844	29344	3½x8x6"	1 lb.	1.85
86 P 445	29445	3½x10x6"	1¼ lbs.	2.44	86 P 845	29345	3½x10x6"	1¼ lbs.	2.03
86 P 446	29446	4x12x7"	2 lbs.	2.88	86 P 846	29346	4x12x7"	2 lbs.	2.59
86 PX 447	29447	4x17x5"	2 lbs.	3.38	86 PX 847	29347	4x17x5"	2 lbs.	3.00

"CHANNEL-LOCK" ALUMINUM BOXES

Latest type two-piece boxes with special "channel-lock" feature for snug and firm fit. These aluminum boxes are so designed that all mounting space is easily accessible. They are readily assembled and disassembled by means of two set screws. Excellent for oscillators, power supplies, phono preamplifiers, amplifiers, etc. Fabricated of 16-gauge aluminum.

Size AxBxC	Shpg. Wt.	Black Wrinkle No.	Black Wrinkle Type	Gray Hammertone No.	Gray Hammertone Type	NET EACH	Natural Aluminum No.	Natural Aluminum Type	NET EACH
1⅝x4x2⅛"	6 oz.	86 P 314	29300	86 P 324	29400	.81	86 P 850	29200	.71
2¼x5x2¼"	6 oz.	86 P 315	29305	86 P 315	29405	1.10	86 P 851	29205	.98
2¼x5¼x3"	8 oz.	86 P 316	29310	86 P 326	29410	1.21	86 P 852	29210	1.08
5x3x4"	8 oz.	86 P 317	29315	86 P 327	29415	1.03	86 P 853	29215	.91
5x6x4"	1 lb.	86 P 318	29320	86 P 328	29420	1.18	86 P 854	29220	1.01
2½x10x4"	1¼ lb.	86 P 319	29325	86 P 329	29425	2.13	86 P 855	29225	1.96



MINIATURE OPEN-END ALUMINUM CHASSIS

Miniature open-end aluminum chassis are available in a wide variety of sizes and shapes to accommodate nearly every possible construction requirement. Ideally suited for small power supplies, oscillators, amplifiers, transmitting and receiving equipment, and other Amateur and experimental work. They are formed to accurate dimensions; have flat surfaces and square corners. Precision-made of quality 16-gauge aluminum. Made with flange on bottom for attaching bottom plate or securing chassis to cabinet. Excellent choice for beginner and experienced builder alike. Units are so designed as to fit most ICA metal cabinets (see page 242 for cabinets). Aluminum is easily punched and drilled.

Stock No.	ICA Type	Size AxBxC	Shpg. Wt.	NET
86 P 475	29075	1¼x2¾x2⅝"	4 oz.	29¢
86 P 476	29076	1 x3⅛x1¾"	4 oz.	32¢
86 P 477	29077	2 x4½x3¼"	4 oz.	35¢
86 P 478	29078	1½x4⅛x2¾"	2 oz.	35¢
86 P 479	29079	1½x4⅛x3¼"	2 oz.	35¢
86 P 480	29080	1¼x6⅛x3"	4 oz.	41¢
86 P 481	29081	1½x4⅞x5¼"	6 oz.	44¢
86 P 482	29082	1 x3⅛x4"	2 oz.	35¢
86 P 483	29083	1 x4⅛x4"	4 oz.	38¢
86 P 484	29084	1 x5⅛x4"	4 oz.	41¢
86 P 485	29085	1 x6⅛x4"	6 oz.	44¢
86 P 486	29000	1½x8 x4½"	8 oz.	88¢
86 P 487	29001	1½x9½x5"	12 oz.	97¢

STURDY RELAY RACKS FOR ALL PURPOSES

Fig. A—DELUXE ENCLOSED RACK CABINETS

Well-built, modern transmitter and public address equipment racks. Strong, heavy-duty construction. Deluxe enclosed cabinets are made of 1/16" cold rolled steel with 1/8" pressed steel panel mounting angles. Screen ventilators on rear door and louvers on sides at top and bottom. Attractive, blue-gray and black ripple finish. Pre-drilled for standard 19" panels; tapped for 10-32 screws. Racks are shipped knocked down. With hardware.

Blue-Gray	Black	Type	Overall Size	Panel Space	Wt., Lbs.	NET
98 PZ 880	86 PZ 950	3865	43¼x22x18"	36¾x19"	85	42.51
98 PZ 881	86 PZ 951	3866	67¼x22x18"	61¼x19"	130	52.87
98 PZ 882	86 PZ 952	3867	83½x22x18"	77x19"	153	63.06

Fig. B—OPEN FACE RELAY RACKS

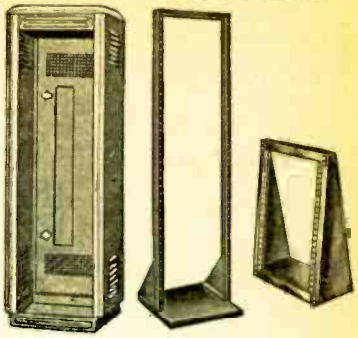
Open-faced racks, made of tough, durable 1/4" steel, with vertical and top cross-brace sections welded for added strength and rigidity. Designed for public address units, various types of Amateur transmitters, laboratory test and measurement equipment, etc. Base depth, 22". Accurately drilled mounting holes. Finished in attractive black ripple. Shipped knocked down; includes all necessary rack screws and cup washers.

Stock No.	Type	Overall Size	Panel Space	Wt., Lbs.	NET
98 PZ 885	3912	73⅛x20x20⅞"	71¾x19"	58	21.91
98 PZ 886	3913	38¼x20x18⅞"	36¼x19"	39	18.76

Fig. C—TABLE MOUNT RELAY RACKS

Table type racks with chassis type base. All panel mounting angles are pre-drilled for standard RETMA 19" panels and are tapped for 10-32 screws. Heavy duty construction with one-piece base. Finished in black ripple. With all necessary hardware.

Stock No.	Type	Overall Size	Panel Space	Wt., Lbs.	NET
98 PZ 883	3910	25x21x12"	21x19"	17	6.47
98 PZ 884	3911	32x21x12"	28x19"	20	8.08



A B C

Depend on ICA cabinets and racks for sturdy construction, easy installation of equipment and handsome professional appearance.

PORTABLE STEEL CABINET

An excellent portable cabinet with leather handle. For a variety of test or operating equipment which must be thoroughly protected while being carried. Ideal for transceivers, field strength meters, etc. Front and back panels are removable. The entire cabinet is very sturdily built of metal and has reinforced corners and edges. Size: 7¾" wide, 7" deep. In black ripple enamel.

Stock No.	Type	Ht.	Lbs.	NET
86 P 395	3850	12"	7	2.84
86 PX 396	3851	15"	8	3.56

HANDLE-LOCK SET

Attractive handle and lock sets to dress up cabinets. Zinc handle with nickel-plated finish. Spring snap lock of durable steel for long service. Complete with hardware. Shpg. wt., 2 oz.

86 P 398. Type 3532. NET.....59c

CHROME VENTILATING LOUVER PLATE

Adds attractive touch to any receiver, transmitter, amplifier, etc. Polished chrome-plated steel. Five ventilating louvers. Overall size, 5⅞" x 3". Length of louvers, 4¼". Mounts behind panel cut out. Shpg. wt., 3 oz.

86 P 281. Type 3525. NET.....66c

CHROME HANDLES

For cabinet, chassis, etc. Chrome finished. With mtg. screws. Shpg. wt., 4 oz.

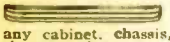
Type 3600. 4" long, 11/16" wide, 2¼" mtg. ctrs.

42 H 520. NET EA.57c

Type 3501. 6¼" L. ⅝" W. 4 13/16" mtg. ctrs.

42 H 521. NET EACH.....75c

CHROME TRIM MOLDING



Adds a decorative professional appearance to any cabinet, chassis, receiver, etc. Average shpg. wt., 4 oz.

Double-Stripe Trim. Attractive all-chrome molding with a wide double stripe running lengthwise. Molding is ¾" wide.

86 P 366. Type 3513. 8" long. NET...1.05
86 P 367. Type 3514. 12". NET.....1.21
86 P 368. Type 3515. 17". NET.....1.47

Type 3510. Chrome trim molding with single lengthwise stripe. ½" wide; 4" long.

86 P 365. NET EACH.....66¢

Type 3505. All-chrome trim molding in a unique bullet shape, tapered at ends. ¼" wide, overall length, 6".

86 P 369. NET EACH.....66¢

D

E

F

G

RELAY RACK ACCESSORIES

Fig. D—STEEL RACK PANELS

Series 3600 RS. Handsome relay rack panels with standard RETMA notching. Width 19"; 1/8" thick. Support up to 200 lbs. *Also fits Western Electric type racks. Crackle finish.

Black	Gray	Height	Lbs.	NET
*86 PX 100	*86 PX 130	1¾"	2	.66
*86 PX 101	*86 PX 131	3½"	3	.73
*86 PX 102	*86 PX 132	5¼"	4	.91
*86 PX 103	*86 PX 133	7"	6	1.06
86 PX 104	86 PX 134	8¾"	7	1.29
*86 PX 105	*86 PX 135	10½"	8	1.55
86 PX 106	86 PX 136	12¼"	9	1.84
86 PX 107	86 PX 137	14"	10	2.13
86 PX 108	86 PX 138	15¾"	12	2.35
86 PX 109	86 PX 139	17½"	13	2.65
*86 PX 110	*86 PX 140	19¼"	14	2.94
86 PX 111	86 PX 141	21"	15	3.23

Fig. D—ALUMINUM RACK PANELS

Series 8600 RS. Lightweight panels made of hard aluminum. RETMA notching. Size, 1/8" thick, 19" wide; heights given below. *Fits RETMA or Western Electric type racks.

Black	Gray	Height	Lbs.	NET
*86 PX 400	*86 PX 450	1¾"	1	.73
*86 PX 401	*86 PX 451	3½"	2	1.06
*86 PX 402	*86 PX 452	5¼"	2	1.34
*86 PX 403	*86 PX 453	7"	2	1.76
86 PX 404	86 PX 454	8¾"	3	2.06
*86 PX 405	*86 PX 455	10½"	3	2.44
86 PX 406	86 PX 456	12¼"	4	2.79
86 PX 407	86 PX 457	14"	4	3.12
86 PX 408	86 PX 458	15¾"	5	3.53
86 PX 409	86 PX 459	17½"	5	3.91
*86 PX 410	*86 PX 460	19¼"	6	4.26
86 PX 411	86 PX 461	21"	7	4.56

Fig. E—RACK DOLLY

ICA Type 4086. Heavy-gauge, all welded steel. Free-moving casters. Black wrinkle finish. Size, 21x22". Shpg. wt., 9 lbs.

86 PX 282. NET.....9.41

STEEL RACK SHELVES

Heavy duty steel shelves designed to provide additional support of heavy rack mounted units such as power supplies. Easily installed in rack. Standard RETMA width. Heavy gauge steel. Black wrinkle. Shpg. wt., 2 lbs.

86 PX 338. Type 3854. 19x1x15". NET 3.04
86 PX 339. Type 3856. 19x1x12". NET 2.30

Fig. F—SWIVEL TRUCK CASTERS

ICA Type 3209. Swivel casters for heavy-duty work. Recommended for relay racks. Steel mounting plate, 1⅞x2⅝". 4 mounting holes. Load, 500 lbs. Shpg. wt., 7 oz.

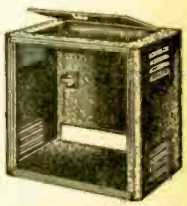
86 P 283. NET EACH.....88c

Fig. G—RELAY RACK BRACKETS

Heavy duty, triangular design brackets. For reinforcing racks and for mounting of panels, shelves, chassis, etc. Black wrinkle finish. 8 oz.

Stock No.	Type	Base	Per Pair
86 P 335	3950	5"	.78
86 P 336	3951	8"	.90
86 P 337	3952	11"	1.08

DELUXE CABINET RACKS



Steel equipment cabinet racks with handsome professional appearance. Available in attractive blue-gray or black ripple enamel finish. Extremely useful for accommodating public address systems. Amateur transmitters or receivers, testing or measuring equipment, etc. Streamlined design features rounded front corners, trim molding in chrome, and side louvers for adequate circulation of air. Formed from heavy sheet steel, welded for unusual strength and durability.

Notched for standard RETMA 19" panels, Western Electric or Amateur panels. Equipped with nickel-plated brass snap locks on hinged doors. Models 3880, 3881, 3885 and 3886 have door on top only; Model 3882 has doors on top and rear; Models 3883, 3884 has door on rear panel only. Shipped completely assembled, ready for use.

Black	Blue-Gray	Type	Overall Size	Panel Space	Wt., Lbs.	NET
98 PZ 870	86 PZ 953	3880	10½x21x15"	8¾x19"	29	11.76
98 PZ 875	86 PZ 954	3885	12¼x21x15"	10½x19"	30	13.23
98 PZ 871	86 PZ 955	3881	14x21x15"	12¼x19"	32	14.29
98 PZ 876	86 PZ 956	3886	15¾x21x15"	14x19"	34	15.88
98 PZ 872	86 PZ 957	3882	19¼x21x15"	17½x19"	36	18.78
98 PZ 873	86 PZ 958	3883	28x21x15"	26¼x19"	50	22.04
98 PZ 874	86 PZ 959	3884	36¾x21x15"	35x19"	60	24.50

ICA Metal Cabinets

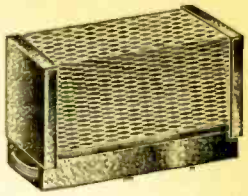
DELUXE AMPLIFIER FOUNDATION UNITS

WITH "AIR GATE" VENTS

Cleverly designed and styled. Top covers have rounded corners and fronts have chrome-plated Air Gate ventilators. Screened openings on the top and louvers on sides and back for more ventilation. Handsome blue-gray ripple finish with striped, chrome-plated moldings and handles. Cover height, 6"; chassis, 3". Precision fit for easy assembly. Less bottom plate.

Stock No.	Type	H.W.D.	Wt., Lbs.	NET
86 P 370	3971	9x10x5½"	6	3.82
86 PX 371	3972	9x12x8"	7	4.90
86 PX 372	3973	9x17x7"	9	5.39
86 PX 373	3974	9x14x10"	9	5.56
86 PX 374	3975	9x17x10"	11	6.20

WITH PERFORATED COVERS



A new line of amplifier foundation units. Features a criss-cross grille-type metal cover that provides maximum ventilation and excellent protection from mechanical damage. Grille is spot-welded to heavy-gauge steel end plates. Includes sturdy chrome-plated handles in modern fluted design. Finished in handsome blue-gray ripple enamel. Chassis bases are 3" in height.

Stock No.	Type	Overall Size	Wt., Lbs.	NET
86 PX 570	3965	5½x10x9"	5	3.82
86 PX 571	3966	8x12x9"	7	4.90
86 PX 572	3967	7x17x9"	9	5.39
86 PX 573	3968	10x14x9"	9½	5.56
86 PX 574	3969	10x17x9"	10	6.20

CABINETS WITH HINGED COVERS

Modern cabinets for amplifiers, transmitters, test equipment, etc. Front edges are rounded. Louvers in sides and grille ventilators in rear panel. Flush-fitting front panel. Top cover has hinge at rear. Rear panel has opening at bottom for leads, etc. Finished in beautiful blue-gray ripple enamel. Illustration shows a deluxe cabinet which has chrome-plated side ventilators and front trim.

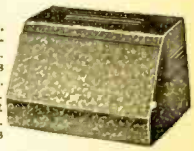
DELUXE MODELS

Stock No.	Mfr's. Type	NET	Size H. W. D.	Panel Size	Wt., Lbs.	Use Chassis
86 PX 300	3860	4.07	8x10x8"	8x8"	6	86 P 655
86 PX 301	3861	4.58	8x12x8"	8x10"	6	86 P 656
86 PX 302	3862	4.85	8x14x8"	8x12"	11	86 P 657
86 PX 303	3863	10.45	12x20x12"	12x18"	17	86 PX 666

STANDARD MODELS

86 PX 310	3925	3.53	8x10x8"	8x8"	6	86 P 655
86 PX 311	3926	3.82	8x12x8"	8x10"	7	86 P 656
86 PX 312	3927	4.49	8x14x8"	8x12"	11	86 P 657
86 PX 313	3928	9.76	12x20x12"	12x18"	17	86 PX 666

DELUXE SLOPING PANEL CABINETS

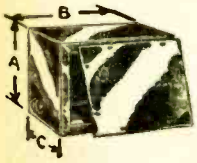


Top has rounded corners and chromium trim. Rear and side panels louvered for adequate ventilation. Opening at rear for cable connections. Front panel is removable so that the chassis can be attached to it and used as one unit. Cabinets and chassis (below) are heavy steel. Finished in blue-gray ripple enamel. Excellent for amplifiers, test equipment and ham gear. Cabinets complete with bottom plates, but less chassis bases.

No.	Type	NET	H. W. D.	Lbs.	Chassis
86 PX 320	3990	4.78	8x8x8"	5	86 P 655
86 PX 321	3991	5.63	8x10x8"	6	86 P 656
86 PX 322	3992	6.86	8x14x8"	11	86 P 659
86 PX 323	3993	9.22	12x18x12"	17	86 PX 666

CHASSIS BASES FOR ICA CABINETS

No.	Type	Size	NET	For Cabinets	Lbs.
86 P 655	4024	7x 7x2"	.88	86PX300, 86PX310, 86PX320	2
86 P 656	4004	7x 9x2"	1.06	86PX301, 86PX311, 86PX321	2
86 P 659	4007	7x13x2"	1.18	86PX322	3
86 PX 666	4033	10x17x3"	1.60	86PX303, 86PX313, 86PX323	5
86 P 657	4005	7x11x2"	1.10	86PX302, 86PX312	3



UTILITY CABINETS

Popular utility cabinets for amplifiers, monitors, input stages, meters, transceivers, etc. Excellent for the Amateur, experimenter and builder. Removable front and back covers may be fastened to cabinet with self-tapping screws provided. Available in steel with black ripple finish, aluminum with gray Hammertone finish and natural aluminum. Shipped knocked down—ready for quick, easy assembly. Supplied complete with hardware.

BLACK-RIPPLE STEEL

Stock No.	Mfrs. Type	C. B. A.	Wt., Lbs.	NET
86 P 350	3810	2x4x4"	1⅛	.83
86 P 351	3811	3x4x5"	1½	.93
86 P 358	3812	5x4x6"	2½	1.18
86 P 352	3800	6x6x6"	3	1.27
86 P 353	3801	5x9x6"	4	1.83
86 P 354	3802	8x10x7"	5	2.25
86 P 355	3804	11x12x8"	8	3.53
86 P 356	3803	8x10x10"	8	2.84

ALUMINUM GRAY

Stock No.	Mfrs. Type	C. B. A.	Wt., Lbs.	NET
86 P 304	29810	2x4x4"	½	1.00
86 P 305	29811	3x4x5"	¾	1.15
86 P 306	29812	5x4x6"	1	1.44
86 P 307	29800	6x6x6"	1½	1.53
86 P 308	29801	5x9x6"	1¾	2.20

NATURAL ALUMINUM

Stock No.	Mfrs. Type	C. B. A.	Wt., Lbs.	NET
86 P 960	29840	2x4x4"	½	.88
86 P 961	29841	3x4x5"	¾	1.00
86 P 962	29842	5x4x6"	1	1.29
86 P 963	29843	6x6x6"	1½	1.36
86 P 964	29844	5x9x6"	1¾	1.94

UTILITY CABINETS WITH BUILT-IN CHASSIS

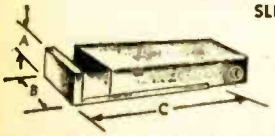
Multi-purpose small cabinets ideal for VFO assemblies, pre-amplifiers and units requiring enclosed cabinets. Front and rear panels are attached by self-tapping screws. Built-in chassis is welded to front panel. Constructed of sturdy steel in black ripple finish. Accurately formed for perfect fit. Handy for the Amateur, builder and experimenter.

Stock No.	Mfr's. Type	Cabinet Size A. B. C.	Chassis Size A. B. C.	Wt., Lbs.	NET
86 P 416	3816	4x2x4"	2⅞x1⅞x1"	1⅛	1.03
86 P 417	3817	4x3x5"	2⅞x2⅞x1"	1½	1.13
86 P 418	3818	5x3x4"	3⅞x2⅞x1¼"	1½	1.13
86 P 419	3819	4x5x6"	2⅞x4⅞x1¼"	2¼	1.40
86 P 421	3821	6x5x4"	4⅞x4⅞x1¼"	2¼	1.40
86 P 423	3823	6x6x6"	4⅞x5⅞x1¼"	3½	1.47

HINGED COVER CABINETS

Sturdy steel cabinets with piano-hinged lids for instant accessibility. Front panel, back panel or bottom can be removed separately. Easy to assemble with self-tapping screws supplied. Finished in handsome, durable black ripple enamel. Available in six sizes to accommodate a wide variety of uses. Ideal for the construction of experimental and test equipment.

Stock No.	Mfr's. Type	H. W. D.	Weight, Pounds	NET EACH
86 P 340	3825	6x9x5"	4	3.23
86 P 341	3826	7x10x8"	6	3.84
86 P 343	3828	7x12x8"	6	4.37
86 P 344	3829	8x12x11"	8	5.19
86 P 345	3830	7x14x8"	7	5.19
86 PX 346	3831	9x18x12"	15	6.50



SLIP COVER ALUMINUM BOXES

Aluminum boxes suitable for housing a wide variety of electronic devices. Excellent for low-level high-gain amplifiers, frequency multipliers and applications requiring complete shielding. Slide cover permits easy accessibility to mounted parts and offers protection against damage, electric fields and dust. Cover is secured to ends by screws. For the Amateur, experimenter, etc. Gray Hammertone or natural aluminum finish.

GRAY HAMMERTONE

No.	Type	A. B. C.	Shpg. Wt.	NET
86 P 424	29130	2⅝x3⅛x13"	1 lb., 2 oz.	3.55
86 P 425	29135	2⅝x5⅛x13"	1 lb., 4 oz.	3.84
86 P 426	29140	2⅝x3 x17"	1 lb., 12 oz.	3.67

NATURAL ALUMINUM

No.	Type	A. B. C.	Shpg. Wt.	NET
86 P 965	29100	2⅝x3⅛x13"	1 lb., 2 oz.	3.38
86 P 966	29105	2⅝x5⅛x13"	1 lb., 4 oz.	3.68
86 P 967	29110	2⅝x3 x17"	1 lb., 12 oz.	3.51

SLOPING PANEL CABINETS

Professional type, new streamlined sloping panel steel cabinets. Ruggedly built, small and compact, they are ideally suited for any type of equipment which is to be used on the top of an operating desk or work bench. Sloping panel provides maximum meter visibility. With rounded corners, finished in handsome, durable blue-gray ripple enamel. Size, 4½" high x 4¼" deep. Less rear cover. See below.

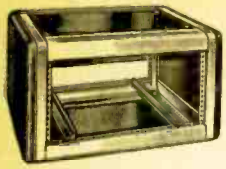
Stock No.	Mfr's. Type	Width	Wt. Lbs.	NET EACH
86 P 380	3905	4¼"	1½	.98
86 P 381	3906	7½"	2	1.64

CABINET REAR COVERS

Type 4155. For 86 P 380 cabinet above. Size: 4½x4⅛". 6 oz.
86 P 678. NET EACH.....29¢

Type 4156. For 86 P 381 cabinet above. Size: 4½x7½". 8 oz.
86 P 679. NET EACH.....41¢

EMCOR DELUXE METAL CABINET

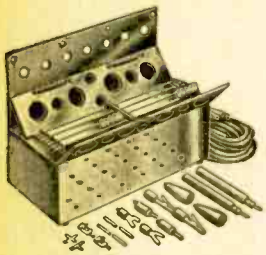


Type INS-S-8. An extremely versatile, unusually rugged cabinet, handsomely finished in two-tone gray. Custom styling adds professional appearance to equipment. Top, bottom, back and ends removable with screwdriver. Chassis need not be removed for servicing. Tough, bonderized finish is highly scratch- and chip-resistant. Front panel will take any 8¾" rack panel with RETMA or WE notching. Adjustable mounting brackets accommodate any size chassis up to 17" wide by 15" deep. Two or more cabinets may be bolted together for vertical or horizontal stacking. Top and bottom panels are solid, formed steel. Back panel is 5¼" high; perforated to provide adequate ventilation. Complete with all hardware and four rubber feet. Less front panel; see below. Shpg. wt., 32 lbs.
B6 PZ 810. NET 23.03

Type SFP-8. Front Panel. For above. Matching finish. Four mounting holes. Size. 8¾x19". Shpg. wt., 3½ lbs.
B6 PX 811. NET 3.70

Type HDW-61-371. Handles. Set of two. Satin chrome. 8 oz.
B6 P 812. NET 1.47

"UNICHASSIS" EXPERIMENTAL CHASSIS



All-metal "breadboard type" chassis permits rapid assembly of circuits. For electronic research labs and experimenters. Scientific layout uses all space without crowding. 8 holes for miniature and 8 for standard sockets cut in two sections of chassis top. Angled at 45 degrees to permit using large tubes or other components without sacrificing lower shelf space. Heavy components can be mounted on lower shelf. Chassis is made of heavy-duty aluminum alloy, ruggedly constructed for long use. 4 chassis-length, plated, grooved rods serve as bus bars. 22 leads of assorted lengths from 6" to 42". Leads are rubber covered number 18 wire. Each end has insulating sleeve fitted with socket for interchanging assorted connectors which are supplied. Overall size: 11x7½x 8¼". Shpg. wt., 3½ lbs.
B6 PX 575. NET 19.50

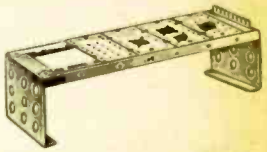
"SPECIFIC" MODEL 8-140 SPEED CHASSIS

Versatile chassis for lab and experimental use. Has tapped holes for variety of plates listed below. Perfect for temporary experimental circuits. With 4 tie-point strips: 3 insulated, 1 grounded, each 14" long. Cadmium-plated 20-ga. steel. Size: 16⅞" L, 5¼" D, 5" H. Shpg. wt., 1¼ lbs.
86 PX 680. NET 5.88

MOUNTING PLATES. Cadmium-plated, 20-ga. steel. Quickly and easily installed or removed from Speed Chassis. Pre-punched for sockets and other parts. 4⅟₁₆" deep. Av. shpg. wt., 2 oz.

Stock No.	Description	Width	NET EACH
86 P 681	Single 7-pin min. socket	1⅛"	20¢
86 P 682	Double 7-pin min. socket	1⅛"	24¢
86 P 692	Single 7-pin Vector socket	1⅛"	34¢
86 P 693	Double 7-pin Vector socket	1⅝"	39¢
86 P 694	Triple 7-pin Vector socket	1⅝"	44¢
86 P 683	Single 9-pin min. socket	1⅝"	22¢
86 P 684	Double 9-pin min. socket	1⅝"	27¢
86 P 695	Single 9-pin Vector socket	1⅝"	34¢
86 P 696	Double 9-pin Vector socket	1⅝"	39¢
86 P 697	Triple 9-pin Vector socket	1⅝"	44¢
86 P 685	Single octal socket 1¼" ctrs.	2⅛"	25¢
86 P 698	Double octal socket 1¼" ctrs.	2⅛"	30¢
86 P 686	Single octal socket 1⅝" ctrs.	2⅛"	25¢
86 P 699	Double octal socket 1⅝" ctrs.	2⅛"	30¢
86 P 687	Universal transformer (2 supplied)	1⅛"	34¢
86 P 688	Volume control	1⅛"	34¢
86 P 689	Blank	1⅛"	15¢
86 P 690	Blank	1⅛"	18¢
86 P 691	Blank	2⅛"	21¢

DUMONT UNIVERSAL CIRCUIT BREADBOARD



Type K-100. Time saver for engineers and experimenters. Speeds construction of experimental models. Consists of a 3x4x12" steel frame with end plates punched for controls, 16 phenolic 4x2" sub-chassis, 29-terminal strips, and 20 double-ended terminals. Sub-chassis include 4 single and 4 double-hole types for 7 or 9-pin miniature sockets, 4 single-hole types for octal, loctal, etc., sockets, and 4 utility chassis with holes for mounting terminals or parts. Shpg. wt., 2 lbs.
86 PX 794. NET 12.25

A B

ICA SPEAKER CASES

Fig. A. Composite. Neatly designed cabinet to house either a 4- or 5-inch speaker. Skillfully fabricated of heavy sheet steel. Beautifully finished in blue-gray ripple with attractively embossed grille. Removable back plate has keyhole slots for hanging. Size, 7x4x7". Shpg. wt., 2¾ lbs.
B6 P 394. Type 3988. NET 3.26

Fig. B. Midget Type Speaker Cases. Designed to accommodate smaller size speakers. Speaker mounts on special removable internal chassis, already punched for proper opening. This unit fastens to side of cabinet with no visible screws to mar front. Sheet steel construction. Beautifully finished in blue-gray ripple with attractively embossed speaker grille. Size, 4¼x4⅜x4½".

Type 3986. For 2" speakers. Hole diameter, 2⅜". Shpg. wt., 1½ lb.
B6 P 392. NET 1.47

Type 3987. For 3" speakers. Hole diameter, 2⅞". Shpg. wt., 1½ lb.
B6 P 393. NET 1.47

ICA DELUXE METER CASES

Designed to harmonize with the trend of modern streamlined equipment. Finished in blue-gray ripple enamel, trimmed with an attractive chrome band. Case has neat rounded top. Extremely compact—easily placed with any equipment. Available for 2" and 3" meters. Dependable heavy gauge pressed steel construction for maximum strength and durability. Overall size: 4½" high by 4¼" wide by 4¼" deep. Shpg. wt., 1¼ lbs.

B6 P 390. Type 3995. 2⅜" dia. hole for up to 2½" round or rectangular meter.
B6 P 391. Type 3996. 2⅞" diameter hole for up to 3" rectangular or 3½" round meters.
NET EACH 93c

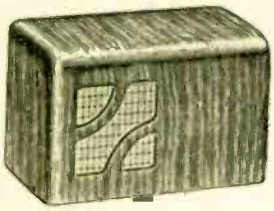


TABLE RADIO CABINETS

Use one of these handsomely-finished table-model wood radio cabinets to house your favorite home-built set. Ideal for replacement, radio servicing, etc. Attractive modern styling. Walnut-finished. Furnished with blank panels (except for speaker cut-out as shown) for making dial and control cut-outs to suit individual requirements. Speaker grilles neatly fitted with attractive cloth. Sizes given are height, width and depth. Shpg. wt., 5 lbs.

Inside measurements: 8⅝x5⅞x4¼". Overall size: 9⅛x6x4½".
98 S 932. NET 2.63

Inside measurements: 10⅜x6⅝x5⅛". Overall size: 11x7x5⅝".
98 S 930. NET 3.23

Inside measurements: 12¼x7¼x6¼". Overall size: 13¼x7⅞x6½".
98 SX 931. NET 4.05

Inside measurements: 13¾x7⅝x6¼". Overall size: 14¾x8⅝x6½".
98 SX 929. NET 4.28

ICA SLOPING FRONT CHASSIS

Steel chassis with sloping front for meters. Inclined at proper angle for best visibility. Black ripple. Ht., 3½".

No.	Type	Top	Bottom	Lbs.	NET
86 PX 347	3320	7x17"	10x17"	4	2.48
86 PX 348	3321	10x14"	13x14"	5	2.77
86 PX 349	3322	10x17"	13x17"	5	3.20

WALDOM PLASTIC CASES AND PANELS

Sturdy, molded, black plastic cases and panels. For housing test instruments, receivers, transmitters, transistor amplifiers, oscillators, pre-amps, and similar equipment. Recessed corner bosses for flush mounting panels. Case walls and panels are ⅛" thick. Av. shpg. wt., cases: 1½ lbs.; panels: 1 lb.

CASES

Stock No.	Mfr's Type	Size (O.D.)	NET
86 P 286	BC-138	6¼x3¾x2"	.79
86 P 287	BC-140	6⅞/₁₆x5⅞/₁₆x2⅝/₁₆"	1.23

MATCHING PANELS

Stock No.	Mfr's Type	Size	NET
86 P 288	BP-137	6x3½"	.41
86 P 289	BP-139	6½x5"	.59

RADIO PANELS

A complete line of masonite and steel panels for all radio and electronic purposes. Steel panels are 1/16" thick; finished in black wrinkle enamel. Masonite panels are ⅛" thick; have smooth black finish.

STEEL PANELS

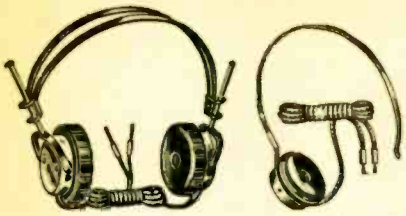
Stock No.	Size	Wt., Lbs.	NET
86 P 740	7x10"	1	.64
86 P 741	7x12"	1	.71
86 P 742	7x14"	1	.82
86 P 747	8x18"	2	1.09
86 P 748	9x15"	2	1.06

MASONITE PANELS

Stock No.	Size	Wt., Lbs.	NET
86 P 750	7x10"	1	.32
86 P 751	7x12"	1	.36
86 P 752	7x14"	1	.41
86 PX 755	7x21"	2	.56
86 P 757	8x18"	2	.55
86 P 758	9x15"	2	.54

Headphones & Accessories

AMERICAN-BELL HEADPHONES



A B

Sensitive headphones with all terminals inside to avoid shocks or damaging shorts. Produced by one of America's leading manufacturers. Noted for their remarkable tonal fidelity and sensitivity. Lightweight. Have adjustable flexible headbands to provide utmost wearing comfort and long life. Magnets are of high permeability alloy, providing exceptional power and stability. Solenoid coils are well insulated and firmly mounted in headphone shell. Metal case; bakelite caps. Supplied with 4½ foot extra-flexible cord of mercerized cotton covered tinsel. With standard phone tip terminals. Ideal for use with crystal or battery sets as well as for all general-purpose headphone requirements.

Fig. A—STANDARD DUAL HEADSETS

Double headband with firmly gripping yokes. 1⅞" diaphragm. Cords are mercerized cotton-covered copper tinsel. Shpg. wt., 1¼ lbs.

2000 ohms.
59 J 110. NET.....1.79

3000 ohms.
59 J 111. NET.....1.92

INSTITUTIONAL DUAL HEADSETS

Especially designed for schools, prisons, hospitals and other institutions where fool-proof, lightweight headphones are essential. Also ideal for use with crystal sets, battery radios and low-cost hearing aids. Every feature required for institutional use has been incorporated: Polished aluminum cases and durable bakelite caps which are easily cleaned; inside terminal connections, to prevent shocks and tampering; diaphragm is 2⅛" in diameter; chrome steel magnets. 4½" braided cord. Cotton-covered steel headband. Shpg. wt., 1¼ lbs.

59 J 100. 2000 ohms. NET.....1.96
59 J 101. 3000 ohms. NET.....2.15

Fig. B—SINGLE HEADPHONES

Improved inside-terminal type. Suitable for hard-of-hearing installations. Spring-metal headband. With cord. Shpg. wt., 8 oz.

1000 ohms.
59 J 112. NET.....98c

1500 ohms.
59 J 113. NET.....1.08

HEADPHONE REPLACEMENT PARTS

Quality replacement parts for American-Bell headphones listed above.

Diaphragm. Shpg. wt., 2 oz.
59 J 104. Pkg. of 2.....11c

Bakelite Cap. Shpg. wt., 2 oz.
59 J 106. NET EACH.....12c

Double Headband. Less yokes. Wt., 6 oz.
59 J 107. NET EACH.....59c

Yoke. For double headband above. 3 oz.
59 J 108. NET EACH.....10c

BRUSH CRYSTAL HEADPHONES

Model A200. High-impedance phones. Extremely lightweight (6 oz.) and very sensitive. For radio training schools, laboratories, Amateurs, etc. Response: 100 to 8,000 cps. Cone-type diaphragm. Molded plastic case shaped for maximum comfort. Require small DC blocking condenser for DC circuits. Low power consumption. With 5-ft. cord and headband. Shpg. wt., 1¼ lbs.
59 J 151.
List. $17.50. NET..10.29

A202 SINGLE HEADPHONE

Like 59 J 151 above, but consists of a single phone complete with 5 ft. cord and spring-steel headband with end-cushion. Weighs only 3 oz. Shpg. wt., 6 oz.
59 J 156. List, $11.25. NET.....6.61

BRUSH HI-FI HEADPHONES

Feature uniform frequency response, low distortion, and excellent bass response. Lightweight, for perfect fit with maximum comfort. Impedance 100,000 ohms at 1,000 cps. No transformer required.

Model BA-206. Double Headphone. With headband and cord. Shpg. wt., 3 lbs.
59 J 163. List $30.00. NET.....17.64

Model BA-207. Single Headphone. With headband and cord. Shpg. wt., 1 lb.
59 J 164. List $16.50. NET.....9.70

Model 205 Double Headphone. Response: 60 to 10,000 cps. Corrected for rise below 200 cps. 80,000 ohms impedance. With 5 ft. cord. Shpg. wt., 3 lbs.
59 J 158. List $26.75. NET.....15.73

BA202 LORGNETTE PHONE

Single type—telescoping lorgnette handle—adjustable from 12" to 17". With 5-ft. cord. Shpg. wt., 10 oz.
59 J 157. List, $14.50. NET.....8.53

C D E

C. F. CANNON HEADPHONES AND ACCESSORIES

Fig. C. Brandes "Superior" Phones. A high quality, ruggedly-built headset which has been a favorite for years. Outside terminal type, with metal cases and bakelite caps. Diaphragm diameter is 2⅛". Has double coils, two in each receiver. Flexible metal split headband is easily adjustable for maximum comfort. Supplied complete with 4½-foot cotton-covered cord. Magnets of high retentivity are ¼" square. Resistance, 2000 ohms per pair. Shpg. wt., 1¼ lbs.
59 J 130. Type BS-2. NET.....2.20

Fig. C. "Admiral" Phones. Sturdy, lightweight phones similar to "Superior" type described above but with terminal connections inside case. With molded bakelite caps, double-coil magnets. 4½-ft. cotton-covered cord, etc. Housed in durable metal cases. Shpg. wt., 1¼ lbs.
59 J 135. BA-2. 2000 ohms. NET....2.35
59 J 136. BA-3. 3000 ohms. NET.....2.65
59 J 137. BA-5. 5000 ohms. NET.....3.53

CAPS AND DIAPHRAGMS

59 J 138. Caps. Wt., 2 oz. EACH.....18¢
59 J 140. Diaphragms. 2 oz. Pkg. of 2..11¢

Fig. D. Master Phones. High-resistance headset. Splendid for use in multiple installations. Cases are metal with bakelite caps and inside terminals to prevent shock. Chrome-steel magnets. 2⅛" dia. diaphragm. Headband adjusts by spring clips. 4½-foot cotton-covered cord. Shpg. wt., 1¼ lbs.
59 J 215. MC-2. 2000 ohms. NET...2.20
59 J 125. MC-3. 3000 ohms. NET.....2.50
59 J 126. MC-5. 5000 ohms. NET.....3.38

59 J 127. Replacement bakelite cap for above headsets. 2 oz. NET EACH.....18¢

59 J 129. Replacement diaphragm for above headsets. 2 oz. Pkg. of 2.....11¢

Fig. E. Alnico V Phones. Small, lightweight phones featuring powerful Alnico V permanent magnets. Two durable coils in each phone. DC resistance, 2000 ohms. Diaphragm diameter is 1⅞". Inside terminal connections to prevent shock. Case and caps are of molded black plastic. Equipped with 4½-foot black braided cord. Shpg. wt., 1¼ lbs.
59 J 132. Type 15-2. NET.....2.35

"CANNON-BALL" RADIO HEARING AID

Popular, low priced Cannon-Ball hearing aid for any radio set. Can be attached to any speaker. Employs a specially constructed low resistance headphone which matches the voice coil of the speaker. Has function selector switch to permit listening with speaker only, with headphone only, or with both speaker and headphone. Complete with simple, easy-to-follow wiring diagram and instructions. Shpg. wt., 1 lb.
59 J 118. NET.....3.38

TV HEADPHONE KIT

Consists of volume control, adapter box and phones. Permits listening to TV through phones alone or phones and speaker. Diaphragm dia., 2⅛". Inside terminals. Black molded plastic. 4½ ft. braided cord with pin tips. 15 ft. plastic cord connects control box to TV set. With 2 pairs of phones. 3 lbs.
59 J 175. NET.....9.70

As above, but one pair of phones. 1½ lbs.
59 J 176. NET.....6.61

Control box only for TV kit. Wt., 9 oz.
59 J 177. NET.....4.41

HEADPHONE CORDS

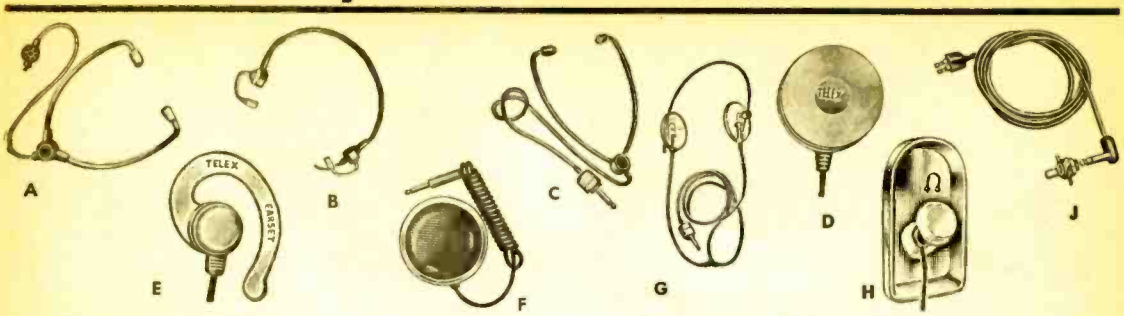
Copper tinsel inner conductor covered with closely woven cotton braid. For phones on this page and page 245. Shpg. wt., 2 oz.

No.	Description	For Use With	EACH
4½ Ft. Double Cords			
59 J 220	With spade lugs on one end; tips on other. For inside terminals.	59 J 100,-101, -110,-111,-125, -126,-132,-135, -136,-137,-215	44c
59 J 205	Same as above	59 J 130	44c
59 J 206	With tips on both ends	Govt. and military types	
59 J 002	Phone tip ends	59 J 070	
5 Ft. Double Cords			
59 J 006	.....	59 J 020,-021	49c
59 J 181	.....	59 J 151,-158, -163	
6 Ft. Double Cords			
59 J 004	.....	59 J 000,-001	53c
59 J 007	.....	59 J 040	
8 Ft. Double Cords			
59 J 221	With spade lugs on one end; tips on other.	Same as type 59 J 220 above	71c
59 J 218	Same as above	59 J 130	
59 J 219	With tips on both ends	Govt. and Military type	
Single Cords			
59 J 200	4 ft. cord. Spade lugs on one end; tips on other.	59 J 112,-113	31¢
59 J 003	4½ ft. cord with phone tips	59 J 072	31¢
59 J 182	6 ft. phone cord	59 J 157	97¢

ICA RUBBER PHONE CUSHIONS

Type 195. Finest quality. Used by leading airlines. Provide maximum comfort without interfering with reception. Fit all phones Shpg. wt., 6 oz.
59 J 122. PER PAIR..82c
10 OR MORE PRS., EA...74¢

Headphones and Accessories



LATEST TELEX QUALITY HEADSET EQUIPMENT

All Telex headsets below are *less cord* (except Models 8110 and 8130 pillow speakers and Models D-7, 8825, 9316, 8560 and 8561). This permits selections of either the standard cord or the volume control cord for any headset. Cords and accessories are in the right-hand column.

Fig. A—LIGHTWEIGHT MONOSET

For use wherever individual listening is desired. Weighs only 1.2 oz.; ends ear pressure and head fatigue. Magnetic type. Made of tough, durable tenite. White plastic ear plugs remove easily for cleansing. Shpg. wt., 8 oz.
59 J 281. Model 4626. 2000 ohms.
59 J 280. Model 4601. 128 ohms.
List Each, $9.00 NET EA., Less cord. 5.29

Fig. B—TWINSET

An innovation in headset design. Nothing touches the ears with Telex Twinset. Receivers rest lightly at the temples. Tubular sound arms pipe signal into ears. Weighs only 1.6 oz. Approved by C.A.A. for pilots. Shpg. wt., 8 oz.
59 J 285. Model 3776. 1000 ohms.
59 J 286. Model 3781. 64 ohms.
List Each, $13.40. NET EA., Less cord. 7.88

Fig. C—HI-FI "DYNASET"

Model D-7. Excellent wide-range, under-the-chin dynamic headset. *A midget ¾", 6-ohm speaker is built right into the plug.* Extremely sensitive. Response, 50-8000 cycles to 25 mw. Speaker diaphragm directs sound through a 60" flexible plastic tube to the headset. Light-gray finish. 6 ohms. Shpg. wt., 6 oz.
59 J 239. List, $14.75. NET 8.67

Fig. D—PILLOW SPEAKER

Exceptionally small and compact. Designed for comfortable radio or TV listening through a pillow without disturbing others. Only ⅝" thick by 2¼" diameter. Red waterproof plastic. Shpg. wt., 6 oz.
59 J 290. Model 4531. 2000 ohms.
59 J 291. Model 4501. 128 ohms.
List Each, $7.20. NET EA., Less cord. 4.23

Fig. E—MIDGET EARSET

Midget earpiece receivers that slip onto the ear. Weigh only ½ ounce! Flat plastic frame. Frequency response, 50-4000 cycles. Single cord connection. Less cord. Shpg. wt., 5 oz.

No.	Type	Description	Ohms	EACH
59 J 265	4650	All plastic	128	4.59
59 J 266	4660	All plastic	2000	
59 J 274	4642	Plastic frame; metal ear bow	128	
59 J 275	4644	Plastic frame; metal ear bow	2000	

Fig. F—DYNAMIC PILLOW SPEAKER

Model 8110. Wide frequency range and great power handling ability. Rich, full tone. For individual or institutional use. Stainless steel, moistureproof housing. 3.2 ohm voice coil. With 5 ft. cord and standard phone plug. 3¼" dia., 1⅛" thick. Shpg. wt., 6 oz.
59 J 276. List, $10.20. NET 6.00

Model 8130. As above but has 10,000 ohms impedance. Shpg. wt., 6 oz.
59 J 277. List, $12.10. NET 7.12

Fig. G—MUFF-TYPE HEADSET

New plexiglass headset. Weighs just 1.6 oz. Ear cushions are ball and swivel mounted to stainless steel headband. Shpg. wt., 6 oz.
59 J 279. Model 8825. 128 ohms.
59 J 283. Model 9316. 2000 ohms.
List, $14.50. NET EACH 8.53

Fig. H—SLIP-ON EARPHONE

New, miniature earphone slips over either ear. Weighs less than 1 oz. Clear plastic shield transmits sound into ear. Sealed, rustproof receiver. With 5-ft. cord and phone plug. Shpg. wt., 6 oz.
59 J 278. Model 8560. 128 ohms.
59 J 282. Model 8561. 2000 ohms.
List, $12.50. NET EACH 7.35

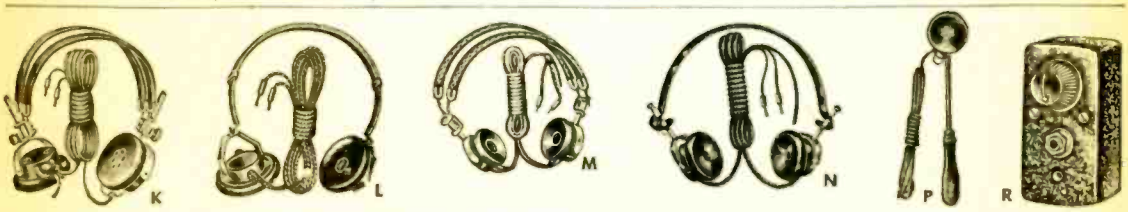
Fig. J—CORD & MINIATURE PLUG

Model 9200. 5-ft. cord with 90° miniature plug. Length of plug, ¾". Dia., ⅝". For computers, dictating machines, etc. Shpg. wt., 5 oz.
59 J 252. List, $3.15. NET 1.85

CORDS, EXTRA TIPS AND ACCESSORIES

5-ft. cord with standard phone plug and other accessories. *Have built-in volume controls, with pocket clips. For use with Telex units listed on this page. Av. shpg. wt., 4 oz.

No.	Description	For Use With	NET
59 J 270	Type 3280 standard cord	All Telex sets except Dynaset	2.06
59 J 272*	Volume Control Cord w/5,000 ohm pot.	Twinset 59 J 285	5.09
59 J 245*	Volume Control Cord w 20,000 ohm pot.	59 J 281, 59 J 266 59 J 290	5.09
59 J 246*	Volume Control Cord w/1,000 ohm pot.	59 J 280, 59 J 265 59 J 286, 59 J 291	5.09
59 J 297	Type 4652 Plastic Earframe	59 J 265, 59 J 266	.47
59 J 269	Type 8555 5-ft. Extension Cord	All Telex Units except Dynaset	2.06
59 J 242	Type 8570 Panel Mounted Jack	59 J 252 Cord & Plug	.24
59 J 243	Type 9210 Miniature Straight Plug	59 J 252 Cord & Plug	.35
59 J 295	Ear Tips	All Twinsets	.09
59 J 296	Ear Tips	All Monosets	.09



TRIMM HEADPHONES AND ACCESSORIES

Fig. K—"MILITARY" TYPE

Model 29. Constructed to meet military headphone specifications. Impedance, 20,000 ohms; 2,200 ohms DC resistance. Metal shell with bakelite cap. 6 ft. cord. Inside terminals. Leather-covered band. Wt., 1½ lb.
59 J 040. NET 10.35

Replacement Cap. For above and for Western Electric Headphones
59 J 041. NET ..... 59¢

59 J 042. Extra Diaphragms. For above. EACH ..... 15¢

Fig. L—"FEATHERWEIGHT" TYPE

Weigh less than 5 ounces. Black bakelite caps and shells. Forged magnets, pole pieces of permalloy. Impregnated coils. 6 ft. moistureproof cord. 2⅜" dia. Shpg. wt., 9 oz.
59 J 000. 4,000 ohm Standard.
59 J 001. 24,000 ohm Special.
NET EACH 6.47

59 J 045. Extra Diaphragms. EACH 15¢
59 J 013. Replacement Caps. EACH 44¢

Fig. M—"PROFESSIONAL" MODEL

Magnetic headphones for general purpose duty. Bakelite caps and shells. Forged magnets of chrome steel. Impregnated coils. 5 ft. cord. Inside terminals. Has plastic covered headband. Shpg. wt., 1¼ lb.
59 J 020. 3,000 ohms. NET
59 J 021. 4,000 ohms. EACH 3.41
59 J 030. Replacement Caps. EACH .. 38¢
59 J 031. Extra Diaphragms. EACH .. 12¢

Fig. N—"ACME DELUXE" PHONES

Sensitive and practical phones for every headset use. Each unit weighs less than 1½ ounces. Cap and shell of bakelite with light-tension flexible headband. 4½ ft. cord. Phone tip terminals. Shpg. wt., 8 oz.
59 J 070. 2000 ohms. NET 1.97

"ACME" SINGLE HEADSETS

A lightweight single unit headphone. With headband as described above. Wt. 4 oz.
59 J 072. 1000 ohms. NET 1.18

EXTRA DIAPHRAGMS

59 J 012. Replacement diaphragms for Acme Deluxe phones. 1 oz. NET EACH .... 12¢

Fig. P—"LORGNETTE" TYPE

Model 120. Has same construction as "Featherweight" headphones described at left. An excellent earphone for use in churches, small theatres and similar applications. Earphone size, ¾x2⅛" diameter. Lorgnette handle extends to 14". Impedance, 4,500 ohms; DC resistance, 1,000 ohms. 6-foot braided cord, less phone plug. Shpg. wt., 10 oz.
59 J 036. NET 4.85

INDIVIDUAL VOLUME CONTROLS

Fig. R. Phone jack and volume control in a neat, compact box. Recommended for group hearing aid systems in theatres, churches, schools, etc. Permits convenient adjustment of volume to suit individual needs. Resistance, 10,000 ohms. Available in either glossy ivory, suitable for theatres, or brown wrinkle for churches, schools, etc. Box measures 3¼x2⅛x1¼". Edges and corners are rounded to avoid tearing clothing. Shpg. wt., 1 lb.
59 J 056. Brown.
59 J 057. Ivory.
NET EACH 2.59

For Complete Product and Manufacturers Index, See Pages 317-320

Headphones—Speaker Cones

PERMOFLUX HIGH-FIDELITY DYNAMIC HEADSETS

Type HD-1. Moderately priced hi-fi dynamic headphones. Smooth response from 50-12,000 cps. Rated 75 mw. 8 ohms. With 5' cord and plug. Shpg. wt., 2 lbs.
59 J 387. NET.....29.25

Type B-DHS-17B High-Fidelity Binaural Model. Dynamic headset. Impedance per phone, 300 ohms. With Type 1505 ear cushions; 5' cord with PL-68 plug. Shpg. wt., 2¼ lbs.
59 J 370. NET.....49.00

Type 1505 Ear Cushions.
59 J 372. NET PER PAIR.....5.88

NEW MAESTRO CONTROL BOX

Deluxe speaker-headset control box for hi-fi system, TV, radio etc. Permits headset listening and convenient control of extension speaker. Connects main speaker only; extension speaker (or headset) only; or both main speaker and extension (or headset). Mahogany wood cabinet, 5x10¼x6¾". Supplied complete with two jacks, volume control, 10' cable. Shpg. wt., 2½ lbs.
59 J 395. NET.....10.29

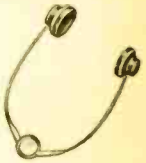
BMA-1 BINAURAL TO MONAURAL HEADSET ADAPTER

Permits any Permoflux binaural headset to be used for monaural service. Input end of adapter has jack to receive the PL-68 type, 3-circuit plug of binaural headset. Output end is standard 2-circuit PL-55 type plug which can be plugged into any conventional headset jack. Length, 2¼"; Dia., 1⅛". Shpg. wt., 2 oz.
59 J 385. NET EACH.....2.21

BRITISH INDUSTRIES TYPE K HI-FI DYNAMIC HEADSETS

Professional-type, high-fidelity dynamic headphones. Ideal for broadcasting, monitoring and recording. Response, 50-10,000 cps. Uses moving-coil armature assemblies. Complete with foam rubber ear cushions, 6½ ft. rubber-covered cord. 52 ohms impedance. Shpg. wt., 1¼ pounds.
59 J 337. NET.....28.95

600-Ohm Type. As above, but 600 ohms.
59 J 338. NET.....34.50



NEW FEN-TONE INDUCT-O-PHONE

Unique ultra-convenient induction-type earphones. Require no connecting wires! Permit complete freedom of movement within an area of 200 to 500 square feet. Sound is picked up from induction loop taped around room or under the rug. Wearer can adjust built-in volume control. Perfect for hard-of-hearing or "night-owl" listeners who do not wish to disturb family or neighbors. Shpg. wt., 5 oz.
59 J 332. NET.....9.65

FEN-TONE HI-FI "ADAPHONE"

Model M-3. Hearing-aid earphone for radio and TV. Choice of "normal" response, or "high" for accentuation of treble. With control unit, 18' cable, instructions. 3x2x1¼". Shpg. wt., 1 lb.
59 J 333. NET.....13.40

Model MS-2. Additional earset for above. With cord and plug. Shpg. wt., 5 oz.
59 J 334. NET.....5.15

ALLIED OFFERS COMPLETE SPEAKER SERVICE

EXACT DUPLICATE CONES

ALLIED supplies replacement cones, accurately designed to match the originals. One-piece material and precise forming provide good tone quality. Voice coils are exact duplicates. Cones not listed may be ordered by sending old cone and voice coil. Include make and model number of set and speaker, speaker size, and identifying marks. Send remittance (including postage) with order. Delivery 30 days. Shpg. wt., 2 lbs.

Speaker Size	Cone	Speaker Size	Cone
4" to 6"	1.00	14" to 15"	3.00
6½" to 9"	1.50	4"x6" oval	1.30
10"	2.00	5"x7" oval	1.50
11" to 12"	2.20	6"x9" oval	1.70

SPEAKER REPAIR SERVICE

Skilled technicians will completely rebuild all your old speakers for the small charges listed below. Ship speaker to us prepaid and send remittance (including postage) with order. Allow 30 to 45 days for delivery. Additional charges for field coil repair or replacement are as follows: $1.25 for 4" to 9" speakers; $2.25 for 10" to 12" speakers. Field coils welded into speaker frames cannot be repaired or replaced.

Speaker Size	Complete Repair Service	Speaker Size	Complete Repair Service
4" to 6"	1.55	14" to 15"	3.85
6½" to 9"	2.55	4"x6" oval	2.00
10"	2.85	5"x7" oval	2.55
11" to 12"	3.05	6"x9" oval	2.55

HOW TO ORDER STOCK CONES BELOW. To determine correct replacement cone for your speaker, measure your old cone and select the cone you require from the listings below. "O.D." is the outside diameter of the speaker; "V.C.I.D." is the inside diameter of the voice coil. All dimensions are in inches. Spider type: *Flat, †cup, ‡2 point, §center, **3 point. With flexible voice coil leads.

3½" to 6½" Cones

Stock No.	Mfr's Type	O.D.	V.C. I.D.	Cone Depth	Spider O.D.
82 D 655	15W98	3½	9/16	29/32	1¼*
82 D 708	18W94	3½	9/16	29/32	1⅝†
82 D 588	18W05	4	9/16	1	1⅞†
82 D 709	18W69	4	9/16	15/16	1⅝†
82 D 707	19W16	4	9/16	1	1⅝†
82 D 505	15W28	4	9/16	1 3/32	2*
82 D 650	15W55	4	9/16	29/32	1⅝†
82 D 503	16W16	4	½	15/16	1½*
82 D 500	16W19	4	9/16	31/32	1⅞*
82 D 507	18W32	4	½	15/16	1⅝†
82 D 508	17W68	4	9/16	⅞	1⅝†
82 D 533	17W26	4	9/16	31/32	1¾*
82 D 532	17W62	4½	9/16	1⅛	1⅞†
82 D 710	18W34	4½	9/16	1⅛	1⅞*
82 D 711	18W50	4½	9/16	1 1/16	1⅝†
ABOVE CONES, NET EACH.....71¢					
82 D 657	17W18	5	9/16	1 3/16	2⅛*
82 D 525	15W89	5	9/16	1 7/32	1⅝†
82 D 517	14W91	5	9/16	1¼	2 1/16*
82 D 530	17W10	5	9/16	1 5/32	1⅝†
82 D 510	14W73	5	½	1⅛	2¼*
82 D 519	16W26	5	⅝	1⅛	2*
82 D 697	16W99	5	9/16	1⅛	1⅝†
82 D 526	15W84	5	9/16	1 3/16	1⅞*
82 D 583	17W04	5	9/16	1⅛	1⅝†
82 D 531	16W85	5	9/16	1 5/32	1¾*
82 D 623	18W24	5	¾	1⅛	1⅝†
82 D 630	15W34	5	⅝	1⅛	1¼*
82 D 634	14W89	5¼	¾	1 5/32	2 1/16*
82 D 584	16W73	5¼	9/16	1 3/16	1⅞†
ABOVE CONES, NET EACH.....88¢					
82 D 547	16W45	6	¾	1 9/16	2⅛†
82 D 705	19W18	6	9/16	1 7/16	1⅝†
82 D 712	17W05	6	9/16	1 15/32	1⅝†
82 D 714	15W00	6	¾	1⅝	2⅛*
82 D 555	16W71	4x6	9/16	1⅛	1⅞*
82 D 558	16W98	4x6	9/16	1⅛	2*
82 D 627	16W62	6½	¾	1 9/16	2¼*
ABOVE CONES, NET EACH.....1.06					

7" to 15" Cones

Stock No.	Mfr's Type	O.D.	V.C. I.D.	Cone Depth	Spider O.D.
82 D 640	15W57	7	¼	1⅞	2⅛*
82 D 562	15W83	7⅛	1	2	2¼†
82 D 642	12W45	7½	1	2 1/16	.....§
ABOVE CONES, NET EACH.....1.18					
82 D 579	16W84	8	¼	2 3/32	2¼*
82 D 717	17W78	8	¼	2	2¼†
ABOVE CONES, NET EACH.....1.29					
82 D 683	16W68	6x9	¼	2 3/32	2⅛*
82 D 572	16W69	6x9	¼	2	2⅜*
82 D 573	16W70	6x9	¼	2 3/32	2¼†
82 D 684	17W45	6x9	¼	2 1/32	2⅛*
82 D 587	18W26	6x9	¼	2⅛	2¼†
82 D 718	19W09	6x9	⅞	2 1/16	2 3/16†
82 D 704	19W10	6x9	1	2 7/32	2⅛†
82 D 680	16W67	6x9	1	2 3/16	2¼†
82 D 682	17W11	6x9	1	2 1/32	2⅛*
82 D 695	18W14	6x9	1	2 3/16	2⅛*
82 D 696	18W63	6x9	1	2 5/32	2⅛†
ABOVE CONES, NET EACH.....1.44					
82 DX 719	17W36	9¼	1	3	2 5/8†
82 DX 721	19W47	10	1	2 13/16	2¾*
82 DX 596	17W88	10	1	2 15/32	3⅛†
82 DX 688	18W18	10	1	2 27/32	2⅝†
ABOVE CONES, NET EACH.....1.59					
82 DX 613	12W48	10⅞	1	3⅛	.....§
82 DX 597	17W91	12	1	3¾	2¾*
82 DX 601	12W56	12	1½	3 19/32	2 11/16**
82 DX 603	13W84	12	1	3 15/32	3½†
82 DX 618	17W17	12	1	3¾	3⅛†
82 DX 612	16W55	12	1½	3⅞	3 11/16**
82 DX 611	16W66	12	1	4 7/32	3⅛*
82 DX 689	17W09	12	1¼	3 17/32	4¼*
ABOVE CONES, NET EACH.....1.85					
82 DX 692	16W65	15	1½	4⅞	3¾*
82 DX 693	16W81	15	1½	4¾	4¼*
ABOVE CONES, NET EACH.....2.53					

HI-FI SPEAKER REPLACEMENT CONES

Stock No.	Speaker	Size	NET
82 D 725	Altec Lansing 400B	8"	1.62
82 DX 726	Altec Lansing 600B	12"	2.20
82 DX 727	Altec Lansing 603B	15"	3.09
82 D 728	Electro-Voice SP8-B	8"	1.91
82 DX 729	Electro-Voice SP12	12"	2.58
82 DX 730	Electro-Voice SP12-B	12"	2.58
82 DX 731	Electro-Voice SP15	15"	3.31
82 DX 732	Electro-Voice 15W1	15"	3.31
82 DX 733	GE A1-400	12"	2.20
82 DX 734	Jim Lansing D131	12"	2.58
82 DX 735	Jim Lansing D130	15"	3.31
82 D 736	Jim Lansing D208	8"	1.62
82 DX 739	Stephens P22FR	12"	2.20
82 DX 740	Stephens P52FR	15"	3.09
82 DX 737	Stephens 106	15"	3.09
82 DX 738	Stephens 103-120LX	15"	3.09
82 DX 741	University 6200	12"	2.20
82 DX 742	University Diffusicone	12"	2.58
82 DX 743	University 6201	12"	2.20

SPEAKER CONE CEMENT

Cements speaker cones, spiders, paper rings and felts to speaker frames. Dries quickly. In 2 oz., flexible-metal tube. Shpg. wt., 6 oz.
43 N 101. NET.....35c

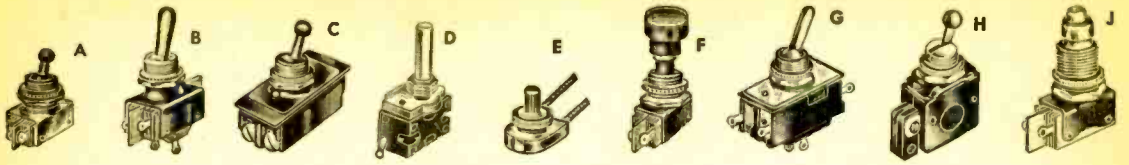
CENTERING SHIMS

For use when replacing or centering speaker cones. Following sizes (4 each): .005; .0075; .01; .0125; .015. Color-coded. In leatherette case. Shpg. wt., 2 oz.
43 N 105. NET.....38c

WALDOM REPLACEMENT CONE CATALOG

Stock No. 82 D 724. Lists replacement cones by manufacturer and model number. Includes instructions for proper cone installation and detailed illustrations. Gives characteristics of all Waldom universal type field coils. **No charge with your next order.**

H and H Toggle Switches



POPULAR HART & HEGEMAN APPLIANCE SWITCHES

Fig. A—BALL HANDLE TOGGLE SWITCHES

Popular, high-quality Hart and Hegeman ball handle toggle switches. Underwriters' Laboratories Approved. Built for long, dependable service. SPST type rated at 3 amps, 250 volts. All others 3 amps at 125 volts or 1 amp at 250 volts. 34B127 is momentary contact type. All have bakelite insulation. Shank, 15/32" diameter. Supplied with mounting nuts. Solder lug terminals. Shpg. wt., each, 2 oz.; per 20, 2 lbs.

Stock No.	Mfr's Type No.	Type	Shank Length	NET EACH	20-39 EA.	40-99 EA.
34 B 100	20994-BF	SPST	13/32"	.46	.43	39¢
34 B 101	21518-B	SPST	3/4"	.57	.52	47¢
34 B 102	21615-BD	SPST	1"	.59	.54	49¢
34 B 110	21350-B	SPDT	13/32"	.59	.54	49¢
34 B 111	80023-B	SPDT	3/4"	.70	.64	58¢
34 B 112	21661-B	SPDT	1"	.72	.66	60¢
34 B 127	21827-B	SPDT	13/32"	.87	.79	73¢
34 B 120	20902-AM	DPST	13/32"	.84	.77	71¢
34 B 121	20902-AZ	DPST	3/4"	.95	.87	79¢
34 B 122	20902-Q	DPST	1"	.97	.89	81¢
34 B 130	20905-Z	DPDT	13/32"	.97	.89	81¢
34 B 131	20905-BT	DPDT	3/4"	1.08	.99	90¢
34 B 132	20905-C	DPDT	1"	1.10	1.01	92¢

Fig. B—BAT HANDLE TOGGLE SWITCHES

Ruggedly built H and H bat handle toggle switches. Underwriters' Laboratories approved. All have bakelite insulation. Silver-plated lug terminals. Shank, 15/32" diameter, 13/32" long. Supplied with mounting nuts. Solder lug terminals. Shpg. wt., each, 2 oz.; 20, 2 lbs.

Stock No.	Mfr's Type No.	Type	Amps.	Volts	NET EACH	20-39 EA.	40-99 EA.
34 B 195	20994-EW	SPST	3	125	.53	49¢	44¢
34 B 196	21350-BP	SPDT	3	125	.66	60¢	55¢
34 B 197	20902-DN	DPST	3	125	.91	83¢	76¢
34 B 198	20905-GA	DPDT	3	125	1.04	95¢	86¢

Fig. C—POWER TYPE TOGGLE SWITCHES

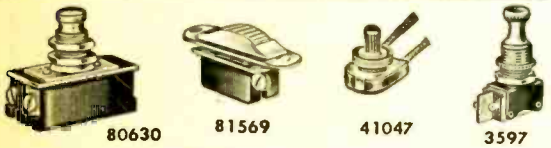
Compact, toggle-operated power switches for motors and appliances; 34B135 and 34B136 are rated at 6 amps 250 volts; 12 amps at 125 volts; 34B136 is also rated 1 HP, 250 volts. 34B137 is rated at 6 amps, 250 volts; 12 amps, 125 volts. U.L. Approved. Bakelite case. Screw terminals. Shank, 15/32" dia. 5/16" long. With mtg. nuts. Shpg. wt., 2 oz.; 20, 2 lbs.

Stock No.	Mfr's Type No.	Type	NET EACH	20-39 EA.	40-99 EA.
34 B 135	80607	SPST	96c	88c	80c
34 B 136	80600	DPST			
34 B 137	80618	SPDT			

Fig. D—ROTARY SWITCHES

Positive contact rotary switches. U.L. Approved. All switches 125/250 volts. Bakelite insulation. Silver-plated lug terminals. Threaded shank, 11/32" dia., 3/8" long. Shaft, 1/4" dia., 7/8" long. Wt., 2 oz.

No.	Type No.	Type	Amps	EACH	20-39 EA.	40-99 EA.
34 B 141	81715-G	SPST	6/3	1.13	1.04	.94
34 B 142	81721-G	SPDT	6/1	1.26	1.16	1.06
34 B 143	81724-G	DPST	6/3	1.52	1.39	1.26
34 B 144	81727-G	DPDT	6/3	1.65	1.51	1.37



80630 81569 41047 3597

GENERAL-PURPOSE SWITCHES

Type 80630 Push-Button Switch. Momentary contact. DPST, normally open. Can be used as interlock in heavy-duty applications. Metal button. 6 amp, 250 v., 12 amp, 125 v. U.L. Approved. Screw terminals. Size, 1 3/4 x 1 3/16". Sleeve length, 5/8"; dia., 1 5/32". Wt., 2 oz.; 20, 1 1/4 lbs.
34 B 152. 20-99, EA. 1.19 EACH 1.42

Type 81669 Slide Switch. SPST. Indicating switch, screw terminals. Requires 1 3/4 x 5/16" cutout for mounting. 3 amp at 250 v.; 6 amp at 125 v. Size, 2 1/4 x 3/4". Bakelite case. Wt., 2 oz.; 20, 1 1/4 lbs.
34 B 153. 20-99, EA. 76¢ EACH 91c

Type 41047 Rotary Canopy Switch. Rated 1 amp, 250 v., 3 amp, 125 v., SPST. 5/16" stem; 1/2" dia. Deluxe brass finish; metal handle. 6" leads. Shpg. wts.; each, 2 oz.; 20, 1 1/4 lbs.
34 B 165. 20-99, EA. 29¢ EACH 32c

Type 3597 Push-Pull Midget Switch. SPST. Metal button, laminated fibre base. Solder lug terminals. 3 amps at 250 volts. U.L. Approved. Requires 15/32" mtg. hole. Size, 1 5/32 x 1 3/16". Wt., 2 oz.; 20, 1 1/4 lbs.
34 B 154. 20-99, EA. 68¢ EACH 81c

Special prices available on H & H switches in quantities greater than those listed on this page. Write for quotations.

Fig. E—CANOPY-TYPE ROTARY SWITCH

Type 41044. Rated 3 amps, 125 volts; 1 amp 250 volts. U.L. Approved. Bakelite base. Threaded shank, 3/8" dia. 3/16" long. Fluted shaft, 3/16" dia., 5/16" long. 6" wire leads. With mtg. nuts. Shpg. wt., 2 oz.
34 B 147. 20-99, EA. . . 22¢ EACH 24c

Fig. F—PUSH-BUTTON SWITCHES

Type 86710-C. SPST push-button switch with snap-on bakelite button in red or black. Press button to close circuit; press again to open. Rated at 3 amps, 250 volts; 6 amps, 125 volts. U.L. Approved. Threaded shank, 15/32 x 3/16" long. With mtg. nuts. Shpg. wt., each, 2 oz.; 20, 1 1/4 lbs.
34 B 161. Red.
34 B 162. Black. 20-99, EA. . . 89¢ EACH 1.07

Type 86710. As above, but less snap-on bakelite button. Shpg. wt., each, 2 oz.; 20, 1 1/4 lbs.
34 B 160. 20-99, EA. . . 75¢ EACH 90c

Type 3391-GL. Momentary contact. SPST normally open. 1 amp, 125 volts. U.L. Approved. Threaded shank, 15/32 x 5/16". With mtg. nuts, lugs and bakelite button. Shpg. wts., each, 2 oz.; 20, 1 1/4 lbs.
34 B 159. 20-99, EA. . . 55¢ EACH 66c

INDUSTRIAL TYPE SWITCHES

Underwriters' Laboratories Approved. All have 15/32" shank diameter, except 34B107, 3/4" diameter. With mounting nuts.

Fig. G—BAT HANDLE TOGGLE SWITCHES

Shank lengths: 13/32", except *11/32". 34B103 is center-off type. Shpg. wt., 4 oz.; per 20, 5 lbs. Lug terminals except 34B106 with screw terminals.

Stock No.	Mfr's Type No.	Type	Amps	Volts	NET EACH	20-39 EA.	40-99 EA.
34 B 109	80607-BJ	SPST	12/6	125/250	.99	.90	.82
34 B 113	80601-BD	SPST	15/10	125/250	1.51	1.38	1.26
34 B 106	80602-CA	DPST	15/10	125/250	1.51	1.38	1.26
34 B 103*	82024-D	DPDT	6/3	125/250	1.36	1.25	1.14

Fig. H—BALL HANDLE TOGGLE SWITCHES

34B104 has 1/2" shank. 34B107 has 3/8" shank and has center-off position. Screw terminals. Wt., 7 oz.

Stock No.	Mfr's Type No.	Type	Amps	Volts	NET EACH	20-39 EA.	40-99 EA.
34 B 104	80323-BU	SPST	10/5	125/250	.77	.70	.65
34 B 107	80638	DPDT	10/5	125/250	3.12	2.85	2.60

Fig. J—PUSH-BUTTON SWITCHES

Momentary contact. Metal base, and 3/16" shank. *Two-circuit type. §Same as 3392 but with black bakelite button. Shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Type	Amps	Volts	NET EACH	20-39 EA.	40-99 EA.
34 B 118	3592	SPST	3	250	.97	.89	.81
34 B 119	3392*	SP2	1	125	.63	.58	.52
34 B 124	3392-AE§	SP2	1	125	.80	.73	.70

34 B 125. Type 3391-194R. Red button for 3392-AE switch only.
34 B 126. Type 3391-194B. Black button for 3392-AE switch only.
NET EACH 15c

INDICATING SWITCH PLATES

Type 20690-1. For Toggle Switches. Nickel-plated brass stamping. Keyed to fit switch shank. Reads "On-Off". For 15/32" dia. shank. Shpg. wt., per pkg. of 2, 2 oz.
34 B 157. Pkg. of 2 ..... 8c
50 Pkgs. or More, Per Pkg. 6c

Forward-Reverse Plate. As above, but reads: "For—Rev."
34 B 166. Pkg. of 2 ..... 7c

For Toggle or Rotary Switches. 1 1/8" diameter polished aluminum plate for use with toggle or rotary switches. Has 1/2" hole. Etched on black background. Shpg. wt., 2 oz.
34 B 151. NET EACH 18c
20-99, EA. 16c

LOCK SWITCH

Type 81815-L. Lock switch with key. SPST 3 amps at 250v., 6 amps at 125v. Sleeve dia. 15/32". Fits panels to 9/32" thick. Size, 1 3/4 x 1 1/2". Black phenolic case. Switch must be open to remove key. Wt., 2 oz.
34 B 156. EA 1.44
20-99, EACH 1.32

Type 81715-LE. As above, but key removable open or closed pos.
34 B 158 ..... 1.44
20-99, EACH 1.32

34 B 128. Extra key ..... 14¢

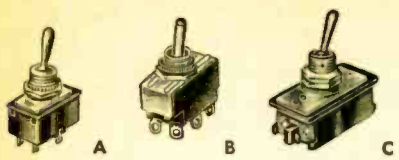
STEVENS-WALDEN SPINTITE SWITCH WRENCHES

Specially designed Spintite wrenches with deep recess to accommodate even bat-handle switches. Knurled surface is tapered to accommodate different-sized ring nuts. Wood handle. Shpg. wt., 6 oz.

Type 3480. For H&H switches only.
46 N 056. EACH 2.20

Type 3481. For Cutler Hammer switches.
46 N 167. NET EACH 2.20

Toggle Switches



CUTLER-HAMMER TOGGLE SWITCHES

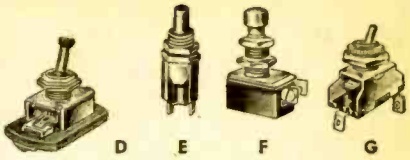


Fig. A—GENERAL-PURPOSE AC-DC TYPE

AC-DC switches. Bakelite case. Solder lug terminals. 15/32" diameter threaded stem. U.L. Approved. Use with on-off plate at right below. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Stem Lgth.	Type	Amperes 125V	Amperes 250V	NET EACH	20-39 EACH	40-99 EACH
34 B 500	8280-K16	15/32"	SPST	.....	3	46¢	42¢	39¢
34 B 527	8280-K14	1/4"	SPST	.....	3	46¢	42¢	39¢
34 B 508	8381-K8	15/32"	SPST	6	3	53¢	49¢	44¢
34 B 501	8282-K14	15/32"	SPDT	3	1	59¢	54¢	49¢
34 B 528	8282-K12	1/4"	SPDT	3	1	59¢	54¢	49¢
34 B 502	8360-K7	15/32"	DPST	.....	3	84¢	77¢	71¢
34 B 529	8360-K6	1/4"	DPST	.....	3	84¢	77¢	71¢
34 B 530	8363-K6	1/4"	DPDT	.....	3	97¢	89¢	81¢
34 B 503	8363-K7	15/32"	DPDT	.....	3	97¢	89¢	81¢

Fig. B—HEAVY-DUTY AC TYPE

Slow-make, slow-break mechanism for long, dependable use. 15/32" diameter threaded stem, 15/32" long. *Center off. †Screw terminals; others have solder lug terminals. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Type	Amperes 125V	Amperes 250V	NET EACH	20-39 EACH	40-99 EACH
34 B 534	7501-K13	SPST	15	10	.54	.49	.45
34 B 591	7500-K14†	SPST	15	10	.63	.58	.53
34 B 535	7503-K13*	SPDT	15	10	.61	.56	.51
34 B 592	7502-K13*†	SPDT	15	10	.75	.69	.63
34 B 536	7505-K4	SPDT	15	10	.61	.56	.51
34 B 593	7504-K4†	SPDT	15	10	.75	.69	.63
34 B 537	7561-K4	DPST	15	10	.82	.75	.69
34 B 594	7560-K5†	DPST	15	10	1.01	.92	.84
34 B 538	7565-K5	DPDT	15	10	.94	.86	.78
34 B 595	7564-K6†	DPDT	15	10	1.22	1.12	1.02
34 B 539	7563-K4*	DPDT	15	10	.94	.86	.78
34 B 596	7562-K4*†	DPDT	15	10	1.22	1.12	1.02
34 B 543	7611-K2	3PST	15	10	1.55	1.42	1.29
34 B 597	7610-K2†	3PST	15	10	1.83	1.69	1.53
34 B 523	7613-K2*	3PDT	15	10	1.91	1.75	1.60
34 B 598	7612-K2*†	3PDT	15	10	2.33	2.14	1.94
34 B 544	7691-K13	4PST	.5 hp	10	3.27	3.00	2.83

Fig. B—AIRCRAFT TYPE

Meet aircraft requirements. †Screw terminals; all others have solder lug terminals. 15/32" threaded stem, 15/32" long. Size 1 1/8"x5/8". *Have center-off position. Tested 10,000 operations at maximum ratings indicated. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Gov't No.	Type	Amperes 30V DC	Amperes 125V AC	NET EA.	20-39 EA.	40-99 EA
34 B 551	8803-K6	ST42A	SPST	20	8	.77	.72	.65
34 B 552	8816-K5	ST42D	SPDT	20	8	.92	.84	.77
34 B 553	8802-K6*	ST42E	SPDT	20	8	.92	.84	.77
34 B 554	8823-K5	ST52K	DPST	30	20	.93	.86	.78
34 B 559	8822-K8†	ST50K	DPST	30	20	1.55	1.42	1.29
34 B 555	8825-K5	ST52N	DPDT	30	20	1.05	.97	.88
34 B 576	8824-K8†	ST50N	DPDT	30	20	1.86	1.71	1.56
34 B 556	8821-K5*	ST52P	DPDT	30	20	1.05	.97	.88
34 B 577	8820-K10†*	ST50P	DPDT	30	20	1.86	1.71	1.56

Fig. B—MOMENTARY, HEAVY-DUTY AC TYPE

Slow-make, slow-break. 15/32x1 15/32" dia. threaded stem. *Normally open. †One side normally open; other side normally closed. ‡Screw terminals; others solder lug. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Type	Amperes 125 V	Amperes 250 V	NET EACH	20-39, EACH	40-99, EACH
34 B 578	7506-K4*‡	SPST	.5 hp	10	1.00	.90	.75
34 B 541	7510-K6†	SPDT	.5 hp	10	.96	.86	.72
34 B 579	7510-K7†‡	SPDT	.5 hp	10	1.16	1.04	.86
34 B 542	7570-K4†	DPDT	.5 hp	10	1.56	1.36	1.17

Fig. C—STANDARD AC-DC INDUSTRIAL TYPES

Standard duty switches. Suitable for motors. Mechanism enclosed in bakelite case. Insulating barrier between terminals. 15/32" threaded stem, 15/32" long. Screw terminals. U.L. Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type No.	Type	Amperes 125 V	Amperes 250 V	NET EACH	20-39, EACH	40-99, EACH
34 B 545	7320-K3	DPST	12	6	.96	.88	.80
34 B 520	7321-K3	SPST	12	6	.96	.88	.80
34 B 516	7360-K8	DPST	15	10	1.51	1.38	1.26
34 B 546	8680-K2	DPDT	10	5	2.74	2.51	2.28
34 B 517	7402-K4	DPST	1 1/2 hp	20	2.14	1.96	1.78

Fig. D—CENTER-OFF TYPE

Type 7140-K6. SPDT switch. 3 amps 125 volts AC or 10 amps 24 volts DC. Screw terminals. 11/32x1 15/32" stem. U.L. Approved. Wt., 3 oz.
34 B 522. 20-99, EACH .....36¢ **Single Lots, EACH** **43c**

ON-OFF PLATE

Type 827-228F3. For Cutler-Hammer toggle switches. Wt., 2 oz.
34 B 504. Per Pkg. of 2 ..... **8c**

Fig. E—PUSH-BUTTON AC-DC TYPE

Door-operated switches. All momentary. 15/32" shank. Solder lug terminals. *Normally open. †Normally closed. U.L. Approved. Wt., 3 oz.

Stock No.	Mfr's Type No.	Type	Amperes 125 V	Amperes 250 V	NET EACH	20-39, EACH	40-99, EACH
34 B 548	8411-K4	SPST*	.75	.25	36¢	33¢	30¢
34 B 547	8411-K8	SPST†	.75	.25	25¢	23¢	21¢
34 B 549	8440-K2	SPST*	3	1	73¢	67¢	62¢

Fig. F. Type 7190-K1 AC-DC Push Button Switch. SPST momentary contact, normally open. Rated 3 amps 250 v., 6 amps 125 v. Solder lugs. U.L. Approved. 15/32" shank. Shpg. wt., 2 oz.
34 B 518. 20-99, EACH .....80¢ **Single Lots, EACH** **97c**

Fig. F. Type 7208-K2 AC-DC Push-Push On-Off Switch. Rated 3 amps, 250 v., 6 amps.125v. Screw type terminals. 15/32" diameter threaded stem; 11/16" long. U.L. Approved. Shpg. wt., 2 oz.
34 B 519. 20-99, EACH ....82¢ **Single Lots, EACH** **99c**

Fig. G—SPST MIDGET SWITCH

Type 8098-K3. 3 amps 125 v. AC. Screw term. 11/32" long. 2 oz.
34 B 510. 20-99, EACH....34¢ **Single Lots, EACH** **40c**

Special prices are available on Cutler-Hammer switches in quantities of 100 or more. Write for quotations.

CARLING TOGGLE SWITCHES

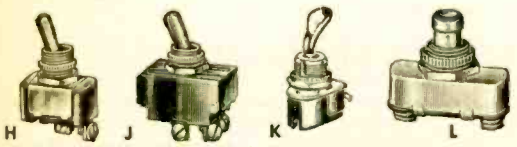


Fig. H—SINGLE POLE SWITCHES

Toggle-actuated. AC switches. Rugged bakelite base with metal covering for added strength. Slow make and break mechanism minimizes pitting of contacts. Screw-type terminals with No. 6-32x3/16" binding head screws. Stem length. 15/32". Bat handle type toggles. 11/16" long. †Has center-off position. ‡Momentary action on either side and center-off. 15/32" dia. threaded shank. With locknut and ring-type panel nut. Body dimensions (HWD): 1 11/64x5/8x1". Av. shpg. wt., 3 oz. **Write for quantity prices.**

Stock No.	Mfr's Type No.	Type	Amperes 125 V	Amperes 250 V	NET EACH	20-39, EACH	40-99, EACH
34 B 385	2FA54	SPST	15	10	59¢	54¢	49¢
34 B 386	2FB54	SPDT	15	10	71¢	66¢	60¢
34 B 387	2FC54†	SPDT	15	10	71¢	66¢	60¢
34 B 388	6FC54‡	SPDT	15	10	89¢	82¢	74¢

Fig. J—DOUBLE POLE SWITCHES

Double pole. AC switches. Same construction as Fig. H. †Center-off position. ‡Center-off and momentary spring return contact on one side. Shpg. wt., 3 oz. **Write for quantity prices.**

Stock No.	Mfr's Type No.	Type	Amperes 125V	Amperes 250V	NET EACH	20-39, EACH	40-99, EACH
34 B 389	2GK54	DPST	15	10	.96	.88	.80
34 B 390	2GL54	DPDT	15	10	1.11	1.02	.93
34 B 391	‡2GM54	DPDT	15	10	1.11	1.02	.93
34 B 392	‡6GM58	DPDT	15	10	1.36	1.24	1.14

Fig. K—MOMENTARY TOGGLE SWITCH

Type 110-M-NO-93. Normally open. SPST action. 15/32" dia. shank. 15/32" long. Trigger-bat handle. Bakelite body. Lugs are silver-plated. Rated 3 amps, 250 volts; 6 amps. 125 volts. Shpg. wt., 3 oz.
34 B 149. NET **68c**
Lots of 20-99. Each .....57¢

Fig. L—PUSH-BUTTON SWITCHES

Heavy-duty, push-type, momentary contact switches. Rated 10 amps, 125-250 v. AC. § n.o., normally open; n.c., normally closed. Screw terminals. 15/32" dia. stem; 9/16" long. Shpg. wt., 3 oz. **Write for quantity prices.**

Stock No.	Mfr's Type No.	Type§	NET EACH	20-39, EACH	40-99, EACH
34 B 398	172	SPST, n.o.	59c	54c	49c
34 B 397	170	SPST, n.c.			

Centralab Switches

MINIATURE PHENOLIC SWITCHES

Miniature phenolic-insulated switches. 30° indexing, adjustable stop. 1½"x1 3/16" dia. Shaft, 1⅞" long. Silver-plated clips and contacts, double-wiping. Metal parts withstand 50-hr. salt spray test. Wt., 5 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Sections	Total Poles	Pos. per Pole	NET EA.
35 B 050	PA-1000	35 B 065	PA-1001	1	1	2-11	1.32
35 B 051	PA-1002	35 B 066	PA-1003	1	2	2-5	1.32
35 B 052	PA-1004	35 B 067	PA-1005	2	2	2-11	1.76
35 B 053	PA-1006	35 B 068	PA-1007	1	3	2-3	1.32
35 B 054	PA-1008	35 B 069	PA-1009	3	3	2-11	2.20
35 B 055	PA-1010	35 B 070	PA-1011	1	4	2	1.32
35 B 056	PA-1012	35 B 071	PA-1013	2	4	2-5	1.76
35 B 057	PA-1014	35 B 072	PA-1015	4	4	2-11	2.65
35 B 058	PA-1016	35 B 073	PA-1017	5	5	2-11	3.09
35 B 059	PA-1018	35 B 074	PA-1019	2	6	2-3	1.76
35 B 060	PA-1020	35 B 075	PA-1021	3	6	2-5	2.20
35 B 061	PA-1022	35 B 076	PA-1023	6	6	2-11	3.53
35 B 062	PA-1024	35 B 077	PA-1025	2	8	2	1.76
35 B 063	PA-1026	35 B 078	PA-1027	4	8	2-5	2.65
35 B 064	PA-1028	35 B 079	PA-1029	3	12	2	2.20

UNIVERSAL AND INTERCOM SWITCHES

34 B 088. Type 1443. SP, 23 pos. switch. Shorting contacts, 15° positive indexing. Continuous rotation. 1 off pos. Cadmium-plated metal parts. Shaft 1⅞" L. 1" behind panel. With knob, mounting nut, dial plate. 8 oz. **NET**.....1.91

34 B 085. Type 1450. 4PDT rotary switch having universal application. Bakelite insulating wafer. Non-shorting. Shaft 1⅞" L. ¾" behind panel. With bar knob, locknut and washer. Shpg. wt., 8 oz. **NET**...59¢

34 B 087. Type 1451. 4PDT rotary switch. Shaft 1⅞" L. ¾" behind panel. Non-shorting. Long-life construction. 2¼" long. Spring-return type. Bakelite wafer. With bar knob. Wt., 8 oz. **NET**.....1.03

34 B 071. Type 1448. 6P, 3 pos. rotary switch for intercom circuits. Spring-return type. Non-shorting contacts. Shaft 1⅞" L. 1" behind panel. With knob, mounting nut and lock washer. Wt., 8 oz. **NET**..1.32

34 B 072. Type 1449. 6P, 3 pos. rotary switch for Intercoms. Positive in 2 pos., spring return in third. Non-shorting. Shaft 1⅞" L. 1" behind panel. With knob, mounting nut and lock washer. Wt., 8 oz. **NET**..1.32

TONE SWITCHES

Step type. Rated 1 amp. at 6 v. Shaft, ¼" dia., 2⅛" long. Shorting contacts except *non-shorting (for Intercoms). †Has "saw-tooth" index action.

No.	Type	Description	Wt.	NET EA.
34 B 080	1460	SPDT or SPST phono-radio sw.	4 oz.	44¢
34 B 081	1461†	SP 3-pos. selector	5 oz.	59¢
34 B 082	1462	DPDT wave-band switch	5 oz.	59¢
34 B 083	1463*	SPDT spring return	4 oz.	59¢
34 B 084	1464*	DPDT spring return	4 oz.	59¢

MEDIUM-DUTY STEATITE POWER SWITCHES

Type JV. New, accurate and dependable rotary power switches for transmitters, power supplies and specialized applications. Rated 750 watts at 115 volts AC. Have positive, non-stall 20° indexing; double-wiping, solid silver contacts. Mounting bushing, ⅜"-32 thread, ⅜" long. 2⅞" between locating rods. With knob and dial plate. Av. shpg. wt., 6 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Gangs	Total Poles	Pos. per Pole	NET EACH
35 B 100	JV-9000	35 B 115	JV-9001	1	1	2-17	8.23
35 B 101	JV-9032	35 B 116	JV-9033	1	2	2-8	8.23
35 B 102	JV-9004	35 B 117	JV-9005	2	2	2-17	13.23
35 B 103	JV-9002	35 B 118	JV-9003	1	3	2-5	8.23
35 B 104	JV-9008	35 B 119	JV-9009	3	3	2-17	18.82
35 B 105	JV-9034	35 B 120	JV-9035	2	4	2-8	13.23
35 B 106	JV-9012	35 B 121	JV-9013	4	4	2-17	24.70
35 B 107	JV-9016	35 B 122	JV-9017	5	5	2-17	32.34
35 B 108	JV-9006	35 B 123	JV-9007	2	6	2-5	13.23
35 B 109	JV-9036	35 B 124	JV-9037	3	6	2-8	18.82
35 B 110	JV-9020	35 B 125	JV-9021	6	6	2-17	38.22
35 B 111	JV-9038	35 B 126	JV-9039	4	8	2-8	24.70
35 B 112	JV-9010	35 B 127	JV-9011	3	9	2-5	18.82
35 B 113	JV-9014	35 B 128	JV-9015	4	12	2-5	24.70
35 B 114	JV-9018	35 B 129	JV-9019	5	15	2-5	32.34

SWITCH COMPONENTS FOR ASSEMBLING JV SWITCHES

Switch Sections. Shorting and non-shorting sections for assembling custom or standard switches. Carry same ratings as above switches. Av. shpg. wt., 2 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Total Poles	Pos. per Pole	NET EACH
35 B 135	KV-8	35 B 138	KVN-8	1	2-17	5.88
35 B 136	KV-10	35 B 139	KVN-10	2	2-8	5.88
35 B 137	KV-9	35 B 140	KVN-9	3	2-5	5.88

35 B 141. Type KV-7 Index Assembly. Includes shaft, tie rods, spacers, hardware, adjustable stop pin, 2" bar knob, dial plate. 5 oz. **NET**....4.12

Dial Plates. 2¾" diameter, 20° markings. Av. wt., 1 oz.

Stock No.	Type	Description	NET EACH
35 B 143	P-230	Marked 1 to 5	18¢
35 B 144	P-232	Marked 1 to 8	18¢
35 B 145	P-231	Marked 1 to 17	18¢

35 B 147. Type P-277 Mtg. Nut. ⅜"-32 thread. 2 oz. **PKG. of 12, NET**.....21c

35 B 148. Type P-250 Lockwasher. ⅜" I.D. 2 oz. **PKG. of 12, NET**.....15c

MINIATURE STEATITE SWITCHES

Compact rotary switches, excellent RF characteristics. Double wiping type contacts. 30° index, adjustable stop. *1 off, up to 9 progressively shorting positions. Shaft 1⅞" long. Av. shpg. wt., 5 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Gangs	Total Poles	Pos. per Pole	NET EA.
35 B 095	PA-2042*	.....	.....	1	1	2-10	1.47
34 B 900	PA-2000	34 B 921	PA-2001	1	1	2-12	1.47
34 B 901	PA-2002	34 B 922	PA-2003	1	2	2-6	1.53
34 B 902	PA-2004	34 B 923	PA-2005	2	2	2-12	2.20
34 B 903	PA-2006	34 B 924	PA-2007	1	3	2-5	1.62
34 B 904	PA-2008	34 B 925	PA-2009	3	3	2-12	2.94
34 B 905	PA-2010	34 B 926	PA-2011	2	4	2-6	2.29
34 B 906	PA-2012	34 B 927	PA-2013	4	4	2-12	3.67
34 B 907	PA-2014	34 B 928	PA-2015	1	5	2-3	1.68
34 B 908	PA-2016	34 B 929	PA-2017	5	5	2-12	4.41
34 B 909	PA-2018	34 B 930	PA-2019	1	6	2	1.68
34 B 910	PA-2020	34 B 931	PA-2021	2	6	2-5	2.35
34 B 911	PA-2022	34 B 932	PA-2023	3	6	2-6	3.09
34 B 912	PA-2024	34 B 933	PA-2025	6	6	2-12	5.14
34 B 913	PA-2026	34 B 934	PA 2027	4	8	2-6	3.82
34 B 914	PA-2028	34 B 935	PA-2029	3	9	2-5	3.09
34 B 915	PA-2030	34 B 936	PA-2031	2	10	2-3	2.50
34 B 916	PA-2032	34 B 937	PA-2033	5	10	2-6	4.56
34 B 917	PA-2034	34 B 938	PA-2035	2	12	2	2.50
34 B 918	PA-2036	34 B 939	PA-2037	6	12	2-6	5.29
34 B 919	PA-2038	34 B 940	PA-2039	3	15	2-3	3.38
34 B 920	PA-2040	34 B 941	PA-2041	3	18	2	3.38

Type PA-2043. Miniature rotary switch with 60° indexing. Single pole, 2-6 position. Steatite insulation. Av. shpg. wt., 2 oz. **35 B 096. NET EACH**.....1.47

Type PA-2045. Miniature rotary switch with 60° indexing. Two section two pole, 2-6 positions. 1½" spacing between sections. Av. wt., 2 oz. **35 B 097, NET EACH**.....2.20

SEPARATE ASSEMBLIES FOR MAKING MINIATURE SWITCHES

Phenolic Sections Only. Shorting and non-shorting sections for assembling custom or standard miniature switches. Carry the same ratings as above switches. Excellent RF characteristics. Adjustable stop. Hardware includes spacers, tie rods, nuts, lockwashers, etc. Shpg. wt., 2 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Total Poles	Pos. per Pole	NET EACH
35 B 080	PA-30	35 B 085	PA-31	1	2-11	.59
35 B 081	PA-32	35 B 086	PA-33	2	2-5	.59
35 B 082	PA-34	35 B 087	PA-35	3	2-3	.59

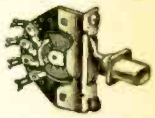
Steatite Sections Only. Custom and standard switches can be assembled by using these shorting and non-shorting sections. 2 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Total Poles	Pos. per Pole	NET EACH
35 B 040	PA-0	35 B 045	PA-1	1	2-12	79¢
35 B 041	PA-2	35 B 046	PA-3	2	2-6	79¢
35 B 042	PA-4	35 B 047	PA-5	3	2-5	88¢
35 B 043	PA-6	35 B 048	PA-7	5	2-3	88¢
35 B 044	PA-8	35 B 049	PA-9	6	2	88¢

Shaft and Index Assemblies. Hardware for miniature switches. Includes spacers, tie rods, nuts, lockwashers, etc. 3 oz.

Stock No.	Type	Indexing	Shaft	Sections	EACH
35 B 092	PA-300	30°	2"	1 to 3	.88
35 B 093	PA-301	30°	4"	4 to 6	1.18
35 B 094	PA-302	30°	6"	7 to 9	1.47

LEVER-ACTION SWITCHES



Low capacity. For use singly or in groups. *Shorting type; others non-shorting. Long-life construction. Front plate and lever cadmium-plated. Index: †Positive; §Spring-Return; 1466, 1467 are Positive and Spring Return. 1⅞x⅝x1½". Mtg. ctrs., 1⅛". Knob and mounting screws. Av. shpg. wt., 3 oz.

No.	Type	No.	Type	Poles	Positions	EACH
34 B 021	1452*†	34 B 026	1454†	2	3	73c
34 B 022	1453*§	34 B 027	1455§	2	3	
34 B 025	1456*§	34 B 030	1457§	4	2	
34 B 024	1459*†	34 B 029	1458†	4	2	
34 B 023	1466*	34 B 028	1467	2	3	

MOUNTING PLATES. For single or multiple mounting of lever-action switches. Black wrinkle finish steel. *Chrome-plated. Av. shpg. wt., 4 oz.

No.	Type	Switches	Size	EACH
34 B 050	P1755	1	¾x2⅝"	21¢
34 B 051	P1756	2	1½x2⅝"	24¢
34 B 052	P1757	3	2¼x2⅝"	29¢
34 B 053	P1758	4	3x2⅝"	35¢
34 B 060	P221*	2	2¼x4½"	44¢
34 B 061	P222*	1	2¼x4½"	35¢

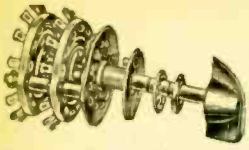
AUTO RADIO SPEAKER SWITCH

Type PK300. Switch Kit. Contains a complete assembly for switching between dual speakers such as auto rear seat and front seat. Etched dial-mounting plate; dual speaker switch. Pointer knob is white, split knurl. With screws, instructions. Shpg. wt., 2 oz. **34 B 077. NET**.....88c

34 B 086. Type 1483 Switch. SP 3-pos. switch for rear deck auto radio speaker. 1 amp @ 6 v. Silver-plated contacts. 4 oz. **NET**....53¢

Mallory Switches

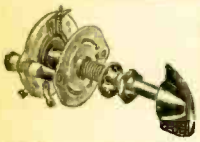
CERAMIC-SECTION SELECTOR SWITCHES



Multi-contact ceramic-section Circuit Selector Switches. Minimize RF losses in high frequency circuits and eliminate effects of moisture absorption. Adjustable stop permits selecting number of positions desired, from 2 to maximum of unit. All are non-shorting (break before make). Silver plated, double-wiping, self-cleaning contacts to insure low contact resistance over an extended temperature range. 2 gang spaced ½"; 3 gang, 1". 30° indexing; 1¼" base diameter; use plates below, at right. With 2" grooved shaft, knob, and mtg. hdwe. Shpg. wt., 7 oz.

Stock No.	Mfr's Type	Gangs	Total Poles	Positions per Pole	NET EACH
34 B 327	172C	1	1	11	1.32
34 B 328	173C	1	2	5	
34 B 329	174C	1	3	3	
34 B 331	176C	2	1	11	2.06
34 B 332	177C	2	2	5	
34 B 333	178C	2	3	3	
34 B 335	180C	3	1	11	2.94
34 B 336	181C	3	2	5	

160C CERAMIC-SECTION "HAMBAND" SWITCHES



Four position, continuously rotating switches for band switching. Rated for use in plate circuits up to 1,000 volts DC with power up to and including 100 watts. Impregnated magnesium-silicate ceramic provides low losses at high frequencies. Low-resistance, self-cleaning, silver-plated contacts. 90° indexing. Complete with 2" grooved shaft, ¼" bushing, knob, nut and washer. Non-shorting. Shpg. wt., 8 oz.

Stock No.	Mfr's Type	Gangs	Total Poles	Positions per Pole	NET EACH
34 B 337	161C	1	1	4	1.32
34 B 338	162C	2	2	4	2.06
34 B 339	163C	3	3	4	2.94
34 B 340	164C	4	4	4	3.53
34 B 341	165C	5	5	4	4.41

Type 488 Dial Plate. For 160C switches, above. Shpg. wt., 2 oz.
34 B 688. NET.....12c

PUSH-BUTTON SWITCHES

The "2000" Push Button Switch Series provides a choice of many different combinations for use in laboratories—on test panels, in meter circuits, etc. Ideal for a wide variety of applications requiring momentary or permanent contact. Steel cadmium-plated frame and nickel-plated brass bushing. Low resistance silver-plated contacts. Nickel-plated phosphor-bronze contact springs. "L" denotes locking type; others have spring-return to normal position. Mount in ⅞" diameter holes on panels up to ¼" thick. Switch body extends 1 3/16" behind panel. Has tinned lug type terminals. With mtg. hdwe. Shpg. wt., 4 oz.

No.	Type	Action	EA.	No.	Type	Action	EA.
34 B 560	2001	SPST-make	.76	34 B 569	2005-L	DPST-break 2	.94
34 B 561	2001-L	SPST-make	.76				
34 B 562	2002	SPST-break	.76	34 B 570	2006	DPDT	1.15
34 B 563	2002-L	SPST-break	.76	34 B 571	2006-L	DPDT	1.15
34 B 564	2003	SPDT	.82	34 B 572	2007	DP-make 2 break 1	1.03
34 B 565	2003-L	SPDT	.82				
34 B 566	2004	DPST-make 2	.94	34 B 573	2007-L	DP-make 2 break 1	1.03
34 B 567	2004-L	DPST-make 2	.94	34 B 574	2008	DPDT-make before break	1.29
34 B 568	2005	DPST-break 2	.94	34 B 575	2008-L	DPDT-make before break	1.29

LEVER-ACTION SWITCHES

Positive or spring-return indexing—shorting or non-shorting contacts. Indexing in two, three or four positions with 20° spacing between positions. 6000 and 7000 series have mounting brackets with round holes spaced for 1¾" centers. 5000 series have elongated mounting holes in the bracket, spaced 2¼" to 2¾" apart. High-grade phenolic resin insulation. Can be mounted in multiples with ¼" spacing between levers on conventional rack and panel installations. For PA, test equipment and industrial applications. With knob and mtg. hdwe. Shpg. wt., 4 oz.

WITH POSITIVE ACTION INDEX

SHORTING No.	SHORTING Type	NON-SHORTING No.	NON-SHORTING Type	Poles	Positions	NET EACH
34 B 382	5124	34 B 383	5224	2	4	88¢
34 B 365	6142	34 B 367	6242	4	2	73¢
34 B 366	6143	34 B 368	6243	4	3	73¢

WITH SPRING RETURN INDEX

SHORTING No.	SHORTING Type	NON-SHORTING No.	NON-SHORTING Type	Poles	Positions	NET EACH
34 B 369	7122 L	34 B 374	7222 L	2	2	73c
34 B 370	7123 C	34 B 375	7223 C	2	3	
34 B 371	7142 L	34 B 376	7242 L	4	2	
34 B 372	7143 C	34 B 377	7243 C	4	3	
34 B 373	7162 L	34 B 378	7262 L	6	2	

1200L & 1300L MULTI-GANG SWITCHES

Well-constructed and versatile multi-gang switches for all servicing and industrial applications. Have one fixed and one adjustable stop, silver-plated contacts, solid silver rotor contact slugs, and phosphor-bronze springs. 3- and 4-gang spaced 1"; all others, ½". 2" notched shaft. Shorting-type make before break. Require ⅞" mtg. hole. With bar knob and mounting hardware, less mounting plate. Use 34 B 600 dial plates below. *Provided with additional "off" positions with all circuits open. Av. shpg. wt., 8 oz.

Shorting Stock No.	Shorting Type	Non-Shorting Stock No.	Non-Shorting Type	Gangs	Total Poles	Pos. per Pole	NET EACH
34 B 201	1211L	34 B 251	1311L	1	1	11	.91
34 B 202	1215L*	34 B 252	1315L*	1	2	5	.97
34 B 203	1213L*	34 B 253	1313L*	1	3	3	1.06
34 B 204	1212L*	34 B 254	1312L*	1	4	2	1.12
34 B 206	1221L	34 B 256	1321L	2	2	11	1.35
34 B 207	1225L*	34 B 257	1325L*	2	4	5	1.53
34 B 208	1223L*	34 B 258	1323L*	2	6	3	1.65
34 B 209	1222L*	34 B 259	1322L*	2	8	2	1.73
34 B 211	1231L	34 B 261	1331L	3	3	11	1.82
34 B 212	1235L*	34 B 262	1335L*	3	6	5	1.94
34 B 214	1241L	34 B 264	1341L	4	4	11	2.32
34 B 215	1245L*	34 B 265	1345L*	4	8	5	2.70
34 B 216	1251L	34 B 266	1351L	5	5	11	2.88
34 B 217	1256L	34 B 267	1356L	5	10	6	3.56
34 B 218	1261L	34 B 268	1361L	6	6	11	3.41
34 B 219	1266L	34 B 269	1366L	6	12	6	4.35

3100J & 3200J SINGLE GANG SWITCHES

Compact, enclosed, low-voltage switches. Have 2" notched shaft; ¼" threaded bushing, ¾" long. With bar knob and nut. All 1 11/16" base dia. types have adjustable stops. For band switching, etc. Use plates listed below. Shpg. wt., 4 oz.

Shorting Stock No.	Shorting Type	Non-Shorting Stock No.	Non-Shorting Type	Poles	Positions	Base Dia.	NET EACH
34 B 300	3115J	34 B 350	3215J	1	5	1¼"	68c
34 B 301	31112J	34 B 351	32112J	1	12	1¼"	
34 B 302	3122J	34 B 352	3222J	2	2	1¼"	
34 B 303	3123J	34 B 353	3223J	2	3	1¼"	
34 B 304	3126J	34 B 354	3226J	2	6	1¼"	
34 B 305	3134J	34 B 355	3234J	3	4	1¼"	.71
34 B 306	3142J	34 B 356	3242J	4	2	1¼"	.71
34 B 307	3143J	34 B 357	3243J	4	3	1¼"	.71
34 B 308	31117J	34 B 358	32117J	1	17	1 11/16"	1.06
34 B 309	3129J	34 B 359	3229J	2	9	1 11/16"	1.06
34 B 310	31361	34 B 360	3236J	3	6	1 11/16"	1.15
34 B 311	3163J	34 B 361	3263J	6	3	1 11/16"	1.15

1400L CIRCUIT OPENING SWITCH

34 B 290. Opens any one of 12 "lines" for insertion of current reading meter while "through" circuit is maintained on other 11 lines. Multiplying resistors can be wired to switch so that it not only opens line, but also cuts in proper resistor. For test sets, tube checkers, analyzers and wherever it is desirable to use only one meter. With bar knob, dial plate and mounting hardware. Shpg. wt., 6 oz. NET..... 3.47

13124L 24-POINT TAP SWITCH

34 B 295. Single circuit, 24 position, non-shorting switch. Continuous rotation. ¼" bushing. 2" grooved shaft. Particularly useful in test equipment. 15° indexing action between positions. With bar knob, dial plate and mtg. hardware. Shpg. wt., 6 oz. NET..... 2.06

DIAL PLATES

Types 372 to 390 for switches 1200L, 1300L and 1¼" base 3100J and 3200J. Others for 1 11/16" base 3100J and 3200J. Etched aluminum. Black background. 1 13/16" dia. ⅞" hole. Shpg. wt., 2 oz.

30° SPACING FOR 1¼" BASE SWITCHES

Type	Marking	Type	Marking
372	1 to 2	384	Off 1 to 4
373	1 to 3	385	Off 1 to 5
374	1 to 4	386	Off 1 to 6
375	1 to 5	387	Off 1 to 7
376	1 to 6	388	Off 1 to 8
377	1 to 7	389	Off 1 to 9
378	1 to 8	390	Off 1 to 10
379	1 to 9	.....	.....
380	1 to 10	.....	.....
381	1 to 11	.....	.....
382	1 to 12	.....	.....
383	Off 1 to 3	.....	.....

20° SPACING FOR 1 11/16" BASE SWITCHES

Type	Marking	Type	Marking
453	1 to 3	474	Off 1 to 4
454	1 to 4	475	Off 1 to 5
455	1 to 5	476	Off 1 to 6
456	1 to 6	477	Off 1 to 7
457	1 to 7	478	Off 1 to 8
458	1 to 8	479	Off 1 to 9
459	1 to 9	480	Off 1 to 10
460	1 to 10	481	Off 1 to 11
461	1 to 11	482	Off 1 to 12
462	1 to 12	483	Off 1 to 13
467	1 to 17	484	Off 1 to 14
473	Off 1 to 3	486	Off 1 to 16

34 BB 600. Specify Type. | 34 BB 650. Specify Type.
NET EACH.....12c

34 B 670. Type 369. 0-100 plate for volume control. EACH ..... 15¢
34 B 620. Type 391. Increase type plate for vol. control. EACH.... 9¢
34 B 622. Type 393. 0-10 plate for rheostats and pots. } EACH.. 15¢
34 B 624. Type 396. 0-10 plate for wire-wound controls. }
34 B 623. Type 394. 1-24 position. 15° opening. EACH..... 12¢

RB254 UNIVERSAL MOUNTING BRACKET

"L" shaped Universal Mounting Bracket for baseboard or rear support mounting of all Mallory circuit selector switches, volume controls and jacks. Shpg. wt., 2 oz.
34 B 420. NET.....15c

General Purpose Switches

SWITCHCRAFT SWITCHES

LEV-R TYPE SWITCHES

Ultra-compact lever action switches. Silver contacts, rated at 3 amps, 120 volts, non-inductive load. Length, 3 1/64"; width 3/8". § n.o. means normally open; n.c., normally closed. *3-position type. ‡Types 3034 and 3034L are operated to close either of two circuits keeping the other open. †Types 3035 and 3035L are operated to open one of two circuits keeping other closed. Require 1 1/32" mtg. hole. Shpg. wt., 3 oz.

Spring Return		Locking		Action §		NET EACH
No.	Type	No.	Type	Poles	Diag.	
34 B 465	3001	34 B 471	3001L	SPST, n.o.	I	1.15
34 B 454	3002	34 B 455	3002L	SPST, n.c.	II	1.15
34 B 466	3003	34 B 472	3003L	SPDT	III	1.32
34 B 467	3004	34 B 473	3004L	DPST, n.o.	IV	1.47
34 B 456	3005	34 B 457	3005L	DPST, n.c.	V	1.47
34 B 468	3006	34 B 474	3006L	DPDT	VI	1.62
34 B 485	3009	34 B 484	3009L	3PDT	.....	2.00
34 B 469	*3033	34 B 475	*3033L	SPDT, n.o.	VII	1.47
34 B 458	*3034	34 B 459	*3034L	DP 2-Ckt ‡	VIII	1.53
34 B 464	*3035	34 B 477	*3035L	DP 2-Ckt †	IX	1.53
34 B 478	*3036	34 B 479	*3036L	DP 2-Ckt	X	1.71
34 B 470	*3037	34 B 476	*3037L	DPDT, n.o.	XI	1.73

ROTARY TYPE SWITCHES

Dependable rotary type switch. Available in wide variety of circuits. Fibre cam actuates long springs for easy action. Self-wiping contacts. Conventional spring stack assembly with bakelite spacers. Press fit, hard rubber tubing through stack assures correct contact alignment and gives high insulation resistance. Silver contacts rated at 3 amperes, 120 volts AC, non-inductive load. 1/4" diameter shaft, 5/16" long is flatted to accurately index bar knobs. *3-position type. ‡2034 and 2034L close either of two circuits keeping the other open. †2035 and 2035L open either of two circuits keeping the other closed. **2036 and 2036L transfer either of two SP circuits keeping the other closed. §n.o. means normally open; n.c., normally closed. Less knob. Mount in 3/8" diameter hole. For panels up to 1/4" thick. Require only 1" depth behind panel. Shpg. wt., 3 oz.

Spring Return		Locking		Action§		NET EACH
No.	Type	No.	Type	Poles	Diag.	
34 B 976	2001	34 B 982	2001L	SPST, n.o.	I	59¢
34 B 977	2002	34 B 983	2002L	SPST, n.c.	II	59¢
34 B 978	2003	34 B 984	2003L	SPDT	III	71¢
34 B 979	2004	34 B 985	2004L	DPST, n.o.	IV	73¢
34 B 980	2005	34 B 986	2005L	DPST, n.c.	V	73¢
34 B 981	2006	34 B 987	2006L	DPDT	VI	97¢
34 B 988	*2034	34 B 991	*2034L	DP 2-Ckt. ‡	VIII	73¢
34 B 989	*2035	34 B 992	*2035L	DP 2-Ckt. †	IX	73¢
34 B 990	*2036	34 B 993	*2036L	2-Ckt. Tr. **	X	97¢

TELEVER TYPE SWITCHES

A rugged telephone-type lever switch. Nylon rollers actuate nickel-silver springs. Solder lug terminals. Palladium contacts rated at 3 amps, 120 v. AC (non-inductive). Insulated black knob; chrome-plated brass actuator; stainless steel pivot pin. Tapped for 3-48 screws (not supplied); standard telephone mtg. ctrs., 1 7/32x1 3/16". Depth behind panel 3". *3-position type. Shpg. wt., 6 oz.

Spring Return		Locking		Action		NET EACH
No.	Type	No.	Type	Poles	Diag.	
34 B 726	6006	34 B 734	6006L	DPDT	VI	2.94
34 B 727	6008	34 B 735	6008L	4PST	4 sec. I	3.29
34 B 728	6009	34 B 736	6009L	3PDT	3 sec. III	3.53
34 B 729	60012	34 B 737	60012L	4PDT	4 sec. III	4.00
34 B 738	*6036	34 B 742	*6036L	DPDT	X	2.94
34 B 739	*6038	34 B 743	*6038L	4PST	4 sec. I (2 each side)	3.29
34 B 740	*60312	34 B 744	*60312L	4PDT	4 sec. III (2 each side)	4.00
34 B 741	*60324	34 B 745	*60324L	8PDT	8 sec. III (4 each side)	5.88

Type 530 Escutcheon. For Telever switches. With 4 mtg. screws. 3 oz.
34 B 486. NET ..... 35¢

NON-LOCKING PUSH-BUTTON TYPE SWITCHES

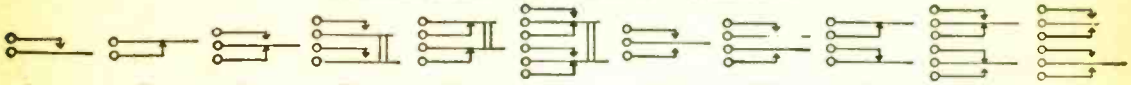
FF Switches. Flat frame construction provides frame adaptable to any stack of contact springs. Simple, direct action movement. Conventional spring stack assembly with bakelite spacers. Silver contacts rated at 3 amperes, 120 volts AC. One-piece, black button and shaft. 3/8" diameter threaded shank, 3/4" long. With locknut and washer. Shpg. wt., 3 oz. § n.o. means normally open. n.c. means normally closed.

Stock No.	Mfr's Type	Button Color	Action §		NET EACH
			Poles	Diag.	
34 B 994	1001	Black	SPST n.o.	I	.56
34 B 995	1002		SPST n.c.	II	.56
34 B 996	1003		SPDT	III	.65
34 B 997	1004		DPST n.o.	IV	.71
34 B 998	1005	Black	DPST n.c.	V	.71
34 B 999	1006		DPDT	VI	.86
34 B 969	1009		3PDT	.....	1.18

Littel Switches. For limited space applications. One piece, black or red, button and shaft. Nickel silver spring contacts. 3/8" threaded shank, 3/8" long. With mtg. hdwe. Shpg. wt., 3 oz. (Not illustrated.)

34 B 944	101	Red	SPST n.o.	I	.50
34 B 945	102		SPST n.c.	II	.50
34 B 946	103		SPDT	III	.53
34 B 947	201	Black	SPST n.o.	I	.50
34 B 948	202		SPST n.c.	II	.50
34 B 949	203		SPDT	III	.53

SWITCHCRAFT SCHEMATIC DIAGRAMS

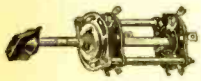


MALLORY "2100" PUSH-BUTTON SWITCHES

For automatic station selector tuning, intercom, or any other application requiring a switch for making, breaking, or transferring multiple circuits in any desired sequence. Has brown bakelite knobs, attractive bronze escutcheon plate, blank designation inserts, and transparent strip for windows. †Shorting. *Non-shorting. Av. shpg. wt., 11 oz.

Stock No.	Mfr's. Type	Buttons	Description	NET EACH
34 B 580	2164	4	DP, Circuit Closing	3.09
34 B 581	2166	6	DP, Circuit Closing	3.85
34 B 582	2168	8	DP, Circuit Closing	4.65
34 B 583	2184	4	†DPDT, Circuit Transfer	3.09
34 B 584	2186	6	†DPDT, Circuit Transfer	3.85
34 B 585	2188	8	†DPDT, Circuit Transfer	4.65
34 B 586	2194	4	*DPDT, Circuit Transfer	3.09
34 B 587	2196	6	*DPDT, Circuit Transfer	3.85
34 B 588	2198	8	*DPDT, Circuit Transfer	4.65

"HAMSWITCHES"



Type 151L. Two-section, 5-position switch; 1 pole per section. Non-shorting type. For switching meter circuits. 2 1/4" spacing between sections. Rated at 1000 volts AC (rms) or 1500 volts DC. 60° indexing between positions. With brass bushing 3/8" long, 3/8" dia., and 2" long, 1/4" dia. shaft. With knob, nut and lock washer. Shpg. wt., 6 oz.
34 B 318. NET 1.62

Type 152L. Two-section, 6-position switch; 1 pole per section. Shorting type. Spacing 1/2" between sections. For bandswitching or meter-switching uses. 60° indexing between positions. Phenolic resin insulation used in the 2-section assembly. Supplied with same accessories as Type 151 L, above. Shpg. wt., 6 oz.
34 B 319. NET 1.91

OHMITE POWER TAP SWITCHES

All-ceramic, high-current, power tap switches, non-shorting, single-pole type. "Slow-break, quick-make" action. Silver contacts. The 111 is rated at 10 amps, 150 volts, AC. Dia., 1 3/4". The 212 is rated at 15 amps, 150 volts, AC. Dia., 2 1/4". Model 312 is rated at 25 amps, 300 volts, AC. 150 v. between taps. Dia. 3 5/16". *Two-in-tandem types; rated same as single types. Insulated 1/4" dia. shafts and for panels up to 1/4". 312 mounts with three 10-32 machine screws, others have 3/8"-32 threaded bushing and hex nut. Shpg. wt., 111, 5 oz.; 212, 10 oz.; 312, 1 lb. All are U.L. Approved.

MODEL 111

MODEL 111

Stock No.	Taps	Rotation	NET EA.
34 B 226	2	30°	2.39
34 B 223*	2	30°	9.34
34 B 227	3	60°	2.39
34 B 222*	3	60°	9.34
34 B 228	4	90°	2.39
34 B 221*	4	90°	9.34
34 B 229	5	120°	2.46
34 B 220*	5	120°	9.54
34 B 230	6	150°	2.46
34 B 231	7	180°	2.57
34 B 232	8	210°	2.57
34 B 233	9	240°	2.67
34 B 234	10	270°	2.67
34 B 235	11	300°	2.74

MODEL 212

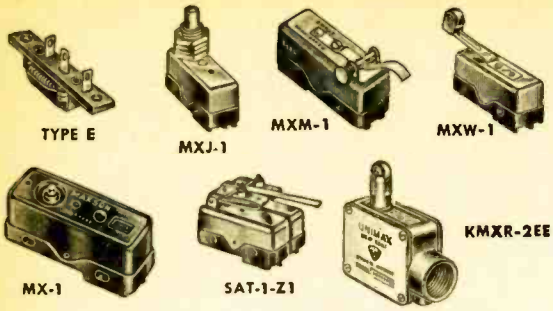
Stock No.	Taps	Rotation	NET EA.
34 B 237	2	30°	5.96
34 B 324*	2	30°	16.69
34 B 238	3	60°	5.96
34 B 323*	3	60°	16.69
34 B 239	4	90°	5.96
34 B 322*	4	90°	16.69
34 B 240	5	120°	6.19
34 B 241	6	150°	6.19
34 B 321*	6	150°	17.15
34 B 242	7	180°	6.44
34 B 320*	7	180°	17.62
34 B 243	8	210°	6.44
34 B 244	9	240°	6.65
34 B 245	10	270°	6.65
34 B 246	11	300°	6.88
34 B 247	12	330°	6.88

MODEL 312

34 B 280	2	30°	8.72	34 B 274	8	210°	9.18
34 B 279	3	60°	8.72	34 B 273	9	240°	9.41
34 B 278	4	90°	8.72	34 B 272	10	270°	9.41
34 B 277	5	120°	8.94	34 B 271	11	300°	9.62
34 B 276	6	150°	8.94	34 B 270	12	330°	9.62
34 B 275	7	180°	9.18				

See page 250 for 30° type switch plates.

All-Purpose Switches



UNIMAX SNAP-ACTION SWITCHES

Snap action switches for wide variety of industrial and laboratory uses. Highly dependable actuators are attached to stainless steel "Adaptaplates" except *basic type less "Adaptaplate." Rated 15 amps, 125 volts; 5 amps, 250 volts, 60 cycle non-inductive AC. Type MXO-1 has SPST action; SAT-1-Z1, DPST. All others, SPDT. Av. shpg. wt., 3 oz.

Stock No.	Mfr's Type	Actuator and Operating Force	Overall Size	NET EACH
34 B 750	*MX-1	Basic pin type; 6-9 oz.	⅜x1 15/16x1 1/16"	1.35
34 B 751	MXL-1	Leaf spring type; 2-5 oz.	1x1 15/16x1 1/16"	1.45
34 B 752	MXW-1	Same, with roller; 2-5 oz.	1¼x1 15/16x1 1/16"	1.90
34 B 755	*MXT-1	Leaf spring, hinged; ½-1½ oz.	1x1 15/16x1 1/16"	1.70
34 B 759	*MXA-1	Same, with roller; ½-1½ oz.	1 7/16x1 15/16x1 1/16"	2.10
34 B 764	MXM-1	Safety interlock; 4-7 oz.	1 3/16x1 15/16x1 1/16"	2.45
34 B 775	SAT-1-Z1	Dual switch; 1-2 oz.	1⅞x1 15/16x1⅜"	4.40
34 B 753	MXQ-1	Plunger, small; 6-10 oz.	1⅞x1 15/16x1 1/16"	1.65
34 B 754	MXJ-1	Plunger, large; 6-10 oz.	1¼x1 15/16x1 1/16"	3.00
34 B 756	MXO-1	Plunger, top reset; 1-3 oz.	1x1 15/16x1 1/16"	2.00
34 B 776	MXR-1	Plunger, with roller; 6-10 oz.	2¼x1 15/16x1 1/16"	4.40
34 B 777	*MB-1	Pin, low force; 2-3½ oz.	⅞x1 15/16x1 1/16"	1.35
34 B 778	KMXR-2EE	Plunger, metal clad; 6-10 oz.	2⅞x3x1"	7.05
34 B 781	KMXJ-2EE	Plunger, metal clad; 8-14 oz.	2⅞x3x1"	3.95

SPST UNIVERSAL AC-DC SWITCHES

Versatile snap-action switches. Focused-flux arc blowout, and non-carbonizing case. Silver contacts. Beryllium copper flat spring for instant traverse. 1" mtg. ctrs. 10 amps, 125 volts DC or AC (non-ind). Av. shpg. wt., 3 oz.

Stock No.	Type	Actuator	Size	EACH
34 B 771	DMXW-1	Leaf, with roller	1 15/16x1 1/16x6 1/64"	4.40
34 B 772	DMX-Q-1	Plunger, small	1 15/16x1 1/16x6 1/64"	4.20

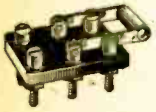
TYPE E SNAP-ACTION SWITCH

Control of loads up to 10 amps. Unusually effective contact wiping action assures clean make or break under severe load conditions. Rated at 10 amps, 125 v., or 5 amps, 250 v. Operating force, 3-10 ounces. 1 1/16x2⅛x7/16". SPDT action. U.L. Approved. Shpg. wt., 3 oz.
34 B 782. NET 60c

UNIMAX DESIGN KIT

Unimax kit of standard interchangeable parts. Contains two Type MX-1 basic switches, one Type MTX-1 switch, 3 different "Adaptaplates," spring leaf, leaf and roller, roller assembly, 12 screws and 12 rivets. Simplifies choice of switch styles to suit any need. Permits assembly of exact switch required. Shpg. wt., 12 oz.
34 B 760. NET 3.50

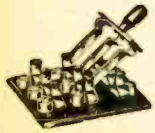
ICA KNIFE SWITCHES



MINIATURE TYPE

Sturdily constructed miniature-type knife switches for mounting on non-conducting base or panel. Excellent for limited-space applications. Hardware is heavily nickel-plated brass. Highly polished, black bakelite bases. Insulated handles. Have screw-type terminals on underside of base for neat, concealed wiring; terminals also serve as mounting screws. Types 2223 and 2224 are ½x1¼"; Types 2225 and 2226 are 1x1¼". Supplied complete with mounting nuts. Av. shpg. wt., 2 oz.

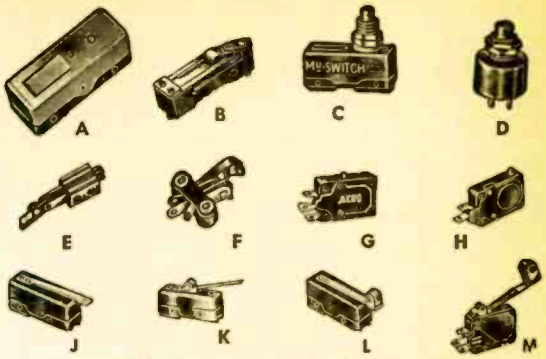
Stock No.	Mfr's Type	Action	NET EACH	Stock No.	Mfr's Type	Action	NET EACH
34 B 800	2223	SPST	24¢	34 B 802	2226	DPST	49¢
34 B 801	2224	SPDT	41¢	34 B 803	2225	DPDT	52¢



STANDARD TYPE

High-quality, easy-action standard knife switches. Hardware is heavily nickel-plated brass. All except Type 238 are mounted on 3/16" thick, highly polished black bakelite bases. Type 238 is mounted on moisture-proof porcelain base; an excellent switch for outdoor applications. Perfect alignment of contacts assures smooth dependable action. Av. shpg. wt. 5 oz.

Stock No.	Mfr's Type	Action	Size	EACH
34 B 840	1216	SPST	1 13/16x1"	.54
34 B 841	1217	SPDT	2⅞x1"	.59
34 B 842	1218	DPST	1⅞x1¾"	.73
34 B 843	1219	DPDT	2¼x1¾"	.88
34 B 844	1220	3PDT	2⅞x2½"	1.30
34 B 823	238	DPDT	1½x2⅝"	.53



ACRO SNAP-ACTION SWITCHES

Feature Lightweight "Rolling Spring" Positive Action

Precision made for laboratory and industrial requirements. Snap-action switches are ideal for use in safety, limiter, counting, signalling and many other applications. Positive snap-action switches. Feature "Rolling Spring" construction—provides low pressure "make" with fast "break". Lightweight "Rolling Spring" and its friction-free action assure extra long life and dependability. Enclosed types have thermosetting plastic cases. In listing below NC means normally closed; NO normally open. Ampere ratings given at 125 volts. Type 1CMD1-2AXX-A22 and 2CMD1-2AXX-A24 are light pressure switches for coin applications. All have solder lug terminals. Sizes: 1—1 15/16"Lx1 1/16"Wx2 7/32"H, 2—1 13/64"Lx3/32"Wx5 3/64"H, 3—2 9/32" dia.x9/64"H, 4—1 11/32"Lx5/16"Wx1/64"H, 5—1 13/64"Lx1/16"Wx2 1/32"H, except 35B039, 2 9/32x1 29/32" H. *Operating force in grams. **For use with A18 mtg. bracket below. †With wire leaf actuator; ‡With A18 bracket; §With flat leaf actuator. Av. shpg. wt., 4 oz.

Stock No.	Fig.	Mfr's. Type	Action	Operating Force Oz.	Pre-travel Max. In.	Size	Amps	NET EACH
35 B 002	A	RD-1A	SPDT	8-10	.025	1	10	1.40
35 B 010	.....	XD-1A	SPDT	2-3	.040	1	10	1.40
35 B 013	J	RD-5L	SPDT	4-5	1/16	1	10	1.50
35 B 014	L	RD-2M	SPDT	4-5	1/16	1	10	1.70
35 B 016	K	TD-48L	SPDT	12*	3/32	1	10	1.70
35 B 017	.....	XD-63L	SPDT	1	⅛	1	10	1.70
35 B 009	G	1MD1-1A	SPDT	3-6	1/32	2	10	1.45
35 B 018	G**	2MD1-1A	SPDT	6-10	1/32	2	10	1.45
35 B 019	G**	2MD3-1A	SPDT	6-10	1/32	2	10	1.45
35 B 020	H	1CMD1-2AXX	SPDT	20-27*	.040	2	3	1.45
35 B 021	H	2CMD1-2AXX	SPDT	33-44*	.030	2	3	1.45
35 B 024	G†	1CMD1-2AXX-A22	SPDT	20-27*	.040	2	3	1.75
35 B 028	D	3NO5-5P	SPST-NO	10-15	.070	3	12	1.65
35 B 029	D	3NC5-5P	SPST-NC	10-15	.070	3	12	1.65
35 B 039	D	3NO5-8P	SPST-NO	10-15	.070	.....	12	1.95
35 B 030	G§	2CMD1-2AXX-A24	SPDT	33-44*	.040	2	3	1.75
35 B 031	E	M-S1-POBD-R	SPDT	1-2	.188	2	10	.65
35 B 033	C	MPB-312	SPDT	14	.020	1	20	3.15
35 B 034	F	1MOBD	SPST-NO	3-6	.....	4	3	.90
35 B 036	B	GD4-1A	SPDT	4-6	.020	5	10	1.40
35 B 008	G‡	1MD1-1A-A18	SPDT	3-6	1/32	2	10	1.85
35 B 038	M	1MD1-1A-A18M	SPDT	3-6	1/32	2	10	2.05
35 B 022	.....	A18 flat leaf actuator mounting bracket						.40

FEDERAL SWITCHES

ANTI-CAPACITY TYPE

Quick make-and-break type, positive action switches. All normally open. Lever action is cam-roller type, with graphite—impregnated bearing turning on tool-steel axles. Provides smooth, easy action under all atmospheric conditions. Round and flat master spring blades are silver-plated phosphor bronze with pure silver contacts. Insulating block is molded bakelite; chrome faceplate. Aluminum frame, 2½x5x¾". Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Action	NET EACH
34 B 480	1427	DPST	2.53
34 B 481	1425	DPDT	2.53
34 B 482	1424	4PDT	2.86
34 B 483	12494	8PDT	6.20

SLIDE SWITCHES

Cadmium-plated steel housing. Black bakelite buttons. Contacts and terminals are silver-plated to prevent corrosion. Size, 3/64" wide x 1 13/32" long. Mounting centers, 1⅛". All switches listed below rated at 125 volts AC-DC. Type S-110-S is heavy duty; 10 amps at 125 volts; 5 amps at 250 volts. Type SS-6 has 3/16" bevel trigger with prong guide, solder lug terminals, spring return. Type S-110-S has screw terminals; all others have hot-tinned solder lugs for easy soldering. For special prices for quantities over 50, write for quotation. Underwriters Laboratory Approved. Av. shpg. wt., 3 oz.

Stock No.	Mfr.	Mfr's Type	Action	Amps.	NET EACH	10-24 EACH	25-49 EACH
34 B 491	Wirt	SW724	SPDT	0.75	20¢	16¢	13¢
34 B 492	Wirt	SW725	DPST	0.5	22¢	20¢	17¢
34 B 148	Carling	S-110-S	SPST	10	59¢	53¢	49¢
34 B 421	Carling	S-516	SP2 Cir.	3	53¢	48¢	44¢
34 B 422	Carling	S60A	SPST	4	9¢	8¢	7¢
34 B 423	Carling	S60B	SPDT	4	10¢	9¢	8¢
34 B 424	ICA	1260	DPDT	.....	24¢	22¢	20¢
34 B 496	Stackpole	SS-6	3PDT	0.5	30¢	27¢	24¢

General Purpose Switches

JBT MINIATURE SWITCHES

MOLDED ROTARY SWITCHES

Exceptionally compact, rotary selector switches. Sturdily constructed of molded bakelite, with rigid 3-post deck suspension. Moving contacts fully enclosed to minimize wear and corrosion. Current carrying parts are heavily silver-plated to pass 100-hour salt spray test. Large area silver contacts insure low contact loss; average contact resistance of .007 ohm. AC-DC current-carrying capacity (not make or break): normal, 1 amp; max. momentary, 5 amps. Max. rms volts between contacts and ground, 1000. Between decks and ground, 2000. N-S—Non-shorting, break before make. S—Shorting, make before break. With knob. Av. shpg. wt., 6 oz.

CONTINUOUS ROTATION SWITCHES

Continuous rotation type, except *6-pole, double-throw. **Type MS-14** has 13 circuits and 1 "off" position per deck, in a 2" circle. Angular indexing, 25°, 43'. **Type MS-20** has up to 19 circuits and 1 "off" position per deck, in a 2¼" circle. Angular indexing, 18°.

Stock No.	Mfr's. Type	Gangs	Total Poles	Pos. per Pole	Shorting or Non-Shorting	Depth	EACH
34 B 950	MS-14-1	1	1	14	N-S	1 3/16"	1.47
35 B 250	MS-14-1S	1	1	14	S	1 3/16"	1.47
34 B 951	MS-14-2	2	2	14	N-S	1 1/8"	1.76
35 B 251	MS-14-2S	2	2	14	S	1 1/8"	1.76
34 B 952	MS-14-3	3	3	14	N-S	1 7/16"	2.20
34 B 953	MS-14-4	4	4	14	N-S	1 1/2"	2.84
34 B 954	MS-14-6	6	6	14	N-S	2 1/8"	4.16
34 B 955	MS-20-1	1	1	20	N-S	1 3/16"	1.91
35 B 253	MS-20-1S	1	1	20	S	1 3/16"	1.91
35 B 252	*MS-20-1-6DT	1	6	2	N-S	1 3/16"	2.65
34 B 956	MS-20-2	2	2	20	N-S	1 1/8"	2.35
35 B 255	MS-20-2S	2	2	20	S	1 1/8"	2.35
35 B 254	*MS-20-2-6DT	2	12	2	N-S	1 1/8"	2.49
34 B 957	MS-20-3	3	3	20	N-S	1 7/16"	3.18
34 B 958	MS-20-4	4	4	20	N-S	1 3/4"	3.87
34 B 959	MS-20-6	6	6	20	N-S	2 1/8"	5.49

ADJUSTABLE STOP SWITCHES

Type MAS-14. Adjustable stop rotary switches. Molded switches, similar to above, but have enclosed adjustable stop mechanism. 13 circuits and 1 "off" position per deck in 2" circle. Indexing, 25°, 43'.

Stock No.	Mfr's. Type	Gangs	Total Poles	Pos. per Pole	Shorting or Non-Shorting	Depth	EACH
34 B 970	MAS-14-1	1	1	14	N-S	31/32"	1.91
35 B 256	MAS-14-1S	1	1	14	S	31/32"	1.91
34 B 971	MAS-14-2	2	2	14	N-S	1 9/32"	2.20
35 B 257	MAS-14-2S	2	2	14	S	1 9/32"	2.20
34 B 972	MAS-14-3	3	3	14	N-S	1 19/32"	2.65
34 B 973	MAS-14-4	4	4	14	N-S	1 29/32"	3.28
34 B 974	MAS-14-6	6	6	14	N-S	2 17/32"	4.61

LAMINATED ROTARY SWITCHES

Instrument-type rotary selector switches. Decks and rotors made of laminated plastic material for maximum mechanical and dielectric strength. 2 basic types: SS-14 and SS-20. SS-14 type is available with up to 14 positions in a 2" circle, including 1 "off" position. Type SS-20 is available with up to 20 positions, including "off", in a 2 21/32" circle. Continuous rotation. Angular indexing for SS-14, 25°, 43'; for SS-20, 18°. Current ratings (not make or break): normal, 1 amp; momentary, 5 amps. Insulation ratings same as type MS, above. Supplied with knob. *Complete shorting, all contacts shorted except one in use. Av. shpg. wt., 6 oz.

Stock No.	Mfr's. Type	Gangs	Total Poles	Pos. per Pole	Shorting or Non-Shorting	Depth	EACH
35 B 258	SS-14-1	1	1	14	N-S	1 3/16"	1.47
35 B 259	SS-14-1A	1	2	5	N-S	1 3/16"	1.52
35 B 260	SS-14-1S	1	1	14	S	1 3/16"	1.47
35 B 261	SS-14-1CS	1	1	14	*	1 3/16"	1.81
35 B 262	SS-14-2	2	2	14	N-S	1 1/8"	1.76
35 B 263	SS-14-2A	2	4	5	N-S	1 1/8"	1.91
35 B 264	SS-14-2S	2	2	14	S	1 1/8"	1.76
35 B 265	SS-14-2CS	2	2	14	*	1 1/8"	2.50
35 B 266	SS-14-3	3	3	14	N-S	1 7/16"	2.20
35 B 267	SS-14-3S	3	3	14	S	1 7/16"	2.20
35 B 268	SS-14-4	4	4	14	N-S	1 1/2"	2.84
35 B 269	SS-14-6	6	6	14	N-S	2 1/8"	4.16
35 B 270	SS-20-1	1	1	20	N-S	1 3/16"	1.91
35 B 271	SS-20-1A	1	2	6	N-S	1 3/16"	1.96
35 B 272	SS-20-1S	1	1	20	S	1 3/16"	1.91
35 B 273	SS-20-2	2	2	20	N-S	1 1/8"	2.35
35 B 274	SS-20-2S	2	2	20	N-S	1 1/8"	2.35
35 B 275	SS-20-3	3	3	20	N-S	1 7/16"	3.18
35 B 276	SS-20-4	4	4	20	N-S	1 3/4"	3.87
35 B 277	SS-20-6	6	6	20	N-S	2 1/8"	5.49

ETCHED DIAL PLATES. For the JBT rotary switches listed above. Raised bright metal numerals are easy to read against the dull black finish of the dials. Diameter, 2¼". Shpg. wt., 1 oz.

Stock No.	Mfr's. Type	Calibration	Angular Indexing	EACH
34 B 960	EP-13	Off thru 13	25°, 43'	21c
34 B 961	EP-14	1 thru 14	25°, 43'	
34 B 962	EP-19	Off thru 19	18°	
34 B 963	EP-20	1 thru 20	18°	

LEVER SWITCH

Type MS-20-1L6A-1. A double-pole, 5-position lever switch. Fully enclosed in black molded housing. Construction is similar to the instrument-quality switches described in MS series at top of this page. With threaded black molded knob and mounting hardware. 6 oz.
34 B 975. NET 2.20

GRAYHILL MINIATURE SWITCHES

4000 — 2000 — 5000 (Single Deck) — Multi-Deck — 23-1

PUSH-BUTTON MOMENTARY CONTACT SWITCHES

Series 4000. Non-snap, momentary contact, SPST switches. Housing and button of molded phenolic. Rated @ ½ amp, 115 v. AC (non-inductive). (When used @ 1 amp, life is about 100,000 operations.) Single hole panel mount. Bushing is ⅜" long; 13/32"-32 thread. Solder type ¾" terminals. Body, ⅞x⅝". Shpg. wt., 4 oz.

Series 2000. As above, except snap type, rated @ 10 amps, 115 v. AC (non-ind.). Body dia., ⅞". With 2 hex nuts. Shpg. wt., 4 oz.

No.	Type	Contacts	No.	Type	Contacts
34 B 870	4001	Normally open	34 B 872	2201	Normally open
34 B 871	4002	Normally closed	34 B 873	2202	Normally closed
Type 4000. NET EACH 59c			Type 2000. NET EACH 1.62		

Series 23-1. Tiny push-button switch designed for miniaturized equipment. When used at factory rating, has an extremely long life. Momentary contact, SPST, non-snap action switch. Solder type terminals. Rating, ¼ amp, 115 v. AC, non-inductive. Normally open. Length, 1"; diameter at widest point, ½". 5/16-32 thread. Shpg. wt., 2 oz.
34 B 890. NET EACH 73c

MINIATURE ROTARY TAP SWITCHES

Series 5000. Switch housing is high arc-resistant molded Melamine. Contacts and rotor are silver plated. Rated: to break, 1 amp at 115 v. AC (non-ind.); to carry, 5 amps. 10-position switches have continuous rotation. All others have stops. Angular indexing, 36°. Non-shorting type. Sizes: Single-deck type, 1 1/32" dia. x 1 9/32"; 2-deck, 1⅛" dia. x 1¼"; 3-deck, 1⅛" dia. x 1 21/32"; 4-deck, 1⅛" dia. x 2 1/16". Mounts in ⅜" hole. Most popular types listed below. *5 and 6 deck types available on special order.* Shpg. wt., 5 oz.

SINGLE DECK

No.	Type	Pos.	EACH	No.	Type	Pos.	EACH
34 B 875	5002	2	.73	34 B 893	5006	6	.93
34 B 876	5003	3	.76	34 B 894	5007	7	.98
34 B 891	5004	4	.83	34 B 895	5008	8	1.03
34 B 892	5005	5	.88	34 B 878	5010	10	1.13

2-DECK

34 B 879	5202	2	2.60	35 B 304	5207	7	2.80
35 B 300	5203	3	2.65	35 B 305	5208	8	2.84
35 B 301	5204	4	2.69	35 B 306	5209	9	2.88
35 B 302	5205	5	2.72	34 B 880	5210	10	2.92
35 B 303	5206	6	2.76				

3-DECK

35 B 307	5302	2	2.82	35 B 312	5307	7	3.41
35 B 308	5303	3	2.94	35 B 313	5308	8	3.53
35 B 309	5304	4	3.06	35 B 314	5309	9	3.65
35 B 310	5305	5	3.18	35 B 315	5310	10	3.76
35 B 311	5306	6	3.29				

4-DECK

35 B 316	5402	2	3.35	35 B 321	5407	7	4.14
35 B 317	5403	3	3.51	35 B 322	5408	8	4.29
35 B 318	5404	4	3.67	35 B 323	5409	9	4.45
35 B 319	5405	5	3.82	35 B 324	5410	10	4.61
35 B 320	5406	6	3.98				

Series 24 Rotary Tap Switches. Miniature switches with improved detent action. Special construction permits more precise indexing. Other characteristics same as type 5000, above.

Stock No.	Single Deck Type	Single Deck Pos.	EACH	Stock No.	2-Deck Type	2-Deck Pos.	EACH
35 B 332	24YY2100-2	2	2.82	35 B 342	24YY2032-2	2	4.18
35 B 333	24YY2100-3	3	2.93	35 B 343	24YY2032-3	3	4.27
35 B 334	24YY2100-4	4	3.04	35 B 344	24YY2032-4	4	4.40
35 B 335	24YY2100-5	5	3.15	35 B 345	24YY2032-5	5	4.51
35 B 336	24YY2100-6	6	3.25	35 B 346	24YY2032-6	6	4.62
35 B 337	24YY2100-7	7	3.36	35 B 347	24YY2032-7	7	4.72
35 B 338	24YY2100-8	8	3.47	35 B 348	24YY2032-8	8	4.83
35 B 339	24YY2100-9	9	3.58	35 B 349	24YY2032-9	9	4.94
35 B 340	24YY2100-10	10	3.68	35 B 341	24YY2032-10	10	5.05

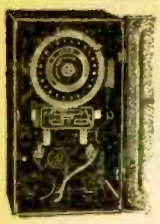
Spring Return Rotary Switch. Same as Series 24, but 3-position, with center "on" or "off." Momentary contact on either side of center.

No.	Type	Decks	EA.	No.	Type	Decks	EA.
35 B 325	24YY2101	1	3.73	35 B 327	24YY2103	3	5.14
35 B 326	24YY2102	2	4.41				

AMPHENOL TAP SWITCHES

8-position, single-pole, continuous rotary switches. White numerals marking each position are clearly visible through window built into switch housing. Type 36-1 has markings 1-2-3-4-5-6-7-8 for general purpose use. Type 36-2 has impedance markings 0-2-4-8-16-250-500 for use as an output impedance selector. An additional convenience feature is a set-screw in the side of the switch which locks the switch-arm in any desired position. This safety feature prevents accidental change of the switch position. Shpg. wt., 5 oz.
34 B 090. Type 36-1. Numerals 1 to 8. **NET** 53c
34 B 091. Type 36-2. Impedance Markings. **NET** 53c

Time Switches—Foot Controls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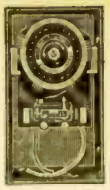
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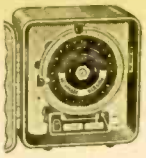

919

925P
1925-P

TORK SWITCHES—INTERVAL TIMERS

MODEL 1191—"LITTLE GIANT"

Automatically turns electrical equipment "on" and "off" at any pre-set time, once every 24 hours. For timed operations in stores, offices, shops and the home. On-off dial calibrated in 15-minute intervals. 45 minutes required between settings. May be manually operated without disturbing settings. Handles 35 amps at up to 3300 watts lighting load (4000 watts heating load) or ½ h.p. single-phase motor. Free turning ratchet dial. Requires no tools to set or adjust—may be operated by hand at any time. Self-starting oil-sealed, Telechron clock motor drives the precision timing gears to operate the switching mechanism. For operation from 110-120 volts, 60 cycles AC. Steel case with hinged cover. Size, 8¼x4¼x4¼". Shpg. wt., 5 lbs.
78 B 302. List. $13.95. NET.....9.77

MODEL 948A—"THE TORKMASTER"

Automatically turns electrical equipment "on" and "off" once over a 24-hour period. Two hours required between settings. Dial calibrated in 15-minute intervals. Switch is single pole with current rating of 30 amps. Ideal for window lights, display signs, porch lights, hallways, yard lights, oil burners, coal stokers, defrosters, pumps and many other shop and home applications. Switch may be opened by hand without disturbing pre-set adjustments. Size: 5¼x4¼x3½". With conduit knockout holes. Housed in blue-gray finished steel case with hinged cover. Telechron motored; precision timing gears. For operation from 110-125 volts, 60 cycle AC. Shpg. wt., 3 lbs.
78 B 308. List. $10.95. NET.....7.67

MODEL 801 PROGRAM TIMER

This highly versatile, program switch has a total of 40 spring-type tabs for "on" or "off" intermittent operation. Requires no tools to set or adjust—tabs can be easily inserted at any quarter-hour period to provide 15-minute operation. Adjoining tabs keep the operation continuous. Enables users to set up almost any desirable timing combination for 15 minutes or longer, day or night. Provides a multitude of timed operations for stores, offices, shops and the home. Ideal for controlling fans, heating systems, lights or signs, etc. Minimum time between settings, 15 minutes; maximum, 24 hours. Timer employs rugged, 10-ampere, single-pole Unimax switch. Telechron clock motor. Size, 8¼x4¾x4¼". For 110 volts, 60 cycle AC. Shpg. wt., 5 lbs.
78 B 337. List. $19.95. NET.....13.97

MODEL 919—PORTABLE PLUG-IN

New, portable plug-in time switch. 24-hour, fully automatic. Numerous applications: operates window air conditioners, burglar alarms, bedside radios, coffee-makers, electric signs, portable heaters, etc. Simple turn of dial to set "on" time. On-off levers for manual use. Adjustable "off" tripper. Minimum time between settings, 45 min. Powered by oil-sealed, self-starting Telechron clock motor. 96 adjustment slots, 15 min. each. Capacity, 15 amps, 1650 watts. Hangs up or stands on 4 rubber feet. Size, 5½x4¼". For 110 v., 60 cycles AC. Shpg. wt., 3¼ lbs.
78 B 304. List. $13.95. NET.....9.77

Extra Trippers. For above. Pair, 3 oz.
78 B 309. NET PER PAIR.....35c

MODEL 925P—HOUSEHOLD TIMERS

Low-cost timers for accurate control of electric mixers, coffeemakers, blenders, hotplates, broilers, fryers, washing machines, dryers, sun lamps, ozone lamps, fans, radios, window ventilators and numerous other appliances. Model 925-1P will automatically shut off most electrical appliances at the end of any pre-selected time interval from 1 to 59 minutes, adjustable in one minute intervals. For longer periods up to 4 hours, use Model 925-4P. Telechron-motored. For 110-120 volts, 60 cycle AC. Rating 660 watts. White enamel finish. Size, 4½x3x3". Shpg. wt., 3 lbs.
78 B 306. Model 925-1P. 1 hour.
78 B 307. Model 925-4P. 4 hours, List. $10.95. NET EACH.....7.67

1925-P MODELS

Single set interval timers, similar in appearance to the Model 925P, above. Can be manually set for any interval less than stated maximum settings. Provide automatic time control for a wide variety of household appliances such as toasters, waffle irons, mangles, roasters, etc. All are 15 amp capacity, single pole normally open. Telechron-motored, with receptacle. Size, 4½x3½x3". For operation from 110-120 v., 60 cyc. AC. Shpg. wt., 2 lbs.

Model 1925-4P. Max. setting, 4 hrs.
78 B 347. List, $11.95. NET.....8.37

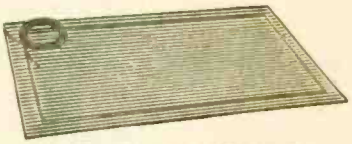
Model 1925-12P. Maximum setting, 12 hours.
78 B 348. List. $11.95. NET.....8.37

Model 1925-24P. Maximum setting, 24 hours.
78 B 349. List, $11.95. NET.....8.37

SWITCHMAT "STEP-ON" SWITCHES

"ANNOUNCEMAT" CHIME ALARM

Low-cost, practical alarm system for stores, offices, homes and industry. Signals the presence of visitors or intruders. Even the step of a small child on any part of the Switchmat sounds the alarm. Excellent for medical office waiting rooms. Operates by visible "area switch" (Switchmat). Rugged Switchmat is 1/16" thick, heavily ribbed brown vinyl plastic. Completely protected—sealed between layer of plastic and rubber. Resistant to cleaning and sweeping compounds, oils, acids and most chemicals. Lies completely flat on floor—will not slip or slide even on polished floors. No installation problems—simply plugs into wall outlet. Can be quickly and safely installed by anyone. Operates on extremely low voltage. Complete with 18x30" commercial-type Switchmat, transformer with 6 ft. cord and plug, 25 ft. low voltage cable and chime s gnal alarm. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 11½ lbs.
78 BX 358. List. $27.95. NET.....21.91



INDUSTRIAL "STEP-ON" SWITCH

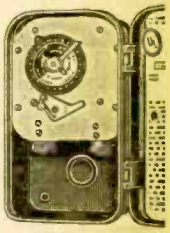
Stepping on Switchmat closes circuit which may be used to ring bells, turn on lights, actuate electric counters, open doors, etc. Attractive brown vinyl plastic carpet conceals SPST switch (normally off). Controls 110-volt circuit with non-inductive loads up to 100 watts. Has power handling capacity of up to 1,000 watts when used with control box below. ¼" thick. With 10-ft. leads.
78 BX 355. 14x23". 6½ lbs. NET.....14.90
78 BX 356. 18x30". 9½ lbs. NET.....21.17

RELAY CONTROL BOX

Handles up to 1,000 watts at 110-120 v., 60 cycles AC. Provides 6 v. AC for switch circuit. Outlets for normally "on" or "off" operation. With plug, socket, 6' cord. 4x4x2". Shpg. wt., 2½ lbs.
78 B 357. NET.....12.15

RELIANCE HEAVY-DUTY TIME SWITCHES

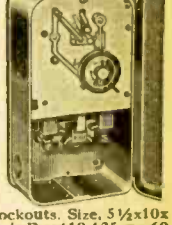
TYPE W—30 AMP



Model W-22. New, completely automatic electric time switch. Ideal for control of apartment lights, water heaters, etc. Convenient manual switching without interfering with automatic operation. Minimum "ON" period, ½ hr.; max., 23 hours. Synchronous, self-starting motor. Snap-action silver-to-silver contacts; spring-temper, phosphor bronze blades. DPST. Contacts rated 30 amps at 120-240 v. ½ and ¾" knockouts. Black wrinkle enamel. Size, 4x7x4" deep. U.L. Approved. For 110-125 v., 60 cycle AC. Neutral tap for 3-wire, 240 v. circuits. Wt., 5 lbs.
78 B 390. List, $15.50. NET.....11.40

Model W-33. As above but DP, 2-circuit throw. Equal to two SP time switches in one. Will control 2 separate circuits independently or simultaneously by setting trippers for desired schedule. Provides 8 different combinations of 2-circuit control; may be set to operate both circuits simultaneously as a DPST switch.
78 B 391. List, $20.00. NET.....14.70

"BADGER" 50 AMP



Model M1. New, heavy duty time switch for dependable control of substantial loads. Automatically controls billboards, flood lights, air-conditioning units, etc. Minimum "ON" period, ½ hr.; max., 23½ hrs. Plunger-action, copper-to-copper, SPST contacts. Contacts rated 50 amps at 120-240 v. Steel cabinet finished in black wrinkle enamel. ¾ and 1" knockouts. Size, 5½x10x4½" deep. U.L. Approved. For 110-125 v., 60 cycle AC. Neutral tap for 3-wire, 240 v. circuits. Shpg. wt., 10 lbs.
78 B 392. List, $20.00. NET.....14.70

Model M2. As above, but DPST.
78 B 393. List, $22.00. NET.....16.17

GENERAL FOOT-CONTROL SWITCHES

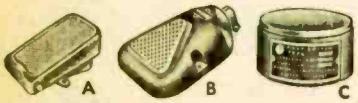

A B C

Fig. A. Type MI-25. Treadle-type. SPDT, one each normally open and closed contacts. First press transfers contacts; second press restores. Adjustable throw. Set for 5 lbs. BX connector. Black wrinkle finish. 12 amps @ 125 v., 6 amps @ 250 v. Shpg. wt., 3½ lbs.
78 B 370. NET.....11.25

Type MI-23. As above, but spring return. 10 amps @ 125 v., 5 amps @ 250 v.
78 B 371. NET.....9.80

Fig. B. Type MA. Efficient control for industrial operations. SPDT, top-treadle foot-switch with removable front plate. Set for 4¼ lbs. Mounted BX connector. Spring return. 10 amps @ 125 v. and 5 amps @ 250 v. AC. Fast operation—minimum fatigue. Baked gray and red wrinkle finish. Shpg. wt., 1¾ lbs.
78 B 374. NET.....4.60

Fig. C. Type MC-13. SPDT spring return foot switch. New patented "press anywhere" no-slip top operates easily, requires only 1/16" throw and 1¼ lbs. pressure. 10 amps @ 125 v., 5 amps @ 250 v., 3 amps @ 460 v. AC. Black wrinkle finish. Shpg. wt., 2½ lbs.
78 B 372. NET.....6.50

Switches with 20 ampere ratings available at $2.50 more.

Time Switches—Clock Timers


TS60SP


P601


TS66


T675


A-211

INTER-MATIC TIME SWITCHES AND CLOCK TIMERS

TYPE TS60SP TIME SWITCH

Inter-Matic SPST time switch turns equipment "on" and "off" once in 24 hours. With extra trippers (see bottom of next column) will operate up to 12 times a day. Trippers can be added without removing the dial. Minimum time between settings is 1 hour. Manual operation does not interfere with settings. 35 amp contacts will handle a 4000 watt load at 125 v., 60 cyc. Gray steel case with knockouts. Size, 5x3x7⅞". U.L. Approved. Operates on 105-125 volts, 60 cycle AC. Shpg. wt., 4 lbs.
78 B 322. List, $10.95. **NET** 7.12

Type TS60DP. As above, but DPST.
78 B 321. List, $12.95. **NET** 8.42

Adapter Kit. Handy adapter kit makes the above unit portable. Consists of 6 ft. cord, plug, etc. 15 amperes. Shpg. wt., 1 lb.
78 B 323. NET ..... 98¢

TYPE P601 TIME SWITCH

Portable type. SPST plug-in time switch. Simple to install. Improved version carries a much heavier load than earlier models. Will handle any appliance that plugs into regular outlets. Provides a great variety of uses in the shop, store, or home. Switch can be easily set for from 1 to 12 on-off operations per day. Minimum "on" or "off" time, 1 hr.; maximum, 23 hrs. Can be used to control lamps, electric roasters, radios, TV sets, shortwave transmitters and receivers, etc. Precision-built to give many years of dependable service without attention or adjustment. Made of finest quality materials. Can be used with up to twelve extra trippers. Manual operation does not interfere with settings. Capacity: 10 amps at 125 volts (1250 watts). Size, 5x3x7⅞". For operation from 105-125 v., 60 cycles AC. Shpg. wt., 4 lbs.
78 B 314. List, $12.95. **NET** 8.42

"SKIPPER" TIME SWITCHES

Permits "skipping" control cycle on Saturdays, Sundays, holidays, etc. The "Skipper" has 2 dials: a time dial and a day dial. To skip any days, small skipping screws are inserted into the proper holes in the day dial. "On" and "off" trippers are set in the usual manner on the time dial. Special "cutout" tripper advances day dial every 24 hours. From 1 to 12 on and off operations per day can be obtained by adding extra trippers. Timing range: Minimum "on" or "off" time, 1 hour; maximum, 23 hours. Switch may be turned on or off manually—regardless of the time settings. Automatic reset resumes time cycle. Silver, snap-action switch contacts are rated 35 amps at 125 volts (4000 watts). Gray, drawn steel case. Size, 7⅞x5x3". With 1 set of "on and off" trippers, 3 skipping screws and instructions. For 110-120 volts, 60 cycle AC. U.L. Approved. Shpg. wt., 4 lbs.

Type TS66SP. SPST. Skips "on" operation.
78 B 315. List, $16.95. **NET** 11.02

Type TS66DP. DPST. Skips "on" operation.
78 B 316. List, $18.95. **NET** 12.32

Type TS66SPDT. SPDT. Skips either "on" or "off" operation.
78 B 317. List, $18.95. **NET** 12.32

TRIPPERS AND SKIPPING SCREWS

Type 107T19A. On-Cutout Trippers. For "Skipper" types only. Shpg. wt., 3 oz.
78 B 319. List, 30c. **NET EACH** 20c

Type 79T2. Skipping Screws. For "Skipper" types only. Shpg. wt., 8 oz.
78 B 388. Pkg. of 3, EACH PKG ..... 12¢

Type 107T8A. Set of "on and off" Trippers. For Inter-Matic switches (except T675). 2 oz.
78 B 324. List, 40c. **NET PER SET** ..... 26¢

TYPE T675 TIME SWITCH

Unusually versatile switch that provides up to 14 complete "on-off" cycles. Each cycle is independently controlled and can vary from 5 to 60 min. Minimum interval between cycles, 1¼ hrs. Can be used as SPST normally open; SPST normally closed; or SPDT. Perfect for any application requiring more than one "on-off" cycle in a 24-hour period. Each cycle is easily adjusted for minutes desired; set screw on tripper selects any period from 5-60 min. Trippers are easily changed or added. Large, silver, snap-action contacts; rated 35 amps, 125 volts, AC. Synchronous timing motor is slow-speed, high-torque type. Gray steel case. 7¼x5x3". With 3 trippers (for 3 "on-off" cycles). For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.
78 B 313. List, $16.95. **NET** 11.02

Extra Trippers. For above. One tripper required for each "on-off" cycle added. Shpg. wt., 4 oz.
78 B 336. NET EACH ..... 49¢

MODEL A-211 TIME-ALL

Time control switch for office, store or home. Ideal for converting radios to clock-radios, defrosting refrigerators, controlling lights or home appliances, etc. Has manual control with automatic reset. Unique feature permits manual control without automatic reset, for continuous "off" or "on." To revert to control cycle, release manual control from "permanent" position. Min. "on" time, 15 min.; max., 23 hrs., 45 min. Plug-in receptacle for equipment to be controlled. Attractive gray plastic case. Size, 5x4x2½". Handles 15 amps, 1650-watt load. With 6-ft. cord, plug, instructions. For operation from 110-120 v., 60 cyc. AC. Shpg. wt., 2 lbs.
78 B 311. List, $11.95. **NET** 7.97

ACCURATE CLOCK TIMERS

MODEL A301 "TIME MINDER"

Combination electric clock and signal timer with thousands of uses. Can be set to time any interval from 1 minute to 4 hours. Signal is a pleasant toned buzzer that sounds at end of interval and keeps going until turned off manually. Ideal for timing sun lamp and heat lamp exposures, long distance phone calls or short naps. Kitchen uses include boiling eggs, roasting, baking, pressure cooking, heating baby's formula, etc. Timer is accurate within seconds and easily set with large, easy-to-read pointer. Clock and timing interval are both set from front panel. Has attractive, easily read dial. Minute pointer is red, dial is light green and bezel is chromium plated with etched white numerals. Case is designed in spruce green plastic, easily cleaned and attractive in any decor. No installation is necessary—just plug the timer in and it's ready to go. Has 6 ft. cord and plug. Underwriters' Laboratories Approved. Size, 4½x4¼x2¼". For operation from 110-120 v., 60 cycle AC only. Shpg. wt., 2 lbs.
78 B 342. List, $8.95. **NET** 7.25

MODEL A401 "CLOCK TIMER"

A combination electric clock and automatic time switch. Ideal for the control of all electrical appliances. This versatile unit will turn appliances on at any pre-set time, then turn them off automatically. "On" interval may be any desired time from 15 minutes to 5½ hours. Converts any radio into a modern clock radio with no installation required. Just plug in the clock and plug in the radio. Adds convenience to modern living: automatically turns on the coffee-maker before breakfast; turns on the electric roaster and shuts it off when the meal is done; turns on fans and room air conditioner at a pre-set time. Timer can also be set for manual operation of appliances. Bezel is chromium plated with etched white numerals; case is spruce green plastic. Clock and timer mechanism are both set from front panel. Underwriters' Laboratories Approved. Complete with 6 ft. heavy duty cord and plug. Size: 4¼x4½x2¼". For operation from 110-120 v., 60 cycle AC only. Capacity: 15 amperes, 1650 watts. Shpg. wt., 2 lbs.
78 B 343. List, $11.95. **NET** 9.67

TYPE T960 TIME SWITCHES

An unusually flexible program timer for use where many "on" and "off" operations are needed. Provides up to 96 operations in a 24 hour period. Minimum "on" or "off" period is 15 minutes. Can be used for 24 hour control of heating, ventilating and air conditioning systems. Ideal for programming industrial music systems. Schedule is easily set by depressing trippers located on dial face. Trippers are permanently attached—cannot be misplaced. Dial face is yellow and black for excellent visibility in poorly lighted locations. Entire mechanism is removable when mounting the case. Pressing one lever releases mechanism; no screws or nuts to remove. 2 knockouts on bottom of case permit neat installation and rapid cable attachment. Large terminal screws on bakelite board allow easy hookup. Switch is SPST type with contacts rated to handle 20 amperes. Will repeat timing cycles without resetting. Synchronous timing motor is low speed, high torque type. Size: 7⅞x5x3". Shpg. wt., 3 lbs.

Type T961. For 105-125 v., 60 cycle AC.
78 B 395. List $37.50 **NET** 27.57

Type T962. For 210-250 v., 60 cycle AC.
78 B 396. List $38.50 **NET** 28.38

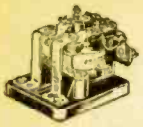
SESSIONS UNMOUNTED TIME SWITCHES

Automatically turns on radios, television sets, toasters, coffee-makers and other electrical devices—at any pre-set time within a 12-hour period. An extremely accurate, highly attractive time-piece. Converts any AC operated radio to a modern clock-radio—an excellent musical alarm. An ideal service replacement for clock-radios. May be installed in a small case with an AC outlet line cord for portable use, or in a wall. All controls, "Sleep-Selector," off-automatic-on, time adjust and timer set, are conveniently located on outer dial face at ¼-hour points. "Sleep-Selector" switch permits bedtime listening by turning radio off at any pre-set time up to 90 minutes. Outer dial face and sweep second hand are of beautiful, highly polished brass. Rugged low-speed motor is silent in operation. Easy to install. Require 3½" diameter round hole. Depth behind dial face, 2¼". Built-in single-pole switch handles up to 15 amperes at 125 v. AC. With mounting bracket and instructions. U. L. Approved. For 105-125 v., 60 cycle AC only. Shpg. wt., 1¼ lbs.

78 B 375. Model TF-583, Square Face.
78 B 376. Model TF-582, Round Face.
NET EACH 4.95

Potter and Brumfield Relays

PR HEAVY-DUTY POWER RELAYS



For motor starting up to 1 HP. heater loads up to 20 amps, remote break-in control of transmitters, etc. Clean wiping contacts rated at 15 amps except *rated at 20 amps AC coils 50-60 cycles. Operating power required, 7 to 10 volt-amps. Sizes: PR1,3,5: 2½x2½x2⅝"; PR7: 2⅜x2½x2⅝"; PR11: 3¼x2½x2⅜". Average shpg. wt., 12 oz.

Stock No. 6 V. AC	Stock No. 24 V. AC	Stock No. 115 V. AC	NET EACH	Type No.	Action	Normal Position
75 P 845	75 P 960	75 P 660	3.70	PR1A	SPST	Open
75 P 846	75 P 961	75 P 600	3.80	PR3A	SPST*	Open
75 P 847	75 P 962	75 P 602	4.00	PR5A	SPDT	.....
75 P 848	75 P 963	75 P 603	4.50	PR7A	DPST	Open
75 P 849	75 P 964	75 P 663	6.00	PR11A	DPDT	.....

Stk. No. 230 V. AC	NET Each	Stk. No. 110 V. DC	NET EACH	Type No.	Action	Normal Position
75 P 965	4.10	75 P 967	4.30	PR1	SPST	Open
75 P 652	4.20	75 P 968	4.40	PR3	SPST*	Open
75 P 966	4.40	75 P 969	4.60	PR5	SPDT	.....
75 P 654	4.90	75 P 970	5.10	PR7	DPST	Open
75 P 655	6.40	75 P 971	6.60	PR11	DPDT	.....

MR MEDIUM-DUTY POWER RELAYS

Compact relays. Designed for small motors and household appliances. Floating armature for fast action. Clean wiping type silver contacts at 8 amps except *rated at 10 amps. Size: SP units, 2 31/32x1 5/16x1 5/8"; DP units, 2 31/32x2 3/16x1 15/16". AC coils draw 4-5 VA; DC, 1.5 watts. Av. shpg. wt., 8 oz.

Stock No. 6 V. AC	Stock No. 24 V. AC	Stock No. 115 V. AC	Type No.	Action	Normal Position	NET EACH
75 P 611	75 P 977	75 P 615	MR1A	SPST	Open	2.85
75 P 975	75 P 978	75 P 665	MR3A	SPST*	Open	3.20
75 P 610	75 P 979	75 P 614	MR5A	SPDT	....	2.90
75 P 613	75 P 980	75 P 617	MR7A	DPST	Open	3.80
75 P 612	75 P 981	75 P 616	MR11A	DPDT	....	3.90
75 P 976	75 P 982	75 P 972	MR14A	3PDT	....	4.95
	230 V. AC					
	75 P 656		MR1A	SPST	Open	3.25
	75 P 973		MR3A	SPST*	Open	3.60
	75 P 657		MR5A	SPDT	....	3.30
	75 P 658		MR7A	DPST	Open	4.20
	75 P 659		MR11A	DPDT	....	4.30
	75 P 974		MR14A	3PDT	....	5.35
6 V. DC	12 V. DC	24 V. DC				
75 P 619	75 P 186	75 P 987	MR1D	SPST	Open	2.70
75 P 983	75 P 187	75 P 988	MR3D	SPST*	Open	2.95
75 P 618	75 P 188	75 P 989	MR5D	SPDT	....	2.65
75 P 984	75 P 189	75 P 990	MR7D	DPST	Open	3.50
75 P 985	75 P 190	75 P 991	MR11D	DPDT	....	3.75
75 P 986	75 P 191	75 P 992	MR14D	3PDT	....	4.60

SP SHOCKPROOF RELAYS

Heavy-duty relays. Resistant to vibration and shock. Balanced armature construction permits mounting in any position. DPDT contacts rated at 5 amps, 115 volts AC. Large copper shading ring eliminates AC chatter. Contact arms are phosphor bronze and are silver plated. 1⅝x1 21/32x2 7/16". 1 3/16" mtg. ctrs. Av. Shpg. wt., 10 oz.

75 P 924. Type SP11D. 6 volts DC. NET 5.70
75 P 925. Type SP11D. 24 volts DC. NET 5.70
75 P 926. Type SP11A. 115 volts AC. NET 5.95

GA MULTIPLE LEAF RELAYS

A rugged, multiple leaf relay for general circuit and power control applications. Designed to withstand shock and vibration encountered in mobile operation. Very useful for remote power switching. Moisture-resistant coil prevents damage by high humidity. Contacts rated at 8 amps. AC coils for 50-60 cycles. Underwriters' Laboratory Approved. Size: 1x1 11/16x1 25/32" high. Mount with single #8-32 screw. Shpg. wt., 10 oz.

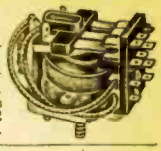
Stock No. 6 V. AC	Stock No. 24 V. AC	Stock No. 115 V. AC	Type	Action	NET EACH
75 P 192	75 P 194	75 P 196	GA11A	DPDT	3.15
75 P 193	75 P 195	75 P 197	GA17A	4PDT	4.15
6 V. DC	12 V. DC	24 V. DC			
75 P 198	75 P 105	75 P 107	GA11D	DPDT	3.15
75 P 199	75 P 106	75 P 108	GA17D	4PDT	4.35

AP RATCHET OR IMPULSE RELAYS

Actuate on impulses as short as 20 ms. Stop mechanism assures accurate operation on each impulse regardless of speed. Contacts are 3/16" fine silver, rated 5 amps. Coils are wound on molded bobbins. Phenolic cams, hardened steel pawl and ratchet with pin hinged armature. Size, 3 11/16x2 5/16x2¼". *50-60 cycle AC, †DC volts. Shpg. wt., 12 oz.

Stock No.	Type No.	Action	Coil Volts	NET EACH
75 P 993	AP11A	DPDT	115*	7.90
75 P 994	AP17A	4PDT	115*	9.50
75 P 995	AP11A	DPDT	24*	7.90
75 P 996	AP17A	4PDT	24*	9.50
75 P 997	AP11A	DPDT	6*	7.90
75 P 998	AP17A	4PDT	6*	9.50
75 P 999	AP11D	DPDT	24†	7.90
75 P 778	AP17D	4PDT	24†	9.50

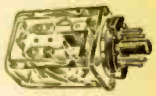
KA GENERAL PURPOSE RELAYS



High-quality, general purpose relay. Particularly useful for transmitters, power supply control and remote switching applications. Have heavy-duty contacts rated at 4 amps. AC coils for 50-60 cycles. Moisture resistant against humidity. Withstands shock encountered in mobile applications. #6-32 mounting stud. Size, 1 1/16x1 27/32x1 5/8". Shpg. wt., 6 oz.

Stock No. 6 V. AC	Stock No. 24 V. AC	Stock No. 115 V. AC	Type No.	Action	NET EACH
75 P 158	75 P 161	75 P 164	KA5A	SPDT	2.85
75 P 159	75 P 162	75 P 165	KA11A	DPDT	3.35
75 P 160	75 P 163	75 P 166	KA14A	3PDT	3.70
6 V. DC	12 V. DC	24 V. DC			
75 P 167	75 P 170	75 P 173	KA5D	SPDT	2.60
75 P 168	75 P 171	75 P 174	KA11D	DPDT	3.05
75 P 169	75 P 172	75 P 185	KA14D	3PDT	3.45

ENCLOSED TYPE RELAYS



Type KRP Midget. Completely enclosed in high-impact, transparent, polystyrene case. Dust-proof and weather-proof. Octal plug on end for insertion in circuit. Heavy silver contacts rated for 5 amps. 1 31/32x1 13/32x2" high. Shpg. wt., 5 oz.

Stock No. 6 V. AC	Stock No. 24 V. AC	Stock No. 115 V. AC	Type No.	Action	NET EACH
75 P 214	75 P 215	75 P 213	KRP5A	SPDT	5.20
75 P 920	75 P 216	75 P 921	KRP11A	DPDT	5.75
6 V. DC	12 V. DC	24 V. DC			
75 P 217	75 P 244	75 P 245	KRP5D	SPDT	5.15
75 P 922	75 P 246	75 P 247	KRP11D	DPDT	5.70

Type KCP plate circuit relays. Completely enclosed in transparent dust-proof and weather-proof polystyrene case. Plugs into standard octal socket. Silver contacts rated at 2 amps non-inductive load. Size, 1 13/32x1 13/32x2" high. Shpg. wt., 5 oz.

No.	Type	Action	Ohms	Ma	NET
75 P 287	KCP5	SPDT	2500	7.2	5.60
75 P 288	KCP5	SPDT	5000	5.0	5.70
75 P 289	KCP5	SPDT	10,000	3.6	6.15
75 P 290	KCP11	DPDT	2500	10.0	6.00
75 P 291	KCP11	DPDT	5000	7.2	6.10
75 P 292	KCP11	DPDT	10,000	5.0	6.50

AMPHENOL TYPE 146-103 SOCKET FOR KRP AND KCP RELAYS. Barrier-type octal socket. Meets N.E.M.A. and U.L. requirements. Has screw-type tie-points separated by insulating barriers. Size, 6¾x1 15/16x2⅝". Mtg. ctrs., 1 11/16". Shpg. wt., 5 oz.
40 H 180. NET 97c

LM PLATE CIRCUIT RELAYS

Quality, medium-cost plate circuit relays. For photo-electric control, counting, and similar circuits. Armature spring tension adjustment and adjustable residual screw permits settings for specific voltages or currents. Has 3/16" fine silver contacts rated at 5 amperes. 115 volts, 60 cycles, non-inductive load. Sizes: LM5, 2 5/16x1¼x2 7/16"; LM11, 2 3/16x2 5/32x2½". Av. shpg. wt., 9 oz.

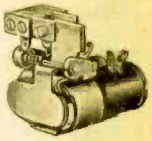
Stock No.	Type	Action	Coil, ohms	Oper. Ma.	EACH
75 P 673	LM5	SPDT	2500	6.3	3.20
75 P 674	LM5	SPDT	5000	4.5	3.35
75 P 675	LM5	SPDT	10,000	3.2	3.80
75 P 682	LM11	DPDT	2500	9.0	5.05
75 P 683	LM11	DPDT	5000	6.3	5.25
75 P 684	LM11	DPDT	10,000	4.5	5.75

LB-5 PLATE CIRCUIT RELAYS

Small, fast-acting units designed for operation in any circuit supplying only a few milliwatts of DC. Breakdown, 500 v. rms min. Pure silver contacts rated at 5 amperes, 28 volts, DC, with non-inductive load. Size, 2 11/16x1¼x1⅛". Adjusted by bending tail-spring hook. For DC only. Shpg. wt., 5 oz.

Stock No.	Coil Resistance	Operating Ma.	Action	NET EACH
75 P 625	2500	9	SPDT	2.30
75 P 626	5000	6.3	SPDT	2.50
75 P 774	10,000	4.5	SPDT	2.65

SS5D SUPER-SENSITIVE DC RELAY



An ultra-sensitive 1 ma relay. SPDT contacts are pure silver. Rated at 2 amps 115 v. AC or 28 v. DC non-inductive load. Balanced armature and pin hinge assembly pivot in needle-point bearings. Coil resistance, 10,000 ohms. Varnish-impregnated coil windings. Mounting is by 2 tapped 6-32 holes on 2 1/32" centers. Size 1 11/16" long, 1 5/16" wide and 1 11/16" high. Shpg. wt., 8 oz.
75 P 844. NET 10.45

SUPER-MIDGET SPDT RELAYS

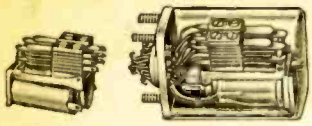
Subminiature relays weighing less than 1 oz. SPDT silver-rhodium contacts rated ½ amp, 24 v. DC for 50,000 operations or .25 amp, 115 volts 60 cycles AC for 1,000,000 operations. Non-inductive load. Units are hermetically sealed in deep-drawn steel tubes. Have standard 7-pin miniature tube type bases. Size, ¼" dia., 1 11/16" high above socket. Av. shpg. wt., 3 oz.

No.	Type	Description	NET
75 P 915	SM5DS	6 volt DC, 80 ohms	4.75
75 P 916	SM5DS	24 volt DC, 80 ohms	4.75
75 P 917	SM5LS	5000 ohms, 3.8 ma	5.10
75 P 949	SM5LS	10,000 ohms, 2.7 ma	5.85

All-Purpose Relays

POTTER AND BRUMFIELD RELAYS

MH MINIATURE 4PDT TELEPHONE RELAYS



Open Sealed

Telephone-type relays. Break-before-make contacts. 1/8" silver contacts rated at 5 amps. Stack insulation, laminated phenolic. Bakelite bobbin. 500 v. rms breakdown. Size 1 17/32x3/4x1 7/16". Types with M suffix are hermetically sealed in metal housing. Header is glass with solder terminals; min. leakage resistance of 10,000 megs at 50% humidity. Sizes: Open type. 1 3/8x2 5/32x1 3/8"; sealed type, 1 11/16x1 1/32x2 7/32". Av. shpg. wts.: Open type, 5 oz.; sealed type, 6 oz.

No.	Type	Coil Volts	Description	NET
75 P 933	MH17A	6 volts AC	Open	6.15
75 P 937	MH17D	6 volts DC	Open	5.30
75 P 934	MH17A	24 volts AC	Open	6.15
75 P 936	MH17D	24 volts DC	Open	5.30
75 P 938	MH17A	115 volts AC	Open	6.15
75 P 940	MH17AM	6 volts AC	Sealed	12.10
75 P 935	MH17DM	6 volts DC	Sealed	11.60
75 P 941	MH17AM	24 volts AC	Sealed	12.10
75 P 939	MH17DM	24 volts DC	Sealed	11.60
75 P 942	MH17AM	115 volts AC	Sealed	12.10

Type MH11L. As above, but current actuated. Open type. Coil resistance. 10,000 ohms. Pull-in current. 4.5 ma. Shpg. wt., 5 oz.
75 P 293. NET 5.05

Type MH11LM. Same as MH11L above, but hermetically sealed. Shpg. wt., 6 oz.
75 P 294. NET 9.70

LK LATCHING RELAYS

Relays designed and engineered for multiple circuit switching of power loads. Act as electrical latch and electrical release; will withstand 10G vibration and 50G shock while operating. Minimum contact pressure 35 grams. Contacts 1/8" dia. fine silver rated at 5 amps. Molded bakelite bobbins with 500 v. breakdown. Size, 2 29/32x1 25/32x1 13/16". Shpg. wt., 10 oz.

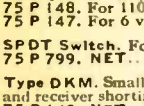
Stock No.	Mfr's Type	Action	Coil Volts	NET EACH
75 P 943	LK17A	4PDT	115 v. AC, 60 cycles	9.50
75 P 944	LK17A	4PDT	24 v. AC, 60 cycles	9.50
75 P 945	LK17A	4PDT	6 v. AC, 60 cycles	9.50
75 P 946	LK17D	4PDT	110 v. DC	9.60
75 P 947	LK17D	4PDT	24 v. DC	8.40
75 P 948	LK17D	4PDT	6 v. DC	8.40

TYPE KL MULTIPLE-CONTACT RELAYS

Highly versatile midget relays. Ideal for limited space applications. Extra-long actuating coil permits double the ampere turns; provides more power to actuate contacts and maintain 25 grams hold-down pressure. High dielectric phenolic insulation. Fine silver contacts; rated 5 amperes at 115 volts. 60 cycle AC. non-inductive load. Size. 1 11/16x1 13/16x1 13/16". Average shpg. wt., 4 oz.

No.	Type	Action	Coil Volts	NET
75 P 219	KL17A	4PDT	24 v. AC, 60 cycles	5.90
75 P 220	KL17D	4PDT	24 v. DC	5.60
75 P 218	KL17A	4PDT	115 v. AC, 60 cycles	5.90

DOW-KEY COAXIAL ANTENNA RELAYS



Type DKC-G. Precision-built coaxial antenna relays. Re-designed magnet provides thrust pressure in excess of 200 grams—prevents intermittent failure in closing of receiver circuit. Shielded magnet. AC type completely free of hum or chatter. Contacts rated 1000 watts. Negligible change in SWR up to 300 mc. Built-in automatic receiver antenna shorting device. Grounds contact leading to receiver before tongue makes contact with transmitter—prevents RF from reaching receiver circuit. Breakdown voltage: over 1000 volts rms. Takes SPDT switch (included in illustration) listed below, for operating B+ of receiver. Connectors, relay tongues and brass parts silver plated. Size, 4 1/4x2 3/4x1 1/4". Wt., 9 oz.
75 P 148. For 110 v. AC. NET 11.50
75 P 147. For 6 v. DC. NET 10.50

SPDT Switch. For above relays. Actuated by plunger on relay. 2 oz.
75 P 799. NET 1.00

Type DKM. Smaller coaxial 6 v. DC relay without external SPDT switch and receiver shorting device. For mobile use. 3 1/4x2 1/2". Wt., 7 oz.
75 P 149. NET 9.50

Type DKF-2 Connector. Double female. For mounting relays directly to output of transmitter. Designed for UHF. Heavy silver plating. Recommended for indoor use. Non-locking type. Shpg. wt., 6 oz.
75 P 136. NET 1.85

DOW-KEY 300-OHM ANTENNA RELAYS

Type DKT-1E. DPDT antenna changeover relay for 300-ohm twin-line. Contacts fully enclosed in dustproof covering. Permits instant transfer of antenna between receiver and transmitter. Handles up to 1000 watts RF. Break-down volts, 1000 rms. External SPDT switch actuated by relay plunger. 3 7/8x2 1/2x1 1/8". For 110-120 v., 50-60 cycles AC. Shpg. wt., 8 oz.
75 P 134. NET 8.50

Type DKT-2E. As above, but DPDT external switch.
75 P 135. NET 9.50

OHMITE "AMRECON" RELAYS

CRU

DO

DOS

TYPE CRU RELAYS

Precision-engineered, general-application relays. Used in recorders, vending machines, etc. Features small size and extremely rugged construction. Designed for long life performance. Has nickel-silver springs and pure silver contacts. Coil drain: 2.75 watts DC. 5.6 watts 50-60 cycle AC. Contact ratings: 5 amps at 115 v. AC; 32 v. DC non-inductive load. Insulation tested at 750 v. AC between all insulated metal parts and between insulated metal parts and ground. 2 7/16x2x1 1/32". Shpg. wt., 4 oz.

Action	No.	Type	Coil v.	EACH	No.	Type	Coil v.	EACH
SPDT	76 P 265	CRUX-192T	6 v. AC	2.96	76 P 274	CRUX-198T	6 v. DC	2.76
DPDT	76 P 266	CRUX-193T	6 v. AC	3.48	76 P 275	CRUX-199T	6 v. DC	3.26
4PDT	76 P 267	CRUX-171T	6 v. AC	4.53	76 P 276	CRUX-133T	6 v. DC	4.25
SPDT	76 P 268	CRUX-194T	24 v. AC	2.96	76 P 277	CRUX-200T	24 v. DC	2.76
DPDT	76 P 269	CRUX-195T	24 v. AC	3.48	76 P 278	CRUX-201T	24 v. DC	3.26
4PDT	76 P 270	CRUX-196T	24 v. AC	4.53	76 P 279	CRUX-165T	24 v. DC	4.25
SPDT	76 P 271	CRUX-197T	115 v. AC	2.96	76 P 280	CRUX-202T	110 v. DC	3.59
DPDT	76 P 272	CRUX-175T	115 v. AC	3.48	76 P 281	CRUX-145T	110 v. DC	4.09
4PDT	76 P 273	CRUX-163T	115 v. AC	4.53	76 P 282	CRUX-137T	110 v. DC	5.08

TYPE DO RELAYS

Ideal for mobile equipment applications where severe shock and vibration is encountered. Coil drain: 3 watts DC. 6 watts 50-60 cycle AC. Contact ratings: 10 amps at 115 v. AC; 32 volt DC non-inductive load. Insulation tested at 1500 v. AC. Size. (4 pole) 2 1/4x2 1/16x1 13/16"; (3 pole) 2 1/4x1 5/8x1 13/16". †Normal position open. *Double break contacts. Av. shpg. wt., 4 oz.

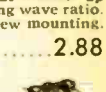
No.	Type	Action	Coil v.	EACH	No.	Type	Action	Coil v.	EACH
76 P 283	DOX-50T	3PDT	6 v. AC	8.48	76 P 291	DOX-53T	4PDT	115 v. AC	9.65
76 P 284	DOX-183T	4PDT	6 v. AC	9.65	76 P 292	DOX-61T	3PDT	230 v. AC	8.48
76 P 285	DOX-181T	3PDT	24 v. AC	8.48	76 P 293	DOX-130T	4PDT	230 v. AC	9.65
76 P 286	DOX-185T	4PDT	24 v. AC	9.65	76 P 294	DOX-145T	3PDT	6 v. DC	7.32
76 P 287	DOX-226T†*	DPST	115 v. AC	8.43	76 P 295	DOX-186T	4PDT	6 v. DC	8.48
76 P 288	DOX-227T†	3PST	115 v. AC	7.68	76 P 298	DOX-141T	3PDT	24 v. DC	7.32
76 P 289	DOX-46T	3PDT	115 v. AC	8.48	76 P 299	DOX-137T	4PDT	24 v. DC	8.48
76 P 290	DOX-228T†	4PST	115 v. AC	8.62					

TYPE DOS RELAYS

Quality, general-purpose relays originally designed to meet rigorous aircraft specs. Extremely compact yet rugged. Capable of handling power loads demanded of heavier and larger relays. Coil drain: 2.5 watts DC, 3 watts at 50-60 cycles AC. Molded phenolic insulation; tested at 1500 v. AC. 1 7/8x1 5/8x1 13/32". *Double break contacts. †Normal position open. Av. shpg. wt., 4 oz.

Action	No.	Type	Coil v.	Amps	EACH	No.	Type	Coil v.	Am	EACH
SPST*	76 P 300	DOSX-229T†	6 v. AC	25	4.74	76 P 308	DOSX-7T	115 v. AC	15	5.35
DPST	76 P 301	DOSX-230T†	6 v. AC	15	4.84	76 P 309	DOSX-235T†	230 v. AC	25	4.74
DPDT	76 P 302	DOSX-30T	6 v. AC	15	5.35	76 P 310	DOSX-236T†	230 v. AC	15	4.84
SPST*	76 P 303	DOSX-231T†	24 v. AC	25	4.74	76 P 311	DOSX-12T	230 v. AC	15	5.35
DPST	76 P 304	DOSX-232T†	24 v. AC	15	4.84					
DPDT	76 P 305	DOSX-162T	24 v. AC	15	5.35	76 P 315	DOSX-237T†	110 v. DC	25	4.30
SPST*	76 P 306	DOSX-233T†	115 v. AC	25	4.74	76 P 316	DOSX-238T†	110 v. DC	15	4.40
DPST	76 P 307	DOSX-234T†	115 v. AC	15	4.84	76 P 317	DOSX-59T	110 v. DC	15	4.86

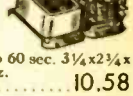
LEACH AMATEUR RELAYS



MODEL 327—MIDGET ANTENNA RELAY

Compact relay for switching antenna between transmitter and receiver. DPDT contacts spaced 1/2" apart for minimum impedance change when using 300-ohm twin-lead transmission lines. Has 1/8" diameter silver contacts. Rated at 2 amps at 115 volts, non-inductive, but handles up to 500 watts of RF in transmission lines having low standing wave ratio. Coil operates from 115 volts, 50-60 cycles. Single 6-32 screw mounting. 1 13/16x1 3/16x1 1/4". Shpg. wt., 4 oz.
75 P 650. NET 2.88

MODEL 1157-T THERMO-ELEMENT TIME DELAY RELAY



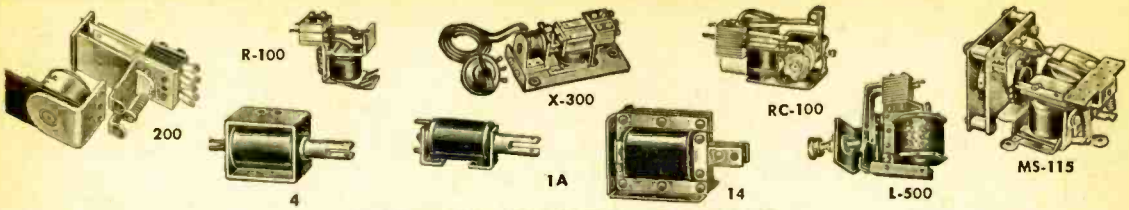
Primarily for transmitting equipment but has many other uses. Protects tubes by assuring proper filament warm-up before application of plate voltage. DPDT contacts can be used normally open, normally closed or as DT. Pure silver contacts are rated 12.5 amps at 115 v., 50-60 cycle AC, non-inductive. Thermo-element provides a continuously variable delay from 20 to 60 sec. 3 1/4x2 1/4x1 7/16". For 110-120 v., 50-60 cycles AC. Shpg. wt., 10 oz.
75 P 651. NET 10.58

SIGMA RADIO CONTROL RELAYS

Type 4F. For the Amateur or builder. Widely used in radio-controlled models; also for used in "Ultimatic" electronic key. Low friction, clock-type pivot. Concentric, non-loading, torsion-type spring. For vacuum-tube or other low-power DC circuits providing 20 milliwatts or more, and requiring a compact, quality relay. Wide range of precision adjustments. SPDT; silver contacts rated 2 amps @ 28 v. DC or 115 v. AC. 8000 ohm coil. Operating current 1.6 ma; releases at 0.75 ma. 1 3/8x1 1/2x1 31/32". Shpg. wt., 8 oz.
75 P 285. NET 7.00

26F-8000—CDS Relay. Similar to above, but slightly lighter and has greater sensitivity. Allows circuits to be adjusted for less plate current and prolonged tube life. Ideal for radio-controlled devices. SPDT, palladium contacts rated 1 amp @ 28 v. DC or 110 v. AC. 8000 ohm coil. Operating current, 0.7 ma. Pull-on, drop-out difference, 0.2 ma. Shpg. wt., 7 oz.
75 P 284. NET 8.50

Guardian and Advance Relays



GUARDIAN ALL-PURPOSE RELAYS

R-100 HIGH-FREQUENCY RELAYS

Excellent for radio-frequency applications. Heavy silver contacts rated 1 kw at 28 mc. Used for antenna switching, band switching, short wave diathermy equipment, and remote control of receivers and transmitters. Type R-100, normally open. Type R-100-B, normally closed. Mounts with single screw. Size: R-100, 2¾x1x2" high; R-100-B, 2¾x1x2⅛"; R-100-C, 2¼x1⅛x2⅛". For 115 volts, 60 cycle AC. Shpg. wt., 6 oz.

Stock No.	Type	Action	NET EACH
75 P 150	R-100	SPST	2.82
75 P 151	R-100-B	SPST	2.82
75 P 152	R-100-C	SPDT	3.38

AC SOLENOIDS

Intermittent-duty solenoids are for applications that do not require energization of coil for more than 5 consecutive minutes with sufficient time between cycles for cooling. Continuous-duty solenoids are constructed not to exceed a maximum temperature rise of 85° C above ambient under continuous operation at rated load. Sizes and shipping weights: 1A—1 1/16x1 5/16x2¼"; 4 oz. 2—1⅜x1 7/16x2"; 10 oz. 4—1⅝x1 7/16x3 3/16"; 14 oz. 12—1 7/16x1 5/16x2¼"; 5½ oz. 14—2 1/16x1⅞x2⅞"; 18½ oz. 16—1 5/16x⅞x1⅝"; 7 oz. 18—2 1/16x1 13/16x2½"; 1 lb. *Intermittent. †Continuous. 110-120 v., 60 cyc. AC.

Stock No.	Type	Ohms	Amps	Stroke	Lift. Oz.	NET
75 P 890	1A*	300	.17	⅛- ½"	8-2	2.15
75 P 891	1A†	675	.07	⅛- ½"	3-1	2.15
75 P 154	2*	60	.50	⅛- ⅜"	27-5	2.50
75 P 155	2	166	.155	⅛- ⅜"	10-1	2.50
75 P 892	4*	37	.64	⅛-1½"	24-19	2.68
75 P 893	4†	133	.14	⅛-1½"	4-4	2.68
75 P 828	12*	100	.27	⅛-1"	32-3	3.32
75 P 829	12†	150	.15	⅛-1"	22-0	3.32
75 P 894	14*	11	1.4	⅛-1½"	110-68	4.79
75 P 895	14†	18	.52	⅛-1½"	65-40	4.79
75 P 885	16†	85	.21	⅛- ⅜"	60-25	3.38
75 P 156	16*	41	.540	⅛- ⅜"	80-48	3.38
75 P 157	18*	8.2	1.45	⅛-1"	340-96	4.32
75 P 886	18†	20	.39	⅛-1"	145-70	4.32

UNIVERSAL "200" SERIES

Custom relays for every application can be assembled from these universal interchangeable parts. Designed to meet the requirements of the circuit designer who needs a special coil and contact assembly. Each custom relay requires one coil and one contact assembly. For additional contacts use the contact switch parts kit. Large silver contacts rated for 115 volts, 60 cycles, non-inductive load. Overall Size: With standard contact assembly, 2⅞x1 1/8x1¾"; with midget contact assembly, 2 1/16x1 1/8x1½". Uses two No. 6-32 screws for mounting. Av. shpg. wt., 4 oz.

AC Coil Types			DC Coil Types		
No.	Volts	NET	No.	Volts	NET
75P709	6	1.59	75P713	6	1.59
75P710	12	1.59	75P714	12	1.59
75P711	24	1.59	75P715	24	1.59
75P712	115	2.00	75P716	32	1.59
75P888	230	2.76	75P717	110	2.00

Type 200-5000 D. Plate Circuit Coil.
75 P 779. NET 2.09

Type 200-1. SPDT contact assembly. 8 amps.
75 P 707. NET 1.32

Type 200-2. DPDT contact assembly. 8 amps.
75 P 708. NET 1.79

Type 200-4. DPDT contact assem. 12.5 amps.
75 P 724. NET 2.09

Type 200-3. Contact switch parts. For adding poles to 200-1 and 200-2. Makes combinations up to 4PDT. With instructions.
75 P 730. NET 1.32

Type 200-M1. Midget contact assembly, SPDT. 8 amps.
75 P 718. NET 1.29

Type 200-M2. Midget contact assembly, DPDT. 8 amps.
75 P 719. NET 1.59

Type 200-M3. Midget contact switch parts. For adding poles to 200-M1 and 200-M2.
75 P 725. NET 1.32

Type 200-M5. Midget contact assembly, 4PDT. 8 amps.
75 P 826. NET 2.76

LOCKING AND OVERLOAD RELAYS

Type RC-100-AR. Locking relay for transmitter break-in control, phone-to-CW switching, etc. Momentary coil energization locks contacts. 4PST. Each impulse reverses contacts. ¼" silver contacts—can handle up to 1500 watts at 115 v., 60 cycle, non-inductive AC; 1 kw inductive loads at 115 v., 60 cycle. Size, 1⅞x2 1/16x3¼". For 115 v., 50-60 cycle AC. Shpg. wt., 12 oz.
75 P 727. NET 5.12

Type RC-100-BR. Locking control relay. Same as above but three pole. One pole, double throw; two pole, single throw. Coil energization locks contacts. Each impulse reverses contacts. Shpg. wt., 12 oz.
75 P 827. NET 5.32

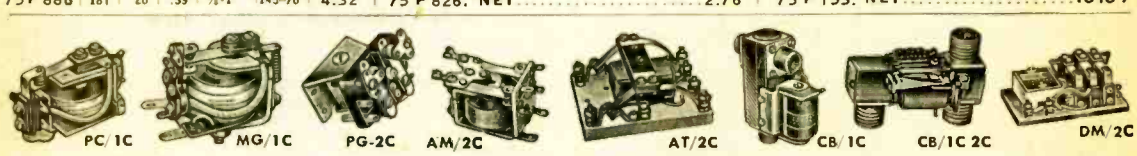
Type RC-100-GR. Locking control relay. Has same specifications as above, but double pole, double throw. Circuit to coil needs energization just long enough to close armature; contacts lock automatically. Each impulse reverses contacts. Wt., 12 oz.
75 P 887. NET 5.03

Type X-300-ER. Overload relay. Protects against surges or continuous overloads. Remote electrical reset and overload adjustment. Adjustable from 250-750 ma., DC. 3000-volt insulation. 4¾x1 13/16x2". Wt., 1¼ lbs.
75 P 640. NET 6.59

Type L-500. Overload relay. Breaks circuit when load exceeds 500 ma. Protects tubes, industrial equipment, etc. Manual reset. Contacts rated 1500 watts non-inductive, 1 kw inductive, at 115 v., 60 cycle 2000 v. insulation. Size: 1¾x2½x3¼". Shpg. wt., 1 lb.
75 P 726. NET 7.64

MS-115 MIDGET STEPPING RELAY

Single-pole 21 pos. non-shorting, stepping relay. Minimum 10 millisec. pulse required to switch from one pos. to next. Max. step rate, 10 per sec. Resets from any position. Aux. SPST contacts can be adjusted to close at any position. Contacts: 1 amp at 115 v. 60 cycles. Stepping and reset coils for 115 v. 60 cycle AC. Size: 3¼x3¼x2 13/16". Shpg. wt., 13 oz.
75 P 153. NET 10.09



ADVANCE ALL-PURPOSE RELAYS

PC POWER CONTROL TYPES

Contacts rated 15 amps, at 115 v. AC non-inductive. ST contacts are normally open. DC coils require 2½ watts, AC coils 4-7 VA. Mount by 2, 6-32 holes on 2" cntrs. SP units: 1 5/16x1 5/8x2⅛"; DP units: 1⅝x1 5/8x2 11/16"; 3P units: 1 17/32x2⅛x3". Av. shpg. wt., 8 oz.

No.	Type	Action	Coil V.	EACH
76 P 200	PC/1C/115 VA	SPDT	115 V. AC	3.01
76 P 202	PC/2C/115 VA	DPDT	115 V. AC	4.30
76 P 203	PC/3C/115 VA	3PDT	115 V. AC	6.63
76 P 207	PC/3C/24 VA	3PDT	24 V. AC	6.63
76 P 208	PC/1C/6 VA	SPDT	6 V. AC	3.01
76 P 216	PC/1C/6 VD	SPDT	6 V. DC	3.01
76 P 218	PC/2C/6 VD	DPDT	6 V. DC	4.30

AT HEAVY-DUTY ANTENNA RELAY

Type AT/2C/115VA. For continuous heavy-duty operation at 1 kw RF power. DPDT ⅛" silver contacts, rated at 10 amps. 115 v. AC, non-inductive, or 1 kw rf. 115 v. AC coil. 1 11/16x2 13/16x3 9/16". Shpg. wt., 14 oz.
75 P 641. NET 7.50

DM TIME DELAY RELAY

Type DM/2C/115VA. Provides adjustable 10-60 sec. delay. For pre-heating tube filaments, etc. DPDT ⅛" silver contacts, rated at 15 amps, 115 v. AC non-inductive. Coil for 115 v. 60 cycle AC operation. 12 oz.
75 P 642. NET 10.38

MG MIDGET RELAYS

Beryllium armature hinge assures positive contact in any mtg. position. Pure silver ⅛" contacts rated at 2 amps, 115 v. AC non-inductive. 6-32 stud mtg.; lug terminals. DC coils require 2 watts—AC coils 4-7 VA. 1¼x1¼x1 13/16". Av. shpg. wt., 3 oz.

No.	Type	Action	Coil V.	EACH
76 P 220	MG/1C/115VA	SPDT	115 V. AC	2.54
76 P 221	MG/2C/115VA	DPDT	115 V. AC	2.73
76 P 222	MG/3C/115VA	3PDT	115 V. AC	3.13
76 P 226	MG/1C/6VA	SPDT	6 V. AC	2.54
76 P 227	MG/2C/6VA	DPDT	6 V. AC	2.73
76 P 228	MG/3C/6VA	3PDT	6 V. AC	3.13
76 P 229	MG/1C/24VD	SPDT	24 V. DC	2.54
76 P 230	MG/2C/24VD	DPDT	24 V. DC	2.73
76 P 231	MG/3C/24VD	3PDT	24 V. DC	3.13
76 P 232	MG/1C/6VD	SPDT	6 V. DC	2.54
76 P 233	MG/2C/6VD	DPDT	6 V. DC	2.73
76 P 234	MG/3C/6VD	3PDT	6 V. DC	3.13

AM MIDGET ANTENNA RELAY

Type AM2C/145VA. Compact, DPDT antenna relay. Highly efficient, yet inexpensive. Well Insulated for RF applications—silicone glass material is used to insulate armature and contact assemblies. Can be used for transmitters with up to 500 watts input. Elements spaced to maintain impedance of 300-ohm twin line. For 115 v., 60 cycle. Single 6-32 mounting. 1¼x1 5/16x1⅞". Shpg. wt., 6 oz.
75 P 644. NET 3.20

PJ AND PG POWER TRANSFER RELAYS

Exceptionally compact power transfer relays, designed for motor starting, heater loads, transmitter control and similar applications. Special armature and frame design will withstand vibration and shock. Efficient coil structure provides high pressure contact. Excellent wiping action. Other features include molded bakelite insulation, heavily plated parts and impregnated coils. Operating power: DC, 4 watts max.; AC, 8 VA max. Contact ratings: PJ type, 30 amps; PG type, 15 amps. 1⅞x1⅝x1½". Av. shpg. wt., 6 oz.

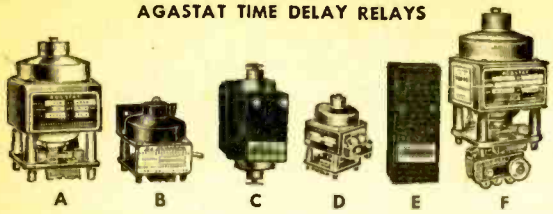
No.	Type	Action	Coil V.	EACH
76 P 235	PJ/1C/230VA	SPDT	230 V. AC	5.63
76 P 236	PG/2C/230VA	DPDT	230 V. AC	5.63
76 P 255	PJ/1C/115VA	SPDT	115 V. AC	4.98
76 P 237	PG/2C/115VA	DPDT	115 V. AC	4.98
76 P 238	PJ/1C/24VA	SPDT	24 V. AC	4.98
76 P 239	PG/2C/24VA	DPDT	24 V. AC	4.98

CB COAXIAL RELAYS

For use with 52-ohm RG cables at RF outputs of up to 880 watts on lines with low SWR. Has SWR of less than 1.02:1.00 at 116 mc. SPDT internal contacts directly connected to Amphenol 83-1R connector. *SPDT with external DPDT contacts for control of auxiliary circuits. 3 1/16x1 7/16x3 9/16". Shpg. wt., 11 oz.

No.	Type	Action	Coil V.	EACH
76 P 250	CB/1C/6VD	SPDT	6 V. DC	9.78
75 P 645	CB/1C/115VA	SPDT	115 V. AC	9.78
76 P 252	CB/1C2C/6VD	SPDT*	6 V. DC	12.13
76 P 254	CB/1C2C/115VA	SPDT*	115 V. AC	12.13

AGASTAT TIME DELAY RELAYS



Precision time-delay relays. Provide adjustable delays—down to 1/10th second, or delays up to 10 minutes, varied by outside screw adjustment on timing head. For vertical operation only. Consist of sealed timing head, solenoid assembly, snap-action switch with fine silver contacts, and screw terminals. Contact ratings based on 115 v., 60 cycle resistive loads. *DB suffix indicates double-break type with 10 amp contact rating; SB indicates single-break, with 5 amp rating. "Use" column numbers mean that delay starts when (1) coil is energized, (2) coil is de-energized, (3) lever is released manually, (4) coil is energized and de-energized, (5) delay starts on main contacts when coil is energized, but no delay on auxiliary SPDT contacts; main contacts transfer at end of time delay. NED-11 is double-head type for adjustable delay in both directions. NEHL-11 is remote push-button type with hold-in switch. NED mounts from front or back; all others rear mounting. NET relays provide 2-step delay or momentary impulse. First delay period from 0 to 15 sec.—2nd period from .01 sec. to 10 min. NET-11, NET-12, NET-21 and NET-22 consist of standard Agastat plus single pole, double throw auxiliary switch at bottom of terminal block. NEU-11 is U.L. Approved. Types G, GY and GZ are general-purpose enclosures similar to NEMA Type 1; GY for NEHL-11, GZ for NET and G for all others. Coil voltages are 50-60 cyc. AC. Av. size, 2½x2½x4¾", except †2½x2½x6". Av. shpg. wt., 2¼ lbs.

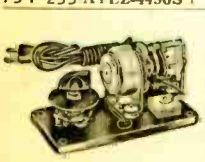
Stock No.	Mfr's Type	Fig.	Use	Contacts*	Coil Volts	EACH	EA., 2 or More
75 P 735	NE-11	A	1	SPDT-DB	115	31.80	28.62
75 P 740	NE-12	A	1	DPDT-SB	115	32.86	29.57
75 P 734	NE-11	A	1	SPDT-DB	230	31.80	28.62
75 P 741	NE-12	A	1	DPDT-SB	230	32.86	29.57
75 P 729	NE-11	A	1	SPDT-DB	440	31.80	28.62
75 P 731	NE-12	A	1	DPDT-SB	440	32.86	29.57
75 P 736	NE-21	A	2	SPDT-DB	115	31.80	28.62
75 P 742	NE-22	A	2	DPDT-SB	115	32.86	29.57
75 P 732	NE-21	A	2	SPDT-DB	230	31.80	28.62
75 P 743	NE-22	A	2	DPDT-SB	230	32.86	29.57
75 P 733	NE-21	A	2	SPDT-DB	440	31.80	28.62
75 P 744	NM-21	B	3	SPDT-DB	Manual	19.61	17.65
75 P 746	NM-22	B	3	DPDT-SB	Manual	20.61	18.55
75 P 747	NED-11	C	4	SPDT-DB	115	60.95	54.85
75 P 748	NED-12	C	4	DPDT-SB	115	61.95	55.75
75 P 242	NEHL11	D	5	SPDT-DB	115	37.10	33.39
75 P 728	NEU-11	.....	1	SPDT-DB	115	34.98	31.48
75 P 230	NET-11†	F	1	SPDT-DB	115	42.10	37.89
75 P 841	NET-12†	F	1	DPDT-SB	115	43.10	38.79
75 P 231	NET-21†	F	2	SPDT-DB	115	42.10	37.89
75 P 842	NET-22†	F	2	DPDT-SB	115	43.10	38.79
75 P 739	G	E	Enc.	.....	.....	5.00	4.50
75 P 248	GY	E	Enc.	.....	.....	6.00	5.40
75 P 249	GZ	E	Enc.	.....	.....	6.00	5.40

BARBER-COLMAN TYPE "O" ULTRA-SENSITIVE RELAYS

Ultra-sensitive, DC-polarized relays. Feature 100 microwatt sensitivity. Ideal for use wherever power supply is limited. Will operate for years with mercury cells. Widely used in plate circuits. High-speed response: can be operated in excess of 100 cps. Fine silver contacts are SPDT, with floating neutral position. Polarity of signal determines which contact closes. Sensitivity is adjustable for precise setting. Two Alnico magnets are used for polarizing field. Balanced armature is mounted on torsional supports in air gap, assuring high resistance to shock. *Double coil; adjusted for 250 μw pull-in. All others, single-coil, 100μw pull-in. Both units have octal plug-in bases. Wt., 10 oz. **We can supply the complete Barber-Colman line of Micropositioners. Write for literature.**

Stock No.	Mfr's Type	Coil Ohms	Pull-In Volts	Pull-In Amps	μ Watt Input	NET
75 P 250	AYLZ-2804S	8200	.970	.00011	106.0	18.00
75 P 251	AYLZ-3192S*	3800	.950	.00025	237.0	19.00
75 P 252	AYLZ-2542S	215	.150	.00070	100.0	18.00
75 P 253	AYLZ-3188S*	5	.033	.0067	221.0	19.00
75 P 254	AYLZ-3353S*	240	.240	.001	240.0	19.00
75 P 255	AYLZ-4436S	13	.035	.0026	90.0	18.00

LEDEX 12 POSITION RELAY



Consists of master switch and solenoid-activated slave switch. Slave switch may be installed at any convenient, remote location. Master switch mounts directly on equipment. Just turn master switch to any desired position—slave switch moves to identical position. 5-conductor cable used between master and slave. Perfect for remote switching of TV antennas, control circuits, meter switching, transmitter band switching, etc. Master switch can be coupled to Amateur beam antenna. Position of slave switch will indicate orientation of antenna. Can be used in place of servo transmitter and receiver for applications where rotary stepping motion can be utilized. Ideal for power and circuit switching for remotely controlling hi-fi equipment. Can be used for counting, programming, sequence operation and coin-operated machines. Both master and slave are supplied on handy demonstration board. Comes completely wired with selenium-rectifier power supply and line cord for plugging into outlet. For operation from 95-130 v. 50-60 cycle AC. Shpg. wt., 3 lbs.

75 P 243. NET 16.50

EBERT MERCURY-PLUNGER RELAYS

Contacts totally enclosed for maximum safety. AC coils rated at 115 volts, 60 cycles. Contacts rated at 35 amps at 115 volts AC, or 25 amps at 230 volts AC, or 2 HP. Type EM-4 is rated at 3 H.P. and Type EM-7 is rated at 5 H.P. —both at 440 volts AC. EM-8 is a sensitive relay with instrument contacts rated at 8 ma., 100 volts. NO indicates normally open; NC, normally closed. 35 millisecond "make" and 55 millisecond "break." U.L. Approved except*. Shpg. wt., 2 lbs. *Shipped by express only.*

No.	Type	Contacts	NET	No.	Type	Contacts	NET
75 P 950	EM-1	SPST-NO	11.50	75 P 954	EM-7	3PST-NO	25.00
75 P 951	EM-2	SPST-NC	12.75	75 P 956	EM-8	*SPST-NO	16.50
75 P 952	EM-4	DPST-NO	19.00	75 P 957	EM-8	*SPST-NC	16.50

Type EM-10. 3-Wire Latching Relay. Normally closed. Input line goes to two isolated output circuits when contact is closed. For lock-up relay service, traffic lights, etc. Same current rating as above. Coil, 115 v., 60 cycles. Shpg. wt., 2 lbs.

75 P 959. NET EACH 20.50

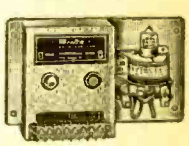
EBERT HEAVY-DUTY MERCURY-PLUNGER RELAYS

Heavy duty mercury relays, similar to above. Types HD-1 and HD-2 are rated at 60 amps for 115 volts AC and 35 amps for 230 volts AC, 60 cycle. DC rating is 12 amps at 120 volts and 7 amps at 240 volts. Type HD-4 2-pole relay: Each tube controls 60 amps at 115 volts AC and 35 amps at 230 v. AC, 60 cycles. DC rating for each tube is 12 amps at 120 volts and 7 amps at 230 volts. Type HD-7 3-pole relay: Each of the 3 tubes can control up to 60 amps at 115 volts AC and 35 amps at 230 v. AC, 60 cycles. DC rating for each tube is 12 amps at 120 volts and 7 amps at 220 volts. All UL Approved. NO: normally open; NC: normally closed. *Shipped by express only.*

No.	Type	Description	Size	Lbs.	NET
75 P 232	HD-1	Single pole, NO	2½x5¾x3⅝"	2	13.00
75 P 233	HD-2	Single pole, NC		2	14.25
75 P 234	HD-4	2-pole, both NO	2½x6x3½"	2	24.00
75 P 235	HD-4	2-pole, both NC		2	27.00
75 P 236	HD-4	2-pole, 1 NO/1/NC		2	25.50
75 P 237	HD-7	3-pole, all NO	3½x6½x4"	3	32.00
75 P 238	HD-7	3-pole, all NC		3	37.00
75 P 239	HD-7	3-pole, 2 NO/1/NC		3	34.00
75 P 241	HD-7	3-pole, 1 NO/2/NC		3	35.50

Ebert Mercury-Plunger Relays are available in a wide variety of coil voltages. Write for detailed literature and quotations.

EBERT SPST MICRELAY



Highly sensitive relay for handling high-power, high-current loads. Uses a 2D21 thyratron to control a built-in mercury-plunger relay. Actuated by control signals as low as 3 μa. For control circuits, .1 to 10 megohms impedance. Contacts: Standard Type—35 amps, 115 v. AC; 25 amps, 230 v. AC and 12 amps, 120 v. DC. Heavy-Duty Type—60 amps at 120 v. AC. Normally open. 5x8¾x2¼". For 115/230 v., 60 cycles. Shpg. wt., 8½ lbs. *Express only.*

75 P 256. Standard Type. NET 37.50
75 P 257. Heavy-Duty Type. NET 40.50

AMPERITE THERMOSTATIC DELAY RELAYS

Heater-actuated time-delay relays. Hermetically sealed in glass envelope with octal base. Heater draws 2 watts and may be operated continuously. Contacts: SPST, 3 amps at 115 v. AC, 1 amp at 220 v. AC. Voltage Breakdown: Contacts, 1000 v.; Heater-to-Contact, 1500 v., except*, 250 v. and 500 v. Ambient temperatures from −55° to +70° C. Size: Dia., 1⅝"; Height less prongs, 2⅞". Av. shpg. wt., 4 oz. *Be sure to specify type number as well as stock number.*

Delay Seconds	Type No. Normally Open 6.3 V	Type No. Normally Open 115 V	Type No. Normally Closed 6.3 V	Type No. Normally Closed 115 V
2*	6N02	115N02	6C2	115C2
5*	6N05	115N05	6C5	115C5
10*	6N010	115N010	6C10	115C10
15	6N015	115N015	6C15	115C15
20	6N020	115N020	6C20	115C20
30	6N030	115N030	6C30	115C30
45	6N045	115N045	6C45	115C45
60	6N060	115N060	6C60	115C60
75	6N075	115N075	6C75	115C75
90	6N090	115N090	6C90	115C90
120	6N0120	115N0120	6C120	115C120

75 PP 295. NET EACH 2.35

Miniature Relays. All types above in miniature size. 9-pin, ¾x2⅝". x2⅝". 3 oz. *When ordering, specify type no., adding letter "T" following type number. Example: 6N02T.*

75 PP 296. NET EACH 2.35

AMPERITE REGULATOR TUBES

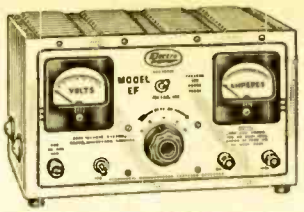
For Replacement Use in Industrial Electronic Equipment

Amperite regulator tubes have achieved wide acceptance for current-voltage regulating applications in industrial electronic equipment. Built to rigid specifications. Listed below are special purpose ballast tubes used in original industrial equipment and identified by Amperite type numbers. All units are stocked for prompt delivery. Av. shpg. wt., 4 oz.

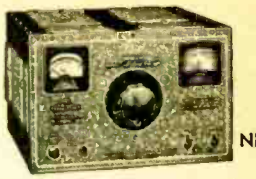
Stock No.	Type	EACH	Stock No.	Type	EACH
9 E 981	1H22	1.76	9 E 987	6H6	1.76
9 E 984	3-4		9 E 991	9-4	
9 E 985	6-4		9 E 993	10-25	
9 E 986	6-11		9 E 995	12-4	

Converters and Power Supplies


D612



EF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ELECTRO-PRODUCTS POWER SUPPLIES

MODEL D612 DC POWER SUPPLY
6 AND 12-VOLT, 10 AMP

Moderately priced 6-12 v. power supply. Designed for operation of 6 to 12 volt units such as auto radios, 2-way marine and aircraft radio, etc. May be used for battery charging, electroplating and model railroad systems. Two ranges, both continuously variable: 0-8 volts and 0-16 volts at 10 amperes, continuous duty. Up to 20 amperes intermittent duty. Less than 5% ripple. Superior choke-input filter circuit. Twin-metered: 0-10 amperes, DC, and 0-20 volts, DC. Four bridge-type selenium rectifiers. Readily accessible fuseholder on front panel. On-off switch and selection switch (0-8 or 0-16 volts). Terminal connector clips furnished. Patented Electro Products Labs conduction cooling provides large margin of safety; assures longer rectifier life and greater current carrying capacity. Built to withstand high overloads. Rugged 18-gauge steel cabinet with baked-on blue Hammerloid finish. Rubber feet. Size, 12x7x8½". For operation from 105-125 volts AC. Shpg. wt., 22 lbs.
80 PZ 211. NET 39.15

MODEL EF DC POWER SUPPLY
14 AND 28-VOLT, 5 AMP

New, dual-range DC power supply. For testing and servicing relays and solenoids, telephone circuits, auto, marine and aircraft radios, and other low-voltage devices. Less than 1% AC ripple at 5 amps. Provides 2 ranges of continuously variable DC power supply: 0-28 volts up to 5 amps; 0-14 volts up to 5 amps. Up to 10 amps at intermittent loads. With choke input and Pi-type filters; bridge-type selenium rectifiers. Fused input. Heavy-duty control transformer provides convenient voltage adjustment. D'Arsonval type meters—voltmeter (0-50) and ammeter (0-6) with ±2% accuracy. Patented conduction cooling feature. Steel cabinet. Size, 12x7x8½" deep. On-Off and Selection switches on front panel. 4-way binding posts. With 6-ft. cord and plug. For 110-120 v., 50-60 cycle AC. Shpg. wt., 30 lbs.
80 PZ 212. NET 82.81

Model E. As above, but with single-section choke input filter. 5% AC ripple at 5 amps. Shpg. wt., 24 lbs.
80 PZ 213. NET 72.03

MODEL NF HEAVY-DUTY
28-VOLT, 15 AMP

High-quality filtered DC power unit for continuous heavy-duty operation. Output is continuously variable from 0-28 volts for loads to 15 amperes and 0-36 volts for loads to 6 amperes, continuous duty. Handles intermittent loads up to 25 amperes. With 2% D'Arsonval movement meters for highly accurate readings. Extremely low AC ripple—1% @ 15 amperes. Choke-input filter circuit uses 2 chokes and 3-2000 mfd. 50 volt capacitors. Bridge-type selenium rectifiers. Switch is rated at 15 amperes. Power drain: 730 watts at 28 volts. 15 ampere output. Blue Hammerloid steel cabinet. 14¼x14¼x9¾". For 105-125 v., 60 cyc. AC. Shpg. wt., 81 lbs.
80 PZ 208. NET 191.10

Model N. Same unit as Model NF above, but has ripple content of 8% @ 15 amperes; ripple content of 5% @ 10 amperes. Filter circuit consists of one choke and one capacitor. Size, 14¼x14¼x9¾". Shpg. wt., 70 lbs.
80 PZ 209. NET 171.50

ATR INVERTERS AND POWER SUPPLIES

DC TO AC INVERTERS

For obtaining an alternating current from a DC power source. Excellent for a wide variety of applications as listed below. Provide years of satisfactory and dependable service.

TELEVISION INVERTERS

Specially designed and carefully adjusted inverters for operating television receivers from DC voltages in DC districts, autos, boats, trains, etc. Suitable for use with all types of electronic equipment where precise output frequency is required. Have specially adjusted vibrators to provide exact output power frequency required for operating TV sets. Well filtered to insure interference-free reception. Equipped with four-point voltage regulators. Operating efficiency better than 85%. Fused for added protection. With on-off switch, AC receptacle, leather carrying handle. Gray Hammerloid metal case. Sizes: Models RSE, 8⅜x9x5¼"; RHF, 6½x11⅛x8½". HSH, 6½x12⅞x8½".

Stock No.	Mfr's Type	Input DC Volts	Output 60 Cycles	Watts Cont.	Watts Inter.	Wt., Lbs.	List	NET EACH
80 PZ 242	6T-HSH	6	110 v.	125	150	36	$129.50	77.70
80 PZ 236	12T-HSH	12	110 v.	200	250	36	129.50	77.70
80 PZ 237	32T-HSH	32	110 v.	225	325	36	145.00	87.00
80 PX 244	110T-RSE	110	110 v.	150	250	19	72.00	42.20
80 PZ 245	110AT-RHF	110	110 v.	250	325	25	79.75	47.85
80 PZ 238	110T-HSH	110	110 v.	400	600	36	145.00	87.00

RECORDER & RADIO INVERTERS—BATTERY INPUT

Designed especially for standard tape recorders, wire recorders, dictating machines, radios, record players, PA systems, electric razors, etc. Not recommended for large motor driven appliances such as refrigerators, washing machines, etc. Fused for added protection. On-off switch. Filtered to suppress "hash" and "ripple". 4-point voltage regulator. In gray metal case with leather carrying strap. Sizes: Models RSE, 8⅜x9x5¼"; RHF, 6½x11⅛x8½"; HSH, 6½x12⅞x8½"; DME, 5¼x4¼x2¾"; RME, 8¾x9x3¾".

Stock No.	Mfr's Type	Input DC Volts	Output 60 Cycle	Watts Cont.	Watts Inter.	Wt., Lbs.	List	NET EACH
80 P 246	6-DME	6	110 v.	30	40	5	$19.95	11.97
80 P 247	6-RME	6	110 v.	50	60	12	39.50	23.70
80 PX 220	6-RSE	6	110 v.	65	80	19	69.95	41.97
80 PZ 248	6-RHF	6	110 v.	100	125	25	79.95	47.97
80 PZ 235	6-HSH	6	110 v.	125	150	36	119.50	71.70
80 P 249	12-DME	12	110 v.	40	50	5	19.95	11.97
80 P 215	12-RME	12	110 v.	80	100	12	39.50	23.70
80 PX 221	12-RSE	12	110 v.	100	125	19	69.95	41.97
80 PZ 216	12-RHF	12	110 v.	125	150	25	79.95	47.97
80 PX 217	32-RSE	32	110 v.	100	150	19	79.50	47.70

RECORDER & RADIO INVERTERS—110 V. DC INPUT

These inverters are specially designed for operating standard AC radios, record players, tape or wire recorders, etc. from a DC power source. Completely filtered to insure interference-free reception. Provide quiet, long-life radio operation from DC voltages in rural areas, DC districts, trains, etc. Carefully engineered; ruggedly constructed. Equipped with four-point voltage selector to correct for output voltage which is lower or higher than normal. Size: Model RME, 8⅜x9x3¾"; Model RSE, 8⅜x9x5¼". In gray Hammerloid metal cabinet, with leather carrying handle.

Stock No.	Mfr's Type	Input DC Volts	Output 60 Cycle	Watts Cont.	Watts Inter.	Wt., Lbs.	List	NET EACH
80 PX 218	110-RME	110	110 v.	100	150	12	$47.50	28.50
80 PX 225	110-RSE	110	110 v.	150	250	19	69.95	41.97


A


B

6-12 V. DC POWER SUPPLIES

Fig. A. Type 610-ELID. DC supply for low voltage equipment. Specially designed for auto radio testing. Operates equipment at maximum efficiency at all times. Features: 8-position voltage selector switch; voltmeter; steel case with leather handle; full-wave dry disc selenium rectifier; on-off switch and fuse. May be connected in series for higher voltage or parallel for higher current. Rated 6 volts @ 10 amps and 12 volts @ 6 amps. For 105-125 volts, 50-60 cycle AC. Size 6½x9⅛x 8½". 22 lbs.
80 PZ 233. NET 35.64

Fig. B. Type 610C-ELID. Features either 6 volts @ 10 amperes continuous, or 12 volts @ 6 amperes continuous. Has voltmeter and ammeter. Toggle switch selects 6 or 12 volts output. 8-position voltage selector control. For 105-125 v., 50-60 cycle AC. Gray steel case. 6½x9⅛x8½". Shpg. wt., 22 lbs.
80 PZ 243. NET 39.95

Fig. B. Type 620C-ELIR. Heavy-duty model. Uses dual rectifiers—full-wave assures noiseless operation. Rated output: 6 volts at 20 amperes or 12 volts at 10 amperes. Has voltmeter and ammeter. Gray steel case with handle. 8-position voltage selector control. Size, 6½x12⅞x8½". For 105-125 volts, 50-60 cycle AC. Shpg. wt., 33 lbs.
80 PZ 234. NET 56.34

INVERTERS WITH BUILT-IN FILTERS

Permit operation of phono motors and other small AC devices from a DC power source. Carefully built for dependable service life and operating efficiency. Both models listed below are housed in steel cabinets. 5¾x4x6¾" deep. Finished in gray Hammerloid. Shpg. wt., 8 lbs.

Model 6-LIG. Inverts 6 volts DC to 110 volts, 60 cycle AC. Rated output wattage, 40 watts continuous; 50 watts intermittent.
80 P 240. List, $35.75. **NET** 21.45

Model 110-LIG. As above, but provides 110 volts, 60 cycle AC from 110-volt DC source. Rated, 65 watts continuous; 80 watts intermittent.
80 P 241. List, $39.50. **NET** 23.70

CORNELL-DUBILIER COMBINATION-INPUT CONVERTER

Type 6/12D6. This versatile vibrator-type converter features dual input—can be operated from 6-volt or 12-volt DC electrical systems. Delivers 110 volts, 60 cycle AC to permit using AC devices in autos or boats. Excellent for dictating machines, shavers, phono turntables, small amplifiers, etc. Installed in a jiffy—input plug of converter plugs into cigarette lighter receptacle; electrical device plugs into standard AC outlet on converter. Rated, 60 watts continuous; 75 watts intermittent. Converter can rapidly be changed from 6 volt to 12 volt operation by simply reversing position of the plug-in vibrator. Output stabilized at 60 cycles, ±3 cycles. 5½x7¼x6¼". Shpg. wt., 11½ lbs.
80 P 263. List $44.95. NET.....26.43

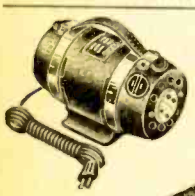
Type MK 3544-1. Mounting kit for above. Mounting plate and hardware for a quick and neat installation job. Shpg. wt., 1 lb.
80 P 264. NET.....1.73

CORNELL-DUBILIER DC TO AC CONVERTERS

The famous line of Cornell-Dubilier "Powercon" DC to AC converters. Efficient vibrator-type recommended for operating AC appliances from DC power sources. All units have well-regulated output of 110 volts, 60 cycle AC. Feature improved RF filtering. Now have a higher rating for intermittent overloads. Wattage figures for intermittent use are rated for power factors from 70-100%. Superior filtering assures output free of "hash". Employ large size, impregnated transformers for cool, stable and reliable operation. Absolute frequency stability regardless of load. Instant starting under load—no warm-up period needed. Output has complete RF filtering for clear TV, short-wave, AM and FM broadcast reception. Choice of 14 sizes for wide variety of applications. Typical applications listed below. Converters listed according to inputs: 6 volt battery, 12 volt battery or 110 volts DC. Models 110H25 and 110H35 are approved for TV sets and are TVI-proofed.

Stock No.	Mfr's Type	Typical Applications	Input V. DC	Watts Cont.	Watts Inter.	Size	Wt., Lbs.	List	NET
80 P 300	6SP2	Electric shaver	6	20	20	2⅜x2½x3½"	2	$ 9.95	5.85
80 P 301	6L6	Phono motor, amplifier	6	60	80	5½x6¼x8"	12	39.50	23.23
80 P 302	6S8	Radio, phono, recorder	6	80	100	5½x6¼x9"	14	59.95	35.25
80 PZ 303	6H10	Radio, recorder, PA	6	100	125	6½x7½x11"	20	69.95	41.13
80 PZ 304	6SH15	Radio, recorder, PA	6	150	175	8x9½x13"	35	109.50	64.39
80 P 305	12SP2	Electric shaver	12	20	20	2⅜x2½x3½"	2	12.95	7.61
80 P 306	12M6	Radio, phono, amplifier	12	60	80	4⅝x3 15/16x5 7/16"	6	35.75	21.02
80 P 307	12L8	Radio, phono, recorder	12	80	100	5½x6¼x8"	12	39.50	23.23
80 P 308	12S10	Radio, recorder, PA	12	100	125	5½x6¼x9"	14	59.95	35.25
80 PZ 309	12H15	Radio, recorder, PA	12	150	175	6½x7½x11"	20	69.95	41.13
80 P 310	110L-M5	Phono, amplifier	110	50	60	3½x3x4 13/16"	4	27.50	16.17
80 P 311	110L-10	Radio, recorder, PA	110	100	150	5½x6¼x8"	12	47.50	27.93
80 PZ 312	110H25	TV, recorder, PA	110	250	325	6½x7½x11"	20	79.75	46.89
80 PZ 313	110H35	TV, recorder, PA	110	350	450	6½x7½x11"	20	105.75	62.18

CARTER CONVERTERS & GENE-MOTORS



D1080CW

450AS

SUPER CONVERTERS FOR TAPE & WIRE RECORDING

Rotary converters specially designed to operate tape and wire recorders from a DC power source. Output: 115 volts, 60 cycle AC; excellent filtering. Frequency stabilized to permit high-quality recording. Has plug-in AC receptacle and DC connecting cord. Size (HWD), 5x8¼x4½". Shpg. wt., 15 lbs.

Type D1080CW. 115 v. DC to 115 v. AC, 80 watts. For Knight Tape Recorders (except 96 RZ 635), Ampex 600, Bell, Dukane, Elcor 1000, 15, 115, Pentron, RCA, Revere T-100, T-500, TR200, Webcor 2020, Wilcox-Gay 4C10 4A10, 4F10.
80 P 066. List, $71.50. NET.....52.56

Type B1080CW. As above, but 12 v. DC input.
80 P 058 List $72.50 NET.....53.28

Type A1080CW. As above, but 6 v. DC input.
80 P 068. List. $72.50. NET.....53.28

Type BR1021CP. Frequency-controlled converter. 12 v. DC to 115 v. AC. 210 watts. For Ampex 401A and Magnecord Binaural. 11⅝x6¼x10¼". Shpg. wt., 50 lbs.
80 PZ 049. List $255.00. NET.....187.43

Type D1010CW. 115 v. DC to 115 v. AC. 130 watts. For: Knight 96RZ635; Ampex 600 plus 620; Berlant 1401; Brush BK-443P; Crescent H19A1; Crestwood 304,404; Ekotape 114, Magnecord PT6, PT6-JA; PT63, M30, M33; Revere T-700; Webcor 2030, 2130, 2010, 2110. 5x8¼x4½". Shpg. wt.,15 lbs.
80 P 067. List $72.00. NET.....52.92

Type B1010CW4. Same as D1010CW, above, but for 12 volt DC input.
80 P 059. List, $84.00. NET.....61.74

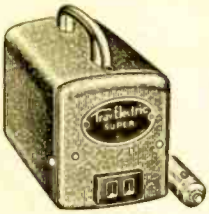
Type A1010CW4. As above, but 6 v. DC input.
80 P 069. List $84.00. NET.....61.74

GENEMOTORS

Type 450AS. For mobile communications. New 3" frame units for intermittent duty, 150 watts. Continuous duty, 90 watts. Ratings: Input: 6 v. DC, 29 amps; output, 400 v. DC @ 250 ma. Size, 7⅛x4¾x3½". Wt., 10 lbs.
80 P 044. List, $69.00. NET.....50.71

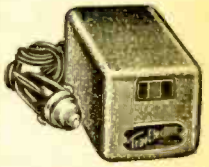
Type 520AS. Same size and weight as above unit. Rating: Input, 6 v. DC @ 28 amps; output, 500 v. DC @ 200 ma.
99 S 032. List, $70.00. NET.....51.45

TERADO 6 AND 12 V. DC TO 110 V. AC CONVERTERS



6—71160

Convenient, DC-to-AC converters for operating 110 v. electrical appliances from car batteries. Equipped with plug which fits cigarette lighter socket. Convert 6 or 12 volts DC to 110 volts, 60 cycle AC. Has completely filtered output. Operates radios, amplifiers, recorders, soldering irons, incandescent lights, electric razors, etc. Permits automobile use of broadcast and short-wave receivers. Select from 10 models, in 5 different output sizes. Each size is available for 6-volt DC or 12-volt DC input. Choose according to maximum load for the type of AC equipment you will be operating. Excellent for vacation trips or business use. *115 cycle output only (not for use with motor-driven devices).



6—1160

Stock No.	Mfr's. Type	Input DC Volts	Output V., 60 Cycles	Watts Cont.	Watts Inter.	Size	Wt., Lbs.	NET
80 P 278	6-11160	6	110	10	15	2x2x3½"		7.97
80 P 279	12-11160	12	110	10	15		2¼	7.97
80 P 274	6-110	6	110*	30	40	2½x2½x4½"	3	8.64
80 P 275	12-110	12	110*	30	40		3	9.97
80 P 272	6-1160	6	110	35	45	2½x2½x4½"	3¼	11.97
80 P 273	12-1160	12	110	35	45		3¼	11.97
80 P 270	6-71160	6	110	60	75	6x5x4"	8	25.30
80 P 271	12-71160	12	110	60	75		8	28.63
80 P 276	6-81160	6	110	75	100	6x5x4"	9	33.30
80 P 277	12-81160	12	110	75	100		9	36.64

SCHAUER QUALITY BATTERY CHARGERS

AX-2

BX-2

TYPE AX-2—4 AMPERE

Highly efficient over-night 6-volt battery charger. 4 ampere charging rate tapers to 2 amperes as the battery becomes fully charged. Built with quality electrical components throughout to assure long-life and dependable performance. Periodical charge at a few cents cost for current will keep battery operating at maximum.

Equipped with built-in "Charger-Guard" which provides instantaneous and full automatic protection against short circuits and overloads. Has full-wave charging output which makes possible higher efficiency of operation. Rectifiers are selenium for long life and dependable service.

Has clip terminals. Quickly connected—no need to disconnect the battery or to remove it from the car. Pays for itself in longer battery life and protection from battery failure. All-steel case 4¼" long, 4¼" wide, 6¼" high. With cables. For operation from 110-115 v. 60 cycle AC. Shpg. wt., 4 lbs.
80 P 161. List, $13.95. NET.....10.46

Type A8410 Charger Plug. Handy charger accessory eliminates clipping charger leads to battery. Plugs into standard cigarette lighter socket. Wt., 7 oz.
80 P 165. List, $1.50. NET.....1.00

TYPE BX-2—6 AMPERE

Dependable 6-volt, 6 ampere charger. Will fully charge the average run-down battery in 7 to 9 hours. For autos equipped with P.A. systems, two-way radio communications, etc., this unit is ideal for restoring battery to full charge over-night. Equipped with "Charger-Guard" for positive protection against damage through short circuits and overloads. Because of this feature, charger may be left connected to battery when starting the car. Meter shows exact charging rate into battery. Complete with cords and battery clips. Steel case. Size, 7¼x6¼x6" deep. For operation from 110-115 v. 60 cycle AC. Shpg. wt., 8 lbs.
80 P 162. List, $18.95. NET.....12.63

TYPE CX-2—10 AMPERE

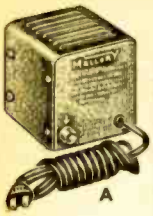
As above, but heavy-duty unit for higher capacity batteries used in farm equipment, taxi, trucks and tractors. 10 ampere charge tapers off as battery becomes fully charged. "Charge Guard" protection and meter. Cords and clips. 7¼x6½x6". For operation from 110-115 v. 60 cycle AC. Shpg. wt., 10 lbs.
80 P 163. List, $24.95. NET.....16.63

Type CX2-12. As above, but for one 12-volt battery or two 6-volt batteries in series.
80 P 164. List, $31.95. NET.....21.30

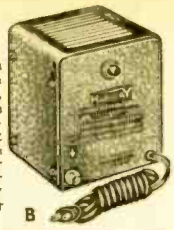
Mallory Power Supply Equipment

BATTERY CHARGERS

PORTABLE 6 AND 12 VOLT TYPES


A

Highly efficient and dependable storage battery chargers using selenium rectifiers. Also serve as power supplies for electroplating, model trains, telegraph systems, vending machines, relays and solenoids, etc. On all units except 6SAC4, charging rate decreases as battery becomes charged; protect battery plates. All except 6SAC4 have pilot light; dims as battery becomes charged and blinks if charger connections are shorted or reversed. DC output terminates in universal socket for use with R670 or R675 cords below. With heavy-duty AC cable and plug. *For 12-volt batteries; others for 6-volt batteries. For 105-125 volts, 60 cycle AC.

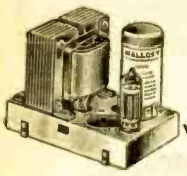

B

Stock No.	Mfr's Type	DC Amps Max	DC Amps Taper	Max DC Amps Continuous	Size H. W. D.	Wt. Lbs.	Fig.	List	NET EACH
80 P 086	6SAC4	4	4	3	4⅝x4¼x4⅜"	5¼	A	$16.95	11.07
80 P 093	6SAC6	6	4	5	6⅞x4⅞x4½"	6	B	19.95	13.03
80 P 094	6SAC10	10	7	8	7⅞x6½x5¼"	9	B	29.95	19.57
80 P 087	12SAC5*	5	3	4	7⅞x6½x5¼"	9	B	29.95	19.57

BATTERY CHARGING ACCESSORIES

Type R670 Charging Cord. DC cord assembly for use with any of the battery chargers listed above. Equipped with heavy-duty polarized battery clips which attach directly to terminals of battery being charged. 6-ft. long. Shpg. wt., 6 oz.
52 P 642. List, $1.95. NET 1.27

Type R675 Charging Cord with Universal Cigarette Lighter Plug. For convenient charging of automobile battery through cigarette lighter socket in car. Universal type cigarette lighter plug may be inserted in either of two ways. Provides proper polarization of the battery charger with respect to the automobile battery, regardless of whether the positive or negative battery terminal is connected to the car frame. 6 feet long. Shpg. wt., 6 oz.
52 P 643. List, $2.25. NET 1.46


VP6-325
VP12-325


VP-555H
VP-557


VP6-260
VP12-260

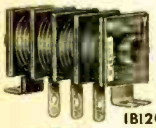
TYPE VP VIBRAPACKS

PORTABLE AND MOBILE HIGH-VOLTAGE POWER SUPPLIES

Flexible, heavy-duty vibrator power supplies. Designed to provide low-cost, high-voltage DC from low-voltage storage batteries. Compact, lightweight, and rugged. Easy to install. Widely used for furnishing "B" power for portable radios, aircraft and marine transmitters and receivers, farm radios, police mobile two-way equipment, mobile PA systems and other electronic applications where regular commercial power is not available. All are dependable, trouble-free units developed through years of research. They are equipped with effective hash-filters to prevent vibrator noise from entering the power supply circuits. Both tube-rectifying and self-rectifying models are available. Circuits having B-negative grounded may use either type. In circuits where self-bias is obtained through a resistor or choke between B-negative and ground tube-rectifying models should be used. VP-555H has built-in RF and ripple filter; additional filtering is required only when used to supply exceptionally high gain circuits. VP-557 has input filter capacitor only (requires filter choke and output capacitor in most applications). VP6-260 and VP12-260 can be converted to 200 v. DC output at 60 ma. with simple wiring change. *Require external filter circuit. All have efficient filtering for vibrator hash.

Stock No.	Mfr's Type	Input VDC	Output VDC	Max. Ma.	Wt. Lbs.	List	NET EACH
80 P 118	VP6-260*	6	260	60	5	$28.95	17.02
80 P 119	VP12-260*	12	260	60	5	28.95	17.02
80 P 104	VP-555H	6	300	200	14	79.95	47.01
80 P 116	VP6-325*	6	325	100	6	29.95	17.61
80 P 117	VP12-325*	12	325	100	6	29.95	17.61
80 P 106	VP-557*	6	400	150	14	79.95	47.01

DRY-DISC RECTIFIERS

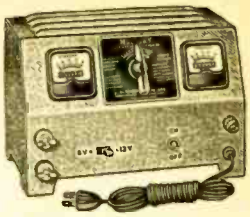

IB12CIJ


IB8R

Magnesium-copper sulphide rectifiers for low-voltage, medium- and high-current applications. All are single-phase, full-wave bridge type rectifiers. Used in battery chargers, battery eliminators, electroplating, service bench power supplies, vending machine power supplies, welding, engine starting, circuit breaker reclosing, solenoid and relay operation, etc. Types IB8R and IB12R are for model railroad reversing. Contain no temperature-sensitive films or layers. All metal in construction, these units are assembled under high pressure and will withstand severe vibrations and shock. Unaffected by extremes of temperature (−90° to +265° F.). Constant output without circuit adjustments. "Self-healing" rectifying film. ‡At full load. Type of mounting: *Insulated bolt; †grounded foot; §insulated stud. Types with J suffix indicates universal construction to permit foot, bolt or stud replacement mounting.

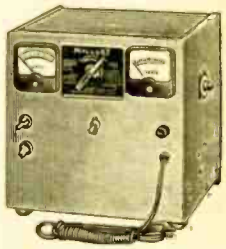
Stock No.	Type	Max. ACV Input	DC Volts Output‡	Cont. Duty Amps	Size H. W. D.	Replacement in Equipment	Wt. Lbs.	List	NET EACH
56 P 174	IB4R*	3.2	1.7	1.5	¾x⅝x1"	GTC Battery Eliminator	¼	$2.40	1.57
56 P 175	IB8R*	6.4	3.4	1.5	¾x⅝x1⅛"	GTC Battery Eliminator	¼	2.85	1.86
56 P 176	IB12R*	9.7	5.2	1.3	¾x⅝x1¼"	Electric Fence Supplies	¼	3.25	2.12
56 P 179	IB12L5*	9.7	5.0	4.5	2⅜x2⅛x2½"	Mallory 6AC4-2 Charger	½	5.85	3.82
56 P 180	IB12C5*	9.7	5.0	5.3	2⅜x2¼x3"	Mallory 6AC6-3 Charger	¾	7.40	4.83
56 P 170	IB12C1J*	9.8	5.1	3.2	1⅝x1¼x2¼"	Mallory 3C, 6AC4 Booster	¾	6.55	4.27
56 P 177	IS16CB7*	12.8	6.6	6.0	3x2½x3¼"	Mallory 5535B, 6AC6, IS16CB7M	1½	10.20	6.65
56 P 181	IS16B7§	12.8	6.5	8.3	3x2½x5½"	6-AC-10-2, 107, IS16B7M	2	11.25	7.34
56 P 182	IS16B9§	12.7	6.4	11.6	4¼x3½x5½"	Mallory 6AC10	3	12.80	8.35
56 P 171	F16C3†	13.0	6.8	3.9	2⅝x1¾x3"	Mallory 5535	1	8.85	5.77
56 P 184	F20C7†	16.2	8.4	4.8	3 3/16x2½x4½"	ATR Battery Eliminators	1	12.75	8.32
56 P 186	IS24C7J§	19.4	10.1	4	3 3/16x2½x4¾"	Mallory 12-AC-5-2	2½	12.60	8.23

POWER SUPPLIES



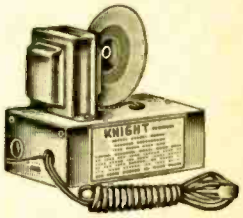
BENCH POWER SUPPLY

Model 12RS6D. Versatile dual-range power supply for the radio service bench; permits servicing of 6 and 12 volt automobile and truck radios. Range "A" supplies 0-16 volts at 6 amperes continuously, or 14 amperes intermittently. Range "B" provides 0-8 volts at 10 amperes continuously or 20 amperes intermittently. 2½" DC voltmeter and DC ammeter read 0-10 v. and 0-20 amps. Automatic overload protection is provided. Size, 6¼x10⅛x5½". For 105-125 volts, 60 cycles AC. Shpg. wt., 12½ lbs.
80 P 098. NET 39.15



HEAVY-DUTY POWER SUPPLY

Model 6RS25-1. Heavy-duty bench unit. For testing medium-power 2-way mobile phone equipment and similar units. Control permits selection of 0-8 volts DC at up to 25 amperes. Intermittently, it will supply 40 amperes at 6 volts. Has 0-10 DC voltmeter and 0-40 DC ammeter. Less than .5 volt ripple. Automatic overload protector and self-resetting circuit breaker. Voltage stabilizer for no-load to full-load conditions provides protection for electronic equipment. Steel case. 11x10½x8¾". For 105-125 volts, 60 cycles. Shpg. wt., 33½ lbs.
80 PZ 113. NET 87.71



KNIGHT BATTERY CHARGER KIT

Model 780. An exceptional battery charger value. This high-quality, easy-to-build kit is carefully designed to safely and dependably charge standard 6-volt automobile batteries. May be used with accessory kit (below) to permit charging of 2-volt batteries. Incorporates full-wave circuit using efficient magnesium-copper sulphide, dry-disc rectifiers. Charging rate tapers from 4 to 2 amperes. Protects batteries by automatically compensating for state of battery charge. Pilot light indicates correct connection of cables to battery; lights if cables are connected correctly. Primary of transformer is fused. Kit supplied with all parts; includes rectifiers, transformer, punched chassis, battery clips and leads, wire and solder. Instructions include pictorial diagram. For 110-120 v., 60 cycle AC. 3⅛x6⅛x5".
Shpg. wt. 6 lbs.
83 S 780. NET 5.95

Two-Volt Adapter Kit. Permits using above for charging 2-volt wet-type batteries, such as used in portable radios and electronic photoflash equipment. Shpg. wt., 6 oz.
83 S 781. NET 99c

DC Adapter Kit. Permits using above charger as 6.3-volt DC supply for phono preamps, etc. Rated, 4 amps. Shpg. wt., 6 oz.
83 S 782. NET 1.35

For Listings of C-D and ATR Inverter Vibrators See Pages 260-261

RCA RADIO AND INDUSTRIAL BATTERIES

All RCA Radio Batteries are designed to give maximum radio performance. Due to rapid turnover, ALLIED's stock of RCA batteries is always fresh. †Sealed in steel. *National Electronic Distributors Ass'n.

PORTABLE "A" BATTERIES

Stock No.	RCA Type	Std. Pkg.	List Price	NET EACH Single Lots	NET EACH Std. Pkg.	Volts	Size	Wt. Each Lbs.	*NEDA No.	Interchangeable with Burgess	Interchangeable with Eveready
80 J 903	VS036†	48	$0.15	.11	.10	1	1 5/16x2 3/8"	1/2	13	2R	950
80 J 948	VS035†	25	.15	.11	.10	1 1/2	1x1 13/16"	1/4	14	1	935
80 J 993	VS070	20	.30	.22	.20	1 1/2	1 3/16x4 1/16"	1/2	23	8R	1060
80 J 901	VS004	6	1.15	.89	.81	1 1/2	2 5/8x2 5/8x4 1/16"	1	4	4F	742
80 J 904	VS073	24	.10	.08	.065	1 1/2	7/16x1 3/16"	1/8	910	.....	910
80 J 912	VS236†	12	.30	.23	.21	1 1/2	1 3/8x4 3/16"	1/2	20	21R	964
80 J 966	VS069	12	.65	.49	.45	1 1/2	2 9/16x1 5/16x2 7/8"	3/4	18	2D	720
80 J 967	VS072	6	.75	.58	.53	4 1/2	3 13/16x1 9/16x2 13/16"	1	19	D3	726
80 J 963	VS067	6	.90	.69	.63	4 1/2	4x1 3/8x4 1/4"	1	3	F3	736
80 J 902	VS009	6	1.15	.89	.81	6	2 5/8x2 5/8x4 1/4"	1 1/2	6	F4P1	744
80 J 965	VS068	12	.75	.58	.53	6	1 3/16x1 3/16x2 3/8"	1/4	2	Z4	724
80 J 962	VS065	12	1.00	.77	.70	7 1/2	2 1/8x1 7/8x3 1/16"	1 3/4	9	C5	717

PORTABLE "B" BATTERIES

Stock No.	RCA Type	Std. Pkg.	List Price	Single Lots	Std. Pkg.	Volts	Size	Wt. Each Lbs.	*NEDA No.	Burgess	Eveready
80 J 969	VS086	6	2.65	2.04	1.85	45	1 1/16x3/16x3 9/16"	1/4	213	U30	415
80 J 905	VS012	6	3.50	2.71	2.46	45	4 1/8x2 5/8x5 5/16"	3	207	B30	484
80 J 906	VS013	6	2.75	2.13	1.93	45	3 9/16x1 11/16x5 1/2"	2	202	M30	482
80 J 907	VS014	6	2.50	1.92	1.75	45	3 7/16x2 1/4x4 9/16"	1 3/4	206	A30	.....
80 J 908	VS015	10	3.50	2.69	2.45	45	3x2 1/4x4"	1 1/2	205	Z30	738
80 J 910	VS055	6	2.10	1.56	1.42	45	2 11/16x1x3 11/16"	3/4	201	XX30	455
80 J 999	VS218	12	2.50	1.94	1.76	67 1/2	1 13/16x1x5 7/16"	1	211	P45	477
80 J 909	VS016	6	2.95	2.28	2.07	67 1/2	2 3/4x1 3/8x3 3/4"	1	200	XX45	467
80 J 932	VS216	6	3.95	2.98	2.71	67 1/2	1 7/8x1x5 9/16"	1	211	P45	477
80 J 889	VS082	6	2.75	2.13	1.93	67 1/2	2 11/16x1 1/8x2 7/16"	3/4	203	K45	457
80 J 968	VS217	1	3.50	2.46	.....	75	1 13/16x1 1/8x6 1/4"	1	212	XX50	437
80 J 911	VS090	6	3.60	2.77	2.52	90	3 1/16x1 1/8x3 3/4"	1	204	N60	490
80 J 984	VS219	1	3.25	2.28	.....	90	1 1/32x1 1/32x7 1/32"	1	.....	P60	479

PORTABLE "AB" BATTERIES

Stock No.	RCA Type	Std. Pkg.	List Price	Single Lots	Std. Pkg.	Volts	Size	Wt. Each Lbs.	*NEDA No.	Burgess	Eveready
80 J 918	VS043	1	6.13	4.26	.....	1 1/2-90	5 1/2x2 11/16x7 1/8"	5	409	5DA60	.....
80 J 927	VS054	1	6.25	4.36	.....	1 1/2-90	10x2 5/16x4 13/16"	5	410	6TA60	.....
										Ray-O-Vac AB64	
80 J 921	VS050	1	5.50	3.85	.....	6-7 1/2-75	8 5/16x2 7/16x3 11/16"	4	403	T5Z50	755
80 J 919	VS046	1	5.95	4.17	.....	6-75	12 5/8x2 11/16x4 1/8"	6	422	G4B50	
										Zenith Z675	
80 J 916	VS019	1	6.25	4.38	.....	7 1/2-9-90	9 9/16x2 11/16x4 3/8"	6	401	F6A60	753
80 J 933	VS057W	1	6.25	4.38	.....	7 1/2-9-90	8 11/16x2 3/16x3 3/4"	4	405	T6Z60	756
80 J 920	VS047	1	6.65	4.65	.....	9-90	13 3/8x2 1/4x4 9/16"	8	400	G6B60	752
										Zenith Z985	
80 J 928	VS058	1	6.25	4.38	.....	9-90	9 1/2x2 1/4x4 3/8"	5	406	F6A60P	.....
										Zenith Z909	
80 J 888	VS059	1	5.95	4.17	.....	9-90	8 11/16x2 3/16x3 1/4"	5	.....	T6Z60P	.....

INDUSTRIAL BATTERIES

Stock No.	RCA Type	Std. Pkg.	List Price	Single Lots	Std. Pkg.	Volts	Size	Wt. Each Lbs.	*NEDA No.	Burgess	Eveready
80 J 870	VS006C	10	.85	.65	.59	1 1/2	2 5/8x6 5/8"	2 1/4	914	.....	6GL
80 J 947	VS034	120	.125	.09	.08	1 1/2	5/16x2"	1/4	15	Z	915
80 J 986	VS101	5	.96	.72	.65	1 1/2	2 5/8x1 1/8x4 9/16"	1	700	2FBP	.....
80 J 957	VS106	10	.90	.67	.61	1 1/2	2 11/16x2 11/16x4 3/16"	1 1/2	900	4FH	735
80 J 894	VS141	6	.75	.57	.52	1 1/2	2 9/16x1 3/16x4 1/4"	1	11	2F	W353
80 J 959	VS130	10	.96	.73	.66	1 1/2-3-4 1/2	3 1/8x1 3/8x3"	1	712	2370ST	761T
80 J 938	VS029	10	1.08	.86	.77	1 1/2-7 1/2	3 1/16x7/8x3 1/8"	1 1/2	713	5540	773
80 J 892	VS134	10	.50	.35	.32	3	1 7/16x3/4x2 9/16"	1/2	704	422	750
80 J 893	VS136	5	1.00	.74	.67	3	2 11/16x2 11/16x4 3/16"	1 3/4	703	2F2H	.....
80 J 985	VS100	5	.96	.72	.65	3	2 5/8x1 1/8x4 9/16"	1	701	F2BP	.....
80 J 872	VS030	5	.96	.73	.66	3-4 1/2	3 1/16x1 3/8x2 7/8"	3/4	718	2370P1	771
80 J 960	VS131	5	2.30	1.74	1.58	3-22 1/2	4 1/8x2 1/2x3 5/16"	2	708	5156SC	778
80 J 937	VS028	10	.65	.49	.45	4 1/2	2 1/8x1 3/16x2 7/8"	1/2	714	5360	781
80 J 987	VS133	10	.60	.43	.39	4 1/2	2 1/8x1 3/16x2 7/8"	1/2	706	532	703
80 J 895	VS142	10	.60	.43	.39	4 1/2	2x3/4x2 5/8"	1/2	705	432	751
80 J 992	VS040C	10	.90	.67	.61	6	2 11/16x2 11/16x4 5/16"	1 1/4	908	F4H	.....
80 J 950	VS040S	10	.90	.67	.61	6	2 11/16x2 11/16x4 3/16"	1 1/4	915	F4BP	.....
80 J 891	VS103	6	3.60	2.70	2.45	6	8 13/16x2 11/16x6 1/16"	7	902	4F4H	706
80 J 874	VS140	1	5.20	3.62	.....	9	8 1/2x4 1/16x6 7/16"	10	904	4F6H	1622
80 J 890	VS083	20	.95	.72	.65	15	1 7/32x5/8x1 7/16"	1/8	208	U10	411
80 J 951	VS102	10	1.97	1.53	1.39	22 1/2	3 1/8x2 1/8x2 1/4"	1 1/4	710	4156	763
80 J 952	VS112	5	3.35	2.54	2.31	22 1/2-45	4 1/8x2 5/8x5 5/16"	3 1/4	709	5308	762S
80 J 988	VS114	10	3.07	2.35	2.14	22 1/2-45	3x1 7/8x4 13/16"	2	711	Z30NX	.....
80 J 871	VS026	6	3.45	2.66	2.42	22 1/2-45	8 1/16x3 3/16x7 3/16"	7 1/2	717	2308P1	485
80 J 873	VS127W	5	4.86	3.99	3.63	22 1/2-45	8x4x7 3/8"	11	724	10308SC(P)	.....
80 J 913	VS084	20	1.25	.96	.87	22 1/2	1x5/8x2"	1/4	215	U15	412
80 J 914	VS085	20	1.50	1.13	1.03	30	1x5/8x2 9/16"	1/4	210	U20	413
80 J 994	VS126	5	3.65	2.82	2.56	45	8 1/8x3 1/4x7 9/16"	8 1/4	723	.....	.....
80 J 995	VS127	5	4.86	3.99	3.63	45	8x4x7 3/8"	11	716	.....	.....
80 J 996	VS157	5	5.22	4.29	3.90	45	8 1/8x4 5/8x7 11/16"	12	715	2130SC	.....
80 J 942	VS039	4	3.75	2.76	2.51	6	10 1/8x2 7/8x7 1/8"	11	907	5461	1461
80 J 989	VS093	1	11.00	7.70	.....	300	2 5/8x2 5/16x3 13/16"	1 1/4	722	U200	.....

TRANSISTOR BATTERIES

Transistor batteries each contain 15, 1.4 volt alkaline dry cells, encased in series in a plastic sleeve. Power requirements from 1.4 to 21 volts can be met simply by slicing off the necessary number of cells. ‡Maximum current drain, 2 ma. §Maximum current drain, 10 ma. Long life operation.

Stock No.	RCA Type	Std. Pkg.	List Price	Single Lots	Std. Pkg.	Volts	Size	Wt. Each Lbs.	*NEDA No.	Burgess	Eveready
80 J 943	VS087‡	1	2.20	1.52	.....	1.4 to 21	17/32x3 3/8"	1/8	759	.....	.....
80 J 944	VS088§	1	2.95	2.06	.....	1.4 to 21	1 5/16x3 7/16"	1/4	760	.....	.....


VS036


VS016


VS067


VS050


VS019


VS040S

VS112


VS087

MALLORY MERCURY "A" BATTERIES

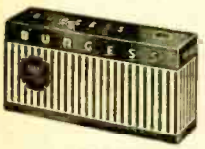
Feature extremely long shelf life and uniform discharge voltage. Unique design permits indefinite storage. Voltage approximately 1.345 v. through entire life. Unaffected by temperatures as high as 250° F. or pressure ranging from a high vacuum to thousands of pounds per square inch. Resistant to humidity. Ideal for use as a secondary voltage standard. *Diameter x height. Shpg. wt., 2 oz.

Stock No.	Mfrs. Type	Size *	Std Pkg.	NET EACH Single	NET EACH Std Pkg.
80 J 878	RM1R	5/8x5/8"	10	33¢	30¢
80 J 879	RM3R	1x5/8"	4	51¢	46¢
80 J 880	RM4R	17/32x5/8"	4	72¢	65¢
80 J 881	RM12R	5/8x1 15/16"	2	82¢	75¢
80 J 882	RM502R	1/2x1 15/16"	2	66¢	60¢
80 J 883	RM625RT	5/8x1/4"	4	32¢	26¢
80 J 884	RM401R	7/16x1 1/8"	5	39¢	35¢

Batteries and Eliminators

XX45 2R

M30 4F



F6A60

17GD60

BURGESS PORTABLE RADIO BATTERIES—THE COMPLETE LINE

Extremely rapid turnover always assures you of fresh stocks. If you are not able to find the batteries which you require, give the make and type no. of the original batteries, make and model no. of your set, and we will supply the Burgess equivalents. *Standard type no. assigned by National Electronic Distributors Ass'n.

PORTABLE "A" BATTERIES

Stock No.	Burgess Type	Std. Pkg.	List Price	NET EACH Single Lots	NET EACH Std. Pkg.	Volts	Uses Plug Fig.	Size	Shpg. Wt., Lbs.	*NEDA No.	Replaces Eveready	Replaces RCA
53 J 069	2D	12	$0.65	.50	.45	1½	D	2⁹⁄₁₆x1⁹⁄₃₂x2³¹⁄₃₂"	½	18	720	VS069
53 J 063	2R	48	.15	.11	.10	1½	.....	2¹⁵⁄₁₆x1²¹⁄₆₄" dia.	¼	13	950	VS036
53 J 000	2F	1	.75	.....	.52	1½	D	2¹⁵⁄₃₂x1⅛x4¼"	¾	11	W353	VS141
53 J 003	4F	6	1.15	.89	.81	1½	D	2⅜x2⁵⁄₁₆x4⁷⁄₃₂"	1½	4	742	VS004
80 J 629	6F	3	1.75	1.29	1.17	1½	D	4⁷⁄₃₂x2¾x4¹⁄₁₆"	2¼	5	743	VS007
53 J 006	8F	1	2.22	.....	1.49	1½	D	3²⁹⁄₃₂x2²³⁄₃₂x5½"	3	17	741	.....
80 J 641	21R	24	.30	.23	.21	1½	.....	4⅛x1²¹⁄₆₄" dia.	3 oz.	20	964	VS236
53 J 070	D3	6	.75	.58	.53	4½	F	3⅞x1⁵⁄₁₆x2¹⁵⁄₁₆"	¾	19	726	VS072
80 J 624	F3	6	.87	.66	.60	4½	F	4x1⅞x4¼"	1¼	3	736	VS067
53 J 013	G3	6	.95	.74	.67	4½	F	4⅛x1⅞x4¹¹⁄₁₆"	1¼	7	746	VS002
53 J 011	F4P1	6	1.15	.89	.81	6	A	2²¹⁄₃₂x2²¹⁄₃₂x4⅛"	1½	6	744	VS009
53 J 001	2F4	1	2.60	.....	1.74	6	A	4x2¹⁄₁₆x5⅞"	2½	1	718	VS010
80 J 625	Z4	12	.75	.58	.53	6	.....	1⅞x1⅛x2⅞"	¼	2	724	VS068
53 J 042	B5	6	1.10	.85	.77	7½	G	3²⁹⁄₃₂x⅞x2²³⁄₃₂"	½	8	713	VS129
53 J 043	C5	6	1.00	.77	.70	7½	G	2⅞x1¹¹⁄₁₆x3½"	¼	9	717	VS065
53 J 071	T5	3	1.38	1.06	.96	7½	G	2¹⁷⁄₃₂x2¹⁹⁄₃₂x3²³⁄₃₂"	1½	10	W360	.....
53 J 049	37	1	.85	.....	.57	1½	.....	6⅛x1⅞" dia.	½	.....	.....	.....

PORTABLE "B" BATTERIES

Stock No.	Burgess Type	Std. Pkg.	List Price	NET EACH Single Lots	NET EACH Std. Pkg.	Volts	Uses Plug Fig.	Size	Shpg. Wt., Lbs.	*NEDA No.	Replaces Eveready	Replaces RCA
80 J 535	A30	2	2.50	1.93	1.75	45	B	3⁹⁄₁₆x2¼x4⅝"	1¼	206	W359	VS014
80 J 536	B30	2	3.50	2.71	2.46	45	B	4¼x2¹⁷⁄₃₂x5⅞"	2¼	207	484	VS012
80 J 537	Z30	2	3.50	2.70	2.45	45	B	3x2⅝x4¹⁄₁₆"	1½	205	738	VS015
80 J 546	M30	6	2.75	2.13	1.93	45	B	3¹⁹⁄₃₂x1¾x5½"	2	202	482	VS013
80 J 539	W30P1	6	2.45	2.11	1.92	45	B	2³¹⁄₃₂x1⁷⁄₃₂x3²⁹⁄₃₂"	¾	.....	733	.....
80 J 545	XX30	6	2.10	1.56	1.42	45	Snapon	2¹⁷⁄₃₂x3¹⁄₃₂x3²¹⁄₃₂"	¾	201	455	VS055
80 J 646	U30	1	2.25	.....	1.58	45	.....	1³⁄₃₂x1⁹⁄₃₂x3¹⁄₃₂"	¼	213	415	VS086
80 J 645	P45M	6	3.35	2.56	2.33	67½	Snapon	1²⁹⁄₃₂x1x5⁹⁄₃₂"	¼	211M	477	VS216-15
80 J 631	K45	6	2.75	2.13	1.93	67½	Snapon	2¹¹⁄₁₆x1⅝x2¼"	½	203	457	VS082
80 J 544	XX45	6	2.95	2.28	2.07	67½	Snapon	2¾x1¹¹⁄₃₂x3¹³⁄₆₄"	¼	200	467	VS016
80 J 642	P45	6	2.50	1.94	1.76	67½	Snapon	1²⁹⁄₃₂x1x5⅝"	¾	211P	477	VS218
80 J 665	P60	6	3.25	2.51	2.28	90	Snapon	1²⁹⁄₃₂x1x7¹³⁄₁₆"	1	214	479	VS219
80 J 613	XX50	6	3.50	2.71	2.46	75	Snapon	1²⁷⁄₃₂x1⅝x6⁹⁄₁₆"	1¼	212	437	VS217
80 J 632	N60	6	3.60	2.77	2.52	90	Snapon	3¹¹⁄₁₆x1⅝x3¹⁹⁄₃₂"	1	204	490	VS090
80 J 588	XX69	6	5.38	3.96	3.60	103½	.....	1¹¹⁄₃₂x1¹¹⁄₃₂x1¹²⁷⁄₃₂"	1¼	.....	W361	.....

COMBINATION "AB" PACKS FOR PORTABLES

Stock No.	Burgess Type	Std. Pkg.	List Price	NET EACH	Volts	Uses Plug Fig.	Size	Shpg. Wt., Lbs.	*NEDA No.	Replaces Eveready	Replaces RCA
80 J 594	2TXX40	1	$4.45	3.07	1½A, 60B	H	2¹¹⁄₃₂x1¹¹⁄₃₂x7⅜"	1¼	412	W370	.....
80 J 551	4GA42	1	6.70	4.50	1½A, 63B	H	9¹⁄₁₆x2¹⁄₈x4¾"	5	407	W366	VS053
80 J 555	6TA60	1	6.25	4.36	1½A, 90B	E	9³¹⁄₃₂x2¼x4⁷⁄₁₆"	4½	410	W369	VS054
80 J 676	4TZ60	1	5.25	3.68	1½A, 90B	C	7¾x2¹⁄₈x3¾"	4½	425	729	VS064
80 J 615	T5Z50	1	5.50	3.85	6A, 7½A, 75B	J	8½x3¹¹⁄₃₂x2⅛"	4	403	755	VS050
80 J 675	T5Z50P	1	5.95	4.17	7½A, 75B	J	8½x3¹¹⁄₃₂x2⅛"	3½	431	Zenith	Z775
80 J 614	T6Z60	1	6.25	4.38	7½A, 9A, 90B	J	2⅜x8¹⁵⁄₁₆x3¹³⁄₁₆"	4½	405	756	VS057
80 J 584	F6A60	1	6.25	4.38	7½A, 9A, 90B	J	9⅝x2²¹⁄₃₂x4⅝"	6	401	753	VS019
80 J 585	G6M60	1	6.75	4.73	7½A, 9A, 90B	J	10⅜x3¹⁄₈x4½"	6	402	754	VS018
80 J 643	T6Z60P	1	6.25	4.38	9A, 90B	J	2⅜x8¹⁵⁄₁₆x3¹³⁄₁₆"	4½	428	756P	.....
80 J 616	F6A60P	1	6.25	4.38	9A, 90B	J	9⅞x2¼x4¹¹⁄₃₂"	6½	406	757	VS058
80 J 570	G6B60	1	6.65	4.65	9A, 90B	L	13²⁹⁄₃₂x2¹⁵⁄₁₆x4¹⁄₃₂"	7	400	752	VS047

FARM RADIO PACKS

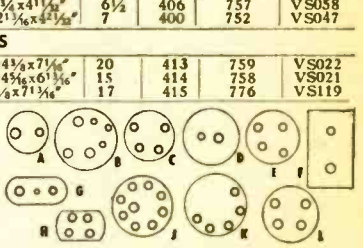
Stock No.	Burgess Type	Std. Pkg.	List Price	NET EACH	Volts	Uses Plug Fig.	Size	Shpg. Wt., Lbs.	*NEDA No.	Replaces Eveready	Replaces RCA
80 JX572	17GD60	1	8.95	6.71	1½A, 90B	C	15¹¹⁄₁₆x4⅜x7⅛"	20	413	759	VS022
80 J 635	4SD60	1	8.95	6.71	1½A, 90B	C	10¹¹⁄₁₆x4⅝x6¹¹⁄₁₆"	15	414	758	VS021
80 J 636	S6D60	1	10.95	8.21	7½A, 9A, 90B	J	9⅞x4¹⁄₈x7¹³⁄₁₆"	17	415	776	VS119

EVEREADY NO. 6 DRY CELL

Standard No. 6 dry cell. Output, 1½ volts. For industrial use, battery-operated ignition systems, farm lanterns, etc. Size, 6x2½" diameter. Screw terminals. Shpg. wt., 2 lbs.
80 J 767. List, 90c.
NET EACH 66c
Lots of 12, EACH ..... 60¢

EVEREADY GEIGER COUNTER 300 VOLT BATTERY

Type 493. Especially designed for low-drain, high-voltage applications such as: Geiger counters, photoflash units (gas discharge type), multiplier-photo cells, and small lightweight insulation testers. Size: 2¹¹⁄₁₆x2⅞x3²⁹⁄₃₂". Shpg. wt., 1¼ lbs.
80 J 759, NET EACH 7.70



PLUGS FOR BATTERIES

Bakelite Battery Plugs. †With 3 small prongs only. *5 prong plug. **Female plug. 2 plugs per package. Av. shpg. wt., 1 oz.

Stock No.	Fig.	For Burgess Battery	For RCA Battery	Per Pkg.
54 J 021	A	F4P1, 2F4, 2F4L	VS009, VS010, VS011	9¢
54 J 034	B	A30, B30, M30, W30P1, Z30	VS014, VS013, VS012 VS015	9¢
54 J 022	B†	A60, W20P1	.....	11¢
54 J 023	C	17GD60, 4SD60, 4TZ60, 5DA60	VS022, VS021, VS043, VS064	11¢
54 J 024	D	2D, 2F, 20F, 4F, 4FL, 6F, 8F	VS069, VS004, VS024, VS0005	9¢
54 J 025	E	F4A60, 6TA60	VS054	9¢
54 J 026	F	D3, F3, G3	VS072, VS067, VS002	9¢
54 J 027	G	B5, C5, T5	VS129, VS065	11¢
54 J 028	H	2TXX40, 4GA42	VS053	9¢
54 J 029	J*	G5A42	VS038	15¢
54 J 031	J	F6A60, G6M60, S6D60, T6Z60, T6Z60P, T5Z50 T5Z50P, F6A60P	VS050, VS057, VS019, VS018, VS064	19¢
54 J 030	K	F4B60	VS048	17¢
54 J 033	L**	T6Z60P, S6D60, F6A60P, G6B60	VS064, VS058	17¢

Snap-on Type Plugs. For Burgess XX30, XX45, K45, N60, XX50, P45, etc., and Eveready equivalents. Wt., 2 oz. 3 per pkg.
54 J 067. Male. NET
54 J 068. Female. Per Pkg. 11c

WILLARD RECHARGEABLE BATTERIES

Compact rechargeable wet batteries. Excellent for portable equipment. Non-spill construction. In lightweight polystyrene containers immune to corrosion. Fibrite insulation retards plate shedding. Built-in charge indicator. For 2-volt power supplies, but can be connected in series for higher voltages. Shipped wet. Express only.

Type 25-2. For Portable Radios. Supplies 2 volts for 21 ampere-hours. Plug-in terminals. Original equipment in GE Models 250 and 260. Size, 6x2½x2¾". Wt., 3¼ lbs.
98 JZ 023. List, $10.60. NET 7.41

Type ER 6-2B For Photo-Flash. Supplies 2 volts for 6 ampere-hours. 125 to 250 flashes per cycle of charge. Gives maximum peak current for positive bulb flash and split-second shutter synchronization. Has plain post terminals. 1¹¹⁄₁₆x2¹⁄₈x4¼". Shpg. wt., 1½ lbs.
98 JZ 024. List, $7.25. NET 5.06

Type ER-34-2. For Portable Radios. Supplies 2 volts for 34 ampere-hours. Battery has plain posts. Original equipment in RCA radio model 65BR9. Length, 4½"; width, 3¹¹⁄₁₆"; height, 4½". Shpg. wt., 5¼ lbs.
98 JZ 025. List, $14.15. NET 10.28

PERMA-POWER 1½-VOLT RADIO-BATTERY ELIMINATOR

Model "A". Converts battery radios to all-electric operation. Perfect for portable and farm radios. No rectifier tubes to replace; uses selenium rectifiers—no warm up period. Well-filtered output. Variety of sockets to handle all types of radios. Fully automatic. Noiseless, interference-free operation. Maintains maximum rated output. "A" power, 1.35 volts to 1.5 volts depending upon current; max. current, 350 ma. "B" power—90 v., 13 ma. For any 4, 5 or 6 tube radio with 1.5-v. filaments. 2¼x4½x6¼". With line cord. For 105-125 v., 50-60 cycle AC. Shpg. wt., 4 lbs.
80 P 176. List, $18.95. NET 11.90

Burgess Quality Batteries

STANDARD DRY BATTERIES

Suitable for all radio and laboratory requirements. ALLIED's stock of Burgess Batteries is always fresh, assuring you of full-rated efficient service. Burgess quality construction and insulators allow use of very active ingredients, providing maximum useful life. Letters following battery type numbers denote terminals: P.I.—plug-in; S.C.—spring clips. Others have screw terminals except *spring clips where S.C. is not included in Type No.; §heavy-duty, industrial type.

"B" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
80 J 501	21308SC	45	8⅛x4 15/32x7 9/32"	13	6	4.30	3.91
80 J 504	10308PI	45	8 1/32x4 1/32x7 3/16"	11½	6	3.91	3.55
80 J 505	10308SC	45	8 1/32x4 1/32x7 3/16"	11¼	6	3.91	3.55
80 J 507	2308SC	45	8 9/32x2 31/32x7¼"	8	6	2.85	2.59
80 J 508	530§	45	4 1/16x2 9/16x5⅛"	3	5	2.54	2.31
80 J 519	W30BPX	45	3x1¼x3 29/32"	1	6	2.01	1.83
80 J 633	Z30BP	45	3 11/16x2 11/32x3 7/16"	1½	6	4.97	4.52
80 J 524	Z30NX	45	1⅞x3 1/32x4 13/32"	1½	5	2.37	2.15
80 J 634	Z60BP	90	3¾x2 11/32x5 15/16"	2¼	4	9.79	8.90
80 J 511	5156PI	22½	4 3/16x2 3/8x2 55/64"	1¾	5	1.69	1.54
80 J 512	5156SC	22½	4⅛x2½x2¼"	1¾	5	1.74	1.58
80 J 510	4156	22½	3 1/32x2⅛x2 29/32"	1	5	1.53	1.39

"C" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
80 J 623	A9BP	13½	2 3/32x2 3/32x2 13/32"	½	3	2.65	2.41
80 J 514	5540	7½	4x⅞x2¾"	¾	5	.85	.77
80 J 521	W5BP	7½	2 3/32x2 21/32x1⅛"	¼	6	1.42	1.29
80 J 516	B5P	7½	4 5/32x1 11/32x2 23/32"	¾	6	2.13	1.94
80 J 515	5360	4½	2 13/32x2 7/32x2 21/32"	¼	10	.51	.45
80 J 513	2370P1	4½	4 1/64x1 27/64x2 63/64"	1⅛	5	.73	.66
80 J 593	2370	4½	3 15/16x1¾x2⅞"	1¼	5	.73	.66

"A" BATTERIES

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
53 J 016	F4BP	6	2⅝x2⅝x4"	1½	10	.67	.61
53 J 035	432	4½	2¼x1 31/32x2 1/32"	¼	10	.43	.39
53 J 017	2F2H	3	2⅝x2⅝x4 1/16"	1½	5	.96	.87
53 J 018	F2BP	3	2 21/32x1¾x4 1/32"	1	5	.72	.65
80 J 591	B2BP	3	1⅝x1 3/16x2 11/16"	¼	6	1.03	.94
80 J 604	2Z2P1	3	1 29/32x1 5/32x2 13/32"	¼	12	.55	.50
53 J 038	422	3	2 1/32x1 11/32x2 5/16"	¼	10	.35	.32
53 J 037	2F2BP	3	5 1/16x1¾x4 55/32"	1½	10	1.74	1.58
53 J 036	2FBP	1½	2 21/32x1⅛x4 1/32"	1	5	.72	.65
80 J 621	2BBP	1½	1 19/32x2 7/32x2 11/16"	¼	6	1.03	.94
53 J 023	44	1½	1 29/32 dia. x 4 5/32"	¼	10	1.05	.95

No. 6 LINE

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
80 J 638	6	1½	2½x6 5/8"	1¼	12	.66	.60
80 J 639	6*	1½	2½x6 5/8"	2¼	12	.65	.59
80 J 644	6§	1½	2½x6 5/8"	2	12	.73	.66
80 J 640	S461	6	10½x2¾x7 13/32"	8½	6	2.76	2.51

FLASHLIGHT BATTERIES

1

2

These top-quality, long-life cells deliver highly dependable performance in all popular sizes of flashlights. All types are now double protected against electrolyte leakage—sealed in plastic and steel on the outside and chrome protected on the inside. Curbs harmful interior action for new, longer life. Designed to permit maximum amount of raw materials per battery. Type 2—for standard flashlights; Type Z—for standard penlights; Type 7—for slim penlights.

Stock No.	Burgess Type	Size	Wt. Oz.	Std. Pkg.	LIST	NET EACH Single Lot	NET EACH Std. Pkg.
53 J 009	2	2⅛ x1 21/64"	6	48	15c	11¢	10¢
53 J 029	1	1 15/16x6 3/64"	4	12	15c	11¢	10¢
53 J 031	Z	1 1/32x3 5/64"	3	24	12½c	9¢	8¢
53 J 082	N	1 11/64x7/16"	3	24	10c	7½¢	6½¢
78 J 243	7	1¾ x1 3/32"	2	24	12½c	9¢	8¢

IGNITION AND TELEPHONE BATTERIES

4FH

4F4H

Famous "Metalclad" weather-resistant batteries. Have strap-handle for easier carrying. Designed for emergency illumination, portable lighting, alarm systems. Used by railroads, police, fire departments and emergency crews. Dependable, leakproof metal container. Types 4F2H and 4FH recommended for general ignition, telephone and lantern service as well as electronic devices, etc.

Stock No.	Burgess Type	Volts	Size	Shpg. Wt. Lbs.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
53 J 033	4F6H	9	8½x3 31/32x5 11/16"	9	4	3.98	3.62
80 J 601	4F5H	7½	7 3/16x3 31/32x5 11/16"	7½	4	3.44	3.13
53 J 025	4F4H	6	8 5/16x2 11/16x5 13/16"	6¼	6	2.69	2.45
53 J 027	4F2H	3	3 29/32x2 5/16x5 13/32"	3	8	1.20	1.09
53 J 024	4FH	1½	2⅝x2⅝x4"	1½	12	.66	.60

LANTERN BATTERIES

For use with railroad type lanterns. 4F2H is replacement for Burgess No. TW2 lantern used by farmers and sportsmen. F4H with coilspring and wing contacts is a favorite of railroadmen.

Stock No.	Burgess Type	Volts	Size	Wt. Lbs.	Std. Pkg.	NET EACH Single	NET EACH Pkg.
53 J 028	F4H	6	2⅝x2⅝x3 15/16"	1½	12	.67	.61
53 J 016	F4BP	6	2⅝x2⅝x4"	1½	10	.67	.61
53 J 027	4F2H	3	3 29/32x2 7/16x5 13/32"	2¼	8	1.20	1.09

PHOTO-FLASH BATTERIES

†Designed for high initial current discharge. U200 is high-voltage, small size battery.

Stock No.	Type No.	Description	Size	Std. Pkg.	Wt.	NET EACH Single	NET EACH Pkg.
53 J 039	220†	15 Amp Flash	2 25/64x1 11/32"	12	6 oz.	14¢	13¢
53 J 040	120†	High Amp Cell	1 13/16x1"	12	4 oz.	14¢	13¢
53 J 041	920†	High Amp Cell	1 31/32x3 5/64"	24	4 oz.	11¢	10¢
53 J 044	U15PF†	22½ Volt	1 11/32x 9/16x1 31/32"	20	4 oz.	96¢	87¢
80 J 678	U160	240 Volt	2 9/16x1 3/16x4 11/32"	6	12 oz.	6.12	5.56
80 J 626	U200	300 Volt	2¼x2 29/32x3⅞"	6	1 lb.	8.47	7.70
80 J 677	XX150	225 Volt	4¼x2⅝x4¼"	6	2½lb.	8.18	7.44

STANDARD BATTERY PLUGS

626 has 3 prongs and Fahnestock clips. 596 has 5 prongs, 5 Fahnestock clips; 612 has 3 prongs. 5A2 has 2 prongs.

54 J 050. **Type 626.** For all 45-volt batteries. 2 oz. EACH ..... 13¢
54 J 051. **Type 696.** For 22½-volt batteries. 5 oz. EACH ..... 15¢
54 J 053. **Type 612.** For 4½-volt batteries. 4 oz. EACH ..... 10¢
54 J 005. **Type 5A2.** For 3-volt "A" batteries. 2 oz. EACH ..... 5¢

MINIATURE HEARING AID, TRANSISTOR AND GEIGER BATTERIES

XX15

Engineered to meet exacting specifications. Designed especially for hearing aid units, transistor circuits and Geiger counters. Maintain uniform voltage for long periods under low drain. High retaining power during non-usage. Extremely compact size with new, moisture-tight polythene seal to lock in essential water vapor. Inner cell connections of silver keep internal contact resistances at a minimum.

XX30PI

"A" BATTERIES

All with metal cap type terminals, except 8R has two-hole socket.

Stock No.	Type	Volts	Size	REPLACES Ever-ready	REPLACES Zenith	REPLACES Sonotone	REPLACES Acousticon	Wt., Oz.	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
53 J 045	5R	1½	49/64 dia. x 2 15/64"	.....	.....	.....	.....	2	12	.10½	.09½
53 J 046	8R	1½	1 3/32 dia. x 3 15/16"	1052P	Z15	X800	34G	6	24	.31	.28
53 J 047	9R	1½	35/64 dia. x 1 63/64"	1015E	Z8	451	115MB	2	12	.13	.12

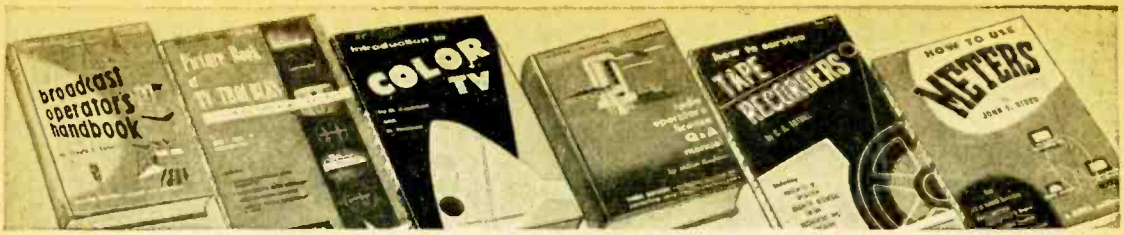
8R

"FEATHERWEIGHT" "B" BATTERIES

All XX types have 3-hole sockets; others have flat contact terminals.

53 J 072	XX15	22½	1 11/32x1 5/16x3 7/8"	425P	.....	922	22EW	4	24	1.23	1.12
53 J 073	XX22	33	2 1/32x3 1/32x3¼"	433P	.....	930	33EW	6	10	1.54	1.40
53 J 074	XX30P1	45	2 1/32x3 1/32x4 1/32"	455P	230	945	45EW	11	24	1.54	1.40
53 J 075	K20	30	1¼x1 5/16x2 3/32"	.....	.....	.....	.....	3	20	1.30	1.18
53 J 076	U10	15	1x39/64x1 7/16"	411	211	311	711G	2	20	.72	.65
53 J 077	U15	22½	1x39/64x1 1/32"	412	212	312	712G	2	20	.96	.87
53 J 078	U20	30	1x39/64x2 1/32"	413	213	313	713G	2	20	1.13	1.03
53 J 080	Y10	15	15/32x1 5/32x1 23/64"	504E	Z5	315	715G	3	12	.75	.68
53 J 081	Y15	22½	15/32x1 5/32x1 31/32"	505E	Z6	322	722G	3	12	.96	.87
53 J 079	Y20	30	15/32x1 3/16x1 15/32"	506E	Z7	.....	.....	3	12	1.21	1.10
53 J 084	Y20S	30	15/32x1 5/32x2 3/16"	507E	.....	.....	.....	3	12	1.06	.96

U15



RIDER PUBLICATIONS AND SERVICE MANUALS

ESSENTIAL RADIO AND TELEVISION PUBLICATIONS

TV MANUFACTURERS' RECEIVER TROUBLE CURES. Volume 1. Gives specific TV receiver troubles and cures as specified by set manufacturers. Includes improvements incorporated in later assembly runs. Describes solutions to manufacturers' production problems. Covers complete details on TV sets produced by manufacturers from Admiral to DuMont. 115 pages. 5x8".
37 K 502. Postpaid in U.S.A. 1.76

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TV MFR'S TROUBLE CURES. Volume 3. Trouble cures for receivers from Kaye-Halbert to Philco. Over 120 pages.
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TECHNICIAN'S GUIDE TO TV PICTURE TUBES. By Ira Remer. Picture tube servicing guide for the TV serviceman. Covers care, handling, replacement, maintenance and repair of picture tubes. 160 pages. Illustrated. Size. 5½x8½".
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37 K 623. Postpaid in U.S.A. 5.29

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HOW TO INSTALL TV ANTENNAS. By Samuel L. Marshall. Clearly written book on how to make professional antenna installations. Based on the author's personal experiences and those of professional installers, the book describes best installation methods currently used. Chapters include: Antenna Fundamentals; VHF Antennas, Installation Materials and Methods; High Masts and Towers; etc. Profusely illustrated. 124 pages. 5½x8½".
38 K 635. Postpaid in U.S.A. 2.45

HOW TO USE METERS. By John F. Rider. Written for the service technician, the TV and radio student, and Amateurs. Thoroughly covers panel type volt-ohm-milliammeters, vacuum tube voltmeters, and variations of these basic types. No technician or hobbyist can afford to be without this valuable source of information. Comprehensively illustrated. Over 140 pages. Size. 5½ x 8½".
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OBTAINING AND INTERPRETING TEST SCOPE TRACES. By John F. Rider. Contains over 500 actual photographs of test scope traces. Complete instructions on use of scopes and interpretation of traces. Indispensable for servicing TV, FM and AM radio receivers, audio systems, etc. Specific test equipment set-ups are shown with each application. Over 140 pages. Size. 5½ x 8½".
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TV TROUBLESHOOTING AND REPAIR GUIDE BOOK. Vol. 1. By R. G. Middleton. Thorough presentation of typical television troubles and their cures. Tells how to recognize trouble symptoms through the use of patterns from TV picture tubes and waveforms from scopes. Includes valuable data on troubleshooting with test equipment and scopes, visual troubleshooting techniques and troubleshooting charts. Profusely illustrated. 200 pages. Size. 8½x11".
37 K 768. Postpaid in U.S.A. 3.82

TV TROUBLESHOOTING AND REPAIR GUIDE BOOK. Vol. 2. By R. G. Middleton. A practical reference for the TV serviceman. Contains highly valuable service information: Troubleshooting front ends; servicing the video IF strips; faults in video amplifiers; trouble analysis in sound IF and detector systems; etc. 160 pages. 8½x11".
37 K 779. Postpaid in U.S.A. 3.23

TV SWEEP ALIGNMENT TECHNIQUES. By Art Liebscher. Written by a test equipment specialist. All phases of TV sweep alignment. Detailed instructions on the new "Supermark" method of sweep alignment. Includes uses for standard test equipment. Profusely illustrated with sweep-curve pictures taken from actual jobs using test equipment set-ups and techniques. Helpful for servicing in UHF areas. Over 120 pages. 5½x8½".
37 K 531. Postpaid in U.S.A. 2.06

TV AND ELECTRONICS AS A CAREER. By Ira Kamen and Richard H. Dorf. Written for those already in electronics as well as young people just planning a career. Top authorities explain career opportunities. Gives full details of jobs and opportunities in radio and television broadcasting, manufacturing and servicing. 326 pages. 5½x8½".
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TUBE SUBSTITUTION GUIDE

Lists substitutes for over 2500 receiving tubes. Gives ratings and wiring changes. RETMA color codes, transformer and condenser substitutions, etc. Complete data on filament wiring of all TV sets in Rider TV Manuals 1 to 5 (page 267). Has tube base diagrams and characteristics chart. 224 pages. 8½x11".
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2nd Supplement. 134 picture tube and 190 receiving tube substitutions. 48 pages. Size. 8½x11".
37 K 547. Postpaid in U.S.A. ..... 97¢

1st Supplement. Lists additional 750 tube replacements. Includes section on TV tubes. 44 pages. Size. 8½x11".
37 K 548. Postpaid in U.S.A. ..... 97¢

COLOR TELEVISION BOOKS

INTRODUCTION TO COLOR TV. By M. Kaufman and H. Thomas. Gives basic features of the N.T.S.C. system. Explains RCA, CBS and Laurence color systems. Discusses circuits used in a modern color TV set. 144 pages. Size. 5½x8½".
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COLOR TV DICTIONARY. By J. R. Johnson. Complete explanation of color TV terms with their definitions. Ideal for anyone interested in color TV. 72 pages. 50 illustrations. Size. 5½x8½".
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GENERAL TECHNICAL BOOKS

PICTURE BOOK OF TV TROUBLES. Vol. 1. By Rider Lab Staff. Covers horizontal AFC-oscillator circuits. Provides servicemen with better understanding of TV receiver troubles by means of picture and waveform illustrations. All material from actual case histories. Typical chapters; Pulse-width Type (Synchroguide); Phase Detector—Stabilized Multivibrator; Phase Discriminator—Sine Wave Oscillator (Synchrolok); Phase Detector—Sine Wave Oscillator. Over 65 "faulty" picture tube patterns; over 150 waveform illustrations. 70 pages. 5½x8½".
37 K 217. Postpaid in U.S.A. 1.32

PICTURE BOOK OF TV TROUBLES. Vol. 2. By Rider Lab Staff. Continuation of the "tell-a-fault" series of abnormal picture tube patterns and waveforms, and accompanying schematic of stages under test. Covers automatic gain control (AGC) circuits, vertical retrace blanking, rapid trouble-shooting of vertical sweep system, etc. 96 pages. 5½x8½".
38 K 636. Postpaid in U.S.A. 1.76

HOW TO USE TEST PROBES. By A. Ghirardi and R. Middleton. Written by two leading electronics experts. Covers all types test probes used with VOM's, VTVM's and scopes. Tells what probe to use, where to use it and how to use it. Step-by-step explanations. Includes resistive hi-voltage DC probe, capacitance-divider high-voltage AC probe, rectifying probes for VTVM, demodulator probes. Also covers test cable shielding, resistive circuit-isolation probe, test circuit loading fundamentals, etc. 172 pages. 5½x8½".
37 K 216. Postpaid in U.S.A. 2.84

ADVANCED TELEVISION SERVICING TECHNIQUES. By Radio-Electronics-Television Manufacturer's Association. Practical, advanced TV servicing course. Divides receiver into major sections. Teaches troubleshooting section-by-section. Explains component problems. Chapters: TV Test Equipment; Sweep Section Servicing; High-Voltage Servicing; Sync Servicing; Video Section Servicing; Sound Section Servicing; Front End Servicing; Alignment; Antennas and Transmission Lines; Interference, etc. 176 pages. 8½x11".
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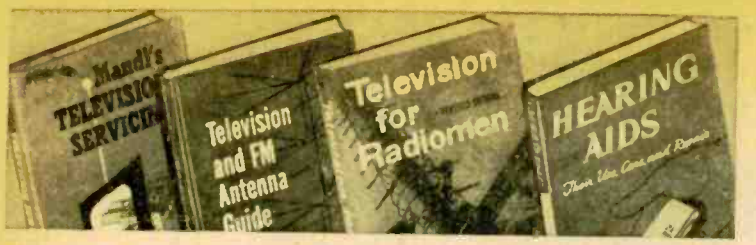

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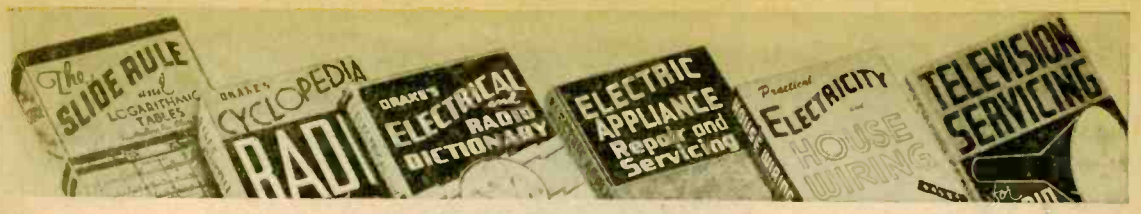

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ALLIED RADIO PARALLEL-RESISTANCE SERIES-CAPACITANCE CALCULATOR. Provides a rapid means of obtaining answers to everyday problems in parallel-resistance and series capacitance. Simple to operate. A single setting to any resistance or capacitance value automatically aligns all parallel pairs of resistance and series pairs of capacitance values. Large, easy-to-read scales. Size, 3⅛x12½".
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ALLIED RADIO COIL WINDING CALCULATOR. A dual-purpose, time-saving calculator. Quickly provides coil winding data without mathematical calculations. Covers series or parallel RF resonance problems on one side and full data for winding single-layer type RF coils on the other. Accurately calibrated—with clear, easy-to-read markings. Simple to operate. Supplied with complete instructions. Results are well within the limits for all practical applications. With handy protective envelope. Size, 4⅞x6⅞".
37 K 955. Postpaid in U.S.A. 50c

SHURE REACTANCE SLIDE RULE. A five-scale calculator for computing capacitive or inductive reactance, dissipation factor, "Q" of inductances and all AF-RF resonant frequency problems. A time-saver for the laboratory, radio service shop or classroom. Ample accuracy for all general purpose calculations. 8⅜x3½" size.
37 K 950. Postpaid in U.S.A. 50c

OHMITE OHM'S LAW CALCULATOR. A time-saver for the experimenter, serviceman, student or Ham. A single setting gives power, voltage and current when resistance is known. When resistance is unknown, single setting of any two known values (E, I or W) gives resistance and the other unknown. Also has slide rule scales (A, B, C and D) and parallel resistance calculator. Size, 9x3".
2 M 780. Postpaid in U.S.A. 25c
2 M 781. Deluxe Plastic Model. Postpaid in U.S.A. 1.50

GORDON ROTARY BEAM ANTENNA CALCULATORS. Covers frequencies from 10 to 30 mc. Tells at a glance with a single setting: length of driven element, reflector and director; element spacing (from .1 to .25 wavelength) and boom length required; full and half wavelength. All dimensions easily read to decimal fractions of a foot. Also includes resonance calculator for determining L and C between 5 and 60 mc. Valuable charts on slide.
37 K 951. Postpaid in U.S.A. 1.00

LITTELFUSE ONE-CALL TV FUSE KIT

Type 094029. The fuses and mountings packed in the handsome plastic case have been carefully selected to cover 94% of all fuse replacements required by the service dealer. Simple to refill after a visual check, or, may be used for other small parts, and entire kit replaced. Stock is visible at all times. Kit contains most often used types. Maximum voltage rating stamped on metal cap. U.L. Approved. Shpg. wt., 12 oz. Includes 6 TV snap-on fuse mountings and the following fuses:

Quantity	Ampere Rating	Description	Size
5	5	Quick-acting	3AG
10	¼	Quick-acting	3AG
5	½	Quick-acting	3AG
5	⅝	Slow-blow	3AG
10	¼	Slow-blow	3AG
5	½	Slow-blow	3AG
5	¼	Quick-acting	8AG

52 B 298. Complete Kit. NET 6.24

INDICATING FUSE POSTS

Bayonet-type fuse posts for type 3AB and 3AG fuses. Feature built-in lamps which light when fuse is blown. Lamps are located in translucent extractor-type knobs. Lamp and knob are completely above mounting panel to provide positive indication from any point. In normal use the fuse is shunted across the lamp which because of its greater resistance does not light. When the fuse blows, the open circuit voltage is applied across the lamp causing it to light. Ruggedly constructed body of black molded bakelite with non-breakable nylon knob. Mount in ⅝" non-twist "D" hole. Overall length, 2⅜" with ¾" above panel. Translucent knob measures 1⅝" diameter. All posts are rated 15 amperes maximum (see tabular listing below for minimums). With lamp. Av. shpg. wt. 4 oz.

LOW VOLTAGE TYPES—INCANDESCENT LAMP

Stock No.	Mfr's Type	Voltage	Minimum Rating	EACH
52 B 684	344010	6-8	1.0 amp.	1.35
52 B 146	344011	10-32	.25 amp.	2.12

HIGH VOLTAGE TYPE—NEON LAMP

52 B 147	344013	90-130	.125 amp.	1.35
52 B 148	344014	135-250	.125 amp.	1.35
52 B 149	344015	260-500	.125 amp.	1.35

"TEKNI-CALS" INSTRUMENT AND PANEL DECALS

Water transfer decal sets. Wide selection covers practically any application. Adhere to any clean surface. Each set consists of hundreds of markings associated with the set title. Av. shpg. wt., 5 oz.

AIRCRAFT SET. Over 1200 titles for instrument panel, cabin, etc. ⅛", ¼", and ½" white markings.
37 K 969. NET 2.35

METER DIAL FACE SETS. New faces for voltmeters, ohmmeters, ammeters, etc. Black on white background.
38 K 107. For 2" meters. NET 1.75
38 K 108. For 3" meters. NET 1.85

37 K 968. Television, White
37 K 966. Receivers, White
38 K 112. Instruments, Black
38 K 132. Communications, Black
37 K 965. Transmitter, White
37 K 954. Alphabet, Gold
37 K 956. Alphabet, Black
37 K 957. Alphabet, White
38 K 115. VTVM, Black
38 K 116. VTVM, White
37 K 962. Instruments, White
37 K 958. Oscilloscope, Black
37 K 964. Oscilloscope, White
37 K 961. Vacuum Tubes, White
37 K 959. Workshop, Black
38 K 137. Workshop, White
37 K 967. Audio, White
38 K 130. Audio, Black
38 K 131. Audio, Gold
NET EACH 1.35
38 K 133. Dials, Black. 37 K 963. Dials, White. NET EACH. 1.50

SERVICE SETS. 2 sheets of titles and markings for TV and radio receivers, intercoms, amplifiers, etc. Ideal for service shops.
38 K 134. White. 38 K 135. Black. 38 K 136. Gold.
NET EACH 40c

HIGH FIDELITY AUDIO SETS. Over 1000 marks, symbols, and titles for hi-fi amplifiers, filters, recorders, players, speakers, etc.
38 K 109. Gold. 38 K 110. Black. 38 K 111. White.
NET EACH 1.50

SERIES NUMERALS. ⅛" numbers from 1 to 2500 consecutively.
38 K 113. Black. 38 K 114. White. NET EACH 1.85

SNAP-ON FUSE HOLDER

Double-ended fuse holder for quick and easy replacement of blown-out "pig-tail" type fuses. It's not necessary to remove the blown fuse. Simply snap a clip-type fuse in one side of the holder and snap the other side across the blown out "pig-tail" fuse. No soldering. Shpg. wt., 2 oz.
41 B 733. Box of 10, per Box ..... 1.47 NET EACH 18c

Littelfuse Fuses and Mountings

CARTRIDGE FUSES FOR RADIO, TV & INSTRUMENTS

TYPE 3AG STANDARD FUSES

Series 312000. Quick to medium acting fuses for short time lag applications. For auto radios, amplifiers, etc. High operating temperatures do not affect fuse characteristics. 1¼x¼". Shpg. wt. 2oz. **5 fuses per pkg.**

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more Per Pkg.
1/16	250	52 B 242	49¢	42¢	¾	250	52 B 233	44¢	37¢
1/8	250	52 B 230	47¢	39¢	1	250	52 B 234	24¢	20¢
15/100	250	52 B 671	47¢	39¢	1½	250	52 B 235	24¢	20¢
.175	250	52 B 672	47¢	39¢	2	250	52 B 236	24¢	20¢
3/16	250	52 B 161	44¢	37¢	3	250	52 B 237	21¢	18¢
1/4	250	52 B 231	44¢	37¢	4	250	52 B 238	29¢	24¢
3/10	250	52 B 673	44¢	37¢	5	250	52 B 239	29¢	24¢
3/8	250	52 B 243	44¢	37¢	6	250	52 B 240	29¢	24¢
1/2	250	52 B 232	44¢	37¢	8	125	52 B 248	44¢	37¢

TYPE 3AG SLO-BLO FUSES

Series 313000. Slo-Blo fuses with high time-lag to stand heavy surges. Designed for circuits having high inductive or capacitive surges. Also for circuits having heavy starting currents, such as motors and lamps. Units through 5 amps are U.L. Approved. Size: 1¼" long and ¼" diameter. Shpg. wt., 2 oz. **5 fuses per pkg.**

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/100	125	52 B 185	97¢	81¢	1	125	52 B 220	79¢	67¢
1/32	125	52 B 186	97¢	81¢	1¼	125	52 B 253	73¢	62¢
1/16	125	52 B 187	79¢	67¢	1½	125	52 B 198	73¢	62¢
1/10	125	52 B 252	79¢	67¢	1.6	125	52 B 254	73¢	62¢
1/8	125	52 B 188	79¢	67¢	2	125	52 B 179	73¢	62¢
15/100	125	52 B 189	79¢	67¢	2½	125	52 B 257	73¢	62¢
.175	125	52 B 675	79¢	67¢	3	125	52 B 181	59¢	49¢
3/16	125	52 B 190	79¢	67¢	3.2	125	52 B 182	59¢	49¢
2/10	125	52 B 191	79¢	67¢	4	125	52 B 227	59¢	49¢
1/4	125	52 B 921	79¢	67¢	5	125	52 B 223	59¢	49¢
3/10	125	52 B 192	79¢	67¢	6¼	32	52 B 183	59¢	49¢
3/8	125	52 B 193	79¢	67¢	8	32	52 B 184	59¢	49¢
4/10	125	52 B 194	79¢	67¢	10	32	52 B 226	59¢	49¢
1/2	125	52 B 923	79¢	67¢	15	32	52 B 224	59¢	49¢
6/10	125	52 B 195	79¢	67¢	20	32	52 B 225	59¢	49¢
3/4	125	52 B 196	79¢	67¢	25	32	52 B 676	59¢	49¢
8/10	125	52 B 197	79¢	67¢	30	32	52 B 677	59¢	49¢

TYPE 3AB FUSES

Series 314000. Steatite enclosed, arc-quenching, powder filled fuses. Shatter-proofed against quick shorts. Medium time lag. Size, 1¼x¼". Approved by U.L. thru 15 amps. Shpg. wt., per pkg., 2 oz. **5 fuses per pkg.**

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more Per Pkg.
1	250	52 B 678	44¢	37¢	10	250	52 B 244	44¢	37¢
2	250	52 B 679	44¢	37¢	12	250	52 B 245	44¢	37¢
3	250	52 B 680	44¢	37¢	15	250	52 B 246	44¢	37¢
5	250	52 B 681	44¢	37¢	20	250	52 B 247	44¢	37¢
8	250	52 B 241	44¢	37¢	30	125	52 B 682	44¢	37¢

TYPE 8AG INSTRUMENT FUSES

Series 361000. For protection of meter movements and delicate electronic equipment. Very high speed action prevents damage to instruments. Size, 1x¼". Shpg. wt., 2 oz. per pkg. **5 fuses per package.**

Ampere Rating	Blow Point In MA	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/500	3	250	52 B 199	3.53	2.94
1/200	8	250	52 B 200	1.35	1.13
1/100	16	250	52 B 201	1.18	98¢
1/32	40	250	52 B 202	1.12	93¢
1/16	85	250	52 B 203	73¢	62¢
1/8	155	250	52 B 205	53¢	44¢
1/4	270	250	52 B 206	44¢	37¢
3/8	380	250	52 B 207	44¢	37¢
1/2	520	250	52 B 208	44¢	37¢
3/4	800	250	52 B 209	44¢	37¢
1	1300	250	52 B 210	29¢	24¢
1½	1950	250	52 B 212	29¢	24¢
2	2600	250	52 B 211	29¢	24¢
3	3600	250	52 B 213	29¢	24¢
5	6000	32	52 B 214	29¢	24¢

TYPE 3AG PIGTAIL FUSES

*Series 315000. †Series 318000. Quick-acting wire lead fuses for TV and limited-space applications. 1¼x¼". Shpg. wt., 2 oz. **5 fuses per pkg.**

Amps	Volts	Action	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
15/100	125	Slo-Blo	52 B 280*	99¢	83¢
2/10	125	Slo-Blo	52 B 281*	99¢	83¢
¼	125	Slo-Blo	52 B 216*	99¢	83¢
½	125	Slo-Blo	52 B 282*	99¢	83¢
2	125	Slo-Blo	52 B 217*	94¢	78¢
2½	125	Slo-Blo	52 B 218*	88¢	73¢
4	125	Slo-Blo	52 B 219*	88¢	73¢
5	125	Slo-Blo	52 B 229*	88¢	73¢
1/16	250	Fast	52 B 927†	73¢	62¢
⅛	250	Fast	52 B 277†	68¢	57¢
¼	250	Fast	52 B 215†	59¢	49¢
⅜	250	Fast	52 B 278†	59¢	49¢
½	250	Fast	52 B 279†	59¢	49¢
1	250	Fast	52 B 928†	44¢	37¢

TYPE 4AG SLO-BLO FUSES

Series 413000. Will withstand severe vibration. Will open within 1 hour on 135% overload; within 60 seconds on 200%; immediately on short circuit. 1¼x⁹⁄₃₂". Shpg. wt., 2 oz. **5 fuses per package.**

Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/10	250	52 B 992	88¢	73¢	2½	250	52 B 946	73¢	62¢
15/100	250	52 B 993	88¢	73¢	3	250	52 B 989	73¢	62¢
2/10	250	52 B 994	88¢	73¢	3-2/10	250	52 B 947	73¢	62¢
1/4	250	52 B 985	88¢	73¢	4	32	52 B 948	73¢	62¢
3/10	250	52 B 995	88¢	73¢	5	32	52 B 990	73¢	62¢
4/10	250	52 B 996	88¢	73¢	6¼	32	52 B 949	73¢	62¢
1/2	250	52 B 986	88¢	73¢	8	32	52 B 960	73¢	62¢
6/10	250	52 B 997	88¢	73¢	10	32	52 B 991	73¢	62¢
3/4	250	52 B 683	88¢	73¢	15	32	52 B 961	73¢	62¢
8/10	250	52 B 998	88¢	73¢	20	32	52 B 962	73¢	62¢
1	250	52 B 987	88¢	73¢	25	32	52 B 963	73¢	62¢
1¼	250	52 B 999	88¢	73¢	30	32	52 B 964	73¢	62¢
1-6/10	250	52 B 945	88¢	73¢	35	32	52 B 965	73¢	62¢
2	250	52 B 988	88¢	73¢	40	32	52 B 966	73¢	62¢

TYPE 4AG AND 5AG STRAIGHT-ELEMENT FUSES

Series 417000: 1¼x⁹⁄₃₂"; **Series 517000:** *1½x¹⁄₃₂". Medium-lag, heavy-duty fuses. Shpg. wt. 2 oz. **5 fuses per package.**

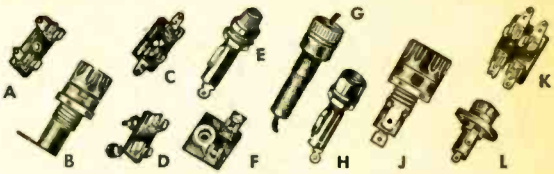
Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1	250	52 B 112	38¢	32¢	* 1	250	52 B 136	44¢	37¢
2	250	52 B 113	38¢	32¢	* 2	250	52 B 137	44¢	37¢
3	250	52 B 114	38¢	32¢	* 3	250	52 B 138	44¢	37¢
5	32	52 B 115	32¢	27¢	* 4	32	52 B 139	44¢	37¢
10	32	52 B 134	32¢	27¢	* 5	32	52 B 140	44¢	37¢
15	32	52 B 135	32¢	27¢	*10	32	52 B 141	44¢	37¢
20	32	52 B 116	32¢	27¢	*15	32	52 B 142	44¢	37¢
25	32	52 B 117	32¢	27¢	*20	32	52 B 143	44¢	37¢
30	32	52 B 118	32¢	27¢	*25	32	52 B 144	44¢	37¢
35	32	52 B 119	38¢	32¢	*30	32	52 B 145	44¢	37¢
40	32	52 B 132	38¢	32¢					
50	32	52 B 133	38¢	32¢					

TYPE SFE 32-VOLT AUTO FUSES

Series 307000. Medium-acting fuses. Made to sizes specified by S.A.E. U.L. Approved. Wt., per pkg., 2 oz. **5 fuses per pkg.**

Amps	Max. Volts	Stock No.	Size	Per Pkg.	20 Pkgs. or more, Per Pkg.
4	32	52 B 250	¼" dia. x ⅝"	15¢	13¢
6	32	52 B 255	¼" dia. x ¾"	15¢	13¢
9	32	52 B 260	¼" dia. x ⅞"	15¢	13¢
14	32	52 B 265	¼" dia. x 1⅛"	12¢	10¢
20	32	52 B 270	¼" dia. x 1¼"	12¢	10¢
30	32	52 B 275	¼" dia. x 1⅞"	18¢	15¢

7AG Fuse. Type 30307.5 fuse for 12 v. auto systems. Rated at 7½ amps. 32 v. Used in new G.M. autos employing 12 v. batteries. ⅞x¼". **52 B 165. 20 Pkgs. or more, Per pkg.....13 Per pkg.....15c**



LITTELFUSE MOUNTINGS—EXTRACTOR POSTS

Fuse holders and mounts for every application. *With fuse. Wt., 3 oz.

No.	Type	Fig.	For Fuses:	Description	Each
41 B 720	341001	H	3AG, 3AB	Panel mount, screw slot	27¢
41 B 721	371001	H	8AG	Panel mount, screw slot	27¢
41 B 729	442001	E	4AG	Panel mount, thumb knob	73¢
41 B 727	342001	E	3AG, 3AB	Panel mount, thumb knob	27¢
41 B 728	372001	E	8AG	Panel mount, thumb knob	27¢
52 B 292	357001	C	3AG, 3AB	Single fuse, lug term.	10¢
52 B 285	387001	C	8AG	Single fuse, lug term.	10¢
52 B 294	356001	C	3AG, 3AB	Single fuse, screw term.	24¢
40 B 450	351011	A	3AG, 3AB	Single fuse mtg.	11¢
52 B 296	381002	K	2-8AG	Double fuse mtg.	21¢
52 B 297	357002	K	2-3AG or 3AB	Double fuse mtg.	21¢
52 B 295	383002	F	8AG	"Meter-back" mtg.	21¢
52 B 291	353001	D	3AG, 3AB	Panel type mtg.	35¢
52 B 290	383001	D	8AG	Panel type mtg.	02¢
41 B 788	155009	G	*SFE, (9 a.)	Inline fuse retainer for autos	26¢
41 B 798	155014	G	*SFE, (14 a.)	Inline fuse retainer for autos	26¢
41 B 789	155020	G	*SFE, (20 a.)	Inline fuse retainer for autos	26¢
41 B 796	342006	J	3AG	Watertight fuse post	1.38
41 B 797	442006	J	4AG	Watertight fuse post	1.38
41 B 795	342003	B	3AG	Miniature fuse extractor post	27¢
41 B 747	342008	B	3AG	Dustproof fuse post	31¢
41 B 748	571004	L	5AG	Watertight fuse post	1.00

PHOSPHOR BRONZE FUSE CLIPS

Burnished nickel plate with fuse stop ears. **10 Clips Per Pkg.**

Stock No.	For Fuse Types:	Per Pkg.	10 Pkgs., Per Pkg.
52 B 685	SFE, 3AG, 8AG, 3AB	12¢	10¢
52 B 686	4AG, 4AB	29¢	24¢
52 B 687	5AG Hi-voltage Midget	29¢	24¢
52 B 688	Standard Hi-voltage	41¢	34¢
52 B 689	NEC-30 Fuses	94¢	78¢

Buss Fuses and Fusetrons

STANDARD AND FUSETRON TYPES

TYPE MDL FUSETRON FUSES

Long time-lag prevents needless blows. Operates instantly on high overloads or shorts. Thermal cutout operates slowly on low overloads. Size, 1¼x¼". Fit 3AG and HKL holders. U. L. Approved. Shpg. wt., per pkg., 1 oz. **5 fuses per package.**

250 VOLTS MAX

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/100	53 B 441	97¢	82¢	3/10	53 B 452	79¢	67¢
1/32	53 B 442	97¢	82¢	4/10	53 B 453	79¢	67¢
1/16	53 B 443	79¢	67¢	1/2	53 B 454	79¢	67¢
1/10	53 B 444	79¢	67¢	6/10	53 B 455	79¢	67¢
15/100	53 B 450	79¢	67¢	8/10	53 B 456	79¢	67¢
2/10	53 B 451	79¢	67¢	1	53 B 461	79¢	67¢

125 VOLTS MAX

1-1/4	53 B 462	73¢	62¢	2-1/2	53 B 465	59¢	49¢
1-6/10	53 B 463	73¢	62¢	2-8/10	53 B 466	59¢	49¢
2	53 B 464	73¢	62¢				

32 VOLTS MAX

4	53 B 468	59¢	49¢	8	53 B 471	59¢	49¢
5	53 B 469	59¢	49¢	10	53 B 472	59¢	49¢
6-1/4	53 B 470	59¢	49¢	15	53 B 473	59¢	49¢

TYPE MDX 125 V. FUSETRONS

FAST-ACTING FUSES FOR PROTECTION OF INSTRUMENTS, ETC.

Similar to MDL above, but faster acting. At 200% load, 12 seconds; at 300% load, 3 seconds; at 500% load, ½ second. Thermal cutout will not blow on low surge, etc. 1¼x¼". Fit 3AG and HKL holders. U.L. Approved. Shpg. wt., per 100, 15 oz. **5 fuses per pkg.**

Amps	Stock No.	Per Pkg.	20 Pkgs. or More, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or More, Per Pkg.
3-2/10	53 B 467	59¢	49¢	6¼	53 B 505	59¢	49¢
4	53 B 503	59¢	49¢	7	53 B 506	59¢	49¢
5	53 B 504	59¢	49¢				

TYPE N TIME DELAY FUSES

Slow-blowing glass tube fuses for use where harmless surges might cause ordinary fuses to fail. Each fuse will fit only one size of fuse holder; impossible to insert wrong fuse. 250 volts max. Shpg. wt. 1 oz./pkg. **5 fuses per pkg.**

Amps	Stock No.	Per Pkg.	20 Pkgs. or More, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or More, Per Pkg.
¼	53 B 535	83¢	69¢	2	53 B 538	78¢	64¢
½	53 B 536	83¢	69¢	3-2/10	53 B 539	69¢	59¢
1-6/10	53 B 537	78¢	64¢	4	53 B 540	69¢	59¢

TYPE C "QUICK-BLOW" FUSES

Same as above except of the "quick-blowing" type. Designed to open the circuit immediately upon overload or short. 1 oz./pkg. **5 fuses per pkg.**

Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
¼	53 B 541	59¢	49¢	2	53 B 544	27¢	23¢
½	53 B 542	49¢	39¢	3	53 B 545	27¢	23¢
1½	53 B 543	27¢	23¢	4	53 B 546	34¢	29¢

TYPES N AND C FUSEHOLDERS

Each of the Type C and N fuses above, requires a specific fuse holder. Each fuse holder will fit only the type fuse shown. Can be mounted in a 7/16" hole with keyway. Shpg. wt. 1 oz. **5 per pkg.**

Stock No.	For Type C, Amps.	Per Pkg.	Stock No.	For Type N, Amps.	Per Pkg.
53 B 547	¼	59c	53 B 553	¼	59c
53 B 548	½		53 B 554	½	
53 B 549	1½		53 B 555	1½	
53 B 550	2		53 B 556	2	
53 B 551	3		53 B 557	3	
53 B 552	4		53 B 558	4	

TYPE W PLUG FUSES

Finest quality Underwriters' Laboratories Approved plug-type house fuses. Condition of fuse is visible at a glance—extremely large window area with white background behind fuse element shows when fuse is blown. Fine quality porcelain and first-cut mica used in construction. 125 volts max. Edison base. Shpg. wt. ½ lb. **5 fuses per pkg.**

Amps	Stock No.	Per. Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
3	53 B 560	28c	26c	10	53 B 564	26c	24c
5	53 B 561			15	53 B 565		
6	53 B 562			20	53 B 566		
8	53 B 563			25	53 B 567		
				30	53 B 568		

TYPE HKL AND HKR INDICATOR FUSEHOLDERS

For 1¼x¼" fuses. HKL has neon indicator which lights when fuse is blown. HKL for use in circuits up to 250 volts. HKR is for 32-volt circuits; has incandescent indicator.

53 B 501. Type HKL. NET..1.02 53 B 502. Type HKR. NET..1.38

AGC AND MTH FUSES

Carry 110% of rated current; open in one hour at 135%, 250 volts max. *Low-resistance fuse providing high-speed action necessary to protect delicate instruments. U.L. Approved. Fit 3AG and HKL holders. 1¼x¼". Wt., 100, 15 oz. **5 fuses per pkg.**

250 VOLTS MAX

Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
1/16	AGC*	53 B 420	73¢	62¢	1½	AGC	53 B 427	24¢	20¢
⅛	AGC	53 B 421	47¢	39¢	2	AGC	53 B 428	24¢	20¢
¼	AGC	53 B 422	44¢	37¢	3	AGC	53 B 429	20¢	18¢
⅜	AGC	53 B 423	44¢	37¢	4	MTH	53 B 430	29¢	24¢
½	AGC	53 B 424	44¢	37¢	5	MTH	53 B 431	29¢	24¢
¾	AGC	53 B 425	44¢	37¢	6	MTH	53 B 432	29¢	24¢
1	AGC	53 B 426	24¢	20¢	8	MTH	53 B 433	36¢	30¢

TYPE AGC 32 VOLT FUSES

For circuits operating at 32 volts or less. Fit 3AG and HKP holders. 1¼x¼". U.L. Approved. Shpg. wt., 1 oz. per pkg. **5 fuses per pkg.**

Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Mfr's Type	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
5	AGC	53 B 434	15¢	13¢	15	AGC	53 B 438	15¢	13¢
6	AGC	53 B 435	15¢	13¢	25	AGC	53 B 439	18¢	15¢
7½	AGC	53 B 436	15¢	13¢	30	AGC	53 B 440	18¢	15¢
10	AGC	53 B 437	15¢	13¢					

TYPE AGX FAST-ACTING FUSES

Capable of very high speed action for proper protection of valuable instruments. Formerly 8AG. Specifications: Will carry 100% load; open at 200% load within 5 seconds. U.L. Approved. *Formerly type MJB. 1x¼". Shpg. wt., per 5, 3 oz. **5 fuses per pkg.**

Amps	Max. Volts	Stock No.	Per. Pkg.	20 Pkgs. or more, Per Pkg.	Amps	Max. Volts	Stock No.	Per Pkg.	20 Pkgs. or more, Per Pkg.
⅛	250	53 B 513	.47	.40	¾	250	53 B 517	.44	.37
¼	250	53 B 514	.44	.37	1	250	53 B 518	.24	.20
⅜	250	53 B 515	.44	.37	1½	250	53 B 519	.24	.20
½	250	53 B 516	.44	.37	2	250	53 B 520	.24	.20
1/500	125	53 B 507*	3.53	2.94	1/100	125	53 B 509*	1.18	.98
1/200	125	53 B 508*	1.34	1.13	1/32	125	53 B 510*	1.12	.93

FUSETRON TYPE FNM LONG TIME LAG FUSES

Avoid needless blows from starting currents or surges. Fuse link operates only on high overloads or short-circuits. Thermal cutout functions on low overloads. Thermal cutout cannot operate quickly on any load—provides long time lag. Yet protection is obtained against short circuits or continued overloads. Dual element type. Fiber tube. Specifications: Carry 110% load; open at 135% load within 1 hour. Approximate blowing time: at 200% load, 25 seconds; at 300% load, 8 seconds; at 500% load, 3 seconds. U.L. Approved. 1½x1½". 250 v. max. except *125 v. 10 **fuses per pkg.** Shpg. wt. per pkg. 5 oz.

Amps	Stock No.	Per Pkg.	10 Pkgs. or More, Per Pkg.	Amps	Stock No.	Per Pkg.	10 Pkgs. or More, Per Pkg.
1	53 B 485	2.32	1.94	4	53 B 491	2.32	1.94
1¼	53 B 486			5	53 B 492		
1-6/10	53 B 487			6¼	53 B 493		
2	53 B 488			8	53 B 494		
2½	53 B 489			10	53 B 495		
3-2/10	53 B 490			15*	53 B 496		

FUSETRON TYPE T DUAL ELEMENT FUSES

New dual-element plug fuses. Provide an additional measure of protection against "blowing" with use of thermal element—element withstands surges of starting current, overloads and short circuits. 20, 25 and 30 ampere types are for use on appliance circuits or mains; 15 ampere fuse for smaller household appliances. For voltages up to 125 volts, AC or DC. Completely shockproof—top cap is insulated with porcelain and mica. Size of fuse is imprinted on face of cap. Large window gives clear indication if fuse is blown. U.L. Approved. Shpg. wt. per pkg., 5 oz. **4 fuses per pkg.**

53 B 521. 15 amp. Per 53 B 522. 20 amp. Pkg.....27c 53 B 523. 25 amp. Per 53 B 524. 30 amp. Pkg..27c

HCM
HKP
HJM

4405

HPC

FUSE MOUNTINGS

Provide a convenient way of mounting fuses on radio, TV, instrument, automobiles, etc. Fuse always easy to remove as it projects beyond holder body and is not held tight at inner end when knob is removed. Av. wt., 1 oz.

No.	Type	For Fuses	NET	No.	Type	For Fuses	NET
53 B 500	HPC	1¼x1½"	34¢	53 B 478	HJM	1x¼"	27¢
53 B 477	HCM	9/32x1¼"	34¢	53 B 480	4405	1¼x¼"	11¢
53 B 475	HKP	7/32x1¼"	27¢	53 B 481	4408	Double 4405	22¢

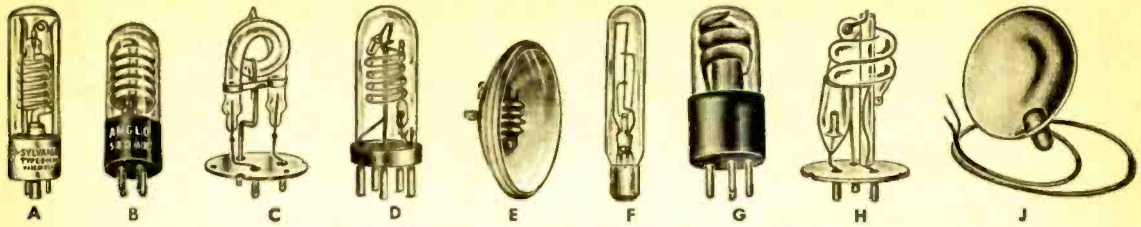
TWIN CLIPS FOR ¼" FUSES

For replacement of pigtail TV fuses with standard snap-on type. No cutting or soldering. Less fuse. Shpg. wt. per box, 10 oz. **10 per pkg.**

53 B 476. Per Pkg.....45c

Include Amperage and Manufacturer's Type on Fuse Orders

Photoflash Components



ELECTRONIC FLASH TUBES AND REFLECTORS

Fig. A—SYLVANIA R4330

Flash tube for use in high-speed photo equipment. High-voltage discharge type. 100 watt-seconds; 2250 volts; flash duration, 1/5000 second. Over 30,000 flashes. Wt., 1 lb.
E3-R4330. List, $23.75. NET 15.35

Fig. B—AMGLO FLASH TUBES

For high-speed photo equipment. Flash duration, 1/10,000 second. Gas-filled design with open-end spiral feature gives long life. May be used for color work without filter. High-intensity, blue-white light. Color temperature, 6500° Kelvin. Shpg. wt., 1 lb.
*Relay type. All others trigger.

Stock No.	Type	W-S	Operating Voltage	Cap., Mfd	EACH
78 E 655	78R9D	200	2000-2500	15-80	14.70
78 E 652	54R4X*	200	2250-2850	15-80	14.70
78 E 653	56J2Z	150	450- 900	300-1400	12.74
78 E 658	58D4X*	110	2250-2850	15-32	13.72
78 E 662	HD-20	200	350-500	1500	8.82

G.E. FLASH TUBES

Used in amateur and professional photography. Provide flashes of exceedingly high intensity for a short duration, ranging from 1/1,000 to 1/1,000,000 second. Same tube can be flashed repeatedly—tens of thousands of times. Standard equipment in many units and popular for the home kit builder and experimenter. Tubes are helix-coiled, xenon-filled. *60 watt incandescent modeling lamp. †Similar to Fig. D. Capacity, 100 hours. Shpg. wt., 1 lb.

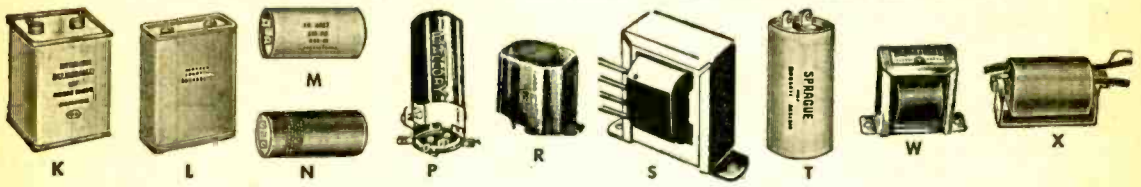
No.	Type	Fig.	W-S	Volts	Mfd	NET
52 E 388	FT-218	C	200	1000	400	8.25
52 E 375	FT-118	C	125	500	1000	7.20
52 E 364	FT-214	D	200	2000	100	19.75
52 E 376	FT-220	E	200	2000	100	21.50
52 E 359	FT-403	†	480	2000	240	23.00
52 E 363	60T6½/1*	F		120		1.85
52 E 860	95X828	Socket for FT-403 & 60T6½/1				11.76
73 H 998	122-275	Socket for FT-214				1.45

SPRAGUE & KEMLITE COMPONENTS

Used in two new low-cost, portable, dry-cell powered photoflash units. Schematics, parts listings and instructions in Sprague Booklet C-703 below. Two models—one using Kemlite DX flashtube (same as FA-100), and one using Kemlite 5W flashtube (same as FA-104). For synchro shutters or solenoid synchronization. Uses two 450 volt capacitors (listed below) and five 90 volt Burgess N60 batteries (listed page 264). Flashes faster than 1/1000 second. Light output of 100 w.s. Flashtubes are Kemlite; reflectors and adapter are Sprague. All parts available from ALLIED. Write for free parts list. Av. shpg. wt., 1 lb.

No.	Type	Fig.	Descrip.	W-S	V.	NET
78 E 700	DX	G	Flash Tube	100	450	12.00
78 E 710	5W	H	Flash Tube	150	500	7.50
78 E 703	FA-101	J	Reflector for DX			2.75
78 E 704	FA-105	J	Reflector for 5W			3.50
78 E 702	FA-102	.....	Adapt. for Ed. bases			2.60

Build Your Own High-Speed Photoflash Units With These Essentials



C-D CAPACITORS

Fig. K. Cornell-Dubilier high dielectric strength capacitors. Wax-impregnated and hermetically sealed in metal cases.

TYPE GKGT-2000 VOLT DC WORKING

No.	Type	Mfd.	W-S	Lbs.	EACH
14 L 480	1A01	25	50	4½	11.17

TYPE GKGT-2500 VOLT DC WORKING

14 L 481	1A02	15	50	4¾	10.00
14 L 483	104	32	100	6	21.76

LOW-VOLTAGE CAPACITORS

Stock No.	Mfr's Type	Fig.	Mfd	Volts	Lbs.	NET EACH
14 L 841	FB10063	M	200	450	1¼	4.03
14 L 842	FW10005	M	200	500	1¼	6.17

ILLINOIS UMC CAPACITORS

Fig. N. Highly efficient, dependable units. Low leakage current. Av. shpg. wt., 1¾ lbs.

No.	Type	Mfd	W-S	Volts	NET
10 L 579	52545	525	53	450	13.23
10 L 581	60045	600	60	450	17.64
10 L 578	100030	1000	45	300	17.64
10 L 582	165030	1650	75	300	23.52

Illinois Electronic Flash Handbook. Handbook and construction manual. Covers 4 units.
37 L 191. Postpaid in U.S.A. ..... 50¢

RECTIFIERS AND VIBRATORS

Type 1013. Fed. Tel. & Radio Rectifier. For storage battery chargers. Output, 700 ma at 18v. Shpg. wt., 4 oz.
4 A 604. NET 65c

Type 16Y1. Radio Receptor Co. Selenium Rectifier. For portable photoflash units. Current rating, 20 ma; Input voltage, 260 rms. Size, ½x½x⅞". Shpg. wt., 8 oz.
4 A 645. NET 1.26

Type W859. Mallory Vibrator. Interrupter type. 4 prong base. Replaces type W659. Shpg. wt., 8 oz.
56 P 118. NET 2.88

Type FA-106. Sprague Vibrator. (Same as Oak V6815). For photoflash equipment. 4 volts; 4 amp. 2 15/16x1½". Shpg. wt., 8 oz.
78 E 706. NET 8.50

SPRAGUE CAPACITORS AND RELAYS

Fig. L. Type PQ Capacitors. Combine maximum dependability with very compact size. Rated at 2500 volts, except 15L729 (4000 v.).

No.	Type	Mfd	W-S	Lbs.	NET
15 L 730	2510	10	31	1¾	10.00
15 L 732	2525	25	78	4¼	15.58
15 L 733	2535	35	109	6	19.11
15 L 729	425	25	200	7¼	24.99

Type FA-103. Sprague Delay Relay. For 5-25 microsecond delay synchronization for operation with 3 to 4½ volt cell flashguns. Shpg. wt., 8 oz.
78 E 701. NET 3.50

Fig. T. Type FF-1 625 Mfd. Capacitor. 450 volts DC working. Low-leakage electrolytic for dry battery photo-flash service. Nominal rating 53 w.s. Wt., 1¼ lbs.
15 L 725. NET EACH 13.23

C703 Electronic Flash Handbook. Contains photos, drawings and instructions for building two battery-operated, high-speed electronic flash units as well as an AC operated unit. A handbook for the amateur or professional photographer.
37 K 078. Postpaid in U.S.A. 35c

Type 2TM-S6 Molded Tubular Capacitor. 200 v. at .05 mfd. ⅝x1¼". Shpg. wt., 8 oz.
15 L 121. NET 15c

MALLORY LOW-VOLTAGE CAPACITOR

Fig. P. Type HC 45003. An excellent low-voltage electrolytic for use in photoflash units. Capacity, 300 mfd at 450 volts working. Size, 2 1/16x4⅛". Shpg. wt., 1 lb.
17 L 820. NET 6.17

Fig. R—UTC TRANSFORMERS

Type PF-1. Primary for 115 volts, 50-60 cycles. Secondary supplies 2200 volts DC when used with proper rectifier, and condensers up to 100 mfd. Transformer is compound-sealed in 2⅛x2¾x2½" case. Shpg. wt., 2½ lbs.
62 G 230. NET 6.86

Type PF-3. Trigger transformer for electronically fired circuit. Shpg. wt., 6 oz.
62 G 232. NET 4.90

Fig. S—STANCOR TRANSFORMERS

Model P-6425. Photoflash power transformer for AC-operated electronic photoflash units. Exact replacement in the Heiland Research Photoflash unit. The comparatively low output voltage (450 v.), permits lower construction cost, simplicity in design and a greater safety factor. Has a 105/115/125 volt primary. Charges up to 1050 mfd. to 450 volts DC, through a half-wave selenium rectifier. 2 5/16x2 5/16x2". Mtg. centers, 2⅛". With diagram. Shpg. wt., 2 lbs.
64 G 445. NET 3.09

Type P-6426. Trigger coil for P-6425 transformer. ¾" long, 9/16" diameter. Replaces G.E. 86 G 41 trigger coil. Shpg. wt., 3 oz.
64 G 144. NET 1.47

THORDARSON TRANSFORMERS

Fig. W. 22 R42. Open frame type with leads. Pri.: 117 v., 60 cycle, AC. Sec. for supply delivering 2250 volts DC at 1.5 ma.; Sec. No. 2, 2.5 volts AC at 1.75 amps. Size, 4x2⅝x2⅛"; 3⅜" mtg. centers. Shpg. wt., 2 lbs.
63 G 720. NET 5.29

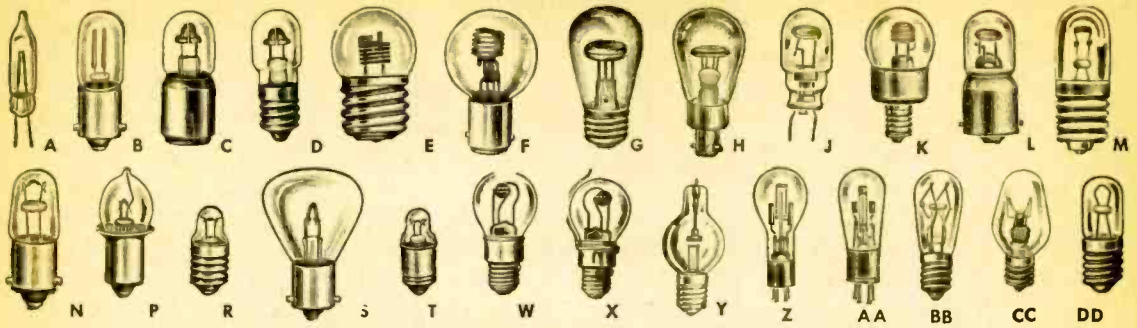
Fig. W. 22 R43. Pri.: 117 volt, 60 cycle, AC, or 4 volt vibrator. Sec., 1100 volts AC at 1.5 ma. Delivers 2250 volts in voltage doubler circuit. Size, 2⅛x3⅛x2¾; 2 13/16" mtg. centers. Shpg. wt., 1½ lbs.
63 G 721. NET 7.35

Fig. X. Type 22 R41. Power transformer. Pri., 4 volts from vib. at 115 cyc. or higher. Sec., 450 volts DC or 900 volts DC at 15 ma. Mtg. ctrs., 2⅜". Size, 2⅛x2⅞x2⅜". Shpg. wt., 1¼ lbs.
63 G 723. NET 2.94

Fig. X. Type 22 R44. Ignition transformer. For high-pressure 3-electrode tubes. Pri., 200 volt DC discharge from .25 to .5 mfd. condenser. Sec., 15,000 v. peak. Size, 2¼x1½x1⅛". Shpg. wt., 8 oz.
63 G 722. NET 3.82

Thordarson Booklet "Universal Power Pack for High-Speed Electronic Photoflash Tubes". Shows how to build your own reliable high-speed photoflash tube power pack. For amateur and professional photographers. Versatile—may be operated from 117 v. A.C. or from self-contained batteries. Contains complete circuit diagram and parts list. 8 pages. 7x9¼". Shpg. wt., 4 oz.
37 K 028. NET 15c

Neon & Miniature Lamps—Sockets



GENERAL ELECTRIC NEON, ARGON AND MINIATURE LAMPS

NEON GLOW LAMPS

For 105-600 volt operation except types marked ‡ which are for 210-600 v. *Indicates AC operation only and § indicates DC only. S.C. stands for single contact; D.C., double contact; Sk., skirted. Screw types have series resistor in base—for 105-125 v. operation; others require external resistor. AC starting voltage shown. DC starting voltage is 40% higher. †Red sprayed. Av. shpg. wt. 1 lamp, 3 oz.; box of 10, 5 oz.

Stock No.	Mfr's Type	Fig.	Watts	AC Volts	Bulb Style	Base	NET EACH	10 or more, Each
52 E 370	NE-2	A	1/25	65	T-2	Wire Term.	.09	.07
52 E 373	NE-51	B	1/25	65	T-3¼	S.C. Bay. Min.	.12	.10
52 E 374	NE-7	J	¼	55	T-4½	Wire Term.	.54	.44
52 E 361	NE-57	D	¼	55	T-4½	Cand. Screw	.69	.57
52 E 812	NE-48	C	¼	65	T-4½	D.C. Bay. Cand.	.52	.43
52 E 807	NE-45	D	¼	65	T-4½	Cand. Screw	.64	.53
52 E 822	NE-21	L	¼	55	T-4½	S.C. Bay. Cand.	.69	.57
52 E 362	‡NE-58	D	½	65	T-4½	Cand. Screw	.64	.53
52 E 826	§NE-16	C	¼	§67	T-4½	D.C. Bay. Cand.	.62	.41
52 E 827	NE-17	C	¼	55	T-4½	D.C. Bay. Cand.	.66	.54
52 E 813	*NE-29	F	½	105	G-10	D.C. Bay. Cand.	.73	.60
52 E 360	‡NE-56	E	1	60	G-10	Edison	.69	.57
52 E 801	NE-30	E	1	60	G-10	Edison	.69	.57
52 E 809	NE-31	K	1	60	G-10	Sk. Cand. Screw	.85	.70
52 E 814	NE-32	F	1	60	G-10	D.C. Bay. Cand.	.64	.53
52 E 803	NE-34	G	2	60	S-14	Edison	.73	.60
52 E 805	†NE-34	G	2	60	S-14	Edison	.78	.68
52 E 815	NE-36	H	2	60	S-14	Sk. D.C. Bay. Cand.	.73	.60
52 E 806	NE-40	G	3	60	S-14	Edison	1.13	.92
52 E 816	NE-42	H	3	60	S-14	Sk. D.C. Bay. Cand.	.98	.80

ARGON GLOW LAMPS

Characterized by small size and low operating temperature. Produce a pale blue-violet light—near-ultraviolet radiation. Clear glass. †Av. life, 3000 hours; *av. life, 1000 hrs. Av. wt., 1 lamp, 3 oz., box of 10, 5 oz.

52 E 811	*AR-3	D	¼	80	T-4½	Cand. Screw	.66	.59
52 E 820	†AR-2	H	2	65	S-14	Sk. D.C. Bay. Cand.	.73	.66
52 E 810	†AR-1	G	2	65	S-14	Edison	.73	.66

TUNGAR BULBS

General Electric tungar bulb type rectifiers for replacement purposes. High quality units. Used in battery-charging equipment. Gas-filled, thermionic-emission types. Av. shpg. wt., 1¼ lbs.

Stock No.	GE Type	Fig.	Amps	NET EACH
9 E 900	12X825	W	2	4.04
9 E 901	206501	X	2	4.04
9 E 906	20X672	W	5	5.15
9 E 903	189048	Y	6	4.41
9 E 904	189049	Y	6	4.41
9 E 905	217283	Y	15	8.88
9 E 907	16X897	Z	2	11.03
9 E 908	45X674	AA	6	13.23

AC-DC PILOT LAMPS

Rated at 1500 hours. average use. All are enclosed in clear glass envelopes except 52 E 356. which is in white glass. Ideal for use behind small panel openings. as general-purpose indicator lamps for dials. etc. *Candelabra screw base. †Double contact candelabra bayonet base. ‡Herzog tubular lamp—all others, G.E. Av. shpg. wt., 4 oz.

No.	Type	Fig.	Volts	Watts	Std. Pkg.	NET EACH Single Lots	NET EACH Std. Pkg.
52 E 349	*S6	BB	115	6	12	19¢	17¢
52 E 352	†6S6	BB	115	6	10	25¢	23¢
52 E 354	*3S6	BB	115	3	10	30¢	27¢
52 E 353	*10WS6	BB	230	10	6	45¢	40¢
52 E 355	*C7	CC	115-125	7	12	17¢	15¢
52 E 356	*C7	CC	115-125	7	12	19¢	17¢
52 E 351	†C7	CC	115-125	10	12	21¢	19¢
52 E 350	‡*	DD	120	4	10	39¢	35¢

LAMP SOCKET REDUCERS

Receptacle opening receives base of bulb; plug end fits into socket desired. Enables user to convert to most commonly-used types of bulb bases. Positive contact. Av. shpg. wt., 2 oz.

Stock No.	Fig.	Description	NET
52 E 606	EE	Edison-to-Candelabra	12¢
52 E 639	FF	Candelabra-to-Miniature	12¢
52 E 634	FF	Intermediate-to-Candelabra	6¢
52 E 638	GG	Edison-to-Intermediate	15¢

GENERAL PURPOSE MINIATURE LAMPS

All are miniature, except *midget flanged type. Under **Amps**, c.p. means candlepower. Abbreviations under **Base** mean: S.C.—single contact; D.C.—double contact. Under **Bulb Style**: G—globe; T—tubular; B—lemon shape; TL—Lens end, tubular (pre-focus type); FE—flat end; RP—reflector, pear shape; S—as in Fig. R. Weights: 1 lamp, 2 oz.; box of 10, 4 oz. **Deduct 10% from price in "10 or more, each" column when ordering 100 or more lamps of one type.**

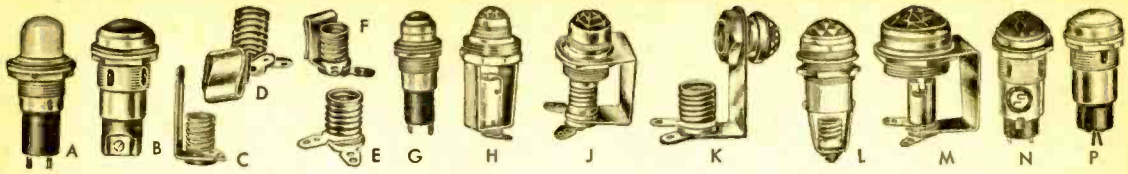
Stock No.	Mfr's Type	Fig.	Volts	Amps	Base	Bulb Style	NET EA.	10 or More, Ea.
52 E 344	PR-2	P	2.4	0.50	S.C.Flanged	B-3½	.17	.11
52 E 345	PR-3	P	3.6	0.50	S.C.Flanged	B-3½	.17	.11
52 E 337	PR-4	P	2.3	0.27	S.C.Flanged	B-3½	.17	.11
52 E 336	PR-6	P	2.5	0.30	S.C.Flanged	B-3½	.17	.11
52 E 338	PR-9	P	2.7	0.15	S.C.Flanged	B-3½	.18	.11
52 E 304	PR13	P	4.75	0.50	S.C.Flanged	B-3½	.17	.11
52 E 318	PR14	P	2.38	0.50	D.C.Flanged	B-3½	.27	.17
52 E 300	13	..	3.7	0.30	Screw	G-3½	.12	.08
52 E 301	14	..	2.5	0.30	Screw	G-3½	.12	.08
52 E 303	27	..	4.9	0.30	Screw	G-4½	.15	.09
52 E 302	31	..	6.2	0.30	Screw	G-4½	.13	.08
52 E 305	40	M	6-8	0.15	Screw	T-3¼	.12	.08
52 E 306	41	M	2.5	0.50	Screw	T-3¼	.12	.08
52 E 307	42	M	3.2	0.35	Screw	T-3¼	.13	.08
52 E 308	43	N	2.5	0.50	Bayonet	T-3¼	.12	.08
52 E 309	44	N	6-8	0.25	Bayonet	T-3¼	.12	.08
52 E 310	45	N	3.2	0.35	Bayonet	T-3¼	.13	.08
52 E 311	46	M	6-8	0.25	Screw	T-3¼	.12	.08
52 E 312	47	N	6-8	0.15	Bayonet	T-3¼	.12	.08
52 E 313	48	M	2.0	0.06	Screw	T-3¼	.16	.10
52 E 314	49	N	2.0	0.06	Bayonet	T-3¼	.16	.10
52 E 315	50	..	6-8	1 c. p.	Screw	G-3½	.12	.08
52 E 316	51	N	6-8	1 c. p.	Bayonet	G-3½	.11	.07
52 E 320	55	N	6-8	2 c. p.	Bayonet	G-4½	.11	.07
52 E 660	57	..	12-16	2 c. p.	Bayonet	G-4½	.14	.09
52 E 322	63	..	6-8	3 c. p.	S.C. Bayonet	G-6	.12	.08
52 E 321	81	..	6-8	6 c. p.	S.C.Bayonet	G-6	.14	.09
52 E 317	82	..	6-8	6 c. p.	D.C.Bayonet	G-6	.16	.10
52 E 325	112	R	1.2	0.22	Screw	TL-3	.13	.08
52 E 327	136	..	1.3	0.60	Screw	G-4½	.15	.09
52 E 330	222	R	2.2	0.25	Screw	TL-3	.13	.08
52 E 331	223	..	2.2	0.25	Screw	FE-3¼	.12	.08
52 E 333	224	T	2.15	0.22	Special	TL-2¼	.14	.09
52 E 334	233	..	2.2	0.27	Screw	G-3½	.12	.08
52 E 339	248	..	2.5	0.80	Screw	G-5½	.15	.09
52 E 319	313	N	28	0.17	Bayonet	T-3¼	.30	.19
52 E 323	327	..	28	0.04	S.C.Midget*	T-1¾	.80	.50
52 E 658	428	..	12.5	0.25	Screw	G-4½	.12	.08
52 E 332	432	..	18.0	0.25	Screw	G-4½	.14	.09
52 E 652	433	..	18	0.25	Bayonet	G-4½	.14	.09
52 E 342	605	..	6.1	0.50	Screw	G-4½	.15	.09
52 E 650	1133	S	6-8	32 c. p.	S.C.Bayonet	RP-11	.33	.20
52 E 651	1188	S	6-8	50/32cp.	D.C.Bayonet	RP-11	.60	.37
52 E 659	1446	..	12	0.20	Screw	G-3½	.15	.09
52 E 341	1447	..	18.0	0.15	Screw	G-3½	.19	.12
52 E 661	1449	..	14	0.20	Screw	G-3½	.15	.09
52 E 662	1458	..	20	0.25	Bayonet	G-5	.15	.09
52 E 653	1477	DD	24	0.17	Screw	T-3	.40	.25
52 E 654	1487	DD	12-16	0.20	Screw	T-3¼	.17	.11
52 E 655	1488	N	14	0.15	Bayonet	T-3¼	.17	.11
52 E 340	1490	N	3.2	0.16	Bayonet	T-3¼	.12	.08
52 E 656	1493	..	6.5	2.75	D.C.Bayonet	S-8	.85	.53
52 E 657	1815	N	12-16	0.20	Bayonet	T-3¼	.17	.11
52 E 324	1820	..	28	1.0	Bayonet	T-3¼	.32	.20
52 E 343	1829	..	28.0	0.07	Bayonet	T-3¼	.30	.19

SOCKETS FOR NEON, ARGON AND PILOT LAMPS

*Hard rubber insert in metal shell. Av. shpg. wt., 3 oz.

Stock No.	Fig.	Description	EACH	10 or More, EACH
52 E 850	HH	Edison	13¢	.12
52 E 858	HH	Miniature screw	14¢	.13
52 E 852	JJ	Candelabra screw	40¢	.36
52 E 855	HH	Candelabra screw	14¢	.13
52 E 853*	KK	Double-contact, bayonet candelabra	29¢	.26
52 E 856	LL	Double-contact, bayonet candelabra	58¢	.52
52 E 857	LL	Single-contact, bayonet candelabra	58¢	.52

Dialco Pilot Light Assemblies



NEON PANEL ASSEMBLIES

PLASTIC CAP ASSEMBLIES

Fig. A. Series 95408. Enclosed neon pilot light assemblies. Built-in 56,000 ohm ⅓ watt resistor. For NE-51 neon lamps in 110-220 v. circuits. Plastic head, bakelite body. 2 1/16" long. 11/16" mtg. hole. Less NE-51 (see listing on page 282). U.L. Approved. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Cap Color	NET EACH	10 or more, EACH
52 E 555	931	Red	97c	87c
52 E 556	933	Amber		
52 E 557	935	White		
52 E 558	937	Clear		

Replacement Plastic Caps for Above

Stock No.	Mfr's Type	Color	NET EACH	10 or more, EACH
52 E 565	95-931	Red	15c	13c
52 E 566	95-933	Amber		
52 E 567	95-935	White		
52 E 568	95-937	Clear		

JEWEL CAP ASSEMBLIES

Fig. B. Series 31914. For NE-45, -57, -58, etc. Candelabra screw base neon lamps. 115 v. 2½" long. 1" mtg. hole. Neon removable from front. Less lamp (see page 282). U.L. Approved. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 559	111	Red	1.03	93c
52 E 560	113	Amber		
52 E 562	137	Clear		

Replacement Jewel Caps for Above

Stock No.	Mfr's Type	Color	NET EACH	10 or more, EACH
52 E 575	31-111	Red	35c	31c
52 E 576	31-113	Amber		
52 E 578	31-137	Clear		

PILOT LIGHT SOCKETS

Popular Dialco assemblies. Cadmium plating on all brackets. Terminal lugs of tinned brass to facilitate rapid soldering. Coil spring construction on all bayonet type sockets. Supplied with high-grade insulating washers. Refer to page 282 for complete selection of miniature screw (for Series 500), bayonet (for Series 700), and candelabra (for Series 600) lamps. Av. shpg. wt., per 5, 6 oz. 5 per package.

MINIATURE SCREW

Stock No.	Mfr's Type	Fig.	Per Pkg.	5 Pkgs. or more, Per Pkg.
52 E 400	501	F	36c	32c
52 E 401	507	E		
52 E 402	504	D		
52 E 410	505	C		

MINIATURE BAYONET
(Not illustrated.)

Stock No.	Mfr's Type	Per Pkg.	5 Pkgs. or more, Per Pkg.
52 E 404	701	39c	35c
52 E 405	707		
52 E 403	704		
52 E 406	705		

CANDELABRA 115 VOLTS

Stock No.	Mfr's Type	Fig.	Per Pkg.	5 Pkgs. or more, Per Pkg.
52 E 407	601	F	54c	49c
52 E 408	604	D		
52 E 409	605	C		

PILOT LIGHT LENS CAPS

All-purpose ¼", ½", and 11/32" diameter smooth jewels in polished nickel-plated brass holders for up to ⅛" panels. Require 11/16", 7/16" and ½" holes, respectively, for mounting. Shpg. wt., 2 oz. Deduct 10% for 10 or more.

Size	Red	Green	Amber	EA.
¼"	52 E 444	52 E 445	52 E 446	24¢
½"	52 E 490	52 E 491	52 E 492	13c
11/32"	52 E 447	52 E 448	52 E 449	20¢

HALF-INCH ENCLOSED TYPE

AVIATION-TYPE SIGNAL ASSEMBLIES

Fig. G. Series 81410. Aviation type signal assemblies with smooth-faced jewels in ½" nickel-brass holder. Take miniature bayonet base lamp, replaceable from front of unit. (See page 282 for bulb listing.) 2¼" long. Require 11/16" mounting hole. For panels up to ⅛" thick. Less lamp. U. L. Approved. Shpg. wt., 3 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 465	111	Red	80c	72c
52 E 466	112	Green		
52 E 467	135	White		
52 E 468	113	Amber		

Replacement Jewel Caps Only for Above

52 E 535	81-111	Red	16c	14c
52 E 536	81-112	Green		
52 E 537	81-135	White		
52 E 538	81-113	Amber		

HALF-INCH OPEN TYPES

Fig. H. Series 857B. Require 11/16" mtg. hole. ½" lens. 2" long. Tinned solder terminals. For panels up to ¼" thick. With mounting washer. Less lamp. Uses type 44, 47 or 51 listed on page 282. Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 545	431	Red	44c	40c
52 E 546	432	Green		
52 E 547	433	Amber		
52 E 548	434	Blue		

MINIATURE TYPE

Fig. J. Series 810. Screw and bayonet type. ½" jewel. Require 11/16" mtg. hole. Use miniature bulbs. Tinned lugs. For PA equipment, recorders, etc. *Indicates bayonet base. Less lamp; see page 282. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 450	M-431	Red	32c	29c
52 E 451	M-432	Green		
52 E 452	M-433	Amber		
*52 E 453	B-431	Red		
*52 E 454	B-432	Green		
*52 E 455	B-433	Amber		

Fig. K. Series 510, 610, and 710. Open type visual indicators. Choice of miniature screw, bayonet or candelabra. Faceted jewels. Lug terminals. Require 7/16" mounting hole. Less lamp. Shpg. wt., 2 oz.

Series 510 Miniature Screw Type

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 475	431	Red	21c	19c
52 E 476	432	Green		
52 E 477	433	Amber		

Series 610 Candelabra Type

52 E 540	431	Red	21c	19c
52 E 541	432	Green		
52 E 542	433	Amber		

Series 710 Miniature Bayonet Type

52 E 480	431	Red	21c	19c
52 E 481	432	Green		
52 E 482	433	Amber		

ONE-INCH ENCLOSED TYPES

Fig. N. Series 31101. 115 volt, enclosed pilot lamp assembly. Black bakelite and brass. Faceted jewel in chrome-plated holder. Candelabra socket. 1" mtg. hole. Shpg. wt., 4 oz. *Not for neon.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 460	431	Red	1.03	93c
52 E 461	432	Green*		
52 E 462	433	Amber		
52 E 510	437	Clear		
52 E 511	434	Blue*		
52 E 512	435	White		

Replacement Jewel Caps for Above

52 E 525	31-431	Red	35c	31c
52 E 526	31-432	Green		
52 E 527	31-433	Amber		
52 E 588	31-437	Clear		

ASSEMBLIES WITH WIRE LEADS

Fig. P. Series 312901. Enclosed assembly. With 6" wire leads. Solid brass. Friction-fit, chrome-plated cap. 1" mtg. hole. U.L. Approved. Candelabra socket. Less S6 lamp (see page 282). Shpg. wt., 4 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 485	111	Red	1.13	1.02
52 E 486	112	Green		
52 E 487	113	Amber		
52 E 488	117	Clear		

Replacement Jewel Caps for Above

52 E 575	31-111	Red	35c	31c
52 E 596	31-112	Green		
52 E 576	31-113	Amber		
52 E 578	31-117	Clear		

ONE-INCH OPEN TYPES

Fig. L. Series 75. 115 volt open pilot lamp assembly with faceted jewel in chrome-plated brass holder. Candelabra socket. Solid brass construction. Friction-fit chrome-plated cap. 1" mounting hole. Less lamp. Shpg. wt., 5 oz.

Stock No.	Mfr's Type	Jewel Color	NET EACH	10 or more, EACH
52 E 500	C-431	Red	83c	75c
52 E 501	C-432	Green		
52 E 502	C-433	Amber		

Replacement Jewel Caps for Above

52 E 525	31-431	Red	35c	31c
52 E 526	31-432	Green		
52 E 527	31-433	Amber		

MINIATURE BAYONET SOCKETS

Fig. M. Series 910. Open type with chrome-plated brass jewel holders. 1½" long. 1" mounting hole. Excellent for power panels, test instruments, etc. Less bulb. Shpg. wt., 3 oz.

Color	Min. Bay.	Min. Screw	Candelabra
Red	52 E 420	52 E 430	52 E 440
Green	52 E 421	52 E 431	52 E 441
Amber	52 E 422	52 E 432	52 E 442

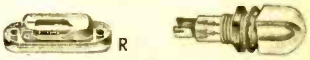
NET EACH ..... 83¢
10 or more, EACH ..... 75¢

SITTLER PANEL LAMP

Type 211007 Neon Indicating Lamp. Easily mounted panel lamp. Starting voltages of 65 v., AC; 90 v., DC. Rated at 1/25 watt. Bulb leads are securely soldered to press-fit type terminals. Compact and sturdy. Shpg. wt., 2 oz.
52 E 380. NET 44c

COLE-HERSEE DASH LAMP ASSEMBLY

Nickel-plated. Socket takes No. 51 or 55 bulb. ⅛" mtg. hole. Securely soldered 12" leads. Easy to install on dashboards, panels, etc. Less switch and bulb. Shpg. wt., 2 oz.
52 E 633. NET 44c



DRAKE NEON INDICATING LIGHTS

Fig. R. Type 110 "Flushlite." Neon lite in translucent plastic base. For 110-125 v. AC-DC. ½x1⅞x⅜". 1½" mtg. cntrs. Wt., 2 oz.
78 E 061. EA. ... 66¢ 10, EACH ..... 58¢

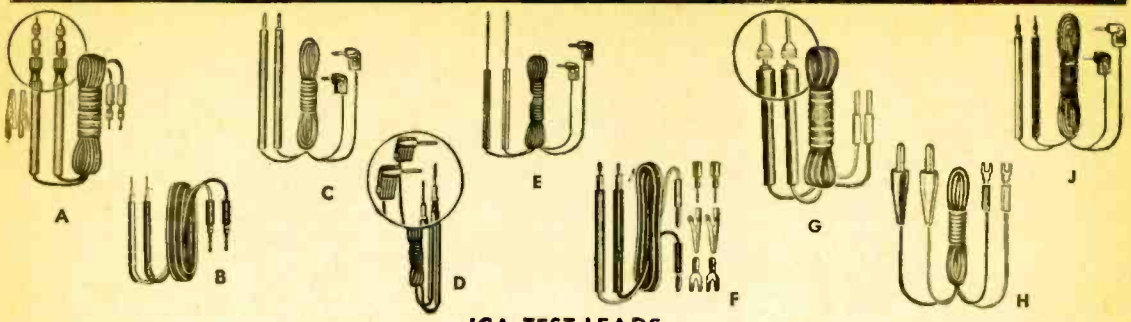
Fig. S. Type 105 "Post-lite." Panel lights for 65-130 v. AC or 90-130 v. DC. 2¼" long. Require ½" mtg. hole. With mtg. nut. 2 oz.
78 E 062. EA. ... 75¢ 10, EACH ..... 67¢

PILOT BULB REMOVER

Designed to expedite installation or removal of miniature and candelabra lamps. High-grade rubber. Wt., 2 oz.
52 E 550. NET 26c

See Page 282 for Complete Listings of Pilot Light Bulbs

Test Equipment Accessories



ICA TEST LEADS

Fig. A. Type 400 Heavy-Duty Leads. Extra-thin 6" red and black fenoline prods knurled at ends for easy finger grip. With removable phono needle type chuck. Other ends have phone tip terminals. 48" heavy-duty kinkless, flexible rubber leads. Shpg. wt., 1 lb.
42 N 200. NET PER PAIR.....1.18

42 N 202. Type 388. Same as above but with alligator clips. NET PER PAIR.....1.11

Fig. B. Type 332 Unbreakable Leads. 5" rubber-insulated red and black steel prods with pointed phone tip ends. Other ends have standard phone tips. 48" kinkless, rubber leads. Complete with non-insulated phone tips. Shpg. wt., 5 oz.
42 N 230. NET PER PAIR.....73c

Fig. B. Type 331. Insulated phone tips.
42 N 231. NET PER PAIR.....82c

Fig. C. Type 329 Extra Long Handle Test Leads. 8" red and black polished hard rubber prods with sharp pointed penetrating tips. Other ends have gun-handle type phone tip plugs. 48" rubber covered kinkless leads. Shpg. wt., 10 oz.
42 N 216. NET PER PAIR.....2.20

Fig. D. Type 373 Pencil Test Leads. 5" sharp-pointed red and black prods. Other ends with gun-handle type phone tips. 48" leads. Shpg. wt., 5 oz.
42 N 240. NET PER PAIR.....1.32

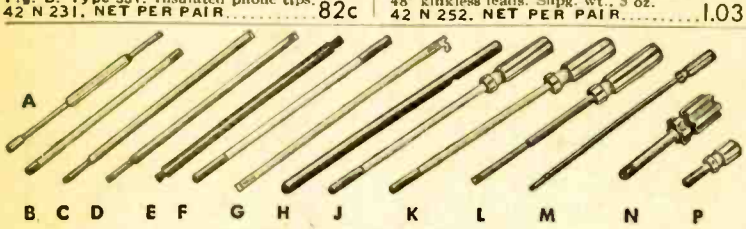
Fig. E. Type 438 Slim Line Test Leads. 7" red and black tenite prods with 3" vinyl-insulated shafts. Permit probing in closely wired circuits without danger of shorting. Other ends have gun-handle type molded phone tip plugs. 48" kinkless leads. Shpg. wt., 5 oz.
42 N 252. NET PER PAIR.....1.03

Fig. F. Type 312 All-Purpose Kit. 7¼" slim tenite red and black prods with pointed phone tips. Other ends banana plugs with interchangeable spade, alligator and phone tips. 48" rubber-covered kinkless leads. Wt., 6 oz.
42 N 220. NET PER PAIR.....1.57

Fig. G. Type 382 Needle Point Test Leads. 4" slim tenite prods with needle points. Other ends phone tips. 48" leads. Wt., 6 oz.
42 N 210. NET PER PAIR.....72c

Fig. H. Type 327 "Clip-On" Test Leads. Spade lugs one end, insulated clips other end. 48" red and black rubber leads. 8 oz.
42 N 215. NET PER PAIR.....1.18

Fig. J. Type 304 Lucite Leads. 5" prods; phono needle chucks. Other ends gun-handle phone tip plugs. 48" leads. Wt., 6 oz.
42 N 217. NET PER PAIR.....1.62



WALSCO TV ALIGNMENT TOOLS

Fig. A. For TV-FM IF. 5½x½". Molded-nylon tool. Shpg. wt., 3 oz.
42 N 294. Type 2526. NET.....32¢

Fig. B. Tuning wand; 6x7/32". Wt., 3 oz.
42 N 293. Type 2540. NET.....32¢

Fig. C. Duplex screwdriver. 7" long. 7/32" and 5/32". Shpg. wt., 3 oz.
42 N 292. Type 2520. NET.....32¢

Fig. D. For "K-Tran" IF transformers. Other end has metal screwdriver tip. Wt., 3 oz.
42 N 289. Type 2515. NET.....47¢

Fig. E. "Slug Saver." Shoulder prevents turning Standard Coil slugs too far. 7½". 3 oz.
42 N 297. Type 2528. NET.....62¢

Fig. F. For TV-FM IF. 7x3/16". For Nos. 4 and 6 studs. Shpg. wt., 3 oz.
42 N 286. Type 2519. NET.....62¢

Fig. G. Wire dressing and alignment tool. 7x3/16". Polystyrene. Shpg. wt., 3 oz.
42 N 288. Type 2512. NET.....35¢

Fig. H. Neutralizing wrench. 7½" long. ¼" I.D. hex; ⅛" dia. Shpg. wt., 5 oz.
42 N 291. Type 2503. NET.....26¢

Fig. J. TV-FM IF alignment screwdriver. 8x3/16" for No. 6 studs. Shpg. wt., 5 oz.
42 N 284. Type 2516. NET.....65¢

Fig. K. TV-FM IF tool. 8x3/16". Slotted type; for No. 6 studs. Shpg. wt., 5 oz.
42 N 287. Type 2524. NET.....65¢

Fig. L. For Standard Coil front ends. 7x¼".
42 N 283. Type 2522. NET.....65¢

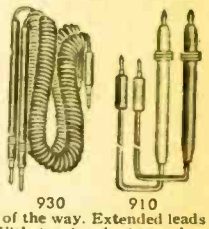
Fig. M. For TV osc. alignment. 12x3/16". Replaceable nylon tip. Shpg. wt., 6 oz.
42 N 290. Type 2523. NET.....1.06
42 N 295. Replacement tip. NET.....18¢

Fig. N. 2½" long. For alignment of RCA and Zenith UHF tuners. Shpg. wt., 3 oz.
42 N 296. Type 2527. NET.....41¢

Fig. P. For IF's 2x3/16". No. 6 studs. 4 oz.
42 N 285. Type 2517. NET.....41¢

"Slim Sticks." (Not illustrated.) Tough plastic alignment tools, for wide variety of TV uses. Sizes given below are dia. x length. Shpg. wt., 4 oz.
42 N 276. Type 2531. ⅛x12". NET.....41c
42 N 277. Type 2532. ⅛x16". NET.....53¢
42 N 278. Type 2534. 5/32x12". NET.....41¢
42 N 279. Type 2535. 5/32x16". NET.....53¢

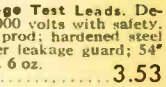
RADIO CITY PRODUCTS HEAVY-DUTY TEST LEADS



Model 930. Retracto Leads. Self-coiling retractable leads. An excellent choice for the service shop or laboratory—never clutters the bench, but always ready for instant use. Fine quality, heavily insulated stranded wire with a built-in, permanent curl. Extends for use, then pulls back out of the way. Extended leads are 7½ ft. long. With insulated phone tips. Shpg. wt., 4 oz.
42 N 245. NET.....2.89

Model 910. High Voltage Test Leads. Designed for use up to 30,000 volts with safety. Features 7" heavy-duty prod; hardened steel prod points; triple-barrier leakage guard; 54" kinkless leads. Shpg. wt., 6 oz.
42 N 246. NET.....3.53

BELDEN TEST PROD WIRE



Rubber-covered wire, specially designed for high-voltage testing applications. "Limp" type; extremely flexible. No. 18 stranded (65x36) tinned conductor. Type 8898 is .230" O.D.; working voltage, 10,000. Type 8899 is .140" O.D.; working voltage, 5000. Shpg. wt. per 100': 8898, 4 lbs.; 8899, 2 lbs. **Lengths under 100' available only in 10- and 25-ft. coils.**

TYPE 8898

47 T 811. Red. 47 T 801. Black.	10-ft. Coil. NET	47c
47 T 812. Red. 47 T 802. Black.	25-ft. Coil. NET	96c
47 T 810. Red. 47 T 800. Black.	100-ft. Coil. NET	3.09
47 W 813. Red. 47 W 803. Black.	Over 100 Ft., PER 100 FT.	3.09

TYPE 8899

48 T 911. Red. 48 T 901. Black.	10-ft. Coil. NET	32c
48 T 912. Red. 48 T 902. Black.	25-ft. Coil. NET	73c
48 T 910. Red. 48 T 900. Black.	100-ft. Coil. NET	2.14
48 W 913. Red. 48 W 903. Black.	Over 100 Ft., PER 100 FT.	2.14

TEST LEAD ACCESSORIES

ICA TEST PRODS

Fig. R. Heavy Duty. Tenite-Insulated handles. Threaded heavy-duty phone tips. 5" long. 3 oz.
42 N 112. 387R. Red.
42 N 113. 387B. Black. NET EACH...36c

Fig. S. Solderless. 5¼x⅜" needle point prods. Solderless chuck. Threaded plastic handle. 3 oz.
42 N 110. Red.
42 N 111. Black. NET EACH.....26c

Fig. S. Lucite. Type 302. Threaded female insert 5" handles. Phone tip plugs. 10 KV. 3 oz.
42 N 114. Red and black.
NET EACH SET.....88c

Fig. T—PHONE TIP PLUGS

Molded, hi-dielectric catalin insulation. Wire will not pull out. Brass phone tip fits all jacks. With nut and bolt. Wt., 4 oz.
41 H 203. Red.
41 H 204. Black. NET EACH.....26c

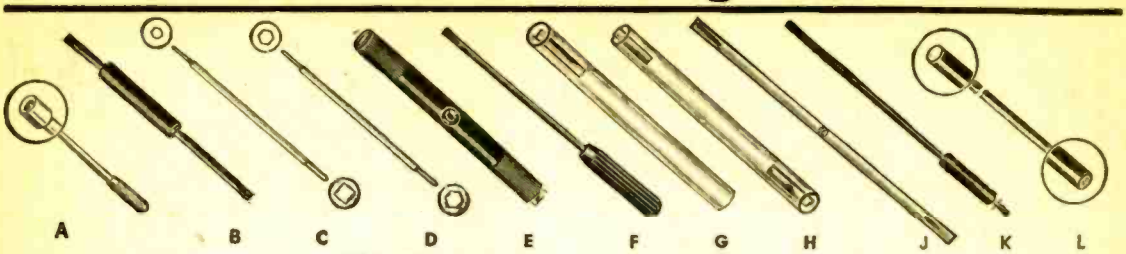
Fig. W—CORD TIPS FOR TEST PROPS

Insulated-sleeve type tip. Fits any standard phone tip jack. Screw-on. 1⅞" long. 2 oz.
41 H 250. Red.
41 H 255. Black. NET EACH.....14c

KLIPZON MINIPRODS

Fig. X. Type B Self-Gripping Tips. Unique self-gripping feature. Clip to any terminal, lug, or wire—and stay there! Needle points for piercing insulation. Solderless connection inside 1¼" plastic handle. Shpg. wt., 2 oz.
42 N 271. Red.
42 N 272. Black. NET EACH.....24c

Type A Prod Set. 48" red and black, rubber-covered leads; Type B tips on one end; self-gripping tips with 4¾" handles on other end. Shpg. wt., 6 oz.
42 N 270. NET.....1.91



ICA PRECISION ALIGNMENT TOOLS

Fig. A. TYPE 6161 SLIM ALIGNER. Alignment tool for making adjustments of slot-end threaded rods. Excellent for cramped probing in television receivers. Has extra-thin metal shaft with recessed blade to prevent slip. Length 6½" overall with fiber handle to reduce shock hazard. Especially suited to making adjustments on linearity, width, and horizontal oscillator controls. Shpg. wt., 4 oz.
42 N 178. NET 65c

Fig. B. TYPE 978 ALIGNER. Insulated tool for IF trans. One end milled, screwdriver at other. 6" long, ⅛" dia. Shpg. wt., 4 oz.
42 N 177. NET 50c

Fig. C. TYPE 6171 HEX-SQUARE ALIGNER. All bone fiber iron-core aligning tool especially designed for Raytheon-Belmont IF and similar type transformers. Has 3/32" hex head at one end, ¼" square head at other end. Insulated shaft is 6" long overall x 3/16" dia. Shpg. wt., 4 oz.
42 N 166. NET 73c

Fig. D. TYPE 6199 HEX-ALIGNER. All bone fiber, iron-core slug alligning tool. Has 3/32" hex one end; ¼" hex other end. 3/16" dia. shaft, 6" long. Shpg. wt., 4 oz.
42 N 167. NET 81c

Fig. E. TYPE 6166 DUAL ALIGNER. For trimmers, IF's, etc. Recessed screw nib on one end; screwdriver on other. 3/16" insulated shaft, 6⅛" long. Wt., 4 oz.
42 N 181. NET 51c

Fig. F. TYPE 6157 TV CHANNEL TUNER. For tuning in deep, hard-to-reach places. Fiber, 7 3/16" long; ⅛" blade. Wt., 4 oz.
42 N 179. NET 54c

Fig. G. TYPE 6192 PLASTIC ALIGNMENT TOOL. Has recessed metal blade on one end; extended blade on the other. Ideal for adjusting IF's, trimmers, etc. Shaft 7" long, 3/16" diameter. Shpg. wt., 3 oz.
42 N 185. NET 59c

Fig. H. TYPE 6193 PLASTIC ALIGNMENT TOOL. Double end recessed alignment tool. Suitable for no. 4, 6, or smaller type screws. 7" long, ¼" dia. Shpg. wt., 3 oz.
42 N 186. NET 59c

Fig. J. TYPE 6158 ALIGNMENT TOOL. A double-bladed, screwdriver type, aligning tool. Made of durable fiber for complete insulation. ⅛" dia. 7" long. Wt., 4 oz.
42 N 188. NET 24c

Fig. K. TYPE 6162 BIG-STRETCH ALIGNER. One end has screwdriver, other for nested iron cores. Bone fiber. Extra long and thin, 9" in length. ⅛" dia. Wt., 3 oz.
42 N 172. NET 72c

Fig. L. †TYPE 6163 TUNING WAND. Flexible vinylite, 7¼" long, 1/32" dia. Brass insert at one end; iron core at other. Wt., 4 oz.
42 N 180. NET 34c

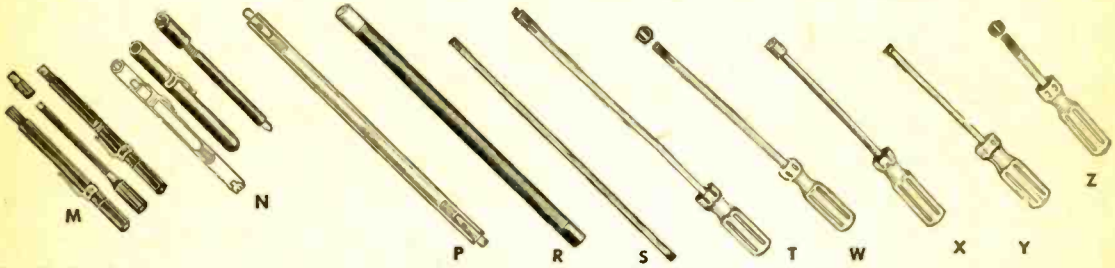


Fig. M. TYPE 1022 5-IN-1 ALIGNMENT TOOL. Consists of: ¼" and 5/16" nut wrenches; miniature blade screwdriver; full-size, heavy-duty, metal screwdriver and key-slot grip wrench. Fully insulated, durable Fenoline; 6¼" long, 7/16" dia. With pencil-type pocket clip. Shpg. wt., 6 oz.
42 N 125. NET 97c

Fig. N. TYPE 1019 4-IN-1 ALIGNMENT TOOL. Combines one each, ¼" and 5/16" nut wrenches, insulated screwdriver, and key-slot grip wrench. Has sturdy, fully insulated, Fenoline handle with pencil-type pocket clip. 5⅞" long, 7/16" dia. Shpg. wt., 5 oz.
42 N 126. NET 59c

FIG. P. TYPE 6247 DUAL-BLADE KLEER ALIGNER. Extended blades each end, .018" and .025" thick. Plastic. 4½" long. 3 oz.
42 N 192. NET 72c

Fig. R. TYPE 6249 PRECISION TUNING WAND. Iron and brass core for varying inductance of coils. 4¼" long. ¼" dia. 4 oz.
42 N 193. NET 88c

Fig. S. TYPE 6194 "SUPER STRETCH" KLEER ALIGNER. Extended blade at one end; brass slotted insert at other end. Shaft is 12⅛" long and 3/16" dia. Shpg. wt., 4 oz.
42 N 169. NET 81c

Fig. T. TYPE 6847 LONG ROD "KLEER ALIGNER." All insulated extra length tool for reaching hard-to-get-at points. Clear plastic rod is 3/16" diameter. Has sure-grip amber plastic handle with positive non-slip hold on rod. Extended blade is 3/32" wide and fits a variety of slot tuned components. 12¾" overall. Shpg. wt., 4 oz.
42 N 195. NET 88c

Fig. W. TYPE 6848 "KLEER TUNER." Low-loss clear plastic rod, 3/16" diameter with insulated amber plastic handle. Recessed blade for No. 6 studs. 8¼" overall. 4 oz.
42 N 196. NET 65c

Fig. X. TYPE 6849 THIN ALIGNER. Has extra-thin recessed blade. Durable slim metal shaft for cramped probing. Sure-grip amber plastic handle. 6⅛" overall. 4 oz.
42 N 197. NET 65c

Fig. Y. TYPE 6850 "ALIGNER TRAN." Tough fiber with amber plastic handle. Excellent for "K-Tran" midgets. 6½". 4 oz.
42 N 198. NET 50c

Fig. Z. TYPE 6846 DEEP-NIB "KLEER ALIGNER." Flexible, low-loss, 7/32" dia. rod with metal nib for No. 6 studs. 4⅛" long. Shpg. wt., 4 oz.
42 N 194. NET 41c

8283

G. C. TOP-QUALITY ALIGNMENT TOOL KITS

Every Alignment Tool Needed for Easier, Faster Servicing

9200

TYPE 8283 MASTER DELUXE TV TOOL KIT. A complete service alignment tool kit for television repair work. Contains 25 high quality alignment tools not over 9" long. Flexible tool-case has heavily stitched edges and fold-over flap to prevent loss of tools. Tools supplied include: TV K-Tran tool, TV Core Aligner, TV Long Reach Aligner, TV Flexible Tuning Wand, TV Short Tool for RF and IF, etc. Leatherette roll-type case. Shpg. wt., 1 lb.
42 N 005. NET 12.26

TYPE 8280 DELUXE TELEVISION ALIGNMENT TOOL KIT. Handy roll-type durable leatherette case with 16 specially engineered TV tools. The steel tips are all extra thin and are made of the best grade of hardened spring steel of accurate dimensions and high durability. Case lays flat when opened for complete accessibility to every tool. Includes TV "Shorty," Duplex Aligner, TV Tuning Wand, TV Core Aligner, TV Oscillator Tool, TV Long Reach Aligner, etc. Shpg. wt., 8 oz.
42 N 006. NET 7.59

TYPE 9200 PANEL KIT. New, wall-mounting panel rack alignment tool kit. Contains 29 different alignment tools for all popular makes of TV sets. Each tool has separate slot identified by type number. Includes: Alignment screwdrivers in various lengths, special short tools, alignment wrenches, channel tuners, core aligners, oscillator adjustment tools, trimmer and IF aligners, solder probe tool, stainless steel brush and scraper, nylon replacement tip, special hex tools, etc. Handsome steel panel rack—2-hole wall mounting. Size: 22x10". In baked, blue enamel. Shpg. wt., 3 lbs.
42 N 032. NET 13.67

9201-X

TYPE 9201-X PANEL KIT. Does not duplicate tools in above panel rack. Contains 23 alignment tools including 3 new beryllium copper, non-magnetic screwdrivers, 15" slug retriever, inspection mirror, focalizer adjustment tools, extra-tough plastic screwdriver, duplex tools, etc. Same size and finish as panel above. Shpg. wt., 4 lbs.
42 N 033. NET 19.55

For Complete Product and Manufacturers Index, See Pages 317-320

Chemicals, Tapes, Grille Cloth

WALSCO RADIO CHEMICALS

Walscolub B. No. 22. A radio lubricant that prevents corrosion. Eliminates noise on switches, contacts, etc. 1¾ oz. tube.
43 N 124. NET.....38¢

Tunerlub. No. 26. Prevents noisy operation of TV tuning units, etc. Cleans and protects contacts from oxidation. 1¾ oz. tube.
43 N 126. NET.....44¢

"Lubriplate." No. 23-A. For phonograph motors, record changers. Superior to ordinary greases. 2 oz. tube.
43 N 125. NET.....38¢

No-Slip. No. 402. Greatly increases the friction of pulley cords and belts. Stops any slippage. 2 oz. bottle.
43 N 167. NET.....47¢

Radio Dial Oil. No. 72. A light-bodied lubricating oil for all electronic and electrical appliances. Free of corrosive acids. Prevents rusting. 2 oz. bottle.
43 N 172. NET.....29¢

Polystyrene Cement. No. 154. For bonding Polystyrene parts, coating coils. Brush-in-cap 4 oz. bottle.
43 N 174. NET.....65¢

Carbon Tetrachloride. No. 211-4. Dissolves dirt and grease instantly. Dries rapidly, is non-explosive and non-inflammable. 4 oz. bottle.
43 N 154. NET.....47¢
43 N 114. No. 211-G. 1-gal. can. NET..4.56

"No-Ox." Fast-acting, chemical contact and control cleaner. Cleans, protects and lubricates with a special corrosion-dissolving chemical action. Contains no harmful solvents.
43 N 127. No. 101. 1 oz. bottle. NET...50¢
43 N 128. No. 102. 2 oz. bottle. NET...94¢

Scratch Removing Polish. Dark. No. 414. For walnut, mahogany, etc. Removes scratches as it polishes. 4 oz. bottle.
43 N 165. NET.....32¢
No. 434. Light Shade for maple, oak, etc. 4 oz.
43 N 175. NET.....32¢

Anti-Corona Lacquer. No. 195. Fast-drying, high-dielectric lacquer. A thin layer (.01") withstands over 15 KV. Prevents corona discharge, arcing in HV power supplies, when applied to sharp corners, wires lugs, etc. 2 oz. bottle.
43 N 145. NET.....71¢

Cap Needle Injector. No. 989. Surgical-grade needle with oil-resistant neoprene bulb—attached to bakelite bottle cap. Permits easy application of Contactene or Dial Oil to band-switches, volume controls, etc., without disassembling. Wt., 2 oz.
43 N 198. NET.....44¢

Radio Cement. Vibration-proof cement. For speaker cones and general radio work. Fast drying. Brush-in-cap.
43 N 155. No. 54. 4 oz. bottle. NET....65¢
43 N 166. No. 58. 8 oz. bottle. NET...1.12
43 N 156. No. 59. 1 pt. bottle. NET...2.15

Super Polish. Removes old polish, grease or dirt from cabinets. Forms a hard, dry and durable high-gloss film.
43 N 164. No. 412. 4 oz. bottle. NET...32¢
43 N 179. No. 418. 8 oz. bottle. NET...47¢

Insulating Varnish. No. 192. Fast-drying; for coils, transformers, solenoids, motors, etc. Non-corrosive, resistant to acid, oil and grease. 2 oz. bottle.
43 N 173. NET.....38¢

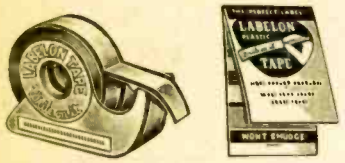
Plastic Cement. No. 42. Repairs broken plastic knobs and cabinets. Also cements metal, glass. Brush-in-cap 2 oz. bottle.
43 N 171. NET.....38¢

Vinylite Cement. No. 25. Vinylite base cement with extreme flexibility when dry. Adheres to metals, plastics, etc. 2 oz. bottle.
43 N 169. NET.....44¢

Rubber Cement. No. 114. For cementing rubber parts to metal or wood. Brush-in-cap, 4 oz. bottle.
43 N 176. NET.....71¢

Cement Solvent and Thinner. For loosening cement on speaker cones, etc. Thins Radio and Plastic Cement.
43 N 157. No. 64. 4 oz. bottle. NET....56¢
43 N 163. No. 68. 8 oz. bottle. NET....73¢
43 N 158. No. 69. 1 pt. bottle. NET...1.06

Contactene. Cleaning fluid for switch or relay contacts, volume controls, etc. Brush-in-cap.
43 N 160. No. 82. 2 oz. bottle. NET....32¢
43 N 161. No. 84. 4 oz. bottle. NET....56¢
43 N 178. No. 88. 8 oz. bottle. NET....73¢



LABELON "WRITE-ON-IT" TAPE

Plastic labeling tape with special carbon writing surface sandwiched between 2 layers of acetate. Writing stays legible; surface is protected by layer of plastic. Resists dirt, water, oil, etc. Sticks firmly to any surface without moistening—peels off cleanly. *Black, †Red, §Blue, ‡Green. Av. wt., per 400-in. roll, 5 oz.

400-INCH DISPENSER ROLLS

Stock No.	Mfr's Type	Width	NET EACH	12-23, EACH	24 or More, EA.
52 N 751	335†	5/16"	1.22	1.10	1.04
52 N 753	415*	½"	1.42	1.28	1.21
52 N 754	425§	½"			
52 N 755	435†	½"			
52 N 756	445‡	½"			
52 N 757	515*	⅜"	1.62	1.46	1.38
52 N 758	525§	⅜"			
52 N 759	535†	⅜"			
52 N 760	545‡	⅜"			
52 N 761	615*	¾"	1.81	1.63	1.54
52 N 762	625§	¾"			
52 N 763	635†	¾"			
52 N 764	645‡	¾"			
52 N 765	815*	1"	2.55	2.29	2.17
52 N 766	825§	1"			
52 N 767	835†	1"			
52 N 768	845‡	1"			
52 N 769	1225§	1½"	3.67	3.31	3.13

TABLETS FOR TYPEWRITER USE

Each has 45, 3-inch strips. Write black; colors given are borders. Av. wt., 5 oz.

No.	Type	Width	Color	NET EA.
52 N 775	62T	¼"	Blue	98c
52 N 776	63T	¼"	Red	
52 N 777	64T	¼"	Green	

"NO NOISE" SOLUTION

New chemical formula. Cleans, lubricates, protects: TV front ends, controls, switches, etc. In 6 oz. aerosol spray can. Wt., 10 oz.
43 N 142. NET.....2.20

"No Noise" solution in 2 oz. bottle with dropper. Wt., 6 oz.
43 N 143. NET.....98c

RAPID "BRUSHPLATER"

For quick, easy electro-plating of small metal items. Plating process is exceedingly simple—just make a few electrical connections and brush surface to be plated with metal compound. Includes cleaner, polish, plating compound, brush and polishing stick. Requires 2 or 3 No. 6, 1½-volt cells (see page 265). Shpg. wt. 1 lb.

Stock No.	Mfr's. Type	Plating Compound	NET EACH
43 N 080	200	Nickel	1.47
43 N 081	202	Cadmium	
43 N 082	204	Copper	
43 N 083	205	Brass	
43 N 084	206	Silver	1.83
43 N 085	207	24 K Gold	3.67

MERIX ANTI-STATIC SOLUTION

Prevents accumulation of static charges on smooth-surfaced substances such as plastics, metals, records, recording discs, etc. Treated surfaces become static-free and no longer attract dust or lint. Removes static-caused crackling noise on all types of records. Single bottle treats approximately 400 records. Non-inflammable. Can be safely used on face of TV tube. 4 oz. plastic bottle. Shpg. wt., 6 oz.
43 N 144. NET.....59c

SPEAKER GRILLE CLOTH

Beautiful new patterns in high quality, durable cloth. Perfect for modernizing old cabinets and for construction of new custom enclosures. Supplied neatly folded in plastic bags.

MAHOGANY

43 N 605. 12x12". Wt., 3 oz. NET.....41¢
43 N 606. 13x24". Wt., 3 oz. NET.....79¢
43 N 607. 36x36". Wt., 6 oz. NET.....3.70

IVORY

43 N 608. 12x12". Wt., 3 oz. NET.....41¢
43 N 609. 13x24". Wt., 3 oz. NET.....79¢
43 N 610. 36x36". Wt., 6 oz. NET.....3.70

43 N 123. Walsco Non-Penetrating Cloth and Fabric Cement. 1¾ oz. tube. NET.....38¢

FLOCK-COATED GRILLE SCREENING

Galvanized wire mesh, flocked on both sides. Soft, brown color. Durable and attractive.
86 N 060. 8x11". Wt., 4 oz. NET.....56¢
86 NX 061. 18x24". Wt., 12 oz. NET...1.88
86 NX 062. 36x36". Wt., 2 lbs. NET...5.82

G-C RADIO & TV CHEMICALS

Television Tube Coat. Fast-drying, conductive coating for re-coating outside of television picture tubes which are scratched or peeling. Excellent for retouching coating where ground clips touch tube. Also used to coat inner part of TV cabinet to prevent high voltage leaks.
43 N 006. No. 49-2. 2 oz. NET.....56c
43 N 007. No. 49-8. 8 oz. NET.....1.56

TV Lens Cleaner. Specially prepared cleaner for TV screens, lenses, filters and safety glass. Thoroughly cleans dirt and lint from surfaces. Eliminates finger marks and spots. Non-inflammable. Just apply and wipe clean.
43 N 048. No. 216-8. 8 oz. bottle. NET 50c
43 N 049. No. 216-16. 16 oz. bottle. NET 82¢

Mag-Netik Recording Head Cleaner. Dissolves the accumulations of sound-distorting oxide on tape and wire recording heads. Thoroughly cleans entire mechanism and prevents loss of sensitivity. Does not leave any film or residue on recording mechanism—contains no harmful acids or solvents. Wt., 6 oz.
43 N 017. No. 53-2. 2 oz. bottle. NET 94c

Spra-Kleen Contact Cleaner. New electrical contact cleaner. Eliminates noise due to dust, dirt and corrosion on electrical contacts. No need to dismantle chassis—cleaner is simply sprayed on contacts or control and mechanism is worked a few times. Effectively cleans and lubricates contacts, controls, relays, switches and other sliding contact devices in one fast operation. Pays for itself in servicing time and money saved. In handy aerosol spray can. Shpg. wt., 10 oz.
43 N 025. No. 8666. 6 oz. can. NET...98c

QUIETROLE CLEANER AND LUBRICANT

Radio-TV general purpose lubricant and cleaner. Eliminates noise from TV front-end tuners and volume-tone controls without removal from chassis. Non-inflammable and non-corrosive liquid; remains effective indefinitely. Also recommended for use on switches, pushbuttons, bearings, dial shafts, contacts, etc. An indispensable tool box item for the radio-TV serviceman. 2 oz. bottle contains over 50 applications. Shpg. wts.: 2 oz. bottle, 6 oz.; 4 oz. bottle, 12 oz. *With eye dropper.
43 N 102. *2-oz. bottle. NET.....1.66
43 N 103. 4-oz. bottle. NET.....2.49

Spray Paints—Service Aids

KRYLON PLASTIC SPRAYS

Hard, waterproof coating of tough Acrylic (Liquid Plexiglas) in Crystal Clear and Bright Aluminum sprays. High dielectric strength of Crystal Clear coating is highly effective in preventing corona and arcing. When sprayed on the bell part of metal picture tubes, minimizes the accumulation of dust. Eliminates arcing when sprayed on high voltage leads and connections. Bright aluminum spray is excellent for use on radio-TV antennas—prevents rusting and pitting and makes antennas salt-spray resistant. In ready to use, hand-size spray can. Shpg. wt., 1¼ lbs.

43 N 133. Clear. NET
43 N 134. Aluminum. EACH.....1.27

Krylon Enamel Sprays. Highly attractive color coatings for interior or exterior use. Excellent adhesion to all surfaces. Dry in 3 minutes. Provide weather-proof and water-proof coating. Protects and beautifies. Shpg. wt., 1¼ lbs.

43 N 137. Touch-up White
43 N 138. Glossy Black
43 N 106. Flat Black
43 N 053. Light Gray
43 N 108. Machine Gray
43 N 109. Bright Gold
43 N 107. Hunter Green
43 N 054. Chrome Yellow
43 N 055. Regal Blue
43 N 056. Cherry Red
NET EACH.....1.11

Krylon Dulling Spray. A quick-dry, soft-finish coating to subdue bothersome highlights or eliminate glare on reflecting surfaces. For TV studios, movie studios and photographers—for black and white as well as color. Easily removed with soft cloth. Harmless to finely finished surfaces. Shpg. wt., 1¼ lbs.
43 N 057. NET.....1.27

Krylon Metal Polish Kit. Contains bottle of liquid metal polish and bottle of liquid plastic coating. For all metals. Easily applied polish eliminates all tarnish and dirt within 30 seconds after application. Liquid plastic is then applied to protect polished metal from further tarnishing. Shpg. wt., 1¼ lbs.
43 N 058. NET.....78c

INSL-X E-33 TOOL DIP

A red, liquid plastic that hardens into a tough, insulating coating when applied to the handles of pliers, wrenches and other tools used in electrical work. Minimizes shock hazard. Dielectric strength, 1500 v. per mil. Simple application; remove cap from container and just dip handle of tool into liquid. Dries in 24 hours. Resists acids, alkalies, etc. Shpg. wt., 6 oz. can, 10 oz.; 32 oz. can, 2¼ lbs.

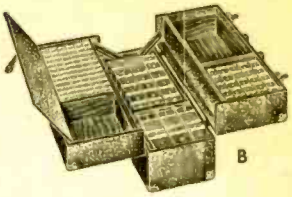
No.	Contents	EA.	24 or More, EA.
42 N 400	6 oz.	79¢	71¢
42 N 401	32 oz.	2.83	2.55

Insl-X E-16 Insulating Spray. Spray-on insulation. In ready-to-use Aerosol spray-can. Insulates parts, wiring, etc. Has same insulating properties as above. Dielectric strength, 800-1200 v. per mil. 12-oz. can. Shpg. wt., 1½ lbs.

No.	Color	Contents	EACH	24 or more, EACH
42 N 402	Clear	12 oz.	1.19	1.07
42 N 403	Aluminum	12 oz.		
42 N 404	Black	12 oz.		

G-C PRINTED CIRCUIT REPAIR KIT

Complete printed circuit repair kit for professional repair jobs on printed circuits. Simplifies replacement of soldered components in circuit. Permits repair of sockets, lugs, copper foil, etc. Consists of silicone resin lacquer (for recoating cleaned areas and connection points), solvent (for removing surplus solder), silver print (for repairing and replacing printed circuit wiring), solder probe tool (for tightening contacts, etc.) and stainless steel brush and scraper (for cleaning and removing excess solder). Complete with instructions. Shpg. wt., 1 lb.
46 N 247. NET.....5.73



ARGOS TELEVISION TUBE CADDIES

Fig. A. Model TC-3 Deluxe Tube Caddy. Deluxe double-door type for quick accessibility of tubes and tools. Carries up to 225 tubes. Two drawers, plus tray for tools, meters, solder gun, etc. Gray tweed leatherette. Size, 18x14½x9¼". Shpg. wt., 16 lbs.
86 NX 058. NET.....14.65

Fig. B. Model TC-4 Carry-All Caddy. A highly versatile tube caddy. Carries up to 262 tubes, also space for soldering gun, small tools, meter, etc. Opens outward from center. In attractive gray tweed leatherette. Size, 8x15x21". Shpg. wt., 13 lbs.
86 NX 129. NET.....13.67

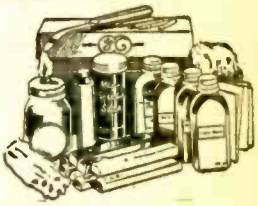
Fig. B. Model TC-2A Tube Caddy, Jr. Smaller version of Model TC-4. Very compact and sturdy. Carries up to 143 tubes with additional room for meter, soldering gun, tools, etc. Conveniently opens outward from center. Has attractive gray tweed fabric covering. Size, 15¼x12½x8". Shpg. wt., 13 lbs.
86 NX 155. NET.....8.97

SAFETY BELTS

TV Safety Belt. Provides maximum safety when installing TV antennas. Has adjustable harness which goes around chimney or tower. Sturdy support is provided by extra-large, form fitting body belt. Belt has loops for tools and includes dispenser for electrical tape. Leather wear-pad on harness prevents wear when strapped to rough chimneys. Shpg. wt., 8 lbs.
86 NX 788. NET.....16.54

Ladder Safety Belt. As above, but has harness that straps around rung of ladder; less tool loops and dispenser. Gives full support to body when working from ladder. An excellent safety precaution when doing any type of installation work. Shpg. wt., 7 lbs.
86 NX 789. NET.....12.72

G-C 901 CABINET REPAIR KIT



You can do a fine refinishing job with this practical kit. Repair dents, scratches or nicks on wood, plastic cabinets, knobs, etc. Consists of an assortment of 10 shades of shellac sticks, bottles of light and dark oil stain, metal shading lacquer, polish, Magic Scratch Remover, alcohol lamp, spatula, touch-up brushes, steel wool, sandpaper and wiping cloth. Shpg. wt., 3 lbs.
43 N 115. List $7.50. NET..4.41

G-C SCRATCH STICK

For removing scratches on walnut, mahogany or oak cabinets, in all shades or colors. Simply run scratch stick over the scratch and it will vanish almost instantly. Shpg. wt., 5 oz.
43 N 113. NET....29c

G-C SILVER PAINT

Pure silver compound. Used to repair printed circuits and to touch up around eyelets, rivets, other parts. Shpg. wt., 4 oz.
43 N 159. NET.....4.56

GENERAL CEMENT PRODUCTS

"SPRA-KOAT" PAINTS AND VARNISH SPRAYS

Wrinkle Finish. Air-drying wrinkle varnish. Provides finish comparable to professional oven baked jobs. Perfect for chassis, panels and racks. Makes composition board and bakelite panels appear as wrinkle finish steel panels. Easy to use—spray on and allow to air-dry. Available in black and gray. Contents, 12 oz. Shpg. wt., 1 lb. In convenient, ready to use, hand-size spray can.

43 N 028. Black. NET
43 N 029. Gray. EACH.....2.04

Hammer Finish. For fine-quality, air-drying professional hammer finish. Beautifies panels, racks, chassis and instrument cases. Prevents rust by protecting metal from moisture. Perfect for re-finishing scratched and scarred metal surfaces. Simply spray and allow to dry for a few minutes. Air dries to attractive hammer finish. Available in silver, brown and blue. Contents, 12 oz. Shpg. wt., 1 lb.

43 N 036. Blue.
43 N 035. Brown. NET
43 N 037. Silver EACH.....2.04

Telephone Black and Gray. A high-grade, satin-finish enamel that covers well and dries fast. Telephone black has ebony satin finish similar to telephone handsets, switchboards and panels. Makes perfect finish for power control and meter panels. Telephone gray gives professional appearance to test equipment and Amateur gear. Dries quickly after spraying. Provide excellent moisture resistance. Can be used on wood or metal. Contents: 12 oz. In ready to use, hand-size spray can. Shpg. wt., 1 lb.

43 N 033. Telephone Black. NET
43 N 034. Telephone Gray. EACH...2.04

Touch-Up Varnish. A fast drying durable varnish-stain. Time saving—eliminates separate stain and varnish steps. Finest quality stain and varnish ingredients are combined to assure excellent results. Completely covers nicks and scratches with a beautiful new finish. Perfect for a complete stain-varnish job on unfinished wood cabinets and cases. No practice needed—no bothersome brush streaks. Contains 12 oz. Shpg. wt., 1 lb.

43 N 038. Walnut. NET
43 N 039. Mahogany. EACH.....2.04

RETMA COLOR-CODING KIT

Complete kit of all standard RETMA colors: Black, brown, red, orange, yellow, green, blue, purple, gray and white. Shpg. wt., 1½ lbs.
43 N 112. NET.....1.26

LUMINOUS LITE-KOAT KIT

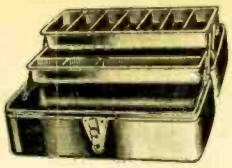
GC's long-life, non-poisonous luminous coating that emits light in the dark. Coating absorbs light in daytime and glows in dark. Shpg. wt., 2¼ lbs.
43 N 111. NET.....1.91

DIAL LITE COLORING KIT

Long-lasting bright colors for coloring bulbs. Instant drying. Colors: Red, green, blue, amber and solvent. Bulbs may be colored by dipping in solution. Shpg. wt., ¼ lb.
43 N 110. NET.....59c

Tool Chests—Parts Containers

1510



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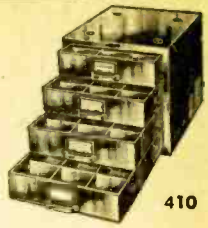


410

NEW HAMILTON UTILITY BOXES

MODEL 1510

The perfect tool box for the radio serviceman, kit builder, and experimenter. Sturdy in construction, handsome in design, this fine tool box will accommodate a soldering iron, screwdriver, pliers, wrenches, test leads, etc. Also excellent for gardening, fishing tackle, or general purpose use. Cantilever tray has three compartments: 1—2⅜", 1—1⅞", 1—9⅞". Its many features include drawn-metal case, rounded corners, push-button lock with eye for padlock insertion, and a folding fingertip handle. Opens easily; locks securely. Handsomely finished in high-gloss gray baked enamel. Overall size, 14½" long, 6¼" wide, 4½" deep. Shpg. wt., 3 lbs.
86 N 156. NET 1.50

ALL-PURPOSE MODEL 1500

Low-cost all-purpose metal utility box. Finger grip handle, push-button latch with ring-clasp to accommodate small lock. Rounded corners; baked on red enamel finish. Size, 14½x6¼x4½". Shpg. wt., 2½ lbs.
86 N 004. NET 98c

UNION STEEL CORP. UTILITY CHESTS

WATERTIGHT TOOL BOXES

Type 5414. Sturdily constructed, watertight utility chest. Has two cantilever-mounted trays. Large tray capacity makes it ideal for storing large and small tools, screws, nails, condensers, resistors, and other small parts. The upper cantilever tray contains seven equal compartments; the lower tray contains one full-length compartment, one ⅔ length compartment, and two small compartments. Has new flat riveted tray supports. Heavily nickel-plated drawbolt with padlock eye. Full-drawn, seamless, rounded corners. Full-grip steel handle. Finished in green hard-baked enamel; green enamel interior. Size, 7¼" wide, 7" high, and 14½" long. Wt., 5 lbs.
86 N 045. NET 3.18

SINGLE TRAY WATERTIGHT BOX

Type 5314. As above, but with one cantilever tray. Tray has 1 full length, 1 two-thirds, and 2 small compartments. Overall size, 7¼" wide, 6" high, and 14½" long. Wt., 4½ lbs.
86 N 046. NET 2.20

"SUPER STEEL" TOOL CHESTS

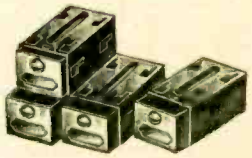
Sturdy steel chests with removable tray. Has built-in padlock eye in addition to regular key lock. Continuous hinge welded to cover and case. Heavy-duty steel handle. Blue, hard-baked enamel interior. Exterior has silver gray hammertone finish.
Type 6116DB. 16x7x7". Wt., 6½ lbs.
86 NX 018. NET 4.40
Type 6119. 19x7x7". Wt., 7 lbs.
86 NX 017. NET 4.70

4-DRAWER STEEL CHEST

Type 410. Steel chest for storing resistors, condensers and other small parts. 4 sliding drawers; size, 2x9x11½". Each drawer has removable dividers which make from 2 to 12 compartments. Drawers have label holders for identifying contents. Indentations in top of cabinet hold feet of cabinet above for convenience in stacking units one above another. Durable silver-gray hammertone finish. Overall size, 10x10x11½". Wt., 10½ lbs.
86 NX 019. NET 4.74

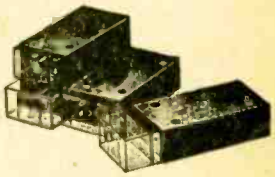
DUPLEX TOOL BOX

Rugged fold-out tool box at a surprisingly low price. Duplex construction—has large bottom compartment for wrenches, screwdrivers, pliers, hammers, etc., and two trays with smaller compartments for resistors, capacitors, fuses, etc. The ideal tool box for home and serviceshop. Smaller trays fold out of way to provide easy access to bottom compartment. Durable steel construction throughout. Carrying handle extends length of toolbox. Size, 6x14x8" deep. Highly attractive green finish. Shpg. wt., 6 lbs.
86 NX 780. NET 3.72



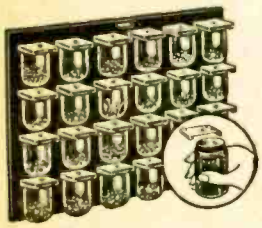
DIXIE INTERLOCKING DRAWERS

Small steel drawers for storage of all types of radio-TV hardware and small parts. May be used separately or ganged together. Each unit interlocks with others at top, sides and bottom. Size, 2⅞x2¼x25". Label holders make it easy to identify contents. Shpg. wt., each 10 oz., per dozen, 8 lbs.
86 N 023. NET EACH 42c
10 or more, EACH 38c
Dividers for above. In packages of 3. Shpg. wt., per pkg. of 3, 4 oz.
86 N 179. Pkg. of 3 ..... 10c



PLASTIC PARTS DRAWERS

For small parts storage and identification. Consists of transparent drawers in steel shells. Each drawer shell has prongs and slots for secure interlock with other units. May be stacked; may be subdivided with plastic dividers. Shells are finished in gray. With one plastic divider and one name card. Size, 6x3⅛ x1⅞" deep. Shpg. wt., ea. 12 oz., per doz., 5¾ lbs.
86 N 024. NET EACH 54c
Standard pkg. of 12 ..... 5.83
Extra Dividers. Shpg. wt., 12 oz.
86 N 193. Pkg. of 7 ..... 22c



VIS-A-PART BOARDS

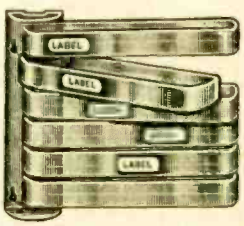
Convenient wallboard for storage of small parts. Keeps parts in sight and within easy reach. Consists of attractive masonite board with up to 24 glass storage jars. Jars are slid into and out of holder clips with one simple motion. Board pre-punched for hanging on any wall. Perfect for use in the radio-TV service shop.

12-Jar Type. Size, 18x8¾". Shpg. wt., 4½ lbs.
86 NX 246. List, $3.00. **NET** 1.99

24-Jar Type. Size, 18x18". Shpg. wt., 9 lbs.
86 NX 245. List, $5.95. **NET** 3.93

Replacement Jars. For above. Wt., 2 oz.
46 N 207. NET EACH 8c

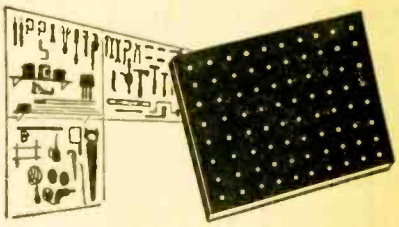
Holder Clips. Same type of holder clips used in boards listed above. For use on walls, boards, etc. 2-screw mounting. Wt., 2 oz.
46 N 208. Pkg. of 6, Per Pkg. 98c



"SWING-BINS" CABINETS

Clear plastic swing-out bins. Ideal for storage of a wide variety of small parts and hardware. Occupy a minimum of space. Bins swing out on bracket for easy access—can be removed from bracket for cleaning. When not in use, bins lie flat against surface to which they are mounted. Installation in a matter of minutes. 2-screw mounting—screws hold bracket securely to underside of shelves or wall surfaces. Can be fastened to walls, work benches, inside of or underneath cabinets. Ideal for home and serviceshop. Each bin is 2½" wide, 1⅛" high and 9½" long. *Two rows of 18.

Stock No.	Model	Bins	Mtg. Space	Lbs.	NET
86 N 760	SC-6	6	8¼x10⅝x3"	2	3.98
86 NX 761	SC-12	12	16x10⅝x3"	4	7.50
86 NX 762	SC-18	18	23⅝x10⅝x3"	6	10.98
86 NX 763	SC-24	24	31x10⅝x3"	8	14.50
86 NX 764	SC-36	*36	23⅝x10⅝x6"	10	21.98



ABACUS PIN-UP BOARD

Model 102. Four separate squares of perforated hardboard, each 19x24". Provide almost 13 square feet of storage space. A convenient and attractive way to store tools and a great variety of other small accessories. An unusually handy tool accessory for radio-TV service shops, home workshops, etc. Easily mounted in any position on any flat wall surface, doors, etc. Pin-up rack includes 62 specially designed fixtures for hanging saws, hammers, planes, etc. Fixtures have exclusive self-locking feature and have handsome, black wrought iron finish. Includes four, 4-oz. nail and screw jars, two shelf brackets, screwdriver holder. Hardboard is of ⅛" thickness—forms an unusually tough and durable surface. Dual suspension brackets. Board can be painted to suit interior motif. Complete with hooks, mtg. screws, spacers and installation instructions. Shpg. wt., 15 lbs.
86 NX 178. List, $7.98. **NET** 5.87

EQUIPTO STORAGE CABINETS

No. 8. 8-Drawer Cabinet. General-purpose storage cabinet. Excellent for storing small parts, hardware, tools, supplies, merchandise, etc., in workshops, stores, offices, or anywhere that an attractive, durable storage rack is required. Parts with loose wire ends are kept completely safe from accidental damage. Especially suited for radio-TV servicemen. Heavy-duty, welded steel frame holds 8 drawers on 2 levels. Each drawer has 2 cross dividers, adjustable on 1" centers, making a total of 24 compartments. Drawers are made of heavy steel, with full-size handles and slot holders for label cards. Durable baked olive-green enamel finish. Drawer size, 3⅛" high, 5⅜" wide and 11" long. Cabinet size, 10" high, 25½" wide and 12" deep. May be placed on shelf or stacked. Shpg. wt., 32 lbs.
86 NZ 012. NET 14.95

Type 8505 Drawer. Same type drawer as in cabinet above. Popular for use as parts trays on open shelving. With handle. Less dividers (below). Shpg. wt., 2½ lbs.
86 N 869. NET 85c

Type 8720 Cross Dividers. For type 8505 drawer above. Fit grooves die-pressed into drawer sides. Slant top for easy labelling. Shpg. wt., 6 oz. 5 per package.
86 N 872. PER PKG 44c

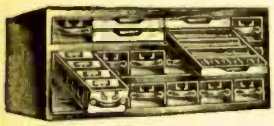
No. 11. 18-Drawer Cabinet. For storing small parts. Each drawer is equipped with two adjustable cross dividers. Drawers have large convenient handles. Instant-visibility label holders on drawers and dividers. Heavy-duty all-steel frame. Olive-green finish. Drawer size, 11x5⅝x3⅛". Overall size, 34" wide, 13¾" high, and 12" deep. Units fit on 12" shelf and may be stacked for greater storage space. Shpg. wt., 62 lbs.
86 NZ 011. NET 24.95

No. 22. 18-Drawer Cabinet. As above, except 18" deep, and with 17x5⅝x3⅛" drawers. Shpg. wt., 95 lbs.
86 NZ 099. NET 35.95

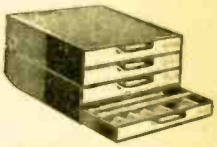
Type 8711 Lengthwise Divider. For No. 8505 drawer, used in No. 8 and No. 11 cabinets. Length, 11". Wt. 9 oz. 5 per pkg.
86 N 871. PER PKG 49c

Type 8720 Cross Divider. For drawers of No. 22 cabinet listed above. Shpg. wt., 6 oz. 5 per pkg.
86 N 872. PER PKG 44c

EQUIPTO COMBINATION AND "LITTLE GEM" CABINETS



No. 12. Combination Cabinet. For small and medium-sized parts. Cabinet combines the features of Equipto Standard Drawer Units with the safety and convenience for tiny parts storage of "Little Gem" Drawers at right. Label holders on each drawer for quick identification of parts. Includes 14 standard drawers with 3 compartments each and 4 "Little Gem" drawers with 12 compartments each (Illustrated). Size: 34x13¼x 11½". Olive-green finish. Shpg. wt., 68 lbs.
86 NZ 096. NET 36.33



"Little Gem" Cabinets. For small parts. May be used individually or stacked. Units lock firmly together when stacked. Large, built-in handle. Drawer stop prevents accidental spilling. Dividers instantly adjustable on 1½" centers. Dividers fit tight to embossed bottom—no creeping of parts under dividers. 12 compartments per drawer—up to 28 with extra dividers. No seams, sharp edges, slots or holes to catch or damage parts. 1⅜x11" label holder on front of drawer. ⅝x11" label holder in overhang at top of each compartment. Olive green baked enamel finish. Size of each drawer: 11" long, 11" wide, and 1½" high.

No. 1. 2-Drawer Cabinet. With dividers providing for 24 compartments. Size: 3¼x11x11". Shpg. wt., 7 lbs.
86 NX 065. NET 6.95

No. 2. 4-Drawer Cabinet. With dividers for 48 compartments. Size: 6½x11x11". Shpg. wt., 15 lbs.
86 NX 066. NET 13.90

No. 3. 6-Drawer Cabinet. 72 compartments. Safe storage for thousands of parts. Size: 9¾x11x11". Shpg. wt., 23 lbs.
86 NZ 067. NET 20.85

No. 8730. Extra Drawer Dividers. Can be added to each drawer to provide up to 28 compartments per drawer. Easily adjustable. Size: 1½x2¼x1½". Shpg. wt., ¼ lb. each. 5 per pkg.
86 N 068. PER PKG 39c

ADJUSTABLE STEEL SHELVING

Each unit is complete within itself, yet all units fit together perfectly in any type of assembly. Shelving fastens to upright with simple solid steel stud. Adjustable 1½" centers. "Iron-Grip" keys included to securely fasten any two units together side-by-side. Olive-green baked enamel. 400 lb. load capacity. With 6 shelves, sway braces, all hardware. 36 inch total width, 7' 1½" overall height.

No.	Type	Depth	Wt., Lbs.	NET
86 NZ 865	60-6	12"	90	23.10
86 NZ 866	62-6	18"	120	26.60
86 NZ 867	64-6	24"	140	30.40
86 NZ 868	66-6	36"	168	44.60

EQUIPTO STEEL STANDS AND TRUCKS

CHASSIS AND TEST UNIT STANDS

Convenient stands for radio and television chassis, industrial electronic equipment, and test instruments. Excellent for use in service shops, labs and factories. Available with or without wheels. Models with wheels are ideal for moving chassis to service bench. Also excellent for bringing test instruments to industrial equipment. Unusually rugged construction; withstand constant use and maximum weight loads. Can be used in narrow aisles. Heavy steel with olive-green enamel finish. Solid rubber wheels, 2½" diameter. Size, 18" wide, 24" in. length. Height: With wheels, 34"; without wheels, 31".

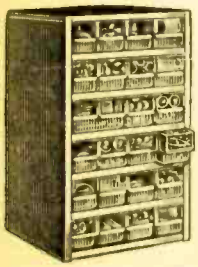
No.	Type	Description	Wt., Lbs.	NET
86 NZ 087	710	With wheels	35	13.77
86 NZ 089	709	Less wheels	33	12.12
86 NZ 088	711	With wheels, wood top	40	15.27

STURDY STEEL TRUCKS

Stock handling carts for a wide variety of jobs. Heavy steel construction with round beaded edges for strength and rigidity. Easy rolling, 5" diameter solid rubber-tired wheels. Wheels are stationary in front, swivel in rear. Designed for use in narrow aisles between rows of shelving or any general trucking use. Durable olive green baked enamel finish. Top tray may be inverted to make flat surface. Trays are 4" deep. Will safely handle loads up to 600 lbs. Paper-carrying shelf (86 N 093) listed in table fastens to push bar.

No.	Type	Description	Wt., Lbs.	NET
86 NZ 090	150	36" high, 24" wide, 36" long	68	35.95
86 NZ 092	145	36" high, 16" wide, 30" long	49	28.25
86 N 093	146	Paper-carrying shelf; 8½x11"	5	2.50

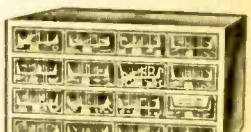
"HAZ-BIN" SMALL PARTS STORAGE CABINETS



SR. CABINET TYPES. Handiest cabinets made for storing small parts. Drawers are molded plastic—crystal clear, 10¾x2¼x2⅛". Each drawer divides into 2, 3, or 4 compartments cross-wise. Rugged cabinet is of welded steel with baked-on gray enamel finish. Will stand on bench, stack together, or hang on wall. Saves space. Contents are always visible in orderly, dust-proof, indexed fashion. Useful in every shop, lab, office, store, etc. Provide perfect storage for small parts, nuts, bolts, drill bits, paper clips, rubber bands, photographic supplies and film, etc. Drawers cannot pull out accidently and spill contents. Each drawer has a stop on back. Will hold drawer on edge of cabinet, yet, can be easily removed by upward tilt. With rubber feet, set of index tabs, and drawer dividers (3 per drawer). Sizes: Model RS-24, 22½x 13⅜x11⅛"; Model RS-16, 14½x13⅜x11⅛"; Model RS-12, 11x13⅜x11⅛".

86 NZ 145. Model RS-24. 24 drawers. Wt., 23 lbs. NET 32.00
86 NX 146. Model RS-16. 16 drawers. Wt., 16 lbs. NET 21.00
86 NX 147. Model RS-12. 12 drawers. Wt., 12½ lbs. NET 16.00

JR. CABINET TYPES. Space-conserving cabinets designed to hold the right quantities of parts and supplies for the average user. Clear plastic drawers. 1⅞x2¼x5⅞" are separated into 3 sections by removable dividers. Index cards are supplied to fit slots on fronts of drawers. Cylindrical stub handles provide sure grip without blocking view of cards. Backstop prevents accidental pull-out. Additional cabinets can be attached to back, side or top. Can be wall-mounted or placed on any level surface. Rubber feet prevent marring or scratching. Durable, welded all-steel cabinets; baked-on, hammertone silver-gray finish.



Stock No.	Mfr's Type	No. of Drawers	H.W.D.	Shpg. wt., Lbs.	NET EACH
86 NX 047	J-16	16	8⅛x12½x6"	8	6.95
86 NX 143	J-20	20	10⅛x12½x6"	9	7.95
86 NX 144	J-24	24	12x12½x6"	10	9.95
86 NX 048	J-32	32	15¼x12½x6"	13	12.95
86 NZ 039	J-64	64	15¼x25⅛x6"	25	24.95

Radio-TV Hardware

Hardware for all purposes, in popular sizes and quantities. Each 29c quantity comes in a handy transparent plastic container with sliding lid.

Needed items are easy to find—protected against loss—kept free of dust. All nickel-plated except Fig. D (brass finish). Size, 2½ x 2½ x 1½".

Fig. A. Round Head Screws. General-purpose type in most sizes required for repair and construction jobs in radio, television and electronics. Plated steel. Shpg. wts.: 3 oz.; 14 oz.; and 5 lbs.

Size	29¢ container		Gross Pkg.		1000 Lot Pkg.	
	No.	Quan.	No.	NET	No.	NET
4-36x ¼"	44 N 502	40	44 N 741	.53	44 N 742	2.66
4-36x ½"	44 N 503	35	44 N 744	.57	44 N 745	2.84
4-36x ¾"	44 N 504	35	44 N 747	.64	44 N 748	3.09
6-32x ¼"	44 N 505	40	44 N 703	.57	44 N 704	2.87
6-32x ½"	44 N 506	30	44 N 711	.64	44 N 712	3.33
6-32x ¾"	44 N 507	30	44 N 716	.74	44 N 717	3.90
6-32x1"	44 N 508	30	44 N 721	.84	44 N 722	4.38
6-32x1¼"	44 N 509	30	44 N 726	1.06	44 N 727	4.99
8-32x ¼"	44 N 518	30	44 N 738	.72	44 N 739	3.67
8-32x ⅜"	44 N 519	25	44 N 753	.76	44 N 754	4.02
8-32x ½"	44 N 529	25	44 N 756	.82	44 N 757	4.27
8-32x ¾"	44 N 535	25	44 N 761	.95	44 N 762	4.94
8-32x1"	44 N 546	20	44 N 768	1.09	44 N 769	5.57
10-32x ½"	44 N 548	20	44 N 777	.95	44 N 778	4.98
10-32x ¾"	44 N 549	20	44 N 780	1.14	44 N 781	5.89
10-32x1"	44 N 553	17	44 N 783	1.29	44 N 784	6.66

Fig. B. Phillips Head Machine Screws. Plated steel. Shpg. wts.: 5 oz.; 1¼ lbs.; 6½ lbs.

6-32x ¼"	44 N 555	40	44 N 851	1.24	44 N 853	6.42
6-32x ½"	44 N 556	40	44 N 856	1.27	44 N 857	6.66
6-32x ¾"	44 N 557	40	44 N 861	1.27	44 N 862	6.66
8-32x 5/16"	44 N 558	40	44 N 871	1.27	44 N 872	6.66
8-32x ½"	44 N 559	40	44 N 876	1.37	44 N 877	7.11
8-32x1"	44 N 563	25	44 N 881	1.73	44 N 882	8.96

Fig. C. Self-Tapping Screws. Flat-slotted type. Ideal for panel and rack mounting. No tapping of metal required. Plated steel. Hex head—with deep screwdriver slot. Shpg. wts.: 4 oz.; 12 oz.; and 4½ lbs.

Size	29¢ container		Gross Pkg.		1000 Lot Pkg.	
	No.	Quan.	No.	NET	No.	NET
4x½"	44 N 564	35	44 N 803	.87	44 N 804	5.40
6x¼"	44 N 565	30	44 N 808	.87	44 N 809	4.47
6x½"	44 N 566	25	44 N 813	1.19	44 N 814	7.08
8x½"	44 N 567	20	44 N 823	1.19	44 N 824	7.08
8x1"	44 N 568	15	44 N 828	1.80	44 N 829	9.22
10x½"	44 N 569	15	44 N 833	1.70	44 N 834	8.66

Fig. D. Ornamental Head Screws. For panels, etc. 4 oz.; 13 oz.; 6 lbs.

6-32x ¾"	44 N 573	25	44 N 671	.79	44 N 672	4.05
6-32x1"	44 N 574	20	44 N 674	.90	44 N 675	4.62
8-32x1¼"	44 N 575	12	44 N 677	1.36	44 N 678	6.97

Fig. E. Binding Head Machine Screws. Plated. 4 oz.; 7 oz.; 2½ lbs.

6-32x¼"	44 N 576	35	44 N 690	.69	44 N 694	3.49
6-32x½"	44 N 577	35	44 N 691	.69	44 N 696	3.49
6-32x½"	.....	.....	44 N 684	.69	44 N 622	2.44
8-32x5/16"	44 N 578	25	44 N 692	.84	44 N 698	4.28
8-32x½"	.....	.....	44 N 686	.81	44 N 624	2.82
8-32x½"	.....	.....	44 N 687	.87	44 N 625	3.99

Fig. F. Hex Nuts. Plated steel. Wts.: 4 oz.; 8 oz.; 3 lbs.

4-36x¼"	44 N 584	30	44 N 906	.74	44 N 907	3.82
6-32x5/16"	44 N 579	30	44 N 910	.82	44 N 911	4.17
8-32x5/16"	.....	.....	44 N 915	.84	44 N 916	4.28
10-32x⅛"	44 N 585	30	44 N 918	.84	44 N 919	4.19
6-32x¼"	44 N 586	30	44 N 937	.76	44 N 953	3.93
8-32x¼"	44 N 587	30	44 N 938	.76	44 N 954	3.93

Fig. G. Split Lockwashers. Tempered steel. Wts.: 2 oz.; 4 oz.; 2 lbs.

Size	29¢ container		Gross Pkg.		1000 Lot Pkg.	
	No.	Quan.	No.	NET	No.	NET
# 6 screw	44 N 588	65	44 N 662	.56	44 N 663	2.59
# 8 screw	44 N 589	55	44 N 665	.56	44 N 666	2.59
#10 screw	44 N 593	50	44 N 668	.56	44 N 669	2.59

Fig. H. Internal Star Lockwashers. Shpg. wts.: 2 oz.; 4 oz.; 1¼ lbs.

# 6 screw	44 N 597	60	44 N 923	.45	44 N 924	2.65
# 8 screw	44 N 598	60	44 N 928	.50	44 N 929	2.59
#10 screw	44 N 599	60	44 N 933	.53	44 N 934	2.75

Solder Lugs. Sturdy, tinned units. Accommodate screw numbers given below; No. 8 holes also take No. 6 screws. Wts.: 2 oz.; 4 oz.; 1 lb.

# 8. Fig. J.	44 N 603	30	44 N 636	1.26	44 N 637	5.73
# 8. Fig. K.	44 N 604	30	44 N 639	1.26	44 N 640	5.73
#10. Fig. L.	44 N 605	30	44 N 642	1.41	44 N 643	6.53
# 8. Fig. M.	44 N 607	30	44 N 645	1.32	44 N 646	6.08
# 8. Fig. N.	44 N 608	30	44 N 648	.97	44 N 649	4.62

Fig. P. Rubber Grommets. Soft, black stock. Size shown below is chassis mounting hole required. Shpg. wts.: 2 oz.; 8 oz.; 4 lbs.

¼"	44 N 618	16	44 N 436	1.62	44 N 437	7.43
5/16"	44 N 619	14	44 N 439	1.62	44 N 440	7.43
⅜"	44 N 620	12	44 N 442	1.85	44 N 443	8.44
½"	44 N 627	10	44 N 445	2.05	44 N 446	9.80
⅝"	44 N 628	8	44 N 448	3.76	44 N 449	16.14

Fig. R. Cup Washers. For oval head screws (Fig. T). 3 oz.; 5 oz.; 2½ lbs.

# 6 screw	44 N 653	45	44 N 537	.44	44 N 538	2.03
# 8 screw	44 N 654	45	44 N 540	.49	44 N 541	2.25
#10 screw	44 N 655	35	44 N 543	.53	44 N 544	2.47

Fig. S. Rubber Tack Bumpers. Tacks molded-in. 2 oz.; 8 oz.; 4 lbs.

⅜" O.D.	44 N 774	10	44 N 163	2.33	44 N 164	14.02

Fig. T. Oval Head Screws. 10/32x¼" screws fit all standard relay racks. Nickel-plated. 3 oz.; 8 oz.; 2¾ lbs.

Size	29¢ container		Gross Pkg.		1000 Lot Pkg.	
	No.	Quan.	No.	NET	No.	NET
6-32x¾"	44 N 656	30	44 N 521	.81	44 N 522	4.05
8-32x½"	44 N 657	25	44 N 524	.96	44 N 525	4.84
10-32x¾"	44 N 658	20	44 N 527	1.11	44 N 528	5.53

Fig. W. Right-Angle Brackets. *Cadmium plated brass. †Cadmium plated steel. ‡Brass, one hole tapped 6-32. Dimensions are mtg. ctrs. from corner and bracket width. For No. 6 screws. 3 oz., 9 oz., 4¼ lbs.

7/32-¼x¼"*	.....	.....	44 N 042	1.23	44 N 045	7.76
¼-5/8x5/16"†	.....	.....	44 N 043	1.05	44 N 046	6.44
5/32-3/16x5/16"‡	.....	.....	44 N 044	1.59	44 N 047	11.66

Fig. X. Snap Hole Plugs. Fill hole size listed. 3 oz.; 1¼ lbs.; 10 lbs.

¼"	44 N 659	8	44 N 286	3.17	.....	.....
⅜"	44 N 679	8	44 N 289	2.86	.....	.....
½"	44 N 689	6	44 N 292	3.31	44 N 293	16.87
¾"	44 N 699	5	44 N 295	4.84	44 N 296	24.74
1"	44 N 707	5	44 N 298	6.40	44 N 299	43.17

Fig. Y. Screen-Vent Snap Hole Plug. 3 oz.; 1¼ lbs.; 10 lbs.

1"	.....	.....	44 N 394	22.49	44 N 395	135.24

Fig. Z. Cable Clamps. Fit cable sizes below. Wts.: 3 oz.; 12 oz.; 5 lbs.

⅛-3/16"	44 N 708	25	44 N 333	1.03	44 N 334	5.29
3/16-¼"	44 N 713	20	44 N 336	1.19	44 N 337	6.08
¼-5/16"	44 N 732	15	44 N 339	1.27	44 N 342	6.53
5/16-½"	44 N 733	15	44 N 344	1.35	44 N 345	6.87

Fig. AA. Rubber Feet. Take screws, nails, etc. Wts.: 3 oz.; 9 oz.; 4¼ lbs.

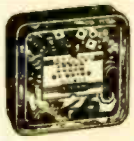
⅜" O.D.	44 N 763	8	44 N 154	1.01	44 N 155	5.17
⅝" O.D.	44 N 764	6	44 N 157	2.25	44 N 158	11.47

HANDY HARDWARE ASSORTMENTS

DELUXE KIT

Consists of a handsome, transparent plastic case with 12 compartments of assorted machine screws, nuts, spade bolts, self-tapping screws, rubber grommets, knob set screws, rivets and eyelets, lugs, washers, and many other small parts. Ideal for servicemen. Shpg. wt., 1¼ lbs.
44 N 300. NET 3.09

BARGAIN KIT



Save on this amazingly low-priced assortment of rivets, rubber grommets, nuts, screws, lock washers, right-angle brackets, soldering lugs, spade bolts, self-tapping screws, eyelets, and other radio hardware. Includes nickel and cadmium-plated and solid aluminum pieces. In transparent plastic container. Shpg. wt., 1¼ lbs.
44 N 315. NET 97c

FIBER WASHERS

Consists of 100 plain and shouldered washers, etc. Have holes for No. 6 to No. 10 screws, ¼" to ⅜" shafts. A handy assortment for the radio-TV serviceman. Shpg. wt., 3 oz.
44 N 320. NET 59c

ICA BRACKET ASSORTMENT

Type 5800. An assortment of plated metal offset and right angle brackets. Contains most popular sizes for radio and TV work. A valuable addition to your hardware stock. Consists of 28 pieces. All nickel plated finish. Shpg. wt., 1 lb.
44 N 325. NET 59c


BB


CC

STORAGE CONTAINERS

Fig. BB. Glass Jar. An ideal storage container for miscellaneous small parts. Complete with metal screw cap for keeping items free from dust and moisture. Size, 2½" high; 2" in diameter. Shpg. wt., 7 oz.
44 N 500. 12 or more, EA. 5c. EACH .. 6c

Fig. CC. Plastic Container. Transparent plastic container with sliding lid. Useful for storing resistors, capacitors, nuts, screws, washers, etc. Size, 2½x1½x2½". Shpg. wt., 3 oz.
44 N 501. PKG. of 12, 1.84 .. EACH .. 17c

Walsco "50 Line" Hardware

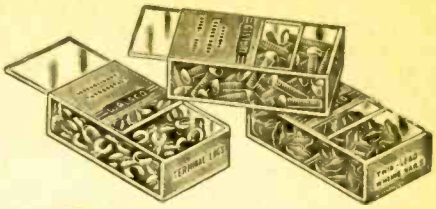
HANDY PLASTIC BOXES OF MOST-OFTEN-NEEDED SERVICING HARDWARE

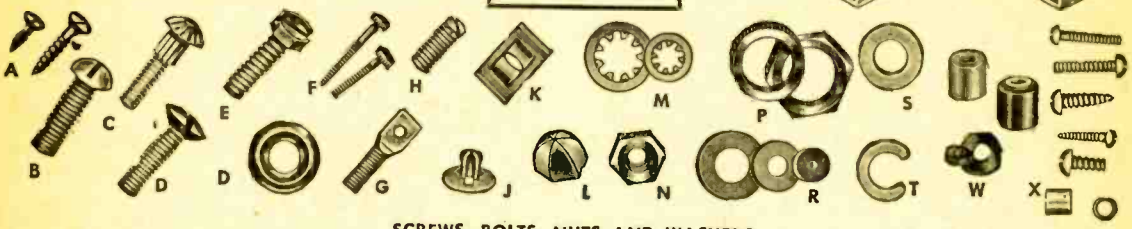
The Walsco "50" line of most-often-needed hardware used in radio, TV, and electronics. Now attractively packaged in handsome plastic boxes. Contents can be quickly identified from any angle. No loss or spillage. Boxes can be stacked where space is a factor. Listings include the hard-to-get sizes as well as the most popular sizes. The wide selection of items meets all the requirements of the serviceman, experimenter, kit builder, Amateur and technician. All items are precision-made from high-quality materials to insure dependable service in all applications. Stock up on these Walsco "50" assortments—save time and money by having on hand the exact item needed. **All are assortments except†.** *Approximate quantity.

NET PER BOX 29c

LIST PRICE, 50c

Av. shpg. wt., 4 oz.





SCREWS, BOLTS, NUTS AND WASHERS

Stock No.	Fig.	Type	Description	Quan.*
43 N 332	A	8500F	Escutcheon and wood screws in extra small sizes.	25
43 N 302	.....	8502F	Wood screws with round and countersunk type heads.	25
43 N 300	B	8000F	¼" to 1" machine screws with round and flat heads: Nos. 6, 8 and 10.	35
43 N 301	B	8002F	Small machine screws and nuts: Nos. 2 and 4.	35
43 N 305	C	8250F	¼—1¼" ornamental head screws: 6-32 and 8-32.	20
43 N 304	D	8005F	Rack screws and cup washers—nickel-plated.	15
43 N 303	E	8300F	Sheet metal screws—round, hex-slotted and unslotted. 6, 8 and 10.	25
43 N 318	F	8550F	Phono needle set screws with knurled heads. 2-56, 2-64, 1-72.	12
43 N 329	G	8570F	Spade bolts for rivets or screws—#6 hole size.	15
43 N 306	H	8605F	Set screws. Hardened steel. Most-often-needed sizes. For radio knobs, etc. 6-32, 8-32 and 10-32.	15
43 N 309	J	7370F	Snap-in trimounts.	20
43 N 322	K	8960F	Self-locking speed nuts. Easily installed.	30
43 N 328	L	8950F	Self-locking acorn nuts. Improve appearance of panels and cabinets.	10
43 N 331	M	7920F	Internal type lockwashers. Tempered. No. 2 to ⅜".	50
43 N 307	N	8800F	Machine screw nuts. Sizes: 6-32, 8-32 and 10-32.	30
43 N 308	P	8920F	Special hex and ring mounting nuts. Used on controls, switches, etc.	15
43 N 330	R	7820F	Insulating washers. Flat and extruded types. No. 6 to ⅜".	35
43 N 312	S	7870F	Steel washers for Nos. 4, 6, 8, 10 and ¼" screws.	80
43 N 313	T	7770F	Retaining rings and C-washers. Rings tempered, washers annealed. For 3/16" to ¼" shafts.	25
43 N 326	W	7083F	Rubber washers, bumpers and spacers.	12
43 N 353	.....	7828F	⅛" flat and extruded fiber washer assortment.	20
43 N 354	X	8560F	Pickup cartridge mounting screws and spacers.	30

NET PER BOX 29c

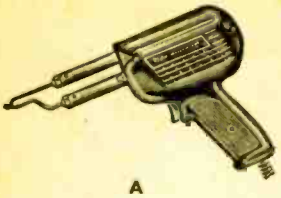
LIST PRICE, 50c

Av. shpg. wt., 4 oz.

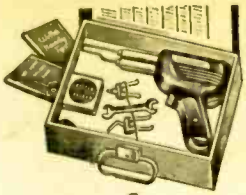
GROMMETS, CHASSIS MOUNTS, SPRINGS, WRENCHES, ETC.

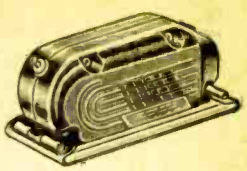
Stock No.	Fig.	Type	Description	Quan.*
43 N 316	A	7300F	Snap-hole plugs for sealing and covering unused holes in chassis, panels, etc. ¼ to 1".	6
43 N 317	B	7330F	Ventilating hole plugs. Permit free circulation of air. Asst. sizes.	3
43 N 341	C	7527F	TV cord rivets. Sizes: from 1/16" to 3/16" in diameter and up to ¾" in length. Washers included.	50
43 N 319	D	7100F	Terminal and solder lugs. Tinned brass. No. 6 to No. 10.	30
43 N 342	E	7620F	Metal spacers with hole size for Nos. 6 and 8 screws.	12
43 N 343	E	7630F	Insulated spacers for Nos. 6 and 8 screws.	12
43 N 321	F	7565F	Twin lead wiring nails. Hold FM and TV twin lead to molding.	35
43 N 347	G	†7016F	Phono motor drives. I.D. 2". O.D. 2⅛". 5/32" thick.	2
43 N 346	G	†7014F	Phono motor drives. I.D. ⅝". O.D. 11/16". ¼" thick.	4
43 N 348	G	†7017F	Phono motor drives. I.D. 1½". O.D. 1¾". 3/16" thick.	3
43 N 349	G	†7018F	Phono motor drives. I.D. ⅞". O.D. 1⅛". 3/16" thick.	4
43 N 350	G	†7019F	Phono motor drives. I.D. ⅛". O.D. ⅜". ¼" thick.	4
43 N 351	G	†7020F	Phono motor drives. I.D. 5¾". O.D. 6". 3/16" thick.	1
43 N 352	G	†7022F	Phono motor drives. I.D. 1 7/32". O.D. 1 15/32". 3/16".	3
43 N 320	H	7380F	Cotter and hairpins.	50
43 N 323	J	7500F	Cable clamps, with mounting hole. For ⅛ to 5/16" dia. cables.	20
43 N 310	K	7421F	Large size expansion springs for all electronic needs.	10
43 N 311	K	7420F	Same as type 7421F above but in smaller sizes.	10
43 N 327	L	7050F	Rubber feet with wood screws.	8
43 N 337	M	7400F	Small-size dial drive springs. Looped at each end. ½ to ¾".	10
43 N 338	M	7401F	Same as above but contains both large and small sizes.	8
43 N 325	N	7048F	Cord strain relief. Provides grommet and strain relief for POSJ type wire.	5
43 N 339	P	7480F	Radio knob springs for quick easy attachment of knob.	18
43 N 344	R	8600F	Hex wrench set. 4 hex: for No. 4 to No. 10 set screws, Nos. 2-6 cap screws.	Set of 4
43 N 345	R	8602F	Spline wrenches for set screws to ¼" and cap screws to No. 8.	Set of 4
43 N 315	S	7075F	Rubber chassis mounts in most needed sizes.	10
43 N 314	T	7025F	Rubber grommets. For use on cables, etc. For metal up to 1/16" thick.	15
43 N 324	.....	7760F	Knob felt washers. Brown. O.D. ¾". I.D. ¼". 1/32" thick.	40
43 N 333	.....	7070F	Rubber tack feet, ½" dia., ⅛" in length.	10
43 N 334	.....	7395F	Special thin dial cord.	10 ft.
43 N 335	.....	7396F	Standard thin dial cord.	10 ft.
43 N 336	.....	7397F	Standard dial cord.	10 ft.
43 N 340	.....	7488F	TV knob springs.	12

Soldering Guns, Irons—Sanders


A

B


C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WELLER QUALITY ELECTRIC TOOLS

Fig. A—INSTANT HEAT "SOLDERLITE" GUNS

Famous Weller soldering guns. Just squeeze trigger—tip reaches soldering temperature in seconds. Ideal for production line use, servicemen, and hobbyists. Ruggedly built. All guns have air-cooled transformers and pre-focused dual spotlights. Versatile, easily replaced tips have attached nuts for easy interchange. Low in cost, tips are easily replaced. All models are for operation from 110-120 volts, 60 cycle AC only.

LIGHT DUTY GUNS

Model S-400. Single-heat type. 135 watts. Specially designed for homecrafter and all hobby uses. When used with cutting and smoothing tips listed at right, below, it performs a wide variety of household functions including furniture repair, cutting plastic wall and tile, etc. Shpg. wt., 3 lbs.
46 N 643. List, $12.15. **NET** 8.77
Lots of 3, EACH 7.89

Model D-440. Dual-heat type. 100-150 watts. Shpg. wt., 3 lbs.
46 N 644. List, $14.90. **NET** 10.73
Lots of 3, EACH 9.65

SOLDER GUN REPLACEMENT PARTS

46 N 625. No. 7326 Tip Nut. For Models S-107, D-207, WS-100, WD-135, S-400 and D-440. Shpg. wt., 3 oz.
NET EACH ..... 15¢

46 N 626. No. 7323 Single Heat Switch. For all single-heat models. Shpg. wt., 3 oz.
NET EACH 1.22

46 N 627. No. 7324 Dual Heat Switch. For all dual-heat models. Shpg. wt., 3 oz.
NET EACH 1.37

46 N 628. No. 7130 Right Housing. For WS-100, WD-135. Shpg. wt., 3 oz.
NET EACH 1.22

46 N 629. No. 7131 Left Housing. For WS-100, WD-135 solder guns. Wt., 3 oz.
NET EACH 1.22

46 N 630. No. 7417 Tip Nut. For WS-200, WD-250, S-500, D-550. Shpg. wt., 3 oz.
NET EACH ..... 15¢

46 N 631. No. 7225 Right Housing. For Model WS-200, WD-250. Shpg. wt., 3 oz.
NET EACH 1.22

46 N 632. No. 7226 Left Housing. For Model WS-200, WD-250. Shpg. wt., 3 oz.
NET EACH 1.22

HEAVY DUTY GUNS

Model 8250A. 250-watt single-heat type. For all-purpose use. Shpg. wt., 4 lbs.
46 N 678. List, $12.95. **NET** 9.52
3 or More, EACH 8.47

Model S-500. Single-heat type. 250 watts. Shpg. wt., 3¼ lbs.
46 N 642. List, $13.50 ..... 9.75
Lots of 3, EACH 8.77

Model D-550. Dual-heat type. 200-275 watts. Shpg. wt., 3¼ lbs.
46 N 641. List, $16.25. **NET** 11.71
Lots of 3, EACH 10.53


7250 6110 6120

VERSATILE ACCESSORY TIPS

46 N 681. Type 6110. Cutting Tip. For S-400, D-440, and 8100. 3 oz. **NET** ..... 35¢

46 N 682. Type 6120. Smoothing Tip. For S-400, D-440, and 8100. **NET** ..... 35¢

46 N 683. Type 6130. Cutting Tip. For S-500, D-550 and 8250A. 3 oz. **NET** ..... 35¢

46 N 684. Type 6140. Smoothing Tip. For S-500, D-550 and 8250A. 3 oz. **NET** ..... 35¢

CHISEL-POINT TIPS

46 N 574. Type 7135. For 8100, S-400, D-440. Wt., 3 oz. 2 per Pkg. **PER PKG.** 25¢

46 N 573. Type 7250. For 8250A, S-500, D-550. Wt., 3 oz. 2 per Pkg. **PER PKG.** 35¢

46 N 579. Type 7300. For use only in older models S-107 and D-207. Not interchangeable with tips used in guns listed above. Wt., 3 oz. 2 per Pkg. **PER PKG.** ..... 25¢

Fig. B—LIGHT-DUTY KIT

Model 8100K. Versatile soldering kit for servicemen, craftsmen and hobbyists. Excellent for radio and TV repair, appliance repair, and almost any other light solder job. Includes new, 100-watt lightweight gun, solder brush, solder-aid tool, coil of rosin-core solder. Gun operates from 110-120 v., 60 cycle AC. Wt., 3 lbs.
46 N 640. List, $7.95. **NET** 5.83
3 or More, EACH 5.19

Fig. C—HEAVY-DUTY KIT

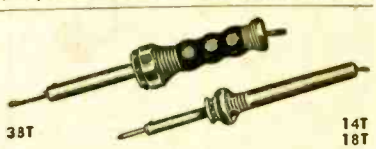
Model 8250AK. Includes: Model 8250A 250-watt heavy-duty solder gun (with trigger-switch control, pre-focused dual spotlights, chisel-point tip, black plastic housing); 1 coil of Kester acid-core solder for metal work (use rosin core solder listed below, for radio, TV and electrical wiring); 1 tip for general work; 1 smoothing tip for heat-sealing and mending plastic articles; 1 cutting tip for plastic tile and putty removal; 1 wrench for interchange of tips; sturdy metal case. Size: 2¼x11¼x8⅛". Gun operates from 110-120 v., 60 cycle AC. Shpg. wt., 7¼ lbs.
46 N 677. List, $14.95. **NET** 10.99
3 or More, EACH 9.77

Kester Rosin-Core Solder. Handy 3-oz. coil.
46 N 900. NET ..... 17¢

Fig. D—POWER SANDER-POLISHER

Model 700. Top-quality, electric sander and polisher. Low design (2⅜" high), for comfortable hand grip. Reciprocating-type motor operates at 14,400 strokes per minute. Rubber insulators between housing and motor minimize vibration. No torque, bucking or twisting—excellent for sanding in corners. Has 25-square inch sanding area. Stroke and power adjustment nut at rear of housing. With 6 sheets of assorted sandpaper and polishing cloth. Pushbutton "On-Off" switch. Extra-long 8-ft. outlet cord. Attractive black plastic housing. For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.
46 N 679. List, $14.95. **NET** 10.99
3 or More, EACH 9.77


212LT
214LTN


38T
14T
18T

WALL "THERMOSTATIC BRAIN" SOLDER GUNS

Wall Trig-R-Heat guns feature the revolutionary "Thermostatic Brain" and lightweight, transformerless design. Just pull the trigger and the tip heats in seconds to the proper temperature for a specific soldering job. "Brain" automatically regulates wattage of gun. Draws heavier current to heat the tip for quicker soldering—then drops to lower operating wattage. Guns are perfectly balanced and lightweight for easy handling in tight places and for fatigue-proof soldering. 6½" narrow barrel simplifies soldering in crowded chassis. All guns below (except Model 214T) have built-in, large 10-watt spotlight with separate switch. All have interchangeable tip-element assemblies (see right). Assemblies are quickly changed with plug-in, 1-screw installation. Steel clad tips for long service life. U.L. Approved. Black plastic housing. For operation from 110-120 volts, AC or DC.

Model 212LT. ½" steel clad tip. Wattage range, 300-650. Shpg. wt., 1½ lbs.
46 N 848. NET 11.07

Model 214LTN. As above, but employs ¼" tip. Wattage range, 150-400. Shpg. wt., 1¼ lbs.
46 N 889. NET 9.77

Model 214T. Same gun and wattage range as the Model 214LTN, but less spotlight.
46 N 888. NET 6.50

Solder Irons. Have unique thermostatic feature—simply plug in and "brain" takes over. Provide maximum wattage for quick heating; then drop to lower operating wattage. *Pencil type. U.L. Approved.

No.	Type	Watts	Tip	Lgth	Wt.	NET
46 N 851	18T*	25 to 90	⅛"	7"	7 oz.	3.59
46 N 852	14T*	40 to 125	¼"	8"	7 oz.	4.24
46 N 854	38T	80 to 225	⅛"	12½"	2 lbs.	4.90

TIP-ELEMENT ASSEMBLIES

Either type fits any of the guns listed at left. Quickly and easily interchanged with plug-in and 1-screw installation. Steel clad.

No.	Watts	Tip	Wt.	NET
46 N 870	150-400	¼"	12 oz.	2.59
46 N 849	300-650	½"	1 lb.	4.54

REPLACEMENT TIPS

*Walloy-Red tips for production line use.

No.	Size	For	Wt.	NET
46 N 874	⅛"	18T*	2 oz.	.83
46 N 875	¼"	14T*	2 oz.	1.50
46 N 876	⅛"	38T*	3 oz.	1.66
46 N 873	⅛"	18T	2 oz.	.27
46 N 872	¼"	14T	2 oz.	.34
46 N 855	⅛"	38T	3 oz.	.54

THERMOSTAT-CONTROLLED KWIKHEAT SOLDERING IRONS

Thermostatically controlled industrial soldering irons. Heat in 80 seconds. Cannot overheat. Made of high tensile strength stainless steel. High-impact phenolic handle. U.L. Approved.

Fig. E. Model 200. 150-Watt. Kwikheat Jr. for light-duty continuous use. For 100-125 v., AC. Length, with tip, 12¼". 1¼ lbs.
46 N 634. NET 5.81
3 or more, EACH 5.17

Type 2051 Replacement Tip. Plunger type, pyramid shape. ⅜" diam., 4" long. 4 oz.
46 N 633. NET ..... 37¢

Fig. F. Model 300. 225-Watt. For heavy-duty continuous use. For 100-125 v., AC. Uses any of 4 tips listed below. With No. 1 tip. Length, 13¼". Shpg. wt., 1½ lbs.
46 N 560. NET 9.18
3 or more, EACH 8.15

INTERCHANGEABLE TIPS

No.	Type	Description	Wt.
46 N 561	0	Small taper point	4 oz.
46 N 562	1	Gradual taper point	5 oz.
46 N 565	4	Heavy, with chisel tip	8 oz.
46 N 566	5	Melting pot; holds 1 oz.	3 oz.

ANY TIP, NET EACH 1.13
3 or more, EACH 1.00

Solder, Irons and Blow Torches

KESTER SOLDERS

Famous for uniformity and reliability. Compounded of 40% tin and 60% lead of the highest grade. Flux filling is evenly distributed and flows easily. Shpg. wts.: Handy coil, 3 oz.; 1-lb. spools, 1¾ lbs.; 5-lb. spools, 6¼ lbs.

ROSIN CORE 3/32" SOLDER

Plastic rosin filled. The most efficient solder for all radio and electrical work. Eliminates possibility of corrosion or leakage. Makes perfect connections with minimum work.

46 N 901. 1-lb. Spool. NET 1.07
46 N 902. 5-lb. Spool. NET 5.15

ROSIN CORE 1/16" SOLDER

Thin solder, plastic rosin filled. For delicate soldering where only the smallest amount of solder is desired.

46 N 930. 1-lb. Spool. NET 1.10
46 N 931. 5-lb. Spool. NET 5.30

"RESIN FIVE" SOLDER

Features "Resin 5" flux, non-corrosive and non-conductive. Makes soldering easier and faster. Handy coil, 1/16" dia.; spool, 3/32" dia.

46 N 900. Handy Coil. NET 17c
46 N 916. 1-lb. Spool. NET 1.07

ACID CORE SOLDER

Acid core solder for all general soldering other than electrical connections. Acid flux saves time; makes a lasting job.

46 N 905. Handy Coil. NET 17c
46 N 906. 1-lb. Spool. NET 1.07
46 N 907. 5-lb. Spool. NET 5.15

BAR SOLDER

One pound bar. Consists of 40% tin, 60% lead. Top quality for production and large-scale soldering jobs. Shpg. wt., 1½ lbs.

46 N 925. NET 90c

SOLDERING PASTE

Specially processed for finer, more even distribution of fluxing ingredients. Permits a clean, non-corrosive solder job. Convenient 2-oz. cans. Shpg. wt., 5 oz.

46 N 915. 10 for 1.05. NET 12c

KESTER TINNING BLOCK

Cleans and tins soldering irons quickly. Replaces sal ammoniac. Will not crumble or cause any corrosion on work. Shpg. wt. 1¼ lbs.

46 N 922. NET 65c

ERSIN SOLDER

New 5-core solder for high-speed, precision soldering. Melts rapidly with less heat. Pure high-grade tin, lead and non-corrosive Ersin flux. Shpg. wts.: 1 lb. spool, 1¾ lbs.; 7 lb. spool, 8½ lbs.

14 gauge (.080") 40/60 Multicore Solder.

46 N 995. 1-lb. Spool. NET 1.26
46 N 996. 7-lb. Spool. NET 8.54

16 gauge (.064") 40/60 Multicore Solder.

46 N 991. 1-lb. Spool. NET 1.28
46 N 992. 7-lb. Spool. NET 8.68

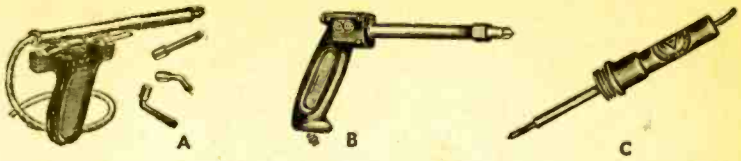
Service Pak. 17-ga., 50/50 5-core solder.
46 N 997. NET EACH 50c

NEW BLONDE TAPE SOLDER

Use It With a Match

Tape of pure 40/60 tin lead solder, impregnated with rosin flux. Just use a match, candle, cigarette lighter or torch for quick, convenient soldering. Solders copper, brass, tin or anything for which regular solder is used. Tape is simply wrapped around wires to be joined or metal to be bonded, and heat is applied. Flux is activated at 190 degrees and completely dissipates at 210 degrees, forming a safe bond that will not corrode. Has same protective qualities as conventional bar or spool solder. Excellent where a soldering iron is not practical. 28" long—enough for 100 connections. Shpg. wt., 2 oz.

46 N 979 List, 25c. **NET** 17c



LENK SOLDERING IRONS

Fig. A—75 AND 125 WATT "GUN GRIP" SOLDERING IRONS

Here's a handy, dependable soldering iron—at moderate cost. Features a pistol-grip handle that is perfectly balanced, is easier to use, and is cooler. In addition, the chrome-plated barrel is spring-mounted; protects delicate work by absorbing shock. For maximum versatility, 4 tips are supplied: straight, 45°, 90°, and one (straight) heavy-duty, general-purpose tip with adapter. Has metal-clad heating element. Built-in stand prevents burning table. U.L. Approved. For operation from 110-120 volts DC or AC. Has 6-ft. cord.

Model 504. 75 watts. Wt., 1¼ lbs.
43 N 708. NET 4.05

Model 555. 125 watts. Wt., 1½ lbs.
43 N 709. NET 4.78

Extra Tips. Set of 3 extra tips; straight 45° and 90°—plus adapter. For soldering in any position.

For Model 504. Shpg. wt., 12 oz.
43 N 713. NET 99c

For Model 555. Shpg. wt., 14 oz.
43 N 716. NET 1.21

Fig. B—ECONOMY PISTOL GRIP SOLDERING IRONS

Popularly priced, all-purpose, pistol grip soldering iron. Designed for efficient, long-lasting use. An excellent iron for servicemen, hobbyists, home owners and mechanics. Cool, convenient pistol grip handle is perfectly balanced for easier soldering with less fatigue. Has highly dependable, heavy-duty heating element. Heavy chrome-plated barrel. Underwriters' Laboratories Approved. For operation from 110-120 volts DC, or AC.

Model 375. 80 watt pistol grip soldering iron. 3/8" tip. Shpg. wt., 1¼ lbs.
46 N 638. NET EACH 2.54

Model 400. 125 watt pistol grip soldering iron. ½" tip. Shpg. wt., 1¾ lbs.
46 N 639. NET EACH 3.17

REPLACEMENT TIPS

43 N 714. 3/8" dia. tip. For use with Model 375 soldering iron. Wt., 3 oz. **NET** 59c

43 N 715. ½" dia. tip. For use with Model 400 soldering iron. Wt., 4 oz. **NET** 73c

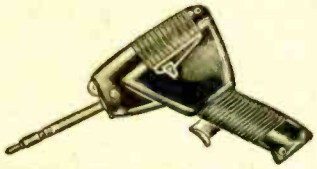
Fig. C—PENCIL TYPE SOLDERING IRONS

Type 251 Pencil Type 25-Watt Soldering Iron. 1/8" dia. tip. Light-weight, compact, and extremely sturdy. Weighs only 4 oz. Ideal for tight-chassis jobs; perfect for production line use. 3" copper tip is nickel plated. Construction features silver nichrome element. Madagascar mica, and a brass core. Tiny stainless steel barrel and tip permit easy access to crowded chassis. For 110-120 volts DC or AC. Shpg. wt., 8 oz.
46 N 940. NET EACH 4.05

46 N 941. Type 256. Same as type 251 but for heavier work. Rated at 40 watts. Shpg. wt., 8 oz.
NET EACH 4.41

46 N 942. Replacement tips for types 251 and 256 irons. Size, 1/8x3". Shpg. wt., 3 oz.
NET EACH 30c

46 N 946 ¼" Tip. For applications requiring larger tip area. Increases versatility of pencil irons. Shpg. wt., 3 oz.
NET EACH 47c



PHILLIPS INSTANT-HEAT SOLDERING TOOL

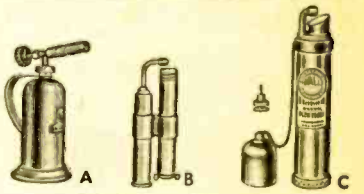
Model 250. 250 watts for light and heavy-duty soldering. Heats in only 4 seconds. Rapidly interchangeable tips. New, replaceable barrel section solves frozen tip problem; copper soldering tip is forced-threaded to the steel barrel extension and threaded joint allows for replacement of both components as single unit. 6-watt lamp. Trigger switch. Generates exceptionally high heat—temperature continues to rise until trigger is released. Has 2 switch positions; one for light only and one for light and heat. Rigid tip will not sag or bend. 3-amp fuse. With 2 elements and 2 tips—1/8", 1/4". For 110-120 v., 50-60 cycle AC. Shpg. wt. 4¼ lbs.
46 N 835 List, $15.95. **NET** 10.44

REPLACEMENT PARTS

Replacement element, *tip-barrel assemblies, etc., for Model 250. Av. shpg. wt., 5 oz.

No.	Type	Description	EACH
46 N 836	VT-210	Carbon element	10c
46 N 837	VT-214	1/4" spade*	39c
46 N 838	VT-215	5/16" pyramid*	39c
46 N 839	VT-216	3/8" pyramid*	39c
46 N 840	VT-219	7/32" pencil*	39c
46 N 841	VT-220	3/32" spade*	49c
46 N 355	VT-225R	Right housing	98c
46 N 356	VT-225L	Left housing	98c
46 N 357	VT-230	Switch assembly	98c

TYPE VT-660 BARREL ADAPTER. Converts Model LW gun to take tip-barrel assemblies of Model 250. Wt., 4 oz.
46 N 842. NET 59c



BLOW TORCHES

LENK TORCHES

Fig. A. Type 104B. Gasoline Torch. Non-clogging. Has flame-control and shut-off valve to eliminate evaporation of fuel and loss of pressure. Has self-cleaning orifice. Heavy gauge, seamless, drawn brass tank with funnel shaped bottom. Height 7½"; diameter at base 3". Capacity, ¼ pint. Shpg. wt., 2 lbs.
43 N 700. NET 3.09

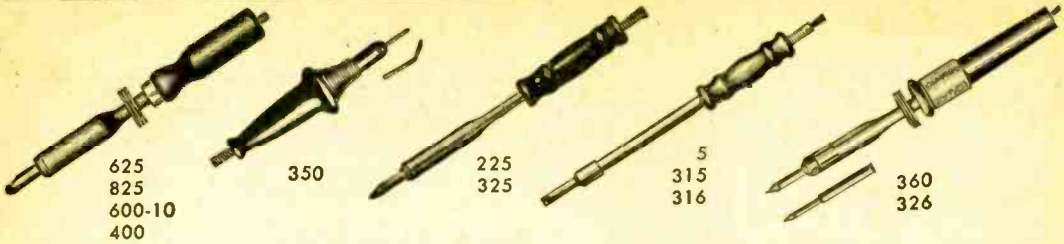
Fig. A. Type 105. Alcohol Torch. As above, but for alcohol. Shpg. wt., 2 lbs.
43 N 704. NET 3.31

Fig. B. Type 108. Alcohol Torch. Double barrel, self-generating. Uses denatured or commercial alcohol. Copper heat conductor attached to wick insures quick starting. Screw-top and bottom prevents leakage. Nickel-plated. Size, 5¾x2⅛x1". Wt., 1 lb.
43 N 701. NET 1.66

WALL ALCOHOL TORCH

Fig. C. Type 2 Dreadnaught. A highly efficient alcohol torch. Completely automatic. No adjustments necessary. Practically foolproof and absolutely safe to use. Just fill with good denatured alcohol and light. No pumping or priming. Made of highest quality brass, extra heavy duty to prevent smashing. Triple chrome plated 6-inch flame develops 1800° F. Operates for approximately one and one-half hours on a single filling. Screw on cap prevents alcohol from evaporating. Torch has no soldered joints and is mechanically leakproof. Filler plugs are slotted for easy opening. Size, 1¼x7¼". Shpg. wt., ¾ lbs.
46 N 869. List, $4.50. **NET** 2.94

Drake Soldering Tools



GENERAL PURPOSE AND INDUSTRIAL IRONS

High-quality, dependable soldering irons. Ruggedly built and perfectly balanced. Heating elements are of highest grade nichrome wire. Comfortable handles. Blued finish. Wide selection of models to cover every application. Standard models are for medium-duty and general radio-television work. Economy models are quick-heating, light-duty irons. Industrial models are designed for continuous duty in production work. Will save time and reduce costs on production lines, in shops, etc.

Deluxe model is extra hot and medium-heavy in weight. Pee-Wee model is small and light—just right for delicate jobs such as soldering voice coil leads, meter connections, crystal pickups and other fine work. Ideal for soldering those hard-to-reach spots in crowded chassis. All are complete with 6-ft. cord, plug and stand. All have plunger type tips except *, which have screw-on type. §With extra 45° tip. For 110-120 volts, AC-DC.

VAPOR PROOF INDUSTRIAL MODELS

Feature special sealed elements. Flux and other vapors encountered in heavy duty soldering operations will not shorten element life.

No.	Model	Watts	Length	Tip	Lbs.	NET
46 N 553	625	125	10"	1/8" chisel	2	5.88
46 N 554	825	225	15"	1/8" chisel	3	7.35

MIDGET MODEL 350

No.	Model	Watts	Length	Tip	Lbs.	NET
46 N 539	350§	35	7"	1/8" pencil	1 1/2	3.53

STANDARD MODELS

No.	Model	Watts	Length	Tip	Lbs.	NET
46 N 522	225	80	13 1/2"	3/8" pyramid	1 3/4	3.53
46 N 523	325	100	13"	3/8" pyramid	1 3/4	3.82

ECONOMY MODELS

No.	Model	Watts	Length	Tip	Lbs.	NET
46 N 505	5	40	10"	1/8" pencil	10 oz.	1.15
46 N 521	315*	60	11 1/2"	3/8" pyramid	1 1/4	1.47
46 N 546	316*	100	13 1/2"	5/8" chisel	1 1/2	2.00

INDUSTRIAL MODELS

No.	Model	Watts	Length	Tip	Lbs.	NET
46 N 550	600-10	100	10"	3/8" pyramid	2	5.29
46 N 538	400	60	9"	1/4" and 1/8"	1 1/2	3.82

PEE WEE MODEL

46 N 532	360	35	7 1/2"	3/16" pyramid	1	3.23

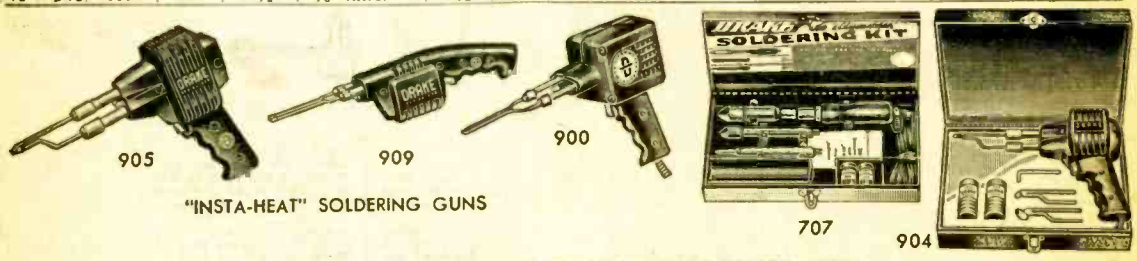
DELUXE MODEL

46 N 545	326	125	13 1/4"	1/8" pyramid	2	4.12

REPLACEMENT TIPS

Exact duplicate replacement tips for all models. Pure copper.

No.	For Model No.	Description	Oz.	NET
46 N 537	5	1/2" pencil, straight	2	.37
46 N 535	600-10, 225, 325, 326,	3/8" pyramid	5	.35
46 N 514	315,	3/8" pyramid	5	.53
46 N 515	316, 625	5/8" chisel	5	1.06
46 N 533	360	3/16" and 1/8" pyramid	1	.18
46 N 513	400	1/4" pyramid	1	.24
46 N 547	350	1/8" pencil, straight	1	.15
46 N 548	350	1/8" pencil, 45°	1	.15



"INSTA-HEAT" SOLDERING GUNS

SOLDERING GUNS AND NEW SOLDERING KITS

MODEL 905—250 WATTS

For Heavy-Duty Use

Newest solder gun from this famous manufacturer of soldering equipment. Product of two years, intensive research and development. Incorporates all of the best, time-proven, most popular features of earlier models—plus the very latest engineering advances in soldering gun design. An outstanding, heavy-duty gun that will pay for itself many times over.

The 905 is ruggedly built to withstand the rigors of continuous-duty use on production lines. Its special-design tip reaches otherwise inaccessible spots in crowded chassis—speeding up production in plants or service shops. Twin "Visa-Lites" light up the work area at all times. Gun is perfectly balanced for maximum ease in handling. Other features: durable, heat-resistant black bakelite case, with 20 air vents and recessed top for free air circulation; comfortable pistol grip; heats up virtually instantaneously, cools very rapidly; uses power only when trigger is pressed; tips are replaceable with a minimum of effort.

All units are performance-tested before leaving the factory, and are U.L. Approved. Supplied complete with 6 ft. cord, plug and 3 1/2" tip. Length less tip, 6". For 110-120 volts, 60 cycle AC. Shpg. wt., 4 lbs.
46 N 527. List. $13.95. NET.....8.20

Replacement Tip for Model 905

Type 906. Special-design tips for use with Model 905 listed above. Easily replaced. Two tips per package. Shpg. wt., 3 oz.
46 N 529. Pkg. of 2. NET.....44c

MODEL 909—135 WATT GUN

Specially Designed for Servicing

Specially designed to fit easily into tool box. Combines the best operating characteristics of solder iron and gun in one compact unit. Takes a minimum of room in any servicing kit. Features ease of handling and positioning with real portability and convenience. Rated at 135 watts single heat. Uses same transformer and tips as Model 900 listed below. Black bakelite case with handy Visa-lite. Overall length with 3 1/2" tip, 14 1/2". Supplied with cord, plug and 3 1/2" tip. U.L. Approved. For 110-120 v. 60 cycle AC. Shpg. wt., 4 lbs.
46 N 528. List. $16.25. NET.....9.55

MODEL 900—135 WATT GUN

Proven in Years of Service

The tried and proven solder gun for rapid radio and television servicing. Heats rapidly—cools quickly. Delicately balanced to minimize handling fatigue. With built-in Visa-lite. Air-cooled transformer. Durable bakelite case is louvered for ventilation. Overall length without tip, 6". U.L. Approved. With cord, plug and 3 1/2" tip. For 105-125 volts, 60 cycle AC. Shpg. wt., 4 lbs.
46 N 516. List $15.00. NET.....8.82

Extra Tips for Models 909, 900

Type 901. 3 1/2" replaceable tip for guns listed above. Shpg. wt., 3 oz.
46 N 517. NET, pkg. of 2.....44c

Type 902. 6" replaceable tip for guns listed above. Shpg. wt., 3 oz.
46 N 518. NET, pkg. of 2.....44¢

NEW MODEL 904 SOLDERING GUN KIT

A new soldering gun kit with accessory tips to do your home and hobby soldering jobs faster and easier. Consists of Model 905 250-watt soldering gun (at left), standard tip for general soldering, cutting tip for trimming plastic tiles, smoothing tip for refinishing, roll of acid-core and roll of rosin-core solder. A tip wrench for quickly interchanging tips is included. Complete kit in all-steel storage case. Shpg. wt., 6 lbs.
46 N 662. List, $15.95. NET.....11.11

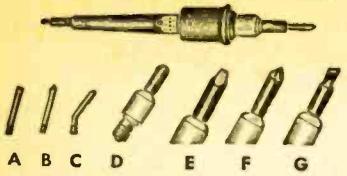
Model 904A Soldering Gun Kit. Same as above but in cardboard storage case. Shpg. wt., 5 lbs.
46 N 687. List. $13.75. NET.....9.61

Model 907 Replacement Smoothing Tip. Shpg. wt., 2 oz.
46 N 663. List. $1.00. NET.....59¢

Model 908 Replacement Cutting Tip. Shpg. wt., 2 oz.
46 N 688. List, $1.00. NET.....59¢

NEW MODEL 707 SOLDERING IRON KIT

An all-new 3-in-1 soldering kit. Three interchangeable heads permit selecting the proper heat for practically any soldering job. Consists of rugged handle assembly with heavy-duty cord and plug, 150-watt head with 1 1/8" tip for medium-heavy work, 100-watt head with 3/4" tip for light work, 60-watt head with 1/4" tip for radio and TV work, safety stand for bench or table-top use, plus a roll of acid-core and a roll of rosin core solder. Just select the head for the job at hand and plug it in the handle assembly. Entire kit contained in sturdy, all-steel storage case. Shpg. wt., 6 lbs.
46 N 519. List. $15.95. NET.....11.11



UNGAR SOLDERING EQUIPMENT

Soldering Pencil. Features: Extra long brass shell; spring-action rivet for positive contact; cooler handle of molded plastic, perfectly balanced; extra flexible cord with rubber sleeve; form-fit cork grip; ceramic insulation. Length, 7". For 110-120 v. DC, or AC. UL Approved.

46 N 580. Soldering pencil with No. 776 handle and No. 536 tip. Shpg. wt., 6 oz.
10 or more, EACH 1.43. NET EACH 1.76

46 N 591. As above, but with No. 1236 tip for production soldering. Shpg. wt., 8 oz.
10 or more, EACH 1.60. NET EACH 1.96

46 N 581. No. 776. Cord and handle only. Less tip and element. Shpg. wt., 5 oz.
10 or more, EACH 73¢. NET EACH 90c

Standard Elements And Tips. 23.5-watt heating element and tip. Heat to 600 degrees in 60 seconds. *Extra-hot; 37.5 watts. Wt., 3 oz.

No.	Fig.	Type	Descrip.	EA.	10, EA.
46 N 582	F	536	Pyramid	86c	71c
46 N 585	E	539	Chisel		
46 N 587	G	540	Marking		
46 N 592	F	1236*	Pyramid	1.06	86c
46 N 593	E	1239*	Chisel		

Heating Units And Elkalloy "Tiplets." Heating unit (Fig. D) does the work of 31 Threaded tiplets screw into heating unit. Type 535 heat unit has 23.5-watt element; *Type 1235 has 37.5-watt element; type 4035 has 47.5-watt element. Shpg. wt., 1 oz.

No.	Fig.	Type	Descrip.	EA.	10, EA.
46 N 606	B	331	Pencil	12c	10c
46 N 607	C	332	Offset		
46 N 608	A	333	Chisel		
46 N 605	D	535	Ht. unit	86c	71¢
46 N 609	D	1235*	Ht. unit	1.06	86¢
46 N 622	D	4035*	Ht. unit	2.40	12.10

"SUPER HI-HEAT" 4000 SERIES SOLDERING IRON TIPS

47½ watt element-tips that will do any job that can be done by any standard 150-watt soldering iron. For use with Soldering Pencil listed above. Iron plated. Shpg. wt., 12 oz.

No.	Type	Descrip.	EACH	10, EA.
46 N 647	4033	Long chisel	2.40	2.10
46 N 648	4036	⅛" pyramid		
46 N 649	4039	⅛" chisel		

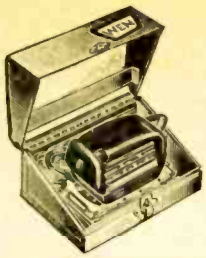
TROUBLE-LIGHT BULB

Type S6. Candelabra base, 115 v. bulb—makes trouble-light when screwed into Ungar No. 776 Solder Pencil Handle listed above. Clear glass. 1⅞" long overall. Shpg. wt., 4 oz.
52 E 349. NET EACH 19c

UNGAR SOLDER AND BURNER SET

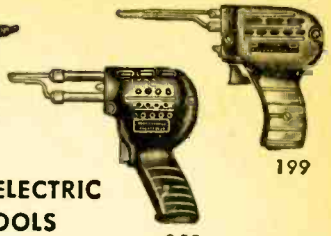
Contains a detachable 20-watt heating element and #776 handle. Includes all necessary tips for soldering, wood burning, foil embossing, cutting plastic, and burning plastic and leather. Complete with 5 sheets of metallic embossing foil, abrasive cloth and complete illustrated instructions. Ideal for the home craftsman and hobbyist. Has molded plastic handle and extra-flexible line cord. Underwriters' Laboratories Approved. For operation from 110-120 v., AC or DC. Shpg. wt., 1 lb.
46 N 604. NET 2.29
6 or More, Ea. 1.75 12 or More, EA. 1.52
Replacement Element and Tips For Above

No.	Description	NET EACH
46 N 664	#936 Tip	18¢
46 N 667	#267 Heating Element	63¢
46 N 668	#123 Brass Tip	12¢
46 N 669	#122 Knife Tip	18¢



303
404

WEN ELECTRIC TOOLS



199

250

Model 404 Power Sander Kit. Heavy-duty electric sander. Has 20 square inches of sanding surface. Powerful motor drives sanding pad at a speed of 14,400 strokes per minute. Does not stall under heaviest pressures. Self tightening clamp firmly tightens and locks paper in position. Light weight makes sanding jobs effortless—weighs only 3¼ lbs. Comfortable grip fits the hand for smooth control. Body size, 6⅛x3¼x4". Complete with 15 assorted sheets of sandpaper, 2 polishing cloths and gold finish heavy gauge steel carrying case. For operation from 110-120 v., 60 cycles, 2 amps. Shpg. wt., 6½ lbs.
46 N 329. List, $19.95. **NET** 14.66

Model 303 Power Sander Kit. Exceptionally powerful, lightweight sander kit for rough or fine sanding. Sander features heavy-duty vibrator-type motor; 14,400 strokes per minute. Takes 2½x7 1/16" sandpaper. Weighs only 2½ lbs. Convenient self-tightening clamp pulls and tightens paper and locks into position. Red plastic body, 5⅜x2½x3 15/16". Complete with 6 sheets assorted garnet paper, 6 sheets of assorted sandpaper, 2 polishing cloths and sturdy metal carrying case. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 3½ lbs.
46 N 323. List, $16.95. **NET** 12.46

Model 250. Heavy-duty soldering gun at low cost. Rated at 250 watts. Heats in 3 seconds. Excellent for radio and TV repair. Perfectly balanced for ease of handling. Straight-line design and built-in spotlight. Heat and shock resistant. U.L. Approved. For 110-120 volts, 60 cycles AC. Length, 6½".
Shpg. wt., 5 lbs.
46 N 325. List, $12.95. **NET** 9.71

REPLACEMENT TIPS

No.	Type	Description	NET
46 N 326	25-A-4	Standard Tip	11¢
46 N 327	25-X-20	Feraloy Tip	35¢
46 N 330	25-C-1	Plastic Cutting Tip	35¢

Model 199. Heats in just 2½ seconds. Excellent balance for more fast, easy soldering. Efficiency comparable to guns of much higher wattage ratings. New steel nose long-life tip. Spotlight focuses on work. Rated at 120 watts. Lightweight; only 1½ lbs. For 110-120 v., 60 cycle AC. Shpg. wt., 2¼ lbs.
46 N 358. NET 5.83

REPLACEMENT TIPS

No.	Type	Description	NET
46 N 359	19-B-4	Standard Tip	35¢
46 N 328	19-C-1	Plastic Cutting Tip	42¢

202

200

100

305H

DRAKE SOLDER POTS AND STANDS

Type 202. 600 Watts. Ideal for production type industrial use, including printed-circuit soldering. Oblong well measures 6x2½x1½" and holds six pounds of solder. Neat, electrically perfect joints are made quickly and easily by dipping spliced wires directly into solder. Replaceable nichrome element is wound directly around pot for maximum heat transfer. Increases production and reduces hazard of burns, shock, etc. Holds up under hard use and continuous duty. Well is made from top-grade cast iron. Complete with cord and plug. U.L. Approved. For operation from 110 to 120 volts, AC or DC. Shpg. wt., 8 lbs.
46 N 549. NET 11.76

Type 200. 300 Watts. Heavy-duty production type solder pot. Designed for continuous duty. Excellent for dip soldering wires, plugs, coils and printed circuits. Large well, 2½" in diameter x 2" deep holds up to 2 lbs. of solder. Well has special nichrome heating element in wrap-around construction for maximum heat transfer. With detachable cord and plug set. Extension lip to prevent hot solder from dripping and damaging cord plug. Convenient handle for easy carrying—even when hot. For 110-120 v., AC or DC. Shpg. wt., 6 lbs.
46 N 555. NET 7.06

Type 100. 150 Watts. Medium-duty soldering pot for the experimenter and radio amateur. Extremely compact and handy. Perfect for soldering and tinning stranded wires, RF coils and other small components. Genuine nickel-chromium heating element is precision wound on finest grade ceramic core. Size of well: 1½" diameter x 1" deep. Holds up to 1 lb. of solder. Wide base gives great mechanical stability. With heavy-duty cord and plug set. For 110-120 v., AC or DC. Shpg. wt., 3 lbs.
46 N 556. NET 5.59

Type 305H. Thermostatic Heat Control Stand. Controls the temperature of soldering irons under all soldering conditions. Has adjustable temperature control thermostat. Prevents iron from over-heating when not in use. Hood prevents fires or accidental burns. Has steel wool cup for cleaning oxide from soldering iron tip. Adjustable handle rest for all sizes of irons. Iron plugs into front of stand. Operates with irons up to 660 watts capacity. All steel construction. For up to 240 volts, AC. Shpg. wt., 3½ lbs.
46 N 504. NET 4.41

AMERICAN BEAUTY "475" TEMPERATURE REGULATING STAND

Thermostatically controlled to maintain soldering iron temperature. Merely set thermostat for any heat you desire. Eliminates heat variations and overheating. Increases soldering iron element life, particularly when iron must be used continuously. Perfect for production line and service bench. Molded plastic body. Soldering iron cradle is metal. Has heater cord and plug-in receptacle. Will operate on any AC voltage up to 240 volts. 660 watts capacity. Less iron. Shpg. wt., 2½ lbs.
46 N 658. NET 4.41

LECTROHM SOLDER POTS

200

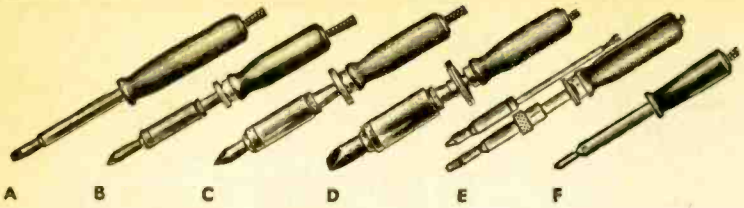
250

High-quality solder pots designed for continuous operation. For tinning wires, RF coils, and solder dipping plugs and printed circuits. Particularly recommended for production lines and other industrial applications. Sturdily constructed to provide maximum efficiency at minimum cost. Made of cast iron, mounted on cadmium-plated steel stands. Sizes: SP-200; 2¼" ht., 2⅛" dia., ⅞" cup depth. SP-250; 3¼" ht., 2" dia., 1¼" cup depth. With 6-ft. cord. For 110 volts, AC or DC.

No.	Type	Capac.	Watts	Wt.	NET
46 N 880	SP-200	1¼ lbs.	200	3¼ lbs.	4.98
46 N 881	SP-250	2 lbs.	250	3½ lbs.	4.98

Replacement nickel-chrome heating elements.
Type A. For SP-200. **46 N 882. NET** .. 1.42
Type B. For SP-250. **46 N 883. NET** .. 1.42

Soldering Irons—Wire Strippers



AMERICAN BEAUTY SOLDERING IRONS

New tips now available for maximum tip life: Iron-plated, and Eternalloy-plated. Minimize pitting, re-dressing—save time and reduce costs on production lines, in shops, etc.

Fig. A—MODEL 3128—60-WATT

Designed for light work. Uses only ¼" tip, making it handy for working in hard-to-get-at spots. With tip, cord, and stand. For 110-120 v., AC or DC. Shpg. wt., 1 lb.

46 N 674. NET 3.67
6 or more, EACH 3.51

46 N 675. Type 3728. ¼" Copper replacement tip for Model 3128 iron. 3 oz. **NET** .30¢

46 N 820. Type 3728-IP. ¼" Iron-plated tip for Model 3128 iron. 2 oz. **NET** ..... 57¢

46 N 824. Type 3728-EP. ¼" Eternalloy-plated tip for Model 3128 iron. 3 oz. **NET** 1.10

Type 9272. Replacement Element. 60-watt element. Mica insulation. Wt., 6 oz.
46 N 670. NET 1.99

Fig. B—MODEL 3138—100-WATT

Length 12⅞". ⅜" tip. Polished chrome plated metal parts. Has cooling baffle. With stand, 6 ft. cord and tip. For 110-120 volts, AC-DC. Shpg. wt., 2¼ lbs.

46 N 655. NET 5.83
6 or more, EACH 5.58

46 N 656. Type 3738. ⅜" Copper replacement tip for Model 3138 iron. 4 oz. **NET** .37¢

46 N 821. Type 3738-IP. ⅜" Iron-plated tip for Model 3138 iron. 5 oz. **NET** ..... 64¢

46 N 825. Type 3738-EP. ⅜" Eternalloy-plated for Model 3138 iron. 4 oz. **NET** .. 1.17

46 N 666. Type 9273. Replacement element for Model 3138 iron. Wt., 1 lb. **NET** 2.39

Fig. C—MODEL 3158—200-WATT

For medium-heavy factory and production work. Length. 13⅝"; tip dia., ⅝"; weight, 28 oz. With cord, stand and tip. For 110-120 volt AC-DC operation. Shpg. wt., 3 lbs.

46 N 650. NET 6.83
6 or more, EACH 6.53

46 N 652. Type 3758. ⅝" Copper replacement tip for Model 3158 iron. Wt., 7 oz. **NET** ..... 85¢

46 N 822. Type 3758-IP. ⅝" Iron-plated tip for Model 3158 iron. 7 oz. **NET** 1.22

46 N 826. Type 3758-EP. ⅝" Eternalloy-plated tip for Model 3158 iron. 7 oz. **NET** 1.87

Type 9275. Replacement Element. 200-watt element of chrome-nickel wire on mica insulated steel rod. Shpg. wt., 12 oz.
46 N 665. NET 3.19

Fig. D—MODEL 3178—300-WATT

An excellent heavy-duty soldering iron. Ideal for service and production work. Standard equipment in factories and shops. Length 14⅛"; tip dia., ⅞"; net wt., 2½ lbs. With cord, stand and tip. For 110-120 v. AC-DC. Shpg. wt., 4 lbs.

46 N 671. NET 9.00
6 or more, EACH 8.61

46 N 672. Type 3778. ⅞" Copper replacement tip for Model 3178 iron. 1 lb. **NET** 1.61

46 N 823. Type 3778-IP. ⅞" Iron-plated tip for Model 3178 iron. 1 lb. **NET** 2.06

46 N 827. Type 3778-EP. ⅞" Eternalloy-plated tip for Model 3178 iron. 1 lb. **NET** 2.70

46 N 673. Type 9277. Replacement element for Model 3178 iron. 1 lb. **NET** 4.33

Fig. E—MODEL 3438 ELEMENT-IN-TIP

Unique, highly efficient 100-watt soldering iron designed especially for production-line use. Heating element is permanently embedded in the tip. Features light weight, fast heating, high tip temperatures, production-line economy. Uses Model 9473 iron-plated tip for long service. Length, 13¾". With heat-insulating stand. For 110-120 volts. Shpg. wt., 1½ lbs.

46 N 892. NET 7.33
6 or more, EACH 7.02

Model 3438-EP with Eternalloy Tip. As above, but ⅜" tip is Eternalloy-plated for exceptionally long tip-life. Shpg. wt., 1½ lbs.
46 N 893. NET 7.99

Type 9473 Iron-Plated Tip-Element. Replacement tip-element for Model 3438. 6 oz.
46 N 886. NET 3.33

Type 9473-EP Eternalloy-Plated Tip-Element. Replacement for Model 3438-EP. 6 oz.
46 N 887. NET 3.99

Fig. F—MODEL 3118 "BANTAM"

Dependable 30-watt iron for light heat soldering. For continuous or intermittent use. Exceptionally lightweight, (6½ oz. complete) and well balanced. Plug-type tip. Nickel-chromium heating element, compression wound and mica insulated. For 110-120 volts, AC or DC. 9¼". With ⅛" tip and stand. Wt. 12 oz.

46 N 890. NET 3.33
6 or more, EACH 3.19

Model 3120. As above, but with 3/16" tip.
46 N 891. NET 3.33

Type 3718 Tip. For Model 3118 iron.
46 N 884. NET ..... 16¢

Type 3720 Tip. For Model 3120 iron.
46 N 885. NET ..... 20¢

See page 295 for American Beauty temperature regulating stand and for solder pots.

SPEEDEX WIRE STRIPPERS

Very efficient, improved tools for automatically stripping insulation from all wires neatly and quickly. Sturdy and easy to use—with narrow, plier-grip handles. Just insert wire into jaws and squeeze handles. Strips wire ends or any place on wire. Precision-made for uniform results. A great time-saving tool for servicemen, electricians, production lines, etc. Wt., 1¼ lbs.

DELUXE MODELS

Fully automatic, with "delayed return action" to prevent crushing of fine stranded wires. Hardened steel blades, easy-grip handles.

46 N 225. Type 766. For 12 to 20 wire.
46 N 226. Type 766A. 14 to 30 wire.
NET EACH 4.85

STANDARD MODELS

Same efficient stripping tools as deluxe models listed above, but without "delayed return action" feature. Excellent for any stripping job where stay-open feature is not necessary. Hardened steel, precision-ground cutting blades for long life under continuous use.

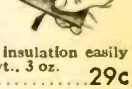
46 N 003. Type 733. For 12 to 20 wire.
46 N 004. Type 733A. 14 to 30 wire.
NET EACH 3.88

766K WIRE STRIPPER KIT

A complete, versatile kit to fill most service and production line needs. Contains the new Deluxe Wire Stripper with "delayed return action" described above and 7 different size hardened steel blades in special steel box. For wire sizes from No. 8 up to No. 30. Inside cover of box contains a guide listing of blades to use for various wire sizes. A very practical addition to the radio serviceman's tool box. Shpg. wt., 2¼ lbs.

46 N 229. NET 10.14

GC-757 5-IN-1 STRIPPER



Extremely compact wire stripper. This handy, multi-purpose tool belongs in every radio and TV serviceman's tool kit. It can be used as a wire stripper, cutter, scraper, winder, and as a screwdriver. Strips insulation easily without cutting wire. Shpg. wt., 3 oz.

43 N 905. NET 29c

MPC WIRE STRIPPER

An easy-to-use combination wire stripper and cutter. Spring steel construction with hardened steel cutting blades. Adjustment screw permits quick and easy adjustment of cutting blade gap for stripping insulation from any size wire to No. 12. Guide head removable to permit sharpening of blades. Overall length, 5¾". Shpg. wt., 5 oz.

46 N 036. NET 66c

K. MILLER 101-S STRIPPER AND CUTTER

Here's an all-new combination wire stripper and cutter that is proving extremely popular with radio-TV servicemen, electricians, and mechanics. Easily adjustable to strip insulation from any size wire, solid or stranded. Calibrated rotary adjustment permits presetting stripper for wire size to be stripped. Insulation can be stripped any place along length of wire—for splicing in. Tempered steel spring holds jaws open, ready for use. Hardened steel blades have ground cutting edges. Ring lock holds blades closed for safety when not in use. 5" long. Shpg. wt., 4 oz.

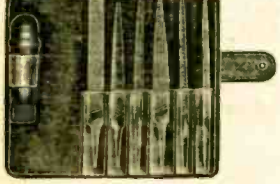
46 N 246. NET 1.17

WALSCO 592 "TWISTO" WIRE STRIPPER

Versatile wire stripper for rapid removal of toughest insulation. Can be inserted into chassis without removing wire. Adjustment for wire sizes 12 to 22. Built-in stop for production stripping. Spring steel blades. 4½" long. Shpg. wt., 8 oz.

46 N 440. List. $4.50. **NET** 2.65

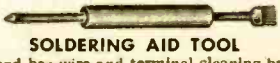
592-3P. Replacement Blades. Wt., 2 oz.
46 N 441. List. 75¢. **NET PER SET** .... 44¢



MINIATURE FILE KIT

Contains six files and durable black plastic handle. Length of files, 4". Made in Western Germany. Includes: one equalling file (flat, single cut) with square edge; one half-round file, double cut; one three-square file, (triangular, double cut); one flat, taper file (double cut); one round (rat-tail, single cut) tapered file; and a tapered square (4-sided, double cut) file. Plastic handle contains built-in collet-type chuck, securely grips file tang. Files are quickly and easily interchangeable. Durable, attractive red plastic roll case with snap-type fastener. Shpg. wt., 5 oz.

46 N 340. NET 1.35



SOLDERING AID TOOL

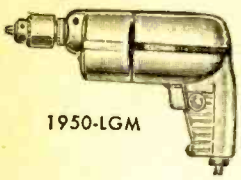
One end has wire and terminal cleaning brush. Other end holds wire in place while soldering. Solder will not stick to chrome-tipped probe. Shpg. wt., 4 oz.

42 N 001. NET 97c

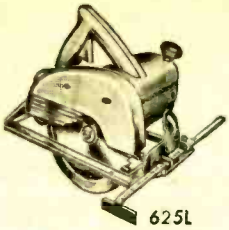
HANSON 100RS 1" MICROMETER

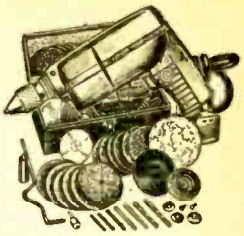
Economically priced, precision micrometer. Full range accuracy to .0005". Special alloy steel used. Carefully designed for minimum frame distortion. Employs screw-type anvil to permit easy zero adjustment. Spring friction stop for improved accuracy. Spindle moves in a steel bushing firmly fixed in frame to preserve high accuracy. Frame, thimble and ratchet fully chrome plated. Pre-tested and factory set using gauge block standards. 7 oz.

46 N 249. NET 1.95


1950-LGM


510


625L


1950-29

SHOPMATE PORTABLE ELECTRIC TOOLS

MODEL 1950-LGM ¼" DRILL

A high-quality, ¼" power drill. Precision gear-type chuck. Pistol grip. A powerful and compact tool, ideal for service bench or home workshop. Excellent source of power for driving attachments. Lightweight, strong, die-cast aluminum alloy case. Gears are precision-cut from heat-treated alloy steel. Self-lubricating bronze bearings. Lock-type trigger switch. 3-jaw chuck takes drill shanks up to ¼" in diameter. Speed: No-load, 1600 rpm; full-load, 900 rpm. Heavy-duty, 6-ft. rubber-insulated line cord. For 110-120 volts, AC or DC. U.L. Approved. Length, 8". Shpg. wt., 3¼ lbs.
46 N 280. List, $19.88. NET.....14.61

NEW MODEL 320-G ¼" DRILL

(Not illustrated.) The new "saw-type" grip of this drill places all the "push" directly behind drill bit. Greater efficiency when drilling material. Die-cast aluminum-alloy housing. Precision cut gears and self-lubricating bronze bearings. 3-jaw gear-type ¼" chuck. Trigger switch. Speed: 1600 rpm no-load; 900 rpm full-load. 6-foot cord and plug. For 110-120 v., AC or DC. U.L. Approved. Shpg. wt., 3⅛ lbs.
46 N 297. List, $20.88. NET.....16.37

MODEL 510 ½" DRILL

Power and performance are combined in this precision-built ½" electric drill. Aluminum alloy die castings for strength and light weight. Provides comfortable handling without fatigue. Removable side-handle for close drilling. Dynamically balanced armature. Heat-treated alloy steel gears in grease-tight housing. Bronze bearings and blower-type ventilation for smooth, efficient running and long life. Speed: No-load, 450 rpm; full-load, 300 rpm, 3-jaw gear-type chuck holds drill shanks to ½" diameter. 7 ft., 3-wire (ground wire) cord with plug. Overall length, 13¼". For 110-120 volts, AC-DC. U.L. Approved. Shpg. wt., 10½ lbs.
46 N 287. List, $39.98. NET.....29.39

MODEL 625L POWER SAW

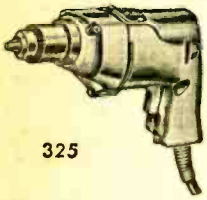
A high-quality, power hand saw that is exceptionally safe and easy to use. Light in weight but it has plenty of power. Precision balanced fan-cooled motor. Easy adjustment for cutting any angle between 90° and 45°. Depth of cut up to 2⅛" at 90°; 1¾" at 45°. Safety guard exposes blade during cutting operations only. Adjustable ripping guide graduated from ⅛" to 8". Speed: No-load, 4800 rpm; normal full-load, 2800 rpm. Complete with CS-3 combination blade listed below, ripping guide and complete instructions. 10 ft. cord and plug. Motor housing of strong aluminum die castings. For 110-120 volts, AC or DC. U.L. Approved. Size: 11¼" L x 9½" W x 7" H. Shpg. wt., 12 lbs.
46 NX 281. List, $44.88. NET.....32.99

ACCESSORY BLADES FOR 625L POWER SAW

Stock No.	Type	Description	Shpg. Wt.	NET
46 N 282	CS-3	6½" Combination	10 oz.	1.84
46 N 283	CS-9	6½" Cross-cut	10 oz.	1.84
46 N 284	CS-8	6¼" Hollow-ground	12 oz.	3.86

MODEL 1950-29 DRILL KIT

A terrific value in a 34-piece electric drill kit that polishes, grinds, sands and drills. Features the Model 1950-LH ¼" drill, similar to the 1950-LGM described at left, but with 3-jaw hand chuck. Includes electric drill (1600 rpm no-load—900 rpm full-load), molded rubber backing pad, paint mixer, 7 carbon steel twist drills, (1/16", 3/32", ⅛", 5/32", 3/16" and ¼"), lamb's wool polishing bonnet, buffing disc, horizontal drill stand, 12 assorted abrasive discs, removable auxiliary side handle, 6-piece adapter set, 2¼" dia. grinding wheel and heavy-gauge steel case. Gray hammerloid finish. U. L. Approved. For 110-120 volts, AC or DC. Shpg. wt., 6 lbs.
46 N 289. List, $22.88. NET.....16.82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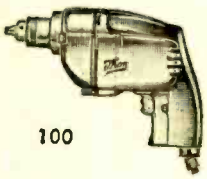
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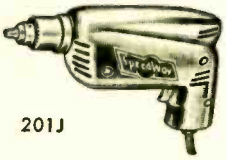
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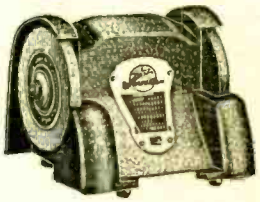
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310

THOR SPEED TOOLS

MODEL 201J ¼" DRILL

Here's a fine value in a powerful, excellently balanced electric drill. For servicemen. Amateurs and home craftsmen. Gear-type chuck takes drill shanks up to ¼" diameter. Drills holes to ¼" diameter in steel, or to ½" in hardwood. Heavy-duty, universal series-wound motor. Self-aligning bearing and ball thrust bearing assures very smooth, highly dependable operation. Momentary-contact trigger switch with locking pin. No-load speed, 2400 rpm; full-load speed, 1500 rpm. Overall length, 9". U.L. Approved. For operation from 110-120 volts, AC or DC. Shpg. wt., 4½ lbs.
46 N 360. List, $19.95. NET.....14.66

NEW MODEL 100 ¼" DRILL

Powerful new electric drill. Features heavy-duty, anti-friction, radial thrust ball bearing on spindle. Designed for rugged use and long periods of operation. Series-wound universal motor develops high torque. Reliable 3-jaw geared chuck with tightening key. Chuck takes drill shanks up to ¼" diameter. Easily drills holes up to ¼" diameter in metal, or up to ½" in hardwood. Speed: 2000 rpm no-load, 1200 rpm full-load. Trigger-type, momentary action switch with locking pin. 6-foot 3-conductor cord permits grounding motor housing. Length, 8½". For 110-120 v., AC or DC. Shpg. wt., 5 lbs.
46 N 370. List, $25.00. NET.....19.60

NEW MODEL 325 ⅜" DRILL

This new ⅜" electric drill features a highly polished, cast aluminum housing and ball thrust bearing. Other bearings are anti-friction self-lubricating bronze. Designed to last for years under normal operating conditions, such as in maintenance, installation work, etc. Series-wound universal motor. Gear-type chuck takes drill shanks to ⅜" diameter. Easily drills holes up to ¼" diameter in steel or to ½" in hardwood. Speed: 1000 rpm no-load; 650 rpm full-load. Momentary contact switch with locking pin. 10-foot cord has third conductor for grounding motor housing. Overall length 9¾". For operation from 110-120 v., AC or DC. Shpg. wt., 5 lbs.
46 N 371. List, $32.50. NET.....25.48

NEW MODEL 250 ¼" DRILL

(Not illustrated.) This new ¼" electric drill is specifically designed to give years of outstanding service under the most severe conditions. Features sealed antifriction, ball thrust and needle spindle bearings to give top performance even when subjected to extended periods of continuous use. Heavy-duty series-wound universal motor. Gear-type chuck takes drill shanks up to ¼" dia. Easily drills holes to ¼" dia. in steel or ½" in hardwood. Speed: 2000 rpm no-load; 1300 rpm full-load. Rugged 2-pole switch with button lock. 10-foot 3-conductor cord. For 110-120 volts, AC or DC. Shpg. wt., 5 lbs.
46 N 372. List, $38.00. NET.....29.79

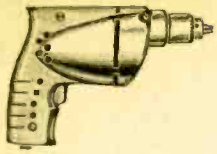
NEW MODEL 117 BENCH GRINDER

A new bench grinder that is ideal for the small shop, garage, or home work bench. 1—60 grit and 1—120 grit grinding wheel for fine or coarse work. Grinding wheels are 4½x⅛" with ⅛" center hole. Dependable, 1/12 HP induction-type motor. Speed: 3450 rpm no-load. Body is 1-piece cast aluminum. Rubber feet permit operation anywhere. Can be secured to bench or table-top if desired. Slide switch conveniently located between wheels. Self-aligning, oilless bearings. 6-foot, heavy-duty 2-conductor cord. Overall length 7½". Attractive blue-wrinkle finish. For 110-120 volt, 60 cycle AC only. Shpg. wt., 8 lbs.
46 N 373. List, $16.50. NET.....12.94

NEW MODEL 310 DRILL STAND

New drill stand instantly converts Thor Model 325 and 250 drills into lever-operated drill presses. Any of these drills can be quickly and easily installed in the bracket clamp of the stand. Drill can be removed in seconds when required for hand work. Heavy base plate has mounting ears for securing stand to work bench. Bracket is adjustable to desired height. Positive-action locking device holds drill at height selected. Specially designed long coil return spring extends travel of drill. Maximum travel of drill at one setting is 3½". 7½" clearance between tip of drill bit and supporting column—center holes can be drilled in work up to 15" diameter. Shpg. wt., 16 lbs.
46 NX 374. List, $19.95. NET.....15.64

Tool Kits & Drills



MILLERS FALLS UTILITY ¼" DRILL

Model 1814. Excellently designed, lightweight electric drill. A perfect choice for shop or home use. Features compact size and sturdy construction. Trigger switch can be locked for continuous use. Powerful 2500 rpm motor has alloy steel gears and oil-impregnated bronze bearings. Ample power for drilling up to ¼" dia. in steel and ¾" dia. in wood. Conservatively rated at 1.7 amperes. Exceptionally well balanced. Jacobs-type chuck; takes ¼" drill bit shanks. Die-cast aluminum housing, finished in hammer-tone gray enamel. Convenient pistol grip. Overall length, 8⅜". For 110-120 volts, AC or DC. With 7-ft. cord and plug. U. L. Approved. Shpg. wt., 3 lbs.
46 N 349. List, $25.70. NET 18.89

MILLERS FALLS DRILL BITS

High-speed power bits for drilling large holes in hard and soft woods, plastics, tile, plywood, etc. Bits will cut through wire nails without damage. Designed for use with any ¼" electric drill. Shanks are ¼", milled for standard three-jawed chucks. Finely tempered high speed steel—holds edges ten times longer than ordinary tool steel. Cut fast and clean, even when cutting on an angle. Bits are easily resharpened on a grinding wheel. Depth of cut, 5"—ideal for boring through floors or partitions. Overall length of bits, 6½".

No. 8004. Power Bit Set. Set of 4 bits in plastic roll. Sizes: ½", ⅝", ¾" and 1". Shpg. wt., ¾ lb.
46 N 366. NET 3.19

No. 8006. Set of 6 bits in plastic roll. Sizes: ⅜", ½", ⅝", ¾", ⅞" and 1". Shpg. wt., 1 lb.
46 N 367. NET 4.74

MILLERS FALLS COUNTERSINK

Model 710. Made of fine grade high-speed steel. For use in any material ordinarily machinable with a high-speed cutter. Cuts fast and clean in soft steel, iron, wood and similar materials. Has 5 carefully ground flutes for fast cutting at 82° angle for wood and machine screws. Shank, ¼". Fits any brace or drill. Overall length, 2⅝". Shpg. wt., 1½ oz.
46 N 156. List, $1.50. NET 1.11

BURGESS V-760 TOOL KIT

Marking, engraving and craftsman's kit. Ideal for many industrial identification applications as well as servicing and hobbyist uses. Uses include jewelry engraving, instrument marking, stencil cutting, embossing, etc. Kit includes Burgess Vibro-Tool, ten all-purpose attachments and sturdy steel storage case. Extremely compact and easy-to-carry. Illustrated booklet with complete instructions included. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 3½ lbs.
46 N 290. List, $14.95. NET 9.77

HIGH-SPEED COPE-SAW BIT

Highly functional all-purpose bit—drills, saws and reams in sheet metal, angle iron, pipe, wood, plastic and similar materials. Use with ½" or ¼" electric drills and drill presses. Drills its own starter hole and can be used in making circles, ovals, squares, scrolls, etc. Finest abrasive-resistant, high-speed steel flutes. Shpg. wt., 3 oz.
46 N 795. All purpose bit.
46 N 796. Wood Bit. **NET**
46 N 797. Heavy metal bit. **EA.** 1.95

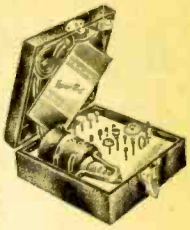
REPAIRMAN'S TAPERED REAMER

Henry Hanson Type 120. For enlarging holes in thin metals and other materials. T-Handle can be easily removed for use in drill chuck. Precision machined of hardened carbon steel. Point ⅛" dia.; shank ½" dia.; 5½" long. Shpg. wt., 9 oz.
46 N 243. NET 1.12

MASTER TAPERED REAMER

Tapered reamer for quickly and easily enlarging undersize holes. Reamer is graduated in width from ⅛" tip to ⅝". Made of finest tool steel, hardened and carefully ground. Has unbreakable plastic handle. A toolbox necessity for radio and TV repairmen. Length, 8". Shpg. wt., 6 oz.
46 N 244. NET 1.02

SPEEDWAY G-A-K TOOL KIT



This very moderately priced 28-piece power tool kit has literally thousands of uses in the shop and home. The heart of this extremely versatile kit is the Speedway Speed-Grinder; has powerful AC-DC 20,000 rpm motor, self-aligning bronze bearings for smooth, highly dependable service, and convenient, slide-type off-on switch. Use the Speed-Grinder with the excellent selection of attachments supplied, and the G-A-K kit is capable of doing innumerable jobs. Here are just a few typical applications: Embossing metal; jewelry engraving; finishing, engraving and decorating ceramics; instrument marking; removing burrs from metal chassis. In addition to the Speed-Grinder, kit includes the following high-quality attachments: 4—grinding stones; 4—steel cutting burrs; 3—bristle brushes; 1—wire scratch brush; 1—abrasive rubber polishing tool; 2—mandrels; 12—sanding discs. Complete with sturdy, compact wood case; covered with handsome blue leatherette. With instruction manual. For operation from 110-120 volts, AC or DC. Shpg. wt., 2½ lbs.
46 N 365. NET 11.94

KNEISLEY MINIATURE DRILL SET

Type KS-1115 Carbon Drill Set. Contains 20 drills in sizes No. 61 through No. 80 (.039" to .0135"). An indispensable set for extremely fine drilling jobs. Drills are hardened by unique new method, assuring precision production. Finest grade of carbon steel used throughout. Set includes 4-jaw chuck with ⅛" shank for using drills in standard chucks. Molded lucite case. Shpg. wt., 6 oz.
46 N 799. NET 4.86

HUOT DRILL CASES

Sturdy drill cases for compact storage and quick, accurate selection. Opening cover brings drills into spread position for easy access. Cases are made of heavy gauge steel. Tag index clearly shows drill sizes. Supplied less drills.

60-Drill Capacity. Sizes, 1-60. 4¼x5x1". Wt., 2 lbs.
46 N 790. NET 1.84

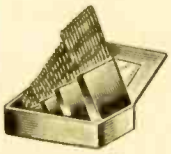
15-Drill Capacity. Sizes 1/16" to ½". 4x7x1¼". Shpg. wt., 4½ lbs.
46 N 716. NET 1.84

A

B

C

D



E

F

G

CENTURY "MAGIC BLACK" MECHANICS' HI-SPEED DRILL SETS

Feature "Magic Black" tempering treatment; insures extra wearing qualities and makes drill bits stay sharp longer. "Quick-Cut" point (on 7/32" and larger) greatly reduces load on electric drill. Four cutting edges instead of two eliminates walk and wander, gives twice the penetration with half the pressure.

Fig. A. 13-Drill Set. 13 drills, 1/16" to ¼" by 1/64" graduations. Packed in Huot Index Drill Case. Opens like a book with every drill instantly accessible and identified. Case size, 4¼x2x¼". Shpg. wt., 9 oz.
46 N 782. NET 5.37

Fig. A. 15-Drill Set. 15 drills, 1/16" to ½" by 32nds. Sizes over ¼" have ¼" shank. Huot Case has space for 14 more drills in 1/64" graduations. 7x4x1¾". Shpg. wt., 3 lbs.
46 N 786. NET 16.02

10-Drill Set. (Not illustrated.) Sizes 1/16", 3/64", 1/32", 1/8", 3/32", 3/16", ¼", 5/16", ⅜" and ½". All have ¼" shanks, in plastic box. Wt., 1 lb.
46 N 715. NET 6.61

Fig. B. 7-Drill Set. 7 drills, 1/16" to ¼" by 1/32" graduations. With indexed plastic container. Shpg. wt., 6 oz.
46 N 784. NET 2.89

Fig. C. Magic Black Hi-Speed Drills Only. Sizes over ¼" have ¼" shank. Av. wt., 3 oz.

No.	Size	Each	No.	Size	Each
46 N 723	1/16"	.19	46 N 738	19/64"	.82
46 N 724	3/64"	.22	46 N 739	5/16"	.90
46 N 725	1/32"	.24	46 N 740	21/64"	.97
46 N 726	1/64"	.24	46 N 741	11/32"	1.08
46 N 727	1/8"	.26	46 N 742	23/64"	1.17
46 N 728	5/64"	.28	46 N 743	3/8"	1.25
46 N 729	3/32"	.29	46 N 744	25/64"	1.38
46 N 730	11/64"	.34	46 N 745	13/32"	1.49
46 N 731	3/16"	.44	46 N 746	27/64"	1.61
46 N 732	13/64"	.48	46 N 747	7/16"	1.72
46 N 733	7/32"	.53	46 N 748	29/64"	1.85
46 N 734	15/64"	.56	46 N 749	15/32"	1.96
46 N 735	¼"	.61	46 N 780	31/64"	2.11
46 N 736	17/64"	.68	46 N 781	½"	2.22
46 N 737	9/32"	.73			

Fig. D. 6-Drill Set. 5 drills, ¼" to ½" in 1/16" graduations. Have ¼" dia. shanks. With indexed plastic container. Wt., 1 lb.
46 N 785. NET 6.59

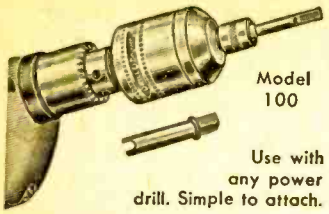
Fig. E. 60-Drill Set. 60 drills, Sizes 1-60. In Huot Case. Shpg. wt., 1¼ lbs.
46 N 717. NET 21.92

Fig. F. 4-Piece Masonry Drill Set. ¼", 5/16", ⅜" and ½". ¼" shanks and carbide tips. Shpg. wt., 3 oz.
46 N 718. NET 3.17

Fig. G. 7-Piece Auger Bit Set. ¼" to 1" by 8ths. For use in ¼" electric drill. Shpg. wt., 11 oz.
46 N 719. NET 3.65

CHROME-STEEL DRILL BIT SET

Set of 5 chrome-alloy steel bits for electric drills. For use on aluminum and other soft metals, wood and plastic. ¼", 5/16", ⅜", 7/16" and ½". Plastic box. Shpg. wt., 1 lb.
46 N 787. NET 2.90



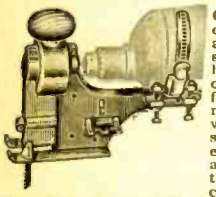
Use with any power drill. Simple to attach.

DRIL-O-DRIVER POWER SCREWDRIVER ATTACHMENT

New attachment for converting any electric or air drill into a power screwdriver. Drives wood, machine, sheet metal screws, etc. Hundreds of uses in production shops, home workshops, repair shops. Operator has complete control of force and speed from 0 to maximum speed. Special ¼" drive adapter enables operator to use all ¼" standard tool accessories. Extremely simple to use—simply insert into drill chuck. Consists of Dril-O-Driver unit, ¼" screwdriver bit and ¼" drive adapter. Shpg. wt., 1 lb.
46 N 336. List, $9.95. NET 7.31

Model 200 Dril-O-Driver Attachment Kit. A handy kit of tools for use with above drill attachment. Consists of 6 screwdrivers and holder-adapter. Nos. 1, 2, and 3 Phillips-head screwdrivers and 3/16", 7/32" and ¼" standard screwdrivers. Supplied in plastic case. Shpg. wt., 4 oz.
46 N 334. List, $4.95. NET 3.65

BABCO 200 JIGSAW ATTACHMENT



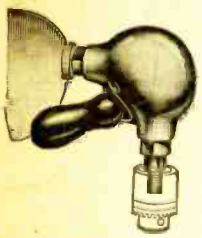
Converts any ¼" electric drill for use as a portable jigsaw, bandsaw, hacksaw, keyhole or coping saw—all from one tool. Drill may be mounted with vise to permit stationary use. An extremely valuable attachment that tremendously increases the usefulness of any electric drill. Cuts its own starting hole; makes curved or straight cuts in wood, metal or plastic. Flexible drive shaft allows for misalignment of drill or "play" in chuck. Highly efficient, double-cam drive for smooth, free-running saw action; air piston blower removes particles from area of cut. Uses include: Cutting openings in chassis bases or panels; cutting holes in walls, floors and ceilings for fuse boxes, electrical outlets, air ducts, etc. Includes 6 assorted, high-quality blades and T Bar. Shpg. wt., 3 lbs.
46 N 385. List, $11.95. NET 8.78

JIGSAW BLADES

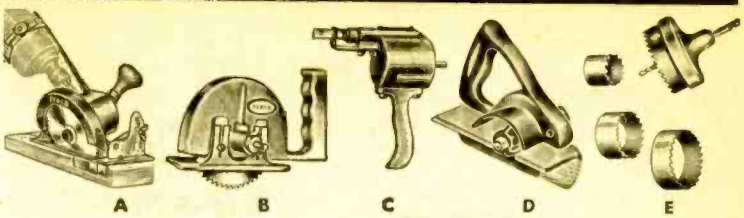
Made of special alloy saw blade steel. *Not for metal. No. after dash in Type No. indicates teeth/inch. Sizes: †¾x3"; §⅝x3". Av. wt., 3 oz.

No.	Type	Description	EA.
46 N 386	201-6†	For general roughing	23¢
46 N 387	201-14†	For starting cut	29¢
46 N 388	203-6§	For moderate contours	23¢
46 N 389	203-14§	Contours in light metals	23¢
46 N 390	204-6*§	Very close contours	25¢
46 N 391	205-6*§	For stationary jigsaw	25¢

BABCO 740 RIGHT-ANGLE DRIVE



New right-angle drive unit for use with ¼" electric drills. A low-cost accessory that greatly increases the versatility of any ¼" electric drill. Unusually handy for drilling in confined spaces, such as between joists or shelves, crowded radio and TV chassis, etc. Highly recommended for radio-TV servicemen, amateurs, electricians, plumbers, home owners, etc. Angle head fits the hand for easy guiding of drill and exerting pressure. Easy to attach. Drive unit fits directly on drill. Chuck is unscrewed from electric drill and screwed on right-angle drive unit. Drive unit is then screwed on to drill spindle. Has ¼"-24 male thread. Two-to-one speed ratio—halves drill speed for sanding wood or polishing painted surfaces; doubles speed for efficient sanding of metal surfaces, such as finishes no automobiles, etc. Shpg. wt., 1 lb.
46 N 268. List, $4.95. NET 3.65



TOOL ATTACHMENTS FOR ¼" DRILLS

FEDCO ADJUSTABLE ATTACHMENTS

Fig. A. Model 605. Circular Saw Attachment. Economically converts any ordinary electric drill into an accurate-cutting power saw. Has ¼" shaft. Easy to install. Features adjustable cutting depth from ⅛" to 1⅛"; rip gauge and bevel-tilt rip gauge from 0 to 45°. Gear case is fully lubricated and factory-sealed for long life. Has extra-broad base for steadier rest and straighter cutting. Hardened alloy steel shafts; "coppo-steel" gears; oilite self-lubricating bronze bearings. Gear housing and safety guard made of cast aluminum. Can be converted into a table-type bench saw by fastening a piece of plywood to the base plate through holes provided in the plate. An excellent choice for the budget-wise serviceman, home hobbyist or mechanic. Unit is complete with 4" combination blade, suitable for ripping and cross-cutting. Wt., 3 lbs.
46 N 237. List, $10.95. NET 8.20

Fig. B. Model 500. Circular Saw Attachment. Similar to above, but without bevel tilt feature. Easily converts drill into power saw. Adjustable cutting depth from ⅛" to 1⅛". Guard fully covers exposed portion of saw blade. Oilite self-lubricating bronze bearings; alloy steel shafts. With 4" diameter combination blade. Shpg. wt., 1¾ lbs.
46 N 238. NET 4.38

Type 504C Combination Blade, 4" blade. Shpg. wt., 6 oz.
46 N 239. NET 1.50

Type 504R Rip Blade. 4". Shpg. wt., 6 oz.
46 N 240. NET 1.50

Type 504M. Special Blade. For soft metals, 4" diameter. Shpg. wt., 6 oz.
46 N 241. NET 2.25

GREENE HACKSAW ATTACHMENT

Fig. C. Model 1625. For driving hacksaw blades. Excellent for close work on wood, steel, etc. Die-cast aluminum housing. Hardened steel shafts, oil-impregnated bronze bearings throughout. With Allen wrench and 1 blade, 2¼" long. Shpg. wt. 2¼ lbs.
46 N 012. NET 10.99

ROTEX ATTACHMENTS

Fig. D. "Roto Plane" Planing Attachment. A moderately priced precision planer attachment for use with any ¼" electric drill. Ideal for home craftsmen, carpenters, etc. Increases the versatility and usefulness of any ¼" electric drill. Planes against, across or with the grain with equal ease. Can be used to cut all varieties of wood, plastics, etc. Guide edge provides automatic planing at a true 90 degrees—simplifies wood jointing. Employs specially designed 3-flute spiral cutter. Diagonal shearing action eliminates deflections from knots or bad grains. Planes at any angle—adjustable depth of cut. Durable alloy tool steel cutter is deep-hardened and precision-ground for long life. Planing width, 1¾". Entire unit is perfectly balanced for fatigue-free ease of operation. Lightweight, die-cast aluminum housing. Heavy-duty, oil-impregnated bearing. Baked hammerloid enamel finish. Complete with instructions, ready to install. Shpg. wt., 3 lbs.
45 N 872. List, $12.95. NET 9.53

Fig. E. Holesaw Attachment. New holesaw attachment for ¼" electric drills. An indispensable tool for radio-TV servicemen, experimenters, home craftsmen. Cuts through any ¼" stock, wood, plastic or metal. Ideal for chassis work. Complete with arbor and 4 saws. Cuts 1", 1½", 2" and 2½" holes. Light, rugged aluminum arbor and 4 top quality, high carbon steel blades. Shpg. wt., 1 lb.
45 N 873. List, $1.95. NET 3.65

ROTO BENCH STAND

Rugged, heavy aluminum horizontal drill stand for any ¼" electric drill. Won't shake or shimmy. Holds firmly in place on workbench for polishing, grinding, buffing, burnishing, drilling, etc. Adds a variety of new uses to any electric drill and accessories. Bolts to workbench—clamp attachment for drill. Wt., 1 lb.
45 N 874. List, $3.95. NET 2.90

CHAMPION SPRAY KIT

Completely Self-Contained—Simply Plug It in and Use

With this kit, anyone can do a professional-quality paint job at home. Sprays paints, lacquers, enamels, varnishes, chemicals, oils, insecticides, deodorants, etc. Excellent for painting new work, re-finishing and touch-up work; rust-proofing, stenciling, marking, deodorizing, etc. Perfect for use in home and shop. No compressor needed; uses heavy-duty power unit and pump assembly housed in the handle. High-speed atomizing pump with piston-driven actuator, delivers 7200 strokes per minute. Develops 100 pounds pressure per square inch. No need to dismantle to clean—solvent is simply sprayed through gun and it's automatically clean! Housing is rust-proof, die-cast alloy metal. Piston and cylinder are non-corrosive; nozzle is brass. Fully adjustable spray. Unit will spray direct from container supplied or from any open container by means of the "long-distance" polyethylene tubing included. Kit includes: Spray gun with 8-ft. AC cord attached, aluminum jar, 15-ft. Du-pont polyethylene spray tubing, 15-ft. neoprene AC extension cord, full set of spare parts including 5 nozzle discs, strainer and filter, steel carrying case and instruction booklet. Size: 7½x12¼x 5". U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 14 lbs.

46 NX 202. List, $29.95. NET 19.57

Spray Gun Only, With Aluminum Jar. Shpg. wt., 5 lbs.
46 N 291. NET 11.73

Spray Gun Only, With Glass Jar. Shpg. wt., 5 lbs.
46 N 139. NET 9.77

GENERAL HARDWARE AUTOMATIC CENTER PUNCH

Model 79. Hand pressure on handle triggers powerful spring, which drives punch. Perfect for accurate center punching in tight spots. Extremely valuable aid to the builder. Tension is adjustable. Size, ½" dia. x 5". Plastic tube. Replaceable point. Shpg. wt., 5 oz.
46 N 195. NET 2.85
46 N 196. 79P. Extra point. NET 35¢

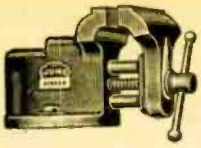
FOSTORIA PORTABLE OUTLET BOX

Furnishes 3 extra convenience outlets. Two outlets controlled by toggle switches; other remains "hot" at all times. Switches are AC-DC, rated at 10 amps, 125 volts. Size, 4¼x5¼x1¾". Complete with 6-ft. rubber covered cord and plug. U.L. Approved. Shpg. wt., 1½ lbs.
42 N 136. NET 7.06

Shop Tools—Vises


343


301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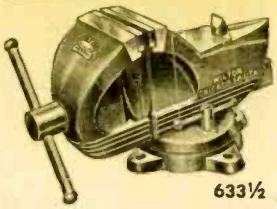
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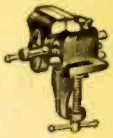

149

SHOP AND BENCH VISES

WILTON SHOP AND BENCH VISES

Model 343 "Junior" PowRarm. Light-duty capacity all-angle work positioner. For positioning small electronic assemblies or parts. Provides a second pair of hands for production workers, servicemen or home craftsmen. Supports work firmly in any desired position. Body is cast aluminum and cadmium-plated steel. Capacity, 24 lbs. Base diameter, 4¼". Shpg. wt., 4½ lbs.
46 N 857. NET 12.80

Model 301 Mechanical PowRarm. Medium-duty work positioner. Easily handles weights up to 70 lbs. Ideal for rapid mass production operations. Supports work firmly in any desired position. Convenient handle has fast on-off action. Position of work can be rapidly shifted. Steel parts cadmium plated. Base diameter, 6". Shpg. wt., 13 lbs.
46 N 856. NET 25.60

Model 1107 "Juno" 2½" Utility Vise. For use with model 343 "Junior" PowRarm. Jaw width, 2½". Max. jaw opening, 2¼". When used with PowRarm, makes possible the clamping of work piece in any angle or position. Vise utilizes straightline pull, Acme-thread spindle and malleable-iron casting for greater strength. Shpg. wt., 3½ lbs.
46 N 858. NET 3.53

Model 633½ Vise. "Shop King" hardware vise. With slide-bar lock. Has 3½" jaw width; opens to 4". Top jaws are serrated, hardened steel. Equipped with removable 1½" capacity pipe jaws, cut-off tool, and swivel base. Shpg. wt., 21 lbs.
46 NZ 866. NET 8.55

Model 634 Vise. As above, but 4" jaw. Opens to 4½". Shpg. wt., 30 lbs.
46 NZ 867. NET 12.39

MILLERS FALLS No. 217 VISE

For holding work on drill-press bed or work bench. Radiomen find it perfect for holding parts to be soldered or drilled. 2⅜" wide jaws have parallel faces, extend to 3⅛". Removable swivel jaw is provided for holding odd-shaped parts. Fine thread on screw gives excellent leverage. Shpg. wt., 5 lbs.
46 N 064. NET 6.32

BRINK & COTTON No. 149 VISE

Compact clamp vise ideally suited for radio work. Securely holds small parts for soldering, filing, cutting, etc. Smooth, easy action. Can be clamped to bench or table up to 2" thick. Jaws are 1¼" wide, open to 1¾", and are machined to meet squarely for a firm grip. Shpg. wt., 2¼ lbs.
46 N 015. NET 1.57

HANSON TAP AND DIE SETS

Model 614V

Ace "Super" set. A highly versatile tap and die outfit for radiomen, mechanics and hobbyists. Includes a complete set of popular sized taps, dies and accessories, each in its own easy-to-reach compartment. Contains 1 each tap and die: 4-36, 6-32, 8-32, 10-24, 10-32 and 12-24 machine screw std., ¼-20, 5/16-18, ⅜-16, 7/16-14 and ½-13 NC (U.S. Std.); ¼-28, 5/16-24, ⅜-24, 7/16-20 and ½-20, NF (SAE Std.); ⅛" pipe. Includes die stock, tap and reamer wrench, "T" tap wrench, screwdriver and screw pitch gauge. Dies are V-notch adjustable. Attractive, lightweight, green plastic carrying case—combines all the advantages of the conventional wooden box, but is much lighter, smaller, and more durable. Shpg. wt., 4 lbs.
46 N 245. NET 18.38

RADIO TAP AND DIE SET

Model 21. 12-piece set covering basic threads most frequently used in radio work. An excellent, low-cost set for the radio serviceman, hobbyist, experimenter, or engineer. Includes 1 each plug tap and die, sizes: 4-36, 6-32, 8-32, 10-32, ¼-20; tap wrench and die stock. Dies are solid type. High carbon, tempered steel assures long tap life. Tap wrench is finished in cadmium plating. Cover of case has index showing correct tap drill size to use with each tap. In mahogany box. Shpg. wt., 3 lbs.
46 N 025. NET 4.60

INDIVIDUAL TAPS AND DIES

High-quality taps and solid dies for all-purpose use. Tough carbon steel. Right-hand thread. Shpg. wt., 2 oz.

Size	Tap	EACH	Die	EACH
4-36	46 N 700	25¢	46 N 706	30¢
6-32	46 N 701	25¢	46 N 707	30¢
8-32	46 N 702	25¢	46 N 708	30¢
10-32	46 N 704	30¢	46 N 710	30¢
10-24	46 N 703	30¢	46 N 709	30¢
¼-20	46 N 705	36¢	46 N 711	36¢

Tap Wrench. "T" handle tap wrench for above taps. Sliding handle with spring tension. Shpg. wt., 4 oz.
46 N 713. NET ..... 44¢

Die Stock. Plain die stock for above dies. Has no guide. Shpg. wt., 8 oz.
46 N 714. NET ..... 44¢

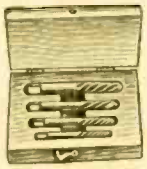
LINSTEAD CHASSIS CRADLE

Features "Speed Clamps" that hold work securely. No fumbling with makeshift setups to hold bulky chassis, no breakage of tubes or other above-board parts and equipment. Job is quickly, easily clamped into position. Full 360-degree swing allows work to be done in the most desirable position for speed and ease. Takes all chassis: power packs, record changers, television sets, amplifiers, transmitters, receivers, etc. All-steel construction. Size, 24" long, 14" high, 12½" wide. Shpg. wt., 7 lbs.
86 NX 034. NET 4.60

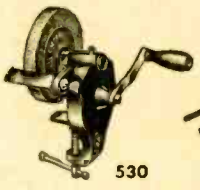
JFD "REPAIRACK"

Model 79-3. Sturdy, cast iron chassis rack for supporting chassis—makes servicing easier. Simplifies clamping of TV chassis, record players, etc. Holds chassis of up to 200 lbs. securely in place. Free pivoting for easy access of all parts. Adjustable to 32" in length. Protects tubes and components from damage during servicing. Size, 14¾" H, 32" L, 15" W. Cast iron construction for maximum rigidity and dependable trouble free service. A "must" for the busy serviceman's bench. Highly efficient; will pay for itself in time saved on the job. Finished in durable black crackle lacquer. Shpg. wt., 18 lbs.
86 NX 038. NET 17.64

HANSON SCREW EXTRACTOR SET



Model 20. For removing broken screws, bolts, studs and pipes that cannot be taken out by regular methods. A hole is drilled into the broken piece, using the correct drill size marked on the extractor. Counter-clockwise turning of the extractor wedges it into the hole and removes the broken piece on its own threads. No damage to the threaded hole results. Set contains 4 extractors in hinged cover box. Will remove screws with diameters from 5/32 to ⅝". Will also remove ⅛" and ¼" pipe. Extractors are tough alloy steel. Shpg. wt., 1 lb.
46 N 264. NET 1.76


530 825

DRILL GRINDING TOOLS

G. M. Co. Type 530. 5" Bench Grinder. Sturdy, well-made grinder for general-purpose work. Has 5" fine electric furnace abrasive wheel. All gears expertly machined and properly meshed for long, dependable service. Dirt-proof gear case and extra-long bearings assure accurate gear alignment and true running of wheel. Shpg. wt., 4 lbs.
46 N 105. NET 3.20

General Hardware 825 Grinding Attachment. For repointing and sharpening of drills. Handles drill sizes: ⅛" to ¾"; No. 30 to No. 1; A to Z; and 3.0 to 19.0 millimeter. Adjustable. Shpg. wt., 2 lbs.
46 N 106. NET 5.05

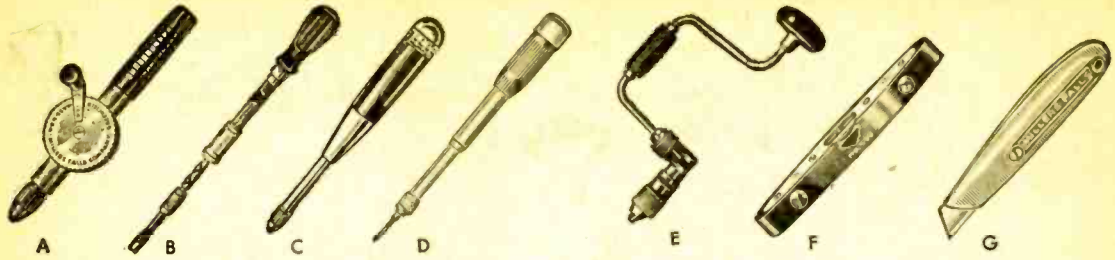
ECONOMY HAND DRILL

An exceptionally well-balanced, inexpensive hand drill with knurled, hardened steel chuck. Will take drill bits up to ¼" in diameter. Selected hardwood handle, with screw-on cap; has convenient storage space for extra drills. Properly meshing gears, with die-cast teeth, for long dependable service. Has wooden side knob. Drill can be used with carbon steel or high-speed steel drill bits for drilling through wood, metal or plastic. Sturdy construction throughout. All wooden parts are lacquer-finished. Overall length, measured to tip of chuck, 11½". Wt., 1¼ lbs.
46 N 030. NET 1.90

¼" TWO-SPEED BREAST DRILL

This deluxe 2-speed breast drill provides maximum ease in all types of hand drilling operations. Handle attaches to high- or low-speed drive shaft for speed selection. Handle-to-chuck ratios: 1:5 for fast, light-duty jobs and 1:2 for heavy-duty jobs. Breast-plate and side handle permit heavy, even pressure. Steel gears enclosed in cast frame. 14" long. Wt., 4 lbs.
46 N 296. NET 5.63

All-Purpose Hand Tools



MILLERS FALLS HIGH-QUALITY HAND TOOLS

Fig. A. Model 104 Hand Drill. Latest drill design. Frame is die-cast aluminum; handle is made of tough, break-proof plastic. Steel pinion is driven by large, cast iron gear; both gears with machine-cut teeth. 3-jaw chuck. Takes drills up to ¼" in diameter. Hollow handle stores 8 drills (supplied), 1/16" to 1/64". Length: 12⅝". Wt., 1¼ lbs.
46 N 042. List, $7.00. NET 5.14

Fig. B. Model 610A Ratchet Screwdriver. Drives and draws screws by automatic ratchet action. Spring return. Also drives and draws screws by rigid action in long (20½") or short (12⅝") position. With 3 blades: 3/16", ¼", and 5/32". Shpg. wt., 1¼ lbs.
46 N 048. List, $7.70. NET 5.66

Model 29 Ratchet Screwdriver. As above, but 10" long. One blade, ¼". Wt., 9 oz.
46 N 047. List, $3.00. NET 2.20

Fig. C. Model 100 Automatic Drill. Multiple-toothed spiral mechanism with internal spring return. Hollow red plastic handle stores 8 fluted-shank drills (supplied), 1/16" to 1/64". Shpg. wt., 1½ lbs.
46 N 038. List, $4.50. NET 3.31

Fig. D. Model 170 Automatic Drill. New drill with quick-action chuck. Locks or releases with slight forward thumb pressure. Serrated, red plastic handle has 4 compartments—holds up to 12 drill bits. With 4 drills: 3/64", 1/16", 5/64" and 1/64". 10¼" long. Shpg. wt., ¾ lb.
46 N 307. List, $3.25. NET 2.39

Fig. E. Model 1708 Brace. Low-priced brace for square shank bits. Has semi-boxed ratchet; Barber chuck with alligator jaws. 8-inch sweep. Ball bearing head mount. Hardwood head and handle. Shpg. wt., 2½ lbs.
46 N 043. List, $4.70. NET 3.46

Fig. F. Model 590 Torpedo Level. Handsome new level with one 45° plumb, one 90° plumb and one level. Black bakelite body. Top plate of heavy, polished "nickeloid"; sets flush with body to protect the level glass. Plumbs and level vial are of cat's-eye type. Bottom has V-groove running its entire length. Size, 9x1¼x ¾". Shpg. wt., 7 oz.
46 N 309. List, $2.10. NET 1.55

Fig. G. Model 333 Utility Knife. Versatile new utility knife of 1000 uses in shop or home. Neatly cuts rubber, veneer, gaskets, linoleum, etc. Die-cast, 2-section handle contains 4 extra razor-sharp blades, .018" thick. Each blade has 3 positioning notches for exposing longer or shorter cutting edge. Blades are end-to-end reversible—a total of 10 keen cutting edges. 5" long. With 5 blades. Shpg. wt., ½ lb.
46 N 308. List, $1.00. NET 73c

ALL PURPOSE SAWS

Fig. H. Forsberg V-35 Four-Way Keyhole Hacksaw. Handy lightweight saw for all general purpose work. Cuts metal, wood, plaster, conduit, etc. Blade is 7½" long, 24 teeth/inch—can be faced in 4 directions. Shpg. wt., 6 oz.
46 N 341. NET 29c

Extra Keyhole Saw Blades. Wt., 2 oz.
46 N 342. NET EACH ..... 12¢

Fig. J. Millers Falls Model 525 Keyhole Hacksaw. Cuts metal, wood, plaster, etc. Has removable, 11¾" blade; 10 teeth/inch. Blade can be rotated and locked in any of 8 positions for easier odd-angle cuts. Handle fits blades below. Shipping weight, 9 oz.
46 N 102. NET 1.47

Metal-Cutting Blade. 24 teeth/inch. 3 oz.
46 N 103. NET ..... 37¢

Wood-Cutting Blade. 7 teeth/inch. 3 oz.
46 N 104. NET ..... 37¢

Fig. K. Penn. Saw Model 77-HB Metal Cutter Saw. New saw with glass-hard teeth. Cuts nails, BX cable, pipe, etc. Blade turns and locks in 8 positions. Metal handle. 11" blade, 12 teeth/inch. Shpg. wt., ½ lb.
46 N 306. NET 98c

Type 77-BM 11" Replacement Blade. For above. 3 oz.
46 N 303. NET ..... 34¢

Type 77-BS. 10" Blade. 18 teeth/inch. 3 oz.
46 N 302. NET ..... 34¢

Type 77-BL. 12" Blade. 10 teeth/inch. 3 oz.
46 N 301. NET ..... 34¢

Fig. L. Wilson Model 100 Coping Saw. Natural hardwood, lacquered handle. Special ratchet locks blade in position. Length of blade, 6½". Throat depth, 4¾". Wt., ¼ lb.
45 N 878. NET 73c

Type 124. Replacement Blade. Wt., 2 oz.
45 N 876. Pkg. of 2. PER PKG 9c

Fig. M. Stickleback Drilsaw. Drills its own starting hole, then saws any shape in plywood, plaster, etc. Tip is gimlet; main blade has sharp spiral toothing. In 7" and 13" sizes.
46 N 148. 3/16" Drilsaw. 7" L. 6 oz. NET 1.60
46 N 149. 5/16" Drilsaw. 13" L. 12 oz. NET 2.60

Fig. N. Wilson Model 107 Utility Saw. ¼" round steel back. Sliding steel channel adjusts for ¼" to 3" cutting depth. Steel handle. Shpg. wt., ¾ lb.
45 N 877. NET 52c

Type 123 6½" Replacement Blade. Wt., 3 oz.
45 N 875. Pkg. of 2. PER PKG ..... 20¢

Fig. P. Pistol-Grip Hacksaw. Adjusts for 8 to 12" blades. With 10" blade. Wt., 1½ lbs.
46 N 090. NET ..... 98¢

Replacement Blade Set. Contains 1 fine and 1 coarse blade. Shpg. wt., 3 oz.
46 N 091. NET PER SET OF 2 ..... 15¢

CLAUSS INDUSTRIAL SCISSORS

Type 925. Electricians' scissors. Made of finest cutting steel. Nickel plated for long service. Lgth. of cut, 1¾". Ideal for cutting tape, rubber, etc. 5" long. Shpg. wt., 3 oz.
45 N 896. NET 1.84

Type 925BS. Same as above, but 1 blade serrated.
45 N 897. NET 2.05

Type 4217. Industrial Shears. Not illus. For shop use. 7" long. Length of cut, 3¼". 5 oz.
46 N 305. NET 2.75

Type 4218. As above, but 8" long; 4" cut. 6 oz.
46 N 304. NET 3.13

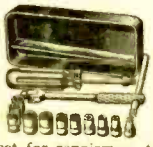
CAMILLUS ELECTRICIAN'S KNIFE

Model 229. Rugged electrician's knife. Two blades: Combination screwdriver-cutter-stripper-scraper; spear-shaped, ¾" knife blade. Brass locking bar positively prevents screwdriver blade from closing accidentally. Each blade is 2½" long; of high-quality steel. Black plastic handle. Shpg. wt., 5 oz.
45 N 895. NET 1.23

STEVENS-WALDEN TOOLS

"SPINTITE" SET 3800B15

Deluxe 15-piece radio and electrical kit. Includes 7 hex wrenches in following sizes: 3/16", ¼", 5/16", 11/32", ⅜", 7/16" and ½"; three screwdrivers; one combination reamer and awl; and one universal handle which holds all tool shafts. Also includes 6" long-nose pliers. 5" diagonal cutters, and insulated screwdriver and wrench. Supplied complete with leatherette tool roll. Shpg. wt., 2¼ lbs.
46 N 055. NET 10.83



"MIGIT" RADIO WRENCH SET

Model 3100C14. This compact, 14-piece socket set will cover almost all hex-head bolt and nut sizes encountered in radio-television servicing. A highly valuable wrench set for repairmen, technicians, etc. Universal joint handle with sliding "T" bar, and one straight spin type amber plastic handle. Eight hex sockets, 3/16" to 7/16"; 3 double-square sockets. Chrome-plated tools; bright enamel-finished case. Shpg. wt., 1½ lbs.
46 N 165. NET 5.94

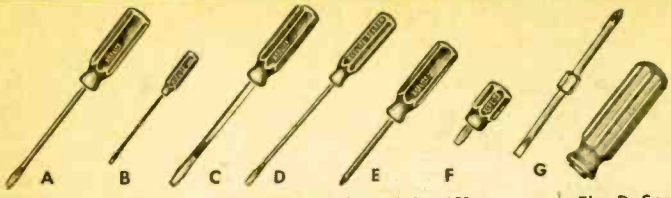
GRIP SPINTITE WRENCHES

New "Grip-Spintite" wrenches with knurled sleeve. Sleeve is pushed forward by fingers to close wrench securely on hex nut. Sleeve is easily pulled back to release grip. No magnets or springs; grips securely—releases quickly and easily. "Push-pull" feature permits convenient one-hand operation. A full set of these wrenches is an invaluable aid to the radio-TV serviceman. Shank and sleeve of wrench are made from high-grade, heat-treated steel. Precision machined taper lock; bright plated finish. Tough and durable plastic handles. *For non-standard sizes. Overall length, 6½". Av. shpg. wt., 6 oz.

Stock No.	Mfr's Type	Size	Nut Size	NET EACH
45 N 712	3606	3/16"	#2, 3, 4	2.46
45 N 707	3607	7/32"	*	
45 N 713	3608	¼"	#4, 5, 6, 8	
45 N 709	3609	5/32"	*	
45 N 714	3610	5/16"	#5, 6, 8, 10	2.46
45 N 711	3611	11/32"	#8	
45 N 715	3612	⅜"	#8, 10, 12	
45 N 716	3614	7/16"	#10, 12, 14, ¼	2.70
45 N 717	3616	½"	#14, ¼, 5/16	
45 N 718	3618	9/16"	⅜	2.92

For Complete Product and Manufacturer's Index, See Pages 317-320

Xcelite Quality Tools



SCREWDRIVERS

High-quality, rugged screwdrivers for every application. Built to last a lifetime. Shafts are skillfully forged from chrome vanadium electric furnace steel, and polished to a high luster. Flange on shaft at handle absorbs shock of pounding. End of shaft is of winged design, and is firmly embedded in handle—will not break loose. Handles are of famous XceLite plastic known for its rugged dependability. Handle grips fluted to provide firm non-slip grip.

Fig. A. Round Shaft. Available in lengths from 4¼" to 12".

Stock No.	Mfr's Type	Shaft Size Dia.	Shaft Size Length	Overall Length	Shpg. Wt.	NET
43 N 845	R-182	⅛"	2"	4½"	3 oz.	30¢
43 N 846	R-184	⅛"	4"	6½"	3 oz.	33¢
43 N 847	R-186	⅛"	6"	8½"	4 oz.	36¢
43 N 848	R-188	⅛"	8"	10½"	4 oz.	42¢
45 N 795	R-144	¼"	4"	8"	6 oz.	60¢
45 N 796	R-146	¼"	6"	10"	6 oz.	63¢
45 N 797	R-148	¼"	8"	12"	7 oz.	69¢

Fig. B. Set-Screw Types. Precision-ground, narrow-blade screwdrivers designed to fit set-screws. Have pocket clips.

43 N 830	R-3323SS	3/32"	3"	5"	2 oz.	24¢
43 N 831	R-184SS	⅛"	4"	6"	2 oz.	24¢

Fig. C. Square Shaft. Available in lengths from 8" to 18".

43 N 829	S-3164	1/16"	4"	7⅝"	4 oz.	57¢
43 N 832	S-144	¼"	4"	8"	6 oz.	69¢
43 N 833	S-146	¼"	6"	10"	6 oz.	72¢
43 N 834	S-148	¼"	8"	12"	7 oz.	81¢
43 N 837	S-388	⅜"	8"	12⅛"	1 lb.	1.14
43 N 838	S-3812	⅜"	12"	18"	1¼ lb.	1.65

Fig. D. TV Focalizer Type. Non-magnetic—simplify adjustment.

43 N 828	BR-1410-FC	¼"	10"	14"	12 oz.	1.95

Fig. D. Sparkplug Tester Screwdrivers. Neon bulb in handle.

Stock No.	Mfr's Type	Shaft Size Length	Shaft Size Dia.	Overall Length	Shpg. Wt.	NET
43 N 823	T-182	⅛"	2"	4⅞"	3 oz.	54¢
43 N 824	T-3166	3/16"	6"	9⅝"	5 oz.	75¢

Fig. E. Phillips Screwdrivers. Alloy steel. *Stubby type.

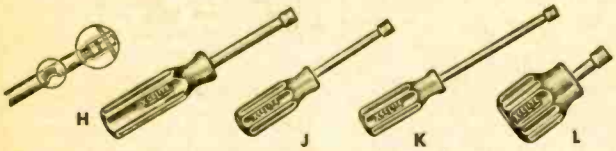
43 N 876	X-101	No. 1 pt.	3"	6⅛"	5 oz.	63¢
43 N 877	X-108	No. 1 pt.	6"	10"	5 oz.	69¢
43 N 878	X-102	No. 2 pt.	4"	7½"	6 oz.	81¢
43 N 879	X-1020	No. 2 pt.	10"	13¾"	8 oz.	1.08
43 N 881	X-103	No. 3 pt.	6"	10"	10 oz.	1.08
43 N 882	SX-101	No. 1 pt.	*	2½"	3 oz.	60¢
43 N 883	SX-102	No. 2 pt.	*	3¼"	5 oz.	66¢

Fig. F. Stubby Screwdriver. Square saft, polished blade.

43 N 844	S-141	¼"	1¼"	3¼"	5 oz.	45¢

Fig. G. Combination Blade Screwdrivers.

Stock No.	Mfr's Type	Blade Combination	Overall Length	Shpg. Wt.	NET
45 N 746	CR1	3/16" Regular #1 Phillips	7"	4 oz.	1.14
45 N 747	CR2	¼" Regular #2 Phillips	7"	4½ oz.	1.14
45 N 748	CR3	5/16" Regular #3 Phillips	7"	9½ oz.	1.14

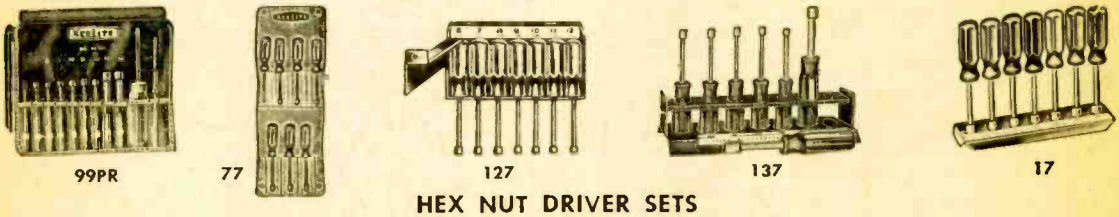


HEX NUT DRIVERS

The famous XceLite line of quality nut drivers. Made to exacting specifications, with shafts of chrome vanadium electric furnace steel, and handles of rugged XceLite plastic. Fully polished shaft is firmly embedded in handle—will not break loose. Sockets have no burrs, fit the nuts snugly, and are deep enough to handle two nuts simultaneously. Fig. H shows types with full-length hollow shafts; fig. J color-coded handle type; fig. K, extra-long type, and fig. L, stubby type. *Used primarily as volume control wrench.

Stock No.	Mfr's Type	Fig.	Nut Size	Handle	Length	Wt., Oz.	NET
45 N 779	HS-8	H	¼"	Red	6"	6	75¢
45 N 780	HS-10	H	5/16"	Amber	6"	6	75¢
45 N 781	HS-11	H	11/32"	Green	6"	6	75¢
45 N 782	HS-12	H	¼"	Blue	6"	6	75¢
45 N 783	HS-14	H	7/16"	Brown	7"	6	84¢
45 N 784	HS-16	H	½"	Red	7"	6	87¢
45 N 785	HS-18*	H	9/16"	Orange	7"	6	90¢
45 N 786	HS-20	H	⅝"	Amber	7"	6	1.05
45 N 813	6	J	3/16"	Black	6"	6	57¢
45 N 814	7	J	7/32"	Brown	6"	6	57¢
45 N 815	8	J	¼"	Red	6"	6	57¢
45 N 816	9	J	9/32"	Orange	6"	6	57¢
45 N 817	10	J	5/16"	Amber	6"	6	57¢
45 N 818	11	J	11/32"	Green	6"	6	57¢

Stock No.	Mfr's Type	Fig.	Nut Size	Handle	Length	Wt., Oz.	NET
45 N 819	12	J	⅜"	Blue	6"	6	57¢
45 N 860	A6	K	3/16"	Black	9"	8	69¢
45 N 861	A7	K	7/32"	Brown	9"	8	69¢
45 N 862	A8	K	¼"	Red	9"	8	69¢
45 N 863	A9	K	9/32"	Orange	9"	8	69¢
45 N 864	A10	K	5/16"	Amber	9"	8	69¢
45 N 865	A11	K	11/32"	Green	9"	8	69¢
45 N 866	A12	K	⅜"	Blue	9"	8	69¢
45 N 867	A14	K	7/16"	Brown	9"	8	90¢
45 N 868	A16	K	½"	Red	9"	8	90¢
45 N 857	S-8	L	¼"	Red	3¼"	5	48¢
45 N 858	S-10	L	5/16"	Amber	3¼"	5	48¢
45 N 859	S-12	L	⅜"	Blue	3¼"	5	48¢



HEX NUT DRIVER SETS

MODEL 99PR MULTI-PURPOSE NUT & SCREWDRIVER SET

A complete 12-piece tool set in a durable red plastic kit that rolls up to convenient pocket size. Set consists of 9 nut drivers, a double-ended standard screwdriver shaft, a double-ended Phillips screwdriver shaft, and a rugged plastic handle. Screwdriver and nut driver blades can be interchanged rapidly in the handle. Just select the proper driver for the job at hand and plug it in the handle. All blades and shafts are chromium plated. Nut driver sizes: 3/16", 7/32", ¼", 9/32", 5/16", 11/32", ⅜", 7/16", and ½". Screwdriver blades: 3/16" and 3/32"; No. 1 and No. 2 Phillips. Average depth of holes in nut driver shafts is 1½". A handy tool kit for work bench or tool box. Shpg. wt., 2 lbs.
45 N 738. List, $11.95. NET 7.17

MODEL 77 NUT DRIVER SET

A handy 7-piece set of hex nut drivers in a convenient, rollup carrying case. An indispensable tool set for the radio-TV serviceman and the experimenter or builder. Color-coded handles for easy identification. Shafts are hollowed to an average depth of 1¼" to permit tightening nuts on long screws. Socket sizes from 3/16" to ⅜" in 1/32" steps. Handle colors and sizes are: black 3/16", brown 7/32", red ¼", orange 9/32", yellow 5/16", green 11/32" and blue ⅜". Shafts are full polished, high-quality steel. Shock-proof handles are fluted for sure grip and firmly secured to shafts. Overall length 6". Shpg. wt. 2 lbs.
46 N 337. List, $7.85. NET 4.71

MODEL 127 NUT DRIVER SET

Color-coded plastic handles indicate socket sizes instantly. Sockets are deep enough to handle two nuts. Depth of shaft hole, 1¼". Includes 7 wrenches, sizes 3/16" to ⅜" in 1/32" steps. Sturdy metal holder in red wrinkle finish. Can be permanently fastened to wall. Size, 7½x7¼x1¼". Shpg. wt., 2¼ lbs.
45 N 735. List, $7.85. NET 4.71

MODEL 137 NUT DRIVER SET

Consists of seven nut drivers and a stand-up rack for holding tools in place when not in use. Ideal for serviceman's bench or workshop. Sizes: 3/16", ¼", 5/16", 11/32", ⅜", ½" and 9/16". Large handles insure non-slip gripping. Handle colors include black, red, yellow, green, blue, red and brown. Shanks are polished steel. Shpg. wt., 3 lbs.
45 N 734. List, $8.95. NET 5.37

MODEL 17 NUT DRIVER SET

Consists of the seven most commonly used nut driver sizes in radio-television servicing. A valuable addition to any work bench. With durable amber plastic handles and highly polished, tough alloy steel shanks. Sizes: 3/16", 7/32", ¼", 9/32", 5/16", 11/32" and ⅜". Set includes metal rack for holding nut drivers upright when not in use. Shpg. wt., 2½ lbs.
45 N 733. List, $7.20. NET 4.32

Quality Tools–Tool Kits

VACO TIME-SAVING SERVICE TOOLS AND TOOL KITS

K-7 HEX NUT DRIVER SET

Kit includes 7 hex-nut drivers with new, color-keyed shafts. Each shaft is a different color, to represent a popular nut size. Permits immediate selection of correct hex driver for the job. Shaft hollow the entire length. Completely insulated, all-hollow shafts. Sure-grip handles; extra-hard sockets. In convenient, tool roll with individual holders marked for size and color. Roll hangs on wall or stands on workbench. Shaft length, 3". Nut size 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2". Shpg. wt., 1½ lbs.

43 N 906. List, $9.00. NET **7.06**

COLOR-KEYED HEX NUT DRIVERS

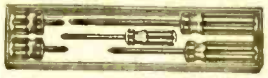
Complete selection of individual hex nut drivers. Insulated, all-hollow shafts. Have same features as set above, but choice of shaft lengths from 1½" to 8¼". Av. shpg. wt., 5 oz.

Stock No.	Mfr's Type	Hex Size	Color	Shaft Lgth	NET EACH
43 N 914	N6-1	3/16	black	1½"	.73
43 N 915	N8-1	1/4	red	1½"	.73
43 N 916	N10-1	5/16	yellow	1½"	.73
43 N 917	N11-1	11/32	green	1½"	.73
43 N 918	N12-1	3/8	blue	1½"	.73
43 N 919	N14-1	7/16	brown	1½"	.75
43 N 920	N16-1	1/2	orange	1½"	.75
43 N 907	N6-3	3/16	black	3"	.81
43 N 908	N8-3	1/4	red	3"	.81
43 N 909	N10-3	5/16	yellow	3"	.81
43 N 910	N11-3	11/32	green	3"	.81
43 N 911	N12-3	3/8	blue	3"	.81
43 N 912	N14-3	7/16	brown	3"	.91
43 N 913	N16-3	1/2	orange	3"	.91
43 N 921	N6-6	3/16	black	5½"	.91
43 N 922	N8-6	1/4	red	5½"	.91
43 N 923	N10-6	5/16	yellow	5½"	.91
43 N 924	N11-6	11/32	green	5½"	.91
43 N 925	N12-6	3/8	blue	5½"	.91
43 N 926	N14-6	7/16	brown	5½"	1.00
43 N 927	N16-6	1/2	orange	5½"	1.00
43 N 928	N6-8	3/16	black	8¼"	.97
43 N 929	N8-8	1/4	red	8¼"	.97
43 N 930	N10-8	5/16	yellow	8¼"	.97
43 N 931	N11-8	11/32	green	8¼"	.97
43 N 932	N12-8	3/8	blue	8¼"	.97
43 N 933	N14-8	7/16	brown	8¼"	1.07
43 N 934	N16-8	1/2	orange	8¼"	1.07

HANDY COMBINATION KIT

Type RT-14. Provides all the nut drivers, Phillips, and regular drivers needed for almost any job. All blades fit the shock-proof Amberyl handle provided. A special 6" extension is included. Kit includes: Handle; extension piece; 7 nut drivers, sizes 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2"; 2 Phillips drivers, No. 1 and No. 2; and 3 regular drivers, sizes 1/8", 3/16" and 1/4". All drivers are of high-quality chrome alloy steel. Kit is supplied complete with 14-section leatherette tool roll. Shpg. wt., 1½ lbs.

45 N 829. List, $9.18. NET **7.19**



P550 PHILLIPS KIT

Kit contains an excellent selection of 5 of the most popular Phillips screwdrivers, listed below. Shock-proof Amberyl handles and vanadium steel blades. Sold as complete kit only. Shpg. wt., 1½ lbs.

Type	Overall	Blade	For Screws
P1	6½"	3/16x3"	No. 4 and smaller
P2	7¾"	1/4x4"	No. 5 to No. 9
P3	10"	5/16x6"	No. 10 to No. 16
P5	3⅞"	1/4x1¾"	No. 5 to No. 9
P6	3"	5/16x1¼"	No. 4 and smaller

43 N 880. Complete kit.
NET **3.35**

BERYLLIUM-COPPER SCREWDRIVERS

For adjusting PM focus units on TV sets. Extra-long sizes permit back-of-the-set adjustments without removing the back cover. Quickly makes close tolerance adjustments. Non-magnetic; do not affect image. Nearly as hard as steel. Provide long service without buckling or shearing. Will not "give."

No.	Type	Lgth.	Blade	Oz.	NET
43 N 896	VB26	8¾"	6x1/8"	3	.78
43 N 897	VB48	11⅝"	8x1/8"	4	1.90
43 N 898	VB210	12¼"	10x1/8"	4	.86

27-PIECE TV AND RADIO KIT

Type TV-27. Unique master kit containing practically every hand tool used in radio-TV servicing. Includes: 1/4" stubby screwdriver; 1 medium and 1 heavy-duty handle; 6" bit ext.; 1/4", 3/16" and 1/8" bits; #1 and #2 Phillips bits; 3/16", 1/4", 5/16", 11/32", 3/8", 7/16" and 1/2" hex wrenches; 3/16" metal tip aligner; 3/32" pocket clip, #1 Phillips, 1/8" screw-holding, 1/8" insulated, 3/16" screw-holding and 3/16" insulated screwdrivers; 1/8"x10" non-magnetic adjuster; 5/32" fiber TV aligner; medium and small offset screwdrivers. Shpg. wt., 2½ lbs.

45 N 831. List, $20.00. NET **15.68**

ZSX-61 WRENCH SET

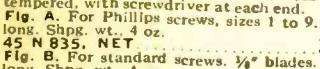
Handy 7-piece wrench set featuring five detachable hex nut wrench shafts, a six-inch extension shaft, and a shockproof, unbreakable Amberyl handle. All shafts are made of high quality, oil-tempered chrome alloy steel, plated in rust-proof cadmium. Kit consists of one each—1x3⅜" Amberyl handle with clutch, 1/4" hex nut wrench shaft, 5/16" hex nut wrench shaft, 11/32" hex nut wrench shaft, 3/8" hex nut wrench shaft, 7/16" hex nut wrench shaft, and extension shaft. Wrench shafts are 3" long. Seven-section leatherette tool roll included. Shpg. wt., 1 lb.

45 N 828. List, $5.06. NET **3.97**

INSULATED BLADE SCREWDRIVERS

Heavily coated with break-resistant plastic of high dielectric strength. Precision built for perfect balance. Smooth amberyl handles with fluted sides for comfortable grip. Vanadium steel blades. Choice of 5 popular sizes.

No.	Type	Lgth.	Blade	Oz.	NET
43 N 960	VR241	7"	4x1/8"	2	51¢
43 N 861	VR261	9"	6x1/4"	3	55¢
43 N 962	VR281	11"	8x1/8"	3	59¢
43 N 963	VR361	9½"	6x3/16"	5	67¢
43 N 964	VR381	11½"	8x3/16"	5	70¢



OFFSET SCREWDRIVERS

Forged from a steel bar, heat-treated and tempered, with screwdriver at each end.

Fig. A. For Phillips screws, sizes 1 to 9. 4½" long. Shpg. wt., 4 oz.
45 N 835. NET **39c**

Fig. B. For standard screws. 1/8" blades. 4½" long. Shpg. wt., 4 oz.
43 N 843. NET **54c**

ICA FLEXIBLE SHAFT SCREWDRIVER

Type 935. Valuable addition to the tool box. Flexible shaft reaches otherwise inaccessible areas. Insulated guide at tip helps locate head and holds blade in screw slot. 7¼" long; 7/32" tip. Wt., 5 oz.
46 N 070. NET **1.32**

INSULATED MAGNETIC SCREWDRIVERS

Made by craftsmen in U.S. zone of Germany. Tough steel, full rubber-insulated shock-proof blade. Features magnetic tip to hold screws. Parallel ground tip follows screw heads into deep holes. Molded bakelite handle with screw cap. 1/8" tip. Excellent for trimmer adjustment, TV and radio receiver alignment, etc. Moderately priced yet high in quality. Order a full set for your bench or tool kit.

No.	Type	Lgth.	Blade	Oz.	NET
43 N 867	503	5½"	2½"	1¼	19¢
43 N 868	504	7½"	4"	2	29¢
43 N 869	505	9½"	5½"	2½	39¢

ALLEN SCREW KEY WRENCH SET

6 L-shaped wrenches to fit 7 popular-sized Allen-head screws: Nos. 4, 5, 6, 8, 10, 1/4" and 5/16". Made of "Allenoy" steel. With leatherette case which fits into pocket. Shpg. wt., 3 oz.

46 N 072. NET EACH **71c**
12 sets or more, EACH ..... **64¢**

JEWELER'S SCREWDRIVER SET

Type 600. Set of six screwdrivers. An exceptionally useful tool for fine work. Made by General Hardware. Each has swivel head, removable blade, and nickel-plated, knurled body. Overall length, 3¼". Blade sizes: .1, .08, .07, .055, .04 and .025". Wt., 8 oz.
43 N 855. NET **3.09**

WALSCO HEX AND SPLINE WRENCH SET

Handy kit with 11 hex and spline wrenches in sizes most often used in radio. Contains 7 hex (Allen) and 4 spline (Bristol) keys for No. 2 to 3/8" screws. Finest carbon steel. In attractive leatherette case. Shpg. wt., ½ lb.
46 N 166. NET **1.06**

HOLLOW HANDLE SET

Screwdriver bit and 5 hex sockets in 1/4", 5/16", 11/32" and 7/16" sizes. Hollow hardwood handle and screw top hold all parts. Case-hardened steel sockets have nickel finish. Firmly embedded steel shaft. Shpg. wt., 6 oz.
45 N 826. NET **89c**

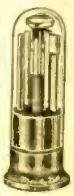
MOODY WRENCH AND SCREWDRIVER SETS

SCREWDRIVER SETS

Type SC-5. Contains 5 interchangeable hardened steel blades in sizes .100", .080", .070", .055" and .040". Insert quickly and firmly into chuck. Excellent for kit- and model- building; repairing radios, appliances, cameras, etc. Complete set of five blades, handle and plastic base with transparent dust cover. Wt., 8 oz.
43 N 859. List, $1.79. NET **1.03**
12 sets or more, EACH ..... **97¢**

Type PA-5. Combination Phillips Head Screw Set and Allen Head Wrench Set. Contains No. 0 and No. 1 Phillips type driver and Nos. 4, 6, and 8 Allen type wrench. Complete with handle, stand and dust-proof cover. Wt., 7 oz.
43 N 857. List, $2.50. NET **1.64**
12 sets or more, EACH **1.47**

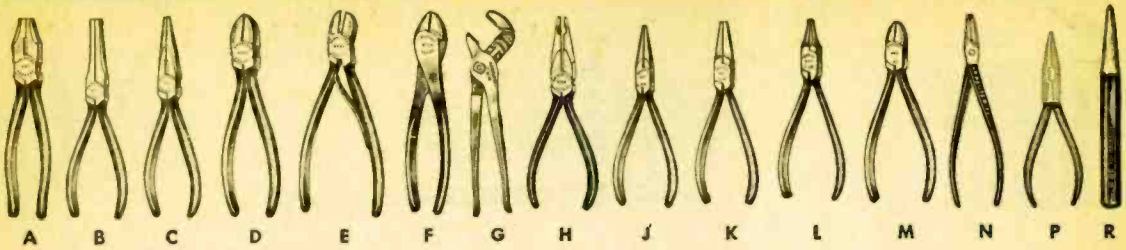
MAGNETIC SOCKET WRENCH SET



Type BW-5. Moody kit containing five tiny, interchangeable socket wrenches with magnetized swivel-top handle. Magnetized handle provides easy means for removing or inserting nuts in recessed, hard-to-get-at places. Particularly suitable for close work in crowded radio or television chassis. An indispensable tool kit for radio-TV servicemen, electricians, home craftsmen, etc.

Socket wrench sizes: 5/64" hex, 3/32" hex, 7/64" hex, 1/8" hex, and 5/32" hex. Wrenches and handle of tough, heat-treated and rust-proofed steel. Kit supplied in transparent plastic container, with colored plastic base. Shpg. wt., 5 oz.
43 N 862. List, $3.95. NET **2.59**

Quality Tools



THE KRAEUTER "INDUSTRIAL LINE" OF HIGH-QUALITY HAND TOOLS

A complete selection of fine, professional-quality pliers. Drop-forged from highest quality tool steels. Scientifically heat-treated and hardened in automatic furnaces where absolute uniformity of temperature is closely regulated by electrical controls. Blue-tempered rust-resistant finish. Assures long life of dependable service under hardest use.

"Cushion-Grip" Pliers†. Handles are coated with red plastisol insulation for added safety and more comfortable grip.

4½" Jewelers' Type Pliers*. Small lightweight pliers designed for use with miniature parts and where working space is very limited.

Av. shpg. wts.: Standard tools, 10 oz.; 4½" pliers, 5 oz.

No.	Fig.	Type	Description	NET
46 N 408	A	1801	8½" Side-Cutting Pliers	3.67
46 N 400	A	1830	6½" Side-Cutting Pliers	2.29
46 N 413	B	1741	6" Long Flat Nose Pliers	1.96
46 N 401	C	1661	6" Needle Nose Side Cutter	2.50
46 N 404	C	1671	6" Needle Nose (no cutter)	1.96
46 N 402	D	4501	5" Diagonal Cutters	2.21
46 N 403	D	4501	6" Diagonal Cutters	2.50
46 N 421	G	710	10" Joint Pliers	2.37
46 N 419	H	1663	6" Nose Cutting Pliers	2.58
46 N 414	E	2612	6½" Strip-Notch Diag. Cutters	2.83
46 N 410	F	4610	7" Extra Heavy Diag. Cutters	2.50

No.	Fig.	Type	Description	NET
46 N 415	J	83*	4½" Chain Nose Pliers	2.42
46 N 416	K	84*	4½" Flat Nose Pliers	2.50
46 N 417	L	85*	4½" Round Nose Pliers	2.50
46 N 418	M	81*	4½" Diagonal Cutting Pliers	2.50
46 N 412	R	23	Octagon Center Punch. ⅛x4½".	.38
46 N 420	N	71	8" Nose Cutting Pliers	3.13
46 N 436	P	CG826†	6" Needle Nose Side Cutters	2.92
46 N 437	P	CG827†	7" Needle Nose Side Cutters	3.25
46 N 438	P	CG1771†	7" Chain Nose (no cutters)	2.50
46 N 439	P	CG1781†	7" Chain Nose Side Cutters	3.17

JEWELERS' MINIATURE PLIERS SETS

Kraeuter Type 89. Set of 3 jeweler-type precision pliers for close, accurate work. Basic types for all wiring requirements and many other applications. Includes 1 No. 81 diagonal cutting pliers, 1 No. 83 chain nose pliers, 1 No. 84 flat nose pliers. Pliers are drop forged from selected tool steel, heat treated and fully polished. Each 4½" long. In black zipper case, 5¾x6¼". Shpg. wt., 1 lb.
46 N 435. NET 9.08

Kraeuter Type 90. Five jewelers' pliers in black zipper case. Excellent for close, accurate work. Consists of one each: #81 diagonal cutters, #82 end cutters, #83 chain nose, #84 flat nose and #85 round nose pliers. These fine pliers make up a complete set for any type of precision work. Polished, drop-forged tool steel. All are 4½" long. Shpg. wt., 1¼ lbs.
46 N 423. NET 15.20

KRAEUTER SNIPS

Model K-13. Combination pattern snips. Designed to cut either curved or straight lines in sheet metal, plastics, rubber, leather, etc. Hundreds of uses. Ideal for use in shop and home. Drop forged from high-quality steel. Carefully heat-treated. Blades stay sharp and have uniform shearing action over their entire length. Rated to cut 26 gauge cold rolled sheet steel. Highly polished blades; black enameled handles. Pocket sized—only 7" long. 1⅝" cut. Shpg. wt., 10 oz.
46 N 422. NET 1.50

STEEL TAPE RULES

Retracting, steel rules in choice of 6, 8 or 12 ft. lengths. Right-angle, square-corner case permits accurate inside or outside measurements. Die-cast case is finished in attractive, heavy chrome plating. Tape is made of high carbon steel with durable, baked-on white enamel face. Highly readable, black numerals. Average shpg. wt., ¼ lb.
46 N 298. 6 ft. NET 58c
46 N 321. 8 ft. NET 77c
46 N 322. 12 ft. NET 1.26

SPECO SHOCKPROOF PLASTIC PLIERS

Non-magnetic and shockproof pliers for working on radios, electrical appliances, etc. 6,000 v. breakdown. Heat resistant, 240° F. Made of black plastic. 6¼" long. Shpg. wt., 3 oz.
46 N 035. NET 97c

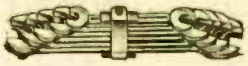
WALSCO PROTECTO-TUBE

Type K-18. Synthetic HV tubing for insulating handles of pliers, screwdrivers. Expanding solution swells tubing for quick application. 12 ft. of tubing. Shpg. wt., 12 oz.
43 N 132. NET 1.06

DIAMOND CALK TOOLS

COMBINATION PLIERS

Type K16. Slip joint combination pliers with wire cutter. Knurled handles for firm grip. 6" long. Shpg. wt., 10 oz.
46 N 460. NET 81c



VLCHEK PANEL BAR WRENCH SETS

Type X2564. 5-piece open-end wrench set. Made of finest tempered carbon steel. 10 openings, 5/16" to ¼"—marked on wrench. Velco finish resists rust. Shpg. wt., ¾ lb.
46 N 265. NET 1.03

Type X2567. 5-piece large wrench set. As above but ⅛" to ⅞" openings. Wt., 1¼ lbs.
46 N 266. NET 1.43

JIFFY TOOL RACK

Handy aluminum tool rack. Mounts an amazingly large number of tools in a very small space. Uses only 2x12" of wall space yet it neatly holds all your small tools within easy reach. Right-angle shape. Bottom half, for flush wall mounting, has 9 hooks for general utility use. Upper half of rack has 10 holes and 10 recesses. The holes provide convenient, rust-proof storage space for screwdrivers, files, inspection mirrors and other small tools. The recesses are useful for mounting pliers, wrenches, shears, etc. Constructed of sturdy, rustproof aluminum. Shpg. wt., 5 oz.
46 N 779. NET 57c

ADJUSTABLE WRENCH

Type DB76. Exceptionally strong "Diamalloy" tool steel. Capacity ½" and ¾". Length, 6". Long wearing, rust-resistant chrome finish. Shpg. wt., 6 oz.
45 N 770. NET 2.50

L. B. MILLER "MAGIMMICK JR."

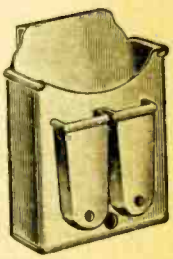
A permanent magnet swivel-connected to extension handle to pick up small metal objects in hard-to-reach places. 6" long. Wt., 6 oz.
46 N 084. NET 1.10

ARROW GUN TACKER

Easy-action stapling tool for tacking down 300-ohm twin-lead, intercom cable, etc. Features "pistol grip" for convenient, rapid, accurate operation. Just hold tacker against surface and squeeze—staple goes in wherever a tack can be driven. Easy to use. Chrome-plated steel. Shpg. wt., 2 lbs.
46 N 062. NET 7.92

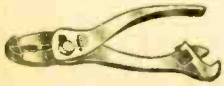
Staple Clips. For gun tacker above. Easy to insert. Length, 3/16". Package contains 5,000 staples. Shpg. wt., 1 lb.
46 N 063. NET 1.88

G.C. 8943 "TUX" TOOL HOLSTER

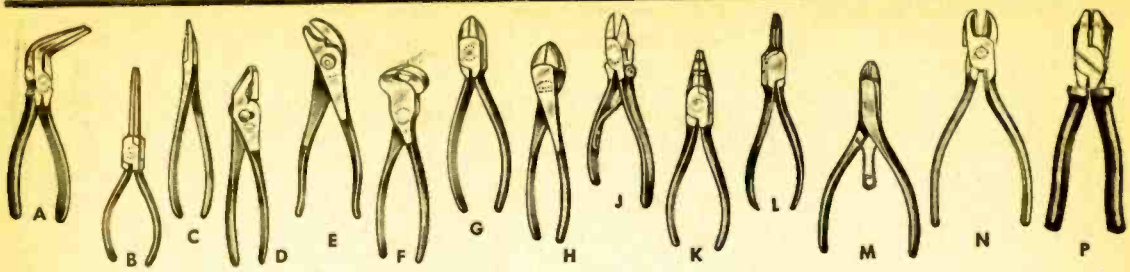


Servicemen will find this tool holster as handy as a third arm. Excellent for service calls and antenna installations; the required tool is always available. Attaches to belt. Has two narrow compartments and one full-size compartment. Plenty of room for carrying most-needed tools, such as wrench, pliers, wire cutter, tube puller, screwdrivers, alignment tools, file, etc. Made of tough, flexible "Alathon" polyethylene plastic. Holds its shape. Wt., 6 oz.
46 N 345. NET 2.32

HANDYBOY PLIERS



Type DH16. Combination of 4 tools in 1. Slip-joint plier, adjustable wrench, screwdriver and wire cutter. Length, 6½". 7 oz.
46 N 461. NET 2.35



UTICA HIGH-QUALITY PLIERS, CUTTERS AND SNIPS

All types of electrical wiring and assembly jobs are easier with fine-quality Utica tools. They are ideal for use by manufacturers, servicemen, Amateurs, experimenters—any who insist upon tools offering the utmost in smooth action, dependability and long life under the hardest use. Precise, scientifically controlled heat treating and hardening of the finest tool steels assure uniform quality. Precision-fit joints provide free, positive action under all conditions. Accurate, easy cutting and gripping are assured by careful alignment of jaws and cutting edges. Handles on all types are of the proper size and shape for completely comfortable grip and balance. Use Utica tools and add power to your hands. *Type 48 Plastic Cutting Diagonal Pliers are for cutting of non-metallic materials only. Average shpg. wt., 10 oz.

No.	Fig.	Type	Description	EACH
46 N 476	A	888	6" Curved Needle Nose Pliers	2.28
46 N 475	B	777	6" Long Needle Nose Pliers	2.20
46 N 477	C	82	8" Assembly Pliers, Needle Nose	2.06
46 N 479	D	512	8" Heavy-Duty Bent Nose Slip Joint Pliers	2.58
46 N 480	E	523	7" Angle Nose Gripping Pliers	1.65
46 N 474	F	260	7" End Cutting Nippers	2.50
46 N 470	G	45	6" Aviation Diagonal Cutters	2.42
46 N 471	H	40	7" High Leverage Diagonal Pliers	2.06

No.	Fig.	Type	Description	EACH
46 N 472	J	48*	6" Plastic Cutting Diagonal Pliers	3.67
46 N 473	J	48*	7" Plastic Cutting Diagonal Pliers	4.04
46 N 478	K	2291	6" Insulation Skinning Pliers	2.11
46 N 426	L	896	6" Cutting and Stripping Pliers	2.65
46 N 425	M	101	4½" Midget, Scissors-Type Snips	2.20
46 N 427	N	241N	5" Cushion Throat Side Cutters	2.91
46 N 428	N	241N	6" Cushion Throat Side Cutters	3.13
46 N 489	P	3950	6" Linemen's Side Cutters	2.94

UTICA STRAIGHT CUT TIN SNIPS

Type 270. High quality tin snips for straight cutting, medium-duty applications. 7" length. Sturdy tempered steel construction. Cutting edge holds sharpness. Ring-type handles provide firm grip. Shpg. wt., 12 oz.
46 N 490. NET 1.42

GREENLEE CHASSIS PUNCHES

Series 730. Cut holes in metal chassis up to ⅛" thick by turning cap screw. Operate simply with ordinary wrench for drive power. No reaming or filing required. All require ⅜" hole for lead screw, except §1¼" hole, and †1¼" hole. Average shpg. wt., 1½ lbs.

No.	Size	EACH	No.	Size	EACH
§46 N 169	½"	2.16	46 N 179	1 9/32"	2.47
§46 N 177	⅝"		46 N 174	1 3/16"	2.47
46 N 170	¾"		46 N 175	1¼"	2.47
46 N 171	⅞"		46 N 176	1⅜"	2.83
46 N 172	1"	2.34	46 N 180	1½"	3.19
46 N 178	1 1/16"	2.47	†46 N 181	2¼"	6.11
46 N 173	1⅛"	2.47			

Series 732 Key Punches. Cuts holes for keyed sockets. Require ½" hole. Av. wt., 1½ lbs.

No.	Size	NET	No.	Size	NET
46 N 184	15/16"	3.73	46 N 189	1 17/64"	4.27
46 N 186	1 11/64"	4.00	46 N 193	1 21/64"	4.50

46 N 182. Replacement ¼" cap screw for ½" and ⅝" punches. Shpg. wt., 3 oz. NET ..27¢

46 N 183. Replacement ⅜" cap screw for ¾" and ⅞" punches. Shpg. wt., 4 oz. NET ...27¢

46 N 168. Replacement ⅜" cap screw for 1" to 1½" punches. Shpg. wt., 5 oz. NET ....27¢

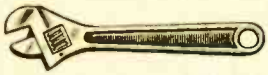
Series 731 Square Punches. Cut holes in metal up to ⅛" thick. Requires ½" hole. Shpg. wt., 2 lbs.

46 N 276. For ⅝" hole. NET 3.33
46 N 277. For ¾" hole. NET 3.87
46 N 278. For 1" hole. NET 4.50

WALSCO-PIONEER CHASSIS PUNCHES

Save time—cut square or angular holes for easy mounting of transformers, terminal strips, etc. Operate with ordinary wrench. Several full or shorter cuts will enlarge first hole to any larger angular hole or slot desired. Screw bolt requires ½" hole. Wt., 10 oz.

No.	Size	NET	No.	Size	NET
46 N 191	⅝"	3.23	46 N 272	⅞"	4.21
46 N 271	1 1/16"	3.63	46 N 273	1"	4.36
46 N 192	¾"	3.77			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92

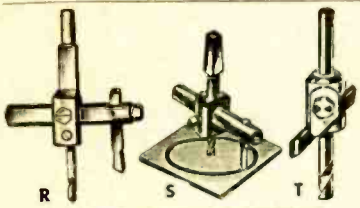
UTICA ADJUSTABLE WRENCHES

Type 91 Adjustable Wrench. Thin pattern design. Easily slip into tight places. Drop-forged from tough alloy steel for rugged, dependable service. Easy-action thumbscrew adjustment holds jaws in position desired without slippage. Chrome finished head. Ringlet eye in handle for hanging. *Tip thickness.

Stock No.	*Thickness	Size	Jaw Open	Shpg. Wt.	NET EACH
46 N 481	⅛"	4"	½"	2 oz.	1.53
46 N 482	3/16"	6"	¾"	4½ oz.	1.53
46 N 483	13/64"	8"	13/16"	8 oz.	1.79
46 N 484	9/32"	10"	1⅛"	1 lb.	2.28
46 N 485	11/32"	12"	1 5/16"	1½ lbs.	3.31

Type 92 Locking Adjustable Wrench. Versatile wrench acts as 3 wrenches: As an adjustable wrench; as an open end wrench, (locking lever sets jaws rigidly at any setting); as a vise wrench, (jaws adjusted on work, lever moved off handle and hinge-pin pulled out ¼"). In locked position, jaws won't spread even though wrench is dropped. *Tip Thickness.

Stock No.	*Thickness	Size	Jaw Open	Shpg. Wt.	NET EA.
46 N 486	15/64"	8"	15/16"	9 oz.	2.35
46 N 487	9/32"	10"	1⅛"	1 lb.	2.83
46 N 488	11/32"	12"	1 5/16"	1½ lbs.	3.86



ALL-PURPOSE CIRCLE CUTTERS

Cut holes accurately in wood, sheetmetal, plastics, etc. Round shank type for use in drill press; square shank type for hand brace. Drill acts as center pilot, keeping cutter in alignment. Horizontal cross-bar and cutting bits are instantly adjustable. Shpg. wt., 8 oz.

No.	Fig.	Shank	Hole Size	NET
45 N 600	R	Round ¼"	⅞" to 4"	1.44
45 N 602	S	Square	1" to 5½"	1.91
45 N 603	S	Round 5/16"	1" to 5½"	1.91

Cutter Blades. For above. Hardened tool steel. Shpg. wt., 4 oz.
45 N 610. NET EACH ..... 53¢

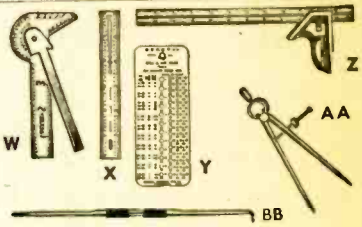
Fig. T—CLARK HOLE CUTTER

Type 100. Cuts holes from ⅝" to 1½" in diameter, in metals up to ⅛" thick. ¼" pilot drill with ¼" round shank for electric drills. Fully adjustable. Shpg. wt., 5 oz.
45 N 620. NET 2.89

ICA 775 COMBINATION SHANK

Circle cutter for cutting smooth, accurate holes from 1½" to 8" in dia. in chassis metals, panels, bakelite, wood, etc. Rugged ⅜" sq. cutting bar will not twist. ⅜" hexagon shank. With removable 3/16" pilot drill. Shpg. wt., 1 lb.
45 N 604. NET 2.20

777 Replacement Blade. For above. Made of hardened tool steel. Shpg. wt., 4 oz.
45 N 605. NET 66c



CHASSIS LAYOUT TOOLS

Fig. W. Multi-purpose Steel Rule. 4" scale in 32nds and 64ths, drill point gauge, square, bevel protractor, center finder, circle divider, tap-drill table. In leather case. 4 oz.
46 N 153. NET 1.28

Fig. X. 6" Steel Rule and Wire Gauge. Made of stainless steel. Front graduated in 32nds and 64ths, also B. & S. wire gauge. Back has decimal equivalents. Identifies No. 8 to 20 wire. Shpg. wt., 2 oz.
46 N 061. NET 33c

Fig. Y. Drill and Steel-Wire Gauge. For sizes 1 to 60 with decimal equivalents. Lists taps with tap-drill and body-drill sizes, ¼-28 to 2-56. Shpg. wt., 5 oz.
46 N 060. NET 1.13

Fig. Z. Combination Steel Rule. 12" etched-steel combination square. Graduated on both sides in 32nds, 16ths, and 8ths. Head has thumbscrew for locking. 45 degree angle for bevel cuts. Shpg. wt., 1¼ lbs.
46 N 154. NET 1.33

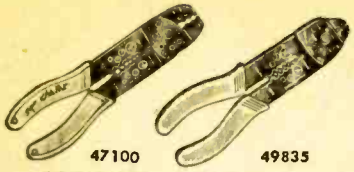
Fig. AA. Steel Dividers. Has stiff spring to assure rigidity. Needle points are centerless ground and tempered. Divider frame of high quality steel. Length, 6". Wt., 2 oz.
46 N 089. NET 2.25

Fig. BB. Scriber. Two-point machinists' scriber with knurled finger-hold. 9" long. 3 oz.
46 N 197. NET 38c

12" Stainless Steel Bench Rule. (Not illustrated.) Has two sides graduated in 8ths, 16ths, 32nds, and 64ths. ⅞" wide. Shpg. wt., 2 oz.
46 N 088. NET 60c

General Service Aids

A-MP TERMINAL TOOLS

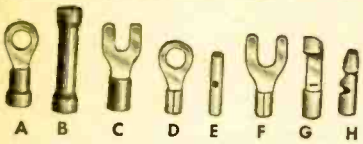


47100 SUPER CHAMP HAND TOOL

Extra heavy-duty hand tool for crimping solderless terminals, shearing bolts, wire cutting, stripping, etc. Quality hardened tool steel, plastic handles. Designed for insulated terminals listed below. Has handy B & S wire gauge. Shpg. wt., 1 lb.
45 N 321. NET 3.95

49835 HAND TOOL

For crimping solderless terminals, wire cutting, stripping and shearing bolts. Shears 10-24, 10-32, 8-32, 6-32 and 4-40 bolts. Has B & S wire gauge. For non-insulated terminals below. 7⅞" long. Shpg. wt., 1 lb.
44 N 453. NET 3.95



A-MP TERMINALS FOR GENERAL WIRING

Provide positive contact without wire fracture. Eliminate soldering. Simple crimping operation provides extremely strong, neat, vibration-proof connections. *Insulated terminals—plastic outer sleeves. Wire size, 16-14, except †22-16. Wt., 8 oz. 100 per pkg.

Stock No.	Flg.	Mfr's No.	Type	Stud Size	PER PKG.
45 N 301	A	34701*†	Ring	8-10	4.58
45 N 302	A	34706*†	Ring	4-6	4.58
45 N 303	B	34707*†	Butt	.....	5.49
45 N 304	A	34710*	Ring	4-6	4.58
45 N 305	A	34711*	Ring	8-10	4.58
45 N 306	C	34715*	Spade	4-6	4.58
45 N 307	C	34716*	Spade	8-10	4.58
45 N 308	B	34717*	Butt	.....	5.49
45 N 309	C	32980*	Spade	6	3.85
45 N 310	D	33021†	Ring	8-10	3.22
45 N 311	D	33020†	Ring	4-6	3.22
45 N 312	E	33045†	Butt	.....	3.43
45 N 313	D	33023	Ring	4-6	3.22
45 N 314	D	33037	Ring	8-10	2.82
45 N 315	F	33026	Spade	4-6	3.58
45 N 316	F	33027	Spade	8-10	3.58
45 N 317	G	31762†	Knife	.....	6.45
45 N 318	G	33030	Knife	.....	6.45
45 N 319	H	33089	Shur-Plug	.....	1.69
45 N 320	....	36840*	Recep.	.....	5.31

A-MP TERMINAL KIT

Terminal kit containing an assortment of 225 insulated, solderless terminals (over $10.00 worth), plus the heavy-duty "Super-Champ" crimping and wiring tool above. Assortment includes ring, spade, butt connector and nylon closed-end connector types. For wire sizes 10-22 and most often used stud sizes. A complete workshop for general wiring and wiring repairs. In compartmented, transparent plastic box. Box size, 2x9½x6½". Shpg. wt., 2 lbs.
45 N 322. NET 13.19

LYNN TERMINAL KIT

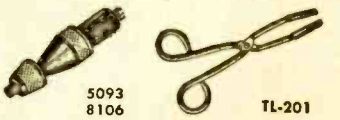
Type 2195. Contains: $5.00 worth of solderless terminals in assorted sizes in addition to the practical, No. 1900 crimping tool. A wide variety of terminals for making virtually any type of lug connector likely to be encountered in radio or TV work; includes new "lightning spade" and hook-type terminals. A full range of sizes is provided. Crimping tool can cut and strip wire from 22 to 10 gauge. Clear plastic container supplied with kit. 8¼x6x1¼". Shpg. wt., 2 lbs.
44 N 479. NET 8.33

No. 1900 Crimping Tool Only. Same as crimping tool furnished in above set. Tempered steel with red plastic shockproof handles. Shpg. wt., 1 lb.
44 N 478. NET 3.43

Extra Terminals. Popular sizes of Lynn terminals. Av. wt., 3 oz. *Used in 2195 kit above.

Stock No.	Flg.	Mfr's No.	Type	Wire Size	Stud Size	Pkg. Qua.
44 N 476	A	2300*	Ring	22-16	4- 6	45
44 N 481	A	2301*	Ring	22-16	4- 6	45
44 N 482	A	2302*	Ring	22-16	8-10	45
44 N 477	A	2400*	Ring	16-14	4- 6	45
44 N 485	A	2401*	Ring	16-14	4- 6	45
44 N 486	A	2402*	Ring	16-14	8-10	45
44 N 487	A	2403	Ring	16-14	12-¼	36
44 N 489	A	2502	Ring	12-10	8-10	36
44 N 490	A	2503	Ring	12-10	12-¼	27
44 N 498	....	2600*	Stud	22-16	4- 6	50
44 N 492	B	2601*	Spade	16-14	4- 6	45
44 N 493	B	2602*	Spade	16-14	8-10	45
44 N 494	B	2702	Spade	12-10	8-10	36
44 N 495	C	2802	Flag	22-16	8-10	45
44 N 496	C	2902	Flag	16-14	8-10	45
44 N 432	....	3101	Butt	22-16	.....	58
44 N 433	....	3102	Butt	16-14	.....	58
44 N 434	....	3103	Butt	12-10	.....	45
44 N 499	....	3300*	Hook	22-16	.....	50

NET PER PKG. 98c

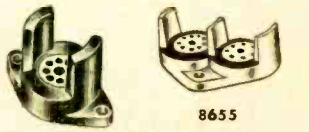


G-C AMO TUBE PULLERS

Type 5093. Aluminum body with rubber cup; for 7-pin miniature tubes. Shpg. wt., 2 oz.
46 N 094. NET 1.06

Type 8106. As above, for 9-pin tubes.
46 N 155. NET 1.06

Type TL-201. Scissors-type, with rubber tips. Unusually handy tool. Shpg. wt., 12 oz.
46 N 092. NET ..... 97¢



G-C PIN STRAIGHTENERS

Type 5191. Precision-built steel die. For 7-pin miniature tubes. Shpg. wt., 6 oz.
46 N 227. NET ..... 72¢

Type 8105. As above, for 9-pin tubes.
46 N 228. NET ..... 72¢

Type 8655. Combination for both 7 and 9-pin miniature tubes. Shpg. wt., 6 oz.
46 N 230. NET 1.47

DUTCH BRAND TAPE

¾" FRICTION TAPE. A very popular standard width tape. For radio, electrical, home and shop applications. Av. shpg. wt., 6 oz.

Stock No.	Size	Each, In Quantities of 1-29	30-99	100
52 N 610	¾"x13'	12¢	11½¢	11¢
52 N 611	¾"x32'	22¢	21¢	20¢
52 N 612	¾"x68'	38¢	37¢	36¢

⅜" FRICTION TAPE. Narrow width, for radio work. 60 ft. long. Shpg. wt., 7 oz.
52 N 620. NET 19c

PLASTIC TAPE. Black vinyl plastic electrical tape. ¾" type is only .007". Rated 7000 volts; ½" type is .010". Rated 10,000 volts. Stretches and conforms to irregular surfaces. Av. wt., 6 oz.
52 N 614. ¾"x44'. PER ROLL 1.00
15-49. PER ROLL ..... .90
50 or more. PER ROLL ..... .80

52 N 623. ½"x108'. PER ROLL 1.84
6-47. PER ROLL 1.66
48 or more. PER ROLL 1.48

VINYL COLOR TAPE. Thin and flexible. Dielectric of 1000 volts per mil. Average thickness, 5 mils. 36 yd. Av. shpg. wt., 5 oz.

Stock No.	Color	Size	EA., In Quantities of 1-5	6-47	48 or more
52 N 690	Red	⅜"	1.50	1.35	1.21
52 N 691	Red	½"	2.01	1.79	1.61
52 N 692	Red	¾"	2.49	2.21	2.00
52 N 693	Green	⅜"	1.50	1.35	1.21
52 N 694	Green	½"	2.01	1.79	1.61
52 N 695	Green	¾"	2.49	2.21	2.00

"DB" WIRE CONNECTORS

Solderless. Simply strip two wire ends, push into "DB", and screw cap down. No tools necessary. Wires cannot be pulled out. Finest grade phenolic. U. L. Approved. Av. wts.: Pkg. of 25, 5 oz.; Pkg. of 100, 1¼ lbs.

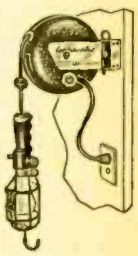
Mfr's Type	Wire Size	Stock No.	Pkg. of 25	Stock No.	Pkg. of 100
DB-1	16-18	52 N 874	25¢	52 N 870	.83
DB-3	14-18	52 N 875	38¢	52 N 871	1.27
DB-4	12-18	52 N 876	50¢	52 N 872	1.62
DB-6	10-18	52 N 877	98¢	52 N 873	3.07

SCOTCH NO. 33 PLASTIC BACKED TAPE

Plastic-backed electrical tape. .007" thick; 10,000 v. dielectric strength. Molds to irregular surfaces. Resistant to chemicals, abrasion, oil, salt water, weathering. Av. wt., per roll, 6 oz.

Stock No.	Size	PER ROLL	12 or More Rolls PER ROLL
52 N 613	¾"x20'	.54	.49
52 N 616	¾"x66'	1.47	1.32

CORDOMATIC DROP-LIGHT REELS



New, self-winding drop light reel. Provides light where you want it. Cord is out of the way when light no longer needed. No. 18, 2-conductor cord, covered with tough, neoprene insulation. Crack-proof handle with built-in outlet and toggle switch. Chrome reflector has swing-open bulb guard. Steel housing is equipped with universal mounting bracket. Spring mechanism operates like a window shade. Less bulb. Underwriters' Laboratories Approved.

Model 700. 20' cord. Shpg. wt., 7 lbs.
46 NX 976. NET 12.69

Model 800. 30' cord. Shpg. wt., 8 lbs.
46 NX 977. NET 17.59

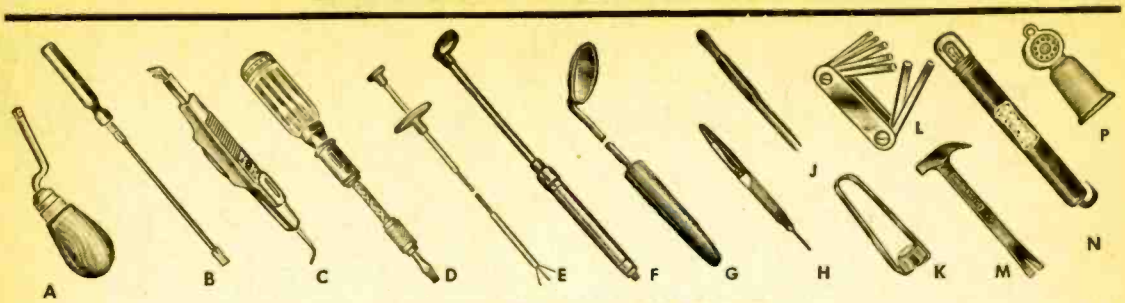
Model 900. 40' cord. Shpg. wt., 9 lbs.
46 NX 978. NET 21.51

TAP-A-LINE OUTLETS

Type TL-1. Convenient, multiple outlet tap. Up to 8 AC line cords can be plugged into this compact outlet strip. Has two parallel conductors, spaced ½" apart (prong separation of standard plugs). Encased in tough plastic housing. Easily mounted in any position with a screw at each end (supplied). Ideal for the serviceshop or home workbench. Case is ivory color. Size, 12" long and 1" square. With 4 ft. line cord and plug. Rated 1000 watts. Shpg. wt., 1½ lbs.
52 N 636. NET 1.47

Type TL-2. As above, but 2 ft. long. Shpg. wt., 2½ lbs.
52 NX 637. NET 2.40

Service Tools—Tool Kits



ALL-PURPOSE SERVICING TOOLS

Fig. A. Screw-Ball Ratchet Socket Handle. New speed handle for ¼" socket wrench sets. Reversible ratchet turns with easy, circular wrist motion. Shpg. wt., 10 oz.
46 N 453. NET 2.79

Fig. B. Hunter TV-12 Tuning Slug Retrievor. Retrieves Standard Coil slugs without removing chassis from cabinet. Automatic holding mechanism. 11" L. 9 oz.
42 N 012. NET 2.20

Type TV-16. As above but 15" long.
42 N 013. NET 2.92

Type TV-20. As above but 20" long.
46 N 452. NET 3.67

Fig. C. Seaco Probe-O-Pliers. Two tools in one. Needle-nose pliers, pushbutton operated. Other end is high-voltage probe with neon glow indicator. Thoroughly insulated. Shpg. wt., 8 oz.
46 N 462. NET 1.12

Fig. D. Mansco Speedriver. Spiral ratchet-action automatic screwdriver. With 7 bits: ¼" and 3/16" screwdrivers; No. 1 and No. 2 recessed head screwdrivers; 3 countersink wood drills. Shpg. wt., 8 oz.
42 N 017. NET 2.72

Fig. E. Miller 345 Pick-Up Tool. Press button to open claws—release to close over object. Flexible 14" shaft. Wt., 1 lb.
42 N 014. NET 75c

Fig. F. GC 8725 Illuminated Inspection Mirror. Permits inspection of parts otherwise hidden from sight. Consists of anodized aluminum flashlight with 6" lucite rod and 1" hinge-mounted mirror. Plastic housing prevents shocks. Locking switch allows one-hand operation. With bulb. Requires 2 penlight cells. 12¼". Shpg. wt., 6 oz.
42 N 130. NET 1.91

Burgess Type Z Cell. 1½-volt cell for 42 N 130 above. 1 31/32x35/64". Shpg. wt., 3 oz.
53 J 031. NET EACH 9c

Fig. G. GC 5090 Inspection Mirror. For inspecting parts, connections, etc. in tightly wired radio, TV sets. Handy for reading parts numbers and inspecting solder and wire connections in out-of-sight places. Mirror dia., 1". Shpg. wt., 8 oz.
42 N 121. NET 32c

Fig. H. Pres-To-Oiler. Press on plunger to release one drop of oil. Prevents over-oiling and waste. Transparent fountain-pen reservoir holds oil supply. Also ideal for dispensing various radio and TV chemicals in hard-to-reach places. Shpg. wt., 3 oz.
46 N 065. NET 95c

Fig. J. Handy Steel Tweezer. Finely tempered steel tweezers. Size, 6½" long. For delicate work. Holds wires, nuts, screws, etc. Shpg. wt., 4 oz.
46 N 095. NET 42c

Fig. K. Knob-Puller. Easily removes all types of push-on knobs. Simply place blades in back of knob, close handles, and pull forward. Shpg. wt., 4 oz.
46 N 077. NET 29c

Fig. L. Pocket Hex Key Wrench Set. Hardened steel wrenches open like a pocket knife. Seven popular size hex key wrenches from .050 to 3/16". Fitted in nickel chrome alloy steel case. Plastic carrying case. Shpg. wt., 4 oz.
42 N 002. NET 84c

Fig. M. All-Steel Utility Hammer. Claw handle. Made of finest tempered steel. Excellent for use in workshop or home. Ideal size for carrying in tool box. Length, 9½". Shpg. wt., 1¼ lbs.
43 N 900. NET 75c

Fig. N. GC 705 Handy Trouble Light. For 110-120 volts, AC or DC. Ideally suited for visual inspection of chassis and components in cabinets, etc. With bulb and 5½-foot cord. Shpg. wt., ½ lb.
42 N 120. NET 1.32

Fig. P. Walsco 565 "Straight 'N' Pull." 3 tools in one. Straightens 7 or 9 pin miniature tube pins; pulls tubes. Extremely helpful where tube pins have been bent thru removal from socket. Prevents finger burns. Shpg. wt., 3 oz.
42 N 016. NET 73c

VLCHEK PLASTIC BOXES

For Storing Small Parts

Tough, clear plastic storage boxes. Individual compartments for neat, visible arrangement of parts.

Type P250. One-compartment utility box. Overall size, 6¼x4x1⅝". Shpg. wt., 6 oz.
44 N 362. NET 34c

Type P212. 5 compartments. 4 are 1½x2⅜" plus 1½x3 3/16" center compartment. Overall size, 7x3½x1 3/16". Shpg. wt., ½ lb.
44 N 356. NET 40c

Type P203. 6 compartments, each 1¼x4⅛". Overall size, 8¼x4¼x1¼". Wt., ¾ lb.
44 N 357. NET 55c

Type P210. 9 compartments. 8 are 1¼x1½". Center compartment, 1x3 3/16". Overall size, 7x3½x1 3/16". Shpg. wt., ½ lb.
44 N 355. NET 40c

Type P201. 12 compartments. Has 2x1¼" compartments; two 1¼x4"; six 1¼x1¼". Overall size, 8¼x4¼x1¼". Shpg. wt., ¾ lb.
44 N 358. NET 55c

Type P618. 18 compartments, each 1 11/16x2". Overall size, 10¾x6⅝x1¾". Shpg. wt., 1¼ lbs.
44 N 359. NET 1.46

REAR CONTROL TV TUNING AID

New aid for remote adjustment of TV rear panel controls. No mirrors needed. Has sturdy alligator clip attached to rugged, long-life cable. Simply stand in front of set and turn cable drive. Fits all alignment controls on rear of chassis. Permits adjustment in minimum time. Rolls up to carry. Shpg. wt., 8 oz.
46 N 248. NET 2.98

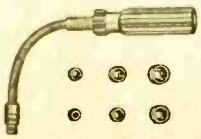
ECONOMY TOOLS AND KITS

COMBINATION DRIVER SET

A complete nut and screwdriver set, in a convenient pocket-sized roll. Multi-purpose, 10-piece tool kit contains 6 nut driver blades, 3 screwdriver blades and a clear amber plastic handle with an aluminum adjustable screw chuck. Blades are made of hardened and tempered tool steel, zinc chromide plated to prevent rusting. Nut driver blades are for hex sizes 3/16", ¼", 5/16", 11/32", 3/8", 7/16". 3 screwdriver blades: 1 large and 1 small standard screwdriver blade and 1 Phillips screwdriver blade. Plastic roll case has tie string. Shpg. wt., 1 lb.
46 N 463. NET 1.37

10 PIECE RATCHET SOCKET SET

Ratchet set with 8 heavy-duty sockets. 3½" extension bar for hard-to-reach places. 3-position ratchet, right, rigid, or left. Five 6-point sockets for hex nut sizes: 3/16", 7/32", ¼", 9/32" and 5/16". Three 12-point sockets: 11/32", 3/8" and 7/16". Length, 6½" plus 3½" extension. Unbreakable, amber plastic handle. Shpg. wt., 1 lb.
46 N 464. NET 1.67



FLEXIBLE-DRIVE SOCKET SET

For use around corners and out-of-the-way places. Shaft of laminated steel wires. Thick cadmium plating. Shockproof amber handle. 8¼" overall. Includes 6 hex sockets, sizes: ¼", 5/16", 11/32", 3/8", 7/16", ½". With handy wood case. Shpg. wt., 10 oz.
46 N 067. NET 1.96

4-PIECE TOOL KIT

Top-quality, drop-forged, imported tool steel. Ground and polished heads. An excellent kit for the service shop or garage. Contains: 1, 7" lineman's slip-joint pliers; 1, 5¼" long nose pliers; 1, 5¼" diagonal side cutters; 1, 6" adjustable wrench. Each tool kept in place by transparent plastic compartment. Size, 7½x8½". Shpg. wt., 2 lbs.
42 N 007. NET 2.72

SCREWDRIVER, PLIER, WRENCH SET

Handy eight-piece combination wrench, plier and screwdriver kit. An outstanding value in a practical, versatile tool kit. Ideal for the serviceman. Amateur or hobbyist—for television, radio or round-the-home use. Provides most of the smaller tools needed for repairs on appliances, table radios, etc. Contains following tools: 4" adjustable wrench; 4¾" combination pliers; 3 screwdriver blades measuring ⅛x3½", 3/16x3¼", ⅛x4½"; 2 Phillips screwdriver blades, #1 (3/16x3½"), and #2 (1¼x5½"). Shock-proof, amber plastic handle with adjustable chuck. Roll-up plastic holder. Shpg. wt., 2 lbs.
46 N 233. NET 2.05

5-IN-1 SCREWDRIVER KIT

5 different interchangeable blades: plastic handle. Hardened tool steel blades. Contains: 1 each ⅛" and 3/16" cabinet blades; Phillips No. 1 and No. 2 blades; ¼" keystone blade with 3/16" tip and plastic handle. Leatherette roll case. Shpg. wt., 8 oz.
46 N 096. NET 61c

Electrical Accessories

BELDEN REPLACEMENT CORDS

Type 1765B. SP-1. 6-Foot Replacement Cord. No. 18 wire. Brown, rubber-covered cord. Extra-flexible. Supplied with Belden unbreakable, soft rubber plug on one end; other end stripped. Ideal as a replacement cord for electric clocks, lamps, fans, radio sets and similar small electric appliances. Shpg. wt., 6 oz.
49 T 211. NET 25c

Type 1735K. SP-1. Same as above, but 12 feet long. Shpg. wt., 8 oz.
49 T 236. NET 49c

Type 1750K. SJ. 10-Foot Replacement Cord. No. 16 wire. For washing machines, heavy home workshop tools, etc. With soft, unbreakable rubber plug. Opposite end is stripped and tinned ready for easy attachment. Provides long service life and dependable performance. U.L. Approved. Shpg. wt., ¼ lb.
49 T 213. NET EACH 79c

Type 1754K. SJ. 8-Foot Replacement Cord. No. 18 wire. Specially designed for refrigerators, small home workshop tools, etc. Type SJ flexible black cord, unbreakable rubber plug. U.L. Approved. Shpg. wt., ½ lb.
49 T 215. NET EACH 60c

Type 1749K. SV. 6¼-Ft. Replacement Cord. No. 18 wire. Type SV cord used in mixers, sewing machines, small appliances, etc. Gray satin finish. Unbreakable plug. U.L. Approved. Shpg. wt., ½ lb.
49 T 212. NET EACH 47c

Type 1766B. SJ. 8-Foot Appliance Grounding Cord. No. 18 wire. Used for tools, neon signs and other small appliances requiring grounding. Type SJ flexible 3-conductor black portable cord with unbreakable rubber plug and 4-inch grounding lead. Opposite end stripped and tinned, ready for easy attachment. U.L. Approved. Shpg. wt., ½ lb.
49 T 219. NET EACH 76c

HEAVY-DUTY EXTENSION CORDS

Type 1751K. SV. 20-Foot Extension Cord. No. 18 wire. Type SV extra-flexible gray cord with unbreakable soft rubber plug and molded-on rubber connector. Specifically designed for use on vacuum cleaners and other small appliances and tools such as soldering irons, grinders, polishers, etc. In natural gray; will not mark or stain floors. Handsomely styled to match the finest appliances or electric tools. Convenient, safe and dependable to use. Grip prongs insure long service life. Underwriters' Laboratories Approved. Shpg. wt., 1 lb.
49 T 214. NET EACH 1.28

Type 1756K. SJ. 10-Foot Extension Cord. No. 16 wire. For general purpose use. Unbreakable rubber plug and connector. U.L. Approved. Wt., 1 lb.
49 T 216. NET EACH 1.06

Type 1791K. SJ. 50-Foot Extension Cord. No. 16 wire. Designed for electric lawn mowers, yard extensions, etc. U.L. Approved. Wt., 3¼ lbs.
49 T 217. NET EACH 3.82

Type 1792K. SJ. 100-Foot Extension Cord. No. 16 wire. Extra-flexible, black rubber. Same uses as above. U.L. Approved. Unbreakable plug. Shpg. wt., 6½ lbs.
49 T 218. NET EACH 6.43

Type 1701 10-Foot Extension Cord. No. 18 wire. Extensively used for lamps, radios, small appliances, etc. Brown, all-rubber extension cord, with unbreakable rubber plug and triple outlet tap. Trim, neat appearance, styled to match the finest appliances. Design of grip prongs assures safe insertion or removal from wall outlet. U.L. Approved. Shpg. wt., 8 oz.
47 T 820. NET EACH 69c

CORD'N REEL

Extension cord and storage reel with built-in electrical outlet. Designed to permit unwinding only as much cord as is needed during use. Has service outlet built into reel hub to furnish current for appliance or tool to be used. Excellent for use with shop tools, lawn mowers, floor sanders, vacuum cleaners, hedge trimmers, etc. Offers a wide variety of uses in the service shop, garage or home. Heavy-duty, U.L. Approved, rubber covered cords.

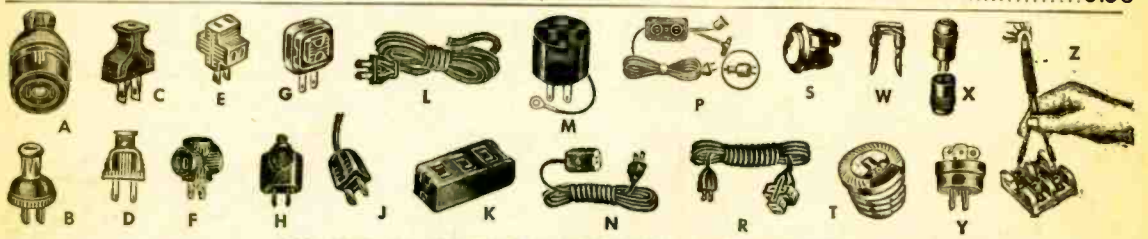
Model 1825. 25' SV type, No. 18 2-conductor cord. Capacity, 7 amps. Wt., 2 lbs.
46 N 954. List, $3.95. NET 3.28

Model 1850. As above, but 50'. Wt., 3 lbs.
46 N 958. List, $5.95. NET 4.95

Model 1650. 50' SJ type, No. 16 2-conductor cord. Capacity 10 amps. Wt., 4 lbs.
46 N 959. List, $7.95. NET 6.61

"POWER-PANEL" OUTLET BOX

Model 22. New, 3-circuit, fuse-protected outlet box. Excellent for use in the service shop or home—puts power hookups at your fingertips. "Power-Panel" includes two outlets controlled by separate On-Off toggle switches, plus one outlet without switch for plugging in worklight. First outlet is 5-amp fuse protected—for use with electric drills, grinders, etc. Second outlet has 10-amp time delay fuse; maximum capacity, ¾ horsepower, 125-volt AC motor. Lower current capacity of fuses in outlet box also provides added protection for equipment. Panel takes any No. 16 wire extension cord listed at left. In gray hammerloid. 1½x5¼x3¼". Shpg. wt., 1½ lbs.
46 N 395. NET EACH 6.58



VALUES IN HANDY ELECTRICAL ACCESSORIES

Fig. A. LINE CORD RECEPTACLE. Rubber pull-handle receptacle. Dia., 1¼". 15 amps at 125 v. Shpg. wt., 3 oz.
52 N 603. EACH 26c

Fig. B. RUBBER-HANDLE PLUG. Unbreakable soft-rubber. Approved for power tools. Excellent for use with 52 N 603, above, for line cord extensions. Shpg. wt., 2 oz.
52 N 602. EACH 8c

Fig. C. BAKELITE PLUG CAP. With finger-grip. Cap size, 1⅛x1⅞x⅜" deep. Brown. Shpg. wt., 2 oz.
52 N 600. EACH 8c

Fig. D. FLAT RUBBER PLUG. Non-breakable molded rubber plug cap. Because of their narrow construction, these caps are ideal for use with multiple AC receptacles similar to Fig. K above. Easily disassembled. Screw terminal wiring. Rated 15 amps at 125 v.; 10 amps at 250 v. Shpg. wt., 3 oz.
52 N 641. EACH 10c

Fig. E. RUBBER CUBE TAP. Spring-action, 3-way outlet of one-piece, soft rubber. U.L. Approved. Shpg. wt., 4 oz.
52 N 609. EACH 19c

Fig. F. 3-WAY CUBE TAP. Spring-action type. Brown bakelite. U.L. Approved. Internal contacts are in separate pockets to prevent shorts. Shpg. wt., 5 oz.
52 N 667. EACH 10c

Fig. G. CUBE TAP. 3 taps. Brown bakelite. Flat, compact type. Rated at 15 amperes, 125 volts; U.L. Approved. Shpg. wt., 4 oz.
52 N 601. EACH 10c

Fig. H. FUSED PLUG. Protects equipment. Small fuses for each side of line fit snugly in cylindrical receptacles—blown fuse easily removed for quick replacement. Interchangeable with any standard AC plug. Supplied less 3AG cartridge fuses. (See pages 279, 280 for fuses.) Shpg. wt., 3 oz.
52 N 648. EACH 26c

Fig. J. ACADEMY AUTOMATIC PLUG. No wire stripping. Just insert through cap. "Needles" on prongs make connection through insulation. For POSJ cable only. Wt., 3 oz.
52 N 607. NET EACH 12c
Display Box of 36. NET 3.51

Fig. K. ACADEMY 3-WAY OUTLET. No wire stripping—insert cord, close case. 15 amps/125 v. or 10 amps/250 v. Shpg. wt., 5 oz.
52 N 622. Mahogany plastic.
52 N 619. White plastic. } EACH 20c

Fig. L. 6 FT. REPLACEMENT CORD SET. Heavy rubber-covered cord firmly secured in sturdy molded plug. Brown. Wt., 5 oz.
49 T 230. 10 or More, EA. 20¢. EA. 22c

Fig. M. PARALLEL GROUND ADAPTER. Adapts 3-prong plugs for use in standard 2-prong AC outlets. Rated at 15 amps, 125 v. Has 3" wire with grounding lug. Shpg. wt., 3 oz.
52 N 669. NET EACH 22c

Fig. N. CUBE TAP EXTENSION. 3-way extension tap. Rated at 15 amps 125 volts; 10 amps 250 volts. With 6-foot cord and bakelite plug cap. Shpg. wt., 7 oz.
52 N 605. 10 or More, EA. 31¢. EA. 35c

Fig. P. TYPE 180 ALL-PURPOSE SERVICE CORD. One cord to service most TV sets. One end plugs into regular AC wall outlet, other end has two 1 ft. cords for standard and Zenith male TV chassis connectors. Also has 2-way outlet receptacle for soldering iron, trouble light, etc. Shpg. wt., 1 lb.
52 N 665. EACH 1.03

Type 192. As above, but plugs into female connector on TV set back cover. 1 lb.
52 N 666. EACH 1.45

Fig. R. RUBBER CUBE TAP EXTENSION. An all-rubber, solderless, 3-way extension cord set. 9-ft. cord, cube tap and plug. Shpg. wt., 8 oz.
52 N 608. EACH 59c
Same as above, but with 6-ft. cord.
52 N 621. EACH 50c

Fig. S. FLUSH-MOUNT PUSHBUTTON SWITCH. Pearl button. Brass contacts. Screw terminals. Provided with spring clasps for mounting in ⅝" hole on panels to ⅛" thick. Shpg. wt., 2 oz.
55 B 196. 10 or More, EA. 26¢. EA. 29c

Fig. T. PLUG FUSES. U.L. Approved. Clear view—easily seen when blown. Shpg. wt., 8 oz. 5 per box.
52 B 170. 10 Amps
52 B 171. 15 Amps
52 B 172. 20 Amps
52 B 173. 25 Amps
52 B 174. 30 Amps } PER BOX 25c

Fig. W. INSULATED STAPLES. Saddle-type, drive-in staples. With fiber insulation. Shpg. wt., 5 oz. 100 per box.
NET PER BOX 15c
52 N 030. 10 or More Boxes, PER BOX 13c

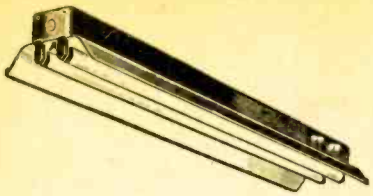
Fig. X. MORSE MIDGET CORD CONNECTOR. 2-contact pull-apart type. For AC-DC cords, phono motors, pilot lights, etc. Consists of plug and receptacle. 1⅞" long and ⅜" dia. Shpg. wt., 2 oz.
52 N 626. 10 or More, EA. 44¢. EA. 49c

Fig. Y. CORD CLAMP PLUG. Two-wire bakelite plug cap with cord clamp attachment riveted on. Cord clamp is adjustable to all wire sizes and provides absolute strain relief; wire cannot slip out of clamp—clamp will not move. Spring-action prongs. Highly dependable. Brown. Shpg. wt., 4 oz.
52 N 604. 10 or more, EACH 22¢. EA. 24c

Fig. Z. GENERAL CEMENT NE-O-LITE. Neon glow-type tester for indicating voltages from 60 v. AC and 90 v. DC to 500 v. AC-DC. Ideal for finding "hot" AC leads, checking fuses, etc. Neon bulb mounted in insulating holder. 5" insulated leads with phone tip ends. Shpg. wt., 3 oz.
78 N 055. 10 or More, EA. 31¢. EA. 35c

For Complete Product and Manufacturers Index, See Pages 317-320

Compco Fluorescent Values



FLUORESCENT INDUSTRIAL FIXTURES

Efficient, low-cost fluorescent fixtures, ideal for industrial use. Provide non-glare light with even diffusion and high illumination. Virtually eliminate shadows. Power factor corrected to reduce inductive effects. Constructed of heavy-gauge pressed steel. Reflectors are finished in high-gloss white enamel for maximum lighting efficiency and easy cleaning. Suitable for single or multiple mounting.

STANDARD FIXTURE

Model 633. Uses two 48" Type T-12, 40-watt fluorescent lamps. Starters located on sides for easy replacement without removing lamps or reflector. Convenient brackets for hanging from ceiling, and knockouts to permit flush or stem mounting. Fixtures may be hung on chains, flush-mounted separately, or mounted end-to-end in a continuous row. Size, 48½x11½x5⅝". With reflector, starters and ballasts. Less lamp and chains. U. L. Approved. For operation from 110-120 volts, 60 cycles AC. Shpg. wt., 17 lbs.
91 RZ 260. List, $14.50. **NET EACH** 9.43
Lots of 3, EACH 8.70

SLOTTED FIXTURES

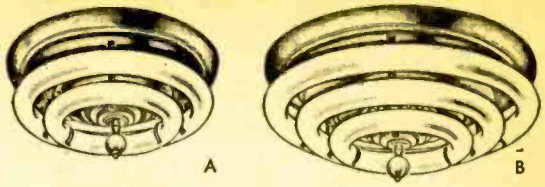
Model 636SL. Features deluxe, all-white, slotted-top reflectors for ideal diffusion of light. Other features same as Model 633, above. Shpg. wt., 20 lbs.
91 RZ 319. List, $16.70. **NET EACH** 10.86
Lots of 3, EACH 10.02

RAPID-START FIXTURE

Model 633 RS. Same as Model 633, above, but rapid-start type. Shpg. wt., 17 lbs.
91 RZ 315. List, $17.85. **NET EACH** 11.60
Lots of 3, EACH 10.71

SLOTTED RAPID-START FIXTURE

Model 636 RSSL. Same as Model 636SL fixture, described above, but has the rapid-start feature in addition to the slotted-top reflectors. Shpg. wt., 20 lbs.
91 RZ 320. List, $20.00. **NET EACH** 13.00
Lots of 3, EACH 12.00



CIRCLINE FLUORESCENT FIXTURES

Fig. A—CHROME-PLATED 2-LIGHT FIXTURES

Model 841C. Fully chrome-plated 2-lamp fluorescent fixture in attractive circular design. Appears built-in on ceiling or wall. Features improved light diffusion. With 12" dia. 32-watt and 8" dia. 22-watt rapid start lamps. With mounting hardware and glass pendant. For 110-120 v., 60 cycle AC. U.L. Approved. Shpg. wt., 11 lbs.
91 RX 262. List $19.65. **Lots of 3, EACH, 11.79. NET EA.** 12.77

Model 841W. As above, but finished in white "Glazenamel."
91 RX 261. List, $18.85. **Lots of 3, EACH, 11.31. NET EA.** 12.25

Fig. B—CHROME-PLATED 3-LIGHT FIXTURES

Model 847C. Deluxe model with three self-starting lamps and full chrome plating for high illumination without glare. Pan diameter, 16½". With 40-watt, 32-watt, 22-watt lamps and mounting hardware. For 110-120 volts, 60 cycle AC. U.L. Approved. Shpg. wt., 15 lbs.
91 RX 241. List, $33.35. **Lots of 3, Each, 20.01. NET EA.** 21.68

Model 847W. As above, but finished in white "Glazenamel."
91 RX 240. List, $30.05. **Lots of 3, EACH, 19.11. NET EA.** 20.70

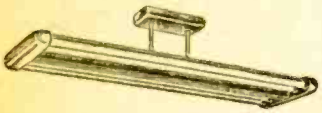
SINGLE LIGHT FIXTURE

Model 665C. Low-cost, chrome-plated fluorescent fixture, with "instant-start" feature. Provide clear, glareless light—equivalent in light diffusion to a 100-watt incandescent bulb. Complete with 12" diameter, 32-watt circline lamp—ready for immediate, simple installation. For operation from 110-120 volts, 60 cycle AC. U.L. Approved. Shpg. wt., 9 lbs.
91 RX 279. List, $12.50.
NET EACH 8.13
Lots of 3, EACH 7.50

Model 665W. As above, but finished in white "Glazenamel."
91 RX 278. List, $11.60. **Lots of 3, EACH, 6.96. NET EACH** 7.54

For listing of Circline lamps, see page 311.

FOUR-LAMP COMMERCIAL FIXTURES



Low-cost, four-lamp commercial fixtures with wafer-thin body. Streamlined—only 2½" thick. Lightweight. Easy for one man to install. Highly polished end housings in modern design. Starters replaceable without removing lamps. U. L. Approved.

Model 319 Open-Style (160-Watt) Fixture. For 4—40-watt, 48" lamps. Surface or suspension mounting. Easily installed in continuous rows for greater illumination. Wiring fastened to body. High-gloss, baked-on white enamel. Stainless steel trim. With starters; less lamps, stem and canopy. Size, 2½x14½x52". For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 20 lbs.
91 RZ 280. List $27.50. **NET EACH** 17.88
Lots of 3, EACH 16.50

Model 326. Double Stem and Canopy Set. For Model 319 fixture above. 30" long. Shpg. wt., 4 lbs.
91 RX 282. List, $3.90. **NET** 2.54

Model 320. Open-Style 80-Watt Fixture. For 4—20 watt, 24" lamps. With starters; less lamps, stem and canopy. Size, 2½x4½x28". For 110-120 v., 60 cycle. Shpg. wt., 11 lbs.
91 RX 281. List, $16.80. **NET EACH** 10.92
Lots of 3, EACH 10.08

Model 325. Stem and Canopy Set. For Model 320 fixture above. 30" long. Shpg. wt., 2 lbs.
91 RX 283. List, $2.90. **NET** 1.89

WALL BRACKET

Model 704. Sturdy, general-purpose fluorescent wall bracket—perfect for shop, store or home use. Utilizes maximum radiation from single 15-watt fluorescent lamp. Has handy flush-type electrical outlet on side panel. Attractive triple-chrome finish provides long wear and smart appearance. Rotary type on-off switch at one end. Size, (HWD) 20x2¼x2". Supplied with starter. Less lamp and shade. For 110-120 v., 60 cycles AC. U.L. Approved. Shpg. wt., 3 lbs.
91 RX 286. List, $5.90. **Lots of 3, EACH, 3.54. NET EACH** 3.84

Model 705. As above, but has adjustable hooded shade. Wt., 3½ lbs.
91 RX 287. List, $8.20. **Lots of 3, Each, 4.92. NET EACH** 5.33

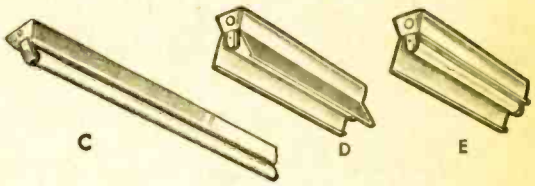


Fig. C—FLUORESCENT STRIP LIGHTS

Specially designed for end-to-end continuous strip lighting installations. Each unit has provision for secure locking to adjacent unit. Washable, baked white enamel finish. With starters. Less lamps. For 110-120 volts, 60 cycle AC. U.L. Approved. See list of lamps on p. 311.

1 LAMP—20 WATT 24"

Model 316. Single light strip. Normal power factor. 4 lbs.
91 RX 195. List, $4.10. **NET EACH** 2.67
Lots of 3, EACH 2.46

1 LAMP—40 WATT 48"

Model 318. Single strip for 40 W. lamp. Normal power factor. Shpg. wt., 6 lbs.
91 RX 196. List, $6.80. **NET EACH** 4.42
Lots of 3, EACH 4.08

2 LAMP—80 WATT 48"

Model 265. Double light strip for maximum illumination using two 40-watt, 48" lamps. Features high power factor. Shpg. wt., 8 lbs.
91 RX 197. List, $13.35. **Lots of 3, EACH, 8.01. NET EA.** 8.68

REFLECTORS FOR STRIP LIGHTS

Streamlined reflectors for fluorescent strip lights above. Provide maximum lighting efficiency. For symmetrical reflection when strip lights are paired or banked, use one asymmetric reflector on each side. Constructed of heavy-gauge steel with white "Glazenamel" finish.

REFLECTORS FOR 20 WATT (24") STRIPS

Fig. D. Model 570. Symmetric type, two-sided. Shpg. wt., 2 lbs.
91 RX 191. List, $2.90.
NET 1.89
Lots of 3, EACH 1.74

Fig. E. Model 571. Asymmetric. For close-to-wall mtg. Wt., 1½ lbs.
91 RX 192. List, $2.90.
NET 1.89
Lots of 3, EACH 1.74

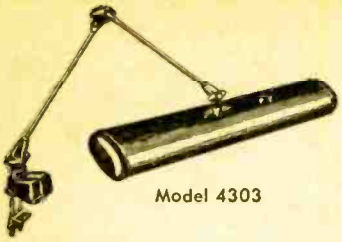
REFLECTORS FOR 40 WATT (48") STRIPS

Fig. D. Model 572. Symmetric type. Shpg. wt., 4 lbs.
91 RX 193. List, $4.20.
NET 2.73
Lots of 3, EACH 2.52

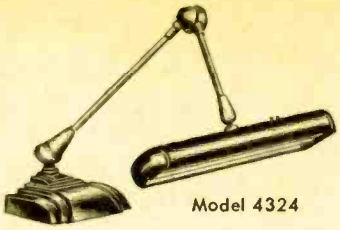
Fig. E. Model 573. Asymmetric type. Shpg. wt., 3 lbs.
91 RX 194. List, $4.20.
NET 2.73
Lots of 3, EACH 2.52

For Complete Listings of Lamps, Ballasts, etc., See Page 311

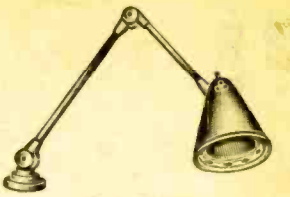
Industrial & Desk Lamps



Model 4303



Model 4324



Model 5505

FLEXO ADJUSTABLE FLUORESCENT AND INCANDESCENT LAMPS

MODEL 4303 ALL-PURPOSE LAMP

For offices, workshops, drafting rooms, etc. Head tilts vertically 180° and turns 300° on its axis. Upper elbow swings in 160° vertical arc; lower elbow swings in 110° vertical arc. Double arm extends 36" straight up or in any direction. Spring-controlled swivel joints. Push-button on-off. Two bolts clamp base firmly to surfaces up to 3" thick. Bolts removable for screw mounting. Statuary bronze finish. Requires 2 T8 15-watt lamps. For 105-125 v., 60 cycles AC. U.L. Approved. Less lamps. See page 311. Wt., 10 lbs.

91 RX 225. List, $18.95. NET.....13.93

3 or more, EACH.....13.00

Model 4300. As above, but for single lamp.

91 RX 224. List, $15.75. NET.....11.57

3 or more, EACH.....10.80

MODEL 4324 PORTABLE DESK LAMP

Portable desk model. Similar to Model 4303 (left) but with weighted base. For desks where screw clamp cannot be used. Can be adjusted so that light falls at ideal angle for virtually any work. Raises and lowers, extends and tilts in any direction. Stays in position. Can be used to illuminate architectural drawing boards, piano music, etc. Extremely versatile for service bench use. Ideal for fine precision work, industrial assembly lines. Gives a light without glare or shadows. Attractive streamline base design has pen and pencil grooves. Double arm extends 32". U.L. Approved. For 105-125 volts, 60 cycle AC. Less lamps. See page 311. Shpg. wt., 23 lbs.

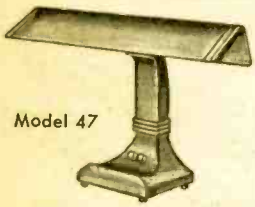
91 RZ 226. List, $25.00. NET.....18.37

3 or more, EACH.....17.15

MODEL 5505 ADJUSTABLE BENCH LAMP

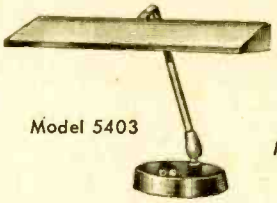
Fully adjustable incandescent bench lamp. Engineered by Swiss craftsmen. Provides instantaneous fingertip control and absolute rigidity in any position. Shade has large vents for air circulation and heat dissipation. Swivels at base and has universal ball-joint at shade. Has swivel at midpoint for flexible up-down positioning. Screws in serrated swivels provide positive control of tension. Off-On switch conveniently located at top of shade. Two extension arms. Maximum extension, 34". No exposed wiring. Extremely lightweight for maximum portability. Attractive streamlined appearance; neutral gray finish. Shade diameter, 5½"; 6" deep. With clamp bracket for attachment to any bench, table, etc. Uses standard light bulb. Less bulb. Wt., 5¼ lbs.

91 RX 227. List, $12.75. NET.....9.37

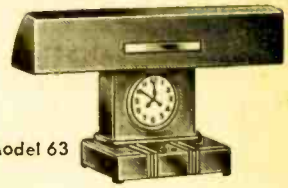


Model 47

Model 4444



Model 5403



Model 63

FLEXO FLUORESCENT DESK AND TV LAMPS

MODEL 47 "LITEMASTER" DESK LAMP

Beautifully designed, versatile desk lamp providing excellent no-glare illumination. Ideally suited for the student or office desk. Useful in the home and institution for study, reading, clerical work, etc. Durable, oven-fired statuary bronze finish. Base and stem are non-magnetic, die-cast metal. Large, streamlined shade, 18x3¾x2¼", constructed of heavy-gauge steel with white enameled reflector. 5x5¾" base has rubber feet —prevents marring or scratching furniture surfaces. Handy grooves for pens and pencils. Overall height, 11". Double button on-off switch. Complete with 6-ft. cord and plug, less type T-8 15-watt fluorescent lamp. Underwriters' Laboratories Approved. For operation from 105-125 v., 60 cycle AC. Shpg. wt., 7½ lbs.

91 RX 147. List, $8.95. NET.....6.58

Model 4444 "Flexarm" Adjustable Twin-Light Desk Lamp

Flexible-arm desk lamp for office, lab, shop and home. Permits shade adjustment from 8" to 14". Non-magnetic metal base grooved for pencils and pens. Heavy-gauge steel shade, 2¼x4½x18". White enamel porcelain reflectors. Heavy rubber bumpers on base. Push-button on-off switch. Requires two T8, 15-watt fluorescent lamps. Finished in royal statuary bronze. U.L. Approved. For 105-125 v., 60 cycles AC. Shpg. wt., 10 lbs.

91 RX 146. List, $14.95. NET.....10.95

Model 4448. As above but uses one lamp only.

91 RX 143. List, $9.50. NET.....6.99

NEW MODEL 5403 "SIGHTMASTER" DESK LAMP

Two-tube fluorescent desk lamp in English bronze. Oven-fired, baked enamel for long lasting beauty and durability. Spring-tensioned swivel holds unit in any desired position without drooping. Adjustable arm and shade are made of steel. Base is die-cast metal, rubber padded. Base is 6⅞" in diameter; arm, 12½" long; shade, 1⅞x3¾x18". Maximum height, 15". Less T8 15-watt fluorescent lamps. U.L. Approved. For operation from 110-120 volts, 60 cycle AC. Shpg. wt., 8 lbs.

91 RX 144. List, $16.95. NET.....12.46

Model 5405. Same as above but for one lamp only.

91 RX 148. List, $11.95. NET.....8.78

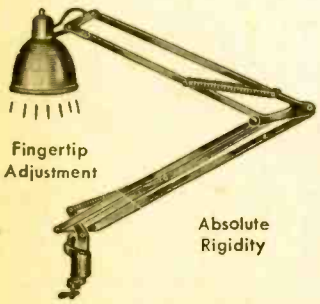
MODEL 63 TV LAMP AND CLOCK

Beautifully styled TV lamp and clock especially designed for no-glare TV reception. Light reflects backwards without interfering with TV screen brilliance. Creates soft, indirect lighting. Excellent for mantel or night table. Steel shade, 3x18¼". Has louver for clock illumination. Convenient on-off switch. Porcelain white enamel reflector, easily cleaned. Clock is Telechron 3½" unit. Height, 10¼"; base, 5x8". For operation from 110-120 volts, 60 cycles AC. Less T8 fluorescent 15-watt lamp. Shpg. wt., 9 lbs.

91 RX 223. Gray; brass trim. List, Each, $16.95. NET EACH.....12.46

91 RX 222. Brown; brass trim.

LUXO ADJUSTABLE LAMP



Model L-1A All-Angle Adjustable Lamp

Completely new type of lamp—designed to provide: Proper amount of light, instantaneous fingertip control, absolute rigidity in any position. The perfect lamp for a service bench. May be raised, lowered, or turned, with a touch of the fingers. *At all times, angle of lamp in relation to bench remains the same.* Swings from a straight vertical position to within a few inches of the floor (handy when searching for dropped parts!). The Luxo lamp, made in Sweden, is famous for its precision construction and adaptability to any lighting application.

Has two extension arms, 45" long in fully extended position. Swivel joints are spring-loaded; knurled nut controls overall tension. Porcelainized shade has large vents at top for heat dissipation; On-Off switch conveniently located at top of shade. Supplied with clamp bracket for easy attachment to any bench, table, etc. Extremely lightweight (3 pounds) for maximum portability—yet ruggedly constructed for a lifetime of use. Handsome dove gray finish. Underwriters' Laboratories Approved.

Uses standard light bulb. Less bulb. Shpg. wt., 5 lbs.

91 RX 296. 3 or more, EACH, 15.63. NET EACH.....21.95

"STRAT-O-LITE" INSPECTION LAMP

Inspection magnifier lamp. Has 4½" dia. x 9" focal length lens centers in 360° black shield; provides shadow-free, perfectly enlarged vision. Adjustable arm and swivel joints, permit adjustment to any combination of height, angle, magnification, and light source. With instant-start fluorescent circline lamp, illuminates at touch of a button. For 110-120 v., 60 cycle AC. Shpg. wt., 8½ lbs.

91 RX 350. NET.....29.95

For Additional Fluorescent Fixtures and Accessories, See Pages 309 and 311

STARTERS & SOCKETS

High-quality starters and sockets for all types of fixtures. *For Circline fixtures. Av. wt., 3 oz.

Fig. A—STARTERS

Stock No.	Mfr's Type	Watts	Each	Lots of 10, EA.
78 R 850	FS2	14,15,20	20¢	.18
78 R 851	FS4	30 or 40	20¢	.18
78 R 854	*FS12	32	24¢	.22

Fig. B—LAMPHOLDER SOCKETS

Stock No.	Watts	Color	Each	Lots of 10, EA.
78 R 860	14,15,20	Black	15¢	.14
78 R 861	30 or 40	White	17¢	.15

Fig. C—STARTER SOCKETS

Standard Dual-Loc remote starter socket.
78 R 858. 10 for 1.26. NET EACH ..... 14¢

Fig. D—STARTER SOCKET & LAMPHOLDERS

78 R 865	14,15,20	Black	33¢	.30
78 R 866	30 or 40	White	35¢	.32

DUPLEX STARTER

Features handy "pilot-light." Shows when starter is operating and the lamp is dead. Plastic case. *Circline Lamp; †Circlarc. Shpg. wt., 2 oz.

Stock No.	Mfr's Type	Watts	Ea.	Lots of 10, EA.
78 R 855	FS-22	14-15-18*-20-22†	25¢	.23
78 R 856	FS-42	13-30-40		

JUSTRITE WARNING LAMP

Model 2192. New type lantern warning lamp of novel design. Powered by four standard flashlight batteries, light is visible from any direction from as much as 1½ miles away. When used as a flasher, will flash continuously at one second intervals for up to 18 hours. When used for steady service (not flashing), batteries will last up to seven hours. Flasher can be switched on or off as desired. Red inner lens is easily removable if white light is preferred. Small enough to be stored in glove compartment, tool kit, or tackle box. Actual size, 3x3x6". Rotating base—can be used in virtually any position. Finished in lustrous baked enamel, bright yellow body, flame red on base. Unbreakable plastic lens. Separate switch on flasher unit. With No. 27 bulb. Less batteries; uses 4 No. 2 flashlight batteries (see page 265). Shpg. wt., 1 lb.
78 J 260. List, $4.95. NET 3.23

LIFETIME ALL-PURPOSE LANTERN

Model 501. Features powerful, sharply focused, sealed-beam lamp. May be hand-held, hung on wall or set on flat surface. Lamp fully adjustable through 180-degree swivel. Lamp and handle fold down for easy storage. 3-way switch for off-on-manual-flash operation. Excellent as an emergency lamp or as trouble light for servicemen, motorist, etc. Uses one 6-v. lantern battery (Burgess F4H listed below). Constructed of 16-gauge steel. In bright red baked enamel with chrome trim and handle. Less battery. 5x3x2¾". Lamp 4" dia. Shpg. wt., 4 lbs.
78 J 222. NET 3.53

Model 500. As above, but completely chrome plated. Less battery (see below).
78 J 223. NET 5.00

F4H Battery. 6 v. For above. 1¾ lbs.
53 J 028. NET ..... 67¢

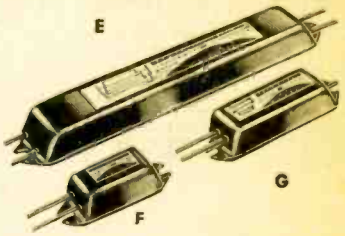
STANDARD, SLIMLINE AND CIRCLINE FLUORESCENT LAMPS

Provide non-glaring light from entire surface with even diffusion and high illumination. White lamps approximate incandescent lighting, daylight lamps have slight bluish tinge approximating natural daylight. Life approximately 2,000 hours or more. Under "Color," cool-white is 4,500° Kelvin. *Circline lamps; size is diameter of lamp circle. †Slimline lamps; 430 ma; shipped by Express only. ‡May be mixed sizes and colors. §Rapid start.

With purchase of fluorescent fixture, order lamp (or lamps) required for fixture, at the lots-of-7 price in table below.

Stock No.	Type	Watts	Size	Color	Std. Pkg.	Wt., Lbs.	EA.	‡7 Lots, EA.	Std. Pkg., EA.
91R 521	T5	6	9"	White	24	½	1.15	1.04	.92
91R 523	T12	14	15"	White	24	1	.95	.86	.76
91R 511	T12	14	15"	Cool-white	24	1	.95	.86	.76
91R 500	T8	15	18"	Daylight	24	1	.85	.77	.68
91R 501	T8	15	18"	White	24	1	.85	.77	.68
91R 512	T8	15	18"	Cool-white	24	1	.85	.77	.68
91R 514	T12	15	18"	Cool-white	24	1	.95	.86	.76
91R 513	T12	15	18"	Daylight	24	1	.95	.86	.76
91RX 515	T12	20	24"	Cool-white	24	1½	.95	.86	.76
91RX 502	T12	20	24"	Daylight	24	1½	.95	.86	.76
91RX 503	T12	20	24"	White	24	1½	.95	.86	.76
91R 535	T9*	22	8"	Cool-white	24	1½	2.95	2.66	2.36
91R 516	T10*	32	12"	Cool-white	24	1½	2.95	2.66	2.36
91R 271	T10*	32	12"	Warm-white	12	1¼	2.95	2.66	2.36
91RX 537	T10§*	40	16"	Cool-white	12	1¼	3.75	3.38	3.00
91RX 538	T10§*	40	16"	Warm-white	12	1¼	3.75	3.38	3.00
91RX 534	T12§	40	48"	Cool-white	24	2	1.25	1.13	1.00
91RX 506	T12	40	48"	Daylight	24	2	1.15	1.04	.92
91RX 507	T12	40	48"	White	24	2	1.15	1.04	.92
91RX 510	T12	40	48"	Cool-white	24	2	1.15	1.04	.92
91RZ 528	T12†	74	96"	Cool-white	12	4	3.50	3.16	2.81
91RZ 529	T12†	74	96"	Daylight	12	4	3.50	3.16	2.81
91RZ 530	T12†	74	96"	White	12	4	3.50	3.16	2.81

ADVANCE FLUORESCENT BALLASTS



These ballasts are popular streamlined models which fit any fixture. Normal power factor types are 55-65% corrected. High power factor types are 90-100% corrected and meet power company requirements; also corrected for stroboscopic effect. L-132 is for standard Circline lamp; LQ-132 is for quick-start Circline. S-240 is 4-lead, narrow cross section type. BRSH-240 is 6-lead, brick type ballast. U.L. Approved. For operation from 105-125 volts, 60 cycle AC.

1-LAMP BALLAST—NORMAL POWER FACTOR

Stock No.	Mfr's Type	Lamp Watts	Size	Mtg. Ctrs.	Fig.	Wt. Lbs.	NET EACH 1-9	NET EACH 10-up
78 R 889	L-115	15	4¼x2x1 7/16"	3¾"	F	1	.79	.71
78 R 891	L-120	20	4¼x2x1 7/16"	3¾"	F	1	.79	.71
78 R 893	L-140	40	6½x2 5/16x1 11/16"	6"	G	3	1.70	1.53
78 R 894	L-132	32	6½x2 5/16x1 11/16"	6"	G	2¼	1.65	1.48
78 R 895	LQ-132	32	6½x2 5/16x1 11/16"	6"	G	3¼	2.45	2.20

2-LAMP BALLAST—NORMAL POWER FACTOR

78 R 898	L-220	20	6¼x2x1 7/16"	5⅜"	G	1½ lb.	1.55	1.39

2-LAMP BALLAST—HIGH POWER FACTOR

78 R 896	S-240	40	11¾x2 5/16x1 11/16"	11 7/16"	E	4½ lbs.	4.35	3.91
78 R 897	BRSH-240	40	9½x2 11/16x2"	8 15/16"	G	5½ lbs.	5.05	4.54

NEW BURGESS "RADAR-LITE" LANTERN

New, super-power, all-purpose lantern. Sealed-beam lamp develops 40,000 candlepower—penetrates over half a mile. Modeled after emergency lanterns used by police, fire and utility crews. Automatic, "on-off" red flashing signal on movable arm, swings 90°. Uses new super-powered battery that couples to lamp assembly—uses only two insulated thumb screws. The battery is the lantern body—can be installed in seconds. Steel-clad, leakproof and weatherproof. Delivers over three times longer service than conventional lantern batteries. Weatherproof switch has silver contact points. "Thumb-tip" control and one-hand operation. Chrome plated handle. 11¼x9¼x3½". Lamp, 4¾" dia. With 6 v. battery. Wt., 6 lbs.
78 J 270. List, $11.95. NET 7.33

TW1 Battery. Replacement for above. 3½ lbs.
80 J 680. List, $2.45. NET 1.63

HIDE-A-GLARE TELEVISION LAMP

Provides a soft indirect glow to relieve the eyestrain of continuous television viewing. Just hang on back of TV cabinet. Metal housing, 7½x3⅛x3¼". Gray crackle finish. With 6-ft. cord and plug. For 110-120 volts, AC or DC. Less standard light bulb. Shpg. wt., 1 lb.
91 R 291. List, $3.49 NET 2.10

BURGESS FLASHLIGHTS

Fig. A. Standard Size. Two-cell. All metal. Factory pre-focused. On-off slide switch with pushbutton. Enamel finish, chrome trim. Uses two No. 2 cells with PR2 single contact flanged bulb. Less batteries. Wt., ¼ lb.
78 J 233. List, $1.89. NET 1.26

Fig. B. Type 152 Penlight. Heavy-chrome finish. Uses two No. 7 cells. With No. 224 pre-focused bulb. Less batteries. Wt., 5 oz.
78 JC 245. List, 88c. NET 59c

See Page 265 for Batteries

Selected Feature Values

PHILMORE BUILDERS KITS

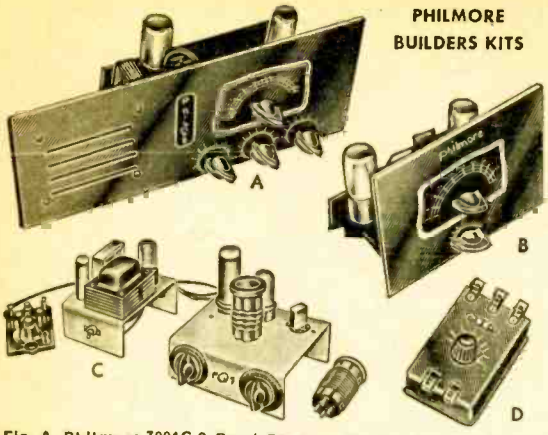


Fig. A. Philmore 7001C 2-Band Receiver Kit. Popular, easy to build 2-band receiver. Covers standard broadcast band plus 6-18 mc short wave band. Regenerative circuit has high sensitivity. Tubes required: 50L6, 12SJ7 and 35Z5 rectifier. With all parts, instructions and hardware; less tubes, headphones, wire, solder and antenna. 5¾x12½x4¼". For 105-125 v., 50-60 cycle AC, or DC. Shpg. wt., 4 lbs.
83 S 032. NET 11.76

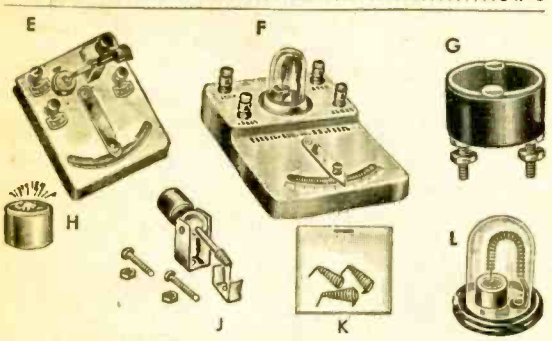
83 C 100. Antenna Kit. Shpg. wt., 1 lb. NET ..... 89¢

Fig. B. Model 7001B 1-Tube Receiver Kit. Tunes 535-1650 kc. Regenerative circuit. Uses 1—12SJ7 tube; 1—35Z5 rectifier. Less tubes, headphones, wire and solder. 6¾x5¾x4". For operation from 105-125 v., 50-60 cycle AC, or DC. Shpg. wt., 2 lbs.
83 S 031. NET 7.35

59 J 110. Dual 2000 ohm headset. Shpg. wt., 12 oz. NET 1.79

Fig. C. Model NT-200 Novice Transmitter Kit. Covers 80, 40 and 15 meter novice bands. Complete with all tubes, coil forms, key, punched chassis, and full instructions. Less only wire, solder and crystal. For operation from 110-120 v., 60 cycle AC. Shpg. wt., 10 lbs.
83 S 556. NET 29.40

Fig. D. Model TR-101 Transistor Battery Radio Kit. Operates on single 1½ volt penlite battery. Covers broadcast band. Transistor audio stage. Less wire, solder, battery and headphone. Shpg. wt., ½ lb.
83 S 562. NET 5.73



CRYSTAL SETS AND ACCESSORIES

Fig. E. Philmore Supertone. Gives splendid results on local stations within a radius of 25 miles. Crystal enclosed in dustproof plastic case. Tuning by smooth-action slider. Sturdy bakelite case. Less headphones and antenna. 4¼x5¾x2¾". Shpg. wt., 12 oz.
83 S 003. NET 1.49

Fig. F. Philmore Little-Wondor. One of the smallest sets made. Will tune local stations within a 25 mile radius when used with a suitable antenna. Galena crystal mounted in lead. Slider-contact tuning. Less headphones and antenna. Shpg. wt., 6 oz.
83 S 015. NET 1.15

Fig. G. Fixed Detector. Permanently adjusted, sensitive, meter-tested crystals. In bakelite case. Shpg. wt., 3 oz.
52 S 001. NET EACH 71c

Fig. H. Mounted Crystal. Highly sensitive, very dependable, galena crystal, securely mounted in lead. Shpg. wt., 2 oz.
52 S 005. NET EACH 6c

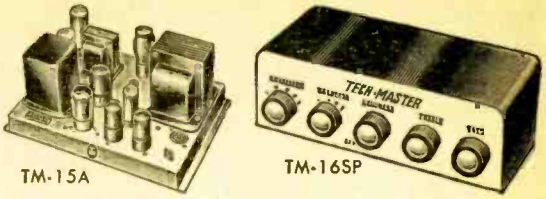
Fig. J. Detector Mount Kit. Crystal holder, cat-whisker and hardware. Less crystal. Uses No. 52 S 005 or 52 S 006. Shpg. wt., 3 oz.
53 S 003. NET EACH 15c
As above, but on fiberboard base. Fahnestock clips. Shpg. wt., 5 oz.
52 S 004. NET EACH 21c

Fig. K. Cat Whiskers. Set of three. Correctly designed of tested spring steel. Proper tension for all detectors. Shpg. wt., 3 oz.
52 S 011. PER SET 12c

Fig. L. Enclosed Detector. Dustproof plastic enclosed detector. With crystal. Shpg. wt., 3 oz.
52 S 002. NET EACH 44c

Meter-Tested Crystal. Laboratory tested and selected to assure excellent performance. Has greater sensitivity than 52 S 005 above. (Not illustrated.) Shpg. wt., 3 oz.
52 S 006. NET EACH 15c

TECH-MASTER HI-FI KITS



TM-15A 20-WATT HI-FI AMPLIFIER KIT

An outstanding amplifier for the most discriminating hi-fi enthusiasts. Provides topnotch reproduction at moderate cost. Employs Williamson type circuit for extremely wide response with negligible distortion. High-quality parts include an output transformer designed especially for use in Williamson-type circuits. Ideal for use with the finest high-fidelity equipment. All sockets, terminal strips and connectors are mounted—ready to wire.

Specifications: *Rated Output:* 20 watts. *Response:* ±1 db, 8-100,000 cps at 5 watts; ±1 db, 10-70,000 cps at 10 watts. *Intermodulation and Harmonic Distortion:* Both less than 0.25% at 10 watts and 0.45% at 15 watts. *Hum and Noise:* 70 db below 20 watts. *Inverse Feedback:* 20 db. Has no controls; high-impedance input for tuner or preamp. (See TM-16SP, below.) *Speaker Outputs:* 4, 8 and 16 ohms. *Tubes:* 2—6SN7's, 2—5881; 5V4G rectifier.

Supplied complete with all tubes, parts, chassis, instructions. Less only hook-up wire and solder. Overall size: 9x12x6½". For operation from 110-120 volts, 50-60 cycle AC. Shpg. wt., 27 lbs.
83 SZ 096. NET 48.95

TM-16SP PREAMPLIFIER-EQUALIZER KIT

New, self-powered preamplifier-equalizer kit. Ideal for control of Tech-Master TM-15A, above, or other quality hi-fi amplifiers. Provides 5 positions of accurate record equalization, for proper playback of both standard and microgroove records. Loudness-compensated volume control provides faithful reproduction at low levels. Cathode follower output allows long lead to amplifier. All sockets, terminals and connectors are mounted—ready to wire. Complete instructions and diagrams assure easy construction.

Specifications: *Four Inputs:* Magnetic cartridges; crystal cartridges; FM-AM-TV tuners; auxiliary input for tape or wire recorder playback. *Five Positions of Record Equalization:* RIAA; FFRR; AES; 78 rpm; old 78 rpm. *Controls:* Equalizer; Selector Switch; Off-On-Loudness; Treble; Bass. Bass control has 15 db of boost or attenuation at 20 cps. Treble control has 15 db of boost or attenuation at 20,000 cps. *Tube Complement:* 1—12AX7, 1—12AU7; 1—6C4. Has selenium rectifier power supply.

Size: 9⅞x3⅜x4½". For operation from 110-120 volt, 50-60 cycle AC. Supplied with punched chassis, all components, tubes, cabinet, and escutcheon for custom mounting. Shpg. wt., 4 lbs.
83 S 098. NET 24.01

UTC LINEAR STANDARD AMPLIFIER KIT

Model MLF. Unique, new 20-watt high-fidelity basic amplifier kit from this famous maker of audio components. Has printed circuit panel as large as the chassis with virtually all components pre-assembled and wired. Additional wiring involves only connection of 17 leads to screw terminals. No controls—mounts in any out-of-the-way place. Minimum transient distortion. Multiple-loop feedback and network stabilization circuit. Rated Output, 20 watts. Intermodulation Distortion, .07% at 1 watt, 1% at 20 watts. Frequency response, +0, −1 db, 20-20,000 cps. Hum & Noise, 80 db below rated output. Feedback, 36 db. Speaker Outputs, 4, 8 and 16 ohms. Tubes: 1—12AX7, 2—6AU6, 2—5881; 1—5V4G rectifier. Size (with cover), 5¼x8x17⅛". Air-vented cover finished in handsome baked gray enamel. Complete with tubes and comprehensive instruction manual. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 26 lbs.
83 SZ 099. NET 99.00

NEW "ILLINI 300" ELECTRONIC FLASH KIT

New, high-intensity electronic flash kit. Will meet the exacting requirements of the professional photographer, both in appearance and performance. Exceptionally high output of 100 watt seconds for color film. Very easy to build—head portion of the flash gun is factory wired. Full instructions, including pictorial and schematic diagrams, make assembly simple. Requires 2—67½ volt batteries and 2—90 volt batteries, listed below. Uses standard B batteries. Flash duration is 1/600 second, sufficient to stop practically any action. Advanced-design discharge bulb and reflector result in higher intensity. Life is greater than 10,000 flashes. Color corrected for daylight film. Shpg. wt., 6 lbs.
83 S 552. NET 59.50

80 J 670. **Battery Kit.** For above. Shpg. wt. 4½ lbs. NET 10.10

"POPULAR MECHANICS" DIAGRAMS

The leading radio sets and electronic devices published in *Popular Mechanics* magazine are clearly described on 17x22" blueprints. The listing below includes newest circuits featured in recent issues of the magazine. Each piece of equipment diagrammed has withstood the acid test of successful construction and operation by thousands of *Popular Mechanics* readers. Each blueprint includes all essential data and a complete parts list.

38 K 236. R316. "Pop Corn Can" RF Signal Generator.
38 K 244. R337. 2-Tube "Pockette" Set.
38 K 259. R350. 50-Watt 10-Meter Xmitter
38 K 271. R358. 50-Watt 5-Band Xmitter.
38 K 267. R360. Signal Booster for Short-wave Receivers.
38 K 272. R365. Crystal Set and Battery-operated Amplifier.
38 K 274. R367. 3-Way Portable Receiver
38 K 275. R368. 1-Tube AC-DC Loudspeaker Set.
38 K 276. R369. 3-Tube Pockette Receiver.
38 K 278. R371. Low-Cost, 3-Station Intercom System.
38 K 285. R378. 2-Tube Super Battery Set.
38 K 287. R380. Inexpensive Signal Tracer for Radio Servicing.
38 K 289. R382. 2-Tube Mini-Pal Portable.
38 K 292. R388. AC-Operated All-Wave Progressive Receiver (No. 2).
38 K 293. R389. Capacity-Operated Electronic Switch.
38 K 294. R391. Uranium Survey Meter with Audio Amplifier.
38 K 060. R394. "Handle-talkie" Pocket Receiver for Experimenters.
38 K 061. R396. Two Germanium Diode Crystal Receivers.
38 K 062. R398. Super-Fidelity Amplifier.
38 K 084. R400. Battery-Operated Progressive Receiver (No. 1).
38 K 067. R404. CW Xmitter for Novice Band.
38 K 069. R407. 4½ Watt Versatile Amplifier.
38 K 077. R408. 1952 "Little Giant" Radio-Intercom System.
38 K 078. R411. Pre-Amp. for Radio-Phonos.
38 K 079. R412. Tiny AC-DC Superhet.
38 K 080. R416. 20-Watt Super Fidelity Audio Amplifier.
38 K 081. R417. 1953 "Little Giant" Hi-Fi Superhet Tuner.
38 K 082. R419. Applause Meter.
38 K 085. R421. Multi-purpose Battery-Operated Audio Amplifier.
38 K 086. R422. "Seven Seas Scout" Receiver.
38 K 087. R423. 1-Tube Loudspeaker Set.
38 K 088. R424. Super-Fidelity Phono.
38 K 089. R425. 1954 "Little Giant" Multi-Station Intercom.
38 K 090. R428. Two Low-Cost, Hi-Fi Multiple Speaker Enclosures.
38 K 091. R429. Children's Playroom Phono.
38 K 092. R430. 2-Meter Transceiver.
38 K 093. R432. 30-Watt Audio Amplifier.

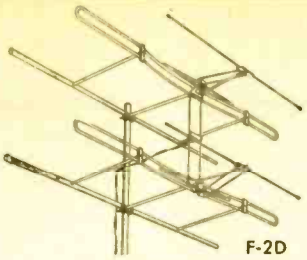
Postpaid In U.S.A. ..... 3 for 1.00

EACH 40c

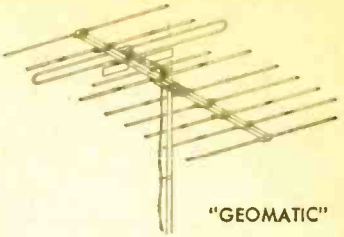
NEW ARRL HANDBOOK

The Mobile Manual For Radio Amateurs. Published by the Headquarters Staff of the American Radio Relay League. A valuable sourcebook of basic information for the mobile enthusiast. Compilation of the most popular and informative articles on mobile radio that have appeared in QST magazine. Articles include: 1-Tube 75-Meter Mobile Converter, Simple Crystal-Controlled Converters, Bandswitching Mobile Converter, Mobile SSB Receiver for 80 and 40 Meters, Two-Band Mobile Transmitter, "Mighty Mo," "Mighty Mo Sr.," 80 and 40 On Wheels, etc. Contains latest, authoritative material on power supplies including 12-volt automotive systems, information on antennas, etc. Valuable hints and kinks for all mobile operators—written by experienced Amateurs. Profusely illustrated with photos, diagrams, schematics, etc. Size, 6½x 9¼". 352 pages.

37 K 573. Postpaid In U.S.A. 2.50



F-2D



"GEOMATIC"

NEW FINNEY "FIDELITY PHASING" VHF TV ANTENNAS

Model F-2D. New, 2-bay broadband antenna with exclusive fidelity phasing feature. On high band, has 6 driven colinear elements, 2 reflectors and 4 colinear directors. On low band, has 2 driven folded dipoles, 2 reflectors and 2 directors. Eliminates any need for matching harness. Assures maximum signal reception and picture clarity 100 miles from station. All aluminum construction. Less mast and 300-ohm twin line. Shpg. wt., 7 lbs.
92 CZ 073. List, $23.00. NET 13.52

Model B-5 "Geomatic." Very high gain antenna. Employs fidelity phasing, multiple low-band directors and reflectors, high-band colinear reflectors and directors and other combination elements. Equals or surpasses, on channels 2 through 13, the extremely sharp directivity of a 12-element Yagi cut for a single channel. For use in extreme fringe areas—signal reception of 200 miles or more. Less mast and 300-ohm twin line. Shpg. wt., 9½ lbs.
92 CZ 074. List, $32.00. NET 18.82

Model S-5 Stacking Kit. For stacking two B-5's for ultra-high gain. Shpg. wt., ¼ lb.
92 C 075. List, $2.50. NET 1.47

Each of the "Geomatic" antennas below are similar in construction and appearance to the Model B-5 described at left, but have fewer elements, depending on their particular application. Each antenna employs fidelity phasing; all are less mast and 300-ohm twin line.

Model B-4. For deep fringe areas of 150 miles or more. Shpg. wt., 6 lbs.
92 CZ 076. List, $17.50. NET 10.29

Model B-3. For suburban or fringe areas of 75 miles or more. Shpg. wt., 5 lbs.
92 CZ 078. List, $13.50. NET 7.94

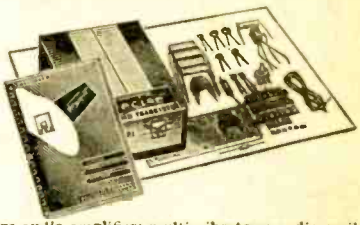
Model B-2. For city, suburban or semi-fringe areas. Shpg. wt., 3½ lbs.
92 CZ 082. List, $8.75. NET 5.15

Model B-1. Primarily for metropolitan and suburban areas. Shpg. wt., 3¼ lbs.
92 CZ 083. List, $7.50. NET 4.41

Stacking Kits. Av. shpg. wt., ½ lb.

No.	Type	For stacking	List	NET
92 C 077	S-4	Two B-4 antennas	$2.00	1.18
92 C 079	S-3	Two B-3 antennas	2.00	1.18
92 C 084	S-1	Two B-2 or two B-1	1.75	1.03

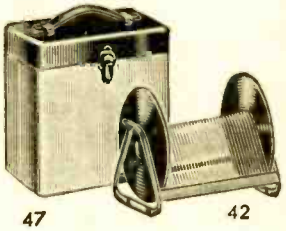
PRECISE 12-EXPERIMENT TRANSISTOR KIT



A fascinating kit for laboratory experiments with two transistors. Provides a simple, thoroughly practical approach to a clear understanding of this new, important branch of electronics. Learning is accomplished by actually wiring transistors into practical, useful circuits. Kit includes an excellent, 60-page instruction book which covers transistor physics in simple, easy-to-understand non-mathematical terms. Equipment includes: Two transistors, condensers, coils, potentiometer, transformer, germanium diode, chassis, terminal strips, wire and resistors. Prepared experiments cover a 1-stage audio amplifier; multi-vibrators; audio oscillator; RF oscillator; signal tracer; tuned signal tracer (TRF receiver); etc. Less only headphones, battery and solder. Shpg. wt., 4 lbs.
83 F 134. NET 14.95
53 J 035. Battery. 4½ volts. Shpg. wt., ½ lb. NET 43c
59 J 110. Headphones. 2000 ohms. Shpg. wt., 12 oz. NET 1.79

LYRIC RECORD CARRYING CASES AND STORAGE RACKS

A complete assortment of high-quality, attractively styled record carrying cases and storage racks. Provide safe, convenient record storage for 7", 10" and 12" sizes. Record rack holders have welded steel wires with soft felt covering to prevent scratching delicate record grooves. Records rest safely on rubber cushions. Rack holders provide ultra-compact storage space—eliminate the need for bulky cabinets. Although moderately priced, all carrying cases and storage racks are fully indexed for quick record identification and selection.



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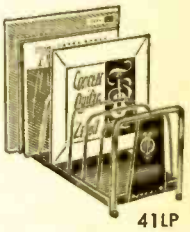

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41LP

CARRYING CASES

Smartly styled record carrying cases. Extra-strong, all-metal construction. Excellent for travel or home storage. All have plastic carrying handles (except Model 47, metal handle), tab index, dividers and numbered identification stickers. Models 43, 46 and 49 have rubber feet and sponge-rubber cushions for absolute record safety while carrying. All have brass-plated, snap-clasp locks. *Indexed for 35 records. Shpg. wts.: Model 47, 2 lbs.; Model 49, 8 lbs.; Model 43, 6 lbs.; Model 48, 5 lbs.; Model 46, 7 lbs.

Stock No.	Mfr's. Type	Records	Color	NET EACH
96 R 899	47	40- 7"	Red	1.93
96 RX 849	49	80- 7"	Gray and green	3.23
96 R 894	43	50-10"	Two-tone brown	4.55
96 R 887	48*	50-10"	Beige, wood-grain	3.23
96 RX 898	46	35-12"	Two-tone brown	4.90

RECORD HOLDER RACKS

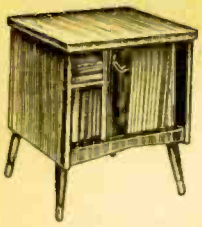
Model 42 Deluxe. Holds up to fifty 10" or 12" records. Separators covered with soft felt. Records fit securely in place. Each space is numbered for quick location of record. Copper-plated end pieces, formed in the shape of handles. Length, 12". Shpg. wt., 5 lbs.
96 RX 835. List, $3.95. NET 2.58

Model 45 Bantam Deluxe. As above, but for 7" records. Holds 50 discs. Wt., 3½ lbs.
96 R 832. List, $2.75. NET 1.79

Model 52 Bantam Junior. For 7" and children's records. Holds 50 discs. Less end-pieces. Shpg. wt., 3½ lbs.
96 R 833. List, $2.25. NET 1.47

Model 41 LP Rack. New holder for LP records in jackets. Accommodates sixty, 7", 10" or 12" records. All steel, finished in black and brass. 5 separators; 11" long. Shpg. wt., 2½ lbs.
96 R 848. List, $4.95. NET 3.23

Selected Feature Values



Top Value In Combination Phono Table and Record Cabinet

PHONO TABLE RECORD CABINET

Here's an extra-spacious, handsomely-styled phonograph table and record cabinet at a remarkably low price. Available in choice of mahogany or blonde finish to blend with any home furnishings. Holds records, phonograph, record player or tape recorder. Provides plenty of space for storage of 10" and 12" records and albums. Has removable dividers for convenient storage of records in standup or flat positions. Divider forms separate compartment for 7" records and albums. Top surface is big enough to accommodate almost any phonograph, record player or tape recorder. Legs are gracefully tapered and have solid brass ferrules. 24" high. Top surface size: 18½" wide, 22½" deep. Shipped unassembled—can be set up in minutes. Shpg. wt., 20 lbs.

96 RZ 843. Mahogany.
96 RZ 844. Blonde. NET EACH....12.75

Completely Adjustable

Swivels In All Directions

Fits Into Any Room

Smartly Styled

SWIVEL TOP TV TABLE

This swivel-top TV table combines functional design with trim, modern styling and rugged construction. Although very low in cost, it offers many high-quality features. Arms and legs are both adjustable for cradling and supporting of all sizes of TV receivers. Swivel is reinforced; glides smoothly on ball bearings. Legs are made of ¾" tubular furniture steel; arms are of solid steel. Choice of styling: Legs in black finish and arms with brass trim—or arms and legs in brass plate. 19" high, 18" deep. Width is adjustable from 18" to 32". Shipped unassembled—can be set up in a jiffy. Shpg. wt., 16 lbs.

98 SZ 910. Black legs, brass arms. NET 6.45
98 SZ 911. Brass-plate arms, legs. NET 7.75

"FERRI-LOOPSTICK"

Revolutionary antenna development. Hi-Q Ferrite core coil with short antenna lead. Completely eliminates need for bulky, conventional loop antennas. An extremely small, yet very powerful replacement antenna. Has Q of 240-275. Boosts sensitivity and signal-to-noise ratio considerably in portable receivers. Equally efficient at every angle. Mounts in any position. Needs no orientation. Easily adjusted for proper tracking. Once tuned (with sliding Ferrite core) at installation, no further tuning is needed. Angle mounting bracket has pre-drilled hole for single-fastener mounting. Size: 2" long less mounting bracket; 2½" overall. Shpg. wt., 3 oz.

51 C 036. NET EACH.....44c

"VARI-LOOPSTICK"

An exceptionally small, compact radio antenna for all types of broadcast receivers. Micrometer adjustment for maximum efficiency and precise tracking over entire broadcast band. Eliminates need for space-consuming loop antennas and has high sensitivity in all directions. Based on new antenna principle; may be installed in any convenient location, then peaked for optimum performance. With mounting bracket. Shpg. wt., 4 oz.

51 C 034. NET EACH.....59c

MICRO-VOX WIRELESS MICROPHONE

Consists of a microphone with a built-in midget radio transmitter. Plays through any AM radio within 75 feet. Requires absolutely no technical knowledge. Simply tune your radio to any clear channel, then with the knob on the side of the Micro-Vox tune it to the same channel. Mike is detachable from bottom half, which is stand. May be used as a small PA system, for picking up calls from the nursery, sick room, etc. Uses one 22½-volt miniature "B" battery and one flashlight cell. Uses low drain tube. With guide book, tube and batteries. Wt., 3 lbs.

99 S 485. List, $9.95. NET.....6.50

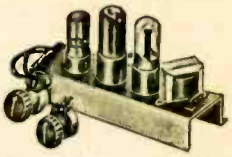
Micro-Vox AC-DC Wireless Mike. Same as above but plugs into wall outlet. For 110-120 v., 60 cyc. AC, or DC. Wt., 2 lbs.

99 S 488. List, $12.95. NET.....8.50

KNIGHT CRYSTAL MIKE VALUE

Sealed crystal element resists humidity. High output makes it ideal for Amateur speech amplifiers. Excellent for general recording work. Also ideal for budget-wise home recording fans. Frequency response 60-7500 cps. Output level, −50 db. High impedance. Insulated inner element for safe AC-DC use. Die-cast, gold-finished case. 5 ft. shielded cable. Shpg. wt., 1 lb.

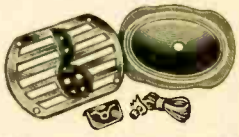
99 S 556. NET.....3.95



QUALITY AC-DC PHONO AMPLIFIER

This ultra-compact amplifier is excellent for audio hobbyists or experimenters. Long, narrow chassis fits in portable record changer case. Controls are mounted on 8" extension cables to simplify installation. On-Off-Tone, and Volume. Has connection for using On-Off switch to control phono motor. Chassis is isolated from line to avoid shock hazard. With 12SQ7 and 50L6GT tubes, 35Z5GT rectifier, output transformer, knobs, line cord, and instructions. Size: 8" long, 3½" wide, and 4⅛" high. 110-120 volts DC, or 60 cycle AC. Less speaker. Shpg. wt., 2½ lbs.

83 R 075. NET.....9.95



REAR DECK AUTO SPEAKER

High-quality rear deck speaker kit—at big savings. Features 6x9" speaker for unusually fine tonal quality. Eliminates need for raising radio volume so that passengers in rear can hear program—driver simply switches on rear deck speaker. Three-way, dash-mounted switch permits operation of front speaker only, rear speaker only, or both speakers simultaneously. Complete with speaker, chrome-plated grille, pre-wired switch and cable, and instructions. Shpg. wt., 2¼ lbs.

81 D 542. NET.....4.95

3-IN-1 RADIO TUNER

ICA No. 93. Functions as antenna tuner, wave trap or aerial eliminator. Operates on any radio receiver. When used as antenna tuner, improves reception of weak signals. When used as a wave trap, minimizes interference from strong local stations. Improves reception when used with outdoor antenna. Easily installed. Shpg. wt., 5 oz.

70 C 395. List, $1.00. NET.....59c
10 or more, EACH.....53c

MASCO "SMALL TALK" TWO STATION INTERCOM

A low-cost two-station intercom system complete with 50-ft. cable, ready to operate. Consists of Master and Remote unit. Press-to-talk switch allows Remote to originate calls to Master. Remote can answer calls from a distance; can be left "open" for baby-sitting or dictation, or "closed" for privacy but still able to receive calls from Master. 4" Alnico V speakers in Master and Remote assure full voice reproduction. Master has volume control with on-off switch. Separate "press-to-talk" switch. On-off pilot light indicator. Output, 1½ watts. Tubes: 12AT6, 50C5; 35W4 rectifier. All metal cabinets, finished in attractive brown hammertone. Size, each cabinet, 6½x4⅝x4⅛" high. Complete with Master, Remote, 50-ft. cable. U.L. Approved. For 110-120 v., 50-60 cyc. AC. Shpg. wt., 6½ lbs.

95 R 925. List, $29.95. NET.....17.64

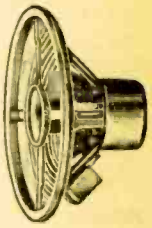
Model MM-5 Multiplier. For converting system above into 6-station system: Master and 5 Remotes. "Small Talk" Master station mounts on multiplier. Sloped front panel has 5 slide switches for selecting one or more remote stations at same time. With 6-ft. cable. Size, 6¼x5¼x2" high. Shpg. wt., 2 lbs.

95 R 926. List, $11.00. NET.....7.18

Model ST Remote Station. For adding to 2-station system. 4⅜x6½x4⅝. Shpg. wt., 2½ lbs.

95 R 927. List, $10.00. NET.....6.54

COAXIAL SPEAKER VALUES



Outstanding values for economy-minded high-fidelity enthusiasts. Dependable, high-quality, 8", 12" and 15" coaxial speakers for home music installations and high-fidelity systems. Unusually good high-frequency response and faithful bass reproduction. All have 6-8 ohm impedance and "Alnico" magnets. Tweeters mounted on cross bars attached to speaker frames. Built-in crossover networks.

8" Coaxial Speaker. 8" cone; has 2.15 oz. magnet. 2¼" tweeter with 1 oz. magnet. Rated at 8 watts. Range: 70-12,000 cycles. Crossover: 3000 cycles. Shpg. wt., 3 lbs.

81 D 607. NET.....7.95

12" Coaxial Speaker. 12" cone; has 2 lb. magnet. 3½" tweeter with 1.47 oz. magnet. Rated at 15 watts. Range: 55-12,000 cycles. Crossover: 2000 cycles. Shpg. wt., 8 lbs.

81 DX 638. NET.....12.95

15" Coaxial Speaker. 15" cone; has 2 lb. magnet. 5" tweeter with 1.47 oz. magnet. Power handling capacity: 20 watts. Range: 45-12,000 cycles. Crossover: 1800 cycles. Shpg. wt., 11 lbs.

81 DX 608. NET.....19.95

QUALITY CAPACITOR ASSORTMENT

Selection of 25 capacitors. Popular values. Wax impregnated paper except *mica. 6 oz.

W.V.	Mfd
200	.03 (1), .013 (3)
400	.002 (3), .003 (3) .005 (2), .02 (3) .05 (3)*, .1 (3)*
600	.0016 (1), .004 (1) .0068 (1)
1000	.005 (1)

58 L 458. NET.....95c

CRYSTAL RECEIVING SET

An extremely small, completely self-contained set with built-in earphone. Provides clear reception of local stations. Uses germanium diode crystal—an extremely sensitive detector which eliminates adjustment of catwhisker. Complete with antenna and ground leads; nothing else to buy. Size, 4⅝x2⅝x1⅛". Wt., 1 lb.

83 S 006. NET.....3.95

IT'S EASY TO GET THE EQUIPMENT YOU WANT ON

ALLIED'S EASY PAYMENT PLAN

BUY OUR EASY-PAY WAY: ONLY 10% DOWN, 12 FULL MONTHS TO PAY

Only Tubes and Parts Not Covered. Now, ALLIED's new Easy Payment Plan covers everything except tubes and parts. A small down payment is all you need to get any equipment and thousands of smaller articles listed in this catalog.

Types of Merchandise Sold on Easy Payments. Included under the plan are High Fidelity Systems, separate Hi-Fi units and accessories; Recording, Public Address and Test Equipment; Cabinets, Phonographs and Record Changers; Amateur Gear; Build-Your-Own Kits, including the sensational Knight Electronic Kits; Radioactivity Detectors; TV Accessories; Chargers, Boosters and Converters; Power and Hand Tools; Manuals and Books; and many other items.

10% Down on Orders for $45.00 or More. Don't put off ordering because you don't have the ready cash for something you want. A 10% down payment on an order totalling $45.00 or more will bring you your selection from the world's largest electronic stocks. The low carrying charges (see table at right) average less than 6% on the unpaid balance. *There are no other charges.*

Our Easy Payment Terms

Minimum Order—$45.00 total cash value.

Down Payment—10%. A bigger down payment will reduce carrying charge and monthly payments.

Carrying Charge—See table. Average is less than 6% on unpaid balance. Carrying charge is subject to refund as explained in column at right.

Monthly Payments—See table. In most cases, there will be 11 equal monthly payments, with 12th payment for odd amount remaining due. Minimum payment per month is $5.00.

Example:

93 PA 686 Knight 30-Watt Portable PA System	124.25
10% Down Payment	12.43
Unpaid Balance	111.82
Add Carrying Charge (See Table)	6.60
Total	118.42
11 Payments of $10.00 each (See Table)	110.00
12th Payment	8.42

How to Buy on ALLIED's Easy Pay Plan

It's simple to start an Easy Payment account. Use your ALLIED order blank to enter the merchandise you want to buy on credit terms. Please be sure to include only items eligible for sale on time payments (see above). Fill in the answers to the simple questions on the back of the order blank and sign it. Include your remittance for the down payment (10% or more) and mail your order to ALLIED. Shipment is made as soon as your credit is approved. The first payment is made 30 days after shipment, and your invoice will provide complete details. No red tape—no finance companies to deal with—no hidden charges. Any responsible person of legal age, with a steady income, can get credit approval. Additional order blanks and our Time Payment Bulletin will be sent on request.

EASY PAYMENT TABLE

If Unpaid Balance Is	*Carrying Charges*	*Monthly Payments*
UP TO $ 51.59	$ 2.00	$ 5.00
$ 51.60 to 63.99	3.40	
64.00 to 74.99	4.10	6.00
75.00 to 84.99	4.80	7.00
85.00 to 95.99	5.40	8.00
96.00 to 105.99	6.00	9.00
106.00 to 115.99	6.60	10.00
116.00 to 126.99	7.30	11.00
127.00 to 146.99	8.20	12.00
147.00 to 170.99	9.50	14.00
171.00 to 190.99	10.80	16.00
191.00 to 212.99	12.10	18.00
213.00 to 233.99	13.40	20.00
234.00 to 253.99	14.60	22.00
254.00 to 274.99	15.80	24.00
275.00 to 299.99	17.20	26.00
300.00 to 321.99	18.60	28.00
322.00 to 343.99	20.00	30.00
344.00 to 365.99	21.30	32.00
366.00 to 387.99	22.60	34.00
388.00 to 409.99	23.90	36.00
410.00 to 435.99	25.30	38.00
436.00 to 457.99	26.80	40.00
458.00 to 483.99	28.20	42.00
484.00 to 505.99	29.70	44.00
506.00 to 527.99	31.00	46.00
528.00 to 549.99	32.30	48.00
550.00 to 575.00	33.70	50.00
Please Write for Terms over $575.00.		

No Charges if Paid in 60 Days

ALLIED's Easy Payment Plan provides for *full refund* of carrying charges if you complete payments within sixty days after shipment. You get a refund of 50% of the carrying charges if you finish payments in half the required time. Take the full time to pay if you wish. But if you decide to pay in 60 days or even six months, you get a refund.

NOTE: ALLIED'S Easy Payment Plan is offered to residents of the 48 states only. It does not cover shipments to U. S. Possessions or Territories or to A.P.O. and F.P.O. addresses. For complete details please write for our Time Payment Bulletin.

HOW TO ORDER FROM ALLIED

IT'S EASY TO ORDER

Orders may be sent on our order blanks or your own purchase order forms or stationery. To speed handling, please fill in all information requested on our order blank. If you use your own order forms or stationery, please give our stock number, quantity desired, name of item, manufacturer's type number and price. Type or print to help us fill your order accurately. Remit to cover the full amount of the merchandise, plus postage and insurance for parcel post shipments. Don't worry about sending too much. *Every cent extra will be refunded.*

"Z" ITEMS SHIPPED BY EXPRESS

The letter "Z" (as in 98 SZ 767) is part of the stock number for items which exceed parcel post size or weight limits. Such items are shipped by express. See "EXPRESS" information at right.

HOW TO SEND MONEY

The best way to send money is by postoffice or express money order, bank draft or check. Avoid sending coin or currency, but if necessary, be sure to register your letter. Please do not remit in stamps except if necessary on very small orders. For rush handling, telegraph your order and money by Western Union.

ABOUT C.O.D. ORDERS

You will save money by sending cash in full with your orders. On parcel post C.O.D. shipments, the Postoffice charges (in addition to regular postage) a C.O.D. collection fee and also a money order fee for forwarding the C.O.D. amount to us. (See C.O.D. fee and money order tables below.) Similar fees are collected on express and freight C.O.D. shipments. It will pay you to remit in full and save the C.O.D. charges. We will refund every penny not used. If a C.O.D. shipment is unavoidable, your order should be for a minimum of $4.00, with a deposit of at least 25%. Please include full remittance with any orders for less than $4.00.

PARCEL POST C.O.D. FEES

$0.01 to $5.00.	30c	$50.01 to $100.00.	80c
5.01 to 10.00.	40c	100.01 to 150.00.	90c
10.01 to 25.00.	60c	150.01 to 200.00.	1.00
25.01 to 50.00.	70c		

MONEY ORDER FEES

From $0.01 to $ 5.00..... 0c
From 5.01 to 10.00.....15c
From 10.01 to 50.00.....25c
From 50.01 to 100.00.....35c

PARCEL POST: Size and weight limits will vary depending on your postal zone from Chicago and the type of post office area in which you live. Items not mailable are identified by stock numbers with the letter "Z" (as in 98 SZ 767) and will be shipped by express or the most convenient low cost method.

Include Money for Postage and Insurance. Please send enough money to cover merchandise, postage and insurance on parcel post orders. Catalog gives approximate shipping weights. If you send too much, *we will refund every penny not used to fill your order.* In case of insufficient remittance we ship C.O.D. for balance. To protect you we insure all parcel post. Allow for insurance at these rates:

Up to $5.00..... 5c	$10.01 to $25.00...15c	$50.01 to $100.00..30c
$5.01 to 10.00.....10c	25.01 to 50.00...20c	100.01 to 200.00..35c

HOW TO ESTIMATE PARCEL POST CHARGES

Up to 8 ounces allow 2c for first ounce, 1c for each additional ounce

WEIGHT IN POUNDS	Local	1st & 2nd Zone, up to 150 mi.	3rd Zone 150 to 300 mi.	4th Zone 300 to 600 mi.	5th Zone 600 to 1000 mi.	6th Zone 1000 to 1400 mi.	7th Zone 1400 to 1800 mi.	8th Zone Over 1800 mi.
1	.18	.23	.23	.24	.26	.28	.30	.32
2	.20	.27	.29	.31	.36	.40	.46	.51
3	.21	.31	.34	.38	.45	.52	.61	.69
4	.23	.35	.39	.45	.54	.64	.76	.87
5	.24	.39	.44	.52	.63	.76	.91	1.05
6	.26	.43	.49	.59	.73	.88	1.06	1.23
7	.27	.47	.54	.66	.82	1.00	1.22	1.41
8	.29	.51	.60	.73	.91	1.12	1.37	1.59
9	.30	.55	.65	.80	1.00	1.24	1.52	1.77
10	.32	.59	.70	.87	1.10	1.36	1.67	1.95
11	.33	.63	.75	.93	1.19	1.48	1.82	2.13
12	.34	.67	.80	1.00	1.28	1.60	1.98	2.31
13	.36	.71	.85	1.07	1.37	1.72	2.13	2.49
14	.37	.75	.90	1.14	1.47	1.84	2.28	2.67
15	.39	.79	.96	1.21	1.56	1.96	2.43	2.85
16	.40	.83	1.01	1.28	1.65	2.08	2.58	3.03
17	.42	.87	1.06	1.35	1.74	2.20	2.74	3.21
18	.43	.91	1.11	1.42	1.84	2.32	2.89	3.39
19	.45	.95	1.16	1.49	1.93	2.44	3.04	3.57
20	.46	.99	1.21	1.56	2.02	2.56	3.19	3.75
For Each Extra lb.	Add 1½c	Add 4c	Add 5c	Add 7c	Add 9¼c	Add 12c	Add 15¼c	Add 18c

EXPRESS: Please remit full amount for merchandise, *but do not send any money for express charges with your order.* All transportation charges are collected on delivery at no extra cost to you. All "Z" items (see column at left) are shipped by express. In addition, to assure safe arrival, we prefer to ship by express many hi-fi units, communications equipment, sound systems, transmitting and TV tubes, recorders, test units, TV chassis and other fragile merchandise. If there is no express agent at your location, be sure to specify your nearest express office.

HOW TO ESTIMATE EXPRESS CHARGES

(To estimated charges add 3% Federal Tax for each shipment.)

Weight Pounds	Maximum Distance in Miles							
	50	150	300	500	750	1000	1500	2250
5	1.80	1.80	1.80	1.80	1.80	1.87	1.99	2.17
10	1.80	1.80	1.87	2.01	2.13	2.25	2.49	2.85
15	1.80	1.87	2.07	2.27	2.45	2.63	2.99	3.54
20	1.82	2.00	2.26	2.53	2.77	3.01	3.50	4.22
25	1.91	2.13	2.45	2.79	3.10	3.40	4.00	4.91
35	2.08	2.39	2.84	3.32	3.74	4.16	5.01	6.28
45	2.25	2.64	3.23	3.84	4.39	4.93	6.02	7.65
55	2.42	2.90	3.62	4.37	5.03	5.70	7.03	9.02
70	2.68	3.29	4.20	5.15	6.00	6.85	8.54	11.08
85	2.93	3.68	4.79	5.94	6.97	7.99	10.05	13.14
For each 100 lbs.	3.19	4.06	5.37	6.72	7.93	9.14	11.56	15.19

AIR SHIPMENTS: For quick delivery, instruct us to ship your order by Air Parcel Post, Air Express or Air Freight. Air Parcel Post rates are given below. Consult your local express office for Air Express charges, and your nearest commercial airport office for Air Freight rates. Air Parcel Post size and weight limits are 70 pounds and 100 inches length and girth combined *except on A.P.O. and F.P.O. shipments* which are limited to 2 pounds and 30 inches in length and girth combined.

AIR PARCEL POST RATES

ZONES	1, 2 & 3	4	5	6	7	8	U.S. Territories, Possessions and APO & FPO Addresses, 80c per lb.
1st lb.	60c	65c	70c	75c	75c	80c	
For each Extra lb.	Add 48c	Add 50c	Add 56c	Add 64c	Add 72c	Add 80c	

FREIGHT: If speed is not essential, freight is cheapest on heavy shipments. Minimum charge is for 100 pounds. For truck freight, preferred truck line may be specified.

IMPORTANT INFORMATION

OUR TERMS

Our general terms of sale are cash with order. Open account terms of net, 10 days, E.O.M. are extended to rated firms, schools, institutions and government agencies. Catalog prices are net, f.o.b. Chicago (except where indicated). *All trade and cash discounts have already been deducted from every price.* Our *NET* catalog prices are the prices you pay.

LOWEST PRICES AT *ALLIED*

Prices in this book supersede prices in all previous Allied catalogs and are subject to change without notice. *Orders will be filled at prices in effect at time of shipment.* If prices are reduced during the life of this catalog, we shall reduce our prices accordingly and refund the difference to you. We reserve the right to add any Federal, State or Local taxes now in effect or which may be levied after this book is printed. You can always depend on Allied for lowest prices.

YOUR SATISFACTION GUARANTEED

This catalog has been prepared with the greatest care. Specifications for each item were checked for accuracy by technical experts. Everything you select from this book must satisfy in every way. See page 1 for details of our guarantees that protect you on every purchase.

IF YOU WRITE OR SHIP TO US

Before writing please check explanations on your invoice. When writing us about an order, include all papers, invoices and prior correspondence. Give same name and address as on original order.

If necessary to make a return, place your instructions, all papers and invoices in a stamped envelope and attach securely to the *outside* of the package. Address both the letter and the package to us. Please pack carefully and be sure to insure the shipment.

TELEPHONE ORDERS

A specially trained staff, using multi-trunk line facilities, is maintained to handle telephone orders. If you are in a hurry for any merchandise, telephone your order. It will be filled and shipped promptly. If you are located in the Chicago area, you are invited to use our convenient "Will Call" service. Soon after you telephone your order, it will be waiting for you at our "Will Call" window. Phone: HAymarket 1-6800.

TELEPHONE

For Orders and Information

HAymarket 1-6800

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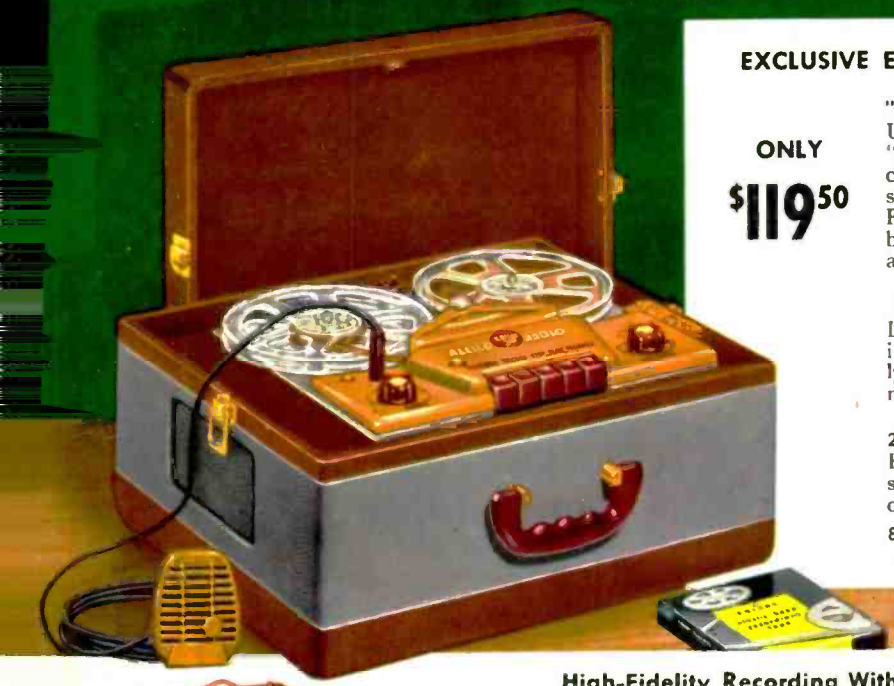
HANDY INDEX TO MANUFACTURERS

"BEST BUY" KNIGHT HI-FI PORTABLE TAPE RECORDER



ONLY

$119.50

EXCLUSIVE EXTRA-VALUE FEATURES

"PIANO KEYBOARD"
Ultra-convenient "piano-keyboard" controls permit instant selection of Fast Forward, Playback, Stop, Record and Fast Reverse.

TAPE INDEX DIAL
Large, sweep-hand indicator for quickly locating recorded material.

2 BUILT-IN SPEAKERS
High-quality 5x7" speakers deliver outstanding tone.

8-WATT PUSH-PULL AUDIO AMPLIFIER

Available with Portable Accessory Speakers to Permit Use as Public Address System

High-Fidelity Recording With Push-Button Convenience

Offers exceptional versatility and highly authentic reproduction at an astonishingly low price—it's an undisputed value champion! Operates as recorder and PA system, separately or simultaneously when used with external speakers listed below. Excellent for the home, school, churches, election campaigns, etc. Features push-pull, 8-watt amplifier and 2 built-in, 5x7" speakers to provide outstanding audience coverage during tape playback. Separate accessory speakers may be used to augment tape playback sound coverage and also permit PA use with microphone. 3 jacks for external speakers or headphones; 1 jack cuts out built-in speakers. Dual-track, 2-speed (3¾ and 7½ ips) recording mechanism. Convenient pushbutton controls for instant selection of fast forward, playback, stop, record and rewind. 2 inputs: 1—for mike; 1—for radio, TV, phono, etc. 2 neon recording level indicators; sweep-hand index dial for locating recorded material.

Response: At 7½" speed, ±3 db from 50-10,000 cps; at 3¾" speed, ±3 db from 50-7500 cps. *Recording Time (1200-ft. reel):* 7½" speed, ½-hr. continuously and 1 hour overall; 3¾" speed, 1 hour continuously and 2 hours overall. *Wow:* Less than 0.5%. *Hum:* −50 db. *Noise:* −58 db. Maroon and gray, luggage-type, fabric-covered case. With crystal mike and 5-ft. cable, 600-ft. reel of "A" tape and 5" take-up reel. 9½x17⅞x14⅞". For 110-120 v., 60 cycle AC. Shpg. wt., 32 lbs.

96 RZ 635. NET 119.50

CHAIRSIDE REMOTE CONTROL. For remote starting and stopping. 3-position switch: Motor Off, Motor On, Record. Complete with 18-ft. cable and plug. 2x3x3". Wt., 3 lbs.

96 R 636. NET 6.64

PATCH CORD. For recording from radio, TV, or phono. Has plug on one end and clips on other end. Clips to speaker leads.

96 R 674. NET 1.25

ACCESSORY SPEAKERS. Two extended-range 12" speakers in 2-section case; each half serves as separate baffle. With two 25-ft. cables and plugs. Size, 20x9x16". Shpg. wt., 21 lbs.

96 RZ 637. NET 43.00

Knight Plastic Recording Tape

TOP QUALITY AT TREMENDOUS SAVINGS

This fine plastic-base tape meets even the most critical professional requirements—yet it's remarkably low in cost! Features wide frequency response, high signal-to-noise ratio, low distortion, and uniformity of output. Red oxide coating; securely bonded and mirror polished. 1200-ft. reels splice-free. Type "A" (inside coated). Transparent plastic reels. Shpg. wts.: 600-ft. reel, ½ lb.; 1200-ft. reel., 1 lb.

96 R 698 600-ft. reel.
1 to 4, EACH, 1.37. 5 or More, EACH 1.24

96 R 699. 1200-ft. reel.
1 to 4, EACH, 1.98 5 or More, EACH 1.78

ALLIED stocks an outstanding selection of tape recorders, recording components and accessories. Whether you require a recorder for home or professional use, we carry a complete line of equipment to meet your specific needs. For complete listings, see pages 45-51.

NEW KNIGHT HIGH FIDELITY COMPONENTS

THERE IS NOTHING FINER AT THE PRICE

CUSTOM DESIGNED FOR THE EXPERTS

Knight custom components are built to ALLIED's high standards using only the finest materials. They offer outstanding performance and distinguished styling at very moderate cost. All Knight hi-fi components are *unconditionally guaranteed for one full year.*

New Knight 24-Watt High-Fidelity Amplifier

ONLY **$94.25**

- Response, ±0.75 db, 20-40,000 cps.
- Variable Damping Control
- 16 Positions of Record Compensation
- Continuously Variable Loudness Control

The all new Knight 24-watt amplifier offers brilliant reproduction at astonishingly low cost. Custom designed to combine truly deluxe performance with top hi-fi dollar value. Has high power handling capacity and authentically reproduces from the lowest bass notes to the highest treble overtones. Beautiful, compact styling with cork-grained finish matches any motif. *Unconditionally guaranteed for one year.*

This fine amplifier is up-to-the-minute in every respect and literally loaded with deluxe features. A variable damping control provides optimum speaker coupling; a rumble filter eliminates turntable rumble; two hum balance adjustments assure absolutely negligible hum; tube bias and tube balance adjustments provide peak performance at all times. Two 5881 output tubes. *Rated Output:* 24 watts. *Response:* ±0.75 db, 20-40,000 cps. *Harmonic Distortion:* Less than 1%. *Intermodulation:* Less than 2%. *Hum:* −80 db. *All specs at 24 watts. Output Imp.:* 8 and 16 ohms for speaker; high-impedance for tape recorder. *Controls:* Input-Turnover Selector (Aux, Tape, Tuner, Eur, AES, FFRR, RIAA-LP, Mike), Rolloff (Eur, AES-FFRR, RIAA-LP, Quiet), Bass, Treble, Loudness, Off-On-Level. Removable escutcheon. 6 shaft extenders required for behind-panel mounting (see p. 8). 4x15½x11". For 110-120 v., 50-60 cycle AC. Shpg. wt., 30 lbs.

94 SZ 701. NET 94.25

New Knight Deluxe Basic FM-AM Tuner

ONLY **$94.50**

- Simplified "lock-in" FM Tuning
- Tuning Meter for FM and AM
- Extremely Sensitive on FM and AM
- Precision-Engineered 11-Tube Circuit

This new Knight high-fidelity FM-AM tuner offers design features and performance unheard of at this low price. Extraordinary tonal quality, sensitivity and selectivity of the highest order, and beautiful compact styling make this tuner an unbeatable value. An excellent companion for the Knight 24-watt amplifier at left. It can be used with any amplifier having volume and tone controls. Automatic frequency control on FM, plus tuning meter and flywheel-weighted tuning mechanism provide effortless tuning. Separate tuned RF stages on FM and AM for highest sensitivity. FM discriminator with dual limiters. Cathode follower with 2 outputs (one output for connection to amplifier; has level control. Other output is constant-level type for tape recording). AM stage has high gain ferrite loop antenna; FM dipole antenna also supplied.

Sensitivity: FM, 5 microvolts for 30 db quieting; AM, 5 microvolts for 1.5 volts output. *Response:* FM, ±0.5 db 20-20,000 cps; AM, ±3 db 20-5000 cps for optimum selectivity. *Distortion:* Less than 2% at 1.5 volts output. *Controls:* Function Selector (Off, AM, FM with AFC, FM without AFC, TV) and Tuning. TV position is for use with TV Audio Tuner, below left. 4x13½x10" deep; 12" deep including loop-stick. 11 tubes plus rectifier. For 110-120 volts, 50-60 cycle AC. Shpg. wt., 17 lbs.

94 SX 702. NET 94.50

Knight TV Audio Tuner

High Fidelity
TV Sound For
Listening or Recording

New Knight TV audio tuner—plugs into FM-AM tuner (at right) to deliver high-fidelity audio on any VHF TV channel. Uses IF strip, discriminator and audio stage of tuner to provide superior TV sound for listening or tape recording. No wiring necessary—just plug in. Takes operating voltage from tuner. 4x 7¼x8¼". Shpg. wt., 3 lbs.

94 S 704. NET 41.95

Complete Knight Matched Phono System

A complete deluxe phono system with color-coded plugs and cables—ready to connect and play. Consists of the Knight deluxe 24 watt amplifier above left; the famous Garrard RC-80 record changer with mounting base; G.E. RPX-052A triple-play cartridge with diamond tip for microgroove and sapphire for standard; E-V 12TRX-B 12" speaker in Aristocrat cabinet. Shpg. wt., 95 lbs.

94 PA 186. NET 261.00