



EVERYTHING IN RADIO

Allied Radio

C O R P O R A T I O N

**833 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS**

1939

HERE'S RADIO'S BIGGEST VALUE!

It's Beautiful... It's Powerful!

and it has AUTOMATIC TUNING!



R.C.A. AND HAZELTINE LICENSED

WITH *New* ACOUSTIC BAFFLE & MAGNI-GLAS DIAL

Plus THESE FEATURES

- PUSH-BUTTON TUNING
- NEW PLASTIC CABINET
- FULL-ACTING A.V.C.
- DYNAMIC SPEAKER
- ILLUMINATED DIAL
- LATEST TYPE TUBES
- GETS POLICE CALLS

Knight **5 TUBE A.C. SUPERHET**

ALLIED brings you an all-star radio value in this new, versatile, and beautiful compact radio receiver with Push-Button Automatic Tuning. It has the quality, the performing power, the features of sets selling at two or three times our low price. The ideal "utility" radio for bedroom, kitchen, den, spare room or office use. A 1939 Radio Leader!

• **AUTOMATIC TUNING.** The simplest and most effective system yet devised. Offers you a choice of any four of your favorite stations. Simply push a button and there's your station—tuned instantly, easily, perfectly. Each button is directly geared to the tuning condenser; adjustment is made in a few seconds; operation is instantaneous and tuning is always right on the head. Regular tuning is made easy, too, by the unique illuminated dial with the magnifying glass face which makes the calibrations appear large and legible. 175 to 550 meters (535-1730 K.C.) are covered powerfully and dependably, bringing in all standard Broadcast programs as well as many police calls.

• **NEW PLASTIC BEAUTY.** The beautiful molded plastic cabinet of the new **Knight 5** is a triumph of harmonious design. All edges are softly rounded; the front face has pleasing beaded design with dial portion set forward for tuning convenience. The speaker grille is uniquely formed on a new principle to give a louvre effect which greatly enhances the tonal reproduction of the speaker. The **Knight 5** is available in plastic-molded cabinets of soft Ivory, attractive mottled Walnut or gleaming Black. Cabinet measures 10 3/4" x 7" x 5 1/2". The **Knight 5** is distinguished for performance and for outstanding beauty, conforming to the rigid **Knight** standards of radio quality and value.

• **1939 CIRCUIT DESIGN.** Licensed by the famous R.C.A. and Hazeltine laboratories, the circuit of the **Knight 5** assures you of the latest engineering developments. Uses the latest type tubes as follows: 6A8 as Converter; 6106 as I.F. Amp.; 75 as Diode-Det.-A.V.C.-1st Audio (triple-purpose); 41 as Audio Output; 5Y3G as Rectifier. This tube line-up assures high gain, big output, and flawless tonal fidelity.

• **LATEST FEATURES.** The new **Knight AC 5** has full A.V.C. action to assure uniform volume and freedom from fading. Incorporates a sturdy 5-inch electro-dynamic speaker with fine volume-handling capacity and excellent tonal response. Output is 1 watt undistorted—1 1/2 watts peak. All circuit components are of the finest standard makes and are designed to give long, dependable life. Underwriters' Approved. These advantageous features plus Automatic Push-Button Tuning give you top-value.

• **5 TUBE MODEL COMPLETE.** Value is the keynote of the 1939 **Knight 5 A.C. Superhet**. It's a quality receiver every one can afford to own. The **Knight 5** comes complete in handsome plastic-molded cabinet, with R.C.A. tubes. For operation on 110 volts, 60 cycles A.C. Shwg. wt., 11 lbs.

E10840.
Black.
List, \$19.95.
NET EACH,
\$10.95.
LOTS OF 3,
EACH.....

\$10⁴⁵

E10841.
Walnut.
List, \$22.50.
NET EACH,
\$11.45.
LOTS OF 3,
EACH.....

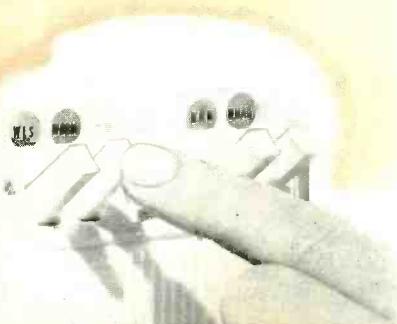
\$10⁹⁵

E10842.
Ivory.
List, \$24.50.
NET EACH,
\$12.45.
LOTS OF 3,
EACH.....

\$11⁹⁵

E9150. CARRYING CASE. Of Suedette; with zipper opening and handle. **NET.....\$1.15**

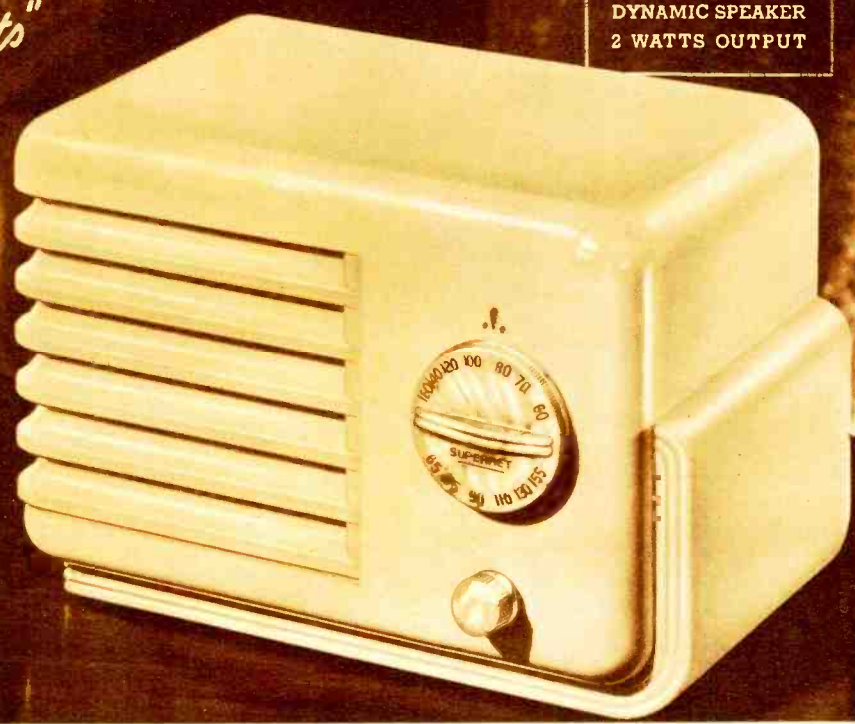
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NEW...SMART...

"Tiny Knights"

with
**ACOUSTIC BAFFLE
DYNAMIC SPEAKER
2 WATTS OUTPUT**



America's

Smallest Radio!

**With Big Set Tone
and Power!**

4 TUBE AC-DC MODEL

5 TUBE AC-DC SUPERHET

So small that you can hold it in the palm of your hand—so light that you can carry it anywhere—soloy in price that anyone can easily afford it—this new "Tiny Knight" 4 Tube A.C.-D.C. Model is the year's sensation in ultra-compact radios! Tone quality, distance-reach, and sturdy dependability have not been sacrificed; in power output and in performance, this compact set is equal to models ten to twelve times its size.

- **PLAYS ANYWHERE.** Unusual versatility is an outstanding feature of this "Tiny Knight". You can play it wherever 110 volt, 40-60 cycle A.C. or D.C. current is available. You can take it with you on trips—it is easily packed into any size suitcase or overnight bag. Built-in aerial permits instant operation.
- **SPLENDID NEW CIRCUIT.** The "Tiny Knight" 4 is built around an exceptionally efficient R.C.A. and Hazeltine licensed circuit using the latest tubes as follows: 6J7GT as Det.; 6K7GT as R.F. Amp.; 25L6GT as Beam Power Output; and 25Z6GT as Rectifier. Every tube works, contributing to splendid, thoroughly enjoyable performance. The 25L6GT Beam Power Output stage develops a full 1½ watts undistorted output (2 watts maximum) achieving strong volume seldom found in compact sets. Both voice and music are delightfully reproduced through the newly designed 4-inch electro-dynamic speaker.
- **NEW EASY-TO-TUNE DIAL.** The large molded dial of the "Tiny Knight" 4 is clearly marked and easy to operate. Calibrations are in both meters and kilocycles, covering the complete standard Broadcast range of 175 to 560 meters (535-1730 K.C.) and permitting reception of all standard Broadcast programs plus many Police Calls.
- **STRIKING NEW CABINET.** An entirely new and beautiful cabinet has been especially created for this splendid receiver. Molded of one-piece Bakelite, the cabinet combines simple lines with flowing harmony. Louvre grille is both attractive and practical; it acts as an acoustic baffle, greatly enriching the tonal quality. Cabinets are available in a choice of four rich colors: soft Ivory, lustrous Black, warm Walnut, and handsome Red. Size is only 7" wide, 5" high, and 4½" deep.
- **BEAUTIFUL TONE QUALITY.** No other receiver as small as the "Tiny Knight" 4 approaches the superb tonal quality it offers. You will actually be amazed that so tiny a receiver can furnish such strong volume, such beautiful tone. Sensitivity and selectivity are likewise surprising. Definitely not a novelty, not a toy, the "Tiny Knight" is America's smallest quality radio—delivering full performance and full value.
- **SET COMPLETE.** The "Tiny Knight" 4 Tube A.C.-D.C. receiver is supplied complete with Hytron tubes in plastic-molded cabinet as illustrated. For 110 volts, 40-60 cycles A.C. or D.C. Shpg. wt., 6 lbs.

E10857. Black.
List \$12.95.
NET EACH, \$7.45.
LOTS OF 3,
EACH.....

\$6.95

E10855. Ivory.
E10856. Walnut.
E10858. Red.
List Each, \$13.50.
NET EACH, \$7.95.
LOTS OF 3, EACH

\$7.45

In the same stunning Bakelite cabinet shown above we also offer another "Tiny Knight" model—a powerful 5 Tube A.C.-D.C. Superhet. All-around utility and beauty are exactly the same as in the Knight 4—but even greater distance reach and selectivity are derived from the brilliant Superhet circuit which incorporates an additional tube for added strength.

- **BRILLIANT TONE.** The "Tiny Knight" 5 reproduces all programs in a manner you'd ordinarily expect only from large-size receivers. The combination of a newly designed 4" electro-dynamic speaker and the special acoustic baffle louvre grille results in rich, full-voiced reproduction of both music and speech. Generous power is provided too—a full 1½ watts undistorted output (2 watts maximum) for enjoyable reception.
- **PRACTICAL VERSATILITY.** You can take the "Tiny Knight" 5 along and play it practically anywhere. It operates perfectly from either Alternating or Direct Current (110 volts, 40-60 cycles). It has a special built-in aerial which means that the set is ready to play as soon as you plug in the line cord. Here is the ideal traveler's radio—as well as the perfect personal or "second" receiver for the home.
- **NEW 1939 SUPERHET CIRCUIT.** The latest Superhet circuit, licensed by the R.C.A. and Hazeltine laboratories, assures you of the newest engineering developments. Five tubes—everyone working—are used as follows: 6A8 as 1st Det.-Osc.; 6K7 as I.F. Amp.; 6Q7-2nd Det.-1st Audio; 25L6 as Beam Power Output; 25Z6 as Rectifier. This circuit with its two dual-purpose tubes achieves seven-tube power and efficiency!
- **GETS POLICE CALLS.** In addition to full coverage of all standard Broadcast programs, the "Tiny Knight" 5 also tunes upper channel Police Calls. Reception range extends from 175 to 560 meters (535 to 1730 K.C.). Tuning is always easy by means of the big molded dial with clear calibrations (in both meters and kilocycles) etched into its surface. The entire range is alive with programs which are quickly and easily tuned by the unusually selective new superheterodyne circuit.
- **SUPERB BEAUTY OF DESIGN.** No other ultra-compact cabinet offers the graceful lines, the winning beauty, of the "Tiny Knight" models. Molded of one-piece Bakelite, the cabinet presents a lustrous, mar-proof finish enhancing its pleasing streamlined design. Speaker is housed behind a special louvre grille which is built on a new principle to act as acoustic baffle. Cabinets are available in Black, Ivory, Walnut, and Red. Size is only 7" wide, 5" high, 4½" deep. The "Tiny Knights" possess an attractive gem-like quality resulting in universal appeal.
- **SET COMPLETE.** The "Tiny Knight" 5 Tube A.C.-D.C. Superhet is supplied complete with R.C.A. tubes in plastic-molded cabinet as illustrated. For 110 volts, 40-60 cycles A.C. or D.C. Shpg. wt., 6 lbs.

E10847. Black.
List, \$15.00.
NET EACH, \$8.95.
LOTS OF 3,
EACH.....

\$8.45

E10845. Ivory.
E10846. Walnut.
E10848. Red.
List Each, \$16.00.
NET EACH, \$9.45.
LOTS OF 3, EACH

\$8.95

R.C.A. & HAZELTINE LICENSED

PLAY IT ANYWHERE



TAKE IT WITH YOU ON TRIPS



THE IDEAL "EXTRA" RADIO



**WHEREVER HIGH-GRADE LOW-COST
RADIO EQUIPMENT AND FAST SERVICE
ARE IN DEMAND—**

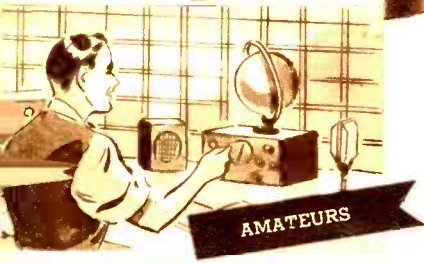
**Allied IS
FIRST CHOICE!**



DEALERS



SERVICEMEN



AMATEURS



**BUILDERS &
EXPERIMENTERS**



SCHOOLS



LABORATORIES



INDUSTRIES

To thousands of wise radio buyers everywhere there is only one single, dependable source of supply for everything in the radio field—**ALLIED RADIO**—the house that is *First Choice* wherever high-grade, low-cost radio equipment is required. There is no magical formula, no mysterious secret behind this overwhelming preference. There are just three simple reasons for **ALLIED'S** enduring leadership:

FIRST—**ALLIED'S** high standards of quality are your assurance that you can buy with confidence—that every item you order from us will meet the most exacting standards for performance and dependability.

SECOND—**ALLIED'S** low prices always assure you of fullest value for your money. You get more—you save more—you profit more on every purchase. You obtain the full benefits of our efficient way of doing business.

THIRD—**ALLIED'S** prompt, careful service saves you time and effort. You get what you want just when you want it. Our central location and our efficient shipping methods mean that your orders are delivered quickly and safely.

OUR COMPLETE STOCKS COVER EVERY RADIO REQUIREMENT

In every field of radio, the **ALLIED** Catalog is recognized as the foremost Buying Guide. Whether your particular interest is a Sound System for a school, a new tester for your service bench, a new rig for your Amateur "shack," replacement parts for any radio set, or experimental equipment for a laboratory, you will find us a complete, dependable source of supply. By consolidating your purchases and by ordering all your radio equipment from one source, you can effect considerable savings in time and transportation costs.

In addition to the full lines of equipment shown in this 180-page catalog, we can always supply—with the least delay—any special or made-to-order equipment you may need. We are constantly in touch with the leading radio manufacturers and can furnish all the newest products promptly.

**EXTRA-VALUE SERVICES —
EXCLUSIVE WITH ALLIED**

Technical Staff. We maintain an extensive staff of expert radio engineers to help you solve problems involved in every phase of radio. Write to us for authoritative advice on your Amateur, experimental, radio-building, or Public Address problems.

Educational-Industrial Division. To schools, industries and institutions we are ready to offer valuable and concrete suggestions in adapting radio and sound to special needs. We are prepared to give estimates and to recommend equipment for special purposes.

Sales Promotion Division. Let us help you to increase your sales and profits. We offer dozens of useful sales aids in this catalog and can furnish additional sales literature covering many popular items.

See Complete Index on
Pages 159-160. How-to-
Order Information and
Freight Allowance Offer
on Page 158.

Guarantee

**WE GUARANTEE 100% VALUE IN
PRICE, QUALITY AND SERVICE**

Every item in our catalog is guaranteed to conform exactly to the description and illustration. We guarantee that our merchandise conforms to the standards of the Radio Manufacturers' Association and will perform in the manner intended for such apparatus. Any merchandise that does not so operate, if returned at once, will be promptly adjusted by exchange, repair or refund.

—**ALLIED RADIO CORPORATION**

1939's Latest - Smallest "BIG POWER" Radio Made!



CARRIES EVERYWHERE PLAYS ANYWHERE

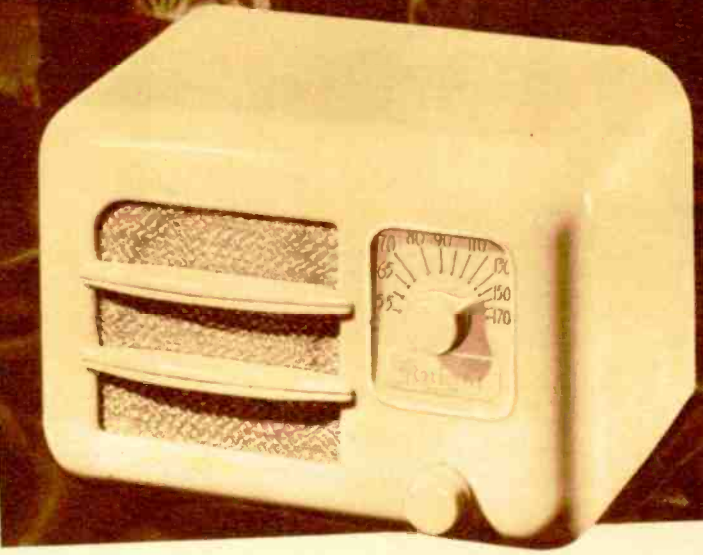
5 TUBE "Tiny Knight" AC-DC SUPERHET

- Full A.V.C.
- Dynamic Speaker
- 2 Watts Output
- Plays Anywhere
- Smart Cabinet
- Weighs Only 4 Lbs.

This diminutive new "Tiny Knight" 5 Tube A.C.-D.C. Superhet is a striking example of progress in the radio art! Here in an ultra-compact bakelite cabinet measuring only 6 1/4" x 4 1/4" x 4 3/8" is a real Superhet receiver offering big set tone quality, selectivity and power. Designed on masterpieces of miniature art, this new "Tiny Knight" will actually amaze you. You can hold the set in the palm of your hand—you can carry it in an overcoat pocket—you can take it anywhere—and always you can enjoy radio's finest entertainment!

• **PLAYS ANYWHERE.** The "Tiny Knight" 5 may be used almost anywhere with unusual efficiency. It operates equally well on Alternating or Direct current, 110 volts, 50-60 cycles. The complete set weighs only 4 lbs. A built-in antenna permits instant operation. These features make the "Tiny Knight" the ideal travelling companion or "personal" radio. Use it in any room of your home. Take it along wherever you go.

• **GETS POLICE CALLS.** The tuning range covers 175 to 545 meters (550 to 1720 K.C.) affording excellent reception of all standard Broadcast excellent reception of all standard Police Calls. You will gain plus upper channel Police Calls. You will gain thrill to the way in which this powerful performer reproduces each program in a thoroughly delightful manner—without distortion or blasting.



- **SPLendid NEW CIRCUIT.** The "Tiny Knight" 5 is built around an efficient Superhet circuit, fully licensed by R.C.A. and Hazeltine. New type ultra-compact tubes—fully equal in performance and durability to larger tubes—are employed as follows: 6A8GT as Converter-Osc. (dual-purpose); 6K7GT as I.F. Amp.; 6Q7GT as Diode Det.-A.V.C.-1st Audio (triple-purpose); 25L6GT as Beam Power Pentode output; and 25Z6GT as Rectifier. This circuit actually achieves brilliant seven-tube power and efficiency. Full 2 watts undistorted output is developed and smoothly handled by the special electro-dynamic speaker. Full Automatic Volume Control maintains uniform volume level.
- **EASY TUNING DIAL.** The "Tiny Knight" 5 features a new clock-type full-visibility slanted dial face, with soft, indirect illumination. Clear calibrations are in kilocycles for easy station logging.

• **SMART CABINET STYLING.** A new compact molded plastic cabinet—flawlessly designed and executed—is available in a choice of two charming colors: soft Ivory, and lustrous mottled walnut. Attractive grille permits finest acoustical reproduction.

• **SET COMPLETE.** The "Tiny Knight" 5 Tube A.C.-D.C. Superhet is molded plastic cabinet is offered complete with tubes, Dynamic Speaker, and built-in aerial. For operation on 110 volts, 50-60 cycles, A.C. or D.C. Shpg. wt., 5 lbs.

E10801, Walnut.
List, \$14.50.
NET EACH, \$8.75.
PRICE, LOTS OF 3, EACH, \$825

E10802, Ivory.
List, \$15.50.
NET EACH, \$9.25.
PRICE, LOTS OF 3, EACH, \$875

E9145, 220 Volt Adapter. NET, .59c

Knight 6 TUBE AC-DC 2 BAND SUPERHET

This handsome new 1939 Knight 6 Tube A.C.-D.C. 2 Band Superhet (with ballast) is the kind of value for which ALLIED is noted. In reception range, tonal quality, and circuit features, the Knight 6 is easily the equal of many A.C.-D.C. sets at much higher prices. Just try it out for yourself under our Free Trial and Money-Back Guarantee offer (see Page 10) and discover what an exceptional buy this is!

• **DUAL-WAVE RECEPTION.** The Knight 6 offers unusually fine Short-Wave and Broadcast reception on two full bands from 174 to 560 meters (535 to 1720 K.C.) and from 41 to 136.4 meters (2200 to 7000 K.C.). This is actual 2 1/2 Band utility and coverage. The Short-Wave band covers thrilling foreign stations on the ever-popular 49 meter band plus Police, Aviation and Amateur calls. The 174-560 meter band provides powerful standard Broadcast American and Canadian reception and tunes upper channel Police Calls.

• **NEW SUPERHET CIRCUIT.** The new R.C.A. and Hazeltine licensed Superhet circuit includes R.C.A. tubes as follows: 6A8G as 1st Det.-Osc. (dual purpose); 6K7 as I.F. Amp.; 6Q7G as triple purpose 2nd Det.-A.V.C.-1st Audio; 25L6G as Beam Power Pentode Output. 25Z6G as Rectifier; 16SR4G Ballast. Full Automatic Volume Control maintains unvarying volume level on all stations. Other circuit features contributing to added stability are individual coils for each band, rubber-mounted tuning condenser, etc.

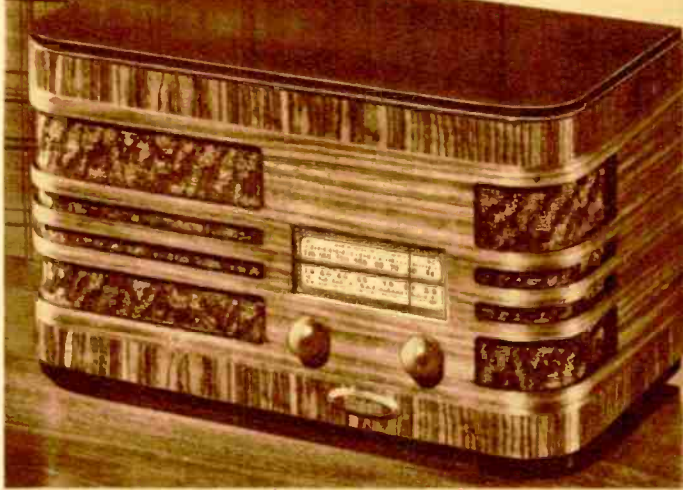
• **SUPERB TONAL QUALITY.** Even the most discriminating listener will thrill to the wonderful tone quality produced through the use of a new super-efficient 5" electro-dynamic speaker. More than adequate volume on all programs is assured through the big Beam Power Output of 2 watts.

• **FULL VISION SLIDE-RULE DIAL.** The finest type of new slide-rule vernier dial affords remarkable ease of tuning. Separate scales are provided for Short-Wave and Broadcast bands. Dial measures 3 3/4" x 1 1/2". Easy to read and tune.

• **SET COMPLETE.** Knight 6 A.C.-D.C. 2 Band Superhet (with ballast) in table cabinet is supplied complete with 5" Dynamic speaker and R.C.A. tubes. For operation from 110 volts, 40-60 cycles, A.C. or D.C. Shpg. wt., 11 lbs. Code: SH08.

E10803, Retail Value, \$26.50.
NET PRICE, EACH, \$12.95.
YOUR PRICE,
LOTS OF 3, EACH, \$1225
E9145, 220 volt AC-DC Adapter. NET, .59c

R.C.A. & HAZELTINE LICENSED



- LATEST FEATURES**
- SLIDE-RULE DIAL
 - DUAL-WAVE RECEPTION
 - FULL A.V.C. ACTION
 - INDIVIDUAL COILS
 - NEW DYNAMIC SPEAKER
 - BUILT-IN AERIAL
 - WILL PLAY ANYWHERE
 - LATEST SUPERHET

The Knight 6 may be operated from 110 volts, 50-60 cycles, A.C. or D.C. or (with line cord listed below at left) from 220 volts, A.C. or D.C. This remarkable adaptability means that you can obtain exceptionally fine two-band reception practically anywhere that electric current is available. The beautiful new table cabinet shown above has been especially designed to house this new set. Of lustrous finished walnut woods, cabinet has one-piece horizontally-stripped front and sides with contrasting vertically-stripped top and bottom trim. Size: 13 1/4" long, 7 3/8" high, 7 3/8" deep. Beautifully-styled throughout. 3



\$7²⁵

Each, Lots of 3

R.C.A. & HAZELTINE LICENSED

Knight 5 TUBE

Completely new—in cabinet design, in circuit features, in compact portability—this attractive Knight 5 Tube A.C.-D.C. (with ballast) is the ideal personal or "spare" receiver. Priced to set your quality components and careful construction come up to our high standards in every respect.

• **SMART PLASTIC CABINET.** The beautiful new cabinet, one-piece molded of strong plastic, is exceptionally attractive and practical. Available in either soft Ivory or handsome mottled Walnut; cabinet measures only 7" x 8" x 4 1/4", yet it houses a full-sized chassis and built-in aerial. Pleasing speaker grille louvers are designed for perfect acoustical response. Cabinet will not scar or discolor.

• **PLAYS ANYWHERE.** The compact Knight 5 is unusually versatile and may be used almost anywhere with exceptional efficiency. Operates from Alternating or Direct Current, 110 volts. 40-60 cycles, or may also be used on 220 volts, A.C. or D.C., with adapter listed below. Here is the ideal traveling companion—the set you can take everywhere. It's small enough to fit into luggage, yet powerful enough to furnish the type of performance everyone will enjoy. Few radios as compact as the Knight 5 can offer such splendid tone quality, such big volume, and such remarkably dependable operation, day-in and day-out. There's never a dull moment when the Knight 5 is at your finger tips—all your favorite programs are instantly at your command. It's the real life of every party!

• **BIG PILLOW-SHAPED DIAL.** The large, easy-to-read flood-lighted dial is dual-calibrated in meters and kilocycles. Covers the complete standard Broadcast range of 175 to 550 meters (535 to 1730 K.C.). Offers selective and sensitive tuning of all standard Broadcast programs plus upper channel Police Calls. A real performer with fine tone and power.

Knight 5 TUBE

A real price leader! This new Knight 5 Tube (with ballast) A.C.-D.C. receiver will sell for much more even without its many special features. But with true Automatic Push-Button Tuning at our amazing low price, it's this year's sensation of the industry. Combines smart styling, fine versatility, and powerful performance in a truly unmatched manner. Stock up with several of these new sets. They'll sell quickly to bring you large sales volume at excellent profits. Just compare these features:

• **PUSH-BUTTON TUNING.** The Knight 5 offers genuine Automatic Push-Button tuning of any four favorite stations. Initial adjustment is easy to make right at the buttons, and operation is always accurate. This new convenient way of tuning makes the Knight 5 unusually easy for anyone to tune. The four station buttons are sufficient to accommodate practically all of the most popular stations in any locality. Everyone wants Push-Button Tuning. And here it is at a price everyone can easily afford!

• **PLAYS ANYWHERE.** You can operate the Knight 5 with fine efficiency practically anywhere that electric current is available. It's equally well adapted from 110 volts, 40-60 cycles, A.C. or D.C., or, with line cord adapter listed below, will also operate from 220 volts, A.C. or D.C. A truly versatile performer.

• **LARGE 4" DIAL.** In addition to Automatic Push-Button Tuning, the Knight 5 features a big 4" full-vision dial with a handy pointer knob. Easy-to-read calibrations are in kilocycles from 176.5 to 556 meters (540 to 1700 K.C.), covering all standard Broadcast programs as well as many Police Calls. At every point on the dial, the Knight 5 brings in programs clearly and strongly—in a way that you'll enjoy.

Knight 5 TUBE

This new Knight 5 Tube A.C.-D.C. (with Ballast) gives you more for your money—more power, better performance, and finer tone—than any other set in its price class. Buy several—their handsome appearance and strong power will win the approval of everyone who is looking for a quality-built receiver at a low price. Take advantage of our lots of 3 price for extra savings and for bigger profits.

• **Plays Anywhere.** Just plug the Knight 5 into any 110-volt A.C. or D.C. (40 or 60 cycle) outlet, and listen to it bring in program after program in clear, undistorted fashion! On 220 volts use the adapter listed below. Designed especially for portable use, it is ideal for den, bedroom, office, kitchen, etc.—wherever a handy, efficient performer is desired. The ideal "extra" or "personal" radio receiver for the home.

• **Powerful Circuit.** The dependable circuit of this remarkable performer is fully licensed by R.C.A. and Hazeltine. It uses the following matched tubes: 6D6 as R.F. Amp.; 6C6 as Det.; 25L6G as Beam-Power Pentode Output; 25Z5 as Rectifier; and 185R4G as Line Ballast. Here's a tube lineup that attains a remarkable sensitivity and selectivity rarely found in so compact a receiver.

• **Slide-Rule Dial.** For greatest ease and accuracy in tuning, the 1939 Knight 5 uses the latest Slide-Rule Dial. Dial pointer travels horizontally across the dial face. Calibrations are in kilocycles and meters—covering 174 to 560 meters (535-1720 K.C.) for American and Canadian standard Broadcast programs and many police calls. You get powerful, enjoyable reception no matter what program you tune.

\$8⁴⁵

Each, Lots of 3

R.C.A. & HAZELTINE LICENSED



\$9⁹⁵

Each, Lots of 3



AC-DC PLASTIC

• **EFFICIENT NEW CIRCUIT.** Many new developments have been incorporated into the carefully engineered R.C.A. and Hazeltine licensed circuit of the Knight A.C.-D.C. 5. Employs 6C6 as Detector; 6D6 as R.F. Amp., 25L6G as Beam Power Output; 25Z5 as Rectifier; and L55BG Ballast. A full 2 watts output is developed from the 25L6G Beam Power stage—large enough to handle any program with pleasing quality. A special iron-core antenna coil makes for unusual sensitivity in so compact a radio. Built-in antenna adds to convenience and utility.

• **WONDERFUL TONE.** The latest full 5" electro-dynamic speaker mounted behind the acoustic baffle louvre grille renders every program in an unusually enjoyable manner. The full 2 watts output is easily accommodated without distortion. This exceptional tone quality compares favorably with that of many sets of much larger size and higher cost. All programs are reproduced with pleasing fidelity and big-set volume. Whether the Knight 5 is operated from A.C. or D.C., reception is always powerful and full-toned, always dependable and enjoyable.

• **SET COMPLETE.** The Knight 5 Tube A.C.-D.C. (with ballast) is supplied complete with genuine R.C.A. tubes, 5" Dynamic speaker, and built-in antenna. For operation from 110 volts, 40-60 cycles, A.C. or D.C. Shpg. wt., 7 lbs.

E10861. Walnut model.

Retail Value, \$13.50.

NET EACH, \$7.75.

YOUR NET PRICE,

LOTS OF 3, EACH

\$725

E10860. Ivory model.

Retail Value, \$14.95.

NET EACH, \$8.75.

LOTS OF 3, EACH

E9145. 220 Volt Adapter. NET

\$825

NET 59c

AC-DC MODEL

• **POWERFUL CIRCUIT.** An efficient new circuit, fully R.C.A. and Hazeltine licensed, uses latest tube types as follows: 6C6 as Detector; 6D6 as R.F.; 43 as Power Output; 25Z5 as Rectifier, and L55B as Ballast. These tubes and this circuit attain a fine degree of sensitivity and selectivity seldom found in sets priced so low. Litz-wound coils add to distance reach. A built-in antenna provides for instant operation wherever you take the set. You can carry this fine receiver from room to room; it is ideal for kitchen, den, guest room, office, bedroom, etc.—wherever a "personal" set is in demand.

• **ATTRACTIVE CABINET.** The Knight 5 is presented in a very attractive table cabinet, measuring 12 $\frac{1}{4}$ " wide, 6 $\frac{1}{4}$ " deep, and 8" high. Front and sides are of one-piece smoothly grained walnut, with beaded edges, and contrasted bottom trim. Rounded corners and simple but tasteful speaker grille emphasize the graceful lines. Cabinet accommodates a full 5" Dynamic speaker which provides for pleasing reproduction of both voice and music and handles all programs in an effective fashion.

• **SET COMPLETE.** The Knight 5 Tube (with ballast) A.C.-D.C. receiver with Automatic Push-Button Tuning is supplied complete with matched Rheon tubes and 5" Dynamic speaker. For use from 110 volts, 40-60 cycles, A.C. or D.C. The "price-leader" set for every dealer. Shpg. wt., 11 lbs. Code: VOGUE.

E10893. Retail Value, \$18.50.

NET PRICE EACH, \$10.45.

YOUR NET PRICE

LOTS OF 3, EACH

E9145. 220 Volt Adapter. NET

\$995

AC-DC MODEL

• **Excellent Tone.** The heavy-duty 5" dynamic speaker of the Knight 5 handles the exceptional volume of the set (full 2 watts output) with a clarity and richness of tone that is amazing in such a low-priced radio. You'll find a new conception of compact-radio tone quality in the Knight 5! You'll enjoy its full-voiced reproduction of every program.

• **Other Features.** Additional value features of the Knight 5 A.C.-D.C. are: 25-foot built-in antenna for maximum convenience; heavy-duty tuning condenser for sharper tuning; quality-built parts throughout, etc. You get amazing value in the Knight 5—an outstanding compact radio of 1939.

• **Charming Cabinet.** So that the Knight 5 will harmonize beautifully with any interior, we have chosen for it a gracefully designed cabinet of the latest 1939 style. Front and sides are of one-piece delicately-grained walnut, while top and bottom are of darker matched woods. Size: 11 $\frac{1}{4}$ " wide, 7 $\frac{1}{4}$ " high, 6 $\frac{3}{4}$ " deep. Easily portable, the Knight 5 may be carried anywhere and plugged-in for instant operation.

• **Set Complete.** The Knight 5 Tube A.C.-D.C. (with Ballast) is offered complete with 5" speaker and R.C.A. tubes. For operation from 110 volts, A.C. or D.C., 40 to 60 cycles. Shpg. wt., 9 lbs. Code: TEMPO.

E10805. Retail Value, \$16.50.

NET PRICE, EACH, \$8.95.

YOUR PRICE,

LOTS OF 3, EACH

E9145. 220 Volt Adapter for above set. NET

\$845

NET 59c

America's
Lowest-Priced
QUALITY RADIOS



COMPACT... POWERFUL... BEAUTIFUL PERFORMERS



Knight 6 TUBE A.C. SUPERHET

If we had to name our first choice for leadership in the low-priced A.C. radio field, we'd have to include this superb 1939 Knight 6 Superhet. Its remarkable power, quality performance, and sparkling tone quality mark it as one of the year's outstanding buys—and we predict it will outsell many a so-called "leader."

• **Power-Boost Circuit.** An exclusive new development which provides twice as much voltage from the power supply, allowing each tube 100% increase in plate voltage to assure full voltage rating. This ingenious innovation makes the Knight 6 equal in performance to many 7 and 8 tube receivers!

• **Slide-Rule Dial.** Beautiful, practical and efficient, this dial makes for the simplest, most accurate tuning. Dial has gold face with light green calibrations in both kilocycles and meters. The Knight 6 tunes 174 to 560 meters (535-1720 K.C.) for strong, reliable reception of American and Canadian standard Broadcast stations, as well as many police calls. Dial-pointer travels horizontally over easy-to-read scales.

• **Splendid Tone.** For sheer beauty of tone, no other low-priced A.C. radio can compare with the Knight 6 Super. The full 2 watts output of the set is handled capably and smoothly by the 5" dynamic speaker, to produce rich, mellow tone—the kind you'd expect only from more expensive receivers.

• **1939 Superhet Circuit.** Licensed by R.C.A. and Hazeltine. Uses the latest R.C.A. tubes: 6A8G as 1st Det.-Osc.; 6K7 as I.F. Amp.; 6Q7G as 2nd Det.-A.V.C.-1st Audio; 25A6G as Pentode Power Output; 25Z6G as Rectifier; and 165R4G as Power-Boost Regulator. The use of double and triple-purpose tubes adds to the power and sensitivity of the Knight 6, developing 2 full watts output.

• **Additional Features.** Other value features of the Knight 6 are: Full A.V.C. for freedom from blasting and fading; heavy-duty rubber-mounted tuning condenser; fully shielded components, etc.

• **Beautiful Cabinet.** The tasteful cabinet of the Knight 6 reflects the quality which is built into the set. Built of selected solid walnut, with dark top and bottom bands contrasting with lighter-finished raised center instrument and grille panel. Horizontal grille bars lend unusual grace and distinction. Size: 12" x 7 $\frac{1}{4}$ " x 7 $\frac{1}{4}$ ".

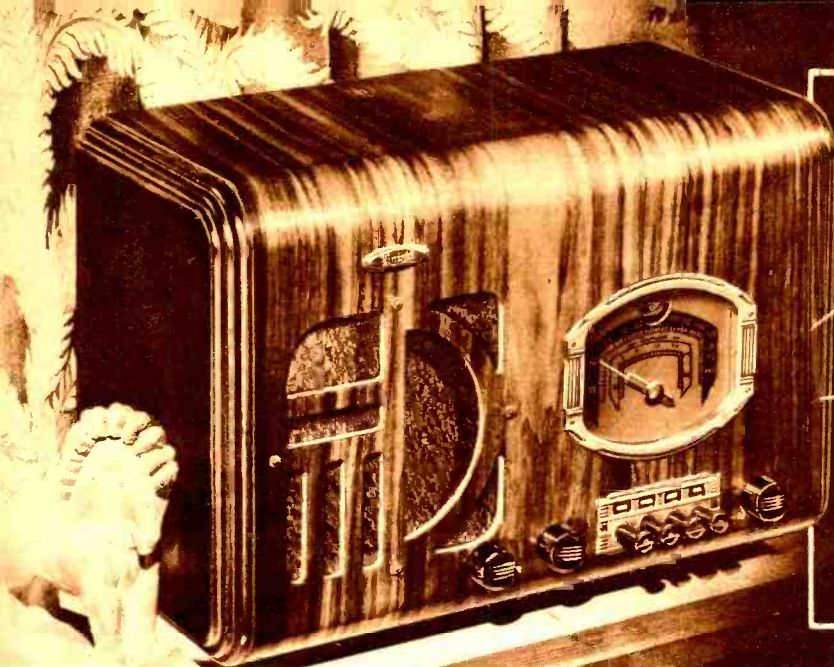
• **Set Complete.** The Knight 6 Tube A.C. Superhet is offered complete, as illustrated, with 5" speaker and R.C.A. tubes. For 110 volt 60 cycles A.C. operation. Shpg. wt., 12 lbs. Code: CHEER.

E10804. Retail Value, \$26.50.

NET PRICE, EACH, \$12.95.

YOUR PRICE, LOTS OF 3, EACH

\$1225



Knight 7 TUBE AC-DC 2 BAND SUPERHET

Here is a new 1939 **Knight 7 Tube A.C.-D.C. Superhet** (with Ballast) which is so efficient it will give you hours of pleasurable radio entertainment, so goodlooking it will enhance any room, so low-priced everyone can afford it! Sets a new standard for radio performance at a price ordinarily associated with smaller sets. Look at these features:

- **Wide Tuning Range.** The **Knight 7 A.C.-D.C.** covers two full bands: 17 to 51 meters (5800 to 17500 KC.) for foreign and domestic Short Wave, including police, Amateur, airplane and commercial signals; and 175 to 545 meters (550-1720 KC.) for the best in American and Canadian standard broadcast programs. The superhet circuit makes for greater selectivity in tuning long distance.
- **Push-Button Tuning.** Just push a button—and there's your favorite broadcast station, tuned to hairline accuracy. The tuning condenser and push-button unit are all in one assembly. Buttons are provided for four of your favorite Broadcast stations; once set, the buttons need

no further attention. Manual tuning knob allows you to tune also by the regular method.

- **Latest Circuit.** Fully licensed by R.C.A. and Hazeltine, this is one of the finest A.C.-D.C. and superhet circuits ever designed. It employs the latest Raytheon tubes: 6A7 as Det.-Osc. (dual-purpose); 6D6 as I.F. Amp.; 6Q7G as 2nd. Det.-A.V.C.-Audio (triple-purpose); 25A6 as Power Output; 25Z5 as Rectifier; L49B as Ballast; and 6U5 as Electric Eye.
- **Electric Eye.** For utmost accuracy in manual tuning, there's nothing like the Electric Eye. Precise and efficient. When the dark sector is narrowest, you are tuned in accurately.
- **Additional Features.** Other valuable features include: Full A.V.C. for uniform maintenance of volume, and freedom from blasting and fading; separate coils on each band for maximum efficiency; heavy-duty tuning condenser, etc.
- **Beautiful Tone.** For beauty of tone, the **Knight 7** is unequalled by any other A.C.-D.C. receiver at its price. All programs are reproduced

through the full 5" dynamic speaker with a life-like fidelity that will amaze you. Tune in your favorite program—see how much better it sounds with the **Knight 7!**

- **Handsome Cabinet.** The **Knight 7 Tube A.C.-D.C.** is housed in a quality-built cabinet of winning design. Made of one-piece selected walnut, it has a roll-top effect which will blend charmingly in any interior scheme. Grille is cut in an unusual design. Beautiful pillow-shaped dial has gold face. Size 17 1/2" x 11" x 8".
- **Set Complete.** The **Knight 7 Tube A.C.-D.C. 2 Band Superhet** (with Ballast) for 110 volt A.C.-D.C., 40-60 cycles operation, is offered complete with Raytheon tubes as illustrated. Shpg. wt., 14 lbs. Code: TRBE.

E10894. Retail Value, \$34.95.
NET PRICE EACH, \$17.45.
NET, LOTS OF 3, EACH
E9145. 220 Volt Adapter for above set.
NET 59c

\$1645

R.C.A. & HAZELTINE LICENSED

Knight 5 TUBE A.C. SUPERHET



\$945

Walnut Each, Lots of 3

- 5" Dynamic Speaker
- Gets Police Calls
- Bakelite Cabinet
- Pillow-Shaped Dial
- Dual-Purpose Tubes
- Superhet Circuit

If you are looking for a compact A.C. radio which will give you more performance, more beauty and more real value than any other set in its price class—then the **Knight 5 A.C.** is your choice. From its neat bakelite cabinet to its brilliantly designed superhet circuit, it incorporates every new 1939 development for delightful, sparkling performance.

- **SMART PLASTIC CABINET.** The beautiful new cabinet is made of one-piece molded Bakelite; you have your choice of either smooth Ivory or rich, sleek Walnut. Unusually attractive and practical, it will not mar or fade in color. Measures: 7" x 8 3/4" x 4 3/4". Novel speaker grille louvers are designed for perfect acoustical response.
- **ATTRACTIVE DIAL.** Pillow-shaped and fully illuminated, the dial of the **Knight 5** is clearly calibrated in both meters and kilocycles, for easiest and most accurate tuning. Blends perfectly with the modern cabinet design.
- **SPLENDID NEW CIRCUIT.** The **Knight 5** uses a superhet circuit fully licensed by R.C.A. and Hazeltine. Employs the latest tubes as follows: 6A7 as 1st. Det.-Osc. (dual-purpose); 6D6 as I.F. Amp. 75 as Diode Det.-A.V.C.-1st. Audio (triple-purpose); 41 as Power Output, and 80 as Rectifier.
- **BEAUTIFUL TONE.** The use of the latest dual- and triple-purpose tubes gives the **Knight 5** an output and tone quality comparable to many sets of larger size and higher price. The splendid output of the set is capably handled by the 5" electro-dynamic speaker, which reproduces all programs with clear, pleasing tone quality.
- **COMPLETE COVERAGE.** The 1939 **Knight 5** tunes the entire Broadcast band, covering 175 to 550 meters (535-1730 KC.) powerfully and dependably for the finest Broadcast programs plus police calls. It's a set that can be used anywhere—you'll like it for its compactness, good looks, and strong performance!
- **SET COMPLETE.** The **Knight 5 Tube A.C. Superhet Plastic Model** is offered complete with Raytheon tubes and 5" electro-dynamic speaker. For operation from 110 Volts, 60 cycles A.C. Shpg. wt., 8 lbs.

E10866. WALNUT. Retail Value, \$17.50.
NET EACH, \$9.95.
NET PRICE, LOTS OF 3, EACH
E10865. IVORY. Retail Value, \$18.95.
NET EACH, \$10.95.
NET PRICE, LOTS OF 3, EACH
E9151. Snuede Zipper carrying case. **NET 85c**

\$945

\$10.45





**OUTSTANDING
1939 FEATURES**

**WITH
PUSH-BUTTON
TUNING**

**WITH
ELECTRIC EYE**

Knight 6 TUBE A.C. Push-Button SUPERHET

- Push-Button Tuning
- Thermometer Dial
- With Electric Eye
- Full-Acting A.V.C.
- 5" Dynamic Speaker
- Gets Police Calls

We couldn't have chosen a better example to illustrate what **ALLIED** means by "value". This new 1939 **Knight 6** is a perfect combination of strong power, sparkling performance, excellent tone quality, and low price—a combination that no competition can meet!

• **Push-Button Tuning.** It's easy, it's simple, it's fool-proof! Just press a button and there's any one of your five favorite stations. The **Knight 6** uses the latest front-adjusted, electric permeability type of push-button tuning, the most efficient system available. Convenient manual tuning is provided for, also.

• **New "Thermometer" Dial.** A novel, practical dial which is fully illuminated. A moving band of color clearly shows the exact position of the station indicator on the kilocycle calibrated scale. Easy to read—easy to tune.

• **Powerful New Circuit.** The perfected R.C.A. and Hazeltine licensed circuit of the **Knight A.C. 6** makes for utmost power, sensitivity, and selectivity. Uses the following tubes: 6A8G as Osc.-Mod. (dual-purpose); 6K7G as L.F. Amp.; 6Q7G as Det.-A.V.C.-1st. Audio (triple-purpose); 6K6G as Audio Output; 5Y4G as Rectifier; and 6G5 as Electric Eye. This new circuit develops more than 2 watts output, resulting in better reproduction and finer tone quality.

• **Flawless Tone.** To bring you the mellow, delightful tone quality you'd expect only from a much higher-priced set, the **Knight 6** uses a special 5" dynamic speaker which reproduces every note at every volume level with a realism that is astonishing. You'll like your favorite programs even better with the **Knight 6!**

• **Electric Eye.** The easy visual aid to accurate tuning. Enables you to "see" when your program is perfectly tuned. Keep the volume down; when the dark sector is narrowest, turn the volume up—and there's your program!

• **Additional Features.** Other valuable features of the **Knight 6** are: Full Automatic Volume Control, to prevent fading and blaring; heavy-duty type tuning condenser for maximum tuning selectivity; highest grade circuit components, etc.

• **Beautiful Cabinet.** The **Knight 6** is fittingly presented in one of the best-looking cabinets we have ever offered. Front and sides are of handsomely grained light walnut, while top and bottom are of deeper contrasting shade. Horizontal grille bars enhance the flowing lines. Size: 14 1/4" x 9" x 6 3/4".

• **Set Complete.** The **Knight 6 Tube A.C. Superhet** is offered complete, as illustrated above, with R.C.A. tubes and 5" dynamic speaker. For operation from 110 volts, 60 cycles A.C. Shpg. wt., 14 lbs. Code: FLAME.

E10905.
Retail Value, \$37.50.
NET EACH, \$18.95.
NET, LOTS OF 3, EACH.....

\$1795

Knight 5 TUBE A.C. 2 BAND SUPERHET

\$1325

Each,
Lots of 3

- Tunes Two Bands
- Automatic Tuning
- 5" Dyn. Speaker
- Full A.V.C. Action
- Beautiful Dial
- Superhet Circuit

Here is **ALLIED'S** Value Leader!—a **Knight 5 Tube 2 Band A.C. Superhet** that sweeps aside all previous conceptions for quality radio performance at a low price. Combining Push-Button Tuning, smart styling, strong power, excellent tone quality, and genuine 2-band reception, it can't be matched for "leader" purposes.

• **Tunes 2 Full Bands.** Covering a surprisingly wide range, the **Knight 5** tunes 75 to 175 meters (1730-4000 KC.) for Short Wave amateur and police signals; and 177 to 545 meters (550-1700 K.C.) for excellent reception of American and Canadian standard Broadcast programs. You get 2-band reception at a price ordinarily paid for Broadcast only.

• **Push-Button Tuning.** The newest type, making tuning easier, simpler, and more accurate than ever before. The **Knight 5** will tune any four of your favorite Broadcast stations. Condenser and push-button assembly are combined in one unit making for greater efficiency in operation. Automatic and foolproof, with easy front adjustment.

• **Powerful Circuit.** Licensed by the famous R.C.A. and Hazeltine laboratories, the superhet circuit of the **Knight 5** is built for fullest sensitivity and selectivity. It employs the following latest tubes: 6A7 as Det.-Osc. (dual-purpose); 6D6 as L.F. Amp.; 6Q7G as 2nd. Det.-A.V.C.-Audio (triple-purpose); 41 as Power Output; and 80 as Rectifier. The double and triple-purpose tubes add greatly to the circuit efficiency, giving the **Knight 5** surprising power and tone.

• **Full-Bodied Tone.** The life-like tonal quality of the **Knight 5 Superhet** is the type you'd ordinarily associate with much higher-priced receivers: rich and clear, reproducing every note with realistic vitality. The full 5" dynamic speaker superbly handles the strong output of the **Knight 5.**

• **Extra Features:** Beautiful rectangular dial, with gold face; kilocycles and megacycles are clearly marked; full A.V.C. for uniform maintenance of volume; heavy-duty tuning condenser for greater selectivity, etc.

• **Attractive Cabinet.** You'll have to go into the higher price ranges to find a more handsome cabinet than this. Front and sides are of one-piece, vertically-grained walnut; top and bottom of contrasting darker woods. Vertical grille bars add a distinctive note. Size: 13" x 8" x 6 3/4".

• **Set Complete.** The **Knight A.C. 5 Tube 2-Band Superhet**, for 110 Volt 60 cycle operation is offered complete as illustrated, with 5" dynamic speaker and Raytheon tubes. Shpg. wt., 14 lbs. Code: PROUD.

E10895. Retail Value, \$24.50.
NET PRICE, EACH, \$12.35
YOUR PRICE, LOTS OF 3, EACH.....

\$1325



R.C.A. & HAZELTINE LICENSED

R.C.A. & HAZELTINE LICENSED

Knight 6 TUBE A.C. 2 BAND SUPERHET

WITH
PUSH-BUTTON
TUNING



- Slide-Rule Dial
- 6" Speaker
- Tone Control
- Power Booster
- Full A.V.C.
- Separate Coils

This beautiful new 1939 Knight 6 Tube 2 Band A.C. Superhet is thoroughly in the ALLIED tradition of value—incorporating exclusive circuit refinements, expertly engineered for finest performance and tone, and offered at a record-breaking low price. Compare this receiver with other makes selling even at twice the price and you'll find that only the Knight 6 gives you all these features:

- **DUAL-WAVE RANGE.** In addition to powerful standard Broadcast reception, fascinating Short-Wave foreign and domestic programs are at your finger-tips with the Knight 6. Tuning range covers the two most important bands of the radio spectrum: 16 to 53 meters (3650 to 18100 K.C.) for Short-Wave, and 174 to 560 meters (535 to 1720 K.C.) for standard Broadcast and Police Calls. On both ranges, the Knight 6 is extraordinarily selective and sensitive—separating stations smoothly and easily.
- **AUTOMATIC PUSH-BUTTON TUNING.** Any of 6 favorite stations is instantly available simply by pushing a button. The automatic tuning system used in this receiver is of the latest

1939 perfected type. Initial adjustment is made instantly from the front, at the buttons, and is surprisingly simple. Operation is smooth, effortless, and "right on the head" for each station.

• **OUTSTANDING NEW CIRCUIT.** A newly developed R.C.A. and Hazeltine licensed Superhet circuit—with exclusive big features—is the secret of the fine performance obtained from the Knight 6. Incorporated is the special new "Power Booster" stage which provides twice as much voltage from the power supply. Operates each tube at full voltage rating, and secures tremendous increase in amplification over ordinary 6-tube sets. Conservatively rated, the "Power Booster" attains three times the output of conventional 6 tube radios. Efficient tube line-up includes: 6K8-1st Det.-Osc. (dual purpose); 6K7-I.F. Amp.; 606G—triple-purpose Diode Det.-A.V.C.-1st Audio; 25A6G—Pentode Power Output; 25Z6G—Rectifier; 165R4G—"Power Booster" Voltage Regulator. Here is actual eight and nine tube efficiency at big savings!

• **EXTRA-VALUE FEATURES.** Full Automatic Volume Control provides uniform, unvarying volume level for all stations. Continuously variable Tone Control permits personal tone selection from Bass to Treble. Rubber-floated condenser. Individual Coils on each band, and

I.F. Wave-Trap add to circuit stability, distance reach, and selectivity.

• **SUPERIOR TONE QUALITY.** For tonal beauty and full strength faithful reproduction of voice and music, the Knight 6 is unsurpassed in its price class. A full undistorted 3 watts output is easily achieved and is smoothly handled by the 6" electro-dynamic speaker. So big an output is a feature ordinarily available only in expensive 7 to 9 tube radios. Every program is re-created for you with all the color, the strength, and the beauty of the original Broadcast studio performance.

• **SET COMPLETE.** The Knight 6 Tube 2 Band A.C. Superhet is presented in the unusually attractive modern table cabinet shown above. Has horizontally-grained walnut face and sides with contrasting center band of vertically striped walnut. Measures: 17 1/2" long, 10 1/2" high, 8" deep. With genuine R.C.A. tubes and 6" dynamic speaker. For operation from 110 volts, 60 cycles A.C. Shpg. wt., 20 lbs. Code: AMBER. E10806. Retail Value, \$42.50. NET EACH, \$20.85. YOUR NET PRICE \$19.85. LOTS OF 3, EACH.....

Knight 8 TUBE AC-DC SUPERHET

3 FULL BANDS

- Slide-Rule Dial
- Push-button Tuning
- Dynamic Speaker
- Tone Control
- Electric Eye
- Separate Coils

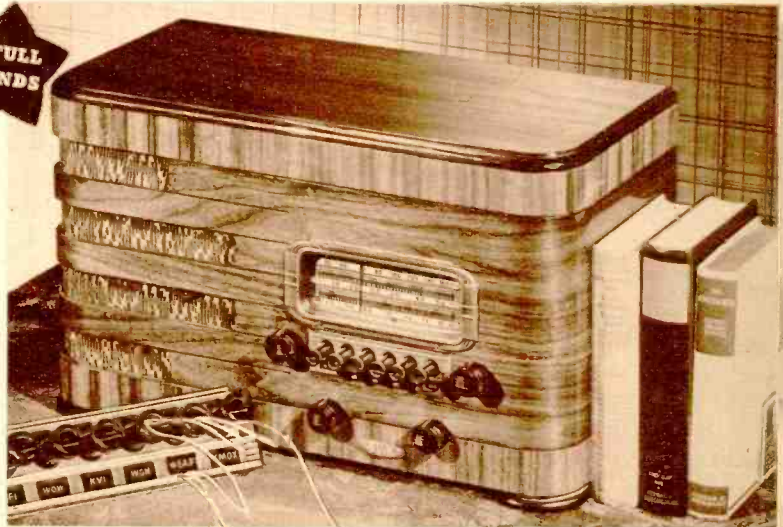
Here is a fine value in a new 1939 Knight 8 Tube All-Wave A.C.-D.C. Superhet (with ballast) incorporating all the latest refinements and offered at a surprisingly low price. From its efficient new Superhet circuit to its striking cabinet design, the Knight 8 is thoroughly in the modern trend.

• **ALL-WAVE RANGE.** The Knight 8 A.C.-D.C. 8 tubes three full bands continuously for enjoyable all-wave reception. Covers 17 to 52 meters (5800-17500 K.C.) for Short-Wave foreign programs; 52 to 175 meters (1720-5800 KC.) for Amateur, Aviation, and Police Calls; and 175 to 556 meters (540 to 1720 KC.) for strong reception of all standard Broadcast programs.

• **AUTOMATIC PUSH-BUTTON TUNING.** Any of 6 favorite stations can be tuned automatically simply by pushing a button. The push-button assembly and the gang condenser are one complete unit, assuring an extremely simple initial adjustment and consistently accurate operation. Anyone can tune the Knight 8 without difficulty or tedious dial-twirling.

• **BIG SLIDE-RULE DIAL.** Manual tuning, too, is thoroughly up-to-date in this new set. A big 7" x 2 1/2" gold-faced Slide-Rule type dial shows separate scales for each wave-band. Calibrations are large, clear, and easy-to-read. Smoothly-acting needle-pointer travels horizontally across dial face, quickly covering the full dial space. For added tuning ease, the Electric Eye is incorporated. This visual tuning aid is especially valuable when the receiver is tuned manually; it shows instantly when stations are correctly in tune.

• **ADVANCED SUPERHET CIRCUIT.** A new R.C.A. and Hazeltine licensed Superhet circuit is built around the newest tube types. Tubes used are: 6A7 as Det.-Osc.; 6D6 as I.F.; 70 as 2nd Det.-A.V.C.; 6K5G as Audio; 25A6G as Power Output; 25Z5 as Rectifier; L42B as Ballast; and 6U5 Electric Eye. The use of two dual-purpose tubes adds to distance-reach and power. Individual coils on each band assure exceptional stability of operation and unusual selectivity. Other circuit features include: full Automatic Volume Control to prevent fading or blasting; continuously variable Tone Control to permit personal selection of treble or bass emphasis; quality components throughout for lasting dependable performance; etc.



• **VERSATILE OPERATION.** The Knight 8 is designed to operate with equal efficiency from 110 volts, 50-60 cycles, A.C. or D.C., or (with adapter listed below) from 220 volts A.C. or D.C. This means that fine radio reception is available at low-cost practically anywhere that electric current can be had. In addition to this unusual versatility, the Knight 8 offers pleasing tone quality on all programs through the use of a full 6 1/2" electro-dynamic speaker. Both voice and music are reproduced with excellent clarity and volume. The Knight 8 makes available fine entertainment on all-wave bands at unusually low-cost.

• **SET COMPLETE.** The Knight 8 Tube A.C.-D.C. Superhet (with ballast) is presented in a new table cabinet of horizontally-grained walnut woods with contrasting top and bottom trim bands. Speaker grille extends around corner, adding a distinctive note. Measures: 19 1/2" x 11 1/2" x 9 3/4". Supplied with Raytheon tubes and 6 1/2" dynamic speaker. For operation from 110 volts, 50-60 cycles, A.C. or D.C. Shpg. wt., 18 lbs. Code: MORN. E10806. Retail Value \$47.50. NET EACH, \$22.95. PRICE, Lots of 3, EACH \$21.75. E9145. 220 Volt Adapter. NET..... 59c



"Just Push a Button!"

- ALL-WAVE RANGE
- SLIDE-RULE DIAL
- 5 WATTS OUTPUT
- FULL A. V. C. ACTION
- TONE CONTROL
- 8" DYNAMIC

Knight 8 TUBE AC-DC 3 BAND SUPERHET

This new 1939 8 Tube A.C.-D.C. Superhet (with ballast) will delight "DX" enthusiasts—will amaze lovers of fine tone quality and rich cabinet design—will fully satisfy the demands of critical radio buyers. Those who are familiar with the high standards of Knight quality will readily appreciate what an extraordinary value this is; to our new customers we say: Try it out under our Free Trial. Money-back Guarantee—put it through its paces—check its brilliant features—if it doesn't meet your demands for a top quality A.C.-D.C. receiver we'll refund every penny of your purchase price!

• **World-Wide Reception.** The Knight 8 tunes everything on the air: 16 to 53 meters (5650-18000 KC.) for thrilling foreign and domestic Short Wave programs; 52 to 175 meters (1710-5650 KC.) for Short Wave Amateur, police, aircraft, and ships-at-sea signals; and 174 to 560 meters (535-1720 KC.) for your choice of the finest American and Canadian standard Broadcast programs. Here's genuine all-wave tuning that brings you the entire world of radio! Here's radio reception brought to you clearly, powerfully and enjoyably on all programs.

• **Push-Button Tuning.** The simplest, finest, fool-proof automatic tuning system ever devised. Buttons are provided for seven of your favorite stations, plus one for clearing when manual tuning is desired. Buttons are easily set at front; tuning thereafter is always "right-on-the-head." Station tabs for all important U. S. Broadcast stations are included. You'll like the convenience and accuracy of Push-Button Tuning—the easiest and most enjoyable way of tuning your favorite stations.

• **Slide-Rule Dial.** A beautiful, rectangular type, measuring 8 3/8" x 3 3/4". Upper scale is calibrated in kilocycles for Broadcast band, lower scales in megacycles for Short Wave. Calibrations are clearly etched in black on an attractive gold background, showing important Broadcast stations and Short Wave channels. Has easy-to-see horizontal-traveling pointer.

• **Exceptional Circuit.** One of the finest A.C.-D.C. circuits ever produced; fully licensed by R.C.A. and Hazeltine. Uses the following tubes: 6K8 as Det.-Osc. (dual purpose); 6K7 as I.F. Amp; 6Q7G as Diode Det.-A.V.C.-1st. Audio (triple-purpose); 6J5G as Phase Inverter-Audio Amp; 2-25L6G as Beam-Power P.P. Output; 25Z6G as Rectifier; and BK17E1 as Ballast. This remarkable circuit, using 2 Beam-Power Tubes, develops a matchless degree of power and tone quality.

• **Superlative Tone.** Never before has an A.C.-D.C. receiver achieved the tonal brilliance of the Knight 8. The concert-type speaker (8" in the table model) handles the full 5 watts output adequately, as full, rich, enjoyable tone. The special Bass-Booster circuit retains all the depth and warmth of the deepest overtones on both voice and music.

• **Real Versatility.** No matter whether you have A.C. or D.C., 40 or 60 cycles, 110-volt current available, the Knight A.C.-D.C. 8 will play perfectly at all times. It will also operate from 220 volts A.C. or D.C. with the adapter listed below. Here's real versatility plus top performance!

• **Outstanding Features.** Check these extra luxury features: Full-acting A.V.C. to maintain uniform volume on all programs; Continuously Variable Tone Control for emphasis of either treble or bass; 3-gang tuning condenser, rubber-floated for maximum selectivity; preselector for added sensitivity; separate coils on each band, promoting unusual stability, etc. Each feature contributes to the magnificent tuning range, tonal excellence, and versatility of the Knight A.C.-D.C. 8.

• **Beautiful Table Cabinet.** No matter what the decorative scheme in your home is, the handsome cabinet of the Knight 8 will harmonize perfectly. Beautifully proportioned, it features a dual grille effect in the newest 1939 mode. Fashioned of choice walnut woods, with horizontal graining on front and sides, and vertical striping for top and bottom trim. Size: 21 1/4" long x 11 1/2" high x 10 3/4" deep.

• **Table Model Complete.** The Knight 8 Tube A.C.-D.C. Superhet is offered complete in table model as illustrated above, with 8" speaker and R.C.A. tubes. For 110 volts, A.C. or D.C., 40 or 60 cycles operation. Shpg. wt., 32 lbs. Code: SHELL.

E10807, Retail Value, \$67.50.
NET PRICE EACH, \$33.95.

LOTS OF 3, EACH, \$95.95. NET...59c

\$31.95

8 TUBE AC-DC CONSOLE MODEL

A magnificent presentation of the Knight 8 Tube A.C.-D.C. Superhet is shown at the left. Includes all features of the table model described above: Push-Button Tuning; Slide-Rule Dial; All-Wave tuning; Tone Control; Bass Booster; full A.V.C.; 3-gang condenser; preselector, etc. Has large 8-inch super-dynamic speaker. Attractive low-boy console cabinet has large baffle area. Sloping instrument panel is of choice grained walnut, with curved side pilasters in richly marked walnut, enhanced by tasteful vertically striped head overlays. Entire cabinet is hand-rubbed to a rich lustrous piano finish. Size: 32" wide x 36" high x 13" deep. A superb musical instrument.

• **Console Model Complete.** The Knight A.C.-D.C. 8 Tube Superhet is offered complete with 8" speaker and R.C.A. tubes. For operation from 110 Volts, A.C. or D.C., 40-60 cycles. Shpg. wt., 75 lbs. Code: SLOPE.

E10808, Retail Value, \$89.95.

NET PRICE EACH, \$45.95. LOTS OF 3, EACH, \$137.85. NET...59c

\$43.45

8 TUBE AC-DC CHASSIS MODEL

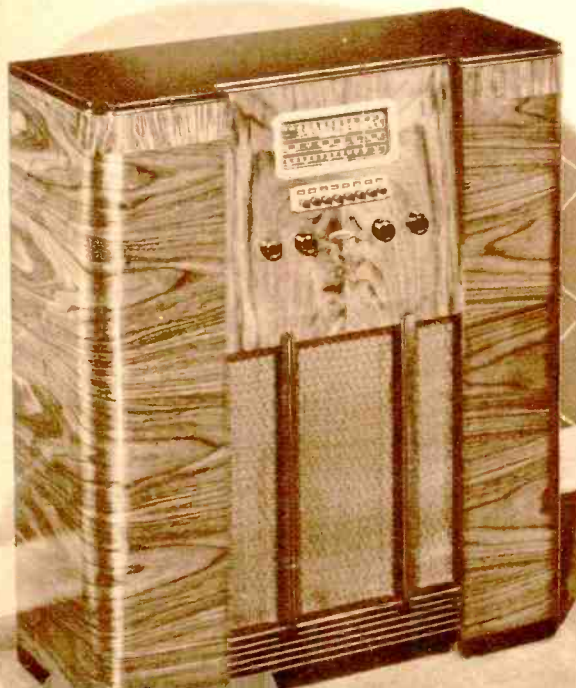
The chassis model of the Knight A.C.-D.C. 8 makes an especially desirable replacement for obsolete sets. Incorporates all the features described above, including a heavy-duty 8" Dynamic speaker. Built to meet 1939's demands for peak radio performance, power and tone at a moderate price, it will give brilliant, dependable performance for years to come. It's a set we're confident of and proud to back with our Free Trial. Money-Back Guarantee! Chassis size: 15 1/4" long, 9" deep, and 9" high. Complete with escutcheon, 8" speaker and R.C.A. tubes. For operation from 110 volts, A.C. or D.C., 40 or 60 cycles.

Shpg. wt., 20 lbs. Code: COVER.

E10809, Retail Value, \$56.95.

NET PRICE EACH, \$28.50. LOTS OF 3, EACH, \$85.50. NET...59c

\$26.95





Prove to Yourself
THAT NEW KNIGHT RADIOS
ARE 1939's BEST BUYS!



15 DAY FREE TRIAL
& MONEY-BACK GUARANTEE

Into the making of the new 1939 KNIGHT RADIOS have gone months of careful research, painstaking planning and designing, and rigorous laboratory testing with the most precise of modern instruments—so that we might bring you the finest radios that modern science and craftsmanship can produce. Not until every model had passed the most exacting tests for quality, durability and performance, and had met our high standards in every detail, were we satisfied that these new sets offer you the most for your money.

And now, so certain are we that you will be thoroughly pleased with any KNIGHT RADIO you may buy—that the new 1939 KNIGHT models will bring you more brilliant performance, finer tone, more luxurious beauty, and more exclusive features—that we make the liberal Free Trial Money-Back Guarantee Offer at the right—the fairest and squarest you could ask for.

Buy any KNIGHT RADIO on our regular terms. Try it out for fifteen days without risk—you be the judge! We make this offer so that you can prove to yourself—what we already know—that KNIGHT RADIOS are 1939's best buys!

Guarantee

Order any KNIGHT RADIO on our regular terms. Try it out under your own operating conditions. Check the tone quality, the distance-getting performance, the rugged stability of operation. Observe the quality construction, the beauty of cabinet design, the ease of operation. And then, if within 15 days—for any reason—you are not fully satisfied with your choice, you may return the set to us, and we will promptly refund your full purchase price, less transportation charges. This powerful Guarantee is further supplemented by the regular Radio Manufacturers' Association Guarantee against defects in materials and workmanship over a period of three months from date of purchase.

—ALLIED RADIO CORPORATION

NEW FEATURES — NEW LOW PRICES!



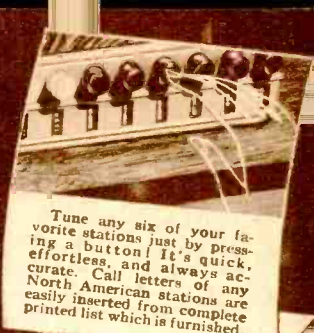
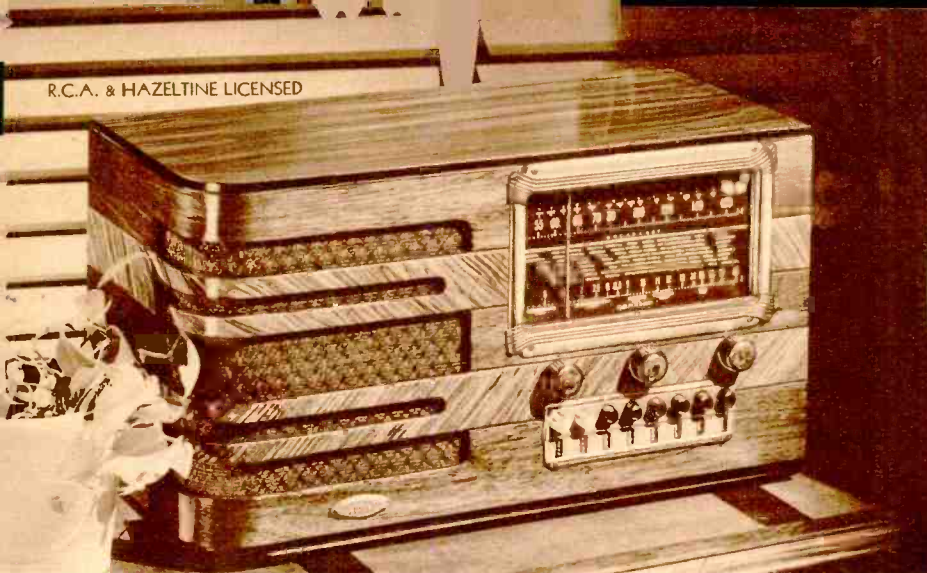
1939 KNIGHT Radios incorporate every new and advantageous refinement, and yet they are lower in price than ever before. Take advantage of our additional lots-of-3 discount. This offer applies on orders for any 3 sets, whether of the same model or assorted—to bring you bigger savings and profits.

EVERY RADIO WORKS BETTER WITH A KNIGHT ANTENNA

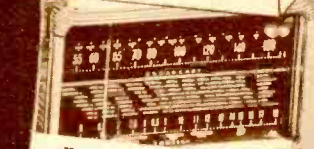
To get the best results on both Broadcast and Short Wave bands—to realize what radio enjoyment really means—install a KNIGHT Antenna Kit. Utilizing the famous doublet principle for utmost efficiency, it provides greater signal strength while reducing noise interference. Works with any set having input for either the single or doublet-type—is especially effective when used with KNIGHT Radios (see Page 145 for complete description).

E3391. NET

\$195



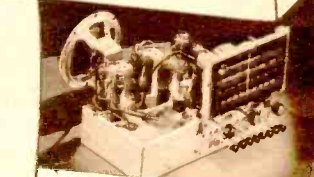
Tune any six of your favorite stations just by pressing a button! It's quick, effortless, and always accurate. Call letters of any North American stations are easily inserted from complete printed list which is furnished.



Even manual tuning is easier with this big new slide-rule type dial! Separate scales are provided for Short-Wave and Broadcast bands. Large, clear calibrations are in Kilocycles and Megacycles. Foreign stations are clearly indicated on Short-Wave Scale.



Built right into the dial face, the Electric Eye shows you exactly when your station is correctly tuned in. This precise visual tuning indicator is the best aid ever developed to assure correct manual tuning.



The chassis of the Knight 7 is the product of expert engineering and careful construction. Highest quality components are used throughout with extra safety factors built in. Correctly aligned and rigidly tested, the receiver is geared to provide the finest type of performance modern radio science can devise.

Knight 7 TUBE 2 BAND A.C. SUPERHET

We'll back up every claim we make for this wonderful new 1939 Knight 7 Tube 2 Band A.C. Superhet. Only when you have seen and heard it in operation can you appreciate its exceptional combination of brilliant tone, long-distance range, and the convenience of Automatic Push-Button Tuning. Try it out for yourself and put it through its paces—take advantage of our liberal Free Trial and Money-Back Guarantee offer (see opposite page for details). Just check these value-giving features:

- **PUSH-BUTTON TUNING.** Any of six favorite stations can be tuned instantly and automatically just by pushing a button. The Knight 7 incorporates the permeability-tuned type of automatic system—the simplest, fool-proof method ever developed. In initial adjustment, push-buttons are set to required station frequencies directly from the front panel—and no special tools or skill are needed. Once buttons are set, no further attention is needed. "Drifting" is entirely eliminated; stations will always come in "right-on-the-head." In addition to six station buttons, there is a push-button for wave-band switching, and another button for shifting from automatic to manual tuning.
- **1939 SLIDE-RULE DIAL.** 5 3/4" long by 2 1/2" high, this dial offers a new conception of manual tuning ease. Needle pointer travels horizontally across dial face to permit quick, accurate station logging. Separate dial scales are provided for the standard Broadcast and Short-Wave bands. Popular foreign stations are indicated in the Short-Wave sector. All calibrations are large, clear, and easily-read. The Electric Eye—built into the dial face—enables you to log stations manually with volume tuned down; when dark area of the Eye is narrowest, you turn up volume, and your program comes in perfectly.
- **TWO-BAND RECEPTION.** The Knight 7 offers you on two full bands the "cream" of the airwaves. In addition to powerful, enjoyable reception of all American and Canadian stations, from 175 to 560 meters (535 to 1730 K.C.), the receiver tunes the most popular foreign and domestic Short-Wave programs

from 16.5 to 54 meters (5650 to 18,100 K.C.). This combination covers the most important and fascinating channels of 3-band sets and brings you thrilling entertainment at every point on the dial.

- **R.C.A. LICENSED CIRCUIT.** Built up to exacting standards—not down to a price—the Superhet circuit of the new Knight 7 incorporates the latest features developed by the great R.C.A. and Hazeltine laboratories. The newest tube types are correctly combined to produce extra sensitivity, selectivity, and power: 6A7 as 1st Det.; 76 as Osc.; 6D6 as I.F. Amp.; 75 as Diode Det.-A.V.C.-1st Audio; 41 as Power Output; 80 as Rectifier; and 6U5 Electric Eye. Additional circuit features include full Automatic Volume Control; continuously variable Tone Control; extra safety factors, etc.
- **REALISTIC TONAL QUALITY.** The Knight 7 employs the most efficient type of 6" electro-dynamic speaker (8" in console) to furnish true-toned reproduction of all ranges in the musical register. Full undistorted 1 1/2 watts output (2 watts maximum) provides plenty of volume for all programs. In addition, Tone Control enables you to emphasize bass or treble ranges to suit your personal taste.
- **ATTRACTIVE TABLE CABINET.** The pleasing beauty of the newly designed table cabinet housing the Knight 7 will meet with universal approval. Horizontally-grained walnut panel with wrap-around side is set off by contrasting bands of diagonally-striped lighter-toned walnut. Speaker grille extends around left side of cabinet. Size: 18 1/4" long, 11 1/2" high, 9" deep.
- **SET COMPLETE.** The Knight 7 Tube 2 Band A.C. Superhet is supplied complete with 6" speaker and Raytheon tubes. For operation from 110 volts, 50-60 cycles A.C. Shpg. wt., 25 lbs. Code: WARM.

E10870, Retail Value, \$49.95.
NET PRICE, EACH, \$24.45.
YOUR PRICE, **\$22.95**
LOTS OF 3, EACH.....

7 TUBE A.C. CONSOLE MODEL

The 1939 Knight 7 Tube 2 Band A.C. Superhet is also offered in the beautiful new console cabinet illustrated at the right. Thoroughly in the modern mode, the console is designed to harmonize with any decorating scheme. Walnut woods are used throughout. Instrument panel, tilted and recessed for ease of operation, is of straight grain walnut. Wrap-around sides and contrasting bands of lighter-toned walnut are in excellent taste. Grille cloth is in thorough harmony with the cabinet details. The cabinet houses the powerful 7 tube chassis shown above at right. Has all features as described above, plus the added advantage of a full 8" electro-dynamic speaker. Unusually large baffle area assures full-voiced tone quality that is a delight to hear. Features include: Automatic Push-Button Tuning, 5 3/4" slide-rule dial, two-band tuning range, Superhet circuit, etc. Console measures: 29" high, 21" wide, and 8" deep. Here is the ideal low-priced receiver for those who want domestic and foreign reception, superb tone quality, and thorough dependability of operation.

- **SET COMPLETE.** The Knight 7 Tube A.C. Superhet in console cabinet, complete with Raytheon tubes and 8" speaker. For 110 volts, 50-60 cycles A.C. Shpg. wt., 58 lbs. Code: SWING.

E10871, Retail Value, \$69.50.
NET PRICE EACH, \$34.45.
NET PRICE, LOTS OF 3, EACH.....

\$32.95

7 TUBE A.C. CHASSIS MODEL

The complete chassis of the Knight 7 Tube 2 Band A.C. Superhet (pictured at right above) is also offered separately. Ideal as a replacement set for your present cabinet or for custom installations. Ruggedly constructed of highest quality components for strong power and long-life stability. Includes all features of table and console models described above. Tunes 16.5 to 54 and 175 to 560 meters. Offers automatic push-button tuning and features such as: Slide-Rule Dial, variable Tone Control, full Automatic Volume Control, Electric Eye, 8" Electro-dynamic speaker, etc. Measures 14" long, 8 1/2" deep, and 9" high. Supplied complete with automatic tuning mechanism, set of Raytheon tubes, control knobs, etc. For operation from 110 volts, 50-60 cycles A.C. Shpg. wt., 16 lbs. Code: CEDAR.

E10872, Retail Value, \$45.00.
NET PRICE EACH, \$22.45.
YOUR NET PRICE, LOTS OF 3, EACH.....

\$20.95



Push-Button Tuning—1939's outstanding radio development is incorporated in the new receivers shown on these two pages. Push-Button Tuning used in these 1939 Knight sets brings a new concept of luxurious radio enjoyment. Just push a button—and there's your program!

Knight 7 TUBE 3 BAND A. C. SUPERHET

We set out to develop a seven tube radio with better-than-ordinary seven tube radio power and efficiency. We set out to develop such a set with newer and more features, with greater cabinet appeal—and we're proud to say that we've come through with an outstanding new 1939 seven tube radio receiver! We're proud to present it for your consideration.

• **Push-Button Tuning.** Just push a button to tune any one of six favorite stations! The latest perfected 1939 foolproof mechanical type system. Initial adjustment is made instantly from the front, at the buttons, with the utmost ease. Operation is smooth, effortless and right-on-the-head for each station. Horizontal-traveling pointer moves with button touch. This new system puts real meaning into the phrase: "Just push a button—there's your program!"

• **3 Full Bands.** The 1939 Knight 7 tunes everything on the air: 16 to 53 meters (5650-18100 K.C.) for thrilling foreign and domestic Short Wave programs; 53 to 175 meters (1710-5650 K.C.) for Short Wave amateur, aviation and police signals; and 174 to 560 meters (535-1720 K.C.) for your choice of American and Canadian standard Broadcast programs.

• **Slide-Rule Dial.** The latest 1939 6-inch Slide-Rule Dial is used in the Knight 7 to make manual tuning more convenient and accurate. Has illuminated translucent scales and horizontal-traveling pointer. There are separate scales of equal length for each band. The Broadcast band is calibrated in kilocycles; the Short Wave bands are indicated in megacycles.

• **Latest Tubes.** Fully licensed by R.C.A. and Hazeltine, the matchless circuit of the Knight 7 uses the following newest type R.C.A. tubes: 6K8 as Conv.-Osc. (dual-purpose); 6K7 as I.F. Amp.; 607G as Signal Diode-A.V.C.-1st Audio (triple-purpose); 6J5G as Phase Inverter Audio Amplifier; 2-25A6G as Push-Pull Output; 25Z6G as Rectifier. Dual-purpose and triple-purpose tubes attain added power and efficiency comparable to that of many nine tube receivers.

• **Power-Boost Circuit.** Full five watts output is developed by the Knight 7. This tremendous power in a low-cost model is made possible by the exclusive new Power-Boost Circuit which actually achieves nine-tube power, efficiency and performance. This new circuit provides twice as much voltage from the power supply, allowing each tube at least 100% increase in plate voltage to obtain maximum voltage rating results. This means maximum power and efficiency from each tube. The splendid power output of the Knight 7 is enhanced by such features as full-acting A.V.C. which maintains uniform volume on all stations; Wave Trap which blocks out code interference in the Broadcast band; Individual Coils on each band for added sensitivity and more dependable tuning on each band; rubber-floated tuning condenser for greater selectivity, etc.

• **Superlative Tone.** Never has a 7 tube receiver achieved the tonal brilliance of the Knight 7. The high-fidelity, high output push-pull audio system develops full five watts output. A full 6-inch special Electro-dynamic speaker of new design reproduces each program with exceptional faithfulness at any frequency level. Continuously variable Tone Control allows bass or treble emphasis as desired.

• **Beautiful New Table Model.** The Knight All-Wave 7 is superbly presented in a beautiful table model cabinet reflecting exceptionally good taste. The instrument panel and sides are of one-piece horizontally-striped walnut with roll-effect. Has top and bottom trims of contrastingly striped walnut. The speaker grille has three curved overlay bars which harmonize beautifully with the cabinet design. Dimensions: 18" x 10 1/4" x 8".

• **Table Model Complete.** The Knight 7 All-Wave Superhet is offered complete with 6-inch Dynamic Speaker and R.C.A. tubes in the table model cabinet illustrated above. For operation from 110 volts, 60 cycles A.C. Shpg. wt., 23 lbs. Code: SLEEK.

E10810. Retail Value, \$49.95.
NET PRICE, EACH, \$24.75.
NET LOTS OF 3, EACH.....

\$23.45

- 3 Full Bands
- Slide-Rule Dial
- 5 Watts Output
- Tone Control
- Full A.V.C.
- Wave Trap
- Power Booster

Prove the outstanding worth and value of this new Knight A.C. 7 by putting it through its paces under your own operating condition. Take advantage of our trial offer and money-back guarantee (see Page 10) and find out for yourself that only ALLIED can give you so outstanding a radio value. The Knight 7 offers you 1939 radio's finest features at a price everyone can afford.

7 TUBE CONSOLE MODEL

The Knight A.C. 7 is also available in a strikingly beautiful new 1939 console model. Features the latest distinguished new lowboy type of design which harmonizes beautifully in any home environment. Instrument panel is of striped walnut and is sloped for perfect tuning visibility. The entire cabinet is band-rubbed to a high piano finish. Dimensions: 32" wide, 36" high, 13 1/2" deep. The Knight A.C. 7 in console model is presented complete with all features exactly as described above: Automatic Push-Button Tuning; All-Wave coverage on three full bands; new 6" Slide-Rule Dial; latest Superhet circuit with Power-Boost feature; full five watts output; Automatic Volume Control; variable Tone Control; Wave Trap; Individual Coils; etc. In addition, a full 8" Electro-dynamic speaker is incorporated in the Console model and is mounted with unusually effective baffle area. Includes R.C.A. tubes. For 110 volts, 60 cycles A.C. Shpg. wt., 65 lbs. Code: SPEED. An outstanding value in a 1939 console model offering powerful distance-reach, glorious tone quality, and rich beauty of design at a truly remarkable low price.

E10811. Retail Value, \$74.50.
NET PRICE, EACH, \$36.95.
NET PRICE, LOTS OF 3, EACH.....

\$34.95

7 TUBE CHASSIS MODEL

The Knight 7 may also be had in chassis form only, to replace obsolete receivers. Exactly as described above, but with 8-inch dynamic speaker, less cabinet. Size: 14 1/4" x 7 1/4" x 8". Complete with escutcheon, push-button tuning mechanism and R.C.A. tubes.

Shpg. wt., 19 lbs. Code: SILK.
E10812. Retail Value, \$44.50.
NET PRICE, EACH, \$21.85.
NET PRICE, LOTS OF 3, EACH.....

\$20.75

(For efficient all-wave aerial, see page 145.)





R.C.A. & HAZELTINE LICENSED



Knight 8 TUBE 3 BAND A.C. SUPERHET

- SLIDE-RULE DIAL
- A.V.C. ACTION
- DYNAMIC SPEAKER
- ELECTRIC EYE
- SEPARATE COILS
- 3 FULL BANDS
- TONE CONTROL
- 3½ WATTS OUTPUT
- BEAUTIFUL TONE

The convenience of Automatic Push-Button Tuning, the thrill of All-Wave reception, and the beauty of an exquisite table cabinet are combined in this new 1939 Knight 8 Tube 3 Band A.C. Superhet to provide unusually enjoyable radio entertainment at a very moderate price. On every count, the Knight 8 scores with the latest features to assure powerful reception and beautiful tone. Most 8 tube sets with comparable features cost twice the price. Only ALLIED can give you such value!

• **ALL-WAVE RANGE.** The Knight 8 tunes three full bands for continuous and powerful all-wave reception. Covers 17 to 52 meters (5800 to 17500 K.C.) for Short-Wave foreign and domestic programs; 52 to 175 meters (1720 to 5800 K.C.) for fascinating Amateur, Aviation, and Police Calls; and 175 to 545 meters (550 to 1720 K.C.) for sensitive and selective American and Canadian standard Broadcast reception. This complete range covers everything of interest that's broadcast.

• **AUTOMATIC PUSH-BUTTON TUNING.** Tune any of six selected stations automatically and instantly—simply by pushing a button! The newest type of push-button assembly—one unit with the tuning condenser—provides for unusually simple initial adjustment at the buttons and for fool-proof operation. This automatic system always works—and always gets you favorite stations right on the head.

• **STRAIGHT LINE SLIDE-RULE DIAL.** Even manual tuning is easy with this big new 7" x 2¾" gold-faced Slide-Rule type dial. Has separate scales for each wave-band with all calibrations in large, clear numerals. Broadcast band is directly calibrated in kilocycles; Short-Wave bands are marked in megacycles. In addition, the valuable Electric Eye incorporated affords precise visual tuning facilities. Shows exactly when manually selected stations are in tune.

• **LATEST SUPERHET CIRCUIT.** Fully licensed by the famous R.C.A. and Hazeltine laboratories, the Superhet circuit of the Knight 3 Band 8 features valuable new developments. Uses 8 latest tubes as follows: 6A7 as Det.-Osc. (double-purpose); 6D6 as I.F.; 6Q7 as triple-purpose; 2nd Det.-A.V.C.-Audio; 76 as Phase Inverter; 2-43 as strong Push-Pull Output; 25Z5 as Rectifier; 6U5 Electric Eye. This combination achieves the efficiency and power of many conventional 10 and 11 tube radios. Individual coils on each band contribute to stable operation. Other features include: a full undistorted 3½ watts output (5 watts maximum) to provide plenty of power for all programs whether distant or local; full Automatic Volume Control to maintain steady volume level; continuously variable Tone Control for personal tone emphasis on any range within the whole musical register.

• **DELIGHTFUL TONE QUALITY.** The full 3½ watts output developed from the Push-Pull Output stage is smoothly handled and beautifully reproduced by a full-sized 8" electro-dynamic speaker (10" in console and chassis models). The inclusion of continuously variable personal Tone Control contributes materially to the easy selection of proper tonal emphasis and acoustical reproduction of any program in any size room. You will never tire of listening to the beautiful tone of the Knight 8.

• **EXQUISITE TABLE CABINET.** To house the fine new 1939 Knight 8 Tube 3 Band A.C. Superhet, we have selected the distinctive and beautiful table cabinet pictured above. An entirely new note of beauty is struck by the low-cut type speaker grille which, in addition to pleasing the eye, offers finest acoustical properties for correct tone rendition. Cabinet is of selected horizontally-grained walnut woods with contrasting top and bottom bands of vertically striped walnut. Entire cabinet is hand-rubbed to a high finish. Cabinet measures 19½" wide, 11½" high, 9¾" deep. Ideally suited for any room in the home. May be placed on bookshelves or end table in practically any type of setting.

• **8 TUBE TABLE MODEL COMPLETE.** The Knight All-Wave A.C. 8 is offered complete with matched Raytheon tubes and 8" electro-dynamic speaker in table cabinet. Check its many features—its startlingly low price—and you'll agree that it's the outstanding 8 tube radio value of the year. For 110 volts, 50-60 cycles, A.C. Shpg. wt., 19 lbs.

Code: MUSIC
E10898 Retail Value, \$52.50.
NET PRICE, EACH, \$25.85.
YOUR NET PRICE,
LOTS OF 3, EACH.....

\$2445

Knight 8 TUBE CONSOLE MODEL

A deluxe presentation of the Knight 8 Tube 3 Band A.C. Superhet is the superb console model cabinet shown at the right. Finest walnut hardwood veneers are used throughout. Recessed and slightly tilted instrument panel is set off by fluted pilasters and harmonious horizontal speaker grille bars. Entire cabinet is hand-rubbed to a lustrous finish. Measures: 36" high, 22" wide, and 10½" deep. Incorporates chassis having all features of table model described above, but has special 10" concert-dynamic speaker mounted for exceptionally large baffle area. Tunes three full bands (no skips) from 17 to 545 meters (550 to 17500 K.C.) for continuous all-wave reception. For fine stability, strong power, and long distance-reach, the Knight 8 features: 3½ watts undistorted output (5 watts maximum); full Automatic Volume Control; individual coils on each band; continuously variable Tone Control, etc., as described in detail above. Includes Automatic Push-Button Tuning of any 6 selected stations, Electric Eye, and full 7" x 2¾" gold-faced Slide-Rule dial. At our exceptionally low price, this full-sized console model All-Wave 8 tube receiver is a rare value. With Raytheon tubes. For operation from 110 volts, 50-60 cycles, A.C. Shpg. wt., 65 lbs.

Code: STYLE.
E10899 Retail Value, \$64.50.
NET PRICE, EACH, \$31.85.
YOUR NET PRICE, LOTS OF 3, EACH.....

\$2995

8 TUBE CHASSIS MODEL

The Knight 8 Tube 3 Band A.C. Superhet is also available in chassis form suitable for replacing obsolete sets in your present cabinet or for custom-type installations. Supplied complete with tubes and 10" electro-dynamic speaker, but less cabinet. Features are exactly the same as those of table and console models described above. Includes: Superhet circuit, 17 to 545 meter range (550-17500 K.C.); Automatic Push-Button tuning, Slide-Rule Dial, A.V.C., continuously variable Tone Control, separate coils on each band, Electric Eye, 3½ watts undistorted output, etc. Complete with Automatic tuning mechanism, Raytheon tubes, control knobs, etc. For operation from 110 volts, 50-60 cycles, A.C. Shpg. wt., 15 lbs. Code: VOCAL.

E10897 Retail Value, \$44.95.
NET PRICE, EACH, \$21.95.
YOUR NET PRICE, LOTS OF 3, EACH.....

\$2065

(For efficient all-wave aerial, see page 145.)



Thrill to the



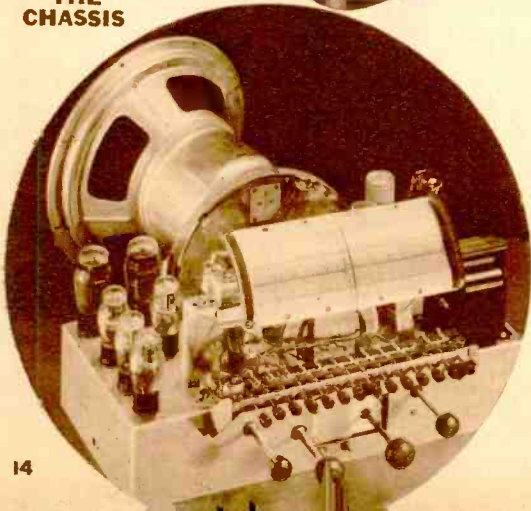
R.C.A. & HAZELTINE
LICENSED

ELECTRIC PUSH-BUTTON TUNING
Just press a button—and there's any one of 8 stations you may desire! Dependable, test-proven, automatic, the Electric Tuning used in the Knight 11 is motor-driven, the finest type available. "On-off" Switch, Tone Control, Phono Connection and Manual Tuning Release are also worked automatically, by Push-Button!



**JUST PUSH A BUTTON—
THERE'S YOUR PROGRAM!**

**THE
CHASSIS**



OUTSTANDING 1939 FEATURES!

- ELECTRIC TUNING
- NEW SLIDE-RULE DIAL
- FULL-ACTING A.V.C.
- BASS COMPENSATION
- 2 STAGES OF I.F.
- 7 WATTS OUTPUT
- PUSH-BUTTON TONE CONTROL
- TEMPERATURE COMPENSATOR
- SPECIAL BASS CONTROL
- TUNES THREE FULL BANDS
- PHONOGRAPH CONNECTION
- 12-INCH DYNAMIC SPEAKER

We invite you to make this test: Order the Knight 11 on our regular terms and use it under your own operating conditions for a full 15 days. Enjoy its convenient, entirely automatic Push-Button control system; thrill to its luxurious reproduction of every program, both foreign and domestic; examine the rugged precision-built, over-sized chassis. And then—if you do not agree with us that this is the finest deluxe radio ever offered at so low a price—if you are not entirely satisfied that this is the radio set you have always wanted, you may return the receiver to us under our generous Free Trial and Money-Back Guarantee offer (See page 10 for details). We make this offer with full confidence that the Knight 11 will delight the most critical and exacting listener—that it will give an entirely new conception of modern radio enjoyment. You can buy the Knight 11 with absolute confidence—confidence in its ability to tune powerfully, to operate with extreme selectivity and sensitivity, to perform always with enjoyable and faithful tone quality on every program.

New Knight 11 TUBE A. C. SUPERHET

The De Luxe Instant Action Electric Tuning Radio Everyone Can Afford

ALLIED is proud to present this new 1939 feature-studded **Knight 11**—the season's champion radio value! No other 11-tube radio at any where near its price can touch it for its combination of outstanding power, Automatic Tuning, marvelous tone and up-to-the-minute styling. We know of no other 11 tube radio that offers so much built-in quality and the promise of so much glorious, enjoyable entertainment at so low a price. Check these outstanding specifications for yourself:

- **ELECTRIC PUSH-BUTTON TUNING.** The **Knight 11** is the first radio to offer practically complete automatic control of all tuning operations. It not only offers you a choice of any one of eight favorite stations at the touch of a button, but it also provides Tone Control operated by three push-buttons. "on-off" switch on push-button, push-button for switching to phono in case phono attachment is used; push-button for making the change from electric to manual tuning. This ingenious Push-Button control of practically all operations is exclusively used in the **Knight 11** for the first time in radio. You'll like Electric Push-Button Tuning because it's easy to adjust; it's fool-proof; it tunes your favorite eight stations in less than eight seconds, precisely, smoothly, unerringly. And, in addition, you regulate Tone Control accurately and delightfully by Push-Buttons.
- **WORLD-WIDE RECEPTION.** Everything that's broadcast is brought to you by the **Knight All-Wave 11**—powerfully, smoothly, dependably. Its complete range covers three full bands: 16 to 54 meters (5650-18100 K.C.) for world-wide Short Wave reception; 54 to 175 meters (1715-5650 K.C.) for Short Wave police, amateur, ship and airplane signals; and 175 to 560 meters (535-1730 K.C.) for superlative long distance reception of all American and Canadian standard Broadcasts. A special wave-band knob and plate indicator are provided so that you always know the band you are tuning. Just select the program you want—the **Knight 11** will bring it to you—quickly, dependably, perfectly!
- **LATEST SLIDE RULE DIAL.** For easy, accurate manual tuning the latest Slide-Rule Dial is incorporated. It is ingeniously tilt-mounted for easy visibility and "no-stoop" tuning. An individual full-length scale is provided for each band. Calibrations are in kilocycles for the Broadcast band and in megacycles for Short Wave. Names of popular stations and country locations are indicated on all bands. A horizontal-traveling pointer is featured. You just push a button to make the change from Push-Button tuning to regular manual tuning.
- **BRILLIANT NEW CIRCUIT.** The very latest efficient tubes are used in the R.C.A. and Hazeltine licensed circuit of the **Knight 11** as follows: 6A8G as Osc.-Conv. (dual-purpose); 6J5G as Oscillator; 6K7G as I.F. Amp.; 6K7G as I.F. Amp.; 6J5G as A.V.C. Diode; 6J5G as Signal Diode; 6J5G as Audio Amp.; 6J5G as Phase Inverter; 2-6F6G as Power Audio Output; 5Z3 as Rectifier. There's real teamwork in this advanced superhet circuit, for each tube contributes its full share to make the **Knight 11** a marvel of power, tone beauty and matchless efficiency.
- **NEW TEMPERATURE COMPENSATOR.** The mark of the most luxurious 1939 radios. Used in the Electric Tuning Circuit to maintain the **Knight 11** circuit in hairline tuning for absolutely perfect tone and for precise program location. With the Temperature Compensator you simply can't drift "off-tone." That's why the **Knight 11** is so easy to tune and so beautiful to listen to—it's as automatically perfect as a radio can be made and will bring you delightful performance for years to come.

• **ADDITIONAL VALUE FEATURES.** Other noteworthy features of the 1939 **Knight A. C. 11** include: Full Automatic Volume Control for uniform volume on all stations and freedom from fading; R.F. pre-selector for added sensitivity and stability; rubber-floated 3-gang tuning condenser for sharper, more dependable tuning; 2 I.F. stages for more dependable reception on each band; phono connection provision with Push-Button control for adding Record Player (see Page 175); "On-off" Push Button control for turning set on or off instantly, etc. Finest grade components are used throughout with exceptionally wide safety factors to make long dependable service and enduring enjoyment a certainty.

• **POWER TO SPARE.** The **Knight 11** has amazing power output—7 1/2 watts undistorted, 10 watts peak. This volume is beautifully handled by the newly developed 12-inch giant super-dynamic speaker, and is reflected in thrilling tone that reproduces the entire tonal register to perfection from highest treble to lowest bass. Special bass compensation is built in with separate control knob offering 10 positions for subtle variation of bass emphasis. You will never grow tired of listening to the **Knight 11**—so life-like, so true to the original is its powerful tone! Even the most discriminating and critical music lover will applaud the true-toned performance of this brilliant 1939 All-Wave Radio Receiver.

• **PUSH-BUTTON TONE CONTROL.** For the first time in any radio receiver! Three buttons are provided for varying tone to give bass or treble emphasis as desired. Assures perfect acoustical correction for every room. Provides absolutely faithful response along the entire musical range without cutting off frequencies. Gives complete tonal control of all programs just by pressing a button! Together with the 10-position bass control knob, the **Knight 11** offers 42 separate tonal variations for the most complete tonal control ever incorporated in any radio receiver. It's amazing; it's new; it's exclusive in the **Knight 11**. You'll be sure to appreciate these outstanding features which explain the secret of the wonderful tone quality achieved by the **Knight 11**. You have only to listen to your favorite program over this amazingly fine music instrument, to note the wonderful difference over ordinary receivers.

• **AN OUTSTANDING CONSOLE.** The **Knight 11** is handsomely presented in a magnificent new console in the latest 1939 low-boy vogue. Has outstanding appeal and perfect acoustical properties. Features a tilted dial panel of choicely grained walnut, with curved side pilasters in richly marked walnut, enhanced by tasteful vertically-stripped head overlays. The console is beautifully finished in a high lustrous effect. Dimensions: 32" wide, 36" high, 13" deep. The new 1939 **Knight "Tilt-Tuner"** cabinet is a fine advance in radio cabinet design. You can easily see and tune the large slide-rule dial without bending or stooping uncomfortably. It's easy to tune the "Tilt-Tuner."

• **KNIGHT 11 COMPLETE.** The **Knight 11 All-Wave A.C. Superhet** is offered complete in the new "Tilt-Tuner" console as illustrated at left, with 12-inch dynamic speaker and R.C.A. tubes. For 110 volts, 60 cycles, A.C. Shipping weight, 85 lbs. Code: CHANT.

E10850. Retail Value, \$105.00.
NET PRICE EACH, \$51.50.
YOUR PRICE, LOTS OF 3, EACH,.....

\$48⁹⁵

The new **Knight 11 Tilt-Tuning Cabinet**—no stooping—no bending! Easy to tune sitting or standing!



R.C.A. & HAZELTINE LICENSED

The circuit of the **Knight 11** is fully licensed by R.C.A. and Hazeltine—your assurance of the very latest and finest 1939 radio developments from these world-renowned radio laboratories. Every feature built into the 1939 **Knight 11** is an advantageous one, intended to increase enjoyment on every program whether on Short Wave or Broadcast, whether near or far. Never before have so many new features, so many distinct advantages and refinements been embodied in a radio receiver at so low a price. You'll agree once you see and hear this wonderful 1939 performer, that only **ALLIED** can bring you such outstanding quality, such cabinet beauty and such value! Order the **Knight 11** now—put it through its paces under your own operating conditions. You be the judge!

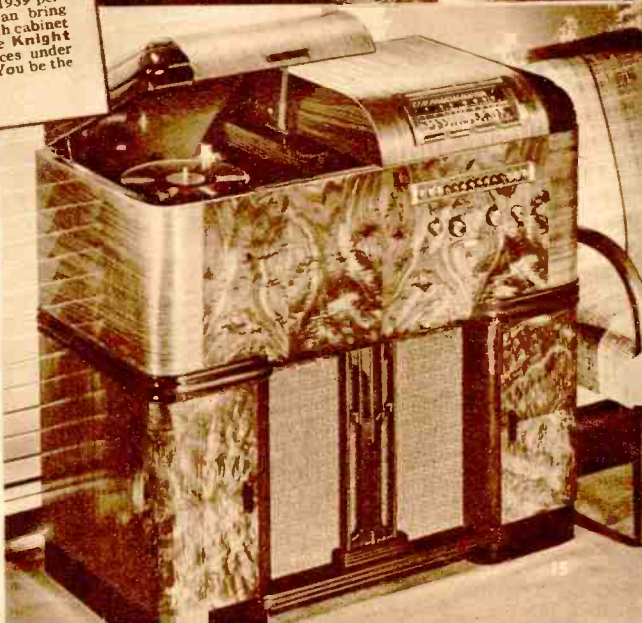
with AUTOMATIC RECORD CHANGER



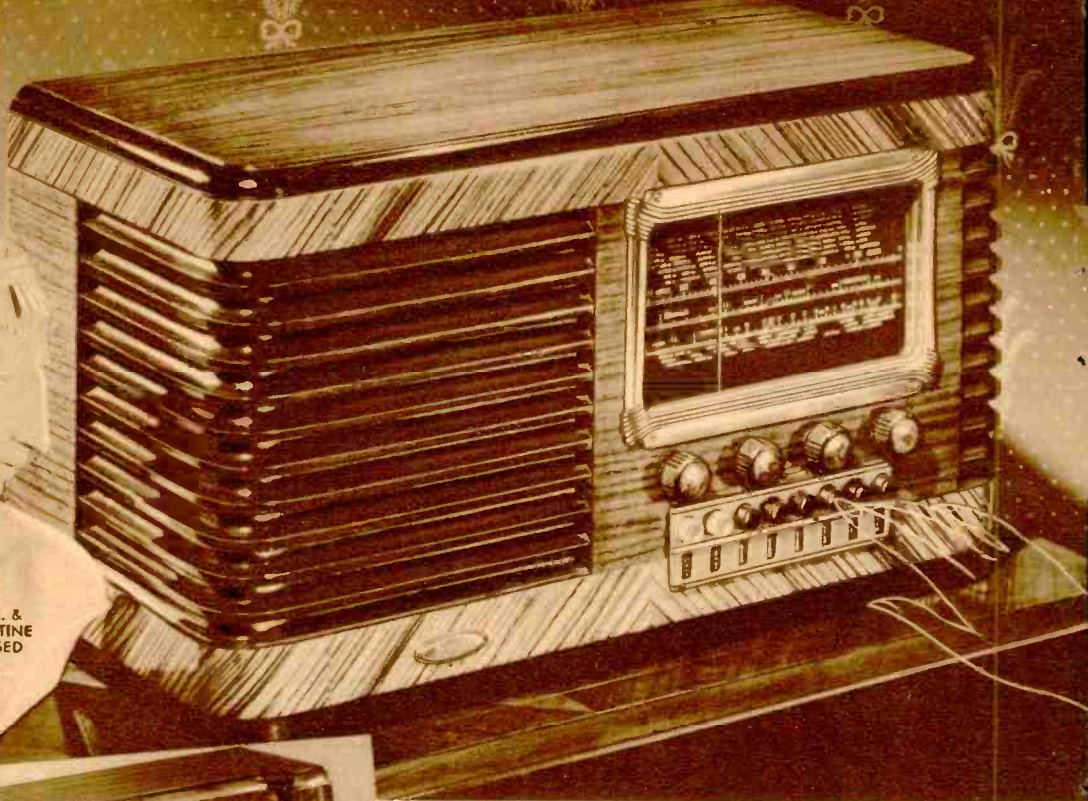
11 TUBE PHONO COMBINATION

For the most exacting music-lover who wants the best in music reproduction, the **Knight 11** is also offered in an outstanding Phono-Radio combination. Equipped with a de luxe R.C.A. automatic record changer, this fine instrument offers the entire world of musical entertainment—the music you want when you want it. Incorporates the de luxe radio described above, providing powerful World-Wide radio reception, life-like fidelity of tone and remarkable all-around performance. High-grade new top-loading offset Crystal Pickup; silent, powerful phono-motor and automatic record changer assure perfect reproduction of recordings. Records are played through the radio amplifying circuit with utmost clarity. Plays eight 10" records or seven 12" records automatically, or will play 10-inch and 12-inch records in mixed sequence. 7 watts output provides perfect amplification of every nuance and overtone. The **Knight 11 Phono-Combination** includes all the features described above: Electric Push-Button Tuning, A.V.C., new Tone Control, 3-band coverage, Bass Compensation, 12-inch Speaker, etc. The massive cabinet of the **Knight 11 Phono-Radio** is an outstanding creation. Features a double-roll front panel of center-matched butt walnut with straight grain walnut side panels; has record compartment at sides. Dimensions: 40" wide, 38" high, 18" deep. For 110 volts, 60 cycles, A.C. Shpg. wt., 160 lbs. Code: WIND.

E10851. Retail Value, \$250.00.
NET PRICE EACH, \$195.00



R. C. A. &
HAZELTINE
LICENSED



8 TUBE A.C. CONSOLE

Presented in the exquisite console shown above, the **Knight 8 Tube 3 Band A.C. Superheterodyne** is a distinguished musical instrument perfectly suited for the most luxurious setting. Rich walnut woods are rubbed to a piano finish. Instrument panel is slightly tilted and recessed to afford fullest convenience in operating controls. A full 10" electro-dynamic speaker is incorporated in the circuit which is otherwise exactly the same as that used in the table model described in detail at the right. Cabinet measures: 37" x 27" x 11 3/4". Shpg. wt., 60 lbs. With Raytheon tubes. For operation from 110 volts, 60 cycles A.C. Code: FLUTE.

E10875, Retail Value, \$79.95.
NET EACH, \$39.95. LOTS OF 3, EACH, \$37.95

8 TUBE CHASSIS MODEL

The deluxe chassis incorporated in console model above is also offered separately. Includes all latest features as described at right. Measures: 14" wide, 8 3/4" deep, 9" high. Complete with automatic tuning mechanism, ecutcheon, 10" electro-dynamic speaker, Raytheon tubes, knobs, etc. For 110 volts, 60 cycles A.C. Shpg. wt., 25 lbs. Code: NEWS.

E10876, Retail Value, \$52.95.
NET EACH, \$26.45. \$24.95

YOUR NET PRICE, LOTS OF 3, EACH, \$24.95

Knight 8 TUBE 3 BAND A.C. SUPERHETERODYNE

- Push-Button Tuning
- Big Slide-Rule Dial
- World-Wide Range
- Preselector Stage
- Bass Compensation
- Full A.V.C. Action
- Button Tone Control
- 3 Gang Condenser
- Individual Coils

Here is true luxury radio at a popular price. Here are thrilling performance, stirring tone quality, world-wide reception, and the convenience of automatic Push-Button Tuning in a new set so beautifully styled, so richly finished, that our unusually low price is truly amazing. So certain are we this all-new 1939 **Knight 8 Tube A.C. Superhet** will please even the most critical, that we urge you to try it out for yourself—with full protection under our generous Free Trial and Money-Back Guarantee offer (see page 10 for details).

• **AUTOMATIC PUSH-BUTTON TUNING.** Don't "tune-in" your favorite stations—just push a button—and the station is brought to you instantly, easily. The permeability-type Push-Button System used in this set is fool-proof and quick-acting. At initial adjustment the push-buttons are set directly from the front panel—quickly and easily. Six buttons afford automatic selection of any six desired local stations. The seventh and eighth buttons ingeniously provide Tone Control, emphasizing bass or treble as desired.

• **WORLD-WIDE TUNING.** The full range of modern radio—fascinating foreign broadcasts as well as local programs—is easily within the reach of the **Knight 8**. Tunes 16.5 to 54 meters (5650 to 18100 K.C.) for world-wide Short-Wave programs; 54 to 175 meters (1715 to 5650 K.C.) for Police, Amateur, Airplane Calls, and Ship-at-Sea; and 175 to 565 meters (535 to 1750 K.C.) for powerful Standard Broadcast reception of American and Canadian stations.

• **EASY-TO-READ SLIDE-RULE DIAL.** In addition to Push-Button Tuning, the **Knight 8** is provided with an 8 1/2" x 5 1/2" slide-rule type dial offering a separate scale for each wave-band. Needle-pointer travels horizontally across the dial face permitting quick station logging when manual tuning is desired. Popular stations on both Broadcast and Short-Wave ranges are clearly indicated.

• **SUPERB TONE QUALITY.** For splendid reproduction of all programs whether music or voice, the **Knight All-Wave Superhet** is unsurpassed in the 8-tube class. A big 8-inch electro-dynamic speaker (10-inch speaker in console and chassis) brings out the full depth and tone quality of each program. Clever Push-Button Tone Control permits you to select the tone emphasis you most enjoy. Bass Compensation—another expensive set feature—provides proper balance of tone elements, with bass notes always clearly defined. In addition new Bass Booster feature assures correct rendition of the bass register no matter how tone control is set. For added enjoyment, a phonograph connection is provided so that you can plug in the **Knight Record Player** (see page 175) or any similar unit.

• **NEW 1939 CIRCUIT FEATURES.** Fully licensed by R.C.A. and Hazeltine laboratories, the new Superhet circuit develops uncanny sensitivity and selectivity. Latest R.C.A. tube types are used as follows: 6A7 as 1st Det.; 6D6 as LF. Amp.; 76 as Osc.; 76 as Phase Inverter; 75 as 2nd Det.-A.V.C.-1st Audio (triple-purpose); 2-41 as Push-Pull Audio Output; and 80 as Rectifier. The use of the triple-purpose type 75 tube enables this receiver to equal 9 and 10 tube performance. A pure, undistorted 3 1/2 watts output (5 watts maximum) is easily achieved from the strong Push-Pull Output power stage. Such features as the 3-gang rubber-mounted condenser, preselector stage, full Automatic Volume Control, and individual coils on each band, assure you of consistently fine reception.

• **GRACEFUL CABINET DESIGN.** The **Knight All-Wave 8** is presented in an unusually beautiful walnut table cabinet distinguished by a harmonious louver-type speaker grille, diagonally striped top and bottom bands, and dark-toned strip at base and top edge. Size: 19 1/2" x 11 1/2" x 9 1/2".

• **SET COMPLETE.** **Knight 8 Tube 3 Band A.C. Superhet** in table cabinet. With Raytheon tubes and 8" speaker. For operation on 110 volts, 60 cycles A.C. Shpg. wt., 30 lbs. Code: RIGHT.

E10874, Retail Value, \$62.95.
NET PRICE EACH, \$31.45.

YOUR PRICE, LOTS OF 3, EACH, \$29.95

Special FEATURE VALUES



NEW G.T.C. "PEE-WEE" TRANSMITTER KIT

Here's a peach of a little crystal-controlled rig that makes a hit with everybody—beginners and old-timers alike. A complete 25 watt crystal controlled transmitter that enables you to get on the air at low cost. It just naturally fits into any Ham Shack, and makes itself indispensable in a hurry. Assembled on a richly finished gray chassis base with built-in power supply, it has a modern circuit using a 6LG oscillator with crystal control, and a type 80 rectifier tube. Packs a wallop, too! Full 25 watts input, enough to "work" stations over long distances, or to drive a 100 watt R.F. amplifier. Old-timers like it, too, as an auxiliary or emergency rig, or to take along on vacation jaunts. The "Pee-Wee" Kit includes a crystal for CW operation on the 40 meter band; with additional plug-in coils you can work the 20 and 10 meter bands without changing crystals. Will work 80 and 160 meters with appropriate coils and crystals. Chassis base is drilled; plate coil, with antenna coil, is already wound. Every necessary part—tubes, meters, Biley 40 meter crystal, etc.—is included. You can wire the "Pee-Wee" in a couple of hours, hook on the antenna and key—and start "pounding brass."

E9555. Complete "PEE-WEE" Kit. For 110 V. A.C. 60 cycles. NET. \$19.95

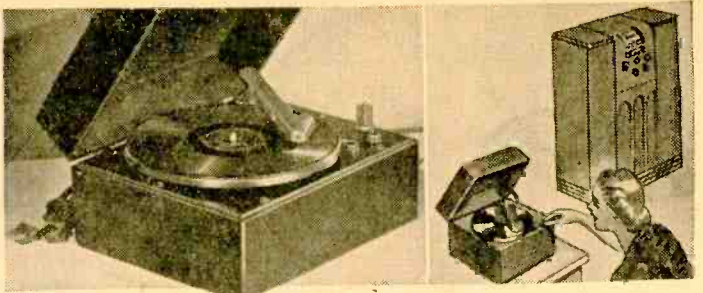
E9556. BATTERY MODEL "PEE-WEE". Operates from a 6 Volt Battery. For use on motor boats, yachts, automobiles, trailers—wherever emergency communication might be required. Built-in vibrator power supply. Uses metal 6L6 oscillator and 6X5 rectifier. Works CW on all five bands and, like the AC model above, is a complete transmitter—power supply and all on a small chassis. Complete with tubes and crystal. **NET. . . . \$21.95**



CODE PRACTICE SET

This Signal-twin wireless code practice set is a practical, scientifically designed set, invaluable for learning wireless code. Enables the operator, through practice, to develop professional speed and accuracy. Consists of two complete "stations," each equipped with key buzzer and easy-to-read code plate mounted on a sturdy, attractive base. 75 feet of wire supplied. Signals are clear and strong. May be operated up to 1000 ft. apart by adding more wire. Uses standard dry cell. Complete with instructions. Shipping weight, 2 1/2 lbs.

E700. YOUR PRICE, EACH. \$2.03
LOTS OF 3, EACH. \$1.91



KNIGHT "MAGIC WIRELESS" RECORD PLAYER

Here is the most amazing, most versatile record player ever developed! With absolutely no connections to radio set, this new Knight "Magic Wireless" Record Player will reproduce all phonograph records through any radio with the full tone and volume regularly obtained from your set! May be used anywhere—with any A.C. or A.C.-D.C. receiver no matter what size, model, or age. It's portable—weighs only 12 lbs, and can be carried anywhere; it's versatile—will accommodate all records up to full 12" size; it's economical—saves on installation costs. Anyone can install this unit—no technical knowledge is required. Simply plug into convenient electric outlet and you can play records instantly. No need to meddle with radio chassis—no impedance-matching problems. Anyone—anywhere—with any electrically-operated radio can use the "Magic Wireless" Record Player at once. Newly developed unit uses 2 tubes and is, in effect, a miniature broadcaster which transfers energy from record pickup to radio set preventing instantaneous regular use of radio for broadcast channel—at no time preventing instantaneous regular use of radio for broadcast reception. Features include: quiet 110 Volt 60 cycle A.C. synchronous motor; quality pickup; 8" turntable which takes all 8-, 10-, or 12-inch records. Housed in attractive walnut-finished wood case with hinged cover. Size, 12 3/4" x 7" x 10 1/4". Volume and tone can be set through regular controls on radio set. Here is a real achievement—bringing ideal record playing facilities within the reach of everyone—at a price everyone can afford! Shpg. wt., 15 lbs.

\$14.95

E10057. NET EACH. \$14.95
YOUR PRICE, LOTS OF 3, EACH. \$14.20



LATEST HOME BROADCASTERS STUDIO TYPE MICROPHONE

A popular style hand carbon microphone for use with any radio set or amplifier. Looks like a professional crystal type microphone. Includes on-off switch mounted on handle. Furnished with 10 ft. cord and connector prong. (Shown at left.)

E7100. NET EACH. \$1.18

HAND MICROPHONE

E7087. Similar in size to the Standard Model but fitted with wood handle. Includes cord. (Shown at left center.) YOUR PRICE. 98c

DELUXE MODEL

An efficient microphone for home radio use. Can be easily connected to any set. Provides endless entertainment for everyone; make your own broadcasts and announcements. Does not interfere with radio reception; push-button controls operation. Sturdily built, finished in attractive green-bronze. 5" high. Weight, 1 pound. (Shown at center right.)

E7085. NET EACH. 85c

STANDARD MODEL

Similar to the De Luxe Model described above, but is slightly smaller in size. In bronze metal case, 3 1/2" high. Complete with adapters. Weight, 12 oz. (Shown at right.)

E7086. NET EACH. 57c



POWER LINE FILTER

End bothersome radio interference! Use this capacity type filter for effectively eliminating line noises. The Tobe Power Line Filter may be used either on the interfering device, or on the radio set. It requires no ground connection; plugs into any standard receptacle. Has socket for receiver plug. Simple to install. Ideal for elimination of noises from home appliances such as electric razors, vacuum cleaners, hair dryers, etc. Low in cost, but very efficient in results. Will not interfere with radio reception. For operation from any 110-volt line, AC or DC.

E8406. List, \$1.00. 59c
YOUR PRICE. \$3.35
PER LOTS OF 6. \$3.35



ELECTRIC TIME SWITCH CLOCK

An electric clock and automatic control for electrical appliances. Will switch radios, store lights, heaters, etc., "on" or "off" at predetermined time. Can be set for any period "on" or "off" from 10 minutes to 5 hours. No special wiring is required—it can be attached in a few seconds. Easily adjusted by means of small dials on face. Self-starting motor assures long life, accurate time service, and dependable operation. Underwriters' approved. In brown bakelite case. Attractive, effective. For 110 volt, 60 cycle AC.

E7644. NET. \$5.44
YOUR PRICE. \$5.07
LOTS OF 3, EACH. \$5.07

Famous the World Over!

R.C.A.-Radiotron tubes are always the standard for dependable performance and superb operating efficiency. They are the most widely accepted and demanded radio tubes sold today. Known everywhere—bought everywhere!

R.C.A.-Radiotron tubes represent a good, steady source of profit for dealers who stock them. You can depend on ALLIED to supply you—we carry all R.C.A. types in stock at all times to assure prompt deliveries.

EXTRA QUANTITY DISCOUNTS

You can earn bigger profits by buying RCA tubes in quantities. We give you a special 50% discount from the LIST PRICES shown below, when you order 25 or more RCA-Radiotron tubes on one order. For example, if the list price of your tube order amounts to \$20, your net cost will be 50% less, or \$10. RCA tubes are always in demand. You can easily select 25 fast-moving tubes from our listing below for bigger discounts and profits.

STANDARD GLASS TYPE TUBES

Type	No.	List	NET	Type	No.	List	NET	Type	No.	List	NET
00A	E100	2.25	1.22	12Z3	E187	1.50	.81	50	E135	2.50	1.35
01A	E101	.80	.43	15	E108	2.25	1.22	53	E138	2.00	1.08
1A4	E160	1.75	.95	19	E109	1.50	.81	55	E139	1.50	.81
1A6	E161	1.75	.95	20	E110	2.25	1.22	56	E140	.80	.43
1B4	E162	2.25	1.22	22	E111	2.00	1.08	57	E141	1.25	.68
1B5	E163	1.25	.68	24A	E112	1.25	.68	58	E142	1.25	.68
1C6	E164	1.75	.95	25Z5	E188	1.25	.68	59	E143	2.00	1.08
1F4	E165	1.50	.81					71A	E144	1.00	.54
1F6	E166	2.25	1.22	26	E113	.80	.43	75	E145	1.25	.68
1V	E103	1.25	.68	27	E114	.80	.43	76	E146	.80	.43
2A3	E167	2.50	1.35	30	E115	1.00	.54	77	E147	1.50	.81
2A5	E168	1.25	.68	31	E116	1.00	.54	78	E148	1.25	.68
2A6	E169	1.25	.68	32	E117	1.75	.95	79	E149	1.50	.81
2A7	E170	1.50	.81	33	E118	1.50	.81	80	E150	.80	.43
2B7	E171	1.75	.95	34	E119	1.75	.95	81	E151	2.25	1.22
5Z3	E172	1.25	.68	35	E120	1.25	.68	82	E152	1.50	.81
6A4 LA	E174	1.50	.81	36	E121	1.25	.68	83	E153	1.75	.95
6A6	E175	1.75	.95	37	E122	1.00	.54	83V	E154	2.25	1.22
6A7	E176	1.50	.81	38	E123	1.25	.68	84/6Z4	E155	1.75	.95
6B7	E178	1.50	.81	39/44	E124	1.25	.68	85	E156	1.25	.68
6C6	E179	1.25	.68	40	E125	1.00	.54	89	E157	1.50	.81
6D6	E180	1.25	.68	41	E126	1.25	.68	V99	E158	1.50	.81
6E5	E181	1.50	.81	42	E127	1.25	.68	X99	E159	1.50	.81
6F7	E183	2.00	1.08	43	E128	1.50	.81	112A	E107	1.00	.54
6G5	E184	1.50	.81	45	E130	1.00	.54	WD11	E105	2.25	1.22
6N5	E191	1.75	.95	46	E131	1.50	.81	WX12	E106	2.25	1.22
6U5	E185	1.75	.95	47	E132	1.50	.81	874	E193	4.50	2.43
10	E104	2.75	1.49	48	E133	4.00	2.16	876	E194	6.50	3.51
12A7	E186	2.25	1.22	49	E134	1.25	.68	886	E195	8.00	4.32

ALL-METAL TYPE TUBES

Type	No.	List	NET	Type	No.	List	NET	Type	No.	List	NET
5T4	E261	2.50	1.35	6H6	E269	1.25	.68	6Q7	E275	1.50	.81
5W4	E262	1.00	.54	6J5	E277	1.50	.81	6R7	E276	1.50	.81
5Z4	E263	2.00	1.08	6J7	E270	1.50	.81	6S7	E284	2.25	1.22
6A8	E264	1.50	.81	6K7	E271	1.50	.81	6V6	E282	1.75	.95
6B8	E265	1.75	.95	6K8	E273	1.75	.95	6X5	E278	1.50	.81
6C5	E266	1.25	.68	6L6	E272	2.25	1.22	25A6	E279	1.50	.81
6F5	E267	1.25	.68	6L7	E273	1.75	.95	25L6	E280	2.25	1.22
6F6	E268	1.50	.81	6N7	E274	1.75	.95	25Z6	E281	1.50	.81

OCTAL BASE GLASS TUBES

Type	No.	List	NET	Type	No.	List	NET	Type	No.	List	NET
0A4G	E200	2.25	1.22	6A8G	E221	1.50	.81	6L6G	E237	2.50	1.35
1C7G	E201	2.25	1.22	6AC5G	E220	1.25	.68	6L7G	E238	1.75	.95
1D5G	E202	2.25	1.22	6B8G	E224	1.75	.95	6N7G	E241	1.75	.95
1D7G	E203	1.75	.95	6C5G	E225	1.25	.68	6Q7G	E243	1.50	.81
1E5G	E204	2.25	1.22	6C8G	E226	1.50	.81	6R7G	E244	1.50	.81
1E7G	E205	2.75	1.49	6D8G	E227	2.25	1.22	6S7G	E245	2.25	1.22
1F5G	E206	2.25	1.22	6F5G	E228	1.25	.68	6T7G	E246	2.25	1.22
1F7GV	E207	2.25	1.22	6F6G	E229	1.50	.81	6U7G	E242	1.50	.81
1G5G	E211	2.00	1.08	6F8G	E239	1.50	.81	6V6G	E248	1.75	.95
1H4G	E209	1.00	.54	6G6G	E240	2.25	1.22	6X5G	E251	1.75	.95
1H6G	E210	1.75	.95	6H6G	E230	1.25	.68	6Y6G	E249	2.25	1.22
1J6G	E212	1.50	.81	6J5G	E231	1.50	.81	6Z7G	E222	1.75	.95
5U4G	E213	1.50	.81	6J7G	E232	1.50	.81	6ZY5G	E223	1.50	.81
5V4G	E214	2.50	1.35	6K5G	E233	1.50	.81	25A6G	E255	1.50	.81
5X4G	E216	1.50	.81	6K6G	E234	1.50	.81	25A7G	E247	2.25	1.22
5Y3G	E217	1.00	.54	6K7G	E235	1.50	.81	25B6G	E257	1.75	.95
5Y4G	E218	1.00	.54	6L5G	E236	2.25	1.22	25L6G	E258	2.25	1.22
								25Z6G	E259	1.50	.81

TUBE TEST STICKERS



A roll of 2,000 perforated gummed labels, 1 1/4" x 1 1/2". Imprinted with your name, address and city; has space to mark date and tube condition. FREE with order for 30 R.C.A. tubes. **E390. NET \$1.00**

R. C. A. TUBE MANUAL

E395. Complete technical specs for all R.C.A. receiving type tubes. FREE with order for 15 R.C.A. tubes, or sold for... **20c**
E398. Metal Tube Manual. Net..... **5c**

R. C. A. PINDEX

E396. Pocket slide rule which gives essential information about tubes, pins, etc. FREE with order for 15 R.C.A. tubes, or... **15c**

FREE TUBE SALES AIDS

E391. DUMMY CARTONS. 25 R.C.A. display tube cartons free with tube order.
E392. DECALCOMANIA. 3 color window sign free with order for R.C.A. tubes.
E393. PRICE CARDS. Shows list prices for all R.C.A. tubes. Free with tube order.
E394. O. K. TAGS. For completed repair jobs; 10 free with order for R.C.A. tubes.



RADIO TUBES



FREE: R.C.A. SALES AID CATALOG FOR DEALERS & SERVICEMEN. Ask for E398.

RAYTHEON

RAYTHEON shows you the way to bigger tube profits. Handle this money-making line which offers you amazingly **BIG DISCOUNTS** and a powerful sales appeal. RAYTHEON tubes are noted for quality and have an outstanding reputation for long life, silent operation and brilliant tonal reproduction. For better results and for sure customer satisfaction and good-will, use RAYTHEON tubes for replacements in all radio sets.

You will find listed on this and on the next page the complete line of RAYTHEON tube products, including Resistance and Panel type bulbs. (Transmitting types are listed on page 113.) There is a RAYTHEON tube for every radio requirement. Stock this popular line. **WE CARRY THE COMPLETE LINE OF RAYTHEON TUBES IN STOCK AT ALL TIMES. DEPEND ON ALLIED TO GIVE YOU QUICK, COMPLETE SERVICE.**

SPECIAL QUANTITY DISCOUNTS

Buy Raytheon tubes in quantities for added profits. In lots of 25 or more, we give you a special added discount of 10% from the net prices shown. For example, if the net total price of your tube order amounts to \$15.00, your net price at this special discount is \$13.50. Build your order to 25 or more tubes and earn extra profits! Round out your stock and increase your profit on every tube sale.

ALL STANDARD GLASS TYPE TUBES

Type	No.	List	NET	Type	No.	List	NET	Type	No.	List	NET	Type	No.	List	NET
00A	E400	2.25	1.15	6D6	E480	1.25	.64	34	E419	1.75	.90	75	E445	1.25	.64
01A	E401	.80	.41	6E5	E481	1.50	.77	35/51	E420	1.25	.64	76	E446	.80	.41
1A4P	E489	1.75	.90	6E6	E482	2.00	1.03	36	E421	1.25	.64	77	E447	1.50	.77
1A4T	E493	1.75	.90	6F7	E483	2.00	1.03	37	E422	1.00	.51	78	E448	1.25	.64
1A6	E461	1.75	.90	6G5	E484	1.50	.77	38	E423	1.25	.64	79	E449	1.50	.77
1B4	E462	2.25	1.15	6N5	E491	1.75	.90	39/44	E424	1.25	.64	80	E450	.80	.41
1B5	E463	1.25	.64	6T5	E496	1.50	.77					81	E451	2.25	1.15
1C6	E464	1.75	.90	6U5	E497	1.50	.77					82	E452	1.50	.77
1F4	E465	1.50	.77	6Z4	E455	1.75	.90					83	E453	1.75	.90
1F6	E466	2.25	1.15					40	E425	1.00	.51	83V	E454	2.25	1.15
1V	E403	1.25	.64					41	E426	1.25	.64	84	E455	1.75	.90
				12A5	E485	2.25	1.15	42	E427	1.25	.64	85	E456	1.25	.64
2A3	E467	2.50	1.28	12A7	E486	2.25	1.15	43	E428	1.50	.77	89	E457	1.50	.77
2A5	E468	1.25	.64	12Z3	E487	1.50	.77	45	E430	1.00	.51				
2A6	E469	1.25	.64	25Z5	E488	1.25	.64	46	E431	1.50	.77	V99	E458	1.50	.77
2A7	E470	1.50	.77	10	E404	2.75	1.42	47	E432	1.50	.77	X99	E459	1.50	.77
2B7	E471	1.75	.90	12A	E407	1.00	.51	48	E433	4.00	2.05	182B	E624	2.00	1.03
2E5	E490	1.50	.77	15	E408	2.25	1.15	49	E434	1.25	.64	183	E625	2.00	1.03
				19	E409	1.50	.77					485	E626	2.00	1.03
												950	E494	2.25	1.15
5Z3	E472	1.25	.64	20	E410	2.25	1.15	50	E435	2.50	1.28	951	E462	2.25	1.15
6A3	E473	2.00	1.03	22	E411	2.00	1.03	52	E437	2.00	1.03				
6A4	E474	1.50	.77	24A	E412	1.25	.64	53	E438	2.00	1.03	WD11	E405	2.25	1.15
6AB5	E192	1.75	.90	26	E413	.80	.41	55	E439	1.50	.77	WX12	E406	2.25	1.15
6A6	E175	1.75	.90	27	E414	.80	.41	56	E440	.80	.41	BA	E620	7.50	4.50
6A7	E476	1.50	.77	30	E415	1.00	.51	57	E441	1.25	.64	BH	E621	4.75	2.79
6B5	E477	2.25	1.15	31	E416	1.00	.51	58	E442	1.25	.64	BR	E622	2.75	1.65
6B7	E478	1.50	.77	32	E417	1.75	.90	59	E443	2.00	1.03	LA	E474	1.50	.77
6C6	E479	1.25	.64	33	E418	1.50	.77	71A	E444	1.00	.51				

MERCHANDISING AIDS TO INCREASE YOUR TUBE PROFITS

Use these Raytheon sales stimulants, and watch your tube profits grow! Make use of these fine sales aids—be sure to ask ALLIED for them with your next tube orders.

With your next tube order, ask for the free copy of the complete **Raytheon Sales Aids Catalog**. Shows you what materials are available and how to secure them. Ask for **Raytheon Sales Aids Catalog** under number E699.



DUMMY CARTONS

For display purposes only. Exact replicas of the standard Raytheon tube cartons. These attractive cartons can be used for an arresting, sales stimulating display. We offer 12 dummy cartons free with your order for Raytheon tubes.

E694. FREE.

TECHNICAL DATA CHART

Latest edition; invaluable to every dealer and serviceman; contains complete, up-to-the-minute technical data on all Raytheon receiving tubes; new base design diagrams, and complete tube characteristics. We offer this chart free with your order for Raytheon tubes.

E693. FREE.



RAYTHEON DATABASE

COVERS ALL RECEIVING TUBES

An education in all receiving tube types. Covers maximum ratings and essential characteristics. Also gives operating curves for all active tubes. Includes data on resistance tubes and on panel lamps. Have all the information on hand when you need it. 200 pages.

E688. NET 25c



WINDOW DISPLAY

A real Bull's-eye of a display! Unusually attractive 3-color card for window use. 16 1/2" diameter. A great "attention-getter" that will really attract tube customers. Ask for this fine display the next time you order Raytheon tubes.

E687. With tube order, given FREE.



GUARANTEE BLANKS

Consists of a "90 Day Radio Repair and Service Guarantee." Has space for complete description of services performed; condition of tubes, transformers, condensers, connections, wiring, etc.; and charges for parts and labor.

E692. 25 Blanks with tube order. FREE

DECAL WINDOW STICKER

Identifies you as authorized Raytheon Tube Dealer. Gummed on front; can be used on window or tacked on wall. Size, 7 1/4" x 8 1/4".

E685. With tube order, given FREE.

NEW RAYTHEON TUBE STICKERS

The new Raytheon tube stickers for glass tubes have spaces for noting "Date Sold," "Date Tested," condition of tube, "Satisfactory," or "Unsatisfactory"—and space for your name. A pad of 100 is given free with your order for Raytheon tubes. (Available in pads of 2000 with your name imprinted at \$1.00.)

E689. Pad of 100 with tube order. FREE.



METAL TUBE STICKERS

Attractive Raytheon stickers as above but for metal tubes. 100 are given free with order for Raytheon tubes. 2000 are available imprinted at \$1.00 per pad.

E690. Pad of 100 with tube order. FREE.

REPAIR TICKETS

Consists of combination repair ticket and receipt. Contains space for name, address, phone number, make and model of receiver. Perforated; one end is attached to set or chassis taken in for repairs, and detachable end is customer's receipt.

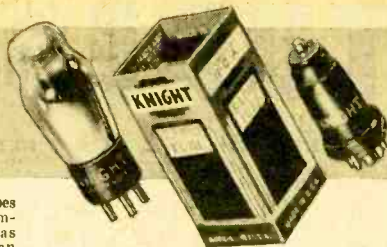
E691. 25 Tickets with tube order. FREE.

DEALER PRICE CARDS

Latest handy reference dealer price list card for all Raytheon tubes. Shows interchangeable tube types. Indicates popular replacement types.

E698. Request on next order. FREE.

KNIGHT



RADIO TUBES

The popular KNIGHT line of radio tubes has been greatly enlarged to include a complete selection of standard glass type tubes as well as octal-base and metal types. You can undersell all competition with this popular line of superior quality tubes. Precision construction, attractive factory-sealed packaging, and dependable performance will give you big volume-building sales. Put in a stock of popular KNIGHT types and watch your profits soar!

KNIGHT Tubes are priced to bring you 10% to 15% BIGGER PROFITS. Put in a stock of fast-moving, popular types and build real profits in your tube-replacement business. All KNIGHT Tubes are packed in factory-sealed cartons, assuring you of perfect merchandise. We carry the complete line of KNIGHT Tubes—including all glass and metal types—in our regular stock at all times. You can depend on ALLIED for real service and bigger profits!

SPECIAL QUANTITY DISCOUNT

In lots of 25 or more, we offer KNIGHT Tubes at a special discount of 10% from the NET PRICES shown below. You can easily select 25 fast-moving types from our complete listing.

ALL STANDARD GLASS TYPE TUBES

Type	No.	List	NET
01A	E901	.80	.32
1A4	E960	1.75	.71
1A6	E961	1.75	.71
1B4	E962	2.25	.91
1B5	E963	1.25	.51
1C6	E964	1.75	.71
1F4	E965	1.50	.61
1F6	E966	2.25	.91
1V	E903	1.25	.51

2A3	E967	2.50	1.01
2A5	E968	1.25	.51
2A6	E969	1.25	.51
2A7	E970	1.50	.61
2B6	E989	2.50	1.01
2B7	E917	1.75	.71

5Z3	E972	1.25	.51
6A4/LA	E974	1.50	.61
6A6	E975	1.75	.71
6A7	E976	1.50	.61
6B5	E977	2.25	.91
6B7	E978	1.50	.61

Type	No.	List	NET
6C6	E979	1.25	.51
6D6	E980	1.25	.51
6E5	E981	1.50	.61
6F7	E983	2.00	.81
6G5	E984	1.50	.61
6T5	E990	1.50	.61
6U5	E991	1.50	.61

10	E904	2.75	1.11
12A	E907	1.00	.40
12A7	E986	2.25	.91
12Z3	E987	1.50	.61
19	E909	1.50	.61

22	E911	2.00	.81
24A	E912	1.25	.51
25B5	E992	2.25	.91
25Z5	E988	1.25	.51
26	E913	.80	.32
27	E914	.80	.32

30	E915	1.00	.40
31	E916	1.00	.40

Type	No.	List	NET
32	E917	1.75	.71
33	E918	1.50	.61
34	E919	1.75	.71
35/51	E920	1.25	.51
36	E921	1.25	.51
37	E922	1.00	.40
38	E923	1.25	.51
39/44	E924	1.25	.51

41	E926	1.25	.51
42	E927	1.25	.51
43	E928	1.50	.61
45	E930	1.00	.40
46	E931	1.50	.61
47	E932	1.50	.61
48	E933	4.00	1.62
49	E934	1.25	.51

50	E935	2.50	1.01
53	E938	2.00	.81
55	E939	1.50	.61

Type	No.	List	NET
56	E940	.80	.32
57	E941	1.25	.51
58	E942	1.25	.51
59	E943	2.00	.81

71A	E944	1.00	.40
75	E945	1.25	.51
76	E946	.80	.32
77	E947	1.50	.61
78	E948	1.25	.51
79	E949	1.50	.61

80	E950	.80	.32
81	E951	2.25	.91
82	E952	1.50	.61
83	E953	1.75	.71
83V	E954	2.25	.91
84/6Z4	E955	1.75	.71
85	E956	1.25	.51
89	E957	1.50	.61
V99	E958	1.50	.61
X99	E959	1.50	.61

OCTAL BASE GLASS TUBES

Type	No.	List	NET
1C7G	E750	2.25	.91
1D5G	E751	2.25	.91
1D7G	E752	1.75	.71
1E5G	E753	2.25	.91
1E7G	E754	2.75	1.11
1F5G	E755	2.25	.91
1F7G	E756	2.25	.91
1G5G	E757	2.00	.81
1H4G	E758	1.00	.40
1H6G	E759	1.75	.71
1J6G	E760	1.50	.61

Type	No.	List	NET
6J5G	E777	1.50	.61
6J7G	E778	1.50	.61
6K5G	E779	1.50	.61
6K6G	E780	1.50	.61
6K7G	E781	1.50	.61
6K8G	E782	1.75	.71

6L5G	E783	2.25	.91
6L6G	E784	2.50	1.01
6L7G	E785	1.75	.71
6N6G	E786	2.25	.91
6N7G	E787	1.75	.71
6Q7G	E788	1.50	.61
6R7G	E789	1.50	.61
6S7G	E790	2.25	.91

5U4G	E761	1.50	.61
5V4G	E762	2.50	1.01
5X4G	E763	1.50	.61
5Y3G	E764	1.00	.40
5Y4G	E765	1.00	.40

6A8G	E766	1.50	.61
6AC5G	E767	1.25	.51
6B8G	E768	1.75	.71
6C5G	E769	1.25	.51
6C8G	E770	1.50	.61
6D8G	E771	2.25	.91
6F5G	E772	1.25	.51
6F6G	E773	1.50	.61
6F8G	E774	1.50	.61
6G6G	E775	2.25	.91
6H6G	E776	1.25	.51

6T7G	E791	2.25	.91
6U7G	E792	1.50	.61
6V6G	E793	1.50	.61
6X5G	E794	1.50	.61
6Y6G	E795	2.25	.91
6Z7G	E796	1.75	.71
6ZY5G	E797	1.50	.61
25A6G	E798	1.50	.61
25A7G	E799	2.25	.91
25B6G	E800	1.75	.71
25L6G	E801	2.25	.91
25Z6G	E802	1.50	.61

ALL-METAL TYPE TUBES

Type	No.	List	NET
5T4	E1061	2.50	1.01
5W4	E1062	1.00	.40
5Z4	E1063	2.00	.81
6A8	E1064	1.50	.61
6B8	E1065	1.75	.71

6C5	E1066	1.25	.51
6F5	E1067	1.25	.51
6F6	E1068	1.50	.61
6H6	E1069	1.25	.51
6J7	E1070	1.50	.61
6K7	E1071	1.50	.61

Type	No.	List	NET
6L6	E1072	2.25	.91
6L7	E1073	1.75	.71
6N7	E1074	1.75	.71
6Q7	E1075	1.50	.61
6R7	E1076	1.50	.61

6V6	E1077	1.75	.71
6X5	E1078	1.50	.61
25A6	E1079	1.50	.61
25L6	E1080	2.25	.91
25Z6	E1081	1.50	.61

NEW HYTRON BANTAM TUBES



These new tubes represent one of the latest developments in radio tube manufacture. With "T" Bulb and Octal Base, they measure only 1/4" in diameter and range from 2 3/4" to 3 1/2" in overall height. Unique electronic design and mechanical structure assure excellent characteristics and rugged dependability. Hytron "Bantams" are now being used as original equipment by manufacturers of many compact receivers. Put in a supply to take care of replacement needs.

Type	No.	List	NET
6AC5GT	E850	1.25	.61
6A8GT	E851	1.50	.73
6C5GT	E852	1.25	.61
6F5GT	E853	1.25	.61

6H6GT	E854	1.25	.61
6J5GT	E855	1.50	.73
6J7GT	E856	1.50	.73
6K5GT	E857	1.50	.73
6K6GT	E858	1.50	.73
6K7GT	E859	1.50	.73

Type	No.	List	NET
6K8GT	E860	1.75	.86
6P5GT	E861	1.25	.61
6Q5GT	E862	1.25	.61
6Q7GT	E863	1.50	.73

6X5GT	E864	1.75	.86
25A6GT	E865	1.50	.73
25A7GT	E866	2.25	1.10
25L6GT	E867	2.25	1.10
25Z6GT	E868	1.50	.73
6RS GT	E869	1.50	.73

BALLAST TUBES BULBS · NEON LAMPS



QUALITY KNIGHT BALLAST TUBES

New metal-shell ballast tubes for replacement in A.C.-D.C. sets. Identically the same in electrical characteristics and base connections as originals. Require no rewiring; simply remove old defective ballast tube and replace with the proper Knight Ballast tube. Sturdily built for long life. Will give proper performance.

No.	Type	Replaces
018	K29B	BK29B
019	K36B	BK36B
020	K42C	BK42C, 95K2
021	K42D	BK42D
022	L42B	L42B
041	L42C	L42C, 69, 2037
023	M42B	BK42B
024	K249B	50L2, 50L25MG
025	K49B	BK49B, W-49357, 135K1
026	K249C	50A2MG
033	K19C	BK49C
027	K19D	BK49D, 3954A
042	L49D	2U1224, 69, 2033
043	L49E	L49E, 55C
028	L95D	3CR-241
029	M49B	859B, BM49B
050	56A	K55A
051	K55B	BK55B, 3615, 55K13
034	K55C	K55C
052	K55CP	K55CP
035	M55B	BK55B, 115, 92
036	K55H	K55H, 92, 55H1
043	L55H	2VR, 215, 859B
044	L55C	L55, 55C
045	L55S1	L55S1
047	L55S2	L55S2
054	L55S3	L55S3
055	M55B	BK55B
037	K74H	K74H
048	K74C	K74C
037	K80B	K79B, K79B
038	K87B	K90B
036	K92B	K95B
039	K92A	K90A
049	K105A	K105A

List. 80c.
YOUR PRICE EACH..... **25c**

AC-DC ADJUSTABLE BALLASTS

A revolutionary new idea in Ballast tube replacements. Just 2 units will replace over 100 R.M.A. type Ballast tubes. Will also replace many special ballasts. Shaded instructions show exactly what adjustments to make on base of tube. Send for FREE replacement chart.

2 TYPES WILL REPLACE 100 TUBES

Special design enables you to use these 2 Ballasts for more than 100 replacements simply by making adjustments on prongs and jumper at base of tubes. Replace defective ballasts quickly at low cost. Stock up with both types.

E1058. Ballast A. } List. \$1.00.
E1059. Ballast B. } NET EACH... **49c**



AMPERITE BALLAST TUBES

AC-DC REPLACEMENTS

The units below will replace 30% of the ballast tubes used in A.C.-D.C. sets. They are designed to pass only 3A through tube filaments which keeps them ± 5% with line voltages varying from 85 to 140 volts. Prevents damage to tubes, pilot lights, etc. 1 or 2 15A or 25A pilot lights may be used with one Amperite. If pilot light burns out set will still play.

ALL TYPES BELOW SELL AT 59c NET

Cat. No.	Amperite No.	Starting No. Letter	With No. From	Ending With No. Letter
E1184	K145*	K, L, M or BK	36 to 67	A, B, C or D
E1185	K173*	"	67 " 105	"
E1186	K150S2	"	40 " 100	S2

*Except L55B and M55B. Use Amperite L55B.

E1187 Amperite No. 4P-45. 4 Prong base. Replaces the following types:
140R4 165R4 185R4 300R4 LX42D KX55A
140R8 165R4 185R8 320R4 KX40B KX55B
140R44 165L4 185R44 KX42M KX49C KX55C
140L4 165L4 185L4 KX42C KX49D KX55D
140L8 165L4 185L8 KX42D LX49B LX55B
140L44 40A2 185L44 LX42B LX49C LX55C
60X37 40B2 50B2 LX42C LX49D LX55D

E1188 Amperite No. 3-40. 4 Prong base. Replaces the following types:
50 50X3 65R KX42A KX55A
50 140R 185R KX49A G-153

GENUINE EVEREADY MAZDA BULBS



Genuine Eveready Mazda pilot light bulbs. Famous the world over for their quality, dependability and long life. Cheaper than foreign-made bulbs in the long run. Take advantage of the attractive quantity prices and buy them in lots of ten.

RADIO PILOT LIGHT BULBS

No.	Type	Volts	Amps.	EACH	PER 10
E1250	41*	2.5	.50	\$0.09	\$0.54
E1252	43*	2.5	.50	.10	.59
E1251	44*	3.2	.35	.12	.71
E1253	40	6.8	.45	.09	.54
E1257	50*	6-8	.20	.10	.59
E1258	51**	6-8	1.0	.07	.41
E1260	55**	6-8	4.0	.07	.41
E1254	48	2.0	.06	.22	1.15
E1259	49*	2.0	.06	.22	1.29
E1255	46*	6.8	.25	.09	.54
E1256	46	6.8	.25	.09	.54

*Indicates miniature bayonet base.
**Indicates small round bulb.

MAZDA FLASHLIGHT BULBS

Stock No.	Lamp No.	Cell	Volts	Amp.	Price Each	Box of 10
E1262	223	2	2.2	0.25	\$0.09	54c
E1263	233	2	2.3	0.27	.09	54c
E1264	13	3	3.8	0.30	.09	54c
E1265	14	2	2.5	0.30	.09	54c
E1266	31	5	6.2	0.30	.11	65c
E1267	136	1	1.3	0.60	.10	59c
E1268	248	2	2.4	0.80	.11	65c

KENRAD 6, 12 & 32 VOLT LIGHT BULBS



G.E. licensed bulbs of superior construction providing maximum efficiency and economy. Designed for storage battery lighting systems. Ideal for farms, camps, trailers, etc. Provide excellent light with maximum efficiency and economy.

6 VOLT LAMPS

No.	Watts	Drain	EACH
E890	15	2.5 Amp.	25c
E891	25	4.2 Amp.	35c
E892	50	8.5 Amp.	35c

12 VOLT LAMPS

No.	Watts	Drain	EACH
E893	15	1.7 Amp.	30c
E894	25	2.1 Amp.	40c
E895	50	4.5 Amp.	40c

32 VOLT LAMPS

No.	Watts	Drain	EACH
E897	15	.45 Amp.	23c
E898	25	.78 Amp.	25c
E899	50	1.6 Amp.	25c

WRITE FOR QUANTITY PRICES

See pages 45-47 for a complete listing of 6 Volt Light Plants and associated equipment.

GENERAL ELECTRIC NEON GLOW LAMPS



Genuine G. E. neon gas lamps. Useful in many test instruments such as Weston and Tohe, etc. Can be used to build short and leakage testers. Will fill many other purposes such as light source for stroboscopes, night lights, etc. Both electrodes glow on A.C.; only negative glows on D.C. For 105 to 120 volt operation.

E6454. MIDGET 1/4 WATT. Candelabra Base. Pear shape clear bulb for tube testers. 3/16" diam. Split cone electrode. **36c**

E6457. MIDGET 1/4 WATT. Bayonet Base. Will exactly replace bulb in Tohe Neon Condenser Tester. Tubular clear bulb. **41c**

E6452. MEDIUM 1/2 WATT. Edison Base. 1/8 C.P., .005 Amp. Round 1 1/4" dia. For A.C. only. Split cylinder electrode. **36c**

E6451. MEDIUM 1 WATT. Edison Base. 1 C.P., .010 Amp. Round 1 1/4" dia. Spiral electrode. See right hand cut above. **36c**

E6450. MEDIUM 2 WATT. Edison Base. 1/2 C.P., .020 Amp. Pear shape. 1 3/4" dia. Split-disc electrode. **45c**

E6453. MEDIUM 3 WATT. Edison Base. Round electrodes. An ideal night light. Excellent for test panel. **54c**

PORCELAIN SOCKETS



Designed for neon lamps. Highest quality porcelain construction. Handy screw terminals for easy connection.

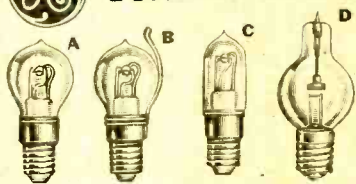
E6459. Edison Base. Clear mounting type. NET EACH **10c**

E6460. Edison Base. Sub-panel mounting. NET EACH **16c**

E6461. Candelabra Base. Sub-panel mounting. NET EACH **28c**



GENUINE G.E. TUNGAR BULBS



The well-known, highly efficient G.E. Tungar Bulbs. Used in many standard chargers. Will replace Rectifon bulbs of the same rating.

No. Type Fig. NET EACH

E6440 2 Amp. A **\$2.94**
E6441 2 Amp. B
(Top Connection) C

E6442 6 Amp. D
List. Each. \$4.00.

E6443 5 Amp. D **\$4.41**
E6444 6 Amp. D **\$4.41**
List. Each. \$6.00.

E6445 15 Amp. D **\$8.82**
List. Each. \$12.00.

MALLORY BIAS CELL

Designed to furnish initial bias for RF, IF and AVC tubes. Size, only 1 1/2" x 3/8". Noiseless; non-reactive at audio frequencies. Provides a no-current potential of 1 or 1 1/2 Volt ± 10%. May be used in series for higher bias voltage. Greatly eliminate distortion caused by conventional bias arrangements.

E11939. 1 Volt Type **18c**
E11871. 1/2 Volt Type

BIAS CELL HOLDERS

E11946. For one cell. NET **6c**
E11947. For two cells. NET **12c**
E11948. For three cells. NET **15c**
E11949. For four cells. NET **21c**

Everything for the RADIO SERVICEMAN

In the following pages ALLIED brings you the most extensive selection of service instruments and replacement parts ever offered in a single catalog. Whether you are setting up a new shop or adding to your present equipment, you can make your entire selection here—quickly and economically. Let ALLIED help you to save and to earn more.

Easy time payments on TEST EQUIPMENT

Get the test equipment you want NOW and let it earn for you as you pay! Most of the instruments listed in this section are available on easy Time Payment Terms through ALLIED. Write for application blank, specifying the models you want. Then watch your new equipment pay for itself through increased business and bigger profits.

NEW SUPREME "Speed" TEST INSTRUMENTS



COMPLETE LABORATORY

The four new Supreme "Speed" test instruments are also available housed in a Service Laboratory Rack. The complete unit consists of the Models 592 Set Tester, 593 Analyzer, 594 Tube Tester, and 596 Substitution Box. No other service instruments offer so many features, so many new improvements, such great convenience at such a low cost. The rack is beautifully finished in baked enamel with chrome trim. It occupies less than one square foot of bench space. Has a large, handy drawer at bottom. Rack measures 25½" high, 9" wide, 11" deep at bottom and 6" at top. Shpg. wt., 35 lbs.

E10975. Complete Lab. **\$89.42**
NET CASH PRICE.....

E10976. Lab. Rack Only. NET. \$9.80

E10977. Blank Panel. 8½"x14½".
NET CASH PRICE..... 34c

E10978. Blank Panel. 8½"x18½".
NET CASH PRICE..... 49c

E10979. Set of 5 Converters. For use with Model 594 Tube Tester. NET. \$2.94

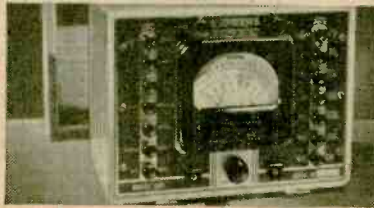
CASES AND TRAYS ONLY

E10988. Portable open oak tray for Model 593 or Model 596. NET. \$2.11

E10989. Portable oak carrying case for Model 592 or Model 594. NET. \$3.43

E10990. Portable oak case for 1-592 or 594 and 1-593 or 596. NET. \$5.39

E10991. Portable oak case for 592 and 594 and 1-593 or 596. NET. \$6.96



MODEL 592 SET TESTER

This model features an exclusive, new push-button switching circuit of advanced design. The 14 push-buttons control a total of 47 ranges which are available through two pin jacks. Ranges are as follows: 0-3.5-7-35-140-350-700-1,400 volts D.C., either at 1,000 or 25,000 ohms per volt; 0-0.7-7-7-35-140-350 mls D.C.; 1.4-14 amps D.C.; 0-500-5,000-50,000-500,000 ohms; 0-5-50 megohms; 0-3.5-7-35-140-350-700-1,400 volts A.C.; and -10 to +46 D.B. in 5 ranges. A push-button permits using A.C. voltage scales as an output meter. Case size, 9"x7½"x6½". Shpg. wt., 11 lbs.

E10980. In Case. **\$40.18**
NET CASH PRICE.....

E10981. Less Case.
NET CASH PRICE..... \$36.75



MODEL 594 TUBE TESTER

The Model 594 uses only one octal socket but is so designed that you can test all tubes by means of your own analyzer plug and cable or the Model 593 Analyzer. Any one mil movement meter may be used with the 594. The instrument gives a positive 4-way check on all receiving tubes for (1) opens, (2) shorts, (3) leakage, and (4) quality, with special tests for rectifiers and multi-element tubes. The 594 comes complete with full instructions and a chart listing over 600 tube tests. Size of case, 9"x7½"x6½". For 100-130 volts 60 cycles. Shpg. wt., 12 lbs.

E10982. In Case. **\$25.48**
NET CASH PRICE.....

E10983. Less Case.
NET CASH PRICE..... \$22.05



MODEL 593 ANALYZER

For the first time there is now available an all-push-button-controlled analyzer. It is no longer necessary to waste valuable time using connectors and twin jacks. Simply connect your multimeter to the two pin jacks on the 593, place analyzer plug in the set's socket, place the set's tube in the 593 and you can quickly and easily make voltage or resistance measurements between any two tube elements or current measurements in any tube element. Two push-buttons are pressed to obtain any reading. No special instructions are necessary. It's as easy to operate as ringing a door bell. Case size, 9"x14"x4½". Shpg. wt., 7 lbs.

E10984. In Case. **\$14.36**
NET CASH PRICE.....

E10985. Less Case.
NET CASH PRICE..... \$12.25



596 SUBSTITUTION BOX

The Model 596 Substitution Box is an extremely handy service instrument used to determine accurately the proper values of resistance and capacity for replacement work. Unit contains five fixed resistors having values of 25,000, 100,000, 250,000 ohms, 1 megohm, and 5 megohms; and a variable 25,000 ohm resistor. All of these resistors are available by means of push-buttons. Condenser values of 1, .5, and 3 MFD are also obtained through three push-buttons. All ranges are brought out to tip jacks and both resistance and capacity can be used at the same time. Case measures 9"x14"x3¾". Shpg. wt., 5 lbs.

E10986. With Case. **\$10.68**
NET CASH PRICE.....

E10987. Less Case.
NET CASH PRICE..... \$8.57

TIME PAYMENT TERMS FOR ABOVE INSTRUMENTS

E10975. Complete Speed-Service Laboratory.	\$8.36 down, \$8.36 monthly for 11 months.
E10980. Model 592 Set Tester in Portable Case.	4.51 down, 4.51 monthly for 9 months.
E10981. Model 592 Set Tester less case.	4.12 down, 4.12 monthly for 9 months.
E10982. Model 594 Tube Tester in Portable Case.	4.09 down, 4.09 monthly for 6 months.
E10983. Model 594 Tube Tester less case.	4.12 down, 4.12 monthly for 5 months.
Combination Models 592 and 593 in one Portable Case—	
NET CASH PRICE, \$54.39.	TIME PAYMENT TERMS: 5.09 down, 5.09 monthly for 11 months.
Combination Models 592, 593, and 594 in one Portable Case—	
NET CASH PRICE, \$78.01.	TIME PAYMENT TERMS: 7.30 down, 7.30 monthly for 11 months.

New SUPREME Test Equipment

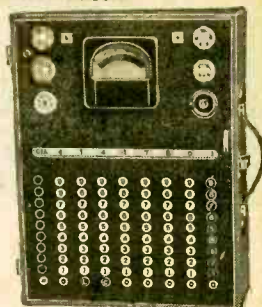
SUPREME "ZEPHYR" PUSH-BUTTON TUBE TESTERS



MODEL 506 COUNTER MODEL

This Model has been designed particularly for counter use. Because of the extreme simplicity of its operation, anyone can use it. The large illuminated double-scale dial is easily read from both sides of the counter. Your customers will get a thrill from being able to test their own radio tubes. The beautifully finished case measures 12½" x 6¼" x 21½". For 110 V. 60 cycles. Shpg. wt., 30 lbs. **\$58.31**

E10226. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$5.46 down, \$5.46 monthly for 11 months.



MODEL 506 PORTABLE TYPE

The Model 506 Portable is exactly the same as the Counter Model except that the flat panel is mounted in a sturdy, attractive quartered-oak carrying case with a leather handle. While designed primarily for portable service work, the removable cover permits its use on the counter. The meter utilizes a single scale dial. Case measures 13" x 16¼" x 5½". For 110 V. 60 cycles. Shpg. wt., 24 lbs. **\$58.31**

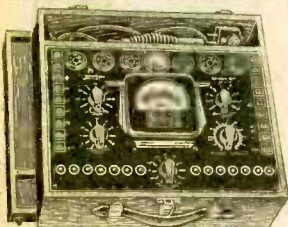
E10227. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$5.46 down, \$5.46 monthly for 11 months.



MODEL 501 TUBE TESTER

The 501 is an improved, compact, light weight, portable tube checker of exceptional accuracy. Five possible tests are available with this instrument: (1) inter-element leakage between any two tube elements, (2) open element test in each tube element, (3) short check between any two elements, (4) quality test of complete tube elements, and (5) separate checks for rectifiers and diodes. The 501 is protected from obsolescence by the "Floating Filament" selector which can apply filament voltage to any two pin terminals. Tubes such as the 6P7, 6A5, 5X4, 5Y4, etc., are quickly and easily tested. Extra adapters are not required. The 501 tests M, G, M-G, octal, non-octal, plain and spray-shield types and also BR, BH, OZ1, etc., gas rectifiers and all magic eye types. The new, highly accurate 4" square meter has an English-reading "Good-?-Bad" scale. Real sapphire bearings are used. The large over size transformer prevents sudden voltage changes when tubes of different filament ratings are being tested. The bronze panel and golden oak carrying case produce a professional appearance. Full instructions and a complete chart listing over 600 tubes are included. Size of case is 9¼" x 13 x 1½". Weight, 22 pounds. For 100-130 volts, 60 cycles A.C. Special voltages and frequencies at slightly higher prices. Write for quotations. Shpg. wt., 15 lbs. **\$36.21**

E10267. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$4.07 down, \$4.07 monthly for 9 months.



MODEL 502 RADIO TESTER

Two complete instruments in one—a radio set tester and a tube checker. The 502 permits five possible tube tests: (1) leakage between any two elements, (2) opens in any element, (3) short check between any two elements, (4) quality test of complete tube elements, and (5) separate tests for diodes and rectifiers. All quality tests are made at full rated load for highest accuracy. The obsolescence-proof "Floating Filament" feature permits testing such tubes as the 5X1, 5Y4, etc., without extra adapters. The 502 tests all M, G, M-G, octal, non-octal, gas rectifiers and magic-eye tubes. Readings are on a large, highly accurate "Good-?-Bad" scale. Sensitivity of meter is 1,000 ohms per volt. Ranges are: 0-7-140-350-1400 volts A.C. and D.C.; 0-200-2000-20,000 ohms; 0-2-20 megohms and four output ranges. Leakage of electrolytic condensers is read directly on the "Good-?-Bad" scale. A sensitive Neon bulb is used for testing paper and mica condensers. The low ohm-meter range reads 3.5 ohms center scale. First division is 0.1 ohm. The 502 is housed in a white oak case, 10¼" x 14½" x 5" and weighs only 16 pounds. The panel is finished in bronze giving the instrument a truly professional appearance. Complete with all accessories and full instructions. For 100-130 volts, 60 cycles A.C. Shpg. wt., 20 lbs. **\$48.95**

E10263. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$5.50 down, \$5.50 monthly for 9 months.

MODEL 502-S. Similar to the 502 described above but with a 25,000 ohm per volt supersensitive meter using a Cobalt magnet. Ideal for testing A.V.C., A.F.C., and similar circuits where current drain is an important factor. **\$53.85**

E10261. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$6.05 down, \$6.05 monthly for 9 months.

542 POCKET MULTIMETER

The new Model 542 Multimeter is a compact, yet highly versatile instrument. Conveniently located pin-jacks provide the following ranges: 0-3-0-30-150 M.A. D.C.; 0-6-150-300-1,500 volts D.C.; 0-0-30-150-600 volts A.C. and output; 0-2,000-20,000-200,000 ohms and 0-2 megohms; —6 to +50 D.B. in 4 ranges. The accurate 3" square meter is provided with a knife-edge pointer for easy readings. Sensitivity of meter is 5,000 ohms per volt. The 3¼" x 6" x 2¾" molded bakelite case is small enough to slip into a coat pocket. All ohmmeter ranges operate from self-contained batteries. Shpg. wt., 4 lbs. **\$15.97**

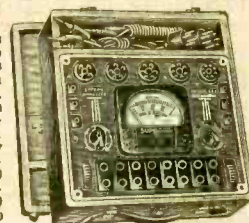
E10228. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$4.73 down, \$4.73 monthly for 3 months.



551 ANALYZER

The new Model 551 analyzer permits fast and accurate checking of all radio circuits through the use of Supreme's exclusive "Free Reference Point System of Analysis." All resistance, voltage, and current measurements may be taken between any two tube elements or between any tube element and chassis. All multimeter ranges are read directly on the new type square flush-panel meter. Meter ranges are 0-7-140-350-1400 volts D.C. (at 1000 ohms per volt); 0-7-140-350-1400 volts A.C. 0-1-7-35-140 mils D.C.; 0-7-30-140-350-1400 ohms output; and 0-200-2,000-20,000 ohms, 0-2-20 megohms. For use on 110-125 volts, 60 cycles only. Housed in an oak carrying case. Complete with all leads, cables, adapters and full operating data. Shpg. wt., 15 lbs. **\$38.17**

E10268. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$4.29 down, \$4.29 monthly for 9 months.



MODEL 551S. The 551S is identical to the 551 except that it is equipped with an ultra-sensitive 25,000 ohm per volt meter. Features a 40 microampere D.C. range instead of the 1 mil range. **\$43.07**

E10248. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$4.84 down, \$4.84 monthly for 9 months.

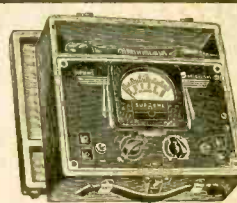
541 MULTIMETER

The 541 is one of the most efficient Set Testers available. An indexed rotary switch selects the 21 ranges as follows: 0-7-140-350-1400 volts A.C. and D.C. at 1000 ohms per volt; 0-1-7-35-140 mils D.C.; 4 output meter ranges; 0-200-2000-20,000 ohms and 0-2-20 megohms. The megohm scales are operated from a self-contained power supply. Low ohms range reads 3.5 ohms at center scale. Quartered oak case, 7¼" x 10½" x 4½". Complete with all accessories. For 110-125 volts, 60 cycles A.C. Shpg. wt., 12 lbs. **\$26.41**

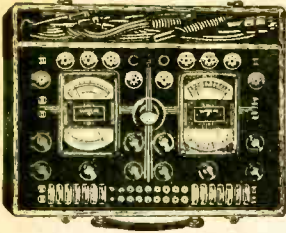
E10269. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$3.70 down, \$3.70 monthly for 7 months.

MODEL 541S. The 541S is identical to the 541 except that it is equipped with an ultra-sensitive 25,000 ohm per volt meter. Features a 40 microampere D.C. range instead of the 1 mil range. **\$31.31**

E10249. NET CASH PRICE.
S.I.C. TIME PAYMENTS: \$3.90 down, \$3.90 monthly for 8 months.



New SUPREME Test Equipment



585 DE LUXE DIAGNOMETER

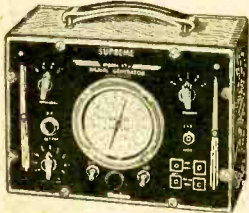
- A Complete Portable Laboratory.
- Double-view Illuminated Meters.
- Full Analysis of Every Circuit.
- Tube Tests on "Good-Bad" Scale.
- Forty-two Multimeter Ranges.
- 5 Decibel Ranges -10 to +46 DB.

A truly advanced professional service test instrument. Makes quick and accurate checks of all circuits and components; also tests every type of metal or glass tube. All measurements of resistance, voltage, current, capacity, power level, etc., as well as tube and condenser tests, are read directly from 2 sensitive D'Arsonval meters and multiple scales. Tube and condenser leakage checked by direct-reading "Good-Bad" scales.

FORTY-TWO FUNCTIONS AND RANGES

Meters are accurately calibrated to read: 0-7-35-140-350-700-1400 A.C. or D.C. volts, or D.C. M.A.; 0-14 D.C. amperes; 0-200-2,000-20,000-200,000 ohms; 0-2-20 megs.; 0-07-.35-1.4-3.5-7-14 mfd.; -10 to +5, 0 to +10, +10 to +20, +20 to +35, +30 to +46 D.B. A.C. and capacity ranges are read from evenly spaced scales for accuracy. The Model 585 incorporates Supreme's exclusive Free Reference Point Analysis system that checks every circuit and tests all tubes for opens, leakage and shorts. Oak-finished case, 21"x16"x7". With all charts, accessories, etc. For 98-125 volts, 60 cycles A.C. Shpg. wt., 40 lbs.

E10250. NET CASH PRICE **\$9500**
S.I.C. TIME PAYMENTS: \$8.89 down, \$8.89 monthly for 11 months.



570 SIGNAL GENERATOR

Covers from 125 K.C. to 60 M.C. in 8 bands. Fundamentals cover 90 K.C. to 15 M.C.; harmonics cover 15 M.C. to 60 M.C. Has directly calibrated airplane dial. Unusual stability is afforded by use of electron-coupled oscillator and complete circuit shielding; not affected by varying load or line voltage. Provides modulated or un-modulated signal; tip-jacks furnish 400 C.P.S. audio. With tubes, accessories, etc. Size, 10 1/2"x8 1/2"x4 1/2". For

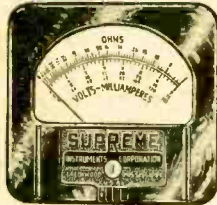
110-125 volts, 60 cycles A.C. Shpg. wt., 20 lbs. **\$3130**
E10256. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$3.90 down, \$3.90 monthly for 8 months.



520 UNIVERSAL A.C. BRIDGE

Here is a sensitive, accurate Universal Bridge that will speed up your work and solve many of those difficult repair jobs. The 520 provides the following ranges: 1 Mill to 10 H in 4 ranges; 100 MΩ to 100 MΩ in 6 ranges; 1 ohm to 10 megohms in 7 ranges and 0 to 100% for measuring power factor. A sensitive neon bulb checks condenser leakage. The 675 radial target eye is used as a null indicator. Golden oak case measures 8 3/4"x11 1/2"x6 1/2". Panel is beautiful antique bronze. For 110 V. 60 cycles. Other frequencies at slight ad

ditional cost. Shpg. wt., 18 lbs. **\$3817**
E10229. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$4.29 down, \$4.29 monthly for 9 months.



512 METER KIT

The meter used in this kit has a sensitivity of 25,000 ohms per volt. Ideal for measurements in A.V.C., A.F.C., and other circuits where current is an important factor. The precision Westinghouse meter features accurately ground pivots, genuine sapphire bearings and heavy, solid forged magnets.

THIRTY RANGES

The ranges of this kit are as follows: 0-7-35-140-350-700-1400 volts A.C. and D.C.; 0-7-35-140-350-700-1400 mls. D.C.; 6 A.C. output meter range; 0-200-2,000-20,000 ohms; 0-2-20 megohms and 0-40 microamperes D.C. The five ohmmeter ranges are obtained through one 45 volt battery. The low 200 ohm range has 0.1 ohms as first indication and 3.5 ohms center scale. Complete with instructions. Wt., 12 lbs.

E10225. NET **\$1955**

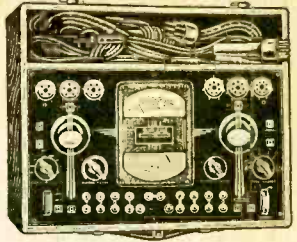
MODEL 511 FOUNDATION KIT

One mill meter with long, easily read scales: 0-7-35-140-350-700-1400 volts A.C. and D.C.; 0-1-7-35-140-350-700-1400 D.C. mls.; 6 output ranges up to 1400 volts A.C.; 0-2,000-20,000-200,000 ohms and 2 megs. Kit includes resistors, switches, rectifier, condensers, knobs, and complete instructions with diagrams. Shpg. wt., 12 lbs.

E10257. NET **\$14.65**

550 DE LUXE RADIO TESTER

- Free Reference Point Analyzer.
- Tests All Metal and Glass Tubes.
- Twenty-nine Multimeter Ranges.
- Completely Tests All Circuits.
- Indirectly Illuminated Meter.
- Tests All Condensers.

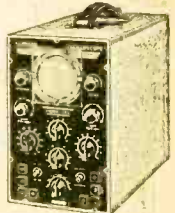


This new Supreme test instrument is a combination set analyzer and point-to-point tester. Provides complete circuit analysis of resistance, voltage and current as well as tube tests directly from tube sockets in set. All meter ranges are supplied through the analyzer cable making it unnecessary to change the chassis from the cabinet. Meter ranges are: 0-7-35-140-350-700-1400 V. A.C. and D.C. at 1000 ohms per volt; 0-1-7-35-140-350-700-1400 M.A. D.C.; 0-14 Amperes (external only); 0-2,000-20,000-200,000 ohms and 0-2-20 megohms; -10 to +6, 0 to +10, +10 to +20, +20 to +30 and +30 to +46 D.B.; 6 output ranges; electrostatic capacity meter 0.07-.35-1.4-3.5-7-14 mfd.; electrolytic capacity meter 0-3.5-7-14 mfd. Leakage of electrolytic condensers reads directly on meter dial; makes electrostatic leakage test; all electrolytic condensers can be tested at rated working voltage. Size, 7x14x18 3/4". Complete with test prods, cable and plus. adapters, charts and complete instructions. For 110-125 volts, 60 cycles A.C.

Shpg. wt., 30 lbs. **\$5483**
E10254. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$6.16 down, \$6.16 monthly for 9 months.

MODEL 546 3-INCH OSCILLOSCOPE

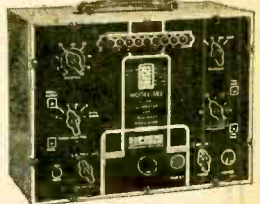
This instrument is a real necessity in every up-to-date service shop and laboratory. It is indispensable for servicing modern receivers. Its use will permit you to turn out the highest quality work in the shortest possible time. Customers will be glad to pay extra for this service. Inter-mittent operation of a set, hum, sensitivity, overload, waveform, distortion, etc., are quickly and easily checked with the 546. A complete set of plainly marked controls is conveniently mounted on the front panel. Both amplifiers are flat up to 90,000 cycles. The sweep oscillator is linear from 15 to 30,000 cycles. A special synchronizing control holds image absolutely stationary on the screen. Sensitivity of vertical plates .32 volts per inch, horizontal plates .48 volts per inch. An exclusive feature of the 546 is the return-trace eliminator. The instrument is housed in a finely finished oak case with a beautiful bronze panel. Complete with tubes, accessories, calibrated screen, and instructions. For 110-125 volts, 60 cycles



A.C. Shpg. wt., 25 lbs. **\$5875**
E10258. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$5.50 down, \$5.50 monthly for 11 months.

582A PUSH-BUTTON SIGNAL GENERATOR

The 582A frequency modulated signal generator is the first on the market to offer push-button tuning. Five popular I.F. and four broadcast frequencies are instantly available at the touch of a button. This greatly simplifies and speeds up alignment work. The stabilized electron-coupled oscillator circuit covers from 85 K.C. to 15 M.C. on fundamentals and up to 60 M.C. on harmonics in 5 bands. The dial has an effective scale of 8 feet. A hair-line shadow indicator eliminates parallax. An illuminated dial shows only the band and frequency to which generator is tuned. Permanently-tuned iron-core inductors and air-tuned trimmers assure maximum stability and accuracy. Four outputs are available: unmodulated R.F.; frequency-modulated R.F.; amplitude-modulated R.F.; and a 400 cycle audio note. Special shielding permits attenuation down to 1/2 microvolt. The attenuator is marked for microvolt output so that gain per stage measurements can be made. Measures 15 1/2"x8 1/2"x12 1/2".



For 110 V. 60 cycles. Shpg. wt., 34 lbs. **\$6560**
E10213. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$6.14 down, \$6.14 monthly for 11 months.

MODEL 582 SIGNAL GENERATOR

Incorporates all the features of the Model 582A described above, but does not include the push-button control. Size 15 1/2"x8 1/2"x12 1/2". Shpg. wt., 37 lbs.

E10214. NET CASH PRICE **\$58.75**
S.I.C. TIME PAYMENTS: \$5.50 down, \$5.50 monthly for 11 months.

SPECIAL COMBINATION PRICES

Model 582A Signal Generator and Model 546 Oscilloscope. **\$124.35**

E10238. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$11.63 down, \$11.63 monthly for 11 months.

Model 582 Signal Generator and Model 546 Oscilloscope. **\$117.50**

E10239. NET CASH PRICE
S.I.C. TIME PAYMENTS: \$11.00 down, \$11.00 monthly for 11 months.

Modern TEST EQUIPMENT

NEW AEROVOX CAPACITY AND RESISTANCE BRIDGE



Regardless of what other test equipment you may have, here is an instrument you cannot do without. It has not only proved its superiority as a condenser and resistance bridge, but in addition, it is a universal instrument of many functions. Its components are utilized for other measurements and tests. The essential properties of condensers such as capacity, leakage, power factor, etc., are measured under actual operating conditions. The polarizing voltage which is applied to the condenser under test is read directly on the voltmeter.

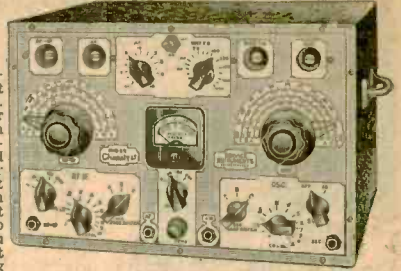
WIDE CHOICE OF RANGES

Six ranges from 100 MMF to 100 MF are provided. The resistance bridge will accurately and quickly measure values from 10 ohms to 1 megohm. Insulation resistance of condensers, wires, etc., can be measured up to 10,000 megohms on the directly calibrated meter scale. The instrument also includes a vacuum-tube voltmeter with an amplifier stage and a detector. Extremely useful in measuring voltages in circuits where current drain is an important factor. Other meter ranges are: 0-60-300-600 volts D.C. at 1,000 ohms per volt; 0-6-60 mils D.C., and 0-60 millivolts. A continuously variable power supply from 15 to 600 volts D.C. is available for testing condensers or for external use. The 270° linear capacity dial spreads calibrations for easy readings. Instrument is housed in a natural finish, red gumwood case with a slip-hinged cover. Has rubber bumpers on side and bottom. Complete with tubes. Size: 10 1/2" x 7 1/4" x 8". For 110 V. 60 cycles. Shpg. wt., 11 lbs. **E10173. NET \$35.03**

THE REVOLUTIONARY RIDER "CHANALYST"

THE GREATEST ADVANCE IN THE HISTORY OF SERVICE INSTRUMENTS

Due to the fundamental design of this instrument, it is now possible for the first time to test receivers under theoretically ideal conditions. You can now localize troubles in a particular stage or part of a receiver or amplifier with greater speed and more efficiency than ever before. This is true no matter how complicated the circuit may be and regardless of the number or types of tubes used. Locating defects in a set is much more difficult and time-consuming than repairing them. By actual tests, the Chanalyst cuts down the time necessary to analyze radio trouble to an unbelievably low minimum. You can check the signal at any point in the circuit without disturbing operation of set. All testing is done without the use of any plugs or adapters.



HAS 5 SEPARATE CHANNELS

The instrument has 5 separate and independent channels: R.F., I.F., A.F., oscillator, and operating voltage channels. Also includes a wattmeter and a very high resistance input voltmeter. Zero position of voltmeter needle is at center of scale. Ranges are: -5 to +5, -25 to +25, -100 to +100 and -500 to +500 at 2 megohms per volt. This meter permits measuring actual bias voltage at the control grid of a tube without upsetting normal operation of the receiver. The meter is also suitable for measuring D.C. operating voltages as well as D.C. control voltages developed by the signal, such as AFC, AVC, etc. These voltages can all be taken without breaking into the circuit. Another important feature of this instrument is its ability to locate intermittent reception in a set. The Chanalyst shows up this type of trouble definitely the first time there is no guess-work. The beautifully finished case measures 14" x 9" x 9 1/4". For 110 volts 60 cycles. Shpg. wt., 30 lbs. **E10224. NET CASH PRICE \$107.50**

CHANALYST FEATURES

- Traces signal through entire set showing when it exists, dies, weakens, or distorts.
- Checks actual operating voltages at any point in the set without loading the circuit.
- Checks control voltages without interfering with the set's normal operation.
- Accurately checks frequency output of the oscillator section in a superhet.
- Quickly and easily locates troubles in intermittent receivers.

The test channels which are available in the Chanalyst provide a means of separating a complete receiver into 5 basic sections. Each of these sections has its own indicator. When a breakdown or intermittent condition develops, the indicators show the presence or absence of the signal in the various sections and also the change in wattage consumption and operating voltages. By interpreting the indications, you can quickly and easily localize the trouble. **WRITE FOR DESCRIPTIVE BOOKLET.**

TIME PAYMENTS: \$10.75 DOWN, \$13.30 MONTHLY FOR 8 MONTHS.

NEW DEPENDABLE TEST INSTRUMENTS

800 TUBE & SET TESTER

Here is the answer to the serviceman's demand for a versatile instrument at a price he can afford to pay. The 3 1/4" square, bakelite case meter has a sensitivity of 1,000 ohms per volt and 2% accuracy. An R.M.A.-approved tube-testing circuit checks all types of tubes, including gas rectifiers and ballasts. A sensitive neon bulb indicates leakage between any two tube elements within the tube is hot. Line voltage control continuously variable. The multitester circuit has 25 ranges as follows: 0-5-50-0-1-10-100-1,000 M.A. D.C.; 0-500-5,000 +55 D.B. and 4 output voltage ranges. Condenser leakage is easily checked. The portable case with hinged-top measures 12 1/2" x 10 1/4" x 5". For 110 V. 50-60 cycles. **E10161. NET \$27.39**

MODEL 307 TUBE TESTER

The Model 307 is one of the finest, low-priced tube testers on the market today. All tubes are tested under voltages and loads as recommended by the R.M.A. and all the leading tube manufacturers. Tests all metal, glass, metal-glass, spray-shield, cold-cathode rectifiers, and ballast tubes. A separate ballast tube chart is supplied with the instrument. The sensitive neon bulb accurately indicates shorts and leakage between individual elements while the tube is hot. Separate tests of each section of full-wave rectifiers, duo-diodes, and multi-purpose tubes are readily made. The accuracy of calibration has been carefully checked against a laboratory standard mutual conductance instrument. The 3" square D'Arsonval meter has an accuracy of 2%. A direct-reading "Good-Bad" calibrated scale is used to permit the matching of power tubes. Model 307C measures 9" x 12" x 5". Shpg. wt., 3 lbs. Model 307P measures 11 1/4" x 12" x 7". Shpg. wt., 10 lbs. For 105-135 V. 50-60 cycles. (220 V. 50-60 cycles, \$1.00 extra) **E10164. MODEL 307C. COUNTER MODEL. NET \$16.61**
E10165. MODEL 307P. COMBINATION COUNTER AND PORTABLE MODEL. NET \$18.57



SIGNAL GENERATOR MODEL 701

The Model 701 is continuously variable from 125 K.C. to 15 M.C. on fundamentals and to 60 M.C. on harmonics. The 4 1/2" full-vision dial is direct-reading. No charts or tables are required. Output can be modulated 30% at 400 cycles. This 400 cycle supply is also available for testing vacuum tubes at output of 6 volts. Special lead-coated steel case and perfect shielding of parts eliminate all leakage. Automatic shorting of coils in use prevents dead spots. Attenuator is calibrated from 1 micro-



volt to 1/2 volt. 8" x 11 1/4" x 5". For 110 V. 50-60 cycles. **E10162. NET \$25.43**

AC-DC MULTITESTER

MODEL 444

The 444 gives you 22 complete instruments in one compact case. A large 3 1/4" D'Arsonval meter provides the following ranges: 0-5-50-1,000 volts A.C.; 0-100-500-500-0-500-1,000 volts D.C. at 1,000 ohms per volt; 0-1-10-100 mils D.C.; -12 to +54 D.B. in 4 ranges and 4 output ranges same as A.C. volts. The 3 ohm meter ranges can be zero-adjusted without using test prods. Size: 8 1/2" x 7" x 3". Complete with self-contained batteries. Shpg. wt., 4 lbs. **E10166. NET \$9.75**



MODEL 409 MULTITESTER

The sensitive, 2000 ohms per volt 5" fan-type meter has an accuracy to within 2%. Ranges are as follows: 0-5-50-1,000 volts A.C. and D.C.; 0-500 microamperes D.C.; 0-5-50-500 D.C. milliamperes; 0-5 D.C. amperes; 0-1,000-7,500-75,000 ohms; 0-7.5 megohms; -10 to 40 db in 4 ranges and 0-5-50-500-1,000 output voltage ranges. The low range ohmmeter reads 2 ohms at center of scale permitting measurements as low as a few hundredths of an ohm to be made. The exclusive system of A.C. measurements is as accurate at 20,000 cycles as at 60 cycles. **E10163. NET \$17.59**



432 TROUBLE SHOOTER

Here is an instrument that is priced lower than any other type of D'Arsonval volt-ohm-milliammeter. The 432 has the following ranges: 0-5-50-500-1,000 volts D.C. at 1,000 ohms per volt; 0-500-50,000-500,000 ohms with self-contained batteries; and 0-1-10 mils D.C. Center scale reading of low-range ohmmeter circuit is 10 ohms. Not necessary to use test prods for zero-adjusting the 3 ohm-meter ranges. Has an attractive etched panel and a welded steel case with moroccco finish. Size: 5 1/2" x 3" x 2 1/4". Shpg. wt., 3 lbs. **E10167. NET \$5.83**



Readrite

TEST EQUIPMENT

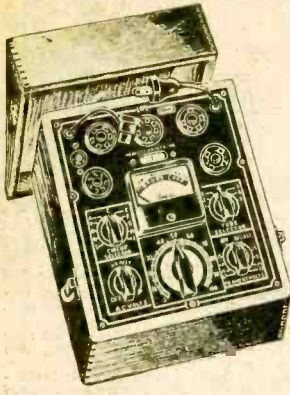
NEW MODEL 432 TUBE TESTER

The Readrite Model 432 is a brand new tube tester incorporating many desirable features. It uses a square 2" Triplet meter with a 3-color "Good-Bad" direct-reading scale. A separate shadow-type A.C. meter permits accurate line voltage adjustments. An emission type circuit is used for its reliability and ease of operation. The proper voltages and load values, as specified by the R.M.A. and the tube manufacturers, are applied to the tube under test. This assures that the final reading will show definitely the true condition of the tube.

TESTS ALL TUBES AND BALLASTS FEATURES A NEON SHORT TEST

The Model 432 quickly and accurately checks metal, glass, sprayshield, metal-glass, gas rectifier, and ballast tubes. Separate plate tests can be made on diodes and rectifiers: A sensitive neon bulb determines the slightest inter-element leakages and shorts. Testing procedure is extremely simple as there are only 5 operations. These are: A.C. line voltage adjustment, filament voltage for tube, circuit selector, tube selector, and shunt control. Up-to-date, revised tube charts are furnished free of charge to all registered owners as new tube types appear on the market. The attractive quartered oak case is provided with a handle and a removable cover which makes it suitable for either counter or portable work. Size of case is 11"x8 1/2"x7". The durable panel is etched in silver and black. For 110 V. 60 cycle A.C. operation. Shpg. wt. 18 lbs.

E9909.
List, \$36.00. YOUR PRICE..... **\$21¹⁷**



431 TUBE TESTER

The Model 431 is an inexpensive, simple, direct-reading tube checker. It quickly and accurately tests all metal and glass tubes with the exception of ballast tubes. An improved emission type circuit is used which applies actual load values to the tube under test. The scale of the Readrite meter is plainly marked "Good-Bad." The meter is fully protected against overload.

An additional shadow-graph type meter is used for line voltage adjustments. The 431 will positively indicate the slightest leakages and all shorts. The 431 is housed in a beautiful quartered-oak case with removable cover and has a sloping panel etched in silver and black. Complete with coil, plug, and full instructions. Size, 9"x8 1/2"x7". For 110 V. 60 cycle A.C. operation. Shpg. wt. 18 lbs. One of the finest low-cost tube testers on the market today.

E9906.
List, \$26.50. YOUR PRICE..... **\$15⁵⁸**



READRITE POINT-TO-POINT ANALYZER MODEL 720-A

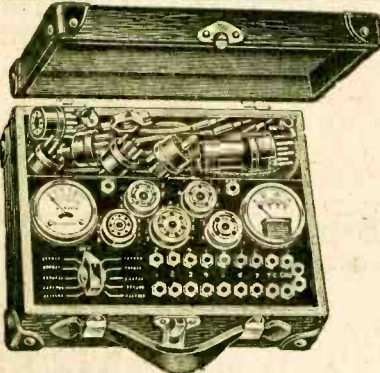
Designed to test all parts of all radio circuits including modern metal as well as glass tube types. Measures voltages and currents accurately in any tube circuit. Resistance, continuities, and capacities are also quickly measured. Break-in jacks in all tube circuits provide a means of obtaining all current and voltage measurements. Equipped with 8-conductor cable and plug with necessary adapters for plugging into any type tube socket. Has separate A.C. and D.C. meters which permit scale readings. Meters are accurate and exceptionally well-built to give long, dependable service.

TESTS METAL AND GLASS TUBE CIRCUITS

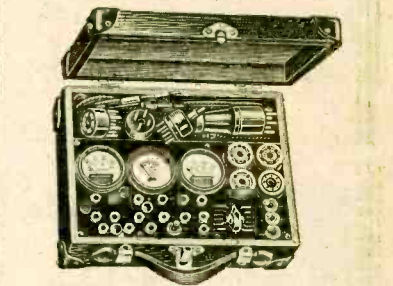
All meter ranges are available through a single pair of jacks. Selector switch quickly chooses proper scale on AC or DC meters. DC scales are: 0-15-150-300-600 Volts, 0-15-150 M.A.; AC scales are: 0-10-25-150-750 Volts. Complete analysis may be made without removing the receiver chassis from the cabinet. In leatherette case 11 1/2"x8". Wt., 10 lbs.

E9900. Complete with adapters, charts, and instructions. List, \$25.00.

YOUR PRICE..... \$14⁷⁰



READRITE ANALYZER MODEL 710-A



A new Readrite Standard Analyzer which completely and accurately tests all parts of all metal and glass tube receiver circuits. Meters may be connected into various parts of the circuit for testing plate, filament, grid, screen and line voltages and currents. A 1/2 volt battery is required for testing continuity and resistance of all resistors, chokes, transformers, etc., without removing the radio chassis from the cabinet. Charts are provided for use in testing condensers, and for measuring resistances up to 100,000 ohms. Meters are accurate to within 5%. A reliable low-priced test instrument for the small service shop. Will check voltage, current, capacity and continuity in any set and for any of the tubes in the set, whether A.C. or battery type. All switches and jacks are conveniently located on the front panel and are instantly accessible. A special built-in compartment is provided for housing the analyzer plug, cable, and adapters.

FOR ALL OCTAL AND GLASS TUBE CIRCUITS

Four sockets are provided to accommodate all metal and glass tubes. The analyzer cable is equipped with a small-size latch-type plug and adapters to fit all sets. The three meters provide the following readings: 0-20-60-300-600 Volts DC; 0-10-140-700 Volts AC; 0-15-150 M.A. DC. External jacks are provided for using these nine scales separately. 12 position selector switch connects the meters into various parts of circuit under test. Housed in a sturdy, attractive leatherette case, 11"x8 1/2"x4". Shpg. wt., 10 lbs. An excellent value in an accurate, quality-built, low-priced analyzer.

E9902. Complete with plug, cable, and instructions. List, \$27.50. YOUR PRICE..... **\$16¹⁷**

MODEL 712-A

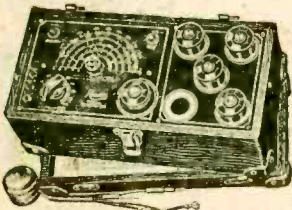
Same as 710-A described above, but with 1000 ohms per volt Triplet A.Arsenval DC meter. Voltmeter reads: 0-15-60-300-600 Volts. In leatherette case. Shipping wt., 11 lbs.

E9903. Complete with plug, cable, adapters and instructions. List, \$37.00. YOUR PRICE..... **\$21⁷⁶**

FLEXIBLE OPERATION

Will make complete point-to-point tests between all tube socket terminals by means of break-in jacks. Permits complete circuit checking as well as standard tests of voltage, current, and continuity. Easy to operate; extremely portable. A truly versatile instrument at a remarkably low price that will give exceptional service.

E9901. MODEL 730-A. Similar to the Readrite 730-A described above. Has precision Triplet DC voltmeter with 1000 ohms per volt sensitivity. Complete with all instructions. **\$18.23**



MODEL 554-A ALL-WAVE OSCILLATOR

This All-Wave Signal Generator is similar to the Model 557 at right but less direct-reading dial. Calibration charts are supplied for each of the five bands. Housed in a sturdy leatherette carrying case with removable hinged cover. Case measures 12 x 6 1/2 x 5 1/2". Shipped complete, ready to operate, with all necessary coils, tubes and batteries. Full operating instructions are included. Shpg. wt., 12 lbs.

E9904.
List, \$24.00. NET. **\$14.11**

READRITE-RANGER SIGNAL GENERATOR MODEL 557

The new completely shielded All-Wave Readrite-Ranger Oscillator. Improved plug-in coils are employed to give complete laboratory accuracy in each of the five ranges. Plug-in coil feature was adopted to eliminate all possibility of losses due to band selector switches. Designed to meet all present or future requirements, it will only be necessary to add new coils. Built is tube-modulated and completely operated by self-contained battery. All controls are on the front panel. Simple and easy to use. The small, compact size of this instrument makes it ideally suited for portable work away from the shop.

5 BANDS: 110-20,000 K.C.

Covers a range of 110 KC to 20,000 KC continuously variable over entire frequency range. Translucent dial pointer permits accurate settings at all frequencies. Additional coil may be added to increase range from 20,000 to 30,000 KC. Individual coils allow each range to be spread over the dial for accurate settings. Individual coil ranges are as follows: 110 to 295 KC; 275 to 840 KC; 820 to 2800 KC; 2500 to 8500 KC; 8000 to 20,000 KC. Features complete shielding against static and magnetic fields; effective attenuation and stability; strong signal strength, etc. Has on-off switch and jacks for minimum and maximum attenuation and ground. Accuracy 1% from 110 to 8000 KC, 2% for higher frequencies. Mounted in durable black leatherette covered case, 12"x6 1/2"x5 1/2".

E9905. Complete with coils, tubes and batteries. Shpg. wt., 12 lbs. List, \$31.50. NET. **\$18⁵²**

READRITE RANGER VOLT-OHM-MILLIAMMETERS

TRIPLETT METERS



AC-DC POCKET MODEL 736

The 736 is a brand new instrument at a remarkably low price. It is built around a highly accurate Triplett meter. Ranges are: 0-1-1.5-15-150 mils D.C.; 0-15-150-750 volts A.C. at 400 ohms per volt; 0-15-150-750 volts D.C. at 1,000 ohms per volt and 0-1,000-100,000 ohms. External batteries may be used for higher resistance

measurements. The sturdy, molded case measures 3 1/4" x 5 3/8" x 2 1/2". Panel is attractively finished in silver and black. All accessories including test leads, alligator clips, and complete instructions are supplied. Shpg. wt., 5 lbs.

E9910. List, \$20.00. NET.

\$11.76

CARRYING CASE

An attractive leather case with strap handle. For all above Testers. Ample space for tester and accessories.

E9920. NET

\$3.53

DC POCKET MODEL 735

A complete, handy Volt-Ohm-Milliammeter of convenient small size; may be easily carried in a coat pocket or in the tool kit. Meter is a Triplett D'Arsonval type instrument with 2% accuracy, with scales for reading 0-15-150-750 Volts D.C.; 0-1.5-15-150 M.A.; 5-1000-100,000 ohms. Housed in a sturdy case, measuring only 3 1/4" x 5 3/8" x 2 1/2".

Has black and silver panel. Supplied with battery, leads and test clips. Molded case. Shpg. wt., 4 lbs. E9919. List, \$18.00. NET



\$10.58

DC MODEL 737

Same as Model 735 but less selector switch. Ranges are obtained through jacks.

E10011. List, \$15.50. NET

\$9.11

VOLT-OHM-MILLIAMMETER MODEL 666

A new and improved service instrument built around a sensitive Microammeter movement. Will accurately indicate values of Volts, Ohms and Milliampers. Compensated copper-oxide rectifier provides measurement of A.C. voltages. Meter scale reads: 0-10-50-250-500-1000 Volts D.C.; 0-10-50-250-500-1000 Volts A.C.; 0-1-10-50-250 M.A. D.C.; 0-300-250,000 Ohms

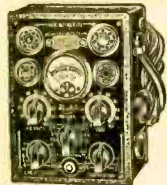


Higher resistance readings may be obtained with external battery. Meter sensitivity for both D.C. and A.C. voltages is 1000 Ohms per Volt. Panel carries three controls: A.C.-D.C. toggle switch, rotary meter-range switch, and zero ohms adjuster. Complete with battery, leads, alligator clips and instructions. Size 3 1/2" x 5 3/8" x 2 1/2". Wt., 4 lbs. E9928. List, \$22.50. NET

\$14.70

E9929. Model 669 Carrying Case. NET **\$3.59**

READRITE-RANGER PORTABLE INSTRUMENTS



MODEL 442 TUBE TESTER

The new Readrite Ranger Model 442 speedily and accurately checks all types of vacuum tube types, including ballasts. A standard emission type circuit is used which applies the correct load values to the tube under test. The plates of diodes and rectifiers are checked separately. A positive neon short test indicates all interelement shorts and leakages. The 4 flush-type sockets accommodate all tubes. A combination 5-6 prong socket is utilized to conserve panel space. The illuminated shadow-graph type A.C. meter is used for line voltage adjustments. It also serves to indicate that the tester is connected to the A.C. line. The 3 color Triplett meter scale is marked "Good-Bad" for easy reading. Case is finished in black wrinkle and measures 5 7/8" x 7 7/8" x 4 1/2". For 110 V. 60 cycle operation.

E10012. List, \$31.50. NET

\$18.52

540 SIGNAL GENERATOR

Supplies signals on 5 frequency bands from 110 to 20,000 kilocycles, all fundamentals. Plug-in coils are accurately calibrated. Guaranteed accuracy is better than 1% from 110 to 3,000 KC and better than 2% on short waves. The 12" vernier dial has a direct-reading, scale marked in KC. Provides either modulated or unmodulated signal. The 400 cycle audio signal is available separately. Stability of operation is assured by rigid mechanical construction and carefully designed circuits. Completely shielded against static or magnetic fields. One of the outstanding features of this instrument is the perfect attenuation. Equipped with necessary tubes, batteries and accessories. Fully-shielded; mounted in metal case 4 1/2" x 7 1/2" x 5 1/2". Shpg. wt., 11 lbs.

E9914. List, \$32.50. NET



\$19.11



640 FREE-POINT TESTER

This Free-Point Tester which is used with the 740 Multi-Meter above, makes a complete circuit analyzer. Permits rapid analysis of circuits without disturbing circuit wiring. Has 5 sockets with standard I.M.A. markings for servicing all sets with new or old type of tubes. whether glass, ocal or metal. 8 automatic and 10 standard jacks bring all circuits to the panel. Extra connections may be added later if necessary. In sturdy black metal case, measuring 4 1/2" x 7 1/2" x 5 1/2". Has convenient handle, and compartment for accessories. Complete with instructions, latch type adapters, guarantee and registration cards. Shpg. wt., 6 lbs.

E9912. List, \$17.25. NET

\$10.14

740 VOLT-OHM- MILLIAMMETER

A new precision Volt-Ohm-Milliammeter. Uses a Triplett Model 328 square precision meter with accuracy of 2% on D.C. and 5% on A.C. Readings are: 0-10-50-250-500-1000 Volts A.C. and D.C. at 1000 ohms per volt; 0-1-10-50-250 D.C. Milliampers; 0-300-250,000 ohms with "back-up" scale for low range having mid-scale reading of 25 ohms. Ohmmeter scale can be made to read up to 2.5 megohms in 25 megohm steps. Extremely low ohmmeter current drain assures long battery life. Case has compartment for test leads, tools, etc. Size, 5 7/8" x 7 1/2" x 4 1/2". Complete with test leads, batteries, and instructions. Shpg. wt., 9 lbs.

E9911. List, \$32.50. NET



\$19.11

MODEL 1200-A VOLT-OHM- MILLIAMMETER KIT

2000 OHMS PER VOLT

A complete kit of parts for Service Engineers who wish to "build-their-own" Triplett 1200-A Universal A.C.-D.C. Volt-Ohm-Milliammeter. Kit includes: new Twin meter with separate A.C. and D.C. movements of 2% accuracy, marked panel plate, all necessary series and shunt resistors, switches, and ohmmeter rheostats. The exclusive rifting meter feature permits adjustment of instrument to angles in direct alignment with user's line of vision. Meter reads: 0-10-50-250-500-1000 volts A.C. and D.C. at 2000 ohms per volt on D.C.; 0-1-10-50-250 M.A.; 5-500 ohms on "back-up" scale. 1500 ohms-1.5-3 megohms. Dual meter measures 4 1/2" x 2 1/2" x 1 1/2" flange is 3 1/2" x 5 1/2". A truly ideal outfit for servicemen. With complete instructions, blue prints and test leads. A complete kit, even to hook-up wire and hardware, ready for assembly. Shpg. wt., 10 lbs.

E9930. List, \$27.50. NET

\$17.96

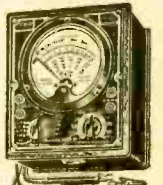
MODEL 1200-C

Similar to Model 1200-A but with a sensitivity of 5,000 ohms per volt. Also reads 7 1/2 megohms and 250 microamperes. E9931. NET **\$20.90**

VOLT-OHM-MILLIAMMETER

MODEL 1209-D

An ideal unit for the service bench. The 5" meter has extra long scales, making it easy to read even at a considerable distance. An aluminum needle type pointer allows extreme accuracy of readings. The following ranges are available: 0-10-50-250-500-1000 volts D.C. at 1000 ohms per volt; 0-1-10-50-250 M.A. and 0-500-100-1,000,000 ohms (later with external batteries). In metal case with panel etched in red and silver on black background. Wt., 9 lbs. Complete with leads. E9974. List, \$30.00. NET



\$19.60

1209-A AC VOLT METER

An extremely useful unit for all-around radio service or experimental work. Will check all AC voltages usually encountered. The five ranges are: 0-10-50-250-500-1000 volts. The 5 inch meter has an unusually long scale with large numerals. Has same type case and panel as Model 1209-D. Complete with leads. Shpg. wt., 9 lbs. E9975. NET **\$15.68**

COMBINATION RANGER TEST INSTRUMENTS

The Readrite-Ranger Series "40" testers described above are also available in various combinations which have been selected to give you the instruments most necessary for general servicing needs. Their compact size makes them ideally suited for portable laboratory work on outside service calls. By purchasing the combinations listed below, you can realize a substantial saving in cost per instrument. At the same time you receive, without extra cost, the attractive metal carrying case. These cases measure 11 1/4" x 7 7/8" x 4 1/2" and are provided with convenient leather handle. Finish is black enamel.

E9916. MODEL 640-740. Shpg. wt., 16 lbs.

\$27.78

List, \$47.25. NET

E10013. MODEL 442-740. Shpg. wt., 20 lbs. List, \$61.50. NET

\$36.16

E10014. MODEL 442-540. Shpg. wt., 21 lbs. List, \$61.50. NET

\$36.16

E9918. MODEL 540-740. Shpg. wt., 19 lbs. List, \$62.50. NET

\$36.75

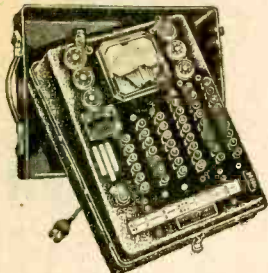
TRIPLETT

"UNIVERSAL" & "SIMPLIFIED"

TEST EQUIPMENT

ROBOT MULTIPURPOSE TESTERS

1611 PUSH-BUTTON TUBE TESTER AND V.O.M.



The Model 1611 incorporates the newest development in servicing equipment — push-button control. You simply rotate chart to required section, press button shown below each row, and readings appear on the large illuminated dial. The tube testing circuit is the emission type built to R.M.A. load requirements. Checks all receiving tubes, plus ballast types. A sensitive neon circuit indicates leakages and shorts. Has shadow-type meter for line voltage and resistance. Meter ranges are: 0-10-50-250-500-1,000 volts D.C. at 1,000 ohms per volt; 0-1-10-50-250-500-1,000 ohms; 0-1.5-3 megohms and 0-10-50-250-500-1,000 volts A.C. at 400 ohms per volt. A plug-in copper-oxide rectifier is used. The lustrous satin finish metal case measures 15 1/2" x 11 1/2" x 6 1/2". Removable cover. For 110 V. 60 cycles. Shpg. wt., 20 lbs.

500-1,000 volts A.C. at 400 ohms per volt. A plug-in copper-oxide rectifier is used. The lustrous satin finish metal case measures 15 1/2" x 11 1/2" x 6 1/2". Removable cover. For 110 V. 60 cycles. Shpg. wt., 20 lbs. **\$48.51**
E9969. NET CASH PRICE.
TIME PAYMENTS: \$4.85 down, \$6.01 monthly for 8 months.

MODEL 1610 TUBE TESTER ONLY

Same as Model 1611 but without V.O.M. feature. **\$38.22**
E9970. NET CASH PRICE.
TIME PAYMENTS: \$3.82 down, \$4.86 monthly for 8 months.

FINAL ANALYSIS TESTERS

1616 DYNAMIC TUBE TESTER AND V.O.M.



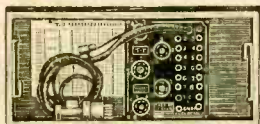
The Model 1616 is the first dynamic mutual conductance tube tester and V.O.M. with simplified push-button control. All tubes are tested under actual operating conditions. Separate test for ballast tubes. A gas test and a conclusive neon short and leakage test are provided. The spare socket and versatile push-button controls make the Model 1616 absolutely obsolescence proof. The "Good-Ibad" meter scale is illuminated. Ranges are: 0-10-50-250-500-1,000 volts D.C. at 1,000 ohms per volt; 0-10-50-250 mils D.C.; 0-500-300,000 ohms; 0-1.5-3 megohms and 0-10-50-250-500-1,000 volts A.C. at 400 ohms per volt. Also measures up to 42 D.B. Removable cover makes instrument suitable for counter and portable work. Metal case is 15 1/2" x 11 1/2" x 6 1/2". For 110 V. 60 cycles. Shpg. wt., 30 lbs.

E9980. NET CASH PRICE. **\$71.87**
TIME PAYMENTS: \$7.19 down, \$8.90 monthly for 8 months.

MODEL 1615 TUBE TESTER ONLY

Same as the Model 1616, but less the V.O.M. feature. **\$62.07**
E9981. NET CASH PRICE.
TIME PAYMENTS: \$6.21 down, \$7.69 monthly for 8 months.

1181-E PORTABLE LABORATORY TESTER

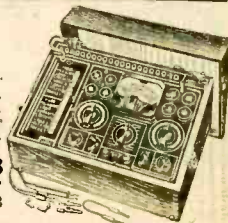


An absolutely modern tester which combines three instruments in one case for complete circuit analysis. Includes: (1) the precision Model 1151 All-Wave Oscillator for aligning and balancing all radio sets; (2) the Model 1125-A Universal Volt-Ohm-Milliammeter for point-to-point analysis and as output meter; (3) the Model 1166-A Free-Point Auxiliary Set Tester for free-point and standard analysis tests. The 1181-E Tester is ultra-modern; it will handle all metal tube as well as glass tube circuits. Meter scales read as follows: 0-15-75-150-750 Volts A.C. or D.C. at 1,000 ohms per volt; 0-1.5-

15-150 M.A., D.C.; 0-15-150 M.A., A.C.; 0-1,500-1.5 meg.-3 megohms. Oscillator has four ranges from 110 K.C. to 18 M.C. Auxiliary set tester has 4, 5, 6, 7 prong and 8 prong octal sockets for all analyses. The 1181-E Tester constitutes a compact, complete radio service test laboratory. Size 16 1/2" x 4 1/2" x 7 1/2". Complete with batteries, adapters, accessories, and instructions. Shpg. wt., 17 lbs. **\$40.99**
E9932. NET CASH PRICE.
TIME PAYMENTS: \$4.10 down, \$5.08 monthly for 8 months.

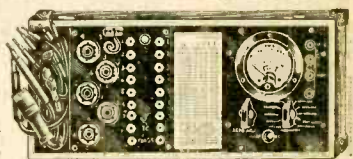
1511 TUBE TESTER AND V.O.M.

Same as the Model 1616 but with selector switches instead of the push-button control. The rotating chart speeds up testing of tubes. Circuit is the dynamic mutual conductance type. The illuminated meter has a gold dial. Oak case measures 15 1/2" x 11 1/2" x 7 1/2". For 110 V. 60 cycles. Shpg. wt., 30 lbs. **\$58.48**
E9982. NET CASH PRICE.
TIME PAYMENTS: \$5.85 down, \$7.23 monthly for 8 months.



E9983. MODEL 1510 TUBE TESTER ONLY. Same as the Model 1511, but less the V.O.M. feature. **\$48.68**
NET CASH PRICE.
TIME PAYMENTS: \$4.87 down, \$6.03 monthly for 8 months.

UNIVERSAL SELECTING ANALYZER MODEL 1167-E

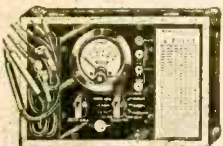


This instrument is ideal for making complete receiver analyses by either point-to-point or standard analysis method. Consists of Model 1166-A Auxiliary Set Tester and Model 1125-A Universal Volt-Ohm-Milliammeter in a single oak case. Scales read as follows: 0-15-75-150-750 volts, A.C. or D.C., at 1,000 ohms per volt. 0-1.5-15-150 D.C. M.A.; 0-15-150 A.C. M.A.; 0-1500 ohms, 0-1.5-3 megohms. Charts are supplied for capacity measurements. With etched metal panel.

TESTS ALL METAL AND GLASS TUBE SETS

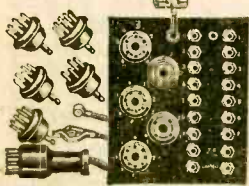
A plug-in cable brings all set circuits to the 5 sockets on the panel; tip jacks permit external use of meter terminals for complete point-to-point analysis. In oak case, 16 1/2" x 7 1/2" x 4 1/2". Complete with all accessories, leads and instructions. Shpg. wt., 17 lbs. **\$26.95**
E9934. List, \$41.25.
YOUR NET PRICE.

1125-A UNIVERSAL AC-DC VOLT-OHM-MILLIAMMETER



Designed to measure both A.C. and D.C. voltages, currents, and resistance. Sensitive D'Arsonval meter. Has selector switch for choosing ranges. Reads: 0-15-75-150-750 V.A.C. and D.C.; 0-1.5-15-150 M.A.; 0-15-150 M.A., A.C.; 0-1500 ohms, 1.5 meg., 3 meg. Voltmeter resistance is 1000 ohms per volt for all ranges. Has chart for accurate capacity measurements. Ideal for use with Model 1166-A Auxiliary Set Tester to make a complete free-point analyzer. Supplied complete with test leads, prods, batteries and instructions. Etched metal panel. Size, 11 1/2" x 7 1/2" x 4 1/2" inches. Shpg. wt., 12 lbs. **\$21.56**
E9933. List, \$33.00. NET.

FREE-POINT SET TESTER MODEL 1166-A

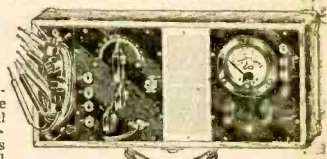


For use with Model 1125-A Volt-Ohm-Milliammeter. Panel contains 4, 5, 6, 7 and 8 prong sockets; all circuits are brought out to jacks on face of panel. Makes tests without removing chassis. Complete with adapters and instructions. Less case. Etched panel. **\$10.78**
E9940. Wt., 8 lbs.
List, \$16.50. NET.

MODEL 1166-A IN CASE

The Model 1166-A Free-Point Auxiliary Set Tester as described above but in sturdy attractive oak carrying case with handle. Makes a handy instrument. Etched metal panel. Shpg. wt., 10 lbs. **\$13.23**
E9924. List, \$20.25. NET.

PERPETUAL TESTER MODEL 1180-E



A professional instrument designed to meet precision service standards. Combines a Model 1151 shielded All-Wave Oscillator with large calibration graphs and a Model 1125-A Universal Volt-Ohm-Milliammeter in a single oak carrying case. The oscillator generates a modulated or unmodulated signal for complete alignment of all receivers. Universal Meter reads: 0-15-75-150-750 Volts A.C. or D.C.; 0-1.5-15-150 M.A., D.C.; 0-15-150 M.A., A.C.; 0-1,500 ohms-1.5-3 megohms. Selector switch on panel chooses range quickly. A zero adjustment knob for the ohmmeter, an A.C.-D.C. switch and four tip jacks are also provided. The All-Wave Oscillator has four bands covering 110-500 K.C.; 500-3,000 K.C.; 2,000-6,000 K.C.; and 6,000-18,000 K.C. Completely operated from self-contained 2 1/2 V. battery and 2-1 1/2 V. flashlight cells. Supplied with test prods, leads and instructions. Shpg. wt., 17 lbs. Panels are etched metal. **\$32.34**
E9938. List, \$49.50. NET.



MASTER TEST EQUIPMENT

MODEL 1212 DYNAMIC TUBE TESTER

The Model 1212 tests all receiving tubes, including ballast types, quickly and accurately. The emission-type circuit used has been greatly improved. Direct readings are made on the "Good-Bad" scale of a 3-inch precision meter. The slightest inter-element leakage and all shorts are easily detected on plate tests for diodes and rectifiers. Has separate plate tests for diodes and rectifiers. Uses a shadow meter for line voltage adjustments. Up-to-date tube charts are regularly supplied to owners as new tubes appear on the market. Sturdy metal case in black wrinkle-finish measures 7 7/8" x 6 7/8" x 4 1/2". Red on black. For 110 V. 60

\$2156

Etched panel is silver and cycles. Shpg. wt., 12 lbs. E9921. List, \$33.00. NET.

1252 VACUUM TUBE VOLTMETER

The Model 1252 permits voltage measurements to be made with zero current drain. It incorporates Triplet's new, exclusive self-callows feature. The tube on end of cable allows readings to be made at high frequencies without inserting circuit constants. Ranges are: 0-3-15-75-300 volts. The lifting meter has two movements; one for bridge balance and the other for peak A.C. and D.C. volts. Metal case measures 7 7/8" x 6 7/8" x 4 1/2". Etched panel is silver and red on black. For 110 V. 60 cycles. Shpg. wt., 18 lbs. E9922.

\$4736

CASH PRICE

T.I.P. TIME PAYMENTS: \$7.25 down, \$5.90 monthly for 8 months.

MODEL 1250

Similar to Model 1252 but ranges are 0-2.5-10-50 volts. Tube is mounted inside case.

\$35.94

E9935. NET CASH PRICE

T.I.P. TIME PAYMENTS: \$5.50 down, \$4.50 monthly for 8 months.

FREE-POINT TESTER MODEL 1220-A

For use with the Model 1200 Master Volt-Ohm-Milliammeter or other similar instruments. Makes proper voltage tests between any tube element, current tests in series with any tube element, and resistance tests between any tube element or socket contacts. Panel contains 4, 5, 6, combination 7 prom, and 8 octal sockets which are marked according to recommended R.M.A. specifications. Eighteen jacks permit insertion of meter leads for all tests. With 7 prom latch plug and 5 adapters. In new metal case. Shpg. wt., 8 lbs. E9946. List, \$16.50. NET.

\$10⁷⁵

CONDENSER TESTER MODEL 1241

A precision instrument for the service engineer. Tests for shorts, opens and high resistance leakages; capacities of condensers are determined by sensitive microammeter. Shadow-type meter is used to obtain exact line voltage adjustments. Makes breakdown and leakage tests for electrolytic and paper condensers at rated working voltages. Checks all paper, mica, oil, and electrolytic condensers in 4 ranges: .0001-.01, .01-2, 2-20, 20-30.0 mfd. Has "GOOD-BAD" scale for electrolytics. 110 volt, 60 cycle, A.C. Shpg. wt., 10 lbs. Metal case. E9937. List, \$41.25. **\$26⁹⁵**

YOUR PRICE

1200-A VOLT-OHM-MILLIAMMETER 2000 OHMS PER VOLT

A compact universal A.C.-D.C. Volt-Ohm-Milliammeter with many new features. Twin meters in silver case have separate A.C. and D.C. movements. D.C. meter reads: 0-10-50-250-500-1000 volts at 2000 ohms per volt; 0-1-10-50-250 M.A.; 0-1500 ohms-1.5 meg-3 meg. Has additional "Backup" low-ohm scale of 0-500 ohms with 25 ohm center scale reading. A.C. meter reads: 0-10-50-250-500-1000 volts. Meter may be tilted and read at any angle; all voltage scales are direct-reading; ohmmeter scales have individual adjustments with scale selector switch for rapid operation. Switch contact error is less than 1/10%. Metal case, 7 7/8" x 6 7/8" x 4 1/2". With leads, prods, bat. E9941. List, \$35.75. NET.

\$2335

MODEL 1200-B-2000 OHMS PER VOLT

Similar to 1200-A above, but with DC movement and copper oxide rectifier for AC voltage scales of 2-10-50-250-500-1000 at 1000 ohms per volt. Complete with batteries. Shpg. wt., 10 lbs. E9942. List, \$44.00. NET.

\$28.74

MODEL 1200-C-5000 OHMS PER VOLT

Same as the Model 1200-A except that meter has sensitivity of 5000 ohms per volt on DC voltages. Suitable for checking all circuits, including A.C. Also has 250 microampere scale, and additional ohmmeter scale of 7 1/2 megohms. Shpg. wt., 10 lbs. E9943. List, \$40.25. NET.

\$26.29

MODEL 1200-E-25000 OHMS PER VOLT

Similar in appearance and design to Model 1200-A, but the D.C. meter has a circuit resistance of 25,000 ohms per volt, a greater sensitivity than was ever available before. Reads 0-1000-10,000 ohms-1-10 megohms. Also has 0-50 microampere scale. Shpg. wt., 10 lbs. E9944. List, \$46.75. NET.

\$30.55

ALL-WAVE SIGNAL GENERATORS

MODEL 1232

A stable, accurate, direct-reading All-Wave Signal Generator of new design and sturdy construction. Large 12 inch vernier dial-scale permits extremely fine and accurate readings on each of the six fundamental frequencies bands: calibrated from 120 to 30,000 K.C. Amplitude-modulated at 400 C.P.S. by self-contained audio oscillator. The coils are all individually shielded and placed to require the shortest possible leads. All grid leads are carefully shielded. The graduated attenuator is perfectly smooth and designed for use with A.V.C. circuits requiring a low signal level. Has modulation "ON-OFF" switch. 400 cycle audio signal is available for external tests. Metal case measures 7 7/8" x 6 7/8" x 4 1/2". Complete with shielded leads. For 110 volt 60 cycle A.C. Shpg. wt., 16 lbs. E9949. List, \$41.25. YOUR NET PRICE.

\$26⁹⁵

MODEL 1231 SIGNAL GENERATOR

Similar to Model 1232 except that it is designed for battery operation. Batteries are self-contained. Shpg. wt., 13 lbs. E9948. List, \$38.50. NET.

\$25.16

MODEL 1230 SIGNAL GENERATOR

The Model 1230 is designed to furnish a continuously variable signal from 100 KC to 18,000 KC. These frequencies are covered by six bands. Batteries, tubes, and six individually calibrated graph charts are supplied with the instrument. Appearance as above. E9947. List, \$25.25. NET.

\$16.49

COMBINATION MASTER UNIT TEST SETS

A professional, completely portable laboratory instrument consisting of four accurate Triplet instruments. Each instrument is described in detail above. Set of four is housed in compact leatherette case as illustrated.

MODEL 1205-A

Includes Models 1200-A, 1212, 1220-A, and 1230 in a 17x17 1/2 x 5 1/2" case. Shpg. wt., 36 lbs.

E9951. **\$78.08**

CASH PRICE

TIME: \$7.81 down, \$9.67 monthly for 8 months.

MODEL 1207

Includes Models 1200-A, 1212, 1220-A, and 1232 in a 17x17 1/2 x 5 1/2" case. Shpg. wt., 37 lbs.

E9953. **\$88.52**

CASH PRICE

TIME: \$8.85 down, \$10.96 monthly for 8 months.

MODEL 1206

Includes Models 1200-A, 1212, 1220-A, and 1231 in a 17x17 1/2 x 5 1/2" case. Shpg. wt., 37 lbs.

E9952. **\$86.73**

CASH PRICE

TIME: \$8.67 down, \$10.74 monthly for 8 months.

MODEL 1208

Includes Models 1200-E, 1212, 1220-A, and 1231 in a 17x17 1/2 x 5 1/2" case. Shpg. wt., 37 lbs.

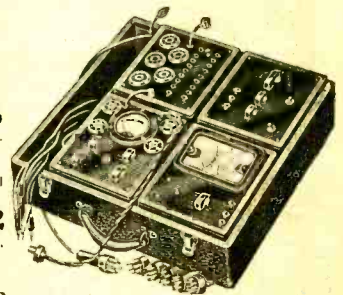
E9923. **\$93.92**

CASH PRICE

TIME: \$9.39 down, \$11.63 monthly for 8 months.

CASES ONLY FOR MASTER UNITS

Portable cases. Leatherette covered; cloth-lined. Extra compartments for test leads, adapters, etc.
E9954. Case for one Master Unit. \$3.92
E9955. Case for two Master Units. \$4.58
E9956. Case for three Master Units. \$5.22
E9957. Case for four Master Units. \$5.88

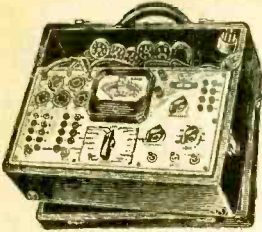


TRIPLET De Luxe TEST EQUIPMENT

MULTI-PURPOSE SET TESTER

MODEL 1601

25000 OHMS PER VOLT



A modern, high quality tester for the up-to-date serviceman. Provides accurate, rapid analysis of every circuit, with minimum operations and time required. Measures 10-50-250-500-1000-2000 volts, A.C. and D.C. D.C. sensitivity is 25000 ohms per volt; A.C. is 1000 ohms per volt. D.C. current: 0-50 microamperes; 0-1-10-50-250-500 M.A.; 0-1-2-20 amp. Resistance: 0-500-20,000-200,000 ohms and 0-2-20 megohms. All meter scale ranges are available for external circuit measurements by means of panel tip-jacks. Condenser tester checks capacitors from .001 to 30 mfd.; gives leakage tests for electrolytics. Calibration is easily checked by line voltage control and separate shadowgraph meter. All ranges are easily read on large illuminated dial scale. Free-Point Tester checks all metal and glass tube circuits. Panel has silver finish with etched black lettering. Housed in sturdy black metal wrinkle-finished case with removable cover. Size, 14 1/2" x 7" x 4 1/2". Complete with all adapters, accessories and instructions. Shpg. wt., 26 lbs.

\$44.42

NET CASH PRICE

TIME PAYMENTS: \$4.42 down, \$5.48 monthly for 8 months.

E9961. Model 1601 housed in beautiful black leatherette case (illustrated). Shpg. wt., 28 lbs. **CASH \$48.34**

TIME PAYMENTS: \$4.83 down, \$5.99 monthly for 8 months.

2" OSCILLOSCOPE

MODEL 1690



Meets every requirement of the Service or Communications engineer for the visual study and adjustment of all radio circuit problems. The oscilloscope incorporates separately controlled resistance-coupled horizontal and vertical amplifiers. Has self-contained linear sweep from 15 to 20,000 cycles. Either internal, external, or 60 cycle sweep may be used. All controls are on the panel; absolutely no interaction of controls. The new 2" tube used has an effective screen area four times that of the one inch tube usually used. Turret-type mounting allows adjustment of screen to direct alignment with user's line of vision. Extremely brilliant pattern may be read in broad daylight by using the adjustable shield. Provides accurate visual analysis of R.F., I.F., and Audio systems, thereby permitting peak alignment for maximum sensitivity, selectivity and tone quality. The tubes used are: 25Z5, 6J7, 6C6, 885, 24-XH. Silver and black etched panel. In black wrinkle-finished metal case with leather handle. Size, 14 1/2" x 7" x 4 1/2". For use on 110 volts, 60 cycle A.C. Complete with tubes and instructions. Shpg. wt., 24 lbs.

\$46.06

E9964. NET CASH PRICE

TIME PAYMENTS: \$4.61 down, \$5.70 monthly for 8 months.

E9963. Model 1690, housed in a beautiful black leatherette case (illustrated). Shpg. wt., 25 lbs. **NET \$49.98**

TIME PAYMENTS: \$5.00 down, \$6.19 monthly for 8 months.

E9960. Model 1691 3" OSCILLOSCOPE. Same as above but has 3 inch screen. In metal case. **NET \$61.25**

TIME PAYMENTS: \$6.13 down, \$7.58 monthly for 8 months.

TRIPLE-SHIELDED OSCILLATOR MODEL 1630



An outstanding signal generator for extreme accuracy. Covers 100 KC to 30 MC in six ranges. Answers every requirement of a wide frequency range oscillator. Accuracy of calibration is 1/2 of 1%. Unusually large direct-reading calibrated dial has total scale length of 52%. Each coil is individually calibrated and tracked for linearity over the entire range. This generator has zero leakage with triple shielding where necessary to eliminate all possibility of even the slightest leak. A continuously variable pad and attenuator controls the output from zero to maximum. Ruggedly built to withstand the wear and tear of constant service. Internal construction is as rigid as possible to eliminate any changes in calibration. Furnished in case similar to that of Model 1601. Panel is etched in black on silver. For use on 110 volts, 60 cycles, A.C. With tubes. Wt. 30 lbs.

\$48.02

E9965. NET CASH PRICE

TIME PAYMENTS: \$4.80 down, \$5.95 monthly for 8 months.

E9966. Model 1630 in black wrinkle-finished metal case with leather handle. Wt., 28 lbs. **NET \$44.10**

TIME PAYMENTS: \$4.41 down, \$5.46 monthly for 8 months.

MODEL 1631

Same as Model 1630 described above, but with electronic frequency modulation. Frequency modulation is continuously variable from 5 KC to 40 KC. Supplies 400 C.P.S. modulated or unmodulated signal, as well as pure CW signal with provisions for external modulation. In leatherette case. Complete with tubes. Wt., 35 lbs.

\$57.82

E9967. NET CASH PRICE

TIME PAYMENTS: \$5.78 down, \$7.16 monthly for 8 months.

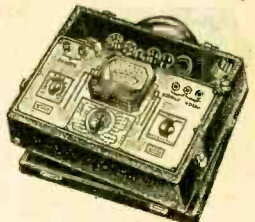
E9968. Model 1631 in black wrinkle-finished metal case with leather handle. Wt., 33 lbs. **NET \$53.90**

TIME PAYMENTS: \$5.39 down, \$6.67 monthly for 8 months.

NEW VOLT-OHM-MILLIAMMETERS

MODEL 1602

25000 OHMS PER VOLT



The Model 1602 De Luxe Set Tester has a D.C. sensitivity of 25,000 ohms per volt. Ideally suited for measurements where current drain is an important factor. A.C. and D.C. ranges are as follows: 0-10-50-250-500-1,000-2,000 volts A.C. at 1,000 ohms per volt; 0-10-50-250-500-1,000-2,000 volts D.C. at 25,000 ohms per volt; 0-50 microamperes; 0-1-10-50-250-500 mils D.C.; 0-1-2-20 amperes D.C.; 0-500-20,000-200,000 ohms; and 0-2-20 megohms. A special chart permits decimal readings against volts from -20 to +55. An exclusive development allows resistance measurements to be made without batteries. A plug-in rectifier simplifies replacement in case of damage. The extra large dial has easily readable scales which are illuminated. A shadowgraph type meter is used for line voltage control. The durable panel has a silver background with permanent etched markings. Attractive metal case measures 14 1/2" x 7" x 4 1/2". For 110 V. 60 cycles. Shpg. wt., 26 lbs.

\$34.30

E10015. IN METAL CASE. NET CASH PRICE

TIME PAYMENTS: \$4.43 down, \$4.25 monthly for 8 months.

E10016. MODEL 1602 IN LEATHERETTE CASE **\$38.22**

(Illustrated). NET CASH PRICE

TIME PAYMENTS: \$4.82 down, \$4.73 monthly for 8 months.

CONDENSER BRIDGE

MODEL 1640



The 1640 is a true bridge-type condenser checker that balances against highly accurate capacity standards. It provides the most conclusive tests possible for shorts, opens, leakage, and capacity. Six ranges from .0001 MF to 100 MF. Has provision for power factor measurements. All condensers are tested for breakdown and leakage at their rated voltages. The illuminated meter is protected against damage from shorted condensers. A direct-reading. Has built-in power supply from 25 to 575 volts. Black wrinkle-finished metal case measures 14 1/2" x 7" x 4 1/2". For 110 V. 60 cycles. Shpg. wt., 24 lbs.

\$41.16

E10017. IN METAL CASE

TIME PAYMENTS: \$4.12 down, \$5.10 monthly for 8 months.

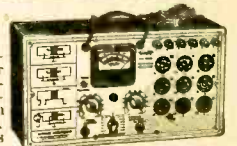
E10018. MODEL 1640 IN LEATHERETTE CASE **\$45.08**

(Illustrated). NET CASH PRICE

TIME PAYMENTS: \$4.51 down, \$5.58 monthly for 8 months.

VIBRATOR TESTER

MODEL 1670



This new vibrator tester checks all automotive and home battery radio receiver vibrators under actual performance conditions. An essential precision-built test instrument. Tests are made under a 5000 ohm load as recommended by vibrator engineers. Three scale meter: 0-10 volt scale shows input voltage to vibrator; "GOOD-BAD" scale is used for output; scale marked 0-100 shows percent of output voltage reflected by change in input voltage. Black metal case. 14 1/2" x 7" x 4 1/2". Shpg. wt., 18 lbs.

\$23.52

E9939. IN METAL CASE. NET

TIME PAYMENTS: \$3.35 down, \$2.92 monthly for 8 months.

E10009. MODEL 1670 IN LEATHERETTE CASE. **\$27.44**

NET CASH PRICE

TIME PAYMENTS: \$3.74 down, \$3.40 monthly for 8 months.

TEST BENCH RACKS

These compact and convenient Test Bench Racks, available in three styles, offer facilities for a complete service laboratory. They are designed to house any metal-cased Triplet De Luxe or Master tester. Dials and controls on testers are in full view and are easily accessible at all times. Special suction-fitting rubber retaining strips hold each tester firmly and rigidly in place. This type each installation permits instant removal of any unit for portable use. Cabinets are of sturdy metal construction with an attractive black wrinkle finish. Red border with white pin strip around each panel opening. Cabinets may be bolted together to form one continuous panel. Each is equipped with a rotary drawer at bottom for holding accessories. Height 22 1/2", width 16", depth 7 1/2" at front, 5" at top. Lamp is extra. Wt., 40 lbs. each.



MODEL 1402

Designed to accommodate any two metal-cased De Luxe units.

E9976. **\$9.80**

NET

MODEL 1404

Designed to accommodate any four Master units.

E9978. **\$9.80**

NET

MODEL 1403

Designed to accommodate one De Luxe and two Master metal-cased units.

E9977. **\$9.80**

NET

CLAMP-ON LAMP

Lights panel completely. Black metal with wrinkle finish.

E9979. **\$4.25**

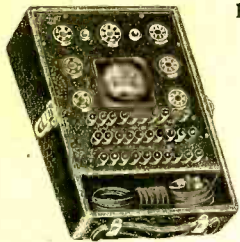
NET

SERVICE Instruments

MILLION TEST EQUIPMENT

MODEL MO PUSH-BUTTON TUBE TESTER

Here is a tube tester with push-button control at a remarkably low price. It has been designed with the following requirements of the serviceman in mind: (1) to provide a quick, accurate test for all tubes; (2) to indicate open filaments; (3) to test for leakage with the tube hot. All readings are shown on a large "Good-Bad" scale. Push-button control greatly simplifies and speeds up your work. Correct readings are assured throughout life of instrument since rotary switches are not used. Perfect engineering has produced an instrument so rugged in construction that it will maintain its accuracy and dependability indefinitely. The customary jars and jolts encountered in portable service work will not affect the performance of this instrument. It is fused for protection against line voltage surges. Unit measures 10"x12 1/2"x5". For 110-120 V. 60 cycles. Shpg. wt. 1 1/2 lbs.



E10150. MODEL MO. COUNTER TYPE. NET..... **\$18.95**
 E10151. MODEL MOP. PORTABLE TYPE, WITH COVER. YOUR NET PRICE..... **\$19.95**

MILLION TUBE AND CONDENSER TESTER

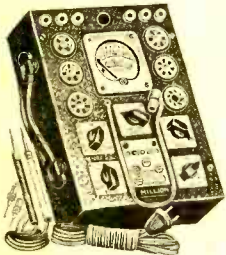
MODEL CP. This new emission tube tester tests all tubes including the newest metal and glass octal base types. The exact condition of the tube under test is clearly indicated on the English-reading "GOOD-BAD" scale of the accurate D'Arsonval meter. Neon tube shows shorts and leakages up to 2 megohms. This same leakage test can be used through external jacks for the measurement of resistance and for checking bypass and electrolytic condensers. For 110 Volts, 60 cycles, A.C. Shpg. wt., 8 lbs.



E10152. NET..... **\$13.95**
 E10153. MODEL CN. Same as above, but neon bulb performs functions of meter used in Model CP. Jacks provided for testing resistance, condenser leakage, etc. NET..... **\$9.95**

MODEL TV TUBE TESTER AND MULTIMETER

Combines tube tester features together with an analyzer. Accurately tests the emission of all types of tubes. Neon bulb shows all shorts and leaks up to 2 megohms with tube "Hot." All tube quality tests are made on a large 3" square D'Arsonval meter with illuminated dial. Has the following milliammeter ranges: 0-20,000-100 mids D.C. at 6000 ohms per volt; 0-300 microamps; 0-30-300-500 milliamperes D.C.; 0-0.9 amperes D.C.; 0-1.3 mids.; 0-10,000 ohms; and 0-15 megohms. For 110 Volts, 60 cycle, A.C. Shpg. wt., 10 lbs. 7x10x3 1/2".



E10154. NET..... **\$27.95**

MODEL TM TUBE TESTER

A tube tester designed to test all tubes including metal, metal-glass and glass tubes. A large English-reading "GOOD-BAD" scale indicates the exact condition of the tubes under test. Contains all other features of the Model TV above except the voltage, current and resistance features. For 110 V. 60 cycles A.C. Wt. 8 lbs.

E10155. NET..... **\$16.95**

ALL-WAVE OSCILLATOR MODEL OD

Direct reading with over 40% of scale. Covers 100 to 25,000 K.C. in 5 bands. Individual coils and trimmers assure 100% accuracy. Output can be modulated 400 cycles. This audio signal is also available separately for checking amplifiers. Line filters and complete shielding keep leakage down to a minimum. For 110 volts A.C. or D.C. Shpg. wt. 7 lbs.



E10156. NET..... **\$19.95**

POCKET VOLT-OHM-MILLIAMMETERS

MODEL S. 2" square D'Arsonval meter. Reads: 0-5-50-500-1,000 volts D.C. at 1,000 ohms per volt; 0-1 mil D.C. and 0-1,000-500,000 ohms. Zero adjuster has same setting for both scales. Metal case, 3 1/4"x6"x2". Wt. 3 lbs.



E10157. NET..... **\$7.95**
 MODEL SS. 2" square meter. Reads: 0-5-50-250-500-1,000 volts D.C. at 1,000 ohms per volt; 0-1-5-50-500 mids D.C. and 0-1,000-500,000 ohms. Size, 3 1/4"x6"x2". Wt. 3 lbs. E10158. NET..... **\$9.95**



MODEL SA. 3" square meter. Reads: 0-5-50-250-750 volts D.C. at 1,000 ohms per volt; 0-50-750 volts A.C.; 0-1-50-500 mids D.C. and 0-1,000-500,000 ohms. Size, 3 1/2"x6 1/2"x2". Wt. 3 lbs. E10159. NET..... **\$12.95**

SOLAR CAPACITY ANALYZERS

A sensational new instrument for quickly and accurately determining the worth and capacity of any condenser between .00001 and 70 mfd. A 6J5 tube is used as a bridge-balance indicator; capacity of condenser under test is shown directly on accurately calibrated color-coded scale. Also measures power factor, and detects defective condensers. Two large resistance scales give readings up to 2 megohms, for checking insulation resistance, or for measuring resistors. Checks all types of condensers. No headphones, meters, etc., are required; compactly built in sturdy, attractive cabinet, will handle for carrying. Measures 9 1/2 x 7 1/2 x 6 1/4". Requires 1-1/2 V. and 1-6J5 (not supplied). An efficiently engineered instrument that is needed on every service bench. Shpg. wt., 9 lbs.



E10186. Model CB-1-60. For 110 V. 60 cycle, NET..... **\$18.82**
 E10187. Model CB-2-U. For 110-220 V. 25-60 cycle, NET..... **\$23.52**

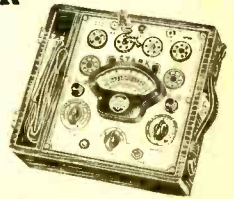
MODEL CC CAPACITY ANALYZER

The Model CC Capacity Analyzer and Bridge is similar to the CB Models described above, but has the advantage of extended capacity and resistance ranges. It will quickly and accurately measure resistance from 50 to 2,000,000 ohms; capacity from .00001 to 800 MF; power factor of test condensers up to 50%; and insulation resistance up to 1,000 megohms. Test voltages are available up to 600 volts D.C. Requires 1-80 and 1-6J5 (not supplied). Shpg. wt., 10 lbs.

E10183. MODEL CC-1-60. For 110 V. 60 cycle, NET PRICE..... **\$24.40**
 E10184. MODEL CC-2-U. For 110-220 V. 25 to 60 cycle, NET PRICE..... **\$29.40**

STARK RURAL METER TUBE TESTER AND ANALYZER

The Stark Rural Meter is a sensationally new instrument incorporating many new features. Especially suited for the servicemen who specialize on battery-operated receivers. It combines a modern analyzer with a tube tester built to R.M.A. standards, both operated from a self-contained power supply. It is no longer necessary to bring batteries and auto sockets back to the shop for testing. The Stark Rural Meter works right on the spot. No external electrical connections are required.



HAS SELF-CONTAINED POWER SUPPLY

The Rural Meter is supplied with a built-in battery power supply. Condition of batteries can be checked by throwing a switch. Large fan-type meter has "Good-Bad" scale. Ranges are: 0-10-100-500 volts D.C., 0-1,000-100,000 ohms, and 0-1 megohm. Has sensitive leakage test. Checks all battery and auto radio tubes plus many A.C. types. The leatherette case measures 10 1/2 x 9 x 4 1/2". With test leads and batteries. Wt., 9 lbs.

E10195. NET..... **\$39.15**

PORTABLE STANDARD VOLT-OHMMMETER

A practical and convenient pocket-size Volt-Ohmmeter. Scale calibrated 0-10,000 ohms, and 0-300 volts D.C. Mounted in sturdy metal case 3 inches in diameter; 1 1/2 inches deep. Equipped with 32 inch test leads. Includes self-contained flash-light cells. Switch is provided for rapid changeover from volts to ohms or vice versa.



E2894. YOUR PRICE..... **\$24.80**

PORTABLE SIMPLEX VOLT-OHMMMETER

An exceptionally compact, pocket-size test unit. Scale marked 0-3, 0-30, 0-300 volts D.C., and 0-10,000 ohms. Attractive black finished bakelite case measures 1 1/2 x 2 1/4 x 3 1/4". Has pin jacks for quick selection of desired scale. Self-contained batteries included. Supplied with 30 inch polarized test leads, and instructions.



E2892. YOUR PRICE..... **\$3.23**

PORTABLE PRECISION VOLT-OHMMMETER

Pocket meter in black bakelite case 1 1/2 x 2 1/4 x 3 1/4". Ranges: 0-5-50-500 volts D.C. at 1000 ohms per volt; 0-500,000 ohms with zero adjuster. 30" test leads.



E2893. NET..... **\$7.75**

363 UNIVERSAL AC-DC V. O. M.

Universal A.C.-D.C. Volt-Ohm-Milliammeter. Ranges: 0-15-150-450 volts and 0-15 ma. A.C. and D.C.; 0-20,000-100,000 ohms; 0-1-20 mids.; with built-in power supply for 110 volts A.C. or D.C. Bakelite case measures: 1 1/2 x 2 1/4 x 3 1/4". With leads and instructions. A high-quality precision instrument at low cost.

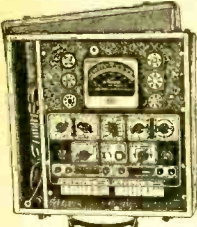


E2891. NET..... **\$7.92**

Modern TEST EQUIPMENT

HICKOK TEST INSTRUMENTS

DYNAMIC TUBE TESTERS MODEL T-53-P



The Model T-53-P permits you to test tubes in accordance with the manufacturers' standards. It uses the Dynamic Mutual Conductance type of circuit, the most accurate known today. Readings are on a large 4" square meter with illuminated dial. This dial is calibrated directly in microohms and also has a "Good-? Replace" scale. Checks gas content of tubes. Each element of tube is tested separately. Shorts and leakage tests are made with tube either hot or cold. The roll-type chart is easy to use and replace. Sturdily-built case measures 14x13x6". For 110 V., 60 cycles. Shpg. wt., 22 lbs. **\$48.80**

NO 10320.
CASH PRICE.

TIME PAYMENTS: \$10.78 down, \$4.50 monthly for 10 months.

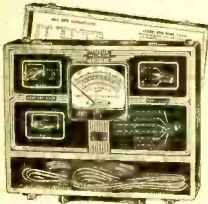
MODEL AC-SIX DYNAMIC TUBE TESTER

Similar to the model AC-51 but has a large square meter with a scale 3 3/4" long. Also includes following ranges: 20-200-500-1000 V. A.C. D.C.; 0-20-200 M.A. D.C.; 1 ohm to 25 megohm in 3 ranges; 000 to 24 MF. Checks inductance of chokes. Output and decibel readings can be made. For 110 V., 50-60 cycles. 14x13x6". **\$58.21**

E10302. NET CASH PRICE.

TIME PAYMENTS: \$10.53 down, \$5.60 monthly for 10 months.

RADIO SET TESTERS MODEL 4900S



This instrument draws an absolutely no current from the circuit under test. Meter has an infinite ohms per volt sensitivity on the D.C. scales. Covers the following ranges: 0-10-50-250 V. D.C.; 0-2.5-10-50-250-500 V. A.C. D.C. at 1000 ohms per volt; 0-1-5-50-500 M.A. A.C. or D.C.; 0-500 D.C. microamperes; .05 ohm to 10 megohms in 5 ranges; .0001 MF to 200 MF in 3 ranges and 5 output ranges. Also measures inductance, decibels and impedance. Size, 12 1/2 x 10 x 5". For 100-130 V., 60 cycles A.C. Shpg. wt., 14 lbs. **\$48.22**

E10304. CASH PRICE.

TIME PAYMENTS: \$10.10 down, \$5.00 monthly for 9 months.

MODEL 4800S RADIO SET TESTER

Similar to Model 4900S but with built-in Multi-Selector for complete socket analysis. Supplied with all adapters, plugs, cables, etc. Size, 10x12x4". For 110 V., 60 cycles. Shpg. wt., 17 lbs. **\$58.51**

E10321. CASH PRICE.

TIME PAYMENTS: \$12.54 down, \$5.40 monthly for 10 months.

MODEL RFO-4 3 INCH OSCILLOGRAPH

One of the finest 3" jobs available. Built-in demodulator permits connecting vertical plates to any R.F. or I.F. stage for visual analysis. Variable from 0 to 30 K.C. Size, 11x13x15 1/4". For 110 V., 60 cycles. (Add \$4.50 for 25 cycle operation.) Shpg. wt., 40 lbs. **\$97.02**

E10303. NET CASH PRICE.

TIME PAYMENTS: \$15.88 down, \$9.50 monthly for 10 months.

MODEL 18 UNIVERSAL SIGNAL GENERATOR

This instrument covers from 100 KC. to 30 MC. in 6 bands at an accuracy better than 1%. Five outputs are available: (1) amplitude modulated R.F.; (2) frequency modulated R.F.; (3) unmodulated I.F.; (4) 100 to 10,000 variable audio; and (5) 400 cycle fired audio. Separate D.B. meter reads -10 to +38. Size, 13x10x7". For 110 V., 60 cycles. Wt., 21 lbs. **\$52.92**

E10322. NET CASH PRICE.

TIME PAYMENTS: \$10.48 down, \$5.00 monthly for 10 months.

MODEL 17 SIGNAL GENERATOR

Same as Model 18 above but less D.B. meter. Size, 13x10x7". For 110 V., 60 cycles. Wt., 21 lbs. **\$44.10**

E10323. NET CASH PRICE.

TIME PAYMENTS: \$10.40 down, \$4.00 monthly for 10 months. Write for complete literature covering any Hickok instrument.

NEW 33 ELECTRONIC DYNAMIC TUBE TESTER



Here is an accurate, modern, and rapid dynamic tube tester with many outstanding features. The illuminated meter and roll-type tube chart permit tubes to be tested in even the poorest light. The rotating chart lists over 350 receiving tubes and over 150 ballast types. Obscure-proof as revised charts are available as soon as new tubes appear on the market. The dynamic type of circuit used provides for accurate testing of each element of a tube.

SPEEDS UP TUBE TESTING

The co-ordination of roll chart and illuminated dial under one escutcheon provides rapid, easy settings which save you time. New 23 position switch with logarithmic tapered manganin resistors. Has sensitive neon test for locating shorts and leakages.

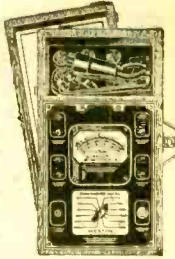
The attractive walnut case with line cord compartment measures 9 1/2 x 13 1/2 x 6". Panel is finished in chrome. Complete with rectifier tube. For 110 V., 60 cycles. Shpg. wt., 13 lbs. **\$31.85**

E10115.
NET

WESTON TEST INSTRUMENTS

SUPER-SENSITIVE ANALYZER MODEL 772-20000 OHMS PER VOLT

Has 4 1/2" multi-scale meter with 100 division scale and sensitive D'Arsonval movement; knife-edge pointer. Ideal for checking all types of radio sets and transmitters; has high sensitivity for analysis of television circuits. Incorporates the following ranges: 0-2.5-10-50-250-1000 volts, D.C. at 20,000 ohms per volt, and A.C. at 1000 ohms per volt; 0-100 micro-amperes D.C.; and 0-1-10-50-250 D.C. M.A.; 0-1-10 Amms. D.C.; 0-3000-30,000 ohms; 0-3-30 megohms; -14 to +54 Db. Ohmmeter used for condenser leakage tests. Housed in sturdy fabricoid carrying case, 15x5x8 3/4". Attractive etched black panel trimmed in red and chrome. **\$52.13**



E10350. NET.

MODEL 666 TYPE 1B SOCKET SELECTOR

Recognized as the most efficient method of breaking into a receiver circuit for measurements. Can be used with any analyzer. Complete with plug, cable, selector, block, and all adapters. **\$15.83**

E10363. NET.

776 AC OSCILLATOR

The coverage of this instrument is 50 KC. to 33 MC. in six bands. Accuracy on B.C. bands is 1/2 of 0 and on S.W. bands 1%. The 6 foot scale of direct reading dial is hand calibrated. Output is held constant at all frequencies—an exclusive Weston feature. Leaks, strays, and drift have been minimized by perfect shielding. Output may be modulated 50% at 400 cycles. Size, 10x16x5 1/2". For 110-180 V., 50-60 cycles. Wt., 16 lbs. **\$65.25**



E10364. NET.

MODEL 773 TUBE CHECKERS

These models incorporate Weston's famous point-to-point method of double-checking tubes. Will step up your tube sales. **\$53.81**

E10355. MODEL 773-1. PORTABLE TYPE. Size, 15 1/2 x 8 1/2 x 5 1/2". For 110 V., 60 cycles. Wt., 13 lbs. NET

E10352. MODEL 773-2. COUNTER TYPE. Size, 14 1/2 x 10 1/2 x 7". For 110 V., 60 cycles. Wt., 16 lbs. NET **\$58.13**

WESTON CHECKMASTER MODEL 771-2

A complete tube and circuit analyzer. Checks all receiver tubes; measures receiver circuit voltages; locates condenser leakage; and makes resistance analysis. Provides separate tests for diode type tubes; checks for shorts under actual operating conditions. Quick reading, easily understandable scale reads "Good-Bad" for tube tests, also reads 6-10-100-1000 volts D.C.; and 0-2 megohms. In attractive carrying case. Wt., 17 lbs. For 110 volt, 60 cycle, A.C. **\$55.13**

E10354. NET.

WRITE FOR DETAILS OF OUR TIME PAYMENT PLAN.

PRECISION TEST INSTRUMENTS

NEW MODEL 900 DYNAMIC ELECTRONOMETER

The Model 900 is a modern "push-button" operated dynamic mutual conductance tube tester combined with a complete analyzer. Tests every type of receiving tube on the market today including ballasts. Its flexibility insures ability to accommodate future tube releases. New tube charts are furnished from time to time without charge. Meter ranges are: 0-10-50-250-1,000 volts A.C. and D.C.; at 900 ohms per volt; 0-1-10-50-250 mils D.C.; 0-10 amps. D.C.; 0-400-100,000 ohms; 0-1-10 megohms; -10 to +55 D.B.; and 4 output ranges. The 4 1/2" square D'Arsonval meter has accuracy of 2%. Housed in wood case, 12 1/2 x 11 1/2 x 6". Wt., 15 lbs. **\$48.95**



MODEL 842P VOLT-OHM-DECIBEL-MILLIAMMETER

Ideally suited for servicing radio receivers, transmitters and P.A. systems. The D'Arsonval meter is 4 1/2" square and has an accuracy to within 2%. Ranges are: 0-10-50-250-1000-2500 V. A.C. or D.C. at 1,000 ohms per volt; 0-1-10-50-250 M.A. D.C.; 0-400-100,000 ohms; 0-1-10 megohms; -10 to +63 Db in 5 ranges; 0-1-10 amps. D.C.; and 5 output ranges. The 4 1/2" and 45 volt batteries for ohmmeter circuit are not furnished. Space with instrument for batteries. In attractive walnut-finished wood case, 9 1/2 x 6". Shpg. wt., 7 lbs. **\$23.47**

E10130. NET.

E10131. MODEL 842L. Same specifications as the Model 842P, but less detachable cover and compartment. Wood case, 7 1/2 x 8 1/2 x 4". Wt. 6 lbs. NET **\$21.51**

We can promptly supply any Precision test instrument. Write us.

Modern TEST EQUIPMENT

CLOUGH-BREngle INSTRUMENTS GRAPHOSCOPES



Showmanship pays! A skillful display of impressive test equipment tells louder than words that you are up-to-date and an expert in your work. The C-B instruments listed below will improve your professional standing, gain customer confidence and respect, and build up trade at better profit.

MODEL 105-1 INCH

This instrument offers every performance characteristic of more costly oscillographs. Reveals signal imperfections sharply and accurately. Size $9\frac{1}{2} \times 9 \times 10$ ". For 110 V., 60 cycles. Wt., 20 lbs.

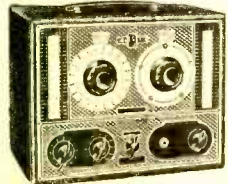
E10392. NET..... **\$29.50**

E10393. MODEL 105-2 INCH. Same as Model 105-1, except it uses new 2" tube. Wt., 20 lbs. NET..... **\$43.61**

E10394. MODEL 126-3 INCH. Same as Model 105-1, except standard 3" tube is used. Wt., 27 lbs. NET..... **\$63.21**

E10395. MODEL 127-3 INCH. Same as Model 126-3, but with frequency modulator. Wt., 29 lbs. NET..... **\$91.63**

SIGNAL GENERATORS



These signal generators are highly accurate, precision instruments built to laboratory standards. Especially suited for use with the oscillographs described above.

MODEL OCX

The Model OCX covers from 100 KC to 30 MC on fundamentals. Accuracy is within $\frac{1}{2}\%$. Has fine micro-tuner dial. Panel is calibrated with 92 frequencies. For 110 V., 60 cycles. Wt., 20 lbs.

E10367. NET..... **\$33.81**

E10373. MODEL OMA. Has built-in frequency modulator. 100 KC to 50 MC. For 110 V., 60 cycles. Wt., 29 lbs. NET..... **\$63.21**

E10374. MODEL 110. A highly accurate 100 KC to 31 MC generator. For 110 V., 60 cycles. Wt., 26 lbs. NET..... **\$48.51**

E10368. MODEL 111. A frequency modulator for use with any signal generator and scope. Wt., 20 lbs. NET..... **\$38.70**

MODEL 79c AUDIO OSCILLATOR

E10365. Accurate to 2% from 0-15,000 C.P.S. Has high stability. Output of 120 milliwatts across either 500 or 5,000 ohms imp. For 110 V., 60 cycles. Wt., 26 lbs. NET..... **\$58.31**

MODEL 125 TUBE CHECKER

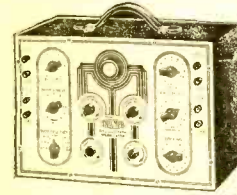
E10366. Checks all types of tubes for mutual conductance performance. Has "Good-Bad" scale and sensitive neon shorts test. Size, $11\frac{1}{2} \times 9\frac{1}{2} \times 5$ ". For 100-130 V., 60 cycles. Wt., 15 lbs. NET..... **\$33.80**

MODEL 120 SUPER ANALYZER

E10369. Ranges are: 0-3.75-7.5-140-350-1,400 volts A.C. and D.C. at 20,000 ohms per volt D.C.; 0-.07-.7-35-350 mills D.C.; 0-30 megohms in 4 ranges and -14 to +61 D.B. Wt., 13 lbs. NET..... **\$42.63**

TRIUMPH TEST INSTRUMENTS

MODEL 77 OSCILLOSCOPE AND WOBBULATOR



Here is one of the finest low cost 2 inch Oscilloscope-Wobbulator combinations ever offered to the Radio Service man. Absolutely essential for flat-topping I.F.T.s, locating hum, distortion, oscillation, fading, etc. It produces an easily understood single trace curve. With tubes. Size, $13\frac{1}{2} \times 10 \times 8\frac{1}{2}$ ". For 110 V., 60 cycles. Wt., 16 lbs.

E10124. NET..... **\$58.75**

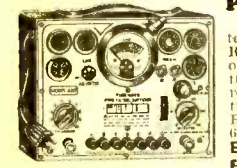
120A SIGNAL GENERATOR



The Model 120A duplicates the performance of higher-priced instruments in frequency calibration, attenuation, modulation, waveform, and absence of stray leakage. The large, full-size dial is directly calibrated from 100 KC to 27 MC on fundamentals and to 75 MC on harmonics. External, 100 cycle, and 1 K.C. are available. Size, $9 \times 7 \times 6\frac{1}{2}$ ". With R.C.A. tubes. For 110 V., 60 cycles. Wt., 10 lbs.

E10120. NET..... **\$29.35**

PUSH-BUTTON TUBE TESTER



Here is one of the fastest operating tube testers on the market. Makes the standard R.M.A. tests of electronic conductance, shorts, open circuits, and leakage on all types of tubes. The replaceable tube chart is on a roller index. Leakage tests are made with tube hot. Size, $7\frac{1}{2} \times 9\frac{1}{2} \times 2\frac{1}{2}$ ". For 100-125 V., 60 cycles. Shpg. wt., 12 lbs. EACH

E10121. Portable Model. **\$33.80**
E10122. Counter Model.

NEW RCA TEST EQUIPMENT

MODEL 151 OSCILLOGRAPH



Uses type 913 one-inch cathode-ray tube. The separate horizontal and vertical amplifiers each have a gain of 50 and are flat from 20-10,000 cycles. This oscillograph will aid in aligning receivers visually, check distortion, gain and hum. Size, $13\frac{1}{2} \times 9\frac{1}{2} \times 7\frac{3}{4}$ ". For 110 volts, 60 cycles. A.C. Complete with tubes. **\$39.95** Shpg. wt., 16 lbs.

E10330. NET.....

MODEL 151 2-INCH OSCILLOGRAPH

E10331. Similar to the model described above but uses the new 902-2" cathode-ray tube. The sensitivity of this tube has been increased, permitting maximum deflection with minimum deflecting voltage. Complete with tubes. Wt., 20 lbs. NET..... **\$49.95**

MODEL 155 3-INCH OSCILLOGRAPH

E10332. The Model 155 retains the fine qualities of previous models, plus many new features, all at a new low price. For the finest work, a 3-inch oscillograph is always preferable because of the easily-read image. Size, $15\frac{1}{2} \times 8\frac{1}{2} \times 14$ ". For 110 V., 60 cycles. Shpg. wt., 28 lbs. NET..... **\$63.95**

AC TEST OSCILLATOR

MODEL 153



Here is one of the finest oscillators available and at a remarkably low price. Six bands cover from 100 to 20,000 KC on fundamentals and an accuracy of 2%. The large 6" dial, over 50" in length, insures easy reading. RF output variable from 2 microvolts to 1 volt maximum. A 400 cycle 8 volt output is also available. With tubes. Size, $13\frac{1}{2} \times 9\frac{1}{2} \times 6\frac{1}{2}$ ". For 110 V., 60 cycles. Shpg. wt., 15 lbs.

E10333. NET..... **\$29.95**

MODEL 9558 FREQUENCY MODULATOR

Designed to modulate the RF frequency of any oscillator over a range sufficient for visual alignment with an oscillograph. It sweeps the RF voltage over the resonant frequency of the circuit under test and at the same time generates an AC synchronizing voltage. Size, $6\frac{1}{2} \times 9\frac{1}{2} \times 14\frac{1}{2}$ ". For 110 V., 60 cycles. Shpg. wt., 7 lbs.

E10334. NET..... **\$27.50**

MODEL 4317 OUTPUT INDICATOR

For use with an oscillator in alignment work. Neon glow lamp accurately indicates resonance. Unaffected by overload. Three outputs: 4, 1.5, and .6 ohms. Molded bakelite case, $5\frac{1}{2} \times 2\frac{1}{2} \times 2\frac{1}{2}$ ".

E10336. NET..... **\$4.00**

NEW 156A TUBE TESTER

This new Model RCA Tube Tester has many distinctive worthwhile features. It is so easily operated that instructions are unnecessary. The roll type chart has large, easily read figures which indicate the proper buttons to be pressed. Both 4 prong and octal base ballast tubes are tested for noisy welds and opens. Checks gas rectifiers and magic-eye tubes. All tests made according to R.M.A. standards. In attractive, wrinkle-finished cabinet with sloping panel. Size, $13\frac{1}{2} \times 5\frac{1}{2} \times 8\frac{1}{2}$ ". For 100-125 V., 60 cycles. Shpg. wt., 20 lbs.

E10335. COUNTER MODEL. NET..... **\$37.95**

E10324. PORTABLE MODEL. Same as Model 156A, but with rugged cover and snap-on handle. NET..... **\$39.95**

We can supply all R.C.A. test equipment. Write for particulars.

NEW BERNARD METERETTES

DELUXE MODEL



A sensitive, highly accurate instrument at a remarkably low price. Ranges are: 0-10-50-250-500-2,500 volts D.C. at 5,000 ohms per volt; 0-10-100-1,000 volts A.C. at 1,200 ohms per volt; 0-2,000 ohms; 0-2 megohms; 0-200 microamps. D.C. and 0-10-100-1,000 milliamps D.C. The 3" square meter has an accuracy of 2%. All A.C. ranges are marked in red on meter scale while D.C. ranges are in black. An exclusive feature is the combined A.C.-D.C. switch and ohms adjuster. Housed in solid mahogany case with etched metal panel and removable cover. Supplied with test leads.

E10231. NET..... **\$13.90**

STANDARD MODEL

Same as De Luxe except meter is 0-1 M.A., 1000 ohms per volt. Less cover, wt., 3 lbs.

E10232. NET..... **\$8.90**

NEW BERNARD ECONOMETER

An economical V.O.-3 with a sensitivity of 1,000 ohms per volt. Ranges are: 0-10-100-500 volts A.C. and D.C.; 0-400-250,000 ohms and 0-1-10-100,000 mills D.C. Has accurate 2" round meter with 2-color extended scales. Ohms adjuster and A.C.-D.C. switch are combined. In $5\frac{1}{2} \times 3\frac{1}{2}$ " handomely finished wood case. Wt., 3 lbs.

E10233. NET..... **\$7.90**

READRITE METERS SHUNTS • RECTIFIERS

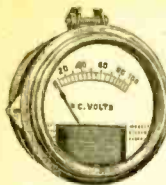
READRITE PANEL METERS

MODEL 55 D.C.

The popular and economical Readrite line used extensively in radio and electrical work where an efficient low-priced meter is required. Accuracy assured within 5%. D.C. meters are polarized vane, solenoid type. Require 2 1/4" mounting hole. Have easy-reading white dial, black lettering and full nickel-finish metal shell. Clamp included to hold meter tight against panel. Screw connections with binding nuts on rear. 2 1/4" diameter. Convertible for outside flange mounting with use of No. 65A Flange ring.

MODEL 95

Here is a brand new addition to the famous line of Readrite meters. Model 95 is modernistic and up-to-date in every respect. The beautiful black lacquer-finished square case measures 2 1/4" x 2 1/4". Wrinkle, nickel, and chrome finishes are also available on special order. Meters require a 2 1/2" hole for mounting. Ideal modern low-cost meters for all radio work.



Standard Type

Zero Adjustment



Less Zero Adjustment

D. C. VOLTMETERS

Volts	Resist. Ohms	MODEL 55				MODEL 95	
		Without Zero Adjustment		With Zero Adjustment		Without Zero Adjustment	
		No.	NET Each	No.	NET Each	No.	NET Each
0-1	30	E7350		E7375		E7250	
0-3	175	E7351		E7376		E7251	
3-0-3	550	E7352	59c	E7377	73c	E7252	79c
0-5	410	E7353		E7378		E7253	
0-6	650	E7354		E7379		E7254	
0-8	875	E7355		E7380		E7255	
0-10	1450	E7356	59c	E7381	73c	E7256	79c
0-15	2014	E7357		E7382		E7257	
0-25	1025	E7358		E7383		E7258	
0-25	7720	E7359	\$1.62	E7384	\$1.76	E7259	\$1.82
0-50	3250	E7360	.59	E7385	.73	E7260	.79
0-50	15440	E7361	1.91	E7386	2.06	E7261	2.12
0-100	6500	E7362	.88	E7387	1.03	E7262	1.09
0-100	30888	E7363	1.91	E7388	2.06	E7263	2.12
0-150	9750	E7364	1.03	E7389	1.18	E7264	1.23
0-150	40320	E7365	1.91	E7390	2.06	E7265	2.12
0-300	92640	E7366	1.91	E7391	2.06	E7266	2.12
0-500	154400	E7367	2.65	E7392	2.79	E7267	2.85
0-750	231600	E7368	3.23	E7393	3.38	E7268	3.44
0-8-160	10200	E7369	1.32	E7394	1.47	E7269	1.53
0-60-300	92640	E7370	2.65	E7395	2.79	E7270	2.85
0-20-40	180000	E7371	3.23	E7396	3.38	E7271	3.44

D. C. AMMETERS

Amps.	Type	MODEL 55		MODEL 95	
		No.	NET Each	No.	NET Each
0-1	380	E7428		E7438	
0-3	336	E7429		E7439	
0-5	381	E7430	59c	E7440	73c
0-10	398	E7431		E7441	79c
0-25	382	E7427	\$0.88	E7437	\$1.03
0-50	383	E7426	1.47	E7449	1.62
1-0-1	101	E7432		E7442	
3-0-3	303	E7433		E7443	
6-0-6	606	E7434	59c	E7444	73c
10-0-10	110	E7435		E7445	79c
20-0-20	220	E7436		E7446	
30-0-30	330	E7448	\$1.18	E7447	\$1.32
50-0-50	550	E7461	1.32	E7460	1.47

RESISTANCE METER

MODEL 501



Direct reading: 0-10,000 ohms, 0-4% volts. Measures resistance and checks continuity in radio and electrical circuits. Uses 3 small flashlight cells. An inexpensive but reliable meter.

E7341. NET.....**88c**

RESISTORS

No. 503 Resistor. 1150 ohms resistance to increase No. 501 ohmmeter reading to 60,000 ohms when used with a 2 1/2 Volt battery.

E7343. List. \$1.00. NET.....**59c**

No. 504 Resistor. 2,300 ohms, center-tapped, for use with 45 V. "B" to increase reading of No. 501 ohmmeter to 100,000 ohms.

E7344. With tip jacks. NET.....**\$1.32**

OUTPUT METER

MODEL 575



Indicates output voltages for correct alignment of RF and IF stages. Ranges: 0-5, 0-50 volts. Has copper-oxide rectifier. In 4 1/2" black enamelled metal case. Has tip-jacks for leads.

E7348. NET.....**\$4.85**

MODEL 515 OUTPUT METER

Same as Model 575 above but with Triplet meter. Has range of 2.5-5 volts. 750 ohms resistance per volt.

E7349. List. \$16.50. NET.....**\$9.70**

CONTINENTAL CARBON SEMI-PRECISION RESISTORS



A high quality line of triple ceramic-molded semi-precision carbon resistors. Accurate within 5%; ideal meter range multipliers; 1 watt size.

Ohms	Volts at 1 M.A.		Volts at 1 M.A.		Volts at 1 M.A.	
	Ohms	M.A.	Ohms	M.A.	Ohms	M.A.
100	.1	8500	8.5	100000	100	
200	.2	*8950	9	150000	150	
400	.4	*9050	10	200000	200	
500	.5	10000	10	240000	240	
1000	1	13500	13.5	250000	250	
*1450	1.5	15000	15	300000	300	
2000	2	20000	20	400000	400	
*2850	3	25000	25	450000	450	
3500	3.5	30000	30	490000	490	
4000	4	40000	40	500000	500	
*4450	4.5	50000	50	600000	600	
*4950	5	60000	60	750000	750	
5000	5	75000	75	800000	800	
5500	5.5	85000	85	900000	900	
*5950	6	90000	90	1000000	1000	
*7450	7.5					

*These units allow for the 50 ohms internal resistance of the milliammeter.

E5899. Specify Values When Ordering. NET EACH.....**18c**

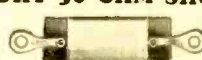
COPPER OXIDE RECTIFIER

Exceptionally small full-wave rectifier for converting D.C. meters for A.C. use. Input 10 volts RMS; output 20 M.A.



E2503. NET EACH.....**\$2.06**

KNIGHT 50 OHM SHUNTS



Individually calibrated to an accuracy of $\pm 1/2$ of 1%. Ideal for increasing the range of 0-1 mill meters. Wire is hard drawn magnanin, with negligible temperature coefficient.

No.	M.A.	No.	M.A.
E2369	5	E2373	100
E2370	10	E2374	250
E2371	25	E2375	500
E2372	50	NET EACH.....	49c

KNIGHT COMBINATION SHUNTS

No.	Milliamp.	NET
E2377	10-50-100	\$1.29
E2378	50-100-250	
E2379	50-250-500	

COPPER-OXIDE RECTIFIERS S M. A. CAPACITY

Miniature type. Converts D.C. meters drawing less than 5 M.A. to A.C. instruments. $3/16$ " square.



E2500. NET.....**\$2.15**

20 M. A. CAPACITY

3/16" round, 3/8" long. Converts D.C. meters drawing not over 20 M.A. to A.C. types.



E2501. NET.....**\$1.88**

50 M. A. CAPACITY

3/8" dia.; 1/2" long. Heavy-duty type for use in circuits where current does not exceed 50 M.A.



E2502. NET.....**\$1.75**

Quality METERS TRIPLETT · BEEDE

ILLUMINATED DIALS

These attachments represent the very latest and by far the most outstanding dial-lighting developments of the season. Light is spread evenly and scale. Two models available. With socket and 6.3 V. bulb.

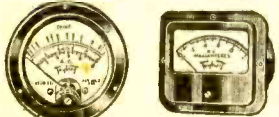
FRONT LIGHTING ATTACHMENT
Modernistic design. For use with models 321 and 331 meters. Easily attached. Lamps can be replaced without opening instrument.

E9071. NET **98c**

REAR LIGHTING ATTACHMENT
Supplied only with meters. Add prices below to cost of meter.

E9072. For Models 221, 231. NET **39c**

E9073. For Models 321, 331. NET **46c**



321-521 **326-421**

TRIPLETT FOUNDATION INSTRUMENT KITS

1000 OHMS PER VOLT

These high-quality, precision-built Triplett meters, with the shunts and multipliers described below, afford the opportunity to build an extremely accurate, multi-scale volt-ohm-milliammeter at low cost. The four meters incorporate a basic 0-1 mil movement with an internal resistance of 100 ohms and a sensitivity of 1,000 ohms per volt. Ranges are as follows: 0-10-50-250-500-1,000 volts D.C.; 0-500-100,000 ohms; and 0-1-10-50-250 mills D.C. Readings as low as .2 ohms can readily be made. All meters are equipped with zero adjustments and have knife-edge pointers which simplify readings. Each instrument is supplied with a wiring diagram.

MODEL 321
E8946. Flange $3\frac{1}{2}$ " diameter, flush mounting. Scale length, 2". Molded bakelite case. NET **\$4.90**

MODEL 326
E8941. Flange $3\frac{1}{2}$ " x $2\frac{1}{4}$ " $\frac{1}{2}$ " flush mounting. Scale length, 2". Molded bakelite case. NET **\$4.90**

MODEL 421
E8943. Flange measures $4\frac{1}{4}$ " x $4\frac{1}{4}$ " flush mounting. Scale length, $3\frac{1}{2}$ ". Molded bakelite case. NET **\$6.20**

MODEL 521
E8949. Flange measures $5\frac{1}{4}$ " diameter, flush mounting. Scale length, $3\frac{1}{2}$ ". Molded bakelite case; $\frac{1}{8}$ " diameter body. $1\frac{1}{2}$ " deep. NET **\$6.86**

RESISTORS & SHUNTS
E8942. Resistors mounted on bakelite to obtain following ranges: 0-10-50-250-500-1,000 volts D.C. NET **\$7.18**

E8943. Shunts mounted on bakelite for 0-1-10-50-250 mills D.C. shunt for low ohms and current limiting resistors for low and high ohms. NET **\$2.28**

E8778. Zero adjuster for ohms. NET **66c**

E9779. Selector switch with knob. NET **\$1.64**

E8944. Current limiting resistors for the 100,000 ohmmeter range. NET **66c**

TRIPLETT PRECISION METERS

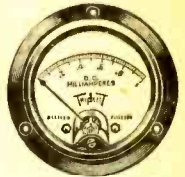
These accurate, dependable meters are available in a variety of styles, sizes, and ranges. Incorporate a rugged D'Arsonval movement which assures an accuracy within 2%. The genuine polished sapphire-jeweled bearings are set in adjustable screws. All instruments have zero adjustments and balanced aluminum knife-type pointers. Metal dials are beautifully finished in white enamel with large, easily-read scales. The A.C. meters have the movable iron-repulsion type, air-damped, and have light moving parts. Front lighting attachments are available for the Model 321, 321, 421, and 521 meters. Rear lighting attachments are available for the Model 221, 231, 321, and 331 meters. These illuminating attachments are fully described at left. Average shipping weight of each meter is 3 lbs. You can buy these modern Triplett instruments with confidence in their quality.

METER DIMENSIONS

Model	Flange	Mtg.	Scale	Case
221	2 $\frac{1}{2}$ "	Flush	1 $\frac{11}{16}$ "	Bakelite
227	2 $\frac{3}{8}$ " x 2 $\frac{3}{8}$ "	Flush	1 $\frac{11}{16}$ "	Bakelite
231	2 $\frac{3}{8}$ "	Flush	1 $\frac{11}{16}$ "	Bakelite
237	2 $\frac{3}{8}$ " x 2 $\frac{3}{8}$ "	Flush	1 $\frac{11}{16}$ "	Bakelite
321	3 $\frac{1}{2}$ "	Flush	2 $\frac{1}{2}$ "	Bakelite
327	3 $\frac{1}{8}$ "	Flush	2 $\frac{1}{2}$ "	Bakelite
331	3 $\frac{1}{8}$ "	Flush	2 $\frac{1}{2}$ "	Bakelite
337	3 $\frac{3}{8}$ "	Flush	2 $\frac{1}{2}$ "	Bakelite



227-327 D. C.
237-337 A. C.



321-221 D. C.
331-231 A. C.

PORTABLE FRAME

This portable frame is especially designed to house Triplett Model 321 and 331 meters. Substantially built of metal with attractive black wrinkle finish. Closed sides. Includes two insulated binding posts for making necessary connections. Tilted panel of frame provides easy, legible reading of meter face.



E9074. Frame only. NET **98c**

D. C. MILLIAMMETERS

Model	Flange	NET	M.A.	Model	Flange	NET
321	327	NET	M.A.	221	227	NET
E8650	E8664	\$4.57	0-1	E8736	E8786	\$3.75
E8651	E8665		0-1.5	E8737	E8787	
E8652	E8666	3.75	0-5	E8738	E8788	2.94
E8653	E8667		0-10	E8739	E8789	
E8654	E8668		0-15	E8740	E8790	
E8655	E8669		0-25	E8741	E8791	
E8656	E8670	3.75	0-50	E8742	E8792	2.94
E8657	E8671		0-100	E8743	E8793	
E8658	E8672		0-150	E8744	E8794	
E8658	E8673		0-200	E8745	E8795	
E8663	E8674		0-250	E8746	E8796	
E8659	E8675	3.75	0-300	E8747	E8797	2.94
E8660	E8676		0-500	E8748	E8798	
E8662	E8677		0-750	E8749	E8799	

D. C. VOLTMETERS

Model	Flange	NET	Volts	Model	Flange	NET
321	327	NET <th>Volts</th> <td>221</td> <td>227</td> <td>NET</td>	Volts	221	227	NET
E8761	E8450		0-5	E8462	E8474	
E8762	E8451		0-10	E8463	E8475	
E8763	E8452	\$3.75	0-15	E8464	E8476	\$2.94
E8764	E8453		0-25	E8465	E8477	
E8765	E8454		0-50	E8466	E8478	
E8766	E8455	3.75	0-100	E8467	E8479	2.94
E8767	E8456	3.75	0-150	E8468	E8480	2.94
E8768	E8457	4.57	0-250	E8469	E8481	3.75
E8769	E8458	5.39	0-300	E8470	E8482	4.24
E8770	E8459	6.05	0-500	E8471	E8483	5.07
E8771	E8460	13.23	0-750	E8472	E8484	12.08
E8772	E8461	15.36	0-1000	E8473	E8485	14.38

A. C. VOLTMETERS

Model	Flange	NET	Volts	Model	Flange	NET
331	337	NET <th>Volts</th> <td>231</td> <td>237</td> <td>NET</td>	Volts	231	237	NET
E8830	E8700		0-5	E8711	E8486	
E8831	E8701		0-10	E8712	E8487	
E8832	E8702	\$3.75	0-15	E8713	E8488	\$2.94
E8833	E8703		0-25	E8714	E8489	
E8834	E8704	3.75	0-50	E8715	E8490	2.94
E8835	E8705	3.75	0-100	E8716	E8491	2.94
E8836	E8706	4.57	0-150	E8717	E8492	3.75
E8837	E8707	5.39	0-300	E8718	E8493	4.73
E8838	E8708	7.18	0-500	E8719	E8494	6.53
E8839	E8709	14.38	0-750	E8720	E8495	13.55
E8840	E8710	16.49	0-1000	E8721	E8496	15.68

TRIPLETT UNIVERSAL AC-DC METER

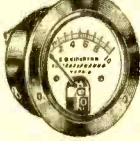
E9070. A versatile instrument reading both A.C. and D.C. Ranges are as follows: 0-15-75-150-750 volts A.C. and D.C. at 1,000 ohms per volt; 0-1.5-15-150 mills D.C.; 0-15-150 mills A.C.; 0-1,500 ohms; and 0-1.5-3 megohms. Model 321 meter, 3" diameter. With copper-oxide rectifier and switch. NET **\$9.80**

E9069. Kit of resistors and shunts for above ranges, selector switch, rheostat, jacks, panel, bar knobs, batteries, wire, etc. Complete less meter. NET **\$14.38**

MODEL 701 BEEDE TEST PANEL METERS

D. C. MILLIAMMETERS

Highly accurate D'Arsonval type meters. Moving coil design. Accuracy within 2%. Have zero adjustment, sapphire bearings, aluminum pointers. Flush mounting, $3\frac{1}{4}$ " diameter, metal case.



No.	M. A.	List	NET
E2300	0-1	\$6.00	\$3.53
E2301	0-10	4.75	2.79
E2302	0-100	4.75	2.79
E2303	0-200	4.75	2.79
E2305	0-500	4.75	2.79
E2304	1-0-1	6.00	3.53

VOLT-OHM-MILLIAMMETERS

Build your own point-to-point analyzer or test panel using one of these meters as the Volt-ohm-milliammeter. Scale ranges provided are those most generally used in service and test instruments.

E2315. MODEL 701. Meter only. Reads 0-1 mills D.C., 0-50,000 ohms, 0-15-300 volts D.C. NET **\$3.53**

E2317. MODEL 701. Meter only. Reads 0-1 mills D.C., 0-2,000 ohms, 0-5-250-750 volts D.C. NET **\$3.53**

We can supply all Beede meters. Write for descriptive literature and prices.

Precision FOUNDATION & PANEL METERS

KNIGHT-BEEDE FOUNDATION METERS



These new Beede Foundation Meter Kits are ideal for building an efficient Volt-Ohm-Milliammeter at an attractively low price. An invaluable instrument for the Serviceman, Amateur or Experimenter. The black bakelite fan-type case is 4 1/2" long and 3 3/8" high and mounts in a 2 1/2" diameter round hole. The large figures on the long 3 3/8" scale are indicated by a special knife-edge pointer. The 2% accuracy D'Arsonval movement is carried on sapphire jewel bearings.



1000 OHMS PER VOLT

You can build an efficient Volt-Ohm-Milliammeter around this high quality Beede Foundation Meter. It employs a sensitive 0-1 MA movement, 50 ohms internal resistance. Scales are: 0-10-25-50-100-250-500 volts D.C.; 0-1,000 ohms-1 megohm; and 0-10-100 milliamperes D.C. These scales provide quick and accurate testing. (See multiplier resistor kit and shunt resistors below.)

\$4.41

E2330. NET

MULTIPLIER RESISTOR KIT

Consists of high quality semi-precision resistors for use with the above meter to secure the indicated scale readings. Resistors are accurate to within 5%. With diagram.

E2331. Resistor Kit. NET. **\$1.59**

SHUNT RESISTORS

E2370. To obtain reading of 0-10 M.A. on above meter.

E2373. To obtain reading of 0-100 M.A. on above meter. NET. EACH. **49c**

20,000 OHMS PER VOLT

Now you can build a really sensitive voltmeter at an extremely low price. Uses a 50 microampere basic movement that will give you a sensitivity of 20,000 ohms per volt when used as a multi-range D.C. voltmeter. Internal resistance is 1575 ohms. Scales are: 0-10-50-100-500-1,000 volts D.C.; 0-1,000-100,000 ohms, 0-1-2 megohms, and 0-10-100 M.A. D.C. These ranges are obtained when the meter is used with the resistors and shunts listed at the right. With diagram.

E2333. NET **\$10.58**

E2333. NET

5000 OHMS PER VOLT

An ideal instrument for use as a voltmeter where a meter sensitivity greater than 1,000 ohms per volt is required. Uses a 200 microampere movement; internal resistance, 450 ohms. Scales are: 0-10-50-100-500-1,000 volts D.C.; 0-1,000-100,000 ohms, 0-1-10 megohms, and 0-10-100 milliamperes, D.C. Use resistors and shunts below to obtain indicated ranges. With wiring diagram.

\$5.88

E2332. NET

MULTIPLIER RESISTOR KIT

Consists of 6 precision wire-wound resistors, 7 Continental Carbon Semi-Precision resistors, and 1 Yaxley wire-wound potentiometer for ohm and volt scales. For use with 5,000 ohm per volt meter above. Accuracy within 5%.

E2320. NET. **\$4.65**

SHUNT RESISTORS

Three accurately calibrated wire-wound precision resistors. For adding 0-1-10-100 M.A. ranges to meter listed above. Accuracy of calibration is 5%.

E2321. NET **\$1.45**

MULTIPLIER RESISTOR KIT

Consists of 7 precision and 7 Semi-Precision resistors, and 1 Yaxley potentiometer for ohm and volt scales. Calibrated within 5%; for use with 20,000 ohm per volt meter.

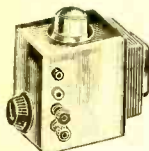
E2322. NET **\$5.65**

SHUNT RESISTORS

Three wire-wound precision resistors for adding 0-1-10-100 M.A. ranges to the 20,000 ohm per volt meter. Accuracy 1%.

E2323. NET **\$1.45**

RESISTANCE RANGE EXTENDER KIT



Here is a brand-new kit which, when used with a low-range ohmmeter, will enable you to measure resistors up to 10 megohms. It is designed for use with any meter having a 1 mil D.C. movement and a reversed resistance scale. This type of meter is generally used with a 4 1/2 volt battery. Every serviceman, amateur and experimenter will find this range extender a valuable aid in his work. Kit consists of all parts, including a punched and formed chassis base, power transformer, triode tube, etc. Easy to build. For 110 volt 60 cycle operation. Shpg. wt., 6 lbs.

E2334. NET **\$2.85**

METER REPAIR SERVICE



Whether your meter is burned out or damaged mechanically, our meter service will put it back into good condition. Repairs are made by trained technicians and are calibrated against standards of the highest accuracy. Here is a fine service that amateurs, servicemen and experimental laboratories need. For prices on services not shown, send meter prepaid for inspection.

SERVICE A: For 3 1/2" meters with burned-out or open armatures. We dismantle the entire moving element, rewind or replace armature, re-plate and sharpen the pivots, and polish the jewels. If the armature has been burnt, new hair-springs are installed. The moving element is then reassembled and balanced, and the meter calibrated at three points. Metal cases if badly scratched, are carefully refinished.

YOUR COST **\$3.75**

SERVICE B: For sluggish or erratic meters. Same as Service A except that armature and hair-springs are not replaced.

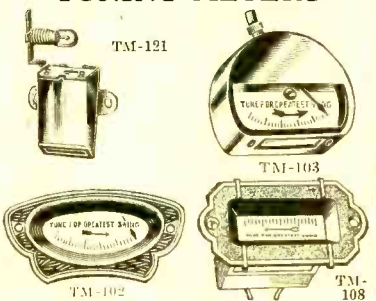
YOUR COST **\$2.95**

SERVICE C: If glass is cracked, scratched or broken, we will replace it for an additional charge of **90c**

SEND CASH WITH ORDER

Prices above cover only replacement parts specified in each service. Additional parts, such as pointers, springs, zero adjusters, case, etc., will be supplied at the lowest possible prices.

TUNING METERS



High resistance milliammeters for visual tuning of A. V. C. sets. Indicate exact tuning resonance. Model 121 is shadow tuning type. Other models use needle as indicator.

M. A.	TM-103	TM-102	TM-108	TM-121
0-5	E 7475	E 7480	E 7485	E 7490
0-7	E 7476	E 7481	E 7486	E 7491
0-10	E 7477	E 7482	E 7487	E 7492
0-15	E 7478	E 7483	E 7488	E 7493

Choice of any type above, less post-charge. List, \$1.50. NET EACH. **88c**

ESUTCHEONS

E 7495. For TM-108, 121. }
E 7496. For TM-102, 103. } EACH, **18c**

SIMPSON D. C. MILLIAMMETERS



TYPE 27S. These meters are the most accurate, rugged, low-cost instruments ever built. They have white enameled metal dials with black scales and figures. The scale length is 2 1/8". 3" rectangular bakelite case.

No.	M.A.	NET	No.	M.A.	NET
E2336	0-1	\$5.07	E2340	0-100	\$4.15
E2337	0-1.5	5.07	E2341	0-200	
E2338	0-10	4.15	E2342	0-300	
E2339	0-50	4.15	E2343	0-500	

We can supply all Simpson meters. Write for quotations, or order with deposit.

WESTON 301 PANEL METERS



These panel instruments are distinguished for their fine workmanship and dependable performance. They have well-damped D'Arsonval movements with an accuracy within 2%. Contained in 3 1/2" round bakelite cases of the flush-mounting type. The A.C. meters use a full-wave copper-oxide rectifier.

D. C. MILLIAMMETERS

No.	M.A.	NET	No.	M.A.	NET
E1428	0-1	\$7.35	E1424	0-100	\$6.61
E1429	0-1.5	7.35	E1425	0-200	
E14220	10	6.61	E1426	0-300	
E14230	25	6.61	E1427	0-500	

D. C. VOLT METERS

(1000 Ohms Per Volt)

No.	Volts	NET	No.	Volts	NET
E1428	0-5	\$8.82	E1430	0-25	\$8.82
E1429	0-10		E1431	0-150	9.74

D. C. AMP METERS

No.	Amps.	NET	No.	Amps.	NET
E1432	0-1	\$6.61	E1434	0-20	\$6.61
E1433	0-5		E1435	30-0-30	

MODEL 476 A. C. VOLT METERS

No.	Volts	NET	No.	Volts	NET
E1436	0-25	\$6.61	E1438	0-150	\$8.27
E1437	0-100	7.35	E1439	0-300	12.12

MODEL 476 A. C. AMP METERS

No.	Amps.	NET	No.	Amps.	NET
E1440	0-2	\$6.61	E1443	0-10	\$6.61
E1441	0-3		E1444	0-20	
E1442	0-5		E1445	0-50	

Available in rectangular cases at same prices listed above. Order with deposit.

PORTABLE METER BASE

These bases offer a convenient and practical method of mounting your Weston panel meters. All bases are supplied with black crackle finish.

E1446.	With 2 binding posts.	\$1.47	
NET	E1447. With 3 binding posts.		
NET	E1448. With four binding posts. NET.	\$1.83	\$2.02

PANEL LIGHT



Excellent for lighting panel-type meters. Requires single 1/2" mounting hole. Accommodates miniature base bulb.

E9133. NET. **29c**

AUDIO BEAT FREQUENCY OSCILLATOR KIT

Pure wave form essentially flat from 30 to 15,000 cycles. Essential kit contains coils, variable condenser, filter unit, dial, and hardware parts. Write for full literature.

E5691. NET. **\$6.29**

E5692. Complete Parts Kit. Punched chassis, resistors, condensers, cabinet tubes, etc. Wt., 12 lbs. NET. **\$20.80**



MODERNIZER ADAPTERS • TESTERS

SPEAKER-HEADPHONE MIKE & PHONO ADAPTERS



For speaker and headphone switching. Connects off speaker to radio set; built-in switches of speaker so that other persons in room will not be disturbed. Adapters supplied fit under power tubes. Very easily installed.

SINGLE PUSH-PULL

E5537. 4 Prong. For self-biased tube.	E5541. 4 Prong.
E5538. 5 Prong.	E5542. 5 Prong.
E5539. 6 Prong.	E5543. 6 Prong.
E5540. 7 1/2 Tube.	E5504. 8 Prong.
E5544. 8 Prong.	

NET EACH **\$1.45** NET EACH **\$1.63**

FOR EXTRA SPEAKERS

E5529. For push-pull 4 prong tubes.	25c
E5530. For push-pull 5 prong tubes.	33c
E5532. For single 5 prong tube.	28c

FOR MIKE & PHONO

E5505. 5 Prong.	NET EACH	54c
E5506. 6 Prong.		
E5508. 7 Prong.		
E5509. 8 Prong.		

FOR EARPHONES

To connect headphones to any set. Ideal for DX and hard-of-hearing use. May also be used as extra speaker adapter in sets having one power tube.

E5294. 5 Prong.	NET EACH	44c
E5295. 6 Prong.		

UNIVERSAL ADAPTER

All tube terminals are brought out for quick easy connection.

E5510. 4 prong.	EACH	12c
E5511. 5 prong.		
E5512. 6 prong.		
E5513. 7S prong.		
E5514. 8 prong.		

GRID CAP PHONO ADAPTER

Connects phonograph pick-up to grid cap of tube. Has 2 contacts into which the pick-up's phono tips are connected. Ideal for magnetic or crystal pick-ups.

E5546. For Glass Tubes.	YOUR PRICE EACH	26c
E5547. For Metal Tubes.		

GRID CAP ADAPTERS

E1672. Double clip for metal and glass tubes. Insulated in molded housing.	YOUR PRICE	12c
E1673. Plugs into standard grid cap. Other end fits small metal tube cap.	YOUR PRICE	9c
E1684. Dual stud for control grid lead of analyzer plug. Metal and glass.	YOUR PRICE	6c
E1685. Octal screw type. Replaces 1 of the large studs on plugs having 2.	YOUR PRICE	6c

UNIVERSAL OUTPUT-METER ADAPTER

For making connections to meters, controls, etc., for test purposes. Pull out tube. Slip adapter over proper prong, and replace the tube. 50" lead.

E1678. NET	18c
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UNIVERSAL ADAPTER KIT

Can be used to make up any adapter required for test purposes. Contains one each: 4, 5, 6, 7, and 8 octal prong water separators and 12 contacts. In use, the separator needed is selected; then the correct number of contacts are inserted according to element of tube or circuit under test. Parts may be used over and over again. Complete in leatherette case. Shpg. wt., 1 lb.

E1679. NET	44c
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ADAPTERS FOR MODERNIZING AND TUBE TESTING

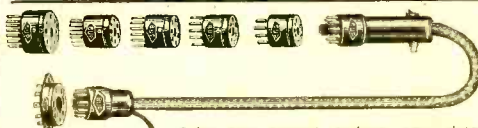
Cash in on set-modernization. Use these adapters to replace tube types listed below. The new glass and metal tubes now available will increase set sensitivity, selectivity power and stability. No longer necessary to change sockets. These adapters may also be used to modernize old style testing equipment. The wiring of your present tube tester or analyzer need not be disturbed.



No.	Test or Replace	In Socket	No.	Test or Replace	In Socket
E1728	25Z6	25Z5	E1739	57, 58, 77	24, 35/51, 37
E1735	6E5	75 (Triode)			39/44
E1737	6X5	84, 6Z4	E1740	47	45
E1730	6J7	77, 6C6	E1742	82	80
	6K7	78, 6D6	E1743	59	45
	6E6, 6L6	41, 42	E1747	27	Kellogg 401
	6K6	41, 42	E1748	56	Kellogg 401
E1686	25A6	43	E1749	2A5	Kellogg 403
E1687	6BE*	75, 85	E1744	2A5	45
E1682	6H6*	75, 85	E1746	2A5	47
E1677	6C5	37, 76	E1745	59	47
E1680	5Z4, 5W4, 5Y3	80	E1755	UX201A	UV201A
	6K7, 6J7, 6E6	78, 77, 42	E1741	UX199	UV199
	6L6, 6Q7, 6R7	42, 75, 85			
	25A6, 6B5	43, 6N6			

YOUR CHOICE OF ANY ABOVE ADAPTERS

NET EACH **44c**



BUD ANALYZER PLUG AND ADAPTERS ANALYZER KIT

This molded bakelite analyzer plug with its small-base adapter kit makes it possible for you to consist of: 8 prong plug; cable

bring your present analyzer up-to-date.

E1650. Analyzer plug only. Small 8 prong octal base plug which plugs into adapters. Has dual grid studs for small and large grid clips. Positive adapter locking device. Small size of plug permits its use in the new receivers with metal tubes.	E1659. YOUR PRICE	E1651. Analyzer plug, as described above, with 5 feet of 9 wire cable attached and an 8 prong panel plug with grid lead attached. Ideal for building a shop test panel. Use this plug, cable and adapters to modernize your old test equipment.
NET \$1.03		NET \$2.94

Consists of: 8 prong plug; cable

will handle all tubes. Have 8 hole octal tops, to take 8 prong plug such as listed above. Adapters use RMA numbering system for point-to-point analysis.

No.	PRONGS	NET EACH
E1653	8 to 1	58c
E1654	8 to 5	
E1655	8 to 6	
E1656	8 to 7	
E1657	8 to 7S	

TEST ADAPTER FORMS

A brand new type of adapter with many outstanding features. The top consists of a standard bakelite socket. Any top and any bottom together with E1715 adapter shell will make the adapter you need. The adapter shell is brass, finished in black. It is 1 1/2" long. Both the top socket and bottom plug may be firmly snapped into the shell adapter after wiring.

SOCKET (Top)

E4532. 4 Holes	NET EACH	61c
E4533. 5 Holes		
E4534. 6 Holes		
E4535. 7S		
E4538. 8 Octal		

PLUG (Bottom)

E1710. 4 Prong	NET EACH	61c
E1711. 5 Prong		
E1712. 6 Prong		
E1713. 7S		
E1714. 8 Octal		
E1715. Adapter Shell		9c

ANALYZER ADAPTERS FOR METAL TUBES

Modernize your equipment. These adapters are for use in remodeling old analyzers which were not originally designed to test metal tube circuits. For use with analyzers using the 7S type of latch plug.

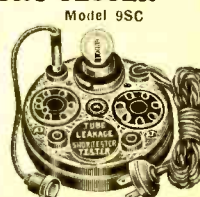
E1669. For all metal tube sockets except 5Z4, 7S latch-lock top, octal base.	YOUR PRICE	59c
E1622. For testing in socket of 5Z1, 5Y3, or 5W4, 7S latch-lock plug, octal base.	YOUR PRICE	59c

FOR OCTAL TUBES

E1676. For all octal base tubes except 5Z4, 5Y3 and 5W4, 8 hole octal top.	YOUR PRICE	59c
E1677. For testing 5Z4, 5Y3 or 5W4 metal tube circuits, 8 hole octal top, 4 prong base.	YOUR PRICE	44c

ALDEN TUBE LEAKAGE AND SHORT TESTER

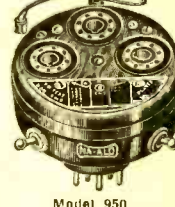
For 4, 5, 6 and 7 prong tubes. Will indicate leakage as high as 1 megohm. Operates directly from A.C. line. Contains jacks for using as a continuity tester. Complete with neon lamp, grid lead, cord and plug. Wt., 2 lbs.



E1675. NET	\$2.06
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ALDEN METAL TUBE TEST ADAPTER

Checks all tube types. For use with any tube checker. Plugs into 36 socket. 3 octal sockets on adapter accommodate all metal tube types. 2 toggle switches are provided for thorough tests including both plates of double-plate tubes. Etched instruction plate on face. Wt., 2 lbs.



E1674. NET	\$3.82
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ALDEN MULTI-DAPTER

TYPE 950XYLA. Tests over 120 types of tubes with your present tester. No leads, wires, or jacks. Single toggle switch makes all tests. Has 4 sockets for all tubes and 5 prong plug at bottom to fit tester.



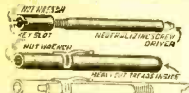
E1756. NET	\$2.94
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E1757. TYPE 954SGL. This associate adapter must be used on the bottom of the 950XYLA adapter if your tube tester has no filament voltage switch. Wt., 1 lb.

NET	44c
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NEUTRALIZING TOOLS • TEST LEADS

ALIGNING AND NEUTRALIZING TOOLS



4-IN-1 SERVICE ALIGNMENT TOOL

Combines in one fountain pen size tool 4 Serviceman's necessities— $\frac{1}{4}$ " and $\frac{5}{16}$ " nut wrenches, neutralizing screwdriver and key slot strip. Insulated handle with pocket clip.

E5523. Shpg. wt., 3 oz. **28c**
 YOUR PRICE
 E5524. Crosley attachment. **10c**
 E5525. Majestic attachment, EA. **10c**



NEUTRALIZING AND ALIGNING TOOL KITS

DE LUXE MODEL

A tool for every type of receiver. 14 separate parts cover multiple functions. These units telescope into each other forming 6 separate tools. They come in a handy leatherette case and the kit includes: screwdriver with flexible shaft for hard-to-reach spots; "magic" alignment tool; alligator side wrench; 6" insulated screwdriver with metal nib; $\frac{3}{8}$ " hex slotted insulated wrench screwdriver; $\frac{5}{16}$ " hex insulated nut wrench; $\frac{3}{4}$ " hex metal side wrench; $\frac{3}{16}$ " insulated screwdriver with metal nib; $\frac{3}{8}$ " hex slotted insulated wrench screwdriver; $\frac{5}{16}$ " hex insulated nut wrench; 5" and 6" insulated screwdrivers. With case.

E5529. NET. **\$2.94**



STANDARD MODEL KIT

A real servicing necessity for every type of receiver. Similar to the "De Luxe" set above but less the flexible screwdriver and "magic" aligning tool. With handy case.

E5532. Net **\$2.30**

FLEXIBLE SHAFT TUNING WAND

Excellent for checking alignment of radio sets without disturbing the adjustment of the trimmers. Shaft is of flexible cutgut; brass cylinder at one end, fine iron core at other.

E5534. YOUR PRICE **59c**

SOLID SHAFT TUNING WAND

For quick, accurate adjustment of trimmer condensers. Especially valuable for testing alignment of All-Wave sets without upsetting trimmer capacity adjustments. Shaft is of bakelite with brass cylinder at one end and finely divided iron-core at other.

E5573. NET. **53c**



INSULATED ADJUSTABLE NEUTRALIZING TOOLS

Handy tools of unbreakable, non-metallic Fenolite for peaking I.F. Transformers. Has telescoping screwdriver at one end; other end has hexed socket for neutralizing condensers and coils.

E5580. Extends 6 to 11". NET. **34c**
 E5581. Extends 10 to 18". **49c**
 NET



NARROW SHAFT ALIGNMENT TOOL

An ideal tool for working in crowded quarters. Consists of combination socket wrench and screwdriver on bakelite shaft which is only $\frac{3}{32}$ " in diameter.

E5584. NET. **29c**



BAKELITE SCREWDRIVERS

Non-metallic screwdriver made entirely of $\frac{5}{16}$ " bakelite rod with sturdy blade. For neutralizing and adjusting condensers, etc., where metal screwdriver may not be used.

E5483. NET. **26c**
 E5484. DOUBLE-EDGED SCREWDRIVER. Made of $\frac{3}{4}$ " bakelite rod and machined with blades at both ends. NET. **21c**

5-IN-1 ALIGNMENT TOOL



A handy alignment tool kit that will serve innumerable uses. Consists of $\frac{1}{4}$ " and $\frac{5}{16}$ " nut wrenches, miniature blade screwdriver, and a full-size screwdriver with pocket clips.

E5527. YOUR PRICE **59c**

INSULATED NEUTRALIZING SCREWDRIVER

This handy tool has a grip-rite handle with pocket clip. Completely insulated. Ideal for neutralizing and alignment work. A useful tool for servicemen. Colorful insuloid construction. $5\frac{1}{4}$ " long. Narrow $\frac{9}{16}$ " diameter permits use in tight places.

E5503. YOUR PRICE **18c**



BALANCING ATTACHMENT

Neutralize any set without removing chassis. May be screwed into 4 in 1 above left. $3\frac{1}{2}$ " long. Ideal for working in close quarters. Off-set $\frac{3}{4}$ " hex. socket; steel neutralizing screwdriver.

E5526. YOUR PRICE **23c**

SET TRIMMERS FOR PHILCO, ZENITH, RCA, ETC.



A specially designed tool required for precision alignment of the small-space coil and trimmer assemblies used on the new All-Wave sets such as Philco, Zenith, RCA, etc. Screwdriver is turned down to a diameter of $\frac{7}{64}$ " so that it will easily pass through a $\frac{1}{8}$ " hole. Other end has socket head for $\frac{5}{16}$ " hex nut and has external metal re-inforcing band. Every serviceman needs this efficient, time-saving tool.

E5535. 6" Trimmer. **44c**

E5536. 10" Trimmer. **59c**

YOUR PRICE

ALIGNMENT WRENCH FOR RCA, PHILCO, ETC.



A new aligning tool for efficiently neutralizing and adjusting the air trimmers of all 1936-37-38 RCA Victor, Philco, and similar sets. Consists of a $\frac{3}{8}$ " dia. Fenolite rod. $8\frac{1}{2}$ " long. Has hollow-shaft hexagon wrench at one end and specially shaped hook at other end.

E5502. **73c**
 NET



NEUTRALIZING WRENCH

Hex broaching runs entire length. End may be cut off when worn. Fibre rod. Fits $\frac{1}{4}$ " nut.

E5473. **12c** | E5474. **15c**

$\frac{5}{2}$ " INCH. **12c** | 8 INCH. **15c**



METAL NIB NEUTRALIZING TOOL

Two valuable tools. One is a $6\frac{1}{2}$ " tube, on each end of which are heavy brass nickel plated socket wrenches for $\frac{5}{16}$ " and $\frac{3}{8}$ " hex nuts. The other tool fits into the tube tool. Has a strong screwdriver blade at one end with the other end of special magnetic steel.

E5528. YOUR PRICE **65c**



ALLIGATOR NEUTRALIZING WRENCH & SCREWDRIVER

An important tool with many uses. The wrench opens $\frac{3}{8}$ " and is fastened securely to extra-strong high-insulation rod. Size, $4\frac{1}{4}$ ". Has hardened steel screwdriver blade.

E5531. YOUR PRICE **24c**

TEST LEADS AND KITS

HEAVY-DUTY LAB MODEL PRODS

All-purpose leads for test work. Flexible, rubber-covered kinkless wire fitted into heavy $\frac{3}{16}$ " handles, one red and one black. Handles $5\frac{1}{2}$ " long have pointed tips. Leads are 40" long. Popular high-quality test prods that are used by leading servicemen.

E5490. Phone Tips...1 PER **42c**
 E5491. Spade Tips...1 PAIR **42c**
 E5492. Alligator Terminals, PER PAIR **48c**



SERVICE TEST LEADS

Very popular low-priced test prods having a wide variety of service uses. Kinkless wire leads with solderless phone tips are fitted into heavy $\frac{3}{8}$ " inch diameter handles, 4 inches long. Leads are 50 inches long. Prod. wire is securely tightened by knurled nut.

E5493. Phone Tips. 1 PER **25c**
 E5494. Spade Tips. 1 PAIR. **25c**
 E5495. Alligator Terminals, PER PAIR **35c**



NEEDLE-POINT LEADS

High-quality test leads equipped with needle points for making good contact through insulation or pitch. 4" handles. $\frac{3}{8}$ " thick. With 50" kinkless wire leads.

E5496. Phone Tips. **29c**
 E5497. Spade Tips. **29c**
 PER PAIR
 E5498. Alligator Terminals. PER PAIR. **36c**



SOLDERLESS TEST PRODS

Needle-point test prod with insulated handle. Completely solderless. Wire clamps tightly in prod. $5\frac{1}{2}$ " long.

E5471. Red. **15c**
 E5472. Black. Each. **15c**



PENCIL TYPE TEST PRODS

High-grade leads for all test equipment. 5" handles of insulating material, with flexible rubber wire. Sharp-pointed tip is threaded and screws into handle. Milled grips with phone tips have set screws for easy removal of wire. Combined length of leads and handles is 65". Properly soldered connections and good quality throughout.

E5530. YOUR NET PRICE **71c**



PENCIL PROD TEST KIT

An unusually serviceable kit that meets every testing need. Heavy-duty handles are 6 inches long with 60-inch test leads attached to banana type plugs. Each kit contains 2 alligator clips, 2 needle-point tips, and 2 spade lug tips, all of which fit securely on banana tips of test leads. Interchangeable tips make this kit exceptionally versatile and suitable for all types of testing. It's a real necessity for every service-bench.

E2106. List, \$1.50. NET. **72c**



ALL-PURPOSE TEST KIT

This all-purpose test lead kit contains one pair of test leads 60 inches long, one red and one black, of kinkless, fine rubber wire. One end has insulated phone tips and the other end is equipped with insulated banana prod-type handles. The extra fittings supplied are all of the plug-on type making the test leads universal in application. Also included in the kit are: 1 pair insulated alligator clips—one red and one black; 1 pair insulated spade plugs—one red and one black, and 1 pair insulated needle points—one red and one black. Neatly fitted into handy compartment case.

E5550. YOUR NET PRICE **\$1.32**





BOOKS for Every Service Need

GERNSBACK MANUALS VOLUME 7



Latest edition. Over 1800 pages and 3000 illustrations. Complete data on more than 1600 different 1938 models. Gives complete diagrams, socket voltages, I.F. frequencies and alignment procedure. Supplied with a 74 page master index covering all seven volumes.

E6287. POSTPAID \$9.80
IN U. S. A.

VOLUME 6. More than 1200 pages and 2500 illustrations cover all sets built during 1935, 1936, and early 1937. Complete with index.

E6286. POSTPAID IN U. S. A. \$6.86

VOLUME 5. Over 1000 pages and 3000 illustrations. Complete service data for 1934-35 sets; data on P.A. and test instruments. Includes circuit diagrams, data on alignment, etc.

E6285. POSTPAID IN U. S. A. \$6.50

VOLUME 4. 1934 edition. Over 400 pages with 2000 diagrams and charts. Includes parts specifications, schematics, voltages and troubleshooting. Covers 1933-34 receivers.

E6284. POSTPAID IN U. S. A. \$3.00

VOLUME 3. 1933 edition. Complete service data on practically all 1932-1933 sets. Over 700 pages, more than 2000 illustrations. Valuable S.W. data.

E6283. POSTPAID IN U. S. A. \$4.00

VOLUME 2. A complete directory of 1931-1932 receivers. 1000 pages; over 2000 diagrams, charts and illustrations. Valuable standard set data includes full discussions.

E6282. POSTPAID IN U. S. A. \$4.00

VOLUME 1. The first of the Radio Service Manuals. Covers all receivers made between 1923-1931. Over 1500 diagrams and illustrations. More than 650 pages.

E6281. POSTPAID IN U. S. A. \$4.41

CONSOLIDATED VOLS. 1, 2, 3, 4
Volumes 1, 2, 3 and 4 combined in a single 2700 page indexed loose-leaf volume. Cover standard receiver circuits from 1923-1934. Shpg. wt., 16 lbs.

E6280. YOUR PRICE \$16.98

RADIO SERVICE HANDBOOK



Every Serviceman needs a copy of this great book. 1000 pages of practical circuit theory and analysis. Covers short cuts of trouble-shooting, repairing, modernization, and installation. Size, 6x9 inches. 750 illustrations. Cloth-bound.

E6290. POSTPAID IN U. S. A. \$3.92

AUTO RADIO MANUALS

Complete service data on practically all standard auto radio circuits. Vol. 1 has 200 pages and 500 illustrations, with service notes for sets up to 1934. Vol. 2 has 240 pages and 500 illustrations, covering 1934-1935 sets. Complete data on trouble-shooting, noise suppression, installations, etc. Invaluable books for every radio serviceman; attractively priced.

E6288. VOLUME 1. \$2.00
E6289. VOLUME 2. \$2.00
YOUR PRICE, EACH.

REFRIGERATION MANUALS VOLUME 1

E6291. Explains and illustrates the servicing of standard type refrigerators. Contains diagrams; describes trouble-shooting, refrigerants, automatic equipment, valves, etc. Explains the use of every part and tool. Clearly-written. 450 pages, 1200 illustrations. 9x12". Shpg. wt., 4 lbs.

VOLUME 2
E6292. Contains data on many new and different methods of trouble-shooting and repairs and shows the proper tools required. Does not duplicate Vol. 1. Size, 9x12". 353 pages. 1200 diagrams. Shpg. wt., 4 lbs.

YOUR PRICE \$4.00
EACH VOLUME

POPULAR GHIRARDI RADIO BOOKS "RADIO PHYSICS COURSE"

The latest enlarged and revised edition of radio's leading school and home-study text book. A remarkably complete course in radio, television, and sound. Explains in an easy-to-understand way all the essential and practical facts about radio, from simple fundamentals to the most intricate applications. Includes valuable and complete information on radio servicing and experimentation. May be used by ambitious radio-minded men as a home-study course in radio. Endorsed and used by leading technical schools. Invaluable to the radio beginner, Student, Serviceman, Set-Builders, Experimenter, and Amateur. Handy appendices explain symbols, formulas, wire sizes, etc. Almost 1000 pages; 508 illustrations. Size, 9 1/2 x 7". Attractively printed; cloth-bound. A book everyone interested in radio should own.



E7077. "RADIO PHYSICS COURSE" (2nd Edition). \$4.00
YOUR SPECIAL PRICE POSTPAID IN U. S. A.
SCHOOLS AND COLLEGES—Write for Special Quantity Prices.

FIELD SERVICE DATA BOOK

A complete compilation of case histories and remedies for over 1500 popular sets—including the latest type models. Packed with data; shows intermediate frequencies for 5000 super-heterodyne circuits, auto-radio data, complete tube charts, color codes, wire tables and 25 other charts. 436 pages.

E7067. \$2.50
POSTPAID IN U. S. A.



MODERN RADIO SERVICING

Newest edition. Discusses all the latest test equipment, the newest trouble-shooting and servicing methods for all types of sets, data on noise and interference elimination and antenna systems, auto radio, Cathode-ray aligning, all-way, high fidelity, etc. 1300 pages. 706 illustrations.

E7070. \$4.00
POSTPAID IN U. S. A.

SPECIAL COMBINATION OFFER

E7068. Save time, money and "servicing headaches" by purchasing MODERN RADIO SERVICING and FIELD SERVICE DATA BOOK together. Use one for quick reference on the job, the other for thorough study of servicing data. NET POSTPAID \$6.00

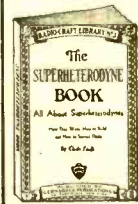
NEW POCKET TROUBLE SHOOTERS



Time-saving, accurate and easy to use, these handy new Ghirardi lightning trouble finders tell you where to find the defect in a circuit by the trouble symptom method. Consist of a set each of pocket-size, wear-resisting cards—one for Home Radio, one for Auto Radio. Just a flip of the card gives you an instant, exact summary of any of the eight most common trouble symptoms, such as "hum," "weak," "noisy," "dead," etc. Invaluable for spotting trouble in Power Units, Receiver Circuits, Speakers, Tubes, etc.

E5233. For Home Receivers. \$50c
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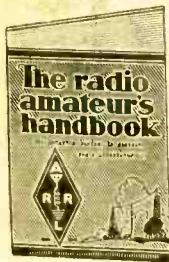
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E8925. YOUR PRICE..... **21c**

KNIGHT "HOT SHOT" TYPE

Newly developed compact 6 volt batteries providing the full electrical equivalent of No. 6 cells in less than half the space. Built for efficient, long-life service and supplied in moisture-resistant metal cases. Size: 10½x2½x8½. Shpg. wt., 7 lbs.
E8940. NET. **\$1.21**



GENERAL MIDGET PORTABLE "A" & "B" BATTERIES



Extremely small, light-weight portable batteries. For use in portable radio receivers and transmitters, transceivers, monitors, hearing aids, weather balloons, pocket radio sets, etc. The approximate rating of E8935 is 100 MA hours; E8936 is 400 MA hours; E8937 is 1000 MA hours; E8939 is 8 ampere hours; E8938 is 15 ampere hours. E8936 and E8937 are tapped at 22½ volts. All others are untapped.

NO.	Volts	Leth.	Width	Ht.	Wt.	List	NET
E8933	45	3"	1¼"	2¾"	11 oz.	\$3.00	\$2.00
E8935	45	3½"	2¼"	2¾"	22 oz.	1.85	1.23
E8937	45	4"	2½"	2¾"	59 oz.	1.50	1.05
E8938	3	3½"	1½"	1½"	20 oz.	.60	.40
E8939	3	2½"	1½"	1½"	16 oz.	.60	.40

BATTERIES • BATTERY CHARGERS



NEW EVEREADY AIR CELL "A" BATTERY

Especially designed and intended only for use with 2 volt "Air-cell" battery sets. Operates on a new principle using air as a depolarizer to maintain constant voltage and give long life.

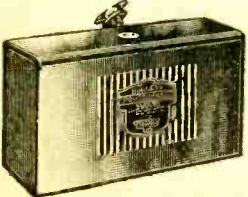
ECONOMICAL—CONVENIENT

Consists less to operate than any other "A" battery. Now offered at a reduced price. Both Air Cell batteries listed below are rated at 600 ampere hours and have a useful life of approximately 1000 hours. The A-600 type is for sets with a maximum current drain of 660 M.A. The SA-850 is for sets having a maximum drain of 750 M.A. In leak-proof cases, 10 7/8 x 3 3/8 x 9 1/2". Wt. 24 lbs. (Not mailable.)

E10025. No. A-600. **\$4.51**
NET \$4.62. Less 2%.....

E10026. SA-850. Heavy-duty (750 M.A.) for multi-tube sets. Wt. 29 lbs. **\$5.40**
NET. \$5.51. Less 2%.....

BURGESS 3 VOLT DRY "A" PACKS TYPE 20F2



A 100% dry "A" battery for 2 volt battery sets. Provides 400 hours' service at 1/2 amp. discharge 3 hours daily. Plug terminals. 1 1/2 x 4 x 6 1/2".

E10020. Wt., 14 lbs. NET... **\$2.35**
TYPE 40F2

This heavy-duty 3 volt Burgess dry "A" battery is built to give at least 900 hours of service at 1/2 ampere drain 6 hours daily. Shpg. wt., 30 lbs.

E10019. NET **\$4.76**
NOTE: Reducing resistor is necessary with both of the above batteries when used with 2 volt set having no voltage regulating device.
E8933. Tapped Reducing Resistor..... 25c

"A", "B" & AIR CELL BATTERY TESTERS

Inexpensive, portable type battery testers. Will test "B" Batteries, Dry Cells, Storage Batteries, etc. Air Cell Tester indicates condition of Air Cell Batteries as "Good" or "Bad"; also aids in determining future life of battery. Unusual values.

E6260. STORAGE BATTERY TESTER. Tells condition of battery. **59c**
YOUR NET PRICE
E6261. 0-35 Amps. For testing dry cells. **45c**
E6262. 0-50 Volts. For "B" Batteries. **45c**
E6263. Combination 0-40 Amp. and 0-50 Volts. NET **68c**
E7340. Air Cell Battery Tester. **\$1.61**
YOUR NET PRICE

LEADER HYDROMETER

Accurate, well-made hydrometer for testing storage batteries. Has beaded float. Bulb is of live, resilient rubber. Shpg. wt., 1 lb. **28c**
E3971. NET



KING COLE CHARGING RESISTOR

Resistance unit for charging any 6 volt radio or auto storage battery from 32 volt lighting system. Maintains uniform charging rate and does not injure batteries. Saves time and expense of hauling batteries to town. **\$1.47**
E2266. List. \$2.50. NET

FOR GREATER POWER! FOR EXTRA VALUE! KNIGHT LONG-LIFE STORAGE BATTERIES

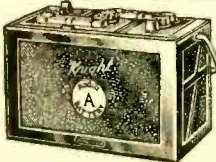


FOR EVERY RADIO AND LIGHTING PURPOSE

KNIGHT 2 VOLT

A 2 volt 21 plate Heavy Duty battery giving 300 operating hours at 1/2 ampere without recharging, at intermittent rate. Rated at 150 Ampere hours at Radio rate. 2 1/2 in. x 7 1/4 x 8 1/16". For sets using 1 1/2 or 2 volt tubes. **E10456. 21 PLATE.** Not mailable. Shipped express or by freight. Shpg. wt., 16 lbs. NET **\$3.29**

E10455. 13 PLATE. Light-duty type. 100 amp. hours. 1 1/2 hours intermittent rate. Size, 2 1/2 x 7 1/4 x 8 1/16". Not mailable. Shipped by express or freight. Shpg. wt., 16 lbs. NET **\$2.55**



6 VOLT HEAVY-DUTY

Musky, giant-size 6 volt storage batteries for use with radio or for farm lighting plants. Ideal for Windcharger or Rurlpower use. Here are the batteries you need for lighting your home, barn, henhouse, etc. Radio terminals.

E10460. 21 PLATE. Rated at 150 ampere hours. (172 Amp. hr. intermittent rate.) Size, 13" x 7" x 11 1/4". Will operate 5-15 watt lamps or 2-25 and 2-15 watt lamps, intermittently for approximately 11 hours before requiring recharge. Shpg. wt., 58 lbs. **\$8.45**
NET

E10461. 25 PLATE. Rated at 180 ampere hours. (207 Amp. hour intermittent rate.) Size, 14 1/2" x 7" x 8 1/16". Will operate same number of bulbs as above for 14 hours. **\$11.85**
Shpg. wt., 70 lbs. NET



KNIGHT 6 VOLT

Heavy-duty, solidly constructed, leak-proof batteries that deliver maximum power. Thick plates, carefully sealed cells. Built for long life, trouble-free service. With radio terminals. Not mailable. Shipped by express or freight. The finest 6 Volt Batteries you can buy. With bale handles.

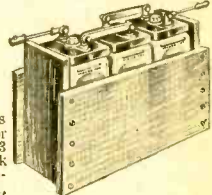
E10457. 13 PLATE. 95 Ampere Hours. Size, 9 1/2 x 7 x 8 1/16". Wt., 40 lbs. **\$4.75**
NET

E10458. 15 PLATE. 121 Ampere Hours. Size, 9 1/2 x 7 x 8 1/16". Wt., 42 lbs. **\$5.95**
NET

E10459. 19 PLATE. 155 Ampere Hours. Size, 11 1/2 x 7 x 8 1/16". Shpg. wt., 53 lbs. Brute-force, heavy-duty type. **\$7.49**
NET

These batteries may be had with auto terminals at prices quoted above. Send cash with order, and specify "with Auto Terminals."

HEAVY-DUTY 6 VOLT GLASS BATTERY



A de luxe glass case battery for heavy-duty use. 13 heavy-duty, thick plates per cell. Convenient pilot ball charge indicator. Charged porcelain cover. Ideal for providing radio or lighting service. Size, 27 1/2" x 11" x 16 1/2". Shpg. wt., 165 lbs. Rated 187 amp. hrs. (215 hrs. intermittent rate.) Shipped express or by freight. **\$20.59**
E10462. NET

Packed for Export..... \$23.75

HOMCHARGER BATTERY CHARGERS

5-3 AMP. BOOSTER



A 5 to 3 amp. tapering battery charger for auto or home use. Has steering post connector for mounting on car. No radio interference. For 110 V. 50-60 Cycles. Shpg. wt., 8 lbs. **E10040. \$4.41**
NET

6 AMP. CHARGER



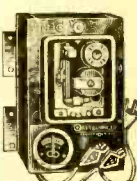
Vibrator-type. For 6 volt storage batteries. Self-polarizing; entirely automatic in operation. Works from 110 V. 60 Cycles A.C. With cord, cables, S.C. clamp, and cables. S.C. wt., 11 lbs. A dependable unit. **E10041. NET. \$7.35**

HI-RATE CHARGER



Designed especially to provide a fast, high-rate charge. Automatic tapering feature assures safety at 10 amp. fast charge. Current drain is no more than that of smaller chargers. Complete with ammeter, 10 ft. cables, and dash receptacle. For 110 Volt, 60 cycle A.C. Shpg. wt., 15 lbs. **E10037. \$11.47**
NET

ADD-A-CHARGER



One of these units will handle 2 to 3 batteries per 24 hour period; additional units may be easily added if greater capacity is desired. No radio interference; self-polarizing - no "reverse" charging. For 110 Volt, 60 cycle A.C. Complete with line cord, cables, clips, etc. **E10038. \$12.49**
NET

GENUINE G. E. 5 AMP. TUNGAR CHARGER



High-grade 5 amp. unit for charging any 6 volt storage battery from 110 V. 50/60 cycles A.C. line. Famous General Electric quality construction. Delivers full 5 ampere charge to keep battery fully charged; automatic tapering feature prevents overcharging. Assures long battery life and freedom from run-down battery troubles. Supplied with steering post attachment, A.C. cord, charger cord, tungar bulb, and full instructions. For 110 Volts, 50/60 cycles A.C. Shpg. wt., 12 lbs. One of the finest chargers made. **E10043. \$10.88**
NET

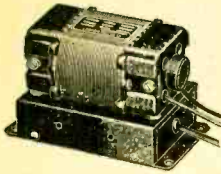
RADIART PAK FOR ELECTRIC SHAVERS



Double the utility of your Electric Shaver! With this new Shaver-Pak you can operate your 110 Volt Shaver from any 6 volt or 32 volt source. For use in cars, trailers, boats, trains, or rural areas. Shpg. wt., 5 lbs. **E9158. Type S-6a. Portable. \$4.09**
For 6 volts. With 2 1/2 ft. cord and plug. NET
E9159. Type S-6b. For 6 volts. With permanent mounting bracket and 2 1/2 ft. cord. NET **\$4.09**
E9160. Type S-32a. Portable. For 32 volts. With 6 ft. cord and plug. NET **\$4.09**

GENEMOTORS • CONVERTERS

CARTER GENEMOTOR POWER PLANTS NEW HEAVY-DUTY HIGH-POWER GENEMOTORS



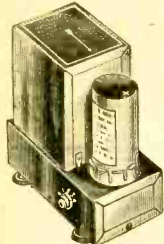
These units are especially well-suited for two-way Police Radio, Hi-Power Amplifiers, Aircraft Radio, etc. The new brush construction eliminates all traces of ripple, hash, sparking, and radiation. This results in a constant D.C. voltage output which can be removed without taking anything apart. The bearings require no oiling, adjustment, or replacement. These are the smallest and lightest weight dynamometers made. Average shpg. wt., 11 lbs.

6 VOLT MODELS				
CAT. No.	OUTPUT VOLTS	M.A.	AMP. DRAIN	NET EACH
E10100	350	100	10	\$17.64
E10101	350	150	15	19.99
E10102	400	100	13	21.76
E10103	300	200	19	22.34
E10104	350	200	22	25.93
E10105	400	150	20	25.93
E10106	400	200	26	23.52

5.5 VOLT MODELS				
CAT. No.	OUTPUT VOLTS	M.A.	AMP. DRAIN	NET EACH
E10107	400	200	25	24.70
E10108	500	200	38	27.64

12 VOLT MODELS				
CAT. No.	OUTPUT VOLTS	M.A.	AMP. DRAIN	NET EACH
E10109	300	200	9	23.52
E10110	350	200	11	24.11
E10111	400	150	10	25.18
E10112	400	200	12	25.70
E10113	400	225	15	25.87
E10114	400	250	23	27.64
E10116	500	200	15	25.28

NOTE: Any of the above models can be supplied with an efficient filter for \$7.06 extra.



NEW MALLORY VIBRAPACKS PORTABLE POWER FOR ALL RADIO & P. A. REQUIREMENTS

A new, inexpensive, dependable source of power for all portable radio receivers and transmitters, P.A. amplifiers, etc. Vibrator type units; operate completely from 6 volt storage battery. Will supply up to 100 M.A. of easily filtered pulsating D.C. Output voltage is

variable in four 25 volt steps by selector switch. Models 551 and 552 are self-rectifying; tube rectifier is supplied with models 553 and 554. Shpg. wt., 10 lbs.

E11996. Type VP-551. Self-rectifying. Output voltage: 125-150-175-200. With vibrator but no filter supplied. **\$8.82**

E11997. Type VP-552. Self-rectifying. Output voltage: 225-250-275-300. With vibrator but no filter supplied. **\$10.88**

E11998. Type VP-553. Tube rectifier. Output voltage: 125-150-175-200. With vibrator and tube; no filter. **\$9.70**

E11999. Type VP-554. Tube rectifier. Output voltage: 225-250-275-300. With vibrator and tube; no filter. **\$11.76**

E12000. Type VP-G556. Self-rectifying. Same as VP-552 except for 12 volt operation. With vibrator but less filter. **\$11.76**

NET



NEW ATR DC-AC INVERTERS

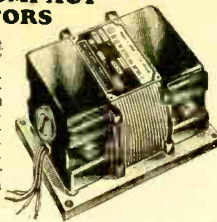
It is now possible to obtain 110 volt 60 cycle A.C. from 6 volt batteries, 32 volt farm plants, or 110 volt D.C. systems. These units are designed especially for operating electric radios, P.A. systems, fans, small motors, etc. The improved plus-in vibrator has eight 3/4" diameter contacts which assure long life and reliable service. Inverters are available with an efficient filter for \$1.76 extra. Specify with or without filter when ordering. Weight, 19 lbs.

E10487. TYPE 6. Output, 110 volts, 60 cycle A.C. Input, 6 volts D.C. Max. output, 50 watts. Less filter. **\$11.76**

E10488. TYPE 32. Output, 110 volts 60 cycle A.C. Input, 32 volts D.C. Maximum output, 100 watts. Less filter. **\$12.35**

NET

CARTER COMPACT GENEMOTORS



The smallest complete auto "B" eliminator made. Completely shielded. Has built-in filter. Ball bearings eliminate oiling and adjustments. Easily installed; will deliver full efficiency from a 6 volt battery. Measures 2 3/4 x 4 5/8". Wt., 6 1/2 lbs.

E10235. 135 VOLT MODEL. Operates from 6 volt battery and delivers 135 volts at 30 M.A. tapped at 87 1/2 volts. Draws 2.2 amps.

E10236. 180 VOLT MODEL. Operates from 6 volt battery and delivers 180 volts at 30 M.A. tapped at 90 volts. Draws 2.6 amps.

E10237. 200 VOLT MODEL. Operates from 6 volt battery and delivers 200 volts at 40 M.A. tapped at 90 volts. Draws 3.5 amps. List, Each, \$16.50. **\$9.70**

NET EACH

HEAVY-DUTY POLICE TYPE GENEMOTOR

Ideally suited for use where reliable, trouble-free service is essential. Fully guaranteed for one year against mechanical and electrical defects. Perfect filtering produces a ripple-free, pure D.C. output. The dynamically balanced armature assures quiet, smooth running. Input, 6 volts at 4.5 amps. Output, 250 volts at 50 M.A. Wt., 11 lbs. **\$20.58**

E10234. NET

STANCOR POWER PACKS



The ideal power pack for auto and battery radio sales demonstration and for service test work. Eliminates need for storage batteries. Delivers filtered, metered direct current output from 110 Volt 60 cycle A.C.

E10145. JUNIOR MODEL. Delivers 5 amps, 5-7 1/2 volts D.C. to operate average auto or battery radio. Complete with meter, circuit breaker, etc. Shpg. wt., 25 lbs. **\$16.61**

E10146. STANDARD MODEL. Delivers 1 1/2 to 4 amps at 5-7 1/2 volts D.C. With meter, circuit breaker, etc. Shpg. wt., 30 lbs. NET. **\$19.55**

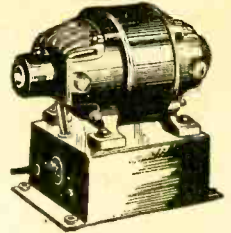
E10147. DE LUXE MODEL. Delivers 15 amps at 2-8 volts D.C. Has Hi-Lo switch and variable voltage control. Shpg. wt., 31 lbs. NET. **\$25.97**

E10148. 6 VOLT MODEL. For Philco, R.C.A., Audioia, Zenith, and Eola 6 volt farm sets. Makes selling and servicing of 6 volt sets easier. Shpg. wt., 9 lbs. **\$14.70**

E10149. FOR 32 VOLT FARM SETS. A real asset to 32 volt sales and service. NET. **\$38.95**

NET

FAMOUS JANETTE ROTARY CONVERTERS



CONVERTS D.C. TO A.C.

Permits the operation of A.C. radio sets, sound systems, and other devices and appliances from 32 volt light plants or 110 volt D.C. lines. Compact, dynamically balanced, rationally designed and built for long life. The armature employs the superior dynamotor type of dependable construction. The field frames are of high quality rolled steel and the field poles are laminated for the very highest efficiency. Removable grid covers protect commutator rings and brushes.

WITH BUILT-IN FILTER

The Janette Rotary Converters listed below are equipped with special All-Wave Interference filters, for all types of radio receivers. Assure exceptionally quiet reception results on all bands. from 500 to 30,000 K.C. (800 to 10 meters).

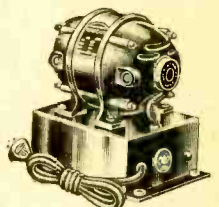
110-115 VOLTS D. C. TO 110 VOLTS 60 CYCLE A. C.					
Stock No.	Output Watts	Input Amps.	Mfrs. Type	YOUR PRICE	
E10206	110	1.9	CA-18-F	\$31.39	
E10207	150	2.4	CA-18-F	34.64	
E10210	225	3.0	CA-16-F	40.30	
E10208	300	4.0	C-13-F	38.71	
E10209	500	6.4	CE-11-F	34.14	
E10211	750	8.5	CE-12-F	95.53	
E10197	1000	13.0	CE-10-F	118.51	

32 VOLTS D. C. TO 110 VOLTS 60 CYCLE A. C.					
Stock No.	Output Watts	Input Amps.	Mfrs. Type	YOUR PRICE	
E10201	110	6.5	CA-18-F	\$31.39	
E10202	150	8.5	CA-18-F	34.64	
E10199	225	11.5	CA-16-F	40.30	
E10203	300	15	C-13-F	38.71	
E10204	500	18	CE-14-F	64.14	
E10198	650	27	CE-12-F	95.53	

We can supply all other types of Janette converters, motor or gas-engine driven generators, etc., at lowest prices. Write describing your needs, for prompt quotation.

KNIGHT HIGH-QUALITY ROTARY CONVERTERS

A complete new line of Rotary Converters at remarkably low prices. These units provide the most dependable means for converting D.C. to A.C. Particularly well-adapted for operating radio receivers, P. A. systems, neon signs, A.C. motors, etc. They incorporate many new features such as ball-bearing motors which require no oiling, good output voltage regulation and quiet operation. Each converter is supplied complete with an efficient filter which prevents noise from reaching the radio set or P.A. amplifier. They are designed to give trouble-free performance under all operating conditions. Approx. shpg. wts., 25 to 31 lbs.



Cat. No.	Output Watts	Input Amps.	NET EACH
E10490	110	1.78	\$23.95
E10491	150	2.23	27.20
E10492	300	2.85	37.57

Cat. No.	Output Watts	Input Amps.	NET EACH
E10493	110	5.6	23.95
E10494	150	7.8	27.20
E10495	300	15.0	37.57

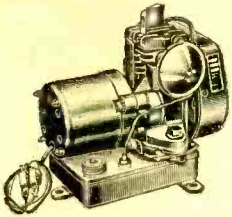
Cat. No.	Output Watts	Input Amps.	NET EACH
E10496	40	13.3	30.51
E10497	60	19.0	37.26

E10498. 220 VOLTS D.C. TO 110 VOLTS A.C. 150 1.11 28.62

We can supply Rotary Converters with different output ratings than those listed above at lowest prices. Write our Engineering Department for prompt quotations on your specific needs.

GAS ENGINE GENERATORS & PLANTS

PIONEER GAS-ENGINE BATTERY CHARGERS



Efficient, low-cost gas-engine-driven battery charger. Built with the precision of an automobile engine. Developed to furnish power needs in districts not served by power companies. Also for use on boats, trailers, camps, industrial work, construction jobs, etc. Desirable features as follows: Shunt-wound 2-pole self-excited generator; shaft-mounted armature; automatic cutout relay and ammeter; 4 cycle air-cooled 1/2 H.P. Briggs and Stratton Engine, operating at 2200 R.P.M. The two-quart built-in tank will hold sufficient fuel for 8 hours' operation. Equipped with built-in cutout for noise reduction. Employs magneto for push-button starting with a storage battery. Also equipped with auxiliary rope-pull starter. Overall dimensions: 15 1/2" H., 13 1/2" W. Shpg. wt. for all units, 60 lbs. each.

FOR 6 VOLT BATTERIES

E10950. Model S-6. 175 Watts capacity. For charging 6 volt storage batteries for radios, farm lighting, automobiles. **\$37.40**

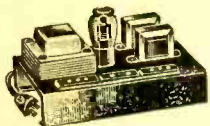
FOR 12 VOLT BATTERIES

E10951. Model S-12. 175 Watts capacity. Charges 12 V. storage batteries. **\$37.40**

FOR 32 VOLT BATTERIES

E10952. Model S-32. 200 Watts capacity. For charging wet cell farm batteries of 32 volt ratings. **\$41.20**

KNIGHT LOW-COST POWER PACKS



MODEL XPC

E9190. For Short Wave receivers or small transmitters using 2-45 tubes. Delivers 300 volts pure D.C. at 65 M.A., tapped at 180, 90 and 22 1/2 Volts. Also supplies 2 1/2 Volts C.T. at 3 amps. for filaments. Requires type 80 tube. For 15 volt, 60 cycle A.C.

E9187. Same as above, except has filament winding for 6.3 volt tubes, at 1.5 amps. Weight, 10 lbs. **\$510**

YOUR PRICE, EACH.....

E9191. MODEL XC. A power supply for low-power X-mitters or for crystal or buffer stages. Delivers 300 Volts pure D.C., untapped, at 65 M.A., and 2 1/2 Volts A.C. center-tapped at 4 amps. for filaments. Built on steel chassis. For 115 Volts, 60 cycles. Requires type 80 tube. **\$425**

E9188. Same as above, except has filament winding for 6.3 volt tubes, at 1.5 amps. Weight, 9 lbs. **\$425**

MODEL O-I. A power supply for X-mitters using 3 or 4-210 tubes. 450 V. D.C. at 150 M.A. and 7 1/2 V. C.T. at 5 A. Steel chassis, black crackle finish. Operates on 115 V. 60 cycles. Requires type 82 tube. **\$795**

Weight, 14 lbs. YOUR PRICE,.....

MODEL 00-1. For Class "B" Modulators or X-mitters using 4-46 or similar tubes. 450 V. D.C. at 150 M.A., and 2 1/2 V. C.T. at 6 A. For 115 V. 60 cycles. Requires type 82 tube. **\$795**

E9192. **YOUR PRICE,.....**

B9198. MODEL J. For Short Wave Receivers. Hum-free. Substantially and neatly built. Delivers 250 Volts D.C. at 40 M.A., tapped at 22 1/2 and 90 volts; 2 1/2 Volts C.T. at 5 amps. for filaments. Chassis size, 7 1/2"x13 1/2" inches. Weighs 9 lbs. Requires one 80 tube. **\$495**

E9189. Same as above, except has filament winding for 6.3 volt tubes, at 2 amps. **\$495**

YOUR PRICE, EACH.....

NEW PIONEER "BLUE-DIAMOND" GAS-ELECTRIC PLANTS

PROVIDE 110 VOLTS A.C.

Super-efficient, dual-purpose Electric Power Plants for supplying A.C. and battery-charging D.C. The A.C. plants deliver 110 volts for flickerless lighting, the same as supplied by power companies. Engine is 4 cycle, air-cooled 1/2 H.P. type with built-in governors to maintain constant engine speed. All have self-starting features. All plants except 600 and 1000 watt sizes hold enough fuel to last 12 to 16 hours. Size of all plants except 600 and 1000 watt models: 19 1/2"x14"x14".

FOR BATTERY CHARGING

All plants listed, except DD32, provide battery-charging D.C. in addition to A.C. These A.C.-D.C. plants answer your power and lighting problems with a minimum of expense.

300WATT A.C.—200 WATT D.C.

E10953. Type BD6. Supplies both 300 Watts A.C. and 200 Watts D.C., sufficient to charge any 6 volt wet-cell battery. Less filter. (See filter listing below.) Built-in tank holds gallon of fuel to run plant for 12 to 16 hrs. Wt., 116 lbs. **NET \$59.90**

E10954. Type BDR6. Same specifications as BD6 above but with remote-control push-button starting and stopping. **\$78.70**

Shpg. wt., 120 lbs. **NET.....**

600 WATT A.C. MODEL

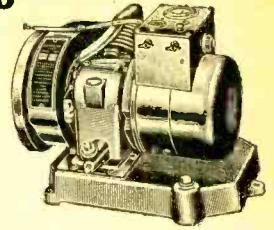
E10955. Model BA-60. A straight A.C. medium-duty generator. Supplies 110 Volts at 600 Watts maximum capacity. Engine delivers 1 H.P. to generator. Tank holds 1 gallon. Self-starting. 30% "x18 1/2"x20". **\$134.60**

Shpg. wt., 155 lbs. **NET.....**

1000 WATT A.C. MODEL

E10956. Model BA-100. Heavy-duty straight A.C. power generator. Develops 1000 Watts at 110 V. A.C. For use in electrifying farms, resorts, camps, boats, etc. Air-cooled, push-button starting motor. Engine delivers 2 H.P. to generator. 1 gallon will run plant 4 hrs. 185 lbs. **NET \$194.60**

* Requires 12 volt battery, not supplied. Standard equipment includes rope-pull starter.



300WATT A.C.—325WATT D.C.

E10958. Model BD32. A gas-engine generator supplying 110 V. A.C., or D.C. for charging 32 volt batteries. Delivers 325 Watts D.C. to handle requirements of even the largest 32 Volt farm plants. Also supplies 110 V. A.C. at 300 watts. Shpg. wt., 116 lbs. **\$68.90**

NET.....

E10959. Model BDR32. Has same specifications as BD32 above but with remote control push-button feature built into the plant. Shpg. wt., 125 lbs. **\$87.70**

NET.....

32 VOLTS D.C.—250 WATTS

E10961. Model DD32. A straight D.C. power plant providing 32 Volts D.C. at 350 Watts. Push-button starting (with battery). Fully enclosed high tension magneto facilitates starting at all times with use of auxiliary rope-pull starter furnished. Do away with your old, bulky, costly equipment. Install a DD32 for full efficiency. Size: 19 1/2"x14"x14". Shpg. wt., 118 lbs. **NET \$52.40**

We can supply PIONEER gas engine generators and electric power plant units for 6, 12, 32, and 110 volts, and up to 5000 watts, both air-cooled and water-cooled in the larger sizes. Let us help you with your lighting or battery-charging problems. Send us your requirements and we shall quote on a suitable system.

RADIO FILTERS FOR ABOVE GAS-ELECTRIC PLANTS

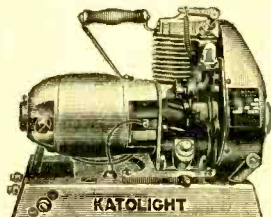
E10957. Radio Filter. Designed to prevent generator noises from entering the output leads. These effective filters are for use with 600 watt and 1000 watt models above. **\$11.25**

NET.....

E10960. Radio Filter. Recommended for use with all generators listed above except 600 and 1000 watt units. Will prevent disturbing noises from entering into the power lines. **\$4.50**

NET.....

KATOLIGHT A.C. POWER PLANTS



JUNIOR MODEL JRA3

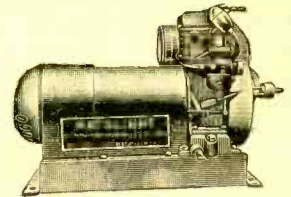
These plants furnish a constant source of standard 110 volt 60 cycle A.C. current for light and power in small summer homes, construction camp buildings, trailers, sound trucks, etc. Just set plant on floor or pedestal, connect wires and **PLANT IS READY TO GO.** Fuel consumption is 10 hours to one gallon of gasoline at 300 watts. Oil consumption, 2 oz. for each 10 hours operation. 3/4 h.p. air-cooled, single vertical cylinder engine with "L" head, 4-cycle type; speed 3600 R.P.M. Flyball-type governor, splash-type lubrication. Ball bearings on crankshaft. Armature connected to engine shaft; self-excited; high-speed ball bearings. JRA3 will charge 6 volt battery up to 10 amps. With convenient terminals, generator filter condenser, shielded ignition cable, suppressor, carrying handle, V-belt pulley, muffler and instruction manual. Peak rating, 350 watts. Shpg. wt., **\$67.20**

E10125. **YOUR PRICE,.....**

JUNIOR MODEL JR35

As above, but with self-crank feature; charges 6 volt batteries up to 20 amps. Use a standard 6 volt battery for self-starting. 300 Watts at 110 V. A.C. Shpg. wt., 60 lbs. **\$73.50**

E10126. **NET.....**



1000 WATT LIGHTING PLANT

A 1000 watt, constant heavy-duty, 110 volt, 60 cycle A.C. light plant. Ideal for use where the regular high-line service is not available. Uses an air-cooled, magneto ignition, single cylinder engine. Accurate mechanical governor assures minimum voltage variation between "no load" and "full load." Engine and generators are mounted on common base. Connection between engine and generator is direct. This assures steady, non-flickering light. Speed, 1800 R.P.M. Designed especially for applications where economy is the most important factor. Supplied less filter, shielding, generator terminal panel, air-cleaner, muffler, etc. There are no fancy gadgets built into this power plant. Just a plain economy model which will supply dependable, money-saving service. Accessories which include filters, terminal board, muffler, etc., may be added later if found necessary. (Write for prices.) Shipping weight, 260 lbs. F.O.B. Factory, Manakota, Minnesota. **\$171.00**

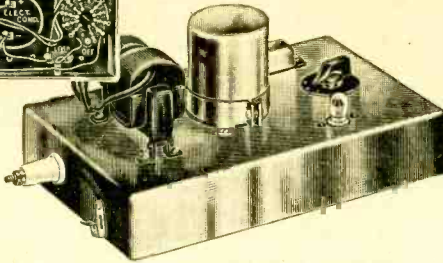
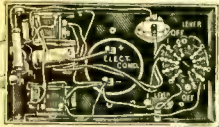
E10127. **YOUR PRICE.....**

WE CAN SUPPLY ALL KATO GENERATORS.

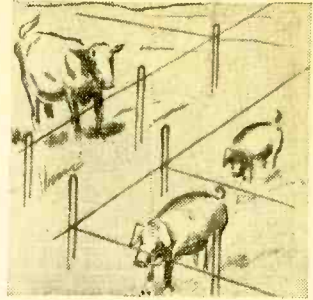
We can supply all KATO generators. Power plants to supply 6, 12, 32, and 110 Volts. Rotary Converters, battery chargers, can all be supplied by ALLIED without the slightest delay. Send us your requirements for our low quotations.

FARM LIGHTING • ELECTRIC FENCE

"POPULAR MECHANICS" R257 ELECTRIC FENCE CONTROLLER KIT



- CUTS LABOR AND FENCING COSTS 50%.
- ONE-WIRE FENCE HOLDS IN LIVESTOCK
- ABSOLUTELY HARMLESS TO MAN OR BEAST
- EASILY INSTALLED BY ANYONE
- OPERATING COST ONLY 10c TO 12c PER MONTH
- HAS LATEST ELECTRIC FENCE FEATURES
- WILL GIVE YEARS OF FINE SERVICE
- INEXPENSIVE — EFFICIENT



EASY TO BUILD AND OPERATE

Featured in Popular Mechanics for September, 1938. A proved Fence Controller that can be built by anyone who can handle a screwdriver, soldering iron, and a pair of pliers. Laid out on an open bottom chassis base for ease of mounting. All parts except transformer, condenser, and neon bulb fit underneath chassis base. All holes are already drilled in the metal chassis base to match mounting holes of component parts. In a few minutes' time and with a minimum of effort anyone can build this efficient fence controller. When you get your kit of parts, simply screw components to chassis with hardware supplied and solder wires where necessary; then connect dry cells, and fence controller is ready to operate. Designed with simplicity of assembly as the main aim. When properly assembled and installed, the fence controller will work for years without any trouble. Start building your controller today. Illustrations show simplicity of this effective Fence Controller. Anyone can build it quickly and properly for effective operation and long service.

RELAY TYPE INTERRUPTER DEVICE

The economical low-current consumption of the R257 controller is made possible by double-relay action. Controller produces 40 short-duration shocks per minute. When horses, cattle, hogs or sheep come in contact with the wire, they receive an effective but harmless "sting" which drives them away. Livestock soon learn to keep away from these wires and controller can be shut off for long periods of time, thus effecting more economy of operation. The relays are the only moving parts in the entire assembly. These Guardian Relays are sturdily built to give trouble-free operation for many years. Assembly is designed so that relays are mounted under chassis for protection from dust, etc.

REQUIRES ONLY FOUR DRY CELLS

The R257 Popular Mechanics controller is by far the most economical type "Electric Fence" available. With only four dry cells, you can control up to 5 miles of fence in wet or dry weather. While this controller was originally designed to work with four dry cells for economy, any 6 Volt D.C. source will operate unit satisfactorily. You may use storage batteries, "Hot-Shot" batteries, or dry cells with practically the same results. Suitable "Hot-Shot" type batteries can be found on pages 42 and 47. Storage batteries are listed on page 43. Equipped with many new features including indicating neon glow lamp, safety fuse, wet-dry switch, etc. Neon glow lamp will glow when fence is operating correctly. There will be no glow when fence is shorted. The controller is recommended for installation in barn, hen-house, or any similar building where some protection from the elements can be had. However, if unit must be mounted out of doors, cabinets listed on page 134 (if properly sealed with "Eas-Seal") may be used. Chassis on which controller is built measures $8\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$ "

- E9568. COMPLETE KIT. NET. **\$7.95**
- E14100. INSULATOR KIT. 50 Fence and 4 Corner Insulators with feather washers. NET. **79c**
- E8911. DRY CELLS. 4 required for above Controller. EACH. **33c**
- KIT OF 4. NET. **\$1.20**

FOR ADDITIONAL LISTINGS of fence controllers and accessories see page 47 for factory-built controllers in both standard and de luxe units. See page 47 for "Hot-Shot" batteries; page 43 for storage batteries; page 145 for ground rods (very essential when making a successful and effective fence controller installation).

NEW KNIGHT "FREE POWER" WINDCHARGERS

HY-TOWER CHARGER

Get FREE POWER from the wind with this new de luxe Hy-Tower Charger. Costs nothing to operate; saves on battery-charging expenses. Puts the wind to work for you to deliver up to 16-20 amperes of direct 6 volt current. Charges 6 volt storage batteries to supply current for radios, lighting service, etc. Has latest valuable features: weatherproofed, balanced propeller; automatic tilt-back regulator for any wind velocity; heavy-duty generator which cuts in at 37.0 R.P.M.; automatic turntable brake to keep propeller faced into wind; throw-out collar for easy starting or stopping; self-adjusting non-arcing collector ring, etc. Supplied with 10-foot all-steel tower, all necessary accessories, and full instructions. Shpg. wt., 75 lbs.

E10610. Complete Hy-Tower Wind-Charger. Fig. A. List Price, \$29.50. **\$19.75**

YOUR NET PRICE.....

WINDMILL SIDE-TOWER CHARGER

For the farmer who has a windmill tower close to the house, the new Windmill Side-Tower Charger makes a splendid installation. Windcharger unit includes all features as described above; automatic tilt-back regulator; heavy-duty generator; automatic turntable brake to keep collar; self-adjusting collector ring, etc. Supplied with special mounting equipment for mounting out side of any windmill tower. Shpg. wt., 75 lbs.

E10611. Fig. B. **\$19.75**

List Price, \$29.50. YOUR NET PRICE.....

SKY-SCRAPER CHARGER

"The higher the tower, the greater the power." This new Sky-Scraper Charger offers the very finest performance obtainable from any Windcharger on the market today. Includes same charger head as described above, but is supplied complete with a full 42½ foot all-steel Sky-Scraper tower. Captures every gust of wind even in areas of low wind velocity to offer exceptionally efficient battery-charging. Develops sufficient power to enable you to charge several 6 volt batteries in an unusually short time. (For offering of tower only see below.) Shpg. wt., 215 lbs. F.O.B. CLARINDA, IOWA.

E10612. Fig. C. List Price, \$47.00. **\$33.75**

YOUR NET PRICE.....

SKY-SCRAPER TOWER ONLY

The 42½ foot all-steel Sky-Scraper tower is offered separately for Windcharger installations. Also ideal for use as antenna mast for Amateur station. Complete with guy wires. Shpg. wt., 154 lbs. F.O.B. CLARINDA, IOWA. Shipped unassembled, with hardware.

E10613. List, \$22.50. NET PRICE. **\$17.50**

6 VOLT LIGHTING SYSTEM AND ACCESSORIES

A complete kit of essential equipment for wiring the rural home. A 6 volt battery charged by means of Windchargers shown at left



or gas-engine (see page 45) will provide plenty of current for modern electric lighting at low cost. Complete kit includes: 1—porcelain entrance switch and fuse block; 2—30 amp. plug fuses; 100-foot roll No. 8 weatherproof wire; 25-foot roll twisted drop-cord 3—25 watt and 3—15 watt 6 volt light bulbs; 6—pull chain sockets; 6—porcelain cleats; 6—porcelain nail knobs; 2—6" porcelain tubes; 1—4 oz. roll friction tape; 1—4 oz. roll rubber tape; and full instructions.

E3487. NET. **\$8.45**

6 VOLT LIGHTING BULBS

These high-grade G. E. licensed light bulbs give maximum light from a 6 volt storage battery. Ideal for farm-lighting or camps, lodges, house-trailers, etc. Made by KEX-RAD; famous for high quality. Have frosted inside surface and standard Edison base. (Also available in 12 volt type; see page 21.)

No.	Watts	Drain	EACH
E890	15	2.5 Amp.	} 25c
E891	25	4.2 Amp.	
E892	50	8.5 Amp.	35c

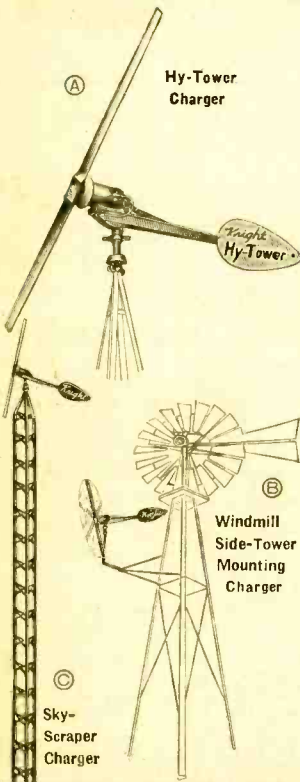
WRITE FOR ATTRACTIVE QUANTITY PRICES

E5469. PULL-CHAIN SOCKET. Pendant type, standard Edison socket. Threaded to hold screw-on type reflector. With 6" pull-chain. NET EACH..... **15c**

LIGHT PLANT WIRE

Weatherproof single conductor wire for Windcharger or gas engine plants. For specific uses of each size, see listing on page 117.

No.	Size	Per Foot
E2490	6	\$5.25
E2491	8	4.50
E2492	10	3.10
E2493	12	2.65
E2496	14	1.25



ELECTRIC FENCES & ACCESSORIES

KNIGHT 6 VOLT ELECTRIC FENCE CONTROL

- COMPLETE FOR INSTANT INSTALLATION
- BUILT-IN BATTERY COMPARTMENT
- WILL NOT HARM HUMANS OR ANIMALS
- NEGLIGIBLE OPERATING COST
- FOR USE WITH ALL LIVING COSTS
- SAVES ON FENCE WIRE COSTS



ALLIED brings you the finest commercially-built Electric Fence Control device available today. By installing a Knight Electric Fence, tremendous savings can be effected. Save on wire: With this new Electric Fence only one wire—instead of two or three—is required to hold in livestock. Save on posts: With the Knight Fence, short light stakes placed 50 feet apart will serve for any length of fence. Gate-latch listed below makes a gate out of any section of wire. Save on labor: One man can easily fence 20 acres a day. Because the current is not on at all times, and because controller makes a current-drawing contact only 40 times a minute, further saving is effected. This is true of both D.C. and A.C. types. The A.C. type draws no more than 10 watts. A "Hot-Shot" type dry cell battery (see below) will operate the D.C. controller for about 3 months, or even longer if used intermittently. For use with all livestock. Will hold horses, cows, sheep, hogs, etc., with the same effectiveness. The Knight Electric Fence Controller employs a unique system of current control on the fence. The current cannot

increase beyond a safe limit, no matter what the weather condition. The shock is therefore SAFE even though it gives a considerable jolt to any animal touching fence. However, the time limit of the shock is less than .0015 seconds in duration. In effect, the shock feels more like the lash of a whip than an electrical sensation. The fence voltage is high enough to be practical in all weather and under all conditions. Only the usual precautions of making a good ground connection must be followed. If this is done, the Knight Electric Fence Control will effectively handle 15 miles of wire, putting almost as much charge on the farthest length of wire as on the closest. The standard model 6 volt unit is equipped with a built-in battery compartment which will take either "Hot-Shot" battery or conventional dry cells. Mounting a battery or dry cells in this compartment makes the controller a self-contained unit. Standard model measures: 11"x12"x3 1/2". Shpg. wt., 12 lbs.

E10620. Complete 6 Volt Model. **\$965**
NET PRICE.....

32 VOLT AND 110 VOLT POWER CONVERTERS

E10621. 32 VOLT CONVERTER. By connecting this converter to battery leads of the Knight Electric Fence standard model above and then connecting converter to your regular 32 volt plant, you can instantly change the controller to a 32 volt unit. Converter is housed in attractive heavy-gauge steel box enamelled red to match above unit. **\$2.95**
Shpg. wt., 6 lbs. NET.....

E10622. 110 VOLT CONVERTER. Connects directly to standard 110 V. A.C. source. Converts 110 V. A.C. current to 6 V. D.C. for operating the Knight Electric Fence. Fully filtered. If you have 110 volts A.C., use this unit instead of batteries. Housed in heavy-gauge steel box. Equipped with approved A.C. cord. Shpg. wt., 9 lbs. **\$4.95**
NET.....

Some of the very desirable features of the Knight Electric Fence Control are as follows: The built-in, high-quality transformer will withstand 5000 volts. Switch frame is made of heavy-gauge cadmium-plated steel to resist rust. Contact points are made of fine-grain tungsten for long life. Cabinets are finished with red water-proof ripple paint.

ELECTRIC FENCE ACCESSORY EQUIPMENT

INSULATORS

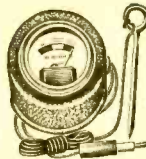
Fig. A. Insulates electric wire from fence posts. **2c**
E14101. EACH...
Fig. B. Insulates electric wire at fence corners. **3c**
E14102. EACH...

INSULATOR KIT

This handy Electric Fence Insulator Kit consists of 50—Type A fence post insulators and 4—Type B corner post insulators. Necessary leather washers are also included in the kit. Shpg. wt. 5 1/2 lbs. **79c**
E14100. NET.....

FENCE TESTER

An indispensable instrument which quickly determines whether fence is working properly, is partially grounded, or completely grounded. There are two leads from the meter—one terminating in a pointed rod and the other equipped with a bakelite insulated prod. To test a fence, the pointed rod is shoved into the ground and the prod touched to fence wire. Needle of meter instantly shows condition of fence control. **\$1.75**
Shpg. wt., 4 lbs. NET.....



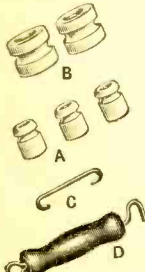
KNIGHT "HOT-SHOT" TYPE BATTERY

An efficient 6 volt dry battery particularly well-suited for operating fence controls. Internal connections are securely soldered. The sturdy metal case is water-proof. Has insulated spring terminals. Size, 10 1/2"x2 1/2"x6". **\$1.21**
Shpg. wt., 7 lbs. NET.....



KNIGHT DE LUXE MODEL ELECTRIC FENCE CONTROL

With built-in meter for testing purposes. Simply press button to see if fence line is grounded. Equipped with "on-off" switch for greater convenience. The bright red metal box is water-proofed. This will permit mounting unit out-of-doors on any convenient post. Offered in a choice of two popular models. The 6 volt model operates from dry cells, "Hot-Shot," or storage battery placed outside of Fence Control. The 110 V. A.C. model is self-contained; will work instantly when plugged in to regular utility power lines or other 110 V. A.C. source. Complete instructions for installing this control, and getting all of the available voltage into your wires, are included. Technical specifications are otherwise the same as for standard model listed above. 7"x9"x3 1/2". **\$13.55**
E10623. 6 Volt Model. Shpg. wt., 11 lbs. NET PRICE.....
E10624. 110 Volt Model. Has built-in transformer. Ready to plug in to regular 110 V. A.C. power line. Fully filtered. **\$17.85**
Shpg. wt., 20 lbs. NET.....



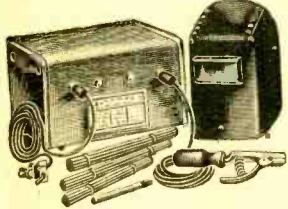
CONVENIENT KWIK-KLIPS
Fig. C. These clips provide an easy, quick method for fastening electric fence wire to insulators. Made of high-grade spring steel, cadmium-plated to prevent rust. **30c**
E14103. PER PACKAGE OF 50.....

HANDY GATE LATCH
Fig. D. Consists of insulated handle with hook on one end and loop on other. Makes inexpensive gate out of any section of fence. **30c**
E14104. NET.....

COMPLETE, EASY-TO-OPERATE ARC WELDERS

DYNAMIC SUPER-CHARGED WELDER

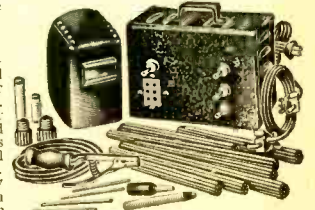
FOR METALLIC ARC AND CARBON ARC WELDING



Here is the low-cost answer to those innumerable welding jobs you have been putting aside. This handy arc-welder will weld cylinder blocks, bumpers, fenders, tanks, and practically all metal farm implements. It is no longer necessary to discard perfectly usable machinery because some part has broken. Just plug the Dynamic Welder into a 110 volt 60 cycle A.C. socket, and in a few minutes' time the broken part is repaired and useful again. Works on iron, steel, tin, brass, etc. Does both carbon arc and metallic arc welding. Will easily weld metals up to 1/2" thick. Convenient terminal board supplies outlets for Low, Medium, High, and Very High heat welding. Settings will, of course, depend on type of welding being done. Range of four settings is 30 to 75 amperes. Helmet supplied must be worn at all times to protect head and eyes. Helmet is sturdy but light enough to be worn for hours without fatigue. Fitted with scientifically correct lens. Each unit is shipped with assortment of rods for all types of welding. Complete Dynamic Arc-Welder includes ground clamp, ground cable, spring type electrode holder, and detailed instructions. Unit measures 7 1/2"x9"x11 1/2". With convenient carrying handle and mounting feet. Shpg. wt., 35 lbs. **\$22.09**
E10598. Complete with helmet. NET.....

SUPER INDUSTRIAL ARC-WELDER

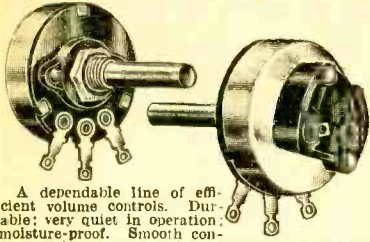
FOR ALL HEAVY-DUTY TYPES OF WELDING



A De Luxe Industrial type Arc-Welder. Heavy-duty type for all welding work, such as on cylinder blocks, bumpers, fenders, tanks, wheels, tractors, plows, all other farm machinery, etc. Will weld all metals up to 1/2" thick. Has 33 heat ranges to apply to all types of welding requirements. Conveniently portable; weighs only 72 lbs. Economy of operation brings cost down to about five cents per hour. Welder is not limited as to type of work which can be done. Will weld both heavy and light jobs. An efficient cooling arrangement makes it possible to run the machine continuously over long periods of time. An unusually short time is required to strike an arc. Built very compactly; unit measures only 10 1/2"x9"x11 1/2". Works with remarkable efficiency on all kinds of metal when brazing, soldering, or welding. Each unit is shipped complete with five pounds of assorted rod, ground cable and clamp, spring type electrode holder, headshield helmet, 2 special fuses, carbon flux, clamp electrode holder, headshield helmet, 2 special fuses, carbon flux, solder, heat control plug, etc. Complete detailed instructions supplied are actually a course in welding. For operation from 110 volts, 50-60 cycles. A 220 volts A.C. units also supplied at same price on special order. Shpg. wt., 90 lbs. **\$45.60**
E10599. Complete with helmet. NET.....

Finest Quality VOLUME CONTROLS

KNIGHT UNIVERSAL VOLUME CONTROLS



A dependable line of efficient volume controls. Durable; very quiet in operation; moisture-proof. Smooth contact action assures quiet operation. Rated at one watt. Case, 1 3/8" diameter; 1/4" shaft extends 1 1/2". Code: A—Antenna control, U—Antenna and "C" bias, W—"C" bias, P—Potentiometer, T—Tone control or audio shunt. These are dependable long-lived units.

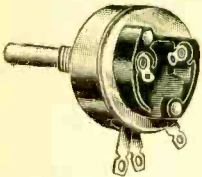
No.	Ohms	No.	Ohms
E5960	1000A	E5965	2500P
E5961	2000A	E5966	5000T
E5962	3000P	E5967	7500W
E5963	5000U	E5968	10000T
E5964	10000U	E5970	25000T
	15000P	E5971	50000T
	20000W		1 Meg. T.

YOUR PRICE EACH LESS SWITCH..... **28¢**

A. C. SWITCH

E5972. Standard AC switch for use with Knight Volume Controls listed above. Easily attachable. NET..... **12¢**

UTAH-CARTER VOLUME CONTROLS



High quality volume controls. Insulated shaft type. Clockwise Taper; CC—Counter Clockwise; all others with uniform taper. 1 1/4" shafts may easily be changed to shorter lengths. 3/8" bushings. May be used with or without AC line switch.

SPECIFY VALUES WHEN ORDERING

Ohms	Ohms	Ohms	Ohms
600	6000	25000	200000
1000	10000C	50000	250000C
2000	10000	75000C	500000C
5000	15000C	100000C	1 Meg. C.
5000	20000C		

LESS SWITCH WITH SWITCH
E6950. NET EACH..... **38¢** E6968. NET EACH..... **56¢**

UTAH-CARTER MIDGETS



Extremely compact. Precision-built wire-wound units. Only 1 1/2" dia. and 3/8" deep back of panel. Dissipate one watt. Less knob. Single hole mounting type. May be used for all radio requirements. Ideal where space is at a premium. Large lugs make soldering easy. Save money by using these dependable low-priced midget controls.

POTENTIOMETERS

No.	Ohms	No.	Ohms
E9020	6	E9025	400
E9021	10	E9026	500
E9022	15	E9027	1000
E9023	20	E9028	1500
E9024	200		

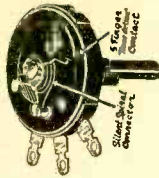
RHEOSTATS

No.	Ohms	No.	Ohms
E9030	1/2	E9037	20
E9031	1	E9038	25
E9032	2	E9039	30
E9033	3	E9040	40
E9034	4	E9041	50
E9035	6	E9042	75
E9036	10		
E9037	15		

YOUR PRICE EACH..... **24¢**

IRC STANDARD VOLUME CONTROLS

A new volume control with superior features. Operates quietly. Only 1 1/4" diam. In bakelite housing. Uses: A—Potentiometer or rheostat with uniform resistance change; C—Audio grid or antenna shunt; D—Antenna and "C" bias for one tube; F—Antenna and "C" bias for two tubes. H—Audio level control for automatic bass compensation. X—Special control for use as fader. These high-quality IRC Standard Volume Controls are renowned for long life and quiet dependable performance.



No.	Use	Ohms	No.	Use	Ohms
E1900	A	1000	E1918	C	5000D
E1901	A	1000	E1919	C	7500D
E1902	A	2000	E1920	D	7500*
E1903	A	3000	E1921	A	10000D
E1904	A	4000	E1922	C	10000D
E1905	A	5000	E1923	A	20000D
E1906	C	5000	E1924	D	20000*
E1907	F	1000*	E1925	C	25000*
E1908	A	1000*	E1926	D	25000*
E1909	D	10000*	E1927	C	50000D
E1910	C	1000*	E1928	C	2 Meg.
E1911	D	1500*	E1929	C	2 Meg.
E1912	F	1500*	E1930	C	2 Meg.
E1913	D	2000*	E1931	C	2 Meg.
E1914	D	2500*	E1932	C	3 Meg.
E1915	A	2500*	E1933	A	5 Meg.
E1916	F	2500*	E1934	A	10 Meg.
E1917	A	5000			

YOUR PRICE EACH. **59¢**

See Switch listing below. **88¢** Less Switch NET EACH

*These controls are supplied with 300 ohm 1/2 watt resistor. For replacing controls in grid bias circuits which require fixed minimum resistance. T-Tapped for tone control circuit.

ATTACHABLE SWITCHES

E1935	S.P.S.T. Switch, NET.....	29¢
E1936	S.P.D.T. Switch, NET.....	35¢
E1937	D.P.S.T. Switch, NET.....	35¢

SELECT THE PROPER IRC VOLUME CONTROL FROM THIS COMPLETE GUIDE

An invaluable aid for every serviceman. Shows the exact replacement volume control for hundreds of standard radios. This page lists the most popular volume controls shown in the IRC Control Guide; the others are available promptly on order through ALLIED. Get this guide with your next order. **E11938. FREE ON REQUEST.**



IRC SPECIAL REPLACEMENT VOLUME CONTROLS

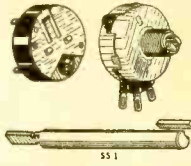
Consult IRC Guide for proper selection. For unlisted special controls, specify set and model No., and enclose \$8c for single controls, less switch, \$1.18 with switch; \$1.47 for duals, less switch, \$1.76 with switch. There is an IRC Volume Control for every replacement need. For the proper unit refer to IRC Guide or order unlisted units from us remitting as specified.

No.	Type	NET	No.	Type	NET
E13900	J-5	\$0.88	E13920	J-211	\$0.88
E13901	J-11	1.47	E13921	J-222	.88
E13902	J-15	.88	E13922	J-244	1.18
E13903	J-18	1.18	E13923	J-250	1.18
E13904	J-45	1.18	E13924	J-252	1.18
E13905	J-58	.88	E13925	J-268	.88
E13906	J-63	.88	E13926	J-272	1.47
E13907	J-74	.88	E13927	J-273	1.47
E13908	J-84	.88	E13928	J-280	.88
E13909	J-85	.88	E13929	J-295	1.47
E13910	J-90	1.47	E13930	J-296	1.47
E13911	J-106	1.47	E13931	J-352	1.18
E13912	J-107	1.47	E13932	J-408	1.18
E13913	J-110	1.47	E13933	J-560	1.18
E13914	J-127	1.47	E13934	J-628	1.18
E13915	J-136	1.76	E13935	J-693	.88
E13916	J-139	1.76	E13936	J-699	.88
E13917	J-143	.88	E13937	J-807	1.18
E13918	J-170	.88	E13938	J-876	.88
E13919	J-175	.88	E13939	J-879	.88

MALLORY-YAXLEY UNIVERSAL MIDGETS

TYPE UM

These new midget volume controls, together with the Plug-In Shafts listed below, offer suitable replacements for over 952 radios. For proper selection consult your Mallory-Yaxley Encyclopedia; for taper explanation and switch selection refer to listing below MR controls on following page 49. NOTE: We can select for you the proper control and shaft for any set, on receipt of information giving name, model number and tube lineup of receiver. Please re-mit \$8c for each unit (less switch) wanted.



Ohms	Type	Taper	Ohms	Type	Taper
5000	UM114	IV-A	10000	UM143*	I
10000	UM118	I	15000	UM144	I
10000	UM119	II	25000	UM147	I
10000	UM120	IV	25000	UM149	IV
15000	UM121	I	25000	UM150*	IV
15000	UM122	II	35000	UM151	I
20000	UM124	I	50000	UM154	I
25000	UM128	II	50000	UM156	IV
25000	UM129	IV	50000	UM157*	I
50000	UM133	I	75000	UM158	I
50000	UM134	II	1 Meg.	UM161	I
50000	UM135	IV	1 Meg.	UM162*	I
75000	UM137	I	2 Meg.	UM163	I
75000	UM138	II	3 Meg.	UM165	I
100000	UM140	I	10000	UM180	Spec.
100000	UM141	II	10000	UM181*	Spec.
100000	UM142	IV			

*Clutch type controls—no provision for attachment; hand switch action.

E13945. Specify values and Type No. when ordering. List each, \$1.25. EACH, less shaft. **73¢**

TYPE SS—PLUG-IN SHAFTS

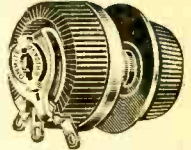
For use with type UM controls listed above. A complete set of Plug-In Shafts plus 56 "M" controls will cover 952 individual volume control replacements.

No.	Type	No.	Type	No.	Type
E13950	SS1	E13956	SS7	E13962	SS13
E13951	SS2	E13957	SS8	E13963	SS14
E13952	SS3	E13958	SS9	E13964	SS15
E13953	SS4	E13959	SS10	E13965	SS16
E13954	SS5	E13960	SS11	E13966	SS17
E13955	SS6	E13961	SS12		

List Each, 25c. YOUR PRICE EACH..... **15¢**

OHMITE VITREOUS ENAMELED RHEOSTATS

High-quality power rheostats for all radio and power control circuits. Conservative ratings are for open-air use. Large contact shoe of metal-impregnated carbon graphite; shaft is insulated. Require 1/2" mounting hole. Have 3 terminals; may be used as potentiometer.



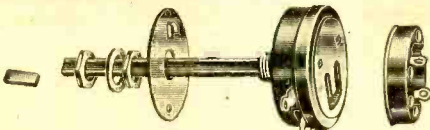
Model H-25 Watt			Model J-50 Watt		
No.	Ohms	Each	No.	Ohms	Each
E6600	1	\$2.65	E6622	5	
E6601	2		E6623	1	\$2.94
E6603	6		E6624	2	
E6605	10		E6625	4	
E6606	15		E6626	8	
E6607	25		E6627	12	
E6609	50	2.35	E6628	22	
E6611	100		E6630	50	2.65
E6612	175		E6631	80	
E6613	250		E6632	150	
E6615	500		E6633	225	
E6616	750		E6634	300	
E6617	1000		E6635	500	
E6618	1500	2.65	E6637	1000	
E6619	2500		E6639	2500	2.79
E6620	3500		E6641	5000	
E6621	5000	2.79	E6643	10000	2.94

MODEL K-100 WATTS

No.	Ohms	EACH	No.	Ohms	EACH
E6405	0.5		E6410	50	
E6406	2	\$4.41	E6411	100	\$4.12
E6407	3		E6412	500	
E6408	10	4.12	E6413	1000	4.41
E6409	25				

MALLORY-YAXLEY VOLUME CONTROLS

UNIVERSAL VOLUME CONTROLS



The listings on this page constitute practically all of the Yaxley Volume Controls. With a comparatively small stock, you can now meet the requirements of 90% of all repair jobs. Universal controls have adjustable bias feature and 3" shaft which can be shortened very easily where necessary. Universal controls come complete with knob adapter and extension bushing. All of these controls are listed LESS SWITCHES. Where original control calls for a switch or where switch-type control is to be used, select proper switch cover from listing below, and order as separate unit. NOTE: All units will be shipped less switch unless switch is specified in your order and extra remittance made.

UNIVERSAL REPLACEMENT CONTROLS

No.	Ohms	Type	Taper	No.	Ohms	Type	Taper
E9001	2	Q	IV	E9006	15000	*H12	I
E9002	2	Q	IV	E9007	15000	*H1	II
E9003	10	S	IV	E9008	15000	*H7	VII
E9004	10	T	IV	E9009	20000	*A20MP	IV
E9005	20	T	IV	E9010	20000	*Y	IV
E9006	30	U	IV	E9011	25000	*Y25MP	IV
E9007	60	V	IV	E9012	25000	*J	IV
E9008	100	W	IV	E9013	50000	*Y50MP	II
E9009	200	X	IV	E9014	50000	*K	II
E9010	400	A	IV	E9015	50000	*K12	I
E9011	500	A400P	I	E9016	75000	Z12	I
E9012	550	A550P	I	E9017	75000	Z	I
E9013	1000	A1MP	IV	E9018	100000	*Y100MP	IV
E9014	1000	B	IV	E9019	100000	UC500	II
E9015	1000	UC500	II	E9020	100000	UC510	II
E9016	2000	A2MP	IV	E9021	130000	UC502	I
E9017	2000	C12	II	E9022	200000	Y200MP	IV
E9018	3000	*C	II	E9023	250000	Y250MP	IV
E9019	3000	A3MP	IV	E9024	250000	M	I
E9020	3000	D12	II	E9025	250000	UC511	II
E9021	3000	D	II	E9026	250000	UC509	IV
E9022	3000	D7	VII	E9027	500000	Y500MP	IV
E9023	5000	A5MP	IV	E9028	500000	UC510	I
E9024	5000	X5MP	IV	E9029	500000	UC512	I
E9025	5000	E12	I	E9030	500000	UC512	I
E9026	5000	E	II	E9031	500000	UC515	I
E9027	5000	E7	VII	E9032	500000	UC513	I
E9028	7500	F12	II	E9033	750000	UC503	II
E9029	7500	F	II	E9034	1 Meg.	Y1000MP	IV
E9030	7500	F7	VII	E9035	1 Meg.	Y1000MP	IV
E9031	10000	A10MP	IV	E9036	1 Meg.	UC514	I
E9032	10000	Y10MP	IV	E9037	2 Meg.	P	I
E9033	10000	G12	II	E9038	3 Meg.	UC504	I
E9034	10000	G	II	E9039	4 Meg.	UC505	I
E9035	10000	UC501	II	E9040	5 Meg.	UC506	II
E9036	10000	G7	VII	E9041	5 Meg.	UC507	II
E9037	10000	G7	VII	E9042	9 Meg.	UC508	I

* Adjustable Bias.
 † Slotted Shaft for auto sets.
 ‡ Low shaft for auto sets, etc.
 ‡ Wire-Wound. Rest are Carbon.

List, \$1.00.
 NET EACH..... 59c

ATTACHABLE VOLUME CONTROL SWITCHES

Volume controls listed on this page do not have switches. Select switch to fit your control requirements from listing below.

E9004	Type 6-9, Standard S.P.S.T., Special thin design.	E9006	Type 8, S.P.D.T., List, 60c. NET..... 35c
E9005	Type 7, D.P.S.T., Similar to Type 6-9.	E9007	Type 13, (3PST) Shorting. List, 60c. NET..... 35c
	List, 60c. NET..... 35c	E9008	Type 14, (4PST) Shorting. List, 60c. NET..... 35c

EXPLANATION OF YAXLEY TAPERS:

TAPER I: A modified log, left-hand taper in the carbon unit; semi-log in W.W. unit. For audio or ant. shunt circuits.

TAPER II: A right hand log. taper in the carbon unit; semi-log in the W.W. unit. For series circuits, such as cathode voltage controls.

TAPER III: Combination right and left hand taper. For antenna and "C" bias control.

TAPER IV: Linear taper. Used where the voltage changes proportionately to the degree of rotation.

TAPER VII: A left hand taper found only in wire-wound controls. Useful in combined antenna and bias control circuits.

UNIVERSAL "TRP" TAPPED CONTROLS

For practically all sets using tapped volume controls. Less Switches.

Cat. No.	Mfg'r. No.	Res. Ohms	Tapped at Ohms	Cat. No.	Mfg'r. No.	Res. Ohms	Tapped at Ohms
E9200	TRP600	6M	2500	E9218	TRP618	2 Meg.	460M
E9201	TRP601	30M	6M	E9219	TRP619	3 Meg.	75M
E9202	TRP602	63M	31M	E9220	TRP620	2 Meg.	1 Meg.
E9203	TRP603	125M	125M	E9221	TRP621	2 Meg.	250-500M
E9204	TRP604	350M	25M	E9222	TRP622	4 Meg.	7-14M
E9205	TRP605	500M	75M	E9223	TRP623	250M	50M
E9206	TRP606	500M	100M	E9224	TRP624	2 Meg.	250-500M
E9207	TRP607	500M	250M				
E9208	TRP608	1 Meg.	200M				
E9209	TRP609	1 Meg.	500M				
E9210	TRP610	1 Meg.	20M				
E9211	TRP611	1 Meg.	170M				
E9212	TRP612	2 Meg.	25M				

YOUR NET PRICE EACH

88c

IT'S EASY TO FIND THE RIGHT YAXLEY VOLUME CONTROL

Your volume control worries are over when you use the Mallory-Yaxley Encyclopedia. Sets are listed alphabetically according to manufacturers' names. All you need do is choose the control listed for any specific set, and order from the complete listings on this page.

MALLORY-YAXLEY ENCYCLOPEDIA

Here, in one book—on one page—on one line, is the correct answer to every service problem. New, expanded second edition of the M-Y Encyclopedia eliminates guess-work from servicing; analyzes 17,000 radio sets. 336 pages, 8 1/2 x 11". Stup. wt., 2 lbs. **\$1.91**
 E11865. YOUR NET PRICE.....



SPECIAL SINGLE "SRP" CONTROLS

These controls are especially made for receivers whose volume control requirements are so special that they cannot be met by the universal type controls. These controls have special electrical or mechanical features, which make them suitable for special replacement purposes. Consult your Mallory-Yaxley Encyclopedia for correct selections.

Mfg'r's. Type	Resis. Ohms	Mfg'r's. Type	Resis. Ohms	Mfg'r's. Type	Resis. Ohms
*SRP133	2M	*SRP245	32M	*SRP268	15
*SRP134	4500	*SRP249	20M	*SRP269	10M
*SRP138	450	*SRP251	250M	*SRP271	150
*SRP139	550	*SRP252	500M	*SRP272	300
*SRP141	1200	*SRP253	400	*SRP274	10M
*SRP142	2900	*SRP254	3500	*SRP275	500M
*SRP144	2M	*SRP255	15M	*SRP276	2M
*SRP145	2M	*SRP256	10M	*SRP277	3M
*SRP150	50M	*SRP257	5M	*SRP278	500M
*SRP152	60	*SRP258	13M	*SRP279	50M
*SRP153	1M	*SRP259	50M	*SRP280	500M
*SRP154	50M	*SRP260	1M	*SRP281	500M
**SRP160	3200	*SRP261	100M	*SRP282	350M
*SRP170	75M	*SRP262	1500	*SRP283	250M
*SRP179	125M	*SRP263	32M	*SRP280	20M
*SRP185	1500	*SRP264	650	*SRP901	10M
*SRP188	32M	*SRP265	50M	*SRP900	800
*SRP213	250M	**SRP266	600	*SRP961	10M
*SRP216	500M	*SRP267	8M	*SRP962	250M
*SRP223	1M				

E9230. Specify Type Number and Value When Ordering. **88c**
 List, \$1.50. NET EACH.....

E9226 SRP239. 450 Ohms. Vol. Strip } EACH.....29c
 E9227 SRP241. 6000 Ohms. Vol. Strip }
 E9228 SRP273. 500,000 Vol. Control with Switch. NET....\$1.18

* Volume Control. †† Phone Control. *† Volume-Sens. Control.
 ** Hum Control. ††† Tone-Beam Control. *††† Phono-Vol. Control.
 † Volume-Tone. †††† Regeneration Control. *†††† Equalizer Control.

SPECIAL DUAL "DRP" CONTROLS

Consist of two separate resistance elements ganged and controlled by one shaft. These dual units will service practically all sets employing this type of control. Consult your Mallory Encyclopedia for control you require and then order from this listing.

Type	Resistance Front	Resistance Rear	Type	Resistance Front	Resistance Rear	Type	Resistance Front	Resistance Rear
DRP114	250	5M	DRP241	5M	150M	DRP306	5M	10M
DRP115	3800	3800	DRP242	10M	500M	DRP307	3M	12M
DRP116	25700	10000	DRP243	3M	750M	DRP308	50M	50M
DRP117	500	2500	DRP244	25M	6M	DRP309	12M	65M
DRP119	3M	10M	DRP245	1 Meg.	3 Meg.	DRP310	25M	25M
DRP122	645	10M	DRP246	32M	50M	DRP311	150M	250M
DRP129	7500	10M	DRP250	50M	1M	DRP312	75M	500M
DRP221	10M	100M	DRP301	5M	2500	DRP313	1M	500M
DRP222	75M	32M	DRP302	100M	250M	DRP314	500M	2500
DRP232	3 Meg.	3 Meg.	DRP303	2500	100M	DRP315	2 Meg.	2500
DRP239	25M	25M	DRP304	1 Meg.	3 Meg.	DRP316	200M	1M
DRP240	250M	10M	DRP305	25M	25M	DRP317	500M	1M

* Tapped at 160M ohms.
 E9231. Specify Type Number and Value When Ordering. **\$1.47**
 List, \$2.50. NET EACH.....

MIDGET "MR" CONTROLS-FIXED SHAFTS

A new series of midget replacement volume controls especially suited for applications where special shafts and couplings are unnecessary. Efficiently built, compact, long-lived. Designed with switch cover and cam to accommodate attachable switches wherever required.



Ohms	Type	Taper	Ohms	Type	Taper	Ohms	Type	Taper
5000	MR14	IV-A	50000	MR33	I	250000	MR44	I
10000	MR18	I	50000	MR34	II	250000	MR45	II
10000	MR19	II	50000	MR35	IV	500000	MR48	I
10000	MR20	IV	75000	MR36	I	500000	MR50	IV
15000	MR21	I	75000	MR37	II	750000	MR51	I
15000	MR22	II	100000	MR39	I	1 Meg.	MR53	I
20000	MR24	I	100000	MR40	II	2 Meg.	MR55	I
25000	MR28	II	100000	MR41	IV	3 Meg.	MR57	I
25000	MR29	IV	150000	MR42	I			

E9264. Specify Type Number and Value When Ordering. **59c**
 List, \$1.00. NET EACH.....

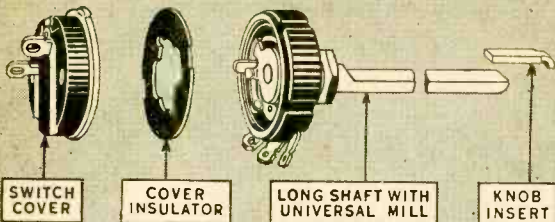
MIDGET SWITCHES

E9240. M26. S.P.S.T..... 29c
 E9241. M27. D.P.S.T..... 35c
 E9242. M28. S.P.D.T..... 35c
 E9243. M23. 3P.S.T..... 35c
 (Shorting)
 E9244. M24. 4P.S.T..... 35c
 (Shorting)

KEY TO TAPERS

TAPERS: For explanation of tapers see table at left. Taper IV-A is modification of regular linear taper to No. IV.
 FOR ADDITIONAL LISTING OF MALLORY-YAXLEY MIDGET CONTROLS. SEE PAGE 48.

CENTRALAB STANDARD RADIOHM



The famous small-size CRL Standard Control. The complete listing below covers practically all volume control requirements. The size of these controls is only 1 1/2" diameter, 3/4" deep, less switch. Has 3/8" x 1/2" shaft which may be cut to fit. All units below are carbon type. See chart below for taper. Supplied with or without "snap-on" switch No. E2125 described below.

STANDARD MIDGET RADIOHM



Bakelite case, 1 1/4" dia. Aluminum shaft is 1/2" dia. x 3/8" long. Knob insert supplied. Can be used with either push-on or set-screw type knob. Shaft is easily cut.

Less Switch No.	CRL No.	Max. Res. Ohms	Curve No.	With Switch No.	CRL No.
E3025	72-118	500	1	E3060	62-118
E3026	72-107	1000	1	E3061	62-107
E3027	72-101	2000	1	E3062	62-101
E3028	72-108	3000	1	E3063	62-108
E3029	72-109	4000	1	E3064	62-109
E3030	72-135	5000	1	E3065	62-110
E3031	70-204	5000	6	E3066	62-204
E3032	72-139	7500	1	E3067	62-139
E3033	72-114	10000	1	E3068	62-114
E3034	72-113	10000	3	E3069	62-113
E3035	70-205	10000	4	E3070	52-205
E3036	72-100	10000	6	E3071	62-100
E3037	72-115	15000	10	E3072	62-115
E3038	79-006	15000	4	E3073	99-006
E3039	72-119	20000	3	E3074	62-119
E3040	72-111	25000	1	E3075	62-111
E3041	70-206	25000	4	E3076	52-206

Less Switch No.	CRL No.	Max. Res. Ohms	Curve No.	With Switch No.	CRL No.
E3042	72-102	25000	3	E3077	62-102
E3043	72-103	50000	1	E3078	62-103
E3044	72-117	50000	6	E3079	62-117
E3045	72-123	75000	6	E3080	62-123
E3046	70-202	75000	4	E3081	52-202
E3047	72-104	100000	1	E3082	62-104
E3048	72-122	100000	6	E3083	62-122
E3049	72-136	150000	6	E3084	62-136
E3050	72-120	200000	4	E3085	62-120
E3051	72-131	200000	6	E3086	62-131
E3052	72-105	250000	1	E3087	62-105
E3053	72-106	500000	6	E3088	62-106
E3054	70-203	500000	4	E3089	52-203
E3055	72-140	750000	6	E3090	62-140
E3056	72-116	1 Meg.	6	E3091	62-116
E3057	72-137	2 Meg.	6	E3092	62-137
E3058	72-132	3 Meg.	6	E3093	62-132

LESS SWITCH. EACH **59c**
5 FOR \$2.65

WITH SWITCH. EACH **88c**
5 FOR \$3.95

LESS SWITCH. EACH **59c**
5 FOR \$2.65

WITH SWITCH. EACH **88c**
5 FOR \$3.95

TAPPED RADIOHMS

E3059	72-138	250000	10	E3098	62-138
E3057	72-134	500000	10	E3092	62-134
E3058	72-135	1 Meg.	10	E3093	62-135
E3016	72-142	2 Meg.	10	E3009	62-142

LESS SWITCH. EACH **88c**
WITH SWITCH. EACH **\$1.18**

RADIOHM SWITCH COVERS

Underwriters' approved. Bakelite insulated switch mounted on snap-on type plate.

E2125	S.P.S.T. Standard	29c
E2126	S.P.D.T. 3 Term.	35c
E2127	D.P.S.T. 4 Term.	35c
E2128	S.P.D.T. Clockwise	35c
E2129	S.P.S.T. Dummy Lag.	35c
E2130	4 Point (for Battery Radios)	35c

TWIN VOLUME CONTROLS

Many troublesome sets with single controls may be improved with No. 74-601 if the original control is in the "C" bias circuit, or with No. 74-602 for the screen grid circuit. Back case wired in like original control; section nearest shaft is shunted from ant. to gnd. Other listings have same resistance in both sections. No. 6 taper. Case, 1 1/2" x 3/4" deep; shaft is 1 1/2" x 3/4".

Stock No.	CRL No.	Resistance Ohms Front	Resistance Ohms Back
E2090*	74-601	10,000	25,000
E2091*	74-602	10,000	50,000
E2092*	4-010-804	500,000	500,000
E2093*	4-010-805	100,000	100,000
E2094*	4-010-807	250,000	250,000

NET EACH **\$1.47**

EXTENSION SHAFTS B

Fig. A. Intended for use with Centralab Volume Controls or switches where it becomes necessary to add to the length of the shafts. May be easily cut to any desired length.

No.	Size	EACH
E2722.	4x 1/2" x 3/4" flat	18c
E2723.	4x 3/4" x 3/4" flat	
E2724.	4x 9/16" x 3/4" flat	

Fig. B. Shaft is 1 1/2" x 3/8" long, slotted 3/4" wide, full length. Hinged slot insert is pushed out of shaft and cut to required length. Guide funnel then fits over shaft.

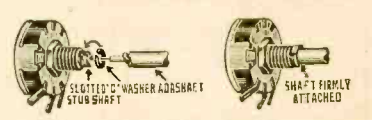
E2721. No. K159. NET **32c**

MIDGET SWITCH COVERS

Underwriters' approved. Bakelite midget switch cover. *For use with battery radio circuits.

No.	Type	NET
E2131	S.P.S.T. (Standard)	29c
E2132	S.P.D.T.	35c
E2133	D.P.S.T.	35c
E2134	S.P.S.T. (Dummy Lag)	35c
E2135	Four Point	35c

ADASHAFT MIDGET RADIOHMS



A revolutionary new idea in volume control replacements. Each control will take any one of five shafts listed below. You can make up your own exact duplicate control by ordering the right control and shaft to meet your needs.

Stock No.	CRL No.	Res. Ohms	Curve No.	List. Price
E2136	NT126	10000	3	NET
E2137	NT127	50000	6	EACH
E2138	NT128	250000	6	73c
E2139	NT129	500000	6	
E2140	NT130	1 Meg.	6	
E2141	NT131	2 Meg.	6	

TAPPED ADASHAFT CONTROLS

Tapped Adashaft controls for use in audio circuits where necessary.

E2117	NT132	250,000	10	NET
E2118	NT133	500,000	10	EACH
E2119	NT134	2 Meg.	10	73c
E2120	NT135	2 Meg.	10	

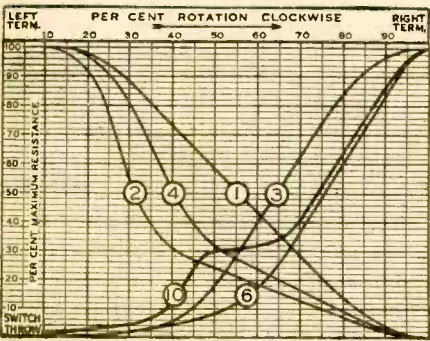
ADASHAFTS FOR ABOVE UNITS

May be used with any of the above "Adashaft" controls to make almost all standard replacements. Sizes cover most popular needs.

Stock No.	CRL No.	Description
E2142	K163	4" x 1/2" flat full length.
E2143	K164	4" x 3/4" flat full length.
E2144	K165	10" x 1/2" flat full length.
E2145	K166	3" Auto type with tunnel.
E2146	K167	6" Auto type with tunnel.

NET EACH **15c**

STANDARD CENTRALAB RESISTANCE CURVE CHART

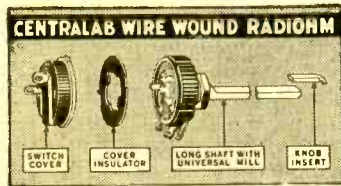


The taper curves illustrated on the left will help you select the proper Centralab Volume Control for use in any type of radio circuit. The numbers shown on each curve correspond to the curve numbers given in the Standard and Midget listings above. Standard applications of each curve are as follows: (1) Voltage divider with uniform resistance change, (Pot.). (2) "C" bias rheostat (L.H.). (3) Antenna and "C" bias of one tube (R.H.). (4) Antenna and "C" bias of two tubes (L.H.). (5) Audio grid, antenna shunt, or tone control (R.H.). (6) Audio grid volume control with tone compensation tap. Minimum volume at the left and maximum volume at the right. The figures at the left of the curves indicate percentage of resistance change; figures at the top indicate percentage of clockwise rotation. Refer to this chart when ordering volume controls.

VOLUME CONTROL GUIDE



The new completely revised CRL Volume Control Guide. Larger than ever. Some of the features are: 10,000 different models; set in 641 numbers listed in numerical order; new tone and wand-band switch listing; new Midget Radiomih listing; new Economy P.A. controls; new ADASHAFT controls; Every Serviceman should have a copy of this valuable Guide. **E3099. FREE WITH ORDER FOR CRL CONTROLS.**



Same size and shape as standard Radiomih. Case of brown bakelite. Stamped less switch but any Radiomih switch listed on page 50 may be added. Shaft 3/8" 3" long. Linear taper.

Stock No.	CRL No.	Res. Ohms.	Stock No.	CRL No.	Res. Ohms.
E2005	V100	2	E2018	V121	100
E2006	V102	4	E2019	V123	200
E2007	V104	6	E2020	V125	300
E2008	V106	8	E2021	V126	400
E2009	V108	10	E2022	V127	500
E2010	V109	15	E2023	V128	750
E2011	V110	20	E2024	VF129	1000
E2012	V111	25	E2025	VF131	2000
E2013	V112	30	E2026	VF133	3000
E2014	V114	40	E2027	VF134	4000
E2015	V116	50	E2028	VF135	5000
E2017	V118	75	E2029	VF136	7500
E2017	V118	75	E2030	VF137	10000

YOUR PRICE EACH CONTROL 59c

NEW UNIVERSAL AUTO REPLACEMENT CONTROL



All units curve No. 10. All have slip clutches and tone compensation tap. D.P.N.T. switch standard switch type. 3/4" slotted shaft 3" long. Easily cut to size. With guide funnel.

Resls.	Type	"NA" Type No Sw.	"PA" Type With Sw.	No.	Net Each
250000	123	E2043	E2047		
500000	105	E2044	E2048		
1 Meg.	124	E2045	E2049		
2 Meg.	125	E2046	E2050		

88c \$1.18



15 WATT					
No.	Ohms.	No.	Ohms.		
E3000	25	E3005	400		
E3001	6	E3006	1000		
E3002	15	E3007	5000		
E3003	50				
E3004	150				
\$1.18					
50 WATT					
No.	Ohms.	No.	Ohms.		
E3010	25	E3017	50		
E3011	60	E3018	150		
E3012	150	E3019	200		
E3013	500	E3020	500		
E3014	1000	E3021	1000		
E3015	5000				
\$1.47					
75 WATT					
No.	Ohms.	No.	Ohms.		
E3016	25	E3022	50		
E3017	60	E3023	150		
E3018	150	E3024	200		
E3019	500	E3025	500		
E3020	1000	E3026	1000		
E3021	5000				
\$1.76					

NET EACH PRICE EACH

REPLACEMENT VOLUME CONTROLS

A very thorough listing of the latest line of Centralab Volume Controls. Controls marked (*) are EXACT Duplicates. Where original control is small in size, new Midget controls are supplied. Centralab Volume Controls have a universal reputation for long life and fine performance.

Manufacturer and Model	Cat. No.	NET
Allied Radio (See Knight)		
Atwater Kent		
469Q, 558Q, 424, 531	E3052	\$0.59
37, 38, 40, 42, 52, 41, 43, 44		
45, 53, 47	E3106*	.88
55, 55C, 55F, 55FC, 60, 60C (Later)	E3101*	1.76
55, 55C, 55F, 55FC, 60, 60C (Early), 61, 61DC	E3102*	1.76
60, 60C, 70 (D & L Chassis), 74 (D & L Chassis), 76 D (L Chassis), 87D (F Chassis)	E3105*	1.76
H2 Series, 72, H1 Series	E3107*	1.47
70 & 76 (Q Chassis)	E3108*	1.47
80, 83, 90	E3122*	1.18
165, 217, 246, 275, 310, 667, 448, 555, 708, 82D, 188, 228, 260, 467, 266, 612, 627, 808, 812, 89F, 92	E3087	.88
67, 67C	E3047	.59
H2 Series, 72, H1 Series	E3057	.88
567, 567F	E3075	.88
944	E3073	.88

Manufacturer and Model	Cat. No.	NET
Brunswick		
10 Midget	E3112*	1.18
14, 21, 31 Panatrobe	E3076	.88

Manufacturer and Model	Cat. No.	NET
Crosley Radio		
60, 61, 62S, 74, 56	E3043	.59
41A, 42, 61, 602, 608, 610, 609, 704, 705 and 706	E3113*	.88
ACT, Buddy, Chum	E3025	.59
408, 418, 428 (Early Models)	E3114*	1.47
408, 418, 428 (Later Models)	E3109*	1.47
555, 555S, 606, 5666	E3110*	.88
21, 22 Batt.	E3046	.59
28, 30, 31, 33, 34, 315	E3115*	.88
127, 126-1	E3051	.59
53, 54, 57, 58, 605, 615	E3052	.59
400, 410, 420	E3047	.59
55, 61, 92 Auto	E3037	.88
77, 50	E3036	.59
122 Super Smoker	E3027	.59
154	E3070	.88
124, 125	E3215*	1.18
95, 96, 98, 99 Auto Sets	E3091	.88
133	E3036	.59
141, 147, 155, 163, 166, 176, 148, 150, 167, M5-3	E3065	.88
182	E3087	.88
134, 134-1, 175	E3052	.59
146, 157, 158, 164, 170, 171, 168-D	E3056	.59
160, 169, 172, 174, 176	E3068	.88
804	E3137	.88

Manufacturer and Model	Cat. No.	NET
Edison, Inc., and Splittorf		
C1, C2, R1, R2, SRC's, Rear	E3117*	.88
C1, C2, R1, R2, SRC's, Front	E3118*	.88
R4, R5, C4, R12, Abbey J.	E3119*	1.47
R6, R7	E3120*	.88

Manufacturer and Model	Cat. No.	NET
Eveready (National Carbon)		
1, 2, 3	E3116*	.88
50 Series	E3159*	1.47
Fada (F.A.D. Andreu)		
122-K-E	E3039	.59
41, 42, 44, 46, 47, 81, 84	E3055	.59
48, 49-KW	E3087	.88
45, 51, 53, 57	E3067	.88

Manufacturer and Model	Cat. No.	NET
General Electric		
T41	E3125*	1.47
H31, H51, H71	E3029	.59
E-61, S-62, E-68, E-71, E-72, E-76, S-81, E-86, E-91, E-95, E-101, E-105, E-108	E3145*	1.18
A8-C, A86, A87	E3126*	1.47
GETT12	E3038	.59
MDO2530	E3043	.59

Manufacturer and Model	Cat. No.	NET
General Motors Radio (Day-Fan)		
5066, 5065, 5057, 6DC, 110-6		
MG	E3039	.59
SAC, 5077, 5080	E3042	.59
A5005, A5020, 210, 217, 219	E3043	.59
22	E3031	.59
5003, 5004, 5010, 5091, 5048	E3035	.59
120A, 130, 140, 110, 18, 180	E3216*	1.47
211-S9A, S9S, S3S, 200, 201, S-1A-216, 217, 219, 250	E3078	.88
1001, 160	E3130*	1.47
S-11-D, 1095, 250	E3078	.88
220, S-10-A, 10-B	E3071	.88
S-2-B, S-3-A, S-3-B, 251-8	E3067	.88

Manufacturer and Model	Cat. No.	NET
Grunow (General Household Util.)		
500	E3090	\$0.88
501	E3087	.88
1101	E3055	.59
Chassis, 6A, 6C, 6F	E3146*	1.18
4-B, 4-BA, 4-C, Chassis	E3024	.59
54, 6-J Chassis, 580, 811, 640		
641, 680, 681	E3144*	1.18
6D, 8D Chassis	E3093	1.18
11-C, 12A, Chassis, 1171, 1241	E3123*	.88
6-11R, 7-DB Chassis; 620, 621, 720, 721	E3124*	1.18

Manufacturer and Model	Cat. No.	NET
Howard Radio		
SG-A, SG-C	E3148*	1.47
SG-B, H.O., 35AC, 40	E3154	.59
X2, X3, X8, Z4	E3087	.88

Manufacturer and Model	Cat. No.	NET
Kennedy, Colin B., Corp.		
Royal 60, 80	E3052	.59
128G, 10, 20, 22	E3152*	1.47
34, 30, 22, 50, 52, 56	E3032	.59
26, 526, 826, 36, 38, 40	E3129*	1.47

Manufacturer and Model	Cat. No.	NET
Knight (Allied Radio Corp.)		
6/7, 8/9, 9 Tube Super	E3028	.59
SG8	E3076	.88
SG9	E3154*	1.76
SG10	E3155*	1.18
AC5	E3069	.88
7 Tube Super (108)	E3087	.88
9 Tube Super (114)	E3088	.59
7 Tube Super (108), 9 Tube Super (114), (Tone Cont.)	E3044	.59

Manufacturer and Model	Cat. No.	NET
Kolster Radio (Columbia Phono)		
K21, 23, 24	E3044	.59
K20 to 32, B10, L15, B16, 902, 901		
C1, C3, C2, C4, C5, C6, C7, 40-60, 7-K, 902, 930	E3055	.59
K42, K43, K44, K45	E3157*	1.47
930 Phono Comb.	E3154*	1.76
100 Series	E3087	.88
60 Series, 31-33	E3065	.88
70, 80, 90 Series	E3071	.88
32-34	E3069	.88

Manufacturer and Model	Cat. No.	NET
Majestic (Grigsby-Grunow)		
70, 70B, 71, 72	E3131*	.88
180, 181	E3132*	1.47
80	E3035	.59
50, 51, 52	E3133*	1.47
55, 96, 57, 58, 150	E3104*	1.18
90 Series, 102, 180, 321 (Equalizer)	E3134*	.88
90 Series	E3135*	.88
30, 31, 220A	E3136*	1.76
130A, 130, 131, 132	E3138*	.88
25 Early, 251, 253, 254	E3139*	1.18
15, 15B, 150	E3140*	1.18
120, 121	E3141*	1.47
60 Series, 160	E3142*	.88
210, 211, 214, 215	E3143*	.88
251, 251B, 253B, 254B, 35, 35A, 352		
111 Auto 1st Type	E3226*	1.18
66 Auto	E3229*	.88
118 Ford Auto	E3232*	.88
200, 201, 202, 203	E3234*	1.18
200, 201, 203, 204	E3235*	.88
200, 221, 223	E3236*	.88
290, 300, 310, 320 Series, 77	E3237*	.88
370, 371, 373	E3239*	1.18
440	E3241*	1.18
460	E3242*	.88

Manufacturer and Model	Cat. No.	NET
Montgomery-Ward (Airline)		
1522-62, 3035-37, 65-67, 811, 1711, 1611	E3037	.59
WG-9, 62-3, 62-6, 62-7, 62-8, 62-9, 62-104		
62, 22, 62-30, 62-21, Auto, 17	E3052	.59
63-38, 62-40, 62-50, 62-91, 62-93	E3055	.59
62-1, 62-2	E3048	.59
13, 15, 16, 16X, 17, 18, 18X	E3033	.59
07A	E3248*	.88
87, 62, 101, 101X	E3087	.88
77, 95	E3249*	.88

Manufacturer and Model	Cat. No.	NET
Motorola		
60, 70, 75, 79, 80 General Voice	E3208*	1.18
50	E3150*	1.18
57, 62	E3151*	1.18
K-40	E3153*	.88

*Exact Duplicate Control. CONTINUED ON NEXT PAGE . . .

REPLACEMENT VOLUME CONTROLS

Manufacturer and Model	Cat. No.	NET	Manufacturer and Model	Cat. No.	NET	Manufacturer and Model	Cat. No.	NET
Phileo			R.C.A. Victor (Continued)			U.S. Radio & Television (Apex) (Cont.)		
65	E3223*	\$0.88	100, 101	E3064	\$0.88	28 Series, 41, 42, 43, 44, 46	E3025	\$0.59
80, 87, 511	E3161*	.88	300	E3078	.88	47, 48	E3036	.59
1, 2, 3	E3052	.59	M-101, M-104, M-108, M-109	E3209*	1.18	49, Midget 32	E3033	.59
20, 21, 41DC, 42DC, 70, 70A	E3162*	1.47	M145, 242, 243, M226	E3202*	.88	26B, 26P, 20	E3055	.59
77, 90 (2-45*8), 470	E3178*	1.18	118, 211	E3203*	1.18	10, 10 Series	E3087	.88
14, 17, 18, 49, 118			9-K-1	E3173*	.88	1010		
16 (Code 125, 126, 127); 17			67-M	E2043	.88	Wells-Gardner (Gulbransen)		
(Code 122); 116B (Code 121);			67-M-1, 67-M-2, 67-M-3	E2045	.88	WG24, 291, CG, 9-in-line, Club	E3147*	1.47
116X (Code 122); 650, 655,			85-T, 85-T-1, 86-X	E3295	.88	Late	E3148*	1.47
660, 665	E3179*	1.18				82 Arcade	E3037	.59
28AC-DC: 45AC-DC	E3180*	1.18				8 tube SG, 50, 70	E3052	.59
37-10 & 11 (Code 121); 37-116;			Sears Roebuck			40A, 23 Series, 062 Auto.	E3071	.88
37-610; 37-620; 37-623; 37-			1390, 1400, 1402, 1404, 1406			WG5, 5 tube A.C., 05A, 05AA,	E3071	.88
630; 37-640; 37-650; 37-655;			1580, 1582, 1584, 1590, 1592	E3072	.88	05BA	E3087	.88
37-660; 37-670, and 37-673			1704, 7070-1-2-3-4, 1706, 7075-			06Z, 06W, Y6Z	E3248*	.88
(Codes 121 & 122)	E3181*	.88	6-T-S, 7091-2-3-4	E3087	.88	17A, Tube Control	E3249*	.88
37-84 (Code 122), 84, 81B	E3182*	1.18	1708-B, 1750	E3052	.59	2-C, 2-CM, OD, ODM	E3240*	1.76
111, 111A, 112, 112A, 30, 96	E3163*	.88	1726X, 1732, 1732X	E3156*	1.47	7-G, 7-GM Series, 7K Series	E3243*	1.76
51, 52, 48 DC, 51A	E3164*	.88	1705	E3158*	1.76	6-P, R-P, Series	E3245*	1.18
71, 47DC	E3165*	.88				6-N Series, 6-R, 6-S (Cadillac	E3246*	1.47
57, 58, 59	E3168*	1.18	Simplex			80-S Tube	E3247*	1.18
95	E3166*	.88	H-A, C, J	E3063	.88	6-U Auto	E3090	.88
70 Lazy X	E3221*	1.76	H-C above serial 320001	E3069	.88	092 (1933)	E3052	.59
60, 66, 261, 264, 265, 505	E3222*	.88	P	E3087	.88	05A, 5B	E3068	.88
76	E3224*	.88	P	E3082	.59	10, 13 Series	E3032	.59
35, 36 (Batt.)	E3169*	1.47	P	E3032	.59	Zenith Radio Corp.		
FT-6 Ford Car Radio	E3225*	1.18	U, V, (AC-DC)	E3082	.88	1028 All Models, 60, 61, C2, G4,	E3082	.88
38, 38A Batt.	E3214*	.88				67, 602, 613, 642, 672	E3078	.88
80 with switch	E3183	.88	Spartan			70 Series, 50, 60, 70, 71, 72,	E3191*	1.76
81 with switch	E3186	.88	61, 62, 71, 71B, 72, 78	E3086	.88	73, 77 Single Unit	E3069	.88
89 Late	E3197*	.88	39	E3054	.59	"Zenette" All, CH, R1L, 3A,	E3069	.88
144	E3167*	1.18	89A, 111A, 564, 570, 574, 600,			LP	E3192*	1.18
90 (1-47), 490	E3199*	.88	610, 620, 737, 740, 870	E3217*	.88	70 Series, 50, 60, 70, 71, 72, 73,	E3070	.88
90 (2-47)	E3200*	.88	69, 69A, 101, 109, 110AC, 301,			73, 77 Dual Units	E3043	.59
610	E3188*	1.18	589, 591, 593, 980, 931	E3218*	.88	20X, 80	E3087	.88
620, 625, 630, 635	E3184*	1.18	31, 55	E3056	.59	200	E3032	.88
610, 641, 642, 645, 651	E3186*	1.18	235, 285 DC	E3041	.59	70N, 80	E3087	.88
FT-9 Ford; 816; 817; 81491	E3187*	.88	410, 420, 430 (Dual)	E3174*	1.76	201, 240, 245, 474	E3069	.88
Studebaker			5 and 9	E3069	.88	2021, 2022, 2024, 2047, 2018,	E3086	.88
37-62, 37-93, 38-12, 38-14, 38-	E3296	.88				250	E3069	.88
15 (Codes 121 & 124)			Stewart-Warner Corp.			2014	E3086	.88
38-1, 38-2, 38-4, 38-5, 38-7, 38-	E3212*	.88	900 Series	E3176*	.88	6-B-107, 6-B-120, 6-B-164,		
8, 38-9 (Codes 121, 124), 38-	E3291	.59	R100 Series, 950, 935	E3177*	.88	6-S-128, 6-S-137, 6-S-147,		
23	E3293	.59	811	E3046	.59	6-S-152, 6-S-157, 8-S-129,		
38-10 (Code 121)	E3291	.59	970AC, 980	E3129*	1.47	8-S-154, 10-S-130, 10-S-147,		
38-60, 38-80 (Code 125)	E3267	.88	905, 915, 920	E3055	.59	10-S-153, 10-S-155, 10-S-156,		
901, 002 Philophone	E3227*	1.18	263	E3031	.59	10-S-157, 10-S-160, (1004),		
14, 507	E3227*	1.18	R-104-A, B, E, 106, 108, 108X,			1203, 5634, 5635, 5801 Chas-	E3193*	1.18
623 (Batt.)	E3228*	1.18	11AC and DC, 109 Series,	E3087	.88	sis)	E3193*	1.18
11, AC-236 Studebaker, 700, 800,			R111, R116, R119	E3087	.88	6-M-90-D, 6-M-90-D, 6-M-91-S,	E3189*	1.18
H Hupmobile, J Nash, P	E3230*	1.18	110, A and B	E3087	.88	6-M-91-D, 7-M-91-S, 7-M-91-	E3190*	1.18
Nash, R Car Radio, R Hup-	E3231*	.88	R120	E3052	.59	D, 5630, 5631 Chassis	E3190*	1.18
mobile	E3238*	.88	101, 102-A, B, E (Oldsmobile),	E3032	.59	5619	E3190*	1.18
808 Car Radio	E3238*	.88	105 Series	E3044	.59	980, 985, 990, 1201, 1201-A	E3194*	1.18
806 Car Radio	E3238*	.88				Chassis	E3194*	1.18
			Temple			9-S-80, 9-S-84, 9-S-85, 12-L-57,		
			Batt. Set	E3052	.59	12-L-58, (Use ext. shaft)		
			8-60, 8-80, 8-90	E3031	.59	16-A-61, 16-A-63 Stratostores,		
			970AC, 980	E3129*	1.47	1202, 1202A, 1601-C, 1601-P	E3195*	1.18
			905, 915, 920	E3055	.59	Chassis, 5300		
			263	E3031	.59	4-P-133 (5407), 5-F-134, 5-F-166		
			R-104-A, B, E, 106, 108, 108X,			(5518), 5-F-233, 5-F-231		
			11AC and DC, 109 Series,	E3087	.88	(5522), 6-J-230, 6-J-237		
			R111, R116, R119	E3087	.88	(5042)	E3292	.59
			110, A and B	E3087	.88	5-S-119, 5-S-126, 5-S-127, 5-S-		
			R120	E3052	.59	150, 5-S-151, 5-S-161 (5516),		
			101, 102-A, B, E (Oldsmobile),	E3032	.59	6-S-203, 6-S-222, 6-S-223, 6-		
			105 Series	E3044	.59	8-S-229, 6-S-230, 6-S-241 (5638),		
						7-D-119, 7-D-126, 7-D-137,		
			Transformer Corp. (Clarion)			7-D-138, 7-D-148, 7-D-151,		
			51, 53, 55, 60, Jr.	E3074	.88	7-D-162, 7-D-168 (5707), 7-D-		
			70, 61, 83	E3037	.59	203, 7-D-222, 7-D-223, 7-D-		
			40, 100, G102	E3112*	1.18	229, 7-D-239, 7-D-241, 7-D-		
			90 Series, 94, 25-94	E3060	.88	243, 7-D-253 (5710)	E3296	.88
			G 120	E3034	.88	5-M-191 (5520), 6-M-192 (5637),	E3297	.88
			G1849, 160, 25-160	E3061	.88	6-S-254, 6-S-256 (5644), 7-S-		
			241, 240, 25-240, 360, 260, 25-			204, 7-S-232, 7-S-240, 7-S-		
			260, AC-280, 25-280, 480	E3052	.59	242, 7-S-258, 7-S-260, 7-S-		
			84, 85	E3034	.59	261 (5709)	E2038	1.18
			AC420, 450	E3087	.88			
			320	E3033	.59			
			422, 423, 425, 440	E3073	.88			
			United Motors Service, Inc. (Delco)					
			626, 642	E2044	.88			
			627, 628, 629, 630, 631, 632, 633,					
			634, 635, 644	E2045	.88			
			631-A, 640, 641, 643	E2043	.88			
			4036 (B.O.P.), 4037, 4038	E2048	.88			
			980534, 980535 (Duick)	E2051*	1.18			
			982014, 982045 (Oldsmobile),					
			983526, 983527 (Pontiac)	E2052*	1.18			
			U.S. Radio & Television (Apex)					
			Hattery Models	E3054	.59			
			Gloritone 31 Series	E3069	.88			
			Panatrope 70, Radiotrope, Case					
			8-80, Heritage	E3035	.59			
			36, 37	E3031	.59			
			Midget 27 Series	E3072	.88			

*Exact Duplicate Controls.



KNIGHT Carbon Resistors

RESISTOR ASSORTMENT AND CABINET

CONTAINS
100 POPULAR
RESISTOR
VALUES

A handy Basswood 6 drawer cabinet with a carefully selected assortment of 100 Knight 1 watt quality Carbon Resistors. Ideal also for condensers, washers, lugs, small tools, etc. Each drawer has 3 removable partitions. Bottom drawer oversized for larger items. Varnished in natural wood finish. Will not warp and will stand hard usage. 8 1/4" x 6 1/2" x 5 1/2".



Bottom drawer oversized for larger items. Varnished in natural wood finish. Will not warp and will stand hard usage. 8 1/4" x 6 1/2" x 5 1/2".

CONTAINS THE FOLLOWING RESISTORS

Ohms	Ohms	Ohms	Ohms
300(2)	2000(4)	20000(4)	100000(8)
400(4)	2500(2)	25000(8)	200000(2)
500(4)	3000(2)	30000(2)	250000(8)
600(2)	5000(4)	4000(2)	500000(8)
1000(4)	10000(8)	50000(8)	1 meg.(4)
1500(2)	15000(4)	75000(2)	2 meg.(2)

NOTE: Figure in bracket indicates quantity.

E5141. The attractive Basswood 6 drawer cabinet, as illustrated, complete with 100 Knight 1 watt resistors, and handy celluloid color-code guide. **\$5.35**

YOUR PRICE ONLY.....

E5140. Cabinet only. **\$1.65**

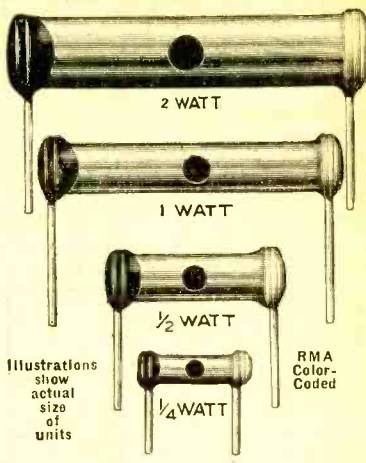
FREE! The above basswood cabinet will be given to you free with an order for any 200 Knight Carbon resistors you select.

HIGHEST STANDARD OF QUALITY

ASSURED ACCURACY

- SOLID MOLDED; PERMANENTLY BONDED.
- TOLERANCE AVERAGE CLOSE TO 5%.
- ABSOLUTELY QUIET IN OPERATION.
- COMPLETELY MOISTURE-PROOF.
- NON-INDUCTIVE—NO CAPACITY EFFECT.
- MAINTAIN RESISTANCE VALUES OVER WIDE TEMPERATURE RANGE.
- OXYGEN-WELDED TINNED LEADS.
- NO FINER CARBON RESISTORS MADE.

The finest carbon resistors you can buy at any price. Use these highest quality units with confidence, in any R.F. or Audio circuit. No other resistor is so universally used. Knight Carbon Resistors are of solid molded construction, permanently bonded, with solid cross-section. Impervious to moisture, quiet in operation, non-inductive, have low temperature coefficient; are mechanically strong. They will carry 100% overload without being permanently affected. Each resistor is RMA Color Coded. The tolerance of each and every Knight Carbon Resistor is held within 10% (average close to 5%) by unerring automatic testing machines. Save and profit by using Knight highest standard Carbon Resistors—the resistor units with the outstanding features.



Illustrations show actual size of units

RMA Color-Coded

Resist. Ohms	WATT				Resist. Ohms	WATT			
	1/4 No.	1/2 No.	1 WATT No.	2 WATT No.		1/4 No.	1/2 No.	1 WATT No.	2 WATT No.
100	E4850	E4950	E5050	E5150	17500	E4882	E4982	E5082	E5182
150	E4851	E4951	E5051	E5151	20000	E4883	E4983	E5083	E5183
200	E4852	E4952	E5052	E5152	22500	E4884	E4984	E5084	E5184
250	E4853	E4953	E5053	E5153	25000	E4885	E4985	E5085	E5185
300	E4854	E4954	E5054	E5154	30000	E4886	E4986	E5086	E5186
350	E4855	E4955	E5055	E5155	40000	E4887	E4987	E5087	E5187
400	E4856	E4956	E5056	E5156	50000	E4888	E4988	E5088	E5188
450	E4857	E4957	E5057	E5157	60000	E4889	E4989	E5089	E5189
500	E4858	E4958	E5058	E5158	75000	E4890	E4990	E5090	E5190
600	E4859	E4959	E5059	E5159	100000	E4891	E4991	E5091	E5191
700	E4860	E4960	E5060	E5160	150000	E4892	E4992	E5092	E5192
750	E4861	E4961	E5061	E5161	200000	E4893	E4993	E5093	E5193
800	E4862	E4962	E5062	E5162	250000	E4894	E4994	E5094	E5194
1000	E4863	E4963	E5063	E5163	300000	E4895	E4995	E5095	E5195
1250	E4864	E4964	E5064	E5164	400000	E4896	E4996	E5096	E5196
1500	E4865	E4965	E5065	E5165	500000	E4897	E4997	E5097	E5197
1750	E4866	E4966	E5066	E5166	600000	E4898	E4998	E5098	E5198
2000	E4867	E4967	E5067	E5167	750000	E4899	E4999	E5099	E5199
2250	E4868	E4968	E5068	E5168	1000000	E4900	E5000	E5100	E5200
2500	E4869	E4969	E5069	E5169	1 meg.	E4901	E5001	E5101	E5201
3000	E4870	E4970	E5070	E5170	1.5 meg.	E4902	E5002	E5102	E5202
3500	E4871	E4971	E5071	E5171	2 meg.	E4903	E5003	E5103	E5203
4000	E4872	E4972	E5072	E5172	2.5 meg.	E4904	E5004	E5104	E5204
4500	E4873	E4973	E5073	E5173	3 meg.	E4905	E5005	E5105	E5205
5000	E4874	E4974	E5074	E5174	3.5 meg.	E4906	E5006	E5106	E5206
6000	E4875	E4975	E5075	E5175	4 meg.	E4907	E5007	E5107	E5207
7000	E4876	E4976	E5076	E5176	5 meg.	E4908	E5008	E5108	E5208
8000	E4877	E4977	E5077	E5177	6 meg.	E4909	E5009	E5109	E5209
9000	E4878	E4978	E5078	E5178	7 meg.	E4910	E5010	E5110	E5210
10000	E4879	E4979	E5079	E5179	8 meg.	E4911	E5011	E5111	E5211
12500	E4880	E4980	E5080	E5180	9 meg.	E4912	E5012	E5112	E5212
15000	E4881	E4981	E5081	E5181	10 meg.	E4913	E5013	E5113	E5213

1/4 WATT Net Each	1/2 WATT Net Each	1 WATT Net Each	2 WATT Net Each
4c	5c	6c	10c
Per Doz. 41c	Per Doz. 49c	Per Doz. 60c	Per Doz. 99c
Per 100 \$3.45	Per 100 \$4.00	Per 100 \$4.85	Per 50 \$3.95



HANDY KNIGHT RESISTOR KITS

An asset in shop or on service calls. Each kit is an assortment of the most popular values of Knight quality carbon resistors. RMA color-coded. Mounted on convenient sturdy strip.

12 POPULAR VALUES IN EACH STRIP

12 Certified high quality Knight carbon resistors of the type most frequently requested are included in the handy Resistor Kit assortment listed below. Replace resistors as you use them. Free RMA Color-Code chart is included with each kit.

STANDARD VALUES

Ohms	Ohms	Ohms	Ohms
200	3000	20000	75000
400	4000	25000	100000
500	6000	30000	250000
700	10000	40000	500000
1000	12500	50000	1 meg.
2000	15000	60000	2 meg.

1/2 WATT KITS
E5125. Consists of one each of the above from 200 to 15,000 ohms.

1 WATT KITS
E5126. Consists of one each of the above from 20,000 ohms to 2 meg. **49c**

2 WATT KITS
E5127. Consists of one each of the above from 200 to 15,000 ohms.

4 WATT KITS
E5128. Consists of one each of the above from 20,000 ohms to 2 meg. **60c**



RMA COLOR-CODE GUIDE
A handy pocket-size celluloid guide with rotary dials which show body, end and dot colors of resistors according to standard RMA color-code. Gives resistance value quickly. **9c**

E5130. YOUR PRICE.....

FREE with order for 24 resistors

POPULAR KNIGHT CARBON RESISTOR KITS

Highest quality Knight Carbon Resistors. Packed in handy kits of 24 units of the most commonly used and needed values. Keep a kit on your work bench and a kit in your tool bag—you'll have the resistor you need when you want it. All resistors RMA color-coded. A handy Celluloid Color-Code Guide is supplied FREE with each kit. Knight Resistors will save you time and money!

KITS CONTAIN THE FOLLOWING VALUES:

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
200	1000	6000	20000	50000	250000
400	2000	10000	30000	60000	500000
500	3000	12500	30000	75000	1 Meg.
700	4000	15000	40000	100000	2 Meg.

1 WATT KIT
Consists of one each of the above Knight Carbon Resistors in 1 watt size. **\$1.25**

1/2 WATT KIT
Consists of one each of the above Knight resistors in the 1/2 watt size. **\$1.03**

1/4 WATT KIT
Consists of one each of the above Knight resistors in 1/4 watt size. **87c**



RMA Color Coded

All Popular Values

Put in a stock of these high-grade money-saving kits. You can't beat them for quality, value and convenience. Order a supply now.

IRC RESISTORS

TYPE "BT" INSULATED METALLIZED RESISTORS



- Crack-proof, Trouble-free
- Completely Moisture-Sealed
- High Voltage Insulation

An improved new resistor design makes these units outstanding and desirable in every way. The high voltage insulating material absolutely eliminates danger of grounding. The quiet performance of these new type resistors renders them ideal for use in AVC circuits, high gain amplifiers, etc. Each unit is color-coded and marked with resistance value. Accuracy is $\pm 10\%$. (Illustrations at left are actual size.)

STANDARD STOCK RANGES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
0.5	30	350	2000	8000	25000	125000	1.5 meg.
1	40	400	2250	9000	30000	150000	2 meg.
2	50	450	2500	10000	35000	200000	3 meg.
3	75	500	3000	11000	40000	250000	4 meg.
5	100	600	3500	12000	50000	300000	5 meg.
7.5	120	750	4000	12500	60000	400000	6 meg.
10	150	800	5000	15000	65000	500000	7 meg.
15	200	1000	6000	17500	70000	600000	10 meg.
20	250	1250	7000	20000	75000	750000	20 meg.
25	300	1500	7500	22500	100000	1 meg.	

Type BT-1/2-1/2 Watt

E5705. Available in all ranges from 50 OHMS to 20 MEGOHMS. (Below 50 ohms use BW-1/2 resistors listed below.) $\frac{1}{2}$ " long, $\frac{3}{16}$ " dia. Specify values when ordering. List, Each, 17c. NET EACH **10c**

Type BT-1-1 Watt

E5706. Available in all ranges from 150 OHMS to 20 MEGOHMS. (Below 150 ohms use BW-1 resistors listed below.) Size, $1\frac{1}{4}$ " x $\frac{3}{16}$ ". Specify values when ordering. List, Each, 20c. NET EACH **12c**

Type BT-2-2 Watt

E5707. Available in all ranges from 200 OHMS to 20 MEGOHMS. (Below 200 ohms use BW-2 resistors listed below.) Size, $1\frac{1}{2}$ " x $\frac{3}{16}$ ". Specify values when ordering. List, Each, 30c. NET EACH **18c**

TYPE "BW" INSULATED WIRE-WOUND RESISTORS



New type insulated, wire-wound resistors. Ideal for use with meters, as cathode bias resistors or for air-cell battery use. May also be used as center-tapped resistors when hooked in series. Specify values when ordering.

Type BW-1/2-1/2 Watt

E5708. Available in all ranges from 0.5 to 750 ohms in standard stock ranges shown above. Size, $\frac{1}{2}$ " x $\frac{3}{16}$ ". List, 17c. NET EACH **10c**

Type BW-1-1 Watt

E5709. Available in all ranges from 1 to 2500 ohms in standard stock ranges shown above. Size, $1\frac{1}{2}$ " x $\frac{3}{16}$ ". List, 20c. NET EACH **12c**

Type BW-2-2 Watt

E5710. Available in all ranges from 1 to 7000 ohms in standard stock ranges shown above. Size, $1\frac{1}{2}$ " x $\frac{3}{16}$ ". List, 30c. NET EACH **18c**



TYPE "F" METALLIZED RESISTORS

Quiet, metallized type resistors for use in critical circuits. Absolutely dependable famous IRC quality. Standard with leading manufacturers and radio servicemen. Order resistors desired from list of standard stock ranges above, specifying resistance and giving stock number shown under each type.

E5700. F-1/2. $\frac{1}{2}$ Watt. $1\frac{1}{2}$ " long. Available in all ranges from 50 OHMS to 10 MEG. List, 17c. NET EACH **10c**

E5701. F-1. 1 Watt. $1\frac{1}{2}$ " long. Available in all ranges from 100 OHMS to 10 MEG. List, 20c. NET EACH **12c**

E5702. F-2. 2 Watt. $1\frac{1}{2}$ " long. Available in all ranges from 500 OHMS to 10 MEG. List, 30c. NET EACH **18c**



POWER WIRE-WOUND RESISTORS

Finest resistance wire is evenly spaced on non-hygroscopic ceramic core. Durable cement coating provides protection against extreme heat and humidity. With tinned wire leads. Actual tests prove these units superior for mechanical strength, load capacity, lower surface temperature, etc. Conform to N.E.M.A. standards and are accurate to within 5%. Ideal for all service work.

Ohms	Ohms	Ohms
1	7.5	25
2	10	50
3	15	75
5	20	100

Ohms	Ohms	Ohms	Ohms	Ohms
200	750	2000	5000	15000
300	1000	2500	7500	20000
400	1250	3000	10000	25000
500	1500	4000	15000	30000

Ohms	Ohms	Ohms	Ohms
3000	40000	50000	600000

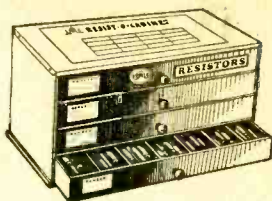
TYPE AB-10 WATTS

E5750. Available in all ranges up to 50,000 ohms. Extremely popular among Servicemen and Experimenters for making up voltage divider networks. $1\frac{1}{4}$ " long; $\frac{5}{16}$ " diam. Heavy tinned leads for easy connection. List, Each, 40c. NET EACH **24c**

TYPE DG-20 WATTS

Available in all ranges except 2, 3, 7.5, 15 and 20 ohms. $2\frac{1}{2}$ " long; $\frac{5}{16}$ " diam. For all types of installations. E5925. 1-15,000 Ohm Units. NET EACH **38c**
E5926. 20,000 to 50,000 Ohm Units. NET EACH **44c**

NEW IRC ALL-METAL RESIST-O-CABINET



FREE—WITH PURCHASE OF 59 IRC RESISTORS

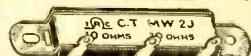
Sturdily built indestructible cabinet of heavy metal, handsomely finished in blue and silver. Has four metal drawers, each with stock labels on front, and seven permanently fastened metal partitions. Flange bottom permits stacking cabinets. Front cover permits storage for resistors. Provides convenient storage for resistors as follows: BT- $\frac{1}{2}$ 1 Watt, 1 each; 1000, 5000, 10000, 25000, and 50000 ohm, 1, .25, and 5 megs.; BT-1 1 Watt, 1 each; 4000 and 7500 ohms, .15 and 2 meg.; 2 each; 1000, 1500, 2000, 2500, 5000, 15000, and 25000 ohms, 1.0 and 2.0 meg.; 3 each; 1000 and 5000 ohms, .1, .25, and .5 meg.; AB 10 Watt, 1 each; 1000, 1500, 2500, and 5000 ohms; 2 each; 10000, 15000, and 25000 ohms; AB 10 Watt adjustable, 1 each; 1000, 2500, 5000, and 10000 ohms. Overall size of cabinet: 11" long, 5 $\frac{1}{2}$ " high, 5 $\frac{1}{2}$ " deep. You pay only for the resistors at standard price; cabinet is supplied FREE. E5718. Cabinet complete with 59 above resistors. NET **\$8.91** Cabinets are not sold separately.

IRC WIRE-WOUND PRECISION RESISTORS

Designed to meet the most exacting demands of accuracy and durability. Especially adapted for meter multipliers and shunts. Accuracy is within $\frac{1}{2}\%$ of rated values. Units are non-inductively space wound on Isolairite forms. Resistance wire is enamel-insulated; windings are varnish-impregnated. Ideal for increasing the ranges of voltmeters and milliammeters, and for faders, gain control pads, etc. Sizes of values up to 500,000 ohms, 1% long, $\frac{1}{2}$ " diameter, 10000 lug terminals. Values from 0.6 meg to 2.5 meg supplied with knurled nuts. Size, $2\frac{1}{2}$ " x $1\frac{3}{8}$ " dia. Available in odd sizes, not listed, on special order at cost equal to next higher value.



No.	Ohms	NET	No.	Ohms	NET
E4805	1		E4825	40000	\$0.79
E4807	10		E4826	50000	-.79
E4808	25		E4827	60000	.94
E4809	50		E4828	75000	.94
E4810	100	50c	E4829	100000	1.09
E4812	200		E4830	125000	1.23
E4806	250		E4831	150000	1.38
E4813	500		E4832	175000	1.38
E4814	1000		E4833	200000	1.38
E4845	1500		E4834	225000	1.53
E4846	2000	53c	E4835	250000	1.53
E4815	2500		E4836	300000	1.68
E4847	4000		E4837	400000	1.76
E4816	5000		E4838	500000	2.00
E4817	7500	59c	E4844	600000	2.50
E4818	10000		E4839	750000	2.55
E4819	12500		E4840	1 Meg.	3.09
E4820	15000	65c	E4841	1.5 Meg.	4.41
E4821	20000		E4842	2 Meg.	5.88
E4822	25000		E4843	2.5 Meg.	7.35
E4823	30000	79c			

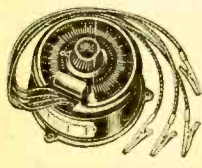


NEW IRC TYPE MW-2J CENTER-TAPPED RESISTORS

These units are the most completely protected wire-wound resistors available. Enclosed in a special phenolic compound impervious to moisture. Lugs are clamped to element under high pressure. Mounting centers $2\frac{1}{2}$ ".

No.	Ohms	No.	Ohms
E5683	10	E5686	75
E5684	20	E5687	100
E5685	50	E5688	200

YOUR PRICE, EACH RESISTOR **21c**



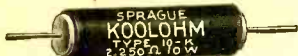
NEW IRC VOLUME CONTROL ANALYZER AND RESISTANCE INDICATOR

A new calibrated continuously variable Resistance Indicator. Fused to protect against overloads. Direct-reading etched scale covers entire range from zero to 1 Megohm. Four flexible leads permit it to be used as a voltage divider; for determining circuit values by substitution; for checking resistor units, potentiometers and volume controls. Housed in a sturdy molded bakelite case. Supplied complete with four color-coded leads, alligator clips, instructions. **\$485**

E5712. NET **\$485**
E5711. Extra $\frac{1}{16}$ amp. fuse. NET **12c**

Finest Quality RESISTORS

SPRAGUE "KOOLOHM" RESISTORS



Non-inductive wire-wound resistors accurate to 5%. Layer-wound and insulated with "Ruhbencote" which is non-moisture-absorbent and benecote" Encased in aluminum shell with firmly embedded terminals. Combine cooler operation with greater wattage capacity in minimum space.

Ohms	Ohms	Ohms	Ohms	Ohms
1	125	1000	5000	15000
2	150	1250	6000	17500
5	200	1500	7000	20000
10	250	1750	7500	25000
15	300	2000	8000	30000
20	400	2500	10000	40000
25	500	3000	11000	50000
50	600	3500	12000	60000
75	800	4000	12500	70000
100	800			

5 WATTS E4430. 1 to 5,000 ohms. EACH... **18c**
10 WATTS E4433. 1 to 25,000 ohms. EACH... **24c**
25 WATTS E4434. 30,000 to 50,000 ohms. EACH... **38c**
50 WATTS E4435. 60,000 and 40,000 ohms. EACH... **59c**
 SPECIFY VALUES WHEN ORDERING.

10 WATT "BUILD-YOUR-OWN" VOLTAGE DIVIDERS



Now you can have "tailor-made" voltage dividers for every special requirement. Small, compact 10 watt units which can be quickly assembled on brass rod and mounting bracket to make up any desired value. Units are insulated with "Ruhbencote" same as Koolohm resistors above, providing rapid heat dissipation. E4440 hardware kit for building divider is furnished FREE with each purchase of two or more 10 Watt units.

Ohm	Ohms	Ohms	Ohms	Ohms
1	100	750	3500	15000
2	125	800	4000	17500
5	150	1000	5000	20000
10	200	1250	7000	25000
15	250	1500	7500	30000
20	300	1750	8000	35000
25	400	2000	10000	40000
50	500	2500	11000	50000
75	600	3000	12500	60000
			70000	

E4436. 1 ohm to 25,000 ohms. EACH... **24c**
 E4437. 30,000 ohms to 35,000 ohms. EACH... **35c**
 Note: We can supply all Sprague Koolohm Resistors. Write for complete catalog.

WIRE-WOUND RESISTORS

Wire-wound on fibre strips. Low inductance.

No.	Ohms	No.	Ohms	No.	Ohms
E9075	1	E9080	8	E9085	30
E9076	2	E9081	10	E9086	40
E9077	3	E9082	15	E9087	50
E9078	4	E9083	20	E9088	100
E9079	6	E9084	25		

10 FOR 63c. NET EACH... 7c
10 FOR 73c. NET EACH... 8c



EAGLE PLUNGER LEAK
 Adjustable grid leak with a range from 0 to 50 megohms. Standard mounting. E3974. YOUR PRICE... **25c**

ADJUSTABLE WIRE-WOUND RESISTORS



KNIGHT
 A husky resistor that will take a lot of punishment. Made to rigid specifications. Wound on ceramic tubes. Stock and use Knight resistors.

Two lines of quality wire-wound resistors. For use in power packs, as replacements, etc. Slot is provided for slider contact. Complete with one slider and mounting brackets. The very finest wire-wound resistors that can be bought today.



IRC
 Wound on non-hygroscopic ceramic core for cool operation even at high overloads. Built to withstand intense heat, dampness and humidity.

10 WATT

Ohms	KNIGHT Size, 1 3/4"x3/4"		IRC Size, 1 3/4"x3/4"	
	M.A.	No.	M.A.	No.
1	3150	E4200	3150	E4460
2	2230	E4201	2210	E4461
3	1825	E4202	1830	E4463
5	1415	E4203	1420	E4464
7.5	1155	E4204	1150	E4465
10	1000	E4205	1000	E4466
15	815	E4206	820	E4467
20	707	E4207	720	E4468
25	630	E4208	640	E4469
50	447	E4209	440	E4471
75	365	E4210	360	E4472
100	315	E4211	315	E4473
150	258	E4212	260	E4492
200	223	E4213	220	E4474
250	200	E4214	200	E4493
300	182	E4215	175	E4475
400	158	E4216	157	E4476
500	141	E4217	140	E4477
600	129	E4218	125	E4494
750	115	E4219	115	E4495
1000	100	E4220	100	E4479
1250	89	E4221	90	E4480
1500	79	E4222	83	E4481
2000	69	E4223	71	E4482
2500	61	E4224	63	E4483
3000	56	E4225	57	E4484
3500	51	E4226	53	E4496
4000	47	E4227	50	E4485
5000	40	E4228	45	E4486
7500	32	E4229	36	E4487
8000	31	E4230	35	E4497
8500	30	E4231	34	E4498
9000	26	E4232	33	E4499
10000	24	E4233	31	E4488

NET EACH **29c** NET EACH **35c**
 E4345. Extra Lug for Knight 10W Res. . 5c
 E4500. Extra Lug for IRC 10W Res. . 6c

50 WATT

Ohms	KNIGHT Size, 4"x3/4"		IRC Size, 4 1/2"x3/4"	
	M.A.	No.	M.A.	No.
5	3160	E4275	3165	E4741
10	2240	E4276	2230	E4742
25	1420	E4277	1390	E4743
50	1000	E4278	1000	E4744
75	815	E4279	810	E4745
100	707	E4280	700	E4746
150	577	E4281	560	E4747
200	500	E4282	500	E4748
250	447	E4283	440	E4749
400	354	E4284	350	E4701
500	316	E4285	300	E4750
750	258	E4286	250	E4751
800	250	E4287	248	E4752
1000	224	E4288	215	E4753
1500	183	E4289	175	E4754
2000	158	E4290	155	E4755
2500	142	E4291	135	E4756
3000	129	E4292	120	E4757
4000	112	E4293	105	E4758
5000	100	E4294	95	E4759

NET EACH... **66c** NET EACH... **79c**
 7500 81 E4295 77 E4761
 8000 79 E4296 75 E4762
 10000 70 E4297 66 E4764
 12000 64 E4298 63 E4765
 15000 57 E4299 58 E4766
 20000 48 E4300 45 E4767
 25000 43 E4301 43 E4768

NET EACH... 73c **NET EACH... 88c**
 30000 41 E4302 39 E4769
 40000 35 E4303 34 E4770
 50000 25 E4304 30 E4771

NET EACH... 83c **NET EA. \$1.00**
 60000 20 E4305 28 E4772
 80000 15 E4306
 100000 12 E4307

NET EACH... 98c **NET EA. \$1.18**
 30000 50 E4331 50 E4794
 35000 47 E4332 47 E4795
 40000 43 E4333 43 E4796
 45000 41 E4334 41 E4797
 50000 39 E4335 39 E4798

E4346. Extra Lug for Knight 50W Res. . 5c
 E4502. Extra Lug for IRC 50W Res. . 6c

25 WATT

Ohms	KNIGHT Size, 2"x3/4"		IRC Size, 2 1/2"x3/4"	
	M.A.	No.	M.A.	No.
1	5000	E4240	5000	E4705
3	2850	E4241	2850	E4706
5	2240	E4242	2200	E4712
10	1580	E4243	1580	E4713
15	1290	E4244	1290	E4714
25	1000	E4245	1000	E4715
50	707	E4246	719	E4716
75	577	E4247	575	E4717
100	500	E4248	500	E4718
150	410	E4249	409	E4719
200	354	E4250	353	E4720
250	316	E4251	320	E4721
300	284	E4252	284	E4722
400	177	E4254	177	E4724
500	158	E4255	158	E4725
600	141	E4256	141	E4700
750	129	E4257	129	E4726
1000	112	E4258	112	E4727
1250	100	E4259	100	E4728
1500	91	E4260	91	E4729
2000	84	E4261	84	E4730
3500	79	E4262	79	E4731
4000	70	E4263	71	E4732
5000	70	E4263	71	E4732

NET EACH... 42c **NET EACH... 50c**
 6000 64 E4264 64 E4733
 7500 57 E4265 58 E4734
 10000 50 E4266 50 E4736
 12000 44 E4267 45 E4737
 15000 34 E4268 41 E4738

NET EACH... 46c **NET EACH... 56c**
 20000 26 E4269 26 E4739
 25000 23 E4270 35 E4740

NET EACH... 54c **NET EACH... 65c**
 E4346. Extra Lug for Knight 25W Res. . 5c
 E4501. Extra Lug for IRC 25W Res. . 6c

80 WATT

Ohms	KNIGHT Size, 6"x3/4"		IRC Size, 6 1/2"x3/4"	
	M.A.	No.	M.A.	No.
5	3870	E4310	4000	E4802
25	2730	E4311	2700	E4773
15	2230	E4312	2230	E4774
25	1730	E4313	1730	E4775
50	1220	E4314	1220	E4776
100	865	E4315	865	E4777
250	545	E4316	545	E4778
300	500	E4317	500	E4779
350	387	E4318	387	E4780
750	316	E4319	316	E4781
1000	274	E4320	274	E4782
1500	223	E4321	223	E4783
2000	193	E4322	193	E4784
2500	173	E4323	173	E4785
3500	145	E4324	145	E4786
5900	122	E4325	122	E4787

NET EACH... 85c **NET EA. \$1.03**
 7500 100 E4326 100 E4789
 10000 86 E4327 86 E4790
 15000 70 E4328 70 E4791
 20000 61 E4329 61 E4792
 25000 55 E4330 55 E4793

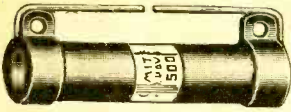
NET EACH... 98c **NET EA. \$1.18**
 30000 50 E4331 50 E4794
 35000 47 E4332 47 E4795
 40000 43 E4333 43 E4796
 45000 41 E4334 41 E4797
 50000 39 E4335 39 E4798

NET EA. \$1.10 **NET EA. \$1.32**
 60000 35 E4336 35 E4799
 80000 30 E4337 30 E4800
 100000 27 E4338 27 E4801

NET EA. \$1.22 **NET EA. \$1.47**
 E4346. Extra Lug for Knight 80W Res. . 5c
 E4503. Extra Lug for IRC 80W Res. . 6c

RESISTORS · BALLASTS

OHMITE WIRE-WOUND RESISTORS



"RED DEVIL"

For all radio requirements. Wire-wound on low-loss porcelain core; coated with refractory cement which protects wire even at red heat. Will not deteriorate or change value with age. Efficiency is 100% at rated wattage; will stand temporary overloads of up to 50 watts. Size, 1 3/4" x 3/8". Firmly anchored 1 1/2" tinned leads.



"BROWN DEVIL"

A high quality line of wire-wound resistors for all radio and industrial requirements. Accurately rated; wound on porcelain core. These resistors have a vitreous enamel coating for complete protection. Especially recommended where abnormal moisture is present. Size, 1 3/4" x 3/8"; with heavy tinned wire leads, 1 1/2" long.

STANDARD STOCK RANGES

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1*	25	225*	750	1750	4000	11000*	20000	60000†
2*	30*	250	800	1850†	4500	12000*	22500*	65000†
3*	35*	300	850†	2000	5000	12500*	25000	70000†
4*	40*	350	900*	2250	6000	13500*	30000	75000†
5	50	400	1000	2400†	7000	14300*	35000	80000†
7.5*	75	450*	1100*	2500	7500	15000	40000	85000†
10	100	500	1200	2750†	8000	16000*	45000	90000†
12*	125*	600	1250	3000	8500*	17500*	50000	95000†
15*	150	650†	1500	3500	10000	18000*	55000†	100000†
20*	200	700						

"RED DEVIL"—10 WATTS

E8290. Available in all values from 1 to 25,000 ohms, except those marked †. Specify value desired when ordering.

NET EACH **24c**

"BROWN DEVIL"—10 WATTS

E8292. Available in all values from 1 to 50,000, except those marked †. Specify value desired when ordering.

NET EACH **24c**

Be sure to specify value desired when ordering "Red Devil" or "Brown Devil" Resistors.

"BROWN DEVIL"—20 WATTS

Available in all values listed above, except those marked *.

E8293. Values, 5 to 15,000 ohms. Size, 2x1/2". Specify value desired.

NET EACH **38c**

E8294. Values, 20,000 to 50,000 ohms. Size, 2x1/2". Specify value desired.

NET EACH **44c**

E8295. Values, 55,000 to 100,000 ohms. Size, 2x1/2". Specify value desired.

NET EACH **59c**

MUTER WIRE-WOUND ZIPOHM RESISTORS



Flat, wire-wound resistors to replace overloaded carbon units. Each resistor is clearly marked with a tag. They are noiseless, thoroughly insulated, and accurate to within 5%.

Ohms	Ohms	Ohms	Ohms	Ohms
100	600	1500	4500	12500
125	700	1750	5000	15000
150	750	2000	6000	16000
200	800	2250	7000	17500
250	900	2500	7500	18000
300	1000	3000	8000	20000
350	1100	3500	9000	22500
400	1200	4000	10000	25000
500	1250			

E6748. 5 WATT. Size, 1 1/2 x 1/2", except units rated 12500 to 25000 ohms which are 2 1/2". With 1 1/2" tinned leads.

NET EACH **15c**
Specify values desired when ordering.



CANDOHM RESISTORS

These resistors are exact duplicates of the originals listed below. To order units not listed, give all numbers on original part. Also give make, model and tube line-up of set. Please include deposit with your order.

No.	Fact. No.	Ohms	NET
Clarion (Trans. Corp.)			
E6551	1819	15100	50.59
E6553	4269	19200	.68
E6593	4305	13600	.59
E6594	4512	10085	.59
Crosley			
E6529	20452B	4295	.68
E6530	20909	10000	.49
E6531	21955	6500	.49
E6532	21956	3160	.29
E6536	28471	35500	.39
Majestic			
E6543	10145	21702	.68
E6544	10252	10000	.29
U.S. Radio & Tel.			
E6556	1959	23800	1.56
E6557	2303	3640	.39
E6561	2811A	4450	.68
E6562	3111	6825	.78
E6563	3360	24300	.88
E6565	3621	3315	.78
E6566	3622	4300	.49
E6572	6749	17560	.39
E6573	2792	45	.21
Wells-Gardner			
E6597	98002	30050	.71
E6598	98020	41000	.59
Zenith			
E6595	63-351	17035	.59

LINE CORDS AND VOLTAGE REGULATORS



AC-DC SET LINE CORDS

Line cord with built-in resistor which supplies proper filament voltage for the popular 3 amp. metal and glass tubes when they are connected in series. Shpg. wt., 1 lb.

No.	Ohms	Filament Drop	NET EACH
E7207	360	10.0 to 17.0 V.	
E7206	330	18.0 to 24.0 V.	
E7205	290	25.2 to 31.5 V.	
E7204	230	35.0 to 44.5 V.	
E7203	220	45.0 to 52.0 V.	
E7202	180	53.0 to 61.0 V.	
E7201	160	56.5 to 68.9 V.	
E7200	135	68.9 to 75.2 V.	

NET EACH **29c**



220-110 VOLT AC-DC LINE CORD

A special cord with built-in resistor which permits the operation of any 3 ampere 110 Volt A.C.-D.C. receiver from a 220 Volt line. With plug and receptacle.

E9145. List, \$1.50. NET **59c**

VOLTAGE REDUCING RESISTOVOLT

Reduces 220 Volts A.C. to 110 Volts A.C. to permit the operation of any A.C. radio receiver without change in circuit or wiring. Easy to install; simply plug Resistovolt into electric line socket, then plug radio set line cord into other end of Resistovolt. Will accommodate any set with power consumption of 60 watts or less.

Built for efficient service. Wt., 1 lb. NET **97c**

PROTEX VOLTAGE REGULATOR

An air-cooled dependable voltage regulator. Fits any standard socket or outlet and will deliver correct voltage to any set. Small and inconspicuous. Extremely efficient. Will give lasting service. 1 lb. Lots of 10, \$2.85. E3970. EACH **30c**

REPLACEMENT LINE BALLASTS

Exact duplicate line ballasts to replace original units in sets designed for their use. Made of quality parts to exact specifications of originals, both physically and electrically. These units maintain normal voltage in spite of line fluctuations from 90 to 135 volts, thus assuring better radio performance and preventing damage to other parts of set. Enclosed in air-cooling perforated metal cases. Shpg. wt., 1 lb. We can supply replacement ballasts for practically any set made. Send in original with deposit, stating make, model and tube line-up of set, and we shall supply promptly.

- E3274. For Brunswick receivers.
- E3275. For Majestic 70 series.
- E3276. For Majestic 80 series.
- E3277. For Majestic 100 series.
- E3278. For Majestic 120 series.
- E3279. For Majestic 90 series.
- E3280. For Stewart-Warner 900 series.
- E3281. For Stewart-Warner 950 series.
- E3282. For Stewart-Warner R100 series.
- E3283. List, \$1.30.

YOUR PRICE EACH **88c**

UNIVERSAL RESISTOVOLT

Automatic voltage regulator. Maintains a constant potential of 110 Volts, preventing tube burnouts. Operates automatically. Shpg. wt., 1 lb. each.

E5500. Light Duty for sets up to 6 tubes.

E5501. Heavy Duty for sets over 6 tubes.

NET EACH **56c**

CLAROSTAT A.C. LINE VOLTAGE REGULATOR

Automatically adjusts line voltage for all 110 Volt A.C. radios using power as shown. Gives protection against fluctuating voltages. 1 lb. each.

No.	Type	Watts
E3260	O.	Up to 60
E3261	A.	60 to 100
E3262	B.	100 to 150
E3263	C.	150 to 200
E3264	D.	200 to 250

List, \$1.75. NET EACH **49c**

CANDOHMETER RESISTANCE INDICATOR

Accurately calibrated dual-range resistance indicator. Quickly and accurately determines the value necessary for replacing any burned-out or defective resistor. Sliding test prod moves freely in exposed slot. With leads, prod, and clips.

E6599. 0-10,000; 0-100,000. **\$1.18**

Ohms. Shpg. wt., 1 lb. NET

E6596. 0-100; 0-1000 Ohms. **\$1.03**

Shpg. wt., 1 lb. NET

CENTER-TAPPED RESISTORS

May be used in any filament or hum balancing circuit. Wire-wound on flexible fibre strip.

No.	Ohms	No.	Ohms	No.	Ohms
E9096	6	E9099	20	E9107	100
E9097	10	E9100	40	E9103	200
E9098	15	E9101	60	E9104	400

10 FOR 71c. NET EACH **8c**

SPRAGUE
450 VOLTS

SPRAGUE CONDENSERS

SPRAGUE
600 LINE

450 V. ELECTROLYTICS

CARDBOARD TYPE LD

Exceptionally high quality dry electrolytic condensers. Compact, moisture-proof. Wtg. V., 450; Peak V., 525.

No.	Mfd.	Size	NET
4400	2	2 1/4 x 1 1/4 x 1 1/4	\$0.38
4401	4	4 1/2 x 1 3/8 x 3/4	.44
4402	6	4 1/2 x 1 3/8 x 1	.53
4403	8	4 1/2 x 1 3/8 x 1	.56
4404	10	4 1/2 x 1 3/8 x 1 1/4	.68
4404	12	4 1/2 x 1 3/8 x 1 1/4	.71
4405	16	4 1/2 x 1 3/8 x 1 1/4	.76
4406	4-4	4 1/2 x 1 3/8 x 1	.71
4407	4-8	4 1/2 x 1 3/8 x 1 1/4	.79
4408	8-8	4 1/2 x 1 3/8 x 1 1/4	.88
4409	8-8	(4 Leads)	.88
4410	8-8-8	4 1/2 x 1 1/2 x 2	1.29
4412	8-8-8	(6 Leads)	1.29

"TINY-MIKES" TYPE TM

Ideal for replacement work. Low power factor. Working Volts, 450 D.C.

No.	Mfd.	Size	NET
4413	1	1 1/2 x 1 1/4 x 2 1/4	\$0.32
4414	2	1 1/2 x 1 1/4 x 2 1/4	.38
4415	4	1 1/2 x 1 1/4 x 2 1/4	.44
4416	6	1 x 1 x 2 1/2	.53
4417	8	1 x 1 x 2 1/2	.56
4418	10	1 1/2 x 1 1/2 x 2 1/2	.68
4419	4-4	(4 Leads)	.71
4420	8-8	(4 Leads)	.88

ALUMINUM CAN DRY UNITS TYPE LS

Excellent for all filter uses. Extremely low power factor assures best results. Hermetically sealed against moisture, unaffected by heat. Supplied with insulating washers, solder lug terminal nut and lock washer. Wtg. V., 450. Maximum surge voltage, 525 volts. High quality compact units.

No.	Mfd.	Size	NET
4438	2	1 x 3 1/2	\$0.44
4439	4	1 x 3 1/2	.50
4440	8	1 3/8 x 4 1/8	.62
4441	12	1 3/8 x 4 1/8	.82
4442	16	1 3/8 x 4 1/8	.91
4443	8-8	1 3/8 x 4 1/8	.94
4444	8-8	(4 Leads)	.94

TUBULAR ELECTROLYTICS

Specially designed for compact sets. Exceptionally heat-proof. With ample pig-tail leads of covered push-back wire.

No.	Mfd.	Wtg. V.	Size	NET
4480	1	450	3/8 x 2 3/8	\$0.32
4481	2	450	1 1/4 x 2 3/8	.38
4483	8	450	1 1/2 x 2 3/8	.56
4484	8-8	450	1 1/2 x 3 1/8	.88
4485	2	200	1 1/4 x 2 1/2	.32
4489	16	200	1 x 2 1/2	.62
4490	25	200	1 x 2 1/2	.73
4491	8-8	200	1 x 2 1/2	.73
4492	8-12	200	1 x 3	.82
4493	8-16	200	1 x 3 1/4	.85
4494	2	100	1 1/4 x 2 1/2	.29
4496	8	100	3/8 x 2 1/2	.35
4498	25	100	1 1/4 x 2 1/2	.66
4430	10	50	1 1/2 x 1 1/2	.38
4432	50	25	1 1/2 x 1 1/2	.29
4433	50	25	1 1/2 x 2 1/2	.29
4434	10	25	1 1/2 x 2 1/2	.29
4436	50	25	1 1/2 x 2 1/2	.56
4437	10-10	25	1 1/2 x 2 1/2	.44

TYPE SW OIL-IMPREGNATED SHORT WAVE CONDENSERS

Compact, oil-impregnated, cartridge-type condensers. Ideal for a 11 HF work. Metal-cased; moisture-proof.

No.	Mfd.	Wtg. V.	Size	NET
4422	.002	1500	9/16 x 1 1/8	\$0.26
4423	.005	1500	5/8 x 1 1/8	.26
4424	.01	1500	1 1/4 x 1 1/8	.41
4427	.02	1500	5/8 x 1 1/8	.44
4425	.05	1000	3/8 x 2 1/4	.47
4426	.1	1000	7/8 x 2 1/4	.53



NEW SPRAGUE "ATOMS" MIDGET ELECTROLYTICS

Brand new "midget-size" dry electrolytics perfect for hundreds of replacements. Sized to fit in the smallest spaces, yet built for very low leakage, high voltage, and unusually long life. Contained in hermetically sealed aluminum tubes and protected against "blow-outs."

No.	Mfd.	Wtg. V.	Size	NET
E13316	4	450	5/8 x 1 3/8	32c
E13317	8	450	3/8 x 1 3/8	35c
E13318	12	450	7/8 x 1 3/8	44c
E13319	16	450	1 1/8 x 2 1/8	53c
E13320	20	450	7/8 x 2 1/8	59c
E13313	4	350	5/8 x 1 1/2	29c
E13314	8	350	1 1/8 x 1 1/2	32c
E13315	12	350	7/8 x 1 1/2	41c
E13309	4	250	9/16 x 1 1/2	26c
E13310	8	250	5/8 x 1 1/2	29c
E13311	12	250	1 1/8 x 1 1/2	38c
E13312	16	250	3/8 x 1 1/2	44c
E13303	4	150	5/8 x 1 1/2	24c
E13304	8	150	3/8 x 1 1/2	29c
E13306	16	150	1 1/8 x 1 1/2	33c
E13307	20	150	3/8 x 1 1/2	35c
E13308	40	150	7/8 x 1 1/2	38c
E13302	25	50	9/8 x 1 1/2	32c
E13300	10	25	9/8 x 1 1/2	24c
E13301	25	25	9/8 x 1 1/2	24c

DUAL CARDBOARD TUBULARS

No.	Mfd.	Wtg. V.	Size	NET
E13328	8-8	200	1 1/2 x 2 3/8	59c
E13329	8-16	200	1 1/2 x 2 3/8	59c
E13326	12-12	200	1 1/2 x 2 3/8	56c
E13329	16-16	200	7/8 x 2 3/8	62c
E13325	10-10	50	7/8 x 2 3/8	38c

HANDY KITS OF "ATOMS"

KIT NO. 1. Contains six of the popular 8 Mfd. 450 V. Atoms. **\$1.99**
KIT NO. 2. Consists of twelve of the 8 Mfd. 450 V. Atoms. **\$3.89**
E13331. NET



TUBULAR BY-PASS UNITS

Neat and compact tubular condensers. Non-inductively wound. Oil-impregnated for superior service. For all R.F. and Audio circuits.

Type TC—Test Volts 1200—Wkg. Volts 600

No.	Mfd.	Size	NET
E1360	.0001	7/8 x 3/8	
E1361	.00025	7/8 x 3/8	
E1362	.0004	7/8 x 3/8	
E1363	.0005	7/8 x 3/8	
E1364	.001	1 1/4 x 3/8	
E1365	.002	1 1/4 x 3/8	
E1366	.003	1 3/8 x 7/8	
E1367	.004	1 3/8 x 7/8	
E1368	.005	1 3/8 x 7/8	
E1369	.006	1 3/8 x 7/8	
E1370	.01	1 3/8 x 7/8	
E1371	.02	1 3/8 x 7/8	
E1378	.03	1 3/8 x 7/8	12c
E1379	.04	1 1/2 x 7/8	12c
E1372	.05	1 3/8 x 7/8	15c
E1373	.06	1 3/8 x 7/8	15c
E1374	.1	1 3/8 x 7/8	15c
E1375	.25	2 1/8 x 1 1/8	21c
E1376	.5	2 1/8 x 1 1/8	29c
E1377	1.0	2 1/8 x 1 1/8	47c

HANDY KIT OF TYPE TC CONDENSERS



This kit provides a handy means of keeping up your tubular condenser stock. You will be sure of having all the capacities you need—when you need them. Contains: 3—.01, 3—.02, 3—.05, 8—.1, 4—.25 and 4—.5 condensers. All 25 units are 600 Volts working. **\$3.75**
E1452. YOUR PRICE...

600 V. ELECTROLYTICS



ALUMINUM CAN TYPE

Extremely long-life filter condensers. Low power factor and low leakage give you better filtering at less cost. 600 Volts Peak, 475 Volts Working. Impervious to heat and moisture. Types A and B have mounting brackets.

UPRIGHT TYPE AC-FIG. A

No.	Mfd.	Size	List	NET
E1330	2	1 3/8 x 1 1/2	\$1.10	\$0.65
E1331	4	1 5/8 x 1 7/8	1.50	.88
E1332	12	1 3/8 x 1 7/8	2.05	1.21
E1333	16	1 1/2 x 1 7/8	2.30	1.35

MULTIPLE UNITS-FIG. B

No.	Mfd.	Size	List	NET
E1334	8-8	1 1/2 x 1 1/2	2.40	1.41
E1335	8-8-8	3 x 4 1/2	4.00	2.35
E1336	5-15	2 1/2 x 1 1/2	3.35	1.96
E1337	9-9-18	3 x 4 1/2	5.80	3.41
E1338	8-8-8-8	3 x 4 1/2	5.35	3.14
E1340	18-18	2 1/2 x 4 1/2	4.90	2.88

INVERTED TYPE SC-FIG. C

No.	Mfd.	Size	List	NET
E1341	4	1 x 3 1/2	\$1.25	\$0.73
E1342	8	1 3/8 x 4 1/8	1.50	.88
E1345	10	1 3/8 x 4 1/8	1.80	1.06
E1346	12	1 3/8 x 4 1/8	2.05	1.21
E1347	16	1 1/2 x 4 1/8	2.30	1.35
E1343	8-8	1 1/2 x 4 1/8	2.40	1.41
E1344	8-8	(4 Leads)	2.40	1.41

"500" WET ELECTROLYTICS

Heavy-duty, self-healing condensers. Leak-proof. 500 Volts Peak, 400 Volts Working.

Type WC—Fig. D—500 Volts Peak

No.	Mfd.	Size	NET
E1350	4	1 x 2 1/2	\$0.47
E1351	8	1 x 2 1/2	.56
E1359	8	1 3/8 x 3 1/8	.56
E1352	10	1 3/8 x 3 1/8	.62
E1353	12	1 3/8 x 3 1/8	.68
E1354	16	1 3/8 x 3 1/8	.79
E1355	18	1 3/8 x 3 1/8	.91
E1356	25	1 1/2 x 4 1/8	.97

Peak Voltage—300 Volts

E1357	18	1 3/8 x 1 1/2	.68
E1358	40	1 3/8 x 1 1/2	.79



600 V. CARDBOARD CASED

For use under high surge conditions. Low power factor. 600 Volts Peak, 475 Volts Working. With long pushback leads and handy mounting flanges.

TYPE DC—STANDARD UNITS

No.	Mfd.	Size	NET
E1300	2	2 1/2 x 7/8 x 7/8	\$0.56
E1301	4	4 1/8 x 1 1/8 x 3/8	.68
E1302	6	4 1/8 x 1 1/8 x 3/8	.76
E1303	8	4 1/8 x 1 1/8 x 3/8	.79
E1304	4-4	4 1/8 x 1 1/8 x 1 1/8	1.06
E1305	4-8	4 1/8 x 1 1/8 x 1 1/8	1.18
E1306	8-8	4 1/8 x 1 1/8 x 1 1/8	1.29
E1307	8-8	(4 Leads)	1.29

NEW FIXED MICAS

New Sprague fixed mica condensers. Impregnated against moisture. Very low power factor. Equipped with heavy, flexible wire leads. Ideal for replacement use or in new equipment. Working volts 600.

No.	Mfd.	NET	No.	Mfd.	NET
E1315	.0005	9c	E1320	.002	18c
E1316	.001	9c	E1321	.003	24c
E1317	.0025	12c	E1322	.004	26c
E1318	.005	15c	E1323	.005	29c
E1319	.01	15c	E1324	.006	35c



KNIGHT ELECTROLYTIC CONDENSERS

THE FINEST ELECTROLYTIC CONDENSERS YOU CAN BUY!

Quality materials, quality construction, and quality safeguards have gained for KNIGHT Condensers a national reputation for outstanding efficiency, long-life, and trouble-free service. Thousands of Servicemen, Amateurs, Radio Builders and Experimenters use KNIGHT Condensers exclusively because they have found these units to be absolutely the equivalent of the finest standard makes and yet priced much lower under the KNIGHT famous quality trade-mark.

TYPICAL CONSTRUCTION FEATURES:

1. Sturdy outside cardboard container.
2. Wax impregnated, moisture-resisting inner liner.
3. Carton completely filled with pure, high-temperature wax.
4. Etched aluminum foil increasing capacity per square inch.
5. Superior grade cellulose separator.
6. Terminal lead securely and permanently riveted.
7. Flexible, insulated push-back leads.

Electrically and mechanically, KNIGHT Condensers are the best that can be made and are guaranteed unconditionally for a year. ALLIED will replace any KNIGHT Condenser that does not give one full year of satisfactory performance when operated at correct rated voltage. Simply return the condenser if it does not live up in this guarantee, and we will promptly send you a new one without charge.

UNCONDITIONALLY GUARANTEED FOR ONE YEAR

CARDBOARD CASED DRY ELECTROLYTICS

These KNIGHT single and multiple section electrolytic condensers are adaptable to practically any filter and by-pass application. Flanges may be removed without injury to condenser. The 6" color-coded insulated leads allow the greatest possible flexibility in mounting. Conservatively rated at 525 D.C. surge volts; 450 D.C. working volts. Multiple units have separate sections. Whether used for replacement or construction work, these KNIGHT condensers will do the job efficiently and inexpensively.

525 Volts Surge—450 Volts Wkg.

SINGLE SECTION

No.	Mfd.	Size	NET
33823	2	4 1/2 x 1 1/2 x 1/2	23c
33824	4	4 1/2 x 1 1/2 x 1/2	27c
33825	6	4 1/2 x 1 1/2 x 1/2	32c
33826	8	4 1/2 x 1 1/2 x 1/2	34c
33827	10	4 1/2 x 1 1/2 x 1/2	41c
33828	12	4 1/2 x 1 1/2 x 1/2	47c
33829	16	4 1/2 x 1 1/2 x 1/2	52c

MULTIPLE SECTION

33830	4-4	4 1/2 x 1 1/2 x 1 1/2	43c
33831	4-8	4 1/2 x 1 1/2 x 1 1/2	49c
33832	6-6	4 1/2 x 1 1/2 x 1 1/2	49c
33833	8-8	4 1/2 x 1 1/2 x 1 1/2	60c
33834	4-4-4	4 1/2 x 2 1/2 x 1 1/2	60c
33835	8-8-8	4 1/2 x 2 1/2 x 1 1/2	80c

BANTAM SIZE DRY ELECTROLYTICS

The latest perfected development in small electrolytics. Same as standard condensers above except that the foil has been treated to increase surface area consequently increasing capacity and decreasing overall size. Six inch leads. With tabs for easy mounting. Note centers 2 1/2" dia.

525 Volts Surge—450 Volts Wkg.

No.	Mfd.	Size	NET
33836	2	2 1/2 x 1 1/2 x 1/2	23c
33837	4	2 1/2 x 1 1/2 x 1/2	27c
33838	6	2 1/2 x 1 1/2 x 1/2	32c
33839	8	2 1/2 x 1 1/2 x 1/2	34c
33840	12	2 1/2 x 1 1/2 x 1/2	47c
33841	4-4	2 1/2 x 1 1/2 x 1 1/2	43c
33842	8-8	2 1/2 x 1 1/2 x 1 1/2	54c

VOLTAGE DOUBLING DUAL SECTIONS

Quality-built electrolytic condensers especially designed for filter use in A.C.-D.C. sets or for voltage-doubling circuits in A.C. sets using type B 25Z5 or 25Z6 tubes. With 4 colored flexible 6 inch insulated wire leads—2 black and 2 red. Each capacity is a separate condenser section. Careful production assures long life.

300 Volts Surge—150 Volts Wkg.

No.	Mfd.	Size	NET
33807	10-10	3x2x1	45c
33808	12-12	3x2x1	49c
33809	16-16	3x2x1	56c
33810	20-20	3x2x1	63c

Cross-section of a typical KNIGHT Electrolytic Condenser. Highest quality materials are used throughout, and are combined with skilled production to assure you of a finer condenser at a lower price.



NEW "TINY KNIGHTS" DRY ELECTROLYTICS

Newly developed dry electrolytics designed to fit the smallest spaces. Full capacity provided by special etched foil. Built for low leakage and to withstand high surges. Hermetically sealed.

No.	Mfd.	Wkg. V.	Size	NET
E4400	4	450	1 1/2" x 3/4"	24c
E4401	8	450	1 1/2" x 3/4"	27c
E4402	12	450	1 1/2" x 3/4"	33c
E4403	16	450	2 1/2" x 3/4"	40c
E4404	20	450	2 1/2" x 3/4"	44c
E4405	4	350	1 1/2" x 3/4"	22c
E4406	8	350	1 1/2" x 3/4"	24c
E4407	12	350	1 1/2" x 3/4"	31c
E4408	4	250	1 1/2" x 3/4"	20c
E4409	8	250	1 1/2" x 3/4"	22c
E4410	12	250	1 1/2" x 3/4"	29c
E4411	16	250	1 1/2" x 3/4"	33c
E4412	4	150	1 1/2" x 3/4"	18c
E4413	8	150	1 1/2" x 3/4"	20c
E4414	12	150	1 1/2" x 3/4"	22c
E4415	16	150	1 1/2" x 3/4"	24c
E4416	20	150	1 1/2" x 3/4"	27c
E4417	40	150	1 1/2" x 3/4"	29c
E4418	25	50	1 1/2" x 3/4"	24c
E4419	10	25	1 1/2" x 3/4"	18c
E4420	25	25	1 1/2" x 3/4"	22c

DUAL CARDBOARD TUBULARS

4421	8-8	450	2 1/2" x 1 1/2"	44c
4422	8-16	200	2 1/2" x 1 1/2"	42c
4423	12-12	200	2 1/2" x 1 1/2"	42c
4424	16-16	200	2 1/2" x 1 1/2"	42c
4424	10-10	50	2 1/2" x 1 1/2"	29c

(Deduct 5% on Orders for 10 or More.)

WET ELECTROLYTICS

For heavy-duty filter work. Self-healing properties and ability to withstand voltage overloads make these units dependable. 1 1/2" dia., 3 1/2" high.

No.	Mfd.	Peak Volts	NET
E2712	8	600	59c
E2713	8	500	59c
E2714	8	500	38c
E2715	10	500	43c
E2716	12	500	46c



CARTRIDGE TYPE DRY ELECTROLYTICS

Cardboard encased electrolytics with 2" bare wire leads. Completely wax-filled. They vary from 2 to 3" long; 5/8 to 1" diameter.

No.	Mfd.	D.C. Wkg.	Surge V.	NET
E3776	1	450	525	20c
E3777	2	450	525	24c
E3778	8	450	525	33c
E3779	8	200	250	27c
E3780	16	150	200	38c
E3781	5	50	75	16c
E3782	10	50	75	22c
E3783	5	25	40	16c
E3784	10	25	40	16c
E3785	25	25	40	28c
E3786	5-5	25	40	25c
E3787	10-10	25	40	28c
E3800	60	15	25	24c

(Deduct 10% on Orders for 10 or More.)

ALUMINUM CAN DRY ELECTROLYTICS

Popular, low-priced dry electrolytic condensers mounted in aluminum insulated containers. Have standard stud and nut mounting and insulated leads. Length, 3 1/2" for E3850-51; 4 1/2" for the others.

525 Volts Surge—450 Volts Wkg.

No.	Mfd.	Dia.	NET
E3850	2	1 3/8"	27c
E3851	4	1 3/8"	31c
E3852	6	1 3/8"	36c
E3853	8	1 3/8"	42c
E3854	10	1 3/8"	48c
E3855	12	1 3/8"	50c
E3856	4-4	1 1/2"	47c
E3857	6-6	1 1/2"	56c
E3858	8-8	1 1/2"	58c



MULTIPLE UPRIGHTS

In moisture-proof aluminum containers with each section separately wrapped and fully insulated from the others. Negative terminals grounded to can; positive leads brought out to soldering lugs at top. Working voltage, 450; surge voltage, 525.

No.	Mfd.	Size	NET
E3860	8-8	4x2 1/2"	\$0.65
E3861	4-4-4	4x2 1/2"	.77
E3862	5-5-5	4x2 1/2"	.83
E3863	8-8-8	4x3	.97
E3864	8-8-8-8	4x3	1.30
E3865	9-9-18	4x3	1.25
E3866	9-9-18-18	4x3 1/2"	1.89

ALUMINUM-COATED CARDBOARD CONTAINERS

Popular replacements for A.C. D.C. and midsize A.C. receivers. Containers are of aluminum-coated cardboard. Spade lugs are provided for easy mounting. Flexible insulated wire leads. Ratings are conservative, assuring long life and efficient operation. Containers are 4 1/2" long; from 1 1/2" dia. Buy a stock of condensers of different values so that you will have a replacement for every service job on hand always.



No.	Mfd.	Peak Volts	NET
E2738	8-16	500	88c
E2739	4-8	500	54c
E2740	8-8	500	60c
E2741	16	500	54c
E2737	12-16	500	92c
E3732	4-4-4	500	75c
E3733	8-8-8	500	83c

LOW VOLTAGE ELECTROLYTICS

E3734	8	200	34c
E3735	16	200	46c
E3736	8-8	200	50c
E3737	8-16	200	58c
E3738	8-10	200	63c
E3739	8-30	200	73c
E3740	8-40	200	86c
E3741	12-12	200	62c
E3742	12-16	200	63c
E3743	12-24	200	71c
E3744	8-8-8	200	70c
E3745	10-10-20	200	70c
E3746	8-14	200	85c
E3747	10-10	35	87c
E3748	8-20	200	87c
E3749	10-10	35	90c
E3750	12-16	200	90c
E3751	10-10	35	



BY-PASS AND REPLACEMENT CONDENSERS



KNIGHT MOLDED BAKELITE MICA CONDENSERS

Genuine bakelite molded units available in three convenient mounting styles. Highest quality mica dielectric and bakelite cases. Sizes: Insulated mounting type, 1 1/2 x 2 1/2". Pigtail and lug types, 3/4 x 3/4". Types B and C have metal terminals which may also be used for mounting. Highest quality mica units available.

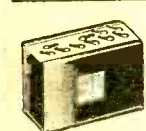
Capd. Mfd.	Pigtail Type (Fig. A)	Insul. Hole (Fig. B)	Lug Type (Fig. C)	Net Each	
.000025	E7827	E7826	E7844	8c	
.00004	E7828	E7809	E7845		
.00005	E7829	E7810	E7846		
.0001	E7830	E7811	E7847		
.00015	E7831	E7812	E7848		
.0002	E7832	E7812	E7849		
.00025	E7833	E7813	E7850		7 1c
.0004	E7834	E7814	E7851		
.0005	E7835	E7815	E7852		
.0008	E7836	E7816	E7853		
.001	E7837	E7817	E7854		
.0015	E7838	E7818	E7855		
.002	E7839	E7819	E7856		
.0025	E7840	E7820	E7857		
.003	E7841	E7821	E7858	12c	
.004	E7842	E7843	E7859		
.005	E7822		E7860		10 for \$1.08
.006	E7823		E7861		
.008	E7824		E7862		
.01	E7825		E7863		

KNIGHT UNCASED SECTIONS

Wax-dipped for use in filter block repairing. Compact; high dielectric factor. 6" leads.

Mfd.	No.	200 VOLTS	400 VOLTS
.25	E7741	9c	E7746
.5	E7742	11c	E7747
1.0	E7743	18c	E7748
2.0	E7744	29c	E7749
			E7750
.25	E7750	24c	E7754
.5	E7751	26c	E7755
1.0	E7752	34c	E7756

Deduct 10% on orders for 10 or more of above sections. Buy them in quantities and save.



EXACT DUPLICATE BLOCKS

Same physical dimensions as the originals. We can supply condenser blocks not shown. Send in old block with deposit and information.

No.	Model	ATWATER-KENT
E7105	37	\$2.94
E7106	Splr. filter (A.K. 149021)	.59
E7107	40, 42, 46, 52, 37, 38, 39 (1/2, 3/4, 1)	.59
E7128	40, 52. Condensers only	1.47
KNIGHT		
E7109	SGS	3.40
E7110	SG8 (213)	.52
E7111	SG8 (213)	.58
E7112	SG8 (214)	.88
E7113	AC5 (1.0)	.73
MAJESTIC		
E7115	70, 71P, 71P6	1.73
E7118	90, 91P, 91P6 (with res.)	1.85
E7119	90 (5)	.34
E7120	180, 81P	2.95
E7122	50	2.20
RCA-VICTOR		
E7124	R82, RE15, 52	4.20
SPARTON		
E7127	930	3.95
E7125	69, 79	4.25
E7135	89A	3.70

No.	Mfd.	NET	10 FOR
E7769	.25	23c	\$2.05
E7770	.5	27c	2.40
E7771	1.0	29c	2.60



KNIGHT BATHTUB CONDENSERS

Non-inductive metal-cased units for all bypass requirements. Permanently sealed and moisture-proof. Type A: 1 1/2 x 3 1/2". Type B: Single, 1 1/2 x 2 1/2"; multiple, 2 x 2 1/2 x 3 1/2".

By-Pass (Type A)					
No.	Mfd.	Volts	NET	10 FOR	
E7773	.1	200	15c	\$1.35	
E7774	.25	200	19c	1.70	
E7775	.5	200	20c	1.99	
E7776	.25	300	22c	1.80	
E7777	.25	300	24c	2.15	
E7778	.5	300	32c	2.85	
E7779	.05	400	12c	1.05	
E7780	.1	400	15c	1.35	
E7781	.25	400	19c	1.70	
E7782	1-1	400	26c	2.30	

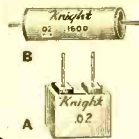
Single Section (Type B)					
No.	Mfd.	Volts	NET	10 FOR	
E7785	1.0	200	30c	\$2.70	
E7787	2.0	200	49c	4.40	
E7789	1.0	300	31c	2.80	
E7791	1.0	400	32c	2.85	
E7792	.25	400	26c	2.30	
E7793	.5	400	33c	2.95	

Multiple Section (Type B)					
No.	Mfd.	Volts	NET	10 FOR	
E7794	1-1-1-1	200	52c	\$4.65	
E7795	2-2-2-2	300	82c	7.40	
E7796	3-3-3	300	38c	3.40	
E7797	1-1-1	400	36c	3.20	
E7798	2-2-2	400	32c	2.85	
E7799	3-3-3	400	39c	3.50	

VIBRATOR CONDENSERS

A new series of oil-impregnated condensers capable of withstanding heavy voltages in vibrators. Suitable as replacements in hundreds of units. Housed in specially designed, fully shielded cans. Wkg. V. 1600 D.C. Units marked * have one lead.

No.	Fig.	Mfd.	Size	Each
E7860	A	.01	1 1/2 x 2 1/2"	22c
E7861	A	.02	1 1/2 x 2 1/2"	22c
E7862	A*	.007	1 1/2 x 2 1/2"	10 For
E7863	A*	.01	1 1/2 x 2 1/2"	\$2.05
E7864	A*	.02	1 1/2 x 2 1/2"	
E7865	B	.01	Tubular	
E7866	B	.02	Tubular	



KNIGHT PERM-A-SEAL TUBULAR CONDENSERS

Specially-treated tubulars with spun ends. Non-inductive wound with tinfoil. Leads soldered to sections. Built to highest standards.

400 VOLTS					600 VOLTS				
Mfd.	No.	Net	No.	Net	Mfd.	No.	Net	No.	Net
.001	E7915	Each	E7931	Each					
.002	E7916	6c	E7932	7c					
.003	E7917								
.004	E7918								
.005	E7919								
.006	E7920								
.01	E7921								
.02	E7922	7c	E7938	8c					
.03	E7923								
.04	E7924								
.05	E7925								
.06	E7926								
.1	E7927								
.25	E7928								
.5	E7929								
1.0	E7930	19c	E7945	19c					

DEDUCT 10% ON ORDERS FOR 10 OR MORE KNIGHT PERM-A-SEAL UNITS.

KNIGHT CONDENSER ASSORTMENTS

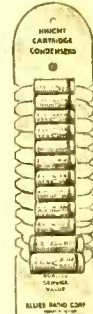
Kits of 12 popular Knight tubular condensers on handy strips.

200 VOLTS					DUAL UNITS				
No.	Mfd.	Net	No.	Mfd.	V. Net				
E7910	.1	7c	E7946	1-1	200 14c				
E7911	.2		E7947	.25-25	200 16c				
E7912	.25		E7948	1-1	400 14c				
E7913	.5		E7949	1-1	600 24c				
E7914	1.0								

PRICE **\$1.34**

400 VOLTS				
Mfd.	No.	Mfd.	Volts	Each
.001	400	.004	600	
.005	400	.005	600	
.006	400	.01	600	
.001	600	.05	600	
.002	600	.1	600	

PRICE **\$1.34**



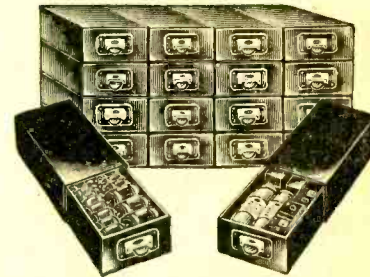
HANDY KNIGHT CONDENSER KITS

WITH FREE METAL CABINETS

Take advantage of this remarkable offer. Receive the condenser kits listed below, and receive absolutely free the handy metal cabinets. They measure 9 1/2 x 4 1/2 x 2 1/2". Sturdily constructed and finished in dark green. Provision is made for stacking several of these cabinets to form one compact, handy unit. Ideal for housing small parts. Buy quality condensers and get these cabinets FREE.

KIT No. 1			
ASSORTMENT OF "TINY KNIGHTS"			
Kit of new "TINY KNIGHT" Dry Tubular Condensers. The most popular and widely demanded values have been selected for your convenience. Kit consists of: 9—E4401 8 Mfd. 450 volt; 7—E4109 8 Mfd. 250 volt; and 3—E4111 16 Mfd. 250 volt condensers.			
E7768.	NET WITH CABINET.	\$4.96	

KIT No. 2			
STANDARD DRY ELECTROLYTICS			
Kit of KNIGHT Cardboard and Can Type Electrolytics. Following selection has been carefully chosen. Consists of: 3—E3853 8 mfd. 525 volt; 2—E3826 8 mfd. 325 volt; and 4—E3824 4 mfd. 525 volt condensers.			
E7766.	NET WITH CABINET.	\$4.94	

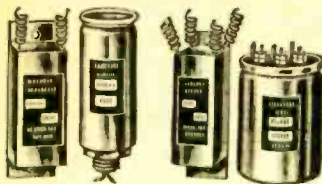


KIT No. 3			
PERM-A-SEAL TUBULARS			
Kit of KNIGHT PERM-A-SEAL Tubular Paper Condensers. Consists of: 2—901, 2—.002, 1—.005, 7—.01, 5—.02, 1 at 600 V., 4—.05, 8—1, 2—.25, 2—.5 at 400 V., 5—1, 3—.25, 1—.5 at 200 V. condensers			
E7767.	NET WITH CABINET.	\$4.33	

MAKE UP YOUR OWN CONDENSER SELECTION—SAVE MONEY!
FREE! Select any assortment of KNIGHT Electrolytic Condensers (Perm-A-Seal and new TINY-KNIGHTS may be included) which totals \$5.00 net or over, and 1 metal cabinet will be included in your shipment FREE of cost to you. You save not only because of the low prices of KNIGHT Condensers, but because you also get a useful cabinet without extra charge. Start building your group of cabinets today. Use them for condensers, resistors, etc. They're handy; they're valuable. E7762. Single Metal Cabinet unit when bought separately. NET **95c**

Knight EXACT DUPLICATE & REPLACEMENT CONDENSERS AEROVOX

SPECIAL VALUE DRY ELECTROLYTICS



Aluminum can or cardboard container dry electrolytic condensers. Rated at 450 V. D.C. wkg. 550 V. peak. Dual units have individual sections and leads. Excellent condensers for general repair and experimental purposes. Fully guaranteed. Popular with servicemen, builders and experimenters everywhere.

550 VOLTS DC PEAK CARDBOARD METAL CANS

2 MFD.	8 MFD.
1 1/4 x 3/4" 21c	1 1/2 x 3/4" 30c
E3836 10 FOR \$1.95	E3842 10 FOR \$2.85
4 MFD.	4-4 MFD.
1 1/2 x 1 1/2" 22c	1 1/2 x 3/4" 42c
E3837 10 FOR \$2.05	E3843 10 FOR \$3.95
8 MFD.	8-8 MFD.
1 3/4 x 1 1/4" 26c	1 1/2 x 3/4" 53c
E3838 10 FOR \$2.35	E3844 10 FOR \$5.00
4-4 MFD.	8-8 MFD.
1 3/4 x 1 1/4" 40c	E3845 88c
E3839 10 FOR \$3.75	E3846 10 FOR \$8.35
8-8 MFD.	5-15 MFD.
1 1/2 x 1 1/4 x 2 1/4" 49c	2 1/2 x 1" 72c
E3840 10 FOR \$4.65	E3841 10 FOR \$6.90
8-8 MFD.	
2 1/2 x 1 1/4 x 3" 77c	
E3841 10 FOR \$6.90	

NEW KNIGHT "600" DRY ELECTROLYTICS



600 Volt Peak—475 V. D.C. Wkg. A new line of high voltage, high safety factor condensers. Developed especially for P. A. use in amplifiers and for use in equipment where condenser failure must not occur. Will stand heavy surges and overloads. Mounting tabs may be cut off where necessary. Units of genuinely high quality which will stand up under all types of heavy-duty service.

No.	Mfd.	Size	NET	10 FOR
E3801	4	4 1/4 x 1 1/4 x 3/4"	\$0.56	\$5.35
E3802	8	4 1/4 x 1 1/4 x 1 1/4"	.65	6.15
E3803	4-4	4 1/4 x 1 1/4 x 1 1/4"	.87	8.25
E3804	4-8	4 1/4 x 1 1/4 x 1 1/4"	.96	9.10
E3805	8-8	4 1/4 x 1 1/4 x 1 1/2"	1.05	9.90

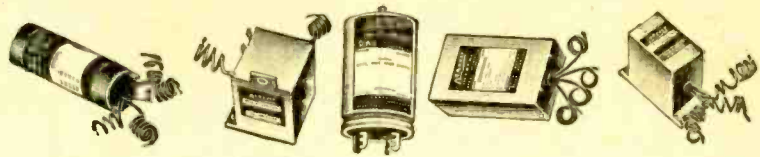
NEW TOBE "PLUGGIN" DRY ELECTROLYTICS



A radical departure from standard designs in condenser manufacture. Leads are brought out to a standard 4 prong tube base. Ideal for use by experimenters in building new equipment. Makes possible split-second replacement of any electrolytic condenser in a public address amplifier or in a receiver chassis. Mounted in moisture-proof, non-corrosive aluminum containers.

No.	Mfd.	Size	NET
E8410	8	1 1/2 x 3/4"	\$1.03
E8411	8-8	1 1/2 x 3/4"	1.56
E8412	16	1 1/2 x 3/4"	1.56
75 VOLT PEAK—50 VOLT D.C. WORKING			
E8413	50	1 1/2 x 3/4"	\$0.94

AEROVOX EXACT DUPLICATE ELECTROLYTICS



ALLIED brings you the most comprehensive exact duplicate filter condenser listing available today. The listing below constitutes the most popular replacements. We also have on hand, in our vast condenser stocks, many condensers which are not as constantly in demand. If the unit you need does not appear below, send in your order with complete information and small deposit, and we will supply correct condenser promptly. You will find these condensers exact duplicates in every detail. Mounting holes will be identical with condenser you are replacing. Leads are all color-coded. Fast and accurate replacement work. Aerovox standard quality is built into each unit.

Cat. No.	Part No.	Model	Cap. Mfd.	NET	Cat. No.	Part No.	Model	Cap. Mfd.	NET
ATWATER KENT					MAJESTIC (Cont'd)				
E13970	24602	155 (1 & 2)	8-8-8	\$0.97	E14003	4713	211,214,251B	8	\$0.56
E13973	27592	376	4-8-10	1.12	E14004	7824	311,314,315	8-16	.97
BOSCH					E14005	8385	15,153-4-5-6	8-8	.94
E13974	CE-9520	04	12-12x5-5	1.15	E14006	8755	381	4-8	.76
E13975	105772	350, 500-1-2	4-12-8x4	1.26	MONTGOMERY WARD				
E14074	CE-9510	Early 139	4-4	.73	E13986	80944A	62-96, 98 (Old)	4-12-16	1.09
E14075	CE-9510	Late 139	4-4	.73	E13987	80944E	62-96, 98 (New)	4-12-16	1.09
BELMONT					MOTOROLA (GALVIN)				
E14046	C-525B	545	5-25-5	.94	E14010	1468	75 (Late)	6-4x6	.82
E14047	A11093-1	425	5-25-5	1.45	E14011	2185	60, 80	8-8x25	1.15
E14072	C52C	650	5-25	.82	E14012	34	34	3-6-10	.82
E14073	119-24B	505A Series	5-25	.53	E14013	8123	44	8-12	.75
COLONIAL					E14014	1424	57 (Early)	2-4	.65
E14076	R-10673	1850 S1, 621	6-6x25	1.94	E14015	1540	57 (Late)	3-5x6	.79
CROSLEY					E14016	8825	Dual 6 and 8	8-8-25	1.09
E14048	W23801	122, 152	6-8	.85	E14017	14-H37275	9-A, 6-2, 8-1	16-2-2-25	1.35
E14049	W25857B	95, 163	8	.59	E14080	8426	34	4-8x5	1.09
E14050	W26870	96, 150, 155, 163	8	.29	SIMPLEX				
EMERSON					E14018	V	4Z	4-20	.82
E14051	W27488A	148, 167	8-6	.56	E14019	4Z	15-8x5-5	1.15	
E14052	W29067B	164, 170, 171	8-8-8	1.28	STEWART WARNER				
E14053	W29150B	169	6-7-8	1.06	E13976	81959	R115, R116	4-12-5	.97
E14054	W29264A	166, 172	16-16-8	1.18	E13977	83111	R112	8-8-5-5	1.15
E14055	W30962	182	8-25	.85	E14081	83962		10-5	.79
E14056	W27677A	147	8-8	.44	SPARTON				
E14057	W28468	160	8-12	1.32	E13978	A9550		5-25-5	1.18
E14058	W2804A	174	8-16-16	1.23	E13979	A11093-1		5-25-25	1.15
E14059	B30017	129, 134, 135, 137	4-8	.85	UNITED MOTORS (DELCO)				
E14060	W30059A	175	8-8-8	1.29	E13980	8508	4052	8-8-4	1.21
E14061	W30124	173, 173-5	16-16-8	1.26	E13981	A443341	01D5-36	8-8-12	1.06
E14062	W30419	103	8-8	.64	E13982	1210514	BUCK-36	8-8-12-5	1.26
DETROLA					E13983	1210885	626, 627	12x8-5	1.15
E14063	1460		4-8-20	1.06	E13984	1209285	CHEV. '34, '35	12x8-5	1.09
EMERSON					E13985	1209047	B.O.P.	12x8-5	1.09
E14064	GCC-137	32	8-16x5-5	1.21	WELLS GARDNER				
E14065	RKC-143	12-9	12-9	.73	E13986	80944-A	05A, 05BA	4-12-16	1.09
E14066	UTC-179	31B5	12-8x5-5	1.15	E13987	80944-E	05A	4-12-16	1.09
E14067	ZCC-192A		4-8-16	1.12	ZENITH				
E14068	ZCC-194		8-16	.85	E13988	22-484F	7D 126	4-16-8-4	1.59
E14069	ZDC-203	108, 110	8-16	.79	E13989	22-407B	Chas.-5401	2-4-8	1.15
E14070	ZCC-222	106	12-12	1.03	E13990	22-416F	Chas.-5704	8-8-2	1.18
E14071	GCC-125C	38	4-8-16	1.38	E13991	22-412C	Chas.-5903	2-4-16	1.47
E14072	ZWC-239	409, 410, 411	8-5-5	.85	E13992	22-481F	Chas.-5933	4-8-8	1.09
E14073	EEC-129	45	8-4	.97	E13993	22-560	5639, 6D-219	35-16-10	.88
E14074	ZLC-224	107	16-4-8	1.09	AEROVOX UNIVERSAL REPLACEMENT CONDENSERS				
E14075	ZLC-123	965	6-10	.88					
E14076	4DC-345	BA-139	16-16	.82	These electrolytes are identical to the units originally used in a wide variety of standard sets. Each unit has color-coded wire leads 8" long. Cardboard units have mounting flanges.				
E14077	TC-89	375, Ch W96	4x12x16	1.12	TUBULAR TYPE				
E14078	TTC-159	36	6-8-12	1.32	No.	Mfd.	Wkg. Volts	Size	NET
G. E.					E14085	8-8	450	1 1/4 x 1 1/4	\$0.88
E14025	66140-2	RCA-VICTOR	5-5	.44	E14086	12-16	200	1 3/4 x 1 1/4	.91
E14026	66140	K40A, R27	4-4	.59	E14087	8-16	450	1 3/4 x 1 1/4	1.12
E14027	66155	K60, R37	4-4-10.4	1.21	E14088	14-8x10-10	150x25	1 3/4 x 1 1/4	1.21
E14028	66140-4	B52, M34	3-6-1	.47	E14089	16-8x10-10	200x25	1 3/4 x 1 1/4	1.21
E14029	66180-2	L50, R22	8-4-10	.79	E14090	16-12x10-10	200x25	1 3/4 x 1 1/4	1.26
E14030	66185-2	C30, M43, 100	8-8-5-5	1.29	RECTANGULAR TYPE				
E14031	66189-2	K66, 220	8-4-4	.97	E14092	8-8-8x5-5	200x25	1 1/4 x 1 1/4	1.47
E14032	66189-2	K64, 121, 122	8-4-4	1.21	E14094	8-8-20	200	1 1/4 x 1 1/4 x 2 1/2	1.23
E14033	66171-1	L53, 114	8x8-4x10x	1.31	E14091	12-12x5-5	200x25	1 1/4 x 1 1/4	1.15
GRUNOW					E14093	16-16-8x5-5	150x25	1 1/4 x 1 1/4	1.44
E14034	K1216	F63-F65	12-8	.92	* Two negatives. All other cardboard units have common negative.				
E14035	K12111	F70-F75	12-8-8-10	1.29					
E14036	66143	K52, R28	4-4	.62					
INTERNATIONAL (KADETTE)									
E14037	27151	501, 550, 58	4-8-20-4	1.29					
E14038	30091-1	670, 671, 6D	8-8x8-12	1.88					
E14039	34119-6	625	5-10-10-10	1.41					
E14073	30326		8-8-12	1.18					
LEWAL									
E14043	A421	40, 41, 42, 46	3.5-3.5-3.5	.76					
E14044	A424	A & B, 430, 428	4-10-10	.97					
E14045	A427	66	3.5-3.5-3.5	.70					
E13994	A422		8-30	.88					
E13995	A430	A-424, A428	4-10-10	.97					
E13996	A468	1019	8-8x8-8	1.35					
MAJESTIC									
E13997	LW-4	1	.97					
E13998	9661	411, 413	8-10-16	1.06					
E13999	9979	66X, 116A	8-8	.82					
E14000	10369	118	8-8	.88					
E14001	10536	40, 194 (440)	10-4-6	1.00					
E14002	10827	55, 75 (500)	10-8-8	1.09					

★ MALLORY CONDENSERS

TUBULAR BY-PASS UNITS

TYPE TP



are anchored to metal discs.

Non-inductive by-pass condensers of superior quality. Thoroughly impregnated against moisture. Wire leads

600 VOLTS DC			400 VOLTS DC		
No.	Mfd.	NET	No.	Mfd.	NET
E11750	.0001		E11765	.01	
E11751	.00025		E11766	.02	
E11752	.0005		E13007	.03	9c
E11753	.001		E13008	.04	
E11754	.002		E11767	.05	
E13000	.003	9c	E13009	.06	12c
E13001	.004		E11768	1	12c
E11755	.005		E13010	2	15c
E11756	.006		E11769	.25	15c
E11757	.01		E11770	.5	21c
E11758	.02		E13011	1 0	35c
E11759	.03		E13012	01-.01	21c
E13002	.04	12c	E13013	05-.05	24c
E11760	.05		E13014	1-1	29c
E11761	.06		200 VOLTS DC		
E11762	1	15c	E11771	.05	9c
E13003	.15	21c	E11772	.1	15c
E13004	2	18c	E11773	.25	15c
E11763	.25	21c	E11774	.5	21c
E11764	.5	29c	E11775	1 0	29c
E13005	1 0	47c	E13016	.25-.25	29c

"SPECIAL UNIVERSAL" DRY ELECTROLYTICS



Special units to meet requirements not covered by standard Mallory units. Electrically and physically these are exact duplicates of original condensers.

You can easily select the proper condenser for any specific receiver by consulting the appropriate listing in the Mallory-Yaxley Radio Encyclopedia. We can also supply promptly other "Special" units not listed below. Write for quotations.

E13410	Type UR180	8-8 Mfd.	250-300 Volts.	1 1/2 x 1 1/2 x 2 1/2"	NET .76c
E13411	Type UR181	3-2-1-1 Mfd.	450 Volts.	1 3/8 x 2 3/8"	NET . \$1.23
E13412	Type UR182	5-25-10 Mfd.	150 Volts.	1 1/2 x 1 3/4 x 2 1/2"	NET . \$1.15
E13413	Type UR183	4-4-4 Mfd.	150 Volts.	1 1/2 x 1 1/2 x 2 1/2"	NET .79c
E13414	Type UR188	8-8-8, 5-5 Mfd.	200, 25 Volts.	1 3/4 x 3/4"	NET . \$1.47
E13415	Type UR189	8-8-8, 5-5 Mfd.	200, 25 Volts.	1 1/2 x 3/4 x 3/8"	NET . \$1.47
E13416	Type UR190	8-8-8 Mfd.	250 Volts.	1 1/2 x 1 1/2 x 3"	NET . \$1.53
E13417	Type UR191	8-8-8 Mfd.	450 Volts.	1 1/2 x 1 1/2 x 3"	NET . \$1.73
E13418	Type UR192	20-20 Mfd.	150 Volts.	1 1/2 x 1 1/2 x 2 1/2"	NET .97c
E13419	Type UR193	5-8-16 Mfd.	150 Volts.	1 x 1 1/4 x 2 1/2"	NET . \$1.06
E13420	Type SR601	8-12 Mfd.	300 Volts.	1 1/2 x 1 1/2 x 2 1/2"	NET .91c
E13421	Type SR604	3-5-0 Mfd.	300-300-12 Volts.	1 1/2 x 1 1/4 x 2"	NET .88c
E13422	Type SR605	8-8 Mfd.	350 Volts.	1 3/4 x 3 3/8"	NET .91c
E13423	Type SR609	8-8-25 Mfd.	400-400-25 Volts.	1 3/4 x 2 3/4"	NET . \$1.23
E13424	Type SR610	8-8-25 Mfd.	400-400-25 Volts.	1 1/2 x 1 1/2 x 2 3/4"	NET . \$1.12

TUBULAR DRY ELECTROLYTICS



Especially designed for by-pass use. Low power factor. High leakage resistance. With 3" timed leads.

TS—SINGLE SECTION					
No.	Mfd.	Wkg V.	Type	Size	NET
E11737	25	25	TS 103	2 1/4 x 3 3/8"	38c
E11738	50	25	TS 104	2 3/4 x 1"	55c
E11739	5	50	TS 105	1 1/8 x 3 3/8"	25c
E11740	5	50	TS 106	2 1/4 x 3 3/8"	38c
E11741	25	50	TS 107	2 3/4 x 1"	47c
E11742	50	50	TS 108	3 1/4 x 1 1/8"	70c
TN—DUAL—COMMON NEGATIVE					
No.	Mfd.	Type	Size	NET	Each
E11745	5-5	25	TN 110	1 3/4 x 3"	NET
E11746	10-10	25	TN 111	2 1/4 x 3"	NET
E11747	5-5	35	TN 112	1 1/2 x 3"	NET
E11748	5-5	50	TN 113	2 1/4 x 3"	44c

COMPLETE SERVICE DATA ON 17,000 RADIOS

MALLORY-YAXLEY 1939 ENCYCLOPEDIA

Completely new—the enlarged second edition of the most useful book ever published for the serviceman! Analyzes over 17,000 receivers with data on volume controls, resistors, condensers, vibrators, filter circuits, new material on audio degeneration, A.F.C., automatic tuning, tube lineups, etc. Everything a serviceman wants to know "in one book... on one page... on one line." 336 pages; cloth-bound; 8 1/2 x 11". Stpg. wt., 2 lbs.



EI1865. NET **\$1.91**

DRY ELECTROLYTIC CONDENSERS IN METAL CONTAINERS



Small and compact replacement condensers. Internal metal seal prevents damage from excess heat or humidity. With mounting flanges. All units have 8" color-coded leads.

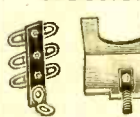
ALLIED STOCKS ALL MALLORY UNITS

The Mallory condensers described on this page constitute types you will need in servicing 90% of all radio sets. Carry a representative stock of these fine units in your service shop. The entire line of Mallory condensers is available from ALLIED at all times. Any items not listed here may be ordered from ALLIED at 40-75% discounts from list prices shown in the Mallory Encyclopedia. Be prepared to meet all service requirements—stock up with Mallory condensers now.



A new series of compact metal-cased tubular electrolytic condensers. Contain new F.P. Plate anode material which allows increased capacity in smaller spaces. Aluminum anode tabs and thorough sealing promote longer life. Special separator material provides higher safety factor.

CS—SINGLE SECTION					BB—TUBULARS				
No.	Mfd.	Type	Size	NET	No.	Mfd.	Type	Size	NET
E11700	2	CS 130	1 1/2 x 1 1/2 x 2 1/2"	\$0.37	E13426	10	BB-12	1 1/2 x 1 1/2 x 2 1/2"	24c
E11701	4	CS 131	1 1/2 x 1 1/2 x 2 1/2"	.44	E13427	20	BB-15	1 1/2 x 1 1/2 x 2 1/2"	29c
E11702	6	CS 132	1 1/2 x 1 1/2 x 2 1/2"	.53	E13428	40	BB-17	1 1/2 x 1 1/2 x 2 1/2"	35c
E11703	8	CS 133	1 1/2 x 1 1/2 x 2 1/2"	.56	E13429	4	BB-20	1 1/2 x 1 1/2 x 2 1/2"	24c
E11704	10	CS 134	1 1/2 x 1 1/2 x 2 1/2"	.67	E13430	8	BB-21	1 1/2 x 1 1/2 x 2 1/2"	26c
E11705	12	CS 135	1 1/2 x 1 1/2 x 2 1/2"	.76	E13431	10	BB-22	1 1/2 x 1 1/2 x 2 1/2"	28c
E11706	16	CS 136	1 1/2 x 1 1/2 x 2 1/2"	.85	E13432	16	BB-24	1 1/2 x 1 1/2 x 2 1/2"	32c
300 V. Peak, 250 V. D.C. Working					E13433	20	BB-25	1 1/2 x 1 1/2 x 2 1/2"	35c
E11707	4	CS 121	1 1/2 x 1 1/2 x 2 1/2"	.37	E13434	30	BB-26	2 x 2 x 2 1/2"	38c
E11708	8	CS 123	1 1/2 x 1 1/2 x 2 1/2"	.47	E13435	4	BB-40	1 1/2 x 1 1/2 x 2 1/2"	29c
E11709	10	CS 124	1 1/2 x 1 1/2 x 2 1/2"	.56	E13436	8	BB-41	1 1/2 x 1 1/2 x 2 1/2"	32c
E11710	12	CS 125	1 1/2 x 1 1/2 x 2 1/2"	.59	E13437	10	BB-42	1 1/2 x 1 1/2 x 2 1/2"	38c
E11711	16	CS 126	1 1/2 x 1 1/2 x 2 1/2"	.65	E13438	16	BB-44	2 x 2 x 2 1/2"	47c
300 V. Peak, 250 V. D.C. Working					E13439	4	BB-60	1 1/2 x 1 1/2 x 2 1/2"	32c
E11712	4-4	CN 150	3 1/2 x 1 1/2 x 2 3/8"	\$0.71	E13440	8	BB-61	2 x 2 x 2 1/2"	35c
E11713	4-8	CN 151	3 1/2 x 1 1/2 x 2 3/8"	.79	E13441	10	BB-62	2 x 2 x 2 1/2"	41c
E11716	8-8	CN 152	3 1/2 x 1 1/2 x 2 3/8"	.88	RS—SINGLE SECTION				
E11717	8-8-8	CN 153	3 1/2 x 1 1/2 x 3"	1.29	Highly efficient metal can electrolytics. Sealed against humidity and temperature. New internal construction prevents surge failure. With 8" leads, mounting nut, and washer.				
300 V. Peak, 250 V. D.C. Working					525 V. Peak, 450 V. D.C. Working				
E11718	4-4	CN 140	3 1/2 x 1 1/2 x 2 3/8"	.53	E11778	4	RS 211	2 1/2 x 1 1/2 x 1 1/2"	\$0.50
E11719	4-8	CN 141	3 1/2 x 1 1/2 x 2 3/8"	.57	E11779	8	RS 213	2 3/4 x 1 1/2 x 1 1/2"	62c
E11720	8-8	CN 142	3 1/2 x 1 1/2 x 2 3/8"	.76	E11780	12	RS 215	2 3/4 x 1 1/2 x 1 1/2"	62c
E11721	8-8-8	CN 145	3 1/2 x 1 1/2 x 3"	1.15	E11781	16	RS 216	2 3/4 x 1 1/2 x 1 1/2"	.91
300 V. Peak, 250 V. D.C. Working					300 V. Peak, 250 V. D.C. Working				
E11722	4-4	CN 170	3 1/2 x 1 1/2 x 2 3/8"	\$0.71	E11782	4	RS 201	2 1/2 x 1 1/2 x 1 1/2"	.46
E11725	4-8	CN 171	3 1/2 x 1 1/2 x 2 3/8"	.79	E11783	8	RS 203	2 3/4 x 1 1/2 x 1 1/2"	.54
E11726	8-8	CN 172	3 1/2 x 1 1/2 x 2 3/8"	.88	E11784	12	RS 205	2 3/4 x 1 1/2 x 1 1/2"	.65
E11727	4-4-4	CN 173	3 1/2 x 1 1/2 x 3"	1.06	E11785	25	RS 207	3 1/2 x 1 1/2 x 1 1/2"	.88
E11728	8-8-8	CN 175	3 1/2 x 1 1/2 x 3"	1.29	RN—COMMON NEGATIVE				
300 V. Peak, 250 V. D.C. Working					525 V. Peak, 450 V. D.C. Working				
E11729	4-4	CN 160	3 1/2 x 1 1/2 x 2 3/8"	.53	E11874	4-8	RN 241	3 x 1 1/2 x 1 1/2"	\$0.85
E11730	4-8	CN 161	3 1/2 x 1 1/2 x 2 3/8"	.67	E11875	8-8	RN 242	3 x 1 1/2 x 1 1/2"	.94
E11731	8-8	CN 162	3 1/2 x 1 1/2 x 2 3/8"	.76	E11876	8-8-8	RN 245	3 1/2 x 1 1/2 x 1 1/2"	1.35
E11732	16-16	CN 164	3 1/2 x 1 1/2 x 2 3/8"	1.06	RN—SEPARATE NEGATIVES				
E11733	8-8-8	CN 165	3 1/2 x 1 1/2 x 3"	1.15	525 V. Peak, 450 V. D.C. Working				
WE—WET ELECTROLYTICS					E11880	4-8	RM 261	3 x 1 1/2 x 1 1/2"	\$0.85
Low power factor and efficient self-heating characteristics make these units ideal for A.F. heavy-duty filter requirements. Rated conservatively at 450 Volts D.C. working voltage, 475 Volts D.C. peak. Built for efficient, long-life service. Supplied with nut for mounting upright.					E11881	8-8	RM 262	3 x 1 1/2 x 1 1/2"	.94
No.	Mfd.	Type	Size	NET	E11882	8-8-8	RM 265	4 x 1 1/2 x 1 1/2"	1.35
E11787	4	WE 447	1 1/2 x 3 1/2"	\$0.47	300 V. Peak, 250 V. D.C. Working				
E11788	8	WE 247	1 1/2 x 3 1/2"	.56	E11884	8-8	RM 252	3 x 1 1/2 x 1 1/2"	.85
E11789	8	WE 874A	1 1/2 x 3 1/2"	.56	E11886	8-8-16	RM 257	3 1/2 x 1 1/2 x 1 1/2"	1.38
E11789	12	WE 1247	1 1/2 x 3 1/2"	.67	MN—REPLACEMENT MULTIPLE SECTIONS				
E11790	16	WE 1647	1 1/2 x 3 1/2"	.79	Dry electrolytics in round metal cans. Designed for replacement of similarly sized units. Their filtering efficiency permits 5 types to replace all multiple units. Good quality replacement electrolytics.				
E11791	18	WE 1847	1 1/2 x 3 1/2"	.88	525 V. Peak, 450 V. D.C. Working				
E11792	25	WE 2545	1 1/2 x 3 1/2"	1.00	E11795	8-8	MN 272	2 1/2 x 3 1/2 x 1 1/2"	\$1.06
E11793	35	WE 3540	1 1/2 x 3 1/2"	1.03	E11796	5-15	MN 273	2 1/2 x 3 1/2 x 1 1/2"	1.35
E11794	40	WE 4045	1 1/2 x 3 1/2"	1.12	E11797	8-8-8	MN 275	3 x 3 1/2 x 1 1/2"	1.59
MOUNTING HARDWARE					E11798	8-8-8-8	MN 277	3 x 3 1/2 x 1 1/2"	2.12
E13444. A-016. Terminal Connector to replace cable or harness wiring. NET EACH 3c					E11799	9-9-18-18	MN 278	3 x 3 1/2 x 3.09	
E13445. U-014. Universal Mounting Bracket to mount threaded-neck round can units on chassis originally equipped with ring clamp or spade bolt mfgs. NET EACH 6c									

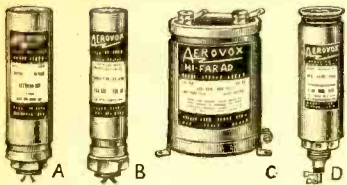


Terminal Connector to replace cable or harness wiring. NET EACH 3c. Universal Mounting Bracket to mount threaded-neck round can units on chassis originally equipped with ring clamp or spade bolt mfgs. NET EACH 6c.

★ AEROVOX CONDENSERS ★

AEROVOX ELECTROLYTIC CONDENSERS

ALUMINUM CAN TYPES



TYPE GL INVERTED-FIG. A

525 Volts D.C. Peak—450 Volts D.C. Working

Inverted mounting, aluminum can condensers suitable for use in any filter circuit. Threaded stem, 5/16" diam., fitted with locking nut. All units equipped with 8" flexible insulated color-coded leads. Multiple section units have two leads brought out from each section. Metal can is insulated from condenser sections.

TYPE GL 450-SINGLE SECTION

No.	Mfd.	Size	NET
E6415	4	1 1/2 x 3 1/2	50c
E6416	8	1 3/4 x 3 1/2	61c
E6417	12	1 3/4 x 3 1/2	82c
E6418	16	1 3/4 x 3 1/2	91c

TYPE 2GL450-DOUBLE SECTION

No.	Mfd.	Size	NET
E6419	4-4	1 3/4 x 4 1/2	\$0.76
E6420	4-8	1 3/4 x 4 1/2	.85
E6421	8-8	1 3/4 x 4 1/2	.94
E6422	8-16	1 3/4 x 4 1/2	1.18

TYPE 3GL450-TRIPLE SECTION

No.	Mfd.	Size	NET
E6423	4-4-4	1 3/4 x 3 1/2	\$1.12
E6424	8-8-8	1 3/4 x 3 1/2	1.41

TYPE GLS MIDGET-FIG. B

525 Volts D.C. Peak—450 Volts D.C. Working

Ultra-compact metal can condensers for use where space is at a premium. Have long flexible leads. Threaded hard rubber stem for inverted mounting. Sections insulated from can.

TYPE E UNIVERSAL MTC.-FIG. C

525 Volts D.C. Peak—450 Volts D.C. Working

Thoroughly dependable units which will service a large number of popular radio sets. Furnished with clamping rings. Hermetically sealed.

WET ELECTROLYTICS

TYPE PG-FIG. D. 500 V. Peak, 450 V. Wkg.

Use these condensers for heavy-duty work where dry units give trouble. Positively non-leaking. With stud and nut inverted mounting.

No.	Mfd.	Size	NET
E6743	4	1 3/4 x 4 1/2	\$0.47
E6744	6	1 3/4 x 4 1/2	.50
E6745	8	1 3/4 x 4 1/2	.59
E6746	10	1 3/4 x 4 1/2	.69
E6747	12	1 3/4 x 4 1/2	.78
E6748	16	1 3/4 x 4 1/2	.89
E6749	18	1 3/4 x 4 1/2	.98
E6750	20	1 3/4 x 4 1/2	1.08
E6751	30	1 3/4 x 4 1/2	1.06



TUBULAR ELECTROLYTICS

TYPE PR. Light, compact units for replacement or construction work. Ideal for by-pass and filter requirements. With 2 1/2" securely riveted tinmed wire leads.

No.	Mfd.	Wkg. V.	Size	NET
E6911	2	450	3/4 x 2 1/2	38c
E6913	4	200	3/4 x 2 1/2	38c
E6915	10	200	3/4 x 2 1/2	53c
E6912	5	100	3/4 x 2 1/2	32c
E6914	10	100	3/4 x 2 1/2	41c
E6920	20	100	3/4 x 2 1/2	53c
E6916	25	100	3/4 x 2 1/2	59c
E6917	5	50	3/4 x 2 1/2	29c
E6918	10	50	3/4 x 2 1/2	38c
E6919	20	50	3/4 x 2 1/2	44c
E6921	50	50	1 1/4 x 2 1/2	71c
E6922	5-5	50	3/4 x 2 1/2	44c
E6923	5-5	25	3/4 x 2 1/2	29c
E6924	5-5	25	3/4 x 2 1/2	38c
E6925	20	25	3/4 x 2 1/2	35c
E6926	25	25	3/4 x 2 1/2	38c
E6927	50	25	1 1/4 x 2 1/2	56c
E6928	5-5	25	3/4 x 2 1/2	44c
E6929	10-10	25	3/4 x 2 1/2	44c

NEW MINIATURE "DANDEES"



New tubular midgets in aluminum cans. For use in crowded spaces in midget, A.C.-D.C., and auto radios and for general servicing. Fully insulated and sealed. With handy 3/16" tinned wire leads for connections and self-mounting.

No.	Mfd.	Wkg. V.	Size	NET
E13370	4	450	1 1/4 x 1 1/4	\$0.22
E13371	4	450	1 1/4 x 1 1/4	43c
E13372	12	450	1 1/4 x 1 1/4	53c
E13373	16	450	1 1/4 x 1 1/4	53c
E13374	4	350	1 1/4 x 2 1/4	29c
E13375	8	350	1 1/4 x 2 1/4	32c
E13376	12	350	1 1/4 x 2 1/4	41c
E13377	16	350	1 1/4 x 2 1/4	47c
E13378	4	250	1 1/4 x 1 1/4	26c
E13379	8	250	1 1/4 x 1 1/4	29c
E13380	12	250	1 1/4 x 1 1/4	38c
E13381	16	250	1 1/4 x 1 1/4	44c
E13382	4	150	1 1/4 x 1 1/4	24c
E13383	8	150	1 1/4 x 1 1/4	26c
E13384	12	150	1 1/4 x 1 1/4	29c
E13385	16	150	1 1/4 x 1 1/4	32c
E13386	24	150	1 1/4 x 1 1/4	32c
E13387	30	150	1 1/4 x 2 1/4	38c
E13388	40	150	1 1/4 x 2 1/4	41c
E13389	10	50	1 1/4 x 1 1/4	26c
E13390	25	50	1 1/4 x 1 1/4	32c
E13391	10-10	50	1 1/4 x 1 1/4	38c
E13392	10	25	1 1/4 x 1 1/4	24c
E13393	25	25	1 1/4 x 1 1/4	29c

MIDGET CARDBOARD DRY ELECTROLYTICS

Space-saver midget units. Conservatively rated to stand up under hardest service. Encased in heavy cardboard; thoroughly impregnated and sealed. With adjustable mounting brackets and flexible leads. Each section of multiple units has separate leads.



TYPE PBS-450

525 V. Peak, 450 V. DC Wkg.

No.	Mfd.	Size	NET
E6750	2	1 3/4 x 2 1/4	\$0.38
E6751	4	1 3/4 x 2 1/4	.46
E6752	8	1 3/4 x 2 1/4	.54
E6754	12	1 3/4 x 2 1/4	.76
E6755	16	1 3/4 x 2 1/4	.85
E6756	4-4	1 1/2 x 1 1/2	.70
E6757	8-8	1 1/2 x 1 1/2	.88
E6758	8-8-8	1 1/2 x 1 1/2	1.29

TYPE PBS-250

300 V. Peak, 250 V. DC Wkg.

No.	Mfd.	Size	NET
E6760	2	1 1/2 x 3/4 x 2 1/4	\$0.32
E6761	4	1 1/2 x 3/4 x 2 1/4	.38
E6762	8	1 1/2 x 3/4 x 2 1/4	.47
E6764	12	1 1/2 x 3/4 x 2 1/4	.56
E6765	16	1 1/2 x 3/4 x 2 1/4	.66
E6766	4-4	1 1/2 x 3/4 x 2 1/4	.53
E6767	8-8	1 1/2 x 3/4 x 2 1/4	.73
E6768	8-16	1 1/2 x 3/4 x 2 1/4	.85
E6769	8-8-8	1 1/2 x 3/4 x 2 1/4	1.12

TYPE "P" ELECTROLYTICS

525 V. Peak, 450 V. DC Wkg.

Wax-filled units. With mounting flanges and 8" flexible wire leads.

No.	Mfd.	Size	NET
E6932	4	1 3/4 x 1 1/4 x 4 1/2	\$0.44
E6933	8	1 3/4 x 1 1/4 x 4 1/2	.56
E6934	12	1 3/4 x 1 1/4 x 4 1/2	.76
E6935	16	1 3/4 x 1 1/4 x 4 1/2	.85
E6936	4-4	1 1/2 x 1 1/2 x 4 1/2	.70
E6937	8-8	1 1/2 x 1 1/2 x 4 1/2	.88

LIVE-RUBBER MOLDED PAPER CONDENSERS

TYPE 88. A new AeroVox development. Paper sections molded in live rubber to increase leakage resistance and breakdown voltage. Moisture-proof.



No.	Mfd.	Wkg. V.	NET
E3400	.05	200	12c
E3401	.1	200	12c
E3402	.15	200	15c
E3403	.25	200	15c
E3404	.5	400	18c
E3405	.8	400	18c
E3406	1	400	18c
E3407	.05	600	18c
E3408	.01	1000	21c



CARTRIDGE CONDENSERS

Conservatively rated compact non-inductive paper condensers. Sealed in wax-impregnated paper tubes; with wire leads. Dual section units have common lug for convenient mounting.

400 Volt		600 Volt		
No.	NET	Cap. Mfd.	No.	NET
E6800	9c	.001	E6818	9c
E6801		.002	E6819	
E6802		.003	E6820	
E6803		.004	E6821	
E6804		.005	E6822	
E6805		.006	E6823	
E6806		.01	E6824	
E6807		.015	E6825	
E6808		.02	E6826	
E6809		.05	E6827	
E6810	.05	E6828	12c	
E6811	.1	E6829	15c	
E6812	.15	E6830	18c	
E6813	.25	E6831	21c	
E6814	.5	E6832	29c	
E6815	1.0	E6833	30c	
	25-.25		50c	

200 Volt		1000 Volt		
No.	NET	Cap. Mfd.	No.	NET
E6685	8c	.001	E6793	12c
E6686		.002	E6794	
E6687		.003	E6795	
E6688		.005	E6796	
E6689		.006	E6797	
E6690		.01	E6798	
E6691		.015	E6799	
E6692		.02	E6800	
E6693		.03	E6801	
E6694		.05	E6802	
E6695	1	E6803	5c	
E6696	14c	E6804	8c	
E6697	26c	E6805	21c	
		E6806	24c	
		E6807	24c	
		E6808	24c	
		E6809	24c	

BAKELITE MICA CONDENSERS

Compact "postage-stamp" type condensers. Ideal for both high-frequency and audio by-pass circuits. Sealed in bakelite cases against all climate and temperature conditions. Selected ruby mica dielectric.



Cap. Mfd.	Type No.	No.	Type No.	NET	
.0004	E6850	E6864	E6875	9c	
.0005	E6851	E6865	E6876		
.00075	E6852	E6866	E6877		
.001	E6853	E6867	E6878		
.0015	E6854	E6868	E6879		
.002	E6855	E6869	E6880		
.00025	E6856	E6870	E6881		12c
.00035	E6857	E6871	E6882		
.0005	E6858	E6872	E6883		
.001	E6859	E6884		
.0015	E6860	E6885	18c	
.002	E6861	E6886	18c	
.0025	E6862	E6887	21c	
.003	E6863	E6888	21c	



TYPE 1450 CONDENSERS

Accurate mica-tinfoil condensers in bakelite cases. Handy soldering lugs. Working voltage up to 500 volts D.C. Tested at 1000 volts. Thoroughly sealed against changes in humidity. Capacity of units is clearly marked on case.

No.	Mfd.	NET	No.	Mfd.	NET
E6893	.001	E6895	.0025	E6897	15c
E6898	.0015	E6896	.0037		
E6894	.002	E6897	.005		
		E6902	.005		
		E6903	.01		
		E6904	.02		



CORNELL - DUBILIER CONDENSERS



"DWARF" TUBULAR PAPER CONDENSERS TYPE DT

Reliable non-inductive small all-purpose condensers. Wax impregnated and triple-sealed against moisture. Low power factor and high DC resistance make these units ideal for all RF, IF and audio by-pass requirements. With securely fastened 2 1/2" tinmed leads.

400 Volts DC Working Volts

No.	Mfd.	NET	No.	Mfd.	NET
E3300	01		E3338	.06	12c
E3335	.05		E3303	.2	12c
E3301	.02	9c	E3339	.2	15c
E3336	.025		E3304	.25	15c
E3322	.03		E3305	.5	21c
E3337	.04		E3306	1.0	29c
E3302	.05				

600 Volts DC Working Volts

No.	Mfd.	NET	No.	Mfd.	NET
E3309	.0001		E3316	.02	9c
E3310	.00025		E3353	.03	
E3311	.0005		E3340	.04	12c
E3312	.001	9c	E3317	.05	15c
E3350	.002		E3341	.06	15c
E3313	.003		E3318	.1	15c
E3351	.004		E3319	.25	21c
E3314	.005		E3320	.5	29c
E3352	.006		E3321	1.1	38c
E3315	.01				

1000 Volts DC Working Volts

No.	Mfd.	NET	No.	Mfd.	NET
E3613	.001	12c	E3619	.008	12c
E3614	.002		E3620	.01	18c
E3615	.003		E3621	.02	18c
E3616	.004		E3622	.04	21c
E3617	.005		E3623	.05	21c
E3618	.006		E3624	.1	24c

1600 Volts DC Working Volts*

No.	Mfd.	NET	No.	Mfd.	NET
E3342	.0025	21c	E3346	.02	26c
E3343	.005	21c	E3347	.03	29c
E3344	.0075	21c	E3348	.05	32c
E3345	.01	24c	E3349	.1	44c

*Ideal for Auto Vibrator Purposes.



MOLDED BAKELITE MICA CONDENSERS

Conservative working voltage rating 500 V. D.C. is based on test voltage of 1000 V. D.C. Type W are 5/8x3/16", to .0005 mfd.; higher capacities are 3/4x3/16". Type L, all capacities, are 1x3/16".

Cap.	No.	No.	NET EACH	
Mfd.	Type W	Type L	Either Type	
.00003	E3641	E3652	12c	
.00010	E3642	E3653	9c	
.00015	E3643	E3654		
.00025	E3644	E3655		
.0005	E3645	E3656	12c	
.001	E3646	E3657		15c
.002	E3647	E3658		18c
.003	E3648	E3659		24c
.004	E3649	E3660		26c
.005	E3650	E3661		35c
.006	E3651	E3662		38c

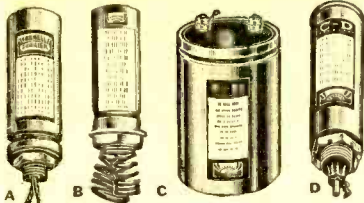


VIBRATOR REPLACEMENT CONDENSERS

Oil-filled, completely sealed units for auto radio power supplies. All are 2000 V. D.C. except Type C-.01 mfd. which is 1500 V. and Type C-.5 mfd. which is 200 V.

No.	Type	Mfd.	Size	NET
E3722	A	.01	5/8 x 3/16 x 3/16	26c
E3723	A	.015	5/8 x 3/16 x 3/16	
E3724	A	.02	5/8 x 3/16 x 3/16	
E3725	A	.05	1 1/2 x 3/16 x 3/16	18c
E3726	A	.01	1 1/2 x 3/16 dia.	
E3727	B	.02	1 3/4 x 1/8 x 3/16 dia.	
E3728	B	.05	2 1/4 x 1/8 x 3/16 dia.	24c
E3729	B	.08	2 1/4 x 1/8 x 3/16 dia.	29c
E3730	C	.01	3 1/2 x 1/2 x 1/4 x 1/8	35c
E3731	C	.5	3 1/2 x 1/2 x 1/4 x 1/8	38c

HIGH-GRADE ELECTROLYTIC CONDENSERS



ALUMINUM CAN TYPES TYPE EB—FIG. A.

525 Volts D.C. Peak—450 Volts D.C. Working

High grade inverted type dry electrolytic condensers. Internal sections are completely insulated from metal container. Single mounting type with insulated wire leads. Exceptional stability, minimum leakage current.

No.	Mfd.	Size	NET
E3890	2	2 1/2 x 1 3/4	\$0.44
E3891	4	4 x 1 3/4	.50
E3892	8	4 x 1 3/4	.63
E3893	10	4 x 1 3/4	.82
E3894	12	4 x 1 3/4	.91
E3897	16	4 x 1 3/4	.94
E3895	4-4	4 x 1 3/4	.76
E3896	8-8	4 x 1 3/4	.94

TYPE KR "DWARFS"—FIG. B.

Compact etched-foil dry electrolytic condensers. May be easily installed on the smallest chassis, giving the serviceman a safe and dependable job. Multiple units have two separate leads.

No.	Mfd.	Size	NET
E3670	4	1 x 2 3/4	\$0.50
E3671	8	1 x 2 3/4	.62
E3672	12	1 x 3	.82
E3673	4-8	1 1/2 x 3 1/4	.85
E3674	8-8	1 1/2 x 3 1/4	.94
E3675	8-16	1 1/2 x 3 1/4	1.35
E3676	8-8-8	1 1/2 x 3 1/4	1.35

TYPE EA—FIG. C.

Single and multiple section electrolytics in aluminum containers. Mount in any position by means of clamping rings supplied. Can is common negative. Make like replacements.

No.	Mfd.	Size	NET
E3633	8	1 1/2 x 3 1/4	\$0.62
E3636	8-8	1 1/2 x 3 1/4	1.06
E3634	8-16	2 1/2 x 3 1/4	1.38
E3637	8-8-8	3 x 3 1/4	1.39
E3639	8-9-18	3 x 3 1/4	2.20
E3640	8-8-18-18	3 1/2 x 3 1/4	2.85

WET ELECTROLYTICS

TYPE EY—FIG. D. 500 V. D.C. PEAK Ideal for all heavy-duty work where dry units give trouble. Low power factor and leakage current. Self-healing. Stud and nut mounting.

No.	Mfd.	Size	NET
E3715	4	3 1/2 x 1 3/4	53c
E3716	6	4 1/2 x 1 3/4	56c
E3717	8	4 1/2 x 1 3/4	59c
E3718	10	4 1/2 x 1 3/4	65c
E3719	12	4 1/2 x 1 3/4	82c
E3720	5	4 1/2 x 1 3/4	85c
E3721	18	4 1/2 x 1 3/4	85c

TUBULAR ELECTROLYTICS

TYPE ED. Compact, low leakage, dry electrolytic condensers. Well-made; double-sealed in durable cardboard containers.

No.	Mfd.	Peak V.	Wkg. V.	Size	NET
E3700	5	35	25	2 3/8 x 5/8	29c
E3701	10	35	25	2 3/8 x 5/8	35c
E3702	20	35	25	2 3/8 x 5/8	38c
E3703	25	35	25	2 3/8 x 5/8	56c
E3704	50	35	25	2 3/8 x 5/8	44c
E3705	5-5	55	25	2 3/8 x 5/8	29c
E3706	10-10	55	25	2 3/8 x 5/8	38c
E3707	5	75	50	2 3/8 x 5/8	47c
E3708	10	75	50	2 3/8 x 5/8	71c
E3709	25	75	50	2 3/8 x 5/8	32c
E3710	50	75	50	2 3/8 x 5/8	32c
E3711	5	150	100	2 3/8 x 5/8	41c
E3712	10	150	100	2 3/8 x 5/8	56c
E3713	25	150	100	2 3/8 x 5/8	32c
E3885	2	250	200	2 3/8 x 5/8	38c
E3886	4	250	200	2 3/8 x 5/8	47c
E3887	8	250	200	2 3/8 x 5/8	56c
E3888	10	300	250	2 3/8 x 5/8	35c
E3888	2	350	300	2 3/8 x 5/8	38c
E3888	1	525	450	2 3/8 x 5/8	32c
E3889	2	525	450	2 3/8 x 5/8	38c



NEW TYPE BR "BEAVERS" MIDGET ELECTROLYTICS

These compact, high quality dry condensers are ideal for replacement and construction work where space is at a premium. Patented bi-formation process gives higher voltage breakdown. Blue-colored varnished protective sleeve, spun over at both ends, prevents possible contact with aluminum container. Finest quality units.

No.	Mfd.	Wkg. V.	Size	NET
E4076	4	450	3/4 x 1 3/4	35c
E4077	8	450	3/4 x 2 1/4	32c
E4078	4	350	3/4 x 1 3/4	29c
E4079	8	350	3/4 x 1 3/4	32c
E4080	12	350	3/4 x 2 1/4	41c
E4081	16	350	3/4 x 2 1/4	47c
E4082	4	250	3/4 x 1 3/4	26c
E4083	8	250	3/4 x 1 3/4	29c
E4084	16	250	3/4 x 2 1/4	44c
E4085	16	250	3/4 x 2 1/4	47c
E4086	20	250	3/4 x 2 1/4	56c
E4087	40	250	3/4 x 2 1/4	56c
E4088	4	150	3/4 x 1 3/4	24c
E4089	8	150	3/4 x 1 3/4	26c
E4090	12	150	3/4 x 1 3/4	29c
E4091	16	150	3/4 x 1 3/4	32c
E4092	20	150	3/4 x 1 3/4	35c
E4093	40	150	3/4 x 1 3/4	38c
E4094	10	25	1/2 x 1 1/4	24c
E4095	25	25	1/2 x 1 1/4	29c

CARDBOARD CASED DWARF MIDGETS TYPE JR

Dependable, inexpensive, compact dry electrolytics. For use in limited space; make ideal replacements in the smallest midget sets. Suitable for every type of radio service job where space is limited. In silver-coated containers; sealed against humidity. With adjustable mounting feet.

No.	Mfd.	Size	NET
E3325	2	2 1/2 x 3/8 x 3/16	\$0.33
E3326	4	2 1/2 x 1/2 x 3/16	.44
E3327	8	2 1/2 x 1/2 x 3/16	.56
E3328	12	2 1/2 x 1/2 x 3/16	.79
E3331	4-8	3 x 1 1/8 x 1/16	.79
E3332	8-8	3 x 1 1/8 x 1/16	.88
E3334	8-16	2 1/2 x 2 x 1/16	1.12

250 V. DC Peak, 200 V. DC Wkg.

No.	Mfd.	Size	NET
E3689	8	3 1/2 x 1 x 9/16	\$0.47
E3691	12	2 1/2 x 1 1/2 x 1 1/8	.56
E3692	16	2 1/2 x 1 1/2 x 1 1/8	.62
E3693	4-4	2 1/2 x 1 1/2 x 1 1/8	.53
E3695	8-8	2 1/2 x 1 1/2 x 1 1/8	.76
E3696	8-16	2 1/2 x 1 1/2 x 1 1/8	.85
E3333	12-16	2 1/2 x 1 1/2 x 1 1/8	.94

TYPE EH

Build up your service profits with these high quality electrolytic condensers. In impregnated cardboard cases with punched flanges to facilitate mounting. Multiple units have common negative leads. Working voltage, 450 V. D.C. Surge voltage, 525 V. D.C. All units have long flexible insulated wire leads. Carefully built for long service.



525 Volts DC Peak

No.	Mfd.	Size	NET
E3601	4	4 1/2 x 1 1/2 x 3/8	\$0.44
E3603	8	4 1/2 x 1 1/2 x 3/8	.56
E3604	16	4 1/2 x 1 1/2 x 3/8	.85
E3605	4-4	4 1/2 x 1 1/2 x 3/8	.71
E3609	8-8	4 1/2 x 1 1/2 x 3/8	.79
E3610	4-4-4	4 1/2 x 1 1/2 x 3/8	.88
E3611	8-8-8	4 1/2 x 2 x 3/8	1.06
			1.29

TYPE HM — 600 VOLTS PEAK

Use these condensers where a high safety factor is required or where surge voltages are high. 475 volts working. Triple-sealed.

No.	Mfd.	Size	NET
E4096	1	2 1/2 x 1 1/2 x 1 1/2	\$0.50
E4097	2	2 1/2 x 1 1/2 x 1 1/2	.68
E4098	4	2 1/2 x 1 1/2 x 1 1/2	.85
E4099	8	2 1/2 x 1 1/2 x 1 1/2	.79

SOLAR CONDENSERS

QUALITY ELECTROLYTIC CONDENSERS



CARDBOARD CASED

"LITTLE GIANT" DRY ELECTROLYTICS

The latest perfected development in dry electrolytics. Electrical characteristics are unchanged but size is greatly reduced. Especially desirable where space economy is an important factor. In silver-finish impregnated containers. Have 8" leads. Dual units have separate sections.

TYPE LG 5

525 V. Peak, 450 V. D. C. Wkg.

No.	Mfd.	Size	NET
100	2	2 1/4 x 1 1/4 x 1/2	\$0.38
101	4	2 3/4 x 1 3/4 x 1/2	.44
102	8	2 3/4 x 1 3/4 x 1/2	.56
103	10	3 1/4 x 1 3/4 x 1/2	.67
104	12	3 1/4 x 1 3/4 x 1/2	.70
105	16	2 3/4 x 1 3/4 x 1/2	.80
106	4+4	2 3/4 x 1 3/4 x 1/2	.79
107	4+8	2 3/4 x 1 3/4 x 1/2	.71
108	8+8	2 3/4 x 1 3/4 x 1/2	.83
109	8+8+8	2 3/4 x 1 3/4 x 1/2	1.29

LG 2-250 V. Peak, 200 V. D. C. Wkg.

No.	Mfd.	Size	NET
110	4	2 3/4 x 1 3/4 x 1/2	\$0.38
111	8	2 3/4 x 1 3/4 x 1/2	.44
112	10	3 1/4 x 1 3/4 x 1/2	.56
114	16	2 3/4 x 1 3/4 x 1/2	.67
115	20	2 3/4 x 1 3/4 x 1/2	.70
116	8+8	2 3/4 x 1 3/4 x 1/2	.80
117	4+16	2 3/4 x 1 3/4 x 1/2	.73
118	12+16	2 3/4 x 1 3/4 x 1/2	.85
119	16+16	2 3/4 x 1 3/4 x 1/2	.97



DAA-O CARDBOARD DRY ELECTROLYTICS

High quality condensers specially treated to repel moisture. In sturdy cardboard containers, wax filled. Unaffected by the most adverse conditions of temperature and humidity. With convenient mounting flanges and 6" insulated leads. Excellent for replacement purposes. Working voltage 450; will withstand surges of 525 volts.

No.	Mfd.	Size	NET
1	4	4 1/2 x 1 3/4 x 3/4	44c
1	6	4 1/2 x 1 3/4 x 3/4	53c
1	8	4 1/2 x 1 3/4 x 3/4	56c
1	10	4 1/2 x 1 3/4 x 3/4	67c
1	12	4 1/2 x 1 3/4 x 3/4	70c



TUBULAR ELECTROLYTICS

TYPE DT. Encased in impregnated tubes to resist moisture. Wax filling gives additional protection. Have 2" bare wire leads.

No.	Mfd.	Peak V.	Size	NET
E131331	50	5	500	2 x 1/4 x 1/2 } 32c
E131332	1	5	500	2 x 1/4 x 1/2 } 32c
E131333	2	5	500	2 1/4 x 1/4 x 1/2 } 38c
E131334	4+4	175	2 1/4 x 1	2 1/4 x 1/2 x 1/2 } 50c
E131335	60	5	60	2 x 1/4 x 1/2 } 29c
E131336	10	60	2 x 1/4 x 1/2	38c
E131337	25	60	2 1/4 x 1/2	47c
E131338	35	35	2 x 1/4 x 1/2	29c
E131339	5+5	35	2 x 1/4 x 1/2	44c
E131340	10+10	35	2 1/4 x 1	44c



BAKELITE MOLDED MICA CONDENSERS

Highest quality materials. Sealed against all climatic conditions. Preferred by discriminating Servicemen and Amateurs.

Mfd.	1/4" Sq. No.	3/8" Sq. No.	1/2" Sq. No.	1 1/4" Sq. No.	NET EACH
000025	E13221	E13222	E13223	E13224	12c
00003	E13208	E13209	E13210	E13211	9c
00005	E13212	E13213	E13214	E13215	12c
0001	E13217	E13218	E13219	E13220	15c
002	E13218	E13219	E13220	E13221	18c
003	E13219	E13220	E13221	E13222	24c
004	E13220	E13221	E13222	E13223	26c



NEW MINICAP TUBULARS

New etched-foil ultra-compact dry electrolytics, hermetically sealed in metal cans; insulated on sides and ends with cardboard tubes. One lead is riveted directly to the metal container, and positive is brought through rubber and bakelite washers. Dual units have common negative mounting strap. Ideal for replacements.

No.	Mfd.	Wkg. V.	Size	NET
E13051	8	525	1 1/4 x 2 1/4 x 1/2	53c
E13052	4	450	1 1/4 x 1 3/4 x 1/2	32c
E13053	8	450	1 1/4 x 1 3/4 x 1/2	44c
E13054	12	450	1 1/4 x 2 x 1/2	53c
E13055	16	450	1 1/4 x 2 x 1/2	59c
E13056	20	450	1 1/4 x 2 x 1/2	59c
E13057	4	350	1 1/4 x 2 x 1/2	29c
E13058	8	350	1 1/4 x 2 x 1/2	32c
E13059	12	350	1 1/4 x 2 x 1/2	41c
E13060	16	350	1 1/4 x 2 x 1/2	47c
E13061	24	350	1 1/4 x 2 x 1/2	53c
E13062	8	250	1 1/4 x 1 1/4 x 1/2	29c
E13063	16	250	1 1/4 x 1 1/4 x 1/2	44c
E13064	4	150	1 1/4 x 1 1/4 x 1/2	24c
E13065	8	150	1 1/4 x 1 1/4 x 1/2	26c
E13066	12	150	1 1/4 x 1 1/4 x 1/2	29c
E13067	16	150	1 1/4 x 1 1/4 x 1/2	32c
E13068	24	150	1 1/4 x 1 1/4 x 1/2	38c
E13069	30	150	1 1/4 x 1 1/4 x 1/2	38c
E13070	40	150	1 1/4 x 1 1/4 x 1/2	41c
E13071	8	100	1 1/4 x 1 1/4 x 1/2	24c
E13072	16	100	1 1/4 x 1 1/4 x 1/2	29c
E13073	30	100	1 1/4 x 1 1/4 x 1/2	35c
E13074	8-8	450	1 1/2 x 2 1/4	59c
E13075	8-8	350	1 1/2 x 1 3/4	36c
E13076	8-8	150	1 1/2 x 1 3/4	37c
E13077	8-16	150	1 1/2 x 2 1/4	53c
E13078	16-16	150	1 1/2 x 2 1/4	59c
E13079	10-10	25	1 1/2 x 1 3/4	35c

IN METAL CANS

STANDARD SIZE DRY INVERTED CAN

Round inverted type electrolytics with six inch leads. Cans are adequately insulated from the capacitor sections, and the leads are brought through extruded metal screw base. A lock-nut is supplied with each unit. Have exceptional stability and are ideal for replacements. Size, 4 1/2" high, diam. 1 1/2".

Type D-450 V. D. C. Wkg.

No.	Mfd.	Peak V.	NET
E13142	4	525	50c
E13143	8	525	61c
E13144	10	525	73c
E13145	12	525	82c
E13146	4+4	525	75c
E13147	4+8	525	85c
E13148	8+8	525	94c

TYPE DM "MINICAP" DRY ELECTROLYTICS

Small size dry electrolytics embodying all the features of larger units. Have remarkable ability to withstand temperature and retain capacity. They are especially desirable for use where space economy is important. 3/8" screw base.

WITH LEADS

525 V. Peak, 450 V. D. C. Wkg.

No.	Mfd.	Size	NET
E13170	4	1 1/2 x 2 1/4 x 1/2	50c
E13171	8	1 1/2 x 2 1/4 x 1/2	61c
E13172	12	1 1/2 x 2 1/4 x 1/2	73c
E13173	16	1 1/2 x 2 1/4 x 1/2	82c
E13174	4+8	1 1/2 x 2 1/4 x 1/2	75c
E13174	8+8	1 1/2 x 2 1/4 x 1/2	85c

WET ELECTROLYTICS

TYPE Z. Compact inverted can type. Size, 1 1/2" diameter by 4 3/8" high.

No.	Mfd.	Peak V.	NET
E13200	8	600	88c
E13201	8	500	47c
E13202	8	500	56c
E13203	10	500	60c
E13204	12	500	68c
E13205	20	500	88c
E13206	30	500	73c
E13207	16	350	1.18



"SEALDITE" TUBULAR PAPER CONDENSERS

Finest quality paper condensers in specially treated cardboard tubes. Double-vacuum-impregnated; non-inductively wound; leads are hot-softened to the section.

600 Volts D.C. Working

No.	Mfd.	Size	NET
E132383	.0001	3/8 x 1	
E132384	.00025	3/8 x 1	
E132385	.0005	3/8 x 1	
E132386	.001	3/8 x 1	
E132387	.002	3/8 x 1	9c
E132388	.005	3/8 x 1	
E132389	.006	3/8 x 1	
E132390	.01	3/8 x 1	
E132391	.02	3/8 x 1 1/2	
E132392	.05	3/8 x 1 1/2	12c
E132393	.1	3/8 x 2	15c
E132394	.2	3/8 x 2	21c
E132395	.25	1/2 x 2	21c
E132396	.5	1/2 x 2	29c

400V. D.C. Wkg. NET

No.	Mfd.	NET
E13275	.01	9c
E13276	.02	9c
E13277	.05	12c
E13278	.1	12c
E13279	.2	15c
E13280	.25	15c
E13281	.5	21c
E13282	1.0	29c

300V. D.C. Wkg. NET

No.	Mfd.	NET
E13360	.1	12c
E13361	.2	15c
E13362	.25	15c
E13363	.5	21c
E13364	1.0	29c
E13365	.1 + .1	24c
E13366	.25 + .25	29c



DOMINO MOLDED CONDENSERS

Paper condensers molded in bakelite. They are resistant to heat and moisture. Flat, compact and small; long wire leads; plainly color-coded for quick identification. Type MP.

No.	Mfd.	Wkg. V.	Size	NET
E13235	.001	1000	1 1/2 x 1 1/4 x 1/2	
E13236	.002	1000	1 1/2 x 1 1/4 x 1/2	15c
E13237	.003	1000	1 1/2 x 1 1/4 x 1/2	
E13238	.004	1000	1 1/2 x 1 1/4 x 1/2	
E13239	.005	1000	1 1/2 x 1 1/4 x 1/2	18c
E13240	.006	1000	1 1/2 x 1 1/4 x 1/2	
E13241	.008	1000	1 1/2 x 1 1/4 x 1/2	
E13242	.01	1000	1 1/2 x 1 1/4 x 1/2	21c
E13243	.02	1000	2 x 1 1/4 x 1/2	24c
E13244	.005	600	1 1/2 x 1 1/4 x 1/2	12c
E13245	.01	600	1 1/2 x 1 1/4 x 1/2	15c
E13246	.02	600	1 1/2 x 1 1/4 x 1/2	
E13247	.05	600	1 1/2 x 1 1/4 x 1/2	18c
E13248	.1	600	1 1/2 x 1 1/4 x 1/2	
E13249	.2	400	1 1/2 x 1 1/4 x 1/2	12c
E13250	.25	400	1 1/2 x 1 1/4 x 1/2	15c
E13251	.5	400	1 1/2 x 1 1/4 x 1/2	18c
E13252	.5	400	1 1/2 x 1 1/4 x 1/2	
E13253	.01	400	1 1/2 x 1 1/4 x 1/2	12c
E13254	.02	400	1 1/2 x 1 1/4 x 1/2	15c
E13255	.05	400	1 1/2 x 1 1/4 x 1/2	18c
E13256	.1	400	1 1/2 x 1 1/4 x 1/2	21c
E13257	.25	400	2 x 1 1/4 x 1/2	24c
E13258	.5	200	1 1/2 x 1 1/4 x 1/2	18c
E13259	.25	200	1 1/2 x 1 1/4 x 1/2	18c
E13261	.5	200	2 x 1 1/4 x 1/2	26c

"KMX" DOMINO ASSORTMENT

A special assortment of popular 600 Wkg. Volt Domino Condensers in the following values: —.1 Mfd.; —.05 Mfd.; —.02 Mfd.; and —.01 Mfd.

E13299. NET \$1.62

"TOM THUMB"

TYPE TT CONDENSERS

Very compact unsealed paper units sealed in varnished wrappers. Occupy very little space. They are especially recommended for replacements in paper filter blocks, etc.

No.	Mfd.	Wkg. V.	Test	NET
E13080	.25	2 x 1/4 x 1/2	50c	50c
E13081	.5	2 x 1/4 x 1/2	50c	.44
E13082	1.0	2 x 1/4 x 1/2	50c	.29
E13083	2.0	2 x 1/4 x 1/2	50c	.67
E13084	4.0	2 x 1/4 x 1/2	50c	1.18

600 V. Working-1200 V. Test

No.	Mfd.	Size	NET
E13085	.1	2 x 1/4 x 1/2	\$0.24
E13086	.25	2 x 1/4 x 1/2	.29
E13087	.5	2 x 1/4 x 1/2	.35
E13088	1.0	2 x 1/4 x 1/2	.44
E13089	2.0	2 x 1/4 x 1/2	.79
E13090	4.0	2 x 1/4 x 1/2	1.59

1600 V. Working-2000 V. Test

No.	Mfd.	Size	NET
E13091	.25	3 1/2 x 1/2 x 3/8	\$0.35
E13092	.5	3 1/2 x 1/2 x 3/8	.44
E13093	.5	4 3/8 x 2 x 3/8	.59
E13094	1.0	4 3/8 x 2 1/4 x 3/8	.88
E13095	2.0	4 3/8 x 2 1/4 x 3/8	1.47

KNIGHT FILTER CHOKES

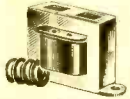


Open-type construction, with leads. For any standard AC receiver. Excellent for servicing and radio building requirements—wherever a high quality, dependable replacement is needed. Size: 1½" x 2" x 3½".

No.	Henries	M.A.	Ohms	NET
E11650	25	25	850	68c
E11651	25	60	325	65c
E11652	20	80	200	71c
E11653	15	100	160	89c
E11654	750	5	*3500	89c

*Plate coupling choke for det. tube. High impedance at audio frequency.

KNIGHT AC-DC CHOKES

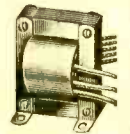


For any 4 or 5 tube midret. Semi shielded. All units rated at 15 Ht. at 40 M.A. Horizontal mounting, 6" insulated leads. Size: 1½" high, 2¼" long, 1½" deep. Mtg. centers, 2½".

No.	Ohms	No.	Ohms
E11635	200	E11639	400
E11636	250	E11640	450
E11637	300	E11641	500
E11638	350	E11642	550

NET EACH..... **37c**

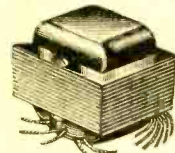
KNIGHT AUTO RADIO VIBRATOR TRANSFORMER



A newly developed compact transformer designed to meet the demand for a high-grade replacement transformer for auto radio vibrators. Designed to deliver 250 volts at 50 M.A. in conjunction with any standard vibrator. Upright type, 3½" high; mtg. centers, 2"x1½". An excellent low-cost replacement unit.

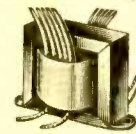
E11671. YOUR PRICE..... **\$1.25**

KNIGHT FIELD EXCITER POWER TRANSFORMER



This power transformer is designed to deliver 160 volts at 200 M.A. out of filter, with an 83 or 523 resistor tube. Will furnish full excitation for either one or two 1000 ohm speaker fields in parallel connection. Primary 115 volts 50/60 cycles. Sec. 200 volts at 225 M.A.—C.T. and 5 volts at 4 A.

2½" x 3½" x 3½" inches. E11673. YOUR PRICE..... **\$1.95**



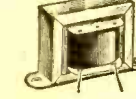
KNIGHT TUBE TESTER TRANSFORMER

An ideal transformer for use in "Build-Your-Own" Test Equipment. Also excellent for replacement purposes and for modernizing old equipment. Can also be used as test equipment in laboratories, etc. It is no longer necessary to purchase new test equipment when the transformers burn out. All you need to do is remove the old defective unit and replace with a new transformer. Furnishes these filament voltages for tube testers: 1.5, 2.0, 2.5, 3.2, 5.0, 6.3, 7.5, 15, 25 and 30 Volts at 2.0 Amps. Also has high voltage winding to supply 250 Volts A.C. at 40 M.A. for plate voltage of tube under test. Size, 2½" high, 4¾" wide, 2¼" deep; with 3½" mounting centers.

E11672. List, \$3.50. NET..... **\$2.06**

MIDGET UNIVERSAL OUTPUT TRANSFORMER

A SPECIAL VALUE

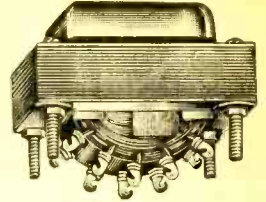


An extremely compact transformer for matching the output of any existing output tubes, single or p.p., to any dynamic speaker voice coil of from 2 to 30 ohms impedance. Size: 1¾" high, 2¼" long, 1½" thick.

E11662. NET..... **49c**

KNIGHT HIGH-QUALITY POWER TRANSFORMERS

Splendid values in carefully designed and well-constructed compact power transformers. Only fine quality materials are used throughout. Conservatively rated for long-lived efficient service. Several types insure selection of proper transformer for practically all set requirements. Terminal arrangement provided for sub-panel wiring. It is not necessary to bring leads through chassis base. Easily installed as corner bolts furnish positive, solid mounting. Ideal for use in limited space. These transformers are a boon to the serviceman, providing low-cost, high-grade units for replacement purposes. Use them regularly for bigger profits.



FOR 2.5 VOLT TUBES

4 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 650 V. at 40 M.A.—C.T.; 2.5 V. at 3.75 A.—C.T.; 5 V. at 2 A.
Mtg.: 2½" x 2". Wt., 2 lbs.

E6055. NET..... **69c**

5 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 660 V. at 45 M.A.—C.T.; 2.5 V. at 5 A.—C.T.; 5 V. at 2 A.—C.T.
Mtg.: 2½" x 2". Wt., 2 lbs.

E6056. NET..... **86c**

6 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 675 V. at 50 M.A.—C.T.; 2.5 V. at 7.5 A.—C.T.; 5 V. at 2 A.—C.T.
Mtg.: 2½" x 2". Wt., 3 lbs.

E6057. NET..... **98c**

7 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 700 V. at 70 M.A.—C.T.; 2.5 V. at 3.5 A.—C.T.; 5 V. at 3 A.; 2.5 V. at 7.5 A.
Mtg.: 3¼" x 2½". Wt., 4 lbs.

E6058. NET..... **\$1.58**

8 TO 10 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 700 V. at 90 M.A.—C.T.; 2.5 V. at 10.5 A.—C.T.; 2.5 V. at 4 A.—C.T.; 5 V. at 3 A.
Mtg.: 3¼" x 2½". Wt., 4 lbs.

E6059. NET..... **\$1.75**

FOR 6.3 VOLT TUBES

4 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 650 V. at 40 M.A.—C.T.; 6.3 V. at 1.6 A.—C.T.; 5 V. at 2 A.
Mtg.: 2½" x 2". Wt., 2 lbs.

E6060. NET..... **73c**

5 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 650 V. at 45 M.A.—C.T.; 6.3 V. at 1.8 A.—C.T.; 5 V. at 2 A.
Mtg.: 2½" x 2". Wt., 2 lbs.

E6061. NET..... **86c**

6 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 675 V. at 50 M.A.—C.T.; 6.3 V. at 2 A.—C.T.; 5 V. at 2 A.
Mtg.: 2½" x 2". Wt., 4 lbs.

E6062. NET..... **\$1.05**

7 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 700 V. at 75 M.A.—C.T.; 6.3 V. at 3.2 A.—C.T.; 5 V. at 3 A.
Mtg.: 3¼" x 2½". Wt., 4½ lbs.

E6063. NET..... **\$1.58**

8 TO 11 TUBE SETS

Primary: 115 V. at 50/60 cycles.
Sec.: 700 V. at 100 M.A.—C.T.; 6.3 V. at 4 A.—C.T.; 2.5 V. at 4 A.—C.T.; 5 V. at 3 A.
Mtg.: 3¼" x 2½". Wt., 6 lbs.

E6064. NET..... **\$1.98**

KNIGHT AUDIO AND OUTPUT TRANSFORMERS

SPECIAL AUDIO



E11656. 3 to 1 ratio. 1½" x 1½" x 3". Mounting centers: 2½". Strap mounting type. Good quality. **78c**

E11657. Push-pull input. Open frame type. 1½" x 1½" x 2¾". **65c**

Mtg. centers: 2¼". NET.....

OUTPUT TRANSFORMERS

To feed into 8 to 15 ohm voice coil. Open frame.

E11658. Single 43, 45, 2A3, 6A5, 25A6, 25A7G. 1½" x 2¾" x 1¾". **49c**

E11659. Single 31, 42, 2A5, 6F6, 6N6, 6A4, 6A6. 1¾" x 1½" x 1½". **49c**

E11660. Push-pull 43, 45, 2A3, 6A5, 25A6, 25A7G. 2x1½" x 3¾". **54c**

E11661. Push-pull 31, 42, 2A5, 6F6, 6N6, 6A4. 2x1½" x 3¾". **54c**

NET EACH.....

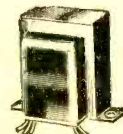
MIKE TRANSFORMERS

OPEN TYPE



E11655. For single or double button microphone. Tapped primary. Open frame type. 1½" x 1½" x 3". Mtg. center, 2½". **52c**

SHIELDED TYPES



E6050. Single button coupling transformer. Turn ratio, 1 to 64; impedance ratio, 1 to 4000. For single button carbon mike to tube input. Fully shielded.

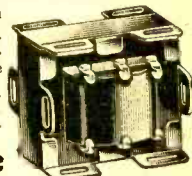
E6051. Two button type. To couple any double button carbon microphone to single grid. Turn ratio, 1 to 45; impedance ratio, 1 to 2000. **\$1.32**

NET EACH.....

UNIVERSAL AUDIO

A compact, high quality audio transformer for use in any A.C. or battery set or amplifier. Will couple any tube to single grid. Has Universal mounting bracket. Ratio 3-1. Size: 2x1½" x 2¾". Shpg. wt., 2 lbs.

E11644. NET..... **75c**



UNIVERSAL OUTPUT

This versatile transformer couples practically any power tubes, either single or push-pull, to any dynamic or magnetic speaker. Has Universal mounting bracket. Size, 2x1½" x 2¾". With instructions. Shpg. wt., 2 lbs.

E11645. YOUR PRICE..... **75c**

UNIVERSAL P.P. INPUT

May be used to couple any single plate to any combination of single or push-pull tubes. Universal mounting bracket. Ruggedly built. Size: 2x1½" x 2¾". Shpg. wt., 2 lbs.

E11646. NET..... **75c**

STANDARD AUDIOS

Ideal for replacement purposes. Open type construction. 3¼" x 1½" x 1½". Mtg. centers: 2¾". Shpg. wt., 2 lbs. each.

E11647. 3½-1. Straight audio. 1 plate to 1 grid. **71c**

E11648. 3-1. P.P. Input. 1 plate to 2 grids.

E11649. Push-pull interstage. 2 plates to 2 grids.

YOUR PRICE EACH..... **71c**



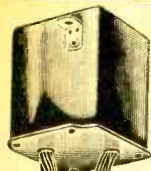
HEAVY-DUTY UNIVERSAL OUTPUT

A heavy duty, unshielded output transformer for universal use. Accurately matches any single or P.P. output stage to any speaker voice coil. Strap mounting. Size: 2¾" x 2¾" x 1".

E11005. NET..... **95c**

STANCOR POWER TRANSFORMERS

EXACT DUPLICATE



EXACT FIT GUARANTEED

The units listed below are precision-built transformers which conform exactly in every respect to the original manufacturers' specifications of physical and electrical characteristics. Current and voltage ratings are conservative and assure proper operating and long life. No refitting or redrilling is necessary. Just pull out the defective unit, put in the new unit and resolder connections.

ALL TYPES AVAILABLE

Whether your old transformer is round or square, shielded or unshielded, half shell or upright, you can get a replacement at ALLIED. Through close contact with StanCOR, we can supply Exact Duplicate Power Transformers for practically any set. Simply give us full information concerning the unit you need and we shall quote prices. Units not shown below can be shipped promptly.



Models	No.	NET
ATWATER KENT		
L&H-1&2, 70 ser.	E11507	\$3.76
188	E11528	2.65
217, 427, 667	E11540	2.94
80, 83	E11542	3.76
82, 85	E11543	3.65
856, 976	E11551	2.59
BRUNSWICK		
14, 21, 31, 81, 82	E11512	3.76
10	E11513	2.94
3NCR, 5NCR	E11516	3.12
11, 12, 16, 18, 33	E11554	3.35

Models	No.	NET
CLARION		
AC40	E11513	2.94
AC60	E11518	3.76
AC90, 90A, 91	E11521	3.79
AC260	E11524	3.53
AC300	E11526	4.06
AC360	E11529	4.17
AC470, AC472	E11530	2.59
AC61, AC70	E11561	3.76
AC100	E11563	2.65
AC160	E11565	4.00
AC340	E11567	3.23
CROSLEY		
40-S, 41-S, 42-S	E11536	3.76
505, 515, 516, 525	E11804	1.76
534, 635, 655	E11803	1.91
5V2, 6H3, 50, 614	E11568	2.20
146, 146-1	E11591	3.82
517, 537, 547	E11593	1.62
526, 616, 555	E11594	2.06

Models	No.	NET
GENERAL ELECTRIC		
A-52, A-55	E11805	3.23
A-83, A-85	E11806	3.67
A-125	E11807	4.12
E-71, E-72, E-76	E11808	2.50
E-79	E11808	2.50
E-61, E-62, E-68	E11596	2.23
E-81, E-86	E11603	3.00
E-105, E-106	E11809	3.38
KNIGHT		
AC5	E11532	2.59
AC7	E11534	2.73
SG8	E11534	4.20
SG9	E11535	3.76
MAJESTIC		
20 (unmounted)	E11550	3.76
70 chassis (Plate)	E11552	2.53
70 chassis (Fil.)	E11553	2.73
90B & 100B chassis	E11555	3.76
90 & 100 chassis	E11556	3.79
130, 131, 132, 233	E11557	3.76
161 (unmounted)	E11558	2.09
180, 181 (Plate)	E11559	5.06
180, 181 (Fil.)	E11583	3.59
25, 25B	E11584	3.76
320	E11585	4.62

Models	No.	NET
PHILCO		
65	E11569	3.53
70, 270, 370, 470	E11570	3.53
76, 77	E11571	3.53
87	E11573	3.53
95, 96, 296	E11578	3.53
611	E11581	3.53
19, 44, 60, 264	E11562	2.06
80, 81	E11564	1.91
116B (121)	E11572	4.12
610, 620, 625, 2620	E11560	3.53
90 (1-47)	E11692	3.53
90 (2-45)	E11694	3.53
37-9, 37-650 (121)	E11574	3.67
37-62, 37-610 (122)	E11575	2.50

FREE STANCOR REPLACEMENT GUIDE

New fourth edition of StanCOR's replacement transformer guide. A 30-page alphabetical listing showing proper replacement transformers, chokes, audios, and output transformers necessary to do a real servicing job. Also shows tube complements of all sets listed. Select the transformer you want and then order from ALLIED. Guide sent FREE on request.



Models	No.	NET
PHILCO (Cont.)		
37-600, 600	E11576	\$1.91
37-116 (121, 122)	E11577	4.41
37-60, 37-61	E11579	2.65
38-7, 38-9 (121)	E11580	2.35
14 (Early)	E11604	3.23
15	E11605	4.41
16 (121)	E11611	4.70
16, 17 (122, 133)	E11612	4.41
16 (126, 127)	E11618	4.12
49 (128)	E11850	2.65
29	E11851	3.09
47, 215	E11852	2.50
71 (Twin Spkr.)	E11853	3.82
84	E11854	2.12
86	E11855	3.53
90 (2-47's)	E11856	3.53
91 (Sgl. Spkr.)	E11857	2.94
97, 98	E11858	4.41
111, 112A (2-45's)	E11859	3.53
112, 112A (2-47's)	E11860	3.53
116X (122)	E11861	4.41
144	E11862	2.50
200, 201	E11863	4.41
630, 635	E11864	3.09
650, 655	E12005	4.41
660, 665	E12006	3.53
680	E12007	4.70
37-10, 37-11 (121)	E11500	3.82
37-84	E11502	2.12
37-93	E11503	2.12
37-640	E11504	3.09
37-660	E11505	4.12
37-675, 38-116 (121)	E11511	4.41
38-17, 38-2 (121)	E11514	3.82
38-12 (121)	E11520	1.76

Models	No.	NET
RCA-RADIOLA-VICTOR		
6T, 7T, 8T, 8K	E11849	2.06
110, 111, 115	E11848	2.35
118, 125, 126, 225	E11599	2.43
9T, 9U, 10T, 10K	E11588	2.94
D-11-2, T-10-3, 9K3	E11597	3.97
13-K, 15-K	E11598	4.12
R32, R52, RE45	E11586	3.53
R4, R6	E11587	2.53
R7, R9, RE16	E11589	2.53
R7A, RE16A	E11590	2.53
R17, 18, 33, 51	E11515	2.53
R60, R62	E11516	3.12
R66	E11595	4.17
R5, R5X	E11525	2.53
R11, RE18, R21	E11527	3.65
RE20, R50, R55	E11531	3.76
R33, R39, RE57	E11537	3.76
RAD64, 67, R38	E11538	2.65
R70, R70N	E12008	10.00
R73, R75 (47)	E12009	3.41
R78A, R75A (2A5)	E12010	3.53
	E12011	3.18

Models	No.	NET
RCA-RADIOLA-VICTOR (Cont.)		
R74, R76, R77, RE81E	E12012	\$4.17
R78, RAES4	E12013	4.12
RAE79	E12014	8.23
R90, R90P, 260	E12015	4.59
100 (Early)	E12016	2.79
100 (Late), T4-8	E12017	1.76
M116	E12018	2.23
117, 119, 214, T5-2	E12019	2.23
121, 122, 129, 221	E12020	2.94
140, 141, 240, 241	E12021	3.53
143, 242, 243, 262	E12022	3.65
220, 222	E12023	2.59
280	E12024	4.23
330, 331	E12025	2.65
380, 380HR	E12026	4.06
C6-2, T6-1, T6-9, 6K-3	E12027	2.47
C7-6, D7-7, T7-5, C8-19	E12028	2.53
C7-14, T7-12, 7U	E12029	2.41
C8-15, C8-17	E12030	2.47
C9-4, C9-5	E12031	2.88
C9-6, D9-19, T9-9	E12032	3.47
C11-1, T10-1, 10K-1	E12033	2.65
C13-2, C13-3	E11680	3.53
D8-28, T9-9, 8U	E11681	2.41
T4-8A, T4-9A, 4T	E11682	1.94
TS-14, TS-16	E11683	2.47

Models	No.	NET
SPARTON		
AF7, G2, G3	E11600	2.47
9A, 410	E11601	3.76
591, 593, 931	E11607	4.12
235, 737	E11602	3.35
930	E11608	3.35
25, 26, 27, 30, 45	E11684	4.17
33, 101, 110, 574	E11685	5.59
53 Police	E11686	3.76
67, 68, 616, 666	E11687	4.12
71, 71B, 72, 78	E11688	2.35
76	E11689	2.65
104, 105X, 135, 966	E11690	3.06
589	E11691	4.12
1116X, 1166, 1176	E11696	3.53

U. S. RADIO & TEL.

8 (series)	E11610	3.35
7 (series)	E11614	3.76
26 series Gloritone	E11616	2.29
26P series Gloritone	E11617	2.29
20	E11697	2.94

Models	No.	NET
ZENITH		
4P-26, 4T-26, 5-S	E11615	1.47
32, 101	E11619	3.53
703, 706, 707, 711	E11619	3.53
712, 750	E11619	3.53
715, 755, 757, 975	E11632	3.23
805, 843, 909, 961	E11634	2.20
10, 11, 12, 102, 112, 122	E11622	3.79
50, 52, 54, 60, 70, 72, 77	E11623	4.59
273, 410, 420, 473	E11624	4.17
430, 440, 441, 619	E11625	3.53
476, 770, 775, 780	E11626	4.12
476B, 770B, 777	E11627	3.53
825, 827, 829	E11628	2.20
835, 880, 935, 990	E11629	3.38
6827, 6852, 68154	E11630	2.06
9554, 9555	E11631	2.65
108130, 108147	E11695	2.94
12157, 12158	E11620	3.53
120158, 120159	E11621	3.53

POWER TRANSFORMERS REBUILT LIKE NEW

DEALER'S PRICE LIST

Tubes	POWER TUBES	NET	Tubes	POWER TUBES	NET
4 to 7	1-6A3, 6A6, 6D5	\$2.95	8	1-45, 47, 59, 2A5	\$3.95
	41, 42, or 6F6			2A3, or 5B	
6 to 10	2-6A3, 6A6, 6D5,	3.95	9	2-45, 47, 59, 2A5,	4.65
	41, 42, or 6F6			2A3, or 5B	
8	1-71A	2.95	10	1-50, 10 or 61.6	5.25
	2-71A	3.95		2-50, 10 or 61.6	6.50

Prices quoted above are for rebuilding transformers not mounted in pitch or wax or other sealing compound. Add \$1.00 to prices shown if your transformer is mounted in sealing compound. Add \$1.50 to prices for 25-cycle primaries. We will rebuild all transformers regardless of primary windings. Write for quotations stating full particulars. All inquiries will be given prompt attention.

SERVICE YOU WILL LIKE

Rebuilding is expertly done, quickly and economically, to exact original specifications. We use the original case and laminations. Transformers for Battery Chargers and Transformers, Neon Transformers, Diathermy and Amateur Transformers are also expertly rebuilt. List at left is only representative. If you cannot determine price, write for quotation, stating name and model number of receiver, tube lineup, and other available data. Increase your profits with neat, efficient repair jobs.

SHIPPING INSTRUCTIONS

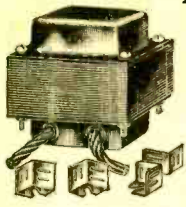
For speedy and efficient service, please follow these suggestions:

1. Send old transformers prepaid. We pay return postage.
2. Include full price or 20% minimum deposit.
3. Be sure to include tube lineup, name of set, 25 or 60 cycle, etc. We will return rebuilt transformers postpaid anywhere in the United States. Take advantage of this additional big saving for added profits.

THORDARSON UNIVERSAL POWER TRANSFORMERS

UNIVERSAL DUPLICATE TRANSFORMERS

18 UNITS FOR 800 SETS



A radically new line of transformers designed to meet the requirements of every serviceman and set-builder. The slotted brackets permit universal mounting. Have long flexible color-coded leads. 100% shielded electrostatically and magnetically. For 110 volts, 50-60 cycles. (Add 60% to list price for 25 cycle, and 30% for 220 volt operation. Include deposit with order.

DIMENSIONS

Transf.	H.	W.	D.
T-13R01	3	2 1/2	2 1/4
T-13R02	3	2 1/2	2 1/4
T-13R03	3 3/4	2 1/2	3 1/4
T-13R04	3 3/4	3 1/4	3 1/4
T-13R05	3 3/4	3 1/4	3 1/4
T-13R06	4 1/2	3 3/4	3 3/8
T-13R07	4 1/2	3 3/4	3 3/8
T-13R08	3 3/4	3 3/4	3 3/8
T-13R09	4 1/2	3 3/4	3 1/4

TYPE T13R01-2.5 VOLTS
SEC. : 650 V. C.T. at 40 M.A.; 2.5 V. C.T. at 4 A.; 5.0 V. C.T. at 3 A.
E11223. List, \$2.50. NET..... \$1.47

TYPE T13R02-2.5 VOLTS
SEC. : 700 V. C.T. at 40 M.A.; 2.5 V. C.T. at 7.25 A.; 5.0 V. C.T. at 3.0 A.
E11224. List, \$3.25. NET..... \$1.91

TYPE T13R03-2.5 VOLTS
SEC. : 700 V. C.T. at 70 M.A.; 2.5 V. C.T. at 9.0 A.; 5.0 V. C.T. at 3.0 A.
E11225. List, \$3.50. NET..... \$2.06

TYPE T13R04-2.5 VOLTS
SEC. : 700 V. C.T. at 90 M.A.; 2.5 V. C.T. at 12.5 A.; 5.0 V. C.T. at 3.0 A.
E11226. List, \$4.25. NET..... \$2.50

TYPE T13R05-2.5 VOLTS
SEC. : 700 V. C.T. at 70 M.A.; 2.5 V. C.T. at 9.0 A.; 2.5 V. C.T. at 3.5 A.; 5.0 V. C.T. at 3.0 A.
E11227. List, \$4.00. NET..... \$2.35

TYPE T13R06-2.5 VOLTS
SEC. : 700 V. C.T. at 120 M.A.; 2.5 V. C.T. at 12.5 A.; 2.5 V. C.T. at 3.5 A.; 5.0 V. C.T. at 3.0 A.
E11228. List, \$5.25. NET..... \$3.09

TYPE T13R07-2.5 VOLTS
SEC. : 800 V. C.T. at 110 M.A.; 2.5 V. C.T. at 15.0 A.; 2.5 V. C.T. at 3.5 A.; 5.0 V. C.T. at 3.0 A.
E11229. List, \$5.50. NET..... \$3.23

TYPE T13R08-2.5 & 6.3 VOLTS
SEC. : 700 V. C.T. at 90 M.A.; 6.3 V. C.T. at 3.5 A.; 2.5 V. C.T. at 6.0 A.; 5.0 V. C.T. at 3.0 A.
E11230. List, \$4.50. NET..... \$2.65

TYPE T13R09-2.5 & 6.3 VOLTS
SEC. : 750 V. C.T. at 180 M.A.; 6.3 V. C.T. at 3.5 A.; 2.5 V. C.T. at 6.0 A.; 5.0 V. C.T. at 3.0 A.
E11231. List, \$6.50. NET..... \$3.82

REPLACEMENT ENCYCLOPEDIA



A brand new 39-page book that tells you what Thordarson transformer to use for replacement in almost any set. Enables you to service 99% of the sets listed in Rider's, with the 18 units listed below. They duplicate originals with minimum stock requirements and at the same time service more sets perfectly than will any other assortment.

E11004. FREE with your order for this Thordarson transformer. Be sure to get this helpful guide at once. Get your Guide today.

DIMENSIONS

Transf.	H.	W.	D.
T-13R00	3 3/4	2 1/4	3 1/4
T-13R11	3	2 1/2	2 1/4
T-13R12	3	2 1/2	3 1/4
T-13R13	3 3/4	3 1/4	3 3/8
T-13R14	3 3/4	3 1/4	3 3/8
T-13R15	4 1/2	3 3/4	3 3/8
T-13R16	4 1/2	3 3/4	3 3/8
T-13R17	3 3/4	2 1/2	3 3/8
T-13R18	4 1/2	3 3/4	3 1/4

TYPE T13R00-2.5 & 5 VOLTS
SEC. : 550 V. C.T. at 70 M.A.; 5.0 V. C.T. at 0.5 A.; 2.5 V. C.T. at 10.5 A.; 5.0 V. C.T. at 3.0 A.
E11232. List, \$4.00. NET..... \$2.35

TYPE T13R11-6.3 VOLTS
SEC. : 650 V. C.T. at 40 M.A.; 6.3 V. C.T. at 2.0 A.; 5.0 V. C.T. at 3.0 A.
E11233. List, \$2.50. NET..... \$1.47

TYPE T13R12-6.3 VOLTS
SEC. : 700 V. C.T. at 70 M.A.; 6.3 V. C.T. at 2.5 A.; 5.0 V. C.T. at 3.0 A.
E11234. List, \$3.25. NET..... \$1.91

TYPE T13R13-6.3 VOLTS
SEC. : 700 V. C.T. at 90 M.A.; 6.3 V. C.T. at 3.5 A.; 5.0 V. C.T. at 3.0 A.
E11250. List, \$4.00. NET..... \$2.35

TYPE T13R14-6.3 VOLTS
SEC. : 700 V. C.T. at 120 M.A.; 6.3 V. C.T. at 4.7 A.; 5.0 V. C.T. at 4.0 A.
E11251. List, \$4.25. NET..... \$2.50

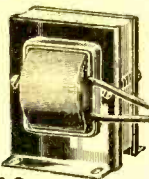
TYPE T13R15-6.3 VOLTS
SEC. : 750 V. C.T. at 150 M.A.; 6.3 V. C.T. at 5.0 A.; 5.0 V. C.T. at 4.0 A.
E11252. List, \$5.75. NET..... \$3.38

TYPE T13R16-6.3 VOLTS
SEC. : 800 V. C.T. at 200 M.A.; 6.3 V. C.T. at 5.14 A.; 5.0 V. C.T. at 4.0 A.
E11253. List, \$6.50. NET..... \$3.82

TYPE T13R17-6.3 & 2.5 VOLTS
SEC. : 600 V. C.T. at 60 M.A.; 6.3 V. C.T. at 2.5 A.; 2.5 V. C.T. at 7.5 A.; 5.0 V. C.T. at 3.0 A.
E11254. List, \$4.00. NET..... \$2.35

TYPE T13R18-2.5 and/or 6.3 VOLTS
SEC. : 700 V. C.T. at 90 M.A.; 6.3 & 2.5 V. C.T. at 3.5 A.; 2.5 V. C.T. at 9.0 A.; 5.0 V. C.T. at 3.0 A.
E11255. List, \$4.75. NET..... \$2.79

UNIVERSAL 6 VOLT VIBRATOR TRANSFORMERS 2G



More and more servicemen are adding to their incomes by replacing defective or burned-out vibrator transformers. The flood of "bargain" vibrators sold in recent years has resulted in a great increase in burned-out and defective vibrator transformers. Thousands of the estimated 3,000,000 auto sets sold in 1936, '37, and '38 will soon require replacement power transformers. Thordarson replacement vibrator transformers are provided with mounting feet or may be used with original mounting brackets. You can add to your service profits by ordering one each of these transformers. Be prepared to service any auto set that may come into your shop. Shpg. wt. of all transformers is approximately 3 1/2 lbs. each, except T14R40 which is 8 1/2 lbs.



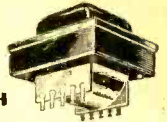
Cat. No.	Type	Fig.	D.C. Volts	M.A.	Size	List	NET EACH
E12735	T14R33	3C	225	40	2 1/2 x 2 1/2 x 3 1/4	\$2.75	\$1.62
E12736	T14R34	3C	250	50	2 1/2 x 2 1/2 x 3 1/4	3.25	1.91
E12737	T14R35	3C	260	60	2 1/2 x 2 1/2 x 3 1/4	3.75	2.20
E12738	T14R36	3C	285	75	2 1/2 x 2 1/2 x 3 1/4	4.25	2.50
E12739	T14R37	3C	350	75	2 1/2 x 3 1/2 x 3 1/4	4.75	2.79

115 V. 50-60 CYCLE OR 6 V. D.C. MODEL

E12740	T14R40	2G	350-6.3 C.T.	135-2.25	3 1/2 x 4 1/2 x 4 1/2	\$5.50	\$3.23
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2G



2H

GENERAL-PURPOSE POWER TRANSFORMERS

A carefully selected listing of general-purpose power transformers. Only the finest materials are used in their construction. Choice of two types as shown. All listings 110 V., 50-60 cycles. Add 60% for 25 cycles; 30% for 220 volts. (*Indicates weight in lbs.) Typical Thordarson quality is built into each one of these quality units to assure perfect performance coupled with long life.

Transf.	DIMENSIONS			MTG. HOLES
	H.	W.	D.	
T-60R49	2 3/4	3	2 1/4	2 1/4" Centers
T-70R20	3	3 1/2	2 3/4	2 3/4" Centers
T-75R47	3 3/4	3 1/4	3 1/4	3 1/4 x 2 1/4
T-70R78	4	3 3/4	3	2 5/8 x 2 3/8
T-70R61	4 1/4	3 3/4	3 1/4	2 5/8 x 2 3/8
T-56R01	4 1/4	3 3/4	3 3/4	3 1/4 x 2 3/8
T-56R03	5	3 3/4	3 3/4	3 1/4 x 2 3/8
T-56R05	5	3 3/4	3 3/4	3 1/4 x 2 3/8
T-92R21	4 1/4	4 1/4	3 3/4	3 3/4 x 3/4
T-17R30	4 3/4	3 3/4	3 3/4	3 3/4 x 3/4
T-74R28	5	3 3/4	3 3/4	3 3/4 x 2 3/8

T-60R49. FIG. 2H-2.5 VOLTS
SEC. : 600 V. C.T. at 30 M.A.; 2.5 V. C.T. at 3.5 A. C.T.; 5 V. at 2 A. (*3 1/2%).
E11014. NET..... \$1.32

T-70R20. FIG. 2H-6.3 VOLTS
SEC. : 600 V. C.T. at 50 M.A.; 6.3 V. C.T. at 2 A. C.T.; 5 V. at 2 A. (*1 1/2%).
E11040. NET..... \$1.62

T-75R47. FIG. 2H-6.3 VOLTS
SEC. : 610 V. C.T. at 125 M.A.; 6.3 V. C.T. at 2 A. C.T.; 5 V. at 2 A. (*8%).
E11015. NET..... \$2.20

T-70R78. FIG. 2G-6.3 VOLTS
SEC. : 680 V. C.T. at 55 M.A.; 6.3 V. at 1.5 A. C.T.; 5 V. at 2 A. (*6%).
E11016. NET..... \$1.91

T-70R61. FIG. 2G-6.3 VOLTS
SEC. : 770 V. C.T. at 70 M.A.; 6.3 V. at 2.5 A. C.T.; 5 V. at 2 A. (*6 1/2%).
E11017. NET..... \$2.35

T-56R01. FIG. 2G-1.5 VOLTS
SEC. : 650 V. C.T. at 70 M.A.; 1.5 V. at 1 A.; 1.5 V. at 4 A.; 2.5 V. at 3 A. C.T.; 5 V. at 5 A. C.T.; 5 V. at 2 A. (*7%).
E11019. NET..... \$2.79

T-56R03. FIG. 2G-2.5 VOLTS
SEC. : 700 V. C.T. at 105 M.A.; 2.5 V. at 3 A. C.T.; 2.5 V. at 1.75 A. C.T.; 1.5 V. at 5 A.; 1.5 V. at 1 A.; 5 V. at 3 A. (*9%).
E11023. NET..... \$3.23

T-70R62. FIG. 2G-6.3 VOLTS
SEC. : 700 V. C.T. at 145 M.A.; 6.3 V. at 4.5 A. C.T.; 5 V. at 3 A. (*8%).
E11021. NET..... \$3.23

T-56R05. FIG. 2G-2.5 VOLTS
SEC. : 700 V. C.T. at 110 M.A.; 2.5 V. at 9 A. C.T.; 2.5 V. at 3 A. C.T.; 2.5 V. at 3 A. C.T.; 5 V. at 3 A. (*9%).
E11022. NET..... \$3.38

T-92R21. FIG. 2G-6.3 VOLTS
SEC. : 800 V. C.T. at 200 M.A.; 6.3 V. at 5 A. C.T.; 5 V. at 3 A. (*11%).
E11024. NET..... \$4.41

T-17R30. FIG. 2G-6.3 VOLTS
SEC. : 740 V. C.T. at 280 M.A.; 6.3 V. at 3.5 A. C.T.; 5 V. at 3 A. (*7%).
E11025. NET..... \$4.56

T-74R28. FIG. 2G-6.3 VOLTS
SEC. : 880 V. C.T. at 125 M.A.; 38 V. Bias tap; 6.3 V. at 3.3 A. C.T.; 5 V. at 3 A.; 2.5 V. at 3 A. (*10%).
E11026. NET..... \$3.82

THORDARSON AMPLIFIER & LINE COUPLING TRANSFORMERS

LATEST COUPLING TRANSFORMERS



FIG. 2-F

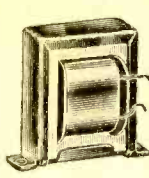


FIG. 2-B



FIG. 2-G



FIG. 2-D



FIG. 4-D

The latest Thordarson high quality transformers, designed for practically every input, output, mixer or line purpose. A transformer for almost any need will be found in the listing below. All units have been carefully designed, and are precision-built to rigid, exact specifications. We can supply all Thordarson transformers. Send us your orders, or write for prices.

TUBE TO LINE [LOW LEVEL]

Cat. No.	Type	Fig.	Primary	Secondary	List	NET
E11038	T14A90	2-F	20,000 CT			
E11039	T14A91	2-F	20,000 CT	500/125 200/50	\$2.50	\$1.47

MIXER OR LINE TO TUBE

E11045	T55A16	2-F	200 or 50 Ohms	Single or PP Grids	\$2.75	\$1.62
E11046	T63A73	2-F	50, 100, 150 or 200 Ohms	Single Grid	3.75	2.20
E11047	T63A71	2-F	200, 400, 600 or 800 Ohms	Single Grid	3.75	2.20
E11048	T61A94	2-F	500 or 125 Ohms	Single or PP Grids	3.25	1.91
E11037	T83A78	2-F	S.B. Mike, 100 Ohms	Single Grid	2.00	1.18

MICROPHONE COUPLING TRANSFORMERS

E11052	T63A73	2-F	D.B. Mike 200-0-200	200 or 50 Ohms	\$3.25	\$1.91
E11053	T70A82	2-F	D.B. Mike to line 200-0-200	500 or 125 Ohms	3.50	2.06
E11054	T70A83	2-F	Crystal Mike to line 100,000	200 or 50 Ohms	3.50	2.06
E11056	T58A37	2-F	D.B. Mike 200-0-200	Single Grid	2.25	1.32

OUTPUT COUPLING TRANSFORMERS

E11060	T61S25	2-B	Universal, 2A3, 2A5, 45, 47, 50, etc.	500 Ohms	\$3.50	\$2.06
E11061	T61S26	2-B	Universal, PP2A3, 2A5, 45, 47, 50, etc.	500 Ohms	3.50	2.06
E11062	T57S01	2-B	Universal, single or PP output tubes.	1 to 29 Ohms	2.00	1.18
E11063	T67S54	2-F	PP2A3 or 45 Class "AB"	4, 8, 15 or 500 Ohms	4.00	2.35
E11064	T67S48	2-F	PP45 Class "A" or 1-53 Class "B" (8,000)	4, 8, 15 or 500 Ohms	3.50	2.06
E11065	T67S52	2-F	2-53 "PP" parallel Class "B" or 2-46 or 50 Class "B" or 2-616 Class "AB" (5,800)	4, 8, 15 or 500 Ohms	4.00	2.35
E11066	T67S92	2-F	4-2A3 or 45 PP Parallel Class "AB" (1,500)	4, 8, 15 or 500 Ohms	4.00	2.35
E11070	T67S51	2-F	PP Pentodes, 79 Class "B" or 2-10 Class "A" (14,000)	4, 8, 15 or 500 Ohms	3.50	2.06
E11071	T65S94	2-F	PP50 Class "A", 2A5 or 42 Class "AB", or 2-79 Class "B" (8,000)	4, 8, 15 or 500 Ohms	4.00	2.35
E11072	T75S75	2-F	PP6B5, 2B6, 6A6, 6N7, 6F6, 30, 49, 31, PP, 1-19 (10,000)	4, 8, 15 or 500 Ohms	1.65	2.06
E11092	T81S01	2-F	PP6L6 Class "AB2" (3,800)	4, 8, 15 or 500 Ohms	6.00	3.53
E11073	T84S58	2-F	PP6L6 Class "AB1" (6,000)	4, 8, 15 or 500 Ohms	4.00	2.35
E11074	T89S75	2-F	1-6L6 Class "A" (4,000)	4, 8, 15 or 500 Ohms	3.75	2.20
E11069	T89S74	2-F	1-6L6 Class "A" (4,000)	50-125-200-250-333-500 Ohms	6.50	3.82
E11049	T89S68	2-G	PP Par. 6L6 Class "AB1"	2-4-8-500 Ohms	3.50	2.06
E12770	T17S10	2-F	1-6L6 (2,500)	4-8-15-250-500 Ohms	2.00	1.18
E12771	T17S11	2-F	2-6V6 PP (3,000)*	4-8-15-250-500 Ohms	2.00	1.18
E12772	T17S12	2-F	2-6L6 PP (4,300)*	4-8-15-250-500 Ohms	4.00	2.35
E12773	T17S13	2-G	2-6L6 PP (6,000)*	4-8-15-250-500 Ohms	6.50	3.82
E12774	T17S14	2-G	2-6L6 PP (5,500)*	4-8-15-250-500 Ohms	6.50	3.82
E12775	T17S15	2-G	4-6L6 PP Par. (3,300)*	4-8-15-250-500 Ohms	7.00	4.12

*Has third winding for obtaining 10% inverse feed back.

LINE TO SPEAKER

E12776	T60S48	2-B	500 to 3000 Ohms	Unlv. Voice Coil	\$3.00	\$1.76
E12777	T14S80	2-B	500 Ohms	2-4-6-8 Ohms	2.00	1.18
E12778	T76S74	2-B	500 Ohms	250/166/125/100/84 Ohms	3.00	1.76
E12779	T53S81	2-D	500 or 250 Ohms	4, 8, or 15 Ohms	4.00	2.35

CLASS "B" AND "AB" DRIVERS

E12780	T67D50	2-F	1-89 Class "A" Triode	1-79 or 55 Class "B"	\$2.75	\$1.62
E12781	T67D47	2-F	1-53 (plates in parallel)	1-53 Class "B"	2.50	1.27
E12782	T67D78	2-F	1-46 or 59 Class "A"	2-46 or 59 Class "B"	3.00	1.76
E12783	T81D42	2-F	PP6B Triode	PP 6F6 Class "AB"	3.25	1.91
E12784	T84D59	2-F	PP 6C5, 37, 76, etc	PP 6L6 Class "AB"	3.50	2.06
E12785	T19D01	4-D	15 Watts, 60 Ma	1:1, 2:1, 1:4, 1:1, 2:1, 1:8, 1:1	6.00	3.53
E12786	T19D02	4-D	15 Watts, 60 Ma	2:1, 2:2, 1:4, 1:1	6.00	3.53
E12787	T19D03	4-D	15 Watts, 60 Ma	2:6, 1:2, 8:1, 3:1, 3:2, 1:4, 1:1	6.00	3.53
E12788	T19D04	4-D	15 Watts, 60 Ma	3:6, 1:3, 4:1, 4:5, 1:5, 1:5.5, 6:1	6.00	3.53

TRANSCIEVER AUDIOS

E11090	T54D63	2-F	1-30 or 49 Class "A"	1-19 or 2-49's Class "B"	\$2.50	\$1.47
E11091	T67M69	2-F	1-19 Class "B"	2,700 Ohms (50MA)	2.75	1.62
E11092	T81S01	2-B	30, 49, 31, PP, 1-19	2-4-8	1.65	.97
E11093	T68S06	2-F	Single Pentode	10 or 2000 Ohms	2.50	1.47
E11094	T72S58	2-B	Single Pentode	High or Low Impedance Phones	1.65	.97
E11095	T72A59	2-B	Single Plate and Single Button Microphone	Single Grid	1.65	.97

TRU-FIDELITY TRANSFORMERS

Sensational new design now makes possible really True Fidelity. Completely shielded units. Can be used as standards in laboratories, etc. Leads can be taken from top or bottom. Handy terminal board for ease of connection. Size, 2 3/4 x 3 3/4". Wt., 4 1/2 lbs. (* Indicates capacitive and inductive balance to center tap, for use on balanced transmission line.)



CRYSTAL MIKE

E11173. T90A06. Crystal Mike or P.E. Cell to Line. Pri. 250,000 and 62,500. Sec. like T90A02 below. NET..... \$10.58

PLATE-TO-LINE [LOW LEVEL]

E11174. T90A02. Single Tube to Line. Couple single triode to line or mixer. Pri. 20,000, 5,000. Sec., 500*-333-250-200-125 and 50 ohms. NET..... \$10.29

E11175. T90A01. P.P. Tubes to Line. P.P. triodes to line. Pri., 20,000 and 5,000. Sec. as above. NET..... \$9.70

MIXER

E11172. T90A10. Line or Mike to Line. Primary impedances, 500*-333-250-200-125 and 50 ohms. Secondary impedances, 500*-333-250-200-125 and 50 ohms. NET..... \$9.41

LINE-TO-GRID

E11170. T90A00. Line or Mike to Single Grid. Couples to grid of any tube. Pri., 500*-333-250-200-125 ohms. Sec., 75,000 and 18,750 ohms. NET..... \$10.00

E11171. T90A11. Line or Mike to P.P. Grids. Primary, 500*-333-250-200-125-50. Sec., 150,000 and 37,500 ohms. NET..... \$11.76

INTERSTATE

E11176. T90A03. Single Plate to Single Grid. For cascade coupling. Pri., 10,000, 2,500. Sec., 40,000, 10,000 ohms. NET..... \$8.82

E11177. T90A04. Single Plate to P.P. Grids. As above, but with Sec. of 10,000 and 40,000 ohms. NET..... \$8.82

E11178. T90A05. P.P. Plates to P.P. Grids. To couple P.P. triodes to P.P. outputs. Pri., 20,000 and 5,000. Sec., 45,000 and 11,250 ohms. NET..... \$9.70

OUTPUT

E11179. T90S07. P.P. Power Tubes to Line. Primary, 5,000-3,000-1,250 and 750 ohms. Secondary, 500*-333-250-200-125 and 50 ohms. NET..... \$10.58

E11180. T90S08. P.P. Tubes to Voice Coil. Primary, 5,000-3,000-1,250 and 750 ohms. Secondary, 1-25-3-75-5-10 and 15 ohms. NET..... \$10.29

E11181. T90S13. P.P. Tubes to Line or Voice Coil. Primary, 5,000-3,000-1,250 and 750 ohms. Secondary to line 500*-333-250-200-125-50 or voice coil 15-10-7.5-5-3.75 and 1.25. NET..... \$11.76

LINE-TO-VOICE COIL

E11181. T90S12. Line to Voice Coil. Pri. Impedances, 500*-333-250-200-125 and 50 ohms. Sec., 1.25-3.75-5-7.5-10 and 15 ohms. NET..... \$10.58

PLATE REACTOR

E11182. T90C09. Audio Plate Reactor. For use in Series Resonant primary circuits. Inductance, 300 Henries, 8 Ma. as series reactor; 75 Henries, 16 Ma. as parallel reactor. D.C. Resistance, 4000 ohms as series reactor; 1000 ohms as parallel reactor. NET..... \$7.35

SOUND AMPLIFIER GUIDE

A very valuable manual for the sound engineer, etc. Contains a world of knowledge pertaining to audio action of metal and glass tube circuits and amplifiers. Covers pre-amplifiers, mixers, etc. One of these manuals should be a part of every Sound-man's library. Latest edition supplied. E11001. NET..... 9c

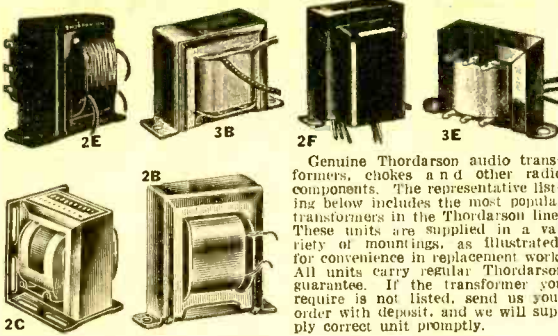


RADIO SERVICE GUIDE

Newest Edition. Contains page after page of valuable information to help you select the proper transformer you require. Lists transformer units for every purpose. E11207. NET..... 9c

THORDARSON AUDIOS · OUTPUTS · CHOKES

THORDARSON TRANSFORMERS



Genuine Thordarson audio transformers, chokes and other radio components. The representative listing below includes the most popular transformers in the Thordarson line. These units are supplied in a variety of mountings, as illustrated, for convenience in replacement work. All units carry regular Thordarson guarantee. If the transformer you require is not listed, send us your order with deposit, and we will supply correct unit promptly.

STRAIGHT AUDIO TRANSFORMERS

Dependable audio units assuring good reproduction at attractively low prices. Universally adaptable for service replacement work.

Cat. No.	Type	Fig.	Ratio	Size	List	NET
111121	T47A25	2-C	3:1	2 3/4 x 2 1/2 x 1 1/2	\$1.75	\$1.03
111122	T29A99	2-B	3:2:1	2 3/4 x 2 x 2	1.75	1.03
111123	T57A36	2-F	3:2:1	2 3/4 x 2 1/2 x 1 1/2	2.00	1.18
111125	T57A38	2-F	3:1	3 x 2 1/2 x 2 1/2	2.75	1.62
111127	T75A74*	2-F	2:1	2 3/4 x 2 1/2 x 1 1/2	2.50	1.47
111120	T17A02†	2-F	3:1	2 x 2 1/2 x 2 1/2	2.25	1.32

* Has static shield between primary and secondary windings.
† For either straight or push-pull use.

PUSH-PULL INPUTS

Cat. No.	Type	Fig.	Ratio	Size	List	NET
111128	T14A29	2-C	3:2:1	2 3/4 x 2 1/2 x 1 1/2	\$2.25	\$1.32
111129	T33A91	2-B	3:2:1	2 3/4 x 2 x 2	2.00	1.18
111130	T57A39	2-F	3:2:1	2 3/4 x 2 1/2 x 1 1/2	2.25	1.32
111131	T57A40	2-B	3:1	3 x 2 1/2 x 2 1/2	2.75	1.62
111132	T57A41	2-F	3:1	3 x 2 1/2 x 2 1/2	3.00	1.76

PUSH-PULL INTERSTAGE

Cat. No.	Type	Fig.	Ratio	Size	List	NET
111137	T58A70*	2-F	1.5:1	3 x 2 1/2 x 2 1/2	\$3.25	\$1.91
111136	T13A36	3-B	1:1	2 x 2 3/4 x 1 3/4	1.75	1.03

* May be used in Class "AB" Amplifiers where some grid current flows.

OUTPUT TRANSFORMERS FOR 1 TO 29 OHM VOICE COILS

Cat. No.	Type	Fig.	Primary	Size	List	NET
E12763	T57501	2-E	Universal for single or P.P. Tubes.	2 3/4 x 2 x 2	\$2.00	\$1.18
E12764	T13538	3-E	Universal for single or P.P. Tubes.	2 x 1 3/4 x 1 1/2	1.50	.88
E12765	T13542*	3-E	Universal for single output tube.	2 x 1 3/4 x 1 1/2	1.50	.88
E12766	T13541*	2-E	Universal for P.P. tubes.	2 1/2 x 2 x 3	3.00	1.76

* For heavy-duty power tubes drawing up to 60 M.A.

FOR 6 TO 12 OHM VOICE COILS

Cat. No.	Type	Fig.	Ratio	Size	List	NET
E12767	T33599	2-B	PP45.	2 3/4 x 2 x 2	1.50	.88

FOR 1, 2, AND 4 OHM VOICE COILS

Cat. No.	Type	Fig.	Ratio	Size	List	NET
E12768	T13537	3-E	1-0F6, 42, 2A5, 47.	1 3/4 x 1 3/4 x 1 1/2	1.25	.73
E12769	T13539	3-E	1-45, 12A5, 31, 43.	1 3/4 x 1 3/4 x 1 1/2	1.25	.73
E11142	T13543	3-E	71A, 1D4, 1F5G.	1 3/4 x 1 3/4 x 1 1/2	1.35	.79

PLATE COUPLING CHOKES

No.	Type	Fig.	MA	Hys.	Size	List	NET
E11145	T29C27	2-B	5*	500	2 x 2 3/4 x 1 1/2	\$1.50	\$0.88
E11146	T52C98	2-F	5*	1080	2 3/4 x 2 1/2 x 1 1/2	.75	1.18
E11147	T37C36	2-F	5	1010	2 3/4 x 2 x 2	2.00	1.18
E11148	T67C46	2-F	5	510	2 3/4 x 2 x 2	1.75	1.03
E11143	T68C08	2-B	35	22	2 3/4 x 2 x 2	2.00	1.18

* For use as plate inductance with S. G. tubes. Max. Cap. 8 MA.

FILTER CHOKES

Designed with typical Thordarson precision to give good service.

Cat. No.	Type	Fig.	Hys.	MA	Ohms	Size	List	NET
E12750	T18C92	2-B	22	35	405	2 x 2 3/4 x 2 1/4	\$1.75	\$1.03
E12751	T47C07	3-B	13	75	280	2 x 2 3/4 x 2 1/4	1.65	0.97
E12752	T68C07	2-B	15	85	375	2 x 2 1/4 x 3	2.00	1.18
E12753	T57C53	2-B	9.5	110	200	2 x 2 1/4 x 3	2.00	1.18
E12754	T57C54	2-F	9.5	110	200	2 1/4 x 2 1/4 x 3	2.25	1.32
E12755	T17C00B	2-F	12	150	231	2 1/4 x 3 x 3 1/4	2.75	1.62
E12756	T13C26	3-B	7	40	530	1 3/4 x 1 3/4 x 1 3/8	.90	.53
E12757	T13C27	3-B	10	40	475	2 1/4 x 1 3/4 x 1 3/8	1.10	.65
E12758	T13C28	3-B	10	65	460	2 3/4 x 1 3/4 x 2	1.25	.73
E12759	T8C29	3-B	9	85	250	2 3/4 x 2 x 2	1.60	.94
E12760	T75C49	3-B	7.2	120	290	2 x 2 1/4 x 2 1/4	1.50	.88
E12761	T13C30	2-B	8	150	200	2 1/4 x 2 x 2 1/4	2.00	1.18

THORDARSON NEW "CHT" SERIES OF TRANSFORMERS

An entirely new line of transformers filling the gap between laboratory grade units and servicemen's replacements. Their response curve meets all requirements for wide-range reproduction. Many advanced electrical and mechanical features take the C.H.T. line out of all competition in its price field. Balanced windings remove hum. Sub-panel terminals make wiring easy. Complete impregnation eliminates moisture problems. Ideal for use in high-grade receivers, transmitters, and portable public address systems. Listing below is representative. We can supply all other C.H.T. transformers immediately. Send us your order.



LOW IMPEDANCE SOURCE TO GRID

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12710	T15A66	500, 333, 250, 200, 125, 50	60,000/15,000 Single Grid	\$7.25	\$4.26
E12711	T15A67	500, 333, 250, 200, 125, 50	120,000/30,000 P.P. Grids	8.00	4.70
E12712	T15A68	60, 38, 30, 22, 15, 10, 5.5, 2.5	60,000/15,000 Single Grid	7.25	4.26

LOW IMPEDANCE TO LINE OR MIXER

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12713	T15A69	500, 333, 250, 200, 125, 50	500, 333, 250, 200, 125, 50	\$6.25	\$3.67
E12714	T15A70	60, 38, 30, 22, 15, 10, 5.5, 2.5	500, 333, 250, 200, 125, 50	6.25	3.67

TUBE TO LINE (LOW LEVEL)

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12715	T15A71	20,000/5,000 Single Plate	500, 333, 250, 200, 125, 50	\$7.25	\$4.26
E12716	T15A72	20,000/5,000 P.P. Plates	500, 333, 250, 200, 125, 50	7.25	4.26

INTERSTAGE COUPLING UNITS (CLASS A)

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12717	T15A73	10,000/2,500 Single Plate	40,000/10,000 Single Grid	\$5.00	\$2.94
E12718	T15A74	10,000/2,500 Single Plate	40,000/10,000 Single Grid	5.75	3.38
E12719	T15A75	20,000/5,000 P.P. Plates	45,000/11,250 P.P. Grids	6.25	3.67

MULTI-TAP LINE TO GRID

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12720	T15A65	500, 333, 250, 200, 125, 50	5,000/12,500 P.P. Cl. A 845	\$10.50	\$6.17
E12721	T15D87	500, 333, 250, 200, 125, 50	7220 P.P. Cl. AB 845	11.00	6.47

DRIVER TRANSFORMERS

Cat. No.	Type	Pri. Ohms	Sec. Ohms	List	NET
E12722	T15D85*	Sgl. 6F6, 42, 2A5	P.P. 6L6-40 W Triodes	\$7.50	\$4.41
E12723	T15D86*	P.P. 6F6, 42, 2A5	P.P. Par. 6L6 Triodes	7.50	4.41

* With humbucking coil construction.

MULTI-TAP OUTPUT TRANSFORMERS

Cat. No.	Type	Primary	Secondary	List	NET
E12724	T15S90*	8000 5000 5000	2-3-4-6 8-16-125 250-500	\$ 9.25	\$ 5.44
E12725	T15S91*	4300 3000	Same as above	11.50	6.76
E12726	T15S92*	6600 5500	Same as above	13.75	8.08
E12727	T15S93*	3300 3800	Same as above	15.00	8.82
E12728	T15S94*	1900	500-250-166 125-100-84	17.50	10.29

* Tertiary winding to give feedback voltage 10% of full primary.

MULTI-TAP LINE TO VOICE COIL

Cat. No.	Type	Primary	Secondary	List	NET
E12729	T15S96	1000-500 (25 Watts)	50-24-16- 8-6-4-3-2	\$11.00	\$6.47
E12730	T15S97	1000-500 (60 Watts)	50-24-16- 8-6-4-3-2	14.50	8.53

ISOLATING TRANSFORMERS

For use on electrical therapeutic machines, hair-dryers, clippers, medical instruments, beauty parlor equipment, etc. Also used in Amateur transmitters for elimination of line noises or to keep R.F. out of the line. Pri. 105-115-125 V. 50-60 cycles. Sec. 115 V. Static shield between pri. and sec.



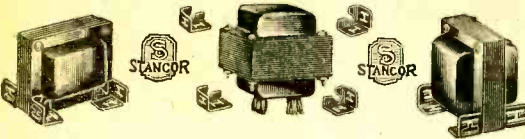
Cat. No.	Type	Capacity	List	NET
E12731	Type T18V00.	Capacity, 100 V.A. 3 3/4 x 3 3/4 x 5". Shpg. wt. 10 lbs.	\$5.29	
E12732	Type T18V01.	Capacity, 250 V.A. 5 1/2 x 6 1/2 x 6". Shpg. wt. 22 lbs.	NET	\$10.29
E12733	Type T18V02.	Capacity 500 V.A. 6 3/4 x 7 3/4 x 6". Shpg. wt. 33 lbs.	NET	\$16.17

We can supply all transformers and associated equipment manufactured by Thordarson. If the particular item you require is not listed in this catalog, simply make your selection from any Thordarson Guide, Manual, or parts list, and we will supply promptly at discounts of 40/20% from list prices. We are in constant touch with the Thordarson organization and can supply any special parts needed with minimum delay. Send us your order with deposit; shipment will be made promptly.

STANCOR TRANSFORMERS



SHIELDED UNIVERSAL POWER REPLACEMENTS



Stancor's new line of Universal Power Transformers is the result of extensive engineering research to determine the exact electrical and physical requirements to service the greatest number of sets. These transformers are ideally suited for replacement work where space is a limiting factor. Their compact size has been obtained without any sacrifice of efficiency. Each transformer contains an electrostatic shield. Flexible leads are R.M.A. color-coded. Brackets supplied permit either vertical or horizontal mounting. For 110-115 V. 25 cycles, add 60%. For 220-230 V. 50-60 cycles, add 15%. For 220-230 V. 25 cycles, add 75%.)

4 OR 5 TUBES—2.5 VOLTS
 Type P-6001. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 2 A.-C.T., 2.5 V. at 4 A.-C.T. Mtg. area, 2½x3". Wt., 3½ lbs.
E12915. List, \$2.35. NET..... \$1.32

5 OR 6 TUBES—2.5 VOLTS
 Type P-6002. Sec.: 700 V. at 50 M.A.-C.T., 5 V. at 2 A.-C.T., 2.5 V. at 7.25 A.-C.T. Mtg. area, 2½x3". Wt., 3½ lbs.
E12916. List, \$3.00. NET..... \$1.76

6 OR 7 TUBES—2.5 VOLTS
 Type P-6003. Sec.: 700 V. at 70 M.A.-C.T., 5 V. at 3 A.-C.T., 2.5 V. at 9 A.-C.T. Mtg. area, 2½x3¾". Wt., 4 lbs.
E12917. List, \$3.25. NET..... \$1.91

8 OR 9 TUBES—2.5 VOLTS
 Type P-6004. Sec.: 700 V. at 90 M.A.-C.T., 5 V. at 3 A.-C.T., 2.5 V. at 12.5 A.-C.T. Mtg. area, 3½x3¾". Wt., 5½ lbs.
E12918. List, \$4.00. NET..... \$2.35

6 OR 7 TUBES—2.5 VOLTS
 Type P-6005. Sec.: 700 V. at 70 M.A.-C.T., 5 V. at 3 A.-C.T., 2.5 V. at 9 A.-C.T., 2.5 V. at 3.5 A.-C.T., 2½x3¾". Wt., 5½ lbs.
E12919. List, \$4.00. NET..... \$2.35

11 OR 13 TUBES—2.5 VOLTS
 Type P-6006. Sec.: 700 V. at 120 M.A.-C.T., 5 V. at 3 A.-C.T., 2.5 V. at 12.5 A.-C.T., 2.5 V. at 3.5 A.-C.T., 3½x3¾". 6 lbs.
E12920. List, \$5.00. NET..... \$2.94

10 OR 12 TUBES—2.5 VOLTS
 Type P-6007. Sec.: 800 V. at 110 M.A.-C.T., 5 V. at 3 A.-C.T., 2.5 V. at 15 A.-C.T., 2.5 V. at 3.5 A.-C.T., 2½x3¾". 6½ lbs.
E12921. List, \$5.00. NET..... \$2.94

14 OR 16 TUBES—6.3 VOLTS
 Type P-6008. Sec.: 750 V. at 180 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 3 A.-C.T., 2.5 V. at 6 A.-C.T., 3½x4¾". 7 lbs.
E12922. List, \$6.00. NET..... \$3.53

6 OR 7 TUBES—5 VOLTS
 Type P-6009. Sec.: 550 V. at 70 M.A.-C.T., 5 V. at 3 A.-C.T., 5 V. at 5 A.-C.T., 2.5 V. at 10.5 A.-C.T., 2½x3¾". 4 lbs.
E12923. List, \$3.50. NET..... \$2.06

4 OR 5 TUBES—6.3 VOLTS
 Type P-6010. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 2 A.-C.T. Mtg. area, 2½x3". Wt., 3½ lbs.
E12924. List, \$2.50. NET..... \$1.47

6 OR 7 TUBES—6.3 VOLTS
 Type P-6011. Sec.: 700 V. at 70 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 2.5 A.-C.T. Mtg. area, 2½x3". Wt., 3½ lbs.
E12925. List, \$3.00. NET..... \$1.76

8 OR 9 TUBES—6.3 VOLTS
 Type P-6012. Sec.: 700 V. at 90 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 3.5 A. Mtg. area, 2½x3¾". Wt., 5½ lbs.
E12926. List, \$3.75. NET..... \$2.20

11 OR 13 TUBES—6.3 VOLTS
 Type P-6013. Sec.: 700 V. at 120 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 4.7 A.-C.T. Mtg. area, 3½x3¾". Wt., 5½ lbs.
E12927. List, \$4.25. NET..... \$2.50

13 OR 15 TUBES—6.3 VOLTS
 Type P-6014. Sec.: 750 V. at 150 M.A.-C.T., 5 V. at 3 A.-C.T., 6.3 V. at 5 A.-C.T. Mtg. area, 3½x3¾". Wt., 6 lbs.
E12928. List, \$5.75. NET..... \$3.38

UNIVERSAL AUDIOS

These unencased audio transformers are among the finest available today. They are noted for their exceptionally flat frequency response curve. The universal mounting plate and long flexible leads make installation exceedingly easy on every replacement job.



E12941. Type A-53. 10,000 ohms plate to single grid, 3:1 ratio, 1½x1½x2¾". Mtg. centers, 2". Wt., ½ lb. NET..... 68c

E12942. Type A-63. 10,000 ohms plate to single grid, 3:1 ratio, 1½x1½x2¾". Mtg. centers, 2". Wt., ½ lb. NET..... 79c

E12943. Type A-53C. 10,000 ohms plate to P.P. grids, 3:1 ratio, 1½x1½x2¾". Mtg. centers, 2". Wt., ½ lb. NET..... 73c

E12944. Type A-63C. 10,000 ohms plate to P.P. grids, 3:1 ratio, 1½x1½x2¾". Mtg. centers, 2". Wt., ½ lb. NET..... 85c

UNIVERSAL CHOKES

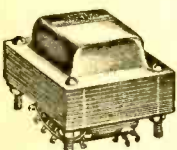
Excellent for replacement work. Universal brackets and long leads simplify installation.
E12945. Type C-1708. 10 HENRY at 65 MA. D.C. resistance 400 ohms. 1½x1½x3¾". Wt., 1½ lbs. NET..... 71c
E12946. Type C-1709. 9 HENRY at 85 MA. D.C. resistance 250 ohms. 1½x1½x3¾". Wt., 1½ lbs. NET..... 94c
E12947. Type C-1710. 8 HENRY at 150 MA. D.C. resistance 200 ohms. 2½x2½x4". Wt., 2 lbs. NET..... \$1.18

FILTER CHOKES

These high-quality chokes are for filter or plate coupling use. They are conservatively and accurately rated. The well-insulated windings are vacuum impregnated to insure long life.
E12950. C-1706. 5 H. at 40 MA. D.C. resistance 300 ohms. 1½x2" mtg. area. Wt., ¾ lb. List, 90c. NET..... 53c
E12951. C-1707. 7 H. at 40 MA. D.C. resistance 500 ohms. 1½x2" mtg. area. Wt., ¾ lb. List, 90c. NET..... 53c
E12952. C-1003. 30 HENRY at 50 MA. D.C. resistance 550 ohms. 1½x3½". Wt., 2 lbs. List, \$1.25. NET..... 73c
E12953. C-1002. 30 HENRY at 75 MA. D.C. resistance, 400 ohms. 1½x3½". Mtg. area. Wt., 2 lbs. List, \$1.55. NET..... 91c
E12954. C-1001. 30 HENRY at 110 MA. D.C. resistance, 200 ohms. 2x3½". Wt., 3 lbs. List, \$1.85. NET..... \$1.09
E12955. C-1515. 50 HENRY at 15 MA. D.C. resistance, 750 ohms. 1½x2½". Wt., 1½ lbs. List, \$1.00. NET..... 59c



HALF-SHELL REPLACEMENT POWER TRANSFORMERS



A complete line of high-grade compact power transformers, designed to meet all requirements for superior flush-mounting replacements. Made of the best quality materials; superior design and neat, workmanlike appearance make them unusual values. Uniformly wound coils and generous insulation assure long, trouble-free performance. Ample safety factor allows momentary high peak-current drains without seriously taxing transformer. For 110 Volt 60 cycle A.C. operation.

FOR 2.5 VOLT TUBES

Type P-2770. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 2 A., 2.5 V. at 4.5 A.-C.T. Mtg. area, 2½x3". Mtg. centers, 2x2½". Shpg. wt., 3 lbs.
E12930. List, \$2.50. NET..... \$1.47

Type P-2868. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 2 A., 2.5 V. at 1.75 A.-C.T., 2.5 V. at 3.5 A.-C.T. Mtg. area, 2½x3". Mtg. centers, 2x2½". Shpg. wt., 3 lbs.
E12931. List, \$2.80. NET..... \$1.65

Type P-2869. Sec.: 700 V. at 50 M.A.-C.T., 5 V. at 2 A., 2.5 V. at 1.75 A.-C.T., 2.5 V. at 5.25 A. Mtg. area, 2½x3¾". Mtg. centers, 2½x2½". Shpg. wt., 3½ lbs.
E12932. List, \$3.00. NET..... \$1.76

Type P-2859. Sec.: 700 V. at 70 M.A.-C.T., 5 V. at 3 A., 2.5 V. at 3.5 A.-C.T., 2.5 V. at 7.5 A. Mtg. area, 3½x3¾". Mtg. centers, 2½x3¾". Shpg. wt., 4 lbs.
E12933. List, \$3.50. NET..... \$2.06

Type P-2860. Sec.: 700 V. at 90 M.A.-C.T., 5 V. at 3 A., 2.5 V. at 3.5 A.-C.T., 2.5 V. at 9 A. Mtg. area, 3½x4¾". Mtg. centers, 2½x3¾". Shpg. wt., 5½ lbs.
E12934. List, \$4.00. NET..... \$2.35

FOR 6.3 VOLT TUBES

Type P-2751. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 2 A., 6.3 V. at 1.6 A. Mtg. area, 2½x3". Mtg. centers, 2x2½". Shpg. wt., 2½ lbs.
E12935. List, \$2.25. NET..... \$1.32

Type P-2771. Sec.: 650 V. at 40 M.A.-C.T., 5 V. at 2 A., 6.3 V. at 2 A. Mtg. area, 2½x3¾". Mtg. centers, 2x2½". Shpg. wt., 2½ lbs.
E12936. List, \$2.50. NET..... \$1.47

Type P-947. Sec.: 700 V. at 50 M.A.-C.T., 5 V. at 2 A., 6.3 V. at 2 A. Mtg. area, 2½x3¾". Mtg. centers, 2½x2½". Shpg. wt., 3½ lbs.
E12937. List, \$2.75. NET..... \$1.62

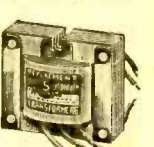
Type P-948. Sec.: 675 V. at 70 M.A.-C.T., 5 V. at 3 A., 6.3 V. at 2.5 A. Mtg. area, 3½x3¾". Mtg. centers, 2½x3¾". Shpg. wt., 5 lbs.
E12938. List, \$3.60. NET..... \$2.12

Type P-949. Sec.: 700 V. at 120 M.A.-C.T., 5 V. at 3 A., 6.3 V. at 3 A. Mtg. area, 3½x3¾". Mtg. centers, 2½x3¾". Shpg. wt., 6 lbs.
E12939. List, \$4.00. NET..... \$2.35

Type P-955. Sec.: 800 V. at 160 M.A.-C.T., 5 V. at 3 A., 6.3 V. at 4.5 A. Mtg. area, 3½x4¾". Mtg. centers, 2½x3¾". Shpg. wt., 7 lbs.
E12940. List, \$6.00. NET..... \$3.53

STANCOR UNIVERSAL VIBRATOR TRANSFORMERS

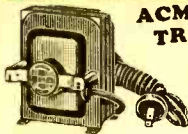
The following five transformers were designed particularly for use in servicing those receivers for which exact duplicates are not available. They are ruggedly-built to give long, dependable service. Replacements are conservative. Since they are practically identical to the original equipment, it is recommended that the brackets from the old transformer be used on these replacement units. Average shipping weight each unit, 2½ lbs.



E11273. Output 225 volts at 40 M.A. YOUR PRICE..... \$1.47
E11274. Output 250 volts at 50 M.A. YOUR PRICE..... \$1.76
E11275. Output 260 volts at 65 M.A. YOUR PRICE..... \$2.06
E11276. Output 285 volts at 75 M.A. YOUR PRICE..... \$2.35
E11277. Output 330 volts at 100 M.A. YOUR PRICE..... \$2.79

SPECIAL TRANSFORMERS

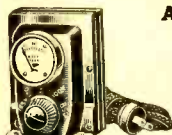
ACME STEP-DOWN TRANSFORMER



Will reduce line voltage of 200-240 volts, 50-60 cycles to 100-120 volts for operation of radio sets, amplifiers, appliances, etc. Will safely handle any device consuming up to 200 watts. Supplied with 8 foot cord, plug, and output receptacle. Small, compact, and well-built. Wt. 8 lbs.

E1265. **\$3.95**
List, \$10.00. YOUR PRICE.....

ACME VARIABLE VOLTAGE ADJUSTER



Maintains proper operating voltage under varying line conditions. Allows step-up or step-down action. Primary tapped

85-100-115-130-145 volts; sec. 115 volts. With voltmeter. For 50-60 cycle, A.C.
E1266. Capacity 150 Watts. **\$7.06**
Shpg. wt. 7 lbs. YOUR PRICE.....
E1268. Capacity 350 Watts. **11.76**
Shpg. wt. 11 lbs. YOUR PRICE.....
E1269. Capacity 500 Watts. **12.94**
Shpg. wt. 14 lbs. YOUR PRICE.....

STANCOR OSCILLOSCOPE TRANSFORMERS



These transformers are ideal for use in circuits either where two independent high voltage supplies are used, or where both high voltages are obtained from one unit with a separate transformer for the filament voltage of the sweep tube. Designed with low flux density so that they do not attain the high temperatures encountered in midget transformers. Each unit is electro-statically shielded, and furnished with wiring diagrams.

FOR 913 TUBE

Type P-4025. Has a primary of 115 V. at 60 cycles, and 5 secondaries: 275-375 V. at 10 MA.; 180 V. at 6 MA.; 6.3 V. at 1 amp.; 2.5 V. at 1.5 amp.; 6.3 V. at 4 amp. Size: 3 3/8" high, 2 1/2" wide, and 2 1/4" deep. 2 lbs.

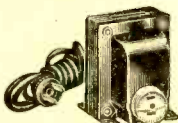
E12972. NET. **\$2.26**

FOR 902 TUBE

Type P-6130. Has a primary of 115 V. at 60 cycles, and 5 secondaries: 430 V. at 2 MA.; 6.3 V. at 6 amp.; 6.3 V. at 2 amp.; 5 V. at 2 amp.; and 5 V. at 2 amp. Size: 3 3/8" high, 3 3/8" wide, and 3 3/8" deep. Shpg. wt. 4 1/2 lbs.

E12973. NET. **\$3.23**

KNIGHT VARIABLE VOLTAGE TRANSFORMERS



A completely new line of variable voltage adjustable type transformers. Designed by a leading manufacturer to meet the requirements of standard 110 volt A.C. appliances in districts where voltage stabilization is unsatisfactory. Offered in two wattage ratings to cover requirements of small or large equipment.

150 WATTS

Suitable for regulating input voltages of 90, 105, 120, 130, 180, 210, 230, 250. Ideal for use with midget sets, small table model sets, small consoles, small fans, hair-dryers, electric razors, electric clocks, soldering irons, lamps, etc. A.C. step-up transformer when line voltage is less than 110 volts A.C.; can be used as a step-down transformer when line voltage is higher than 110 volts A.C.; can be used as an isolation transformer for static shielding purposes. Equipped with selector knob and 8 position plate. Built in A.C. receptacle. In shielded upright mounting case approx. 4"x3"x3". 6 ft. approved cord and plug. Shpg. wt. 10 lbs.

E12980. **\$8.23**
NET

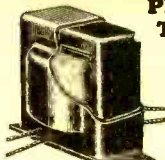
300 WATTS

Has same general specifications as transformer above. Rated at 300 watts. Will handle larger sets, soldering irons, and appliances which draw up to 300 watts. Size approximately 4 1/2"x4"x4". Shpg. wt. 12 lbs.

E12981. NET. **\$10.58**

FAMOUS JEFFERSON TRANSFORMERS

PLASTIC-SEALED TRANSFORMERS



Hematically sealed with a plastic coating which permanently adheres to and seals all exposed surfaces. These transformers provide positive protection against adverse climatic conditions. Windings are completely protected.

Sizes: A—2 1/4"x1 1/8"x1 1/8"; B—3 1/4"x1 1/8"x2 1/8"; C—2 1/4"x2 1/8"x2 1/8"; D—4"x2 1/8"x5/8"; E—3 1/4"x2 1/8"x2 1/8"

AUDIO TRANSFORMERS

No.	Type	Ratio	Down	Size	NET
E6038	467-501	1 to 2	5 D.L.	A	\$0.91
E6039	467-507	1 to 2	2 D.B.	D	1.44
E6040	467-503	1 to 3	3 D.B.	B	1.16
E6041	467-505	1 to 4	3 D.B.	E	1.05

P. P. INPUT TRANSFORMERS

No.	Type	Ratio	Size	NET
E6042	467-502	1 to 2	A	\$1.00
E6043	467-504	1 to 3	B	1.15
E6044	467-506	1 to 4	E	1.29
E6045	467-508	1 to 4	D	1.59

OUTPUT TRANSFORMERS

For single or P.P. 71A, 45, 33, 42, 47, etc. Have 7000 ohm primaries.

No.	Type	Watts	Ohms	Size	NET
E6046	467-509	2	4 to 6	A	\$0.79
E6047	467-510	3 to 8	6 to 8	B	.94

CHOKES

No.	Type	Hy. Ma.	Ohms	Size	NET
E6048	466-590	20	50	425 B	\$0.88
E6049	466-540	200	18	5000 C	.76

MIKE TRANSFORMERS

For use as microphone to grid transformers. Single button types have turn ratio of 1 to 64; double-button type, 1 to 45. Flat response, 30-7000 cycles. Low-cost high quality units.

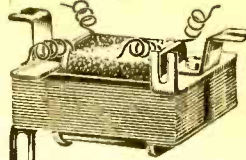
E6036.	467-413.	Single Button;	strap mounting; 2x3 1/4"x1 1/4".	Shpg. wt., 1 1/2 lbs.	List, \$1.60. NET. 94c
E6037.	467-414.	Double Button;	strap mounting; 2x3 1/4"x1 1/4".	Shpg. wt., 1 1/2 lbs.	List, \$1.75. NET. \$1.03
E6034.	467-261.	Single Button;	Shielded type. 2 1/2"x2 1/8"x3".	List, \$2.25.	\$1.32

STANCOR OUTPUT TRANSFORMERS

These scientifically designed output transformers are substantially built, using only the highest quality materials. Coils are carefully wound and highly insulated. Laminations are accurately made of fine silicon steel. Unshielded type. Will withstand hard continuous usage. For Class "A" amplification. Operate directly from plates of either single or push-pull power tubes into 6 to 10 ohm voice coils or dynamic speakers. The exceptionally flat response curve of these transformers assures true reproduction.

SINGLE TYPE

E12957.	A2203.	45, 71A, 2A3, 25A6, 25A7G, 6Y6G.	Size, 2x1 1/2"x2 3/8".	Mtg. centers, 2".	Wt., 1 lb. List, \$1.10. 65c
NET					
E12958.	A2200.	45, 71A, 2A3, 25A6, 25A7G, 6Y6G.	Size, 3 1/2"x1 1/2"x2".	Mtg. centers, 2 1/2".	Wt., 2 lbs.
E12959.	A2227.	31, 41, 10, 12, 6A4, 6A6, 38, 59, 53, 6N7, 49, 12A7, 19, 79.	Size and mtg. same as above.	Wt., 1 lb.	
E12960.	A2313.	42, 47, 6B5, 6F6, 6N6, 950.	Size, 2x1 1/2"x3 1/2".	Mtg. centers, 2 1/2".	Wt., 2 lbs. 82c
List Each, \$1.40. NET EACH.					
E12961.	A3822.	42, 47, 2A5, 6F6, 6N6, 950.	Size, 1 1/2"x1 1/2"x2 3/8".	Mtg. centers, 2".	Wt., 1 lb. List, \$1.15. 68c
NET					
E12962.	A3841.	Universal Output.	Single Plate. Primary Impedance, 2500, 4000, 5000, 6000, 7000 ohms.	2 1/2"x2 1/4"x2 1/8"x2 3/8".	Wt., 2 lbs. List, \$3.50. \$2.06
NET					
E12963.	A3842.	Universal Output.	Push-Pull Plates. Pri. Imp., 8,000, 10,000, 12,000, 14,000 ohms.	2 1/2"x2 1/4"x2 1/8"x2 3/8".	Wt., 3.5 lbs. List, \$3.50. \$2.06
NET					



UNIVERSAL AUDIO

A small, compact audio unit for use in any AC or DC set. Core of high grade silicon steel with accurate machine-wound coil. True Jefferson quality. Furnished with two sets of brackets for horizontal or vertical mounting. Low height makes it suitable for sub-base mounting. Ratio, 2 to 1. Popular for set-building and replacement purposes. Size, 1 1/2"x3 1/2"x2 1/8". With flexible leads. Shpg. wt., 1 1/2 lbs.

Type 467-164. **73c**
E6025. List, \$1.25. YOUR PRICE.....

"STAR" SEALED TRANSFORMERS

Outstanding values in high quality transformers for use in any set of amplifier, A.C. or D.C. Machine-wound coils for accuracy and uniformity. Laminated core of high silicon steel. Assembled in black enameled sheet steel case with nickel-plated binding posts. Windings completely shielded and clearly marked. Size, 2 1/2"x2 1/8"x2 3/8" high. Mtg. centers 2 3/8". Shpg. wt., 2 lbs. each.



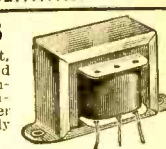
E6030. 467-113. 3 to 1. **\$1.32**
E6031. 467-116. 5 to 1. List, \$2.25. NET EACH.....

LINE TO VOICE COIL OUTPUT TRANSFORMER

A high-quality heavy-duty transformer capable of handling up to 12 watts continuously; ideal for P.A. installation. Several of these transformers may be connected in various series or parallel arrangements for coupling a number of speakers to a 500 ohm line. Primary impedance is 1000 ohms, with taps at 500 and 250 ohms, for matching almost any line. Secondary is 3, 6, 9 and 15 ohms. Size, 4x2 1/8"x2 1/4". Wt., 3 lbs.



E6026. Type 467-438. **\$1.76**
List, \$3.00. YOUR PRICE.....



PUSH-PULL TYPE

E12964.	A2220.	PP 45, 71A, 2A3, 25A6, 25A7G, 6Y6G.	Size, 2x1 1/2"x2 3/8".	Mtg. centers, 2".	Wt., 1 lb. List, \$1.20. 71c
NET					
E12965.	A2201.	PP 45, 71A, 2A3, 25A6, 25A7G, 6Y6G.	Size, 3 1/2"x1 1/2"x2".	Mtg. centers, 2 1/2".	Wt., 2 lbs. List, \$1.50. 88c
NET					
E12966.	A2231.	PP 31, 41, 6A6, 38, 6N7, 213A.	Size, 3 1/2"x1 1/2"x2".	Mtg. centers, 2 1/2".	Wt., 2 lbs. List, \$1.50. 88c
NET					
E12967.	A2312.	PP 42, 47, 6B5, 6F6, 6N6, 950.	Size, 2x1 1/2"x3 1/2".	Mtg. centers, 2 1/2".	Wt., 2 lbs. List, \$1.50. 88c
NET					
E12968.	A2285.	PP 43, 45, 59, 71, 2A3, 25A6, 25A7G, 6Y6G.	Size, 2 1/2"x1 1/2"x2 3/8".	Mtg. centers, 2".	Wt., 3.5 lbs. List, \$2.15. \$1.26
NET					
E12969.	A3830.	Universal.	6L6, 6V6, 6A3, 58, 6A6, 6N7.	Size, 2x2 1/4"x2 3/8".	Mtg. centers, 3 3/4". Wt., 3.5 lbs. List, \$3.00. \$1.76
NET					
E12970.	A3823.	Universal Output.	Single or Push Pull plates.	Size, 1 1/2"x1 1/2"x2 1/8".	Mtg. centers, 2 3/8". Wt., 1 1/2 lbs. 88c
List, \$1.50. NET.					

Quality REPLACEMENT VIBRATORS



USE YOUR M. Y. ENCYCLOPEDIA
See your new Mallory-Yaxley Encyclopedia for help in selecting the proper vibrator for any set. Mallory vibrators are easily the finest available today.

Select the vibrator you want from the set listing below. For price, see chart at right which shows prices for all Mallory vibrator types.

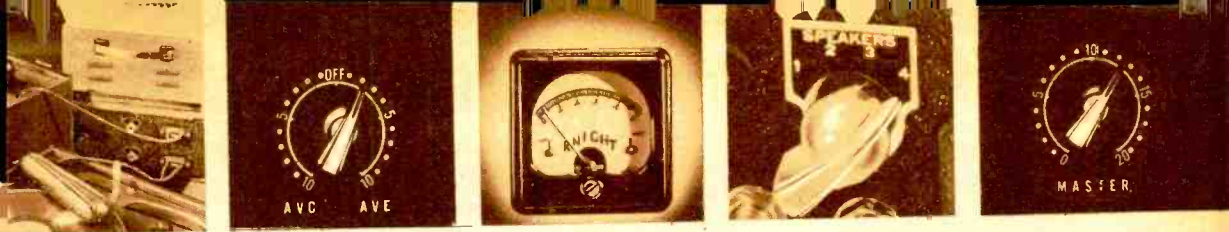
MALLORY EXACT DUPLICATE VIBRATORS

The listing below shows the complete line of Mallory 6 volt vibrators. This list includes vibrators to replace defective units in both automobile and regular household type radio sets. Order your vibrator by manufacturer's type number if original vibrator is a Mallory. If your model is not shown, order your vibrator from ALLIED, giving model number and type number of original set and vibrator. We will fill your order promptly from our huge vibrator stocks. Our complete stocks include vibrator replacements for 12 volt sets and also for 32 volt sets. Your requirements will receive our closest attention.
EXTRA DISCOUNTS: Deduct 10% from net prices shown if you purchase 6 or more vibrators on one order.

Mallory No.	Cat. No.	List Price	NET EACH	Mallory No.	Cat. No.	List Price	NET EACH	Mallory No.	Cat. No.	List Price	NET EACH
201	E4656	\$6.50	\$3.82	W246	E4683	\$4.95	\$2.91	289Y	E4642	\$4.95	\$2.91
205	E4630	6.50	3.82	247	E4668	4.95	2.91	292	E4652	2.95	2.03
210	E4663	7.00	4.41	248	E4633	4.95	2.91	294	E4633	2.95	1.73
220B	E4655	4.50	2.65	249	E4679	4.95	2.91	294C	E4643	2.95	1.73
221	E4664	3.95	2.32	253	E4650	3.95	2.32	294SW	E4644	2.95	1.73
222	E4654	5.50	3.23	253T	E4676	3.95	2.32	296	E4651	2.95	1.73
223	E4667	3.95	3.50	253Y	E4662	3.95	2.32	297	E4660	3.95	2.32
224	E4631	7.00	4.12	270	E4673	5.95	3.50	302S	E4671	6.50	3.82
225	E4658	5.95	3.50	270B	E4634	5.95	3.50	3118	E4645	7.50	4.41
226	E4657	5.95	3.50	271	E4661	5.95	3.50	3001	E4677	2.95	1.73
230	E4672	7.50	4.41	271HD	E4665	5.50	3.23	501P	E4678	2.95	1.73
231	E4674	7.25	4.26	273D	E4666	5.50	3.23	501C	E4646	3.95	2.32
245	E4675	5.95	3.50	275	E4661	5.95	3.50	504	E4647	3.95	2.32
245A	E4632	4.95	2.91	275XS	E4636	7.50	4.41	505P	E4685	2.95	1.73
W245	E4682	4.95	2.91	277S	E4659	5.95	3.50	506P	E4686	3.95	2.32
W245A	E4640	4.95	2.91	285XS	E4687	7.00	2.91	514	E4648	4.95	2.91
245C	E4689	4.95	2.91	P285Y	E4684	4.95	2.91	729A	E4691	4.95	2.91
246	E4688	4.95	2.91	286S	E4641	5.50	3.23	738A	E4692	4.95	2.91

Name and Model	Mfrs. No.	Name and Model	Mfrs. No.	Name and Model	Mfrs. No.	Name and Model	Mfrs. No.	
AIRLINE 62-166, 62-118, 6U 62, 062 102 87 62-199	253 205 296 292 286S	FIRESTONE R1322 54.64, R1332, TRAVELER R1331	289Y 294 294SW	SIMPLEX T 33, 33A, 33B, 333	292 292 222	WELLS-GARD, —Cont'd 6N 6K 25Y1 (5Y) 06W	294 248 286S 210	
ARVIN 15, 25, 35, 45 1st Ser 10A, 20A, 30A, 20B, 30B 16, 15, 25, 35, 45 2nd Ser	296 292	FORD MAJESTIC 40-18805 PHILCO PHILCO (1936), 817, 818, 819	220B 500P 501P	SPARTON 36, 33A, 33B, 333	292 222	WURLITZER A60, 460	292	
ATWATER KENT 666, 776 816, 424, 534 126, 136, 416, 446, 556	296 226 294	FREE A7, A9	210	STEWART-WARNER R112, 1121, 1122, 1123 R118, 1171, 1172, 1181 R189 1601, 143 R132, R1322	292 294 285NS 294SW 289Y	ZENITH 460, 462 JUNIOR 7, FORD 5305-6, 5621, 35 666, 668, 680, 6M90, 7M91S, 7M91D 5M90 (Ch. 5510), 66-34	221 296 246 294 294SW	
AUDIOLA 33A6 C6, 64, 74 33S6 (1st Series) 33S6 (2nd Series) 346, 347 (6 Prong), B6 43, 67, 73 Series	225 294 302S 292 246	G. E. B40, C41, B52 C60 D50, D51, D52 N51 C61 D72, N-60	271* 253 286S 248 224 294	STROMBERG-CARLSON 33, 33A	210	MALLORY TYPE "4-4" VIBRATOR A new Mallory development. Used as initial equipment in thousands of low-drain auto radio sets. 4 contacts, 4 prongs (standard). Can measure 3/8" x 1/2". Similar to type 294, but handles less current.	\$1.03 95c	
BELMONT 566, 060 660 (Vibrator only) 880, 670, 680 Series 1932 Models	294 292 296 311S	GRUNOW 614, 618 625	294 273D	UNITED MOTORS BUICK-OLDS-PONTIAC 393884-5, 405045 405046 Series 544267 Series 980534-5 3654441, 980393 980441, 980455, 980459	273C 273C 514 221 222	WELLS-GARDNER 61, 62 V622, Z621 062, 062A 072-072A	253 292 205 210	
BOSCH 140 (2nd & 3rd Ser.) 536, 636, 637, 524A, 634-634A 150 (1st Series) 150 (2nd Series) 736, 737, 738	271 253Y 210 271 294	INTERNATIONAL K60 (K6)	296	WELLS-GARDNER 61, 62 V622, Z621 062, 062A 072-072A	253 292 205 210	IN LOTS OF 6, EACH	\$1.03 95c	
CHEVROLET 364441 600153 Series 601038 Series 985100, 985200 985300 985252, 3, 4, 5	221 222 222 294 273D 294C	KNIGHT F9541, F9551 U 6 L7, X6, Z4, Z5, BA41 A9811-12, H9817	292 294 245C 285XS	LEWAL 9101-2	292	FOR PHILCO SETS For all Philco auto sets prior to 1936: 816, RT14X, 816B, T2, T3, T5, T6, NT15, ST15, PHXD, 37-S1431. Standard 4 prong base.	E4694, NET EACH LOTS OF 6, EACH	98c 95c
CROSLEY 98, 99, 102, 103, 5A1 4A1, 5A3, A155 A166, A255, A355, A366, A455, A555 A156, A266 6615, 435, 546, 636	223 247 273C 501P 246	MAJESTIC 66, 116, 116A, 118	220B	L'TATRO 6A, K665, J665, H465, I465 R, S, Q, 5636, O, P 4626, M, 4616 (1st Ser.) R, S, Q, 5636, O, P 4626, M, 4616 (2nd Ser.)	275 275XS 285XS	FOR PHILCO SETS For models 817, 818, 819, T12, 827, 826, 828, 1418, 1417, 1430, 1432, 1431, 1421, 1450, 1442, 1440, 1436, 1418, B, P, D, P, DVP.	E4695, NET EACH LOTS OF 6, EACH	98c 95c
DELCO 2035, 4036 4037, 4038 626, 627, 628, 629, 634, 635 6010 630, 631, 632, 633, 500, 631A	221 222 273C 245	MOTOROLA 34, 50, 60, 90 61, 88 77, 77A, 44A, 66 55 44 57, 62, 75, 79, 100, 110, Dual 6, Twin 8	294 302S 230 270B 251 253 253T 253	MUSIC MASTER TEN-TEN	292	FOR DELCO SETS For models 2035, 4036, etc., also for United Motors 980383, 980393 and 364441 sets. Oiling: size, 2 1/2 x 1 1/8 x 1 1/8.	E4696, NET EACH LOTS OF 6, EACH	\$1.16 \$1.04
DETROLA 6A, 1100, 1100A 6M, 6R 1934, 1935 (3 Lead)	220B 294 292	RCA VICTOR 5M, 6M, 6M2 M34, M105, M116 M107 M101, M104, M108 M109, RS63-1, H6 M123 6BK6, 6BT6, 8BK8, 8BT6	249 271* 253 286S 294 224	SEARS-ROEBUCK 7128 (4 PRONG) 7117, 1859A 7128 (6 PRONG) 4400, 107HA62 3400	294 294 296 249 504	FOR MOTOROLA SETS For models 34, 62, 79, 50, 60, 65, 35, 45 and 70.	E4698, NET EACH LOTS OF 6, EACH	\$1.23 \$1.11
EMERSON 965, 667 5A 678-1 & 2 6A, 1A, 2A, E123	296 277S 222 253Y	SEARS-ROEBUCK 7128 (4 PRONG) 7117, 1859A 7128 (6 PRONG) 4400, 107HA62 3400	294 294 296 249 504	FOR DELCO MODELS 625, 626, 627, 628 and 629.	E4697, NET EACH LOTS OF 6, EACH	FOR KNIGHT SETS Type SP55. For models H9571, H9850, L7, X6, Z4, Z5 and BA41. Has five prong base. Measures 3/4" long, 1 1/2" diameter.	E4693, NET EACH LOTS OF 6, EACH	\$1.57 \$1.41 \$1.23 \$2.91 \$2.62
ERLA-SENTINEL 5500, 10M 600, 602, 603	294 292							
FADA 101, 102, 104, 104B 5500, 10M 166 266, 266SD, 266SG	221 253Y 294							





More Features—More Watts for Your Money IN EVERY Knight SOUND SYSTEM!



AN IRON-CLAD Guarantee

We ask you to compare the tone quality, the power output, the overall performance of any Knight Sound System with that of any other system now on the market. Order the model you want, buying for Cash or on Time Payments, and test it out for yourself, under your own operating conditions.

Compare the features, compare the quality, compare the actual performance. If your Knight it to be, if it doesn't prove to be the biggest P.A. dollar's worth on the market for power, for tone, for all-around results after you've tried it—send it back and we'll refund every penny of the purchase price, less only transportation charges. Remember, too, that every Knight Radio Sound System is covered by the regular Radio Manufacturers' Association guarantee.

This is the fairest and the strongest Sound System guarantee you could ask for. It's your absolute assurance that when you buy a Knight Sound System you get more watts, more fidelity, more stamina and more quality for less money.

—ALLIED RADIO CORP.

FREE CONSULTING SERVICE

We invite you to submit your Public Address problems to our Sound Engineers for authoritative aid and proper recommendations without any obligation on your part. Write to us today.

BUY ANY KNIGHT SOUND SYSTEM ON CONVENIENT MONTHLY PAYMENTS

Don't lose big profits in P.A. for lack of Cash! You can get any of the profit-building Knight P.A. Equipment you need—**NOW**—and make it earn for you while it pays for itself. You can buy attractive new Address Equipment easily and conveniently on our \$40.00 or more Monthly Payment Terms, if your order comes to \$40.00 or more. You'll find our Time Payment Terms extremely attractive. Complete explanation as well as table of terms appears below. It will pay you to make any wish, buy it on the easiest terms you can get anywhere. Select the Knight Public Address Equipment you want now, and write to us for full details of our convenient Time Payment Plan.

Take eight months to pay. You pay just 10% down, and the balance in convenient monthly payments. Add 10% to the unpaid balance to cover carrying charges. Then divide by 8 to obtain the monthly payments required. Select the equipment you want, and send in your order with a 10% cash down payment, including your credit investigation. Credit investigation will be promptly handled and contracted forms for your signature will be forwarded to you immediately afterward.

SIMPLIFIED TABLE OF TERMS

If Cash Price of Order Amounts to	Minimum Down Payment is 10% of Cash Price	To Find Carrying Charges	Monthly Payments 8 Months
\$40.00	\$ 4.00	1.530-01 + \$3.00 or \$5.50	\$ 4.95
60.00	6.00		7.43
80.00	8.00		9.90
100.00	10.00		12.38
120.00	12.00		14.85
150.00	15.00		18.57
175.00	17.50		21.66
200.00	20.00		24.75
225.00	22.50		27.85
250.00	25.00		30.94

Simply add 10% to unpaid balance, then the balance is paid. If you pay the balance in 8 months, the balance is paid. If you pay the balance in 8 months, the balance is paid. If you pay the balance in 8 months, the balance is paid.

Knight 8 WATT Standard SOUND SYSTEMS



MORE FOR YOUR MONEY IN POWER AND TONE

- Mike and Phono Input
- Built-in Mixer Control
- Full Tone Control
- Beam Power Output
- Polarized Connections
- 4, 8, 500 Ohm Output
- Built-in Output Transformer
- Jensen Dynamic Speaker Completely Fused

A high-quality low-cost sound system intended for smaller installations where moderate coverage is desired. Comes complete, ready to set up quickly and easily. Compact and complete; no external batteries or mixers are required; microphone transformer and current supply are built in. Output is full 8 watts with remarkably true tonal fidelity. The complete Knight 8 Watt System has essentially uniform frequency response from 80 to 8,000 cycles. A variable Tone Control is provided to accentuate bass or treble as desired and to aid in compensating for varying acoustical conditions. Each system is carefully tested before shipment to assure perfect operation when it reaches you.

• **Latest Circuit.** Latest octal tubes are used: 1—6N7G, 1—6L6G, 1—5Y4G. Gain is 95 db. Hum and distortion are negligible. Field current for the 2500 ohm dynamic speaker is supplied by the amplifier. Output transformer with 4, 8 and 500 ohm taps is mounted in the amplifier. The amplifier circuit is fused. A detailed wiring diagram is mounted on the base plate. No detail has been overlooked in our desire to give you the most for your P.A. dollar.

• **Built-in Mixer.** The Knight 8 Watt Sound System is supplied with an entirely new high-grade double-button microphone of latest streamlined design. A twin tip-jack is provided for plugging in a high-impedance crystal or magnetic phono pickup. Separate volume controls for both microphone and phonograph permit effective blending and fading action. Microphone current is automatically supplied by the amplifier. No external batteries or transformer connections are required. Microphone and speaker receptacles are polarized for rapid, convenient connection. A tip-jack is provided for extra speaker (high impedance P. M. dynamic or magnetic) or headphones. These are exclusive Knight "extra-value" features incorporated to give exceptionally versatile operation in the field.

• **Complete System.** The Knight 8 Watt Sound System comes complete with the following: 1—Knight 8 Watt Amplifier; 1—Knight Streamlined double-button microphone on desk stand with 25 foot cable and polarized plug; full 8-inch Jensen Electro-dynamic speaker with 25 foot cable and polarized plug attached; R.C.A. tube kit; spare fuse and complete operating instructions. For 110 volts, 50-60 cycles A.C. Shpg. wt., 39 lbs.

E12209. Complete 8 Watt Carbon System.

A splendid low-cost P.A. System.

List Price, \$44.95.

YOUR PRICE.....

\$21.45

• **AMPLIFIER ONLY.** The Knight 8 Watt Amplifier is also available separately. Includes: built-in microphone and phonograph mixer; tone control; field current for 2500 ohm dynamic speaker; output transformer with 4, 8 and 500 ohm taps; input for single or double-button carbon mike, and crystal or high-impedance magnetic pickup; fuse. Develops full 8 watts output; uses octal tubes: 1—6N7G, 1—6L6G, 1—5Y4G; gain is 95 db. with essentially flat frequency response from 80 to 10,000 cycles. Attractively designed; size: 11 3/4" x 6 3/4" x 8". For 110 volts, 50-60 cycles A.C. Shpg. wt., 18 lbs.

E12208. 8 Watt Amplifier only.

List, \$22.50. **YOUR PRICE**

E12300. R.C.A. Tube Kit. NET

\$10.95

\$2.84

8 WATT PORTABLE SOUND SYSTEM

The Knight 8 Watt Standard Sound System is offered also in modern, low-cost portable form. Ideal for use in store demonstrations, small halls, churches, club rooms, for sales talks, side-shows, etc. Unusually compact and convenient. Gives excellent coverage of small audiences at low cost. The entire system is completely contained in a single leatherette-covered carrying case, 19 1/4" x 15 1/4" x 8". Weighs only 32 lbs. Uses new type streamlined double-button stability and output. Microphone transformer and current supply are built in. Has input for phonograph as well as microphone. Includes individual volume controls for microphone and phonograph to permit "mixing" and blending of voice and music. Tone Control allows for emphasis of bass or treble as desired. The Beam Power 6L6G tube assures full 8 watts output with minimum distortion. The Jensen 8-inch dynamic speaker is the finest type available. The Knight 8 Watt Standard Portable System comes complete in sturdy and attractive carrying case illustrated. Includes: 1—Knight 8 Watt Amplifier; 1—streamlined Carbon Microphone and desk stand with 25 foot cable and polarized plug; 1—Jensen 8-inch Electro-dynamic Speaker with 25 foot cable and polarized plug—all in a single unit carrying case. For operation on 110 volts, 50-60 cycles. Shpg. wt., 45 lbs.

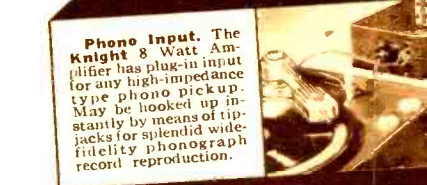
E12210. Complete 8 Watt Portable System.

List, \$54.95. **YOUR PRICE.....**

\$26.40



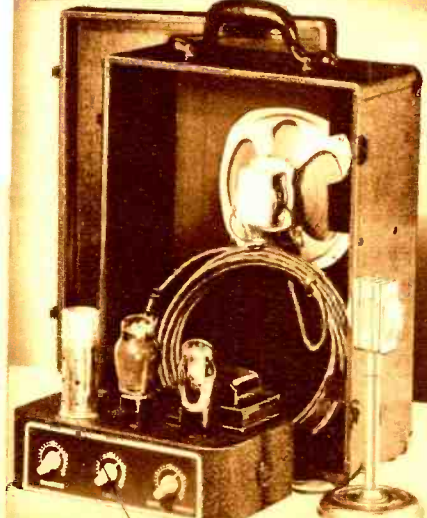
Built-in Mixer. Individual volume controls are provided on the Knight 8 Watt amplifier for simultaneous mixing microphone and phonograph. Tone Control is also included. All controls are easily accessible on the front base panel.



Phono Input. The Knight 8 Watt Amplifier has plug-in input for any high-impedance type phono pickup. May be hooked up instantly by means of tip-jacks for splendid wide-fidelity phonograph record reproduction.



Streamlined Carbon Mike. New two-button type of latest, efficient design—beautiful in appearance; internally rubber-floated—has essentially flat response from 45 to 7000 C.P.S. for excellent performance.



Knight 8 WATT High-Gain SOUND SYSTEMS



- Inverse Feedback
- Hi-Gain Mike and Universal Phono Input
- Beam Power Tube
- Electronic Mixer
- Tone Control
- 4, 8, 500 Ohms P. P.
- Fuse Protected
- New Octal Tubes

Here's a smashing P. A. Value Leader in a high quality modern full 8 Watt High-Gain Sound System packed with exclusive new features—yet priced below all competition. Ideal for smaller installations where moderate sound coverage or effective reinforcement is desired. Fine for window demonstrations, small halls, parking lots, lecturers, small churches and schools, clubs, lodges, night clubs, taverns, weighmasters' offices; for hearing-aid use, electric guitars, etc.

• **Inverse Feedback.** Provides greater output with less distortion, hum and noise, and at the same time improves tone quality immeasurably. Just compare the Knight 8 Watt System with similar more costly systems lacking Inverse Feedback and you'll notice an astounding difference—you'll **Knight** every time.

• **Knight Velocity Microphone.** You get the highest quality new velocity type microphone with the Knight 8 Watt Sound System. Features: Acoustic Compensator which permits automatic matching of the microphone response for best results on either voice or music and also compensates for varying acoustical conditions; "On-off" Switch; live gum-rubber Shock Absorber; Locking-type Polarized Cable Connector; Tilt-Swivel arrangement, etc.

• **Universal Input.** Provision is made to handle any high-impedance type microphone and crystal or magnetic pickup. No circuit changes are required when changing from one type of microphone to another.

• **Built-in Electronic Mixer.** Separate microphone and phonograph volume controls are provided, permitting blending and "mixing" action, as desired. Tone Control is also included to accentuate bass or treble, as desired, and to aid in compensating for varying acoustical conditions.

• **New High-Gain Circuit.** Advanced engineering design is reflected in the circuit of the Knight 8 Watt Amplifier. Uses the following octal tubes to the fullest advantage: 1—6J7G, 1—6F5G, 1—6L6G, 1—5Y4G. This modern tube line-up assures absolute rated output and minimum distortion. The amplifier develops a gain of 115 db. for microphone and 80 db. for phonograph. Has essentially flat frequency response from 70 to 10,000 C.P.S. The incorporation of Inverse Feedback results in negligible hum and distortion. Field current for the 2500 ohm dynamic speaker is supplied by the amplifier. Built-in output transformer is tapped at 4, 8 and 500 ohms. An extra speaker outlet permits the use of an additional speaker (P. M. dynamic or magnetic) or headphones, if desired.

• **Simple to Operate.** The Knight 8 Watt Sound System has been designed for the utmost simplicity in both installation and operation. Polarized connections and complete operating instructions permit instant installation and

operation by anyone. It's impossible to make a wrong connection. The amplifier is effectively fused for complete protection. A complete wiring diagram is mounted on the base plate.

• **Complete Velocity System.** The Knight 8 Watt High-Gain Velocity Sound System comes complete as follows: 1—Knight 8 Watt High-Gain Amplifier; 1—Knight Velocity Microphone with 25-foot cable and connecting plugs; 1—Highest grade Banquet type Stand; 1—Jensen 8-inch Electro-dynamic speaker with 25-foot cable and polarized plug attached; complete kit of R.C.A. tubes, spare fuse and complete instructions. For operation from 110 volts, 50-60 cycles A.C. Shpg. wt., 40 lbs.

E12201.
List, \$67.50.

YOUR PRICE

\$32⁹⁵

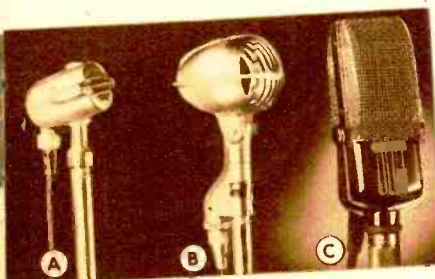
AMPLIFIER ONLY

The Knight 10 Watt High-Gain Amplifier is available separately, either as an ideal replacement for obsolete amplifiers or for use as the heart of practically any moderate-power sound system. Includes features as described above. Size: 11 $\frac{1}{2}$ " x 6 $\frac{3}{4}$ " x 8". Weighs only 19 lbs.

E12200. 8 Watt High-Gain Amplifier only.
List, \$23.50. **YOUR PRICE**

\$11⁴⁵

E12301. Kit of R.C.A. Tubes. NET \$3.38



CHOICE OF MICROPHONES

In addition to the Knight Velocity Microphone, the 8 Watt System is available with choice of microphones, as illustrated above:

E12204. Complete System as above, but with American "Clipper" D-7T Dynamic Microphone. (Fig. A.)

E12202. Complete System as above, but with Shure "Rocket" Crystal Microphone. (Fig. B.)

E12203. Complete System as above, but with Bruno Velotron Microphone. (Fig. C.)

List, \$67.50. **\$32.95**
NET EACH OF ABOVE

HIGH-GAIN PORTABLE

The Knight 8 Watt High-Gain Sound System with Velocity Microphone is available also in a modern, low-cost portable system. Designed for coverage of small audiences. Ideal for musical organizations, lecturers, demonstrations, side-shows, etc. All components are housed in a single compact carrying case, 19 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 8". Weight complete is only 40 lbs. Includes all features described above: Inverse Feedback; Universal Phono Input; High-Gain Mike Input; Beam Power Output; Electronic Mixer; Tone Control; Fuse; Extra Speaker Jack; 4, 8, 500 ohms tapped output; latest octal tubes. Delivers full 8 watts output. The complete Knight 8 Watt High-Gain Portable System includes: 1—Knight 8 Watt High-Gain amplifier; 1—Knight Velocity Microphone with banquet stand and 25 foot cable and plug; 1—8-inch Jensen Dynamic Speaker with 25 foot cable and polarized plug, complete set of R.C.A. tubes, spare fuse, and operating instructions. Entirely self-contained in portable case. For operation from 110 volts, 50-60 cycles A.C. Shpg. wt., 45 lbs. One of the finest low-cost Portable P.A. Systems available.

E12205.
List, \$77.50.
YOUR PRICE

\$37⁹⁰



Knight



The exclusive Knight Velocity Microphone with built-in acoustic Compensator and "On-off" Switch.

FEATURES :

- Four Input Channels
- Universal Mike Input
- Dual Phono Input
- Built-in V. I. Meter
- 12" Jensen Speakers
- Dual Tone Control
- Inverse Feedback
- Beam-Power Output
- Speaker Selector Switch
- Built-in Electronic Mixer
- Universal Output
- Headphone Monitor Jack
- Shorting Type Input Jacks
- Power Stage Tap
- Completely Fused

TECHNICAL SPECIFICATIONS :

The Knight 15 Watt High-Gain System delivers full 15 watts output at 5% distortion, 25 watts peak. Gain is 120 db., essentially flat from 70 to 10,000 C. I. S. Hum level is negligible. Tubes used: 2-6J7G, 2-6N7G, 1-6J5G, 2-6V6G, 1-5Y4G. Two high gain microphone channels permit use of any high-impedance Crystal, Velotron, Velocity, Sound-cell or Dynamic microphone. Individual microphone controls are provided. Has exclusive new Dual Phono Input with fader control to accommodate one or two crystal or magnetic pickups. Includes Dual Tone Controls for bass or treble accentuation. Individual microphone and phono controls permit blending and fading as desired. Mixing action is electronically controlled. Incorporates Inverse Feedback; has Speaker Selector Switch providing choice of 2, 4, 8, 16 or 500 ohms at standard two-contact speaker receptacles. Input jacks are of shorting type, blocking out all possibility of noise from channels not in use. Equipped with Power Stage Tap for adapting it to use of Knight Power Stage (see page 86). Supplied with genuine Jensen Permanent Magnet Dynamic Speakers. Complete with genuine Jensen Permanent quality throughout. Amplifier features latest streamline design, in beautiful grey and black finish. Removable top cover and bottom plate make all tubes and parts immediately accessible. Full instructions are furnished for easy installation and operation. Each system is carefully tested before shipment.

Front Panel Controls: 1—Microphone No. 1; 2—V. I. Meter; 3—Treble Tone Control; 4—Jewelled Pilot Light; 5—Microphone No. 2; 6—Zero position Dual Phono Control; 7—Bass Tone Control; 8—A.C. "On-off" Control Switch.

Volume Level Indicator Meter. Indicates output level of amplifier, directly in decibels. Essential for recording or for maintaining constant volume level at amplifier when speakers are remotely located.

Has provision for use of additional high-impedance microphone. Individual microphone controls allow either microphone to be cut in or out or blended together at will. Rich, high-fidelity tone is achieved on both voice and music by the Knight 15 Watt High-Gain Sound Systems—1939's biggest P.A. values.

The Knight 15 Watt Sound System has plug-in input for one or two crystal or magnetic pickups. (See page 88 for portable phonograph.) Operated from new dual control on front panel—each phono controlled from either side of a zero position—allowing fading action for background or sound effects. Another fine feature.

New Speaker Selector Switch permits instant selection of voice coil or speaker line output impedances to match any number of speakers of the P.M. Dynamic type or any self-excited dynamics, to the amplifier. No figuring or guessing—just set the switch at the position where volume and quality are best.

Dual Tone Controls are provided in the Knight 15 Watt Systems to give individual bass or treble emphasis and to aid in compensating for varying acoustical conditions. Individual controls have no effect on one another.



15 WATT STANDARD HIGH-GAIN SOUND SYSTEMS

THE ALL-PURPOSE P. A. LEADER

An exceptional value in a low-cost complete **Knight 15 Watt High-Gain Sound System** using the new **Knight Velocity Microphone** with exclusive **Acoustic Compensator** feature. Delivers maximum output of 25 watts. Ideal for use by orchestras, churches, morticians, schools, clubs, lodges, night clubs, carnivals or wherever intermediate power with exceptional fidelity is desired. The finest medium-power Sound System available at **Allied's** sensationally low price.

• **Inverse Feedback.** A new feature that is seldom found in moderately priced Sound Systems. Provides greater output with minimum distortion, and greatly improves frequency response. Inverse Feedback permits operation at higher levels not possible in ordinary systems.

• **Four Input Channels.** The **Knight 15 Watt High-Gain Sound System** permits the use of any two high-impedance microphones along with two crystal or magnetic phono pickups. Full electronic mixing is provided by means of individual microphone and phonograph controls, permitting blending and fading as desired. Dual Tone Controls are also incorporated, giving individual bass and treble control.

• **New V. I. Meter.** Indicates output level of amplifier directly in decibels. May be had with System at small additional cost. Valuable for recording or for maintaining constant volume level where speakers are remotely located. Another exclusive **Knight P.A.** feature for 1939!

• **12" Jensen Speakers.** Two genuine 12-inch Jensen Permanent Magnet Type Dynamic Speakers are provided with this 15 Watt System. They adequately handle the output of the amplifier, giving wide-range faithful reproduction. These speakers are far superior to ordinary dynamics; they require no field excitation; ruggedly built with typical Jensen quality. Each speaker is equipped with 30 foot rubber-covered cable and standard 2-prong appliance plug.

• **Powerful Circuit.** The High-Gain Amplifier incorporated in the **Knight 15 Watt Sound System** develops a full 15 watts output with admirable fidelity, free from distortion. Uses the latest type tubes, as follows: 2-6J7G, 2-6N7G, 1-6J5G, 2-6V6G, 1-5V4G. Brilliant engineering results in unusually high gain and remarkable wide-range fidelity.

• **Splendid Response.** Frequency response is essentially flat from 70 to 10,000 C.P.S. Gain is 120 db. on mike and 80 db. for phono. Hum level is negligible. These splendid characteristics assure high output coupled with excellent fidelity, making the **Knight 15 Watt Sound System** ideal both for sound reinforcement as well as for powerful public address coverage.

• **Professional Appearance.** 1939 in design and function, this **Knight 15 Watt Sound System** is distinguished for beautiful, practical design. All controls are assembled conveniently on the etched black front panel, with clear, distinct calibrations in brushed aluminum. Control knobs are of contrasting grey bakelite. Rear and side base panels hold all microphone, speaker and phonograph plug-in receptacles. Here also are the speaker selector switch, a monitor headphone jack and a power stage driver tap. Shield screen at back gives access to tubes.

• **Extra Features.** You get full value in the **Knight 15 Watt Sound System.** Extra refinements include the following: Speaker Selector Switch permitting impedance matching instantly to any number of speakers; Power Stage Driver Tap allowing for addition of extra power stage when desired (see page 86); Monitor Headphone Jack for checking amplified program; completely fused line; diagram on base plate, etc. The **Knight 15 Watt System** is backed by our iron-clad guarantee.

• **Complete 15 Watt Velocity Mike System.** The complete **Knight 15 Watt Velocity Microphone System** includes: 1—**Knight 15 Watt High-Gain Amplifier**; 1—**Knight Velocity Microphone** with Acoustic Compensator; 25 feet of special shielded microphone cable with polarized amplifier plug and locking-type microphone connector; 1—standard **Knight microphone floor stand** with sure-grip clutch (adjustable from 46 to 70 inches); 2—12 inch Jensen P.M. Dynamic Speakers with 30 foot rubber-covered cables and 2-prong plugs; complete R.C.A. tube kit, spare fuse, and full instructions for installation and operation. For operation on 110 volts, 50-60 cycles A.C. (May also be had for 220 volt and 110 volt, 25 cycle at small additional cost.) Shpg. wt., 65 lbs.

E12216. Complete System (less V. I. meter) \$66.50

List, \$134.50.

CASH PRICE.....

Time Payments: \$6.65 down, \$8.23 monthly.

E12250. Volume Level Meter. \$4.50

(Note: See Page 88 for Portable System.)

15 WATT AMPLIFIER ONLY

The **Knight 15 Watt High-Gain Amplifier** is available separately as an ideal nucleus for sound systems using low level microphones. Features as described. Has universal input for any two high impedance microphones and two phonos. Develops a remarkable gain of 120 db., permitting the direct use of high impedance microphones without requiring the use of a preamplifier. The frequency response is essentially flat from 40 to 10,000 cycles. Has individual volume controls for both microphones and phonographs, permitting them to be "faded" or "mixed" as desired. Provision is made for the use of two microphones, either of which may be used at will. Dual Tone Control is built-in for bass or treble emphasis. Has polarized receptacles for mikes, 2-contact receptacles for speakers and twin jacks for phono input. Output is universal, tapped at 2, 4, 8, 16 and 500 ohms. Size: 19 1/2" x 11 1/2" x 9 1/2". Shpg. wt., 27 lbs. For 110 volts, 50-60 cycles A.C.

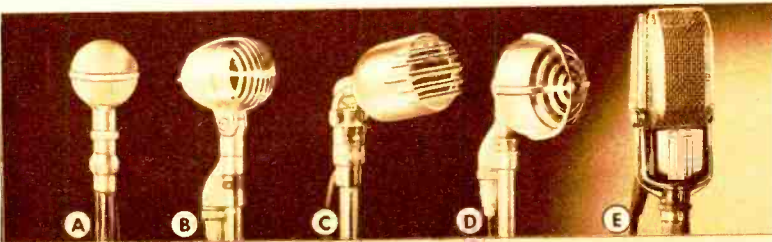
E12215. Knight 15 Watt Amplifier, less V. I. Meter and tubes. \$26.95

List, \$54.95.

CASH PRICE.....

E12302. R.C.A. Tube Kit. NET. \$7.58

E12250. Volume Level Meter. \$4.50



CHOICE OF MICROPHONES

In addition to the **Knight Velocity Microphone**, the 15 Watt System is available with a choice of microphones, as illustrated above (less V. I. meter).

E12211. Complete System as described above, but with **Shure "Rocket" Crystal Microphone.** (Fig. B.)

E12213. System with **Electro-Voice Dynamic Microphone.** (Fig. C.)

E12214. System with **Bruno No-Voltage Velotron Microphone.** (Fig. E.)

E12217. System with **Brush Sound Cell Microphone.** (Fig. A.)

E12212. System with **Shure "Uniplug" Crystal Microphone.** (Fig. D.)

List, Each, \$134.50.

CASH PRICE, EACH OF ABOVE SYSTEMS. \$66.50

Time Payments: \$6.65 down, \$8.23 monthly, for 8 months.

15 WATT High-Gain PORTABLE SYSTEM

A splendid new completely portable full 15 watt Public Address System of exceptional power and wide-range fidelity. Uses the new type **Shure "Rocket" Crystal Microphone.** Designed especially for use by orchestras and lecturers, for demonstration purposes, funeral parlors, churches, political meetings, etc. Unusually portable, compact and convenient. Entirely self-contained in a single carrying case, 24 1/2" x 20 1/8" x 12". Weighs 60 lbs. complete. The **Knight 15 Watt Portable System** will also handle one or two crystal or magnetic phono pickups. Individual volume controls are provided. Dual Tone Control is built-in. Additional features include: Speaker Selector Switch permitting use of additional speakers if desired; Headphone Jack; extra Power Stage Tap; Fuse; Input for additional high-impedance mike with separate volume control, etc.

THE LAST WORD IN P.A. CONVENIENCE

The complete system includes: 1—**Knight 15 Watt High-Gain Amplifier**; 1—**Shure "Rocket" Crystal Microphone** with 25 foot cable and polarized plug; 1—**Banquet Stand**; 1—**Jensen 12" P.M. Dynamic Speaker** and 30 foot rubber-covered cable with 2-prong plug; R.C.A. tube kit, spare fuse and instructions. Self-contained in single sturdy carrying case. For operation on 110 volts, 50-60 cycles A.C. Shpg. wt., 75 lbs. As illustrated.

E12227. List, \$127.50.

CASH PRICE COMPLETE (Less V. I. meter) \$62.50

Time Payments: \$6.25 down, \$7.74 monthly, for 8 months.

E12229. Extra Speaker Case complete with 12" Jensen P.M. Speaker and 30 foot cable and plug. NET \$11.35

PORTABLE SYSTEM WITH 2 SPEAKERS

Same as above, but assembled in two cases: one for amplifier only, the other a dual split-case with two Jensen speakers, with cables and plugs. Shpg. wt., 75 lbs.

E12228. Complete 2 Speaker System (Less V. I. meter) \$79.30

List, \$162.50. NET

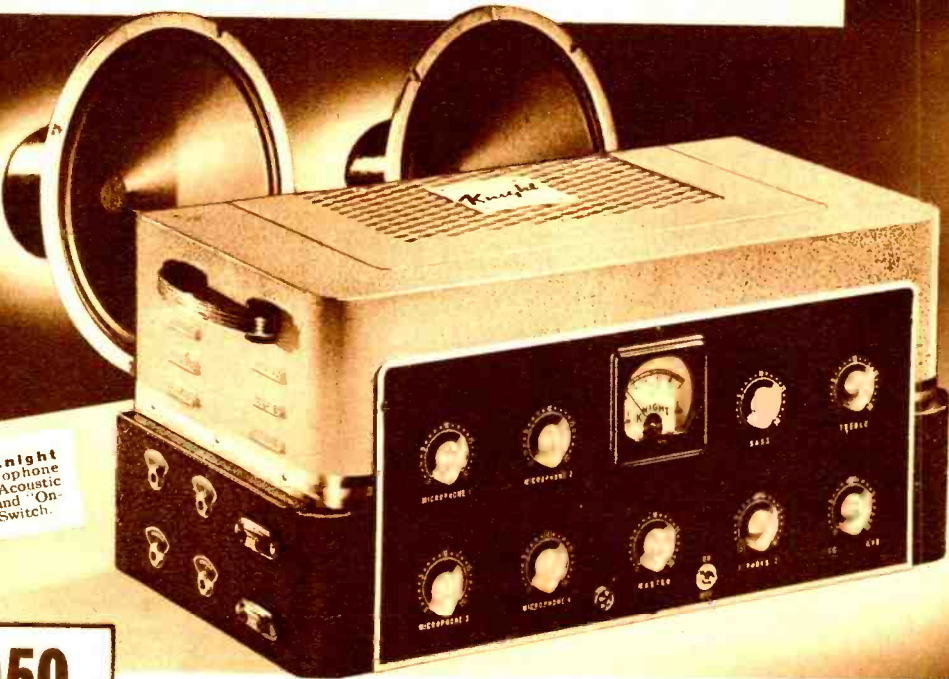
Time Payments: \$7.93 down, \$9.82 monthly, for 8 months.



KNIGHT 18 WATT DeLuxe SOUND SYSTEMS



The new Knight Velocity Microphone with built-in Acoustic Compensator and "On-off" Control Switch.



\$82⁵⁰
Cash Price

Time Payments: \$8.25 down, \$10.21 monthly for 8 months.

- 4 MIKE CHANNELS
- 2 PHONO INPUTS
- A. V. C.—A. V. E.
- INVERSE FEED-BACK
- tone COMPENSATION
- SPEAKER SELECTOR
- MASTER CONTROL
- V. I. METER

A brilliant medium-power system—ALLIED'S great quality P.A. challenger for 1939—packed with smashing new features that work—built for top-notch versatile performance—priced so amazingly low it bowls over all competition. Check the exclusive advantages of this sensational system, and you'll see that ALLIED gives you the most for your money.

- **Automatic Volume Stabilizer.** 1939's successor to A.V.C.—exclusive with ALLIED. Limits excessive peaks to eliminate feedback and blasting. Actually provides twice the usable power output of ordinary 18 watt systems.
- **5 Channel Mixer.** Has input for any four high-impedance microphones with individual gain controls for each channel. Also has provision for any two high-impedance crystal or magnetic pick-ups with fader control. Incorporates Master Gain Control which provides instant control of overall level.
- **Automatic Volume Expansion.** Provides realistic phono reproduction by automatically building up the louder phono passages to preserve the proper relationship between the loud and soft passages of the original recording.
- **Inverse Feedback.** In new improved form; permits greater power output with less distortion, hum and noise, achieving a higher fidelity of tone.
- **Dual Tone Compensation.** Separate controls are provided for both bass and treble ranges, permitting low or high notes to be built up either separately or together without disturbing tones in the middle ranges.
- **Volume Level Meter.** Indicates output of amplifier, directly in decibels. May be had with system at small additional cost. Valuable for recording or for maintaining constant volume level when speakers are remotely located.

• **1939 Features and Design.** Brilliantly engineered. Uses following octal tubes: 4—6J7G, 4—6N7G, 2—6K7G, 1—6H6G, 2—6V6G, 1—5V4G. Delivers full 18 watts at 5% distortion, 25 watts peak output. Gain is 25 db. on microphone, and 80 db. on phono. Hum level and distortion are negligible. Frequency is essentially flat from 40 to 10,000 C.P.S. Other features include: Speaker Selector Switch, offering impedances of 2, 4, 8, 16 and 500 ohms; Power Stage Driver Tap; Monitor Headphone Jack; Fuse; Shorting-type Input Jacks; Wiring Diagram mounted on base plate.

• **Complete 18 Watt Velocity System.** Includes: 1—Knight 18 Watt High-Gain De Luxe Amplifier; 1—Knight Velocity Microphone with 25 foot cable and plug; 1—Knight De Luxe adjustable Floor Stand; 2—Jensen 12-inch P. M. Dynanics with 30 foot cables and polarized plugs; Complete kit of R.C.A. tubes; spare fuse and operating instructions. For 110 volts, 50-60 cycles A.C. Shpg. wt., 72 lbs.

E12219. Complete System \$82⁵⁰
(less V. I. meter). List, \$167.50.
CASH PRICE.

Time Payments: \$8.25 down, \$10.21 monthly.
E12250. Volume Level Meter. NET. \$4.50

18 WATT AMPLIFIER ONLY

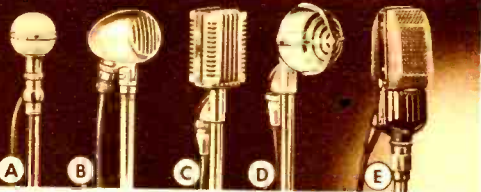
E12218. The Knight 18 Watt High-Gain De Luxe amplifier is also available separately. Includes all of the advanced features described above. Size: 21 1/4" x 11" x 9 1/4". Weighs 34 lbs. For 110 volts, 50-60 cycles A.C. Less tubes and V. I. meter. List, \$75.00.

YOUR PRICE \$36.95
E12303. Kit of R.C.A. Tubes. NET. \$12.50

18 WATT DE LUXE PORTABLE SYSTEM

The Knight 18 Watt De Luxe Sound System is also available in convenient portable form. Has all of the advantages and features described above. Entirely self-contained in two cases—one for amplifier (22 3/8" x 13 1/4" x 10 1/4"), the other a split-case for the speakers (21 1/4" x 13 1/4" x 8 1/4"). Designed to carry easily and conveniently. The complete Knight 18 Watt Portable System includes: 1—Knight 18 Watt De Luxe High-Gain Amplifier in case; 1—Shure "Uniplex" Microphone with 25 foot cable and plug; 1—Knight collapsible de luxe floor stand; 2—Jensen 12-inch P.M. Dynamic Speakers with 30 foot cables and 2-prong plugs. R.C.A. tube kit; spare fuse and instructions. Contained in two handy carrying cases. Shpg. wt., 85 lbs.

E12225. Complete 18 Watt System (less V. I. meter). List, \$194.50. \$94⁵⁰ CASH PRICE.



CHOICE OF MICROPHONES

In addition to the Knight Velocity Microphone, the 18 Watt System is available with a choice of microphones as illustrated above:

E12223. Complete System as described above, but with **Shure 701-D Crystal Microphone**. (Fig. C.) Less V. I. meter.

E12224. Complete System as above, but with **Bruno No-Voltage Velotron Microphone**. (Fig. E.) Less V. I. meter.

E12220. Complete System as above, but with **Brush Sound Cell Microphone**. (Fig. A.) Less V. I. meter.

E12221. Complete System as above, but with **American Dynamic Microphone**. (Fig. B.) Less V. I. meter.

E12222. Complete System as above, but with **Shure "Uniplex" Crystal Microphone**. (Fig. D.) Less V. I. meter. List Each, \$167.50. **CASH PRICE, EACH OF ABOVE \$82.50**

78 Time Payments: \$8.25 down, \$10.21 monthly.

KNIGHT 35 WATT *Standard* SOUND SYSTEMS



The new Knight Velocity Microphone with built-in Acoustic Compensator and "On-off" Control Switch.



Provision is made for the simultaneous use of any two high-impedance microphones. Each microphone has a separate volume control permitting blending or "mixing" action.



Has plug-in input for one or two crystal or magnetic pickups. Each phono is controlled from either side of a zero position, allowing fading action for background or sound effects.



Controls: 1—Microphone No. 1; 2—V. I. Meter; 3—Treble Tone Control; 4—Pilot Light; 5—Microphone No. 2; 6—Dual Phono Control; 7—Bass Tone Control; 8—A.C. Switch.

Here is ALLIED'S answer to the big demand for an intermediate-power High-Gain Sound System. Especially designed to handle the requirements of large auditoriums, ball-rooms, athletic fields, skating rinks, for small parks, political rallies, carnivals, etc.

- **4 Input Channels.** Will accommodate any two high-impedance microphones as well as one or two crystal or magnetic phono pickups. Individual gain controls, together with full electronic mixing, allow any degree of blending or "mixing" as desired.
- **Dual Tone Controls.** Separate controls are provided for bass and treble emphasis and to compensate for varying acoustical conditions.
- **Inverse Feedback.** Results in greater power output with less hum and noise, and tremendously improved tonal fidelity. A remarkable feature seldom found in a low-cost P.A. system.
- **New V. I. Meter.** Indicates output level of amplifier directly in decibels. May be had with system at small additional cost. Valuable for recording or for maintaining constant volume level where speakers are remotely located.
- **Knight Velocity Microphone.** Provides superior quality of reproduction. Acoustic Compensator allows matching of mike to either voice or music for best effect. "On-off" switch provides control right at microphone.
- **1939 Circuit.** The 35 Watt High-Gain Amplifier uses the latest octal tubes as follows: 2—6J7G, 2—6N7G, 1—6J5G, 2—6I6G, 1—5V4G. Develops full 35 watts output at 5% distortion, with 50 watts peak. A gain of 125 db. is developed for microphones and 80 db. for phono. Frequency response is essentially flat from 70 to 10,000 C.P.S. Hum level is negligible. Other features include: Speaker Selector Switch providing 2, 4, 8, 16 and 500 ohms taps; Monitor Headphone Jack; Power Stage Driver Tap; Shorting-type Input Jacks; Fuse; diagram on base of amplifier; easy access to all parts.

veloped for microphones and 80 db. for phono. Frequency response is essentially flat from 70 to 10,000 C.P.S. Hum level is negligible. Other features include: Speaker Selector Switch providing 2, 4, 8, 16 and 500 ohms taps; Monitor Headphone Jack; Power Stage Driver Tap; Shorting-type Input Jacks; Fuse; diagram on base of amplifier; easy access to all parts.

• **35 Watt System Complete.** The Knight 35 Watt High-Gain Standard System is offered complete as follows: 1—Knight 35 Watt Amplifier; 1—Knight Velocity Microphone with 25 foot cable and polarized plug; 1—Knight adjustable Floor Stand; 2—12-inch Jensen P.M. Dynamic Speakers with 30 foot cables and 2-prong plugs; R.C.A. tube kit; spare fuse and operating instructions. For 110 volts, 50-60 cycles A.C. Shpg. wt., 67 lbs.

E12235. Complete 35 Watt System, \$7750
(less V.I. Meter).
List \$157.50
CASH PRICE

Time Payments: \$7.75 down, \$9.59 monthly for 8 months.

E12250. Volume Level Meter. NET. \$4.50

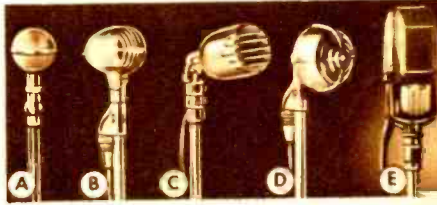
35 WATT AMPLIFIER ONLY

E12235. Features exactly as described above and at left. Size: 19 1/4" x 11 1/4" x 9 1/4". Shpg. wt., 29 lbs. For 110 volts, 50-60 cycles A.C. Less tubes and V. I. meter. **\$33.50**
List, \$67.50. NET. **\$33.50**
E12306. R.C.A. Tube Kit. NET. \$8.38

35 WATT STANDARD PORTABLE SYSTEM

The Knight 35 Watt Standard Sound System is also available in handy portable form as illustrated at right. Includes all of the advanced features described above. Entirely self-contained in two compact cases. One for amplifier (24 1/2" x 20 1/2" x 12"), the other a split-case for the speakers (21 1/2" x 13 1/2" x 8 1/2"). This system can easily be carried anywhere and can be set up instantly for operation. The complete Knight 35 Watt Standard Portable System includes: 1—Knight 35 Watt Amplifier in portable carrying case; 2—Jensen 12-inch P.M. Dynamic Speakers with 30 foot cables and plugs, mounted in split carrying case; 1—Shure "Uniplex" Microphone with 25 foot cable and plug; 1—Knight Deluxe collapsible floor stand; R.C.A. tubes; spare fuse and instructions. Shpg. wt., 79 lbs.

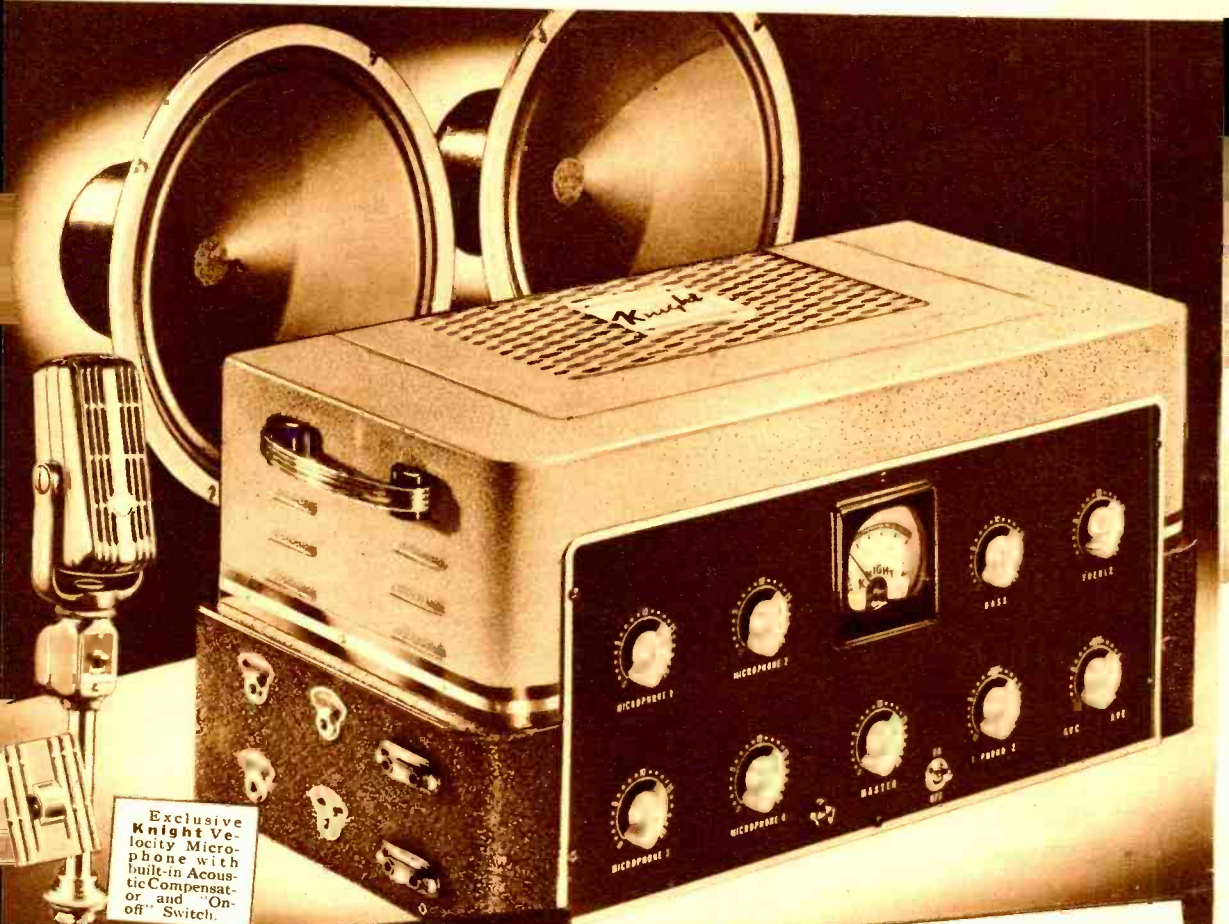
E12242. Complete \$8950
(less V. I. meter).
List, \$184.50.
CASH PRICE



CHOICE OF MICROPHONES

The 35 Watt System is available also with a choice of microphones as illustrated above (less V.I. meter):
E12239. Complete System as described, but with Shure "Rocket" Microphone. (Fig. B.)
E12240. Complete System as above, but with Electro-Voice Dynamic Microphone. (Fig. C.)
E12241. Complete System as above, but with Bruno Velotron Microphone. (Fig. E.)
E12247. Complete System as above, but with Brush Sound Cell Microphone. (Fig. A.)
E12239. Complete System as above, but with Shure "Uniplex" Microphone. (Fig. D.)
List Each, \$157.50. **\$77.50**
CASH PRICE EACH
Time Payments: \$7.75 down, \$9.59 monthly. 79

Knight 35 WATT De Luxe



Exclusive Knight Velocity Microphone with built-in Acoustic Compensator and "On-off" Switch.

OUTSTANDING NEW FEATURES

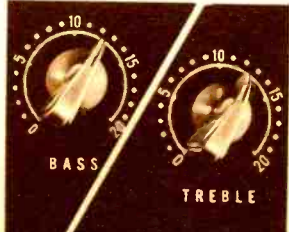
- **Volume Level Meter.** Indicates volume output directly in decibels. May be had with Knight Systems at small additional cost. Valuable for recording work or for determining volume output where speakers are remotely located from amplifier.
- **4 Microphone Inputs.** Here is the first 35 Watt De Luxe Sound System ever offered which permits the use of from one to four microphones, either separately or simultaneously. Each microphone may be individually controlled, and the total number of microphones used may be mixed or blended for proper balance. Microphones may be any of those illustrated at right and need not all be of the same type.
- **A.V.C. and A.V.E.** Among the outstanding new features of the Knight 35 Watt De Luxe Systems are Automatic Volume Control and Automatic Volume Expansion. The former automatically prevents feedback and blasting, maintaining constant volume level. A.V.E. is especially effective in providing higher fidelity phono reproduction.

An advantageous new feature of the Knight 35 Watt De Luxe System is the convenient Master Gain Control. This feature provides simultaneous control of the overall volume level of all the five input channels. After setting the individual microphone controls to desired degree of blending, the handy Master Gain Control may be used to adjust the total volume level. This convenient feature is another one of the exclusive new Knight P.A. features.

The Knight 35 Watt De Luxe Sound System has built-in true Dual Tone Compensation. Separate controls are provided for both bass and treble ranges, permitting low or high notes to be built up either separately or together without disturbing tones in the middle range. This feature is a significant advance in P. A. design and creates a degree of tonal excellence that must be heard to be appreciated. Only Knight P. A. offers such quality of flawless tonal reproduction.

New Speaker Selector Switch permits instant selection of voice coil or speaker line output impedance to match any number of speakers of the P. M. Dynamic type or any self-excited dynamics, to the amplifier. No figuring or guessing—just set the switch at the position where volume and quality are best. Impedances available are 2, 4, 8, 16, 500 ohms, to match all standard voice coils. 500 ohm tap is for use with extremely long speaker lines. You will like the convenience of the Selector Switch.

You can use one or two crystal or magnetic phono pickups with the Knight 35 Watt De Luxe System. Dual phono input of the convenient plug-in type is provided. This is operated from the special dual control on the front panel. Each phono is controlled from either side of a zero position, allowing fading action for background or sound effects. For suitable complete low-cost portable phonograph units see listing on page 88.



Powerful SOUND SYSTEMS!

... EVERY DELUXE FEATURE AT LOW COST

- Automatic Volume Stabilizer
- Automatic Volume Expander
- Six Input Channels
- Improved Inverse Feedback
- Dual Tone Compensation
- 4 Hi-Gain Mike Channels
- Dual Phonograph Input
- Master Gain Control
- Jensen P. M. Dynamics
- Full 35 Watts Output
- Speaker Selector Switch
- Universal Output
- Volume Level Meter
- Headphone Monitor Jack
- Power Stage Tap • Fused

Our finest Public Address achievement—a phenomenal New Sound System backed by ALLIED'S iron-clad guarantee—an invincible System that will outperform and outlast anything on the market in its own power and price class. It has so much built-in quality, so much output and high-fidelity tone, you'll marvel at the low price at which you can buy it. Especially developed for the most critical and exacting of sound requirements. Superb quality makes it ideal for use by large orchestras, for church and school, for large auditoriums and halls, for theatre presentations, for outdoor pageants, field days, for recording studios, etc., wherever large power and utmost fidelity are required.

- **Automatic Volume Stabilizer.** 1939's remarkable successor to A.V.C.—exclusive with ALLIED. Limits excessive peaks and maintains volume at proper level for the elimination of feedback and blasting. Actually permits twice the effective usable power output of ordinary 35 watt systems. An exclusive and brilliant new Knight feature found in no other sound system.
- **Automatic Volume Expansion.** Designed to re-create the original tonal realism of phonograph recordings by automatically building up the louder passages to their true volume relationship, maintaining the correct balance between the loud and soft passages of the original recording.

• **5 Channel Mixer.** Exclusive in the Knight 35 Watt System. Has provision for the use of one to four high-impedance microphones of any type, each with a separate volume control. One or two crystal or magnetic phono units may also be used, regulated by a single fade-type control. As many as four microphones and one phono unit may be used simultaneously and blended or "mixed" in any desired degree. The entire output of all the input channels used at any one time is electronically mixed and may be controlled by the single Master Gain Control without disturbing the original balance.

• **Dual Tone Compensation.** The Knight 35 Watt De Luxe System has built-in true Dual Tone Compensation. Separate controls are provided for both bass and treble ranges, permitting low or high notes to be built up either separately or together without disturbing tones in the middle range. You get far superior tone with this outstanding new feature—exclusive with Knight.

• **Inverse Feedback.** A new development in its latest and most improved form, which permits greater power output with less distortion, hum and noise, achieving a higher fidelity of tonal response. This feature is used effectively in the Knight 35 Watt Sound System. You'll notice the difference once you hear it.

• **Knight Velocity Microphone.** Incorporates the best features of the finest velocity microphones. Has new Acoustic Compensator which matches the microphone to either voice or music for best effect; new "on-off" switch for control right at the microphone; live gum-rubber shock absorber; adjustable swivel mounting; studio type locking cable connector.

• **Volume Level Meter.** Indicates volume output directly in decibels. May be obtained with system at small additional cost. Ideal for recording use or for maintaining constant volume level where speakers are remotely located from amplifier.

• **1939 Engineering.** Uses the following octal tubes: 4—6J7G; 4—6N7G; 2—6K7G; 1—6H6G; 2—6L6G; 1—5V4G. Gain is 130 db. on microphone and 80 db. on phonograph. Full 35 watts output at 5% distortion. 50 watts peak. With negligible hum level and distortion. Frequency response is essentially flat from 40 to 10,000 C.P.S.

• **Genuine Jensen P. M. Dynamic Speakers.** Two 12 inch Jensen P.M. Dynamic Speakers are included with the Knight 35 Watt De Luxe System. They handle the output of the amplifier with excellent fidelity.

• **Added Features.** Special Speaker Selector Switch provides 2, 4, 8, 16 and 500 ohm output taps. Has Headphone Monitor Jack; Power Stage Drive Tap; Fused A.C. line; Shorting-type Input Jacks; diagram on base plate; standard 2-prong speaker receptacles. Top cover and base plate are removable for easy accessibility to all tubes and parts. You get more for your money in every detail.

• **Complete 35 Watt Velocity System.** The complete Knight 35 Watt De Luxe Velocity System includes: 1—Knight 35 Watt High-Gain Amplifier; 1—Knight Velocity Microphone with Acoustic Compensator and 25 foot cable and polarized plug; 1—Knight Adjustable Microphone Floor Stand; 2—Jensen 12" P.M. Dynamic Speakers, each with 30 foot rubber-covered cable and standard 2-prong plug; complete R.C.A. tube kit, spare fuse and instructions. Shpg. wt., 84 lbs. For 110 volts, 50-60 cycles A.C.

E12276. Complete 35 Watt System. \$92⁵⁰
 (Less V. I. meter.)
 List. \$187.50.
CASH PRICE.....
 Time Payments: \$9.25 down; \$11.45 monthly.
E12250. V. I. Meter. NET \$4.50

AMPLIFIER ONLY

Available separately for replacement in high-grade sound systems or initial equipment. Has input for four high-impedance microphones and two phono pickups. Gain is 130 db. The amplifier has an exceptionally wide frequency response essentially flat from 30 to 15,000 cycles. Hum level and distortion are negligible. Output is universal, capped at 2, 4, 8, 16 and 500 ohms. Has polarized receptacles for microphones; standard 2-prong receptacles for speakers. Equipped with individual volume controls for each microphone and with fader control for phonos. Also has Master Gain Control for all inputs. Includes individually variable Bass and Treble Compensation Controls Has A.C. switch and indicating bull's eye on front panel. Protecting fuse is located in tube compartment. Striking modern case measures 21 $\frac{1}{2}$ " x 11" x 9 $\frac{1}{4}$ ". Beautiful black and grey two-tone finish. For 110 volts, 50-60 cycles A.C. Shpg. wt., 44 lbs.

E12275. 35 Watt Amplifier. \$44⁹⁵
 (Less tubes and V. I. meter.)
 List. \$90.00.
CASH PRICE.....
E12307. R.C.A. Tube Kit. NET \$13.39

CHOICE OF MICROPHONES

In addition to the Knight Velocity Microphone, the 35 Watt System is available with a choice of microphones illustrated at left.

E12279. Complete System as described above, but with **Shure 701-D Crystal Microphone.** (Fig. C.) Less V. I. meter.

E12280. Complete System as above, but with **Bruno No-Voltage Velotron Microphone.** (Fig. E.) Less V. I. meter.

E12277. Complete System as above, but with **Brush Sound Cell-Microphone.** (Fig. A.) Less V. I. meter.

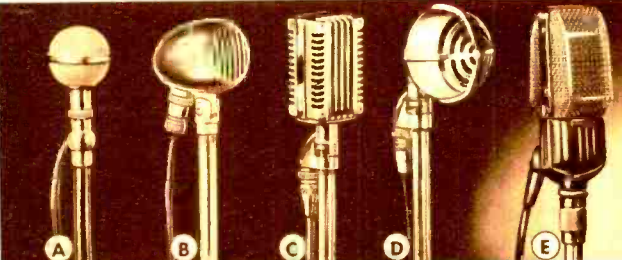
E12281. Complete System as above, but with **American Dynamic Microphone.** (Fig. B.) Less V. I. meter.

E12278. Complete System as above, but with **Shure "Uniplex" Microphone.** (Fig. D.) Less meter.
 List Each, \$187.50. **CASH PRICE, EACH OF ABOVE, \$92.50**
 Time Payments: \$9.25 down, \$11.45 monthly for 8 months

35 WATT PORTABLE SYSTEM

The finest high-quality Portable Sound System now available. Incorporates superb performance with unusual portability and convenience. Answers the most exacting and critical sound requirements; ideal for schools, churches, traveling orchestras, musical organizations, night clubs, funeral homes, lecturers, for portable recording work, etc. An unusually compact system. Contained in two handy carrying cases—one for the amplifier (10 $\frac{1}{2}$ " x 22 $\frac{1}{2}$ " x 13") and the other a split-case for the two speakers (21 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "). Weighs only 75 lbs. complete. The 35 Watt Portable System includes all features described above: Automatic Volume Stabilizer; Automatic Volume Expansion; 6 Input Channels; Inverse Feedback; Dual Tone Compensation; Dual Phonograph Input; 4 Hi-Gain Mike Channels; Master Gain Control; Universal Output; Speaker Selector Switch; Headphone Monitor Jack; Driver Stage Tap, etc. The complete portable system includes: 1—Knight 35 Watt De Luxe Amplifier in portable carrying case; 2—12 inch Jensen P.M. Dynamic Speakers with 30 foot cable and plugs in dual-speaker carrying case; 1—Shure "Uniplex" Microphone with 25 foot cable and plug; 1—Knight de luxe collapsible floor stand; R.C.A. tubes, extra fuse and complete instructions. For 110 volts, 50-60 cycles A.C. Shpg. wt., 95 lbs.

E12282. Complete System, (less V. I. meter.) \$104⁵⁰
 List. \$207.50.
CASH PRICE.....
 Time Payments: \$10.45 down; \$12.94 per month, for 8 months.



Knight 65 WATT "Giant-Power"



The exclusive new Knight Velocity Microphone with Acoustic Compensator "On-off" Switch, Shock Absorber, Swivel and cable lock—the finest velocity microphone made.



The Knight 65 Watt System has exclusive plug-in input for handling two crystal or magnetic phono pickups. Operated from dual control on front panel—each phono is operated from either side of a zero position—allowing fading action for background or sound effects as desired.



Dual Tone Controls are provided in the Knight 65 Watt System to give individual bass or treble emphasis and to aid in compensating for varying acoustic conditions. Controls operate independently and have no effect on one another.



The Knight 65 Watt Amplifier is arranged for easy access to all tubes and parts. Shield screen at back top is easily removable to get at tubes. Base plate can be quickly detached for access to underside of chassis. Circuit diagram is included on base plate for reference.



An exclusive new Volume Level Indicator Meter is available with the Knight 65 Watt System at small additional cost. Indicates volume output of amplifier directly in decibels. Ideal for recording use or for use where speakers are remotely located from the amplifier.

\$127.50
CASH PRICE

Time Payments: \$12.75 down, \$15.78 monthly, for 8 months.

FEATURES

- Four Input Channels
- 2 Universal Mike Inputs
- Dual Phono Input
- 4—12" Jensen Speakers
- Dual Tone Control
- Inverse Feedback
- 4—6L6 Beam Power Tubes
- Headphone Monitor Jack
- Power Stage Top

TECHNICAL SPECIFICATIONS

The Knight 65 Watt High-Gain Sound System delivers full 65 watts output at 5% distortion, 90 watts peak. Gain is 125 db., essentially flat from 70 to 10,000 C.P.S. Hum level is negligible. Tubes used are: 2—6J7G; 2—6N7G; 1—6J5G; 4—6L6G; 2—5V4G. Two high-gain microphone channels permit the use of any high-impedance Crystal, Velotron, controls are provided. Individual microphone, Individual microphone control to accommodate one or two crystal or magnetic pickups. Includes Dual Tone Controls for bass or treble accentuation. Individual microphone and phono controls permit blending and fading as desired. Mixing action is electronically controlled. Incorporates Inverse Feedback; has Speaker Selector Switch providing choice of 2, 4, 8, 16 or 300 ohms at standard two-contact speaker receptacles. Input jacks are of shorting type, blocking out all possibility of noise from unused channels.

SOUND SYSTEMS

Super-Power AT LOW COST

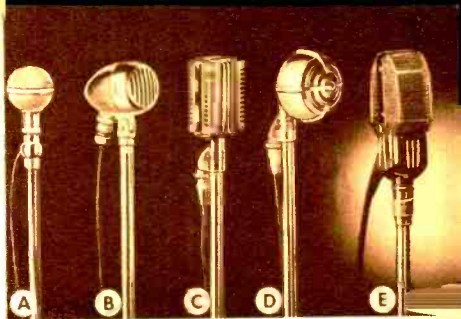
We set out to build a giant-power system to cover a wide range of P. A. requirements at low-cost—and we're proud to say that we've succeeded in a big way. This new **Knight 65 Watt System** is perfect for outdoor use in large stadiums and athletic fields, in public parks, in music band-shells, at race tracks, circuses, skating rinks, beaches, fair grounds, for factory call systems or wherever big power, faithful tone and versatile operation are required. Just check these outstanding value features:

- **Four Input Channels.** The **Knight 65 Watt Sound System** permits the use of one or two high-impedance microphones along with two crystal or magnetic phono pickups. Full electronic mixing is provided by means of individual microphone and phonograph controls permitting blending and fading as desired. Dual Tone Controls are also incorporated, giving individual bass and treble control.
- **Inverse Feedback.** An advantageous development in its most recent, improved form. Permits greater power output with less distortion, hum and noise; achieving a higher fidelity of tonal response. This feature is used effectively in the **Knight 65 Watt Sound System**. You'll notice the difference the minute you hear it.
- **New V. I. Meter.** Indicates output level of amplifier directly in decibels. May be had with the system at small additional cost. Valuable for recording use, or for maintaining constant volume level where speakers are remotely located.
- **Knight Velocity Microphone.** Never before available with a Sound System at this price. Incorporates the best features of the finest velocity microphones. Has new Acoustic Compensator which matches the microphone to either voice or music for best effect; new "on-off" switch for control right at the microphone; live gum-rubber shock absorber; adjustable swivel mounting; studio-type locking cable connector.
- **Four Jensen PM-12B Speakers.** Four genuine 12" Jensen PM-12B Permanent Magnet Dynamic Speakers are provided with the 65 Watt System. They reproduce with excellent fidelity and will adequately handle the volume generally needed for most requirements. These speakers are far superior to ordinary dynamics; they require no field excitation; ruggedly built with typical Jensen quality. Each speaker is equipped with 30 foot rubber-covered cable and standard 2-prong appliance plug.
- **Super Powerful Circuit.** The High-Gain Amplifier incorporated in the **Knight 65 Watt Sound System** develops full 65 watts output undistorted. Uses the latest type RCA tubes as follows: 2-6J7G; 2-6N7G; 1-6J5G; 4-6L6G; 2-5V4G. Frequency response is essentially flat from 70 to 10,000 C.P.S. Gain is 125 db. on microphone, and 80 db. for phono. Hum level is negligible. These unusually fine characteristics plus the incorporation of 4-6L6 Beam Power Output Tubes assure exceptionally high-gain and big-power output coupled with desirable wide-range fidelity.
- **Added 1939 Features.** New and advantageous refinements are featured in the **Knight 65 Watt System**. Among these are: Speaker Selector Switch permitting matching of amplifier to any number of speakers automatically—offers impedances of 2, 4, 8, 16 and 500 ohms; has Power Driver Tap for adding power stage for exceptional power requirements; Headphone Monitor Jack for program supervision; fused A.C. line for protection; wiring diagram conveniently mounted on base plate. Unique modern case design makes all tubes and parts easily accessible.
- **Complete 65 Watt Velocity System.** The complete **Knight 65 Watt Sound System** includes: **Knight 65 Watt High Gain Amplifier**; 1—**Knight Velocity Microphone** and 25 foot cable and plugs; 1—**Knight adjustable Microphone Floor Stand**; 4—**Jensen PM-12B Dynamic Speakers** with 30 foot heavy rubber-covered cables and 2-prong plugs; complete R.C.A. tube kit; spare fuse and full instructions. Shpg. wt., 115 lbs. For 110 volts, 50-60 cycles A.C.

E12266, Complete System, less V. I. meter.
List, \$260.00
CASH PRICE.....

Time payments: \$12.75 down, \$15.78 monthly, for 8 months.

E12250, V. I. Meter only. NET..... \$4.50



CHOICE OF MICROPHONES

In addition to the **Knight Velocity Microphone**, the 65 Watt System is available with a choice of microphones as illustrated above (less V.I. meter):

E12268, Complete System as described at left, but with **Shure 701-D Crystal Microphone**. (Fig. C.)

E12270, Complete System as described, but with **Bruno Velotron Microphone**. (Fig. E.)

E12269, Complete System, but with **Brush Sound Cell Microphone**. (Fig. A.)

E12271, Complete System, but with **American Dynamic Microphone**. (Fig. B.)

E12267, Complete System, but with **Shure "Uniplex" Crystal Microphone**. (Fig. D.)

List Each, \$260.00

CASH PRICE, EACH OF ABOVE..... **\$127.50**

Time Payments: \$12.75 down, \$15.78 monthly.

65 WATT AMPLIFIER ONLY

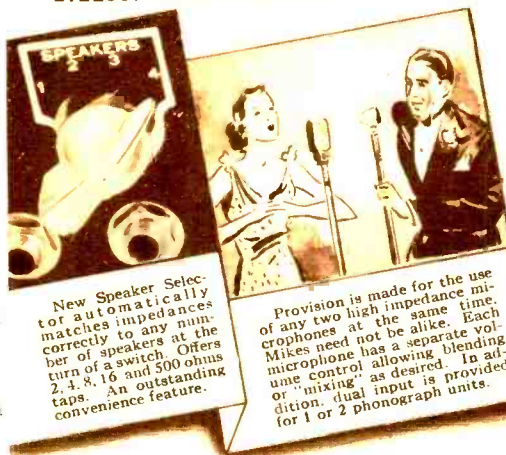
The **Knight 65 Watt High-Gain Amplifier** is offered separately either as an ideal replacement for obsolete amplifiers or for use wherever giant power is required. Has universal input for any two high-impedance microphones and two phonos. Develops a remarkable gain of 125 db. permitting the direct use of high-impedance microphones without requiring preamplifier. Frequency response is essentially flat from 40 to 10,000 C.P.S. The amplifier has individual volume controls for both microphones and phonos, permitting them to be "faded" or "mixed" at will. Dual Tone Control is built-in with separate controls for bass or treble emphasis; helps compensate for varying acoustical conditions. Has polarized receptacles for mikes, 2-contact receptacles for speakers and twin jacks for phono input. Output is universal, tapped at 2, 4, 8, 16 and 500 ohms. Size: 21 1/2" x 11" x 9 1/4". Shpg. wt., 50 lbs. For 110 volts, 50-60 cycles A.C. operation.

E12265, Knight 65 Watt Amplifier, \$47.50
less V. I. Meter and tubes.
List, \$95.00. **CASH PRICE**.....

E12250, Volume Level Meter. NET..... \$4.50

E12308, R.C.A. Tube Kit. NET..... \$12.43

See Page 73 for attractive Time Payment Plan. Suitable portable phonograph units are shown on Page 88. Excellent baffles of all types are described on Page 87.



New Speaker Selector automatically matches impedances to any number of speakers at the turn of a switch. Offers 2, 4, 8, 16 and 500 ohms taps. An outstanding convenience feature.

Provision is made for the use of any two high impedance microphones at the same time. Each Mike need not be alike. Volume control allowing blending microphone as desired. In audio "mixing" as desired. In audio, dual input is provided for 1 or 2 phonograph units.

65 WATT PORTABLE SYSTEM

The **Knight 65 Watt Giant Power Sound System** is offered in a remarkably compact portable system as illustrated at right. Includes all of the advanced features described above with the added convenience of ready portability. Equipment is contained in three compact cases—one for amplifier (10 1/2" x 22 1/2" x 13"), and two split-cases for the speakers (21 1/2" x 11" x 9 1/4" each) in a padded 1—**Knight Dynamic Speaker** with 30-foot cables and plugs, mounted in split carrying cases; 1—**Shure "Uniplex" Microphone** with 25 foot cable and plug; 1—**Knight De Luxe collapsible floor stand**; R.C.A. tubes and spare fuse. Shpg. wt., 130 lbs.

E12272, Complete (less V. I. meter).

List, \$295.00 **CASH PRICE**..... **\$144.50**

Time Payments: \$14.45 down, \$17.89 monthly for 8 months.



Now! POWERFUL P. A.



DIRECTIONAL Baffles

To obtain maximum sound distribution from the splendid new Mobile Sounc System shown on these two pages, we recommend the selection and use of any of the baffles described on page 91 of this catalog. These inexpensive baffles can be easily and quickly installed for either permanent or temporary use on sound trucks and cars.



CHOICE OF MICROPHONES

We offer the Knight Mobile Sound Systems with a wide choice of famous microphones in addition to the type microphones in each system. Among those illustrated are: **A**—the Shure "Rocket" Crystal Microphone; **B**—the American Dynamic Microphone; **C**—the Shure "Uniplex" Crystal Microphone.

18 WATT STANDARD MOBILE SYSTEM

An outstanding Mobile Sound System that is available for universal 6 Volt D.C. or 110 Volt A.C. operation. Versatile and powerful, it has a wide number of applications. Its low price gives it exceptional appeal.

• **COMPACT, POWERFUL 6 VOLT-110 VOLT MOBILE SYSTEM.** The Knight 18 Watt 6 Volt-110 Volt Mobile System is designed for versatile performance. Operates directly and entirely from any 6 volt storage battery or from any 110 volt A.C. line. Will cover large crowds, both indoors and outdoors, with wonderful power and excellent fidelity. Compact and portable. May be simply and quickly installed or changed from car to car or from one place to another. The lowest-priced efficient mobile-portable sound system available. Designed especially for sound trucks; an ideal system for powerful reproduction of phonograph records.

• **HIGHEST QUALITY COMPONENTS.** The Knight 18 Watt 6 Volt-110 Volt Mobile System is built of the finest matched components selected to withstand the punishment of heavy-duty mobile use. The powerful high-gain 18 Watt Amplifier unit has plug-in vibrator "B" supply. A high-quality single speed 78 R.P.M. phonograph motor with 10-inch turntable and speed-regulator is built-in. The pickup is of the finest crystal type, especially designed for mobile service. Supplied with high floor stand if desired. Cables for microphone, speakers and battery are all equipped with polarized plugs for easy, errorless connection. Battery cable has high-grade 30 ampere polarity-marked battery clips. Entire system is housed in an attractive, sturdy steel case equipped with strong handles. Size, 17 1/2" x 15 1/2" x 10 1/2".

• **1939 CIRCUIT DESIGN.** The powerful 18 Watt Universal 6 Volt-110 Volt Amplifier used in the system incorporates the finest new features, including improved Inverse Feedback, high-gain Class "AB" circuit, latest octal tubes, dependable vibrator supply, etc. Inverse Feedback develops greater output with less distortion and noise, achieving greatly improved tonal fidelity. The amplifier uses 1-6J7G; 2-6N7G; 2-6V6G; 1-6X5G tubes in an efficient high-gain circuit with a gain of 115 db. The amplifier has essentially flat frequency response from 70 to 8,000 C.P.S. carries separate volume controls for the microphone and phono pickup, permitting blending and "mixing" of voice or music as desired. Also includes Tone Control as well as "on-off" switch. Polarized receptacles are provided for plugging in microphone, speakers, and battery cable. Has Speaker Selector Switch which permits matching to any number of speakers with output taps at 2, 4, 8, 16 and 500 ohms. Fully fused on both 6 Volts D.C. and 110 Volts A.C.

• **COMPLETE 18 WATT 6 VOLT-110 VOLT MOBILE SYSTEM.** Offered complete for operation from any 6 volt storage battery or from any 110 volt, 50-60 cycle A.C. line. Includes: 1—Knight 18 Watt High-Gain Universal Amplifier, mixing panel and phonograph in steel cabinet, with 2—genuine Jensen 12-inch P.M. dynamic speakers, each with generous 30 foot cables 25 foot cord and polarized plug; R.C.A. tube kit, spare fuse and instructions. Shpg. wt., 90 lbs.

E12319. Complete 6 Volt-110 Volt 18 Watt Mobile System. List Price, \$175.00.

CASH PRICE WITH TUBES

\$86⁵⁰

Time Payments: \$8.65 down, \$10.71 monthly, for 8 months.

18 WATT
6 VOLT-
110 VOLT
SYSTEM

\$86⁵⁰
CASH PRICE

CHOICE OF MICROPHONES

The Knight 18 Watt Mobile System may also be had with a choice of any of the famous microphones illustrated above:

E12320. Knight 18 Watt System complete as described at left, but with Shure "Rocket" Crystal Microphone. (Fig. A.)

E12321. Knight 18 Watt System complete, but with Shure "Uniplex" Crystal Microphone. (Fig. C.)

E12322. Knight 18 Watt System complete, but with American Dynamic Microphone. (Fig. B.)

List Each, \$175.00. **\$86⁵⁰**

CASH PRICE EACH

Time Payments: \$8.65 down, \$10.71 monthly, for 8 months

TIME PAYMENTS

You can buy any of the new Knight Mobile Sound Systems shown on this and the next page on our convenient Time Payment Plan. For complete attractive details and Easy Terms chart, read Page 73. Earn and profit while you pay for this quality Knight Public Address equipment.

18 WATT 6 VOLT MOBILE SOUND SYSTEM

Here is the Knight 18 Watt Mobile Sound System with essentially the same features as described above, but intended only for use from a 6 volt storage battery. An ideal low-cost system for permanent installation in sound trucks and cars or where A.C. current is not available. Particularly recommended for use in advance publicity wagons for carnivals and road-shows, for advertising cars, for gospel-work, etc. Basically the same as the Universal Systems described above, with identical features, but with 6 volt field type dynamic speakers in place of the P.M. type. If at any future date, it is desired to use this system from 110 volts A.C. this may be accomplished by the purchase and substitution of P.M. type dynamic speakers in place of the 6 volt type. Offers ideal service at low-cost. The complete system includes: 1—Knight 18 Watt High-gain Amplifier, mixing panel and phonograph in steel cabinet; 2—Knight 12-inch 6 volt dynamic speakers, each with generous 30 foot cable and plug; 1—Amperite ACH Velocity Microphone with detachable handle, generous 25 foot cable and polarized plug; battery cable, R.C.A. tube kit, spare fuse and complete instructions. Shpg. wt., 92 lbs. For 6 Volt D.C. operation only.

E12323. Complete 18 Watt 6 Volt Sound System.

List Price, \$167.50.

CASH PRICE

Time Payments: \$8.25 down, \$10.21 monthly, for 8 months.

\$82⁵⁰



from 6 volts D.C. or 110 volts A.C.



30 WATT DELUXE SYSTEM MOBILE

\$104.50

America's newest and most versatile Universal Sound System! A new departure in design, features, quality and performance—developed and offered exclusively by ALLIED. Operates entirely and directly from any 6 volt storage battery wherever A.C. current is not available, or, with a slight change, may be operated from any 110 volt, 50-60 cycle A.C. outlet. Delivers full 30 watts output at 5% distortion (40 watts maximum) with excellent tonal fidelity, making it ideal for use in sound trucks, for political rallies, circuses, carnivals, traveling dance orchestras, road shows, lecturers, evangelists, etc.

• **1939 Amplifier Design.** Outstanding for power and circuit excellence—the new Knight 30 Watt Universal Amplifier incorporates exclusive improved Inverse Feedback—a feature which assures larger power output with less noise, hum and distortion, and at the same time aids in developing improved tonal reproduction on both microphone and phono. Has two high-gain universal microphone input channels, permitting the use of any high-impedance microphones. Dual phonograph input permits the use of an additional phonograph pickup of either crystal or magnetic type in addition to the crystal pickup already built into the system. Separate volume controls are provided for blending microphone and phono as desired. Has Dual Tone Controls for emphasizing bass and treble and aid in compensating for varying acoustical conditions. Rear and side panels carry Speaker Selector Switch offering 2, 4, 8, 16 and 500 ohm outputs; Power Stage Tap; Headphone Jack, Extra Phono Jack, Speaker and Microphone receptacles. Amplifier is fused on both A.C. and D.C. Wiring diagram is included on base plate.

• **Powerful New Circuit.** The 30 Watt Universal Amplifier uses the following tubes: 2-6J7G; 2-6N7G; 1-6J5G; 2-6L6G; 2-6X5G. Gain on microphone is 123 db., on phono 80 db. Frequency response is essentially flat from 40 to 10,000 C.P.S. Hum level and distortion are negligible. Current drain on 6 volts as well as 110 volts is at a minimum. A built-in special heavy-duty power supply with plug-in type vibrator operates efficiently from either 6 volts D.C. or 110 volts A.C. Special stand-by switch conserves power supply drain but keeps filaments ready for operation.

• **New V. I. Meter.** Indicates volume output directly in decibels. May be had with system at small additional cost. Ideal for use where speakers are remotely operated from amplifier.

• **Compact Single Unit Design.** The entire 30 Watt De Luxe Mobile System is built around the compact single amplifier unit. Amplifier, high grade single speed motor, sturdy crystal pickup, 6 volt and 110 volt power supplies, and all controls and connecting receptacles are assembled in one compact modern steel case. Size overall is 18 3/4" x 13 1/4" x 11".

CHOICE OF MICROPHONES

The Knight 30 Watt Mobile System may also be had with a choice of any of the famous microphones shown on page 84.

E12232. Knight 30 Watt System complete but with Shure "Rocket" Crystal Microphone. (Fig. A.) Less V. I. meter.

E12233. Knight 30 Watt System complete, but with Shure "Unilux" Crystal Microphone. (Fig. C.) Less V. I. meter.

E12234. Knight 30 Watt System complete, but with American Dynamic Mike. (Fig. B.) Less V. I. meter. **\$104.50** List Each. \$215.00. **NET EACH** Time Payment: \$10.45 down, \$12.94 monthly.

• **Highest Quality Accessories.** The new Shure Military Hand Microphone is used with the Knight De Luxe Mobile System. Built for rugged service, easy handling, and fine response. Two genuine 12-inch Jensen P.M. dynamic speakers are included for finest reproduction. A high-quality single-speed synchronous phono motor with 12-inch turntable is incorporated. Constant speed type whether used from 6 volts D.C. or 110 volts A.C. Will play 8, 10 and 12-inch records. The high-grade Shure Crystal pickup has excellent response to assure fine tonal reproduction of all recordings. No finer accessories have ever been incorporated in a P.A. System.

• **6 Volts or 110 Volts in a Jiffy.** Anyone can change the Knight 30 Watt De Luxe System from 6 volts to 110 volts in a minute. Just substitute the A.C. cord for the battery cable, and you're ready to work from A.C. There has never been anything like the convenience, versatility, power and general all-around performance of this outstanding 1939 De Luxe Mobile Sound System.

• **Complete De Luxe Universal System.** Includes: 1—Knight 30 Watt High-Gain Amplifier with battery and A.C. cables, built-in phonograph motor and pickup, 6 volt and 110 volt power supplies. 1—Shure Military Hand Microphone with ample 10 foot cord and polarized plug; 2—Jensen 12-inch P.M. dynamic speakers with generous 30 foot rubber-covered cords and 2-prong plugs; R.C.A. tube kit, spare fuse and instructions. For 6 volt D.C. or 110 volt A.C. operation. Ship. wt., 95 lbs.

E12231. Complete 30 Watt De Luxe Mobile System (less V.I. meter). **\$104.50** List Price, \$215.00. **CASH PRICE.**

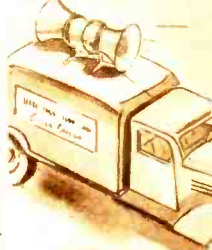
Time Payments: \$10.45 down, \$12.94 monthly.

E12250. Volume Level Meter. NET \$4.50

E12230. AMPLIFIER ONLY with built-in phono and power pack. For 6 volt-110 volt operation. Less tubes and V. I. meter. Wt., 50 lbs. **\$62.50** List Price, \$127.50. **CASH PRICE.**

E12305. R. C. A. Tube Kit. NET \$8.93

OUTDOOR EVENTS



INDOOR P.A.



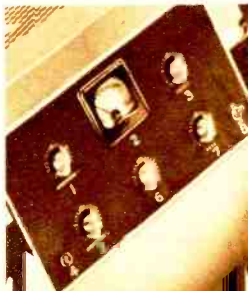
6 VOLT OR 110 VOLT



AMPLIFIER LESS PHONO

E12245. Knight 30 Watt 6 Volt-110 Volt De Luxe Amplifier only. Less built-in phono and pickup. Includes all features and advantages as described above. A splendid all-purpose universal amplifier. Less tubes and V. I. meter. List, \$125.00. **\$59.50** CASH PRICE

E12305. R.C.A. Tube Kit. NET \$8.93



• **Control Panel.** 1—Microphone No. 1; 2—Volume Level Indicator Meter; 3—Treble Tone Control; 4—Jewelled Pilot Light; 5—Microphone No. 2; 6—Phonograph Control with zero position; 7—Bass Tone Control; 8—'On-off' switch. The panel is beautifully finished for easy reading. All control knobs are of bakelite in contrasting attractive grey color. It's easy to set up and operate this outstanding Knight 30 Watt De Luxe Mobile Sound System—the finest ever offered.

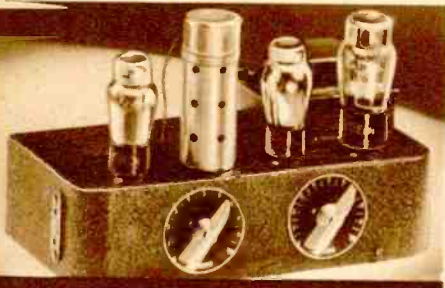
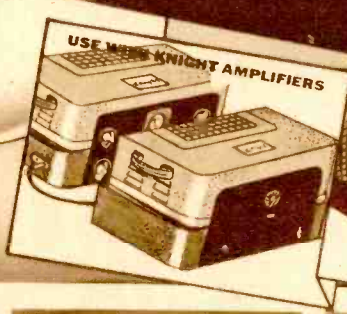


ADD MORE WATTS WITH THIS LOW-COST POWER STAGE

Offered exclusively by ALLIED, an ideal power stage unit for use with any type of amplifier. Especially suitable for the 1939 Knight Amplifiers which are equipped with power stage taps. You can add full 35 watts power inexpensively to your present equipment to take care of an increased number of speakers for larger installations. For example, if your present amplifier is rated at 35 watts and you add this new 35 watt Power Stage, you get full 70 watts at low cost. The new Knight 35 Watt Power Stage is entirely self-contained in an attractive modern-styled case, 9 3/4" x 11 1/4" x 9 1/4". Easy to hook up to any amplifier. Has built-in driver stage which requires no power signal voltage from amplifier for excitation. Draws no power from amplifier since it makes use of an ingenious bridging type Beam Power Output with Inverse Feedback results in greater power with less distortion, hum and noise. Also improves tone quality appreciably. Frequency response from 40 to 10,000 cycles. Front panel holds A. C. switch, jeweled pilot light, and volume control; has provision for installing Volume Level Meter if desired. Also includes 2, 4, 8, 16 and 500 ohm output taps at the two standard two-prong speaker receptacles. Requires only a single-conductor shielded cable for connection to driver amplifier. Any P.M. dynamic or any self-excited electro-dynamic speakers may be used. This fine unit may be connected to any amplifier to add power at a moderate cost.

\$28⁵⁰
E12330. 35 Watt Power Stage.
Less Tubes.
List. \$57.50.
YOUR PRICE..... \$5.00
E12309. R.C.A. Tube Kit. NET. 4.50
E12250. Volume Level Meter. NET. 4.50

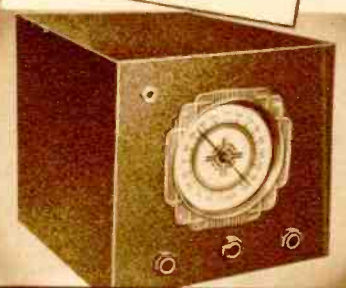
Knight 35 WATT POWER STAGE



VOLUME EXPANDER



A. C. PREAMPLIFIER



MEISSNER R. F. TUNER

A complete, self-contained, self-powered unit for use with any amplifier lacking an effective volume expander. Designed to recreate the original tonal realism of phonograph recordings. When recordings are made, it is necessary to reduce the louder passages and to increase the level of the softer passages to avoid high surface noise and over-cutting into adjacent grooves. This results in a reduction of contrast and brilliance in the recording. To recreate the original rendition properly, the Volume Expander automatically builds up the louder phonograph passages to their true volume relationship, maintaining a correct balance between the loud and soft passages of the original recording. Brings out the exact original recorded rendition and actually minimizes surface noise. The Knight Volume Expander is compactly built; size, 11 3/4" x 6 3/4" x 8 3/4". Uses the following tubes: 1—6N7G, 1—6K7G, 1—6H6G, 1—6X5G. Two controls are used, one for control of volume, the other to control the degree of expansion. Has tip-jack output to connect directly into the phonograph input circuit of any amplifier. Bring your present equipment up-to-date with the Knight Volume Expander and get de luxe phonograph record reproduction. The Knight Volume Expander is also suitable for coupling with high-grade home-type phonograph equipment not provided with this feature. Adds immeasurably to wider tonal response. Recommended for use with Knight 8, 15, 35 and 65 watt standard amplifiers to provide unsurpassed reproduction.

E9850. The Knight Volume Expander. For 110 Volts, 50-60 cycles A.C. Shpg. wt., 12 lbs. Less tubes. (Note: The Volume Expander is intended only for use as an accessory with record playing equipment; it is not itself a complete record-playing device.)
List. \$23.50.

YOUR PRICE..... **\$11⁷⁵**
E12310. R.C.A. Tube Kit. NET..... \$3.39

A new broadcast-station-quality A.C. operated preamplifier. Ideally suited for use with any type of Public Address or recording equipment. Completely built into one compact steel case. Designed to amplify the output of crystal, velocity, dynamic or other low-level microphones to a point where they can be fed into mixing circuits, telephone lines or any low-gain main amplifier. Input is arranged for 50, 200 or 500,000 ohms to match the output of any type of microphone. A volume control is incorporated for convenient operation. Output is to 200 ohm line. Uses 1—6C6 as S.G. Amp.; 1—6C6 as Triode-Amp.; uses 84 as rectifier. Components are carefully shielded and rubber-floated. Has a gain of 60 db. and a flat response from 30 to 12,000 cycles. Hum is negligible. Case size, 6 3/4" x 8 1/4" x 11 3/4". Shpg. wt., 33 lbs. For 110 Volts, 60 cycles A.C. Complete with tubes. A ruggedly constructed unit.

E12252. YOUR PRICE..... **\$44²⁵**

A true high-fidelity Broadcast band tuner for those who desire the very finest program reproduction. Consists of three Tuned R.F. stages and detector, with high impedance output circuit designed to couple to input circuit of almost any type of high quality audio amplifier. Coils have Ferrocart cores providing maximum selectivity without sacrificing quality. Ideally suited for P.A. monitoring of broadcast programs, for School and Educational Broadcast reception, etc. Has monitor headphone jack with unique circuit arrangement which prevents unbalancing of circuit when phones are plugged in or out, thus eliminating annoying plug noises. Built-in power supply is highly stabilized to prevent erratic operation; heavily filtered to insure smooth performance. Illuminated 4" airplane dial is directly calibrated to simplify tuning in desired programs. Tuning range is from 530 to 1600 KC covering all standard Broadcast station frequencies. The entire unit is housed in an attractive black wrinkle finished steel cabinet. Extremely compact in size; measures only 8 3/4" wide, 8 3/4" high, 12 1/2" deep. Has full AVC. Equipped with volume and tone controls. Uses 3—6K7, 1—6H6, 1—6F8G, and 1—5Z4 tubes. Supplied completely wired (not a kit) ready for immediate operation; less tubes. One of the finest R.F. tuners available, yet our price is attractively low for such outstanding quality. For 110 Volts, 60 cycles A.C.

E9852. Meissner R.F. Tuner. YOUR PRICE..... **\$28⁵⁰**
E9853. R.C.A. Tube Kit. NET..... \$5.00

QUALITY CRYSTAL HEARING AIDS

NOW—every hard-of-hearing person can regain the thrill of perfect hearing inexpensively. New portable battery model is housed in pin-seal leather case only 5" deep, 8" wide, 6" high. Requires only two small batteries, one 1 1/2 volt cell, and one small "B" battery. No longer need your friends raise their voices—no more embarrassing situations through misunderstanding. Regain the pleasure of equal understanding on a par with those whose hearing is unimpaired. Here, in one amazingly sensitive and simple-to-operate hearing-aid is the entire solution to your problem. You can use it in your home or at your office, club, or anywhere you travel. It picks up voices or music from any part of the room and reproduces with clear, crisp naturalness of tone. New, modern circuit using latest type crystal microphone and crystal earphone unit reproduces and amplifies every sound at many times its normal intensity—without annoying buzz and noise so prevalent in cheap, imperfectly designed hearing-aids. Here is the first low-cost Hearing Aid that will function sensitively and with excellent fidelity. Weighs only 6 lbs.

E12175. Portable Battery Model (illustrated). \$29.95
With tubes and batteries. Less only earphone (see listing below).
YOUR NET PRICE.....

LATEST ALL-ELECTRIC MODELS

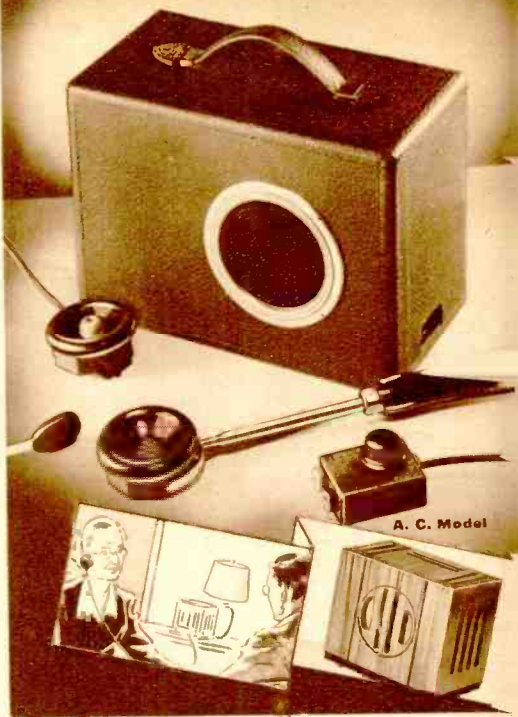
This sensational new device plugs into any 110 volt outlet, AC or DC. Operation is extremely economical—line drain is only 35 watts, less than your favorite reading lamp. Service is limited to occasional tube replacement—and in most cases tubes will last from one to two years! Churches, clubs, and many organizations can use the standard unit also, for every unit will handle up to eight logronette, headband or bone conduction type reproducers. Designed and built of highest quality materials to insure long, dependable service. Standard Model is housed in a handsome polished walnut cabinet, 5 1/2" high, 6 3/4" wide, 4 1/2" deep, to harmonize everywhere. Uses 1 to 8 logronette, headband, or bone conduction units listed below. The AC-DC unit is also available in a portable model, housed in pin-seal leather case no larger than the average camera. Either operates from any 110 volt AC-DC outlet.

E12176. Standard AC-DC Model in walnut case. \$29.95
With tubes, less earphone. Shpg. wt., 6 lbs.
NET PRICE.....

E12177. Portable AC-DC Model in leather case. \$29.95
With tubes; less earphones. Shpg. wt., 6 lbs. **NET PRICE**.....

HEARING-AID ACCESSORIES

- E12178. Crystal Earphone** with headband and 4 foot cord. **NET**..... \$4.41
- E12179. Logronette Type Crystal Earphone** with 4 foot cord. **NET**..... \$4.41
- E12180. Bone Conduction Unit** with 4 foot cord. **NET**..... \$7.64
- E12182. Individual volume control** with 10 foot cord. **NET**..... \$2.06
- E9145. 220 Volt Adapter Cord.** Permits use of 110 volt AC-DC units from 220 volt AC-DC source. **NET**..... 59c
- E12183. Double plugs.** Permit use of two earphone units in single earphone outlet. **NET PER PAIR**..... 59c
- E12184. Replacement batteries** for battery model. **NET PER SET**..... \$1.49



ELECTRICAL INSTRUMENT AMPLIFIER

The very latest in electrical amplification for musical instruments. Everywhere the best of soloists are using amplifiers to create new and novel musical effects, to put new pep into swing arrangements, to bring up feature passages, for fades, overtones, treble endings, etc. **NOW**—you can get these same effects from your own string or reed instrument. The new **KNIGHT** Electrical Instrument Amplifier consists of the **KNIGHT** 8 Watt High Gain Portable Sound System described on page 75 but with the new Home Model Amperite Kontak instrument pickup with foot-pedal volume control supplied in place of the usual microphone. It's so simple a child can operate it! You merely slip the tiny inconspicuous pickup unit under the strings of any instrument, plug the cable from the foot-operated volume control into the amplifier, and you're all set to produce practically any effect you desire.

FOR USE WITH ANY INSTRUMENT

A small slip of adhesive tape holds pickup securely in place. A slight flip of the fingers, and it is instantly removed for portable use or for attachment to another instrument if desired. The complete Electrical Instrument Amplifier is extremely compact for convenient portability. Designed for easy operation (no technical knowledge required). Delivers full 8 watts to carry feature solos or passages above even the largest orchestra. Operates from any 110 volt 50-60 cycle AC outlet. Full 8" dynamic speaker mounted in portable case is also equipped with 25 foot cable permitting operation at some distance from the amplifier unit. Supplied complete, ready to operate, including RCA tubes, amplifier and carrying case with 8" dynamic speaker and Amperite Home Model Kontak pickup with foot-pedal volume control and 25 foot cord.

E12335. Complete System as described. \$35.75
YOUR NET PRICE.....

E12336. Same System as above but with Amperite KTH Professional Pickup with foot-pedal volume control. \$41.35
NET PRICE.....



MASTER

Illustrated are the Master and Sub-Station units as used in a Master station installation. Up to 10 sub-station units may be used.

STATION UNIT

Knight INTERCOMMUNICATION SYSTEM

Here is an entirely new type of intercommunication system which permits instant, automatic, direct contact between adjacent rooms, offices, etc. Essential to all modern businesses, homes, and institutions. Much faster and more convenient than telephone systems; permits instant contact between two (or more) points. The simple two-way system is fast and easy to operate. You simply push the small lever to talk and release to listen. Built-in amplifier operates from any 110 volt AC-DC wall outlet. Stations may be at any distance apart, and are connected by means of inconspicuous cable. Additional sub-station units up to a total of four may be added, but only one conversation at a time may be held. All conversations are heard at all four units simultaneously.

E12340. Complete Two Way System. Consists of: 1—Station unit with amplifier and tubes, 1—Sub-station unit, and 50 foot connecting cable with polarized plugs. \$26.25
YOUR NET PRICE.....

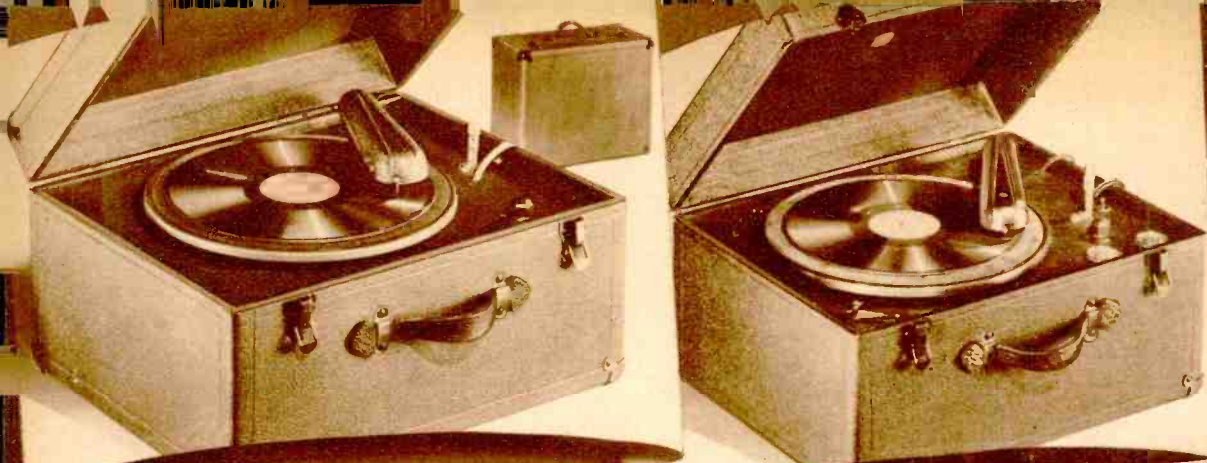
E12341. Additional Sub-Station Unit with 50 foot cable and polarized plugs. Up to four of these units may be used with system above. \$9.90
YOUR NET PRICE.....

• **MASTER STATION SYSTEM.** The Knight Intercommunication System is also available in a selective type Master Station arrangement. Master station can select and talk in complete privacy with any one of a number of sub-station units up to a total of 10. Sub-station units can call Master station but cannot converse with other sub-stations. Operates from 110 volt AC or DC. \$24.50
E12342. Master Station Unit. Complete with tubes, junction box, and instructions. **YOUR NET PRICE**.....

E12343. Sub-Station Unit. Up to 10 may be used with each Master Station Unit. Complete with junction box. \$7.95
YOUR NET PRICE.....

E12344. Cable for connecting Master and Sub-station units. **PER 10 FEET**..... 40c
YOUR NET PRICE.....

NOTE: WE CAN SUPPLY all types of Intercommunication systems for various purposes, as well as Factory and Industrial Paging and Call Systems. For complete details and prices, write to our Engineering Division, giving your requirements in detail.



Values IN FINE ELECTRIC PORTABLE PHONOGRAPHS

LOW-COST SINGLE-SPEED MODEL

A dependable portable electric phonograph, suitable for use with any amplifier or radio set having a high-impedance phono input circuit. Incorporates a high-grade single-speed 78 R.P.M. motor, self-starting synchronous type; maintains constant speed regardless of line voltage variations. Equipped with 12-inch turntable. Uses a high-impedance flat type **Knight** magnetic pickup which has excellent frequency response. Pickup cord is equipped with convenient phone tip ends. Includes built-in volume control. Has needle cup. The entire assembly is housed in a compact, sturdy leatherette-covered case which measures 17 3/4" x 13 3/4" x 7" open; 17 3/4" x 13 3/4" x 9 1/4" closed. Leather carrying handle is securely riveted on top. Entire unit is light in weight; compactly built for easy portability. Includes approved 6 foot cord and plug. For operation on 110 Volts, 60 cycles, A.C. Shpg. wt., 29 lbs.

E10080. With Magnetic Pickup. **\$1365**
YOUR PRICE.
E10077. Single-Speed Portable Phonograph unit exactly as described above, but with Knight Crystal Pickup. **\$14.50**
YOUR PRICE.

HIGH GRADE DUAL-SPEED MODELS

Essential equipment for sound systems. Also suitable for use with any radio set arranged to accommodate a high impedance phonograph. Equipped with the finest self-starting dual-speed (78 and 33 1/2 R.P.M.) heavy-duty phonograph motor with weighted, balanced 12 inch turntable. Motor has speed-regulating and speed-shift levers. Incorporates the latest Webster high-fidelity magnetic pickup; with built-in volume control. Has pickup cord with convenient phone tip ends. Comes in maroon-colored leatherette-covered case with carrying handle and rubber feet. Has slip-type hinges which allow cover to be removed. Measures 17 1/2" x 13 3/4" x 9 1/4". Equipped with leather carrying handle which will not loosen or pull off. Fills every requirement for high quality, portable phono equipment. Includes approved 6 foot cord and plug. For operation on 110 Volts, 50-60 cycles, A.C. Shpg. wt., 36 lbs.

E10081. With Magnetic Pickup. **\$2155**
YOUR PRICE.
E10078. Dual-Speed Portable Phonograph unit as above, but with famous Astatic B-10 Crystal Pickup. **\$27.95**
YOUR PRICE.

E10079. Special Transcription Portable Phono unit. Has 16-inch specially-balanced turntable, professional-type high impedance Astatic Tru-tan Pickup with 12 inch arm, Dual-Speed Green Flyer Motor. With volume control. 23" x 17 1/2" x 8". **\$54.95**
YOUR PRICE.

NEW 6 VOLT D.C. MODELS

Essentially the same as the 110 Volt Models listed above, but equipped with heavy-duty 6 volt D.C. motors. Dual-speed type; will play any 8 to 12 inch record, either 78 or 33 1/2 R.P.M. In ruggedly constructed portable cases. Ideal for all portable 6-volt operated sound equipment. Case size, 17 1/2" x 13 3/4" x 9 1/4". Shpg. wt., 40 lbs.

E10053. With Webster Magnetic Pickup. **\$25.75**
NET
E10054. With Astatic B-10 Crystal Pickup. **\$32.15**
NET



PORTABLE PHONO WITH ENCORE PICKUP

An entirely new type of portable phonograph. Much smaller in size than usual portable units, it is designed for ready portability. New "Encore" type crystal pickup mounts in lid of case directly above turntable. Operation is simple: place record on turntable, start motor, lower lid, and record starts playing. Pickup is automatically lowered in starting groove; last flip-over adjustment makes instant change for playing either 10 or 12-inch records. Pickup is high-fidelity crystal type with tangent head; has extremely wide frequency range and greatly reduces record wear and needle hiss. Patented mechanical arrangement provides cushion rest for pickup when unit is being carried. Case is finished in handsome maroon leatherette with handle and rubber bumper feet. Motor is sturdy single-speed 78 R.P.M. type with 10" turntable. For 110 volt 60 cycles. Size: 15" x 15" x 7". Shpg. wt., 15 lbs.

E10052. **\$1575**
NET

KNIGHT PLAYER

A dandy little record player that will bring endless hours of entertainment. May be quickly and easily attached to any radio set or amplifier to provide brilliant reproduction of 8, 10 or 12" standard records. Sturdy, self-starting 78 R.P.M. motor runs evenly without wavering. High-quality magnetic pickup has extremely wide tonal response. Equipped with smooth, noiseless volume control. Housed in attractive hand-rubbed walnut cabinet with hinged lid. Size: 12" x 11" x 6 3/4". For 110 volts, 60 cycles.

E10050. **\$995**
NET



KNIGHT RECORD PLAYER & AMPLIFIER

This new portable self-contained unit meets a wide demand for a high-quality, self-powered phonograph player. Ideal for use in homes, schools, fraternities, dormitories, advertising agencies, churches, club-rooms, summer homes and camps, etc. Can be used wherever 110 volt 60 cycle A.C. is available. Built of highest quality components to assure long life and trouble-free operation. Single unit carrying case contains sturdy, single-speed 78 R.P.M. phonograph motor and turntable, tangent-head crystal pickup, and built-in amplifier and speaker. Pickup, amplifier and speaker are accurately matched to provide the finest type of record reproduction; will play all 8, 10 and 12" standard records with brilliant tonal quality. Built-in volume control with A.C. switch attached permits operation at either high or low volume levels as desired. Case is covered in attractive tan leatherette with carrying handle and rubber bumper feet. Operates from 110 volts, 60 cycles A.C. Size: 15" x 15 1/4" x 9". Sturdily-built for ideal portable service wherever fine record reproduction is in demand.

E10051. **\$2995**
List \$49.95.
NET



IN PORTABLE CASE



Famous AUTOMATIC RECORD CHANGERS

GARRARD RECORD CHANGERS

New, high-grade record changers for use in the finest type of record-reproducing units. Designed and built to provide finest quality of tone, minimum surface noise, mechanically perfect operation, and a minimum of record groove wear. Will not damage the finest records. Rugged mechanical construction for trouble-free long-life.

MODEL RC-6 CHANGER

An unusually sturdy, rugged mechanism designed to provide simple smooth-acting operation. Spindle holds eight 10" or 12" records; can be instantly set to play 10" or 12" records by means of simple adjustment knob on top of mechanism mounting plate. Heavy-duty electric motor is fully enclosed and requires only periodic inspection; runs silently. Crystal pickup is tangent-head type with swivel head to permit changing of needle. An unusual feature is the Rejector control by means of which any undesired records on the spindle can be automatically rejected without being played. Entire assembly is compact in size: only 16" long, 14" wide, 4 3/4" above panel, and 4 3/4" below panel.

For 100/130 and 200/250 volts, 50/60 cycles. 30 lbs. **\$4470**

E10085. NET

E10086. Model RC-5. Same as RC-6 but for 100/130, 200/250 volts, 25/60 cycles A.C. or D.C. **\$50.98**

E10089. Portable Carrying Case for Garrard RC-6 or RC-5 record changer. In maroon leatherette. **NET** **\$6.75**

MODEL RC-1A MIXER-CHANGER

The finest and most versatile of all record-changing mechanisms. Will play any combination of eight 10" or 12" records inter-mixed without mechanical settings or changes. High-fidelity tangent-head crystal pickup provides true tonal reproduction of every type of recording. Powerful, fully-enclosed motor will operate silently and efficiently without attention. Smooth-acting mechanism is equipped with automatic stop; changer stops when last record in magazine is finished. Automatic rejector allows undesired records to be rejected at will without playing. Any record may be repeated as many times as desired by means of automatic repeater. Dimensions: 17 1/2" long, 14 3/4" wide, 5 3/4" below panel, and 4 1/2" above panel. Wt., 36 lbs. For 100/130 and 200/250 volts 50/60 cycles.

E10087. NET **\$5995**

E10088. Model RC-2A. Same as RC-1A but for 100/130 and 200/250 volts, 25/60 cycles A.C. or D.C. **NET** **\$66.16**

E10090. Portable Carrying Case for Garrard RC-1A or RC-2A record changers. **NET** **\$7.50**

PACKARD RECORD CHANGERS

A completely dependable automatic Record Changer; single speed type; will play any 8, 10 or 12", 78 R.P.M. records. Last record will repeat until mechanism is turned off. May be set to repeat or reject any record at will. Motor is governor controlled, induction type. Operates without noise. Equipped with high impedance, high-fidelity crystal pickup, assuring the very best quality of reproduction. Provides brilliant response without mechanical distortion or noise. For 110 volts, 60 cycles A.C. operation. Available as mechanism only or in portable case.

MODEL K. Mechanism only. An efficient, compact unit measuring only 12" x 12" x 5 1/2". Plays eight 10" records automatically; plays 12" records manually, by means of simple change. Repeats last record. Finished in stately bronze. Wt., 26 lbs. **\$2760**

E10134. NET

MODEL L. Mechanism only. Will play eight 10" or seven 12" records automatically with only simple change adjustment. Size: 14" x 15" x 5". Repeats last record. Statuary bronze finish. Wt., 26 lbs. **\$30.45**

E10135. NET

MODEL M. Mechanism only. Will play eight 10" or seven 12" records automatically. Requires only one shift of adjustment lever to change sizes. This is the finest of the Packard units. Repeats last record.

With volume control. Size: 15" x 14" x 5". Wt., 28 lbs. **\$31.80**

E10136. NET

IN PORTABLE CARRYING CASES

The Packard Record Changer mechanisms, as listed above, are also available in attractive, sturdy black leatherette covered carrying cases.

MODEL K RECORD CHANGER, in portable case. **\$32.00**

E10137. NET

MODEL L RECORD CHANGER, in portable case. **\$35.20**

E10138. NET

MODEL M RECORD CHANGER, in portable case. **\$36.55**

E10139. NET

E10128. PORTABLE CASE ONLY. For all Packard Record Changers. **NET** **\$4.75**

We Can Also Supply Packard Record Changers in other than the standard models listed above, as follows: For dual-speed (78 and 33 1/2 R.P.M.) motors, add \$1.80 to above prices. Add \$5.40 if 78 R.P.M., 6 volt D.C. motor is desired. For 110 volt 25 cycle motor, add 90c, and for 220 volt 50 cycle motor, add 45c.

R.C.A. AUTOMATIC RECORD CHANGER

Here is an exceptionally fine 78 R.P.M. unit for those who require the highest-quality record-changing mechanism. Identically the same as units used in RCA-Victor Radio-Phono Combinations. Will automatically play eight 10" or seven 12" records. When loaded with 12" records, it will provide 35 minutes of uninterrupted entertainment. New RCA Senior crystal pickup is of the latest inertia type, balanced to assure minimum record wear and surface noise. Top-loading makes needle changing fast and easy; no fumbling; simply drop needle in top well and tighten set-screw. Mechanism is of simple fool-proof design, built to provide continuous trouble-free operation. Shock-absorbent coupling between motor and turntable eliminates vibration. High-fidelity type high-impedance crystal pickup has output of 1.5 volts at 1000 cycles; range is from 70 to 7000 C.P.S. providing extremely brilliant reproduction of all types of records. Operates from 110 volts, 60 cycles A.C. Shpg. wt., 35 lbs.

E10091. No. 9844. List, \$74.95. **\$4497**

NET

E10092. No. 9844A. Same as above but with motor for operation from 110 volts, 50-60 cycles A.C. List, \$77.45. **\$46.47**

NET



Knight 4 WATT AC-DC AMPLIFIER



Now for the first time, you can get a high-quality, A.C.-D.C. amplifier to build your own record-reproducing unit. Especially designed by ALLIED'S engineers to provide low-cost record reproduction of highest quality. Can be used for modernizing old phono equipment or for building compact record or transcription-playing devices or phono installation in portable phonograph units, etc. Extremely compact in size, chassis measures only 4" wide, 8" long, and 2" high, exclusive of tubes. Overall height with tubes is only 6 1/2". Uses 1-6C8G, 2-25L6G, and 1-25Z5 tubes. Will operate from any 110 volt A.C.-D.C. outlet and produce full 4 watts output. Input circuit with tip-jacks is designed for high-impedance crystal pickup. Output circuit is high-impedance and designed to operate with a Permanent Magnet dynamic speaker having an output transformer to match the 2 beam-power 25L6G tubes in push-pull. Volume control on front is equipped with "on-off" switch; tone control permits accentuation of treble or bass ranges as desired. Can be quickly and easily installed. Select one of the many fine crystal pickups and P.M. speakers listed in this catalog, and with the Knight 4 Watt A.C.-D.C. Amplifier and a phono motor, you can build a fine record-playing unit that will provide endless hours of high-quality entertainment.

E10055. Knight 4 Watt A.C.-D.C. Amplifier, less tubes and speaker. **\$595**

Shpg. wt., 8 lbs. **NET**

E10056. R.C.A. Tube Kit for 4 Watt A.C.-D.C. Amplifier. NET **\$3.90**



Knight TRANSCRIPTION REPRODUCER AND RECORD PLAYER

This fine new instrument answers the demand for a portable, versatile, high-quality transcription reproducer and record-player. Consists of a built-in amplifier with a 12-inch turntable, transcription reproducer and record-player. Green Flyer motor with 12-inch Astatic Crystal output of 4 watts; a universal dual-speed either AC or DC; a 12-inch Astatic Crystal pickup which operate from 110 volts, either AC or DC; as well as 16-inch transcription both of which will handle all 8, 10 or 12-inch recordings as well as 25-foot cable in recordings, an 8-inch high-fidelity permanent-magnet speaker with leatherette-covered carrying case, a movable front cover all contained in a sturdy leatherette-covered carrying case, 19 1/4" x 11 1/4" x 14". With handle. Ideal for the needs of schools, broadcast studios, government agencies, advertising agencies and all other institutions and services requiring good fidelity reproduction of all types of transcriptions and recordings.

PLAYS 8" TO 16" RECORDS ON 110 V. AC OR DC

The new Knight Transcription Reproducer and Record Player has been designed for maximum versatility in operation. The universal character of both amplifier and phonograph equipment makes the Knight Transcription Reproducer suitable for use on any 110 volt line, AC or DC. The amplifier has been especially developed to give maximum fidelity with the Astatic Crystal pickup, and has a scratch-filter built-in for elimination of surface as well as AC. The amplifier has a gain control for accurate maximum output on DC as well as AC. The amplifier has a gain control for accurate volume-setting and is equipped with Tone Control which permits accentuation of bass or treble ranges as desired. The dual-speed phono motor (33 1/3 or 78 R.P.M.) and AC-DC switch. All controls are grouped conveniently on top panel of portable case. Shpg. wt. 34 lbs.

\$49⁷⁵

E10082. Knight Transcription Reproducer complete as described.
YOUR PRICE.....

PORTABLE CASES for AMPLIFIERS, SPEAKERS, etc.



FOR KNIGHT 15 & 35 WATT AMPLIFIERS

Designed for use with the Knight 15 and 35 watt amplifiers. Maroon leatherette-covered. Comfortable, securely fastened carrying handle; bottom fitted with rubber feet. Has shielded grille for 12" speaker, protected by roll-down cover with snap fasteners. Web straps provided for holding desk type mike stand. 21" x 24" x 12". Wt. 15 lbs.

E12506. NET..... \$7.35

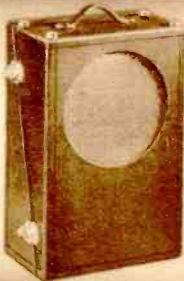
E12516. As above but in Black leatherette. Size 18 1/4" x 17 1/2" x 9 1/2". NET..... \$4.75



FOR KNIGHT 8 WATT SOUND SYSTEMS

Designed for easily carrying either of the two Knight 8 watt sound systems. Sturdy construction with metal reinforced corners. Maroon leatherette covering. Has shielded grille for 8" speaker. Metal plate and web strap for holding microphone and desk stand. 19 1/4" x 15 1/4" x 8". Designed and built with typical Knight quality. May also be used for other amplifiers or similar equipment. A sturdy, easy-to-carry case. Shpg. wt., 10 lbs.

E12505. NET..... \$4.95



DUAL SPEAKER CARRYING CASE

Permits easy carrying of two 12" speakers. Case divides into separate units, serving as baffles when speakers are in use. Has attractive leatherette covering and sturdy carrying handle. Speaker grilles are backed with heavy metal screen. Heavy plywood construction; snap-type trunk clasp; rubber feet on bottom of each section. Extremely compact and portable. Size closed, 21 1/2" x 13 1/2" x 8 1/2". Wt., 7 lbs.

E12519. NET..... \$4.95



SINGLE SPEAKER CARRYING CASE

An attractive case for any 12" dynamic speaker. Ideal for portable sound systems or for temporary installations. Speaker opening with grille cloth backed with heavy metal screen. Removable back fitted with snap-type trunk clasp. Constructed of heavy plywood for light weight and long service. Has carrying handle and rubber feet on bottom. Size, 13 1/4" x 13 1/2" x 9". A fine speaker case value. Shpg. wt., 9 lbs.

E12518. NET..... \$2.95

FOR KNIGHT 15 & 35 WATT SOUND SYSTEMS

Designed to make completely portable the Knight 15 or 35 watt Standard sound systems. Attractive, leatherette-covered case with ample room to carry amplifier and two 12" dynamic speakers. Separates into three units, two of which serve as speaker baffles; holds amplifier in bottom section. All units fasten securely together with heavy trunk clasps. Heavy plywood with reinforced corners. Size, 25" x 22 1/2" x 15 1/4". Shpg. wt., 28 lbs.

E12521. NET..... \$9.95

E12507. Same high quality case as above, but for equipment other than Knight Sound Systems. Size, 24 3/4" x 19 3/4" x 15 1/4". Shpg. wt., 26 lbs. NET..... \$8.25

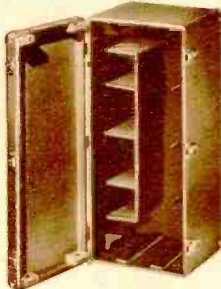


CASE FOR AMPLIFIER ONLY

An exceptionally rugged portable carrying case for use with the Knight 15 or 35 watt Standard amplifiers or similar units. Laminated plywood construction. Attractive maroon leatherette covering. For amplifier only. Size, 10 1/4" x 20 1/2" x 12 1/4".

E12508. NET..... \$5.85

E12509. As above but for Knight 18 and 35 watt Deluxe and 65 watt Standard amplifiers. 10 1/4" x 22 3/4" x 13 1/4". NET..... \$5.95



PHONOGRAPH CASE

Maroon leatherette-covered cases. Sturdy plywood construction; carrying handle; rubber feet on bottom. Cutout for Green Flyer motor. With needle cups and volume control. 9 1/2" x 17 3/4" x 19 1/4".

E12512. NET..... \$4.50

E12513. Same as above but with cutout for Knight Special Value Phono Motor. 13 lbs. NET EACH..... \$4.50

PORTABLE UTILITY CARRYING CASE

A case for every user of portable sound equipment, this ingenious case is designed to carry all miscellaneous accessories. Has ample room for one to four microphones, spare tubes, cables, tools, etc. Covered with attractive maroon leatherette; sturdily built of laminated plywood for light weight and maximum strength. Accurately balanced for easy carrying. Every sound equipment owner will find this case an invaluable accessory. Overall size, closed, 15" wide, 20" long, 14" deep. Shpg. wt., 32 lbs.

E12522. NET..... \$8.75



P. A. BAFFLES, TRUMPETS, STANDS & MOUNTINGS

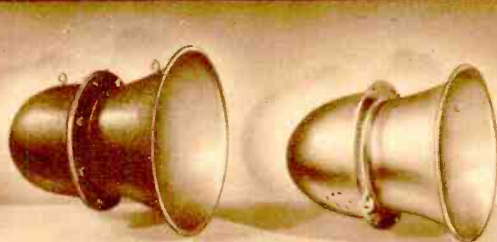


P. A. BAFFLE AND STAND

The ideal sound accessory combination for all portable speaker requirements. Consists of steel baffle as described at right with sturdy adjustable floor stand fitted with swivel adjustment. Stand can be adjusted from 46 to 76" and has locking clutch. Tripod legs provide firm support. Stand may be collapsed into a compact unit for easy packing. Swivel top permits pointing baffle for best distribution of sound. Stand is finished in black enamel. Shpg. wt., 25 lbs.

E10567. Complete. Baffle, Stand and Swivel. NET..... \$14.55

E10566. Stand Only. As described above. May be used with Steel or Aluminum baffles at right or similar units. Shpg. wt., 15 lbs. **NET..... \$6.45**



WEATHERPROOF BAFFLES

STEEL MODEL
Designed to afford complete speaker protection as well as adequate sound distribution for either indoor or outdoor sound installations. Rigidly constructed of pressed steel. Flare is 16 1/4" diameter, 9 3/4" deep. Bell housing 10" deep to accommodate 12" speaker. For smaller speakers use reducer rings listed below. Comes with weather-proof snap-on cover. Has no annoying resonant rattles or vibrations. Finished in black wrinkle enamel. Shpg. wt., 15 lbs. **\$8.25**

E10565. NET.....

DELUXE ALUMINUM
Ruggedly built of 18 gauge aluminum, yet easily portable. Similar to Steel Baffle described at left. Flare, 16 1/4" diam., 9 3/4" deep. Bell, 10" deep, with absorbent felt lining. Supplied with snap-on weather-proof cover. For 12" speaker. Equipped with rugged cast aluminum mounting ring. Use reducer rings at lower left for smaller speakers. The finest aluminum baffle on the market. Wt., 10 lbs. **\$7.75**

E10282. NET.....

REDUCER RINGS
E10280. Reducer ring for 8" speaker. **NET EACH..... 53c**
E10281. Reducer ring for 10" speaker. **NET EACH..... 53c**

STANDARD ALUMINUM
Similar to Deluxe baffle above but made of slightly lighter weight aluminum. Bell housing is not lined with felt; supplied less cast mounting ring. A good quality unit at an unusually low price. **E10283. Wt., 5 lbs. \$4.68**

NET.....



AUTO TOP & WALL MOUNT STAND
For use with any of the Aluminum or Steel Baffles listed above. Heavy rigid construction. 12" high with cast mounting base, 14" diam. Swivel top for angle adjustment.

E10568. Auto top and wall mount finished in black wrinkle. 8 lbs. **\$1.95**

NET.....

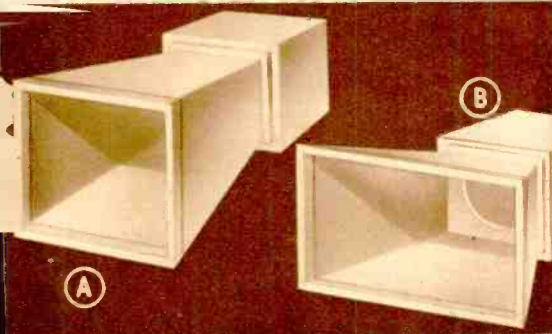
E10569. Auto top and wall mount finished in aluminum. Wt., 8 lbs. **\$2.95**

NET.....



TRUMPET FLARE ONLY
The trumpet flare only as used in the aluminum baffles described above is available for mounting on front of portable speaker cases. Will provide even distribution of sound in desired direction and reduces the problem of acoustic feedback. 16 1/4" diam., 9 3/4" deep. Wt. 3 lbs.

E10284. NET..... \$3.88



LOW-COST DEMOUNTABLE BAFFLES

Fig. A. Ideal for use with any standard dynamic speaker; will greatly increase sound coverage. Weatherproofed for mounting either outside or indoors. Bell is 22" x 23", 25" deep. Type 1 is for 10" and 12" speakers; Type 2 is for 6" to 9" speakers.

LESS SPEAKER HOUSING
E10270. Type 1. **\$5.00**
E10271. Type 2. **NET EACH.....**

WITH SPEAKER HOUSING
E10272. Type 1. **\$7.85**
E10273. Type 2. **NET EACH.....**

GIANT TYPE BAFFLE
E10588. For 12" to 15" speakers. Bell 24" x 36", 37" long. Shpg. wt. 24 lbs. **NET..... \$8.53**

GIANT TYPE BAFFLE
E10589. For 12" to 15" speakers. Bell 24" x 36", 4 feet long. Shpg. wt. 32 lbs. **NET..... \$11.38**

Fig. B. Semi-directional type, demountable, weatherproof baffles for use where extreme directional effect or long range projection is not required. For short range, large-area coverage. Bell is 30" x 18" x 14" deep. Type 1 for 10" to 12" speakers; Type 2 for 7" to 9" speakers. Can be assembled in a few minutes and are readily portable.

LESS SPEAKER HOUSING
E10276. Type 1. **\$3.95**
E10277. Type 2. **NET EACH.....**

WITH SPEAKER HOUSING
E10278. Type 1. **\$6.80**
E10279. Type 2. **NET EACH.....**



BULLET SPEAKER HOUSING
This new streamlined enclosure is ideal for many types of call systems as well as for general voice and sound re-inforcement. Can be suspended from a wall bracket or from the ceiling. Made of high-grade spun aluminum and steel, finished in gray enamel. Metal-cloth front screen is black and silver. Has internal lining of felt to prevent resonant rattles. Equipped with mounting hardware and suspension loops. Size, 11" diam., 10" deep. For 8" speaker. Wt., 4 lbs. Sturdily made; attractive in appearance.

E10570. NET..... \$3.53

E10571. Same as above but for 12" speakers. Size, 14" diam., 12" deep. Wt., 6 lbs. **NET..... \$4.70**



INCLINED SPEAKER BAFFLES
Attractive, walnut-finished speaker baffles for either wall or table mounting. Especially suited for all types of centralized radio and sound installations. Front openings are backed with attractive black and gold grille cloth.

E10287. For 8" Speakers. **NET..... \$3.50**

E10288. For 12" Speakers. **NET..... \$4.25**



OXFORD HORNS & UNITS

A new exponential type of indoor or portable horn. Constructed of heavy-gauge spun-aluminum with chrome finished steel shell housing; acoustically designed and treated to prevent metallic sounds. Complete assembly is impervious to all weather and atmospheric conditions. Driver units are 6" in diam. and have heavy-duty 5" diaphragms with 6 ohm voice coils; will handle up to 15 watts safely. Units are available with either PM or DC-excited fields. Horn has adapter for use on all standard horn stands; bell diam. 20", length 20", overall length approximately 36". Light weight makes this complete unit ideal for mobile or portable sound systems. Shpg. wt., 28 lbs.

E10580. Equipped with P. M. horn unit. **\$23.80**

List, \$40.50. **NET.....**

E10581. Complete horn assembly equipped with 6 volt DC field type unit. List, \$36.00. **\$21.17**

NET.....

E10582. 6 Volt DC Unit only. **\$8.82**

NET.....

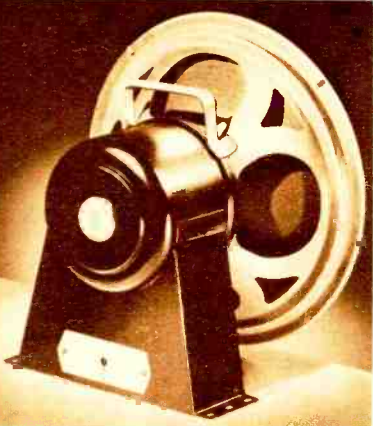
E10583. P. M. Type Unit only. **\$11.76**

E10584. Oxford Exponential Horn only, less trumpet unit. **\$14.70**

List, \$25.00. **NET.....**

E10585. Weatherproof Cover. Heavy rubberized cover for Oxford horn for protection in wet weather. **NET..... \$2.06**

Knight P.A. SPEAKERS



\$575

AUDITORIUM DYNAMICS

These powerful 12 inch Auditorium Dynamic Speakers will reproduce large audio power with absolute fidelity. Will handle from 10 to 15 watts with minimum distortion. They are especially designed for brilliant reproduction of voice and music, either indoors or outdoors. Have rigid pressed-steel frame finished in satin-black. One-piece cone has heavy-duty 1 1/2" diameter 8 ohm voice coil. Overall height, 12 1/2". Depth 7". Supplied less transformer.

Write for prices for Auditorium Dynamic Speakers equipped with any field you specify, and with output transformers for Class "B" or Class "AB" operation. Portable speaker cases are listed on Page 90. If case is ordered with speaker, we will assemble at no extra charge.

- E12525.** 6 Volt Field.
E12526. 1000 Ohm Field.
E12527. 2500 Ohm Field.
YOUR PRICE EACH **\$575**
E11005. Knight Universal Output Transformer.
NET 66c
 (If ordered with speaker, specify O.P. tubes and connections.)

A.C. MODEL

- E12529.** The Knight 12-inch Auditorium Dynamic Speaker is also available in a model for 110 Volt 60 Cycle A.C. operation. The hushless field supply requires a type 80 rectifier. Tube is not supplied.
NET **\$8.75**

KNIGHT HEAVY-DUTY DYNAMICS

Similar to the Knight Auditorium Dynamics described above, but power-handling ability is 25 watts. With 8 ohm voice coils.

- E12477.** Knight Heavy-Duty 12" Dynamic. 1000 ohm field.
E12478. Knight Heavy-Duty 12" Dynamic. 2500 ohm field.
NET **\$829**
E12388. Line transformer 66c
E12390. Output transformer 66c

- E12479.** Knight Heavy-Duty 15" Dynamic. 2500 ohm field. 30 watts peak.
NET **\$10.95**
E12480. Knight Heavy-Duty 15" Dynamic. 2500 ohm field. 45 watts peak.
NET **\$12.45**
E12389. Line transformer 88c
E12391. Output transformer 88c

KNIGHT P.M. DYNAMIC SPEAKERS

A new type of magnet construction has produced a splendid speaker with exceptional sensitivity and unequalled high-fidelity response. Ideally suited wherever quality reproduction combined with power-handling ability must be had at a reasonable cost. Units are fully protected from dust. Require no field excitation. Voice coil impedance, 8 ohms. All wattage ratings are conservative. Average shipping weight 6 lbs.

- E12485.** Knight 12" P.M. Speaker. Normal rating. 18 watts.
NET **\$6.67**
E12396. Line transformer 66c
E12393. Output transformer 66c
E12486. Knight 12" P.M. Speaker. Normal rating. 25 watts.
NET **\$7.86**
E12397. Line transformer 68c
E12394. Output transformer 68c



- E12487.** Knight 12" P.M. Speaker. Normal rating. 30 watts.
NET **\$15.72**
E12398. Line transformer 88c
E12395. Output transformer 88c
E12488. Knight 15" P.M. Speaker. Rating, 30-45 watts.
NET **\$17.38**
E12398. Line transformer 88c
E12395. Output transformer 88c



Famous UTAH SPEAKERS

HEAVY-DUTY DYNAMICS

These 12-inch D.C. Dynamic Speakers are especially designed to handle all heavy-duty requirements in the P.A. field with true high-fidelity reproduction. The completely enclosed cone suspension excludes dust and dirt. Conservatively rated at 15 watts normal input without distortion. Will easily handle peaks of 18 watts. Voice coil impedance, 8 ohms at 400 cycles. The oversize field requires 18 watts excitation. Supplied less transformer. See listing below for suitable line and output transformers. Average shipping weight is 14 lbs. each.

- E12530.** Type F12-2. 6 Volt.
E12531. Type F12-10. 1000 Ohms.
E12532. Type F12-25. 2500 Ohms.
NET **\$6.03**
E12534. Type F12AC. For 110 V. 60 Cycle A.C.
 Less 80 tube
NET **\$10.44**

UTAH SUPER-DYNAMIC SPEAKERS

These Utah 12-inch Super-Dynamic Speakers are particularly noted for their faithful frequency response over the entire audible range. They are designed to handle 18 watts without any trace of distortion and will easily take peaks of 25 watts. The pole pieces are 1 1/2" in diameter. Voice coil impedance is 8 ohms at 400 cycles. The recommended field excitation is 18 watts. Speakers are supplied less transformers. See listing below for suitable line and output transformers. Shipping weight is 15 lbs. each.

- E12465.** Type G12-10. 1000 Ohms.
NET **\$9.85**
E12466. Type G12-25. 2500 Ohms.
NET **\$9.85**

UTAH 15-INCH ELECTRO-DYNAMICS

One of the finest, most efficient stadium-type speakers available today. The extremely wide frequency response covers from 50 to well over 8000 cycles. Highly sensitive to even the lowest tone levels. The specially-treated voice coils provide great power-handling ability. Magnificently built.

- E12467.** Type G15-25. 20 watts normal input. 30 watt peaks. 2500 ohm field. Voice coil impedance, 8 ohms. Requires 18 watts field excitation. Less output transformer.
 Shpg. wt., 18 lbs. **NET** **\$13.23**
E12468. Type H15-25. 30 watts normal input. 45 watt peaks. 2500 ohm field. Voice coil impedance, 8 ohms. Requires 25 watts field excitation. Less output transformer.
 Shpg. wt. 19 lbs. **NET** **\$15.58**

HIGH-FIDELITY PERMO-DYNAMIC SPEAKERS

These P.M. speakers represent the last word in Permanent Magnet design and must be heard to be appreciated. Extremely high efficiency and sensitivity are achieved through the use of a newly developed magnet. The entire voice coil assembly is completely covered for protection against dust and dirt. Each of these units equals or surpasses the performance of the same size of electro-dynamic speaker. Will assure you of the very finest high-fidelity reproduction. Conservatively rated. Less output transformer.



- E12470.** Type G8P. Normal input, 15 watts. Cone size, 8". Voice coil, 8 ohms. Shpg. wt., 5 lbs.
NET **\$5.14**
E12471. Type E12P. Normal input, 18 watts. Cone size, 12". Voice coil, 8 ohms. Shpg. wt., 6 1/2 lbs.
NET **\$8.23**
E12472. Type F12P. Normal input, 25 watts. Cone size, 12". Voice coil, 8 ohms. Shpg. wt., 8 1/2 lbs.
NET **\$9.70**
E12473. Type G12P. Normal input, 25 watts. Cone size, 12". Voice coil, 8 ohms. Shpg. wt., 10 lbs.
NET **\$12.49**
E12474. Type H12P. Normal input, 30 watts. Cone size, 12". Voice coil, 8 ohms. Shpg. wt., 11 lbs.
NET **\$19.40**
E12475. Type H15P. Input, 30 watts. Cone size, 15". Voice coil, 8 ohms. Shpg. wt., 19 lbs.
NET **\$21.46**

UTAH SPEAKER TRANSFORMERS

The output type transformers listed below are designed to couple single or push-pull power tubes to an 8 ohm voice coil. The line transformers have primaries tapped at 500, 1000, 1500, and 2000 ohms. Secondaries for 8 ohm voice coils. These units are sturdily constructed and will stand full rated load without distortion. Line transformers permit accurate matching of several transformers to 500 ohm line for multiple speaking installations. Easily mounted on speakers.



No.	Type	For Speakers	NET
E12350	Output	H15P, H12P, H15-25, G15-25	\$1.18
E12351	Output	G12P, F12P	.73
E12352	Output	E12P, G8P	.59
E12353	Output	G12-10, G12-25, F12-10, F12-25	.73
E12354	Line	H15P, H12P, H15-25, G15-25	1.18
E12355	Line	G12P, F12P	.73
E12356	Line	E12P, G8P	.59
E12357	Line	G12-10, G12-25, F12-10, F12-25	.73

We can supply all UTAH Speakers made. Write for Catalog.



P.M. SPEAKER CABLE

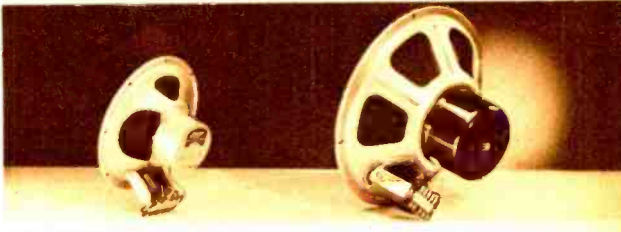
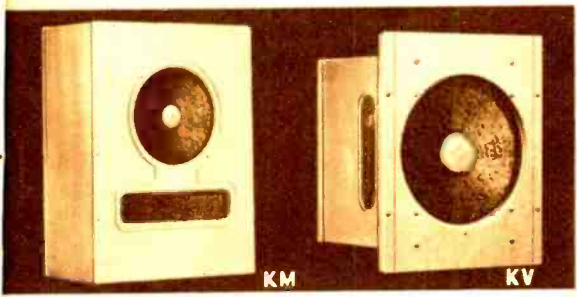
Round flexible weather-proof cable. No. 18 (16/30) stranded wire conductors, each rubber-covered and coded, with cotton wrapping and outer live rubber sheath. High quality; built to last.
E2435. 2 CONDUCTOR.
 100 FT. \$2.95.
PER FT. **3 1/2c**



FIELD EXCITER

A useful field supply unit, using a type 80 tube as a rectifier. For converting a D.C. field speaker for A.C. operation. Furnishes 15 watts under normal use. Special filter reduces hum. With 110 volt, 60 cycle transformer. Size 3 1/2 x 9 x 4 1/2" high. Wt. 5 lbs. Less tube.
E9482. YOUR PRICE **\$2.94**

Jensen • The SPEAKERS with a REPUTATION



PERMANENT MAGNET DYNAMICS

The famous Jensen line of improved permanent-magnet dynamic speakers provides a high-quality unit for every purpose. Scientifically designed, and developed in the laboratories of the world's leading manufacturer of fine reproducers, these speakers are equal in every respect to the finest electro-dynamic types. Smaller units are ideal for replacement purposes, or for original installation in any type of radio receiver requiring the highest quality of reproduction. The larger 10" and 12" units will adequately fill all requirements for full fidelity of reproduction in large radio receivers, Public Address systems, Centralized radio and Sound installations, Call systems, etc. Every model is available less transformer, with adjustable impedance line to voice-coil transformer or with adjustable output transformer. Sturdy frame assemblies are designed to resist vibration and are rust-proof for use under all types of climatic conditions. Correctly balanced and aligned voice-coil and cone assemblies are designed for extremely wide frequency range without rattles or annoying resonant peaks. New improved and over-size permanent-magnet type field assemblies of highly magnetized alloy require no external field supply of D.C. excitant voltage. All models feature extremely high sensitivity and overall efficiency. All "E" and "D" models have 4 ohm voice coils; "C" models have 6 ohm voice-coil; "B" models have 8 ohm voice coils.

JENSEN BASS REFLEX PERI-DYNAMICS

Another exclusive Jensen development. Models KM and KV speaker and cabinet assemblies incorporate the Peri-Dynamic principle with new "Bass-Reflex" feature. Acoustically correct enclosures with matched speakers provide clear, wide-range reproduction of the finest type. Eliminates cavity resonance, boom, vibration, and provides better bass frequency response. The type KM have been especially designed for all-around high-fidelity requirements. Use type KV for voice or speech only. Speakers are supplied less matching transformers. See listing below at right for suitable impedance-matching transformers.

MODEL KM

No.	Speaker Used	Size	Weight	NET
E9630	PM8CS	24" x17 1/2" x11 1/4"	31 lbs.	\$14.41
E9631	PM10CS	28" x21 1/2" x12 1/4"	45 lbs.	17.82
E9632	PM12C	30 1/2" x23 1/2" x12 1/4"	53 lbs.	21.81
E9633	PM12B	30 1/2" x23 1/2" x12 1/4"	58 lbs.	23.14
E9634	A12PM	30 1/2" x23 1/2" x12 1/4"	66 lbs.	33.87
E9635	PM15B	33 1/2" x25 1/2" x13 1/4"	83 lbs.	33.28
E9636	A15PM	33 1/2" x25 1/2" x13 1/4"	89 lbs.	39.90

MODEL KV

No.	Speaker Used	Size	Weight	NET
E9637	PM8CS	11 1/2" x 9 1/4" x 6 1/2"	11 lbs.	\$ 9.06
E9638	PM10CS	14 1/2" x11 1/4" x 7 1/2"	17 lbs.	11.11
E9639	PM12C	16 1/2" x13 1/4" x 9 1/2"	22 lbs.	14.46
E9640	PM12B	16 1/2" x13 1/4" x 9 1/2"	25 lbs.	20.79

JENSEN KM ENCLOSURES ONLY

Particularly recommended for use with Jensen speakers but may be used with other speakers of the correct size.

No.	Type	Speaker	Wt.	Net
E10484	BR8	PM8CS	27 lbs.	\$ 9.41
E10485	BR10	PM10CS	38 lbs.	11.64
E10486	BR12	PM12C	47 lbs.	13.44

JENSEN HIGH-FIDELITY P.M. DYNAMIC SPEAKERS

Highest quality Jensen Permanent Magnet Dynamic Speakers. Especially designed for those installations which require the finest of high fidelity reproduction. Acoustically correct in every detail, these speakers have extended frequency range, greater than the standard models listed above. Response is exceptionally good up to 7500 C.P.S. Have 8 ohm voice coils.



Type	Size Dia.	Less Transformer		With adjust. Output Trans.		With adjust. Line Trans.		Average Shpg. wt.
		No.	NET	No.	NET	No.	NET	
PM5FS	5"	E9600	\$ 1.59	E9680	\$ 2.09	E9681	\$ 2.09	2 lbs.
PM6ES	6"	E9602	1.94	E9604	2.44	E9603	2.24	3 lbs.
PM6CS	6"	E9605	4.70	E9675	6.02	E9606	6.02	4 lbs.
PM8DS	8"	E9607	2.73	E9608	3.61	E9609	3.61	4 lbs.
PM8CS	8"	E9610	5.00	E9676	6.32	E9611	6.32	5 lbs.
PM10CS	10"	E9612	6.17	E9677	7.49	E9613	7.49	7 1/2 lbs.
PM12C	12"	E9614	7.79	E9678	9.11	E9615	9.11	7 1/2 lbs.
PM12B	12"	E9616	14.70	E9617	16.32	E9618	16.32	11 lbs.



CINAUDAGRAPH "Magic Magnet" SPEAKERS

These famous "Magic Magnet" speakers have gained an enviable reputation for unexcelled fidelity of reproduction. Unique compact design and construction; cone and voice coil are one integral assembly. Voice coil cannot get off-center. Supplied less output transformer.

No.	Type	Size	Watts	V.C.	Wt.	NET
E10410	MA6-8	6"	4-8	6 ohms	2 lbs.	\$ 3.09
E10411	EZ8-7	8"	5-8	6 ohms	3 lbs.	4.41
E10412	EZ8-10	8"	6-8	6 ohms	5 lbs.	6.17
E10413	NZ10-7	10"	7-9	6 ohms	6 lbs.	5.29
E10414	NZ10-10	10"	8-10	6 ohms	7 lbs.	7.20
E10415	FY12-12	12"	15-18	6 ohms	11 lbs.	16.17
E10416	HW13-13	12 1/2"	20-30	8 ohms	43 lbs.	35.87
E10417	SU18-12	18"	30-35	8 ohms	65 lbs.	55.80

CINAUDAGRAPH AIR COLUMN UNITS

Utilize the famous "Cinaudagraph" permanent-magnet field structure which does away completely with separate field supplies. Conservatively rated. Supplied less output transformer.

No.	Type	Size	Watts	V.C.	Wt.	NET
E10420	FVA	8"	15	6 ohm	8 lbs.	\$18.23
E10421	HWA	10"	25	6 ohm	27 lbs.	41.16
E10422	SUA	10"	30	6 ohm	36 lbs.	53.80

CINAUDAGRAPH AIR COLUMN HORNS

For use with air column units above. Strongly built to withstand hard outdoor handling. Constructed of spun aluminum.

No.	Type	Length	Bell	For Unit	Wt.	NET
E10425	HU	20"	24"	HWA or SUA	5 lbs.	\$14.41
E10426	FX	28"	24"	FVA	7 lbs.	18.82
E10427	SW	30"	32"	HWA or SUA	11 lbs.	31.16

E10430. Supporting bracket for FVA unit. NET \$2.06
 E10431. Supporting bracket for HWA unit. NET \$2.65
 E10432. Supporting bracket for SUA unit. NET \$3.38

NEW ADJUSTABLE IMPEDANCE MATCHING TRANSFORMERS

Permit accurate matching of one or more speakers to any output circuit or line. Clip terminals with flexible lead for instant selection of impedance. Tube type is tapped at 4500, 7000, 10,000, and 14,000 ohms. Line type is tapped at 500, 1000, 1500 and 2000 ohms. Ideal for single or multiple speaker work.



No.	Type	For Speakers		NET
		Line	Tube	
E11390	Tube	PM5FS, PM6ES		\$0.50
E11391	Tube	PM6CS, PM8CS	PM10CS, PM12C	1.32
E11392	Line	PM8CS, PM10CS	PM12C	1.62
E11393	Tube	A12PM, PM12B, PM15B		1.62
E11394	Line	A12PM	PM12B, PM15B	1.62
E11395	Tube	A15PM		2.20
E11396	Line	A15PM		2.20

JENSEN HEAVY-DUTY B12-X

An exceptionally high quality, highly efficient 12" dynamic speaker. Recommended for wherever high fidelity performance is desired. Curvilinear type-cone provides greatly extended high frequency response. Will handle up to 10 watts continuously. With hum-bucking coil and adjustable output transformer, for all tubes. 8 ohm voice coil. Shpg. wt. 14 lbs. An excellent speaker value at our low price.



E9668. 250 Ohm field.
 E9669. 2500 Ohm field.
 NET EACH \$10.14

JENSEN LEVEL CONTROLS

Constant impedance devices which will control up to 50 watts of power in speaker circuits. Variable in steps of 2, 4, 7, 10, 14, 18 to inf. db. Permit individual regulation of power level in speakers to provide maximum distribution of sound as desired. Shpg. wt., 9 lbs. Highest quality units of their type available.
 E9644. 200 Ohm. NET EACH \$10.88
 E9645. 500 Ohm. NET EACH \$10.88 93



New ASTATIC CRYSTAL MICROPHONES



MODEL T3 ACORN

A diaphragm-type crystal microphone with many features. Swivel-type mounting for directional or non-directional positions. Frequency response flat within 5 db. from 30 to 10,000 C.P.S. Output, -60 db. Acoustic feedback is definitely reduced. With plug-in connector and 25-foot cable. $\frac{3}{8}$ "-27 thread.

E2361.
List, \$25.00.
NET

\$14.70

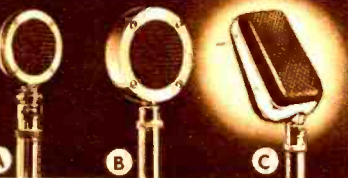


LAPEL TYPE

A new dual-diaphragm, lapel-type crystal microphone. Ideal for use by soloists, speakers, etc. Permits user to move about freely without loss of volume from amplifier system. Only $1\frac{1}{4}$ " in diameter, $\frac{3}{8}$ " thick. Weighs only one ounce. Output, -68 db. with a frequency response flat from 50 to 6,000 cycles. Non-Directional. Element is genuine Grafal Bimorph crystal. Supplied with 25 ft shielded cable.

E2363. List, \$25.00.
NET

\$14.70



D2 WATCH CASE MODEL

Fig. A. A small crystal microphone with good frequency response. Non-directional. Response flat from 50 to 6,000, with rising characteristics to 10,000 cycles. Output, -60 db. Case is $2\frac{1}{4}$ " in diameter, $\frac{3}{8}$ " thick. Locking type plug and socket; $\frac{3}{8}$ "-27 thread. Shpg. wt., 2 lbs. With 25 ft. cable.

E2364. List, \$25.00.
NET

\$14.70

D-104 STANDARD MODEL

Fig. B. Has excellent frequency response, 40 to 10,000 cycles; output, -65 db. Case, 3" diameter; 1" thick. With 8 foot shielded cable. Threaded for $\frac{3}{8}$ "-27 stands.

E2366. List, \$22.50. **NET**

\$13.23

NEW "MU" MODEL

Fig. C. New MU-2 has two dual-diaphragm crystal units. MU-4 has four dual-diaphragm units. Provides maximum amplification without feedback; cannot be overloaded. Tilting head has polarized cable connector. Excellent frequency response. Output, -60 db. Self-locking type tilting head. $\frac{3}{8}$ "-27 thread. Has 25 foot shielded cable.

E2367. MU-2. **NET**
E2368. MU-4. **NET**

\$17.35
\$23.23

R.C.A. TWO BUTTON CARBON MIKE

Genuine R.C.A. quality 7 button microphone. Same as used in R.C.A. home-recording equipment, etc. Suitable for public address work. Impedance is 200 ohms per button. Case is 6 x $3\frac{1}{2}$ x 2 inches, finished in dark brown crackle. With flexible cord. Has high output level.

E2551. **NET**

\$5.73



LATEST SHURE CRYSTAL MICROPHONES

NEW "ROCKET" MODEL

New convertible semi-directional crystal microphone having all the features of "Ultra" wide-range design. Satin chrome finish. Exceptionally wide frequency response with output of -53 db. Equipped with polarized cable connector and 25 foot shielded cable. $\frac{3}{8}$ "-27 thread. An excellent all-purpose mike. Wt., 1 $\frac{1}{4}$ lb.

E2552. List, \$25.00. **NET**

\$14.70

E3929. "Snap-on" baffle plate for "Rocket" **NET**

\$1.47

"UNIPLEX" MODEL

Sensational new microphone that provides true uni-directional operation. Solves feedback, room and background noise, and reverberation problems. Sensitive at front, dead at rear. Tilts up for even 360 degree pickup if desired. Smooth, high-quality wide-range response; output, -62 db. Satin-chrome finish. With polarized cable connector and 25 foot cable. $\frac{3}{8}$ "-27 thread. Wt., 1 $\frac{1}{4}$ lb.

E2554. List, \$29.50. **NET**

\$17.35

DIAPHRAGM MODEL 70H

A superior crystal microphone of the diaphragm pressure-actuated type. Output is -46 db. $\frac{3}{8}$ "-27 thread. Has new side cable-outlet and connector plug. 3 inch diameter; 1 $\frac{1}{4}$ in thick. Supplied complete with 7 foot shielded rubber-covered cable.

E2557. List, \$22.50. **NET**

\$13.23

E2558. Same as above, but with 25 foot cable attached. **NET**

\$14.29

"NEW TYPE" "TRI-POLAR"

A new mike having three directional characteristics available by means of a 3-point switch. Uni-Directional; wide-angle front pickup, dead at back; Bi-Directional; pickup from front and back, dead at sides; or Non-Directional; 360 degree pickup. Response from 30 to 10,000 cycles. New Satin-chrome case. 7 $\frac{1}{2}$ " high. Diameter 2 $\frac{3}{4}$ " $\frac{3}{8}$ "-27 thread. Wt. 2 $\frac{3}{4}$ lbs. With new cable connector and 25 foot cable.

E2556. **NET**

\$26.46



MILITARY HANDMIKE

These small and compact crystal microphones are designed to fit naturally in the palm of the hand. Ideal for portable sound systems. Only $3\frac{1}{2}$ " high by 1 $\frac{1}{2}$ " thick. Furnished with removable suspension hook and 7 foot cable. For use with portable and portable-mobile equipment or for all close-talking purposes. Shpg. wt., 1 lb.

E2559. List, \$14.70. **NET**

\$14.70

E2560. Same as above but with on-off switch. **NET**

\$15.58

2-BUTTON CARBON MIKE

Convenient double-button carbon microphone suitable for general P.A. use. Ideal for use with all portable sound equipment, for sound cars, sports announcing, etc. Can be quickly detached from handle by removing mounting ring; may be hung in floor-stand ring by inserting four hooks supplied. Comfortably shaped handle. Overall length, 8 $\frac{7}{8}$ ". With 6 foot three-conductor cable. 1 $\frac{1}{4}$ lb.

E2555. List, \$10.00. **NET**

\$5.88

SHURE ULTRA WIDE-RANGE CRYSTAL MICROPHONE

These Shure microphones provide reproduction from 30 to 10,000 cycles. Output level, -53 db. Crystal is moisture-sealed. All models have $\frac{3}{8}$ "-27 thread and 25 foot cable.

E2561. Model 702 D. Fig. A. Spherical semi-non-directional type. 2 $\frac{1}{4}$ " overall diameter. Satin-chrome finish. Wt. 1 lb. Complete with 25 foot cable.

E2562. Model 700D. Fig. B. Semi-directional type. Swivel arrangement for tilting head. Chromium finish. 2 $\frac{3}{4}$ " Shpg. wt. 2 lbs. Complete with 25 foot rubber-covered shielded cable.

E2563. Model 701D. Fig. C. Grille type case; Satin-chrome finish. 3 $\frac{1}{4}$ " x 2 $\frac{5}{8}$ " x 1 $\frac{1}{4}$ ". Wt. 1 lb. Complete with 25 ft. cable.

YOUR PRICE EACH

\$14.70

BAFFLE FOR 700D MIKE

Fastens on mike with spring clips. Decreases side and rear pickup. **NET**

E3932. **NET**

\$1.47

Famous UNIVERSAL MICROPHONES



NEW CRYSTAL MICROPHONE

Recommended for high quality Sound Installations, recording studios, etc. New streamline case has built-in on-off switch. "Flex-mount" tube permits tilting without adjustments. Finished in polished chrome. Frequency response, 50 to 5,000 C.P.S.; -64 db. output. Has pressure-actuated curvilinear diaphragm. Supplied with suspension loop, cloth cover, and 25 foot cable. Shpg. wt., 3 lbs.

E2645. List, \$24.50. **NET**

\$14.41

DYNAMIC MIKE

Wide-range pickup and freedom from background noise make this new streamlined dynamic mike suitable for every requirement. Response, 50 to 8,000 C.P.S.; -64 db. output. No polarizing voltage required. Supplied with suspension loop, "Flex-Mount" tube, cover, and 25 foot cable. Shpg. wt., 3 lbs.

E2646. High Impedance. **NET**

\$14.41

E2647. 200 Ohm Output. **NET**

\$14.41

LAPEL MIKE MODEL "W"

Extremely small and compact lapel type single-button carbon microphone. Absolutely dependable. For use in inter-office systems, dictaphones, P.A. systems, etc. Impedance, 200 ohms. Can be used with low-gain amplifiers. Will provide maximum efficiency when used by lecturers, soloists, etc. Output level, -38 db. Completely enclosed in metal case. 1 $\frac{1}{2}$ " diameter, $\frac{3}{4}$ " thick.

E2508. List, \$3.00. **NET**

\$1.76

SINGLE BUTTON HAND MIKE

Carbon mike for sound trucks portable transmitters, and demonstration work. Close-talking type. Will provide excellent results when used with portable or portable-mobile radio transmitters. Impedance, 200 ohms. New balanced-grip body finished in polished chrome, with on-off switch in handle. Output level, -40 db. Length, 6". Furnished with 6 foot cable. Shpg. wt., 1 $\frac{1}{4}$ lb.

E2642. List, \$10.00. **NET**

\$5.88



CARRIER MICROPHONES

MODEL 618-D

An exceptionally high-quality dynamic microphone. This mike requires no field excitation; magnets are of aluminum-nickel alloy. May be used for close-talking without booming; wide angle pickup makes it suitable for use in Broadcast Stations, Recording studios, etc. Response is flat from 30 to 10,000 C.P.S.; output level, -60 db. Swivel adjustment for directional or non-directional angle of pickup. With mounting swivel and cable plug. Less cable.

E3948. 30 Ohms Impedance. List, \$60.00. **NET \$35.28**
E3949. 200 Ohms Impedance. **NET \$40.28**

MODEL 105-D

A new, compact dynamic microphone. Has extremely wide frequency response range making it suitable for all general-purpose use. Semi-directional characteristics make it ideal for P.A. installations to obtain maximum pickup in the desired direction, with reduced feedback tendencies. Permanent magnets of Alnico. Output level, -65 db. Furnished with locking type cable connector and 20 foot cable. Finished in gray wrinkle. Fits any 3/4"-27 thread stand.

E3916. 30 Ohms Impedance. List, \$27.50. **NET \$16.17**
E3917. 200 Ohms Impedance. **NET \$19.11**



ELECTRO-VOICE MICROPHONES

MODEL V-2

An excellent velocity microphone with high fidelity response characteristics making it suitable for all sound pickup requirements. Overall response is essentially flat from 40-11,000 C.P.S.; output level, -68 db. Housing and case design eliminates cavity resonance even under close-talking conditions. Supplied with cradle type mounting; 3/4"-27 thread. With 20 foot cable. A popular efficient microphone of fine response.

E2579. 200 Ohm Model. **NET EACH \$20.58**

MODEL V-1

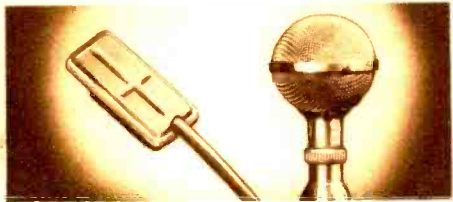
An unusually popular velocity microphone combining high-quality performance and extremely compact size. Ideal for use in Public Address Systems, Recording, Amateur Stations, etc. Cradle type suspension with built-in on-off switch. Frequency response from 40 to 10,000 C.P.S. Output level, -65 db. Shock-proof type mounting; 3/4"-27 thread. With 8' cable, and cable connector.

E2577. 200 Ohm Model. **NET EACH \$14.70**

MODEL 620

A high-fidelity dynamic microphone of the permanent-magnet type with complete elimination of "middle register resonance." Frequency response is flat from 40-10,000 C.P.S., with rising characteristics. Output level, -55 db. Plug-type removable mounting with 3/4"-27 thread. Swivel head permits directional or non-directional pickup. Equipped with 20 foot cable. Finished in attractive gunmetal.

E2358. 50 Ohms. **E2359.** 200 Ohms. **E2360.** High Impedance. **NET EACH \$16.17**



BRUSH MICROPHONES

VIBRATION PICKUP

A genuine crystal-type vibration pickup which can be used for musical instruments, industrial vibration study, vibration and noise measurements, etc. Measures only 1 1/2" long, 3/4" wide, and 1/4" thick. Can be attached to musical instruments in a jiffy without defacing or marring the instrument finish. Exceptionally wide frequency response; high output level. High impedance type; can be used with any high-gain amplifier. Case is aluminum. With 25 foot cord.

E1213. List, \$25.00. **NET \$14.70**

BR2S SOUND CELL

A high fidelity piezo-crystal microphone that is ideal for use in all general-purpose. Public Address or Sound installations, or for uni-directional pickup in theatres and auditoriums. Requires no polarizing voltage, batteries, or input transformers. May be connected direct to grid of input stage in high-gain amplifier. Output, -66 db. Has full 360° pickup with wide frequency range. Equipped with plug and socket type connector with locking ring. Less cable.

E2535. **BR2S.** **NET \$17.35**



AMERICAN DYNAMIC MICROPHONES

TYPES D7-D7T

A rugged general-purpose dynamic microphone with fine frequency response. Output level is -55 db. Semi-directional pickup for installations where background noise and feedback must be attenuated. Chrome finish cast metal case; size, 2 1/2" high, 1 1/2" diam. Threaded 3/4"-27. Supplied with 12 1/2' foot cable.

E2352. D7, 50 Ohms. **NET \$11.76**
E2353. D7 T, High Impedance. **NET \$13.23**

MODEL D-3

A studio-type high-fidelity inductor dynamic microphone for use wherever extremely high quality reproduction is desired. Semi-directional; swivel-mounted for maximum pickup. Uses Alnico permanent magnets, no polarizing voltage required. Response, 30 to 10,000 C.P.S. Output, -80 db. 50 ohms impedance. Thread, 3/4"-27. With 25 foot cable and connector plug.

E2356. List, \$90.00. **NET \$52.92**

MODEL D-9

New, uni-directional dynamic microphone designed for use in public address and general sound installations for exclusion of extraneous noise and feedback reduction. Wide frequency response range with output level of -55 db. Black and chrome finish. Case, 7" high, 2 1/2" wide, 2 1/4" deep. 25 ft. cable and plug.

E2354. D9, 50 Ohms. **NET \$20.58**
E2355. D9 T, High Impedance. **NET \$22.05**

MODELS D5-D5T

An all-purpose dynamic type microphone especially suited to installations having abnormal acoustic conditions. Output -55 db. Semi-directional; with tilting bracket to fit 3/4"-27 thread finished in chrome. Size, 3 1/2" long, 2 1/2" diam. Complete with 25 ft. cord and plug at microphone. Unusually compact.

E2350. D5, 50 Ohms. **NET \$16.17**
E2351. D5 T, High Impedance. **NET \$19.10**



BRUNO MICROPHONES

VELOTRON

Famous no-voltage static-velocity type microphone which can be used with cable lengths up to 2000 feet without appreciable loss. High impedance type. Output level, -50db. Adjustable swivel type mounting yoke with 3/4"-27 thread. With cable connector plug. Has built-in rubber shock absorber.

E3938. Model MB. Less cable. List, \$22.50. **NET \$13.23**
E3937. 25 foot shielded cable for Bruno Velotron, with connector. **NET \$1.47**

SP-CELL

Special purpose microphone suitable for musical instrument pickup, detection, lapel, mike, call systems, etc. Extremely small and compact, only 2 1/4" x 2 1/4" x 3/4". Frequency response from 30 to 14,000 C.P.S., high impedance; output level, -55 db. Can be easily concealed for remote pickup, etc. Has multitudes of important applications. Wt., 4 oz. With three foot cable and connector plug.

E3933. Model SP. List, \$13.50. **NET \$7.94**



TRANSDUCER BULLET MIKES

MODEL MK20

Finished in attractive black crackle. Overall length, 3", only 2" in diameter. Has unusually wide frequency range. Threaded 3/4"-27; with cable connector. Less cable.

E3940. 200 Ohm Model. **NET EACH \$11.47**

MODEL MK30

Highly directional type. Range, 30 to 10,000 C.P.S. Length 3", diam. 2". Output, -55 db. Satin-black finish. 25 ft. cable and plug. Ship, wt., 3 lbs.

E3942. 200 Ohm Model. **E3943.** High Imp. Model. List, \$27.50. **NET EACH \$16.17**

WESTERN ELECTRIC DYNAMIC MIKE

MODEL 633A

A genuine Western Electric dynamic type microphone of the now famous "Salt Shaker" type. Same as used in leading Broadcast and Communication radio stations, Recording studios, etc. Developed by engineers of the Western Electric, A. T. & T. and Bell laboratories. May be mounted on floor stand or desk stand, suspended on cord, or tilted to any desired angle by means of separate swivel unit. Small and compact in size; only 3 1/2" long, 2" in diameter. Exceptionally flat frequency response from 40 to 10,000 C.P.S. Model 633A will reproduce all types of voices or music with crisp, natural tone quality. Type 8A baffle plate may be attached to increase directional characteristics; microphone alone may be used straight up for non-directional pickup or tilted to any angle. Finished in grey. Height, mounted on desk stand, 12"; on floor stand, 46 to 76".

E3915. Model 633A Dynamic Microphone. Same as used in leading Broadcast and Communication radio stations, Recording studios, etc. Developed by engineers of the Western Electric, A. T. & T. and Bell laboratories. May be mounted on floor stand or desk stand, suspended on cord, or tilted to any desired angle by means of separate swivel unit. Small and compact in size; only 3 1/2" long, 2" in diameter. Exceptionally flat frequency response from 40 to 10,000 C.P.S. Model 633A will reproduce all types of voices or music with crisp, natural tone quality. Type 8A baffle plate may be attached to increase directional characteristics; microphone alone may be used straight up for non-directional pickup or tilted to any angle. Finished in grey. Height, mounted on desk stand, 12"; on floor stand, 46 to 76".



E3915. Model 633A Dynamic Microphone. Same as used in leading Broadcast and Communication radio stations, Recording studios, etc. Developed by engineers of the Western Electric, A. T. & T. and Bell laboratories. May be mounted on floor stand or desk stand, suspended on cord, or tilted to any desired angle by means of separate swivel unit. Small and compact in size; only 3 1/2" long, 2" in diameter. Exceptionally flat frequency response from 40 to 10,000 C.P.S. Model 633A will reproduce all types of voices or music with crisp, natural tone quality. Type 8A baffle plate may be attached to increase directional characteristics; microphone alone may be used straight up for non-directional pickup or tilted to any angle. Finished in grey. Height, mounted on desk stand, 12"; on floor stand, 46 to 76".

\$48.30

NET \$15.25

NET \$3.15

NET \$1.45

NET \$3.15

95

AMPERITE VELOCITY

MICROPHONES

ACOUSTIC COMPENSATOR VELOCITY MODEL

A complete line of highest quality velocity microphones that fills every requirement for high-fidelity voice reproduction. The Acoustic Compensator is extremely valuable in adapting the microphone to varying acoustic conditions. Raise the slide to increase the high frequencies; lower the slide to increase low frequency response. These new Ampelite velocity microphones feature: heavy cast gunmetal finished case; hand-hammered ribbons; genuine Alnico magnets; triple-shielding against RF and magnetic fields; high output; elimination of cavity resonance and greatly reduced feedback tendencies. Range from 40 to 11000 C.P.S. With removable cable plug and 25 feet of rubber-covered shielded cable. On-off switch in base of mounting yoke. Swivel type mounting. Live-rubber shock absorber. Threaded $\frac{3}{8}$ "-27. Output, -65 db. Available in chrome-finished cases at no extra charge. Specify when ordering.

E2539. RBMk. 200 ohm model with Acoustic Compensator.
E2306. RBHk. High Impedance model with Acoustic Compensator.
E2540. RBMn. 200 ohm model.
E2541. RBHn. High Impedance model.
E2542. RBMn. 200 ohm model.
E2543. RBHn. High Imp.
NET EACH OF ABOVE \$24.70

MODEL RBSK

E2544. Similar in appearance to the models above. With Acoustic Compensator. Response is 60-8000 C.P.S. Output, -68 db. With switch and 8' cable. 200 ohms impedance. List, \$32.00.
NET \$18.82

MODEL RSHK

E2545. Same as Model RBSK at left, but high impedance type; output, -68 db. 2000 ohms. With Acoustic Compensator. With built-in switch and 12' cable. A really high-grade microphone. List, \$32.00.
NET \$18.82

STANDARD MODEL RAL

A moderately-priced ribbon velocity microphone of typical Ampelite construction. Will reproduce from 60 to 7500 C.P.S. without cavity resonance or background noise. Output, -68 db. Impedance, 200 ohms. With 8' cable. Threaded $\frac{3}{8}$ "-27; with rubber shock absorber.
E2546. NET \$12.94

MODEL RAH

Identically the same as Model RAL listed above but high impedance type, 2000 ohms. With 12' cable.
E2547. NET \$12.94

STUDIO VELOCITY TYPE

A real Broadcast Studio type mike now available at an unusually low price. Frequency response with plus or minus 1 db. variation from 40 to 15000 C.P.S. Exceptionally well-suited for Broadcast station or Recording studio or for Sound installations. Has swivel mounting, rubber shock absorber, on-off switch, locking type cable plug, and 25' cable. Gunmetal finish. Threaded $\frac{3}{8}$ "-27. Output, -56 db. Available in chrome finish at no extra charge. Specify when ordering.
E2307. SR80n. 200 ohm model.
E2308. SR80Hn. High Impedance model.
 List, \$80.00.
NET EACH \$39.20

NEW MODEL ACH

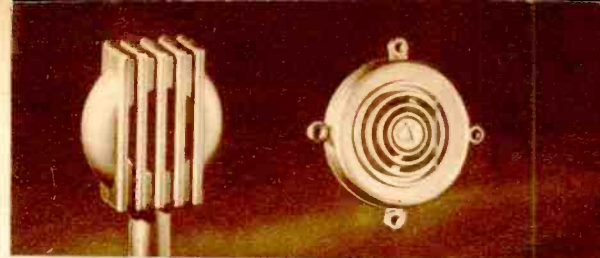
Ideal for use with all types of portable high-gain sound equipment. Can be used as hand, desk or stand type mike. Threaded $\frac{3}{8}$ "-27 to fit all standard mike stands. Frequency response is 60 to 7500 C.P.S. Output is -70 db. Size of head, $1\frac{1}{2}$ " x $2\frac{3}{4}$ " x $1\frac{1}{8}$ ". With 25' cable.
E2310. MODEL ACH. High Impedance.
NET \$14.70

NEW MODEL ACL

Same high quality, compact velocity mike as Model ACH above, but 200 ohms impedance.
E2309. NET \$14.70

AMPERITE KONTAK MICROPHONES

For use with string type musical instruments. Can be attached to most radio sets or to any amplifier. Will provide natural reinforcement without peaks or resonant rattles or vibrations. Greatly enhances quality and volume of tone. Exceptionally fine frequency response. High impedance type. Output, -40 db. Foot-operated volume control permits unusual tonal effects. Supplied with cable.
E2311. SKH. Home Model. Range 60-6000 C.P.S. With 20' cable. **NET \$7.06**
E2312. SKH. With foot-pedal volume control. **NET \$11.76**
E2313. KTH. Professional Model. Range 40-9000 C.P.S. With 25' cable. **NET \$12.94**
E2314. KTH. With foot-pedal volume control. **NET \$17.64**



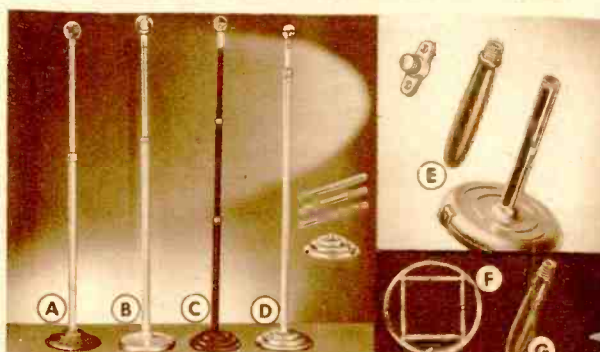
KNIGHT CARBON MICROPHONES

STREAMLINE 2-BUTTON

Modern streamline design. This fine double-button carbon microphone has a frequency response from 40 to 8000 C.P.S. Impedance, 200 ohms per button. Internally suspended on live rubber. Equipped with 6' cable.
E2644. NET \$4.41
E2643. With desk stand and 25' cable. NET \$5.29

STANDARD 2-BUTTON

An outstanding value in a high quality inexpensive double-button carbon microphone. Has essentially flat frequency response from 45 to 7000 C.P.S. Impedance is 200 ohms per button. High quality stretched duralumin diaphragm. This high-grade carbon microphone will give excellent service.
E2566. NET \$2.94



KNIGHT MICROPHONE STANDS

E10550. Fig. A. Chrome-finished telescopic stem with gray crinkle-finished base. Adjustable from 47 to 72". Threaded $\frac{3}{8}$ "-27. Has positive action clutch and heavy cast base. Shpg. wt., 17 lbs. NET \$3.95
E10551. Fig. B. Deluxe Type. Base and telescoping stem finished in polished chrome. Adjustable from 47 to 72". Threaded $\frac{3}{8}$ "-27. Shpg. wt., 18 lbs. YOUR PRICE \$4.95
E10552. Fig. C. Three Section Telescopic Type. Base and three section stem finished in attractive black rubber. Positive clutches. Adjustable from 25 to 63 inches. $\frac{3}{8}$ "-27 thread. Shpg. wt., 17 lbs. YOUR PRICE \$4.45
E10553. Fig. D. Deluxe Collapsible Type. Base and three section take-down stem finished in polished chrome. Ideal for portable use. Use as banquet or floor stand. 20" to 59". Wt., 18 lbs. NET \$5.75
E10554. Fig. E. 3 Way Mike Stand. Can be used as desk stand, hand type or suspension type. Consists of: 1—base, 1—6" chrome stem, 1—Mike handle, and 1—Suspension link. Shpg. wt., 6 lbs. NET \$2.25
E10555. Fig. F. Carbon Microphone Ring. 6 1/4" diameter. Chrome finished. With 8 springs. For use with all carbon mikes. Threaded $\frac{3}{8}$ "-27. Shpg. wt., 3 lbs. NET \$1.47
E10556. Fig. G. Detachable Microphone Handle. Makes any microphone a hand mike for portable use. Spindle threaded $\frac{3}{8}$ "-27. Overall length, 5". Wt., 1 lb. NET 25c
E10557. Mike Stand Adapter. For old type mikes. Chrome-plated. Bottom, $\frac{3}{8}$ "-27 female; top, $\frac{1}{2}$ " male pipe thread. NET 29c
E10558. Mike Stand Adapter. For old style Ampelite, R.C.A., and Universal mikes. Bottom is $\frac{3}{8}$ "-27 female; top is $\frac{1}{2}$ " male pipe thread. NET 29c

MIKE TRANSFORMERS

EXTERNAL INPUT

Balance winding for coupling low impedance microphones to high impedance input.
E3919. NET \$2.94

COUPLING TYPE

E6050. Single button type. Shielded. Flexible wire leads.
E6051. Double-button type. NET EACH \$1.32

2-BUTTON TYPE

Universal mounting type. Primary, 200-200 ohms. Flexible wire leads.
E3918. NET \$2.06

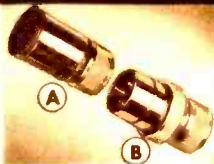
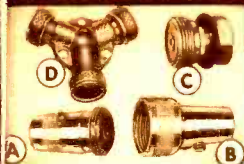


BANQUET & DESK STANDS

E10559. Fig. A. Crystal Mike Desk Stand. Chrome finished 10" high. Base finished in gray wrinkle. $\frac{3}{8}$ "-27 thread. Shpg. wt., 6 lbs. NET \$1.25
E10561. Fig. B. Carbon Mike Desk Stand. Height overall, 10". Octagonal ring, 5 1/4". With 8 mike springs. Finished in black wrinkle. Wt., 4 lbs. NET \$1.32
E10560. Fig. C. Adjustable Banquet Stand. Telescopic two section stem and base finished in polished chrome. Adjustable from 16" to 27". Threaded $\frac{3}{8}$ "-27. Wt., 6 lbs. A deluxe stand in every detail of design and construction. **NET \$3.45**



FINEST QUALITY MICROPHONE ACCESSORIES



HIGH GRADE MIKE & SPEAKER CABLE CONNECTORS

Single Conductor

Designed to permit instant connection or disconnection of cables. Side set screws holds cable securely. Coupling ring lock. Chrome. **E1277, Fig. A. PLUG, NET \$24c**

E1976, Fig. B. RECEPTACLE, NET \$29c

E1978, Fig. C. CHASSIS TYPE, NET \$18c

TRIPLE CONNECTOR

Fig. D. Connects two microphones or loud speakers in parallel to a single output or input of amplifier.

$\frac{1}{8}$ " 27 thread. **E1979, NET \$1.18**

CHASSIS TYPE

Fig. A. Mounts in $\frac{1}{4}$ " hole; use with connectors at right.

E1971, 3 CONTACT RECEPTACLE, NET \$29c

E1973, 4 CONTACT RECEPTACLE, NET \$29c

E1972, 4 PRONG PLUG, EACH \$32c

CAP. Fig. B. Fits connectors above. Protects against dust, dirt, and moisture. Chrome finish.

E1974, NET \$29c

SHIELDED TYPE

Polished chrome-finished heavy brass microphone cable connectors. Threads, $\frac{1}{8}$ " 27.

Cable Type Plugs

E1965, 3 PRONG, \$59c

E1966, 4 PRONG, \$65c

Receptacles

E1967, 3 CONTACTS, \$59c

E1968, 4 CONTACTS, \$65c

CRYSTAL MIKE CABLE

For all types of crystal and velocity microphones. Internal conductor is of fine stranded copper; completely shielded; extremely flexible.

Single Conductor

E2199, PER FOOT \$4c

PER 100 FEET \$3.45

Double Conductor

E2498, PER FOOT \$6c

PER 100 FEET \$4.10

WEATHERPROOF CABLE

May be used outdoors without breakdown or leakage; not affected by atmospheric conditions. Conductors are stranded copper, individually rubber-covered; full cotton serving; completely shielded; covered with heavy rubber.

CAT. NO.	Cond.	PER FT.	100 FEET
E3514	2	3 $\frac{1}{2}$ c	\$2.70
E3515	3	4c	3.75
E3516	4	5 $\frac{1}{2}$ c	4.90

See page 149 for additional cable listings of all types.



FIGS. A, B. ARMORED CONNECTORS

Sturdy, heavy-duty connectors for microphone cables. Polarized type; cannot be reversed when joining cables. Have adjustable cable clamps. Positive knife-blade contacts will handle up to 10 amps. at 250 volts.

E7579, Fig. A, 3 Prong Plug, NET \$48c

E7578, Fig. B, Polarized 3 Prong Socket, NET \$69c

FIG. C. MIKE RECEPTACLE

Designed for use with E7579 plug above. Two types; receptacle only; or receptacle mounted in 4" cover for standard conduit boxes.

E5485, Receptacle only, NET \$75c

E5486, With 4 inch cover, NET \$1.15

FIG. D. MIKE RECEPTACLE & PLATE

A polarized microphone receptacle mounted on brown bakelite plate for flush wall mounting. Measures 2 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ ". Will take E7579 plug listed above. Ideal for permanent installations.

E5487, EACH \$1.32

CARBON GRANULES, No. 100 size. Highest quality. Each vial holds enough to re-carbon two double-button microphones.

E2597, NET \$40c

REPLACEMENT RIBBONS. For use in any standard ribbon velocity microphone.

E2598, STANDARD, Package of 2 ribbons, NET \$73c

E2599, SUPERSENSITIVE, Package of 2 ribbons, NET \$1.03

MICROPHONE SPRINGS. Highest quality tempered steel springs for mounting mikes.

E7557, Set of 8, NET \$15c



SHIELDED PLUGS & JACKS

Fully insulated standard 2 and 3 circuit plugs and jacks. Nickel-plated brass barrels.

2 CIRCUIT

E5666, PLUG, \$59c

E5667, JACK, NET EACH \$59c

3 CIRCUIT

E5668, PLUG, \$69c

E5669, JACK, NET EACH \$69c



3-WAY MIKE PLUG AND JACK

For use in any two or three conductor mike input circuit. High quality plug has bakelite handle. Long jack has phosphor-bronze springs for low-loss contact. Jack mounts in $\frac{1}{8}$ " hole.

E8957, PLUG, NET \$40c

E8958, JACK, NET \$35c



SHURE STAND SWITCH

For use with any type microphone. Fits any standard $\frac{1}{8}$ " 27 threaded stand. Dependable toggle type switch permits cutting mike in or out of circuit without disturbing gain control setting. Case 2 $\frac{1}{2}$ " high finished in satin black. Model A0A. A real P.A. convenience.

E9878, NET \$1.47



SHOCK ABSORBER

Prevents floor vibrations from reaching microphone. A necessity with all mikes.

Made of heavy brass with polished chrome finish. Has live gum-rubber cushions. $\frac{1}{2}$ "-27 threads, male and female. Will improve microphone performance.

E1975, NET \$1.47



MIDJET JACK

Three contact microphone jack to fit E8957 plug at left.

E1605, NET \$21c



PORTABLE JACK

Fully insulated. Fits E8957 plug at left. Compact black molded bakelite barrel threaded to hold jack.

E5665, NET \$35c

MIKE STAND REDUCERS

Fig. B. Chrome-finished adapters for every requirement.

No. Top Male Bottom

E7523 $\frac{1}{8}$ " pipe to $\frac{1}{8}$ "-27

E7524 $\frac{1}{8}$ "-27 to $\frac{1}{8}$ "-27

EACH \$44c

E7525 $\frac{1}{8}$ " pipe to $\frac{1}{8}$ "-27

E7526 $\frac{1}{8}$ " pipe to $\frac{1}{8}$ "-27

NET \$59c

MIKE STAND SWIVELS

Permit tilting microphone to angle of maximum pickup.

E7583, $\frac{1}{8}$ " pipe to $\frac{1}{8}$ "-27,

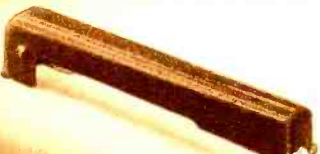
E7584, $\frac{1}{8}$ " pipe to $\frac{1}{8}$ "-27,

E7585, $\frac{1}{8}$ "-27 to $\frac{1}{8}$ "-27,

E7586, $\frac{1}{8}$ "-27 to $\frac{1}{8}$ "-27,

NET \$9c

New SHURE PHONOGRAPH PICKUPS



NEW "ECONOMY" CRYSTAL

A small compact crystal pickup that mounts in minimum space. Especially recommended for compact record players and for modernizing obsolete phonograph units and combinations. Plays 10" and 12" records. Has balanced-tracking, needle-tilt feature, triple moisture-sealed crystal, full-floating rubber-cushioned pivot bearing, and modern streamlined housing. Although moderately priced, the "Economy" crystal pickup has full-range frequency response to render full tonal reproduction of all types of recordings. Accurately balanced arm exerts minimum pressure on needle, resulting in less record wear and greatly reduced surface noise. Finished in wood-tone brown. Length 7 $\frac{1}{2}$ ".

Shpg. wt., $\frac{1}{2}$ lb. With arm rest. **E7527, Model 94A, NET \$3.82**



"ZEPHYR" CRYSTAL

A crystal pickup with uniform frequency response from 50 to 10000 C.P.S., resulting in brilliant reproduction of all types of records. 80,000 ohm impedance; can be connected direct to grid. Needle-tilt angle keeps needle tangent to, and centered in record groove. Needle pressure is only 2 $\frac{1}{2}$ ounces, making for minimum wear and greatly reduced surface noise. In attractive new black molded bakelite housing, 11 $\frac{1}{2}$ " long. Equipped with socket insert to fit arm rest supplied.

E7529, Model 99C, NET \$5.88

E7529, Model 99CW. Same high quality pickup as 99C above, but molded of finish bakelite to match cabinets. NET \$5.88



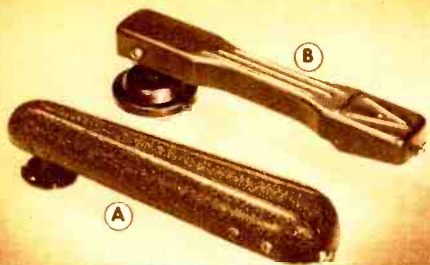
TRANSCRIPTION TYPE

High fidelity crystal type pickup for record-reproducing equipment. Designed to meet the latest requirements for high quality reproduction of records in broadcasting, recording and public address work. Wide range response up to 7000 C.P.S. Exclusive Shure needlelet assures proper tracking of needle to groove at all times. Has tip-back head for rapid, easy needle changes. Needle pressure is only 2 $\frac{1}{2}$ oz. Arm locks automatically when swung back from turntable.

E9628, Model 910B, NET \$9.11

E9629, Model 914A, NET \$9.70

For all records up to 16" size. List, \$16.50. NET \$9.70 97



NEW KNIGHT PICKUPS

CRYSTAL PICKUP

Type A. An accurately balanced, high-impedance, high-output type crystal pickup at a sensationally low price. Has triple-sealed crystal cartridge set at tangent to assure proper needle-tracking to minimum wear and surface noise. Exceptionally wide response for brilliant reproduction. Will play all 8" to 12" records with remarkable tonal fidelity.

MAGNETIC PICKUP

Type B. An outstanding value in a high-quality high-impedance magnetic pickup. Combines high-fidelity performance with attractive appearance. Designed to give maximum output over an extremely wide frequency range. Accurately balanced for minimum needle pressure. Suitable for use in all types of record playing equipment. Plays all 8" to 12" records.

E2288. Magnetic Type.
E2289. Crystal Type.
YOUR PRICE, EACH.....

\$385



NEW WEBSTER PHONOGRAPH PICKUPS

STREAMLINE MAGNETIC

A true high-fidelity magnetic pickup of advanced design. Vertical bearing permits lifting of arm past vertical center for rapid easy needle changes. Correctly damped to eliminate resonance peaks and to smooth out the frequency response. Output, 1 volt at 1,000 C.P.S. Impedance, 18,000 ohms. Length, 9 1/4 inches.

E2285. List, \$8.00.
NET PRICE.....

\$470

STREAMLINE CRYSTAL

Tangent of needle and correct balancing contribute to the increased frequency response of this highly efficient unit. Vibration-free bearings and correctly damped head assembly eliminate resonance peaks.

For all 10" or 12" records.
E2286. List, \$10.00.
NET PRICE.....

\$588



NEW STANDARD CRYSTAL PICKUP

New—in performance, and in styling, this crystal pickup has excellent frequency response. Impedance, 130,000 ohms; output, 2 volts at 1,000 cycles. Tangent type in new curved walnut wood case.

E2283.
NET.....

\$347

DELUXE CRYSTAL PICKUP

Similar in appearance to Standard model directly above, but with extended frequency range for full high-fidelity reproduction. Impedance, 80,000 ohms; output, 2.5 volts at 1,000 cycles. Housed in curved genuine walnut case.

E2284.
NET.....

\$582



LATEST ASTATIC CRYSTAL PICKUPS

STANDARD TYPE

Carefully balanced for correct needle pressure. Frequency response may be varied to accentuate either treble or bass.

E7693. For 10" and 12" records. List \$10.00.
NET.....

\$5.88

E7694. For 10" to 16" records. List, \$12.50.
NET.....

\$7.35

E7688. SCRATCH FILTER. **NET**.....

88c

TRU-TAN TYPE

Offset head holds needle true to tangent through entire record playing surface. Arm rotates on double-row ball-bearings. Top-loading. Will provide true high-fidelity reproduction.

E7687. B-10. For 10" and 12" records. List, \$17.50
YOUR PRICE.....

\$10.29

E7686. B-16. For all records up to 16". List, \$27.50.
YOUR PRICE.....

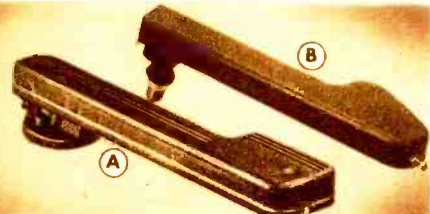
\$16.17

MODEL O-7

Offset head type to assure minimum tracking error and reduction of surface noise. Combines easy needle-loading with correct cushioning against vibration 2 1/2 oz. needle pressure. Has high output voltage. For 10" or 12" records.

E7695. **NET**.....

\$3.82



RCA-VICTOR CRYSTAL PICKUPS

Fig. A. De Luxe Model. A new development from the famous RCA laboratories. Used in many of the expensive RCA piano-radio combinations. Features top needle-loading for quick, easy needle changing. Has offset crystal cartridge; rubber-cushioned arm has ball-bearing mounting. Finished in brown wrinkle with chromium trim.

E7623. RCA 14818. List, \$14.95.
NET.....

\$8.97

E9493. Senior Model. RCA 9847. Similar in appearance to above, but without chromium trim. Has top needle-loading and automatic needle ejection.

List, \$6.95. **NET**.....

\$4.17

E9492. RCA 9848. Needle Box and Pickup Rest for Senior Pickup. **NET**.....

45c

Type B. Junior Model. Another new RCA crystal pickup at a sensationally low price. Impedance at 1000 cycles is 100,000 ohms. Frequency response is 70 to 7,000 cycles. The offset needle position assures true-tracking. Pickup arm is swiveled. Needle pressure only 2.7 ounces.

E9494. RCA 9842. List, \$4.95. **NET**.....

\$2.97

RCA-VICTOR HEADS

E9496. RCA 9676. Exact duplicate for RE45 and RE75. Imp. 400 ohms.
YOUR PRICE.....

E9495. RCA 9666. For Model 341. Impedance 30 ohms.
YOUR PRICE.....

E11279. New Pickup Transformer. 30 ohms to grid.
YOUR PRICE.....

\$2.20



POPULAR RECORD ASSORTMENTS

CARTON OF 25 DOUBLE-FACED RECORDS

Famous brands American records at real savings. All are recorded by famous artists, dance orchestras, and bands. Because these assortments reach us already packed, we cannot determine what titles are in each assortment. Many are current popular numbers. Shpg. wt., 13 lbs.

E9999. Carton of 25 Assorted.
YOUR SPECIAL PRICE.....

\$2.25

FOREIGN RECORDS

Popular selections of foreign language recordings. All new records, no seconds or rejects. 25 assorted.

E9998. Spanish. **E9993.** Swedish.
E9995. Bohemian **E9996.** Italian.

ASSORTMENT OF 25 RECORDS. **NET**.....

\$3.50

RCA-VICTOR PHONOGRAPH NEEDLES

E7613. Soft Tone. 100 to pkg.

E7605. Half Tone. 75 to pkg.

E7606. Full Tone. 100 to pkg.

E7607. Loud Tone. 100 to pkg.

Per Pkge., 9c. 10 Pkgs. for **75c**

E7608. Chromium. 78 R.P.M.

E7609. Chromium. 33 1/2 R.P.M. 6 to pkg. **PER PKGE.**.....

25c

E7610. Tungstone. Full Tone.

E7611. Tungstone. Loud Tone. **25c**

8 to pkg. **PER PKGE.**.....

E7612. Home Recording Needles. 8 to pkg. **YOUR PRICE PER PKGE.**.....

25c

E7620. PERMO-POINT NEEDLE plays over 2000 records. Prolongs record life. Gives good tone quality. **EACH, 60c. in Lots of 5, EACH.**.....

50c

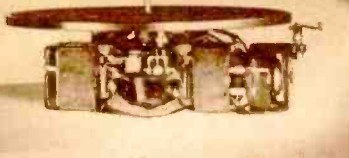


NEEDLE CUP

Attractive, well-made needle cup of nickel-plated brass. Will fit any 1/8 inch round hole. Holds 100 needles.

E7601. **NET**.....

5c



HEAVY-DUTY RECORDING MOTOR

A heavy-duty double motor and turntable for 78 and 33 1/2 R.P.M. recording and playback. Has constant speed, governor-controlled, induction motors. Silent performance is assured by spiral-cut gears running sealed in oil; oversize, self-lubricating bearings. Just the turntable to use with high-grade recording and playback equipment. Ideal for recording with any head on either blank or pre-grooved disc. Supplied with speed shift lever, speed regulator, hardware and weighted 12" turntable.

E10075. List, \$33.50. **\$20.10**
YOUR PRICE

E10076. Same heavy-duty motor as above, but with 16" balanced cast-aluminum turntable. **NET \$30.85**



KNIGHT SPECIAL VALUE MOTOR

An unusual value in a high-quality, inexpensive phono motor. Designed along advanced principles for long life. Absolutely dependable and quiet in operation. Constant speed, self-starting motor is fully enclosed for complete protection from dirt, dust, etc. Will maintain constant speed regardless of line voltage fluctuations. Single speed, 78 R.P.M. Has balanced 12" turntable covered with felt. Motor assembly can be quickly and easily mounted on wood or metal panel. Ideal for modernizing old phono equipment. Operates from 110 volts, 60 cycles, A.C. Shipping wt., 7 lbs. Of famous General Industries make; a motor which will give excellent service and exceptionally long life.

E10093. **\$5.55**
YOUR SPECIAL PRICE



"Green Flyer" MOTORS

SINGLE SPEED 78 R.P.M.

Heavy-duty governor-controlled induction type motor. Operates constantly and quietly at 78 R.P.M. Has spiral-cut pinion gears sealed in oil. With 10" felt-covered turntable, and speed control lever. All necessary mounting hardware supplied. For 110 volts, 60 cycles.

E10070. List, \$12.75. **\$7.65**
NET

2 SPEED 78-33 1/2 R.P.M.

A heavy-duty motor suitable for all records and transcription-playing requirements. Will play all standard 78 or 33 1/2 R.P.M. records. Fully enclosed gears in oil-filled, sealed housing. With 12" turntable, speed control, speed change levers, and hardware. For 110 volts, 60 cycles.

E10072. List, \$17.50. **\$10.50**
NET
E10071. As above but with 10" turntable. List \$17.00. **NET \$10.20**

UNIVERSAL 110 VOLT AC-DC

A single-speed motor for use on any 110 volt AC-DC line. Operates at 78 R.P.M. With 12" turntable and AC-DC change switch.

E10073. List, \$19.75. **NET \$11.85**

DUAL SPEED UNIVERSAL

Plays either 78 or 33 1/2 R.P.M. records. Operates at constant speed from 110 volts AC or DC. Supplied complete with 12" felt-covered turntable, speed control lever, speed change lever, AC-DC switch, and mounting hardware.

E10069. List, \$22.50. **NET \$13.50**

6 VOLTS D.C.

Operates from 6 volt battery with drain of 2.8 amperes. Dual-speed type for 78 or 33 1/2 R.P.M. With 12" turntable and all hardware.

E10074. List, \$24.50. **NET \$14.70**

WEIGHTED 12" TURNTABLE

For 33 1/2 R.P.M. instead of standard 78 R.P.M. turntable, add \$1.80 to prices given above.

Automatic Stop. For use with any of the Green Flyer motors above.
E7624. **NET 90c**



DEAGAN CHIMES

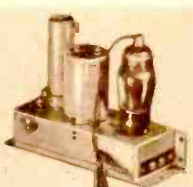
Produces four perfectly pitched notes. Creates delightful mellow tones at any random tapping. Ideal for home use and for Amateur and Broadcast Stations. With tapping mallet and instructions.

E7330. List, \$6.00. **NET \$4.30**



STROBOSCOPE

E7331. 6 in. diam. Checks turntable speed at either 78 or 33 1/2 R.P.M. on any phono motor. **NET 12c**



RCA RK24

PHONO OSCILLATOR

Designed to insure good phonograph reproduction when used with practically any radio set. May be used with any electrical pickup and can be connected in a few minutes. No changes in the set. Leads are arranged to slip under tube prongs of radio set. Requires 6A7 tube with set using 6.3 volt tubes, or 2A7 if set has 2.5 volt tubes.

E9497. List, \$9.75. **NET \$5.85**



R.C.A. MIDGET MOTOR

A midget type phono motor identical to the same as used in the R.C.A. portable record players. An ideal motor assembly for use in all types of portable record-playing equipment, for modernizing old or obsolete phonograph equipment, or wherever space is limited. Synchronous type; manual-starting. Operates at 78 R.P.M. from 105-125 volts, 60 cycles, A.C. without wows or vibration. Power consumption only 10 watts. With 7" turntable for 10 and 12 inch records, and shock-proof mountings.

E3491. R.C.A. \$8.61. List, \$6.50. **\$3.90**
NET

ALLIED OFFERS A COMPLETE SELECTION OF *New* RECORDING EQUIPMENT



ALLIED PORTABLE RECORDER

A deluxe type portable recording turntable. Solid, accurately machined cast-aluminum turntable runs with absolute freedom from side-sway, "wow" or table vibrations; rim-driven by a synchronous type self-starting motor which is suspended in live-rubber. Ruggedly constructed overhead drive assembly has accurately-cut leadscrew driven by completely housed worm gear drive. Quick-acting release lever is provided to raise or lower cutting head without damage to disc. Leadscrew guides cutting head from inside to outside at 112 lines per inch. Records on any disc up to 16" diameter at 78 or 33 1/2 R.P.M. Cutting head has impedance of 500 ohms; smooth frequency response to 5000 C.P.S. Equipped with Astatic Tru-Tan crystal pickup for playback. Housed in leatherette carrying case. For 110 volts, 60 cycles. Write for complete descriptive literature. Less amplifier.

E10340. **NET \$225.00**
Time Payments: \$22.50 down, \$27.85 monthly for 8 months

E10341. Single Unit Portable Recorder. Consists of turntable described above, with built-in amplifier; playback speaker mounted in top of case; adjustable floor stand and Sound Cell microphone. **NET \$425.00**
Time Payments: \$42.50 down, \$50.97 monthly for 8 months



UNIVERSAL PORTABLE RECORDER

An entirely new recording unit built by Universal, and truly universal in its flexibility and simplicity of operation. Will record on any acetate disc up to 17" in diameter at either 78 or 33 1/2 R.P.M. Pitch of leadscrew can be instantly changed to cut either inside to out, or vice versa, at either 90, 110 or 130 lines per inch. Cutting head is of the new full-frequency type with frequency response of 30 to 10,000 C.P.S.; impedance 15 ohms. Rugged leadscrew assembly is mounted entirely outside the turntable, leaving record space free of obstruction; has calibrated timing scale to indicate elapsed cutting time at different cutting speed or pitch. Turntable of heavy cast-aluminum and lead screw are driven by a self-starting 100% synchronous type motor. Maintains absolutely constant speed at all times even under varying load conditions. Housed in sturdy leatherette carrying case. Supplied complete with Micro-meter caliper for measuring depth of groove. Microscope, and spirit level. 110 v., 50-60 cycles. Write for complete descriptive literature. Shp. wt., 117 lbs. Less amplifier.

E10342. Complete as described. **NET \$278.00**
Time Payments: \$27.80 down, \$34.40 monthly for 8 months.

E10343. As above, with Full Frequency playback pickup. **NET \$293.00**
Time Payments: \$29.30 down, \$36.26 monthly for 8 months.



FEDERAL PT-12 RECORDER

A complete portable recorder that will fill the requirements of Schools, Broadcast stations, Advertising Agencies, etc. Completely self-contained, and ready for operation anywhere that 110 volts, 60 cycles, A.C. is available. Consists of portable carrying case with built-in recording turntable, amplifier, radio tuner, and speaker; with crystal microphone and floor stand. Amplifier has four high-gain stages and uniform overall response from 50 to 12,000 C.P.S.; output 12 watts for either recording or playback. Cutting head is of the permanent magnet type with range of 50 to 6,000 C.P.S. Built-in licensed radio tuner permits recording of broadcast programs for monitoring or checking purposes. Playback pickup is of the high-fidelity crystal type. Precision-type geared leadscrew cuts inside out or outside in at 112 lines per inch. Heavy-balanced 12" cast-aluminum turntable will handle any acetate disc up to 12" diameter at either 78 or 33 1/2 R.P.M. Powered by a heavy-duty self-starting synchronous type motor which has a constant speed of 1800 R.P.M., geared down to drive turntable smoothly without variation. Jensen 8" speaker built into top of case. Write for complete descriptive literature.

E10344. Federal Recorder **\$183.75**
complete as described. Wt., 79 lbs. NET

Time Payments: \$18.37 down, \$22.74 monthly for 8 months 99

The Latest in FINE RECORDING EQUIPMENT



KNIGHT PORTABLE RECORDER

The new **Knight Portable Recorder** has been designed to meet the demand for a high-quality recording unit at a price everyone can afford. Ideal for school and home use. Will produce uniform results with a minimum of experience in the art of recording. Powered by a 1/60 h.p. 110 volts, 60 cycle motor, the rim-driven and dynamically-balanced cast-aluminum turntable runs smoothly and silently at 78 R.P.M. without variation. Completely enclosed leadscrew of massive construction is finely machined for positive feed and long trouble-free operation. New horizontal magnetic type cutting head has smooth response from 70 to 5,000 C.P.S. without peaks; automatically compensated for low-frequencies. Impedance of cutting head is 500 ohms. Exclusive "Dual-Action" control automatically engages drive screw and lowers cutting head; eliminates possibility of damaging stylus or disc. Records on any disc up to 12" diam., cutting 100 lines per inch inside to outside, at 78 R.P.M. Supplied complete with p'l-y-back pickup of the inductive-dynamic type. Housed in leatherette covered portable case. Descriptive bulletin on request. Less amplifier.

E12381. SPECIAL NET PRICE..... \$99.50



PRESTO Quality RECORDING EQUIPMENT

MODEL 12-E PORTABLE

An extremely portable high-grade recorder. Designed primarily to fill the requirements of Schools, Advertising Agencies, etc., for high-quality recording equipment at moderate cost. Consists of complete recording and playback equipment in one compact, easily-operated unit. Features heavy 12" turntable, synchronous motor, sturdy overhead assembly, built-in amplifier and 8" dynamic speaker. Grooves and records in one operation on acetate discs up to 12". Records at either 78 or 33 1/2 R.P.M. Switch on amplifier for recording of playback. Playback pickup is high-quality magnetic type. Has built-in volume level indicator meter. With crystal mike and floor stand or banquet stand. Complete descriptive literature sent on request. For 110 volts, 60 cycles.

Wt., 82 lbs. **E12375. \$350.00**

E12376. NET..... \$500.00
MODEL 16-X. Similar to the Model 12-E above, but records any size acetate disc up to 16" diameter at either 78 or 33 1/2 R.P.M. Supplied complete with velocity microphone and floor stand. With 4-A cutting head.

Ships wt., 95 lbs. **E12377. Model 16-X equipped with 1-B High-fidelity cutting head. \$560.00**

E12378. "Junior" Recorder, complete. NET..... \$149.00

E12380. Same as above but less amplifier, speaker, mike and meter. In Walnut case. Wt., 30 lbs. **NET..... \$98.50**

E12379. Similar to Model 5J but equipped with high-grade capacity type microphone mounted on adjustable floor stand. For operation from 110 volts, 60 cycles. **NET..... \$164.00**

WE CAN SUPPLY all Presto recording equipment not listed here on special order. Many Presto items not listed are carried in stock for immediate shipment. Complete Presto catalog sent on request. For Low Time Payment Terms, See Page 73.

Complete Selection of RECORDING DISCS



ALUMINUM DISCS

Made of hardened aluminum alloy; mirror-polished. Assure maximum volume and life.

PREGROOVED		PLAIN	
No.	Dia.	Thickness	NET
E8005	6"	.16c	E8009 6" 15c
E8006	8"	.23c	E8010 8" 20c
E8007	10"	.29c	E8011 10" 29c
E8008	12"	.35c	E8012 12" 42c

MIRROR ACETATE DISCS

Inexpensive mirror-smooth acetate discs.

No.	Dia.	Thickness	NET
E8014	6"	.047"	35c
E8015	8"	.047"	45c
E8016	10"	.047"	58c
E8017	12"	.047"	72c
E8018	16"	.051"	\$1.32

OVERSIZE MIRROR DISCS

E8020	13 1/2"	.056"	\$1.18
E8021	17 1/2"	.066"	2.42

FEDERAL "PERMA-DISK" DISCS

New Acetate discs capable of 100 playbacks when properly cut. Have even coating on heavy base for greatly reduced surface noise.

No.	Dia.	Each	Per 10
E8023	6"	\$0.39	\$3.61
E8024	8"	.54	4.96
E8025	10"	.98	7.21
E8026	12"	.98	7.02
E8027	16"	1.76	16.23

FEDERAL "PERMA-BOARD" DISCS

E8028	6"	.20	\$1.80
E8030	8"	.29	2.70
E8031	10"	.39	3.61

Acetate-coated composition board disc. Coated one side only.

PRESTO "GREEN SEAL" DISCS

Heavy aluminum base with mirror-smooth cellulose compound coating. The finest recording disc available for professional work. New "O" Type.

No.	Dia.	Thickness	NET
E8033	6"	.051"	\$0.40
E8034	8"	.051"	.55
E8035	10"	.051"	.80
E8036	12"	.051"	1.00
E8037	16"	.051"	1.80

Attractive quantity discounts to Schools, Universities, etc. Write us.

OVERSIZE "GREEN SEAL" DISCS

For making master plates where duplicate pressings are required. Only one side can be used.

E8039	11 1/2"	.079"	\$1.25
E8040	13 1/2"	.079"	1.80
E8041	17 1/2"	.079"	3.00

PRESTO BLACK SEAL DISCS

E8042	6"	.021"	35c
E8043	8"	.021"	45c
E8045	10"	.021"	65c
E8046	12"	.025"	80c

UNIVERSAL ECONOMY DISCS

New lightweight, low-priced acetate discs. Even coating for reduced surface noise. Excellent frequency response.

No.	Size	EACH	PER 10
E8050	6"	36c	\$3.31
E8051	8"	46c	4.25
E8052	10"	72c	6.62
E8053	12"	72c	6.62

RCA HOME-RECORDING DISCS

E8055	6"	Pkg. of 4.	75c
E8056	10"	Pkg. of 2.	75c
E8057	12"	EACH	68c

E8060. Cutting Lubricant. Reduces surface noise. In 1 oz. vials.

E8061. Record Preservative. Polishes and seals off disc surface. 1 oz. cans.

E8062. Record Reconditioner. For softening old or new records. 1 oz. cans. **NET PRICE EACH OF ABOVE 29c**

RECORDING NEEDLES



SAPPHIRE NEEDLES

Precision-ground and polished, high quality sapphire cutting needles. Have long life and excellent fidelity.

E2603. Fig. A. For blank aluminum discs. List, \$4.00. **EACH..... \$2.35**

E2604. Fig. B. For pregrooved aluminum and composition discs. List, \$4.00. **EACH..... \$2.35**

E2605. Fig. C. For all Acetate or all other semi-plastic discs. List, \$6.00. **EACH..... \$3.59**

E2601. Fig. A. Bent shank sapphire. Cuts Aluminum at 30° angle when used in 2° acetate cutting head. List, \$7.50. **EACH..... \$4.41**

PRESTO GENUINE SAPPHIRE NEEDLES

E2606. Fig. D. Highest quality recording needles available. Genuine sapphire. Accurately ground and polished. For use on acetate discs. Average life approx. 15 hours. **EACH..... \$5.00**

E2607. Fig. D. Same high-quality genuine sapphire needles as E2606, but with long shank to fit Presto Professional Recording head. **EACH..... \$5.00**

We sharpen Presto sapphire needles at \$1.65 each.

STEEL CUTTING NEEDLES

Professional type cutting style. Special alloy steel hand-polished to a razor edge. For cutting acetate discs.

E2640. For 78 or 33 1/2 R.P.M. **PACKAGE OF 10, EACH..... \$1.76**

E2641. Long shank steel cutting needle for use in Presto Professional cutting head. **PACKAGE OF 12, EACH..... \$2.65**

E8004. RCA Victor Steel Home Recording Needles. For pregrooved discs. **PACKAGE OF 8, NET..... 25c**

PLAYBACK NEEDLES

E8000. BAMBOO NEEDLES. Pkg. of 100..... **55c**

E8001. KACTI NEEDLES. Pkg. of 10..... **29c**

E8002. RED SHANK STEEL NEEDLES. For playing acetate discs. .002" at point. Package of 100..... **59c**

E8003. TRAILING SHOE NEEDLES. 100..... **59c**

E2622. "WALCO" SAPPHIRE NEEDLE. Lasts for years. **EACH..... \$1.90**

ALLIED has everything for the AMATEUR

ALLIED has everything for the Amateur—and for schools, laboratories, industrials, government agencies, etc., where transmitting, receiving or experimental equipment is required. This section is packed with complete listings of the leading brands of Amateur equipment—available constantly from our regular stock. We can also supply promptly, on special order, any other type of standard or special equipment not listed here.

NEW! NATIONAL 600 WATT TRANSMITTER KIT

QST-QST-QST Announcing the newest and latest of modern transmitter kits for the Amateur—stop—Designed by National Co., oldest and most famous builders of high-quality Amateur equipment—stop—Power input up to 600 watts phone or CW—stop—Incorporates sensational new National combination RF and AF exciter unit described below—stop—All chassis and P.P. 100TH final with 203Z modulators—stop—35T buffer leads short and direct for top efficiency—stop—Thoradson CHT series chokes and transformers—stop—Aerovox filter condensers—stop—National tuning condensers, sockets, coil-forms, etc.—stop—All parts fit together without adopting jig-saw puzzle tactics—stop—Looks and operates like a Commercial rig—stop—Don't waste your time and money but build complete National 600 watt transmitter for best results—stop—You can't miss if you start construction of your National transmitter now—stop—You can buy now on easy, deferred payment plan and pay by the month—stop—National catalog with complete details sent on request—stop—Take good look at picture on right, then send your order now so you can get started—stop—AR SK ALLIED'S AMATEUR DIVISION.

COMPLETE R.F. UNIT KIT

All parts, National NT-100PC foundation kit, condensers, coil-forms, sockets, hardware, wire, instructions, etc. Includes meters and dials. Less only 1-35T and 2-100TH tubes. **\$71.59**

E9501. Complete, less tubes. NET \$9.60
E9502. National NT-100PC Foundation Kit only. NET

COMPLETE MODULATOR UNIT KIT

All parts including National NT-300PC foundation kit, CHT transformers, meter, sockets, hardware, wire, etc. Less only 2-203Z tubes. **\$42.55**

E9503. Complete, less tubes. NET \$7.20
E9504. National NT-300PC Foundation Kit only. NET

COMPLETE MEDIUM VOLTAGE POWER SUPPLY

All parts including National NT-1200PC foundation kit, CHT transformers and chokes, Aerovox condensers, sockets, hardware, wire, etc. Less only 2-866 tubes. **\$49.47**

E9505. Complete kit, less tubes. NET \$7.20
E9506. National NT-1200PC Foundation Kit only. NET

HIGH VOLTAGE POWER SUPPLY KIT

All parts including National NT-2000PC foundation kit, CHT transformers and chokes, Aerovox condensers, wire, sockets, meter, etc. Less only 2-866 tubes. **\$100.80**

E9507. Complete kit, less tubes. NET \$7.20
E9508. National NT-2000PC Foundation Kit only. NET \$10.70
E12511. 73 1/4-inch relay rack for mounting the units above. Shipped knocked-down. Shpg. wt. 40 lbs. NET

NTE EXCITER AND SPEECH AMPLIFIER

An ultra-modern exciter unit that provides sufficient RF excitation for any low-power or medium power buffer stage, plus a 15 watt speech amplifier, housed in a single table style cabinet. Ingeniously designed to prevent stray coupling between RF and AF channels. New push-button type band-changing permits rapid shift from one band to another. Multiple crystal holder provides selection of any one of four crystals instantly. Entirely self-contained, including humless power supply. RF channel consists of crystal oscillator followed by three frequency multiplier stages. High gain Audio channel has input for crystal mike; supplies 15 watts output from P.P. 2A3's. For 110 Volts, 50-60 cycles. With tubes, less crystals.

NTE-A. Complete Exciter-Speech amplifier for operation on 5, 10, 20, and 75 meters. Furnished complete with tubes. In black-wrinkle table-type cabinet. Shpg. wt. 70 lbs. **\$129.00**

E9509. NET

NTE-B. Complete Exciter-Speech amplifier for operation on 10, 20, 40, and 75 meters. With tubes. In black wrinkle-finish table cabinet. Shpg. wt. 70 lbs. **\$129.00**

E9510. NET

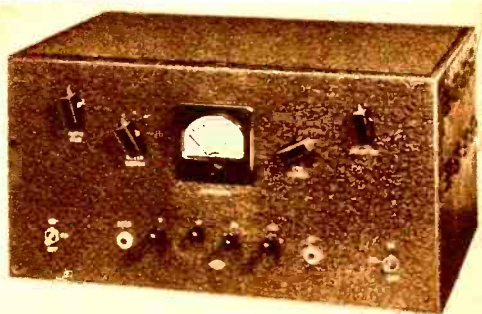
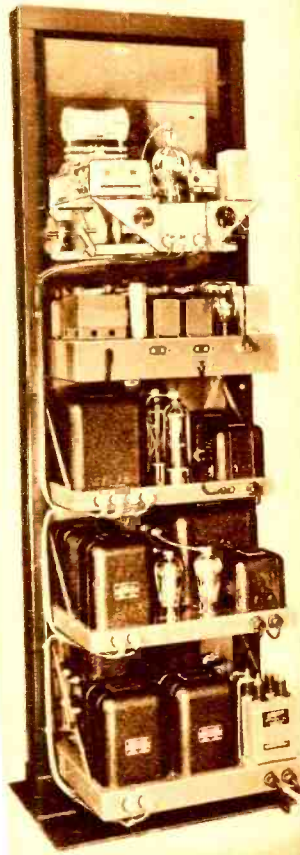
NTE-C. Complete R.F. Exciter unit for use on 10, 20, 40, and 75 meters. Supplied less built-in Speech Amplifier for those who want a CW exciter only. With tubes. Shpg. wt. 70 lbs. **\$93.00**

E9511. NET

NSA. The National Speech Amplifier only, housed in black-wrinkle table cabinet. With built-in power supply. Two input channels: one for crystal mike, one for phono. Frequency response flat within 1 db. from 25 to 10,000 C.P.S. Delivers full 15 watts output. With tubes. Shpg. wt., 50 lbs. For 110 volts, 50-60 cycles. **\$69.00**

E9512. NSA. NET

NOTE: All units above can be supplied on special order with relay rack panel at \$6.00 net added to above prices. Ask for Time Payment details.



ATTRACTIVE TIME PAYMENT TERMS

Buy your National 600 Watt transmitter on our Time Payment Plan. You pay only 10% down, add 10% to the balance, and divide by 12 to get the amount of each monthly payment for 12 months. For example, the complete transmitter consisting of: E9501 R.F. Unit Kit, E9503 Modulator Unit Kit, E9505 Medium Voltage Power Supply Kit, E9507 High Voltage Power Supply Kit, 73 1/4" Relay Rack, and either NTE-A (E9509) or NTE-B (E9510) Exciter unit totals \$404.11. You pay \$40.41 down and \$33.34 each month for 12 months.



hallicrafters

THE POPULAR LOW-COST SKY BUDDY

For the beginning Amateur, the Short-Wave Listener, or the boy in quest of new thrills by way of Short-Wave Radio, the Sky Buddy has always been the outstanding low-cost choice. The new, improved 1939 model offers even greater features, greater performance, and greater value. Tunes from 545 KC to 18,500 KC in three bands, and covers Broadcast, Amateur, and Short-Wave bands. Features are comparable to those usually found only in higher-priced receivers: separate Bandspread dial, Beat Frequency Oscillator, send-receive switch, AVC switch, Pitch control, AF gain control, phone jack, etc. Has built-in speaker offering excellent tone quality. The Sky Buddy uses only five tubes—6K8, 6P7, 6Q7, 6K6, 80—but its performance is characteristic of most 8 tube sets. Antenna input for either doublet or Marconi type antenna system. For 110 V. 50-60 cycles A.C. Shpg. wt., 20 lbs.

E10650. With Tubes. NET CASH PRICE \$29.50
 Time Payments: \$5.90 down, \$4.41 monthly for 6 months

THE NEW SKYRIDER MARINE

For special communication requirements such as Marine and Aircraft service, but also an ideal receiver for Jewelers, Press stations, and other services which require dependable reception on frequencies from 140 KC to 18.5 MC. The new Sky Rider Marine is an 8-Tube receiver designed especially for the commercial frequencies that can be readily adapted for marine work. In its design, especial emphasis has been placed on 600 meter and 700 meter operation. Tunes from 16.2 to 2150 meters (18.5 MC to 140KC) on 4 Bands. Uses: 2-6K7, 2-6J5, 1-6L7, 1-6Q7, 1-6F6, and 1-80 tubes. Incorporates many features such as: Built-in speaker, AVC, Beat Oscillator, Tone and Volume Controls, RF gain control, Phone jack and Standby switch. Sensitivity and selectivity are excellent. Improved image rejection at the higher frequencies is achieved through the use of 1600 KC-I.F. transformers. The directly-calibrated 358° Main Tuning Dial eliminates the use of complicated charts and tables, and an efficient mechanical band spread with separate dial provides easy and simplified tuning. Mounted in sturdy metal cabinet finished in black crystal. This efficiently-designed, ruggedly-built communications type receiver is one of the Hallicrafters' finest achievements. For operation from 110 Volts, 60 cycles, A.C.; with tubes and built-in speaker. Shpg. wt., 50 lbs.

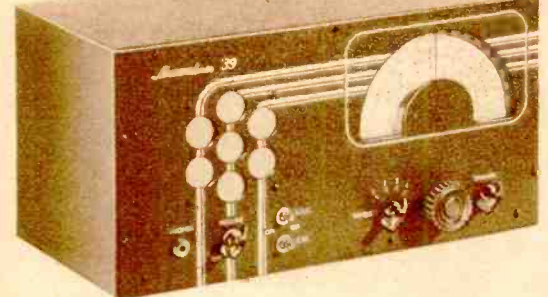
E10652. Model S-22. NET \$64.50
 Time Payments: \$6.45 down, \$7.99 monthly for 8 months



THE NEW SKYRIDER 5-10

This new receiver is specifically designed to render exceptionally efficient performance on the ultra high-frequency range in two bands from 27,000 K.C. to 68,000 K.C. It is ideal for the Amateur who specializes in ultra H.F. work, and for Municipal Dept. communications service. Uses new RK 1851 tube as RF amplifier, offering U.H.F. sensitivity of better than 1 Mv. 1600 K.C. IF stage provides band width of 20 K.C. at 10 times down. This unusual combination of sensitivity and selectivity is only one of the features which make the Sky Rider 5-10 outstanding. Other features include: noise silencer; A.V.C. switch; send-receive switch; R.F. and A.F. gain controls; Beat Frequency Oscillator; Tone Control; Pitch Control; phone jack; built-in speaker, etc. Powerful new 8 tube circuit employs: 1-1851, 1-6L7, 1-6J5, 1-6P7, 1-6Q7, 1-6F6, 1-6F6, 1-80. Separate bandspread dial provides easy, accurate logging and is equipped with inertia tuning control. From every standpoint, the new Sky Rider 5-10 is the answer to the ultra H.F. communications problem. For operation from 110 V. 50-60 cycles. Supplied with tubes. Has "S" meter terminals. Shpg. wt., 34 lbs.

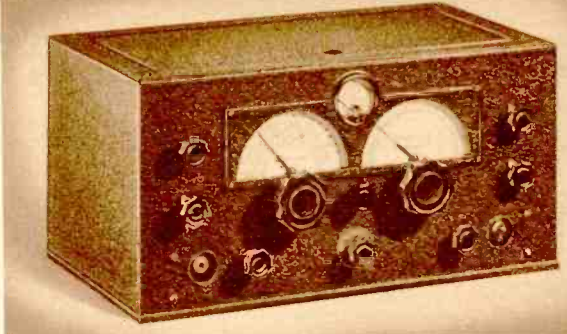
E10653. S-21. With Tubes. NET \$69.50
 Time Payments: \$6.95 down, \$8.60 monthly for 8 months
E10682. "S" meter for Sky Rider 5-10. NET \$10.00



SARGENT 39 STREAMLINER

An entirely new, moderately priced communication type receiver designed for long-distance reception. Attractive modern styling, coupled with advanced circuit refinements, make this fine receiver an ideal set for the Short Wave DX fan as well as for Amateur communication work. Constructed of the very finest materials, designed to provide maximum efficiency and flexibility of operation. Has four frequency bands covering 9.5 to 550 meters. Has extremely high efficiency on Amateur 10 meter band. Full-vision type dial is rear-illuminated and directly calibrated for easy tuning. Incorporates all desirable features such as: Two I.F. stages, Vernier tuning with high ratio drive and extended bandspread, built-in 5" Jensen Speaker, Headphone jack, C.W. Oscillator, A.V.C., built-in hum-free power supply, high-gain Superhet circuit with reduced noise level, modern steel cabinet in black crackle with silver striping, etc. Uses five tubes: 1-6K8, 1-6F7, 1-75, 1-42, and 1-80. Antenna input for single wire or doublet line. An unusual high-performance receiver that will satisfy even the most exacting requirements, yet priced so low that everyone can afford to own it. In its trim professional appearance as well as its remarkable performing ability, the new Sargent "Streamliner" is sure to meet with universal approval. For operation from 110-120 volts, 50-60 cycles A.C.; with tubes. Size, 17 1/4" x 9" x 8 1/4". Shpg. wt., 25 lbs.

E10185. NET \$33.90



RME MODEL 69 SINGLE-SIGNAL SET

A precision-built communications receiver with an exceptionally efficient circuit. Laboratory-built and tested, aligned and adjusted with the tubes which are included when shipped from the factory. Features: two calibrated, illuminated dials; calibrated signal meter; built-in modulation monitor; T.R.F. stage; shielded coil assembly; electron-coupled oscillator; crystal filter. Panel control of bandswitching provides rapid selection of any frequency band from 550 to 32,000 K.C. Uses 5-6D6, 1-6C6, 1-6B7, 1-42 and 1-80 tubes. (Illustrated with built-in Noise Silencer which is \$11.40 net additional. Specify when ordering.) For 110 V. 50-60 cycles A.C.

E10176. Less Speaker. NET \$141.03
E10175. With Speaker. NET \$152.88
510X FREQUENCY EXPANDER. For use with any high-quality Communications superhet. Will provide excellent U.H.F. reception with overall sensitivity of better than 1 Mv. Tunes 27.8 to 70 MC. **\$45.10**
E10178. With tubes. NET
DB-20 PRESELECTOR. Frequency range, 550-32,000 K.C. Average signal gain, 20 to 25 DB; rejection ratio approx., 50,000 to 1. Built-in power supply; input for any antenna. For 110 V. 60 cycles. **\$42.60**
E10177. With Tubes. NET
 Literature on request. See P. 73 for Time Payment terms. 103



NATIONAL NC44 RECEIVER

The new NC-44 Communication Receiver combines capable performance with low price. It employs seven tubes in a superheterodyne circuit. The 6K8 first detector and oscillator has exceptional stability and conversion gain. Other circuit features are: Two 456 KC IF stages, second detector and AVC tube, CW oscillator, and 25L6G beam power tube with 2 watts output. There are separate controls for RF and AF gain, and on-off switches for the AVC and CWO circuits. The self-contained power supply operates on 105-130 volts A.C. or D.C. A straight-line frequency condenser is used in conjunction with a separate bandspread condenser. This combination, plus the full-vision dial calibrated in frequency for each range covered and a separate linear scale for the bandspread condenser, makes accurate tuning easy. Both condensers have an inertia-type drive. A coil switch with silver-plated contacts selects the four ranges from 550 KC to 30 MC. Provision is made for either headphone or speaker operation. Shipping weight, 45 lbs. Housed in an attractive, dustproof steel table type cabinet finished in black wrinkle enamel. With tubes and speaker.

\$49.50

E10676. NET

NC-44B. A battery model of the NC-44 for those who have no A.C. or D.C. supply lines. Operates from a 6 Volt storage battery and "B" batteries. With tubes and speaker.

E10678. NET **\$49.50**

Write for Easy Time Payment Terms.



NATIONAL NC-80X RECEIVER

A communications receiver for operation from any 110 volt A.C.-D.C. line. Skillful engineering and mechanical design blended together provide the maximum in sensitivity, selectivity and ease of operation. A new 1560 KC I.F. system eliminates image interference without preselection. Tuning range is continuous from 550 KC to 30 MC in four bands. Band switching is accomplished through a unique coil arrangement controlled from the front panel. New type full-vision dial with multiple scales is accurately calibrated, making tuning and "logging" easy. The NC80X is equipped with a crystal filter continuously variable from 400 CPS to 5 KC for sharp tuning. Uses 1—6L7, 2—6J7, 3—6K7, 1—6C5, 1—6B8, 1—25L6G, and 1—25Z5 tubes. Beam power output tube (25L6G) supplies 2 watts undistorted to P.M. speaker. Features include AVC, 16 to 1 and 80 to 1 tuning ratios, linear scales, BFO, etc. Ample bandspread is provided for easy tuning on all frequency ranges. Complete with tubes, crystal and 8" P.M. speaker in metal cabinet.

\$99.00

E10670. NET

SPECIAL AMATEUR BAND NC-81X RECEIVER

Similar to the Model NC-80X as described above but incorporates several features making it an exclusive Amateur model. Tuning range covers only the Amateur bands. New mechanical bandspread system will provide adequate bandspread on the 160, 80, 40, 20 or 10 meter bands. Novel design of calibrated full-vision dial makes accurate logging of stations possible. New crystal filter with controllable selectivity makes reception of CW or "Phone signals possible even through severe interference. Has built-in power supply. For 110 Volts A.C. or D.C. With tubes and 8" P.M. speaker in metal cabinet.

\$99.00

E10671. YOUR NET PRICE. NOTE: The NC-80X and NC-81X are both available on special order for battery operation from a 6 volt storage battery and "B" batteries at no additional charge. Write for Time Payment Terms.



NEW NATIONAL NC-100 SERIES

An amazingly efficient 11 tube superhet with a frequency range of from 540 to 30,000 KC in five bands. Incorporates efficiency of plug-in coils with smooth, rapid band-change switch. Panel controls are: Band-switch; AVC-Volume-BFO switch; AC on-off and standby switch; RF and AF gain controls; Tone Control, etc. Full-vision dial is calibrated in megacycles, with separate high-speed vernier scale for precision tuning. Built-in tuned RF stage operates on all bands. Also has built-in hum-free power supply. Has signal level meter calibrated directly in "S" units. Antenna input for single wire or doublet antenna. 10" speaker supplied.

NC-100A A.C. MODEL

New improved model of the famous NC-100 series. As described above, in attractive black wrinkle finish steel cabinet. With tubes and 10" P.M. speaker (in metal cabinet). For 110 volts, 50-60 cycles, A.C. Shpg. wt., 70 lbs.

E10672. NET... **\$120.00**

NC-100A BATTERY MODEL

Similar to the NC-100A but less the built-in power supply. Operates from 6 volt storage battery and "B" batteries. Supplied complete with tubes and 8" P.M. Speaker. Especially suited for portable operation. Shpg. wt., 65 lbs. Less batteries.

E10674. NET..... **\$110.50**

NC-100XA CRYSTAL FILTER MODEL

Identically the same as the Standard NC-100A, but with built-in crystal filter for extreme selectivity. Has crystal phasing control for maximum selectivity. For operation from 110 volts, 50-60 cycles, A.C. With tubes and 10" P.M. speaker in metal cabinet.

E10673. NET..... **\$142.50**

NC-101X "HAM" MODEL

Similar to the NC-100A, but built strictly for use in Amateur communication work. Covers only the 1.7-2.05, 3.5-4.0, 7.0-7.3, 14.0-14.4, and 28.0-30.0 MC bands. Equipped with PW type micro-meter dial giving extreme bandspread. Crystal filter, calibrated "S" meter and supplied with tubes and 10" P.M. speaker. Shpg. wt., 71 lbs.

E10675. NET..... **\$129.00**

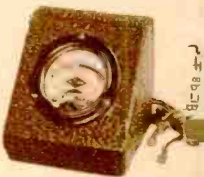


SM-80 MOUNTED "S" METER

For use with the NC-80X or NC-81X receivers which do not have built-in "S" meters, a meter of the same type as that used in the HRO is now available in a desk mounting. The necessary resistor network is built into all receivers of the NC-80 series, and it is only necessary to connect test wires to install the meter. Black wrinkle finish.

E10680. **\$6.00**

NET



NEW NATIONAL NC-510 RECEIVER

A new and ultra-efficient communications type superheterodyne receiver for Ultra High-Frequency work. Has tuning range from 28 MC to 64 MC in three bands. Full-vision type dial is accurately calibrated in megacycles for each band. Dial has parallax eliminating mirror, range indicator, frequency logging markers, and inertia type tuning drive with 60:1 ratio. Rotary coil-changing system combines plug-in coils with easy operating selector switch. Uses 956 in R.F. stage, 954 first detector, and 955 H.F. oscillator. Has three 1560 KC IF stages; air-trimmed R.F. and IF's; continuously variable selectivity crystal filter from 300 cycles to 7 KC. Also incorporates a CW oscillator, a new type of AVC circuit, a vacuum tube voltmeter type "S" meter calibrated to provide accurate indication of signal level. The NC-510 has been carefully and accurately designed to provide optimum performance in the Ultra High Frequency ranges. With tubes and 8" P.M. speaker, in cabinet. Shpg. wt., 62 lbs.

E10677. Complete, less power supply.

NET

E10679. Type 5856 Power Supply, less tube. NET..... **\$150.00**

Write for Easy Time Payment Terms on any of above National sets.

NATIONAL SHORT WAVE EQUIPMENT

NEUTRALIZING CONDENSERS

TYPE NC-600

A small-sized neutralizing condenser suitable for use with 6L6's and similar beam power tubes. Has adjustment range from .5 mmfd. to 5 mmfd. Isolantite insulated.

EI 372. NET..... **27c**

TYPE NC-800

For use with the RCA 800 or other tubes which require small neutralizing capacity. Isolantite insulation. Micrometer adjustment with lock nut. Max. capacity 10 mmfd.

EI 369. NET..... **\$1.80**

TYPE NC-150

A high-voltage condenser for neutralizing the 11K-354, 11K-36, 300T1, 852 and like tubes. Max. capacity 12 mmfd. Adjustable from .2 to 1.6". Isolantite insulated.

EI 370. NET..... **\$3.90**

TYPE NC-500

High-voltage condenser to neutralize WE-251A and similar tubes. Max. cap. 12 mmfd. Adjustable from .5 to 1.9".

EI 373. NET..... **\$7.50**

TYPE TCN

A heavy-duty neutralizing condenser with a peak voltage rating of 6000 volts. Maximum capacity 25 mmfd. For use with 203A, 852, 204A and like tubes.

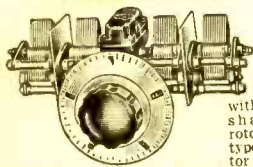
EI 368. NET..... **\$2.40**

TYPE STN

Suitable for neutralizing type 45, 47, 10, or similar tubes. Isolantite insulated. Max. cap. 18 mmfd. Peak voltage breakdown, 3000 volts. Ideal for buffer or doubler stages.

EI 371. NET..... **\$1.20**

PRECISION GANGED CONDENSER WITH MICROMETER DIAL



A precision condenser assembly for I.F. circuits. Ruggedly built, with four bearing shaft. Insulated rotors have brush type contacts. Suitable for insulated with

Stearite. Has 20 to 1 worm drive. S.L.F. plates. 160 MMF. PER SEC. 225 MMF. PER SEC.

No.	Sections	No.	NET
EI 350	2	EI 353	\$12.00
EI 351	3	EI 354	14.40
EI 352	4	EI 355	16.50

EI 523. Complete Drive Unit. Consists of enclosed worm drive and micrometer dial described above. NET..... **\$8.10**

Above condensers are also available in single section types, in capacities of 150, 200, 350 and 500 mmfd. Grounded rotor. NET..... **\$9.00**

SHAFT COUPLINGS

TYPE TX-9

EI 550. A small efficient condenser shaft coupling. Hubs fit 1/4" shaft. Insulation is Stearite. NET..... **66c**

EI 555. TX-10. Similar to TX-9 but has bakelite insulation. NET..... **33c**

TX-11 & TX-12

Flexible shaft with 1/4" hubs for driving offset shafts up to 90 degrees. No backlash. TX-12 has Isolantite insulated hubs. NET..... **75c**

EI 551. TX-12. NET..... **75c**

EI 552. TX-11. Plain hubs, not insulated. NET..... **36c**

TX-1 & TX-2

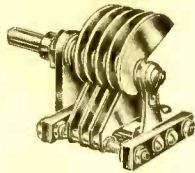
For use with transmitting condensers in high voltage circuits. Insulation is of glazed Isolantite. Hubs will fit any 1/4" shaft. TX-1 leakage path is 1". TX-2 leakage path is 2".

EI 553. TX-1. NET..... **60c**

EI 554. TX-2. NET..... **66c**

NATIONAL CONDENSERS

RECEIVING TYPES



This well-known condenser has a straight line frequency plates, fixed rotation. Isolantite insulated. Plates and frame are aluminum; two bearing rotor with front bearing insulated to prevent noise. Rotor contact

is through constant impedance contact. Type SEU 15 mmfd. and 25 mmfd. condensers have thick plates with rounded and polished edges and are suitable for high voltages. All other types have cut plates; edges are not polished. Air-gaps are as follows: for SE types—.055" for SEH types—.018" and for SEU types—.055". These condensers are ideally suited for use in all types of high-frequency receivers.

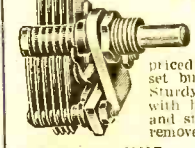
STOCK No.	TYPE No.	CAP. MMF.	NO. OF PLATES	NET EACH
EI 300	SEU-15	15	6	\$1.50
EI 301	SEU-25	25	9	1.65
EI 302	SE-50	50	11	1.80
EI 303	SE-75	75	15	1.95
EI 304	SE-100	100	20	2.10
EI 305	SE-150	150	29	2.25
EI 306	SEH-200	200	27	2.40
EI 307	SEH-250	250	32	2.40
EI 308	SEU-300	300	39	2.40
EI 309	SEH-335	335	43	2.55

TYPE ST 180°

Similar to SE types above, but with 180° Straight-Line-Wave length plates, and somewhat more compact in size. Air-gaps are as follows: Types STHS, STH, and STHD—.018"; Types STD and ST—.026". STHS types have single bearing, while other models are double-bearing.

STOCK No.	TYPE No.	CAP. MMF.	NO. OF PLATES	NET EACH
EI 1311	STHS-15	15	3	\$0.84
EI 1312	STHS-25	25	4	.90
EI 1313	STHS-50	50	8	.96
EI 1314	ST-35	35	8	.90
EI 1315	ST-50	50	11	1.08
EI 1316	ST-75	75	15	1.20
EI 1317	ST-100	100	20	1.35
EI 1318	ST-140	140	28	1.50
EI 1319	ST-150	150	29	1.50
EI 1320	STH-200	200	27	1.65
EI 1321	STH-250	250	32	1.80
EI 1322	STH-300	300	39	1.95
EI 1323	STH-335	335	43	2.10
EI 1343	STD-50	50-50	11-11	2.10
EI 1344	STHD-100	100-100	14-14	2.70

EXPERIMENTERS TYPE CONDENSERS



A superior, low-priced midjet condenser for SV set builders and experimenters. Sturdy, all-brass construction with bakelite insulation. Rotor and stator plates may be easily removed. Single hole mounting.

Cat. No.	MMF.	Type	EACH
EI 325*	15	EX-15	51c
EI 326*	25	EX-25	51c
EI 327*	35	EX-35	60c
EI 328	50	EX-50	54c
EI 329	100	EX-100	60c
EI 330	140	EX-140	75c

* Double spaced; others single.

ULTRA-MIDGET CONDENSERS



Compact midjet condensers. For Ultra I.F. use in receivers and transmitters, for padding or neutralizing, and for Fixed-Tuned exciter stages of hand-switching transmitters. Shaft extends at rear for easy ganging.

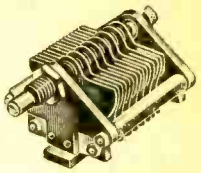
Stock No.	Cap. Mmf.	Fact. Type	NET EACH
EI 3333	15	UM-15	\$0.75
EI 3334	35	UM-35	.90
EI 3335	50	UM-50	1.05
EI 3336	75	UM-75	1.20
EI 3337	100	UM-100	1.14

TYPE UM: SINGLE-SPACED			
Stock No.	Cap. Mmf.	Fact. Type	NET EACH
EI 3339	25	UMA-25	1.11
BALANCED STATOR SINGLE-SPACED			
EI 341	25	UMB-25	1.11

TRANSMITTING TYPES

TYPE TMS

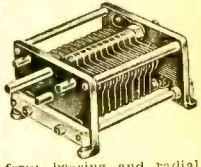
Precision type condensers for use in low-voltage stages of transmitters. Air-gaps: .026" for TMS types, .065" for TMSA. *Low C condensers are rated at 2000 Volt Peaks; others are 1000 Volt Peak. Conical front bearings; single ball thrust, radial rear bearing. Stearite-Isolantite insulation.



NO.	TYPE	MMF.	PLATES	NET
EI 1358	TMS-100	100	10	\$1.50
EI 1359	TMS-150	150	13	1.85
EI 1360	TMS-250	250	23	1.80
EI 1361	TMS-300	300	27	2.16
EI 1362	TMS-50D	50-50	5-5	2.25
EI 1363	TMS-100D	100-100	9-9	2.70
EI 1365	TMSA-35	*35	8	1.80
EI 1366	TMSA-50	*50	11	1.95
EI 1367	TMSA-50D	50-50	11-11	2.40

TYPE TMC—MODERATE POWER

For use in power stages of transmitters where the peak voltage does not exceed 3000 volts. Extremely rigid frame. Stearite-Isolantite insulation. Aluminum plates have buffed edges; air-gap is .077". Have conical front bearings and radial rear bearing with single ball thrust. Stator of split-stator model is supported at both ends.



NO.	TYPE	MMF.	PLATES	NET
EI 1375	TMC-50	50	7	\$2.40
EI 1376	TMC-100	100	13	2.70
EI 1377	TMC-150	150	21	3.15
EI 1378	TMC-300	300	39	3.90
EI 1380	TMC-100D	100-100	13-13	4.50

TYPE TMA HEAVY-DUTY

Insolative insulation. Aluminum plates. Peak voltage of air-gaps: .077-3,000 V.; .171-6,000 V.; .265-9,000 V.; .359-12,000 V.

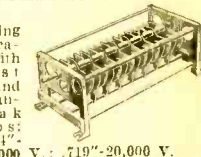
NO.	TYPE	MMF.	AIR-GAP	NET
EI 1384	TMA-300	300	077	\$7.20
EI 1385	TMA-200D	200-200	077	9.00
EI 1386	TMA-50A	50	.171	3.90
EI 1387	TMA-100A	100	.171	6.00
EI 1388	TMA-150A	150	.171	7.20
EI 1389	TMA-250A	250	.171	9.60
EI 1390	TMA-50C	50-50	.171	6.60
EI 1391	TMA-100DA	100-100	.171	10.50
EI 1392	TMA-100B	100	.265	8.10
EI 1393	TMA-150B	150	.265	10.20
EI 1394	TMA-60DB	60-60	.265	11.10
EI 1395	TMA-50C	50	.359	4.80
EI 1396	TMA-100C	100	.359	8.70
EI 1397	TMA-40DC	40-40	.359	8.10

ROTOR CLAMPING DEVICE

EI 556. For clamping rotor shaft of TMA or TMC National Transmitting Condensers. Easy to mount. Holds firmly. NET..... **51c**

TYPE TML

Have self-cleaning rotor contact; thick capacitor plates with rounded edges. Cast aluminum frames and dual tie bars. Isolantite insulated. Peak voltage of air-gaps: 2195-7,500 V.; 3444-10,000 V.; 4697-15,000 V.; 7197-20,000 V.



NO.	TYPE	MMF.	AIR-GAP	NET
EI 1280	TML-75E	75	.719"	\$15.60
EI 1281	TML-150D	150	.469"	15.90
EI 1282	TML-100D	100	.469"	14.10
EI 1283	TML-50D	50	.469"	17.10
EI 1284	TML-245R	245	.344"	15.60
EI 1285	TML-150F	150	.344"	15.00
EI 1286	TML-100	100	.344"	15.00
EI 1287	TML-75B	75	.344"	10.80
EI 1288	TML-500A	500	.219"	21.00
EI 1289	TML-350A	350	.219"	16.80
EI 1290	TML-250A	250	.219"	9.90
EI 1291	TML-30D	30	.719"	15.90
EI 1292	TML-60D	60-60	.469"	17.10
EI 1293	TML-100DB	100-100	.344"	18.90
EI 1294	TML-60DB	60-60	.344"	16.50
EI 1295	TML-200DA	200-200	.219"	21.00
EI 1296	TML-100DA	100-100	.219"	17.10



NATIONAL

Short

NATIONAL COILS AND COIL FORMS

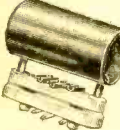
TRANSMITTING INDUCTORS



A new series of low-loss air-spaced coils for use in exciters, buffers, and low power finals. Vicon-insulated. All sizes listed will tune over their respective bands with 30 mmf. and all have separate windings which fit XB16 socket below (not supplied.)

End Link No.	Center Link No.	Type No.	Mega-cycles	NET EACH
1607	611	AR16-80	3.5-4	90c
1608	612	AR16-40	7-7.3	
1609	613	AR16-20	14-14.4	
1610	614	AR16-10	28-30	

COIL FORMS



Un glazed Isolantite forms for winding your own coils. Drilled for leads. Will fit same base as coils above. Plug, socket, and coil form are available separately or as complete assembly as listed.

No.	Type	Description	EACH
1411	PB16	Plug	24c
1412	XB16	Socket	30c
1413	XR16	Coil Form	36c
1414	UR16	Complete Unit	90c

FIXED TUNED EXCITER TANK



An ideal unit for use in multi-band exciters using handswitching. Aluminum case, 4x2 3/4 x 2" contains two 25 mmf. 2000 Volt condensers and XR-2 coil form, 1 1/2" long, 1" diam. With plug-in base to fit tube sockets. Aluminum shield isolates condensers, tubes from top.

E1512.	TYPE FXTB.	5 Prong Base.
E1513.	TYPE FXTB.	6 Prong Base.
EACH		\$2.94
E1511.	TYPE FXT.	Without the plug-in base.
NET		\$2.70

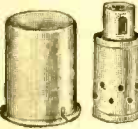
PLUG-IN COIL BASE AND SHIELD



New National combination of plug-in coil base and shield, especially suited for mounting condensers and coils when it is desirable to have them shielded, yet easily removable. Shield can measure: 2" x 2 3/4" x 1 3/4". Special low-loss base is available in 5 or 6 prong types and is offered complete with shield (E1346-1347) or separately (E1348-1349).

Cat. No.	Type No.	Prongs	NET EACH
1346	PB-10	5	45c
1347	PB-10	6	45c
1348	PB-10A	5	24c
1349	PB-10A	6	24c

TUBE AND COIL SHIELDS



High-grade non-magnetic aluminum shields. Coil shield measures 3" dia. x 3 3/4" high and is offered alone or with mounting base. Tube shield includes cap and mounting base and is suitable for tubes such as 57, 58, 77, 78, etc.

E1597.	B30.	Coil Shield Only.	21c
NET			
E1598.	B30.	Coil Shield with Base.	30c
NET			
E1599.	T58.	Tube Shield.	24c
NET			

GRID CAPS



Unique construction assures perfect continuous contact with grid cap of tube.

E1547.	For Standard Glass Tubes.	3c
E1548.	For All Octal Base Tubes.	
NET EACH		
E1549.	For Transmitting Tubes.	6c
NET EACH		

RECEIVER COIL FORMS

Low-loss R-39 forms which are extremely popular with Amateurs and Experimenters. Easy to work. Finger-grip rim. 1 1/2" dia., 2 1/2" long.

E1490.	4 Prong.	EACH.. 45c
E1491.	5 Prong.	
E1492.	6 Prong.	

MIDGET FORMS

Small coil forms designed with excellent form factor, contributing to high efficiency in H.F. circuits. Of R-39 composition, coils are machinable, so that experimenters may groove and drill them to suit individual needs. XR-1 and XR-2 forms measure: 1" dia. x 1 1/2" long; wall thickness, 3/16". XR-1 form has four prongs; others are plain.

E1565.	XR-1.	4-Prong Coil.	30c
NET			
E1566.	XR-2.	Without Prongs.	21c
NET			
E1567.	XR-3.	3/16" Dia. x 3/4" long. Without Prongs.	18c
NET			

PLUG-IN COIL FORM and SOCKETS

This completely new UR-10A coil form and socket assembly consists of the XR-10A coil form for 20 and 40 meters and an entirely new Isolantite Plug-in Base and Socket. Five prong base is easily attached to coil form by means of two screws. Base may also be used separately for air-wound coils. Sockets are complete with special attachments for mounting on TMA condensers if desired.

E1503.	TYPE UR-10A.	Coil Form Assembly. Complete. NET	\$2.76
E1505.	TYPE PB-15.	Plug-in Base Only. NET	81c
E1506.	TYPE XB-15.	Socket Only. NET	\$1.05

TRANSMITTER FORMS

Grooved and drilled ceramic forms for winding low-loss transmitter coils. Will make your home-made coils look professional. XR10A form measures: 2 1/2" winding dia. x 5" long. XR-14A is 5" diameter. Both forms will fit the PB-15 plug and XB-15 socket listed above.

E1494.	XR-10A.	20 or 40 meter bands. NET	90c
E1497.	XR-14A.	80 meter band. NET	\$2.10

BUFFER COIL FORM AND SOCKET

A new Isolantite, low-loss coil form assembly. 1 3/4" x 3 3/4" long. Plug with five prongs is easily attached to coil form by two screws. Socket is equipped with five rugged side-wiping contacts. Plug and socket are made of R39 low-loss insulation.

No.	Type	Description	NET
E1498	UR-13	Complete Assembly.	\$1.50
E1499	XR-13	Coil Form only.	.66
E1500	PB-5	Coil Plug only.	.45
E1501	XB-5	Coil Socket only.	.45

XT8 COIL FORM

Low-loss Steatite form for R.F. chokes, precision resistors, etc. Four sections; wire slot between sections and to terminals.

E1508.	NET EACH	30c
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S-101 AUDIO COUPLER

A high-gain unit for coupling output of screen grid detector to grid of audio tube. Consists of 700 henry plate coupling choke, .01 coupling condenser and .25 megohm resistor in metal case.

E1485.	NET	\$3.60
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NATIONAL R-100 R.F. CHOKE

Ideal for high frequency circuits. Extensively used in receivers and low-power stages of transmitters. Has continuous 4 section universal winding on Isolantite form. Distributed capacitance is only 1 mmf/d. 2 1/2 MH. 125 MA. 50 ohm D.C. resistance.

E1479.	List. 60c.	YOUR PRICE	36c
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TRANSMITTING TYPE CHOKES

Universal chokes with honeycomb-type windings in five sections. Rated at 600 MA continuously. Inductance, 4 MH, 10 ohms D.C. resistance. R152 is for the 160 meter band, and R154 for the 40 meter band.

E1481.	R152.	NET EACH	\$1.35
E1482.	R154.		
E1483.	R154U.	For 20, 40 and 80 meter bands. Five section honeycomb type coil on Isolantite core, with solder lugs. Rated at 600 M.A. continuous, 1 mh. inductance, 6 ohms D.C. resistance.	\$1.05
NET			

AIR-TUNED

I. F. TRANSFORMERS

Efficient IF transformers with air dielectric condensers. Steatite insulation; aluminum plates. Coils are Litz wound. Adjustments are on top of shield can. Oscillators are tuned by a knob.

E1462.	450-550 KC IF.	NET EACH	\$3.00
E1463.	450-550 KC Beat Osc.		
E1464.	175 KC IF.		
E1465.	175 KC Beat Osc.		
List.	\$5.00.		

DIODE TRANSFORMERS

Isolantite mounted, moisture-proof units with air-tuned primary and close-coupled, untuned push-pull secondary. For noise-silencing circuits, or for coupling to a diode detector tube in detector-AVC combinations. Tune 450 to 550 K.C.

E1469.	NET	\$2.10
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LOW FREQUENCY OSCILLATOR COIL

Two separate inductances, closely coupled, in aluminum can. Used in super-regenerative sets as interruption-frequency oscillator. Sec. Inductance, 6.25 mh. Tunes to 100 K.C. with .00041 mfd. condenser.

E1476.	NET	90c
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CRYSTAL HOLDERS

VERTICAL TYPE

Mounts crystal in vertical position, allowing it to vibrate freely. Permits rapid change of crystals. Molded R-39 body, with metal shield. Less crystal. E1558. CHT Resonator. E1559. CHT Transmitting. NET EACH \$1.50

VARI-CAP CRYSTAL HOLDER

Tunes over range of 6 KC when used with special 3.5 MC crystal (12 KC on 7 MC, 24 KC on 14 MC). With 6" shaft, 0-10 dial, knob and panel bushing. Not for X or Y cut crystals. E1561. Holder only. NET \$5.70

E1562.	With Crystal	\$19.50
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4-IN-1 HOLDER

New pressure type holder which accommodates 4 crystals and has built-in low-capacity switch for selecting frequencies. Holds crystals up to 1" square; especially suitable for use where an immediate choice of frequencies is desirable. Has prongs for plug-in mounting.

E1560.	Holder Only	\$4.50
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NATIONAL SOCKETS UNIVERSAL MOUNTING TYPE



Unusually adaptable Isolanite socket. May be mounted in several ways by means of stand-off insulator and metal flange supplied. Has full pin-wiring terminals which do not extend above top of socket and cannot cause shorts.

NO.	PRONGS	NO.	PRONGS
E1515	4	E1518	7 M
E1516	5	E1519	7 S
E1517	6	E1520	8 Octal

List Each, 40c
NET EACH **24c**

LOW-LOSS TYPE



Isolanite sockets designed for use in H.F. receivers and in low power stages of transmitters. 6 prong Special Socket for National Coils is square; others are as illustrated.

NO.	PRONGS	NO.	PRONGS
E1580	5	E1583	7 M
E1581	5	E1584	7 S
E1582	6	E1585	8 Octal

NET EACH **36c**
E1586. 6 (For National Coils).....45c

TRANSMITTING TYPE SOCKETS



An efficient fifty watt socket with glazed ceramic insulation, side-wipe contacts, and conventional bayonet-lock metal shell. Has binding post terminals.

E1588. XM50. NET **\$1.05**

E1587. XM10. A socket similar in construction to the XM50 above, but designed for tubes using the type UX base.
NET **75c**

E1589. XC-50. ALL-STEATITE. 50 watt socket; provides safety from arc-over. Contacts are only metal in entire assembly.
List. \$3.50. NET **\$2.10**

ACORN TUBE SOCKETS



E1591. FOR USE WITH TRIODES. Five contact clips mounted on Isolanite.

NET EACH **90c**

E1592. FOR PENTODES. Has aluminum base with all-contacts by-passed to ground. NET **\$1.20**

POWER PENTODE SOCKETS

An efficient large wafer-type Isolanite socket for the RK28 and RCA 803 power pentode tubes. Has three point mounting and side-wiping contacts.

E1594. NET **\$2.16**

E1595. As above, but less stand-off insulators. NET **\$1.80**

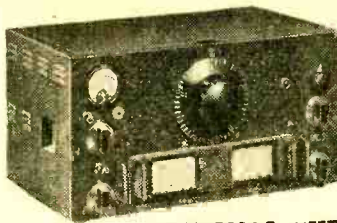


STEEL CABINETS

Sturdily constructed, rugged steel cabinets for housing home-built receivers, special experimental or laboratory equipment, etc. Used with such sets as National F17, 88V-3, 81R, 18N, HRO, and NC100. Panels and sub-bases are numbered so that you can punch holes to your individual requirements. Black crinkle finish. Supplied with sub-base and bottom cover.

No.	Type	Size	NET
E10306	C-SRR	7 1/2 x 7 x 7 1/2"	\$2.10
E10307	C-FB7	11 1/2 x 8 x 12 1/2"	4.20
E10308	C-PSK	6 x 8 x 12"	3.60
E10309	C-SW3	9 1/2 x 7 x 9"	3.30
E10310	C-110	11 x 7 x 7 1/4"	2.70
E10311	C-HWR	13 1/2 x 7 x 7 1/4"	3.00
E10312	C-HRO	16 1/2 x 8 1/2 x 10"	5.10
E10313	C-NC100	17 1/2 x 8 1/2 x 11 1/4"	5.10

NATIONAL "HRO" STANDARD RECEIVER



Built to meet the most exacting requirements of H. F. communication. Incorporates: Two T.R.F. stages; crystal filter with adjustable selectivity; calibrated ganged plug-in coils; single control tuning; calibrated "S" meter; variable beat oscillator. Micrometer dial with 20 to 1 ratio has 500 divisions for tuning accuracy. Extremely high usable sensitivity and selectivity. Supplied with tubes and coils covering 1.7-30 MC. (Less speaker and power supply.) Literature on request. Shpg. wt., 62 lbs.

E10062. 2.5 Volt A.C. Model.
E10063. 6 Volt Battery Model.

YOUR PRICE EITHER MODEL **\$179.70**

NATIONAL "HRO" JUNIOR RECEIVER

Has all features of HRO Standard except for tuning meter and crystal filter. Micrometer dial assures ample handspread (although not as great as the HRO Standard). Supplied with coils tuning 10 to 20 meters (2 amateur bands). Additional coils listed below. Shpg. wt., 42 lbs.

E10065. 2.5 Volt A.C. Model. Less speaker and power supply.....
E10066. 6 Volt Battery Model. Less speaker and power supply..... } EACH, **\$108.00**

COILS FOR "HRO" STANDARD	COILS FOR "HRO" JUNIOR
E1404. 175-400 K.C. \$16.50	E1400. 7 MC to 14.4 MC \$9.90
E1405. 500-1000 K.C. 12.00	E1401. 3.5 MC to 7.3 MC 9.90
E1406. 900-2000 K.C. 12.00	E1402. 1.7 MC to 4 MC 9.90

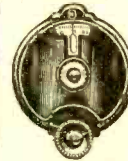
POWER PACK

E10046. For 2.5 Volt HRO Standard or Jr. For 110 V. 50-60 Cycles. **\$15.90**
Less 80 tube. NET.....

P. M. SPEAKER

E10064. 8" P.M. speaker in table cabinet. For use with any model HRO set. **\$14.10**
NET.....

"NATIONAL" DIALS TYPE "B" 4"



A compact dial with a smooth variable ratio drive. Dial scale is read through a window in the black bakelite case.

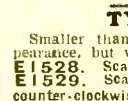
E1525. Scale 0-100-0, 180°. Rotates in either direction.

E1526. Scale 200-0, 360°, counter-clockwise. **\$1.65**

NET EACH **\$1.65**

E1527. Illuminator for dial, with bracket. List. 50c. NET **30c**

TYPE "BM" 3"



Smaller than the "B" dial; similar in appearance, but with fixed ratio vernier.

E1528. Scale 0-100-0, 180°, universal.

E1529. Scale 200-0, 360°, counter-clockwise. EACH **\$1.50**

TYPE "N"



Precision dials, with machine-divided scales and verniers of solid German Silver. Dial is 4" in diameter with a smooth planetary mechanism; 5 to 1 ratio.

E1530. Scale 0-100, 180°, counter-clockwise.

E1531. Scale 100-0, 180°, clockwise.

E1532. Scale 150-0, 270° clockwise.

E1533. Scale 200-0, 360°, counter-clockwise. EACH **\$4.05**

TYPE HRO 1 1/2" DIAL



E1534. Neat etched silver dial as used on HRO receivers. Marked 0-10 over 180° clockwise. 1 1/2" diam.; for 1/4" shaft. **45c**

NET.....

TYPE "A" 4" DIAL



Smooth "Velvet Vernier" dial, entirely free from backlash. Self-contained mechanism. Ratio 5:1. Black bakelite.

E1536. Scale 0-100, 180° Counter Clockwise.

E1537. Scale 150-0, 270° Clockwise. EACH **\$1.80**

TYPE "O" 3 1/2" DIAL



E1543. Attractive circular-plated German Silver dial, 3 1/2" diam. Reads 0-100 over 180°. Large thumb finger-grip knob for easy tuning. Fits all 1/4" shafts.

NET **90c**

"HRC" KNOB



Large, full-grip tuning knob for use with receivers, transmitters, etc. 2 3/4" in diameter with fluted edge. Easy to use; non-tiring. Fits all 1/4" shafts.

E1545. NET **51c**

NATIONAL INSULATORS



AA3 TYPE AA-3. Steatite feeder spreaders, 6 1/2" long; 3/8" dia.

E1571. TYPE AA-5. Aircraft compression type strain insulator. **18c**

NET EACH **18c**

E1572. TYPE AA-6. Steatite. Length, 1 1/4"; 1/2" dia. NET **21c**

NET.....

STAND-OFF INSULATORS

E1573. Fig. A. Small Isolanite insulators designed for extreme efficiency. Make ideal forms for H.F. and U.H.F. chokes. Metal mounting feet. Type GSI. **15c**

E1574. Fig. A. GS2. 2 7/8" high, 1/2" diam. NET **21c**

E1568. Fig. A. GS3. 2 1/2" high, 3/4" diameter. NET **54c**

E1569. Fig. A. GS4. 4 3/8" high, 3/4" diameter. NET **66c**

E1575. Fig. B. A Steatite insulator for mounting parts on metal chassis bases. GS5 tapped 8-32 each end. GS6 and GS7 tapped 10-24 each end. GS5. 1 1/4" high. **15c**

NET.....

E1576. Fig. B. GS6. 2" high. NET. **27c**

E1577. Fig. B. GS7. 3" high. NET. **45c**

E1578. Fig. C. GS8. A small Steatite insulator suitable for use in Low Loss H.F. Circuits for coil mountings, etc. Base has 1 1/4" mounting centers. NET **21c**

NET.....

H. F. BUSHINGS

Efficient, low-loss Steatite bushings for bringing H.F. leads through partitions or windowpanes, for supporting coils, etc.

E1507. XS1. 1 1/2" x 1 1/4". Per Pr. **45c**

E1510. XS2. 1 1/2" x 1 1/4". Per Pair **54c**

NET.....

XS6 H. F. BUSHING

Small steatite shoulder-type flat bushing, 5/8" diam., 3/16" thick with 1/8" hole. **9c**

E1509. NET EACH **9c**

CATHODE-RAY OSCILLOSCOPE TYPE CRM

Graphically depicts Xmitter operating conditions through easily read patterns. Requires: 1-913 tube with 1" screen and 1-6X5 rectifier. Focus, Brilliance, Sweep. Amplitude controls on front panel. Built-in power supply, 60 cycle sweep circuit; provision for automatic sweep. Size: 4 1/2" x 6 1/2" x 8". For 110 V., 50-60 cycles. Shpg. wt., 9 lbs. **\$11.10**

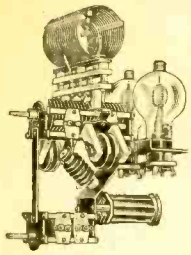
E10317. Less tubes. NET **\$11.10**

E10318. R.C.A. Tube Kit.....\$4.81



Hammarlund Precision PRODUCTS

"PA-300" TRANSMITTER FOUNDATION KIT



A new transmitter unit that requires only a screwdriver and soldering-iron for assembly. Consists of a push-pull R.F. amplifier designed to use triodes such as 755's, 808's, etc., with power output of from 100 to 300 watts per pair. May be used with any low-power driver stage, or with BD-40 Buffer-Driver listed below. Needs no chassis base; drilled and machined brackets support unit which bolts to panel. Ingenious layout permits short direct leads.

E9570. Foundation Kit Only. NET \$1.95

E9571. Complete Kit of Parts. Contains: 1—PA-300 kit, 1—MTCD-100B, and 1—MTCD-100C condensers, 2—N10 condensers, 1—CH-500 R.F. Choke, 3—sockets, 1—grid coil form. Less plate coil and tubes. **NET \$16.14**

BD-40 KIT

An ingeniously arranged buffer-driver unit designed as companion unit to the PA-300 above. Uses 1-807 or RK-39 beam tetrode. Small and compact, needing only $3\frac{3}{4} \times 7\frac{3}{4} \times 3\frac{3}{4}$ " overall. **E9572. BD-40 Foundation Kit Only.** All necessary brackets and hardware. **NET \$2.16**

E9573. Complete Kit of Parts. NET 7.68
Less only tube. NET...
Descriptive literature sent free on request.

I. F. TRANSFORMERS TYPE "T"



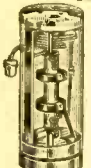
Specially designed for experimental and replacement purposes. Double-tuned, with mica compression type condensers on isolantite base. Adjustable from top of can. Coils are Hitz-wound and wax-impregnated. Aluminum shield can is $2\frac{1}{2}$ " dia., $3\frac{1}{4}$ " high. Base mounting by threaded lugs on 2" centers.

Untapped	Frequency	Center Tapped
E5350	175	E5352
E5351	465	E5353
E5355	465 Beat Oscillator	

List, \$1.65. **YOUR PRICE 99c**

TYPE "ST" MIDGETS

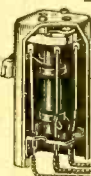
As above but in compact can, $1\frac{1}{4}$ " square, by $2\frac{3}{8}$ " high. Mtg. centers, $1\frac{1}{8}$ ".
Untapped Frequency C.T.
E5356 175 E5358 List, \$1.65.
E5357 465 E5359 NET
E5354 262 (For auto sets.) EACH. **99c**



"AIR-TUNED" TYPE

For use where absolute stability is necessary. Air-tuned, with Hitz-wound coils. Tune from top. Transformer condenser mounted on isolantite. Provide gain in excess of 200 per stage with unequalled selectivity. Designed particularly for Screen Grid type tubes. Beat Oscillator has tuning lever to vary beat note. All leads RMA color-coded. Can, $2\frac{1}{2}$ " dia., 5" high.

Untapped	Frequency	C.T.	NET EACH
E5360	175	E5363	
E5361	465	E5364	
E5366	465 Beat Oscillator.		\$2.70



"ICT" IRON CORE I.F. TRANSFORMERS

A new iron core I.F. transformer which provides maximum gain per stage coupled with extremely sharp selectivity. Core is of high permeability magnesium alloy; rust-proof and non-corrosive. Isolantite mounted trimmers. Size $1\frac{3}{4}$ " square, $4\frac{1}{2}$ " high. Mounting centers $1\frac{1}{2}$ ". I.F. Frequency 465 KC.

NET EACH
E5444. Single stage input.
E5445. Single stage output.
E5446. Two stage input.
E5447. Two stage interstage.
E5448. Two stage output.

\$1.80

HAMMARLUND TRIMMING AND PADDING CONDENSERS

"EC" EQUALIZERS

For balancing, neutralizing and trimming purposes. Mica dielectric; bakelite base. $1\frac{1}{4} \times \frac{1}{8}$ ". Adjusting screw in center.

E5374. 3-35 MMF. 18c
List, 30c. **YOUR PRICE**
E5375. 25-80 MMF. 24c
List, 40c. **YOUR PRICE**

"MEX" EQUALIZER

Extremely small low-loss condenser. Screw adjustment. Isolantite base, with mica dielectric and phosphor bronze plates. 3 to 30 mmf. $\frac{5}{16} \times \frac{3}{4}$ ".

E5376. List, 30c. NET 18c

TYPE "IBT"

A high grade mica padding condenser on a $1\frac{1}{4}$ " inch diameter Isolantite base. Maintains original capacity setting, resisting moisture, temperature and vibration. With 4-36 mounting studs on $1\frac{1}{8}$ " centers.

No.	Type	Mmf.	List	NET
E5420	IBT-70	10-70	50c	30c
E5421	IBT-140	70-140	60c	36c
E5422	IBT-220	140-220	70c	42c

TYPE "BBT"

Similar to Type IBT above, but on Bakelite base ($1\frac{1}{4}$ " diameter). Maintain uniform capacity and temperature; not affected by vibration or humidity. Have $\frac{3}{16}$ " mounting centers.

Stock No.	Type	Mmf.	List	NET
E5415	BBT-70	25-70	40c	24c
E5416	BBT-140	70-140	50c	30c
E5417	BBT-220	140-220	60c	36c

TYPE "MICS"

For L.F. tuning, R.F. trimming, and for padding or trimming of oscillator and other circuits. Isolantite base, $1\frac{1}{2} \times \frac{1}{4}$ " mtg. centers.

Stock No.	Type	Mmf.	List	NET
E5429	MICS-70	10-70	\$0.50	30c
E5430	MICS-140	70-140	.60	36c
E5431	MICS-220	140-220	.70	42c
E5432	MICS-1000	600-1000	1.00	60c

"APC" MICRO CONDENSERS

High quality air-dielectric condensers; compact in size. Particularly adaptable to S.W. and Ultra S.W. work. Isolantite base. Air gap .015". Will fit $1\frac{1}{4}$ " dia. cans. Screwdriver adjustment.

No.	Type	Max. Mmf.	Min. Mmf.	NET
E5324	APC-25	25	3.0	\$0.78
E5325	APC-50	50	3.9	.90
E5326	APC-75	75	4.5	1.02
E5327	APC-100	100	5.5	1.14
E5442	APC-140	140	6.5	1.35

VARIABLE COUPLING IF'S

Type VT. Permits continuously variable selectivity from sharp peak to high fidelity; air-trimmed. IF frequency 465 KC. Size, $2 \times 2 \times \frac{1}{8}$ ".

E5378. NET \$3.30

E5385. Type VTC. Variable coupling mechanism for panel control of up to 4 VT transformers. NET \$1.50

E5383. Type VTF. Similar to VT, but with fixed coupling. For IF output stage.

E5384. Type VTF-CT. Center-tapped output IF transformer; to diode detector.

E5387. Type VTO. 465 KC. beat oscillator. For electron-coupled oscillator. \$2.70
YOUR PRICE EACH

TRANSMITTING TYPE CONDENSERS

"MTC"

For high and ultra-high frequency work. Aluminum plates, silver-plated rotor contacts and Isolantite Insulation insure completeness.

No.	Plates	Cap. Mmf.	Air Gap	Voltage Rating	NET
E5630	15	35	.171"	5500	\$3.60
E5631	5	20	.079"	3000	2.10
E5632	7	35	.070"	3000	2.34
E5633	11	50	.070"	3000	3.00
E5634	21	100	.070"	3000	3.66
E5635	31	150	.070"	3000	1.68
E5636	5	50	.031"	1000	1.83
E5637	11	100	.031"	1000	1.45
E5638	15	150	.031"	1000	1.92
E5639	25	200	.031"	1000	2.16
E5640	35	365	.031"	1000	2.40

Polished round-edged plates—.025" thick.
Polished round-edged plates—.025" thick.
Standard type plates—.025" thick.

"MTCD" DUAL CONDENSERS

Similar to above. Stators may be connected in series to obtain half the capacity at twice the breakdown voltage.

No.	Plates	Capacity	Plate Spacing	NET
E5641	7	35	.070"	\$3.15
E5642	7	35	.070"	2.10
E5643	11	50	.070"	3.90
E5644	21	100	.070"	5.25
E5645	5	50	.031"	2.70
E5646	11	100	.031"	3.00
E5647	15	150	.031"	3.15
E5648	25	265	.031"	3.60

Main edges. Others are rounded.

We can supply the "TC" and "TGD" Series condensers on special order. Send us your order.

"HF" MICRO CONDENSERS

A new series of ultra-high-frequency variables. Very efficient in tuning or trimming critical high-frequency circuits. Cadmium-plated plates. Isolantite insulation. Equipped with special wide front bearing. Noiseless in operation. *Indicates dual-spaced units.

No.	Plates	Max. Mmf.	Min. Mmf.	NET
E5585	5	7.5	3.0	\$0.75
E5586	10	35	3.6	.90
E5587	14	50	4.1	1.36
E5588	27	100	5.6	1.14
E5589	37	140	6.7	1.35
E5590*	10	15	2.6	.96
E5591*	20	30	5.3	1.11

"HFD" DUAL MICROS

No.	Cap. Per. Sac.	List	NET
E5437	50	\$2.75	\$1.65
E5438	100	3.25	1.95
E5439	140	3.75	2.25
E5436*	16	3.00	1.80
E5440*	28.5	3.25	1.95

NEUTRALIZING CONDENSERS

New rounded edge, thick aluminum plate type. Oversized fine thread makes for micrometer tuning. Set screw is provided for permanent setting. Has stop to prevent shooting.

E5426. Type N-10. 2.1 to 10 mmf. $\frac{1}{16}$ " air gap. Plate dia. $1\frac{1}{4}$ ". Size, $2\frac{3}{4} \times 1\frac{1}{2} \times \frac{1}{8}$ ". NET \$1.80

E5423. Type N-15. Same as above, but cap. is 3.2 to 14 mmf. NET \$3.60

E5427. Type N-20. 3.8 to 14 mmf. $\frac{1}{8}$ " to $\frac{1}{2}$ " air gap. Plate dia., 4". Size, $4 \times 5\frac{1}{2} \times \frac{1}{8}$ ". NET \$3.90

"CS-3" COIL SHIELD

Very effective as a general purpose shield. Made of heavy aluminum and slotted to afford easy handling. Comes in 2 pieces, top and bottom. Can be used for coils and condensers, etc. Dia. 3"; height, $3\frac{1}{2}$ ".

E5425. NET 30c

Hammarlund Precision PRODUCTS

HAMMARLUND CHOKES



MIDGET CHOKES CH-X

For receivers and transmitters. Adaptable to many uses in even the smallest space. Universal-wound. Thoroughly impregnated. Center core is of Isolantite. May be mounted by its own leads in any position. D.C. resistance, 35 ohms. 2.1 MH at 125 MA. 1 1/2" x 1/2". **36c**
E5344. List, 60c. NET

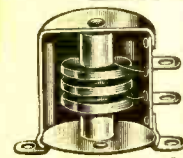


CH-8

Low-loss 8 mh. R.F. choke. Ideal for all short-wave receivers and transmitters. Section-wound on compact Isolantite spool. Moisture-proof windings are protected by lacquer and cellophane. Equipped with flexible leads and reversible end brackets for universal mounting. D.C. resistance, 70 ohms. Current-rating 125 MA. 1 1/2" x 1/2". **66c**
E5343. List, \$1.10. NET

X-MITTING CHOKES-CH-500

A heavy-duty choke for parallel feed in high-powered transmitters in 20-40-80 and 100-meter bands. Has universal-wound pies on Isolantite core. Inductance, 2 1/2 mh.; D.C. resistance, 8 ohms. 500 M.A. continuous rating. Size: 1 3/4" dia. x 2 1/2" long. **\$1.05**
E5345. List, \$1.75. NET



SHIELDED CHOKES-CH-10-S

Completely shielded in aluminum shell; especially suited for use in high-gain circuits. Eliminates circuit instability since there is no stray coupling. Has three impregnated, universal-wound pies. Diameter, 1 3/4". Inductance, 10 mh.; D.C. resistance, 65 ohms. 100 M.A. capacity. **60c**
E5381. List, \$1.00. NET



RFC-85 CHOKES

High inductance chokes for use in plate circuits of all B.C. and S.W. receivers. Specially wound and impregnated; extremely low distributed capacity for maximum efficiency. Inductance, 85 mh.; D.C. resistance, 215 ohms. Max. current rating, 60 M.A. Bakelite case is 1 3/4" high and 1 1/4" in dia. **\$1.20**
E5349. List, \$2.00. NET

ISOLANTITE SOCKETS STANDARD TYPE



Low-loss Isolantite sockets. Have long leakage paths. With positive rust-proof side-gripping contacts. With mounting pillars. Glazed top and sides. Sub-panel or base mounting. Standard 1 1/2" mounting centers. List, 60c. **36c**
E5339. 4 prong. NET, EACH
E5340. 5 prong.
E5341. 6 prong.
E5342. 7 prong (Medium).
E5348. 7 prong (Small).
E5337. 8 prong (Octal). **45c**



ACORN TUBE TYPE

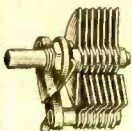
Designed for the new RCA 955, 956 and 954 Acorn type tubes. Low-loss. Glazed Isolantite base. High surface resistivity. Silver-plated bronze spring clips. 1 1/2" in diameter with two mounting holes. 1 3/4" mtg. centers. **90c**
E5338. List, \$1.50. NET



"TS-50" ALUMINUM TUBE SHIELD

Complete isolation is afforded by this shield for the new high-gain RF pentodes. Drawn-in neck completes shielding between grid and plate of tube. Special design affords maximum cooling. 4 1/2" high, 1 1/2" diameter. 1 3/4" mounting centers. **24c**
E5398. NET

FAMOUS "STAR" MIDGET CONDENSERS



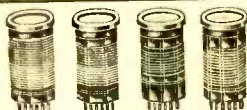
Popular low-priced midgets for set builders and experimenters. Sizes for short wave tuning, regeneration, verniers, etc. Single hole mount, 1/4" shaft. Size, 1 1/4" x 1 1/2" high, and up to 1 1/2" deep behind panel, depending on capacity.

No.	Type	Mmf.	List	NET
E5328	SM-15	15	\$0.85	51c
E5329	SM-25	25	.85	
E5330	SM-50	50	.90	54c
E5331	SM-100	100	1.00	60c
E5332	SM-140	140	1.25	75c

DOUBLE-SPACED "STARS"

Similar to standard "STAR" condensers listed above, but with greater air-gap between adjacent rotor and stator plates, allowing use in low-power transmitter circuits.

E5333. Max. capacity 35 mmf. **60c**
List, \$1.00. NET
E5335. Max. capacity 50 mmf. **75c**
List, \$1.25. NET



"SWK" S.W. PLUG-IN COILS

Efficient, well-designed S.W. coils. Wound on low-loss XP-53 forms. High frequency coil secondaries have heavy silver-plated wire. Others have heavy enameled copper wire. For use with 140 mmf. condenser.

4 PRONG COILS: 17-270 METERS. Kit of 4, two-winding coils. **\$1.80**
E5367. List, \$3.00. NET

6 PRONG COILS: 17-270 METERS. Kit of 4, three-winding coils. **\$2.25**
E5368. List, \$3.75. NET

INDIVIDUAL "SWK" COILS

4 prong coils have two windings; 6 prong have three windings. For 140 mmf. condenser.

Range	4 Prong	6 Prong
10-20 Meters	E5399	E5389
17-41 Meters	E5390	E5392
33-75 Meters	E5391	E5393
NET	60c	75c
EACH		
66-150 Meters	E5394	E5396
135-270 Meters	E5395	E5397
NET	45c	60c
EACH		

Broadcast Coils: 250-560 Meters
E5369. 4 PRONG, two-winding coil. **75c**
List, \$1.25. NET
E5370. 6 PRONG, three-winding coil. List, \$1.50. NET. **90c**



NEW "SWF" LOW-LOSS COIL FORMS

Rugged low-loss forms; of XP-53. Ribbed for air-spacing, with flange grips. Have shelf inside for mounting padding condenser. 1 1/2" dia. x 2 1/2" long. Natural amber color.
E5371. 4 PRONG **21c**
E5372. 5 PRONG **24c**
E5373. 6 PRONG **24c**

"TCF" X-MITTING COIL FORMS

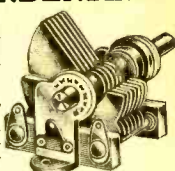
Of low-loss XP-53 dielectric. Ribbed for air-spacing; with flange grips. May be base-mounted on brackets supplied or plugged-in. 2 1/2" dia. x 2 1/2" long.
E5379. TCF-4. 4 PRONG **42c**
E5380. TCF-5. 5 PRONG **42c**

CF-M COIL FORM

Isolantite coil forms designed for maximum efficiency at ultra-high frequencies. Forms are 1 1/2" in diameter, 2" long exclusive of prongs, and have holes drilled to permit almost any type of experimental winding. Made in 5 prong type only. Ideal for coils tuning 38 and 56 MC bands.
E5382. List, \$1.00. **60c**
YOUR PRICE

MIDGET CONDENSERS

High quality midget condensers. Insulated with Isolantite. Brass plates .025" thick with air .025" air gap, are securely fastened to the 1/4" shaft. Wide bearings at front and rear provide extra good contact. Clockwise rotation. Shaft extends beyond rear to facilitate gauging.



No.	Plates	Max. Mmf.	Min. Mmf.	List	NET
E5300*	3	4.5	20	\$1.40	\$0.84
E5301*	5	5	25	1.50	.90
E5302*	7	6	50	1.60	.96
E5298	7	6	50	1.60	.96
E5303*	11	7	80	2.00	1.20
E5304*	11	6.5	80	2.00	1.20
E5305*	14	7.5	100	2.25	1.35
E5306*	14	7	100	2.25	1.35
E5307*	19	8	140	2.50	1.50
E5308*	19	9	140	2.50	1.50
E5309	27	10	200	2.75	1.65
E5310	34	11	260	3.00	1.80
E5310	43	13	320	3.50	2.10

*Semi-circular plates. All others are Midline.

DOUBLE-SPACED MIDGETS

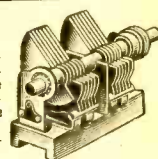
Have special bearings and Isolantite insulation. Exceptionally efficient at ultra-high frequencies. Air-gap, .0715".

No.	Max. Mmf.	Min. Mmf.	List	NET
E5433	20	6.5	\$2.00	\$1.20
E5316*	20	7	2.00	1.20
E5317*	32	7	2.25	1.35
E5318*	32	7.5	2.25	1.35
E5319*	50	9.5	2.75	1.65
E5320*	50	9	2.75	1.65
E5325*	100	16.5	3.50	2.10

*Semi-circular plates. All others are Midline.

DUAL MIDGET CONDENSERS

Rigid, high quality two-gang midget condensers, designed especially to provide added efficiency at ultra-high frequencies. Plates are .0225" brass, with .0245" air-gap. Overall length behind panel, 3 1/4".



E5434. 50 MMF. PER SECTION. Semi-circular Plates. Minimum capacity 5.5 mmf.
E5435. 50 MMF. PER SECTION. Midline Plates. Min. cap. 5 mmf. **\$1.80**
List, \$3.00. NET EACH
E5311. 100 MMF. PER SECTION. Midline Plates. Minimum capacity 6 mmf.
E5346. 100 MMF. PER SECTION. Semi-circular Plates. Min. cap. 6.5 mmf. **\$2.10**
List, \$3.50. NET EACH
E5312. 140 MMF. PER SECTION. Midline Plates. Minimum capacity 7 mmf.
E5437. 140 MMF. PER SECTION. Semi-circular Plates. Min. cap. 8 mmf. **\$2.40**
List, \$4.00. NET EACH

DOUBLE-SPACED DUAL MIDGETS

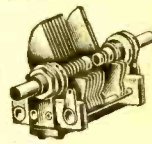
Similar to above, but have air-gap of .0715" between rotor and stator plates. Ideal for 5 meter transmitters and transceivers.

No.	Max. Mmf.	Min. Mmf.	List	NET
E5321	31	6.5	\$3.50	\$2.10
E5322*	31	6.5	3.50	2.10

*Semi-circular plates. Other is Midline.

BANDSPREAD MIDGETS

For use as bandspread tuning condensers in short wave receivers and for amateur frequency meters. "Tank" section may be locked, and all tuning done with bandspread section.



Stock No.	Tank Cap., Mmf.	Tuning Mmf.	List Price	NET PRICE
E5313	100	18	\$3.00	\$1.80
E5314	100	50	3.25	1.95

CONDENSER COUPLING

Bakelized canvas insulation; brass bushings. Flexible; for ganging condensers, etc., without need of exact shaft diameter. For 1/4" shafts.
E5323. List, 60c.
YOUR PRICE **36c**



AMATEUR TRANSMITTERS

POPULAR UTAH TRANSMITTERS



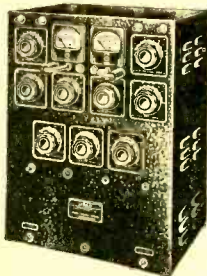
THE UTAH JUNIOR

A complete kit to build a low-power CW rig with power output up to 25 watts. Uses 1-6F6 or 6L6 in a crystal-controlled harmonic oscillator, and 1-5Z4 rectifier. Has built-in power supply. Operates on all bands from 160 to 10 meters. Will operate on two or more bands with one crystal. Has tuned antenna coupling. Requires one 2-inch 0-100 MA meter. 12x7x10". E9863. Less tubes, crystal, and meter. Wt., 19 lbs.

\$15.95

ACCESSORY KIT
Contains: 1-RCA 6L6 and 1-RCA 5Z4 tubes, 1-Triplett 2-inch 0-100 MA meter, and 1-Biley crystal for 160, 80, or 40 meter band. E9857. Accessory Kit. NET **\$10.00**

5-10-20 X-MITTER KIT

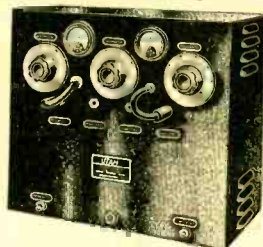


A sensational new 45 watt CW-Phone transmitter kit for use on the Amateur 5, 10, and 20 meter bands. Highly efficient circuit uses two separate final R.F. stages. Complete hand-switching permits rapid change of operation to any of the three frequency bands. Platinum-gray wrinkle-finished cabinet contains entire R.F. unit, speech amplifier-modulator, and dual plate and filament power supplies. Requires: 1-6F6, 2-6L6, 2-6AQ, 2-807, 2-6N7, 1-6J7, 2-866 Jr., 1-83V, 1-5Z3 tubes; one 0-75 and one 0-150 MA Simpson meters; and one or two 7 MC crystals. All necessary parts and cabinet supplied; with complete instructions. Easily assembled in a few hours. Wt., 82 lbs.

E9950. Complete, less only tubes, meters, and crystals. NET **\$69.75**

ACCESSORY KIT

Contains complete set of RCA and Taylor tubes, two Simpson meters, and one Biley B5 7 MC crystal (crystal within 5 KC of specified frequency). E9551. Accessory Kit. NET **\$32.00**



80 WATT CW KIT

An ideal starting rig for the beginner. It's new and up-to-the-minute; uses a 6L6 regenerative crystal oscillator, parallel 6L6's in the RF amplifier, and 1-5Z3 or 2-866 Jr. rectifier. Will safely handle input power up to 80 watts. Attractive steel cabinet, 18x16x19 1/2", is finished in black crystal. Circuit design produces maximum "suck" without excessive power requirements. Easy to assemble; all drilling and punching are already done. Requires one 0-50 and one 0-200 MA meters, 2" size. Complete, ready 2-or assembly, less only tubes, crystal and meters. Wt., 46 lbs.

E9558. NET **\$49.75**

E9558. Accessory Kit containing complete set of RCA tubes, Triplett meters, and one Biley crystal for 160, 80, or 40 meters (within 5 KC). NET **\$14.75**

50 WATT MODULATOR KIT

For use with 80 watt CW unit, or as driver for 250 watt modulator. Uses 2-6C5, 1-6N7, 1-6J7, 2-6L6G, 1-80, and 1-5Z3 tubes. Requires 2 meters: 0-25 and 0-200 MA, 2" size. Has a self-contained power supply. Less tubes and meters. Wt., 57 lbs.

E9559. NET **\$49.75**

E9559. Accessory Kit containing complete set of RCA tubes and Triplett meters for 50 watt modulator kit. NET **\$12.50**

ANTENNA COUPLER KIT

For use with either the 80 watt CW kit, or with the complete 400 watt transmitter. Will match any type of tuned feeder system. Cabinet, 18x8x9 1/2". Requires 1: 0-5 RF ammeter. Supplied with all necessary hardware; coil already wound. Less meter. Wt., 17 lbs.

E9860. NET **\$14.95**

E8893. Triplett 0-5 A. R.F. ammeter. NET **\$6.53**

500 WATT R.F. AMPLIFIER

Can be driven by the Utah 80 watt CW unit, or any similar exciter unit. Uses 2-T55 and 2-866 tubes. Has a heavy-duty built-in power supply. Requires two 3 1/2" meters, 0-100 and 0-500 M.A. Cabinet size, 18x17x9 1/2". No antenna coupling circuit; use Coupling Unit E9860. Less tubes and meters. Wt., 75 lbs.

E9861. NET **\$49.75**

E9561. Accessory kit of Taylor tubes and Triplett meters. NET **\$23.75**

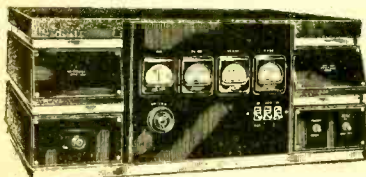
250 WATT MODULATOR KIT

For use with the 500 watt RF amplifier above. Uses 2-203Z tubes. Has self-contained power supply using 2-866 tubes. Requires two 3 1/2" meters, 0-100 and 0-500 MA. Cabinet as above. Less tubes, meters. Wt., 104 lbs.

E9862. NET **\$49.75**

E9562. Complete set of Taylor tubes and Triplett meters for 250 watt modulator. NET **\$25.75**

HALLICRAFTERS "HT" HAM TRANSMITTER



Designed, developed, and produced by the famous Hallcrafters laboratories. Modern in styling and professional in appearance; built around the latest tubes and most advanced circuits. Conservatively rated power output; will output near many 150 to 250 watt home-built rigs. Generously oversized components for utmost dependability. Flexibility and simplicity of operation make it an ideal unit for use by beginner or advanced Amateur. Supplied for operation on 10-20-40 meters, but can be supplied with any three-band combination desired. Accessories required are: Astatic D104 crystal mike, Bias battery, and transmitting key. Write for descriptive literature.

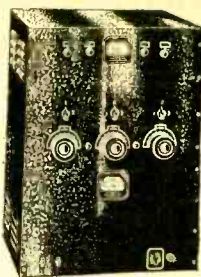
MODEL HT-2

For CW only. Less modulator and accessories. Shg. wt. 120 lbs.

E10170. NET **\$175.00**

\$17.50 down, 8 monthly payments of \$21.66.

NEW THORDARSON 100 WATT MULTI-BAND TRANSMITTER



An extremely compact, modern 100 watt Multi-Band transmitter in complete, easy-to-assemble kit form. Panels and chassis, finished in black crackle, are punched and drilled. Transmitter consists of two units: R.F. unit and Modulator unit, each with built-in power supply. Complete band-switching for all circuits from front of panel. R.F. unit uses 6L6G oscillator, 6L6G buffer-doubler, and TZ10 final amplifier; 1-83 and 2-866 Jr. rectifiers. Modulator uses 1-6J7, 1-6F5, 1-6F6, 2-6L6, 1-82, and 1-83 tubes. Complete descriptive literature sent on request.

R.F. UNIT KIT

All necessary parts for the construction of the R.F. unit. Kit includes: Drilled and punched chassis and panel, Thordarson transformers and chokes, hardware, Barker-Williamson turret and coils for 160, 80 and 20 meters, meter, condensers, resistors, wire, coil-forms, and instructions. Less tubes, crystals. Wt., 74 lbs.

E9565. NET **\$82.32**

E9585. Complete kit of tubes for the R.F. unit. NET **\$9.15**

MODULATOR UNIT KIT

Consists of all necessary parts for the Modulator unit of the Thordarson transmitter. Contains drilled and punched chassis and panel, hardware, transformers, chokes, sockets, meter, condensers, resistors, wire, etc.

E9566. NET **\$44.10**

E9586. Complete tube kit for Modulator Unit. NET **\$6.50**

E10196. Steel Cabinet to hold both R.F. and Modulator units. Black wrinkle finish. NET **\$10.29**

NEW SPEECH AMPLIFIER

Designed and engineered to provide the Amateur with properly designed speech equipment. This new Thordarson Speech Amplifier Kit is adaptable to any amateur phone transmitter. Conservatively rated at 15 watts output; sufficient to drive even the largest Class "B" modulators. Properly designed to provide maximum stability and eliminate R.F. feedback and hum. Uses 1-6F6, 2-6C5, 2-2A3, 1-5Z3, and 1-80. Input for crystal mike; 500 ohm line output. Descriptive literature sent on request.

E9852. Kit of all parts for table model, including drilled chassis, transformers, chokes, etc. Wt., 43 lbs. Less tubes. NET **\$26.90**

Where CHT type units are preferred, add \$5.59.

E9853. Complete kit of parts as above, but for relay rack mounting. Less tubes. NET **\$28.13**

E9584. Complete kit of tubes for above. NET **\$5.85**

SPECIFICATIONS

OUTPUT: 50 watts Phone, 100 watts CW. RANGE: 10-20 meters; single control band-switching. TUBES: 2-6A6 osc., 1st and 2nd doublers, 1-RK47 R.F. amplifier, RECTIFIERS: 2-5Z3, 1-80, 2-866. MODULATORS: 1-6J7, 1-6J5, 4-6L6. Modulation capability 100%. METERS: 4, check all circuits. CONTROLS: Fil. and Plate Switches, Phone-CW Switch, Band-Switch, Gain Control. OUTPUT TERMINALS: From adjustable pickup coils; automatically selected by band-switch. CABINET: Welded steel, 25 3/4" long, 11 1/2" high, 19 1/4" deep. SUPPLIED COMPLETE with tubes, 10-20-40 meter coils, and one 40 meter crystal.

MODEL HT-1

For Phone and CW. Less accessories. Shpg. wt. 145 lbs.

E10171. NET **\$195.00**

\$19.50 down, 8 monthly payments of \$24.13.

- 50 WATTS 'PHONE — 100 WATTS CW
- SINGLE CONTROL BANDSWITCHING
- 100% MODULATION FOR 'PHONE
- FACTORY-BUILT — READY TO WORK
- FAMOUS HALLICRAFTERS QUALITY

Transmitting Equipment

HALLICRAFTERS MARINE TRANSMITTER-RECEIVER



Developed in the famous Hallcrafters Laboratories, this new combination transmitter-receiver is intended for use by the small boat or yacht owner. Operates entirely from a 12 volt storage battery, with a carrier power output of 50 watts. Will provide radio-telephone communication from Ship-to-Ship on any three frequencies in Marine band of 2100 to 2900 KC.

SIMPLE TO OPERATE

Selection of operating frequency is made by front panel switch. Output of receiver is automatically switched from front panel loudspeaker to telephone receiver when handset is lifted from hook. Pressing push-to-talk switch in handset starts transmitter. Single switch turns on all tube filaments; other controls are the receiver volume control, frequency selector switch, and meter switch for checking operation or tuning adjustments. Total power drain is 35 amperes from 12 volt battery when transmitting, 9.5 amperes during standby periods. Vibrator and dynamotor plate supplies are built-in. Available for operation from other DC voltages at slightly higher prices. Entirely self-contained in cabinet 29 3/4" wide, 11 3/4" high, and 19 3/4" deep. Supplied with tubes. Shpg. wt., 155 lbs. Write for descriptive booklet.

E10663. Complete, less only battery, antenna and crystals. NET..... **\$390.00**

RTL "COMPACT" TRANSMITTER-RECEIVER



A portable 50-60 MC unit. Transmitter employs 1-30 as input amplifier, 1-19 as Class B Modulator, and 1-19 as push-pull oscillator. Carrier, 2 watts, 8 watts peak. Non-radiating receiver uses 1-34 or 1-1A4 TRF stage, 1-30 super-regenerative detector and the 2 watt audio system of the transmitter. Housed in 12 1/2" x 15" x 5" steel case with carrying handle. Batteries fit in lower compartment. Requires 3 portable type 45 volt "B" batteries, 2 dry cells and 1-4 1/2 volt "C" battery. Weights only 25 lbs. with all batteries. Weight less batteries, 12 1/2 lbs. Compact, easy to handle anywhere.

E10192. Less tubes and accessories. NET..... **\$26.50**

E10194. TELESCOPING FLEX-STEEL ANTENNA. For use with the "Compact." Adjustable from 3 1/2 to 9 ft. NET..... **\$2.60**

GORDON DX WORLD CLOCK



A modernistically designed electric clock especially developed for the Amateur and Short-Wave DX fan. Has multiple colored dials which tell the time accurately in GMT and Standard time in any part of the world. Dial face is plainly marked for day and night hour markings. Self-starting genuine Waltham movement for operation from standard 110 V. 60 cycle line.

E10133. NET..... **\$8.82**

1939 HOWARD COMMUNICATIONS RECEIVERS



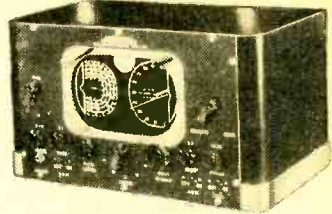
12 TUBE "HAM" MODEL 450A

Complete continuous tuning range covers all frequencies from 540 KC to 65,000 KC in six continuous bands. Features: Illuminated full-vision dual dial; TRF stage on all but 5 meter band; Air-trimmed IF and RF circuits; Iron-Core IF's; Dual IF frequency, 456 and 1560 KC; Calibrated R meter; Full electrical band-spread with separate dial scale; RF and AF gain controls; Stabilized built-in power supply; Rubber-floated tuning system; Antenna input for single wire or doublet with separate input for 5 meter antenna, etc. Attractively finished in telephone black with suede wrinkle panel and satin silver dial escutcheon. All controls grouped for easy operation. Fly-wheel momentum type tuning dial has separate scales for each band, separate scale for bandspread. Supplied with tubes. Size, 21 1/2" x 11" x 10 1/2". Shpg. wt., 50 lbs. For 110 volt 50-60 cycles.

E10667. Less speaker and crystal. NET..... **\$87.50**

E10668. Less speaker, but equipped with crystal for single-signal operation. NET..... **\$97.50**

E10669. 8" PM speaker in metal cabinet. NET..... **\$7.95**



NEW 9 TUBE MODEL 440

Has continuous tuning from 540 K.C. to 40,000 K.C. in 5 bands. An ideal medium-priced All-Wave Communications type receiver for the Amateur or S.W. DX fan. Ruggedly built with features usually found only in high-priced receivers: Illuminated dual-dial; main tuning dial calibrated in M.C., finely calibrated band-spread or logging scale. Also has: Calibrated R meter, R.F. stage on all bands, Iron-Core I.F.'s, Air-tuned R.F. circuits, Coaxially mounted R.F. coils with unused coils shorted out, Beat Oscillator with pitch control, Crystal filter with phasing control, Stabilized built-in power supply, A.V.C. on-off switch, R.F. and Audio gain controls, Send-Receive switch, etc. Tuning dials are fly-wheel momentum type. All controls grouped for easy, wireless operation. Cabinet finished in telephone black, with trimmings in satin silver. Supplied with tubes. For 110 volt 50-60 cycles.

E10664. Less speaker and crystal. NET..... **\$66.50**

E10665. Complete with Crystal, less Speaker. NET..... **\$76.50**

E10669. 8" PM speaker in metal cabinet. NET..... **\$7.95**

NEW LOW-COST 6 TUBE MODEL 430

Designed to provide maximum performance for the beginning Amateur or Short-Wave-Listener with a limited budget. Has continuous tuning from 540 to 40,000 K.C. in 4 bands. Full vision horizontal dial has calibrated scales; separate band-spread scale and band-in-use indicator. Features: Iron-Core I.F.'s, Beat Oscillator with pitch control, Electrical band-spread, built-in dynamic speaker and power supply, A.V.C. on-off switch, Audio gain control, Send-Receive switch, etc. Small compact cabinet finished in telephone black, trimmed in satin silver. For 110 volts 50-60 cycles.

E10666. Complete with tubes. NET..... **\$29.95**



MEISSNER SIGNAL SHIFTER

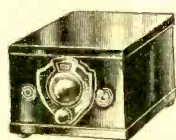
Every operator of an Amateur transmitter can now have quick, accurate control of frequency. Will allow quick QSY over the entire band in 10, 20, 40, 80 and 160 meter bands. Output is sufficient to drive 1K20's, 802's, 809's, etc. Tuning dial has precision vernier scale. Can be link-coupled to transmitter for remote control. Equipped with "ON", "Stand-by" and "Automatic" position switch. Circuit is exceptionally stable, using 1-6F6, 1-6L6 and 1-80. With 80 meter coils, 1-615 and less tubes. For 110 V. 60 Cycles.

E9899. NET..... **\$39.15**

ADDITIONAL COILS
E5600. 160 meter coils. E5603. 20 meter coils.
E5601. 80 meter coils. E5604. 10 meter coils.
E5602. 40 meter coils.

NET, PER SET..... **\$2.45**

LISTENING MONITOR
For Amateur station monitoring, checking quality of emitted signal or phone carrier, or for frequency drift check. (Not a receiver.) Furnished complete with coils for 20, 40 and 80 meter amateur bands. In rugged steel case, 5x7x10". Requires 1-99 tube, 1-3 V. "C" battery and 1-2 1/2 V. "B" battery (not supplied).
E9193. YOUR PRICE..... **\$3.95**

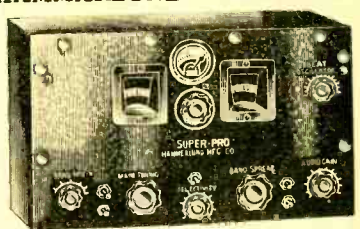


E10141. MODEL SP-110. 15 to 560 meters. With tubes, power supply, and 8" speaker. 110 V., 50-60 cycles. **\$238.14**

E10142. MODEL SP-110S. 7 1/2 to 240 meters. With tubes, power supply, and 8" speaker. 110 V., 50-60 cycles. **\$238.14**

EITHER MODEL. NET..... \$238.14

HAMMARLUND "SUPER-PRO"



The world's finest all-purpose communications receiver. Built around a 16 tube superhet circuit that includes every major development in high efficiency receiver design. Simple enough for even the novice to tune. For all Commercial, Marine, Aircraft, Municipal, or Amateur communications work. Main tuning dial with 12 to 1 ratio calibrated in KC and MC. Variable band width of 3 to 16 KC for high fidelity reception; with calibrated control. Uses eight Hammarlund catalog for complete data. Available on Time Payments; details on request.

E10141. MODEL SP-110. 15 to 560 meters. With tubes, power supply, and 8" speaker. 110 V., 50-60 cycles. **\$238.14**

E10142. MODEL SP-110S. 7 1/2 to 240 meters. With tubes, power supply, and 8" speaker. 110 V., 50-60 cycles. **\$238.14**

EITHER MODEL. NET..... \$238.14

E10143. MODEL SP-110X. Same as Model SP-110, but has built-in crystal filter for extreme selectivity. For 110 V., 50-60 cycles.

E10144. MODEL SP-110SX. Like SP-110S, but has built-in variable selectivity crystal filter. For 110 V., 50-60 cycles. **\$255.78**

EITHER MODEL. NET..... \$255.78

Transmitting Equipment



TYPE T20

A general-purpose triode especially suited to all low-power transmitter circuits. Will furnish efficient performance as R.F. amplifier at all frequencies up to 56 MC. Filament, 7.5 volts at 1.75 A.; Plate, 750 volts max. for Class C service; Max. D.C. plate current, 75 M.A. R.F. output, 42 W. **\$2.25**
E1100. NET.....

TYPE TZ20

A high-mu triode for Zero Bias Class B Audio operation, and for efficient frequency multiplying. Same general characteristics as TZ20 but with ampl. factor of 62. Class B output, 70 W. per pair. **\$2.25**
E1101. NET.....

TYPE T125

A husky triode with carbon anode and patented tantalum fin for higher efficiency. Plate diss., 125 W.; max. plate input, 400 W. Fil., 10 V. at 3.85 A. Plate, 2000 V. D.C. at 200 M.A. R.F. output, Class C 300 W. Ampl. factor, 25. Plate to grid, 4.5 mmf. **\$13.50**
E1103. NET.....

TYPE T200

"The Amateur's Power House Tube." Max. input to one tube, 700 W. modulated or 875 W. for CW, 200 W. plate diss. Fil., 10-11V. at 4 A. Plate, 2500 V. at 350 M.A. max. Ampl. factor, 16.6; driving power required, 20 to 35 W. **\$21.50**
E1105. NET.....

TYPE 822

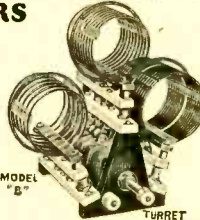
Recommended for Class B audio use, or for R.F. service up to 30 MC. Plate diss., 200 W.; plate, 2500 V. at 300 M.A. max. Fil., 10 V. at 4 A. R.F. output, 400 W. Class B; audio output, 500 W. per pair. Ampl. factor, 27. Driving power required, 20 to 30 W. **\$18.50**
E1119. NET.....

BARKER-WILLIAMSON AIR INDUCTORS



TYPE HDL

Accurately designed and carefully assembled to provide maximum plate or grid current efficiency. Eliminate bulky homemade coils with high R.F. power loss. Get increased performance with these R.W. coils. All Standard coils center-tapped. Power ratings are: B, BL and BVL series, 100 W.; BXL and TVL series, 250 W.; T and TL series, 500 W.; HD, HDL and HDVL series, 1 KW. In ordering HDL series coils, specify whether end or center link is desired. Equipped with plug-in with banana plugs. Capacity to resonate at low frequency end of band.



MODEL "B"

Cat. No.	Type	Cap.	Wire Size	Dia.	NET
"B" SERIES—STANDARD COIL					
E12800	160B	110	18	2 1/2"	\$1.75
E12801	80B	52	16	2 1/2"	1.50
E12802	40B	43	14	2 1/2"	1.35
E12803	20B	40	14	2"	1.05
E12804	10B	28	12	2"	1.00
"BL" SERIES—LINKED TYPE CDIL					
E12805	160BL	110	18	2 1/2"	\$2.50
E12806	80BL	52	16	2 1/2"	2.30
E12807	40BL	43	14	2"	2.05
E12808	20BL	40	14	2"	1.80
E12809	10BL	28	12	2"	1.75
"BXL" SERIES—LINKED TYPE CDIL					
E12810	160BXL	100	14	4"	\$2.80
E12811	80BXL	54	14	3"	2.35
E12812	40BXL	51	14	2 1/2"	2.30
E12813	20BXL	45	14	2"	2.10
E12814	10BXL	35	12	2"	2.05
"T" SERIES—STANDARD COIL					
E12815	160T	115	12	5"	\$1.85
E12816	80T	60	12	3 1/2"	1.65
E12817	40T	38	12	2 1/2"	1.45
E12818	20T	30	12	2 1/2"	1.25
E12819	10T	25	12	2"	1.10
"TL" SERIES—LINKED TYPE CDIL					
E12820	160TL	115	12	5"	\$2.85
E12821	80TL	60	12	3 1/2"	2.60
E12822	40TL	38	12	2 1/2"	2.45
E12823	20TL	30	12	2 1/2"	2.15
E12824	10TL	25	12	2"	2.10
"HD" SERIES—STANDARD COIL					
E12825	160HD	90	10	5"	\$4.25
E12826	80HD	50	10	3 1/2"	3.50
E12827	40HD	35	8	3 1/2"	3.00
E12828	20HD	29	8	3"	2.75
E12829	10HD	23	4	2"	2.25

Taylor

TRANSMITTING TUBES

The favorite of Amateurs everywhere, these tubes have many exclusive features. Floating carbon anodes on all tubes over 50 Watts rated plate dissipation. All carbon anode tubes can be run at red heat without danger to filament. Buy "TAYLOR" for "MORE WATTS PER DOLLAR." Amateurs everywhere swear by them.

TYPE 866 Jr.

A half-wave mercury vapor rectifier for all medium and low-voltage requirements. Fil., 2.5 V. at 2.5 A. Max. RMS A.C. volts, 1250. Max. D.C. current per pair with choke input, 250 M.A. Standard 4 prong ceramic base. Filament is multi-strand type. **\$1.00**
E1108. NET.....



TYPE 866

The world's most famous half-wave mercury vapor rectifier tube. Made with the exclusive Taylor multi-strand filament with double the emitting surface of ribbon types. Fil., 2.5 V. at 5 A. Inverse peak volts, 7500; peak current, 6 A. Standard 4 prong base. **\$1.50**
E1109. NET.....

Type	No.	Plate Diss.	Class of Service	NET
203A	E11116	100 W.	B-C	\$12.50
805	E11147	125 W.	B-C	13.50
814	E11106	200 W.	B-C	108.50
814 SW	E11115	50 W.	C	108.00
845	E11118	75 W.	A	14.50
HD203A	E11118	150 W.	A-B	14.50

WRITE FOR COMPLETE TAYLOR TUBE MANUAL GIVING FULL TUBE DETAILS. SENT FREE ON REQUEST.

TYPE T55

A medium-power triode capable of high efficiency at all frequencies up to 120 M.C. Plate diss., 55 W. Max. R.F. output per tube, 168 W. Plate, 1500 V. at 150 M.A. max. Fil., 7.5 V. at 2.75 A. Ampl. factor, 20. Requires a minimum of driving power for maximum output. Floating carbon anode. **\$7.00**
E1102. NET.....



TYPE T40

"The Wonder Tube." Plate diss., 40 W. Max. R.F. output, 86 W., ample to drive a 1 KW amplifier. Fil., 7.5 V. at 2.5 A. Plate, 1000 V. at 115 M.A. max. Ampl. factor, 25. Needs only 10 W. grid drive. **\$3.50**
E1148. NET.....

TYPE TZ40

A zero bias triode. General characteristics same as T40, but ampl. factor of 92. For use as Frequency Multiplier or Class B modulators. Class B audio output, 175 W. per pair with only 3 W. grid drive. **\$3.50**
E1149. NET.....

TYPE 805

A high-mu zero bias triode providing up to 450 watts of audio per pair as Class B modulators. Plate diss., 125 W. Plate, 2000 V. at 200 M.A. Class C; 1750 V. at 300 M.A. Class B max. Fil., 10 V. at 3.25 A. **\$13.50**
E1147. NET.....

TYPE 203Z

An improved zero bias version of the always-popular 203A, intended for Class B audio service. Will deliver 300 W. of audio with only 8 W. grid drive. Fil., 10 V. at 3.25 A. Plate, 1250 V. at 350 M.A. Metal Plate, 65 W. diss. Suitable for R.F. use up to 15 M.C. **\$8.00**
E1113. NET.....



OHMITE R.F. PLATE CHOKES

High efficiency R.F. chokes for all transmitter circuits. Single layer windings on ceramic core with insulated coating. Rated at 1000MA.

E8250. TYPE 21. For the 5 meter band. Inductance, 5.4 microhenries. D.C. resistance, 85 ohms. 1 1/2" long. Pigtail leads. **15c**

E8251. TYPE 22. For 10 and 20 meters. 35 microhenries. Resistance, 2 ohms. Length, 3"; diam. 1 1/8". With mtg. brackets. **44c**

E8252. TYPE 23. For 20 and 40 meters. 95 microhenries. Resistance, 5 ohms. Length, 6"; diam. 1 1/8". With mtg. brackets. **65c**

E8253. TYPE 24. For 20, 40, 80, 160 meters. 220 microhenries. Resistance, 9 ohms. Size, 6 1/2 x 7". With mounting brackets. **88c**

KNIGHT R.F. CHOKES

MIDGET TYPE

Very popular with the Amateur and Experimenter. Inductance, 2 1/2 M.H.; D.C. resistance 60 ohms. Capacity, 125 M.A. Universal type winding in five sections on ceramic core. **14c**
E2163. EACH..... **\$1.25**



HEAVY-DUTY TYPES

E2164. 2 1/2 MH at 1000 M.A. Three section universal-wound. Res., 5 ohms. With mounting brackets. **88c**

E2165. 5 MH at 500 M.A. Five universal-wound sections on ceramic core. Res., 12 ohms. NET. **73c**

E2166. 2.8 MH at 1000 M.A. Five tapered-rod universal-wound sections. Ceramic core. Res., 5 ohms. NET. **88c**

E2167. 5.3 MH at 500 M.A. Same as E2165 but resistance is 12.5 ohms. **88c**

B-W COIL ACCESSORIES

Plug-in jack bars with jacks, and base assemblies. TV, HDV, and BVL assemblies include swinging link.

E12850	Inductance clip	\$0.10
E12851	Jack bar for HD, HDL, HDVL	1.75
E12852	Jack bar for T, TL, TVL	1.25
E12853	Jack bar for BXL coils	1.15
E12854	Jack bar for B, BL, BVL	.85
E12855	HDV base assembly	5.00
E12856	TV base assembly	4.00
E12857	BVL base assembly	2.50
E12859	Model B turret mounting	7.50
E12858	Pi-network coil	1.85

Transmitting Equipment



TYPE RK49

A beam-power triode similar to the 6L6, but having a six prong isolantite base. An ideal crystal oscillator, frequency multiplier, or neutralized R.F. amplifier. May be either plate or screen modulated. Fil. 6.3 V. at .9 A. Plate, 400 V. at 95 M.A. max. Power output, 25 W. max. Carbon-nickel plate rated at 21 W. dissipation. **\$2.10**
E676. NET.....

TYPE RK25

A low-power pentode with isolantite base. Fil. 6.3 V. at .9 A. Plate, 500 V. at 50 M.A. max. Carbon-nickel plate, 10 W. dissipation. Power output, 18 W. **\$4.50**
E658. NET.....

TYPE RK48

A high-power aligned-grid tetrode with 100 W. plate dissipation and 250 W. power output. Fil. 10 V. at 5 A. Plate, 2000 V. at 180 M.A. Driving power required, 1.0 to 1.6 W. **\$27.50**
E682. NET.....

TYPE RK39

A low-power aligned-grid beam-power triode with max. R.F. power output of 36 W. Fil. 6.3 V. at .9 A. Plate, 600 V. at 93 M.A. R.F. driving power required, 0.5 W. Isolantite base. **\$3.50**
E672. NET.....

TYPE RK43

A dual-triode for use as oscillator or amplifier in portable equipment with dry-cell filament supply. Fil. 1.5 V. at 0.12 A. Plate, 135 V. at 14 M.A. **\$1.50**
E671. NET.....

TRIODES

Type	No.	Plate Diss.	Class of Service	NET
RK41	E669	25 W	C	\$ 3.50
RK47	E681	50 W	C	\$ 7.50

OHMITE VOLTAGE DIVIDERS

Ideal for transmitter power supplies. Conservatively rated. Have sliding contacts. 100 watt size is 6 1/2" long; 200 watt, 10 1/2" long. Hollow ceramic core permits adequate air circulation to prevent overheating; covered with baked enamel coating.

50 WATTS				
No.	Ohms	M.A.	NET Each	
E683	250	447	79c	
E683	500	316		
E683	750	258		
E683	1000	224		
E683	1500	183		
E683	2000	158		
E683	2500	142		
E683	5000	100		
E683	10000	70		
E683	15000	57		
E683	20000	48	88c	
E683	25000	43		
E683	30000	41		
E683	40000	35		
E683	50000	28		
E683	75000	16		
E683	100000	12		
E683	EXTRA SLIDER			1.18
E683				1.18
E683				1.18

100 WATTS				
No.	Ohms	M.A.	NET Each	
E683	1000	316	\$1.18	
E683	5000	141		
E683	7500	100		
E683	15000	81		
E683	20000	70		
E683	25000	56		
E683	30000	51		
E683	40000	38		
E683	50000	28		
E683	75000	16		
E683	100000	14	1.62	
E683	EXTRA SLIDER			1.62
E683				1.62
E683				1.62
E683				1.62
E683				1.62
E683				1.62
E683				1.62
E683				1.62
E683				1.62

200 WATTS				
No.	Ohms	M.A.	NET Each	
E683	1000	447	\$1.76	
E683	5000	200		
E683	10000	141		
E683	15000	115		
E683	20000	101		
E683	25000	89		
E683	30000	81		
E683	40000	63		
E683	50000	49		
E683	75000	30		
E683	100000	20	2.06	
E683	EXTRA SLIDER			2.06
E683				2.06
E683				2.06
E683				2.06
E683				2.06
E683				2.06
E683				2.06
E683				2.06
E683				2.06

RAYTHEON TRANSMITTING TUBES

TYPE RK20A
A medium-power pentode with tungsten filament and isolantite base. Plate dissipation, 40 W. Power output, 84 W. with 1.6 W. driving power. Fil. 7.5 V. at 3.25 A. Plate, 1250 V. at 92 M.A. **\$15.00**
E655. NET.....

TRIODES

Type	No.	Plate Diss.	Service	NET
RK10	E650	12W	B-C	\$ 3.50
RK12	E646	25W	B-C	2.50
RK18	E653	40W	B-C	10.00
RK24	E657	1.5W	C	2.00
RK30	E661	35W	B-C	10.00
RK31	E662	40W	B	10.00
RK32	E663	50W	C	12.00
RK34	E664	DualTriode	B-C	3.50
RK35	E665	35W	C	8.00
RK36	E666	100W	C	14.50
RK37	E667	35W	B-C	7.75
RK38	E668	100W	B-C	13.50
RK42	E670	Triode	B	1.10
RK51	E647	60W	C	8.00
RK52	E648	62.5W	B-C	8.00
RK100	E677	10W	C	7.00
841	E678	12W	C	4.00
842	E679	12W	A	3.25
864	E680	Preamp.	A	1.00

CLASS OF SERVICE: CLASS A: Audio Amp.; CLASS B: Class "B" Mod. or Class "B" RF Amp.; CLASS C: RF Osc. Buffer, Doubler, or Amplifier.

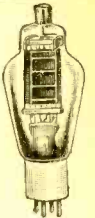
HANDBOOK OF AMATEUR TUBE USES

71 pages of detailed circuit data, operating curves, tube characteristics, and operating conditions on Raytheon Amateur tubes. **50c**
E7098. NET.....



TYPE RK11

A medium-power triode with power output of 55 W. requiring only 3.2 W. grid driving power. For use as oscillator, frequency multiplier, or R.F. amplifier. Fil. 6.3 V. at 3.0 A. Plate, 750 V. at 105 M.A. max. Plate dissipation, 25 W. Has a thoriated tungsten filament and isolantite base. Plate connection at top cap. **\$2.50**
E645. NET.....



TYPE RK34

A twin-triode for use as audio amplifier. Class C-oscillator, frequency multiplier, or R.F. amplifier. Fil. 6.3 V. at 0.8 A. Plate, 300 V. at 80 M.A. max. Isolantite base. **\$3.50**
E664. NET.....

TYPE RK47

An aligned-grid beam-power pentode with R.F. output of 120 W. with only 1.5 W. grid driving power. Fil. 10 V. at 3.25 A. Plate, 1250 V. at 138 M.A. **\$17.50**
E681. NET.....

TYPE 866

Half-wave mercury vapor rectifier. Fil. 2.5 V. at 5 A. Peak inverse voltage, 7500; peak plate current, 1 A.; max. D.C. plate, 5 A. **\$1.50**
E649. NET.....

TYPE 866A

Half-wave mercury vapor rectifier with peak inverse voltage rating of 10,000 V. D.C. output current, 5 A. Fil. 2.5 V. at 5 A. **\$4.00**
E686. NET.....

PENTODES

Type	No.	Plate Diss.	Service	NET
RK23	E656	10W	C	\$ 4.50
RK25B	E659	10W	C	3.50
RK28	E660	100W	C	34.50
RK44	E673	15W	C	8.50
RK45	E674	10W	B	8.50
RK46	E675	40W	B	21.75
1851	E644	Television		2.10

COTO LO-LOSS INDUCTORS



Designed for maximum efficiency in either high or low power transmitters. Less bulky than copper tubing coils and require smaller space for mounting. Rigid construction with low dielectric losses. Wire protected from oxidation by coat of colorless baked enamel. Equipped with plug-in base with banana plugs. "T" and "TL" series handle up to 1 KW input; "B" and "BT" coils handle up to 300 watts input; "I" are antenna coils for inductive coupling or pi-section network.



"T" SERIES

No.	Type	Wire Size	No. Turns	Diam.	NET
E2228	160T	12	42 5"		\$2.29
E2229	80T	10	30 4"		1.94
E2230	40T	10	20 3"		1.71
E2231	20T	10	10 3"		1.35
E2232	10T	10	6 2 1/2"		1.29

"TL" SERIES (WITH FIXED LINK)

No.	Type	Wire Size	No. Turns	Diam.	NET
E2210	160TL	12	42 5"		\$3.23
E2211	80TL	10	30 4"		2.88
E2212	40TL	10	20 3"		2.65
E2213	20TL	10	10 3"		2.29
E2214	10TL	10	6 2 1/2"		2.23

"BT" SERIES

No.	Type	Wire Size	No. Turns	Diam.	NET
E2234	160BT	14	36 4"		\$1.76
E2235	80BT	14	34 2 3/4"		1.68
E2236	40BT	14	22 2 3/4"		1.41
E2237	20BT	14	10 2 3/4"		1.21
E2238	10BT	14	6 2 3/4"		1.15

"B" SERIES

No.	Type	Wire Size	No. Turns	Diam.	NET
E2240	160B	14	46 4"		\$1.62
E2241	80B	14	34 2 3/4"		1.56
E2242	40B	14	22 2 3/4"		1.26
E2243	20B	14	10 2 3/4"		1.06
E2244	10B	14	6 2 3/4"		1.00

"BTL" SERIES (WITH FIXED LINK)

No.	Type	Wire Size	No. Turns	Diam.	NET
E2245	160BTL	14	36 4"		\$2.70
E2246	80BTL	14	34 2 3/4"		2.62
E2247	40BTL	14	22 2 3/4"		2.35
E2248	20BTL	14	10 2 3/4"		2.15
E2249	10BTL	14	6 2 3/4"		2.09

"A" SERIES

No.	Type	Wire Size	No. Turns	Diam.	NET
E2190	160A	12	16 5"		\$1.35
E2191	80A	10	12 4"		1.21
E2192	40A	10	8 3"		.97
E2193	20A	10	5 3"		.85

"TVL" SERIES (With Variable Link)

No.	Type	Wire Size	No. Turns	Diam.	NET
E2216	160TVL	12	42 5"		\$3.82
E2217	80TVL	10	30 4"		3.47
E2218	40TVL	10	20 3"		3.23
E2219	20TVL	10	10 3"		2.88
E2220	10TVL	10	6 2 3/4"		2.82

"BTVL" SERIES (With Variable Link)

No.	Type	Wire Size	No. Turns	Diam.	NET
E2222	160BTVL	14	36 4"		\$3.29
E2223	80BTVL	14	34 2 3/4"		3.20
E2224	40BTVL	14	22 2 3/4"		2.94
E2225	20BTVL	14	10 2 3/4"		2.68
E2226	10BTVL	14	6 2 3/4"		2.68

SEATITE MOUNTING BASES

Convenient Jack assembly for Coto Inductors. Bar and insulators of Seatite. 2, 3 and 5 jack combinations. Nickel-plated brass hardware.

No.	Type	For Coils No.	Jack	NET
E2150	CI-8TM	T	3	\$1.12
E2151	CI-8TLM	TL TVL	5	1.58
E2152	CI-6BM	B	2	1.06
E2153	CI-6BTM	BT	2	1.22
E2154	CI-6BTLM	BTL, BTVL	5	1.18
E2155	CI-4AM	A	2	1.00

COTO R.F. CHOKES



MIDGET TYPE

CI-11. Inductance, 2.5 mh.; 125 amp.; D.C. resistance, 40 ohms; tapered; nickel-plated end caps with pigtails 1 1/2 3/4". **35c**

E2158. NET.....
CI-12. All features of CI-11. Will pass 250 MA without heating; 2.2 mh.; 18.5 ohms D.C. resistance. Size, 1 1/2" x 3/4". **44c**

E2159. NET.....

HEAVY-DUTY TYPE

CI-20. For high power stage. For use on 160, 80 and 40 meter bands. 1/2" core, 3" long. Carries .6 amp.; 3.6 mh.; D.C. resistance, 11 ohms. Size 3" x 1 3/8". **73c**

E2160. NET.....
CI-21. Maximum impedance on 80, 40 and 20 meter bands. Honeycomb wound; Seatite core. Rated at .6 amps.; 1.1 mh.; D.C. resistance, 6 ohms. Size, 3" x 1 1/4". **73c**

E2161. NET.....

Transmitting Equipment



RCA DeFOREST TRANSMITTING TUBES

TYPE 807

An exceptionally efficient beam-power transmitting tube especially designed for use in oscillator, frequency multiplier, buffer, or I.F. amplifier stages. Requires only 0.22 watts grid driving power for maximum output. Fil., 6.3 V. at 0.9 A. Plate, 600 V. at 100 M.A. Plate dissipation, 25 W. **\$3.50**
E312. NET.....

TYPE 809

Low-power triode having power output of 55 W. with grid drive of 2.5 V. Fil., 6.3 V. at 2.5 A. Plate, 750 V. at 100 M.A. max. Plate dissipation, 25 W. Will deliver 100 W. audio per pair Class B. **\$2.50**
E362. NET.....

TYPE 802

A low-power pentode for use as oscillator or frequency multiplier. Fil., 6.3 V. at 0.9 A. Plate, 500 V. at 55 M.A. Power output, 8 W. with grid driving power of 0.1 W. Plate dissipation, 10 W. **\$3.50**
E307. NET.....

TYPE 830B

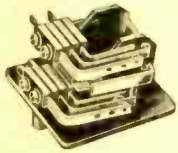
For use as R.F. amplifier or Class B modulator. Fil., 10 V. at 2 A. Plate, 1000 V. at 140 M.A. R.F. power output, 90 W. Class B audio, 175 W. per pair. Plate diss., 60 W. **\$10.00**
E314. NET.....

TYPE 954

Acorn-type pentode for use in U. H. F. receivers or transmitters. Fil., 6.3 V. at 0.15 A. Plate, 250 V. Especially designed for use in receivers at frequencies above 56 M.C. **\$5.00**
E354. NET.....

TYPE 955

The original "Acorn" triode designed for use as a detector in U. H. F. receivers for frequencies above 56 M.C. Fil., 6.3 V. at 0.15 A. Plate, 250 V. max. **\$3.00**
E355. NET.....



GUARDIAN RELAYS

MODEL B-100

For use in break-in circuits, D.P.D.T. type. Will provide rapid switching from receiving to transmitting with minimum number of control switches. For fast break-in operation for CW or for push-to-talk circuits for phone transmitters. Exceptionally heavy magnets and return springs for clean high-speed break. Heavy silver contacts. For 110 volt AC. **\$4.41**
E7570. NET.....

MODEL K100. For all types of keying circuits. S.P.D.T. type. Pure silver contacts break clean; positive return springs allow high speed keying without spattering. Coil operates from any 5 to 16 V. D.C. filament winding or from 1½ to 4 V. A.C. source. **\$3.23**
E7571. NET.....

MODEL R100. For R.F. circuits up to 1 KW. and 14 MC. Used for coil-switching or shorting, cutting condensers in circuits, etc. Completely insulated. S.P.S.T. type. Operates from 110 V. 60 Cycles. **\$1.47**
E7572. NET.....

MODEL R-100-C. Same as R-100 above, but S.P.D.T. type. May be used in multiple R.F. circuits for many purposes. **\$1.76**
E7573. NET.....

MODEL L-250. Overload relay for use in plate voltage circuits. Opens primary circuit if 250 M.A. capacity is exceeded. Has push-button reset. **\$4.41**
E7574. NET.....

MODEL L-500. Same as L-250 but maximum current is 500 M.A. before primary circuit is opened. Push-button reset. **\$4.41**
E7575. NET.....

MODEL L-750. High power type overload relay. Opens primary circuit when maximum drain of 750 M.A. is reached. **\$4.41**
E7576. NET.....

MODEL X-100. Adjustable type overload relay. Can be set to open primary circuit at any current load from 150 M.A. up to 3.5 Amperes. Panel type push-button reset. **\$5.88**
E7577. NET.....

TRIODES AND PENTODES

Type	Cat. No.	Plate Dis.	Service	NET
203A	E300	100W	B-C	\$15.00
211A	E302	100W	A-B-C	15.00
800	E305	35W	B-C	10.00
801	E306	20W	A-B-C	3.45
803	E308	125W	C	34.50
804	E309	40W	C	15.00
805	E310	125W	B-C	22.00
806	E311	150W	B-C	22.00
807	E312	21W	C	3.50
808	E313	50W	B-C	7.75
838	E318	100W	B-C	16.00
840	E319	1W	A	6.00
841	E320	1AW	A-B-C	3.25
850	E326	100W	A-B-C	37.50
852	E327	100W	C	16.40
864	E329	Preampplier	C	1.00
865	E330	15W	C	12.75
868	E333	Phototube		3.70
917	E350	Phototube		4.75
921	E365	Phototube		2.00
922	E366	Phototube		2.00
923	E367	Phototube		2.60
956	E356	Acorn Pentode	C	5.00
1008	E359	20W	C	4.00

RECTIFIERS

Type	Catalog Number	Peak Inv. Volts	Max. Amps.	NET
866	E331	7500	0.5	\$ 1.50
866A	E332	10000	0.5	4.60
872	E334	7500	2.5	14.00
878	E336	20000	0.005	11.00
879	E337	7500	0.007	3.00
884	E368	Gas Triode		2.00
885	E338	Gas Triode		2.00

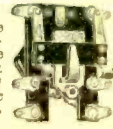
CATHODE RAY TUBES

TYPE	No.	Screen Size	NET
913	E349	1 Inch	\$ 4.00
902	E369	2 Inch	7.50
906	E342	3 Inch	13.50

CLASS OF SERVICE: CLASS A: Audio Amplifier. CLASS B: Class B Modulator or I.F. Amplifier. CLASS C: R.F. Oscillator or Amplifier.

DUNCO RELAYS

Small, efficient relays for use in all types of remote control circuits. Isolated contacts provide suitable breakdown gap for use at high voltages. Exceptionally fast action will follow semi-automatic keying without spitter or break. Low resistance silver contacts.



E7550. MODEL RA-1. 2.5 volt 60 cycle coil. May be used as plate circuit relay in emitter and buffer units, for keying, primary circuits, etc. **\$2.00**

E7551. MODEL RA-3. 6.3 volt 60 cycle coil. Also suitable for all purposes but especially adapted to units using 6.3 volt tubes. May be operated from tube filament supply.

E7552. MODEL RD-1. 5 to 6 volt D.C. coil. For use in all types of battery-powered mobile or portable equipment. **\$2.00**
NET EACH.....

WESTERN ELECTRIC TRANSMITTING TUBES

TYPE 316A
Especially designed for use in ultra high frequency oscillators and amplifiers. 7.5 W. peak output up to 500 MC. reduced output up to 750 MC. Plate, 150 V. at 80 M.A. max. Thoriated fil. 2 V. at 3.65 A. **\$10.50**
NET.....

Type	Stock No.	W.E.Type	NET
300A	E1141	Triode	\$10.10
304B	E1142	Triode	12.50
303A	E1143	Tyode	38.50
306A	E1144	Tetode	10.90
307A	E1145	Pentode	13.65
242C	E1140	Pentode	15.00

Write for complete data book on Western Electric Transmitting Tubes. Indicates individual characteristics of tubes listed above with complete ratings, operating data, special applications for U.H.F. use, etc. Sent FREE on request.

ALLIED can supply any type of transmitting tube made. Write us for complete information.

NEW RCA TRANSMITTING TUBE MANUAL

Completely up-to-date; super-series all previous manuals of this series. Contains complete data, operating conditions, characteristics, and pertinent information on RCA Air-Cooled transmitting tubes. A handy reference text which should be on every Amateur or Experimenter's bookshelf, 192 pages. **E389. NET..... 25c**



RCA X-MITTING TUBE BOOKLET

A 16 page booklet containing condensed tube tables and operating characteristics on RCA transmitting tubes. Will be sent FREE on request with order for RCA tubes. **E397. NET..... 5c**

CATHODE RAY TUBE DATA

A complete booklet on the operation of Cathode Ray tubes. Detailed data of real value. **E387. YOUR PRICE..... 25c**

TELEVISION APPARATUS



R.C.A. TELEVISION KINESCOPES

Just released! Two brand new cathode-ray tubes designed primarily for television use. Both are of the electro magnetic-deflection type. The screens produce a picture with a yellowish hue. Technical information upon request.

E370. RCA 1800. 9" Screen. **\$60.00**
NET.....

E371. RCA 1801. 5" Screen. **\$40.00**
NET.....

E372. RCA 1851. Television pentode metal tube for use in R.F. and I.F. stages in receivers. **\$2.10**

E373. RCA 1852. Television pentode metal tube. For R.F. and I.F. stages in receivers. **\$1.85**

E374. RCA 1853. Television pentode metal tube. For R.F. and I.F. stages of picture amplifiers. **\$1.85**

RCA TELEVISION PARTS

Now available—a complete line of necessary parts for the Experimental Television receiver. Designed to provide maximum efficiency and operation when used with the RCA 1850 and 1811 Kinescope tubes. A complete circular giving detailed descriptions and data on the following parts will be sent free on request. Ask for RCA Television Folder No. 2853.

No.	RCA Type	Description	NET
E7560	9831	Deflecting Yoke.....	\$10.00
E7561	9832	Power Transformer.....	12.50
E7562	9833	Vertical O.P. Reactor.....	3.00
E7563	9834	Vertical Osc. Transf.....	3.00
E7564	9835	Horizontal Osc. Transf.....	3.00
E7565	9836	Horizontal O.P. Transf.....	9.50
E7566	9837	Power Supply Capacitor.....	11.75
E7567	9838	Power Supply Reactor.....	4.75
E7568	9839	Power Transformer.....	10.00
E7569	9840	Power Supply Cap.....	5.50

THORDARSON TELEVISION TRANSFORMERS

T-16R50. For No. 1801 Kinescope tube and 879 rectifier. Pri. 115 V. 60 cycles. Sec. No. 1—2000 or 3000 V. D.C. at 3 M.A. See. No. 2—2½ V. at 1.75 amps. (Does not supply fil. voltage. See T-16P55 below.) **\$9.41**



T-16R51. For use with No. 1800 Kinescope and 878 rectifier. Ser. No. 1—6000, 4500 or 3000 V. D.C. 5 M.A. Sec. No. 2—2½ V. at 5 amperes. (Note: Does not supply fil. voltage.) **E11262. NET..... \$10.88**

T-16F55. Filament transformer for 1800 or 1801 Kinescopes. Pri. 115 V. 60 cycles. Sec. 2½ V. C.T. at 2.1 amperes. **E11263. NET..... \$6.47**

Transmitting Equipment

BLILEY MOUNTED CRYSTALS

TYPE B5

Cut from the finest raw Brazilian quartz; accented as standard by Amateurs throughout the entire world.

TYPE LD2

A new crystal with many features. Has high power output with frequency drift of less than 4 cycles per megacycle per degree C.; eliminates need for oven equipment. Calibration is within .03%. Specify frequency.

FREQUENCY WITHIN 5 KC.

No.	Band MC	NET EACH
E2516	3.5}	\$4.80
E2517	1.7}	
EXACT FREQUENCY		
No.	Band MC	NET EACH
E2519	3.5}	\$5.90
E2520	1.7}	

TYPE BC3

Type BC3. Accurately calibrated X-cut crystal mounted in a molded bakelite holder, having exposed heat-radiating electrode. Plugs into 6 prong tube socket. Calibration is within .03%. Specify frequency when ordering.

STOCK NO.	Frequency Within	Band MC	NET EACH
E2525	± 5 KC	7.0	\$3.35
E2526	± 5 KC	3.5	
E2527	EXACT	7.0	\$4.95
E2528	EXACT	3.5	

TYPE CF1 CRYSTAL FILTER

For crystal filter circuits in Single-Sideband receivers. Vertical mounting. Sealtite holder; pins fit 5 prong socket. Holder size, 1 1/2 x 1 1/2 x 1 1/2. Supplied for 456 KC filters.

E2529. NET **\$5.50**

BLILEY CRYSTAL HOLDERS

Molded bakelite holders for inch square crystals. Threaded screw top. Plugs into tube socket. Mounts in any position.

E2532. 20-40 meter
E2533. 80-160 meter. EACH..... **95c**

EIMAC TUBES

Designed for heavy-duty service and long life. Plates and grids of tantalum; envelopes of hard Nonex glass.

Type 35T. A general-purpose triode ideally suited for use as oscillator, buffer, or frequency multiplier. Fil., 5 V. at 4 A. Plate, 500 to 2000 V. Max. plate dissipation, 70 W. Max. Class C power output, 225 W.
E1130. NET..... **\$6.00**

Type 100T1. A medium-power high-mu triode for use at any frequency up to 40 MC. Fil., 5 V. at 6.5 A. Plate, 1000 V. to 3000V. Max. power Class C, 300 W.
E1131. NET..... **\$13.50**

Type 100TH. General-purpose triode. Same as 100T1, but requires less driving power and lower bias. For diathermy or h. f. use.
E1132. YOUR PRICE..... **\$13.50**

Type 250TL. Plate dissipation 250 watts. Excellent for high frequency work.
E1133. YOUR PRICE..... **\$24.50**

Type 250TH. Similar to 250TL, but requires less driving power and lower bias.
E1134. YOUR PRICE..... **\$24.50**

Type KY21. A mercury vapor rectifier with a control grid for keying purposes.
E1129. YOUR PRICE..... **\$10.00**

NEW EIMAC VACUUM TANK CONDENSERS

A new type of vacuum sealed tank condenser for any power from 50 W. to 1 KW. Provides optimum circuit efficiency at any frequency, with peak flash-over of 32,000 V. Compact in size; only 6 1/2" long, 2 1/2" diam. Use in any single-ended or push-pull amplifier for CW or 'Phone. End caps fit standard 60 A. fuse clips.
E1209. VG6, 6 Mmf. For high L/C ratio circuits on 7, 14, and 28 MC.
NET..... **\$7.50**

E1210.	VC12, 12 Mmf.	NET.	8.50
E1211.	VC25, 25 Mmf.	NET.	10.50
E1212.	VC50, 50 Mmf.	NET.	12.50

KNIGHT UNMOUNTED TRANSMITTER CRYSTALS

High quality, inexpensive, unmounted X-cut crystals. Accurately ground from the finest quartz available; individually calibrated by a leading manufacturer of fine quartz crystals. Calibration will be within .1% of operating frequency under normal conditions, dependent on type of mounting used. Each one of these fine units has only one frequency; no possibility of spurious frequencies. Specify frequency and closest stock unit will be shipped.

No.	Frequency Kilocycles	NET
E2510.	7000-7300	\$1.95
E2511.	3500-4000	\$1.50
E2512.	1715-2000	\$1.50

NEW KNIGHT CRYSTAL HOLDER

An inexpensive holder for all crystals up to 1 1/2" square and .25" thick. Body of low-loss ceramic material with precision-ground electrodes. Furnished with interchangeable threaded banana plugs and tube prongs. Top plate easily removable.

E2612. For 80 to 160 Meters. Will accommodate crystal blanks from 4000 to 1500 KC.
E2613. For 20 to 40 Meters. Ideal for High Frequency crystals. Has light pressure electrodes for maximum power. Each..... **95c**

E2614. Mounting bracket of bakelite with two banana plug jacks. Fits either holder above. NET..... **27c**

BLILEY CRYSTAL HANDBOOK

A complete handbook on frequency control with quartz crystals, which every Amateur should have. Twenty-eight pages explaining theory, use, application, and care of crystals.

E2624. NET..... **10c**

Bliley's new low-drift 20 and 40 meter crystals. Less than 4 cycles/MC/°C drift. Rugged holder is made of new molded low-loss material. These crystals replace type LD2 crystals in frequencies listed below.

No.	Frequencies	Within	EACH
E2615	7.0 to 7.3 MC	5 KC	\$4.80
E2616	7.0 to 7.3 MC	Exact	5.90
E2617	14 to 14.4 MC	15 KC	7.50
E2618	14 to 14.4 MC	5 KC	12.00
E2619	14.4 to 15 MC	30 KC	7.50
E2620	14.4 to 15 MC	5 KC	17.50

TYPE HF2

Available in two ranges: for 20 meter operation, and for multiplying into the 10 and 5 meter bands. "C" cut crystal has drift of only 20C/MC/°C (E2621 is 43C/MC/°C); mounted between stainless steel machine-lapped electrodes in a holder of molded Viotron G.

No.	Frequencies	Within	EACH
E2521	14.0 to 14.4 MC	15 KC	\$5.75
E2522	14.4 to 15.0 MC	30 KC	
E2523	14.0 to 14.4 MC	5 KC	10.00
E2524	14.4 to 15.0 MC	5 KC	15.00
E2621	28 to 30 MC	50 KC	5.75

VARIABLE FREQUENCY UNIT TYPE VF-1

Easily adjusted variable crystal. Can be shifted up to 6 KC at the fundamental 3.5 MC frequency. Drift less than 4 C./MC/°C. Plug-in socket mount.
E2530. Within 5 KC of specified 3.5 MC frequency. NET..... **\$7.50**

E2531. Exact specified 3.5 MC frequency. NET..... **\$10.00**

TYPE SMC-100 CRYSTAL UNIT

A new mounted unit which oscillates at either 100 or 1000 KC. Designed for use in test oscillators for all types of alignment or frequency checking.

E2534. NET..... **\$7.75**

We can supply all types of Police, General Communication and Broadcast frequency crystals. Write for prices.

HYTRON TUBES

A new and complete line of inexpensive, low-power transmitting tubes. Sturdy construction and precision workmanship. Have Isolatite base and plate leads to top cap. HY-40, HY51A, HY51B, and HY57 have grange anode.

Type HY-25. Plate dissipation, 25 W. Plate voltage, 750V. Filament, 7.5 V. at 2.25 A. General-purpose triode suitable for use as Oscillator, R. F. Amplifier, or Class B Modulator.
E1240. NET..... **\$1.45**

Type HY-40. Plate dissipation, 40 W. Plate voltage, 1000V. Filament, 7.5 V. at 2.25 A. High efficiency triode for use as Oscillator, Amplifier, or Class B Modulator.
E1241. NET..... **\$2.75**

Type HY-51A. Plate dissipation, 65 W. Plate voltage, 1000V. Filament, 7.5 V. at 3.5 A. Oscillator, R. F. Amplifier, or Class B Modulator.
E1242. NET..... **\$5.00**


Type HY-51B. Plate dissipation, 65 W. Plate voltage, 1000V. Filament, 10 V. at 2.25 A. Oscillator, R. F. Amplifier, or Class B Modulator.
E1243. NET..... **\$5.00**

Type HY-57. Plate dissipation, 40 W. Plate voltage, 800 V. Filament, 6.3 V. at 2.25 A. Oscillator, R. F. Amplifier, Doubler, or Class B Modulator.
E1244. NET..... **\$3.50**


Type HY-60. Beam-Tetrode. Plate dissipation, 15 W. Plate, 350 V. Filament, 6.3 V. at 6 A. Oscillator, R. F. Amplifier, Doubler, Class AB Amplifier.
E1245. NET..... **\$2.50**

Type HY-61. Beam-Tetrode. Plate dissipation, 25 W. Plate, 600 V. Filament, 6.3 V. at 9 A. Oscillator, R. F. Amplifier, Doubler, Class AB Amplifier.
E1246. NET..... **\$3.00**

Type 866 Jr. Half-Wave Mercury Rectifier. Max. volts, 1250 (RMS). Max. DC current per pair, 250 M. A. Fil., 2.5 V. at 3 A.
E1247. NET..... **\$1.05**



346



341

TRIPLET THERMO-COUPLE AMMETERS

Ideal for use in amateur transmitters, or wherever currents of radio frequency must be measured. Especially designed for high frequency operation and accurate to 2%. Have replaceable external thermo-couples; will stand 50% overload. Molded bakelite cases; hinge mounting type. Model 346 case is 3 1/2 x 2 1/4 x 1 1/2, mounts in 2 1/4" hole. Model 341 is 3 1/2" in diam., mounts in 2" hole. (Voltmeters and Milliammeters to match are listed on page 35).

MODEL 341	MODEL 346	Amps.	NET EACH
E8890	E8800	0-1	\$6.53
E8891	E8801	0-1.5	
E8892	E8802	0-2.5	
E8893	E8803	0-5	

TRIPLET MODULATION MONITOR

Provides a visual indication of carrier shift and accurately measures percentage of modulation. Glow green up to 100% modulation; then flashes red. Indicates percentage of modulation; draws no power from modulated stage.
E9959. YOUR PRICE..... **\$24.33**

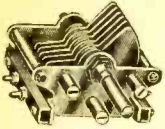
NEW "MODULITE" TUBE

Easily coupled to any Amateur phone transmitter; will flash instant warning of overmodulation. Glow green up to 100% modulation; then flashes red. Indicates percentage of modulation; draws no power from modulated stage.
E9984. NET..... **\$2.35**

Transmitting Equipment

CARDWELL TRANSMITTING CONDENSERS

MIDWAY SINGLES



Sturdily built, compact, variable condensers for receivers and low-power X'mitters. Aluminum plates and frames are carefully machined and finished. Mycalex insulation. Double bearings assure perfect alignment. Shaft, 3/4x1". Mounting space, 3x2 3/4".

Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13600	MR-25BS	25 .030"		\$1.62
E13601	MR-50BS	50 .030"		1.68
E13602	MR-70BS	70 .030"		1.77
E13603	MR-105BS	105 .030"		1.83
E13604	MR-150BS	150 .030"		1.89
E13605	MR-200BS	200 .030"		1.98
E13606	MR-305BS	305 .030"		2.28
E13607	MO-165BS	165 .050"		1.98
E13608	MT-20GS	20 .070"		1.95
E13609	MT-35GS	35 .070"		2.10
E13610	MT-50GS	50 .070"		2.34
E13611	MT-70GS	70 .070"		2.67
E13612	MT-100GS	100 .070"		2.94
E13613	MT-150GS	150 .070"		3.20
E13614	MG-35NS	35 .171"		6.60

AIRGAP VOLTAGES: 1000 V. for .030" gap; 1500 V. for .050" gap; 3000 V. for .070" gap; 5000 V. for .171" gap.

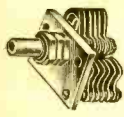
MIDWAY DUALS

Similar to above. For receivers and X'mitters.

Cat. No.	Type No.	Mmf. per Sec.	Air Gap	NET
E13615	MR-25BD	25 .030"		\$2.61
E13616	MR-50BD	50 .030"		2.69
E13617	MR-70BD	70 .030"		2.78
E13618	MR-105BD	105 .030"		2.83
E13619	MR-150BD	150 .030"		2.89
E13620	MR-200BD	200 .030"		3.06
E13621	MT-20GD	20 .070"		3.30
E13622	MT-35GD	35 .070"		3.60
E13623	MT-50GD	50 .070"		3.81
E13624	MT-70GD	70 .070"		4.10
E13625	MT-100GD	100 .070"		4.80
E13626	MO-180BD	180 .050"		4.80

*Rounded Plate Edges.

AIRGAP VOLTAGES: 1000 V. for .030" gap; 1500 V. for .050" gap; 3000 V. for .070" gap.



TRIM-AIR MIDGETS

For all uses where high-quality inductors are required. Rigid, Insulante-mounted assembly assures greatest stability and minimum losses. Universal mounting facilities. Can be used as midget tuning condenser or for low power neutralization. Can easily be ganged.

Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13630	ZR-10AS	10 .030"		\$0.75
E13631	ZR-15AS	15 .030"		.85
E13632	ZR-20AS	20 .030"		.94
E13633	ZR-35AS	35 .030"		1.06
E13634	ZR-50AS	50 .030"		1.22
E13635	ZU-75AS	75 .020"		1.02
E13636	ZU-100AS	100 .020"		1.05
E13637	ZU-140AS*	140 .020"		1.89
E13638	ZT-30AS	30 .070"		1.11
E13639	ZS-48S	4 .140"		1.1
E13640	ZT-15AS	15 .070"		1.93

*Double-bearing; two end plates.

E13742.	Mounting Bracket.	NET. .6c
E13743.	Mounting Posts, per pair.	NET. 8c
E13744.	Extra Extension Posts.	NET. 4c

DUAL TRIM-AIRS

Cat.No.	Type No.	Mmf. per Section	Air Gap	NET
E13641	EU-75AD	75 .020"		\$1.98
E13642	EU-100AD	100 .020"		2.04
E13643	EU-140AD	140 .020"		3.60
E13644	ER-10AD	10 .030"		1.56
E13645	ER-15AD	15 .030"		1.62
E13646	ER-25AD	25 .030"		1.62
E13647	ER-35AD	35 .030"		1.74
E13648	ER-50AD	50 .030"		1.86
E13649	ET-15AD	15 .070"		1.80
E13650	ET-30AD	30 .070"		2.16
E13651	ET-30ADI Insul. Coupl.	30 .070"		2.16
E13652	ES-4SD	4 .140"		1.26
E13653	ES-4SDI Insul. Coupl.	4 .140"		2.46

We can supply the complete line of Cardwell condensers for receiving or transmitting requirements. If the particular unit you require is not listed on this page, tell us the Cardwell type number or give us specifications, and we shall be glad to quote prices.

"T" LINE SINGLES



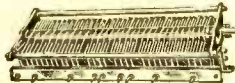
Accurately built, heavy-duty condensers for high-power transmitting purposes. Mycalex insulated. With polished extra heavy plates (rounded edges for minimum loss and maximum peak voltage). 3/4" shafts, and built-in mounting feet.

Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13655	TJ-150US	150 .168"		\$13.80
E13656	TJ-315US	315 .168"		19.20
E13657	TC-160US	160 .200"		14.40
E13658	TC-200US	200 .200"		16.80
E13659	TC-300US	300 .200"		19.20
E13660	TL-50US	50 .294"		9.90
E13661	TL-80US	80 .294"		13.20
E13662	TL-100US	100 .294"		13.20
E13663	TL-160US	160 .294"		18.00
E13664	TL-200US	200 .294"		19.80
E13665	TZ-40RS	40 .500"		16.80
E13666	TZ-80RS	80 .500"		23.70

"T" LINE DUALS

Cat. No.	Type No.	Mmf. per Sec.	Air Gap	NET
E13667	TJ-150UD	150 .168"		\$19.20
E13668	TJ-200UD	200 .168"		21.60
E13669	TC-100UD	100 .200"		18.60
E13670	TC-150UD	150 .200"		20.20
E13671	TC-200UD	200 .200"		23.80
E13672	TC-250UD	250 .200"		25.20
E13673	TL-50UD	50 .294"		15.00
E13674	TL-70UD	70 .294"		17.40
E13675	TL-100UD	100 .294"		20.70
E13676	TL-150UD	150 .294"		26.40
E13677	TK-150UD	100 .350"		28.40
E13678	TZ-40RD	40 .500"		25.80

AIRGAP VOLTAGES: 5500 V. for .168" gap; 6000 V. for .200" gap; 8000 V. for .294" gap; 9000 V. for .350" gap; 12,500 V. for .500" gap.



NEW XE-160-70-QX CONDENSER

Newly developed condenser for multi-band transmitters. Has 2 small and 2 large sections which may be connected in series or parallel to provide correct capacity ranges for all amateur bands. Airgap, 100 inches per section.

E13680. List, \$22.00. **\$13.20**

DISC TYPE NEUTRALIZING CONDENSERS

TYPE ADN. For low capacity tubes such as 89S, 834, 1K-30, T-55, etc. With 1/2" Ainsmag pillars. Cap. range: 5-4 Mmf. Size: 4 1/4x2 3/4".

E13681. List, \$3.00. **\$1.80**

YOUR NET PRICE. TYPE BDN. Cap. range: 2-12 Mmf. For such tubes as 806, 834, RK-38, T-200, etc. With 3/4" Ainsmag pillars. Similar to Type ADN but heavier construction. 4 3/4x4 5/8".

E13682. List, \$5.00. NET. **\$3.00**

FLEXIBLE COUPLINGS

TYPE A. Small but efficient coupling. Fits 3/4" shafts. No backlash. Insulante insulated. 1 1/2" diameter.

E13683. NET. **36c**

TYPE B. Similar to Type A except that hubs are reversed to give maximum flash-over. E13684. NET. **36c**

TYPE C. Heavy-duty unit, 15,000 V. Peak. Ainsmag insulated. 3/8" shafts; removable bushings in 1/2" shafts. 2 3/8" dia.

E13685. NET. **\$1.68**

TYPE D. Same as Type C except that hubs are turned in. E13686. NET. **\$1.68**

TYPE E. Similar to Type C but smaller. 1 1/2" diameter. E13687. NET. **90c**

TYPE ENF. Medium power inflexible coupling. 10,000 V. Peak. Insulante insulated. For 1/2" shafts. 1 1/2" diameter.

E13688. NET. **60c**

TYPE CNF. Heavy-duty inflexible coupling. 15,000 V. Peak. Ainsmag insulation. Size: 4 1/2x2 1/4". For any shaft up to 3/4".

E13689. NET. **\$1.92**

"X" LINE SINGLES



Incorporate every advanced feature in condenser design. Mycalex insulated. Accurately built. Rigid and vibration-proof. Units rated at 4000 V. and over have polished plates with rounded edges.

Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13700	XT-220PS	220 .070"		\$2.70
E13701	XT-440PS	440 .070"		1.62
E13702	XP-90KS	90 .084"		3.70
E13703	XP-165KS	165 .084"		5.30
E13704	XP-290KS	290 .084"		7.70
E13705	XP-330KS	330 .084"		8.10
E13706	XE-240KS	240 .100"		4.88
E13707	XG-35KS	35 .171"		6.60
E13708	XG-50KS	50 .171"		6.60
E13709	XG-110KS	110 .171"		6.60
E13710	XC-18XS	19 .200"		5.40
E13711	XC-40XS	40 .200"		4.50
E13712	XC-65XS	65 .200"		5.40
E13713	XC-100XS	100 .200"		6.60
E13714	XK-55KS	55 .230"		6.60

"X" LINE DUALS

Cat. No.	Type No.	Mmf. per Sec.	Air Gap	NET
E13715	XR-500PD	500 .030"		\$3.90
E13716	XT-80PS	80 .070"		5.40
E13717	XT-210PD	210 .070"		4.80
E13718	XP-90KD	95 .084"		4.80
E13719	XP-165KD	165 .084"		6.60
E13720	XP-325KD	325 .084"		13.20
E13721	XE-240KD	240 .100"		12.60
E13722	XG-50KS	50 .171"		16.80
E13723	XG-110KS	110 .171"		16.80
E13724	XC-40XD	40 .200"		10.20
E13725	XC-75XD	75 .200"		10.20
E13726	XD-160XD	160 .125"		11.40

AIRGAP VOLTAGES: 1000 V. for .030" gap; 3500 V. for .070" gap; 4000 V. for .084" gap; 4250 V. for .100" gap; 4750 V. for .125" gap; 5250 V. for .171" gap; 6000 V. for .200" gap; 6750 V. for .230" gap.

HIGH FREQUENCY NEUTRALIZING CONDENSERS

Especially designed for new low capacity tubes. Mycalex insulated. "N" types have bracket for panel mounting; "V" types have insulated mounting feet. Slotted shafts.



Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13728	NA-4NS	4 Adl.		\$2.16
E13729	NA-6NS	6 218"		2.16
E13730	NA-10NS	11 218"		2.70
E13731	NA-16NS	16 218"		3.00
E13732	NA-12ND*	12 218"		3.00
E13733	VZ-9RS	9 Adl.		8.40
E13734	VZ-12RC	12 .500"		9.15

*Ganged neutralizer with insulated coupling; data given is per section.

U. H. F. DUALS

Ultra high-frequency, low-loss, dual condensers for 5 and 10 meter X'mitters and diathermy machines. NP type ideal as capacitor for 808's or 35-T's; JP and JD types intended for diathermy HP-200's or as tank capacitors for 5 meter amplifiers.



Cat. No.	Type No.	Cap. Mmf.	Air Gap	NET
E13735	NP-35ND	35 .084"		\$3.60
E13736	JP-48ND	48 .084"		9.75
E13737	JD-28ND	28 .125"		9.75

CENTRALAB SWITCHES

Insulante Insulated. New transmitter switches with Insulante insulation for circuit stability and high efficiency. Complete with bar-knob. Ideal as crystal frequency selector, interstage inductance switch, antenna coupling switch, etc. All types have four positions, 90° apart, and adjustable stop. For X'mitters up to 100 watts at potentials up to 1000 V. D.C.



No.	Ganes	Poles	Positions	NET
E1990	1	1	4	\$1.00
E1991	2	2	4	1.53
E1992	3	3	4	2.23
E1993	4	4	4	2.83
E1994	5	5	4	3.59

E1995. Special Dial Plate. Type K-102. For any of the above switches. NET. **12c**

Transmitting Equipment

E. F. JOHNSON TYPE "N"

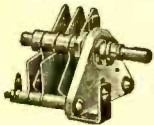
NEUTRALIZING CONDENSERS



Developed for use with low C tubes. Plates are polished aluminum cylinders with high maximum to minimum capacity ratio. Have micrometer adjustment; airgap remains constant. Aismag 196 insulation. Mount vertically or horizontally.

Cat. No.	Type	Capacity		Air Gap	NET
		Max.	Min.		
13840	N125	12	2.5	125"	\$1.91
13841	N250	12	3	250"	2.65
13842	N375	12.75	3.5	375"	3.53

"G" SERIES CONDENSERS



Designed to provide lowest possible minimum capacity, these condensers are suitable for use with most low C tubes. Plates are polished aluminum with beveled and rounded edges. End plate is of Aismag 196. With locking device.

Cat. No.	Type	Capacity		Air Gap	NET
		Max.	Min.		
3843	50G20	52	5	.045"	\$1.47
3844	25G20	27	3.5	.045"	1.32
3845	23G45	23	6.5	125"	1.32
3846	13G45	13	4.3	125"	1.23
3847	8G45	7.5	3	125"	1.23
3848	12G70	12	5.3	225"	1.71
3849	6G70	5.5	3	225"	1.91

FLEXIBLE SHAFT COUPLINGS



For use with any condenser having 1/4" shaft. Flexible phosphor bronze springs. 1" diameter. Ideal for receivers or xmitters.

E6115. Bakelite Type... 22c

E6116. Ceramic Type... 27c

KNIGHT GIANT PANEL FEED-THRU INSULATOR



Made of low-loss ceramic material. Can be used for high voltage feed-thru stand-off for "tank" circuits, antenna feeder bushings, etc. 4" high, 2" diam.

E6118. With 1/4" 20 screw and nuts. 32c

E6117. As above but with wing nut. Ea. 35c

MALLORY-YAXLEY PANEL BUSHING



For use with brass or fibre shafting, to mount condensers, etc., away from panel. Fits 1/4" shaft; panels up to 3/16".

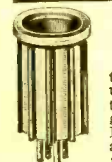
E6120. 10 FOR 44c. NET EACH... 5c

Button-Type Feed-Thru Bushing

For use wherever it is necessary to pass voltage or I.P. current through metal panels or chassis. Low-loss ceramic. 3/8" diam., with center hole for 6-32 screw. Fits 7/16" hole.

E6121. PER DOZEN 20c

TRANSMITTING COIL FORMS



An ideal inductance form for transmitters and for numerous other uses. Bakelite body, 2 1/4" diameter. 3 1/2" long, with molded finger grip rim. Winding space, 3 1/2". Ribs extending 1/4" insure low-loss air-core winding. Grooved forms are threaded 12 turns per inch.

PLAIN FORMS		GROOVED FORMS	
No. Prongs	EACH	No. Prongs	EACH
E2650	4	E2661	4
E2651	5	E2662	5
E2652	6	E2663	6

38c

53c

JOHNSON SOCKETS



E6140. UX BASE. For type 10, 52 or other UX base tubes. Porcelain insulation; heavy spring contacts. List, 85c.

NET 50c

E6141. 50 WATT socket. Porcelain base with heavy dual phosphor bronze contact springs. Cadmium plated. List, \$1.25. NET 73c

SPEED-X KEYS

NO. 301 AMATEUR'S KEY



A good standard key, sturdily constructed. Moulded bakelite base. Coin silver contacts. Arm and binding posts

nickel-plated. E7961. NET \$1.26

NO. 320 HEAVY-DUTY KEY

Has 1/4 inch solid coin silver contacts. Well insulated. Black base. All other parts chrome plated.

E7962. List, \$3.25. NET \$1.91

NO. 310 STANDARD KEY



Skeleton design. Well constructed. Coin silver contacts. Black base with chrome plated parts. Has dual adjustments

for tension and lever action. E7963. List, \$2.50. NET \$1.47

NO. 300



Well-made low-cost practice key. E7960. NET 88c

HI-SPEED AUTOMATIC KEY



NO. 501
A professional key fully adjustable from 8 words per minute to as high as desired.

hold adjustment at all speeds. Coin silver contacts. Equipped with cord and shorting switch for use in land wire service. E7964. List, \$17.50. NET \$10.29

NO. 515 AMATEUR KEY

A durable, heavy-duty Speed Key. Statuary bronze moving parts. Base and casing are covered with brown wrinkle to perfectly match other parts. Other features same as Hi-Speed key above. Less cord and plug; does not have shorting switch.

E7967. List, \$9.25. NET \$5.44

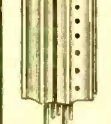
SPEED-X BUZZER



A professional constant frequency buzzer. Will hold its adjustment. Resistance 2 ohms. Works on 2 dry cells, or 1 "C" battery.

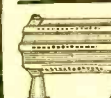
E7966. NET 73c

KNIGHT CERAMIC COIL FORMS



Plug-in coil forms of low-loss ceramic for use in receivers or low-power stages of transmitters. Ribbed type with side slot and holes for easy winding. 1 1/2" diameter.

E2655.	4 Prong.	NET... 32c
E2656.	5 Prong.	NET... 35c
E2657.	6 Prong.	NET... 38c



forms 2 1/2"x5". 4"x6 1/2".

FOR 20 AND 40 METERS

E5696. Less supporting legs..... \$0.70

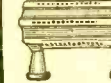
E5697. With supporting legs..... 95

FOR 80 AND 160 METERS

E5698. Less supporting legs..... \$1.18

E5699. With supporting legs..... 1.32

COIL FORMS



Low-loss coil forms of Insulux. Particularly adapted for 20 and 10 meter operation. Threaded for No. 10 wire with plenty of holes for wire and supports. 20 and 40 meter coil 80 and 160 meter coil forms

forms 2 1/2"x5". 4"x6 1/2".

FOR 20 AND 40 METERS

E5696. Less supporting legs..... \$0.70

E5697. With supporting legs..... 95

FOR 80 AND 160 METERS

E5698. Less supporting legs..... \$1.18

E5699. With supporting legs..... 1.32

INSULATED GRID CAPS

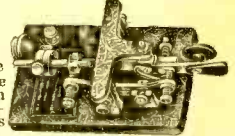


E6331. Standard size for receiving tubes. Black insulation. NET EACH 6c

E6333. Large size for transmitting tubes such as 800, etc. NET EACH 11c

FAMOUS "MAC-KEYS"

DELUXE MAC-KEY



The finest of the Mac-Keys. Huge cast base with black marble finish. Metal parts chrome-finished. Has patented dot stabilizer; 3/16" silver contacts; circuit closing switch. Built for smooth, non-tiring operation at any speed. E7973. NET \$9.50

STANDARD MAC-KEY

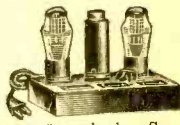
Heavy cast base anchors key firmly to table. Contact points perfectly alignable. Vibrationless and stutter-proof. Non-tiring. E7968. NET \$7.50

MAC STRAIGHT KEY

A well-balanced, sturdily constructed straight key for use in all types of radio or wire transmission circuits. Perfectly balanced arm with heavy cast base makes sending easy and tireless. Will not slide around. E7969. NET \$1.50

MAC OSCILLATOR

An efficient audio oscillator for learning code. In bakelite case. Tone adjustable at 600, 800, or 1000 cycles. Ideal for beginners who find it hard to learn to receive code signals. Also used as instruction equipment for schools. Supplied with 2-6C5G and 1 Ballast tube. Wt., 2 lbs. For 110 V. A.C. or D.C. E7970. NET \$5.95



MAC HUMMER

A simple but entirely efficient mechanical audio oscillator, designed for self-instruction of the Morse and Telegraph codes. Will produce a 1000 cycle note as clear as a bell. Requires a 1/2 volt "C" battery. Will reproduce up to 100 words per minute. E7971. NET \$1.50

MAC PRACTICE SET

A combination of E7969 and E7971 "Straight Key" and mechanical "Hummer" on one base. Excellent for beginners learning the code. E7972. NET \$2.95



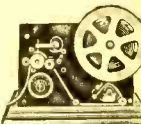
CODE PRACTICE SET

A signal key and adjustable buzzer on wood base. Reproduces high-pitched code signals. An excellent unit for code classes. E7703. NET \$2.00



AMERICAN CODE READER

A new motor-driven device that records code signals up to 100 words per minute on chemically treated paper tape. Operates on 110 V. 60 cycle AC and connects to speaker voice coil of any radio set. Permits recording of code transmissions which are easily decoded, a new field of entertainment for the SWL. Requires 1-76 tube. E10387. NET \$1176



E10388. Extra 250 foot roll of paper tape. NET 25c

WORLD TIME CHART AND SHORTWAVE STATION LIST

Indicates time in 129 countries instantly. Lists 111 Short Wave stations. Valuable for the amateur and SW listener. E5235. NET 10c



Transmitting Equipment

PREMAX ANTENNAS

VERTICAL TYPE

Especially designed to offer peak efficiency. Have heavy copper-plate finish for maximum conductivity. Entirely self-supporting; require no guy wires. Fully adjustable to permit setting at exact length for specific operating frequencies.

20 METER ANTENNA

Maximum height, 34 feet; minimum, 7 feet. Self-supporting on massive base insulator with cast flange for lag-screws or bolts. Copper-plated. Shpg. wt., 25 lbs.

E10058. NET..... **\$16.76**

10 METER ANTENNA

Adjustable from maximum height of 17 feet to minimum of 7 feet. Fluted steel sections are copper-plated. Heavy porcelain base insulator with cast mounting-flange for lag-screws or bolts. Self-supporting. Shpg. wt., 7 lbs.

E10059. NET..... **\$6.17**

HIGH-GRADE 5 METER TELESCOPING ANTENNAS

Vertical type antennas for ultra H.F. use. Telescoping sections of hard aluminum tubing; lock to hold adjustment. For mobile and portable use.

E9183. 1/4 wave 4 section. Less base. For direct mounting. Extends to 52". NET..... **\$1.18**

E9184. 1/4 wave 3 section. With base. Length closed, 18"; extends to 52". NET..... **88c**

E9185. 1/2 wave 3 section. Less base. Binding post mounting. Extends to 102". NET..... **\$1.12**

E9186. 1/2 wave 3 section. With insulator base. Length, 36"; extends to 102". NET..... **\$1.32**

MIDGET STAND-OFF INSULATORS

Small glazed porcelain units. Inexpensive and efficient insulators for multi-stage rigs.

E6142. 2 inches high. Body 1 1/2" with 10-32 nickel plated brass hardware. NET EACH..... **6c**

E6143. 1 3/8" high. Body 1" with 8-32 nickel plated brass hardware. NET EACH..... **5c**

E6144. 1 1/2" high. Body 1/2" with 6-32 hardware. A tiny unit. NET EACH..... **4c**

JACK TYPE

An assembly of 2" stand-off insulator and light duty jack. For low-power use. Inexpensive and efficient.

E6145. NET EACH..... **8c**

FEED-THRU STAND-OFF INSULATORS

The ideal method of bringing leads through chassis bases, or through sub-panels. Sturdy insulators of glazed porcelain. Universally accepted for transmitter use.

E6112. 5/8" high. 5/8" dia. base. NET EACH..... **7c**

E6111. 7/8" high. 3/4" dia. base. NET EACH..... **10c**

E6110. 1 1/4" high. 7/8" dia. base. NET EACH..... **13c**

JACK TYPE FEED-THRU

Same units as listed above, but fitted with built-in jack on top. Jack fits standard GR plug.

E6113. 1 1/4" high. 7/8" dia. base; fits 7/8" hole. NET..... **17c**

E6114. 7/8" high. 3/4" dia. base; fits 3/4" hole. NET..... **13c**

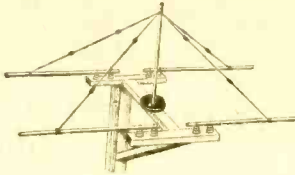
STRAIN INSULATOR

A husky, brown porcelain insulator for breaking up antenna guy wires or supporting wires over long spans. 2 1/4" long, 1 1/2" diam.

E6195. 10 FOR 54c; EA. **6c**

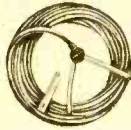
BUILD-YOUR-OWN

'BEAM' TYPE ANTENNA



Do you cripple your station with a no-gain skywire with "broad-as-a-barn" directivity? Increase your antenna efficiency, get power gains from 2 to 7 DB, pull your signals up "out-of-the-mud" and get more results with no increase in transmitter power. All you need is a phased or unphased array, or one of the director or reflector type beams, (either rotary or fixed), for more signal "snack," more QSO's, less QRM, and a saving in input power. Whatever you need, telescoping aluminum tubing, motors, gear-boxes, etc., for fixed or rotating type beam assemblies, ALLIED can supply it. Prices on request.

BASSETT CONCENTRIC CABLE



A completely weatherproof flexible cable for feeding any type of antenna. Impedance and power rating are indicated by type, i.e.: BCF-64-1000 is 64 ohm surge impedance and handles 1000 Watts. Use 64 ohm cable for doublets, stubs, etc., 13 ohm for director type beams. 34 ohm for vertical Marconi type. Molded rubber end-seal which prevents air-entrance at antenna end is supplied at \$1.50 net extra.

E2482. BCF-64"1000. Per Foot. NET..... **17c**
 E2483. BCF-64-500. Per Foot. NET..... **10c**
 E2484. BCF-34-1000. Per Foot. NET..... **19c**
 E2485. BCF-13-1000. Per Foot. NET..... **7c**
 E2486. BCF-64-100. Per Foot. NET..... **5c**

EO-1 TYPE CABLE

Designed to handle any power output up to 2000 watts. 72 ohm surge impedance. Two No. 12 solid copper conductors, cellulose and rubber-insulated, with overall weatherproof braid.

No. Per Foot 100 Feet 250 Feet
 E2328 3 1/2c \$2.94 \$6.99

250 WATT LINE

Flexible weatherproof 66 ohm line for use with power input up to 250 watts. Two No. 18 stranded conductors, rubber-insulated, with overall weatherproof braid.

No. Per Foot 75 Feet 250 Feet
 E2324. 1 1/2c 98c \$3.06

LEAD-IN INSULATORS



For use with transmitter or receiver lead-in or feed systems. Vitri-fied glazed porcelain cones on threaded rod.

E6138. 10" rod with cone insulators and water-tight washers. NET..... **53c**

E6139. 15" rod with cone insulators and water-tight washers. NET..... **88c**

CARDWELL COAXIAL BEADS

For constructing 3/4" copper or brass concentric line. Aising 1/8" beads .295" diam. for No. 12 wire. Enough for 50 feet of line. E13740. Package of 250 beads. NET..... **\$1.38**

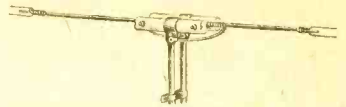
FEEDER SPREADER

For correct spacing of parallel antenna feeders of the 600 ohms or open wire type. Glazed white porcelain. 1/2" wide by 1/4" thick.
 E6218. 3 3/16" long. NET EACH..... **3c**
 E6219. 6 1/8" long. NET EACH..... **14c**

ANTENNA INSULATORS

Made of strong white porcelain. Low capacity and long leakage path. All 1" diameter.
 E3415. 7 inches long. NET EACH..... **20c**
 E3416. 12 inches long. NET EACH..... **29c**
 E3417. 20 inches long. NET EACH..... **39c**

JOHNSON "Q" ANTENNAS



The favorite antenna of leading Amateurs. Provides a considerable increase in radiated power over conventional doublet or Zepp antennas. Accurate matching of line and antenna impedance is provided by use of quarter-wave matching section of aluminum tubing. Can be fed by open wire system up to several hundred feet in length. Includes hard-drawn antenna wire, center assembly, 2 coils 1/2" aluminum tubing, "Q" section spacers, and insulators.

Minimum 13850. 100. 10 Meter Kit. NET..... **\$4.62**
 13850. 200. 20 Meter Kit. NET..... **7.20**
 13850. 400. 40 Meter Kit. NET..... **17.20**
 13850. 800. 80 Meter Kit. NET..... **24.70**
 13854. 50. Special 5 meter antenna with Mycalex spacers and insulators. NET..... **\$4.12**

COPPERWELD SOLID ENAMELED ANTENNA WIRE

The ideal wire for use in long, harmonic radiators, or any antenna which must be free from stretch or sag. Steel core with welded copper covering. High conductivity; no corrosion. Available in continuous lengths up to 1500 feet.

Gauge	100 Ft.	NET	200 Ft.	NET
14	E13864	\$0.73	E13865	\$1.45
12	E13867	1.12	E13868	2.23
10	E13870	1.62	E13871	3.23

HARD-DRAWN SOLID ENAMELED WIRE

Hard-drawn copper wire, uniform in size. Enamel coated. High conductivity.

Gauge	100 Ft.	NET	200 Ft.	NET
14	E3455	35c	E3456	\$C. 68
12	E3453	53c	E3454	99
10	E3450	90c	E3451	1.73

SOLID TINNED COPPER ANTENNA WIRE

Medium hard-drawn copper wire with heavy tinned coating. Ideal for use in R.F. circuits for coils, bus wiring, etc.

Cat. No.	Gauge	25 Ft.	50 Ft.	100 Ft.
E2345	14	13c	26c	\$C. 50
E2346	12	19c	38c	.75
E2347	10	25c	50c	1.00

SOFT-DRAWN COPPER TUBING



For winding your own inductances. Made of seamless soft drawn copper, annealed. Bends easily. Maximum lengths, 25 feet.

Stock No.	Outside Diam.	PER FOOT	Stock No.	Outside Diam.	PER FOOT
E2475	1/4"	4c	E2478	3/8"	8c
E2476	5/16"	5c	E2479	1/2"	9c
E2477	3/8"	6c	E2480	5/8"	13c

PYREX INSULATORS

Strong, genuine Pyrex glass insulators for all types of antenna installations. Extremely low surface conductivity. High tensile strength.

E3750. 3 3/8" long. For R.F. use up to 250 watts. NET..... **20c**

E3751. 7 1/4" long. For R.F. use up to 1000 watts. NET..... **75c**

BEE-HIVE INSULATOR

For supporting coils, condensers, high voltage leads, etc. Made of brown glazed porcelain, 2" diam., 2 1/2" high. Extra-strong; weatherproofed for outdoor use.
 E6190. 10 FOR 84c. EACH..... **9c**

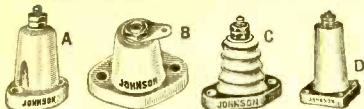
STAND-OFF INSULATOR

Highest quality porcelain; 4" high. Hole at top for supporting or holding wire or cable.
 E6191. 10 FOR 95c; EACH..... **10c**

Transmitting Equipment

FAMOUS E. F. JOHNSON INSULATORS

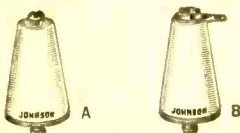
STANDOFF INSULATORS



Made of a superior grade of low absorption high glaze porcelain. Heavy breaker resistant bases. All hardware is of nickel-plated brass. Types 65, 66 and 67 have cadmium steel bases. Finish is white glaze. "J" indicates jack type.

Cat. No.	Type	Fig.	Body Hgt.	Hardware	NET
E13750	20	A	1 1/4"	10-32	8c
E13751	20J	B	1 1/4"	74 J	9 1/2 c
E13752	22	A	1"	8-32	5 1/2 c
E13753	22J	B	1"	74 J	7c
E13754	24	A	5/8"	6-32	4c
E13755	60	C	4 1/2"	1/4-20	38c
E13756	62	C	2 1/2"	1/4-20	21c
E13757	65	D	1 1/4"	10-32	12c
E13758	65J	D	1 1/4"	74 J	15c
E13759	66	D	1 1/2"	1/4-20	28c
E13760	66J	D	1 1/2"	74 J	32c
E13761	67	D	4 1/2"	1/4-20	41c
E13762	67J	D	4 1/2"	76 J	42c

PORCELAIN CONES



Made of high-grade, white glaze, low absorption porcelain. Furnished with machine screws, top and bottom, and with cushion washers. Deeply threaded for maximum strength. Adaptable to all requirements for mounting coils, condensers, etc., on metal chassis or panels. Require only one hole for mounting. Four sizes available with jack mounting for plug-in coils, etc.

Cat. No.	Type	Fig.	Body Hgt.	Thread	NET
E13765	600	A	9/8"	6-32	6 1/2 c
E13766	601	A	1"	8-32	8 1/2 c
E13767	601J	B	1"	74 J	11 1/2 c
E13768	602	A	1 1/4"	8-32	11c
E13769	602J	B	1 1/4"	74 J	14c
E13770	603	A	2"	10-32	15c
E13771	603J	B	2"	74 J	18c
E13772	604	A	3"	10-32	21c
E13773	604J	B	3"	76 J	29c

ALSIMAG 196 CONES

Similar to porcelain cones above but of Alsimag 196 for use at high frequencies. With machine screw top and bottom and cork washer.

Cat. No.	Type	Fig.	Body Hgt.	Thread	NET
E13775	500	A	1 1/4"	6-32	12c
E13776	501	A	1 3/8"	8-32	18c
E13777	502	A	1 1/2"	8-32	24c
E13778	503	A	2"	10-32	29c
E13779	504	A	3"	10-32	50c

THRU-PANEL INSULATORS



Have high mechanical strength with long leakage paths giving extremely high breakdown voltage ratings. Made of white glaze porcelain. Flat mounting surface and cushion washers eliminate breakage. Supplied with terminals top and bottom, or jack top and terminal bottom.

Cat. No.	Type	Fig.	Top Hgt.	Panel Hole	Hardware	NET
E13780	40	A	1 1/2"	1/2"	10-32	15c
E13781	40J	B	1 1/2"	1/2"	74 J	18c
E13782	42	A	1 3/4"	5/8"	10-32	12c
E13783	42J	B	1 3/4"	5/8"	74 J	15c
E13784	44	A	1 7/8"	3/4"	6-32	9 1/2 c
E13785	45	A	1 7/8"	3/4"	10-32	21c
E13786	45J	C	1 7/8"	3/4"	74 J	24c
E13787	4576J	C	1 3/4"	3/4"	76A J	32c
E13788	46	A	2"	1"	1/4-20	38c
E13789	46J	A	2"	1"	76 J	47c
E13790	47	A	4 1/2"	1 1/2"	1/4-20	56c
E13791	47J	A	4 1/2"	1 1/2"	76 J	65c

LEAD-IN BUSHINGS



Have many applications in transmitter and antenna installations. Type 55 is Alsimag 196; others are white glaze porcelain. Types 50, 51, 52 and 55 have nickel-plated brass rod and nuts.

Cat. No.	Type	Fig.	Hgt.	Diam.	Panel Hole	NET
E13793	50	D	1 1/2"	3/4"	1/2"	12c
E13794	51	D	1 1/2"	1 1/4"	3/4"	18c
E13795	52	D	1 1/2"	1 3/4"	1 1/4"	26c
E13796	53	B	1 3/4"	2 1/4"	1 3/4"	18c
E13797	54	A	1"	3 1/4"	2 1/2"	41c
E13798	55	C	1 1/4"	1 1/2"	1 1/2"	18c

MOUNTING FLANGES

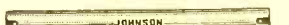
No.	Type	For Bushing	NET
E13800	90	Type 53	15c
E13801	91	Type 54	18c

THREADED BRASS ROD

For use with standoff insulators, through-panel and lead-in bushings. Nickel-plated brass; thread 1/4-20.

No.	Type	Length	NET
E13802	Type 240	8" long.	15c
E13803	Type 241	10" long.	18c
E13804	Type 242	15" long.	24c

ANTENNA INSULATORS



High-grade, wet process, white glazed porcelain. Low moisture absorption; long leakage path. 1" diam.

No.	Type	Length	NET
E13805	Type 107	7" long.	41c
E13806	Type 112	12" long.	53c
E13807	Type 120	20" long.	88c

STRAIN INSULATORS

White glaze low absorption porcelain. Type 32 is for use in light guy wires or receiving antennas. Type 38 is especially designed for R.F. use.



Cat. No.	Type	Fig.	Length	EACH	10 FOR
E13808	32	A	1 1/2"	4c	36c
E13809	38	B	1 1/2"	9c	85c

FEEDEr SPREADERS



For use in all types of feeder lines, either transposed or non-transposed. Made of low absorption white glazed porcelain. Type 31 (Fig. 11) prevents twisting. Others are 3/4"x1/2" bars.

Cat. No.	Type	Fig.	Length	NET
E13810	31	B	4"	9c
E13811	132	A	2"	9c
E13812	134	A	4"	12c
E13813	136	A	6"	15c

LOW-COST KNIGHT

GR TYPE JACKS & PLUGS

Banana type plugs. Prongs of spring brass.

E6343.	METAL JACK.			
E6342.	METAL PLUG.			
DOZ., 41c. EACH.....				4c

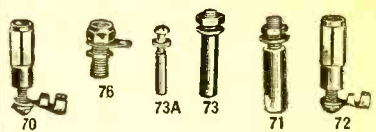
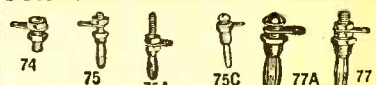
PLUG		INSULATED TYPE		JACK
E6345	RED			E6347
E6346	BLACK			E6348
100 FOR \$4.90.				
10 ASSTD., 55c. EACH.....				6c

TRANSMITTING CONNECTORS

E6146. JACK. 1 1/2" high. Mounts with a 10-32 screw.

NET.....				11c
E6147. PLUG. Fits above Jack. 3/4" diameter with 10-32 hole; has hole in end. Fits 1/4" copper tubing.				3c
NET EACH.....				3c

JOHNSON JACKS & PLUGS

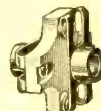


A complete line of highest quality jacks and plugs for every plug-in requirement. Banana type plugs have nickel silver springs; spring sleeve type jacks are nickel-plated brass with phosphor bronze springs. All are accurately machined to assure maximum contact surfaces with freedom from wobble. 77A and 73A plugs have long screw for mounting on ceramic coil forms. Lengths indicated do not include screw thread.

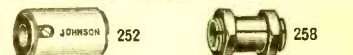
Cat. No.	Type	Length	Thread	NET
E13815	74	1 1/4"	1/4-28	4c
E13816	75	3 1/4"	6-32	4c
E13817	75A	3 1/4"	6-32	4c
E13818	75C	1"	6-32	5c
E13819	76	1 1/2"	3/8-24	15c
E13821	77	1 1/2"	1/4-28	12c
E13822	77A	1 1/2"	10-32	15c
E13824	71	1 1/2"	1/4-28	21c
E13827	72	1 1/2"	10-32	15c
E13838	73	1"	10-32	4c
E13839	73A	1"	10-32	4c

JOHNSON SHAFT COUPLINGS

Flexible insulated shaft couplings with phosphor-bronze springs and absolute freedom from backlash. Insulated with Alsimag 196. Maximum airgap to insure protection from flashover. Hubs cannot loosen. Quality-built to give continuous perfect service.



Cat. No.	Type	Shaft	Diam.	NET
E13825	250	1/4"x1/4"	1 1/4"	47c
E13826	251A	1/4"x1/4"	2 1/4"	82c
E13827	251B	1/4"x1/4"	2 1/4"	82c
E13828	251	3/8"x3/8"	2 1/4"	82c



Solid shaft couplings for use where extension shaft is necessary without flexibility. Type 252 is insulated with Alsimag 196; leakage path 1 1/2". Type 258 is cadmium-plated.

E13830. Type 252. Overall length 1 3/4", 1 1/4" diam. For 1/4" shaft. 44c

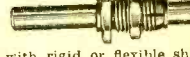
NET.....

E13831. Type 258. Compression type coupling for 1/4" shaft. NET..... 9c

FLEXIBLE SHAFTS
Non-rusting phosphor-bronze flexible shafts with 1/4" hubs. Permit control of condensers, etc., offset or at angles up to 90 degrees. Hubs will not loosen.

E13832. Type 253. 3" length. NET. 21c
E13833. Type 254. 6" length. NET. 29c

PANEL BEARING & EXTENSION



For use with rigid or flexible shaft couplings. Fit panels up to 3/4" thick. Type 255 is panel bushing only. Of cadmium-plated brass.

Cat. No.	Type	Shaft Length	NET
E13834	255	3"	9c
E13835	256	3"	18c
E13836	257	6"	24c

KNIGHT STAND-OFF INSULATORS

High-grade glazed porcelain construction with deep corrugations. Cadmium-plated brass hardware.

E6148. 5 1/4" high, with base 2 1/4" square. NET EACH..... 37c	
E6149. 3 3/8" high, with base 1 1/2" square. NET EACH..... 18c	



Transmitting TRANSFORMERS

THORDARSON TRANSFORMERS AND CHOKES



An extremely popular line offering all necessary transformer equipment for dependable service in Amateur Short-Wave equipment. All primaries are for 110 volt 50-60 cycles. Other voltages on special order.

THORDARSON C. H. T. MULTI-VOLT SERIES

Engineered and constructed for maximum efficiency under continuous load, these units provide extreme flexibility, excellent regulation, and quiet operation. All units fully shielded. Mounting templates furnished.

PLATE TRANSFORMERS

No.	Type	D.C. Volts	D.C. M.A.	Fig.	Wt.	NET
E12600	T19P55*	500-400	250	2G	8	5 4.41
E12601	T19P56	750-600	225	2G	9	4.70
E12602	T19P57	1000-400†	125-150	2G	9	5.88
E12603	T19P58	1000-750†	150-200	2N	17	7.64
E12604	T19P59	1000-1250	300	2K	26	9.41
E12605	T19P60	1250-1500	300	2K	29	10.88
E12606	T19P61	1500-1750	300	2K	31	11.76
E12607	T19P62	1750-2000	300	2K	34	12.64
E12608	T19P63	1000-1250	500	2K	36	13.52
E12609	T19P64	1250-1500	500	2K	42	17.35
E12610	T19P65	2000-2500	300	2K	42	17.35
E12611	T19P66	1500-1750	500	2K	50	22.05
E12612	T19P67	1750-2000	500	2K	56	24.95
E12613	T19P68	2000-2500	500	2K	62	29.40

*Bias tap at 25 volts. †Designed for double rectifiers; supply both secondary voltages simultaneously.

FILAMENT TRANSFORMERS

No.	Type	Volts	Amps.	Insul.	Fig.	Wt.	NET
E12614	T50F61	2.5 CT	3.5	1600	2B	1	50.88
E12615	T19F83	2.5 CT	5.25	2000	3C	1	1.03
E12616	T19F89	2.5 CT	10	2000	3C	1	1.32
E12617	T19F90	2.5 CT	10	7500	3C	2	1.76
E12618	T64F39	2.5 CT	10	7500	2N	4	2.65
E12619	T63F93	5 CT	4	1600	2D	2	1.91
E12620	T19F91	5.25 CT	4	2000	3C	2	1.32
E12621	T19F92	5.25 CT	13	2000	3C	4	1.91
E12622	T74F25	5.25 CT	13	1600	2D	4	2.94
E12623	T74F24	5.25 CT	21	1600	2D	5	4.12
E12624	T19F97	6.3 CT	3	2000	3C	5	1.18
E12625	T81F85	6.3, 5, 2.5	2.5	1600	2E	1	1.18
E12626	T73F60	6.3 CT	5	1800	2D	3	2.20
E12627	T19F98	6.3 CT	6	2000	3C	2	1.62
E12628	T19F99	6.3 CT	10	2000	3C	4	2.06
E12629	T19F93	7.5 CT	4	2000	3C	4	1.32
E12630	T19F94	7.5 CT	8	2000	3C	4	2.79
E12631	T92F20	7.5 CT	8	1600	2D	4	1.91
E12632	T19F95	10 CT	4	2000	3C	2	1.62
E12633	T19F96	10 CT	8	2000	3C	4	2.06
E12634	T64F14	10 CT	8	1600	2D	5	2.79
E12635	T79F84	2.5 CT	3.5	1600	2G	4	2.79
		5 CT	3				
		8.3 CT	3				

SMOOTHING CHOKES

No.	Type	Henries	M.A.	Res.	Insul.	Wt.	NET
E12636	T19C35	5-20	200	130	3000	5	52.79
E12637	T19C36	5-20	300	105	3000	10	3.82
E12638	T19C37	5-20	400	90	4000	17	5.29
E12639	T19C38	5-20	500	75	4000	26	6.76

No.	Type	Henries	M.A.	Res.	Insul.	Wt.	NET
E12640	T19C42	12	200	130	3000	5	52.79
E12641	T19C43	12	300	105	3000	10	3.82
E12642	T19C44	12	400	90	4000	18	5.29
E12643	T19C45	12	500	75	4000	26	6.76

UNIVERSAL DRIVER TRANSFORMERS

Each unit has the usable ratios permitting the use of several types of driver-modulator tube combinations. Catalog showing proper transformer for use with various tube combinations sent FREE on request.

No.	Type	Cap. Watts	Pri. M.A. Per Side	Ratio Pri. to 1/2 Sec.	Wt. Lbs.	NET
E12644	T19D01	15	60	1:1, 1.2:1, 1.4:1, 1.6:1, 1.8:1	4 1/2	53.53
E12645	T19D02	15	60	2:1, 2.2:1, 2.4:1, 2.6:1, 2.8:1	4 1/2	3.53
E12646	T19D03	15	60	3:1, 3.2:1, 3.4:1, 3.6:1, 3.8:1	4 1/2	3.53
E12647	T19D04	15	60	4:1, 4.5:1, 5:1, 5.5:1, 6:1	4 1/2	3.53

UNIVERSAL MODULATION TRANSFORMERS

Have a wide range of applications when used with the Universal Driver transformers above. Tapped coils permit matching of several tube combinations with each transformer. Matching table sent on request.

No.	Type	Cap. Watts	Pri. M.A. Per Side	Sec. Ser.	M.A. Per Lbs.	NET	
E12650	T19M14	30	75	75	150	4 1/2	54.12
E12651	T19M15	60	125	125	250	6 1/2	5.88
E12652	T19M16	100	175	175	330	12	8.82
E12653	T19M17	250	225	225	450	25	14.11

STANDARD MODULATION TRANSFORMERS

No.	Type	Pri.	Sec.	Audio Wt.	NET	
E12654	T67M69	1-19	2700	10 W.	1 1/2	51.62
E12655	T17M59	1-6A6	3000, 3750, 4500	10 W.	2	2.06
E12656	T64M26	2-4E, 59	5000, 10000	40 W.	5	3.53
E12657	T19M21	2-7Z20	3750, 6000	75 W.	5	4.12
E12658	T19M22	2-809	5000, 7500	100 W.	13	5.88
E12659	T84M70	2-35T, 6L6	5000, 6000, 7500	75 W.	15	5.88
E12660	T14M49	2-TZ40	2850, 4500, 6500	175 W.	20	9.70
E12661	T82M25	2-805, 822	4000, 6000, 8000	650 W.	47	23.52

GRID MODULATION TRANSFORMERS

No.	Type	Tubes	Sec. Imp.	Sec. M.A.	Watts	Wt.	NET
E12662	T67M73	1-4e or 59	5,400	32	10	2 1/2	52.06
E12663	T67M74	2-45 or 2A3	5,000	60	20	3 1/2	2.65

MULTI-VOLT PLATE TRANSFORMERS

No.	Type	D.C. Volts	M.A.	Wt.	NET
E12664	T15P11	400-500	200	16	5 7.35
E12665	T15P12	500-650	200	19	8.82
E12666	T15P13	600-750	300	31	11.76
E12667	T15P14	750-1000	300	41	14.70
E12668	T15P15	1000-1250	300	51	17.64
E12669	T15P16	1000-1250	500	81	26.46
E12670	T15P17	1250-1500	300	55	19.11
E12671	T15P18	1500-1750	500	96	35.28
E12672	T15P19	2000-2500	300	85	29.40
E12673	T15P20	2000-2500	650	140	49.98
E12674	T15P21	1500-2000			
		2500-3000	500	129	47.04
E12675	T15P22	1000-1250			
		1500-1750	300	76	29.40

MULTI-VOLT POWER TRANSFORMERS

No.	Type	A.C. Volts	Current	Wt. Lbs.	NET
E12676	T15R00	1000 C.T.	150 M.A.		
		5	3 A.		
		7.5 tap at 6.3	5		
E12677	T15R01	1000 C.T.	400 M.A.	15	56.17
		5	6 A.		
		6.3 C.T.	6 A.		
E12678	T15R02	1500 C.T.	200 M.A.	24	8.82
		2.5	10 A.		
		7.5 tap at 6.3	3 A.		
E12679	T15R03	800 C.T.	200 M.A.	17	7.73
		2.5	4 A.		
		6.3 C.T.	3 A.		
E12680	T15R04	510 C.T.	25 M.A.	19	8.09
		5 C.T.	3 A.		
E12681	T15R05	6.3 C.T.	1.1 M.A.	2 1/2	2.73
		77 V. Bias tap	2.35 M.A.		
		5 or 2.5	3 A.		
		6.3 C.T.	2 A. or 5 A.		
E12682	T15R06	6.3 C.T.	2.25 A.	10	6.17
		726 C.T.	175 M.A.		
		5	3 A.		
E12683	T15R07	6.3 C.T.	2.25 A.	10	5.73
		760 C.T.	280 M.A.		
		5	3 A.		
E12684	T15R08	6.3 C.T.	3 A.	11	6.17
		860 C.T.	325 M.A.		
		5	6 A.		
		6.3 C.T.	4.25 A.	15	8.04

MULTI-VOLT FILAMENT TRANSFORMERS

No.	Type	Volts	Amps.	Insul.	Wt.	NET
E12685	T11F50	7.5 tap at 6.3, 5 V. 2.5 C.T.	6.5	1600	6	54.41
E12686	T11F51	10 tap at 7.5, 6.3 C.T.	8	1600	8	4.70
E12687	T11F52	11 tap at 10, 7.5 C.T.	10	1600	13	5.29
E12742	T11F53	2.5 C.T.	10	7500	6	3.53
E12688	T11F54	5 C.T.	20	10000	16	7.06
E12689	T11F55	5.25 C.T.	22	1600	14	5.88
E12690	T11F56	2.5 C.T.	3.5			
		10 C.T.	3	1600	6	3.82
E12691	T11F57	10 C.T.	3			
		6.3 C.T.	4			
		7.5 C.T.	3			
E12692	T11F58	5.25 C.T.	6.5	1600	15	7.35
		7.5 C.T.	3.25			
		6.3 C.T.	3			
		5 C.T.	3	1600	13	6.47

C. H. T. SMOOTHING CHOKES

No.	Type	Henries	M.A.	Insul.	Ohms	NET
E12693	T15C45	12	200	4000	105	5 4.76
E12694	T15C46	12	300	4000	78	5.88
E12695	T15C47	12	400	4000	95	7.06
E12696	T15C48	12	500	10000	86	11.17
E12697	T15C50	15	650	10000	46	13.52
E12698	T15C53*	12 Par 50 Ser	100	1600	272	
E12699	T15C54*	8 Par 150 Ser	150	1600	1090	3.23
E12700	T15C55*	32 Ser 75 Par	500	1600	735	3.23
E12701	T15C56*	2 Par 8 Ser	250	1600	130	4.12
		2 Par 8 Ser	750	1600	207	
		8 Ser	350		107	5.29

*Have two windings which may be connected in series or parallel.

C. H. T. INPUT CHOKES

No.	Type	Henries	M.A.	Insul.	Ohms	NET
E12702	T15C36	5-25	200-20	4000	105	5 4.70
E12703	T15C37	5-25	300-30	4000	78	5.88
E12704	T15C38	5-25	400-30	4000	95	7.06
E12705	T15C39	5-25	500-30	10000	86	11.17
E12706	T15C41	5-25	650-50	10000	46	13.52

MULTI-VOLT BIAS TRANSFORMERS

No.	Type	D.C. Volts	M.A.	FIL V.	FIL A.	Wt.	NET
E12707	T15R60	150; 135; 120; 110; 100; 90	200	5	3	6 1/2	55.55
E12708	T15R61	275; 250; 225; 200	5	5	3	8 1/2	6.11
E12709	T15R62	200; 175; 150; 150; 450; 400; 350; 300; 275	200	5	3	15 1/2	7.35

Transmitting TRANSFORMERS

THORDARSON X-MITTING TRANSFORMERS

MULTI-MATCH DRIVER TRANSFORMERS

Designed to offer maximum flexibility and efficiency. Have plug-in terminal boards for matching various driver tube combinations. Recessed sub-base lugs permit single hole wiring.

Cat. No.	Type	Cap. Watts	Prl. M.A. Per Side	Ratio	Prl. to 1/2 Sec.	Wt.	NET
E12900	T15D76*	15	60	1:1, 1.2:1, 1.4:1, 1.6:1, 1.8:1	7 1/2	\$4.85	
E12901	T15D77*	15	60	2:1, 2.2:1, 2.4:1, 2.6:1, 2.8:1	6	4.85	
E12902	T15D78*	15	60	3:1, 3.2:1, 3.4:1, 3.6:1, 3.8:1	6	4.85	
E12913	T15D79*	15	60	4:1, 4.5:1, 5:1, 5.5:1, 6:1	6	4.85	
E12903	T15D80**	30	120	1:1, 1.25:1, 1.5:1, 1.75:1, 2:1	8 1/2	6.76	
E12904	T15D81**	30	120	2.25:1, 2.5:1, 2.75:1, 3:1, 3.25:1	8	6.76	
E12905	T15D82#	15	60	1:3.15, 1:2.75, 1:2.5, 1:2.25, 1:2.1, 1:1.75, 1:1.4, 1:1.25, 1:1.1, 1:1.05, 1:1.0	5 1/2	4.85	
E12906	T15D83#	30	120	1:3.15, 1:2.75, 1:2.5, 1:2.25, 1:2.1, 1:1.75, 1:1.4, 1:1.25, 1:1.1, 1:1.05, 1:1.0	8 1/2	6.76	
E12907	T15D84##	30	80	1:5.1, 2:1, 2.5:1, 3:1, 3.5:1	8 1/2	6.76	

*P.P. 45 or 2A3's. **P.P. Par. 2A3's. 500 ohm primary, #P.P. 6L6's with inverse feedback. FREE CHART showing proper Multi-Match Driver and Modulation transformers for various tube combinations sent on request.

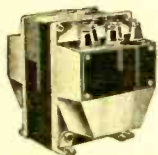
MULTI-MATCH MODULATION TRANSFORMERS

Finest quality modulation transformers. Plug-in terminal board permits instant matching of any driver-modulator tube combination.

Cat. No.	Type	Cap. Watts	Prl. M.A. Per Side	Sec. Ser.	M. A. Par.	Wt.	NET
E12908	T11M74	100	140	80	160	8	\$ 5.29
E12909	T11M75	75	145	145	290	9	7.35
E12910	T11M76	125	210	160	320	18	11.47
E12911	T11M77	300	250	250	500	30	17.64
E12912	T11M78	500	320	320	640	51	35.28

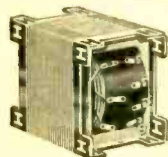
FREE ON REQUEST. Complete Thordarson Transmitting component catalog containing modulation tables, Driver-Modulator tube combinations, and complete data on Multi-match transformers.

KNIGHT PLATE TRANSFORMERS



Here is a husky, high quality plate transformer that is ideal for use in the medium power Amateur transmitter. Rated at 1000-750 Volts A.C. each side of center tap, and conservatively rated at 300 M.A. Fully enclosed in heavy cast aluminum case with glazed porcelain standoff type terminals. Sturdy construction throughout; built by a leading manufacturer of transmitting tube transformers. Exporter of transmitting tube transformers with Amateurs who want a really good unit for medium power R.F. stages or modulators, with good voltage regulation. Primary for 110 volts 50-60 cycles.

Shpg. wt., 22 lbs. NET \$795



An outstanding value in a good, husky built plate transformer without fancy dress. Similar to the E11006 unit directly above but uncase. Secondary rated at 1000-750-500 volts A.C. each side of center tap at 300 M.A. It's just right for those TZ20 or TZ40 modulators, or for an 800 or 350 watt fer or final R.F. stage. Primary for 110 volts 50-60 cycles. Universal mounting style makes it fit almost any type of power supply layout. Well-insulated throughout; with solder lug terminals. Shpg. wt., 15 lbs. NET \$585



For those low voltage buffer or R.F. stages, for small modulators, in fact for most any low-voltage power supply—you can't go wrong on this one. Well-built, heavily-insulated, and rated at 750 volts AC each side of center tap at 200 M.A. Primary, 110 volts, 50-60 cycles. Good quality workmanship and materials throughout; uncase, price down, but worth more than the low price would indicate. A very popular unit with the Amateurs who know value when they see it. Shpg. wt., 8 lbs. NET \$265

KNIGHT HIGH-POWER TRANSFORMER

Every Amateur or Experimenter will find dozens of uses for this high-quality combination plate and filament transformer. Primary, 110 V. 50-60 cycles. Secondaries: 1200 V. at 200 M.A.-C.T.; 7.5 V. at 3 A.-C.T.; 5 V. at 3 A.-C.T.; 2.5 V. at 10 A.-C.T. Fully enclosed case type; upright mounting style; with flexible leads. Shpg. wt., 12 lbs. NET \$1141



\$289

KNIGHT FILTER CHOKES

E11009. Swinging Choke. Especially designed for use as inductor choke of transmitter or modulator power supplies. Capacity, 200 M.A.; inductance swing, 8-30 henries. Fully cased; upright mounting style. Flexible insulated wire leads at bottom. Size: 3 1/2"x3 1/2"x4 1/2". Shpg. wt., 6 lbs. NET \$2.21



E11010. Smoothing Choke. For use as second choke in all medium or low-voltage power supplies. Capacity, 200 M.A. Inductance, 20 supplies. Fully cased; upright mounting style. Flexible insulated wire leads at bottom. Size: 3 1/2"x3 1/2"x4 1/2". An efficient filter choke of highest quality at an exceptionally low price. Wt., 6 lbs. NET EACH \$2.05

FILAMENT TRANSFORMERS

E11011. Uncased, upright mounting type, with solder lug terminals. 2.5 Volts at 10 A., for 2-800's or several 2.5 volt tubes. 5000 Volt insulation. Size: 2 1/2"x2 1/2"x3". Wt., 2 1/2 lbs. NET \$1.15



E11012. 7.5 Volts at 4 A., and 2.5 Volts at 5 A. Ideal for use in low power multi-stage rigs. Size: 2 1/2"x2 1/2"x3". Shpg. wt., 3 1/2 lbs. NET \$1.35

E11013. 6.3 Volts at 6 A. For use with 6L6 or other Beam Power tubes, or several 6.3 tubes in speech-amplifier or R.F. units. Size: 2 1/2"x2 1/2"x3". Shpg. wt., 2 1/2 lbs. NET \$1.15

KNIGHT AMATEUR SPECIALS



For the Amateur who demands extra value for his money, here is the complete line of KNIGHT high-quality transmitter components. Made by a leading transformer manufacturer, these units are especially designed for the intermittent service required of the Amateur transmitter. All conservatively rated; many with tapped primaries, porcelain terminals, fully enclosed air-cooled cases, etc.



PLATE TRANSFORMERS

E11827.	650 or 500 D.C. volts @ 200 M.A.	Wt., 7 1/2 lbs.	\$3.49
E11828.	1250 or 1000 D.C. volts @ 300 M.A.	Wt., 26 1/2 lbs.	6.88
E11829.	1250 or 1000 D.C. volts @ 500 M.A.	Wt., 35 1/2 lbs.	11.11
E11830.	1800 or 1450 D.C. volts @ 300 M.A.	Wt., 30 1/2 lbs.	10.05
E11831.	2500 or 2000 D.C. volts @ 300 M.A.	Wt., 42 lbs.	12.30

FILAMENT TRANSFORMERS

E11838.	2.5 V. C.T. @ 5.25 A.	2000 Volt Ins.	Wt., 1 1/4 lbs.	\$0.79
E11839.	2.5 V. C.T. @ 10 A.	2000 Volt Ins.	Wt., 2 lbs.	.92
E11840.	2.5 V. C.T. @ 10 A.	7500 Volt Ins.	Wt., 2 1/2 lbs.	1.45
E11841.	5.25 V. C.T. @ 4 A.	2000 Volt Ins.	Wt., 2 1/2 lbs.	1.06
E11842.	5.25 V. C.T. @ 13 A.	2000 Volt Ins.	Wt., 4 lbs.	.92
E11843.	6.3 V. C.T. @ 3 A.	2000 Volt Ins.	Wt., 1 1/2 lbs.	1.45
E11866.	6.3 V. C.T. @ 6 A.	2000 Volt Ins.	Wt., 2 1/2 lbs.	1.85
E11867.	6.3 V. C.T. @ 10 A.	2000 Volt Ins.	Wt., 4 lbs.	1.85
E11844.	7.5 V. C.T. @ 4 A.	2000 Volt Ins.	Wt., 2 1/2 lbs.	1.06
E11845.	7.5 V. C.T. @ 8 A.	2000 Volt Ins.	Wt., 4 lbs.	1.71
E11846.	10.0 V. C.T. @ 4 A.	2000 Volt Ins.	Wt., 3 lbs.	1.58
E11847.	10.0 V. C.T. @ 8 A.	2000 Volt Ins.	Wt., 4 lbs.	2.11

INPUT CHOKES

E11832.	5-20 H. 200 M.A.	2000 Volt Ins.	Wt., 4 1/2 lbs.	\$1.98
E11833.	5-20 H. 300 M.A.	3000 Volt Ins.	Wt., 9 1/2 lbs.	2.65
E11834.	5-20 H. 500 M.A.	3000 Volt Ins.	Wt., 25 lbs.	4.76

SMOOTHING CHOKES

E11835.	12 H. 200 M.A.	2000 Volt Ins.	Wt., 4 1/2 lbs.	\$1.98
E11836.	12 H. 300 M.A.	3000 Volt Ins.	Wt., 9 1/2 lbs.	2.65
E11837.	12 H. 500 M.A.	3000 Volt Ins.	Wt., 25 lbs.	4.76

THORDARSON TRANSMITTER MANUAL

E11206. A 52 page book, completely revised, with information on all types of Amateur transmitters. Contains schematic diagrams, parts lists, modulation table, coil data, power supply circuits, etc. NET 9c

NEW KNIGHT OIL-IMPREGNATED TRANSMITTING CONDENSERS

These hermetically sealed, oil-impregnated filter condensers are a real "buy" for any Amateur. No effort has been spared to include every detail of advanced design, quality materials, and careful assembly. Terminals are on glazed porcelain standoff insulators; heavy mounting feet. May be mounted in any position.



1000 Volt			2000 Volt		
No.	Mfd.	NET	No.	Mfd.	NET
E7988	1	\$1.10	E7994	1	\$1.75
E7989	2	1.50	E7995	2	2.35
E7990	4	1.95	E7996	4	3.95
1500 Volt			3000 Volt		
E7991	1	1.45	E7997	1	2.25
E7992	2	1.95	E7998	2	4.25
E7993	4	3.15			

SPECIAL 4 MFD. 1000 VOLT PAPER CONDENSER

A popular size for use in transmitting power supplies. Working voltage, 1000 V. D.C.; 2000 V. test. In metal case, 4 1/2"x1 1/2"x 2 1/4". Porcelain standoff type terminals. Will give long, dependable service. An outstanding "ham" buy. Wt., 5 lbs. E7899. YOUR NET PRICE \$1.89



OHMITE CENTER-TAPPED RESISTORS

"Wirewatt" and "Brown Devil" center-tapped resistors especially suited for providing grid return to ground in transmitting tube circuits. Center-tap accurate to plus or minus 1%. All units have 1/2" tinned pigtail leads with lug center-tap.



1 WATT "WIRE-WATTS"			10 WATT "BROWN DEVILS"		
Ohms	Watts	EACH	No.	Watts	EACH
20	E8270	21c	E8273	29c	
50	E8271		E8274		
100	E8272		E8275		

Transmitting CONDENSERS

AEROVOX TRANSMITTING CONDENSERS



"11" SERIES

An extremely popular line of condensers for use where economy is important. Oil-impregnated and sealed in high melting-point wax. Case is of welded steel with high-tension type pillar terminals equipped with lock nuts and solder lugs. All are supplied with universal bracket for either upright or inverted mounting. Unsurpassed x-mitting condensers.

Cat. No.	Type	Mfd.	Wkg. V.	NET
E13450	1011	1	1000	\$1.08
E13451	1011	2	1000	1.47
E13452	1011	4	1000	1.96
E13453	1511	1	1500	1.96
E13454	1511	2	1500	3.18
E13455	1511	4	1500	1.71
E13456	2011	1	2000	2.40
E13457	2011	2	2000	4.56
E13458	2011	4	2000	2.45
E13459	3011	1	3000	4.85
E13460	3011	2	3000	

HYVOL "09" SERIES

Hermetically sealed in welded steel can. Dielectric is selected paper, oil-impregnated and oil-filled. Recommended for heavy-duty continuous service. With universal upright or inverted mounting bracket. Will give dependable lasting service even under the most rigorous operating conditions.

Cat. No.	Type	Mfd.	Wkg. V.	NET
E13462	609	1	600	\$1.62
E13463	609	2	600	2.06
E13464	609	4	600	2.66
E13465	1009	1	1000	1.76
E13466	1009	2	1000	2.06
E13467	1009	4	1000	2.84
E13468	1509	1	1500	2.06
E13469	1509	2	1500	2.66
E13470	1509	4	1500	3.62
E13471	2009	1	2000	2.40
E13472	2009	2	2000	3.18
E13473	2009	4	2000	4.30
E13474	2509	1	2500	2.73
E13475	2509	2	2500	3.64
E13476	3009	1	3000	4.06
E13477	3009	2	3000	8.82



PORCELAIN CASED MICA CONDENSERS

Especially designed for high-frequency use. Hermetically sealed in glazed porcelain case. Minimum power loss at full load without heating. Size: 4x3x3/4" mounting centers. Well-built, dependable condensers.

Cat. No.	Cap. Mfd.	Wkg. Volts	NET
E13480	.00005	12500	\$2.20
E13481	.0001	12500	2.20
E13482	.00025	12500	2.20
E13483	.0005	12500	2.20
E13484	.0005	7000	2.20
E13485	.001	12500	2.20
E13486	.001	7000	2.20
E13487	.001	3500	2.20
E13488	.0015	12500	2.20
E13489	.0015	7000	2.20
E13490	.0015	3500	2.20
E13491	.002	12500	2.20
E13492	.002	10000	2.20
E13493	.002	7000	2.20
E13494	.002	5000	2.20
E13495	.002	3500	2.20
E13496	.003	12500	4.70
E13497	.003	10000	4.70
E13498	.003	7000	4.70
E13499	.003	5000	4.70
E13500	.003	3500	4.70
E13501	.005	10000	5.59
E13502	.005	7000	5.59
E13503	.005	5000	5.59
E13504	.01	7000	5.59
E13505	.01	5000	4.70
E13506	.01	3500	4.70
E13507	.02	3500	4.70
E13508	.02	2000	4.70
E13509	.1	2000	6.47

HYVOL "05" SERIES

Increasingly popular for all transmitter requirements. These units have pure linen paper dielectric, impregnated and filled with "Hyvol" oil. All voltage ratings are conservative for continuous operation. Hermetically sealed in round aluminum containers. Terminals equipped with lock nuts and solder lugs are adequately insulated by means of high-tension pillars. May be mounted upright or inverted by means of clamping ring supplied.



Cat. No.	Type	Mfd.	Wkg. V.	NET
E13510	605	1	600	\$1.47
E13511	605	2	600	1.76
E13512	605	4	600	2.66
E13513	1005	1	1000	1.76
E13514	1005	2	1000	2.06
E13515	1005	4	1000	2.85
E13516	1505	1	1500	1.68
E13517	1505	2	1500	2.06
E13518	1505	4	1500	2.85
E13519	2005	1	2000	2.06
E13520	2005	2	2000	2.23
E13521	2505	1	2500	4.12
E13522	2505	2	2500	4.12
E13523	3005	1	3000	5.00

MOLDED MICA CONDENSERS

Suitable for all voltage or R.F. bypass requirements. Highest quality, selected mica dielectric in molded bakelite case with screw terminals.



TYPE 1650-1000 VOLTS

Cat. No.	Cap.	NET EACH	Cat. No.	Cap.	NET
E13525	.00005		E13530	.001	29c
E13526	.0001		E13531	.006	50c
E13527	.00015	24c	E13532	.01	68c
E13528	.00025		E13533	.02	\$1.09
E13529	.0005		E13534	.05	2.26

TYPE 1651-2500 VOLTS

Cat. No.	Cap.	NET	Cat. No.	Cap.	NET
E13535	.00005		E13539	.002	79c
E13536	.00025	41c	E13540	.006	\$1.03
E13537	.0005		E13541	.01	1.65
E13538	.001	53c	E13542	.02	2.32

TYPE 1652-5000 VOLTS

Cat. No.	Cap.	NET	Cat. No.	Cap.	NET
E13543	.00005	53c	E13547	.001	88c
E13544	.0001		E13548	.002	\$1.52
E13545	.00025	62c	E13549	.006	2.06
E13546	.0005	73c	E13550	.01	2.41

SANGAMO MICA TRANSMITTING CONDENSERS



Accepted by Amateurs everywhere for all types of transmitter and receiver circuits. Ideal for use as by-pass condensers, in R.F. circuits, as coupling condensers, etc. Bakelite cases; finest ruby mica dielectric. Accurate to within 10%. With machine screw terminals.

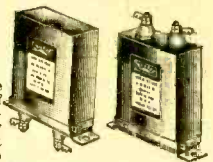
1000 V. DC TEST			2500 V. DC TEST		
No.	Mfd.	NET	No.	Mfd.	NET
E7650	.00005	50.24	E7672	.00005	50.41
E7651	.0001	24	E7673	.0001	.41
E7652	.00015	24	E7674	.0002	.41
E7653	.0002	24	E7675	.00025	.41
E7653	.00025	24	E7676	.0005	.41
E7656	.0005	24	E7677	.001	.53
E7658	.001	29	E7678	.002	.79
E7659	.0015	29	E7679	.004	.91
E7660	.002	29	E7680	.005	1.03
E7661	.003	35	E7683	.006	1.03
E7662	.004	35	E7682	.008	1.32
E7663	.005	41	E7683	.01	1.65
E7664	.006	50	5000 V. DC TEST		
E7665	.008	59	E7975	.00005	50.53
E7667	.01	68	E7976	.0001	.53
E7668	.015	73	E7977	.0015	.59
E7669	.02	1.09	E7978	.0025	.62
E7669	.025	1.35	E7979	.0005	.73
E7655	.03	1.47	E7980	.001	.88
E7671	.05	2.26	E7981	.002	1.32
E7670 Resistor clips.			E7982	.003	1.62
Net, per pair. . . . 6c			E7983	.005	1.94
			E7984	.01	2.41

We can also supply 2500 and 5000 Volt Sangamo condensers with "dead" terminals on one side, suitable for panel mounting at no additional cost. Specify when ordering.

CORNELL-DUBILIER

"TJ" SERIES FILTER CONDENSERS

Always a favorite with builders of transmitting equipment, these new "TJ" units represent increased value at no extra cost. Hermetically sealed in non-corrosive steel containers. Selected dielectric impregnated in Dykanol. Voltage ratings are conservative. Universal bracket supplied for upright or inverted mounting.



Cat. No.	Mfd.	Wkg. Volts	NET
E13550	1	600	\$1.62
E13551	2	600	2.06
E13552	4	600	2.66
E13553	1	1000	1.76
E13554	2	1000	2.06
E13555	4	1000	2.85
E13556	1	1500	1.68
E13557	2	1500	2.06
E13558	4	1500	2.85
E13559	1	2000	2.06
E13560	2	2000	2.23
E13561	4	2000	2.85
E13562	1	2500	4.12
E13563	2	2500	4.12
E13564	4	2500	5.00
E13565	1	3000	5.00
E13566	2	3000	
E13567	4	3000	
E13568	1	2500	2.06
E13569	2	2500	2.06
E13570	4	2500	2.06

"TL" SERIES

Especially designed for heavy-duty service in transmitter or power audio amplifier power supplies. Hermetically sealed in inverted type round aluminum containers; ideal for use where space is limited. Diameter of can is only 1 1/2". Dielectric is selected paper, impregnated and filled with Dykanol. Single hole mount with stud and lock nut.

NOTE: WE CAN SUPPLY all C.D. transmitting condensers not listed here, on special order. Write for complete catalog.



Cat. No.	Mfd.	Volts	NET
E13575	2	600	\$1.32
E13576	3	600	1.62
E13577	4	600	2.06
E13578	1	1000	1.32
E13579	2	1000	1.62
E13580	5	1500	1.76
E13581	1	1500	2.06

GENERAL ELECTRIC PYRANOL TRANSMITTING CAPACITORS

Attractive, durable transmitting condensers of the best quality. These condensers will give exceptional service and long life.

Filled and treated with Pyranol, a non-inflammable, non-explosive substance of unusual dielectric qualities. Hermetically sealed, with porcelain lead-out bushings. Equipped with mounting clamps for easy upright mounting.



No.	Model	Mfd.	Volts	NET
E5400	23F1	1	600	\$1.61
E5401	23F2	2	600	2.06
E5402	23F4	4	600	2.65
E5403	23F10	1	1000	1.76
E5404	23F11	2	1000	2.35
E5405	23F13	4	1000	2.94
E5406	23F20	1	1500	2.06
E5407	23F21	2	1500	2.94
E5408	23F23	4	1500	4.12
E5409	23F30	1	2000	2.65
E5410	23F31	2	2000	3.23
E5411	23F33	4	2000	5.29
E5412	23F39	1	2500	4.70
E5413	23F40	2	2500	7.64
E5414	23F41	4	2500	10.58

G. E. Pyranol Transmitting Capacitors are available in voltage ratings up to 5000 volts D.C. Write for complete listing.

Transmitting Equipment

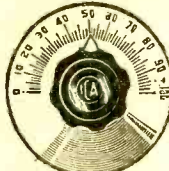
INSTRUMENT DIALS



2 3/4 INCH DIALS
E5733. 325 Degrees.
E5734. 180 Degrees.
NET
EACH..... **73c**

Chrome silver dials with grained satin finish and engraved black numerals and calibrations. Ideal for dressing up transmitters, test equipment, etc. Heavy black knob offers a real grip. For 1/2 inch shaft. Read 0-100 in choice of either 325 or 180 degrees rotation. Complete with vernier marker.

4 INCH DIALS
E5735. 325 Degrees.
E5736. 180 Degrees.
NET
EACH..... **\$1.03**



CHROME-SILVER PLATES WITH POINTER KNOBS

Handsome, professional dial plates finished in silver grain satin with calibrations clearly engraved in black. Calibrated 0 to 100. Plated finger grip pointer knob fits 1/2 inch shafts. 325 style ideal for amplifiers, modulators, etc. The 180° dial plates are excellent for use with all standard receiving and transmitting condensers.

2-INCH DIAL PLATES
E5670. 180 Degrees.
E5671. 325 Degrees. NET EACH... **52c**
3 1/2-INCH DIAL PLATES
E5672. 180 Degrees.
E5673. 325 Degrees. NET EACH... **71c**
4-INCH DIAL PLATES
E5674. 180 Degrees.
E5675. 325 Degrees. NET EACH... **91c**

DIAL PLATES ONLY (LESS KNOB)
180 DEGREES. NET EACH...
325 DEGREES. NET EACH...
No. Dia. NET No. Dia. NET
E5741 2" 28c E5744 2 1/2" 28c
E5742 3 1/2" 48c E5745 3 1/2" 48c
E5743 4" 57c E5746 4" 57c

VERNIER MARKERS

Attractive dial markers for accurate tuning. Chrome silver with satin grain finish.
Cat. No. Dial Size Degrees NET EACH
E5747 2 3/4" 325 15c
E5748 3 1/2" 180
E5749 4" 325
E5752 4" 180

FINGER GRIP KNOBS

Molded of high quality black bakelite; for 1/2" shaft. Has an attractive, professional appearance. Plated rim gives positive grip. Supplied with flange, with pointer, or plain.

WITH POINTER
E5475. 1 1/2". Fig. A. 23c
E5476. 1 3/4". Fig. A. 28c
E5477. 2". Fig. A. 34c
WITH FLANGE
E5478. 2 1/4". Fig. B. 28c
E5479. 3". Fig. B. 37c

LESS POINTER
Like Fig. A, but less pointer.
E5480. 1 1/2". EACH... 17c
E5481. 1 3/4". EACH... 23c
E5482. 2". EACH... 28c

NAVY KEY KNOBS

Molded of black insuloid. For easy keying. 5/8" high; 1 1/8" dia. of lower skirt. 8/32" screw. Relieves finger fatigue. One piece.
E5730. NET..... **9c**

JOHNSON HANDLE INDICATORS

Attractive tuning indicators which give that much desired Commercial appearance to Amateur transmitters. Handle molded of one-piece black bakelite. Scale is black and silver etched metal. left. Fit any 1/2" shaft; Type 206 with zero at also fits 3/8" shaft.
E13860. Type 204.
Indicator with 4" diam. scale. NET... **59c**
E13861. Type 206.
Indicator with 6" diam. scale. NET... **73c**

METAL NAME PLATES



STANDARD SIZE

High quality name plates designed to give your equipment a professional appearance. Made of brass with characters and borders chromium-plated; backgrounds are etched dull black. Available in 104 different markings, among which are the following: Microphone, Phono, Input, Oscillator, Transmitter, 1st Buffer Grid, Power Amp. Plate, Antenna, Plate Voltage, Filament Voltage, Key, Rectifier, A.C. Input, Modulator Plate, Gain Control, Input, etc.

Write for free complete list of name plates available. Standard size plate is 1 1/2 x 3/4 inches. This size is especially suited for Sound and Test Equipment. Finished complete with self-tapping machine screws. SPECIFY MARKING DESIRED WHEN ORDERING.
E2885. **6c**
NET EACH

DE LUXE SIZE

Similar to above but larger; 2 1/2 x 1 1/2. Especially designed for transmitters, etc. WRITE FOR COMPLETE LIST OF AVAILABLE PLATES.
E2888. NET EACH... **10c**

JACK MARKERS

Made of aluminum with background etched dull black. Borders and letters raised and highly polished. Hole dia. 1/4".
E2878. "Phones." **6c**
E2879. "Microphone." NET EACH
E2880. "Mike Cur."
E2881. "Phonograph."
E2882. "Plate Cur."
E2883. "Grid Cur." **7c**

AC-DC DIAL PLATES

Graduated tuning dial is marked 0-100. Volume plate has etched arrow. 1 1/2" diameter. Bronze finish.
E6677. Tuning dial. **9c**
E5678. Volume. EACH

SWITCH PLATES

Toggle-switch plates, attractively finished in etched aluminum with black background. Diameter, 1 1/2".
E4106. "MICRO-PHONO."
E4107. "OFF-ON."
NET EACH... **7c**

METAL DIAL PLATES

Attractive black dial plates with etched aluminum figures. Suitable for use on amplifier panels, etc. Also useful for test equipment. Measure 2 1/2" high x 1 1/2" wide. For 300° rotation.
E4100. "Record." 0-10.
E4101. "Microphone." 0-10.
E4102. "Gain." 0-10.
E4103. "Tone." 0-10.
E4104. "Master Gain." 0-10.
E4105. "Plain." 0-10.
EACH PLATE **12c**

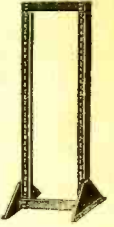
COTO CONTROL WHEEL

Combines pointer and dial in a single attractive control. Wheel is molded black bakelite fitted with aluminum pointer. Fits 1/2" shaft. Dial scale is black-finished aluminum with polished aluminum markings. Two pins attach nameplate. Gives professional appearance. Nameplates available as follows: OSCILLATOR; OSC. PLATE; BUFFER; BUFFER PLATE; DOUBLE-TUNING; DOUBLE PLATE; BUTR. DBLR. PLATE; GRID; PLATE; TANK; NEUTRALIZE; PWR. AMP. GRID; PWR. AMP. PLATE; ANTENNA. Specify name plate desired when ordering complete control.

E2665. 3/4" Control Wheel. **\$1.47**
With name plate. NET
E2666. 3/4" Control Wheel Only. **1.18**
With pointer. NET
E2667. 2/4" Control Wheel. **1.18**
With name plate. NET
E2668. 2/4" Control Wheel Only. **.88**
With pointer. NET

RELAY RACKS & PANELS

Designed for Transmitters or Public Address Systems. Heavy channel iron construction assures maximum rigidity and keeps all units in alignment. Heavy wrought steel base is drilled for floor mounting. Accurately drilled for mounting screws every 1/4 inch. Standard size to accommodate 19 inch panels with holes spaced 18 3/4". Shipped in knock-down form. Complete with necessary nuts and bolts for mounting. Will make professional appearing Transmitter or Public Address Installations.



3 1/2 INCH RACK
E12510. Shipped knocked-down. Complete with hardware. Weight, 26 lbs. **\$8.70**
NET

7 3/4 INCH RACK
E12511. Shipped knocked-down. Complete with hardware. Weight, 40 lbs. **\$10.70**
NET

PAR-METAL CABINETS

Completely enclosed cabinets that give a professional appearance to transmitters. Heavy sheet steel with ample ventilating louvers. Hinged door at rear. Drilled at 1 1/2" multiples for standard 19" relay rack panels.
Cat. No. Size Panel Spacing Shpg. Wt. NET
E12595 42x21x15 1/4" 3 1/2" 75 lbs. \$20.87
E12596 66 1/2 x 21 x 15 1/4" 6 1/4" 120 lbs. 27.64

PANELS FOR RELAY RACKS

All 19" wide, 1/4" thick. Drilled at multiples of 1 1/2". Fit racks or cabinets above.

Size Ht.	Black Wrinkle Steel	Black Wrinkle Electrolyt	Grey Wrinkle Steel
1 1/2"	E12550 .50 .42	E12560 .50 .64	E12570 .50 .46
3 1/2"	E12551 .46	E12561 .93	E12571 .50
5 1/2"	E12552 .50	E12562 1.27	E12572 .64
7"	E12553 .55	E12563 1.55	E12573 .68
8 3/4"	E12554 .59	E12564 1.83	E12574 .84
10 1/2"	E12555 .73	E12565 2.11	E12575 1.05
12 1/4"	E12556 .82	E12566 2.46	E12576 1.15
14"	E12557 .95	E12567 2.73	E12577 1.35
15 3/4"	E12558 1.10	E12568 3.03	E12578 1.55

RELAY RACK BRACKETS

Provides easy mounting of chassis bases and sub-panels to relay rack panels. Made of sturdy auto body steel with black crystalline lacquer finish. Will absolutely prevent sagging of shelves.
E12580 5" Base. PER PAIR... **38c**
E12581 8" Base. PER PAIR... **59c**
E12582 11" Base. PER PAIR... **75c**

METER PANELS

Heavy steel, black crystalline meter panels. Slotted to fit standard relay racks. 5/8" x 19".
Cat. No. No. of Holes Meter Size NET
E12583 3 2" **\$1.38**
E12584 3 2 1/2" .95
E12585 5 3" 1.44
E12586 3 3" .97

UNIVERSAL METAL CABINETS

Sturdy multi-purpose black crystalline-finished cabinets. Will serve many purposes, such as for P.A. amplifiers, transmitters, etc. Properly ventilated. Will take chassis up to 13"x17".
E12588. SINGLE UNIT. Size, 8 3/4"x19"x13". Will take one 8 3/4"x19" panel. Has door on top only. **\$5.14**
NET

E12589. DOUBLE UNIT. Size, 17 1/2"x19"x13". Will take two 8 3/4"x19" slotted panels. Has doors on top and back. **\$9.11**
NET

E12590. TRIPLE UNIT. Size, 26 1/4"x19"x13". Will take three 8 3/4"x19" slotted panels. Equipped with rear door only. **\$9.70**
NET

E12591. QUADRUPEL UNIT. Size, 35x19x13". Will take four 8 3/4"x19" panels. Equipped with rear door only. **\$11.61**
NET

CHASSIS BASES

REFER TO COMPLETE CHASSIS BASE LISTINGS ON PAGE 134 for chassis bases for all purposes and for complete listings of sizes. We can also supply special chassis bases, formed, punched or drilled to order for all special requirements. Prices and information on page 134.

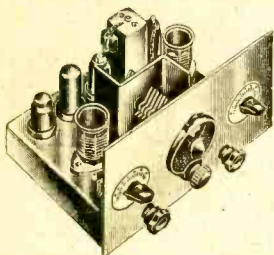
KNIGHT "Build Your Own" KITS

THE 1939 SERIES OF FAMOUS KNIGHT "BUILD-YOUR-OWN" KITS

A wide range of new easy-to-build kits for the beginner as well as for the advanced experimenter. New receivers, transmitters, electrical gadgets and 90 latest circuit diagrams of modern, easy-to-wire kits.

ALL KNIGHT kits can be assembled in a minimum amount of time. Chassis bases are punched and drilled; only the simplest tools are required for assembly. Even the beginner can build these sets successfully.

1939 SUPER-GAINER SHORT-WAVE KIT



An extremely efficient, easy-to-build four tube short-wave receiver capable of seven tube performance. Regenerative first and second detectors provide high degree of selectivity and sensitivity. Features: Handspread tuning, dual-regeneration, iron-core IF transformer, adequate shielding, operation either from batteries or A.C. power pack. Properly handled, this little set will provide knife-like tuning of CW signals closely approaching single signal action. Complete kit includes punched and drilled chassis base and panel, all necessary resistors, condensers, sockets and instruction. Requires 1—6L7, 1—6A5, 1—6J7 and 1—6FG. Shpg. wt., 10 lbs.

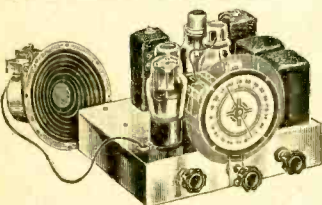
E9829. Complete Kit of Parts with 80 meter coils, less tubes. \$14.50 NET

E9835. Set of 8 Coils. Cover the 10, 20, 40, and 160 meter bands with adequate overlap for short-wave broadcast band coverage. \$3.40 NET

E9836. Broadcast Coil Kit. Set of 4 coils to cover the 540 to 1500 KC Broadcast band. NET \$1.70

E9837. A.C. Power Supply Kit. Output, 240 V. D.C., and 6.3 V. at 1.6 A. Includes punched chassis base, chokes, transformer, condensers, sockets, cable, diagrams, etc. Requires 1—80 tube (not supplied). Wt., 10 lbs. \$4.35 NET

4 TUBE BROADCAST & S. W. PORTABLE KIT



This newly developed, economical, battery-operated portable uses the latest low-draw tubes. The B. C. band (200 to 550 meters) or the S.W. band (16.5 to 53 meters) is selected by means of a rotary switch. Tuning is simplified with high ratio 4" airplane dial. Superhet circuit, IF regeneration and IF-5-G pentode output give real loudspeaker reception on DX. An ideal set where electrical power is not available, at the beach, picnic, camp, ball-park, or on a bicycle or auto. Any single wire or double aerial will serve. Uses 1C7-G converter, 1D5-G IF amplifier, 111-G grid-leak detector, and IF-5-G output. Required three 45-volt "B" batteries will last 6 months in average service, and two low-priced dry cell "A" batteries will operate set 40 hours. Supplied with punched and drilled chassis, speaker, construction diagram, and all parts; less only tubes and batteries. Shpg. wt., 8 lbs.

E9868. Complete Kit. \$14.35 NET

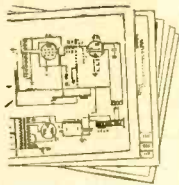
E9883. Battery Kit. Consists of 3 portable 45 v. "B" and 2 1 1/2 V. Burgess dry cells. NET \$3.99

E9884. Tube Kit. Matched set of four Raytheon tubes: 1—1C7G, 1—1D5G, 1—1114G, and 1—1F5G. NET \$3.95

E12545. Combination Portable Cabinet and Carrying Case. Will house both set and batteries conveniently. NET \$3.45

"BUILD-YOUR-OWN" WIRING DIAGRAMS

Clear, easy-to-read diagrams with complete matched parts lists. Enables you to build your own receivers, transmitters, amplifiers, power supplies, and gadgets, using latest type tubes and modern efficient circuits. Carefully designed and capable of "factory-built" performance.



- E1758. 2 Tube DX'er S.W. Battery Set.
- E1759. 2 Tube "Ocean Hopper."
- E1760. 4 Tube A.C. Broadcast TRF.
- E1761. 4 Tube A.C.-D.C. Broadcast TRF.
- E1762. 4 Metal Tube "Super-Gainer."
- E1763. 5 Tube A.C. Broadcast Super.
- E1764. 5 Tube Skip-Band A.C. Super.
- E1765. 5 Tube A.C. Broadcast TRF.
- E1766. 6 Tube Broadcast Battery Super.
- E1767. 6 Tube All-Wave Super.
- E1781. 6 Tube 6 Volt Skip Band Super.
- E1768. 5 Meter Battery Transceiver.
- E1750. 5 Meter A.C. Transceiver.
- E1769. Volume Expander for Radio or P.A.
- E1770. Crystal Set.
- E1771. 3 Watt Amplifier and Power Supply.
- E1751. 4 Watt A.C.-DC Amplifier.
- E1772. 5 Tube 2 Band (Police and B.C.) A.C.-D.C. TRF.

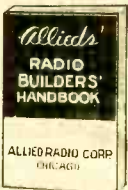
- E1773. 6 Tube 2 Band (S.W. and B.C.) A.C. Super.
 - E1774. 5 Tube Ham Super.
 - F1752. Photo-Electric Cell Unit.
 - F1778. Noise Silencer.
 - F1782. Coil Winding Data.
 - E1779. Electric Fence Control.
- (EACH DIAGRAM (To cover handling and mailing) 5c)

CHOICE OF 6 OF ABOVE DIAGRAMS. 20c

Schools—colleges—radio clubs. Write for our attractive quantity prices for wiring diagrams.

BUILDER'S HANDBOOK

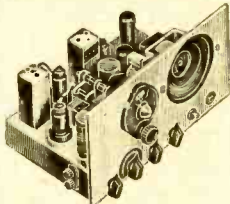
A new and different booklet prepared by ALLIED'S engineers to aid the experimenter and builder. Tells how to select suitable circuits, read diagrams, lay-out and punch chassis bases and panels, correctly place and wire radio parts, and efficiently operate radio receivers and transmitters. Includes socket lay-out information, coil-winding data, and ten other valuable charts. Shows schematic and pictorial diagrams of beginner and advanced sets, transmitters, fence controls, photo electric relays, etc. Size, 8 1/2 x 11".



E1753. NET 10c

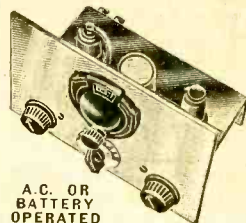
5 TUBE HAM SUPER KIT

Here is a new high-performance superhet for the beginner - amateur. Designed to provide maximum performance, with simplified operation and low cost. Easy to assemble and wire from the complete diagrams supplied. Uses five metal tubes: 6A8 converter, 6K7 I.F. amplifier, 6C5 regenerative second detector, 6F6 pentode output, and 5Z4 rectifier. Has built-in power supply, panel speaker, headphone jack, handspread, stand-by switch, and iron-core I.F. transformers. Regeneration is smooth, noiseless and easy to handle. Coils are supplied for 20, 40, 80 and 160 meter bands. This efficient little super can be assembled in a few hours. Kit contains all necessary parts with punched and drilled chassis base and panel and diagrams. Wt., 15 lbs.



E9843. Less tubes. NET \$19.25

NEW KNIGHT METAL TUBE "OCEAN HOPPER"



A.C. OR BATTERY OPERATED

An extremely efficient, easy-to-build receiver of modern design. Uses two metal tubes, 1—6J7 and 1—6C5. Features full bandwidth tuning; electron-coupled detector for maximum stability; shielded chassis construction; ultra-smooth noiseless regeneration control; non-critical antenna input and real signal "sock." May be operated from dry batteries or from special A.C. power supply listed below. Requires 6.3 volts at 6 A., 90 to 135 volts for plate supply. Will tune from 16 to 195 meters with coils listed below. Kit contains all necessary parts for building this receiver; punched and drilled metal chassis base and panel, sockets, condensers, resistors, wiring diagram, etc. Coils, batteries or A.C. power supply, tubes and headphones, are extra. Shpg. wt., 8 lbs.

E9844. Complete Kit of Parts. \$6.40 YOUR PRICE

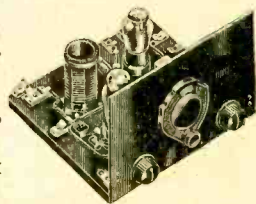
E9845. Coil Kit. Set of four coils for the Metal Tube "Ocean Hopper." Tune 16 to 195 meters. NET \$1.25

E9846. A.C. Power Supply Kit. Contains punched and drilled chassis base, transformer, chokes, condensers, etc. Requires 1—1V tube (not included). NET \$4.90

F9847. 3 Watt Utility Amplifier and Power Supply Kit. Uses 1—6F8, 1—6F6, and 1—5Z4. Supplies field excitation for 2500 ohm field dynamic speaker. Supplies 6.3 volts A.C. and 250 volts D.C. for tuner unit. Kit contains all parts, chassis base, etc. Less tubes and speaker. NET \$4.95

1939 2-TUBE DX-ER KIT

The 1939 version of the most popular low-priced kit for the short-wave beginner, experimenter, and radio student. Uses two economical type 30 tubes in an advanced circuit employing high gain regenerative



detector and transformer-coupled audio stage. Has vernier tuning control, regeneration control, and rheostat knobs on front panel. Operates from one or two dry cells and two "B" batteries. Kit contains all parts, including drilled masonite panel and baseboard. Coil kit and accessories are extra.

E9873. Shpg. wt., 7 lbs. NET \$3.99

E9839. Tube and Battery Kit. 2—30 tubes, 2—1 1/2 volt dry cells and 2—45 volt "B" batteries. Shpg. wt., 25 lbs. NET \$3.15

E2908. Brandes 2400 ohm headphones. NET \$1.59

E5565. Coil Kit. Set of four low-loss coils covering 16 to 217 meters. NET 85c

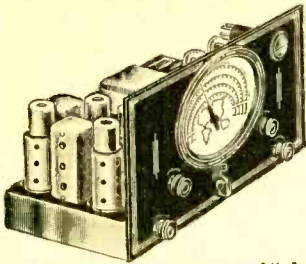
AUDIO AMPLIFIER KIT

E9840. For use with Two Tube DX-er. Uses a type 33 tube (not supplied). Will operate small magnetic speaker. Includes all parts. Wt., 3 lbs. NET \$1.15

E9841. Tube and battery kit audio amplifier. Contains 1—33 tube, 1—2 1/2 V. "C" and 1—45 V. "B" battery. NET \$2.20

Quality RECEIVER KITS

THE NEW BROWNING "83" ALL-WAVE RADIO



An easy-to-build 10 tube all-wave kit for the experimenter, S. W. fan, and active ham. Includes the completely wired, adjusted, and tracked Browning BL-1 Tuner with coils designed for maximum signal and absolute minimum internal noise. Tunes 13 to 550 meters continuously in 4 full bands (no skips). Extremely high signal-to-noise ratio. Sensitivity is less than 1 m.v. on all bands. Has a 7½" full-vision four-scale dial marked in MC; 13 to 1 tuning ratio for easy station logging. Built-in preselector and triple-tuned band-pass 450 KC IF transformers provide needed selectivity on the crowded ham bands and permit real DX work. Diode detection, phase inversion, and push-pull audio output assure high fidelity. Supplied complete including drilled cadmium-plated chassis and attractive black crackle panel. With diagrams and detailed instructions. Quickly and easily assembled and wired. For 110 v. 60 cycles A.C. operation. Shpg. wt., 20 lbs.

E10683. Complete kit, less one tube, speaker and cabinet. \$44.75

E10686. TUBE KIT. Includes: 2-6K7G, 1-6A8G, 1-6116G, 1-6C5G, 1-6F5G, 2-6F6G, 1-6G5, and 1-80 RCA tubes. NET...\$7.25

E10684. METAL CABINET. Attractive black crackle finish. Hinged cover. NET...\$5.30

E10685. WRIGHT-DECOSTER SPEAKER to match. Shpg. wt., 10 lbs. NET...\$5.65

MEISSNER TRF TUNER KIT



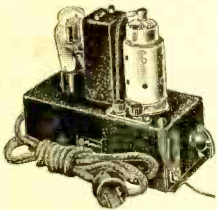
A high fidelity tuner kit for P.A. work and home receivers where the utmost in quality is desired. It uses Formant coils tuned by a 4 gang condenser. The self-contained power supply has an extremely low hum level. Calibrated 4" illuminated dial. Phone jack on front panel for P.A. monitoring. Requires 3-6K7, 1-6116, 1-6F8G, 1-5Z4. For 110 V. 60 cycles A.C. Less panel, cabinet and tubes. Shpg. wt., 20 lbs.

E10690. NET. \$22.78

E10691. Front Panel. NET...73c

E10692. Cabinet of black crystal-finished steel. 8½"x8¾"x12½". NET...\$2.79

NEW MEISSNER PHONOGRAPH OSCILLATOR



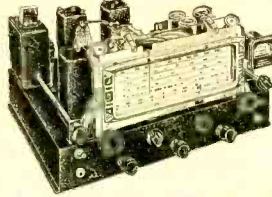
A self-powered, compact phono oscillator designed to provide excellent phonograph reproduction when used with any radio and a high impedance magnet or crystal phono pickup. Easily assembled and wired. Connects to radio set antenna and ground posts; radio or phonograph may then be selected at the turn of a switch. Uses 617 oscillator and 25Z5 rectifier. Supplied complete with drilled chassis and instructions (less tubes). For 110 Volts A.C. or D.C. operation. Shpg. wt. 8 lbs.

E10630. NET. \$6.76

NEW MEISSNER COMPLETE RECEIVER KITS

A selected group of high quality, laboratory-approved Meissner receiver kits. Guaranteed to be mechanically and electrically correct and to operate efficiently when assembled and wired.

14 TUBE 5 BAND "TRAFFIC MASTER"



A remarkable distance-getting communications receiver superhet kit. Complete coverage from 9.25 to 565 meters with better than 1 mv. sensitivity on all bands. Incorporates electrical bandspread, accurately calibrated 9" slide-rule fly-wheel dial, air-tuned coils with shielded switch assembly, mono-unit crystal filter for panel control, built-in noise silencer, BFO with pitch adjustment, "11" meter, A.V.C., 8.5 watts audio, headphone jack, stand-by switch. For 110 V. A.C. Shpg. wt., 40 lbs.

E10636. Complete Kit. \$80.26

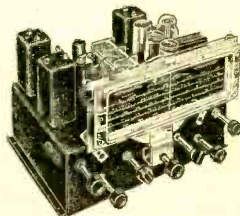
Less tubes, panel, cabinet, and speaker. NET.....

E10639. Tube Kit. 2-6K7, 1-6K8, 2-617, 2-6H6, 1-6L7, 2-6C5, 1-6C8B, 2-6V6G, and 1-5Y3G Raytheon. NET \$10.20

E10637. Front Panel. Black crackle-finished steel. NET...\$2.35

E9531. 12" Dynamic Speaker. NET \$3.69

8 TUBE "COMBINATION" SUPERHET KIT



A highly efficient, low-priced 4 band kit designed to tune continuously from 7.1 to 555 meters. Ideal as a high-fidelity home receiver or for ham communication work. Features: Calibrated 9" slide-rule dial, air-tuned coil assembly, B.F.O., iron-core I.F.'s, A.V.C.; separate R.F. and A.F. gain controls. Supplied complete with assembled, wired, and aligned R.F. assembly. Complete instructions. For 110 volts A.C. Less tubes, panel, cabinet, and speaker. Shpg. wt., 22 lbs.

E10631. NET. \$33.81

E10632. Tube Kit. 2-6K7, 1-6J7, 1-6L7, 1-6C5, 1-6Q7, 1-6V6, and 1-5Y4G Raytheon tubes. NET...\$5.80

E10633. Front Panel. NET...\$2.06

E9262. 8½" Dynamic Speaker. NET \$2.25

6 TUBE BATTERY SUPERHET

New easy-to-build, economical 6 volt battery-operated sets. Broadcast model covers 530 to 1660 K.C. Features R.F. stage, single battery operation, calibrated full-vision 7¼" slide-rule dial, iron-core I.F.'s, A.V.C., tone control, 1.1 watt audio output. Requires 2-6K7, 1-6A8, 1-6Q7, 1-6GGG, and 1-6X5. Less tubes, panel, cabinet, and speaker.

E10635. \$22.78

Broadcast Model. NET.....

E10628. Broadcast and S.W. Model. Covers 530-1660 K.C. and 5.85-18.8 M.C. \$26.90

NET.....

E9523. 8" P.M. Speaker. NET...\$3.29

MEISSNER "HOW TO BUILD" INSTRUCTION BOOK

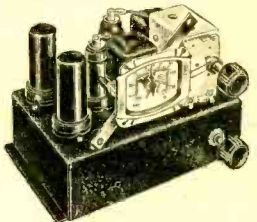


Complete instructions and full data on all Meissner kits. Has pictorial and schematic diagrams and chassis layouts of sets from 4 to 14 tubes. A.C.-D.C. models. Phonograph oscillators, noise silencers, etc. 120 pages. Wt. 1 lb.

E5681. NET...48c

The complete Meissner 44 page catalog features 27 kits, valuable coil information, and a listing of builders' accessories. Write for your FREE copy of this book. Ask for E5682.

LOW-COST 4 TUBE A.C.-D.C. T.R.F. KIT



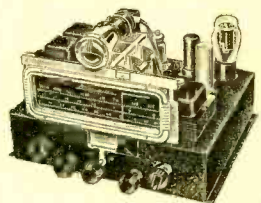
An easily built, compact, metal tube receiver with surprising sensitivity and tone quality. Ideal as a spare set for bedroom, kitchen, office, etc. For broadcast reception, 530 to 1600 K.C. Has vernier airplane dial, shielded antenna and R.F. coils. Uses a 6K7 I.F. amplifier, 617 power detector, 25A5 pentode output, and 25Z5 rectifier. For 110 volts A.C. or D.C. The complete kit includes all parts, instructions, and pictorial and schematic diagrams. May be quickly assembled and wired even by the novice. Shpg. wt., 9 lbs.

E10640. Complete Kit, less chassis, tubes, and speaker. NET. \$7.20

E10641. Punched and drilled chassis. 7"x9"x2". NET...\$1.32

E9533. 5" P.M. Speaker. NET...\$1.89

7 TUBE A.C. "UTILITY" SUPERHET KITS



These unusually efficient receivers can easily be constructed by anyone, using only a screw-driver, pliers, and soldering iron. Available in four models designed for outstanding performance in their respective fields. New circuit uses 6K7 R.F. amplifier, 6A8 translator, 6K7 high-gain I.F. amplifier, 6Q7 2nd detector, A.V.C., and 1st audio. 6V6 tuning condenser, and 6G5 magic eye. All models feature R.F. on all bands, 3 gang precision condenser, full-vision 7¼" slide-rule dial, high-gain iron-core I.F. transformer, tone control, and (except on broadcast model) separate sensitivity and A.F. controls. Supplied complete with all coils, tuning condenser, chassis, controls, knobs, switches, resistors, condensers, transformers, wire, hardware, etc. Instructions with schematic and pictorial diagrams included. Less panel, cabinet, tubes, speaker. Wt., 18 lbs.

E10643. Broadcast Band Model (530-1600 K.C.). \$20.43

NET.....

BROADCAST & SHORT WAVE KIT

E10644. Covers the broadcast and interesting 5.85 to 18.8 M.C. bands. Tunes the active 20 and 40 meter ham bands and \$22.78

permits European reception. NET.....

BROADCAST, POLICE, & S.W. KIT

E10645. Tunes 537-1770 K.C., 1.75-5.4 M.C. and 5.2-18.5 M.C. A good set \$24.55

for the DX fan. NET.....

LONGWAVE, BROADCAST, & S.W. KIT

E10646. An unusually versatile model. Tunes broadcast (530-1580 K.C.); weather reports, ships-at-sea, foreign stations (135-370 K.C.); and S.W. amateur and foreign stations (5.8-18.5 M.C.). NET...\$24.55

E10647. Front Panel for E10643. NET.....\$1.09

E10648. Front Panel for all other above sets. Black crackle-finished. NET...\$1.09

E10649. Cabinet for any of above sets. Black crackle-finished steel. NET...\$2.65

E10629. Tube kit for any of above sets. 2-6K7, 1-6A8, 1-6Q7, 1-6V6, 6G5, and 1-5Y4G Raytheon tubes. NET...\$5.25

E9262. 8½" Dynamic Speaker. NET \$2.25

LATEST "Build Your Own" KITS

"POPULAR MECHANICS" BUILD-YOUR-OWN KITS

Here is an extensive selection of complete kits of matched parts for building the most popular circuits described in recent issues of Popular Mechanics Magazine. Matched parts lists which are included with the "P.M." number blueprints are also available separately. For best results build these splendid Popular Mechanics circuits with ALLIED approved parts.

"PUSH-BUTTON" TWO TUBE CONSTRUCTION BLUEPRINTS

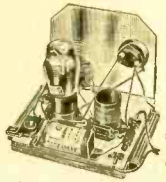


AC-DC SET

"Popular Mechanics" R258. An economical, easy-to-build loud-speaker radio for use in bedrooms, boys' nook, kitchen, office or den. Any one of five local stations is tuned in by pushing a button. The sixth button silences the set. Has separate volume control. Uses 6P7-G, 25A7-G. Has 3-inch P.M. speaker. For 105-130 volts A.C. or D.C. operation. Attractive walnut cabinet, 7 1/2"x7 1/2"x14". Kit includes speaker, cabinet, drilled chassis, blueprint, but less tubes. Shpg. wt., 10 lbs.

E9516. NET \$10.95

ONE TUBE FLASHLIGHT SET



"Popular Mechanics" R-252. A complete matched kit of parts for this popular set. The new high-gain circuit uses a single 49 tube—two cells serve as "B" batteries, and a single flash-light cell as "A". Plug-in coils cover all short-wave bands. Complete kit includes all parts, drilled panel, tube, batteries, and blueprint. Less headphones. Wt., 6 lbs.

E9517. NET \$4.55

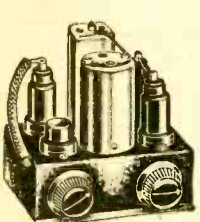
NEW "LITTLE GIANT" 4 TUBE AC-DC KIT



"Popular Mechanics" R250. A new efficient compact broadcast set. Traveling men, tourists, students, etc., will find this the ideal set. Also fine as portable "second set" for the home. Uses 1-6C6, 1-6D6, 1-25B5, 1-25Z5, and 1-K55B ballast. Works from a 110 volt A.C. or D.C. supply. Kit contains all necessary parts and complete instructions. Less only tubes and cabinet. Shpg. wt., 9 lbs.

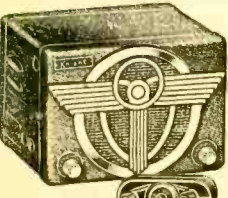
E9518. NET \$8.65

NOISE SILENCER KIT



No longer need your reception be disturbed by static, motor noise or other forms of interference. This new kit will effectively eliminate noises of practically every type. Works with any short wave or table wave superhet having one or two 465 or 456 KC.I.F. stages. Noise silencer incorporates an extra I.F. stage. Supplied complete with all necessary parts, instructions and 1-6116, 1-617, 1-6K7, and 1-617 RCA metal tubes. Black crinkle-finished base measures 5 1/2"x4"x2 1/2", and has all holes drilled. Wt., 6 lbs.

E9869. DE LUXE MODEL \$7.65

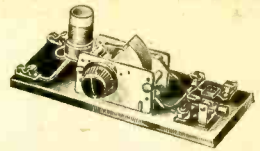


KNIGHT AUTO RADIO KIT

Build your own auto set for better tone quality, selectivity, and tuning ease, and real economy in cost. Compares favorably with the finest, high-priced commercial sets. Supplied with control panel to match any car. For city and country use. Kit contains every part needed: drilled chassis, attractive cabinet, assembly and mounting hardware, and complete instructions. Uses new 6 tube circuit: 6D6 R.F. amplifier, 6A7 pentagrid oscillator, 6D6 I.F. amplifier, 6Q7 2nd detector, 1st audio, and AVC, 41 for 3 wats output, and OZ4 rectifier. Incorporates local-distance switch, tone control, iron-core antenna coil, Litz-wire I.F. coils. Heavy-duty 6 1/2" Utah speaker assures superb tone quality. No suppressors needed. Specify make and year of car. Complete with tubes. Shpg. wt., 22 lbs.

E9894. YOUR PRICE \$20.95

KNIGHT CRYSTAL SET KIT



Here is a new and modern crystal set that every boy can build. Supplied in easy-to-assemble kit form using the best quality parts obtainable. Will provide unusually fine reception of local broadcast stations with clear, undistorted tone quality. Kit contains baseboard, completely wound coil assembly, high-grade variable condenser, open type adjustable crystal detector with sensitive crystal, connectors, color-coded point-to-point wiring instructions and schematic diagram. Shpg. wt., 4 lbs

E9867. NET \$1.35
E2806. Headset. NET .97c
E3485. Aerial Kit. You will obtain the best results with this aerial. NET .37c

KNIGHT EXPERIMENTERS' KIT AND ONE TUBE RADIO



Learn radio fundamentals with this "101 Experiments" kit. Consists essentially of a high quality regenerative one tube set, battery kit, and two test meters. Instructions supplied tell how to measure voltage and current, adjust an oscillating circuit, test for shorts and open circuits, and perform numerous other interesting experiments. It is easy to learn radio principles and construction work with this kit. Fine for beginners and experimenters.

E9596. Complete with tube and batteries. NET \$6.45

TOOL KIT

Essential tools for radio building. Includes soldering iron, solder paste, screw driver and pliers. **E5517. NET .89c**

STANCOR 4 WATT AC-DC AMPLIFIER

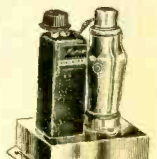
An all-purpose A.C.-D.C. amplifier in kit form with an output of 4 wats. Quickly and easily assembled, this little amplifier unit has a multitude of applications. For use in restaurants, dance clubs, lodge rooms, etc. Uses 1-6A7, 1-6C5, 2-251B, and 2-25Z5 tubes. Has a gain of 89 db., and input for both crystal microphone and phonograph pickup. Output impedances of 4, 8, 15, and 500 ohms permit use of one or more speakers, or use as a preamplifier unit. Two 251B beam power tubes in the push-pull output stage provide full 4 wats of audio without distortion. Two 25Z5's furnish ample power for all tubes. Clever tube combination avoids resistor line cord. Complete with punched and finished chassis base, all necessary parts, wiring diagrams, and instructions. Less microphone, speakers and tubes.



E9597. NET \$10.55
E9598. Kit of RCA tubes. NET \$5.29

BEAT OSCILLATOR KIT

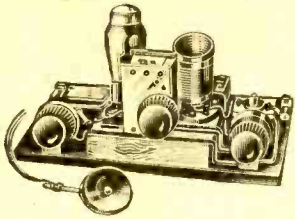
Easily constructed BFO unit which can be attached to any P.C. or S.W. 450-525 KC. superhet. Will enable you to listen in on or to tune in weak signals with ease. Supplied with type 58 tube for sets with 2.5 volt tubes, or with 6D6 for sets with 6.3 volts. Specify which is needed. Wt., 2 lbs.



E9599. NET \$3.15

TRANSMITTER & SHORT WAVE KITS

KNIGHT ONE TUBE ALL-WAVE BATTERY KIT



Compact and simple to build. A one-tube battery-operated receiver which brings in police signals, amateurs, broadcast stations and lots of distant stations. All terminals are color-coded and no wiring diagram is necessary. Has wood base. Uses a type 30 low drain tube. Complete kit includes all parts, hose, hardware, wire, 2 coils for 190 to 550 meters, earphone and clear instructions. Less tube and batteries. Wt., 4 lbs.

E9830. Kit of parts as described above. **YOUR PRICE... \$4.45**

E9831. Tube and Battery Kit. Consists of 2-1/2 V. dry cells, 1-45 V. "B" battery and 1-30 tube. Wt., 15 lbs. **NET... \$1.75**

E5565. Short-Wave Coil Kit. 4 coils cover 16-217 meter range. **NET... \$5.35**

AUDIO AMPLIFIER KIT

E9832. A two-stage audio amplifier. Will produce more than enough volume for magnetic speaker. Uses 2-30 tubes. Complete kit less tubes and batteries. Wt., 4 lbs. **\$1.45**

E9833. Tube and Battery Kit. Contains 2-30 tubes, and 1-45 V. "B" Battery. Wt., 11 lbs. **NET... \$1.75**

NEW 10c "BUILD-YOUR-OWN" RADIO PROJECTS

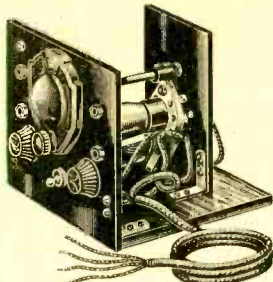


Complete construction information on 50 most popular S.W. receivers and transmitters featured recently in "Short Wave and Television." Average size, 11"x17". Each project includes wiring diagram, illustrations, and list of matched parts.

- 4350. Switch-Band-2 Receiver.
- 4351. Beginner's 2 Tube Receiver.
- 4352. Portable Superhet Four.
- 4353. 4 Band, 3 Tube Superhet.
- 4354. Fixed-Band 8 Tube Super.
- 4355. 5 Tube Superhet for Ham and Fan.
- 4356. Twin-Pentode Receiver.
- 4357. Short-Wave Receiver.
- 4358. Regenerative 2 Tube.
- 4359. S.W. & T. Communications Set.
- 4360. Band Switching 2 Volt Set.
- 4361. Multi-Band 2 Receiver.
- 4362. VS-5 Metal Tube Superhet.
- 4363. Beginner's 2 Tube Super.
- 4364. T. R. F. 3 Fan Receiver.
- 4365. Inexpensive "Forty-Niner."
- 4366. 5-Meter Superhet.
- 4367. 2-Volt Super DX-4.
- 4368. Ultra-High Wizard-6.
- 4369. High Gain, Metal-Tube Set.
- 4370. World-Wide 10-Meter Converter.
- 4371. DeLuxe 3 Tube.
- 4372. Octode Metal Tube 3.
- 4373. 3-in-1 Reflex Set.
- 4374. 100 Watt QRM Dodger.
- 4375. 5-Meter Mobile Station.
- 4376. H-G-M Medium Power Transmitter.
- 4377. 806 All-Band Transmitter.
- 4378. 25-Watt Modulator. Uses 35T's.
- 4379. C-O-M 150 Watt Transmitter.
- 4380. 1-Meter Receiver and Transmitter.
- 4381. 200 W. X'mitter, Pen-Tet Exciter.
- 4382. 10 and 20 Meter Transmitter.
- 4383. Wizard 1-Tube 50 W. Transmitter.
- 4384. "Oscillodyne" 1-Tube Wonder Set.
- 4385. 19" Twinplex Receiver.
- 4386. Ingrida 3-Tube Dnerle Set.
- 4387. "Go-Get 'Em 2" Receiver.
- 4388. 1-Tube Electric "Oscillodyne."
- 4389. 2 to 5 Meter, 2-Tube Speaker Set.
- 4390. 3-Tube Battery S.W. Set.
- 4391. Brief-Case S.W. Receiver.
- 4392. Pocket Short-Wave Receiver.
- 4393. Clear-Box 3-Tube "Catch-All."
- 4394. "Dual Wave" S.W. Battery Set.
- 4395. 1-Tube "53" Twinplex Receiver.
- 4396. Portable Minidyn S.W. Set.
- 4397. Ham-Band "Pee-Wee" 2-Tube.
- 4398. Duo-Amplidyne 1-Tube.
- 4399. Mono-Coil-2, Battery Set.

YOUR PRICE EACH 12 FOR \$1.00

KNIGHT TRANSMITTER & TRANSCEIVER KITS 5 METER TRANSCEIVER BEGINNERS' TRANSMITTERS



TWO-WAY 56-60 MC AMATEUR PHONE KIT BATTERY MODEL

Popular 5 meter phone transmitter and receiver. Easy to build and operate. Ideal for visible distance work. Uses a single 19 tube as push-pull unity-coupled, grid modulated oscillator. For reception same tube acts as push-pull super-regenerative detector. Uses simple 3/4 or 1/2 wave rod as antenna. Kit contains all necessary parts for building chassis. Model shown above. Shpg. wt., 6 lbs. **\$5.40**

E9895. NET... **\$3.50**

TUBE AND BATTERY KIT

Consists of one Raytheon 19 tube, two Burgess No. 5308 portable "B's" and two Knight dry cells. Shpg. wt., 16 lbs. **\$3.50**

A. C. MODEL

Similar to above model, but uses a 6A6 dual-triode tube. Requires 6 volts A.C. or D.C. for filament and 70 to 110 volt plate potential. For use with power supply below or with power pack providing 200 to 300 volts (used with 10,000 ohm 20 watt series resistor). For visible distance transmission. Parts are properly placed to eliminate body capacity. Complete with instructions, less only tube and power supply. **\$5.71**

E9547. NET... **\$5.71**

E475. Raytheon 6A6 tube. **NET... 90c**

POWER SUPPLY

A well-designed power supply kit which provides 6.3 volts A.C. at 1.5 amp. and 250 volts at 40 M.A. Supplied with 10,000 ohm series resistor for use with A.C. transceiver. May also be used to furnish power to S.W. sets, amplifiers, etc. For 105-130 volts, 50-60 cycle A.C. Shpg. wt., 10 lbs. **\$4.59**

E9548. Less tube. **NET... \$4.59**

E450. Raytheon 80 tube for above. **41c**

PORTABLE CASE

Durable, leatherette-covered split case for the Knight transceiver. Bottom holds batteries or power supply. Shpg. wt., 7 lbs. **\$3.75**

E9897. NET... **\$3.75**



UNIVERSAL 5 METER HANDSET

A compact lightweight combination earphone and microphone handset. Contains 2000 ohm earphone and high output, single button 200 ohm microphone. With 6 foot cord. Shpg. wt., 2 lbs. **\$5.88**

E2513. NET... **\$5.88**

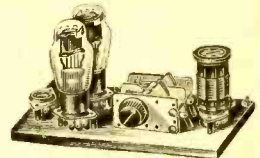
CATHODE RAY TUNING UNIT

An inexpensive visual tuning indicator using the new Electron-Ray tube. Quickly and easily installed in any Broadcast, All-Wave or Short Wave set having AVC, but which is not equipped with visual tuning device. Requires 6.3 or 2.5 volts for filament. Complete assembly with mounting brackets, color-coded cable and instructions, less tube. Wt., 2 lbs. **73c**

E1987. NET... **73c**

E481. Raytheon 6E5 tube for receivers using 6.3 V. tubes. **NET... 77c**

E490. Raytheon 2E5 tube for receivers using 2.5 V. tubes. **NET... 77c**



10 WATT TRANSMITTER

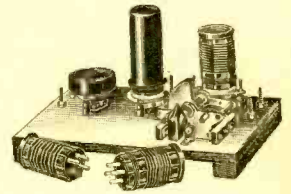
Patterned after the beginner's transmitter described in the AIRL "How to Become an Amateur" book. Designed in breadboard style with all major parts mounted on top. Requires a minimum of assembly and wiring work and can be completed in two hours. Uses 2 type 47 tubes in a push-pull crystal-controlled circuit, which will deliver up to 10 watts output. Complete kit of parts is provided with detailed wiring diagrams and instructions. All parts are of good quality. The completed transmitter may be used with any type of antenna. Kit contains all parts, baseboard and instructions. **\$2.60**

E9541. NET... **\$2.60**

E9542. ACCESSORY KIT. Contains 2 Raytheon type 47 tubes, key and 80 meter crystal and crystal holder. **\$4.80**

E9543. POWER SUPPLY KIT. Will supply 2.5 volts for filaments and correct plate voltage for the above transmitter. Supplied complete, less only 5Z3 tube. For 110 volt 50-60 cycles. **NET... \$5.35**

20 WATT TRANSMITTER



Advanced type 6L6 Beam-Power transmitter for C.W. Stable crystal oscillator circuit may be used with any antenna. Rated at 20 watts. Quickly and easily assembled and wired in breadboard style. Single condenser tunes all bands; supplied with 3 plug-in coil forms for 20, 40 and 80 meter coverage with proper crystals. Kit contains baseboard, tuning condenser, tube sockets, RF chokes, wire, diagrams, etc. Less tube, crystal, and key. Shpg. wt., 8 lbs. **\$3.60**

E9544. NET... **\$3.60**

E9545. ACCESSORY KIT. Contains Raytheon type 6L6 metal tube, key, 80 meter crystal and crystal holder. **\$4.45**

E9546. POWER SUPPLY KIT. Well-filtered unit supplies correct plate and screen voltages and 6.3 V. for tube filament of the above transmitter. For 110 volts, 50-60 cycles A.C. Complete, less only 5Z3 tube. Shpg. wt., 12 lbs. **NET... \$5.05**

NEW PHOTO CELL KIT

Highly sensitive, lowest-price photo-cell kit. May be used for starting a hand stopping motors, controlling bells and lights, for burglar alarm or other applications. Increase or decrease of light intensity controls unit. Self-powered for 110 volt AC or DC operation. Uses G-M sensitive photo-cell and type 43 pentode as rectifier and amplifier. Quickly adjusted for greatest sensitivity with 2,000 ohm control. Sensitive relay is of the SPDT type. Easily assembled and wired as illustrated. Offers a real education in the photo-cell field; definitely not a toy. Kit includes all parts, photo-cell, Raytheon type 43 tube, and instructions. Shpg. wt., 5 lbs. **\$5.85**

E9595. NET... **\$5.85**

NEW COILS FOR ALL PURPOSES

LATEST TYPE MEISSNER COILS FERROCART IRON-CORE I. F. TRANSFORMERS



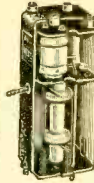
A new development in IF transformers. Incorporate a finely powdered iron core with each particle insulated from the others resulting in a higher "Q". Core and winding losses are reduced to a minimum. Gain and selectivity are nearly twice that of air-core types. Ideal for replacements or original installations. Double-tuned from top mica insulated; 1% square, 3% high. With instructions.

Freq.	Input No.	Interstage No.	Output No.
175 KC	E5800	E5804	E5808
456 KC	E5801	E5805	E5809
1500 KC	E5802	E5806	E5810

NET
EACH..... **\$1.18**

"ALIGN-AIRE" FERROCART IRON CORE I. F.'S

A new line of high-efficiency IF transformers having iron-cores. Will greatly increase gain, selectivity and sensitivity of either old or new sets. Tuned with air-dielectric condensers affording maximum stability. No frequency drift under normal changes of temperature. Finest Litz wound coils; completely shielded; with spade lug mountings. Can size, 2x2x3/4". Double top tuned.



Freq.	Input No.	Interstage No.	Output No.
175 KC	E5825	E5828	E5831
456 KC	E5826	E5829	E5832
1500 KC	E5770	E5771	E5772

NET
EACH..... **\$2.94**

STANDARD I.F. TRANSFORMERS

Standard high-gain IF transformers of superior design. Ideal for replacements and new set building. Lattice-wound primary and secondary tuned by mica-insulated compression type condensers from top of can. RMA color-coded leads. Aluminum cans measure 1 1/2" square and 3/4" high.

Freq.	Input No.	Interstage No.	Output No.
175 KC	E5835	E5838	E5841
282 KC	E5836	E5839	E5842
456 KC	E5837	E5840	E5843

NET
EACH..... **69c**

CENTER-TAPPED OUTPUTS

E5783. 175 KC.	EACH..... 69c
E5784. 456 KC.	

IRON-CORE BAND EXPANDING I.F.'S

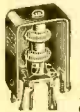


An iron-core I.F. transformer with sharp selectivity for efficient C.W. or foreign reception. Also provides broad band-width for high-fidelity local-station reception. Electrically variable; no shafts or cam controls are needed. Two of these units may be used to provide almost single-signal selectivity. Mica-tuned type. Size, 1 1/2" x 1 1/2" x 3 1/2".

E5768. 2 Position. Sharp selectivity and Broad for High Fidelity.
NET..... **\$1.76**

E5769. 3 Position. Sharp selectivity. Broad for High Fidelity. Medium for average use. NET..... **\$2.06**

UNIVERSAL ADJUSTABLE FERROCART COILS



A unique line of coils that permits exact duplication of defective R.F., Antenna or Oscillator coils in any set. Inductance is continuously variable over a wide range to permit accurate tracking with old coils. In receivers requiring the replacement of only one or two coils. Fully shielded; easily mounted in small space. Simple screw-driver adjustment. Size, 1 1/2" x 1 1/2" x 2 1/2".

E5795. Antenna Coil. NET
E5796. Oscillator Coil. EACH **\$1.18**
E5797. R. F. Coil.

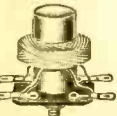
MEISSNER COIL DOPE



This high-grade RF lacquer assures you permanently efficient coils. Absolutely no loss in "Q" at any frequency. Quick drying.

E7522. NET..... **29c**

PENTAGRID OSCILLATORS



Compact, thoroughly impregnated oscillator coils particularly designed for use with Pentagrid tubes. Easy to mount; bakelite base with lug terminals. For use with 365 mmf. TRF type variable condenser and a padeder. Coils are duo-lateral wound to minimize distributed capacity. Wax-impregnated to prevent moisture absorption.

SHIELDED TYPE
E5822. 175 KC. Use 900 mmf. padeder.
E5823. 456 KC. Use 350 mmf. padeder.
NET
EACH..... **56c**

UNSHIELDED TYPE
E5820. 175 KC. Use 900 mmf. padeder.
E5821. 456 KC. Use 350 mmf. padeder.
NET
EACH..... **38c**

PRESELECTOR



A high-gain shielded band-pass preselector unit for the broadcast band. Tunes 540-1700 KC with 365 mmf. condenser. Mounted in square aluminum can. 1 1/2" x 1 1/2" x 2".
E5782. YOUR PRICE... **89c**

HIGH GAIN THREE PI I.F. TRANSFORMERS

New type IF transformers with three pi windings on primary and secondary. Exceptionally high gain. For best results, only one should be used in a receiver. Double-top-tuned. Cans measure 1 1/2" x 1 1/2" x 3 1/2".
E5812.
456 KC Input. NET... **\$1.09**
E5813.
456 KC Output. NET... **1.09**



BEAT FREQUENCY OSCILLATORS

Especially designed units for use in incorporating beat-frequency oscillators in all-wave or short-wave receivers not already so equipped. Will provide "beat-note" tuning for locating weak signals, or for code reception. Can size 1 1/2" square x 3/4". With pitch control knob on top. Mica-insulated trimmer.
E5773. 175 KC.
E5818. 456 KC. NET **\$1.03**
E5774. 1500 KC. EACH



UNIVERSAL REPLACEMENT COMPOSITE OSCILLATORS

A compact, efficient combination oscillator assembly and 1st IF transformer. For use in circuits where first detector is also used as oscillator. Tunes from top. For use with any 370 mmf., T1P type condenser. Measures 2x2x3/4". Supplied with diagram.

E5798. 175 KC.
E5799. 456 KC. } EACH **\$1.76**



MIDGET SOLENOID COILS

Extremely efficient midget solenoid type coils, wound with enamelled wire on a special tubing. Ideal for replacement in midget TRF sets. Primaries are adjustable. Unshielded. Tapped coils enable amateur and police reception. For use with 370 mmf. condenser. 540 to 1600 KC.



E6588. SET OF 2 COILS. **29c**
YOUR PRICE.....
E6589. TAPPED FOR 2400 KC. 1-Antenna coil and 1-RF coil. **35c**
YOUR PRICE.....

REPLACEMENT PRIMARY WINDINGS

Replacement high impedance primary windings for use where extreme economy is necessary; for both Amemna and RF coils. The dimensions given below are the outside diameters of the coils with which these windings may be used.

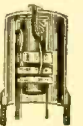
E7516 1/4" | E7519 3/4"
E7517 1/2" | E7520 1/2"
E7518 3/8" |
NET EACH..... **15c**



NEW MILLER IRON CORE R.F. COILS

Small size R.F. coils, especially desirable for use in auto or other sets where a high-gain coil of small physical size is required. In aluminum shield cans measuring 1 1/2" diameter and 2" high. For use with 370 mmf. tuning condensers.

E6584. Antenna Coil. } EACH **88c**
E6585. R. F. Coil. }
E6586. Oscillator Coil (465 KC) }
(Use 400 mmf. pad.) YOUR PRICE **88c**



10 K.C. FILTER COIL

For use in the load circuit of a diode or infinite impedance detector, to eliminate 10 KC whistle in wide-range broadcast receivers. Attenuation to 10,000 cycles, approx. 30 db. Size: 1 1/2" square, 2 1/4" long.
E6587.
NET..... **\$1.32**



HIGH GAIN T.R.F. COILS

Bank wound with Litz wire, permitting unusual sensitivity and uniform gain over entire wave band. Round shielding can 2 1/4" in. high, 1 1/2" in. diameter. Use with 370 mmf. condenser. Covers 1760 to 540 KC. Low impedance primaries.



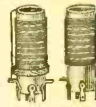
FULLY SHIELDED

E5844. ANTENNA COIL. **31c**
E5845. R.F. Coil. Same size and mounting as above. NET EACH
E5846. 4 TUBE KIT. Contains 1 Ant. Coil and 1 R.F. Coil. NET... **60c**
E5847. 5 TUBE KIT. Contains 1 Ant. Coil and 2 R.F. Coils. NET... **89c**
(All kits include schematic diagrams.)

UNSHIELDED TYPE

Similar to coils listed above but not equipped with shield can. Supplied with mounting bracket and dowel with screw and bolt; permits mounting in any desired position. 3/8" diam. by 2 1/4" long.

E5777. Antenna Coil. } EACH **29c**
E5778. R.F. Coil. }
E5779. 4 Tube Kit. Contains 1 Antenna Coil and 1 R.F. Coil. NET... **56c**
E5780. 5 Tube Kit. Contains 1 Antenna Coil and 2 R.F. Coils. NET... **83c**
(All kits include schematic diagram.)



ANT. & R.F. COILS

High-gain fully shielded coils; for use with screen grid tubes. High impedance primaries. R.F. coil has primary at 90°. For 370 mmf. condenser. With coupling rings. 1 1/2" dia. 3" high. Tune 540 to 1600 KC.
E5848. Antenna Coil. **54c**
E5849. R.F. Coil. EACH



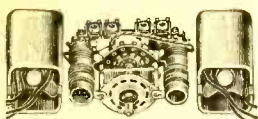
NOISE SILENCER I.F. TRANSFORMER

A close-coupled IF transformer, single-tuned, with center-tapped secondary, especially designed for use in the popular noise silencer circuits. Mica-tuned; coded leads. Each unit supplied with wiring diagram.
E5693. 456 KC. NET..... **81c**



COILS · COIL FORMS · COIL KITS

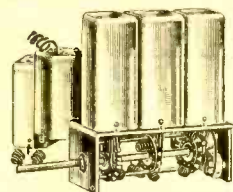
SKIP-BAND COIL ASSEMBLY



Enables you to build a sensitive receiver tuning from 5.7 to 18 M.C. and 540 to 1580 K.C. Coil assembly is completely wired and ready to install. Kit contains: 2 band antenna coil and 2 band oscillator coil mounted on a band-change switch; padding condensers; 2-456 KC IF transformers. Requires a 2 gang 370 mmf. tuning condenser. Diagram is included.

E2707. NET **\$3.74**

GEN-ERAL COIL ASSEMBLY



Antenna, RF and Osc. coils, assembled and wired with 4 point wave change switch. Tunes 140 K.C. to 18 M.C. in four bands with 456 mmf. condenser. Includes 2-456 KC IF transformers and diagram.

E2709. COMPLETE KIT as described above. NET **\$10.19**
E2710. Less I.F. transformers. **\$8.92**
YOUR PRICE

NOTE: Coil assembly above will perfectly match the DeJong unit E2705 listed on page 130.

TWO BAND COILS

Efficient Short-Wave and Broadcast coils for the serviceman and experimenter. Shielded types are complete with mica-dielectric trimmers. Use with 456-465 KC IF systems. For 365 mmf. T.R.F. variable condensers.

BROADCAST AND POLICE	
SHIELDED	UNSHIELDED
E7500. Antenna	E7503
E7501. R.F.	E7504
E7502. Oscillator	E7505
NET	NET
EACH 97c	EACH 67c

BROADCAST AND SHORT-WAVE

BROADCAST AND SHORT-WAVE	
SHIELDED	UNSHIELDED
E7507. Antenna	E7510
E7508. R.F.	E7511
E7509. Oscillator	E7512
NET	NET
EACH 97c	EACH 67c
E7514. DUAL ADJUSTABLE PADDING CONDENSER. Each section 180-620 mmf. The correct series padder for the oscillator coils listed above. NET 32c	
E5775. 3 GANG 2 POSITION SWITCH. For use with coils listed above. For making front-of-panel band changes. NET 88c	

THREE BAND COILS

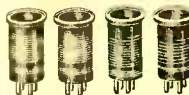
Similar to 2 band coils above, but have 3 band coverage. Trimmer condenser bank mounted on one side for ease of adjustment. Supplied in two popular wave groups. Fully shielded. Well-built for dependable reception.

BROADCAST, POLICE & S.W.	
SHIELDED	UNSHIELDED
E5910. Antenna	EACH
E5911. R.F.	\$1.47
E5912. Oscillator	\$0.73
E5761. Padding Condenser Kit	1.18
E5776. 3 Gang 3 Position Switch	

LONG-WAVE, BROADCAST & S.W.

LONG-WAVE, BROADCAST & S.W.	
SHIELDED	UNSHIELDED
E5914. Antenna	EACH
E5915. R.F.	\$1.47
E5916. Oscillator	\$0.88
E5762. Padding Condenser Kit	1.18
E5776. 3 Gang 3 Position Switch	

PLUG-IN COILS



Space-wound coils for use with 140 mmf. condensers. Forms are smooth bakelite. 1 1/4" diameter and 2 1/4" high; rim-top for easy handling.

4 PRONGS-2 WINDINGS	
E5565. Short-Wave Coil Kit. 4 coils cover range from 16 to 217 meters.	85c
NET	
E5566. Broadcast Coil Kit. 2 coils cover range from 190 to 550 meters.	65c
NET	
E5567. Ultra Short-Wave Coil. Covers range from 9.5 to 21 meters.	35c
NET	

6 PRONGS-3 WINDINGS	
E5568. Short-Wave Coil Kit. Primary, secondary and tickler windings. Cover 16 to 200 meters. 4 coils in kit.	\$1.35
NET	
E5569. Broadcast Coil Kit. 2 coils cover 190 to 550 meters. NET	85c
E5570. Ultra Short-Wave Coil. Covers 9.5 to 21 meters. NET	38c

BAND-SPREAD COILS

5 prong coils complete with ceramic base spreading condenser mounted on top. Spread crowded amateur bands over large part of dial. For use with 140 mmf. condenser.

No.	Meters	Range-MC	NET EACH
1920	20	14.0-14.4	45c
1921	40	7.0-7.3	
1922	80	3.5-4.0	
1923	160	1.7-2.0	
1924	Kit of 4 coils		\$1.70

BAKELITE RIBBED TYPE



1 1/4" diameter and 2 1/4" high; molded ribs for low-loss winding; rim handles. Uniform windings for use with 140 mmf. condenser.

4 PRONGS-2 WINDINGS	
E5574. Short Wave Coil Kit. Set of four coils covers range of 16 to 217 meters. Grid and tickler windings. NET	\$1.18
E5575. Broadcast Coil Kit. 2 coils cover 190 to 550 meters. NET	94c
E5576. Ultra Short-Wave Coil. Covers 9.5 to 21 meters. NET	45c

BAKELITE COIL FORMS RIM TYPE

Low-loss, with high dielectric strength. Molded rim handle for easy grip. 1 1/4" diameter and 2 1/4" high.

No.	Prongs	NET EACH
E1930	4	10c
E1931	5	
E1932	6	
E1934	7S	18c
E1935	8 (750)	

SMALL RIBBED TYPE

Genuine molded bakelite: 1 1/4" diameter, 2 1/4" high. Have molded ribs for low-loss winding.

No.	Prongs	NET EACH
E5577	4	12c
E5578	5	
E5579	6	

LARGE RIBBED TYPE

Large ribbed coil forms of molded bakelite for winding low-loss coils. 1 1/2" diameter with 2 1/2" winding space. Have molded rim at top for easy handling.

No.	Prongs	NET EACH
E2695	4	17c
E2696	5	
E2697	6	

BAND-SWITCHING COILS

Covers from 16 to 550 meters. Two or more units are easily ganged. Has 4 prong base for easy mounting. Complete with pointer knob, dial plate and diagrams. For 140 mmf. condenser.

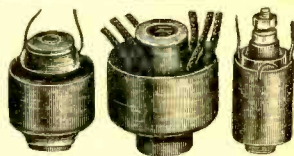
E5661. List, \$1.50. NET **\$2.65**

SPECIAL VALUE

GIANT RIBBED COIL FORMS

High-grade ribbed coil forms. 3" high x 1 1/2" dia. Ideal for amateurs and experimenters who wind their own coils. Easy to drill. Can be wound for all bands to match any receiver.

E2629. 4 PRONG	11c
E2634. 6 PRONG	
NET EACH	
10 FOR	99c
E2639. 4 PRONG COIL KIT. Above coil forms wound for general coverage from 16 to 36, 32 to 64, 57 to 115, and 107 to 217 meters.	89c
YOUR PRICE (4 COILS)	



REPLACEMENT MAJESTIC I. F. TRANSFORMER COILS

Will fit in original Majestic shield cans without change. Well-constructed. Thoroughly impregnated; moisture-proof. Wound of double-coated enameled wire on paper tubing. Coils are supplied less tuning condenser and can.

Cat. No.	Majestic Part No.	Model	EACH NET
E7150	4428	15, 15B, 150	\$0.35
E7151	8384	15, 15B, 150	.40
E7154	6506	55	.40
E7158	6250	209	.40
E7160	6119	210	.40
E7161	6123	210	.40
E7162	6127	210	.40
E7163	7812	390, 310, 330	.42
E7168	10149	460	.40
E7169	10253	460, 800	.48
E7169	11014	800	.48
E7175	7187	Primary coil used as RF plate coil in Models 290, 300, 310, 330, 460, 520 and 800	.40

COIL ASSEMBLIES IN CANS

Cat. No.	Part No.	Model	EACH NET
E7190	4428	15, 15B, 150	\$1.35
E7191	8384	15, 15B, 150	.88
E7193	10149	460	.85
E7194	10843	500	1.25
E7195	3908	20	1.45
E7196	3960	20	1.75
E7197	4439	60	1.75

BELMONT COMPOSITE IF AND OSCILLATOR COIL

E5793. For Models C-19, 50C, Viking 51C. Also exact duplicate for many Silvertone sets. Fits same holes as original coil.

YOUR PRICE **\$2.35**

CROSLY UNTUNED I.F. COIL

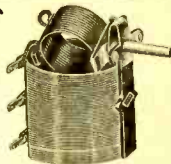
E5794. Exact duplicate for Models 122, 123, 124, 125, 126. No redrilling necessary.

YOUR PRICE **73c**

We can supply exact duplicate, or adequate replacement coils for any set. When ordering, state name, model and type of set, where coil is used, bands covered, condenser type, tubes coil is used, etc. Cost depends on coil specs. Send old coil for quotation or remit with deposit for replacement.

THREE CIRCUIT TUNER

Tuner has primary, secondary and variable tickler windings. Designed for use with a 350 mmf. variable condenser. Pig-tail tickler connections assure positive contact at all times.



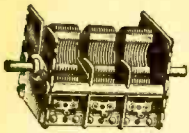
TAPPED FOR SHORT WAVE

Both the three circuit tuner and the R.F. coil are tapped for short wave as well as standard broadcast reception.

E1704. Tuner. YOUR PRICE	78c
E1705. R. F. Coil to match Tuner.	48c
NET	

VARIABLE CONDENSERS & CHOKES

UNIVERSAL GANG CONDENSERS



A tuning condenser of truly universal application. Has $\frac{1}{4}$ " shaft extending out from both ends. Clockwise or counter-clockwise application in a single unit; solid, ball-type unit; front and rear ball-race bearings; high end plates; high-grade low-loss bakelite insulation; rotor grounding springs for each section. High-quality units in every detail.

WITH DOUBLE-END SHAFTS AND REVERSIBLE TRIMMERS

Easy ganging of 2 or more, 2 or 3 gang units permits obtaining 4, 5, 6 or more ganged sections. Either end may be used as front, providing either clockwise or counter-clockwise rotation. Slotted end plates for complete alignment of all circuits. Trimmers may be placed on either side, or may be removed entirely. $\frac{1}{4}$ " shaft can be increased to $\frac{3}{8}$ " by using E1586 bushing below.

2 GANG CONDENSER

Each section has a maximum capacity of 370 MMF. Holes are provided at front, rear and bottom for bracket or spade bolt mounting. End plates $2\frac{3}{4} \times 3\frac{1}{16}$ ".

E4137. NET EACH **\$1.29**

3 GANG CONDENSER

Identical to the model described above except that it has three 370 MMF sections instead of two. End shields; $2\frac{3}{4} \times 3\frac{1}{16}$ ".

E4137. NET EACH **\$1.81**

NEW MEISSNER 3 GANG VARIABLE CONDENSERS

These precision-built three-gang variable condensers are rigidly constructed to give the very highest quality performance possible. Counter-clockwise rotation increases the capacity.

E5763. 365 MMF. With trimmers.. **\$2.35**
 E5764. 365 MMF. Less trimmers.. **2.22**
 E5765. 410 MMF. Less trimmers.. **2.22**
 E5766. 450 MMF. Less trimmers.. **2.26**

TRIMMER CONDENSERS

A new small-size trimmer condenser. Ideal for balancing, trimming, neutralizing, antenna coupling, etc. Of sturdy construction on low-loss bakelite base measuring $\frac{3}{8} \times \frac{3}{8} \times \frac{5}{16}$ ". Full-plate type, with high grade mica dielectric. 3-30 mmf. S in a 11 enough to mount inside coils or directly to coil terminals.

E2949. NET EACH **6c**
 LOTS OF 10 **50c**
 E2947. Ceramic Type. Has porcelain base instead of bakelite. Low-loss. Measures $\frac{3}{8} \times \frac{3}{8} \times \frac{3}{4}$ ". NET **8c**

TRIMMER AND PADDING CONDENSERS

For HF, JF, and Oscillator circuits. First quality mica-insulated; isolantite base. Screw driver adjustment. May be shunted by fixed mica condenser to increase maximum capacity. Solder lug type connectors.

Type A			Type B		
No.	MMF	NET	No.	MMF	NET
E6430	35-120	16c	E6490	20-90	14c
E6431	80-225	19c	E6491	50-180	16c
E6432	210-390	22c	E6492	100-300	19c
E6433	350-600	24c	E6493	170-410	27c
E6434	395-735	27c	E6494	300-800	30c
E6435	520-960	30c	E6495	300-675	33c
			E6496	325-850	38c

MEISSNER "ALIGN-AIRE" UNITS

3600 degrees of micrometer tuning. Air dielectric and ceramic insulation. Dust- and moisture-proof. Metal case. $\frac{1}{2}$ " diameter; 1" long.

E5757. 5-25 MMF. NET **53c**
 E5758. 25-50 MMF. NET **53c**
 E5759. 40-100 MMF. NET **73c**
 E5760. 1-12 MMF. Bakelite body measures $\frac{1}{16}$ " diameter and $\frac{1}{4}$ " long. NET **21c**

Insulated, bakelite flexible shaft coupling. Permits tandem operation of condensers, etc. For $\frac{1}{4}$ " shafts.
 E4149. NET **21c**

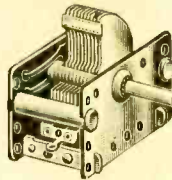
KNIGHT COMPACT PRECISION CONDENSERS

SINGLE TYPE

General-purpose compact single unit condensers. Low-loss bakelite insulation. Measures $3\frac{1}{4} \times 1\frac{1}{2} \times 1\frac{3}{8}$ ". Very rigid, sturdy construction, throughout. Condenser closes to the right. Capacity increases clockwise.

E4115. 100 MMF. NET EACH
 E4116. 150 MMF. **72c**
 E4117. 240 MMF.
 E4118. 450 MMF.

E4121. .0005 MFD. A very popular type used extensively in Short-Wave and All-Wave set building. NET **75c**



370 MMF. GANG CONDENSERS

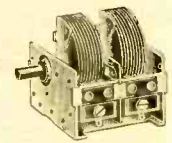
New, easy-to-mount compact condenser assemblies of superior design and precise construction. Trimmers are mounted on both sides. Plates slotted for accurate alignment. Maximum capacity, 370 mmf. Clockwise rotation. $\frac{1}{4}$ " shaft extends $1\frac{1}{2}$ ". End shields measure $2\frac{3}{4} \times 1\frac{1}{4}$ ". Can be used as tuning condensers in popular radio magazine set-builders kits.

E4141. 2 GANG... **89c** E4143. 3 GANG... **\$1.29**

150 MMF. GANG CONDENSERS

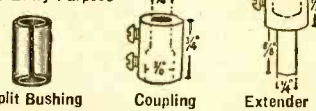
Compact short-wave gang condensers. Ball-bearing pivots. Trimmers may be mounted on either side or removed. $3\frac{1}{2} \times 1\frac{1}{2}$ " overall measurements. These units are ideally suited for use in Short-Wave receivers either as original equipment or for replacement work.

E4119. 2 GANG... **95c** E4120. 3 GANG... **\$1.45**



SHAFT FITTINGS

For Every Purpose



COUPLINGS and EXTENSIONS

Couplings are designed for extending shafts of volume controls, condensers, etc., or for ganging single units, even when shafts are not of same diameter. Extenders are for decreasing or increasing shaft diameter and for extending shaft length.

SIZE	KIND	INSULATED	BRASS
$\frac{1}{8}$ " to $\frac{1}{4}$ "	Coupling	E4570	E4576
$\frac{1}{8}$ " to $\frac{1}{4}$ "	Coupling	E4571	E4577
$\frac{1}{8}$ " to $\frac{1}{4}$ "	Coupling	E4572	E4578
$\frac{1}{4}$ " to $\frac{1}{2}$ "	Ext.	E4573	E4579
$\frac{1}{4}$ " to $\frac{1}{2}$ "	Ext.	E4574	E4580
$\frac{1}{4}$ " to $\frac{1}{2}$ "	Ext.	E4575	E4581

Assorted Per 10 **85c** Assorted Per 100 **\$8.25** NET EACH **9c**

BRASS AND FIBRE SHAFTING

For extensions or replacements. $\frac{1}{2}$ " dia.
 E4582. Brass. 6" long. EACH **10c**
 E4583. Brass. 12" long. EACH **19c**
 E4584. Fibre. 6" long. EACH **10c**
 E4585. Fibre. 12" long. EACH **19c**

SPLIT BUSHING

For increasing shaft diameter from $\frac{3}{4}$ " to $\frac{7}{8}$ " Brass, $\frac{3}{4}$ " I.D. **5c**
 E4586. Per 10, **35c. EACH**

PANEL BEARING ASSEMBLY

For use with rigid or flexible couplings for mounting volume controls, condensers, rheostats, etc., at a distance away from the panel. Use these panel bearings for reducing body capacity in UHF receivers and transmitters. Made of brass. Takes panels up to $\frac{1}{8}$ " thick. For $\frac{1}{4}$ " shafts.
 E5727. Overall length 3". NET **18c**
 E5728. Overall length 6". NET **24c**
 E5729. Bearing only. NET **9c**



USL MIDGET CONDENSERS

A small, well-built condenser, ideal for Short Wave use. $\frac{1}{4}$ " shaft extends $\frac{3}{8}$ " from front of condenser. $\frac{3}{16}$ " bushing allows rigid mounting on panels up to $\frac{3}{8}$ " thick. Single hole mount; fits $\frac{3}{8}$ " hole. Overall size with plates open, $1\frac{1}{4} \times 1\frac{1}{2}$ ".



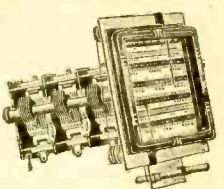
No.	Plates	Min. Mmf.	Max. Mmf.	NET
E4125	3	3	15	35c
E4126	7	5	30	41c
E4127	7	5	45	44c
E4128	9	6	60	47c
E4132	12	6	80	47c
E4129	15	7	100	48c
E4133	18	8	125	53c
E4130	20	8	140	57c

DOUBLE-SPACED MIDGETS

E4123. 11 6 35 **58c**
 E4124. 14 7 50 **79c**

DE-JONG BAND-SPREAD TUNING UNIT

3 gang electrical band-spread tuning unit assembly by the custom-builder. Equipped with universal type gold-foil dial scale. Individual calibrations may be made in ink on dial face. Ball bearings on both main and band-spread sections.



Wipers on both sections insulated with isolantite. Max. cap., .000450; min. cap., .000014; effective cap., .00014; max. band-spread cap., .000033. Dial slide-rule dial, $5\frac{1}{16}$ " W x $9\frac{1}{4}$ " L. Main scale ratio, 10:1 in 180"; Electrical band-spread ratio, 6%:1 in 180". Overall dimensions of condenser with both sections open wide, $5\frac{1}{4}$ " L x $3\frac{3}{4}$ " H. Supplied complete with gold-finished metal escutcheon, pyraline nonbreakable window, 2 pilot light sockets. Shpg. wt., $\frac{1}{2}$ lbs. Matches Gen-Ral coils on page 129.

E2705. Type 450. List, \$17.50. NET **\$10.29**

RADIO FREQUENCY CHOKES

AIR-CORE

Compact, silk-covered wire, R.F. chokes. High impedance, lattice-wound type. Thoroughly impregnated for trouble-free service. Shilded or unmounted.

Unmounted	MH	Shielded
E5605	2 1/2	E5613
E5606	5 1/2	E5614
E5607	6	E5615
EACH		EACH 27c
E5608	8	E5616
E5609	16	E5617
EACH		EACH 33c
E5610	30	E5618
EACH		EACH 42c
E5611	60	E5619
E5612	80	E5620
EACH		EACH 47c

FERROCART [Iron Core]

New High-Q R.F. chokes; may be used in place of air-core chokes for higher efficiency. Provide greater gain and selectivity in either tuned or untuned plate load circuits.

No.	MH	NET	No.	MH	NET
E5785	2 1/2	34c	E5789	30	49c
E5786	3 1/2	34c	E5790	60	57c
E5787	5 1/2	37c	E5791	80	65c
E5788	10	43c	E5792	125	85c

POLARIZED

A new efficient, popularized R.F. choke. Sectionalized winding construction minimizes distributed capacity. Thoroughly impregnated against moisture. Has metal mounting feet.

E5628. 2.5 M.H. NET EACH
 E5628. 3 M.H. NET EACH **21c**
 E5628. 3.5 M.H. NET EACH
 E5625. 10 M.H. NET EACH
 E5624. 30 M.H. NET EACH
 E5623. 60 M.H. NET EACH
 E5622. 80 M.H. NET EACH **29c**

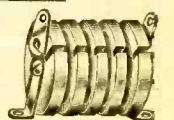


PHOTO CELLS • AUTO RADIO DIALS

PHOTO-ELECTRIC CELL BURGLAR ALARM



An efficient, low-priced, easily installed Burglar Alarm System. A new application of Photo-Electric Cells. In operation, a beam of light is broken when the intruder moves across the room, through a window, or through a door. Breaking this beam causes a loud buzzer to sound. Can be used in

houses, garages, stores, etc., wherever a low-cost, high-efficiency alarm system is required. Alarm will sound even if power lines are cut. For 110 volt. 60 cycle. Complete except for light source. **E1232. NET \$25.70**

INVISIBLE LIGHT SOURCE

The development of this "black-light" invisible light source makes burglar alarm above doubly effective; the intruder is not aware of its presence until he actually trips the alarm. Operates over a distance of 50 ft. **E1233. Light Source Only. NET \$6.60**

EBY P.E. EQUIPMENT

PHOTO CELL

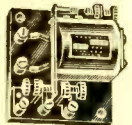


A new type of photo cell designed for long life and maximum sensitivity. Ideal for light-controlling circuits, and for general experimental purposes. Entire unit is shock-proof and moisture-proof. Unaffected by continuous exposure to lights of strong intensity, and will operate on voltages as high as 250 volts without damage to cell. Response curve covers visible spectrum, and extends far into infra-red. Measures 1 1/4" dia., 3/4" high. **\$3.18**

Mounts in standard 4 prong socket. **E4032. NET \$3.18**

ELECTRIC EYE HANDBOOK

E4033. 32 pages of new material pertinent to photo electric cells; gives hints and diagrams on adaptations of Electric Eye. **NET \$3.50**



SENSITIVE RELAYS

Designed for direct, or for full or half-wave rectified current circuits, where the operating power is small. Ideal for photo cell equipment, vacuum tube amplifier circuits, etc., due to the low power necessary to make contact. Sterling silver contacts carry 2.5 Amps. at 115 V. A.C. or 1.5 Amp. at 115 V. D.C.

E4045. 1000 ohm coil. \$4.15
E4046. 2500 ohm coil.
E4047. 5000 ohm coil.
E4048. 10000 ohm coil. EACH.

EXPERIMENTAL KIT

Necessary parts for building various Electric Eye circuits. Includes the Eby Electric Eye; sensitive relay; tube and eye sockets; resistors, condensers, circuits and information. Get acquainted with this interesting field. **\$9.55**

E4049. NET \$9.55

PHOTO CELL AND RELAY



An efficient light-controlled instrument with many valuable uses. Contains a sensitive photo-cell and quick acting relay. Can be used to actuate automatic door opening mechanism, for grading and counting packages on production lines, for controlling lights or for a host of other applications. Size 2"x4"x5". Suitable light source is listed below. With photo-cell. This unit together with light source makes a complete Photo Electric control assembly. For 110 V., 60 cycles. **\$14.70**

E1230. NET \$14.70

PHOTO CELL LIGHT SOURCE

E1231. A ruggedly built light source for use with the above or similar photo-cell relay units. Operates from 110 Volt 60 cycle supply. Uses standard 6-8 volt 32 C.P. auto bulb. Light beam is projected by means of brass tube fitted with high grade optic lens. Size 2 1/2" square. 5 1/2" high. With bulb. **\$5.88**

NET \$5.88

STAR UNIVERSAL AUTO-RADIO CONTROL FITS ALL CARS—FITS ALL RADIOS

A truly Universal Auto-Radio remote control assembly. Included in this unit are such desirable features as: clockwise or counter-clockwise operation; self-contained ratios for every application; 6:1, 8:1, 10:1, 12:1, and 16:1; thumb-screw calibration adjustment; pointer and shaft adjustment for every panel thickness; edge-dial; pre-assembled back plate to match every panel opening—no redrilling, cutting, or filing necessary; provisions for tone control assembly; no backlash. Use your old cables and shafts. It is only necessary to purchase correct panel to match your car (and switch where necessary) to make a de-luxe installation. Complete with detailed instructions. **\$2.06**

ACCESSORIES FOR ABOVE CONTROL

E5881. Type S-1. On-Off Switch. Completely wired. Ready to install wherever necessary. **NET \$5.9c**

E5882. Type T-1. Three Stage Tone Control. (Without "On-off" switch) **NET \$1.18**

E5883. Type T-2. Variable Tone Control. (100,000 ohms.) Without "On-off" switch. Mounts on control unit E5880 above for control of tone from front of panel. **NET \$1.18**

E5884. Type ST-1. 3 stage Tone Control and "On-off" switch. **NET \$1.76**

E5885. Type ST-2. Variable Tone Control (100,000 ohms) and "On-off" switch. **NET \$1.76**

E5886. Type S-2. 2 stage Sensitivity Control for local-distance selection. **NET 29c**

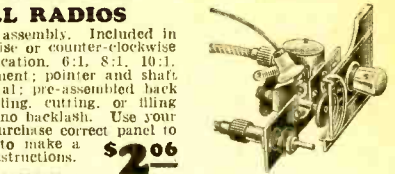
E5887. Type G-6. 20:1 ratio gear. For some special applications. **NET 9c**

STAR DASH-MOUNT PANELS

Select dash panel to match your car from listing below. Order panel with E5880 etc. above, to make a complete assembly. Knobs to match included in price of panel.

No.	Car Model and Year
E5850.	Buick 1938
E5851.	Chevrolet 1935-36
E5852.	Chevrolet 1937
E5853.	Chevrolet 1938
E5854.	Dodge 1936
E5855.	Dodge 1937
E5856.	Dodge 1938
E5857.	Ford Std. & De Luxe '34
E5858.	Ford Std. & Early '36
E5859.	Ford Std. & Late '36
E5860.	Ford De Luxe Early '36
E5861.	Ford De Luxe Late '36
E5862.	Ford Standard '37
E5863.	Ford De Luxe '37
E5864.	Ford 1938

WE CAN SUPPLY PANELS FOR ANY CAR. WRITE FOR COMPLETE LIST.

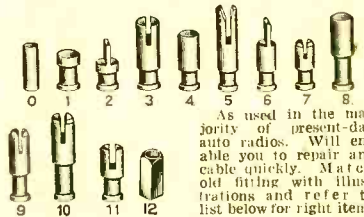


No.	Car Model and Year
E5865.	Hudson 1937
E5866.	Lincoum Zephyr '36
E5867.	Nash 400 & Ambdr. '35-'36
E5868.	Nash-Laf. 400 1937
E5869.	Oldsmobile 1936
E5870.	Oldsmobile 1936
E5871.	Packard 120B '36
E5872.	Plymouth Std. '36
E5873.	Plymouth De Luxe '36
E5874.	Plymouth Std. '37
E5875.	Plymouth De Luxe '37
E5876.	Plymouth '38
E5877.	Pontiac '38

List. \$2.25.
YOUR PRICE ANY OF ABOVE \$1.32

AUTO RADIO REMOTE CONTROL ACCESSORIES

CABLE FITTINGS



No.	Type	No.	Type
E1820	0	E1827	7
E1821	1	E1828	8
E1822	2	E1829	9
E1823	3	E1830	10
E1824	4	E1831	11
E1825	5	E1832	12
E1826	6	NET EACH	6c

WE WILL ASSEMBLE CABLES in any desired length with any of the fittings shown at a net charge of 35¢ per material costs as listed. Give lengths of both cable and housing and specify fittings desired. Send cash with order.

PHOTO-ELECTRIC CELLS CETRON CE-3

E1135. A quality photo-electric cell suitable for many applications. Will replace W.E. type for sound film work. Flexible leads with phone tip connectors. Cathode plate is 1 1/4 sq. in. Requires an average ionizing voltage of 135 Volts.

CE-1 CELL
E1136. For replacing cells in Acme, Simplex, Edco, Motorola, RCA Photophone, Powers, etc. 4 prong plug-in type base. 3 1/2" high, with cathode area of .94".

CE-2 CELL
E1137. A shorter wide cell, with cathode area of 1.33". For use with Argus, Bestone, DeVry, Full Range, Parent, and Universal type projection equipment. Height, 2 1/2". 4 prong base. **\$5.40**
YOUR NET EACH ABOVE

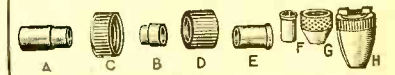
CABLE AND HOUSING

The exact cable and housing used by leading factories. Housing Parkorized to prevent rust.

CABLE ONLY		Length.	NET
E1850	1854	18"	\$0.24
E1851	1858	24"	.29
E1852	1862	30"	.36
E1853	1865	36"	.42
E1895	1869	25 ft.	2.89
E1896	1870	50 ft.	5.65
E1894	1871	Lengths over	1.6c

HOUSING ONLY		Length.	NET
E1860	1864	18"	\$0.18
E1861	1865	24"	.24
E1862	1866	30"	.31
E1863	1867	36"	.38
E1897	1873	25 ft.	2.59
E1898	1874	50 ft.	5.00
E1899	1875	Lengths over	1.2c

HOUSING ENDS



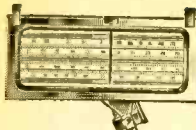
Exact duplicate end-fittings for cable housings.
E1834. Type A. **E1837.** Type D. EACH
E1835. Type B. **E1838.** Type E. **6c**
E1836. Type C. **E1839.** Type F.
E1840. Type H. For Motorola .130" housing.
E1841. Type H. For Motorola .150" housing.
NET EACH 1.18c
E1842. Type G. Casing chuck for Motorola. **NET 9c**

CABLE GEAR FITTINGS

For most popular auto radio cable assemblies.
E1844. Type P5. **15c**
E1845. Type G1. **Each**
E1846. Type G2. **Each**
E1847. Type G3. **24c**
E1848. Type P4. **Each**

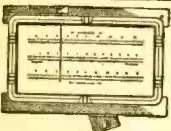
TUNING DIALS • PILOT LIGHTS

VALUES IN MODERN DIALS



11 1/8" LONG SLIDE-RULE

Beautiful new, giant type Slide-Rule dial. 11 1/8" long. 5 1/2" wide overall. Requires 3/4" x 9/16" opening in panel. 4 band calibrations, 55 to 150; 0 to 100; 100 to 0; 150 to 55. Easy-to-read numerals on gold. For 3/8" or 1/2" shaft. Ratio 10 1/2 to 1. Complete with non-breakable escutcheon and 2 pilot light sockets. Shpg. wt., 3 lbs. **E4185. NET \$3.82**



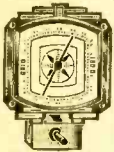
9 1/4" LONG SLIDE-RULE

A fine value in a new Slide-Rule dial. 9 1/4" long x 5 1/4" wide overall. Requires 7/8" x 4" opening in panel. Universal scale calibrated in KC and MC. Has bushing to fit 3/8" or 1/2" shaft. 1 to 1 ratio. With escutcheon and 2 pilot light sockets. Wt. 2 lbs. **E4184. NET \$2.65**



KURZ-KASCH VERNIER DIALS

A durable and attractive dial always popular with builders and experimenters. Made of polished black bakelite. Universal scale reads 0-100-0. Has smooth, positive friction-drive vernier action; no backlash. Available in two sizes, both to fit 1/4" shaft. Ideal for all equipment requiring a smooth, free-tuning panel-mount dial. 4-inch dial has tuning ratio of 13 to 1; 3-inch size has 9 to 1 ratio. **E6201. 4" Diameter. NET \$4.50**
E6200. 3" Diameter. NET \$3.80



3 1/4" INCH MODERN-ISTIC DIAL

An attractive, modernistic square type airplane dial with handsome bronze escutcheon. Positive non-slip friction drive. For 3/8" shaft, but supplied with 5/8" to 1/2" reducer for use on condensers with 1/4" shaft. Tuning ratio of 10-1 assures sharp, easy tuning. Universal scale for use with any clockwise or counter-clockwise condenser. Complete with two pilot light brackets. Shpg. wt., 1 lb. **E4180. NET EACH \$1.05**



2 3/8" INCH AIRPLANE DIAL

A smooth, positive-action friction-drive dial with a tuning ratio of 6 to 1. Dual translucent dial calibrated with a universal scale, 0-100 and 100-0, protected by convex glass bezel. With escutcheon and pilot light socket. Fits 3/8" shaft. **E4175. NET \$6.80**



4 INCH AIRPLANE DIAL

A high quality translucent dial with universal scale. Positive friction drive. Tuning ratio 9 to 1. Dial pointer travels with condenser. Will fit 3/8" shaft. With two pilot light sockets, escutcheon plate and bushing for 1/4" shafts. **E4181. NET \$1.05**



3 1/8" INCH AIRPLANE DIAL

A positive-action, smoothing dial. Dual translucent universal scale with glass bezel. Tuning ratio 6 to 1. Pointer travels with condenser. Has bushing to fit 3/8" or 1/2" shafts. With pilot light socket and escutcheon. **E4182. NET \$8.30**

6 3/4" LONG SLIDE-RULE

Attractive, new Slide-Rule dial. 6 3/4" long by 3 1/8" high, overall. Requires panel opening 5 1/4" by 2 1/4". Universal scale in KC and MC. With bushing for 3/8" or 1/2" shafts. 6 to 1 ratio. With escutcheon and pilot light socket. Shpg. wt., 2 lbs. **E4183. YOUR NET PRICE \$2.06**

MIDGET SLIDE-RULE

Compact new dial, only 4 3/4" x 2 3/8" overall. Panel opening required, 4 3/8" x 1 1/8". Universal scale; 4 to 1 ratio. Fits 3/8" or 1/2" shaft. With escutcheon and pilot light socket. Wt., 2 lbs. **E4179. YOUR NET PRICE \$1.62**

6 1/2" BAND-SPREAD DIAL

A beautiful dial with Divide-A-Meter two-speed planetary drive providing bandspread equivalent to 11 1/2 feet over 180°, 22 to 1 ratio over 360°. For use with 365 or 420 mmf. condensers. Fits 3/8" or 1/2" shafts. Ideal for replacing old dials in sets taken as "trade-ins" which can then be resold at excellent profits. With 7/8" bezel, bronze escutcheon, and brackets. Shpg. wt., 2 lbs. **E4190. YOUR NET PRICE \$3.97**

5 1/8" INCH AIRPLANE DIAL

A large handsome dial with glass-protected pyralin face. Two scales, 0-100 and 100-0 for clockwise or counter-clockwise condensers. Dual pointers; 10-1 tuning ratio. For 3/8" shaft with split bushing for 1/4" shafts. Wt., 2 lbs. An excellent dial value. **E4177. NET \$1.39**

MOLDED DIALS

Attractive black bakelite dials with large dial light bulbs. Easy grip 2" knob on 3" dials. **E4196** and **E4198** fit 3/8" or 1/2" shafts. Others fit 1/4" shafts.

3 INCH DIALS	4 INCH DIALS
E4196. 0-100.	E4198. 0-100.
E4197. 100-0.	E4199. 100-0.
NET	NET
EACH \$2.30	EACH \$2.60

DIAL LITE COLORING KIT

Easily applied transparent colors. For use on pilot and dial light bulbs. Kit contains one bottle each: Green, Blue and Brown; with a bottle of solvent for cleaning bulbs. **E2998. NET PER KIT \$2.90**

110 VOLT CANDELABRA PILOT LIGHT

1" candelabra pilot light assemblies for use on 110 Volts. AC or DC. Ideal for panel installations on transmitters, control panels, etc. Single hole mount. Bulbs removable from front of panel. Chrome finished. Supplied less 110 volt bulb. **E6462. Red. \$5.40**
E6463. Green. \$5.40
E6464. Amber. EACH \$5.40
E6465. 110 Volt Mazda Bulb for above. 15c

EVEREADY MAZDA PILOT LIGHT BULBS

Genuine Eveready Mazda pilot light bulbs. Famous for quality and dependable long life. These lamps are made to operate from the voltages indicated. Excellent for all pilot lamp requirements. Will give long continuous service in standard sets and devices.



STOCK No.	Lamp No.	Volts	Amps.	PRICE EACH	PER 10
E1250	41	2.5	.50	9c	\$0.90
E1252	43	2.5	.50	10c	1.00
E1251	42	3.2	.35	12c	1.20
E1253	40	6.8	.15	9c	.90
E1257	50†	6-8	.20	10c	1.00
E1258	51†	6-8	1.0	7c	.70
E1259	55†	6-8	.40	7c	.70
E1260	48	2.0	.06	20c	2.00
E1255	49	6.8	.06	25c	2.50
E1256	44	6.8	.25	6c	.60
E1255	46	6.8	.25	9c	.90

†Indicates miniature bayonet base. †Indicates small round bulb.

BULB FOR RCA-VICTOR RE-32
S11. A 115 volt bulb; special for RCA-Victor RE32. 10 watt. **E6449. NET EACH 20c**



PILOT LIGHT SOCKETS

Miniature base pilot light sockets for all radio requirements. Highest quality construction. With silver-plated jaws for easy soldering. Spring contact in the socket holds lamp firmly in place. **E6380. Type A.**
E6381. Type B.
E6382. Type C.
E6378. Type D. Bayonet Shell Type.
E6379. Similar to type D, but mounting clip reversed.
10 Lots, 40c. 100 Lots, \$3.50. EACH \$5.00

JEWELLED PILOT LIGHT BRACKETS

Visual indicators for use on power amplifiers, relay racks, etc. Socket mounted on bracket takes regular pilot light bulbs. Single hole mounting. Serves as a definite means of knowing when your equipment is "on." Complete with Jewel. **E6388. Base No. \$1.50**
E6387. Base No. \$1.50
E6389. Base No. \$1.50
E6390. Base No. \$1.50

JEWELS FOR PILOT LIGHTS

Attractive colored jewels with mounting nuts for panel use. Easy to mount on panels up to 1/4 inch thickness. Require 1/8" hole. Have 1/16" threaded shank. 3/8" long. **E6384. Red. \$1.00**
E6385. Green. \$1.00
E6386. Amber. EACH \$1.00

AMERIOD MARKED JEWELS

New 1/2" dia. jewels with letter or number markings for X-mitters, test equipment, etc. Mount in 1/4" hole. Ameriod face diffuses light. **E6303. Lettered A to Z. Specify letter. \$1.00**
E6304. Numbered 0 to 9. Specify number. \$1.00
NET EACH PER LETTER OR PER FIGURE \$1.20

JUMBO JEWEL BRACKET

1/2" removable jewel. Permits front-of-panel bulb replacement. Miniature base. Mounts in 1/4" hole. **E6294. Red. EACH \$2.40**
E6295. Green. EACH \$2.40
E6296. Amber. EACH \$2.40

1" JEWEL BRACKET

For transmitters, test equipment panels, etc. Standard bulb replaceable from front. 1 1/2" long; requires 1" hole. With miniature or bayonet base. 3 colors available. **E6300. Miniature. Color. EACH \$5.40**
E6301. Miniature. RED. \$5.40
E6302. Miniature. GREEN. \$5.40
E6299. Miniature. AMBER. \$5.40

TUNING KNOBS and DIALS

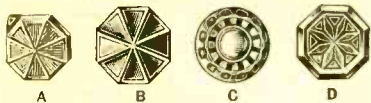
FINE BAKELITE KNOBS



Conservative designs in very attractive bakelite. All will fit $\frac{1}{4}$ " shafts. Listed in popular sizes. Type "C" is push-on type. All others have set screws. Types B and D are especially adapted to midget set knob replacements. Types A and B may be assorted for 10 lot price. Types A, B and D are deep walnut in color. Type C is blackish brown.

Stock No.	Fig. No.	Diam.	NET EACH	10 FOR
E6206	A	1 1/8"	6c	50c
E6207	B	1 3/8"		
E6209	A	1 7/8"		
E6210	B	1 9/8"		
E6214	U	1 1/8"	4c	30c
E2917	D	7/8"	5c	40c

MODERNISTIC TYPES



Similar to above except not as deep. All have set screws and will fit $\frac{1}{4}$ " shafts. For use with ultra-midget and midget sets. All are walnut-colored except C which is black. All four types may be included in your assortment for 10 lot price.

No.	Type	Diam.	EACH	10 FOR
E6202	A	1 1/8"	6c	45c
E6203	B	1 1/8"		
E6205	C	1 1/8"		
E6205	D	1 1/8"		

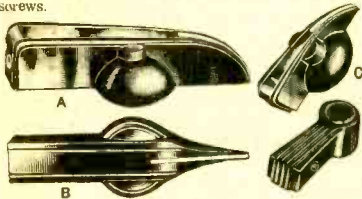


POINTER KNOB

Black $1\frac{1}{2}$ " bakelite knob. White pointer arrow engraved on face. Fits $\frac{1}{4}$ " shaft. E6208. 10 FOR 40c. **5c** EACH

STREAMLINED BAR KNOBS

Modern knobs for test instruments, amplifiers, transmitters. White engraved pointers (except Fig. D). Fit $\frac{1}{4}$ " shafts. Recessed set screws.



Cat. No.	Fig.	Size	NET EACH	12 FOR
E6171	B	1 1/4"	9c	95c
E6176	C	1 1/2"		
E6176	D	1 1/2"		
E6176	A	1 1/2"		
E6171	C	2 1/4"	12c	\$1.25
E6173	B	2 1/4"	10c	1.05

AUTOMATIC TUNING KNOBS

A new selection of touch-tuning knobs for sets with automatic tuning. Of bakelite. Type A has recessed top and push-on spring. Type B is push-on self-locating type without recess. All are $\frac{3}{16}$ " dia. x $\frac{9}{16}$ " high with standard $\frac{1}{4}$ " shaft.

WITH RECESS	LESS RECESS
E3754. Black.	E3780. Black.
E3755. Walnut.	E3781. Walnut.
12 FOR 30c.	100 FOR \$1.99.
NET EACH	3c

GEAR REDUCTION UNIT

6 TO 1 ratio. For use with any condenser not equipped with reduction gear. Has double-driven gear and anti-backlash spring. $\frac{1}{4}$ " drive shaft. Vise-grip set screw holds condenser firmly. E4111. For $\frac{1}{4}$ " shaft. E4108. For $\frac{3}{8}$ " shaft. **35c** EACH

GENUINE WOOD KNOBS



Genuine wood knobs, beautifully made and finished. For $\frac{1}{4}$ " inch shafts. All have sure-grip design. Brass bushing insert; side set-screw. Buy several assortments and have them on hand when you need them.

No.	Fig.	Width	Wood
E3765	A	3/8"	Walnut
E3766	B	3/8"	Maple
E3767	B	3/8"	Walnut

YOUR PRICE EACH PER 10 **8c** 70c

No.	Fig.	Width	Wood
E3768	A	1"	Walnut
E3769	A	1 1/4"	Walnut
E3770	B	1"	Maple
E3771	C	1"	Walnut
E3772	{Plain Top}	1"	Walnut
E3763	D	1 1/8"	Walnut
E3764	D	1 1/8"	Walnut

YOUR PRICE EACH PER 10 **9c** 76c

2 SPEED PLANETARY DRIVE

Used as auxiliary speed reducer on many controls. Mounts on condenser, back of panel, or on dial knob shaft. Slow ratio 7 to 1; fast ratio 1 to 1. Fits $\frac{1}{4}$ " shaft. **88c**

E3756. NET



PLANETARY DRIVE KNOBS

For drive unit listed above. Large knob fits $\frac{7}{16}$ " high speed shaft; small one fits $\frac{1}{4}$ " slow speed shaft. E3757. Walnut. **12c** E3758. Black. PAIR

DIAL DRIVE RUBBERS

Box of 24 assorted dial-drive friction rubbers in eight different types. Used in such sets as RCA, Atwater-Kent, Stewart Warner, Emerson, etc. **88c** E6107. NET

DIAL BELT KITS

Woven fabric radio dial belts; exact duplicates of originals used in Crosley, Emerson, RCA, Spanton, Zenith, etc. Assortment of 25 belts will service more than 90% of all replacements. **\$3.82** E6108. Box of 25 Belts. List, \$7.25. NET

BRAIDED SILK DIAL CORD

Durable dial cable of pure braided silk, with water-proof finish. Flexible, non-kinking. Easy to install. Length NET E6080 5 ft. \$0.22 E6081 25 ft. .80 E6082 50 ft. 1.50 E6083 100 ft. 2.75

PHOSPHOR BRONZE DIAL CABLE

The 42 Stranded Cable is made up of 6 individual cables each consisting of 7 strands of the finest grade of phosphor bronze wire, around central linen core. The 16 Braided Cable is made up of 16 strands of fine bronze wire woven together. Minimum stretch.

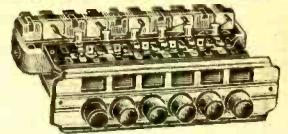
42 STRANDED	NET	16 BRAIDED	NET
E6070 5 ft.	\$0.20	E6074 5 ft.	6c
E6071 25 ft.	.74	E6075 25 ft.	22c
E6072 50 ft.	1.39	E6076 50 ft.	50c
E6073 100 ft.	2.50	E6077 100 ft.	59c

EXACT DUPLICATE DRIVE CABLE - BANDS - BELTS

Exact duplicates in size, material and design of the originals. We can supply any type of cable, band or belt on special order. Sent in old dial cable, or state make and model of set. We will supply the proper replacement promptly.

Stock No.	Model	NET	Brunswick	Majestic (Cont.)
E6085	Atwater-Kent	15c	E6104	S14, 21, 31 15c
E6086	32	24c	E6105	15, 22 Front 24c
E6087	35, 37	15c	E6106	15, 22 Rear 24c
E6088	44	24c	E6093	Crosley
E6089	46	15c	E6094	40s, 60s, 804 18c
E6090	55	15c	E6094	601, 602, 607 21c
E6092	Columbia	29c	E6095	Majestic
	All			No. 1-70
				71, 72 9c
				E6096
				No. 2-70
				71, 72 9c
				E6097
				52, 60 13c
				E6103
				180 15c
				Philco
				E6098
				All RCA 13c
				E6100
				16, 17, 18, 22
				E6101
				80, 82, 86 21c

PUSH-BUTTON TUNERS



KNIGHT SELECT-O-MATIC TUNING UNIT

A new, entirely automatic push-button tuning unit for use with sets having two gang condensers. Sets not now equipped with push-button tuning can easily be modernized by installing this tuner. Tuning is accomplished through a series of padding condensers which are easily set to frequency of desired stations. Five station buttons for automatic tuning will cover any five popular local stations; sixth button is release for conventional dial tuning. Overall dimensions: $5\frac{1}{4}$ " wide, $3\frac{3}{4}$ " deep, $1\frac{1}{2}$ " high. Bronze escutcheon measures $5\frac{1}{2}$ " wide x $1\frac{1}{2}$ " high. With push-on knobs, station call-letters, hardware, and full instructions. **\$3.25** E4191. NET

KNIGHT MECHANICAL TUNER

A new push-button tuner especially suitable for radio set builders. Uses mechanical method of push-button tuning. Offers mechanical tuning of any six B.C. or S.W. stations. Easily installed in any radio. Fits standard $\frac{1}{4}$ " shaft. Size: $6\frac{3}{4}$ " x $2\frac{1}{2}$ ". With escutcheon, station letters, instructions, etc. Shpg. wt., 5 lbs. **\$3.53** E6577. NET



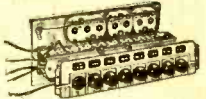
MEISSNER REMOTE CONTROL

Convenient Remote Control push-button tuning unit for any radio set. Tunes any 7 stations. Completely assembled and wired. To install, connect to ant. and grd. posts of set, and plug into wall outlet. Walnut cabinet, $5\frac{3}{4}$ " x $4\frac{1}{2}$ " x $1\frac{1}{2}$ "; self-contained volume control. With 15' cable and tubes. Shpg. wt., 6 lbs. **\$15.58** E5751. For 110 Volts, A.C. or D.C. E5753. For 220 Volts, A.C. or D.C. NET EACH

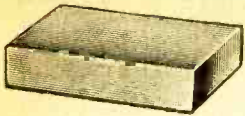


MEISSNER TUNER

Push-button tuning for any TRF or Superhet A.C. or D.C. set. Seven buttons provide automatic tuning of any seven stations; eighth button is release for manual tuning. Requires only setting of trimmer condensers. Positive in operation; has special low-drift, mica-insulated trimmers. Overall dimensions: $6\frac{3}{4}$ " x $2\frac{1}{2}$ " x $1\frac{1}{2}$ ". Supplied complete with escutcheon, station call-letters, mounting hardware, and instructions. **\$4.41** E5752. NET



RADIO-BUILDERS' SUPPLIES

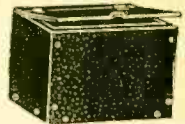


QUALITY METAL CHASSIS BASES

ALLIED now offers the most complete line of high quality chassis bases available anywhere. Each unit has re-inforced or spot-welded corners for heavy-duty service. All are folded on four sides with the exception of those marked *, which are folded on sides only, with ends open. Template is lead-coated auto-body steel; Cadmium-plated and Black wrinkle-finish bases are also steel. See Chassis Forming Service below for sizes not listed.

Size Inches	Template		Electralloy		Cadmium-Plated		Wrinkle Finish	
	No.	NET	No.	NET	No.	NET	No.	NET
4 1/2 x 8 1/2 x 1 1/2 *	E12400	\$0.29	E12418	\$0.71	E12450	\$0.54	E12435	\$0.54
7 x 9	E12401	.40	E12419	.76	E12451	.58	E12436	.58
7 x 11 x 2	E12402	.45	E12420	.76	E12452	.60	E12437	.60
7 x 12 x 3	E12403	.48	E12421	.99	E12453	.62	E12438	.62
7 x 13 x 2	E12404	.50	E12422	1.05	E12454	.63	E12439	.73
7 x 17 x 3	E12405	.65	E12423	1.23	E12455	.77	E12440	.77
7 x 23 x 3	E12406	.69	E12424	1.27				
7 1/2 x 9 1/2 x 3 *	E12407	.40	E12425	.76				
7 1/2 x 11 x 2 1/2 *	E12408	.42	E12426	.82				
8 x 17 x 2	E12409	.59	E12427	1.28	E12456	.74	E12441	.74
10 x 11 x 2 1/2	E12410	.54	E12428	1.20	E12457	.66	E12442	.66
10 x 12 x 3	E12411	.53	E12429	1.12	E12458	.89	E12443	.68
10 x 14 x 3	E12412	.57	E12430	1.20	E12459	.89	E12444	.85
10 x 17 x 3	E12413	.75	E12431	1.45	E12460	.85	E12445	.85
10 x 23 x 3	E12414	.89	E12432	1.69	E12461	1.08	E12446	1.08
13 x 17 x 3	E12415	.89	E12433	1.72	E12462	1.13	E12447	1.13

CRYSTAL-FINISHED CABINETS



Sturdy steel cabinets with hinged lids. Front and back panels, or bottom, easily removed. Ideal for receivers, transmitters, monitors, frequency meters, etc. Supplied knocked-down.

No.	Lgth.	Wth.	Ht.	NET
E9700	9"	5"	6"	\$1.45
E9701	10"	8"	7"	1.85
E9702	10"	8"	10"	2.00
E9703	12"	8"	7"	2.30
E9704	12"	11"	8"	2.40
E9705	14"	8"	7"	2.53
E9706	18"	12"	9"	3.42

PANELS FOR ALL RADIO PURPOSES

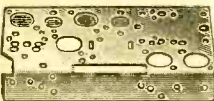
Here is a complete selection of panels in a wide range of sizes and materials for every radio need. Sizes not listed will be cut to order (see prices below). Electralloy and Aluminum panels are 1/8" thick and have natural finish; Hard Rubber and Bakelite panels are 3/16" thick and have polished finish; finished panels are 1/8" steel with black wrinkle enamel finish; Masonite panels 1/8" thick are supplied in smooth black finish resembling bakelite.

Size In.	Electralloy		Aluminum		Rubber		Bakelite		Finished		Masonite	
	No.	NET	No.	NET	No.	NET	No.	NET	No.	NET	No.	NET
7x10	E9731	\$0.40	E9741	\$0.42	E9768	\$0.69	E9758	\$0.79	E9750	\$0.32	E9781	\$0.26
7x12	E9732	.45	E9742	.50	E9769	.82	E9759	1.00	E9751	.38	E9782	.30
7x14	E9733	.53	E9743	.60	E9770	.98	E9760	1.15	E9752	.44	E9783	.34
7x16	E9734	.59	E9744	.70			E9761	1.27			E9784	.38
7x18	E9735	.65	E9745	.80	E9771	1.22	E9762	1.40	E9756	.59	E9785	.43
7x19	E9736	.71	E9746	.82			E9763	1.59			E9786	.44
7x21	E9737	.78	E9747	.85	E9772	1.42	E9764	1.85	E9757	.76	E9787	.52
7x23	E9738	.89	E9748	1.08	E9773	1.58	E9765	2.25			E9788	.52
7x30	E9739	1.10	E9749	1.23	E9774	1.98	E9766	2.55	E9753	.59	E9789	.64
8x18	E9740	.77	E9750	.82			E9767	1.55	E9754	.56	E9790	.64
9x15	E9741	.70	E9751	.82			E9768	1.44	E9755	.56	E9791	.64
24x36			E9749	4.55							E9792	2.75
36x36	E9739	5.29									E9793	3.85

Special Sizes 1c PER SQ. IN. 1c PER SQ. IN. 1 1/2c PER SQ. IN. 1 1/2c PER SQ. IN. 1 1/2c PER SQ. IN. 1 1/2c PER SQ. IN. 3/8c PER SQ. INCH

ORDERS FOR SPECIAL PANELS MUST AMOUNT TO A 75c MINIMUM; MASONITE TO 50c.

SPECIAL VALUE CHASSIS BASES



Ideal chassis bases for experimenters and set builders. They have cutouts, slots and holes for mounting various parts. Include punched holes for tube sockets. Size of the A.C.-D.C. model is 4 1/2 x 7 1/2 x 1 1/2. Made from heavy gauge steel. Shpg. wt., 4 lbs.

- E9721. 5 or 6 Tube. A.C. Base. 5 1/2 x 7 1/2 x 2 1/2. **15c**
- E9717. For A.C.-D.C. Sets. NET. **10c**
- E9719. Bracket for volume control for A.C.-D.C. set. NET. **3c**

CHASSIS MADE TO ORDER

We will promptly form and punch any chassis to your specifications. Charges for this service are as follows: Drilling small holes up to 1/8" - 20c per dozen; holes over 1/8" to 1 1/2" inclusive - 10c each; holes larger than 1 1/2" or cut-outs of special design are priced slightly higher. Transformer cut-outs, 25c each; cutting, notching and forming chassis, 35c. Minimum charge is 95c. This does not include the chassis base (or metal for it). Blank chassis bases or sheet Electralloy and Aluminum are listed on this page. Please send full scale drawing with dimensions and hole sizes clearly marked. Chassis bases are made up on final sales basis only and are not subject to return. A deposit of 95c must accompany order.

COIL SHIELD CANS

Heavy-gauge non-magnetic metal shield cans with beautiful baked black crackle finish. These fine shields are available in two shapes and a variety of sizes. All are furnished with spade bolts for mounting. Ideal for repair jobs or original construction.



SQUARE CANS		
No.	SIZE	NET
E5283	1 1/2 x 1 1/2 x 2 1/2"	15c
E5284	1 3/4 x 1 3/4 x 2 1/2"	18c
E5285	1 7/8 x 1 7/8 x 2 1/2"	19c
E5286	2 x 2 x 2 1/4"	29c

ROUND CANS		
No.	SIZE	NET
E5287	1 1/2" dia. x 1 3/4"	10c
E5288	1 3/4" dia. x 2 1/4"	10c

METAL TUBE GRID CAP SHIELD

A necessity where metal tubes are used in high-gain circuits. Fits firmly over grid cap. Slot is provided to pass grid lead.



E5290. Per doz. 40c. NET EACH **5c**

GRILL CLOTH

Finest tannery material, with artistic design of interwoven black and gold. For use behind speaker grills. Specify size. Furnished only in 1, 2, 3, or 4 ft. widths, any length.



E2916. Square Foot. **18c**

WRINKLE-FINISH VARNISH

An attractive modern wrinkle-finish for all metal chassis, panels, etc. Air drying; applied with brush or spray. 3/8 pint.



E1955. Black. EACH **24c**
E1956. Brown.
E1957. Green.
E1958. Silver Gray.

PER PINT EACH.....\$1.18
Specify color when ordering.

CRYSTALLINE LACQUER

Will cover any metal surface with crystalline finish. Can easily and quickly be applied to chassis bases, panels, etc. with brush or spray-gun. Dries in 20 minutes. 2 oz. cans.



E1950. Black. EACH **24c**
E1960. Gray.
E1952. Brown.
E1951. Black. **73c**
3 oz. can. NET
E1953. Black. **\$1.32**
1 pt. can. NET



REPAIR CEMENT

For repairing coils and speaker cones. Kit consists of one can of cement, one can of thinner and a handy brush. E2930. NET **34c**

FORM-FITTING TUBE SHIELDS

For ST12 Bulbs

Space-savers. Replace old shields; also for spray-shield type tubes. Body consists of two snug-fitting identical half shields with cap and base assuring perfect fit. A clamp and grounding clip are furnished for the large size bulbs.



- E5255. For short tubes with grid caps, as 1A6, 2A7, 3E, 7E, 89, etc.
- E5256. For short tubes without grid caps, as 6Y5, 12A5, 27, 30, 31, etc.
- E5257. For long tubes with grid caps, as 6C6, 6D6, 57, 58, etc.
- E5258. For long tubes without grid caps.

NET **5c**
LOTS OF 10.....45c

For S14 and ST14 Bulbs

E5253. For S14 straight side tubes such as 24A, 27, 32, 35, etc.
E5254. For ST14 dome-shaped tubes such as 24A, 32, 35, 2A5, 01A, 26, 45, 71A, etc.

NET **5c**
LOTS OF 10.....45c

VENTILATED 3 PIECE SHIELD

For ST12 bulbs, such as 55, 57, 2A7, etc. Made of aluminum; well-ventilated, with curled-in neck to hold tube. Shell measures 1 1/2" dia., 3 1/2" high, 4 1/2" high overall with cap which is slotted for grid lead. With base and cap.



No. Mtg. Centers EACH **9c**
E5260. 123
E5261. 113
E5262. 11 1/2"
LOTS OF 10.....75c
LOTS OF 100.....\$6.50

BAKELITE TUBING

High grade smooth polished bakelite tubing. Natural finish. Excellent insulating properties. Has 1/8" inch wall. Listing below gives inside diameter.



No.	Dia.	PER FOOT	PER INCH
E6471	1 1/2"	34c	3c
E6472	1 1/4"	45c	4c
E6473	2"	53c	5c
E6474	2 1/2"	61c	6c
E6475	3 1/2"	74c	7c
E6476	3 1/2"	80c	8c

We can supply bakelite tubing in practically all sizes and for all purposes; write full details and we shall quote at once.

SOCKETS • PLUGS • CONNECTORS

FAMOUS AMPHENOL TUBE SOCKETS



CLIP-TITE SOCKETS

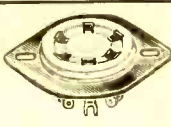
Made of molded bakelite. May be mounted in any position. Special universal adapter plate with each socket permits quick replacement of any wafer socket.

No.	Prongs	EACH
E4524	4	7c
E4525	5	
E4526	6	
E4527	7S	
E4528	7M	10 FOR 65c
E4529	7S	9c
E4530	7M	
E4531	8 Octal	
E4531	9 Prong	
10 FOR 85c		

"MIP" SOCKETS

Strongest sockets made. Sturdy cadmium-plated steel plate is molded directly into solid bakelite body. Withstands higher breakdown voltage. 1 1/2" mfg. centers.

No.	Prongs	EACH
E4506	4	6c
E4507	5	
E4508	6	
E4509	7S	
E4510	7M	10 FOR .54c
E4511	8	EACH... 7c
E4512	9	10 FOR .65c
E4513	11 9c
..... 12c		



CHASSIS TYPE

For chassis hole mounting. With tempered steel locking ring. Molded bakelite with cadmium-plated contact points. Maintain low resistance contact.

No.	Prongs	EACH
E4532	4	6 1/2c
E4533	5	
E4534	6	60c
E4535	7S	
E4536	7M	8c
E4537	7M	
E4538	8 Octal	72c
E4539	9 Prong	

STEATITE

The ideal socket for Short-Wave receivers and transmitters. New low-loss design of glazed steatite. With universal mounting plate. Silver-plated contacts. A very popular high-quality socket.

No.	Prongs	EACH
E4541	4	24c
E4542	5	
E4543	6	
E4544	7S	
E4545	7M	10 FOR \$2.16
E4547	8	Octal

ABOVE CHASSIS

Mounted in heavy aluminum shell, which raises the socket 1/2" above sub-panel and completely shields socket connections. 4 wiring entrances. Sturdily designed and constructed for sure tube connection.

No.	Prongs	EACH
E4522	4	7c
E4523	5	
E4524	6	
E4525	7S	
E4526	7M	10 FOR 65c
E4527	7S	9c
E4528	7M	
E4529	8	10 FOR 85c

GENUINE EBY SOCKETS



BAKELITE TYPE

One-piece molded black bakelite construction. For baseboard or sub-panel mounting. Sturdy contact guides. 1 1/4" mounting centers.

No.	Prongs	EACH
E4000	4	18c
E4001	5	
E4002	6	
E4003	5 and 6	24c
E4004	7M & 7S	
E4005	7M (.855)	
E4006	8 Octal	
..... 26c		

ISOLANTITE TYPE

Low-loss isolantite sockets which are especially effective on high frequencies. With large, positive rust-proof side-gripping contacts. Oval holes for 1 1/4" to 1 3/4" mounting.

No.	Prongs	EACH	PER 10
E4015	4	29c	\$2.70
E4016	5		
E4017	6	32c	2.97
E4018	7S		
E4019	7M		
E4019	8 Octal		
E4014	8 Octal	35c	3.14



BASE MOUNT SOCKETS

A molded bakelite socket for panel or baseboard mounting. Rugged diameter, with nickel-plated knurled binding posts.

No.	Prongs	EACH	PER 10
E4515	4	21c	\$1.95
E4516	5		
E4517	6		
E4518	7M		
E4519	7S	24c	10 FOR 24c
E4520	8 (Octal)		

HOWARD B. JONES PLUGS AND SOCKETS

These heavy-duty, multiple-contact plugs and sockets are made of molded bakelite with heavily armored metal caps. Excellent for Public Address use. Equipped with metal cable clamps in top of cap.



No.	Contacts	NET
E4588	2	44c
E4589	3	36c
E4590	4	52c
E4591	6	61c
E4592	10	69c
E4593	12	77c

No.	Prongs	EACH
E4594	2	39c
E4595	4	49c
E4596	6	59c
E4597	8	70c
E4598	10	79c
E4599	12	89c



PLUG CAP

E3443. Parallel blade type with finger-grip. Brown bakelite. NET



CUBE TAP

E3409. Made of brown bakelite. Blades hold securely at all times. NET

WAFER TYPE SUB-PANEL SOCKETS

High grade wafer type sub-panel tube sockets of laminated bakelite construction. Sturdy and reliable with fully insulated top. Contacts are full-floating type, self-aligning and of one piece construction for low resistance connection; make side-wiring contact with tube prongs. Center rivet securely holds laminations together. Each socket has hole locating ring for quick and easy tube insertion.



STANDARD SIZE

No.	Prongs	EACH	PER 10
E4020	4	5c	45c
E4021	5		
E4022	6		
E4023	7M		
E4024	7S		

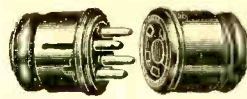
MIDGET SIZE

No.	Prongs	EACH	PER 10
E4026	4	5c	45c
E4027	5		
E4028	6		
E4029	7M		
E4030	7S		

FOR ALL OCTAL BASE TUBES

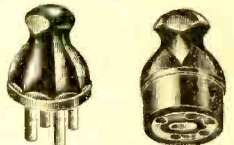
Similar to sockets above but has 8 holes to fit octal base glass and metal tubes. 1 1/2" mounting centers. E4031. 10 FOR 55c. YOUR PRICE EACH..... **6c**

SHIELDED CABLE CONNECTORS



Insulated steel cap snaps over Clip-Tite socket (or plug); provides perfect electrical shielding. Has rubber grommet in end to protect cable. Assures perfect connection. Diam. 1 1/4"; only 1 1/4" long.

No.	Prongs	EACH
E1630	4	15c
E1631	5	
E1632	6	15c
E1633	7S	
E1634	8 Octal	15c
E1635	9 Prong	
E1636	4	15c
E1637	5	
E1638	6	15c
E1639	7S	
E1640	8 Octal	15c
E1641	9 Prong	
E1642	11 Prong	15c
E1643	12 Prong	



TWO PIECE CONNECTORS

Connectors of two piece molded bakelite construction. Sure grip handles; sturdy contacts and pins. For microphone or speaker plugs.

No.	Prongs	EACH
E1807	4	18c
E1808	5	
E1809	6	18c
E1810	7M	
E1811	7S	18c
E1812	8 (Octal)	
E1813	4	24c
E1814	5	
E1815	6	24c
E1816	7M	
E1817	7S	24c
E1818	8 (Octal)	



LOCKING TYPE METAL SLEEVES

Cadmium-plated steel shells; designed to slip over connectors listed above and screw together. E1640. Set, 2 pieces..... **15c**

No.	Prongs	EACH
E1783	4	15c
E1784	5	



CABLE TYPE CONNECTORS

For connecting extension cables together. Cables cannot pull apart; couplings lock securely with threaded ring. In drawn steel shells. Octal type has guide key.

No.	Prongs	EACH
E4550	4	73c
E4551	5	
E4552	6	73c
E4553	7S	
E4554	8 Octal	73c
E4555	9 Prong	
E4556	12	73c
E4557	12	

Female cable connectors. Contacts provide positive connection.

No.	Prongs	EACH
E4562	4	73c
E4563	5	
E4564	6	
E4565	8 Octal	
E4566	8 Octal	73c
E4567	12	

HEAVY-DUTY RUBBER HANDLE PLUGS

Molded bakelite plugs and sockets mounted in unbreakable rubber handles. These plugs and sockets prevent wire breakage. 2 1/2" handles.

No.	Prongs	EACH
E4035	4	15c
E4036	5	
E4037	6	15c
E4038	7S	
E4039	8 Octal	15c
E4040	9 Prong	

BAKELITE MALE CONNECTOR PLUG

A sturdy neat two piece molded bakelite connector plug for speaker connections, etc.

No.	Prongs	EACH
E1800	4	15c
E1801	5	
E1802	6	
E1803	7M	
E1804	7S	15c
E1805	8 (Octal)	

SPEAKER PLUGS

Molded speaker plugs with prongs securely fastened in. Each individual connector is protected with molded insulation to prevent shorts from pushed-back prongs. Make fine speaker to chassis connections.

No.	Prongs	EACH
E1790	4	7c
E1791	5	
E1792	6	
E1793	7S	
E1794	8 Octal	7c
E1795	8 Octal	

Quality SWITCHES • JACKS • PLUGS



H & H TOGGLE SWITCHES

Underwriters approved; rated at 3 amps.—125 V., 1 amp.—250 V., Oxidized bronze finish. Threaded stem, 1/16" dia. Supplied with two locknuts. Have fibre insulation and solder lug connections. For sets, meters, lamps, etc.

SINGLE POLE SINGLE THROW (2 LUGS)

No.	Stem	EACH	PER 10
E5450.	3/8 in.	19c	\$1.80
E5451.	1/2 in.	22c	2.05
E5452.	1 in.	23c	2.10

SINGLE POLE DOUBLE THROW (3 LUGS)

E5453.	3/8 in.	22c	\$2.05
E5454.	1/2 in.	24c	2.20
E5455.	1 in.	26c	2.40

DOUBLE POLE SINGLE THROW (4 LUGS)

E5456.	3/8 in.	26c	\$2.40
E5457.	1/2 in.	29c	2.70
E5458.	1 in.	30c	2.80

DOUBLE POLE DOUBLE THROW (6 LUGS)

E5459.	3/8 in.	39c	\$3.70
E5460.	1/2 in.	43c	4.05
E5461.	1 in.	45c	4.25



TOGGLE SWITCH PLATE

An inexpensive "on-off" plate for any toggle switch. Has 1/2" shaft hole. Bronze finish.

E5467. NET EACH 2c
PER DOZ. 18c



H & H ROTARY SWITCHES

Positive contact rotary type power switches rated at 3 amps.—125 V., 1 amp.—250 V. Steel-cased. Shaft is 3/16" long, 3/16" diameter. Threaded stems for panel mounting. Supplied with locknuts. Underwriters' approved.

E5466. Single Pole, Single Throw. 1/4" Stem. NET. 14c

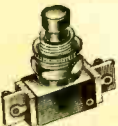
E5462. Single Pole, Single Throw. 3/8" Stem. NET. 17c

E5463. Single Pole, Double Throw. 3/8" Stem. NET. 22c

E5464. Double Pole, Single Throw. 3/8" Stem. NET. 35c

E5465. Double Pole, Double Throw. 3/8" Stem. NET. 40c

H & H ON-OFF PUSH-BUTTON SWITCHES



S.P.S.T. metal plunger type. Press plunger and circuit locks closed; press again and circuit opens. Will handle 250 V. at 3 A.

Threaded stem 3/16" long with lock nuts. Ideal for test equipment. 27c

E5720. EACH. 27c
10 FOR \$2.43

BAKELITE BUTTON TYPE

Same as metal plunger type above, but fitted with concave snap-on bakelite button in red or black.

E5721. RED. 35c

E5722. BLACK. EACH 35c
10 FOR \$3.15



EBY SLIDE-TYPE SWITCHES

Slide-type switch with silver-plated bronze contacts. Phenolic insulation.

E4171. S.P.S.T. NET 24c

E4172. S.P.S.T. EACH 29c

E4173. D.P.S.T. 29c

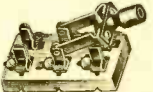
MIDGET KNIFE SWITCHES



For panel or base mount. Nickel-plated blades and contacts; bakelite base. Reliable switches.

E6515 S.P.S.T.	1/2"x1 1/4"	11c
E6516 S.P.D.T.	3/8"x1 1/4"	15c
E4169 D.P.S.T.	1"x1 1/4"	24c
E6517 D.P.D.T.	1"x1 1/4"	24c

MIDGET PORCELAIN KNIFE SWITCHES



Neat and compact; mounted on porcelain base. Screw terminals.

E1275 S.P.S.T.	1"x2 1/4"	10c
E1276 D.P.S.T.	1 1/2"x1 3/4"	17c
E1277 S.P.D.T.	1"x2 1/4"	12c
E1278 D.P.D.T.	1 1/2"x2 1/4"	19c
E1279 3 P.D.T.	2 1/4"x2 1/4"	49c

MIDGET BAKELITE KNIFE SWITCHES



Suitable for many uses in experimental work. These switches have bases of polished bakelite with blades and low-resistance contacts of nickel-plated brass.

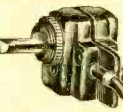
No.	Pole	Throw	NET
E4160	Single	Single	\$0.32
E4161	Single	Double	.38
E4162	Double	Single	.44
E4163	Double	Double	.50
E4164	3	Double	.56
E4165	4	Single	.78
E4166	4	Double	.94
E4167	5	Single	1.29
E4168	5	Double	1.32



PUSH-BUTTON SWITCHES

Cadmium-plated springs. Positive, non-corrosive contacts. Fully insulated. Bakelite knobs. 3/16" hole mounting. Locking type makes contact with knob pushed in. Non-locking type with knob pushed in; returns to open when knob is released.

Locking Type	Type	Non-Locking	NET EACH
E8960	S.P.S.T.	E8964	53c
E8961	D.P.S.T.	E8965	71c
E8962	S.P.D.T.	E8966	59c
E8963	D.P.D.T.	E8967	88c



G. E. ROTARY A.C. SWITCH

With 8" insulated leads. Rated 3 amps., 125 volts. Shaft extends 1/2 in. Underwriters' approved. E29 15.

10 Lots, 80c. EACH 9c

NEW FEDERAL ANTI-CAPACITY SWITCHES



The original Anti-capacity switches in new improved types. Springs and contacts of silver-plated phosphor bronze. Phenol insulation.

E4155.	D.P.S.T.	NET EACH
E4156.	D.P.D.T.	\$1.65
E4157.	4 P.D.T.	\$1.90

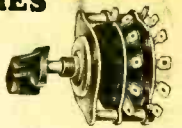


TEST BUZZER BUTTON

Pearl button held in by spring clasp. Has many uses. E3977. NET. 12c

YAXLEY GANG SWITCHES

For test equipment and general radio and laboratory work. Switches have 1 fixed and 1 adjustable stop. Rigidly built. Have laminated bakelite insulation and phosphor-bronze springs. 2 gang switches are spaced 1/2"; 3 gang are 1" between gangs. Notched 2" shaft may be easily shortened. Require 7/16" mounting hole. Complete with bar knob, but less dial plate.



SINGLE GANG SWITCHES

Shorting Type	Non-Shorting Type	Poles	Pos.	List Each	NET EACH
E11950	E11955	1	1-6	\$1.00	\$0.59
E11951	E11956	1	1-11	1.15	.68
E11952	E11957	2	1-5	1.25	.73
E11953	E11958	3	1-3	1.35	.79
E11954	E11959	4	1-2	1.45	.85

TWO GANG SWITCHES

E11960	E11965	2	1-6	\$1.60	\$0.94
E11961	E11966	2	1-11	1.75	1.33
E11962	E11967	4	1-5	2.00	1.18
E11963	E11968	6	1-3	2.10	1.23
E11964	E11969	8	1-2	2.25	1.32

THREE GANG SWITCHES

E11940	E11943	3	1-6	\$2.20	\$1.29
E11941	E11944	3	1-11	2.35	1.38
E11942	E11945	6	1-5	2.50	1.47



YAXLEY 17 POINT TAP SWITCH

For multiple switching. Arm shorts between contacts. Laminated bakelite; phosphor-bronze springs. 2" notched shaft. Size, 1 1/2" by 1 1/2". With knob; less dial plate. E11993. NET. 79c

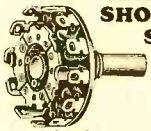


YAXLEY SWITCH PLATES

For switch, tone or volume control use. Have 3/8" center hole.

Marking	Marking	Marking
0 to 100	1 to 8	Off—1 to 5
1 to 15	1 to 9	Off—1 to 6
1 to 20	1 to 10	Off—1 to 7
1 to 3	1 to 11	Off—1 to 8
1 to 4	1 to 12	Off—1 to 9
1 to 5	1 to 17	Off—1 to 10
1 to 6	Off—1 to 3	Off—1 to 16
1 to 7	Off—1 to 4	Volume

E13035. Specify marking desired. Each. 9c



SHORT WAVE SELECTOR SWITCHES

Designed for the new sets having two to five wave bands. Self-wiping contacts of shorting type. Bushing 3/8" dia., with 3/8" x 1/2" steel shaft. Laminated bakelite insulation. With nut and lock washer.

No.	Gangs	Poles	Pos.	NET
E4070	1	3	3	\$0.38
E4071	1	4	2	.38
E4072	1	2	5	.64
E4073	2	4	5	.94
E4074	3	4	5	1.33
E4075	4	8	5	1.58

INDUCTANCE SWITCHES

A well made compact switch. Used in test equipment, etc. Nickel-plated type with pointer knob. 3/8 in. hole mtg.

No.	Points	EACH
E8950	3	38c
E8951	5	38c
E8952	7	45c
E8953	9	45c
E8954	12	45c



MIDGET SHORT JACKS

3/8 in. mounting, heavy bakelite insulators.

E8982. No. 1. Open Circuit. NET 14c

E8983. No. 2A. Single Closed Circuit type. NET 14c



CARTER FLAT PLUG

Popular flat plug. Only 1/16 in. dia., 3/4 in. thick. Ideal for all plate connections. Cord tips held tightly by screws. Polarity shown. Molded bakelite. E8956. YOUR PRICE 38c



CENTRALAB TONE SWITCHES

Finest tone switches for use in any circuit. Set on 1 shaft 1/2"x2 1/4" may be cut to any length; milled flat. Shorting type teeth. Current capacity 1 amp. at 6 volts.

E3270. 1 Pole, 2 position. 1 1/2"x3/4". Type 1460.

E3271. 1 Pole, 3 position. 1 1/2"x1 1/4". Type 1461. NET EACH 29c

E3272. 2 Pole, 2 position. 1 1/2"x1 1/4". Type 1462. NET 35c



DOUBLE PHONE PLUG

Molded black bakelite. Hard-ware brass nickel-plated. Takes 2 sets of cord tips. E5515. List, 50c. NET. 19c



FLAT TYPE PHONE PLUG

Automatic, nothing to take apart; just push in cord tips and plug is ready for use. E3972. NET. 12c



SWITCH LOCK

For automobile radios, etc. Key withdraws only in locked position. Nickel-plated. 3/8 inch body diameter. Switch is not grounded. Has turner lock. With two keys. Single pole, two terminals. Controls one circuit. E2905. NET. 49c

JACKS · PLUGS · CLIPS · CONNECTORS

BINDING POSTS

EBY JUNIOR

Insulated posts with non-removable, engraved tops. Dia. $\frac{1}{2}$ ". Screw is $\frac{1}{8}$ " long.

E4050. Ant. Gnd.
E4051. Gnd.
E4052. Input.
E4056. Plain.
E4053. Output.
E4054. +
E4055. -

List. 16c. NET EACH.....**10c**
PER DOZ.....**\$1.10**

COMBINATION

Top section will receive any standard banana type plug; screw part will take phone tip or wire. Fixed top.

E6325. RED.
E6326. BLACK.

Doz., 75c. EACH.....**7c**

EBY TWIN

Consists of standard Ant. and Gnd. Eby posts mounted on laminated or molded bakelite strips. 2 in. long. $\frac{1}{8}$ in. wide. Insulated posts.

E4058. Molded bakelite strip. List. 35c.
NET.....**21c**
E4059. Laminated bakelite strip. List. 25c. NET.....**14c**

GRID CAPS



STANDARD
Sure contact spring clips. Type A is for standard tubes; Type B is for new metal tubes.

E6334. Type A. EACH.....**1c**
E6335. Type B. EACH.....**8c**
12 FOR.....

COMBINATION

Reversible type cap designed to fit glass and metal tubes. Have 11" leads with standard phone tips.

E6328. Red.
E6329. Black.

EACH.....**12c**

INSULATED

Well-made spring clips. Colored composition insulation. Have 7 $\frac{1}{2}$ " leads with leads. Will fit all glass tubes. Make sure contact.

STANDARD For 866 TUBE
E6330. E6332.
RED. RED.
E6331. E6333.
BLACK. PER DOZ. \$1.25.
PER DOZ. 65c. NET
NET EACH.....**6c**
EACH.....**11c**

BATTERY BINDING POST

Quickly adapts any auto storage battery for radio set use. If a binding screw for connecting lead wire.

E6341. NET.....**18c**

PLUG BUTTONS

Plated brass buttons for covering up unused or drilled holes in panels, chassis, etc., of any metal up to $\frac{1}{16}$ " thickness. Prongs at base assure firm grip.

No. Hole Dia. Each TEN

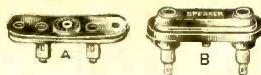
E3964 1/16" 2c 16c
E3965 1/8" 2c 20c
E3966 3/16" 3c 24c
E3967 1/4" 3c 24c
E3968 5/16" 5c 42c

RUBBER HANDLE CAP

Unbreakable soft rubber attachment plug caps. Firm brass blades. Approved type.

E3978. NET.....**4c**
Per 10.....**35c**

TWIN JACKS



LAMINATED TYPE

FIG. A. Of laminated bakelite construction, with sure-grip contact springs. Easy to mount. Ideal for headphones, phonograph or speaker connections. 2"x $\frac{1}{2}$ ".

E4061. SPEAKER.
E4062. PHONO.
E4063. PLAIN. EACH.....**6c**
10 FOR 55c. EACH.....

MOLDED TYPE

FIG. B. Of molded bakelite; attractive, durable. 2"x $\frac{1}{2}$ ".

E4064. SPEAKER.
E4065. PHONO.
E4066. Plain. EACH.....**15c**

SHORTING TYPE

Particularly designed for use in point-to-point analyzers. Circuit automatically closes when cord tips are removed. Single mounting screw. Resembles FIG. B.

E4067. YOUR PRICE.....**18c**



MOUNTING STRIPS

Handy insulated strips to support resistors, junction connections, etc., on metal chassis to prevent grounding and shorting.

NO.	LUGS	EACH	TEN
E6305	2	3c	22c
E6306	3	4c	24c
E6307	4	5c	39c
E6308	5	6c	44c
E6309	6	5c	44c

TERMINAL STRIPS

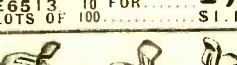
Bakelite strips with securely fastened screw terminals.

No.	Term.	Each	TEN
E6311	2	1.9c	\$0.79
E6312	3	2.4c	1.05
E6313	4	2.9c	1.32
E6314	5	3.4c	1.65
E6315	6	3.9c	1.95
E6436	7	4.4c	2.55
E6437	8	4.9c	3.05
E6438	9	5.4c	3.60
E6439	10	4.7c	4.10

INSULATED TIE TERMINAL

Has a host of uses. Provides a convenient tie point for resistors, by-pass condensers, etc. Lug with hole for easy mounting.

E6513 10 FOR.....**19c**
LOTS OF 100.....**\$1.10**



FAHENSTOCK CLIPS

E6320. Single, 1" long. NET PER DOZ.....**11c**
E6321. Single, $\frac{3}{4}$ " long. NET PER DOZ.....**10c**
E6322. Double, 1 $\frac{1}{4}$ " long. NET PER DOZ.....**26c**
E6323. Double, 1 $\frac{1}{2}$ " long. NET PER DOZ.....**25c**

RUBBER HANDLE CAP

Unbreakable soft rubber attachment plug caps. Firm brass blades. Approved type.

E3978. NET.....**4c**
Per 10.....**35c**

TEST CLIPS



ALLIGATOR TYPE

Long, thin-nosed clips, easy to get into tight places. Handy for all test instruments. Back of clip fits all banana plugs. Strong spring grip.

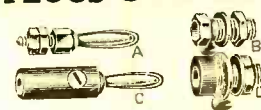
E6317. FIG. A. 2" long. Per Doz. 38c. 100 Lots. \$3.15 NET EACH.....**4c**

E6318. FIG. A. 2 $\frac{3}{4}$ " long. Per Doz. 54c. 100 Lots. \$4.25. NET EACH.....**5c**

INSULATED TYPE

FIG. B. 2 $\frac{1}{2}$ " long.
E6337. RED.
E6338. BLACK.
E6340. 80c. EACH.....**7c**
FIG. B. 3 $\frac{1}{2}$ " long.
E6339. RED.
E6340. BLACK. 10c
Per Doz. \$1.08. EACH.....

PLUGS & JACKS



BANANA TYPE

E6342. FIG. A. New type plug, with tuned spring-brass plug-in prong. Ideal for use with any test equipment. 1 $\frac{1}{2}$ " long. Per Doz. 38c. 100 Lots. \$3.15. EACH.....**4c**

E6343. FIG. B. Nickel-plated brass jack to fit above plug. Complete with lug and nut. $\frac{1}{8}$ " long. Per Doz. 38c. 100 Lots. \$3.15. EACH.....**4c**

INSULATED TYPE

PLUGS JACKS
FIG. C FIG. D
E6345 RED E6347
E6346 BLACK E6348
Per 100 Asstd. \$4.55.
Per 10 Asstd. 48c. NET EACH.....**6c**



SPLIT TYPE BANANA PLUGS

FIG. A. New type plug with split prong, giving much tighter contact between plug and jack. Will stand up under much heavier service than any other plugs.

E6350. Doz. 38c. 100 Lots. \$2.95. EACH.....**4c**

INSULATED TYPE

E6351. RED. FIG. B.
E6352. BLACK. FIG. B. 8c
Doz. 85c. EACH.....



BABY BANANA PLUGS AND JACKS

A new small banana plug and jack made especially for coil mountings. Made of hard brass. Nickel-plated.

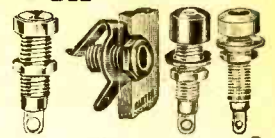
E6354. PLUG. Per Doz. 38c. Per 100. \$3.15. NET EACH.....**4c**

E6355. JACK. Per Doz. 38c. Per 100. \$3.15. NET EACH.....**4c**

INSULATED TYPE

PLUGS JACKS
E6357 RED E6359
E6358 BLACK E6360
Per Doz. 57c.
Per 100. \$4.55. NET EACH.....**6c**

TIP JACKS



A6362. FIG. A. Nickel-plated tip jacks requiring a minimum of panel mounting space. Bronze springs grip phone or speaker cord tips firmly for positive connection. Requires only $\frac{1}{4}$ " mounting hole. Will fit panels up to $\frac{3}{8}$ " thick. Wt. 2 oz. Per Doz. 30c. EACH.....**3c**

E6363. FIG. B. Heavy spring contact with positive action. Short, compact type for limited space. Requires $\frac{1}{4}$ " mounting hole. Will fit panels up to $\frac{3}{8}$ " thick. Per Doz. 30c. EACH.....**3c**

INSULATED TYPE

New type sure-grip contacts for smooth positive action. Insulated head and shoulder washer. Ideal for use on metal chassis or panels for headphones or speaker output, or for test equipment. FIG. C.

E6364. RED. EACH
E6365. BLACK. EACH
Per 100. 57c. 100 Lots. \$4.55. NET EACH.....**6c**

Banana Plug or Tip Jack

FIG. D. A new insulated jack arranged to take either standard phone tips, or the new popular banana type plugs. Insulated head and shoulder washer. $\frac{1}{4}$ " dia.

E6367. RED. EACH
E6368. BLACK. EACH
Per Doz. 85c. 100 Lots. \$6.50. NET EACH.....**8c**

Yaxley Colored Tip Jacks

2 in a package. Bakelite rims, one red, one black. Insulated type. Fits $\frac{3}{8}$ " in. hole. Spring contact with solder lug connections. Takes standard cord tip.

E4069. Per set of 2. 15c
List. 25c. NET.....



IMP PLUGS

E6370. FIG. A. A midjet plug with screw-on solderless connection. Fits all standard tip jacks. Per Doz. 35c. 100 Lots. \$2.85. NET EACH.....**4c**

INSULATED TYPE

E6371. RED. EACH
E6372. BLACK. EACH
Per Doz. 57c. 100 Lots. \$4.55. NET EACH.....**6c**



CORD TIPS

FIG. A. Practical new design. Hole in side allows a quick and easy conversion to be made; just insert wire and apply solder to hole.

E6373. Per 100. 72c. 8c
E6374. Per 10.....

FIG. B. Standard size tip. 1 $\frac{1}{4}$ " long. Solderless screw-on connection. Of nickel-finished brass. Per 100. \$2.45. E6375. EACH.....**3c**

FIG. C. Standard nickel-plated brass cord tips; will fit any regular tin jack. E6376. Per 100. 50c. 6c
E6377. Per 10.....

FUSES · BATTERY CLIPS · HARDWARE

MUELLER BATTERY CLIPS



Strong channel construction. No solder required. For screw or lug connections, 5 and 10 amp. types cadmium-plated; balance lead-coated steel.

MESH TEETH TYPE
E6500. PEE-WEE. 1 1/2" long. 5 amps. No. 45. 7 lb. spring. Jaw spread, 3/8".
EACH, 4c. Box of 10... **29c**
E6501. PEE-WEE. 2" long. 10 amps. No. 48B. 10 lb. spring. Jaw spread, 3/4".
EACH, 5c. Box of 10... **32c**

NEW WEE-PEE-WEE TYPE



E6509. No. 88. 1 1/2" long. Jaw spread, 3/4". Ideal for close-wound coils.
EACH, 8c. Box of 10... **59c**
E6510. No. 88 clip with rubber insulator. Per Pair, 1 Red, 1 Black. NET, 24c.
Box of 10 (5 pair)..... 88c



GRIP TEETH TYPE
E6502. 2 3/4" long. No. 21A. 17 lb. spring. Spread, 1".
EACH, 3c. Box of 10... **59c**
E6503. 3" long. No. 21A. 38 lb. spring. Spread, 1 1/4".
EACH, 16c. Box of 10... **\$1.08**
E6504. 6" long. No. 11A. 38 lb. spring. Spread, 1 3/4".
NET EACH..... 42c

SOLID COPPER CLIPS
 For H.F. work. Non-ferrous. 1 1/2" long. 10 amps. Spread 3/4".
E6480. Type 45-C.
EACH, 8c. Per 10... **54c**



ALLIGATOR CLIPS
 Small clips with slender elongated jaws. Screw terminals; with barrel ends to fit banana plugs. Type 85. Length, 2 3/8". Jaw spread, 3/8".
E6477. EACH..... **6c**
100 Lots, \$3.43. Per 10... **39c**

RUBBER INSULATORS
 For above clips. Protect against electric short. Furnished in pairs of 1 red and 1 black.
 No. For Clip Per Pair 5 Pairs
E6485 45. 45c \$0.14 \$0.52
E6486 48B .17 .63
E6487 21A .34 1.37
E6488 21A .59 2.30
E6489 11A 1.19 4.10
E6481 85 .08 .28

SPECIAL VALUE BATTERY CLIPS
 Exceptionally low priced, high quality battery clips with heavy non-corrosive finish. Have strong springs and will give long, dependable service.
E6400. 1 1/2" long. Jaw spread, 3/8". 10 for 25c.
EACH..... 3c
E6401. 2" long. Jaw spread, 3/4". 10 for 28c.
EACH..... 3c
E6402. 2 3/4" long. Jaw spread, 1". 10 for 42c.
EACH..... 5c
E6403. 3 3/8" long. Jaw spread, 1 1/4". 10 for 60c.
EACH..... 7c

LITTELFUSES FOR TEST INSTRUMENTS

Designed especially for the protection of delicate instruments. Glass enclosed units, 1x1/4". High-speed action with short time lag. For use on A.C. or D.C. up to 250 volts.

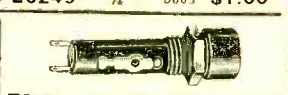


Cat. No.	Rating Amps.	Max. Load M.A.	Aver. Resis. 5 M.A. Load	NET EA.	NET PER DOZ.	Use to Protect meters:		
						Voltmeters Ohms per Volt	All Magnetic Types	Thermo-Couple Types
E6241	1/200	5	500	18c	\$1.95	Over 1000	Galv.	0-5
E6230	1/100	10	110			1000	Up to 0-1	0-10
E6231	1/32	25	20			500-1000	0-10	0-25
E6232	1/16	60	5.0	12c	\$1.32	100-500	0-25	0-60
E6233	1/8	100	1.5				0-75	0-115
E6234	1/8	100	3.0			20-100	0-75	0-115
E6235	1/4	200	6.2			10-20	0-150	0-200
E6236	3/8	300	3.0	9c	\$1.00	5-10	0-250	0-300
E6237	1/2	400	2.5			3-5	0-350	0-400
E6238	3/4	600	.40				0-500	0-600
E6239	1	1000	.24	6c	65c		0-750	0-1000
E6240	2	2000	.14				0-1500	0-2000

LITTELFUSES FOR RADIO AND AMPLIFIER

For use in 105-120 volt primary line. Underwriters' approved. 1 1/4 x 1/4".

No.	Amp.	Volts	EA.	PER DOZ.
E6242	1	250	5c	50c
E6243	1 1/2	250		
E6244	2	250		
E6245	3	250		



EXTRACTOR FUSE POST
 A compact, molded bakelite fuse holder. Underwriters' approved. Designed to hold type 3AG fuses. Will take panels up to 3/16" thick. Requires 3/4" mounting hole.
E6255. NET..... **24c**
E6258. NET..... **24c**

FUSE CLIPS
 Single hole mount for small tubular fuses.
E6253. EA..... **2c**
PER DOZ..... 15c

FUSE RETAINER
 Cadmium-plated separable metal container for fusing a line. Used extensively for auto sets. Takes 1/2" or 1/4" fuse.
E6252. EACH..... **8c**
PER DOZ..... 80c



FUSE MOUNTINGS
 Black molded bakelite mountings for Test Instrument Littelfuses. Have single hole mount.
E6250. PER DOZ., 98c. EACH..... **9c**
E6251. Panel type mounting PER DOZ., \$1.30. EACH..... **12c**
E6255. "Meter Back" mounting. Size: 1 1/4 x 1 1/4 x 3/8". PER DOZ., \$1.30. EACH..... **12c**



METAL-COVERED 3AG FUSE MOUNTINGS
 These metal-covered 3AG fuse mountings are designed for use on the new metal tube radio sets. Approved by the underwriters. Cadmium-plated shell with bakelite base. Size, 2 1/2 x 3/8". 11 is a 6-32 mounting screws spaced at 2 1/2" mounting centers.
E6257. EACH..... **12c**
PER DOZ..... \$1.30



SOLDERING LUGS
 No. Style No. Screw Size PER BOX OF 100
E67045 1 6.8
E67046 2 6.8
E67047 3 8
E67048 4 6.8
E67049 5 6.8
E67018 4 10
E67023 4 3/4"

TUBULAR RIVETS
 For replacement and repair work. May be used with any standard rivet tool. Tool listed on page 141 is ideal. Much faster than screws and nuts.
 No. Size PER 100 PER 25
E6393 3/16" 28c 10c
E6394 1/8" 29c 11c
E6395 1/4" 38c 15c

EYELETS FOR ABOVE
 Designed to fit above rivets.
 No. Size PER 100 PER 25
E6396 3/16" 28c 10c
E6397 1/8" 29c 11c
E6398 1/4" 38c 15c

BUSS QUALITY FUSES

TYPE 3AG
 Tubular fuses. Commercially made. Size 18. 1 1/4 in. x 1/4 in. Protect radio sets, test instruments, etc.



No.	Amp.	No.	Amp.
E6010	1 1/2	E6015	5
E6011	1	E6016	10
E6012	2	E6017	15
E6013	3	E6018	20
E6014	4	E6019	25

Box of 10..... **14c**
PER HUNDRED..... \$2.65

Fractional Sizes
E6020. 1/2 Amp. Box of 5. **45c**
E6021. 3/4 Amp. Box of 5. **45c**
E6022. 1 Amp. Box of 5. **45c**
E6023. 3/4 Amp. Box of 5. **30c**

CADMIUM-PLATED MACHINE SCREWS

Standard thread, good quality.

6-32 ROUND HEAD

No.	Length	Gross
E7010	1/2"	16c
E7011	5/8"	18c
E7012	3/4"	20c
E7013	7/8"	24c
E7014	1"	31c
E7015	1 1/8"	35c
E7016	1 1/4"	39c
E7017	1 1/2"	45c

8-32 ROUND HEAD

No.	Length	Gross
E7018	1/2"	23c
E7019	5/8"	28c
E7021	3/4"	32c
E7022	7/8"	32c

METAL TAPPING SCREWS
 Cut their own threads in metal as they are turned in by screw driver. May be used with all sheet metal up to No. 16 gauge.

SIZE 6	SIZE 8			
No.	Gross	Lth.	No.	Gross
E7035	30c	3/4"	E7041	34c
E7036	32c	3/4"	E7042	36c
E7037	35c	3/4"	E7043	38c
E7038	37c	3/4"	E7044	40c
E7039	40c	3/4"		

ORNAMENTAL HEAD SCREWS
 Rosette head; statuary bronze finish. Size 6-32 (3/8" head dia.).

No.	Length	Doz.
E7000	1"	8c
E7001	1 1/4"	9c
E7002	1 1/2"	10c

LUG SCREWS
 For mounting shield cans, etc. Cadmium plated, 6-32 thread.
E7007. Per 100, 33c. **5c**
PER 10, NET.....

HEXAGONAL NUTS
 Standard 3/8" nuts. accurately machined from cadmium-plated steel. Shpg. wt., 2 lb.
E7005. 6-32. **18c**
E7006. 8-32 PER 100... **18c**

ESCUTCHEON SCREWS
 These 3/4" long wood screws fit every type of escutcheon plate.
E7040. Gross..... **29c**

RACK SCREWS & WASHERS
 Standard 10/32 thread screws with oval heads for use in racks and panels. Length: 5/8".
E7090. 12 for.. **3c**
E7091. Rack cup washers for above screws. **3c**

QUALITY TOOLS & HARDWARE

RADIO HARDWARE



ALL-PURPOSE ASSORTMENT

An indispensable item for the serviceman, experimenter, etc. The handsomely finished metal case has 12 compartments containing assorted machine screws, nuts, waste bolts, self-tapping screws, rubber grommets, knob set screws, rivets and eyelets, lugs, plain and fibre washers, etc.—for every need.

E7094. NET **\$1.76**

1000 PIECE HARDWARE ASSORTMENT



A bargain assortment that will prove invaluable to any serviceman or experimenter. Contains rivets, grommets, nuts, screws, washers, brackets, soldering lugs, etc.—1,000 pieces of useful hardware.

E7008. YOUR PRICE. **95c**

SCREW ASSORTMENTS



For all radio service and set-building needs. Each kit contains 85, 6-32 screws of assorted lengths.

E7031. No. 1 Kit. 85 round-head screws.
E7032. No. 2 Kit. 85 flat-head screws.
EACH KIT **23c**

FIBRE WASHER ASSORTMENT



A large variety of shouldered and plain fibre washers. Very useful. 100 in box.

E7033. PER BOX. **26c**



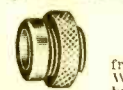
BRACKET ASSORTMENT
Consists of 28 popular-sized angles and brackets for radio work. Nickel-plated.

brass. Shpg. wt., 1 lb.
E7009. YOUR PRICE. **24c**



SET SCREW ASSORTMENT
Handy replacement set screws for knobs. Consists of 120 assorted sizes, 6-32, 8-32, 10-32, from 1/4" to 1/2". In handy sectional cabinet.

E7093. **\$1.32**



INSULATED GROMMETS
Prevent wires from fraying or breaking. Well-made new type bushings.

Stock No.	Fits Hole	Inside Diam.	Lath.	DOZ.
E7024	3/16"	3/16"	3/16"	52c
E7025	3/16"	3/16"	3/16"	53c
E7026	3/16"	3/16"	3/16"	70c
E7027	3/16"	3/16"	3/16"	82c

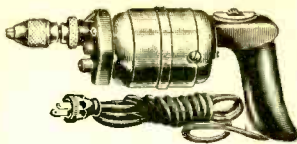
RUBBER GROMMETS

For insulating holes in metal chassis 1/8 in. thick. For metal stock about 1/8 in. thick.

Stock No.	Fits Hole	Inside Diam.	Per Doz.
E7028	3/16"	3/16"	9c
E7029	3/16"	3/16"	19c
E7030	3/16"	3/16"	21c

NEW AC-DC ELECTRIC SPEED DRILL

Here is a high-quality electric speed drill at a remarkably low price. Very rugged construction, yet light in weight and easy to handle. The efficient motor is designed for long life. The sturdy chuck assembly will accommodate up to and including a 1/4" drill. Pistol-grip handle has a thumb-controlled switch. High speed drills on page 141 are ideal for use with this drill. 1500 R.P.M. Drills 3/4" from corners. For 110 V. A.C. or D.C. With 7 foot cord. Wt. 4 1/2 lbs.



E2110. NET **\$7.45**

Triple A. C. Extension

Handy triple electric outlet. Of live rubber. With 10 foot cord. Special plug provides added outlet.
E3422. NET **48c**

A.C. TRI-EXTENSION

A small, handy, three-way extension tap of molded bakelite. A steel plate fastened on back reinforces construction. Has a 6 foot approved brown rubber cord and bakelite handle cap. A very useful item.
E3426. NET. **24c**

EAGLE INDICATING FUSES

New type fuse which shows "OK" in window when fuse is good. "OK" vanishes when fuse blows.

E3995.	10 Amp.	5 FOR
E3996.	15 Amp.	20c
E3997.	20 Amp.	
E3998.	25 Amp.	
E3999.	30 Amp.	

FRICITION TAPE

Made of good quality fabric impregnated with adhesive rubber compound. With high insulation qualities. Easy to apply; will not dry out.

E7705.	2 oz. roll.	NET. 6c
E7706.	4 oz. roll.	NET. 9c
E7707.	8 oz. roll.	NET. 17c

SCOTCH ELECTRIC TAPE

A tough, flexible, electric tape with extremely high insulation factor. Neutral paper backing with touch-sensitive adhesive coating. Will stick to any surface. 1/2" wide. 10 Yard Roll.
E7708. YOUR PRICE. **29c**

ANGLE BRACKETS WITH TAPPED HOLES

Ideal for assembling chassis, cabinets, etc. Have one 8-32 tapped hole and one 3/16" diameter plain hole. Cadmium-plated steel.

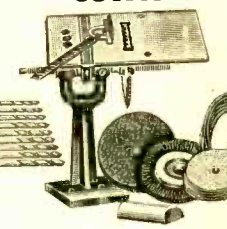
No.	Size	10 For
E1663	1 1/2 x 1 1/2"	16c
E1664	1 1/2 x 3/4"	23c
E1665	1 1/2 x 3/4"	

CABLE CLAMPS

The 3/4" size fits 1/4" cable; 1" size fits 1/2" cables. Made of heavy-gauge steel, cadmium-plated. Have a No. 6 mounting hole.

E1666.	3/4" long.	6c
E1667.	1" long. 10 for.	54c

POLISHING HEAD OUTFIT



A complete polishing kit for home or shop. By using a 3/8 to 1/2 horsepower motor, it makes an efficient outfit for polishing, grinding, buffing, sawing, or drilling. Consists of polishing head and chuck, saw table and guide, cotton buff, wire brush, polishing compound, and 9 steel drills. Head has a two-speed pulley. Chuck has a capacity of 1/2". The 3 spring controlled case-hardened chuck jaws hold drill in dead center. The two steel flanges are milled flat 60 to hold stones, scratch brushes, etc., squarely against material being worked. Finished in red enamel. Wt. 8 lbs.
E2111. Complete Outfit. NET. **\$3.35**
E2112. Polishing head and chuck only. NET. **95c**

TOUCH-UP SPRAYER

Ideal for painting panels, cabinets, furniture, autos, etc. This sprayer is designed to operate efficiently from a very low pressure source such as a spare automobile tire. It is equipped with an airtight brass valve, an adjustable brass spray tip, a rubber hose, and a 2 ounce jar.
E2113. NET. **59c**



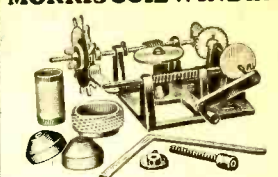
TAP AND DIE SET

Supplied with the most popular size dies for general purpose use. Wooden box contains three cutting dies 1/4", 3/8", and 1/2", with plug and hand taps to match; a tap wrench; and a die holder. All parts are of the finest tempered steel assuring long life. Shpg. wt., 3 lbs.
E2114. S.A.E. Thread. **\$1.25**
E2115. U.S.S. Thread. EITHER TYPE. **\$1.25**

RADIO REPAIR LITE

A handy tool designed to save time and trouble. It provides plenty of light where you want it. Fountain-pen size. Operates from 110 volts A.C. or D.C.
E1668. NET. **88c**

MORRIS COIL WINDER



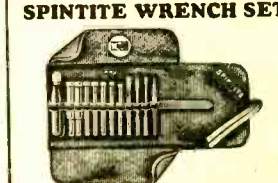
Will wind Honeycomb, Splicer Web, Solenoid coils, etc., in different widths and diameters and will handle wire of different gauges. Makes precision coils that equal factory accuracy. Has recorder with adjustable pointer for counting number of turns. An ideal machine for the experimenter or small factory. Shpg. wt., 4 lbs.
E9302. NET. **\$4.35**

RADIO TOOL CHEST



This handy chest contains 10 handy, sturdy tools for the serviceman or set-builder. Consists of: 3" and 5" screwdrivers, scriber, reamer, countersink, pliers, center-punch, socket wrench sets for hexagon and knurled nuts, and 3 hexagon nut wrenches from 1/4 to 1/2". An ideal tool set for the radio serviceman, experimenter, amateur, etc. Shpg. wt., 2 lbs.
E7691. NET. **\$2.25**

SPINITITE WRENCH SET



This extra-fine quality kit is a very useful and necessary part of the serviceman's and experimenter's equipment. It will meet the need of any repair job and when rolled up, can be conveniently carried in a toolbox or analyzer compartment. Outfit includes: 3 screwdrivers with 3/8", 1/2", and 5/8" blades; 1 universal handle and chuck; 7 spinitite hexagonal wrenches: 3/16", 1/4", 5/16", 3/8", 1/2", 5/8", and 3/4"; 1 reamer roll. Complete in durable leatherette roll. Shpg. wt., 3 lbs.
E2116. NET. **\$4.05**

G-L MICROMETER

Precision-built and guaranteed accurate within .0002 of an inch. Ideal for measuring crystals. Anvil and spindle of hardened steel; accurately calibrated. Zero setting in anvil. Finishes in hard, polished chrome. Standard 1" size. Shpg. wt., 1 lb.
E7736. NET. **98c**

POCKET TOOL CASE

A high grade, two partition case that you can carry in your hip pocket. Will hold a great number of small tools. Made of genuine leather, double sewed, with snap-on flap. Saves wear and tear on your pockets.
E1643. YOUR PRICE. **59c**



BLOW TORCHES • PLIERS • SCREW DRIVERS

SCREWDRIVERS



NON-SKID SCREWDRIVER

Shock-proof, with ribbed points. Handy fountain pen style with clip. American-made.

E7712. 3-inch blade. **12c**
10 for \$1.08. Each.....

E7711. 2-inch blade. **11c**
10 for 99c. Each.....

E7710. 1½-inch blade. **10c**
10 for 90c. Each.....



FIRM-GRIP SCREWDRIVERS

Forged chrome-vanadium alloy steel blades, accurately ground to fit screw slots; tough; hammer-proof. Amberlite handles. American-made.

E7715. 3 INCH BLADE. **30c**
YOUR PRICE.....

E7716. 6 INCH BLADE. **38c**
YOUR PRICE.....

E7717. 8 INCH BLADE. **42c**
YOUR PRICE.....



INSULATED BLADE TYPE

A 10,000 volt insulated 5-inch screwdriver. Red and black composition handle. High quality steel blade insulated almost entire length. American-made.

E7718. YOUR PRICE **14c**

MIDGET SET SCREWDRIVER



Especially shaped to fit into set screws of knobs, and to balance trimmers. Overall length, 4½". Specially hardened blade, 2¼" long. Transparent amber handle 2¾" long x ¾" diam. Complete with pocket clip.

E1604. 10 for 81c. EACH..... **9c**



HANDY LOW COST SCREWDRIVER KIT

A popular kit of three screwdrivers in the most useful sizes. Comes in convenient leatherette holder for shop wall mounting. Each screwdriver has insulated handle and finger guard. Blades measure 5½", 3½", 2¾". American-made. This is one of our most popular tool kits. A very fine value.

E7719. **38c**
NET PER SET.....

FLEXIBLE SHAFT SCREWDRIVER



Here is a screwdriver that will eliminate a lot of skinned knuckles. Special flexible shaft allows its use in many awkward places where another screwdriver couldn't reach. Has insulated movable screw locator. Fluted molded handle. 8¾" long.

E7739. **88c**
YOUR PRICE.....

GRIP-IT SCREW HOLDERS

A simple easy attachment that will make any screwdriver a screw-holding type. Simply slip on the holder that fits your screwdriver, and it is ready for work. In sets of 3 sizes to fit all screwdriver requirements.

E5470. Set of 3. **15c**
NET PER SET.....

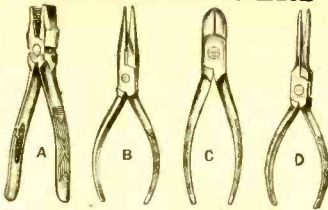


MUELLER SNAPPER

May be used to start nuts and screws in out-of-the-way places; serves as test clip in inaccessible spots, or may be used as a prod contact. Consists of universal clip mounted in a rod insulated tube. Push-button on the top opens and closes clip. American-made.

E6483. RED. **38c**
E6484. BLACK. EACH.....

VALUES IN PLIERS



KRAEUTER PLIERS

The new, famous Kraeuter pliers. With new non-slip Industrial finish, the secret of long-lasting quality tools. Scientifically heat-treated and hardened. American-made.

E7807. Type A. 6 Inch Electrician's Type. **96c**
YOUR PRICE.....

E7806. Type B. 6 Inch Needle-Nose Side Cutter. **\$1 01**
YOUR PRICE.....

E7808. Type C. 4½ Inch Diagonal Cutters. **98c**
YOUR PRICE.....

E7805. Type C. 5½ Inch Diagonal Cutters. **\$1 15**
YOUR PRICE.....

E7803. Type D. 6 Inch Needle-Nose Pliers. **91c**
YOUR PRICE.....

RADIO PLIERS

Well-made handy pliers for radio and electrical work. Made of fully-polished forged tool steel. Diagonal cutting type (5½" long) has hardened and tempered cutters with knurled gun-metal finish handles. Thin nose type (6" long) are nickel plated. Stoutly built to give lasting service. Excellent tool values. American-made.

E7800. Diagonal Cutting. **32c**
E7801. Thin Nose Type. **32c**
YOUR PRICE EACH.....

SPECIAL LONG NOSE SIDE-CUTTING PLIERS

High quality, inexpensive pliers, carefully made of hardened steel. Long slim nose for reaching into hard-to-get-at places. Knives are well-fitted, and are ground to make clean easy cut. Overall length, 5 inches. Particularly useful in radio construction and repair work. Every serviceman, experimenter, and amateur can use these pliers to good advantage.

E7802. **38c**
YOUR PRICE.....

NEW MIDGET UTILITY PLIERS

The handiest, strongest little pliers available. Made of chrome vanadium steel. Have four adjustments up to ¾", and will reach those hard-to-get-at places which are practically impossible to reach with any other tool. Really indispensable for your tool kit. American-made.

E7709. NET **25c**

END WRENCH SET

A handy little wrench set with many handy uses. Cadmium-plated; cannot rust. Wrenches are ¼"x5, 6", ¾"x5¾, and ½" with alligator jaw. American-made.

E2078. Complete set of 3 wrenches. NET **10c**

WIRE STRIPPER

This efficient, time-saving tool strips insulation from wire easily and cleanly. Has a cutting edge made of tempered steel. Shpg. wt. 1 lb. American-made. A handy little tool.

E7722. NET **9c**

LENK BLOW TORCHES

HI-HEAT BLOTORCH

This heavy-duty blow torch assures perfect results. Features flame control, shut-off valve, and non-clogging burner. Fool-proof in design and construction; self-cleaning type. Generates quick flow from asbestos-filled drip-cup. Produces a 2000° F. flame. The tank is of heavy gauge seamless drawn brass, with flared shaped bottom for easy filling. Height 7½ inches; diameter at base 3 inches. Two models are available, either for alcohol or gasoline fuel.

E6224. Type 104. Uses gasoline. **\$1 18**
List. \$2.00. YOUR PRICE.....

E6223. Type 105. Uses alcohol. **\$1.32**
List. \$2.25. YOUR PRICE.....



MODEL 24 BLOTORCH

Entirely automatic in operation. Uses alcohol for fuel. Has copper heat conductor for quick generation of gas. Made of nickel-plated brass. Solid neoprene base. Ideal for shop use. Handy size. 5½"x2½"x1 inches.

E6221. **69c**
YOUR PRICE.....



IMP GASOLINE HAND TORCH

Entirely automatic gasoline hand torch. Flame temperature is over 2000° F. Has priming cup for quick action. No pumping or blowing necessary. Ideal for use where a fusing or brazing heat is required.

E6226. **69c**
YOUR PRICE.....



CABINET REPAIR KIT



Here is a practical, inexpensive repair kit that will meet any emergency or do any cabinet repair job. With this versatile kit you can repair dents, scratches, or nicks on wood, plastic, or bakelite cabinets, knobs, etc. Complete kit consists of: an assortment of 9 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. In handy box. Shpg. wt. 4 lbs.

E7648. NET **\$1.91**

RCA CABINET REFINISHING KIT

For refinishing scratched, marred or dented furniture. Leatherette case 9½"x14"x2½" contains: 1 can cleaning oil; 1 can of Valvoline for rubbing; assorted stick shellac; 2-pigs. aniline stain powders; 1-touch-up brush; 1-spatula; 1-rubbing block; instructions. Shpg. wt. 5 lbs.

E7618. **\$2.90**
NET.....



HANDY SCRATCH REMOVER

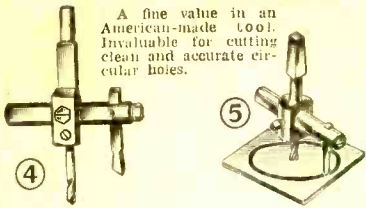
Handy scratch remover for use in touching up small scratches on sets brought in for servicing. One end has filler for building up scratches. The other end is combination polish and stain.

E7600. NET **22c**



QUALITY TOOLS FOR EVERY PURPOSE

CIRCLE CUTTERS



A fine value in an American-made tool. Invaluable for cutting clean and accurate circular holes.

Designed to cut large holes accurately and quickly. May be used in slow-speed drill press or ordinary hand-brace. Type No. 4 is designed for heavy-duty work; Type No. 5 is standard professional cutters, heavy bar construction; Junior type is for light work on softer materials. Will cut holes in wood, bakelite, hard rubber, tin, sheet metal, etc.

E7731, No. 4. \$1.25
Cuts holes 7/8 to 1" in diam. NET.

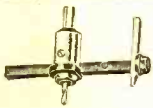
E7730, Junior. Cuts holes 7/8 to 2 1/2" in diam. NET. 78c

E7732, No. 5. Square shank. Cuts holes 1 to 5 1/2" dia. NET. \$1.88

E7733, No. 5. \$1.88
Round shank. NET.

E7735, Extra cutter blades for No. 4 and No. 5. Hardened tool steel. 24c
EACH

ICA ALL-PURPOSE CIRCLE CUTTER



An improved circle cutter that cuts holes from 1 1/4" to 3". High quality hardened steel. Hexagon shaft fits either brace or drill chuck. Easy adjustment of cutter. Cuts metal, bakelite, wood, etc.

E7723, YOUR PRICE \$2.35

E7727, Extra Drill. NET. 21c

E7728, Extra Cutter. NET. 29c

MULTI-PURPOSE CUTTING TOOL



A handy all-around cutting tool for the serviceman or set-builder. Suitable for counter-sinking, heading, drilling, or cutting holes. 3/16" drill used as pilot will cut holes from 7/16" dia. to 3" dia. May be used in drill press or hand brace, or as tool in lathe.

E7724, NET. \$1.62

E7725, Extra Drill. NET. 21c

E7726, Extra Cutter. NET. 29c

GOODSELL-PRATT HAND DRILL



Highly serviceable with solid steel frame and single speed, cut gears. Equipped with three-jawed chuck holding any size drill up to 1/4". Large gear, red enameled, Mahogany finished hardwood handle. Solidly built to give good service. A rare value in a good American-made tool. Length, 10 1/2 in. Shpg. wt., 3 lbs.

E7721, YOUR PRICE \$81c

ASSORTED DRILL SET



A real value. High quality twist drill set containing the popular sizes necessary for radio and other work. Set consists of 9 carbon steel drills ranging from 1/16 to 3/16 sizes in 1/32 inch size graduations. American-made.

E7734, NET. 39c

E7720, High-Speed Drill Set. NET. 95c

VOLUME CONTROL WRENCH

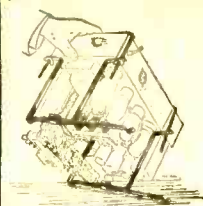


A new wrench designed to tighten volume control nuts, or across flats.

Handle 12" dia. x 3 1/2" long is of amber-colored unbreakable plastic. Shank is of cadmium-plated 1/2" socket is case-hardened steel.

E1601, YOUR NET PRICE \$59c

NEW CHASSIS GUARDS



A practical, new, low-cost aid to efficient radio servicing. Protects tubes, dial, tuning mechanism, etc., while chassis is being worked on. Adjustable clamps fit any chassis and are easy to apply. Protects firm, steady foundation since chassis is held rigidly in place in any position, yet all parts are easily accessible. Every service shop needs several pairs of guards.

\$1.71
E1602, NET PER PAIR

ACRO CHASSIS CRADLE



An absolute necessity for efficient radio servicing. Permits placing any radio set in any position. Prevents damage to tubes and other mounted parts. Chassis is held firmly in place by special mechanical clamps. Ideal for aligning receivers when set is operating or for easy access to chassis wiring. Adjustable base permits accommodating chassis of any size up to 21" long. Of cold-rolled heavy steel construction. With clamps. Shpg. wt., 5 lbs.

E1617, YOUR PRICE \$4.75

E1618, Extra Set Clamps. NET. \$2.70

NEW RADIO BENCH LAMP



Made especially for radio work; focuses light where needed but eliminates glare. Has flexible shaft adjustable to any position. Special base compartments for knobs, screws, parts, etc. Less bulb. Shpg. wt., 10 lbs.

E1603, NET. \$2.45

QUALITY PUNCHES

SOCKET AND CONDENSER PUNCHES



Punches clean round holes in sheet metal (chassis bases, panels, etc.). Easy to use, saves time; no pre-drilling necessary. Made of highest grade rustproof hardened steel to give lasting service. New pin-point center piercing pin cuts through without drilling; contour edges cut clean, accurate holes. All punches are die-tempered and oil-tempered. These punch sets are all American-made.

E1640, For 1/2" Holes. YOUR PRICE 95c

E1645, For 1 1/8" Holes. \$1.60

E1646, For 1 1/4" Holes. \$1.55

E1647, For 7/8" Holes. \$1.55

E1648, For 3/4" Holes. \$1.55

List, \$3.00. **YOUR PRICE EACH \$6.98**
SET OF 5 PUNCHES

E1644, DUPLEX SOCKET PUNCH. Cuts 7/8" and 1 1/8" holes. NET. \$2.59

CLIPTITE SOCKET PUNCHES

Designed to cut holes in "Clitite" tube sockets. Provides locking key for socket.

E1641, 11 sizes—Standard. NET. \$2.94

E1642, 12 sizes—M and T Comb. NET. 2.94

ICA RIVET & EYELET PUNCH SET



A universal tool for re-setting any size eyelet or rivet. Heavy cast-iron anvil has hexagon sides; may be clamped in vise. Setting tools of hardened steel produce clean, factory-like job.

E1616, NET. \$1.32

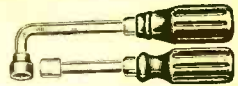
ICA SQUARE HOLE SHEARING PUNCH



A hammer is the only tool necessary with this punch. Permits cutting any size odd shape hole (square, rectangular, hexagon, etc.) on panels or chassis of any metal up to No. 14 gauge thickness. Ideal for enlarging or punching transformer holes, etc.

E7729, YOUR PRICE \$5.58

SOCKET WRENCHES

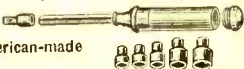


SPIN-TYPE WRENCHES

A complete selection of high grade hexagonal socket wrenches for every radio requirement. Sockets are of hardened tool steel designed to grip surely. Shanks are of heavy cadmium-plated steel with ribbed easy-to-grip wooden handles. Offset type is for reaching into tight places. Sizes listed will handle all standard nut sizes used in radio work. American-made.

Nut Size	6" Straight	9" Straight	6" Offset
1/8"	E2055	E2062	E2069
3/16"	E2056	E2063	E2070
1/4"	E2057	E2064	E2071
5/16"	E2058	E2065	E2072
3/8"	E2059	E2066	E2073
7/16"	E2060	E2067	E2074
1/2"	NET	NET	NET
EACH	10c	EACH	12c
Set of 6	52c	Set of 6	62c

HOLLOW HANDLE WRENCH SET



Ideal for shop and tool bag. Hollow handle holds all sockets. Sizes 1/4", 5/16", 3/8", 1/2", 5/8" and screwdriver socket 7/16" long. Handle heavily knurled for good gripping surface. White nickel finish.

E7737, YOUR PRICE \$49c

LOCK-SOCKET WRENCH SET AND SCREWDRIVER

A set of 9 sockets in assorted sizes to handle hex, square and round nuts. Consists of 1-1/2" hex socket mounted on 3 3/4" straight extension; 5 hex sockets in 1/4", 5/16", 3/8", 7/16", 1/2" sizes, 2 square sockets in 1/4" and 5/16" sizes, 1 round nut socket, 1 "L" shaped extension 4" long and 1 screwdriver wrench handle. Patented locking device holds tools firmly to handle.

E5516, YOUR PRICE 79c

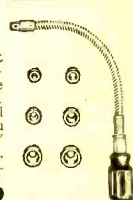
SOCKET WRENCH SET



A set of five detachable sockets of fine wrought steel. Complete with wrench handle. In popular sizes, 1/4", 5/16", 3/8", 7/16" and 1/2" in.

E7690, YOUR PRICE 36c

FLEXIBLE SHAFT SOCKET SET



Flexible laminated steel shaft will bend around corners. Permits handling of nuts which are inaccessible to ordinary tools. Has comfortable fitted wood handle, 10" long; equipped with six hexagon sockets; sizes 3/16", 1/4", 5/16", 3/8", 7/16" and 1/2". Nickel-plated sockets easily interchangeable.

E7738, NET. \$1.76

RADIO CHASSIS PUNCHES

These new punches make or enlarge holes in any metal used in radio work without distorting metal. Consist of two-point punch driven by 3/8" dia. square-cap head screw and die to support metal. In operating, drill pilot hole and follow by turning screw with wrench until hole is cut through. Of high-grade, heat-treated tool steel.

E1661, 1 1/8" Punch with die and screw. NET. \$1.88

E1662, 1 1/2" Punch with die and screw. NET. \$2.14

SOLDERING IRONS and ACCESSORIES

COMPLETE WITH 2 SCREW-ON TIPS



KNIGHT SOLDERING IRON 55 WATT MODEL

A well-designed high quality KNIGHT 55 watt iron suitable for every service use. Has a dependable wire-wound element in a ceramic tube. Heats up quickly; stays hot. Two types of tips are supplied with iron to handle all work from fine soldering to tinning of chassis bases. Tips measure $\frac{3}{8}$ and $\frac{1}{16}$ in diameter, $\frac{1}{2}$ " long. The well-shaped handle remains cool even when iron is continuously used. Equipped with 5 foot heater cord and rubber plug. This KNIGHT iron is an outstanding value at our price. **E6005. YOUR SPECIAL PRICE.**

65c

100 WATT KNIGHT SOLDERING IRON

A high quality all-purpose iron. Has $\frac{3}{8}$ inch diameter removable (screw-on) copper tip. With black insulated handle and 6 foot heater cord. You get your money's worth in this fine iron. **E6006. YOUR SPECIAL PRICE.**

97c



DRAKE SOLDERING IRONS

Underwriters Tested and Approved. A sturdy dependable iron for all shop or Service requirements. With an "Easy-Grip" non-tiring wood handle. Heating elements are of highest-grade nichrome wire wound on genuine amber mica; reaches soldering heat quickly. Removable plunger type tip with set screw adjustment. With 6 foot approved cord and 7" iron stand.

E2203. 80 WATT. Length 13"; tip diameter $\frac{3}{8}$ ". Wt. 1 $\frac{1}{2}$ lbs.
List, \$3.15. **YOUR PRICE..... \$1.85**

E2204. 100 WATT. Length 12 $\frac{1}{2}$ "; tip diameter $\frac{3}{8}$ ". Wt. 1 $\frac{1}{2}$ lbs.
List, \$3.75. **YOUR PRICE..... \$2.20**

E2205. 200 WATT. Length 14"; tip diameter $\frac{3}{8}$ ". Wt. 2 lbs.
List, \$7.50. **YOUR PRICE..... \$3.95**



AMERICAN BEAUTY IRONS

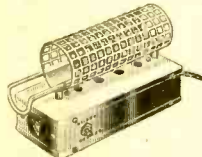
E2000. Type 3138. Adapted for production work on radio, ignition, telephone, etc. 100 Watt; 16 oz.; length 12 $\frac{1}{2}$ "; tip dia. $\frac{3}{8}$ ". 6 foot cord. Wt. 1 $\frac{1}{2}$ lbs.
List, \$7.20. **YOUR PRICE..... \$5.85**

E2001. Type 8-76. Light and compact. Heats quickly. Screw type removable tip. 50 Watt; 6 oz.; length 11 $\frac{1}{2}$ "; chisel point tip $\frac{1}{16}$ ". With 6 foot cord.
List, \$4.50. **YOUR PRICE..... \$3.45**

E2002. Extra $\frac{3}{8}$ " tip for Type 3138 iron. **NET..... 39c**

E2003. Extra tip for Type 8-76 Soldering Iron. **NET..... 21c**

DRAKE HEAT CONTROL



A new variable heat control that will regulate the heat of your soldering iron. Protective shield prevents fire and accidental burns. A convenient toggle switch mounted on the base of the stand, instantly selects the heat required for your work. Will keep any soldering iron up to 150 watts at constant desired heat. For 115 Volts A.C. or D.C. Shpg. wt. 3 lbs.

E2208. Type 300H. NET..... \$2.35

E2207. Type 300. Same as above, but without shield. NET..... \$2.06

7-INCH SOLDERING IRON HOLDER

A sturdy, well-built soldering iron holder measuring 7 inches long. Solidly constructed. Useful in the shop, lab, or on service calls. Prevents scarring or burned surfaces.

E2206. YOUR PRICE..... 15c

KESTER SOLDERS

Compounded of the highest grade tin and lead. Flux filling assures perfect permanent joints free from corrosion. Aluminum solder absolutely holds aluminum. Save money—buy the handy one or five pound spools.



Quantity	ACID CORE		ROSIN CORE		ALUMINUM	
	No.	NET	No.	NET	No.	NET
1 lb. spool	E6176	17c	E6178	17c	E6180	17c
5 lb. spool	E6175	56c	E6177	56c	E6179	1.89
	E6153	\$2.60	E6154	\$2.60		

KESTER SOLDERING PASTE



A new improved soldering paste. Does a clean, non-corrosive job of soldering. Uniform quality makes it ideal for radio work.

E6181. PER TIN..... 12c
10 for..... \$1.05

KESTER TINNING BLOCK

Cleans and "tins" soldering irons of copiers very quickly. Replaces ordinary salammoniac. Won't crumble or corrode.



E6185. 1/4 lb. NET..... 25c
E6186. 1/2 lb. NET..... 40c
E6187. 1 lb. NET..... 65c

ICA SOLDERING IRONS

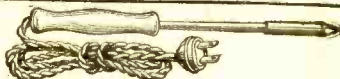


A well-designed, practical soldering iron. Heating element is of the highest quality resistance wire. Will heat in three minutes. Handle remains cool even after the iron has been on for hours. Plunger type tip is easily removed for cleaning or replacement. With cord and plug. Snap-on soldering iron holder supplied free.

E5520. 60 WATT. Developed for radio work. Shpg. wt. 2 lbs.
List, \$3.75. **YOUR PRICE..... \$1.98**

E5522. 85 WATT. A good general-purpose iron. Shpg. wt. 2 $\frac{1}{2}$ lbs. List, \$4.50. **YOUR PRICE..... \$2.41**

E5521. 115 WATT. Heavy Duty type; has $\frac{1}{2}$ " plunger type tip of adjustable length. Shpg. wt. 2 lbs.
List, \$5.50. **YOUR PRICE..... \$2.95**



MARVEL ELECTRIC SOLDERING IRON

A high quality soldering iron, ideal for general radio and light soldering work. Has a Nichrome wire element, mounted in a twin sleeve porcelain tube. Equipped with a good quality 2-inch copper tip. With brown-finished, stay-cool handle and 3 foot Underwriters' approved flexible cord. Only 10 inches long. For 110 volt A.C. or D.C. operation. Easy to use; retains heat efficiently.

E6008. NET EACH, YOUR PRICE..... 28c
YOUR PRICE..... \$3.05
PER DOZ.

NEW INSTANTOT 6 VOLT SOLDERING IRON



Heats instantly from a 6 volt storage battery. Ideal for auto mechanics, farmers, servicemen. No wires to short or tangle. Complete with extra heating elements, battery post protector, acid-core solder, etc.

E6009. NET..... \$1.31

GARDINER RADIO SOLDER ROSIN CORE

A dependable, rosin-core solder developed especially for delicate electrical and radio work. Pure rosin-core assures freedom from corrosion. Can hold about 3 oz.

E6183. PER CAN..... 12c
E6184. 1 LB. SPOOL..... 52c



JACKSON SOLDERING IRONS

A high grade line of electric soldering irons. Elements are wound on amber mica insulation over steel core. Supplied with plunger tips. Both types are furnished with 6 foot cords.

E6000. 75 WATT. With $\frac{1}{16}$ " copper rod tip with set screw. Nickel-plated tube. **YOUR PRICE..... \$1.76**

E6001. 100 Watt. With $\frac{3}{8}$ " copper tip. 12 $\frac{1}{2}$ " long, with removable black handle. **YOUR PRICE..... \$2.40**



MAGIC STYLUS SOLDERING PENCIL

A new, small, easy-to-handle soldering tool, ideal for soldering small parts in hard-to-get-at corners. Heats quickly. Insulated handle with cork finger guard provides cool handling always. Tip is easily removed for cleaning or replacement. With 5 ft. cord. Underwriters' Approved.

E6150. 110 VOLT A.C. OR D.C.
E6151. 6 VOLT D.C.
(Storage Battery.)
NET EACH..... 72c

25 WATT 3 TIP PENCIL

An extra-heavy-duty soldering pencil. Has $\frac{1}{4}$ " tip. Brass-wound, mica-covered element. Complete with three tips, 6 foot rubber cord, and stand.

E6004. NET..... 88c

"HOTSPOT" IRONS



These are inexpensive, well-built soldering irons. Ideal for both radio service and construction work. Come to full heat quickly; heat is concentrated at the tip, where it is needed most. Will solder cleanly and effectively. Approved by the Underwriters' Laboratories. Complete with heavy-duty A.C. line cord and unbreakable soft rubber line plug.

E2201. 75 WATT. Shpg. wt. 1 lb. List, \$2.50. NET..... \$1.47

E2200. 100 WATT. Shpg. wt. 1 $\frac{1}{2}$ lb. List, \$3.75. NET..... \$2.20

E2202. 150 WATT. Shpg. wt. 2 lbs. List, \$4.50. NET..... \$2.65

SOLDERING IRON TIPS

High quality replacement plunger tip copper tips. Make your soldering iron as good as new.

No.	Size	NET EA.
E6197	$\frac{1}{16}$ " x 2 $\frac{1}{2}$ "	28c
E6198	$\frac{3}{8}$ " x 1 $\frac{1}{2}$ "	38c
E6199	$\frac{1}{2}$ " x 3 $\frac{1}{4}$ "	43c

INTERFERENCE ELIMINATORS · FILTERS



NOISE-ELIMINATING FILTERETTES

NOISE MANUAL

A helpful manual published by the Tobe Deutschmann Corp. Contains full information on man-made electrical noises and how to prevent them from reaching the radio set. Will pay for itself on your first service call.
E8449. NET..... **29c**



MODEL 7 AC-DC POWER LINE FILTER

An easily installed Tobe capacity type line filter which will effectively eliminate line noises. Plugs into electric light socket or wall receptacle. Receiver plug fits into top of filter unit. Materially reduces disturbing radio interference from power line. For 110 volt lines. Shpg. wt., 1 lb.
E8402. NET..... **59c**



RAZOR FILTERETTE

A practical filter unit to reduce interference from electric razors. Enjoy early morning programs, time signals, etc. without the disturbing buzz of your razor. Just plug unit in wall receptacle and plug razor in other end.
E8402. NET..... **59c**



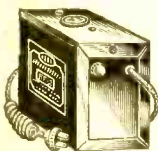
FILTERETTE JUNIOR

A simple yet thoroughly efficient filter unit for appliances such as vacuum cleaners, cash registers, drink mixers, hair driers, distorting machines, sewing machines, etc. Convenient to attach.
E8403. NET..... **73c**



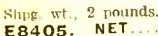
JA FILTERETTE

A light-weight filterette for attachment to appliances such as electric drills, barber clippers, etc. Appliance cord must be cut and JA installed as permanent equipment.
E8407. NET..... **\$1.03**



MODEL RF-2

Designed to eliminate noises coming from the power line. Effective filtering is attained through combining capacity and inductance in one carefully engineered unit. For installation between set and power line. For use on any line where voltage does not exceed 130 volts.
Shpg. wt., 2 pounds.
E8405. NET..... **\$2.79**



SPRAGUE INTERFERENCE ELIMINATION CONDENSERS AND CHOKES

E11455. Type IF-11. Dual Condenser. For large motors, as in refrigerators, oil-burners, etc.
NET..... **\$1.47**

E11456. Type IF-50. Individual Units. A filter for small motors requiring high capacity units.
NET..... **\$1.03**

E11457. Type IF-33. Tubular Condenser. For functional horsepower motors used in mixers, fans, etc.
NET..... **44c**

E11458. Type IF-21. Tubular Condenser. Similar to IP-33 but higher capacity.
NET..... **59c**

E11459. Type CH-1 Choke. Will carry up to 10 amps. Metal can; self-mounting. Can be used on 1 HP motor.
NET..... **79c**

E11460. Type CH-2 Choke. Will carry up to 20 amps. For larger motors.
NET..... **\$1.62**

NOISE-ELIMINATION BOOK

E11453. Covers the Interference Elimination problems from A to Z. Used by National Radio Institute as reference book in teaching how to locate interference and how to clear it up after it is found. Shows which unit to use for different filter problems. FREE on request with orders for Sprague Interference Filters.

RADIO NOISE CAN BE ENDED!

Noise enters a radio set either from the aerial or from the power lines. To determine which, connect the aerial post of the set to the chassis or ground. If the noise stops, an all-wave antenna such as those listed on pages 144-147 should be installed. However, if the noise persists, a power line filter should be selected from the types listed below. If uncertain of choice, write for additional information on noise elimination.

AEROVOX FILTERS

TYPE IN-24 ELIMINATOR

- Eliminates power line interference
- Completely factory-built
- Simple one-minute installation



Completely eliminates all power line noises. Greatly reduces man-made static from electric motors, vacuum cleaners, elevators, and other interfering electrical devices that cause more than 75% of radio disturbances. Provided with inductance as well as capacitance for thorough filtering action. Aerovox Interference Eliminators furnish a real noise-free background for increased radio enjoyment. No tools needed—just plug in. Complete with cord and plug. Size: 4"x2 1/2"x3 1/8".
Shpg. wt. 3 lbs. **\$2.79**
E6953. List. \$4.75. NET.....

TYPE IN-28 FILTER

For direct use with radio set or on small appliances causing interference. Plugs in between connection cord and outlet. Ideal for use where ground is some distance from point of application. Has convenient mounting bracket for attachment to body of appliance. Size: 1 1/2"x1 1/4".
Shpg. wt., 1 lb.
E6955. NET..... **44c**



TYPE IN-29 FILTER

An efficient filter especially suited for use in reducing interference from sources which are variable in character but strong in intensity. Ideal for eliminating noise caused by electric razors and other vibrating devices. Plugs in between connection cord of device and electrical outlet.
Measures: 1 1/2"x2 1/4". Shpg. wt., 1 lb.
E6956. NET..... **44c**



TYPE IN-30 FILTER

A medium-duty filter, similar in appearance to general design to Type IN-29, but provided with inductance in addition to capacitance for elimination of more intense interference. May effectively be used either at source of interference or at radio set. Plugs in directly between attachment cord and outlet. Measures: 1 1/2"x2 1/4".
E6957. NET..... **73c**



TYPE IN-31

Similar to above but for elimination of more serious interference. Size 1 1/2"x2 1/4".
NET..... **88c**



TYPE IN-27 FILTER

For use between radio set and electric outlet in cases where interference is relatively small. Also suitable for application directly to small appliances which are sources of low intensity interference. Size: 1 1/2"x1 1/4".
E6954. NET..... **29c**



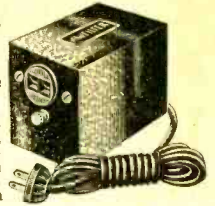
INTERFERENCE ANALYZER



A clever device indicating immediately which of above filters is needed to eliminate specific noises. Plugs into outlet ahead of interfering device. Rotary selector picks proper filter combination. In use on a 1 case. 5 1/2"x5 1/2"x8". For A.C. or D.C. Shpg. wt., 6 lbs.
E6959. YOUR NET PRICE... **\$7.35**

TACO H-F ALL-WAVE LINE FILTERS

A composite filter containing three complete filter circuits. Covers short-wave, and ultra-short-wave as well as the standard broadcast bands. R.F. choke filter system stops noises that would ordinarily enter the set through the power line. Equally efficient when installed on the interference-causing device. Operates on either A.C. or D.C. devices drawing not more than 200 watts at 110 volts. Measures only 4"x4"x5". Easily installed without tools. Equipped with bakelite receptacle and attachment cord with unbreakable rubber plug. Handsome brown-finished metal case. Shpg. wt., 5 lbs.



E7903. Model 100. **\$4.41**
List. \$7.50. YOUR PRICE.....
E7906. Model 101. Same as above but for use on 220-250 Volts A.C. or D.C.
YOUR PRICE..... **\$4.41**

MILLER ALL-WAVE LINE NOISE FILTER

- Capacitative Inductance circuit used
- Duo-lateral R. F. choke coils
- Complete line-noise elimination



Positive results are obtained by use of complete filter circuit. Oil condensers give long life. Duo-lateral chokes are used for greatest filtering. May be used on small interfering devices or on the radio itself. Plug radio or appliance into filter, and filter into outlet. For 110-220 volt A.C. or D.C. Max. current 2 amps. Shpg. wt., 1 1/2 lbs.
E7213. List. \$4.00. **\$2.35**
YOUR NET PRICE.....

CONTINENTAL FILTERNOYS

Free your radio reception from annoying interference caused by electrical appliances. Efficient Filternoys units eliminate or materially reduce "man-made" static caused by vacuum cleaners, refrigerators, electric shavers, mixers, motors, etc. These filters are of highest quality construction, inexpensive and easily installed. For 110-120 Volts, A.C. or D.C.



E7218. Type R01DH. Plug-in type for use between radio and power outlet. Will carry 50 amperes. **59c**

E7219. Type F01DH. Plug-in type for elimination of noise from motors using less than 300 watts. **59c**

E7220. Type R01H. Rejection type for use where neutral power wire is grounded. Plugs in. 5 amp. capacity. **47c**

NET.....

DUPLEX FILTERVOLT

Line noise eliminator converting single wall outlet into filtered dual outlet. Radio set and any electrical appliance may be plugged in to same source. Efficiently eliminates noise caused by shavers, fans, mixers, etc. Easy to install—simply plug in to wall outlet.
E5563. List. 85c. **49c**



FILTERVOLT NOISE FILTER

An efficient new filter to eliminate moderate noise interference from all types of electrical appliances. Suitable for installation directly ahead of radio set or at source of noise disturbance. Assures enjoyable, noise-free radio performance.
E5564. List. \$2.85. NET..... **\$1.44**



RCA-VICTOR ANTENNA SYSTEMS & ACCESSORIES



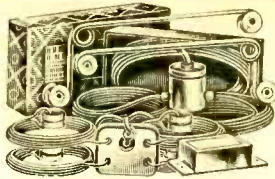
NEW RCA-VICTOR MASTER ANTENNA

A new and extremely efficient noise-reducing antenna that provides adjustable rejection for noises emanating from electric appliances. Set coupling transformer permits individual setting for elimination of noise from oil burners, refrigerators, electric razors, etc. The complete assembly consists of a balanced doubler and a transmission line with parallel counterpoise. Will greatly increase overall set performance on any frequency from 540 to 23,000 K.C. No. 9852 is supplied less coupling transformer for use with all 1939 RCA sets having built-in coupler. No. 9815 with coupler can be used on any set having conventional antenna-ground lug. An ideal dealer demonstration antenna offering actual noise reduction to fit the individual installation. A really remarkable advance in antenna design—especially ideal for use in locations that are noisy. Shipping wt., 3 lbs.

E7546, No. 9852, Model MA. Less coupling transformer. NET... **\$2.94**

E7547, No. 9815, Complete with set coupler. NET... **\$4.09**

E7548, No. 9816, Receiver coupler only. NET... **\$1.15**



RCA "SPIDER-WEB" ALL-WAVE ANTENNA

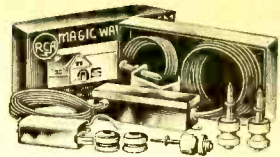
New communications type antenna system designed for peak efficiency. Consists of a series of doublers with high efficiency low-impedance transmission line. Functions as a "T" type antenna below 4000 K.C. and as a multiple-tuned doublet from 4000 to 23,000 K.C. Easy to install; has 38 foot span with 12 foot vertical clearance. This unique antenna insures greater signal pickup on every band, bringing in more stations with maximum noise rejection. Factory-assembled. Includes: 6 coils of 7x22 stranded antenna wire; 2 hangers; 1 coil of lead-in wire; receiver and antenna coupling transformers; 7 "C" clips; 2 antenna transformer connections, complete instructions. Ship. wt., 10 lbs.

E7580, No. 9685. **\$5.26**
List. \$8.95. NET

HIGH-FREQUENCY KIT

E7581, No. 9689. This kit when added to the Spider-Web increases range to cover from 25 to 70 M.C. Ship. wt., 2 lbs.

NET... **88c**



IMPROVED RCA "MAGIC-WAVE" ANTENNA SYSTEM

A new All-Wave Antenna system offering many new features for improved radio reception. Antennas may be from 20 to 120 feet in length. As many as 16 sets may be used with no serious loss in signal or efficiency. New magnetic core in antenna and receiving transformers give high efficiency from 530 to 23,000 K.C. and good noise reduction. Antenna coupling unit has built-in lightning arrester. Transmission lines may be buried. The complete kit is factory-wired for the most efficient results. Consists of: Receiver and Antenna Wire; 45 feet of transmission cable; 5 feet of ground wire; 5 porcelain insulators and 1 ground clamp. Ship. wt., 10 lbs.

E7540, No. 9812. **\$3.50**
List. \$5.95. NET

E7548, No. 9816, Antenna Coupler on 5/8" with built-in lightning arrester. **\$1.15**
NET

E7532, No. 9814, Distribution Transformer. Use one for each 4 additional sets. **\$1.76**
NET

E7533, No. 9813, Set Coupler only for each additional set on one antenna. **\$1.47**
NET

ADDITIONAL TRANSMISSION LINE FOR RCA ANTENNAS

E7534, No. 9816, 60 foot roll. For use with No. 395, No. 9815, or No. 9812 antenna. **88c**
NET

E7535, No. 1817, 75 foot underground cable for No. 9812 antenna. **\$1.88**
NET

E7544, No. 12429, 45 Ft. underground Line for No. 9812 or No. 9685 Antenna. **\$1.18**
NET

E7545, 90 Ft. underground Line for No. 9812 or No. 9685 Antenna. **\$2.20**
NET

RCA POPULAR PRICED NO. 395 ANTENNA SYSTEM



A new RCA Antenna System that will increase the performance of any set. Exceptionally low-priced. Will operate with any type of set, Broadcast, Short-Wave, Long-Wave or All-Wave. Fully assembled and ready to install. Has improved signal pickup; high signal-to-noise ratio; transmission line and receiver coupler help eliminate noises. Consists of: 20 foot coils antenna wire, 2-strain insulators, 45 foot transmission line, 1-junction box, 1-receiver coupler, 2-coupling links, 2-nail-knobs, 1-ground clamp and complete instructions. Requires little space; span is only 40 feet.

Ship. wt., 5 lbs. **\$2.32**

E7596, NET..... 44c

E7530, No. 12855, Receiver Coupler Unit Only. YOUR PRICE

ANTENNA INSULATORS AND ANTENNA EQUIPMENT

PORCELAIN INSULATORS

Glazed porcelain; corrugated for minimum leakage.

E6192, 2 1/2 inches long. **2c**

10 FOR 20c. **100 FOR \$1.85.** EACH

E6193, 4 inches. 45c. **5c**

E6194, 5 inches. 10 FOR 85c. EACH

NET EACH

GLASS INSULATORS

Absolutely climateproof. Extremely efficient; designed for great strain, 3 in. long. Inexpensive sturdy insulators.

E6196, 10 FOR 27c. 100 FOR \$2.50. NET EACH

3c

PYREX INSULATORS

Strong rugged insulators, with low power loss and low surface conductivity. Climate proof.

E3750, 3/8" long. For Receiving Aerials. EACH **20c**

E3751, 7/8" long. Will handle up to 250 watts. NET EACH **75c**

AIRPLANE INSULATOR

Streamlined strain insulators, made of low-loss white porcelain. Ideal for breaking up antenna guy wires. Size 1 1/2 x 7/8". Weight, 3 oz.

E6217, 10 FOR 20c. EACH **3c**

NET EACH

STRAIN INSULATOR

An extremely husky strain insulator for use in guy wires or supporting wires for antenna installations. Made of brown glazed porcelain, 2 1/2" long and 1 1/2" diam.

E6195, 10 FOR 54c. NET EACH **6c**

NET EACH

EYE WALL INSULATOR

White glazed porcelain ring mounted in sturdy galvanized screw eye. For fastening lead-in wires to wall. Strong and durable; will hold up indefinitely.

E3403, 3 INCH. 10 FOR 21c. NET EA. **2c**

E3404, 7 INCH. 10 FOR 32c. NET EA. **3c**



SPRING AERIAL

Especially desirable where space is limited. Easy to erect. Is non-directional. Stretch of 15 to 30 ft. With two fibre end insulators.

E3433, 10 FOR 11c. YOUR PRICE

NET EACH

PORCELAIN NAIL KNOBS

Sturdy split knobs of glazed white porcelain. Leather washers prevent splitting. 1 1/2" high, 1 1/2" diam.

E3418, 10 FOR 18c. 100 FOR \$1.65. EACH **2c**

CROSSOVER INSULATOR

Designed for use with double-doublet antenna systems. Made of low-loss ceramic.

E5548, 10 FOR 7c. EACH

PORCELAIN TUBES

Durable, non-absorbent porcelain. Flanged at end. Inside dia. 3/16".

E6212, 3" Long. 10 FOR 18c. EACH **2c**

E6213, 6" Long. 10 FOR 24c. EACH **3c**

TRANSPPOSITION BLOCKS

Made of glazed ceramic material. Correctly designed to prevent twisting of transposed lead-in; reduces electrical loss to minimum. 2 1/2" x 1 1/2". Wt., 3 oz.

E6215, 10 FOR 40c. EACH **5c**

AERIAL SPRING ADJUSTER

Prevents antenna sag. Powerful, compression type rust-proof spring. With porcelain insulator end rings. Especially suited for doublet type antenna to prevent swaying.

E3419, 10 FOR 29c. List. 50c. NET

AERIAL CONNECTOR

For connecting aerial and lead-in cables in either auto or home aerial systems. Cadmium-plated.

E3421, EA. 5c

INSULATED STAPLES

Standard type insulated staples. Sturdy, durable, and very useful. Packed 100 to the box.

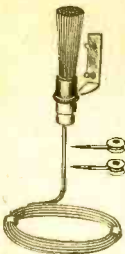
E3975, 10c
Per Box of 100. 100c
Per 1,000 (10 Boxes) 95c

NOTE: FOR ADDITIONAL LISTINGS OF STAND-OFF INSULATORS AND OTHER ANTENNA EQUIPMENT, SEE PAGES 118-119



All-Wave ANTENNA KITS & EQUIPMENT.

ALL-DIRECTIONAL AERIAL



Increases the selectivity and sensitivity of any set. An unusually efficient antenna of new design. Permits absolutely All-Directional reception. Will materially improve reception on short wave bands; makes possible improved efficiency on standard broadcast band. May be quickly installed with a screwdriver. Eliminates all masts, poles, long aerials, dangling wires, etc. Requires only a very small space for mounting. Wt., 4 lbs.
E10010. List, \$2.75. **\$1.95**
YOUR PRICE.

PREMAX TELESCOPING STEEL MASTS

Sturdy, neat-appearing, weatherproof aerial supports. Made of substantial steel tubing, combining strength with light weight. Finished in baked green enamel. Each section is 3 1/2 feet long. Base fittings are adjustable to fit any roof. Additional sections may be added. Excellent quality; built for lasting service.

No.	Lgth.	Ext.	Wt.	NET
E10001	3 1/2 ft.		3 lbs.	\$0.59
E10002	7 ft.		6 lbs.	1.18
E10003	10 ft.		8 lbs.	1.76
E10004	13 ft.		11 lbs.	2.35
E10005	3 ft. sectional extension to increase height of any of above masts.		3 lbs. Each	59c



TENSION INSULATOR

A double-purpose insulator which holds antenna tight by means of a heavy spring. May be used with any antenna. Wt. 1/2 lb.
E11297. YOUR PRICE. **7c**



KNIGHT STANDARD ALL-WAVE ANTENNA

An efficient, All-Wave Antenna at a remarkably low price. Will provide maximum signal strength in any locality with greatly reduced noise-level. May be used with any radio set having input for either single or double wire lead-in. Special type transmission line cancels out noise interference and may be extended for several hundred feet without affecting performance of set. Easily installed and connected.

COMPLETELY ASSEMBLED

Antenna consists of two 30 foot coils of No. 16 stranded copper wire completely assembled with a porcelain insulator and 50 feet of special transmission line. Also supplied are: 2—glazed porcelain insulators; 1—3" porcelain screw-eye; 1—nail knob; 1—doublet lightning arrester; 1—doublet lead-in strip, and instructions.
E3389. **\$1.21**
NET

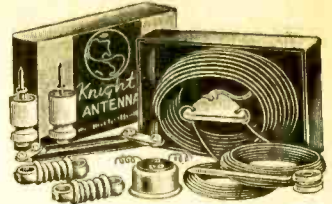
GUY WIRE

A 50-foot coil of special galvanized steel wire. Tough, non-stretching. Annealed for easy handling. For use with masts at left.
E11298. NET. **15c**

ADJUSTABLE ANCHOR



Specialty designed adjustable anchor for keeping guy wires tight. Rustproof steel.
E11299. **9c**
NET



KNIGHT DE LUXE ALL-WAVE ANTENNA

IDEAL FOR THESE SETS:

Crosley Knight
Philco Zenith
R.C.A. Grunow

or for any set with standard or doublet input.

This is one of the finest factory assembled All-Wave antenna systems available. It utilizes the famous doublet principle to provide maximum efficiency. The special transmission cable cancels out noise, thus permitting clear, interference-free reception. A proper impedance match between antenna and receiver is assured through the use of a two-position coupling transformer. The Knight De Luxe Antenna is quickly and easily installed. The 60 foot overall length makes it well-adapted for locations where space is limited. The Knight De Luxe Antenna is designed to give best results in the Broadcast as well as Short-wave bands. Couples to any set having input for either single or doublet type.

COMPLETELY ASSEMBLED

This Antenna Kit is completely assembled at the factory. It consists of 2—50-foot rolls of stranded aerial wire, 1—60-foot length of transmission cable, 1—crossover insulator, 1—impedance matching transformer, 2—glass insulators, 2—porcelain nail knobs, 1—eyewall insulator, and 1—double window lead-in. Shpg. wt., 4 lbs.
E3391. NET. **\$1.95**

AERIAL ACCESSORIES



WINDOW LEAD-IN

Fits between sash and sill. Fastenock connector on each end. Duco insulated braid.
E3428. 16 inch. **5c**
NET EACH
Per 100, \$2.85.
E3427. 12 inch. **4c**
NET EACH



DOUBLE-WINDOW LEAD-IN

Designed for use with any two-wire lead-in, or transmission line. Completely insulated; with screw terminals; 12" long.
E6198. YOUR PRICE. **9c**



MUELLER CLAMP

Durable and rigid because of channeled construction. Case-hardened screw. Cadmium plated.
E6508.
Lots of 10, **46c**
100 Lots, \$4.25. **6c**
EACH



GRIPPER GROUND CLAMP

This heavy-duty clamp may be used on any pipe or rod up to 1 1/2" in diameter. Pointed screw assures positive contact through paint or rust.
E3599. **3c**
EACH
10 lots **25c**



KNOCK-OUT GROUND CLAMP

An efficient and easily attached clamp which makes sure contact. Makes a neat and efficient installation.
E3429. Per 10, **35c**.
NET EACH **4c**



NEW COR-NEX DELUXE CONNECTOR

Eliminates unsightly wiring and makeshift window lead-in for home radio receivers. Can be used with sets having input for either single or doublet type lead-in. Increases efficiency of set by providing noise-free lead-in connections. Installation requires only a few minutes' time with simple tools. Incorporates built-in efficient lightning arrester for complete set protection. Requires only one 3/8" hole through wall or moulding. A necessity for all modern installations.
E3388. **\$1.47**
NET



PLATED GROUND RODS

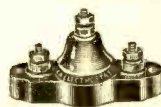
Pep up radio reception by eliminating flimsy and makeshift ground connections. Made of copper-plated steel, 3/8" diam., with screw clamp for lead-in. Shipped by express. Shpg. wt., 4 and 6 lbs.
No. Feet EACH 10 FOR
E10000 4 28c **\$2.65**
E10006 6 38c **3.60**



MOLDING STAPLES

For use in fastening lamp-cords, radio set cords, etc., close to floor or wall molding. Slings behind molding, holding wire tightly; eliminates unsightly trailing wires. Will not mar varnished surface. Plated and rust-proof.
E3405. 10 FOR **7c**
50 for **25c**
100 for **40c**

LIGHTNING ARRESTERS



ELECTROSTATIC ARRESTER

Combination lightning and static arrester. Incorporates choke coil and condenser acting as noise and static reducer and filter. Affords maximum protection against fire hazard. A really effective device that improves radio reception.
E5533. List, \$1.00. **43c**
YOUR PRICE



APPROVED PORCELAIN ARRESTER

A high grade dependable air gap type arrester. Porcelain construction. An unusual value.
E3425. **7c**
12 FOR 75c. EACH



NEW DOUBLET ARRESTER

Two arresters combined in one single unit. May be used indoors or outdoors for any two-wire lead-in or transmission line. Blak porcelain case; weather-proof. Weight, 1 lb.
E5549. YOUR PRICE. **17c**



BABY BAKELITE ARRESTER

Absolutely dependable, safe, weatherproof type. Bakelite construction. Extremely compact to fit anywhere. Approved by the Underwriters' Laboratories.
E6199. 10 FOR 80c. **9c**
100 FOR \$7.25. EACH



VIS-O-GLOW ARRESTER

Uses neon element and operates on low voltage. Sensitive and will carry heavy discharges. Offers real protection. Shpg. wt., 1 lb.
E3407. NET **59c**
E3408. Duplex Type. For doublet antennas. Shipping wt., 1 lb. NET. **82c**



STORM KING ARRESTER

A new improved type lightning arrester that will provide positive protection. Absolutely assures against dangerous static discharges. Duplex type for use with doublet aeriels, or any aerial using a two-wire lead-in. Screw type terminals; weatherproof; for indoors or outdoors.
E3432. NET. **53c**



ALL-WAVE DOUBLET COUPLER

May be used with any type of All-Wave or Short-Wave receiver. Designed to couple low-impedance transmission lines from any doublet or balanced-type antenna system to the radio set. Aids in reducing noise level. Housed in aluminum shield with nickel-plated terminals.
E5519. NET. **39c**

AERIALS • AERIAL ELIMINATORS

TACO ALL-WAVE AERIALS



MODEL 210 DE LUXE SELF-SELECTING

A new self-selecting all-wave aerial, electrically and mechanically designed to render highest possible efficiency. The use of dual precision-built transformers assures perfect matching to any Broadcast, Short-Wave, or All-Wave receiver. Entirely eliminates interference, and provides maximum signal pickup, even in noisy locations. Aerial length is only 60 feet.

Consists of: 1—Antenna Transformer; 2—30 foot coils stranded aerial wire; 75 foot weather-proof transmission cable, all factory-assembled and soldered; 1—insulating screw-eye; 2—nail knobs; 2—porcelain insulators, and complete installation instructions. Shpg. wt., 4 lbs.
E8416. List, \$6.75. **\$3.97**
YOUR PRICE

MODEL 510 STANDARD ALL-WAVE AERIAL

This high quality, factory-assembled antenna is designed to eliminate interference on the broadcast band and all short wave bands. Matches all sets and provides greater signal-to-noise ratio in any location. Consists of: 1—Antenna Transformer; 1—Set Transformer; 2—30 foot coils stranded aerial wire; and 60 foot transmission cable, all completely assembled at factory and ready for installation; 1—screw-eye; 2—nail knobs; 2—glass insulators, and complete instructions.

E8417. List, \$4.50. **\$2.65**
YOUR PRICE
E8418. MODEL 510L. Same high quality kit as 510 above but less set coupler. NET **\$2.00**



NEW MODEL 165 PEAK BAND AMATEUR ANTENNA

Designed to render maximum efficiency when used with present-day communication receivers. Overall space for erection is only forty feet. Antenna is automatically converted to a true 1/2 wave doublet in the 10, 20, and 40 meter Amateur bands. Unusual effectiveness obtained through use of High-Q traps. Will provide increased signal gain even in noisy localities; in low noise level areas, set coupler may be omitted. Consists of: Antenna flat-top with 50 foot transmission line be omitted; Transformer unit; 1—70 foot coil transmission line; 3—7 inch insulators; 1—insulating sleeve; 2—loading coils for 7 MC; 2—end insulators; and 1 set coupler. With instructions for easy installation.

E8419. Model 165 Antenna complete. **\$5.00**
NET
E8420. Set of 2 wave-traps for above 29 MC. NET **\$1.18**
E8421. Set of 2 wave-traps for above 14 MC. NET **1.18**
E8422. Set of 2 loading coils for 7 MC. NET **.88**

MODEL 320 MASTER ANTENNA SYSTEM

A multiple antenna system for Hotels, Apartment Buildings, etc. Designed to provide noise-free reception to as many as 25 receivers. Kit contains: 1—80 foot and 1—20 foot coil of 7x20 tinned copper aerial wire; 1—Transformer unit; 1—70 foot coil transmission line; 3—7 inch insulators; 1—insulating sleeve.

E8423. MASTER FOUNDATION KIT. NET **\$3.53**

E8424. Exposed wiring set coupler, Ivory finish. NET **\$1.47**

E8425. Exposed wiring set coupler, Aluminum finish. NET **1.18**



DX LIFETIME AERIALS

Efficient non-directional antennas, fully-assembled. Designed to increase selectivity and reduce interference. Especially suitable for successful short wave reception. Convenient form makes installation easy anywhere. Built of 7/24 stranded enamel copper wire with zinc spacer rings. Assembled with two porcelain insulators and with 25 feet of rubber-covered lead-in wire soldered on.

No. 60 E9135. Length, 50 ft. 6 spacer rings. Contains 250 ft. wire. Shpg. wt., 4 lbs. **\$2.79**
YOUR PRICE
No. 20 E9137. Length, 20 ft. 5 spacer rings. Contains 100 ft. wire. Shpg. wt., 2 lbs. **\$1.75**
YOUR PRICE



No. 46 DOUBLET SYSTEM

A new doublet type cage antenna designed for noise-free Short-Wave reception. Ideal for use with any All-Wave or Broadcast set. Consists of: 2—20 ft. cage aerials completely assembled with 25 ft. twisted pair lead-in. Each cage has 4 spacer rings and contains 100 ft. of wire. Should be used with an All-Wave Coupler for maximum efficiency. Weight, 4 lbs.
E9138. YOUR SPECIAL PRICE **\$3.59**

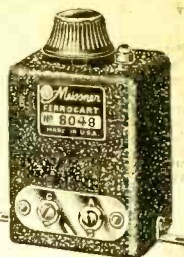
MEISSNER WAVE TRAPS

Interference created by powerful local stations, cross modulation, crosk and long wave signals, can readily be eliminated by using these units. They are simply installed in series with the aerial lead-in wire, near the receiver, and then tuned to the interfering signal.

DUAL UNIVERSAL MODEL

Will eliminate unwanted, interfering signals in the broadcast, police and I.F. channels. Dual controls tune from 400 to 700 K.C. and from 650 to 1950 K.C. Iron-core construction produces a high "Q" which results in very sharp tuning. The attenuation is —10 DB. Easily adjusted. No tools required.

E5679. **\$1.55**
NET



FOR BROADCAST BAND

Covers from 400 K.C. to 1600 K.C. Available for the following ranges:

E5652. 400 to 700 K.C. } EACH
E5653. 650 to 1000 K.C. }
E5654. 950 to 1600 K.C. } **73c**

FOR AMATEUR BAND

Covers Amateur bands, also 456 K.C.

E5655. 20 Meter Band } EACH
E5656. 40 Meter Band }
E5657. 80 Meter Band } **73c**
E5658. 160 Meter Band }
E5659. 456 K.C. Model }



RCA UNIVERSAL WAVE TRAP

Traps out interference occurring between 430 and 1700 K.C. Eliminates annoying code signals, strong local stations, blanketing and broad tuning. Will not interfere with short wave reception. It is quickly and easily attached to any radio set. Has universal mounting. Completely shielded. Assures interference-free radio reception.

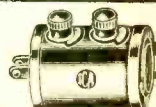
E7599. **\$1.56**
NET



AERIAL ELIMINATOR and ANTENNA TUNER

This new device operates as a noise reducer when used with an outside aerial. May also be used by itself as an indoor aerial. Easily installed; works with any receiver; will improve reception; increases volume on weak stations.

E5554. **\$9.00**
List, \$1.00. NET **59c**



DYNATROL FILTER and INDOOR ANTENNA

Combination indoor aerial and line noise filter. Plugs into light socket. May be used with tearful aerial to gain increased pickup. Reduces noise and improves set sensitivity.

E5518. **\$1.50**
List, \$1.50. NET **83c**

DOUBLE-TUNED AERIAL ELIMINATOR



This carefully designed unit will help to increase the selectivity of any radio. Ideal for ACC-DC sets to increase power and distance reception. Compact and efficient; eliminates noises. Easy to install. Has movable arms to match impedance of receiver.

E2750. **\$9.00**
List, \$1.00. NET **59c**

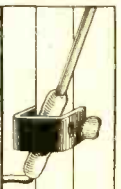
NOISE-REJECTING TACO SET COUPLER



A new Taco variable impedance antenna-matching unit. Designed to provide an accurate match between any antenna transmission line and the input circuit of any radio set. Quickly and easily adjusted by means of top knob. With wire leads for set connection; screw terminals for antenna lead-in. In aluminum case. Wt., 1 lb.

E8415. List, \$2.50. **\$1.47**
YOUR PRICE

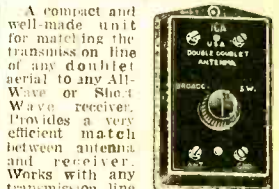
TOBE WINDOW POLE ANTENNA



This new antenna provides signal pickup far superior to the ordinary aerial. Quickly and easily attached to any window sill or frame; extends a full eight feet from the building. Ideal for temporary use; requires no tools to install. Has strap-type lead-in strip. Bracket permits either semi-vertical or horizontal installation. Live gun-bulb insulator. Finished in heat-japan black. Shpg. wt., 3 lbs.

E10482. NET **\$1.15**

RECEIVER MATCHING TRANSFORMER



A compact and well-made unit for matching the transmission line of any doublet aerial to any All-Wave or Short-Wave receiver. Provides a very efficient match between antenna and receiver. Works with any transmission line to eliminate noise and increase signal strength on all bands. Has changeover switch for all-band operation. Will give effective results in increased sensitivity and signal pickup.

E5545. **\$1.50**
List, \$1.50. NET **81c**

Belden RADIO PRODUCTS



BELDEN MAGNET WIRE

Famous Belden quality magnet wire. Highest grade soft-drawn copper wire with uniform insulation. Will not dry out or crack. Each spool is one continuous length, uniformly drawn. Standard B & S gauge. Ideal for winding chokes, coils, etc. Supplied on convenient metal spools. Noted everywhere as absolutely the finest quality magnet wire you can buy.

PLAIN ENAMELED

No.	Size	Feet	NET
3900	14	39	\$0.28
3901	16	63	.28
3902	18	101	.28
3903	20	160	.28
3904	22	253	.28
3905	24	402	.29
3906	26	640	.33
3907	28	1013	.36
3908	30	1618	.40
1/4 LB. SPOOLS			
3909	32	1275	.25
3910	34	2030	.30
3911	36	3220	.38
3912	38	5120	.52
3913	40	8140	.72

DOUBLE COTTON

No.	Size	Feet	NET
3950	18	96	\$0.33
3951	20	150	.39
3952	22	235	.46
3953	24	362	
1/4 LB. SPOOLS			
3969	26	280	.30
3959	28	430	.36
3960	30	660	.40
3961	32	965	.53
3962	34	1373	.63
3963	36	1675	.80

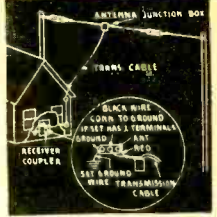
DOUBLE SILK

No.	Size	Feet	NET
3980	18	100	\$0.48
3981	20	160	.50
3982	22	252	.55
1/4 LB. SPOOLS			
3987	24	196	\$0.33
3988	26	310	.40
3989	28	490	.48
3990	30	775	.53
3991	32	1207	.69
3992	34	1785	.94
3993	36	2685	1.27

NEW BELDEN AERIALS

NO. 8302 CLEAR-CHANNEL ALL-WAVE DOUBLET SYSTEM

A newly developed All-Wave Doublet Antenna system by Belden designed for maximum efficiency in all-wave reception. Twisted pair low-loss transmission line and maximum coupling features produce clear-channel reception with remarkable response in all frequencies from 400 to 22,000 K. C., with no dead spots. Uses new Belden-engineered iron-core transformer coupler to match aerial to any all-wave set. Completely factory-assembled, ready to install. Kit includes: 2-30 foot coils 7x24 Belden bare copper aerial wire; 1-45 foot coil twisted-pair transmission wire; 1-antenna junction box; 2-porcelain insulators; 1-iron-core receiver coupler; 1-25 foot coil ground wire; 1-6" stand-off insulator; 2-porcelain nail-on knobs; hardware, etc. Complete with instructions. Easy to install. Shpg. wt. 6 lbs. **\$2.06**



NO. 8301 3-WIRE TRANSMISSION LINE TYPE

New improved Belden antenna system of the 3-wire transmission line type in which one wire of the three functions as ground and eliminates need for lightning arrester. Has new Belden iron-core transformers for B.C. band and air-core transformer for S.W. band. Complete factory-assembled kit includes: 1-60 foot coil 7x22 Belden aerial wire; 1-45 foot coil 3-conductor transmission cable; antenna coupler; receiver transformer; porcelain insulator; nail-on knobs; 6" stand-off insulator; ground clamp, etc. With full instructions. Shpg. wt. 7 lbs. **\$3.09**

CELANESE-WRAPPED PUSH-BACK WIRE

Finest grade radio hookup wire. Celanese push-back insulation, covered overall with lacquered, colored braid. Solid conductor is No. 20 tinned copper; stranded is 10-strand No. 30 tinned copper. 25 foot spools.

No.	Color	NET
2450	Red	18c
2451	Blue	20c
2452	Green	
2453	Black	
2454	Yellow	

No. 18 Stranded Low-Loss Wire

For service and experimental work in A.V.C. and A.F.C. circuits. For use where leakage must be low. Made up of 16 strands No. 30 wire. 1/4" rubber covering. 6300 V. insulation. 25 ft. spools.

No.	Color	NET
2395	Red	17c
2396	Blue	
2397	Green	
2398	Black	
2399	Yellow	

No. 14 Stranded

Similar to above but especially suited for heavy-duty use. Number 14 conductor is made up of 41 strands of Number 30 copper wire. E2460. 25 foot spool. **34c**
Black. NET. E2461. 25 foot spool. **34c**
Red. NET.

No. 20 Double Braid

Double braid, waxed push-back wire with Number 20 tinned conductor. 25 foot coils.

No.	Color	NET
2920	Red	11c
2921	Blue	12c
2922	Green	
2923	Black	
2924	Yellow	

All-Rubber Cord Sets

The modern safe cord for replacement on lamps, radios, etc. Small soft rubber plug and brown No-Pray cord. 7/8" ft. approved cord. Ends "Corditis."
E2447. Each. **23c**
PER 10. **\$2.06**
E2448. Same as above but 12 ft. long. NET EACH. **28c**

GLAZED COTTON MULTIPLE CABLE



For permanent installation of speakers, remote controls, transmission lines, etc. Conductors of No. 20 tinned copper are in heavy wrap, rubber sheath, and color-coded glazed braid, with abrasion-proof woven braid overall.

No. Conductors	Per Ft.	100 Ft.
2381	2 1/2c	\$1.30
2382	3 2/2c	2.11
2383	4 3/2c	2.94
2384	5 4/2c	3.58



RUBBER-COVERED MULTIPLE CABLE

For P.M. or electro-dynamic speakers and for power supply lines. Individual conductors rubber covered, cotton wrapped and an overall jacket of heavy, flexible rubber.

No. Conductors	Per Ft.	100 Ft.
2390	2 2/2c	\$2.11
2391	3 3/2c	2.67
2392	4 4/2c	3.23
2393	5 5c	4.07



DOUBLET ARRESTER

For complete protection with any doublet antenna system. Sturdy brown porcelain case. **181c**
E2409. NET. **182c**



EXTENSION CORDS

Flexible braid-covered cords with phone tips and connector.
E5555. 20 Ft. Cord. NET. **35c**
E5556. 30 Ft. Cord. NET. **51c**
E5557. 50 Ft. Cord. NET. **76c**
E5558. Extra Connector. **8c**

SHIELDED LOOM

No.	Inside Dia.	Per 50 Ft.	Per Ft.
E3423	3/8"	\$1.95	4 1/2c
E3424	1/2"	2.98	6 1/2c

LEAD-IN-WIRE

ALL RUBBER

Stranded conductor, covered with special rubber insulation to allow easy stripping and soldering.

No.	Size	Length	NET
E2422	14	50 ft.	\$0.38
E2423	14	250 ft.	1.96
E2424	16	50 ft.	.26
E2426	16	100 ft.	.46
E2425	16	250 ft.	1.13
E2431	18	100 ft.	.36

SHIELDED

Heavy rubber insulation over stranded conductor. Overall shield of tinned braided copper wire. Ideal for shielded lead-in use. Weatherproof.

No.	Size	Length	NET
E2427	14	50 ft.	\$1.05
E2428	14	250 ft.	4.63
E2429	16	50 ft.	.73
E2430	16	250 ft.	3.16

MATCHED IMPEDANCE TWISTED PAIR LEAD-IN

66.4 ohm twisted pair transmission line. Two No. 18 conductors covered with color-coded rubber and weatherproof outer braid. Designed to match most all-wave antennas and receivers. **98c**
E2324. 75 Foot Coil. **\$6.31**
E2325. 500 Foot Coil. **\$6.31**

FOR ADDITIONAL LISTINGS OF CABLE AND WIRE FOR TRANSMISSION LINES, AERIALS, ETC., SEE PAGE 118.

AERIAL WIRE

BELDEN ENAMEL

High conductivity aerial wire, ideal for all types of Broadcast All-Wave and Short-Wave aeri-als. Belden enamel insulation protects the wire from corrosion and atmospheric conditions indefinitely.

7x22 ENAMELED	NET
E2410. 75 ft.	37c
List, 63c.	
E2411. 100 ft.	48c
List, 82c.	
E2412. 150 ft.	72c
List, \$1.23.	
E2413. 1000 ft.	\$4.60
List, \$7.90.	

7x20 ENAMELED	NET
E2415. 100 ft.	75c
List, \$1.30.	
E2416. 1000 ft.	\$7.50
List, \$13.00.	

SOLID ENAMELED	NET
E2418. No. 10.	96c
100 ft. NET.	
E2419. No. 12.	55c
100 ft. NET.	
E2420. No. 14.	38c
100 ft. NET.	

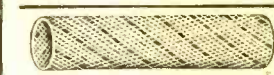


BAKELITE ARRESTER

Underwriters' approved. Provides positive protection. Sturdy and compact. Bakelite body. **E2403. 10 for \$1.15. EA. 13c**

LITZ WIRE

Superior quality for low-loss coil winding. 40 strands No. 28 high conductivity copper wire, white double-silk covered. **12c**
E3401. 100 Ft. Spool. **12c**
E3402. 1000 Ft. Spool. **90c**



COPPER SHIELDING

No.	Diam.	Per 50 Ft.	Per Ft.
E3595	3/4 in.	\$0.95	2 1/2c
E3596	1 in.	1.10	3c
E3597	1 1/4 in.	1.65	4c
E3598	1 3/4 in.	2.35	6c

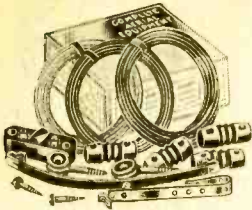
FARM PLANT WIRE

Weatherproof single conductor wire for use with Windcharger or Power plants. Solid copper conductor; triple cotton-covered. For battery charging, use as follows: At 75 foot distance from charger to battery, use No. 6; at 50 feet, No. 8; at 25 feet, No. 10; at 15 feet, No. 12. For single 6 volt 25 watt lamp; 150 feet from battery, use No. 8; 75 feet, No. 10; 50 feet, No. 12; 30 feet or less, No. 14.

No.	Size	100 Ft.	Per Ft.
E2490	6	\$5.25	5 1/2c
E2491	8	4.50	5c
E2492	10	3.10	3 1/2c
E2493	12	2.65	3c
E2496	14	1.25	1 1/2c

AERIAL WIRE AND EQUIPMENT

SPECIAL VALUE AERIAL KITS



DE LUXE AERIAL KIT

An exceptionally fine kit. Will improve reception of any radio set. Contains 100 feet of 7 strand copper aerial wire; 40 feet of rubber covered lead-in wire; 25 feet of ground wire; 4 porcelain insulators; 2 screw-eye insulators; 1 lightning arrester; 1 window lead-in strip; 1 adjustable ground clamp. Easily installed in any location by following the complete, easy instructions packed with each kit. Ship. wt. 6 lbs.

E3486.
NET

63c

STANDARD AERIAL KIT

A real value in a complete aerial kit. Includes all materials for a "Marconi type" antenna for use with any receiver. Consists of: 90 feet of 7 strand copper aerial wire; 25 feet of rubber covered lead-in wire; window lead-in strip; two porcelain insulators; two nail knots; and an adjustable strap-type ground clamp. Conveniently boxed. Complete instructions are included. Shipping wt., 4 lbs.

E3485.

YOUR SPECIAL PRICE.

37c

ALL-PURPOSE LEAD-IN WIRE

RUBBER COVERED LEAD-IN WIRE



Stranded Wire

Stranded No. 18 rubber covered lead-in wire. Flexible and easy to work.

No.	Ft.	10 for	EACH
E3479	25	\$0.95	\$0.10
E3480	50	1.80	.19
E3481	100	3.32	.35
E3482	250	7.93	.91
E3482	1000		3.16



Solid Wire

High quality No. 16 rubber covered lead-in wire. Weatherproof.

No.	Ft.	10 for	EACH
E3475	25	\$1.14	\$0.12
E3476	50	2.18	.23
E3477	100	4.22	.45
E3467	250	10.65	1.11
E3478	1000		4.34



SHIELDED LEAD-IN

For broadcast use. No. 18 stranded tinned wire, with tough, live rubber covering; tinned

woven flexible copper braid over all.

E3492.	50 ft.		49c
YOUR PRICE			
E3494.	100 ft.		96c
YOUR PRICE			
E3499.	250 ft.		\$2.38
YOUR PRICE			



COMBINATION LEAD-IN AND AERIAL WIRE

10 strands of No. 30 copper wire, insulated with Gutta Percha. Free-strapping. Non-corrosive. An all-purpose wire for aerial, lead-in and set hookup.

No.	Length	NET
E3471	25 ft.	\$0.12
E3470	50 ft.	.23
E3469	100 ft.	.44
E3468	250 ft.	1.05
E3468	1000 ft.	4.05



FLEXIBLE INDOOR ANTENNA WIRE

For A.C.-D.C. and midset sets. Moisture-proof woven cotton covering. May be inconspicuously installed under rugs or around moldings.

E3483.	100 Feet	37c
E3484.		
25 Feet		12c

TWISTED PAIR SHIELDED LEAD-IN

For all wave or S.W. aeriads. No. 20 solid copper conductors; weatherproof insulation with closely woven copper shielding overall.

E2487.	50 Ft. Coils.	\$0.85
E2488.	100 Ft. Coils.	1.62
E2489.	250 Ft. Coils.	3.82



WEATHERPROOF TWISTED PAIR

Low impedance transmission line for use with noise-reducing aeriads. Two No. 22 stranded copper conductors, rubber-covered. Paraffined braid overall.

E2434.	50 Ft. Coils.	\$0.47
E2432.	100 Ft. Coils.	.90
E2437.	250 Ft. Coils.	2.10



RUBBER TWISTED PAIR LEAD-IN

For all noise-reducing aerial systems employing double or double-double antenna. Low impedance No. 18 twisted black rubber-covered stranded wire.

E3488.	50 Feet	\$0.45
E3489.	100 Feet	.88
E3491.	250 Feet	2.10

TWISTED LAMP CORD



Approved by the underwriters. No. 18—1/32 rubber insulation with black cotton braid. For extension or A.C. line cords.

E3592.	Per foot.	1c
NET		
E3593.	Per 100 Ft.	\$1.30
NET		

BATTERY CABLES

Well-made. For battery, speaker and analyzer connections. Cotton braid overall. Wires are color-coded for easy identification. Attractively priced quality cables.

No.	Conductors	NET
E2900	4	24c
E2901	5	24c
E2902	6	28c
E2903	7	38c
E2904	9	49c

AERIAL WIRE VALUES

Exceptionally high-quality hand-drawn copper wire. Has high conductivity and very little "stretch". Enamelled wire will not corrode. Ideal for all types of aeriads; single wire, doublet, or case-type, for All-Wave, Short-Wave, or Broadcast sets. Servicemen: take advantage of these low prices to increase your aerial wire profit.



STRANDED ENAMELED

7 STRANDS No. 22	
Excellent for All-Wave aeriads.	
E3444.	50 ft.
10 for \$2.18.	EACH 23c
E3445.	100 ft.
10 for \$4.27.	EACH 45c
E3446.	200 ft.
10 for \$8.54.	EACH 90c

7 STRANDS No. 26	
A fine value in a light wire.	
E3447.	50 ft.
10 for \$1.25.	EACH 14c
E3448.	100 ft.
10 for \$2.40.	EACH 26c
E3449.	200 ft.
10 for \$4.75.	EACH 51c

7 STRANDS No. 20	
Heavy-duty wire for long life.	
E3434.	50 ft.
YOUR PRICE	36c
E3441.	100 ft.
YOUR PRICE	71c
E3442.	200 ft.
YOUR PRICE	\$1.42

SOLID ENAMELED

Hand-drawn solid enameled copper wire for X-mitting and receiving.

No.	Gauge	Feet	Ea.
E3450	14	100'	\$0.90
E3451	10	200'	1.75
E3452	10	500'	4.15
E3453	12	100'	.53
E3454	12	200'	.99
E3455	14	100'	.35
E3456	14	200'	.68

STRANDED BARE

7 STRANDS No. 22	
Standard size for all aeriads.	
E3435.	50 ft.
10 for \$1.61.	EACH 17c
E3436.	100 ft.
10 for \$3.13.	EACH 33c
E3437.	200 ft.
10 for \$6.26.	EACH 66c

7 STRANDS No. 26	
An excellent buy in thin wire.	
E3438.	50 ft.
10 for 76c.	EACH 8c
E3439.	100 ft.
10 for \$1.42.	EACH 15c
E3440.	200 ft.
10 for \$2.84.	EACH 30c

7 STRANDS No. 20	
Heavy wire for added strength.	
E3472.	50 ft.
10 for \$2.99.	EACH 31c
E3473.	100 ft.
10 for \$5.79.	EACH 61c
E3474.	200 ft.
10 for \$11.58.	EACH \$1.22

PHOSPHOR BRONZE

Strongest aerial wire. Has high conductivity; non-stretching. Used commercially on ships.

No.	Size	Feet	NET EA.
E3460	7x22	100	\$1.10
E3461	7x22	200	2.10
E3462	7x21	100	.75
E3463	7x21	200	1.40
E3464	7x26	100	.60
E3465	7x26	200	1.10

FLEXIBLE SPAGHETTI

For insulating bus bar wire, and condenser and resistor plate leads. Fine cambric tubing impregnated with varnish.

E2895.	Black.	Per 30" Lgth.	6c
E2896.	Yellow.		
E2897.	Red.		
E2898.	Green.		
10 LENGTHS			55c

GIANT SPAGHETTI

Black cambric tubing, impregnated with oil varnish. 1/4" inside diameter, 36" long.

E2899.	NET	15c
10 LENGTHS FOR		\$1.25

CORD SET

Underwriters' approved cord for radios, lamps, fans, amplifiers, etc. 6 foot cord with rubber plug.

E3498.	YOUR PRICE	14c
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ANALYZER CABLE

For use in retuning or modernizing test equipment, test panels, tube testers, etc. Tinned, stranded copper conductors with individual rubber and color-coded braid covering.

E1670.	8 CONDUCTOR.	
Has 2 No. 16 and		
6 No. 20 wires.	PER FOOT	9c
E1671.	9 CONDUCTOR.	
Has 2 No. 16 and		
7 No. 20 wires.	PER FOOT	10c



HANDYCORD LAMP CORD

Rubber-jacketed flexible cord; each conductor is No. 18 stranded copper wire, separately insulated in tough rubber sheath that splits down center when pulled apart. Fine for lamps, radios, etc.

E3410.	Brown.	PER FOOT
E3412.	Black.	1c
E3413.	Grey.	
E3414.	Ivory.	
E3414.	Green.	
PER 100 FEET		\$1.15

RUBBER SERVICE CORD

Round flexible weather-proof cable. No. 18 (16/30) stranded wire conductors, each rubber covered and coded, with cotton wrapping and outer live rubber sheath.

E2435.	2 COND.		
100 FT.	\$2.95.	PER FT.	3c
E2436.	3 COND.		
100 FT.	\$3.75.	PER FT.	4c

TEST-LEAD WIRE

Extra-flexible No. 18 test lead wire. Ideal for replacing worn-out test-lead leads or for making new test equipment. Made of 41 strands of No. 34 tinned copper wire, with waxed cotton wrapping, covered by 1/32" wall of rubber.

E2385.	RED.	
E2386.	BLACK.	
5 FOOT COILS.	EACH	6c
E2387.	RED.	
E2388.	BLACK.	
PER FOOT		1c

HOOKUP & MAGNET WIRE - CABLES

SINGLE COTTON ENAMELED MAGNET WIRE

An exceptionally high-grade magnet wire. Properly annealed for easy handling. Cotton wrap over enamel gives adequate insulation.

Each spool holds one continuous, uniformly drawn and insulated length, B. & S. gauge.



HIGH GRADE MAGNET WIRE ON SPOOLS

Insulated copper wire of highest quality for all radio and electrical purposes. Wound on spools in continuous lengths. Excellent for winding armatures and field coils, receiver and transmitter coils, rewinding power transformers and clocks. For schools, laboratories, etc. Standard B. & S. Gauge. We can supply magnet wire in all sizes and types of insulation in large quantities than listed below. Write for attractive prices which will save you money on quantity purchases of magnet wire.



No. LB. SPOOLS			1 LB. SPOOLS		
No.	Ft.	NET	No.	Ft.	NET
E3354	39	\$0.23	E3367	78	\$0.41
E3355	49	.24	E3368	98	.42
E3356	62	.25	E3369	124	.43
E3357	78	.26	E3370	156	.44
E3358	98	.27	E3371	198	.45
E3359	124	.28	E3372	248	.49
E3360	156	.29	E3373	312	.52
E3361	196	.30	E3374	392	.55
E3362	245	.32	E3375	490	.58
E3363	306	.35	E3376	772	.67
E3364	468	.38	E3377	936	.70
E3365	605	.41	E3378	1209	.73
E3366	938	.46	E3379	1876	.89

PLAIN ENAMELED			
LB. SPOOLS			
No.	Size	Ft.	NET
E3520	14	38	\$0.20
E3521	16	63	.23
E3522	18	101	.24
E3523	20	159	.25
E3524	22	253	.26
E3525	24	402	.27
E3526	26	640	.31
E3527	28	1013	.34
E3528	30	1602	.38
E3529	32	2543	.41
E3530	34	4042	.45
E3531	36	6410	.56

DOUBLE COTTON			
LB. SPOOLS			
No.	Size	Ft.	NET
E3533	14	36	\$0.25
E3534	16	61	.27
E3535	18	100	.30
E3536	20	150	.33
E3537	22	234	.36
E3538	24	362	.43
E3539	26	568	.52
E3540	28	842	.61
E3541	30	1321	.79
E3542	32	1880	.90
E3543	34	2746	1.14
E3544	36	3801	1.40

DOUBLE SILK			
LB. SPOOLS			
No.	Size	Ft.	NET
E3546	18	49	\$0.26
E3547	20	78	.29
E3548	22	126	.30
E3549	24	196	.31
E3550	26	310	.37
E3551	28	486	.45
E3552	30	777	.50
E3553	32	1247	.65
E3554	34	1828	.89
E3555	36	2668	1.17
E3556	38	3875	1.43
E3557	40	5325	2.25

CABLES FOR EVERY PURPOSE

MULTI-CONDUCTOR CABLES



COTTON BRAID OVERALL

No. 18 stranded conductors, each covered with rubber jacket with woven cotton braid over all. Any length.

No.	Cond.	Feet	100 Ft.	NET
E3500	2	15c	\$1.35	
E3501	3	25c	2.05	
E3502	4	32c	2.85	
E3503	5	41c	3.50	
E3504	6	46c	4.50	
E3505	7	56c	4.95	
E3506	8	60c	5.50	



WOVEN SHIELDING OVERALL

Tightly woven overall shielding of fine tinned copper wire. Each is No. 18 conductor, insulated with rubber jacket. Any length.

No.	Cond.	Per Ft.	100 Ft.	NET
E3507	2	3c	\$2.75	
E3508	3	4 1/2c	3.75	
E3509	4	5 1/2c	4.75	
E3510	5	6c	5.25	
E3511	6	7c	6.15	



TELEPHONE WIRE

For telephone and multiple speaker installations. High-grade No. 19 solid tinned copper. Has 1/2" rubber insulation with glazed cotton braid overall.

E2494. 2 Conductor.	100 Ft.	500 Ft.	1000 Ft.
\$1.70	\$8.10	\$15.40	
E2495. 3 Conductor.	100 Ft.	500 Ft.	1000 Ft.
\$2.15	\$10.15	\$19.40	

HEADPHONE AND SPEAKER CORDS

Copper tinsel inner conductor covered with closely-woven cotton braid. Tips are firmly anchored.

SINGLE CORDS

E2932. 4 foot cord. Tips on one end; spades on other. For speakers.	
E2933. 4 foot cord. Tips on both ends.	8c
NET EACH	10 for \$7.15.

DOUBLE CORDS

E2934. Spades on one end. Tips on other. 5 foot cord.	
E2935. Tips on both ends. 5 foot cord.	19c
NET EACH	10 for \$1.75. 100 for \$16.95.

HIGH-IMPEDANCE MICROPHONE CABLE



For Crystal, Sound Cell, Dynamic, Velocity, & Velotron Mikes. Low capacity, high-impedance microphone cable, shielded and rubber-jacketed. Conductor is of fine stranded No. 20 copper; extremely flexible. Low-loss. *E2469 is No. 20 stranded copper for hard usage over short distances. Per Ft.

SINGLE CONDUCTOR

No.	Capacity	Per Ft.	100 Ft.	NET
E2499	24 mmf.	4c	\$3.45	
E2497	26 mmf.	7 1/2c	3.22	
E2498	36 mmf.	2 1/2c	3.31	
E2469*	27 mmf.	4c	3.37	

DOUBLE CONDUCTOR

E2498	30 mmf.	6c	\$4.10	
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CARBON MIKE AND UTILITY CABLE

Heavy rubber jacket over tinned copper shielding. Ideal for outdoor and heavy duty service.

No.	Cond.	Per Ft.	100 Ft.	NET
E3514	2	3 1/2c	\$2.70	
E3515	3	4c	3.75	
E3516	4	5 1/2c	4.90	
E3517	5	6 1/2c	6.70	
E3518	6	7c	6.85	
E3519	7	8 1/2c	7.55	

COLOR RUBBER HOOK-UP WIRE

Stranded tinned No. 20 copper wire with flexible rubber insulation. Back to skin. In 5 colors. Use a different color to identify each circuit.

25 FOOT COILS

E3572. Red.	NET EACH
E3573. Green.	13c
E3574. Blue.	
E3575. Black.	
E3576. White.	
10 FOR \$1.04.	
E3577. 1000 Ft. R.O.L.L.S.	
Specify color. NET	\$3.55

No. 16 STRANDED

E2744. Red.	
E2745. Black.	21c
25 Foot Coils, Each	

No. 14 STRANDED

E2746. Red.	
E2747. Black.	31c
25 Foot Coils, Net Each	

No. 12 STRANDED

E2748. Red.	
E2749. Black.	48c
25 Foot Coils, Each	

HANDY MAGNET WIRE SPOOLS

Quality magnet wire available in small quantities on handy marked spools. Double-cotton, double-silk and enamel types. Sleeve spool prevents tangling. Keep an assortment on hand. YOUR PRICE ANY SPOOL.

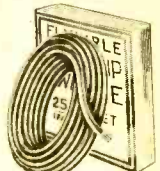


DOUBLE COTTON			DOUBLE SILK			PLAIN ENAMEL		
No.	Size	Feet	No.	Size	Feet	No.	Size	Feet
E2755	14	21	E2770	14	19	E2785	14	25
E2756	16	35	E2771	16	25	E2786	16	40
E2757	18	42	E2772	18	31	E2787	18	48
E2758	20	60	E2773	20	42	E2788	20	85
E2759	22	81	E2774	22	60	E2789	22	133
E2760	24	110	E2775	24	83	E2790	24	200
E2761	26	148	E2776	26	101	E2791	26	292
E2762	28	168	E2777	28	119	E2792	28	420
E2763	30	192	E2778	30	143	E2793	30	590
E2764	32	216	E2779	32	163	E2794	32	805
E2765	34	242	E2780	34	190	E2795	34	1150
E2766	36	266	E2781	36	219	E2796	36	1560
E2767	38	294	E2782	38	243	E2797	38	1980
E2768	40	325	E2783	40	275	E2798	40	2430

YOUR PRICE ANY SPOOL Lots of 10 Assorted. NET \$1.30

PUSH-BACK HOOK-UP WIRE

This tinned push-back hook-up wire is of the highest quality. Only evenly-drawn pure copper wire is used. Available in both solid and stranded wire. The stranded wire is made up of carefully twisted individual strands with a tensile strength that gives them unusual flexibility.



FIVE DIFFERENT COLORS

This wire is double-cotton covered with paraffin-treated damp-proof braid which pushes back easily. Available in five distinctive colors. Use a different color for each circuit for ready identification. Buy in quantities at our attractive low prices.

No. 20 SOLID 25 FOOT ROLLS			No. 20 STRANDED 25 FOOT ROLLS		
No.	Color	PER ROLL	No.	Color	PER ROLL
E3555	Black.	10c	E3560	Black.	11c
E3556	Yellow.		E3561	Yellow.	
E3557	Red.		E3562	Red.	
E3558	Green.		E3563	Green.	
E3559	Blue.		E3564	Blue.	
10 FOR 93c.			10 FOR 99c.		

100 FOOT ROLLS			1000 FOOT ROLLS		
No.	Color	PER ROLL	No.	Color	PER ROLL
E3565	Black.	35c	E3585	Black.	40c
E3566	Yellow.		E3586	Yellow.	
E3567	Red.		E3587	Red.	
E3568	Green.		E3588	Green.	
E3569	Blue.		E3589	Blue.	
10 FOR \$3.35.			10 FOR \$3.80.		

1000 FOOT SPOOLS			1000 FOOT ROLLS		
No.	Color	PER ROLL	No.	Color	PER ROLL
E3570	Black.	\$3.35	E3590	Black.	\$3.60
1000 Ft. NET			1000 Ft. NET		

NET EACH \$1.02

AUTO RADIO ACCESSORIES

LATEST AUTO RADIO AERIALS

KNIGHT AERIALS

HINGE TYPE



There is the new type flexible hinge-whip antenna that is proving so very popular. Good-looking, made of the highest grade steel. Very low-priced. Easily attached to hinge pin of any car door without drilling. Provides good signal pickup. 40" long. Has 24" lead-in. Chrome plated finish. **E10450.**

NET..... **59c**

E10481. BUMPER POLE TYPE. 3' to 8' telescoping rod. Easily attached to rear bumper of any car. NET..... **\$1.55**

BUICK-OLDS RUNNING-BOARD INSULATOR KITS



E10451. FOR 1937-38 BUICK. For installation under both running boards. Makes antennas out of running boards by clever method of insulation. Includes 8 insulators, loom-shielded lead-in, instructions, etc. Shpg. wt., 7 lbs.

NET..... **\$2.94**

E10452. FOR 1937-38 OLDSMOBILE. Same as above, but for Oldsmobile 1937 and 1938 models. Easy to install. NET..... **\$2.94**



CARFLO AUTO AERIAL "FITS ANY CAR TOP"

A new development in auto antennas. Absolutely non-directional design gives increased signal pickup and clarity, greater efficiency, and less noise. Constructed of one-piece seamless drawn copper tubing. Wt., 3 lbs.

E10470. Polished Chromium. NET..... **\$2.95**

WARD AUTO AERIALS THE "FLEXOR"



Highly efficient. Fits door-hinge of any car. Drawn from Mol-en-ac steel with polished chromium finish. Flexible—will not break. Easy to install; will increase the signal pickup and improve reception. Complete with 37" lead-in and mounting bracket.

E10383. NET..... \$1.62

THE "QUINLAN"

A two-section cowl antenna for use on any automobile. Made of rustproof Mol-en-ac. Vacuum cup mounting; requires no drilling. Length collapsed is 28 3/4"; extended, 49 1/2". Easily and quickly installed. Affords optimum signal pickup. With lead-in.

E10386. NET..... \$1.73

THE "FISHPOLE"

Consists of flexible, telescoping 8 foot steel rod with insulating bracket and lead-in wire. Easily attached to any rear bumper. Complete isolation from motor noise permits better signal pickup with less possibility of interference from ignition system. With 12 foot lead-in. Wt., 2 lbs.

E10382. NET..... \$1.76



LONG-RANGE TWINS

A new dual-section undercar antenna with signal pickup equaling that of roof type aerials. Sealed in rubber; absolutely weather-proof. No drill mounting. With 66" shielded lead-in cable. Shpg. wt., 7 lbs.

E10381. NET..... \$2.35



"REDHEAD" SENIOR AUTO ANTENNA

A scientifically designed, welded, vibration-proof running-board antenna of remarkable efficiency. Strong signal pickup with minimum of ignition interference. All-metal construction; completely insulated with an overall rubber cover, waterproof and rust-resisting. Easy to install. No springs, wire, etc., to rattle or loosen. Has set screw connection for antenna lead-in. Length, 46"; width, 9". Wt., 7 lbs. A highly efficient aerial.

E10473. NET..... \$1.47

I.C.A. AUTO AERIALS EAGLET TWIN

A modern doublet type auto antenna providing maximum signal pickup with less noise. Full triple chromium-plated for lasting beauty. Easily installed with vacuum cup mountings. Fits all metal top cars.

E10475. Open Windshield Cars. NET..... \$2.50

E10476. For Cars with Permanently Closed Windshield. NET..... \$2.65

MOTO-WHIP

A new adjustable auto antenna for all cars. Easily installed without drilling car top. Maximum length, 63". Increases signal pickup. Has snap-type adjustment; full chrome-plated. With lead-in.

E10477. NET..... \$1.22

HINGE TYPE

An efficient telescopic antenna that is easily attached to the hinge pin of any car door without drilling. Extended from 27" to 54". Chrome-plated. Lead-in enters through car door opening. With lead-in wire and bracket.

E10478. Fig. A. NET..... \$1.47

E10464. Fig. B. One piece tapered aerial. 50" long. With lead-in wire. NET..... \$1.62

E10465. Fig. C. Three piece telescoping. 33 to 96". With lead-in wire. NET..... \$2.06

SIDE-COWL TYPE

May be mounted on the cowl of any car. The triple chromium plating positively prevents rust. Lower end black enameled. Sturdy molded insulators. Non-telescopic, 60" total length. With 40" of lacquered lead-in wire.

E10466. Fig. A. \$1.18

E10467. Fig. B. Extends 35 to 68". With special lead-in connector. NET..... \$1.62

E10468. Fig. C. Extends 30 to 96". With special lead-in connector. NET..... \$2.35

EXTRA DISCOUNTS

You may deduct an additional discount of 10% on any of the I.C.A. aerials listed above if ordered in lots of ten or more. Your order may consist of one type or an assortment.

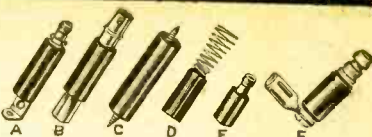
R.C.A. AUTO ANTENNA



Based on a fundamental principle which assures maximum results with any auto radio. Noise from nearby sources is eliminated by cancellation effect caused by shape of antenna. A necessity on new all-steel and turret-top cars. Universal mounting brackets. Shpg. wt., 4 lbs.

E10483. RCA No. 9605. \$1.53

List, \$2.60. NET..... **\$1.53**



KNIGHT AUTO RADIO SUPPRESSORS

Efficient carbon type suppressors for use on any automobile engine. Will cut out practically all ignition interference. Cut shows bakelite type. Ceramic units are white.

Bakelite No.	Ceramic No.
E6990. A. Spark Plug Type.	E7180.
E6991. B. Distributor Type.	E7181.
E6992. C. Cable Type.	E7182.
E6993. E. Short Type.	E7183.
E6994. F. Elbow Type.	E7184.

SET OF 5..... 55c
SET OF 7..... 75c
SET OF 9..... 94c

YOUR PRICE, EACH..... 12c

E6995. D. Special 50,000 ohm. Ford V8 Brush Type. For 1933-1935 models.

E6999. D. Special small type, 50,000 ohm. For 1936, 1937 and 1938 Fords.

YOUR PRICE, EACH..... 12c



LOW RESISTANCE WIRE-WOUND SUPPRESSORS

Extremely effective in eliminating motor noises. Positively will not affect operation of motor; has low resistance—30 ohms. Bakelite cases.

E5560. Plug type. Fig. A.
E5561. Distributor type. Fig. B.
E5562. Elbow type. Fig. C.

10 FOR \$2.50. EACH..... 27c

AUTO RADIO FILTERS

SINGLE CAPACITORS

Metal-cased compact by-pass condensers for use on generators, ammeters, horns, etc., to eliminate noise.

E2942. 1/4 MFD. Round metal container 3/4"x2". Single lead with lug.

For horn. EACH..... **15c**

E2943. 1/2 MFD. Round metal container 1"x2". Single lead with lug.

For coil. EACH..... **19c**

E2944. 1 MFD. Round metal container 1 1/2"x2 1/2". Single lead with lug.

For generator. EACH..... **24c**

E2945. 1 MFD. 1 1/4"x2 1/2". Heavy duty for use near motor.

For generator. EACH..... **32c**

DOME LIGHT FILTER

A 1/2 mfd. condenser and 2 amp. choke in a round insulated container. 3x3". With 3 flexible leads.

E2941. EACH..... 31c

E2938. Ammeter & Gas Gauge Filter. A-5 mfd. condenser in insulated case with two flexible insulated leads. NET..... 29c

FORD V-8 CONDENSER

Especially designed to fit the Ford V8 distributor-head. Special bracket assembly matches distributor head bolts. Required in all Ford V8 cars with Radios.

E5921. For 1934-35 V8 Fords. EACH..... 26c

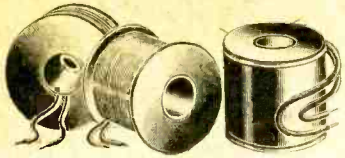
E5922. For 1936-37 V8 Fords. Slightly different shape. NET..... 26c

SPRING-TENSION CONNECTOR FOR AUTO AERIAL LEAD-IN

A specially designed spring tension lead-in connector that assures positive contact. With 12" shielded, flexible lead and bayonet connector. Can be used on any type aerial. Made of brass, heavily chromium plated.

E5507. NET..... 29c

REPLACEMENT PARTS FOR SPEAKERS



EXACT DUPLICATE FIELD COILS

Select your field coil from the following listing and from the Universal coils shown below. We can also supply field coils other than those listed. If possible send sample with a deposit, or specify exact measurements and resistance and we will supply or quote promptly.

No.	Set or Speaker	Ohms	NET
E2990	Apex 20 (1x2 1/4 x 3/8")	5.955	\$1.47
E2950	Apex 20 (1 3/4 x 2 1/2 x 1 1/2")	11.500	1.62
E2951	Apex 26A (1 x 2 1/4 x 1 1/2")	11.500	1.62
E2952	Apex 26P (Speaker 2 7/8 x 2 1/4 x 1 1/2")	11.500	1.62
E2953	Apex 26P (Speaker 2 7/8 x 2 1/4 x 1 1/2")	11.500	1.62
E2954	Apex 27 (1 1/4 x 2 1/4 x 1 1/2")	11.000	1.62
E2955	Apex 8A (7/8 x 2 1/4 x 1 1/2")	6.600	1.62
E2991	Apex 10B (1 1/8 x 2 1/4 x 1 1/2")	6.600	1.62
E2961	Bosch 505, 515	1.500	1.65
E2993	Brunswick 16	2.400	2.35
E2904	Crosley 260	10.000	2.25
E2964	Magnavox 9", D7, D8	2.500	3.82
E2965	Majestic G1	3.100	3.15
E2966	Majestic G2	2.730	3.15
E2967	Majestic G3	2.730	3.15
E2968	Majestic G5	7.650	3.15
E2969	Majestic G19P	7.10	1.59
E2981	Philco 20	3.100	1.18
E2982	Philco 86, 87, 65, 95, 76, 96, 77	3.200	2.65
E2970	Philco 75	3.000	1.83
E2984	Stewart Warner 950	10.000	4.70
E2985	Stow-Warner R202	10.000	2.35
E2989	Victor RE32, 45, 75, 2930	2.930	2.79

UNIVERSAL FIELD COILS FOR AC-DC FIELDS



For midget 5" and 6" speakers, 1" inside dia., 2" outside dia., 1/2" high. Supplied with 3 gaskets for fitting any pole-piece.

E2690	1,000 Ohm.	E2693	2,500 Ohm.
E2691	1,500 Ohm.	E2694	3,000 Ohm.
E2692	2,000 Ohm.		

NET EACH **88c**
List, \$1.50.

FOR GENERAL REPLACEMENT

With the following coils you can now service practically any type of speaker on the market. Coils have 2 windings which may be connected either in series or parallel to obtain the resistance values shown below. Sizes are as follows: Type 1—inside diameter 1 1/4", outside diameter 2 1/4", length 1 1/2"; Type 2—inside diameter 1 1/4", outside diameter 2 1/4", length 1 1/2"; Type 3—inside diameter 1 1/4", outside diameter 1 3/4", length 1 1/2"; Type 4—inside diameter 1 1/4", outside diameter 2", length 1 1/2". With complete instructions. Average shag. wt., 1 1/2 lbs.

PARALLEL RESISTANCE RANGE

Ohms	Type No.	Type 1 No.	Type 2 No.	Type 3 No.	Type 4 No.
375-480	E2670	E2675	E2680	E2685	
490-690	E2671	E2676	E2681	E2686	
695-825	E2672	E2677	E2682	E2687	
900-1100	E2673	E2678	E2683	E2688	
1325-1375	E2674	E2679	E2684	E2689	

SERIES RESISTANCE RANGE

1,500-1800	E2670	E2675	E2680	E2685
2,250-2750	E2671	E2676	E2681	E2686
2700-3300	E2672	E2677	E2682	E2687
3600-4400	E2673	E2678	E2683	E2688
4500-5500	E2674	E2679	E2684	E2689

LIST, 53.10 NET EACH **\$1.82**

CENTERING SHIMS

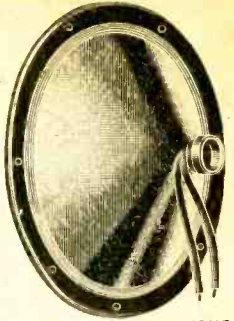


Celluloid spacers for centering and adjusting speaker voice coils and armatures. Flexible and tough. Kit includes 4 shims—.005; 4 shims—.0075; 4 shims—.010; 4 shims—.0125. In handy leather case.

E2999. YOUR PRICE **36c**

EXACT DUPLICATE SPEAKER CONES

Duplicate replacement cones accurately designed and carefully constructed to match the originals. One piece seamless material is used; noted for enduring, non-resonant quality. An accurately wound voice coil is attached to each cone. Cones are precisely molded by patented process to secure excellent tonal quality and long life. Voice coils are also exact duplicates of the originals in all specifications. For improved tone quality, replace your old speaker cones with these reliable exact duplicates.



If the cone you require is not listed below, your cost can be generally determined by the following schedule: 5" to 6" cones—\$1.10; 7" to 9" cones—\$1.50; 10" to 12" cones—\$1.95. Cones 13" and over will be duplicated at a cost not to exceed \$2.75. Please send in your old cone with remittance. If the entire speaker is sent in for cone installation, add 75c to above prices to cover installing and cleaning.

Catalog No.	For Model	Outer Dia., In.	YOUR PRICE	Catalog No.	For Model	Outer Dia., In.	YOUR PRICE
E9350	Airline 62-190, 62-181 (Operaadio)	8	\$1.32	E9359	Quam Nichols (Motrola 34), (Emerson A), (Detrola GR)	5	\$0.88
E9351	Airline 62-177, 62-179	6 1/2	1.03	E9408	RCA 104, 105	8	1.18
E9352	Airline 62-198, 62-175	5 1/2	.88	E9409	RCA 106, R80, R82, R86, R85, R39, RE57, R34, R50	10 1/2	1.18
E9353	Airline 62-236, 62-263	5	.88	E9410	RCA 48, R7, R7A, R8, R10, R11, R12, R15, R18, R19, R20, R23, R12, R14, RE17	10 1/2	.88
E9361	A.K. Pt. No. 15142, mod. 43, 46, 55, 60, 64, 66, 67, F4	10 1/2	1.32	E9290	RCA Pt. No. 9022, mod. M34, M105	5	.59
E9362	A.K. Pt. No. 13574, mod. 43, 46, 55, 60, 64, 66, 67, F9	10 1/2	1.32	E9291	RCA Pt. No. 8087, mod. R28, R28P, R32, R28PW, R30, R34P, 100, 101, 110, 111, 114, 115, M116, 300, 301	5	.59
E9365	Bosch 505, 501, 631A, 640	6 1/2	1.03	E9292	RCA Pt. No. 9428, mod. R37, R38, R38P, 112, 120, 121, 122, 124, 126E, 142B, 241B, 310, 320, ACRI36	6 1/2	.59
E9369	Crosley M45, Mod. 262, 265, 425, 425, 308	8 3/4	1.47	E9293	RCA Pt. No. 8021, mod. R71, R71B, SWA5, R24	7	.73
E9370	Crosley 515 (Magna-Music)	5 1/4	.88	E9452	RCA Pt. No. 13667, mod. 576, 577, 578	5	.59
E9355	Crosley 516	5 1/4	.88	E9360	Rola D15 (Crosley (Emerson UV4))	6	1.03
E9360	Deleo 631A, 640, (Rola D15)	6	1.03	E9294	Rola F4	5	.82
E9431	General Electric A64, A355	8	.73	E9296	Rola P6, F8	5 1/2	1.18
E9432	General Electric A52, A33	6 1/2	.59	E9453	Rola G12	12	1.82
E9358	General Electric E61, E68, E81, E86, E26, E105, M9LE, E76	12	1.18	E9454	Stewart-Warner R206, R207, R204A, R110, 102A, 104A, R218A, 209, 210, 208, 225A	8	1.47
E9366	Grunow 450, 660, 662, Spkr. 8B1, 812	7 1/2	1.32	E9455	Stewart-Warner R125, R224, R118, R116, R220, R225, R231 to 1220, R181, R183	6	1.03
E9442	Grunow 650, 651, 661, 670, 750	8 3/4	1.47	E9456	Stewart-Warner Pt. 85119, R232, R131	6 1/2	1.18
E9375	Jensen D7, D8	11 1/4	1.82	E9428	Utah 12B (3 point spider) 16 ohm voice coil	12	1.82
E9377	Jensen D9 (Inside spider)	11 1/4	1.70	E9429	Utah Isodyne	7 1/2	1.18
E9379	Jensen D15	8 1/2	1.32	E9430	Utah No. 1220	12	2.20
E9380	Jensen D16	8	1.32	E9423	Wright DeCoster 107	12	1.71
E9384	Jensen J1, J2, Stewart 209A	6 1/2	1.03	E9424	Victor RE32, 45, 75, 9	9	.95
E9433	Jensen P5R (Belmont 580), (Emerson 250W)	5	.88	E9365	Westinghouse WR209, VR211	6 1/2	1.03
E9434	Jensen P6R (Motorola 76), (Radiette 83)	6	1.03	E9441	Zenith 52, 72 (17L18)	12 1/2	1.70
E9435	Jensen PM 126	12	1.81				
E9389	Jensen PM 80	8	1.32				
E9412	Magnavox 197, D8, D6, 80, 100, Spartan 737, 931, Ewerly 30, 40, Bosch 29A, Kollogg 523	8 1/2	1.62				
E9450	Magnavox 192, 162, (Zenith 862, 1162, 811, 812)	11 1/2	1.82				
E9386	Majestic G1	9	.97	E9457	Chevrolet 601662, 601874	5 1/2	\$0.88
E9387	Majestic G2	9	.97	E9461	Chevrolet 985201, 985200	5 1/2	.88
E9388	Majestic G3	9	.97	E9462	Chevrolet 985253	5 1/2	.88
E9390	Majestic G5, G8, G9, 12	12	1.71	E9463	Motorola 65 (Rola)	8	1.32
E9391	Majestic G7	9 3/4	1.47	E9464	Motorola 65, 70 (Jensen)	8	1.32
E9395	Majestic G10B	7 1/2	1.18	E9465	Motorola 60 (Jensen)	6 1/2	1.03
E9396	Majestic G11	10	1.40	E9466	General Elec. FA60, FA80	5	.59
E9397	Majestic G13	12	1.47	E9467	United Motors 1210093 S	1.32	
E9398	Majestic G14	12	1.40	E9468	Buick-Olds-Pontiac 980509, Almate 544207	8	1.32
E9399	Majestic G19	12	1.47	E9469	Goodyear 602 (6026 Belmont)	6	.88
E9400	Majestic G22	12	1.47				
E9385	Majestic G23	6	.88				
E9394	Majestic G26A	5	.85				
E9354	Operaadio 2 Pt. Spider used in Airline 62-190, Zenith 4791	8	1.32				
E9402	Oxford (3 pt. spider)	11 1/4	1.62				
E9404	Oxford (3 pt. spider)	9 1/4	1.47				
E9405	Oxford Auditorium	13 1/2	2.35				
E9436	Philco Pt. No. 62861, mod. 5, 48, 50, 52, 80, 81	5 1/2	.59				
E9406	Philco 87, 85, 95, 76, 96, 77, 90, 111, 90, 112	10 1/2	.82				
E9407	Philco 90, 9, 7, 20, 21, 61	8 1/2	.73				
E9437	Philco Pt. No. 30-3159, mod. 6, 7, 8, 9, 10, 12, 14, 15, 19, 43, 47, 71, 89, 91	7 1/2	.59				
E9438	Philco C32, Ford	5	.59				
E9439	Philco 817 (Ford) 1937	6 1/2	.59				

SPEAKER CONE CEMENT

Readily cements speaker cones, paper rings and foils to speaker frames. Comes in convenient metal tube containing 2 ounces enough for many jobs. This high quality cement dries quickly and holds permanently. A necessary item in the serviceman's kit. Almost as important to have as the right cone.

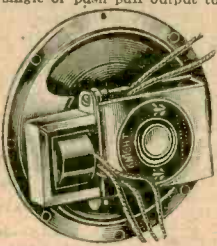
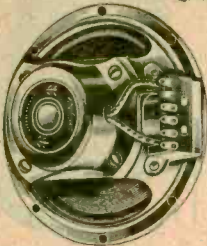
E2931. YOUR PRICE **24c**



Knight DYNAMIC SPEAKERS - UTAH -

KNIGHT DYNAMIC SPEAKERS

Knight Speakers cost less, work better, and earn more for you. Universally accepted by discriminating servicemen, they are ideal as replacements or for original equipment. All Knight Dynamics are equipped with universal transformers to match any single or push-pull output tube.



KNIGHT 6" DYNAMIC

A compact dynamic speaker capable of surprisingly smooth performance. Quality-built, it adequately fulfills all requirements for reproduction in medium-sized sets. Sturdy voice coil is 3/4" diameter; impedance is 3 1/2 ohms at 400 cycles. With universal type transformer for matching any output stage. Shpg. wt. 4 1/2 lbs.

E9256. 6 Volt Field.
E9257. 1000 Ohm Field.
E9258. 1800 Ohm Field tapped at 300 Ohms.
E9259. 2500 Ohm Field.
YOUR PRICE EACH \$1.69

KNIGHT 5" DYNAMIC

Developed especially for use in the new compact receivers. 6 volt model is ideal for use as a replacement speaker for auto radios. Correct design and alignment of cone and voice coil assembly eliminates distortion even at full volume. Voice coil is 3/4" in diameter; impedance is 3 1/2 ohms at 400 cycles. Only 5 inches in diameter and 2 3/4 inches deep. With universal transformer to match all tubes. Shpg. wt. 4 1/2 lbs.

E9254. 6 Volt Field.
E9255. 3000 Ohm Field.
YOUR PRICE EACH \$1.48

KNIGHT 8 1/2" DYNAMICS

Ideal for use with console receivers and small Public Address Systems. Will handle full volume without overloading or distorting. Correctly aligned voice-coil and cone assure maximum efficiency. Voice coil, 7/8" diameter; impedance is 3 ohms at 400 cycles. Diameter overall is 8 1/2", only 4 3/4" deep. With universal output transformer. Shpg. wt. 7 lbs.

E9260. 6 Volt Field.
E9261. 1000 Ohm Field.
E9262. 1800 Ohm Field Tapped at 300 Ohms.
E9263. 2500 Ohm Field.
YOUR PRICE EACH \$2.25

KNIGHT 12" DYNAMICS

Well-built speakers with excellent power-handling ability. Superior tone quality. Will efficiently handle 8 watts. Ideal for console type radios, indoor P.A. systems, etc. Universal transformer matches all tubes. Wt., 8 lbs.

E9531. 1000 Ohm Field.
E9514. 1500 Ohm Field.
E9532. 2500 Ohm Field. **NET EACH \$3.69**

KNIGHT 3 1/2" DYNAMIC

The smallest efficient dynamic speaker on the market. Particularly adaptable for use in small A.C.-D.C. sets where compactness and space economy are important. Has excellent frequency response and will handle surprisingly large amount of volume. With flange mounting. 3/4" watts maximum input; 450 ohm field; 3 ohm voice coil. Extremely popular with radio builders and experimenters. This amazing little speaker will give excellent reproduction with the ability of larger speakers to handle big volume without any degree of blasting or distortion. Shpg. wt., 3 lbs.

E9460. **YOUR PRICE \$1.29**



KNIGHT P.M. DYNAMICS

A new line of Knight high-quality permanent-magnet dynamic speakers with exceptional features. Extremely sensitive; with surprising high-fidelity reproducing characteristics. Require no field current, excitation. Especially suitable for replacements, or for battery-operated sets, P.A. systems, extension speakers, etc.

WITH UNIVERSAL TRANSFORMERS

Universal transformers are included on all except 3 1/2" models. Speaker magnets of special "Alnico" alloy produce greater magnetic flux. Cones are of seamless non-resonant material. Girder frame construction throughout.



Cat. No.	Speaker Size	Voice Coil	Power Watts	Shpg. Wt.	NET EACH
E9528	3 1/2"	3-5 Ohms	2	2 lbs.	\$1.49
E9529	5"	2 1/2 Ohms	5	3 lbs.	1.89
E9530	6"	6-8 Ohms	6	3 lbs.	2.39
E9531	8"	6-8 Ohms	8	3 1/2 lbs.	2.98
E9532	12"	6-8 Ohms	12	4 lbs.	3.29
E9521	14"	6-8 Ohms	15	7 lbs.	4.39
				13 lbs.	8.39

UTAH DYNAMIC SPEAKERS

A popularly-priced line to fit the budget of the experimenter and Public Address man, and to permit the serviceman to make a handsome profit. Workmanship and materials are of the highest quality; construction is sturdy and vibration-proof. There's a model for every speaker need.

MODEL "Q" DYNAMICS

Each model of these new dynamic speakers incorporates every valuable feature of modern speaker design, providing for the excellent reproduction so important to real radio enjoyment. Economical and reliable, these speakers give splendid service at a moderate cost. Their quality construction gives fine frequency response. Each is conservatively rated and has ample power-handling ability, unexcelled by any speakers in comparative price classes. Long life is assured even under continuous operation. Ideal for all purposes where high quality units are required, in both old and new installations.



5 INCH DYNAMICS

E9322. Type Q506. 6 ohm field with single 43 output transformer.
E9323. Type Q530. 3000 ohm field tapped at 2500 ohms, with single 43 output transformer.
E9324. Type Q518. 1800 ohm field tapped at 300 ohms, with single 43 output transformer.
List Each, \$2.75.
NET EACH \$1.62

6 INCH DYNAMICS

E9325. Type Q606. 6 ohm field with universal output transformer.
E9326. Type Q610. 1000 ohm field with universal output transformer.
E9327. Type Q618. 1800 ohm field tapped at 300 ohms, with universal output transformer.
E9328. Type Q625. 2500 ohm field with universal transformer.
List Each, \$3.40.
NET EACH \$2.00

MODEL "Q" 12 INCH DYNAMICS

E9335. Type Q1210. 1000 ohm field with universal output transformer.
List, \$7.50. **NET \$4.41**
E9336. Type Q1215. 1500 ohm field with universal output transformer.
List, \$7.50. **NET \$4.41**

8 INCH DYNAMICS

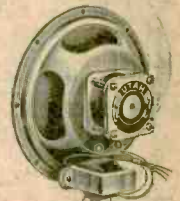
E9329. Type Q810. 1000 ohm field with universal output transformer.
List, \$4.60. **NET \$2.70**
E9330. Type Q818. 1800 ohm field tapped at 300, with universal output transformer.
List, \$4.60. **NET \$2.70**
E9331. Type Q825. 2500 ohm field with universal output transformer.
List, \$4.60. **NET \$2.70**

10 INCH DYNAMICS

E9332. Type Q1010. 1000 ohm field with universal output transformer.
List, \$6.50. **NET \$3.82**
E9333. Type Q1020. 2000 ohm field with universal output transformer.
List, \$6.50. **NET \$3.82**
E9334. Type Q1025. 2500 ohm field with universal output transformer.
List, \$6.50. **NET \$3.82**

UTAH "PERMO-MAG" DYNAMIC SPEAKERS

An entirely new line of P.M. Dynamic Speakers with a quality and sturdiness of construction unmatched at these low prices. A new design and composition of magnet provides amazing high efficiency; each "Permo-Mag" is fully the equivalent of the same size of electro-dynamic speaker. Finest grade components are utilized. These speakers are capable of handling strong power without distortion. Excellent for use in battery and A.C. receivers, Public Address systems, etc.



5-5 WATT MODEL

E9339. Type 5UP. 2 1/2 ohm voice coil, with universal output transformer.
List, \$3.50. **NET \$2.06**

6-6 WATT MODEL

E9340. Type 6UP. 6-8 ohm voice coil, with universal output transformer.
List, \$4.15. **NET \$2.44**

8-8 WATT MODEL

E9341. Type 8UP. 6-8 ohm voice coil, with universal output transformer.
List, \$5.50. **NET \$3.23**

8-10 WATT MODEL

E9342. Type 8UP. 6-8 ohm voice coil, with universal output transformer.
List, \$6.25. **NET \$3.67**

10-15 WATT MODEL

E9343. Type 10UP. 6-8 ohm voice coil, with universal output transformer.
List, \$8.00. **NET \$4.70**

12-15 WATT MODEL

E9344. Type 12UP. 6-8 ohm voice coil, with universal output transformer.
List, \$10.50. **NET \$6.17**

UTAH 3 1/2" "PERMO-MAG" DYNAMIC SPEAKER

A P.M. Dynamic Speaker that is small in size, but big in results. Built to exacting standards to provide the maximum in quality, range, and performance. Has tone quality which is amazingly good for a small speaker. Completely dustproof. Will give excellent service, even under continuous usage. Can be mounted in any position; is especially adaptable for use in midset sets where space is at a premium, communication systems, small S.W. receivers, etc. Has 3-5 ohm voice coil; maximum input, 3 watts. Supplied less transformer. Shpg. wt., 3 lbs.

E9345. Type 3P.
NET EACH \$1.76



MAGNETIC & DYNAMIC SPEAKERS

JENSEN SERIES "S" DYNAMICS

A new series of high-grade speakers for general replacement purposes. Outstanding for rugged construction and excellent tonal response. Completely dust-proof. Less transformer. If adjustable output transformer is needed, order E11399 at 50c net.

MODEL H5S 5-INCH

Cat. No.	Field Coil	Input Imped.	NET EACH
E9650	3000 ohms	4500 ohms	\$1.71
E9651	2750 ohms	4 ohm V.C.	
E9652	1000 ohms	4 ohm V.C.	\$1.35
E9653	6 Volt	4 ohm V.C.	

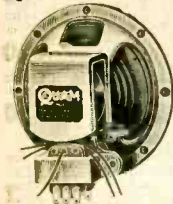
MODEL H6S 6-INCH

Cat. No.	Field Coil	Input Imped.	NET EACH
E9654	2750 ohms	4 ohm V.C.	\$1.59
E9655	1800 ohms	4 ohm V.C.	
E9656	1000 ohms	4 ohm V.C.	
E9657	6 Volt	4 ohm V.C.	

MODEL F8RS 8-INCH

Cat. No.	Field Coil	Input Imped.	NET EACH
E9658	2500 ohms	4 ohm V.C.	\$2.29
E9659	1800 ohms	4 ohm V.C.	
E9661	1000 ohms	4 ohm V.C.	
E9660	6 Volt	4 ohm V.C.	

QUAM REPLACEMENT SPEAKERS WITH UNIVERSAL TRANSFORMER



Quam speakers are widely known for efficient design, quality construction, and conservative ratings. They are used as standard equipment by leading manufacturers of table model A.C. and A.C.-D.C. receivers. These new speakers are particularly designed for general replacement purposes. They are equipped with universal type transformers for matching any output tube. Each unit is rigidly welded to form a rugged, one-piece assembly; there are no screws or fastenings to get out of adjustment. Special Quam armored field coil assures long-life service. Have universal mounting bracket.

5-INCH DYNAMIC

A quality-built speaker, ideal for replacement in compact A.C. or A.C.-D.C. sets. Conservatively rated to handle 3.5 watts output. Depth, 2 1/2". With 10" standard leads. Shpg. wt., 2 lbs.
E9303. 1000 ohm field.
E9304. 2500 ohm field.
E9305. 3000 ohm field.
List, \$3.75.
NET EACH **\$2.20**

5-INCH P.M. DYNAMIC

A new Quam 5-inch Permanent Magnet Dynamic speaker especially suited as replacement for battery and auto sets, or for use in inter-communication systems, or as extension speaker. Conservative output rating is 3.5 watts. Depth, 2 1/2". With universal output transformer. Shpg. wt., 3 lbs.
E9306.
YOUR NET PRICE... **\$2.65**

WRIGHT-DECOSTER SPEAKERS

UNIVERSAL NOKOIL DYNAMICS



A radically new design in Permanent Magnet type speakers. Provides the fine performance usually expected only from electro-dynamic reproducers. Uses new high permeability magnetic alloy. No current is required for field excitation. Rigid pressed steel frame. Excellent tonal characteristics. Ideal for all replacement purposes where a high-quality, moderately-priced speaker is required. Voice coil impedance is 5.3 ohms at 400 cycles. Equipped with universal transformers except on 5" model. All rated at 3 1/2 watts, except E9580 which is 8 watts.

No.	Model	Size	Depth	Wt.	NET
E9580	N5LU	5"	2 1/4"	2 lbs.	\$3.06
E9581	N6LU	6"	2 1/4"	2 1/2 lbs.	3.56
E9582	N8LU	8"	3 1/4"	3 lbs.	3.91
E9583	N10LU	10"	5 1/4"	5 lbs.	4.70
E9584	N12LU	12"	6 1/4"	6 lbs.	5.67
E9585	N12KU	12"	6 3/4"	8 lbs.	8.17

UNIVERSAL DYNAMICS

A high-grade line of speakers for universal application. Will replace any speaker with field resistances of 2500, 1800, 1500, 1000, 700, or 1800 ohms tapped at 300 ohms. Universal output transformer matches any output tubes.

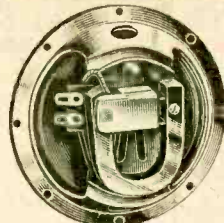
Cat. No.	Model No.	Speaker Size	NET EACH
E9590	E8KU	6"	\$3.53
E9591	E8LU	8"	4.12
E9592	F10KU	10"	4.70
E9593	F12KU	12"	5.67

HYFLUX MAGNETIC SPEAKERS

A new and improved type of magnetic speaker. Designed for use in both new and old construction. Compact assembly makes this speaker ideal for installation where space is at a premium, as in battery and auto sets, or in multiple extension speaker systems. Depth behind panel is less than 3 inches. Frequency response is unusually good. Rigidly constructed from finest materials for years of trouble-free service. 7,000 ohms impedance.

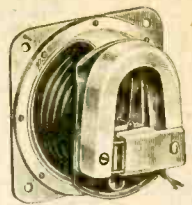
E9317. **\$2.35** | E9318. **\$2.65**
6" TYPE. | 8" TYPE.

KNIGHT MAGNETIC SPEAKERS



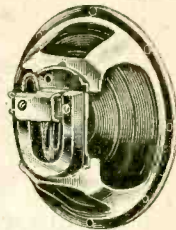
5-INCH MAGNETIC

A well-designed in Lidget type speaker, only 5 inches in diameter. Has rigid, pressed-steel frame and large-sized magnet. 5 to 1 1/2 size makes speaker ideal for use where space is limited. Provides unusually fine tonal response. D.C. resistance is 1000 ohms. An excellent replacement for all compact-type sets. Shpg. wt., 3 lbs.
E9251. NET..... **98c**



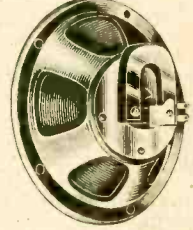
3-INCH MAGNETIC

The smallest efficient speaker on the market—only 3" in diameter. For use in pocket-sized midset sets, intercom systems, and small S.W. receivers. Rigid pressed-steel frame; full-sized magnet and coil. 2 1/2" mtg. centers.
E9459. With 3 1/2" mtg. flange. NET..... **98c**
E9458. Less flange. NET. 88c



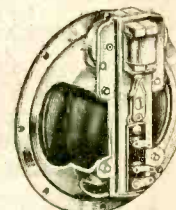
6-INCH MAGNETIC

A sturdy and powerful magnetic speaker only 6" in diameter. Has heavy pressed-steel frame and large magnet. Improved armature design; flexible diaphragm. Will handle up to 1 watt output. D.C. resistance, 1000 ohms. For use in battery and A.C.-D.C. sets, as extension speaker, etc. Shpg. wt., 4 lbs.
E9252. NET..... **\$1.25**



8 1/2-INCH MAGNETIC

A very efficient speaker which will handle up to 1 1/2 watts output without distortion. Has extra-flexible diaphragm and heavy-duty magnet. The D.C. resistance is 1000 ohms. Ideal for battery sets, as extension speaker, and for multiple speaker installations in hotels, schools, etc. Shpg. wt., 5 lbs.
E9253. NET..... **\$1.65**



NEW KNIGHT KINETIC SPEAKER

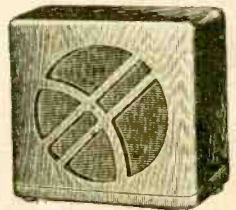
Expertly designed speakers employing new "Alnico" magnet alloy for greater sensitivity and power capacity in more compact space. Laminated armature with adjusting screw permits compensation for plate current changes. Superb tonal quality with excellent bass response. Ideal as replacements in portable, battery, or auto radios. Also valuable for multiple speaker installations where units may be used either as microphone or speaker. 5" model is 2 1/4" deep; 6 1/2" model is 2 3/4" deep. Small in size but powerful. Shpg. wt., 2 lbs. each.

5-INCH MODEL

E9525. 10,000 Ohms.
E9526. 500 Ohms.
List, \$3.50.
NET EACH..... **\$1.49**

6 1/2-INCH MODEL

E9527. 10,000 Ohms.
E9529. 500 Ohms.
List, \$4.00.
NET EACH..... **\$1.65**



CABINET MODEL 8 1/2-INCH MAGNETICS

Handsome new walnut wood cabinet speaker is ideal for use as extension speaker or for multiple speaker installations. Has attractive grill on both front and back providing full protection from dust. Speaker chassis is 8 1/2 inches in diameter, 3 1/2 inches deep. Has pressed-steel frame, large magnet, and improved armature structure. 1000 ohms D.C. resistance. Equipped with 6 foot cord. Available with or without self-contained volume control and switch. Shpg. wt., 8 lbs.
E9486. Less Volume Control and On-Off Switch. **\$2.98**

E9485. With Volume Control and On-Off Switch. **\$3.57**
NET

WALNUT CABINET ONLY

Attractive, rich walnut-finished speaker cabinet is also offered separately. Measures 9 1/4" x 9 1/4" x 3 1/2". Has grills at both front and back. Will house any 8" or 8 1/2" speaker.
E9449. **\$1.49**
NET.

TELEPHONES HEADPHONES Accessories

"REAL-PHONES" DUPLIX TELEPHONES



New two-way French style telephones that operate on dry cell batteries. A real economical convenience for use in home or business. They are easy to install and provide an efficient method of communication between two points. These phones are sturdy, compact, attractive, and modern. Furnished in sets of 2, they are intended for use only in pairs. Only two standard dry cells need to be added for each set in operation. Especially convenient as room-to-room or house-to-garage telephones. Equally useful in offices, schools, factories, public garages, restaurants, stores and for dozens of other applications. Full instructions for rapid connection are included. Shipping weight, 6 lbs.

COMPLETE SETS

Complete set consists of 2 Realphones with buzzers and 35 feet of wire. Additional wiring may be added. Available in four colors. Designed for use only in pairs.

PER SET OF 2
YOUR NET PRICE
E1980. Black. \$4.12
E1981. Green.
E1982. Silver.
E1983. Chinese Red.
Lots of 3 Sets Each, \$3.82.
PER SET

ACCESSORIES

The only accessories required, for either indoor or outdoor use, are listed below.

E8925. Dry Cells for use with Realphones. NET, EACH. **21c**
E1984. 100 feet 3 conductor connector cable for outdoor use. NET. **\$1.71**
E1985. 100 feet cable for indoor use. NET. **\$1.37**

MULTIPLE PHONE SYSTEMS FOR ALL PURPOSES

WE CAN SUPPLY multiple telephone systems for all types of installations. Write to us for descriptive literature on SERV-U-FONE systems providing from two to ten stations, including common-talk, selective and super-selective types. There is a system for every requirement. We are also prepared to quote attractive prices on switchboard and communication type multiple systems suitable for private installations in hotels or apartment houses. Write giving us full particulars, and we will quote promptly.

QUAM-NICHOLS 'PHONE SET



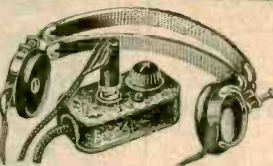
An all-purpose battery phone set which operates electrically to furnish efficient, low-cost intercommunication for homes, offices, factories, farms, camps, etc. Two dry cell batteries at each phone will carry voice and signal 750 feet; four dry cells at each phone will carry 2,000 feet and over. These are cradle-type phones made of durable pressed steel and finished in telephone black. Installation is extremely simple: all that is required is to string two wires running between the phones, hook up the batteries, and you're ready for clear, natural communication. Work like regular commercial phones; unbeatable for utility and economy. Sturdy and well-designed built for dependable, long-life service. Furnished with 70 feet single conductor wire. Less dry cells. For extra wire see page 140. Shpg. wt., 4 lbs. **\$2.65**
E2811. NET.

BRUSH "HUSHATONE"

THE PILLOW SPEAKER

An entirely new and efficient pillow-type speaker. Exclusive Brush principle provides perfect reproduction of entire audible range. Permits the user a more comfortable method of enjoying radio programs and allows complete relaxation at the same time. It may be placed under pillow on bed, couch or chair. Permits genuine radio entertainment without disturbing or interfering with others in the room. The volume is regulated by the volume control on the set. Measures only 3 1/2" x 2 1/4". Supplied with ample length rubber-covered cord. Easily and quickly installed in any receiver and is particularly useful with portable or A.C.-D.C. sets. The Brush "Hushatone" pillow speaker is not only useful in the home but is an invaluable aid and comfort in hospitals and sanitariums where individual wall plugs are available. Shipping weight, 1 lb. **\$2.94**

E1203. NET. **\$2.94**
E1214. INSTITUTIONAL MODEL. Housed in sponge rubber; may safely be dipped into liquid for sterilization. **\$4.41**
NET



Model 643

TRIMM QUIET RADIO HEADPHONE ATTACHMENT

Designed to be attached to the speaker voice coil of any radio receiver. It permits the operation of either headphones or speaker, or both at the same time. Can be easily and quickly attached. The adapter has built-in switch and phone-jack with four foot extension cord. Headphones are extremely compact, light and sensitive. Shpg. wt., 4 lbs. **\$2.59**

E5267. Model 647. **\$2.59**
YOUR PRICE.
Model 643. As illustrated. Uses bakelite shell and cap type. Forged magnet. **\$3.50**
E5264. List, \$5.95. NET. **\$3.50**

FOR HARD-OF-HEARING

Model 641. Same as above but fitted with a bone conduction unit. Especially desirable where regular type phones are unsatisfactory. **\$1.76**
E5268. List, \$20.00. **\$11.76**
NET.

HEARING-AID CONTROL BOX

Designed for use in multiple hearing-aid installations in schools, theaters, churches, etc. Permits adjustment of volume to suit individual hard-of-hearing needs. Resistance, 50,000 ohms. Small and compact; only 1 1/2" x 2 1/4". Has two tip jacks for plugging in headphones, and two mounting holes for pew installation. Corners and edges are rounded. Brown crystalline finish. With 4 ft. rubber covered equipment. **\$1.59**
E12089. **\$1.59**
YOUR PRICE.



WESTERN ELECTRIC HEADSET

Type 1002C. Used in U.S. Government service. Pole pieces are made of silicon steel for greater magnetic flux. Combined resistance of set is 2200 ohms. At voice frequencies, impedance is about 20,000 ohms. Has nickel-plated brass cases with bakelite ear caps, steel headband with textile webbing, and adjustable yokes and slide rods. With phone cord. **\$9.30**
E1205. NET. **\$9.30**



TRIMM HEADPHONES FEATHERWEIGHT PHONES

Very compact phones. Weight only 4 ounces. Bakelite shells and caps. Forged magnets of best Cobalt steel. Adjustable spring steel headband. Diameter only 2 3/16". Custom built for Amateurs, Aircraft, Hard-of-Hearing, etc. Ideal for general purpose work. Special (24,000 ohms impedance) phones are especially for short wave work and have a 35% Cobalt steel magnet. **\$5.88**
E5270. 4000 Ohms Standard. **\$5.88**
E5271. 24,000 Ohms Special. **\$5.88**
List, \$10.00. EACH PAIR.



SINGLE UNIT PHONES LORGNETTE HANDLE

Single unit Trimm featherweight phone with adjustable 14-inch telescoping metal handle. Bakelite cased unit is adjustable to any angle. Terminals are inside of case. Efficient and adaptable for group hearing-aid church systems. Ample extension cord. Wt. 3 lbs. **\$3.97**
E5275. List, \$6.75. **\$3.97**
NET



HEADBAND STYLE

With adjustable steel headband. Ideal for hearing-aid installations in churches, theaters, schools, lodges, etc. **\$3.67**
E5273. List, \$6.25. NET. **\$3.67**

TRIMM PROFESSIONAL PHONES

A high quality standard type-headphone, suitable for battery, crystal and short-wave sets, as well as for multiple installations. Has bakelite case and cap. Perfectly matched units assure long life. With cords. Cord terminals are inside case. **\$2.47**
E5276. 3000 OHMS. **\$2.47**
E5277. 4000 OHMS. **\$2.47**



List, \$4.20
NET EACH

TRIMM COMMERCIAL PHONES

Ultra-sensitive headset of rugged construction and light weight. Leather-covered headband with exclusive spring lock and adjusting clamp. **\$9.40**
E5265. 600 Ohms. **\$9.40**
E5266. 17,000 Ohms. EACH. **\$9.40**

We can supply Trimm Featherweight and Professional phones in any special resistance desired, from 1 ohm to 2400 ohms, each unit, at no extra cost. Please remit deposit with your order.

CANNONBALL MASTER HEADSETS

An improved high resistance type headset of excellent quality. Heavy bar magnet assures maximum sensitivity. Terminals are placed inside of case, assuring greater safety. The flexible headband is easily adjusted by means of handy knurled fastening nuts. Had 4 1/2 foot mercerized cotton-covered cord. These efficient Cannonball Master phones are particularly adaptable for use in hospitals and institutions. Compact and light, they permit the user to enjoy radio programs for hours without discomfort or disturbance to others. Supplied with lightweight stainless-steel headband. Shpg. wt., 2 lbs. **\$2.35**
E2805. 5000 OHMS. NET. **\$2.35**
E2804. 3000 OHMS. **\$1.85**
YOUR PRICE.



Hospitals, Schools and Institutions for the Hard-of-Hearing, Sanitariums, Prisons, etc., are invited to write for attractive quantity prices on Cannonball headsets. Outline your requirements, and a price quotation will be sent promptly without obligation.

CRYSTAL SETS HEADPHONES Accessories

ACME FEATHERWEIGHT HEADPHONES



VALUE LEADER
Sensitive, durable, and practical for every headset use. Light as a feather. Each unit weighs less than 1½ ounces; total weight is only 5 ounces. Recommended especially for Amateurs, SWL's, hard-of-hearing, and multiple phone installations. Case is of non-breakable aluminum with light tension flexible headband. Cord is 4½ ft. braid-covered.

E5250. 4,000 Ohms. (2,000 per phone.) NET..... **\$1.20**
E5251. 2,000 Ohms. (1,000 per phone.) NET..... **95c**

SINGLE ACME HEADSETS

A lightweight single unit phone with headband exactly as described above. With cord.
E5278. 2,000 Ohms. **70c**
YOUR PRICE.....
E5279. 1,000 Ohms. **59c**
YOUR PRICE.....

DIAPHRAGMS FOR ABOVE

E5252. For Acme Featherweight phones. NET EACH..... **5c**



BRANDES SUPERIOR

A high quality ruggedly-built headset which has been a favorite for years. Outside terminal type, with aluminum cases and bakelite caps. Diaphragm diameter is 2½". Has 400 Ohm coils, two in each receiver; adjustable stainless steel piece headband; and 4½ foot cotton-covered cord. Magnets are made of chrome magnet steel, ¼" square. Resistance is 2400 ohms per pair. Wt. 2 lbs.

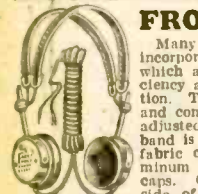
E2908. **\$1.59**
YOUR PRICE.....

BRANDES "ADMIRAL" PHONES

Similar to the phones above, but with terminals inside of case. Sturdy and lightweight—excellent for all-around use.
E2909. 2000 Ohms. **\$1.89**
YOUR PRICE.....
E2910. 3000 Ohms. **\$2.06**
YOUR PRICE.....
E2911. 5000 Ohms. **\$2.49**
YOUR PRICE.....

CAPS AND DIAPHRAGMS

E2801. CAPS. **18c**
YOUR PRICE. EACH.....
E2802. DIAPHRAGMS. **5c**
YOUR PRICE. EACH.....



FROST PHONES

Many superior features are incorporated in Frost phones which add greatly to their efficiency and quality of reproduction. They are light in weight and comfortable to wear; easily adjusted to fit the head. Headband is double type, with woven fabric covers. Units have aluminum shells and hard rubber caps. Cord terminals are inside of case, to prevent accidental shock. Have been sold for many years to discriminating amateurs. With cords. Shipping weight, 2 lbs.

E3251. 3000 OHMS. **\$1.65**
YOUR PRICE.....
E3250. 2000 OHMS. **\$1.48**
YOUR PRICE.....

HEADPHONE CORD

E3254. Standard length, double headphone cords. Cotton-covered. NET..... **33c**

HEADPHONE PLUG

E3252. Takes 2 phones. Has extra wide screws, hold this tight. NET..... **15c**

BRUSH CRYSTAL HEADPHONES

TYPE A

High sensitivity headphones of new piezo-electric design. For Amateurs, Short Wave fans, monitoring, measurement work, etc. Have unusually high impedance and wide frequency response between 60 and 10,000 cycles. These phones are ideal for all applications. When used in circuits carrying direct current a small blocking condenser is required. Weight including band and cord only six ounces. One of the finest headsets made. Quality-built units. NET..... **\$5.29**



SINGLE UNIT TYPE A PHONES

E1201. Single phone with metal headband. List. \$5.00. NET..... **\$2.94**
E1202. Single phone with lornette handle. List. \$6.50. NET..... **\$3.82**

BRUSH TYPE B HEADPHONES

High-fidelity, light-weight, hermetically sealed headphones. Weight is only 3½ oz. Headphone connectors are of the snap connector type. Caps are burnished tightly to the aluminum case for permanent alignment. NET..... **\$5.29**

SINGLE UNIT TYPE B PHONES

E1206. Single phone with metal headband. NET..... **\$2.94**
E1207. Single phone with lornette handle. NET..... **\$3.82**

PHILMORE SETS & KITS

ONE TUBE BATTERY KIT

An efficient and sensitive 1 tube Philmore battery set in kit form. Employs plug-in type coils. Tunes from 13 to 530 meters covering Amateur, Police Calls, Short-wave, Broadcast bands, etc. Has amazing volume and clearness. Especially suited for use in camp or on farm. With coil for broadcast band (200 to 530 meters). Easy to assemble from clear instructions. Also available completely assembled. Shpg. wt. 5 lbs. Less than 200 Batteries. NET PRICE, PARTS KIT ONLY..... **\$1.18**



E7238. As above but completely wired. NET..... **\$1.65**
E7239. Batteries, 1-1½ V., 1-45 V. \$1.15
E7245. Kit of 4 coils (13-240 meters)..... **.72**
E915. Type 30 Tube..... **.40**

2 TUBE BATTERY KIT

Mounts on attractive panel. Uses 2 type 30 tubes. These Philmore sets when assembled are powerful enough to operate several sets of headphones at the same time. With plug-in broadcast band coil. Quickly assembled. Kit includes complete instructions. NET PRICE, PARTS KIT ONLY..... **\$1.49**

E7240. Less Tubes and Batteries. NET PRICE, PARTS KIT ONLY.....
E7241. As above but completely wired. NET..... **\$1.89**
E7242. Batteries, 1-1½ V., 2-45 V. \$2.09
E7245. Kit of 4 coils (13-240 meters)..... **.72**
E915. Type 30 Tubes. EACH..... **.40**

2 TUBE A.C.—D.C. KIT

A reliable Philmore 2 tube electric receiver kit. Will operate from 110 volts A.C. or D.C. Reception is strong and clear. Uses 2 type 76 tubes. Coil supplied is of the plug-in type covering broadcast band. Coil kit permits tuning short-wave, amateur bands, police calls, etc. A really efficient and economical electric set. Can be bought assembled if preferred. Wt., 5 lbs. NET PRICE..... **\$2.25**

E7243. Less tubes. NET PRICE.....
KIT OF PARTS ONLY..... **\$2.65**
E7244. As above but completely wired. NET.....
E7246. Kit of 4 coils (13-240 meters)..... **.72**
E946. Type 76 Tubes. EACH..... **.32**

PHILMORE PORTABLE TWO TUBE "SUPREME"

Now you can have loudspeaker performance in a low-draw, portable battery receiver. This remarkable set covers the complete Broadcast band and employs a full 5" magnetron speaker which delivers clear, undistorted tone. Uses 1-22½ volt "B" battery and 2-1½ volt dry cells; and 1 type 19 and 1 type 49 tubes. Type 19 is a dual-purpose tube, making for three-tube efficiency. Employs highly efficient regenerative circuit, providing excellent selectivity. Fibre carrying case. With tubes, but less batteries. Size 8"x6"x5½". Shpg. wt., 5 lbs., less batteries. NET..... **\$5.98**



E9320. NET.....
E9321. Battery Kit. Consists of 1-22½ volt "B" battery and 2-1½ volt dry cells. NET..... **\$1.01**

CRYSTAL SETS

NEW ICA TOPNOTCH

A super-sensitive crystal set which brings in many stations with exceptional clarity and volume. Housed in a handsome crystalline metal case. Crystal is mounted under a dust-proof glass cover. Has beautifully engraved calibrated dial. Solenoid coil assures clear, strong reception. NET..... **88c**



CARRON MIDGET

Midget model crystal radio set that economically provides genuine radio enjoyment. Built into a sturdy solid walnut cabinet. Has spring action locator and station selector knob. Complete with special earphone and roll of ground wire. 4"x3"x2½". Wt., 3 lbs. NET PRICE, PARTS KIT ONLY..... **\$1.31**



E9310. Set Only. NET..... **88c**

CARRON JUNIOR

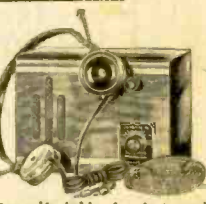
Larger size of the above crystal set. Has the same working characteristics. Attractive solid walnut cabinet of modern design. With spring action locator and easy-to-adjust crystal. Supplied with earphone on metal headband and coil of ground wire. 5"x4½"x3¾". Wt., 5 lbs. NET PRICE, PARTS KIT ONLY..... **\$1.98**



E9312. Set Only. NET..... **\$1.47**

CARRON DELUXE

A unique crystal set in a solid walnut cabinet with real inlay strips. Unusually attractive and has the appearance of a small A.C.—D.C. set. Same tuning features as above. Easy to operate. Complete with double adjustable headset and coil of ground wire. 6"x5½"x3¾". Wt., 8 lbs. NET PRICE, PARTS KIT ONLY..... **\$3.29**



E9315. Complete with Accessories. NET..... **\$3.29**
E9314. Set Only. NET..... **\$2.35**

HEADPHONES CRYSTAL SETS Accessories

AMERICAN BELL 'PHONES



These unusually sensitive and efficient headphones, produced by one of America's foremost manufacturers, are noted for tonal fidelity and clarity. Their aluminum shells and caps make them light in weight; one-piece stainless steel light-weight headband adds to comfort in wear and long-life utility. High-grade magnet gives extra retentivity. Shpg. wt., 2 lbs.

WITH METAL CAPS
E2807.
3000 Ohms.
YOUR PRICE. **\$1.25**
E2806.
2000 Ohms.
YOUR PRICE. **97c**

3000 OHMS WITH BAKELITE CAPS

The same sensitive and efficient headphones as above, but equipped with black bakelite caps instead of aluminum. A real value in a high-quality sensitive headphone.
E2812. YOUR PRICE. **\$1.32**

DIAPHRAGMS

E2809.
YOUR PRICE, EACH. **5c**

EXTRA ALUMINUM CAPS

E2808.
PRICE, EACH. **12c**

AMERICAN BELL SINGLE HEADPHONE



A comfortable dependable single unit headphone which is easy to wear. Has a single spring steel headband. Built of lightweight construction. May be used on any set equipped for phones; ideal for multiple hearing-aid installations. Complete with cord. An outstanding headphone value.

E2813.
1000 ohms.
YOUR PRICE **66c** | E2814.
1500 ohms.
YOUR PRICE **79c**

CRYSTALS & CRYSTAL DETECTORS

OPEN TYPE DETECTOR



Universal Joint on swivel arm provides quick, accurate adjustment on any point of the very sensitive crystal. Handsome polished metal finish. Complete with crystals.

tal. Wt. 8 oz.
E7062.
10 for \$1.10.
Each. **12c**

FIXED CRYSTAL DETECTOR



A very good value. Extremely sensitive. Selected crystals are meter-tested and permanently adjusted. Housed in compact bakelite case. Eliminates bother of continual adjustment for sensitive spot. Pre-tested.

E7063.
List. \$1.00.
NET EACH. **43c**

METER TESTED CRYSTAL



These crystals are tested in laboratory on very sensitive meters. Crystal is of genuine Galena composition. Fit all crystal sets.

E4150.
YOUR PRICE. **19c**

SENSITIVE MOUNTED CRYSTAL



Carefully tested mounted crystal. Sensitive galena. Fits all standard crystal sets.

E4151 10 for 55c.
NET EACH. **6c**

GLASS ENCLOSED DETECTOR



A low-cost high-grade dust-proof glass enclosed detector; complete with supersensitive crystal. Standard in 90% of the crystal sets made. A fast selling item. Shpg. wt., 8 oz.

E7061.
YOUR PRICE. **22c**

FEDERAL FIXED DETECTOR



This fixed detector will give more selectivity to crystal sets or reflex circuits. Sensitivity is permanently fixed. Mounted in small bakelite case with screw connectors. Pre-tested.

E4154.
List. \$1.00.
NET. **53c**

CAT-WHISKERS

Set of three. Correctly designed and made of the finest quality wire.

E4152.
10 for 80c
Each. **9c**

COMFORT EARPHONE CUSHIONS



A real necessity for those who wear headphones consistently. Makes them comfortable and easy to wear. Made of soft sponge rubber. Sanitary and practical. Will fit all types of phones.

E2810. YOUR PRICE, PER PAIR. **22c**
10 PAIRS. **\$1.95**

PHILMORE CRYSTAL SETS

THE SELECTIVE



Designed to give most efficient results and possessing unusual selectivity. Built with a tapped coil matched with a .00035 Mfd. variable condenser. The reception on this set is loud and clear. It is exceptionally sensitive and very easy to tune. It has double connection posts making possible the use of two pairs of headphones at one time. The next thing to a tube set at the lowest possible price. Contained in a crackle finish cabinet. Shipping weight, 3 lbs.

E7053. List. \$5.00. NET. **\$2.35**

THE BLACKBIRD

The "Blackbird" is a first quality crystal set presented at the lowest possible price. It requires no tubes or batteries and delivers programs loud and clear without distortion. Housed in crystalline finish metal cabinet with attractive front panel. It employs a dust-proof glass-enclosed supersensitive crystal detector making possible the best of results. A fast seller everywhere. Accessories of good quality are listed below. Shpg. wt., 3 lbs.

E7050.
List. \$3.00.
NET. **\$1.62**



NEW SUPERTONE

A well-constructed crystal set which will give unlimited service. Offers the utmost in entertainment on local stations with the excellent chain programs now being broadcast from stations all over the country. A sensitive crystal is enclosed in a dustproof glass casing. In bakelite case.

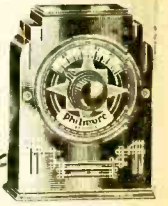
Shpg. wt., 2 lbs.
E7051. List. \$1.50. NET. **69c**



PHILMORE DE LUXE

A De Luxe Crystal set in a modernistic bakelite cabinet. Just turn the handy pointer knob to select the station you desire. Has attractive, easy-to-read, calibrated dial. Fixed crystal detector is permanently sealed on sensitive spot for instant reception. Thoroughly efficient and easily operated by old or young. Accommodates two sets of headphones. Requires only aerial, ground, and headphones for immediate use. A fine value at our low price. Will give good reception with minimum cost.

Shpg. wt., 2 lbs.
E7233. NET. **\$1.95**



CRYSTAL SET ACCESSORY KIT

Complete equipment for operating any of the above crystal sets. Consists of a set of good quality headphones, aerial and ground wire, lead-in strip, lightning arrester, insulators and all necessary parts for a perfect aerial installation. Shpg. wt., 4 lbs.

E7054. YOUR PRICE. **\$1.39**

PHILMORE "DWARF" 1 TUBE SET



The tiniest, self-contained, portable radio made; measures only 5 1/2 x 4 1/2 x 3 1/2", weighs only 1 1/2 lbs. Easily carried anywhere; no electric current necessary. Covers broadcast band; has clear calibrations, tuning and volume controls, "on-off" switch. Uses one low-drain type 30 tube and two 2-cell flashlight type batteries. Supplied complete with tube, batteries, single earphone.

E7232. NET. **\$2.98**

PHILMORE PORTABLE BATTERY SET

A fine new portable receiver that is light, easy to handle, and a splendid performer. Covers the complete broadcast band. Single tuning control makes it easy to tune. Uses a specially designed high "Q" coil system for maximum sensitivity and selectivity. Has tapped antenna setting for maximum pickup selection. Tubes used draw less than one milliamperes for economical battery life. Batteries required: 2 small 1 1/2 volt dry cells, 2 small 4 1/2 volt "C" batteries. Uses one type 30 and one type 49 tube. Tube carrying case; compact, 5 1/2 x 8 1/2 x 7 1/2". Less tubes, batteries and accessories.

E7069. List. \$11.00.
YOUR PRICE. **\$5.98**



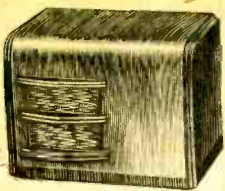
COMPLETE ACCESSORY KIT

Kit includes: 1 type 30 and 1 type 49 tubes, complete set of five Burgess batteries, 1 set of sensitive headphones and 25 ft. of aerial wire. These items all fit in same case with the set.

E7066. YOUR PRICE. **\$3.75**

ALLIED'S PAGE OF *Special* VALUES

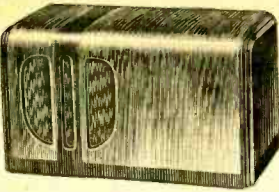
TABLE MODEL RADIO CABINETS



MODEL 115

A solidly constructed midget type cabinet. Just the thing for set kits, intercommunication systems, extension speakers, etc. Face woods are made of walnut veneer. Beautifully rounded at the top to conform with modern furniture appointments. Evenly balanced and shaped grille bars cover a modernistic grille cloth over speaker opening. Inside dimensions: 9 1/4" wide, 6 3/4" high, 6" deep. Shpg. wt., 3 lbs.

E10600. **\$2.04**
NET



MODEL 519

A medium-sized table model cabinet of modern design. Speaker opening has vertical cross bars over modernistic woven grille cloth. Walnut veneer is of two-toned design. Designed to accommodate larger type midget chassis and some table model chassis. Inside dimensions: 15" wide, 8 1/2" high, 7 5/8" deep. Shpg. wt., 6 1/4 lbs.

E10602. **\$3.30**
NET

MODEL 620

E10603. Slightly different from above and larger. Inside measurements: 18" wide, 9 1/4" high, 8 1/2" deep. Shpg. wt., 8 lbs.

NET

MODEL 216

E10601. Same as above but has speaker openings on both ends instead of on front panel.

\$2.07
NET

KNIGHT PORTABLE



A spring-wound portable for picnics, picnics and completely necessary to connect reproduction. Comes with black water American-made nickel on a winding. P.P. Has "Slow-Past" tuning are controlled located on top heavily nickel-acoustically the very finest this type of music in top cover. \$14.36. Shpg.

E10193. NET

SPECIAL VALUES IN AUTO AERIALS



The finest hinge-type auto antennas available at these standard prices. Will look good on any car, new or old. Easily installed by anyone in 5 minutes. Mounts on any automobile door-hinge. Merely knock out hinge-pin with nail, slip hinge-pin through bracket supplied with aerial, and drive pin back into hinge. 37" long. Supplied with lead-in.

E10453. Rustproof satin finish. Will not "whip" while car is in motion. **39c**

YOUR SPECIAL PRICE

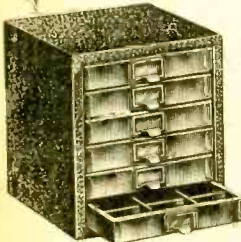
LOTS OF 6.....\$2.10

E10454. A two section chrome-finished brass antenna. 25" in length; extends to 42". Hinge whip type with lead-in. **65c**

YOUR SPECIAL PRICE

LOTS OF 6.....\$3.50

ALL-STEEL PARTS CABINET

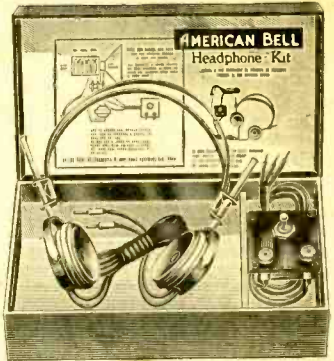


Just what every Serviceman needs. A small-parts cabinet for the numerous small items every serviceman has around the shop. Can also be used in house workshop, office, store, garage, etc. Ideal for the fisherman's supply of fish hooks, sinkers, leaders, etc. Drawers have separators for different sized items. Finished in dark green ripple. Utility cabinet measures 13 1/4" long, 10 1/4" wide, 11 1/2" high. Shpg. wt., 22 lbs.

E10605. NET **\$3.69**

AMERICAN BELL SILENT RADIO HEADPHONE ATTACHMENT

- PERMITS USE OF HEADPHONES OR SPEAKER ALONE OR TOGETHER
- IDEAL FOR LATE-NIGHT RADIO LISTENING
- PROVIDES BETTER DX AND FOREIGN RECEPTION
- EXCELLENT FOR PERSONS WHO ARE HARD-OF-HEARING
- DESIGNED FOR QUICK AND SIMPLE INSTALLATION
- SUITABLE FOR USE WITH ANY RADIO SET



The new American Bell Silent Radio Headphone Attachment combines real convenience with fine versatility. Suitable for installation on any radio set, this unit permits you to silence your radio set, loudspeaker and listen to any program by headphone in your room. Or, you can use it with any other silent radio set.

ng others in the same d the headphones sim- radio enjoyment.

RADIO SET

usually adaptable and Only a few minutes say-to-understand in-headphones are in- it disturbing anyone radio programs with ear DX and foreign reproduced through thoroughly enjoyed Persons who are best through the gram through the er entirely. This radio utility and ance headphones.

\$1.95

with any good edance **85c**

ES IN TORS



omy-type ment in- popular these kits several **18c**

quality **19c**

SECTION 7

ALLIED RADIO CORP.
833 W. JACKSON BLVD.
CHICAGO, ILLINOIS

Name _____
Street or RFD and Box _____
Post Office _____
State _____

FROM:





It's Easy to Order FROM ALLIED!

OUR TERMS

Our low prices to you are the result of efficient organization and the most economical merchandising methods. We buy for cash and sell for cash. The savings are passed on to you in the lowest prices and best values in the radio industry. **Our terms of sale are cash with order or C.O.D.** We ship C.O.D. if you wish (except on orders for special merchandise); new customers are requested to include a 20% remittance with first orders when specifying C.O.D. shipment. A 20% deposit should also be included with C.O.D. orders for heavy items such as windchargers, batteries, generators and console receivers. All quotations in this catalog are net, F.O.B. Chicago (except where noted). **ALLIED** will always give you the benefit of any price reductions. **All prices are necessarily subject to change without notice.** (We reserve the right to add any Federal or State Taxes which may be levied after this book is printed.) See Sound Systems, Test Instruments and Amateur Receivers sections of this catalog for merchandise available on Time Payment Terms.

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It's Easy to Order. Use our convenient order blanks which are bound into this catalog. Type or print your name and address in full and specify whether shipment is to be made by Express, Parcel Post or Freight. List the items you want—one to a line—making sure to give the correct catalog number for each item. Enter correct prices and make extensions carefully. Then total your order and make your remittance large enough to cover both the cost of the merchandise and shipping charges (unless C.O.D. shipment is requested). Additional order blanks and envelopes are packed with each order and will also be sent on request.

PARCEL POST SHIPMENTS

See the table immediately below for parcel post rates. If in doubt, ask your postmaster for your zone number and charges on items for which weights are shown, or write to us. Save C.O.D. charges by sending enough money to cover postage. Any surplus will be promptly refunded. If remittance does not cover postage, shipment will be made C.O.D. for the balance. For your protection all our parcel post shipments are insured. Allow for insurance at the following rates:

Up to \$5.00	5c
\$5.00 to \$25.00	10c
\$25.00 to \$50.00	15c
\$50.00 to \$100.00	25c

How to Send Money. Remittance may be made most safely by post office or express money order, bank draft or check. Avoid sending coin or currency, but if necessary, be sure to register your letter. For special haste, your order and money may be telegraphed through any Western Union or Postal Telegraph station. Make allowance for postage on parcel post orders. Prompt refund of any excess follows shipment. For greatest convenience, do not include transportation charges for express and freight shipments unless there is no agent at your station. Express and freight shipments are sent transportation collect.

EXPRESS SHIPMENTS

Radio Sets, Windchargers, Generators, Storage batteries and any items in this catalog which we have indicated as not available, should be shipped by express or freight. In general, it is best to send radios and bulky merchandise by express rather than by parcel post. This assures quick shipment and safe delivery. If there is no express agent at your location, please be sure to specify your nearest express office. All express shipments are insured. For shipping charges on any items for which weights are shown, refer to your local Railway Express agent or write to us. Express charges need not be included in your remittance. Shipment will be made collect.

HOW TO ESTIMATE PARCEL POST RATES

(For U.S. only. Postage rate to Canada is 14c per pound.)
Packages Under 8 Ounces, Allow 1½c Each 2 Ounces

WEIGHT IN POUNDS	ZONES							
	First, Up to 50 MILES	Second, 50 to 150 MILES	Third, 150 to 300 MILES	Fourth, 300 to 600 MILES	Fifth, 600 to 1000 MILES	Sixth, 1000 to 1400 MILES	Seventh, 1400 to 1800 MILES	Eighth, Over 1800 MILES
1	8c	8c	9c	10c	11c	12c	14c	15c
2	10c	10c	11c	14c	17c	19c	23c	26c
3	11c	11c	13c	17c	22c	26c	32c	37c
4	11c	12c	15c	21c	27c	33c	41c	48c
5	13c	13c	17c	24c	33c	40c	50c	59c
6	14c	14c	19c	28c	38c	47c	59c	70c
7	15c	15c	21c	31c	43c	54c	68c	81c
8	16c	16c	22c	35c	49c	61c	77c	93c
9	17c	17c	23c	38c	54c	68c	86c	\$1.03
10	18c	18c	24c	42c	59c	75c	95c	1.14
11	19c	19c	25c	45c	64c	82c	\$1.04	1.25
12	21c	21c	27c	49c	70c	89c	1.13	1.36
13	22c	22c	33c	52c	75c	96c	1.22	1.47
14	23c	23c	35c	56c	80c	\$1.03	1.31	1.58
15	24c	24c	37c	59c	86c	1.10	1.40	1.69
16	25c	25c	39c	63c	91c	1.17	1.49	1.80
17	26c	26c	41c	66c	96c	1.24	1.58	1.91
18	27c	27c	43c	70c	\$1.02	1.31	1.67	2.02
19	28c	28c	45c	73c	1.07	1.38	1.76	2.13
20	29c	29c	47c	77c	1.12	1.45	1.85	2.24
For Each Additional Pound Add	1c	1c	2c	3½c	5c	7c	9c	11c

FREIGHT SHIPMENTS

You save by ordering merchandise sent by freight where rapid shipment is not essential and merchandise selected weighs approximately 100 pounds or over. The minimum freight charge is for 100 pounds. If you have a freight agent, do not send shipping charges. If you are on a pre-paid station, please send funds to pay charges in advance. Any surplus will be promptly refunded. Charges are the same whether prepaid or collect. If there is no freight station at your location, please be sure to specify your nearest shipping point.

SHIPMENTS TO U.S. TERRITORIES

Orders from U.S. Territories and Possessions always receive special attention. All parcel post C.O.D. orders should include a 20% deposit. Remit in full for merchandise plus eighth zone postage on parcel post orders to the Philippine Islands and the Canal Zone. There is no parcel post C.O.D. service to these territories. Console sets, Windchargers, Generators and items which we have indicated as not available are shipped by freight. Terms on freight shipments are 50% deposit, balance by draft attached to shipping documents. All freight shipments are carefully boxed with no charge for export packing.

CHICAGO CUSTOMERS

For handy quick counter service, visit our City Salesroom. Free parking lot available for our customers. Service Engineers and Licensed Amateurs are always on hand to serve you. If you can't come in, phone your requirements to our City Order Department for prompt delivery. All telephones: HAYmarket 6800.

OVERSEAS CUSTOMERS

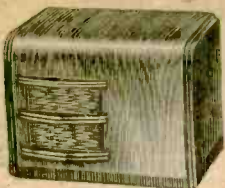
We are Radio Supply Headquarters to the World and serve any export market with every conceivable requirement in radio receivers, parts, sound equipment, etc. To serve our large Overseas trade, our Export Department is staffed with specialists best qualified to know and satisfy your needs. Write for our complete Export Literature.

WE INVITE YOU

On your next visit to Chicago, be sure to visit us in our enlarged Radio Headquarters at 533 W. Jackson Blvd., conveniently located on the edge of Chicago's "Loop." See the famous **Knight Radio Sets and Sound Systems** on display and hear them in actual operation. Visit our Recording Studio. Take advantage of the many service facilities available.

ALLIED'S PAGE OF *Special* VALUES

TABLE MODEL RADIO CABINETS



MODEL 115

A solidly constructed midget type cabinet. Just the thing for set kits, intercommunication systems, extension speakers, etc. Face woods are made of walnut veneer, beautifully rounded at the top to conform with modern furniture appointments. Evenly balanced and shaped grille bars cover a modernistic grille cloth over speaker opening. Inside dimensions: 9 1/4" wide, 6 3/4" high, 6" deep. Shpg. wt., 3 lbs. **E10600. NET \$2.04**



MODEL 519

A medium-sized table model cabinet of modern design. Speaker opening has vertical cross bars over modernistic woven grille cloth. Walnut veneer is of two-toned design. Designed to accommodate larger type midget set chassis and some table model chassis. Inside dimensions: 15" wide, 8 1/4" high, 7 1/2" deep. Shpg. wt., 6 1/2 lbs. **E10602. NET \$3.30**

MODEL 620

E10601. Same as above but has speaker openings on both ends instead of on front panel. **NET \$2.07**

E10603. Slightly different from above and larger. Inside measurements: 18" wide, 9 1/4" high, 8" deep. Shpg. wt., 8 lbs. **NET \$4.20**

KNIGHT PORTABLE PHONOGRAPH



A spring-wound portable phonograph. Ideal for picnics, play-rooms, clubs, etc. Compact and completely self-contained. It is not necessary to connect to radio or amplifier for record reproduction. Covered and lined inside and out with black water-proof artificial leather. New American-made motor plays 2 or more records on a winding. Plays both 10 and 12" records. Has "Slow-Fast" control. Starting and stopping are controlled by friction shoe conveniently located on top panel. All hardware is acoustically correct tone chamber assure the very finest reproduction available from this type of machine. Record compartment in top cover. Size: 11"x14"x6". Shpg. wt., 12 lbs. **E10193. NET \$7.75**

AMERICAN BELL SILENT RADIO HEADPHONE ATTACHMENT

- PERMITS USE OF HEADPHONES OR SPEAKER ALONE OR TOGETHER
- IDEAL FOR LATE-NIGHT RADIO LISTENING
- PROVIDES BETTER DX AND FOREIGN RECEPTION
- EXCELLENT FOR PERSONS WHO ARE HARD-OF-HEARING
- DESIGNED FOR QUICK AND SIMPLE INSTALLATION
- SUITABLE FOR USE WITH ANY RADIO SET



The new American Bell Silent Radio Headphone Attachment combines real convenience with fine versatility. Suitable for installation on any radio set, this unit permits you to silence your radio set loudspeaker and listen to any program by headphones without disturbing others in the same room. Or, you can operate both the speaker and the headphones simultaneously, thus giving the hard-of-hearing full radio enjoyment.

EASILY ATTACHED TO ANY RADIO SET

The Silent Radio Headphone Attachment is unusually adaptable and can easily be installed by anyone on any radio set. Only a few minutes are required to make the attachment and full, easy-to-understand instructions are furnished. Special low-impedance headphones are included to offer unusually fine tone quality. Without disturbing anyone else in the room, you can listen to your favorite radio programs with full enjoyment. You can also pick up and clearly hear DX and foreign stations which are not always readily audible when reproduced through loudspeaker. Late-at-night listening can now be thoroughly enjoyed without fear of disturbing the family or neighbors. Persons who are hard-of-hearing can also enjoy modern radio at its best through the headphones, while others may listen to the same program through the radio set's loudspeaker, or may switch off the speaker entirely. This new unit will easily pay for itself through increased radio utility and enjoyment. Supplied complete with special low-impedance headphones, lightweight headband, 6-foot cord, and adapter unit with switch.

- E2912.** Complete with headphones. NET **\$1.95**
- E2913.** ADAPTER ATTACHMENT ONLY. For use with any good pair of headphones, but offers best results with low-impedance (11 ohms) 'phones as supplied above. NET **85c**

SPECIAL VALUES IN AUTO AERIALS



The finest hinge-type auto antennas available at these stand-out prices. Will look good on any car, new or old. Easily installed by anyone in 5 minutes. Mounts on any automobile door-hinge. Merely knock out hinge-pin with nail, slip hinge-pin through bracket supplied with aerial, and drive pin back into hinge. 37" long. Supplied with lead-in.

- E10453.** Rustproof satin finish. Will not "whip" while car in motion. **YOUR SPECIAL PRICE \$2.10**
- E10454.** A two section chrome-finished brass antenna. 23" in length; extends to 42". Hinge whip type with lead-in. **YOUR SPECIAL PRICE \$3.50**

NEW "TINY KNIGHT" 4 TUBE AC-DC KIT

Here is a smash scoop! You can now build your own "tiny set"—small enough to fit in the palm of your hand, and yet strong enough to give you "big set" results. Uses four new "Bantam" tubes in a circuit where every tube works. Full dynamic speaker. Tunes all standard Broadcast programs from 550 to 1500 K.C. Kit includes all necessary parts (less tubes). In a few short hours and with only a screwdriver, pliers, and soldering-iron, anyone can assemble this set. Kit includes leatherette cabinet with handle. Size: 6 1/4"x4 1/4". Choice of colors. For 110 V., A.C. or D.C.



- E9880.** Alligator Brown. NET **\$6.98**
- E9881.** Satin Black. EACH
- E9882.** Dark Green. EACH
- E9885.** Set of Bantam tubes: 1-6K7GT, 1-6W7GT, 1-25Z6GT, and 1-25L6GT. NET PER SET **\$3.29**

SPECIAL VALUES IN CARBON RESISTORS



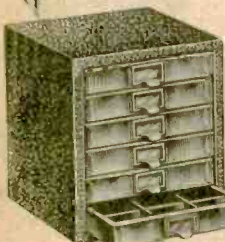
KIT OF 100 RESISTORS

A popular value assortment of economy-type carbon resistors. Color-coded. Assortment includes 1/4 and 1/2 watt sizes in most popular resistance values. You can pay for these kits with your first service call profits. Buy several assortments and have the resistor you need on hand at all times. **E5120.** 100 Resistors. NET **98c**

KIT OF 50 RESISTORS

E5121. Smaller assortment of same quality resistors as those listed above. 50 popular resistors. NET **59c**

ALL-STEEL PARTS CABINET



Just what every service man needs. A small-parts cabinet for the numerous small items every serviceman has around the shop. Can also be used in house workshop, office, store, garage, etc. Ideal for the fisherman's supply of fish hooks, sinkers, leaders, etc. Drawers have separators for different sized items. Finished in dark green ripple. Utility cabinet measures 13 1/4" long, 10 1/2" wide, 8 1/2" high. Shpg. wt., 22 lbs. **E10605. NET \$3.69**

SPECIAL VALUES IN BAKELITE SOCKETS

Our economy line of tube sockets. These special value sockets have individual interchangeable lugs and separate grounding lugs. Have standard 1 1/2" mtg. centers. Numbered pin holes.



- | No. | Prongs | EACH | 10 FOR |
|-------|---------|------|--------|
| E4450 | 4 | 5c | 45c |
| E4451 | 5 | | |
| E4452 | 6 | | |
| E4453 | 7s | | |
| E4454 | 8 Octal | | |

HEARING-AID CONTROL BOX

Designed for use in multiple hearing-aid installations in schools, theatres, churches, etc. Permits adjustment of volume to suit individual hard-of-hearing needs. Resistance, 10,000 ohms. Small and compact, only 1 1/2"x3". Corners and edges smoothly rounded to prevent catching or tearing clothing. Available in either glossy ivory, suitable for theatres, or brown crystal for churches, schools, etc. (Use Knight 2 and 15 watt High Gain Amplifiers for suitable group-hearing use.) **E5280.** Brown Crystal Finish. **E5281.** Glossy Ivory Finish. **YOUR PRICE, EACH BOX \$1.91**





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\$25.00 to \$50.00	15c
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WEIGHT IN POUNDS	ZONES							
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1	8c	8c	9c	10c	11c	12c	14c	15c
2	10c	10c	11c	12c	13c	14c	16c	17c
3	11c	11c	12c	13c	14c	15c	17c	18c
4	12c	12c	13c	14c	15c	16c	18c	19c
5	13c	13c	14c	15c	16c	17c	19c	20c
6	14c	14c	15c	16c	17c	18c	20c	21c
7	15c	15c	16c	17c	18c	19c	21c	22c
8	16c	16c	17c	18c	19c	20c	22c	23c
9	17c	17c	18c	19c	20c	21c	23c	24c
10	18c	18c	19c	20c	21c	22c	24c	25c
11	19c	19c	20c	21c	22c	23c	25c	26c
12	21c	21c	22c	23c	24c	25c	27c	28c
13	22c	22c	23c	24c	25c	26c	28c	29c
14	23c	23c	24c	25c	26c	27c	29c	30c
15	24c	24c	25c	26c	27c	28c	30c	31c
16	25c	25c	26c	27c	28c	29c	31c	32c
17	26c	26c	27c	28c	29c	30c	32c	33c
18	27c	27c	28c	29c	30c	31c	33c	34c
19	28c	28c	29c	30c	31c	32c	34c	35c
20	29c	29c	30c	31c	32c	33c	35c	36c
For Each Additional Pound Add	1c	1c	2c	3c	5c	7c	9c	11c

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Orders from U.S. Territories and Possessions always receive special attention. All parcel post C.O.D. orders should include a 20% deposit. Remit in full for merchandise plus eighth zone postage on parcel post orders to the Philippine Islands and the Canal Zone. There is no parcel post C.O.D. service to these territories. Console sets, Windchargers, Generators and items which we have indicated as not mailable are shipped by freight. Terms on freight shipments are 50% deposit, balance by sight draft attached to shipping documents. All freight shipments are carefully boxed with no charge for export packing.

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On your next visit to Chicago, be sure to visit us in our enlarged Radio Headquarters at 533 W. Jackson Blvd., conveniently located on the edge of Chicago's Loop. See the famous Knight Radio Sets and Sound Systems on display and hear them in actual operation. Visit our Recording Studio. Take advantage of the many service facilities available.

COMPLETE INDEX

- A BATTERIES** 42, 43
 A Adapters, Kits 37
 Line Voltage 56
 Microphone 37
 Testing and Modernizing 37
 Aerial Eliminators 146
 Aerial Equip't 107
 117-119, 144-148, 150, 157
 Air Cell Battery 43
 Tester 43
 Alignment Tools 38
 Aluminum Panels 134
 Discs 160
 Amateur Books, 41, 113-115, 121
 Amateur Equipment 101-125
 Amateur Sets, 102-104, 107, 111
 Amateur X-mitters, 101, 110-111
 Amplifiers, 74-79, 81, 83, 85, 39
 Booster 86
 Cases 90
 Kits 126
 Analyzers 22-33
 Antenna Equip't 107,
 117-119, 144-148, 150, 157
 Attenuators 93
 Audio Oscillators 33, 36
 Audio Transformers 65, 68-71
 Auto
 Aerials 150, 157
 Batteries 43
 "B" Eliminators 44
 Cable 131, 168
 Controls 131, 169
 Filter 150, 168
 Fuses and Holders 138
 Radio Accessories 131, 150, 168, 169
 Radio Kit 128
 Radio Lock 136
 Radio Transformers 66, 67
 Remote Control 131
 Sets 168, 169
 Suppressors 150, 168
 Vibrators 72, 168
 Automatic Record Changers 89
- BAKELITE**
 B Knobs 107, 123, 132, 133
 Panels and Tubing 134
 Baffles 91
 Ballasts 19, 21, 56
 Batteries
 "A", "B", "C" 42, 43
 Air Cell 43
 Cables 147, 148
 Chargers 43, 45
 Clips 138
 Electric Shaver 43
 Eliminators 44
 Flashlight 42
 Hot Shot 42, 47
 Packs 42, 43, 161, 162, 169
 Sets 155, 156, 161-166, 169
 Storage 43
 Testers 43
 Beat Oscillators 36, 123

TEST EQUIPMENT ON EASY PAYMENT TERMS

All Test Equipment listed in this catalog may be purchased on a convenient and economical Time Payment Plan, providing your total Test Equipment order amounts to \$40 or more. Just select the equipment you want and enclose remittance for proper down payment as indicated, giving the customary credit information (references, etc.). Where no Time Payment Terms are shown in our catalog listing, remit 10% of the total net amount with your order.

- Bias Cells 21
 Binding Posts 137
 Blow Torches 140
 Books 39-41, 143
 Brackets 123, 132, 139
 Bulbs 19, 21, 46, 132
 Burglar Alarm 131
 Buzzer 117
 Button 136

- CABINETS**
 Metal 107, 123, 134, 157
 Speaker 90, 93, 153
 Wood 157
 Cable
 Accessories 97, 131, 133, 135, 144, 145
 Analyzer 148
 Antenna 118, 144, 147, 148
 Auto Radio 131, 147, 168
 Battery 147, 148
 Concentric 118
 Connectors 97, 131, 135, 137, 168
 Dial 131, 133
 Housing 131, 147
 Microphone 97, 147, 149
 Multi-Conductor 97, 147-149
 Speaker 92, 97, 147-149
 Capacity Indicators 24, 25, 31
 Carbon Granules 97
 Carbon Resistors 34, 53, 54
 Carrying Cases 90
 Cement 134, 151
 Centralab 50-52, 136
 Chargers 43, 45, 46, 167
 Bulbs 21
 Chassis, Bases 134
 Cradle 141
 Chimes 99
 Chokes
 A.C.-D.C. 65
 Filter 65, 69-71, 120, 121
 Line 143
 Output 65, 68, 69
 Plate, 65, 68, 69, 71, 106, 112
 R. F. 106, 109, 112, 113, 130
 Transmitting 106, 109, 112, 113, 120, 121
 Circle Cutter 141
 Clips 137, 138
 Code Practice Ser. 117
 Code Reader 117
 Coils
 A.C.-D.C. 128
 Antenna 128, 129
 Band-Spread 128
 Dope 128
 Field 151
 Forms 106, 109, 117, 129
 I.F. 106, 108, 128, 129
 Kits 109, 128, 129
 Oscillator 106, 108, 128, 129
 Primary 128
 R.F. Coils 128, 129
 Shields 106, 108, 134
 Short-Wave 106, 108, 109, 128, 129
 Television 128
 Transmitter 106, 112, 113
 Winder 139
 Condensers
 A.C.-D.C. 57, 58, 60-64
 Bandspread 105, 109, 130
 Blocks 59, 60
 Couplings
 105, 109, 116, 117, 119, 130
 Electrolytic 57, 58, 60-64
 Exact Duplicate 59, 60
 Filter 57-64, 121, 122, 150
 Fittings 61,
 105, 109, 116, 117, 119, 130
 Kits 57, 59, 61
 Line 143
 Mica 57, 59, 62-64, 122
 Neutralizing 105, 108, 116, 117, 130
 Oil-Filled 57, 121, 122
 Paddling 105, 108, 130
 Pluggin 60
 Testers 24, 25, 29, 30, 31
 Transmitting 105,
 108, 109, 116, 117, 121, 122
 Trimmer 105, 108, 116, 130
 Tubular 57-59, 61-64
 Variable 105, 108, 109, 116, 117, 130
 Vibrator 59, 63
 Cones 151
 Connectors 135, 137, 150, 168
 Converters, Rotary 44

- Cord Tips 137
 Crystal
 Detectors 156
 Headphones 155
 Holders 106, 115
 Microphones 94, 95
 Pickups 97, 98
 Sets 126, 155, 156
 Transmitting 115
 Crystals 115, 156
DIAGRAMS 124, 126, 127
 Dials 107, 123, 131, 132
 Cables & Belts 131, 133
 Lights 19, 21, 36, 132
 Plates 123, 131
 Display Material 17, 18
 Drills 139, 141
 Dynamic Spkrs. 92, 93, 152, 153

- ELECTRIC EYE** 127
 Electric Fence Control 47
 Kit 46
 Eliminators
 A & B 44
 Aerial 146
 Interference 143, 146, 150
 Extension Cords 139, 147
 Extension Spkrs. 92-93, 152-153

- FARM POWER EQUIPMENT**
 Gas Engine 45
 Generators 45
 Light Bulbs 21, 46
 Lighting Kit 46
 Storage Batteries 43
 Wire 46, 147
 Farm Radio Equipment
 Battery Sets 161-167, 169
 32 Volt Converters 44
 32 Volt Eliminators 45
 32 Volt Sets 167
 Field Coils 151
 Exciter 92
 Exciter Transformer 65
 Filament Transformers 114, 120, 121
 Filters, Aerial 148, 150
 Line 143, 146
 Five Meter Gear 103, 111, 127
 Flashlight Batteries 42
 Bulbs 21
 Frequency Modulator 33
 Friction Tape 139
 Fuses & Mountings 138, 139

- GENERATORS** 44, 45
 Genemotors 44
 Grid Caps 106, 117, 137
 Grid Leaks 55
 Grille Cloth 134
 Grommets 139
 Ground Clamps 145
 Ground Rods 145

- HALLICRAFTERS**
 102, 103, 110, 111
 Hammarlund 11, 108, 109, 111
 Hand Sets 127
 Hardware 138, 139
 Head Phones 154-156
 Accessories
 37, 136, 137, 149, 154-157
 Hearing-Aid Units 87
 Accessories 87, 154-157
 Control Boxes 87, 154, 157
 Phones 87, 154-156
 Hook-Up Wire 147, 149
 Hush-a-tone 154
 Hydrometer 43

- INSULATORS**
 46, 47, 107, 117-119, 144
 Intercommunication Systems 87
 Interference Analyzer 143
 Eliminators 143, 146
 Filters 143, 146, 150
 I.F. Transf. 106, 108, 128, 129
 Inverters 44

- JACKS AND PLUGS**
 97, 119, 136, 137
 Jensen 93, 153

KEYS

- Transmitting 117
 Kits
 Adapter 37
 Amplifier 126
 Coil 128, 129
 Electric Fence 46
 Meter 24, 27, 35, 36
 Noise Silencer 126
 Photo Cell 127, 131
 Receiver 124-127, 155, 157
 Test 21, 27, 35-38
 Transceiver 127
 Tuner 125
 Volume Expander 126
 X-mitter 101, 108, 110, 127
KNIGHT
 Aerials 145, 150
 Amplifiers 74-85, 89
 Batteries 42, 43, 47
 Chokes 65, 112
 Condensers 58-60, 121
 Converters 44
 Electric Fence 47
 Kits 124, 126, 127, 157
 Phonographs 90, 175
 Recorder 100
 Resistors 53, 55
 Sets 1-16,
 161-176, Covers 2, 3, 4
 Speakers 92, 152, 153
 Transformers 65, 71, 121
 Tubes 20, 21
 Volume Controls 48
 Knobs 107, 123, 133

- LACQUER** 132, 134
 Sprayer 139
 Lamp Cord 147, 148
 Lead-ins 117-119, 144-148, 168
 Level Control 93
 Light Bulbs 21, 46
 Lightning Arresters 145, 147
 Calculators 41
 Line Ballasts 21, 56
 Cords 56
 Filters 143, 146

AMATEUR EQUIPMENT ON EASY PAYMENT TERMS

All Amateur Communications Receivers and Transmitters listed in this catalog can be purchased on a convenient and economical Time Payment Plan, providing that your total order comes to \$40 or more. Select the equipment you want and remit the indicated down payment with your order, giving the customary credit information (references, etc.). Where no Time Payment Terms are indicated, remit 10% of the net price with your order. You will find our Easy Terms Plan the most attractive ever offered.

- Litz Wire 147
 Lugs 138

MAGNET WIRE

- Magnetic Speakers 147, 149
 Majestic
 I.F. Coils 129
 Transformers 66
 Tubes 19
 Vibrators 72
 Mallory-Yaxley 21,
 39, 44, 48, 49, 61, 72, 136
 Manuals 39-41, 143
 Map 41
 Masts 46, 145
 Metal
 Cabinets 107, 123, 134, 157
 Chassis Bases 134
 Panels 123, 134
 Meters 34-36, 43, 115
 Cases 35, 36
 Repairs 36
 Micrometer 139
 Microphones 94-96
 Accessories 97
 Adapters 37

COMPLETE INDEX

Microphone (Cont'd.)
 Cable 97, 147, 149
 Connectors & Plugs 97, 135
 Ribbons 97
 Springs 97
 Stands 97
 Switches 96
 Transformers 65, 68, 71, 96
 Mobile Sound Systems 84, 85
 Monitor 111, 115
 Mounting Strips 137
 Multimeter 23, 25, 31, 33

NAME PLATES 123
 "National" 101, 104-107
 Needles 98, 100
 Neon Lamps 21
 Neutralizing Tools 38
 Noise Eliminating 143, 146
 Noise Silencer Kit 126

OSCILLATORS 24-27, 29-33
 Beat 36, 126
 Coils 106, 108, 128, 129
 Phonograph 99, 125
 Oscilloscopes 24, 30, 32, 33, 107
 Outlet Receptacle 97
 Output Indicator 33, 34

PANELS
 Aluminum 134
 Bakelite 134
 Electroalloy 123, 134
 Masonite 134
 Rack 123
 Rubber 134
 Philco Transformers 66
 Vibrators 72
 Phonographs 88, 157
 Adapters 37
 Cases 90
 Combinations 15, 173-175, Cover 3
 Discs 100
 Oscillator 99, 125
 Motors 99
 Needles 98, 100
 Pickups 97, 98
 Portable 88, 157, 175
 Record Changers 89
 Recorders 99, 100
 Records 98
 Scratch Filter 98
 Spring-Wound 157
 Phones 154-156
 Adapters 37, 157
 Caps 155, 156
 Cords 149, 155
 Cushions 156
 Diaphragms 155, 156
 Hard-of-Hearing 87, 151-156
 Plugs 87, 97, 136, 155
 Tips 137
 Photo Cell Kit 127, 131
 Photo Cell Relay 131
 Photo Electric Cells 131
 Pickups 97, 98
 Pilot Bulbs 19, 21, 132
 Sockets and Jewels 132
 Plate Transformers 120, 121
 Pliers 140
 Plug-in Coils 109, 112-113, 129
 Forms 106, 117, 129
 Plugs

Adapter & Analyzer 37
 Extension 135, 137
 Microphone 97, 135, 136
 Phone 87, 97, 136, 155
 P.M. Speakers 92, 93, 152-153
 "Popular Mechanics" Kits 126
 Portable Amplifiers 74, 75, 77, 79, 81, 83
 Cases 90
 Phonographs 88, 157, 175
 Recorders 99, 100
 Set 155, 156, 169
 Potentiometers 48-52
 Power Amplifiers 74-86, 89
 Boosters 86
 Packs 41, 45
 Transformers 65-67, 70
 Preamplifiers 86
 Precision Resistors 51
 Pre-selector Coils 128

Pre-selector Coils 128
 Presto Recorders 100
 Public Address Systems 74-85
 Equipment 74-99

Punches, Socket 141
 Push-Button Tuners 133

**PUBLIC ADDRESS ON
 EASY PAYMENT TERMS**
 See Pages 73 to 100 for America's finest and most complete line of quality Public Address Equipment. You can buy any **KNIGHT** Sound System on the convenient and attractive Time Payment Terms which are shown under each System listed. See Page 73 for complete Time Payment instructions.

RACKS AND PANELS 123
 Radio Chassis 9, 11-13, 16, 165, 166, 170, 171, 176
 Radio Phono Combinations 15, 173-175, Cover 3
 Radio Sets 1-16, 155, 156, 161-176, Covers 2, 3, 4
 Raytheon 18, 19, 40, 41, 113
 R.C.A. 17, 33, 39, 89, 98, 99, 114, 140, 141, 150, 168, 175
 Readrite 26, 27, 34
 Records 98
 Record Changers 89
 Player 88, 90, 175
 Recording Equipment 99, 100
 Rectifiers 21, 34
 Refinishing Kit 140
 Relays 114, 131
 Relay Racks 123
 Remote Controls 131, 133
 Cable and Accessories 131
 Resistance Tubes 19, 21
 Resistors

Cabinet 53, 54, 157
 Carbon 31, 53, 54, 157
 Cords 56
 Indicator 31, 54, 56
 Kits 53, 54, 157
 Line 56
 Multiplier 34, 36, 54
 Precision 54
 Semi-Precision 31
 Shunts 34-36, 54
 Wire-Wound 31, 54-56, 113, 121
 R.F. Chokes 106, 109, 112, 113, 130
 Rheostats 48, 51
 Rhvets and Eyelets 138
 Punch Set 141
 Rotary Converters 41

SCREWDRIVERS 38, 140
 Screws 138, 139
 Selector Switches 136
 Set-Builders' Kits 124-127, 155
 Supplies 128-130, 137-142
 Sets-All-Wave 9, 12-16, 170-176
 AC-DC 1, 3-6, 9, Cover 4
 Auto 168, 169
 Battery 155-156, 161-166, 169
 Crystal 126, 155, 156
 Phono Combinations 15, 173-175, Cover 3
 Portable 155, 156, 169
 Short-Wave 102-104, 107, 111
 32 Volt 167
 Shaft Couplings 105, 109, 116, 117, 119, 130
 Shielding 147
 Shield Cans 106, 108, 134
 Short-Wave

Aerials 118, 144-147
 Books 41, 113-115
 Coils & Forms 106, 109, 112, 113, 117, 128, 129
 Condensers 105, 108, 109, 116, 117, 121, 122, 130
 Insulators 107, 117-119, 144
 Kits 108, 124, 125, 127, 155
 Sets 102-104, 107, 111
 Switches 116, 136
 Transmitters 101, 110, 111
 World Clock 111

SHUNTS 34, 35, 36
 Signal Generators 24-27, 29-33
 Shifter 111
 Sockets 21, 107, 109, 117, 132, 135, 157
 Socket Wrenches 139, 141
 Punches 141
 Solder 142
 Soldering Irons 142
 Heat Control 142
 Holder 142
 Tinning Block 142
 Tips 142
 Sound Equipment 74-100
 Spaghetti 148
 Spartan Tubes 18
 Speakers 92, 93, 152, 153
 Adapters 37
 Baffles 91, 93
 Cable 92, 97, 117-149
 Cases 90, 93, 153
 Cement 131, 151
 Cones 151
 Dynamic 92, 93, 152, 153
 Extension Cords 147
 Field Coils 151
 Field Supplies 92
 Horns 91, 93
 Magnetic 153
 P.M. 92, 93, 152, 153
 Repairs 151
 Shims 151
 Stand 91
 Units 91, 93
 Stand-off Insulators 107, 117-119
 Stands, Microphone 96
 Speaker 91
 Storage Batteries 43
 Suppressors 150, 168
 Supreme 22-24
 Switches

Analyzer 136
 Band 136
 Jack 136
 Key 136
 Microphone 97
 Plates 116, 136
 Rotary 136
 Short-Wave 116, 136
 Toggle 136
 Volume Control 48-50
 Switch Points and Stops 138

TAP & DIE SET 139
 Tape 139
 Taylor Tubes 112
 Telephones 154
 Wire 149, 154
 Television Book 28
 Coils 121
 Transformers 114
 Tubes 114
 Terminal Strips 137
 Test Adapters 37
 Test Clips 137, 138
 Test Equipment 22-38, 47
 Test Leads 38
 Test Panels 22, 30
 Test Plugs 37
 Testers & Analyzers 22-33, 37
 Thordarson 67-69, 110, 114, 120, 121
 Time Chart 117
 Tip Jacks 119, 137
 Tone Controls 48-51
 Switches 136
 Tools 37, 38, 139-142
 Transceivers 111, 127
 Transcription Reproducers 90
 Transformers

Amplifier 68-69
 Audio 65, 68-71
 Auto Radio 65, 67
 Coupling 68, 69, 71, 92, 93, 106
 Exact Duplicates 65
 Field Exciter 66
 Filament 65, 114, 120, 121
 I.F. 106, 108, 128, 129
 I.F. 65, 68, 71, 92
 Modulation 120, 124
 Oscilloscope 71

TRANSFORMERS (Cont'd.)
 Output 65, 68-69, 71, 92-93
 Philco 66
 Plate 114, 120, 121
 Power 65-67, 70, 120, 121
 Rebuilding 66
 Step-Down 71
 Television 114
 Tube Tester 65
 Vibrator 65, 67
 X-mitting 68, 69, 114, 120, 121

2% TRANSPORTATION ALLOWANCE
 Take advantage of our 2% Transportation Allowance on all orders for \$25.00 or more. Don't split your orders! Make **ALLIED** your one dependable source of Radio Supply—save more and profit more. See Page 158 for full How-To-Order Information.

TRANSMITTING
 Aerial Equip't 16, 107, 117-119, 114-148
 Books 41, 113-115, 121
 Chokes 106, 109, 112, 113, 120, 121
 Coils, Forms 106, 109, 112, 113, 117, 129
 Condensers 105, 108, 109, 116-117, 121, 122, 130
 Crystals and Holders 106, 115
 Dials and Knobs 107, 123, 132
 Insulators 107, 117-119, 144
 Jacks and Plugs 119, 137
 Keys 117
 Kits 101, 108, 110, 127
 Meters 34-36, 113
 Monitor 111, 115
 Racks and Panels 123
 Relays 114
 Resistors 55, 56, 113, 121
 Sockets 107, 109, 117, 135
 Switches 116
 Transformers 68, 69, 114, 120, 121
 Tubes 112-115
 X-mitters 101, 110, 111, 127
 Triplett 27-30, 35, 115
 Trouble Light 139
 Trumpets 91, 93
 Tubes 17-21, 112-115

Adapters 37
 Majestic 19
 Photo Cell 131
 Resistance 19, 21
 Shields 106, 109, 134
 Sockets 107, 109, 117, 135, 157
 Spartan 18
 Testers 22-29, 31-33, 37
 Transmitting 112-115
 Tubing 118, 134
 Tuner, High-Fidelity 86, 125
 Tungar Bulbs 21
 Tuning Indicators 36, 127
 Tuning Wands 38

VARIABLE CONDENSERS
 105, 108, 109, 116, 117, 130
 Vibrators 72, 168
 Condensers 59, 63
 Testers 30
 Voltage Dividers 55, 113
 Regulators 21, 56
 Voltmeters 25, 29, 31, 34, 36
 Volt-Ohmmeters 23, 25, 27, 33
 Kits 24, 27, 35, 36
 Volume Controls 48-52
 Volume Expanders 86, 126

WALL SPEAKERS 91
 Washers 138
 Wave Traps 146
 Welders 147
 Windchargers 46, 167
 Wire 16, 87, 92, 118, 114-119
 Wiring Diagrams 124, 126, 127
 Wrenches 38, 139-141



VIDRIO ELECTRIC MIXER

An efficient little labor-saving assistant for the housewife. It beats, whips and mixes. For eggs, salad dressings, meringue, cream and countless other foods. Motor is completely encased by metal housing. Portable motor-driven beater may be used anywhere. Detachable beater is very easy to clean. Glass measured-capacity jar holds 1 pint. For 110 V. 50-60 cycles; complete with cord and plug. Will find innumerable uses in every kitchen. Worth many times our low price.

E9163.

YOUR PRICE.....
LOTS OF 6.....
YOUR PRICE, EACH

\$110
99c



HOT DONUT WATER HEATER

Supplies hot water in a jiffy when needed — Just connect the Hot Donut Water Heater to any 110 volt outlet, either AC or DC, and immerse it in a pan of water and you will have boiling water almost immediately. This dependable little heater is inexpensive and portable; it is extremely valuable to tourists and travelers. Ruggedly built. Heating unit is thoroughly impregnated against moisture. Metal housing is finished in bright aluminum; will not rust. Has heavy rubber cord 6 feet long, with plug.

E9161, YOUR PRICE, EACH
YOUR PRICE
PER LOTS OF 10.....

71c
\$6.65



AUTOMATIC TOASTER

New low-priced fully automatic Electric Toaster. Adjustable for any desired texture of toast. Bell signals when toast is done and shuts off current. Auto-flip doors turn toast when lowered. All-chrome finish; ebony base. With cord set. Underwriters' Approved. For 110 V. Shpg. wt., 4 lbs.

E10435. **\$265**
NET.....

E10436. **ELEC-TRIC TOASTER** similar to above but without automatic feature. NET..... **\$1.45**



STERRO ELECTRIC CLOTHES WASHER

A new Underwriters' Approved Electric Clothes Washer, ideal for the home or nursery. Boils and sterilizes as it washes everything from baby's clothes to wearing apparel and linen. Holds 2 full pounds of dry clothes; washes thoroughly with swirling action. Has powerful air-cooled motor and 3 fin cast-aluminum agitator. Green porcelain enameled tub and cover. Diameter, 16". For 110 V. 50-60 cycles A.C. Shpg. wt., 18 lbs.

E10440. **\$975**
NET.....

E10441. **PORTABLE WRINGER.** Lightweight and compact; easily affixed to washer tub. Has soft rubber rollers. NET..... **\$3.85**



AUTOMATIC ELECTRIC IRON

New Underwriters' Approved Electric Iron with automatic heat regulator adjustable to wide range of ironing temperatures. Has quick-heating thin sole plate which speeds up ironing and saves on current. Sole plate slips under buttons without prying them off. Finished in chromium with black rubber-od handle. This 4 1/2 lb. 690 watt iron is ideal for all home ironing needs. For 115 V. A.C. With 6-foot cord set. Shpg. wt., 5 lbs.

E10437. **\$265**
NET.....

E10438. **ELECTRIC IRON** as above, but less heat regulator. NET \$1.45



HEATING PAD

High-grade Underwriters' Approved heating pad. Has automatic, non-radio interfering double thermostat control and three heating ranges selected by 4-position switch. Gives uniform heat over entire pad surface. 15" x 12"; soft camel's hair finish cover. With 8 ft. cord. For 110 volts AC or DC. 55 watts.

E10442. NET..... **\$1.45**

DE LUXE MODEL. Has 4 thermostats which maintain exact temperature selected. Offers three fixed heats which stay put. When at Low—125°. Med.—150°. High—175°. Cannot overheat. Has removable snap-on camel's hair finish cover and water-repellent interlining. For 110 volts AC or DC, 55 watts.

E10443. **\$2.15**
NET PRICE.....



COFFEE-MAKER

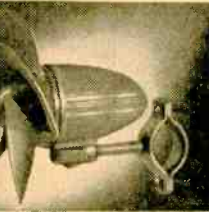
An efficient and attractive coffee maker with improved filtering method which produces coffee of superior flavor. Made of "Glasbake" full heat-resisting glass. Can be used on gas stove, electric stove or over open flame. With black molded handle. (Illustrated with electric stove.)

E10295. **6 CUP MODEL** (Less Stove) NET..... **\$125**

E10296. **8 CUP MODEL** (Less Stove) NET..... **\$1.40**

E10297. **12 CUP MODEL** (Less Stove) NET..... **\$2.10**

E10298. **Electric Stove Only.** NET..... **\$1.01**



SAFE-FLEX AUTO FAN

A truly safe 6 Volt auto fan. Has 6" blades of flexible molded rubber, which hold their shape even during high speed rotation. No unsightly guards, yet it cannot hurt even a baby's fingers. Has two speeds for all-weather driving. For Winter, use high-speed to remove encrusted snow and ice, and then low speed to keep it clear. In Summer, the high-speed is ideal when crawling along in city traffic, while the low-speed is fine when touring in the country, or to remove dangerous steam and fog from windshield on rainy days. Finished in no glare walnut. With universal mounting bracket, rubber cord and battery terminals.

E10439. **\$249**
NET.....

Special APPLIANCE VALUES



AUTOMATIC WAFFLE IRON

A high-quality waffle iron with many exclusive features at an unbelievably low price. Durable heating units, adequately insulated to prevent breakdown, assure rapid heating. Has heavy greaseless-type 7/8" die-cast aluminum grids. Equipped with automatic heat indicator that signals light when grids have reached the proper baking temperature and when waffle is done. Adjustable to desired texture of waffle—light, medium or dark. Beautifully finished in chromium with bakelite handles. Supplied with 6 foot Underwriters' approved cord set.

E10444. NET..... **\$445**
E10445. **WAFFLE IRON**, as above, but less automatic indicator. NET..... **\$2.60**



NEW THREE-SPEED ELECTRIC MIXER

The latest high-quality electric food mixer, beautifully designed and built for long, lasting service. A powerful all-purpose kitchen servant which will mix, whip, stir or beat all types of batters, pastry dough, salad dressings, eggs, cream and many other foods; may also be used with juice extractor listed below. Has many exclusive new features. Equipped with set of 2 self-locking beaters with stainless steel blades, easily removable for cleaning. Base tray is revolving ball-bearing type. Powerful three-speed universal type motor operates on 110 volts AC or DC; light and portable for easy removal from base. Three speeds take care of foods requiring slow or fast mixing. Has sturdy die-cast easy-grip fatigue-proof handle. Motor housing automatically locks self to frames; motor tilts back to drain beaters or for easy removal of 9-inch mixing bowl. Fan-cooled motor stays cool. The entire mixer is ivory-finished, attractive in appearance and easy to clean. The entire mixer is readily portable, made of unbreakable die-casting with scratch-proof rubber feet. Equipped with rubber-covered cord and unbreakable rubber plug. Complete as illustrated. (See below for juicer attachment.) Shpg. wt., 9 lbs.

E10446. **\$745**
YOUR SPECIAL PRICE.....

JUICER ATTACHMENT

Juice extractor attachment, consists of juicer bowl and reamer. Mixer motor reverses for quick attachment of juicer. Easily extracts juice from fruits.

E10447. **Juicer Bowl and Reamer.** NET PRICE..... **\$1.10**

ALLIED PRESENTS:

THE MOST ECONOMICAL FARM RADIO EVER BUILT!



R.C.A. & HAZELTINE LICENSED

NEW 1½ VOLT SUPERHET CIRCUIT

4 TUBES DO THE WORK OF 6

1000 HOUR BATTERY LIFE

BETTER POWER! FINER TONE!

***Knight* 4 TUBE 1½ VOLT BATTERY SUPERHET**

ALLIED is first with this amazing new Farm Radio sensation—the most economical farm set ever built! The ultimate answer to the rural demand for low-cost radio operation—the world's most economical battery receiver! Works 1000 hours—a full radio season—without a change of batteries! And this new *Knight* 1½ Volt Farm Radio is not only the last word in economy, but it's the finest, the best-performing radio ever offered to unwired homes. The secret of this wonderful radio lies in the newly perfected 1½ volt tubes with drain lower than any battery radio tubes yet developed; each of these tubes draws less current; several are multi-purpose types; the result is that you not only save money, but you actually get six-tube performance with only four tubes.

• **POWERFUL RECEPTION.** The *Knight* 4 tunes 175 to 556 meters (540-1750 K.C.C.) for powerful coverage of the standard Broadcast American and Canadian band. Also tunes many police signals. Really sets out and brings in programs dependably, powerfully, day and night, in all locations.

• **"THERMOMETER" DIAL.** The novel new "Thermometer" dial simplifies tuning. As the tuning knob is turned, a ribbon of color shows the exact position of the station indicator on the kilocycle-calibrated scale. The dial measures 2¼" x 1½" and has a 7 to 1 vernier tuning ratio.

• **NEW 1½ VOLT CIRCUIT.** Licensed by R.C.A. and Hazeltine. Uses the new 1½ volt super low-drain tubes as follows: 1A7G as Osc.-Modulator (dual-purpose); 1N5G as I.F. Amp.; 1H5G as Detector-A.V.C.-1st Audio (triple-purpose); 1A5G as Audio Output. Dual-purpose and triple-purpose tubes mean actual six tube power, distance-reach and operating efficiency. Automatic Volume Control assures complete freedom from fading.

• **1000 HOUR BATTERY LIFE.** An amazing performance record— unheard-of, battery radio economy. "A" drain is only 2 amperes; "B" drain is only 8 milli-amperes. Consumes 60% less current

than any previous battery radio. Using the new "AB" power pack especially developed for the *Knight* 1½ Volt Superhet, the set has a normal battery life of 1000 hours when used about 10 hours per day. Never before has there been a farm radio with so low a maintenance cost.

• **NEW POWER PACK.** ALLIED offers the new *Knight* 1½ Volt Superhet with a special single unit "AB" battery power pack that will give 1000 hours, or a full season of radio enjoyment, at a cost of less than two cents a day. Set has special plug for power pack. While this convenient pack is recommended, regular 1½ volt "A" batteries and two standard 45 volt "B" batteries may be used.

• **NEW P.M. SPEAKER.** The latest type of 5-inch Permanent Magnet Dynamic Speaker is used in the *Knight* 4 to reproduce its large power with a brilliance and reality of tone that will be a lasting joy on all programs.

• **AN OUTSTANDING CABINET.** The new 1939 table model cabinet of the *Knight* 4 has a beautiful front face of striped walnut with gracefully rolled ends. Contrasting bands of walnut at upper and lower edges enhance the beauty of the design. Size: 12¼" x 7¼" x 5¼".

• **KNIGHT 4 COMPLETE.** The *Knight* 4 Tube 1½ Volt Superhet is offered complete withsylvania tubes, but less "AB" pack. Shpg. wt., 13 lbs. Code: POWER.

\$14³⁵

E10912. Retail Value, \$28.95. **NET PRICE EACH**

E10913. The *Knight* 4 as above but complete with special 1000 Hour Ray-O-Vac "AB" pack. Shpg. wt., 34 lbs. **NET PRICE EACH** **\$18.10**

E10044. Replacement 1000 Hour Ray-O-Vac "AB" Pack. (15¼" x 4¼" x 6¼"). Shpg. wt., 21 lbs. **NET** **\$4.00**

1½ VOLT SELF-CONTAINED BATTERY MODEL

The *Knight* 4 Tube 1½ Volt Superhet is available also exactly as described above, but in a larger new type table model cabinet (illustrated at left) which will conveniently hold the "AB" Power Pack or the regular standard batteries. The cabinet is a masterpiece of beautiful construction and fine woods. It has a magnificent front panel and top of one-piece beautifully-figured burl walnut with roll-effect. Features an inlaid side trim of diagonally-striped walnut. Has attractive grille. Size: 20¼" x 12" x 12¼". The *Knight* 4 is offered complete withsylvania tubes in cabinet illustrated at left, less only "AB" pack. Has all the features described above, but is sufficiently large to hold batteries. Shpg. wt., 20 lbs. Code: GRASS.

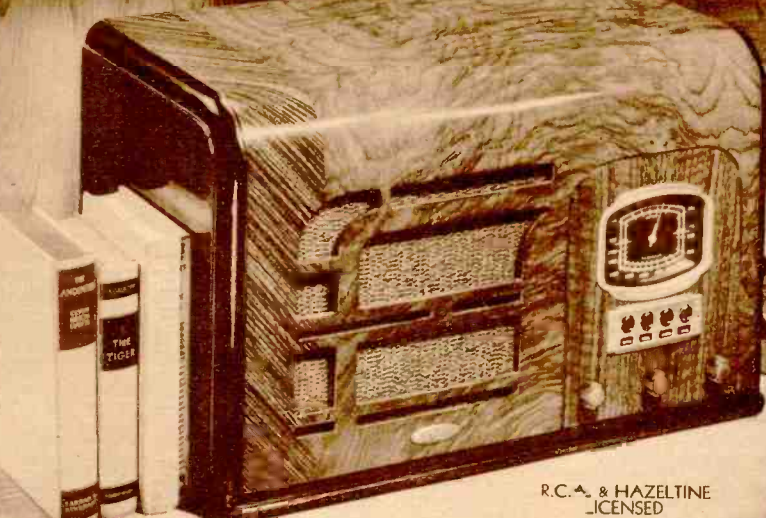
E10916. Retail Value, \$32.75. **NET PRICE, EACH** **\$1645**

E10917. The *Knight* 4 as above but complete with special 1000 hour Ray-O-Vac "AB" pack. Shipping wt., 41 lbs. **NET PRICE, EACH** **\$20.20**

Take advantage of our liberal Money-Back Guarantee. Try the *Knight* 4 out under your own operating conditions. You'll find it everything we claim—the most economical and best-performing Farm Radio at the price!



Sensational NEW 1½ VOLT MODEL the most economical of all FARM RADIOS!



PUSH-BUTTON TUNING



LATEST 1939 FARM RADIO FEATURES

- NEW 1½ VOLT TUBES
- PUSH-BUTTON TUNING
- THERMOMETER DIAL
- 6-INCH P.M. DYNAMIC
- FULL-ACTING A.V.C.
- NEW "AB" POWER PACK
- ON-OFF INDICATOR

The outstanding Farm Radio development of the past 10 years—the new 1½ Volt tube—makes possible the World's most economical Farm Battery Radio!

R.C.A. & HAZELTINE LICENSED

Knight 4 TUBE 1½ VOLT FARM SUPERHET

The new 1939 super-economical, super-efficient, **Knight 4 Tube 1½ Volt Battery Superhet**—with perfected Push-Button Tuning! The greatest and newest development in Farm Radio, the amazing 1½ volt tubes draw 60% less current than ordinary battery radio tubes! Used as multi-function tubes in the Knight 4, they attain astonishing economy with six tube power and efficiency.

• **Push-Button Tuning.** Front-adjusted type; easy to set and tune. Instantly selects any one of four favorite stations just by pushing a button! Manual tuning is made easy by the new "Thermometer" dial which shows a ribbon of color, indicating the exact position of the station indicator on the scale. Dial size is 3¼" x 2¼". Has "on-off" indicator. Tuning range is 173 to 556 meters (540-1730 K.C.), covering all Broadcast stations and many Police calls.

• **New 1½ Volt Circuit.** Licensed by R.C.A. and Hazeltine—offers the greatest Farm Radio development of the past ten years. Uses the new 1½ volt super low-drain tubes as follows: 1A7G as Osc.-Mod. (dual-purpose); 1N5G as I.F. Amp.; 1H5G as Det.-A.V.C.-1st Audio (triple-purpose); 1A5G as Audio Output. Dual-pur-

pose and triple-purpose tubes permit four tubes to do the work of six, attaining greater distance reach, better volume and finer tone—and all this with unheard-of economy in operation. Has Automatic Volume Control to maintain uniform volume and to prevent fading. The full 6-inch P.M. dynamic speaker reproduces each program with flawless enjoyable tone.

• **1000 Hour Battery Life.** The new 1½ volt tubes feature amazingly low drain to satisfy completely and at least the persistent demand for economical battery radio operation. "A" drain is only 2 ampere; "B" drain is only 8 milliamperes. Never before have there been such economy, such savings on maintenance and replacement. The **Knight 4**, when used with the newly developed 1½ volt "AB" Power Pack, has a normal operating life of 1000 hours (used 10 hours a day) before requiring new batteries.

• **New "AB" Power Pack.** ALLIED offers the new **Knight 4** 1½ Volt Superhet with a special single unit "AB" battery power pack that will give 1000 hours, or a full season of radio enjoyment, at a cost of less than two cents a day. While this convenient pack is recommended, a regular 1½ volt "A" battery

and two standard 45 volt "B" batteries may be used. Cable has coded leads for easy connection.

• **Beautiful Cabinet.** The **Knight 4** is offered in a magnificent new 1939 table cabinet. Top and front are one-piece burl walnut with attractive overlay side and top trim of diagonally striped walnut. Has attractively shaped grille. The cabinet is of generous size and will hold either the "AB" power pack or regular batteries. Size: 20¼" x 12" x 12¼".

• **Knight 4 Complete.** The **Knight 4 Tube 1½ Volt Superhet** with Push-Button Tuning is offered complete as illustrated, with Sylvania tubes, but less "AB" pack. Shpg. wt., 20 lbs. Code: RANGE.

E10914. Retail Value, \$39.95. **\$19.85**
NET PRICE EACH.....

• The **Knight 4** as above but complete with special 1000 Hour Ray-O-Vac "AB" pack. Shpg. wt., 41 lbs.

E10915. **NET PRICE EACH**..... **\$23.60**

E10044. Replacement 1000 Hour Ray-O-Vac "AB" Pack. (15¼" x 4¼" x 6¼"). Shpg. wt., 21 lbs. **NET**..... **\$4.00**

Knight 4 TUBE 2 VOLT SUPERHET

- SLIDE-RULE DIAL
- P.M. TYPE SPEAKER
- FULL-ACTING A.V.C.
- "BATTERY SENTRY"
- LOW DRAIN TUBES
- 6 TUBE POWER

A superb new Farm Radio offering at lowest cost a remarkable combination of powerful reception, real economy in operation, sharp selectivity and rich, life-like tone.

• **Dependable Performance.** The **Knight 4** tunes 174 to 560 meters (535-1720 K.C.) to cover the entire standard Broadcast band as well as the upper police channel. The latest type 3¼" x 1¼" slide-rule dial is used for easy tuning. "On-off" red disc indicator is incorporated.

• **Powerful Circuit.** The R.C.A. and Hazeltine licensed circuit uses the following R.C.A. tubes: 1C7G as Det.-Osc. (dual-purpose); 1D5G-P as I.F. Amp.; 1B7G as Diode Det.-A.V.C.-1st Audio (triple purpose); 1C5G as Power Pentode Output. Has full-acting A.V.C. to maintain uniform volume and to prevent fading. The **Knight 4** may be operated efficiently either from a 3-volt dry "A" battery, a 2-volt storage battery, or an Eveready Air Cell. Can be used with either 90 volts of "B" or 135 volts. Our listing offers the **Knight 4** for money-saving operation with a 3-volt dry "A" battery. (If ordered with Air Cell, add \$2.16 to E10836 set price; if ordered with 2-volt storage batteries add \$0.94.) "B" battery cable is of plug-in type to connect to either 2 or 3-45 volt "B's."

• **New Battery Sentry.** Amazing economy of operation is achieved by the **Knight 4**. The new "Battery Sentry" circuit, by use of a special switch, provides increased economy by extending the life available from the batteries. As batteries begin to deteriorate, switch is shifted from "Economy" position to "Power" position. Makes possible a 50% increase in the life of the "B" batteries. "A" drain is only 3 amp.; "B" drain on 90 volts is only 11 milliamps, on 135 volts, only 16 milliamps. When using 135 volts "B" battery life will be approximately 1000 hours, when used 10 hours per day.

• **Outstanding Power.** Real economy is coupled with surprising power and wonderful tonal results in the **Knight 4**. The circuit uses dual-purpose and triple-purpose tubes for actual six-tube operation with four-tube economy. The special P.M. Dynamic Speaker provides the combined supersensitivity and rich tonal output of the finest dynamic speakers. You have only to try the **Knight 4** on our liberal money-back guarantee offer to be convinced that it is a super-value in a fine Farm Radio.



R.C.A. & HAZELTINE LICENSED

• **1939 Design.** You will like the pleasing new cabinet in which the **Knight 4** is presented. The instrument panel is of horizontally-grained walnut with attractive edge trim overlays of vertically striped walnut. Dual grille openings enhance the design to give it real style and beauty. The entire cabinet is beautifully finished. Size: 13½" x 8" x 7½". Nowhere this year will you find so much Farm Radio power, economy and outstanding beauty at so low a price.

• **Set Complete.** The **Knight 4 Tube 2 Volt Superhet** as illustrated, complete with R.C.A. tubes. Less batteries. Shpg. wt., 11 lbs. Code: HONEY.

E10835. Retail \$26.50. **\$13.25**
NET PRICE EACH.....

E10836. The **Knight 4** complete with 2—45 volt B's and 1— Burgess dry "A". Shpg. wt., 45 lbs. **NET**..... **\$17.00**

AMERICA'S LOWEST-PRICED FARM RADIO!

Knight 5 TUBE 2 VOLT SUPERHET

- 4 1/2-Inch Dial
- Full Action A.V.C.
- Low-Drain Tubes
- Tunes Police Calls
- P.M. Type Speaker
- Has Battery Space

ECONOMICAL OPERATION

ALLIED challenges the industry with this amazingly economical and powerful Farm Radio. A superb value in a 1939 mantel-type farm radio offering a combination of powerful reception, real economy in operation, sharp selectivity, and rich, life-like tone. This Knight 5-Tube 2-Volt Battery-operated Superhet incorporates the newest battery radio features. Tuning range covers 175 to 550 Meters (540 to 1720 K.C.) for dependable reception of American standard Broadcast stations plus upper Police channels. New large, easy-to-read, 4 1/2" gold-faced dial is clearly calibrated in kilocycles. Five of the newest low-drain tubes conserve battery energy, yet provide for strong reception. A full-sized 6" newly-developed alloy P.M. dynamic speaker assures flawless tone. Has Automatic Volume Control for uniform volume.

• **A Dependable Performer.** The Knight 5 may be operated efficiently from either a 3-volt dry "A" battery, or a 2-volt storage battery, or an Eveready Air Cell. When operated from a 3-volt "A" battery, drain is only .5 amp. from "A" battery and 20 M.A. from "B" battery. This means greatest economy in operation and makes the Knight 5 inexpensive to operate, by assuring maximum battery life. Our listing offers the Knight 5 for money-battery life. If listing offers the Knight 5 for money-battery life. If listing offers the Knight 5 for money-battery life. If listing offers the Knight 5 for money-battery life.

• **Powerful New Circuit.** An advanced R.C.A. and Hazeltine licensed Superhet circuit is incorporated in the Knight 5. Designed for maximum efficiency and economy. It uses the latest low-drain tubes as follows: 1C6 as Mod-Osc. (dual-purpose); 34 as I.F.; 1F6 as Det.-A.V.C.-A.C. (dual-purpose); 33 as Power Output; 5E1 as Voltage Regulator. The 1F6 is a triple-purpose tube and does the work of 3 tubes so that the Knight 5 actually offers 7 tube power with 5 tube economy. Other circuit features include: heavy-duty tuning condenser, A.V.C. matched alloy battery required, etc. The 1939 Knight 5 circuit represents the last word in powerful and economical battery radio operation, assuring dependable, enjoyable reception.



R.C.A. & HAZELTINE LICENSED

• **Attractive Cabinet.** The beautiful new cabinet illustrated above combines a high degree of attractiveness with perfect utility. Front and top are of one-piece rich walnut with roll-effect and side trim of diagonally-stripped walnut. Hand-rubbed to a high piano finish. Size: 20 1/4" x 12" x 12 1/2". Has space to accommodate all batteries.

• **Beautiful Tone.** Rich, faithful tone is an outstanding feature of the Knight 5 Battery Superhet. It will meet the demands of today's wide-awake battery radio purchasers. There is no finer battery radio offered today at anywhere near our amazing low price.

• **A Splendid Value.** The Knight 5-Tube Battery Superhet in table cabinet as illustrated above, complete with 6" speaker and Sylvania tubes. Less batteries. Shpg. wt., 22 lbs. Code: MAIZE.

E10908.
Retail Value.
\$29.95.

\$14.75

NET EACH.....
E10909. The Knight 5 complete as above, with 3-45-volt "B" and 1-Burgess Dry "A" Batteries. Shpg. wt., 60 lbs. **\$19.70**
NET PRICE EACH.....

Knight 6 TUBE 2 VOLT 2 BAND SUPERHET

- Push-Button Tuning
- Thermometer Dial
- New P.M. Speaker
- Low-Drain Tubes
- With Tone Control
- Full-Acting A.V.C.
- "On-Off" Indicator
- "Battery Economizer"

A Farm Radio setting new standards for battery radio value for years to come—a set incorporating the luxury performance features of the finest A.C. sets—a radio unmatched for operating economy and unequalled for low price—that's the Knight 6 Tube 2-Volt Battery Superhet.

• **Push-Button Tuning.** The latest and finest system yet developed. Front-adjusted and easy to tune. Instantly selects any one of four favorite stations just by pushing a button! Manual tuning is easy, too, by means of the new Thermometer Dial which shows a ribbon of color indicating the exact position of the station indicator on the kilocycle-calibrated scales. Dial size is 3 1/2" x 2 1/2".

• **2 Band Range.** Tunes two full bands. 16-52 meters (5750-18100 K.C.) for thrilling Short Wave reception and amateur, police and aircraft signals; and 173 to 556 meters (540-1730 K.C.) for all standard American and Canadian Broadcast stations.

• **Powerful Low-Drain Circuit.** Licensed by R.C.A. and Hazeltine, the brilliant superhet circuit of the Knight Battery 6 achieves remarkable volume and splendid tone quality. Newest low-drain tubes are used: 1C7C as Osc.-Osc. (dual-purpose); 1D5G as I.F. Amp.; 1H4G as Det.-A.C. (dual-purpose); 1E5G as 1st Audio; 1G5G as Audio Output; 4-1 as Voltage Regulator. Multi-function tubes attain actual 8 tube efficiency.

• **Battery Economizer.** The Knight 6 features a special Battery Economizer utilizing only the amount of current required to provide power for any given level of volume. "A" drain is only 420 amp.; "B" drain with Economizer in use is only 12 M.A.; without Economizer, only 16 M.A.

• **Extra Value Features.** Special alloy P.M. speaker develops a flawless clarity and richness of tone; has full-range Personal Tone Control; A.V.C. keeps volume uniform on all programs; includes heavy-duty tuning condenser and rubber-floated chassis; 6 tuned circuits on each band.

• **Table Model Complete.** The Knight 6 Tube 2-Band Battery Superhet in cabinet, complete with 6" P.M. Dynamic Speaker and Sylvania tubes. Less Batteries. Shpg. wt., 22 lbs. Code: GRACE.

E10910.
Retail Value, \$44.50.
NET PRICE EACH.....

\$21.65

E10911. The Knight 6 Table Model as described complete with Burgess Dry "A" Battery and 3-45-volt "B" Batteries. Shpg. wt., 60 lbs. **\$26.60**
YOUR NET PRICE EACH.....



Unusual Economy. Operating with remarkable money-saving economy, the Knight 6 will work from either a 3-volt Dry "A", a 2-volt Storage or an Air Cell Battery—no "C" Batteries are required, and only 3-45-volt "B" Batteries are used. Plug-in connectors on battery cables assure quick, easy connections. Our listing offers the Knight 6 with 3-volt Dry "A" Battery. (If Knight 6 with Air Cell Battery is desired, add \$2.16 to E10911; if desired with 2-volt Storage Battery, add \$0.94.) You get maximum economy and powerful reception always with the Knight 6.

• **Cabinet Holds Batteries.** Handsomely designed and generously proportioned, the lay-down cabinet of the Knight 6 has a top and front of one-piece selected burr walnut with attractive overlay side trim of contrasting diagonally-grained walnut. Measures 20 1/4" x 12" x 12 1/2" and holds all batteries neatly and conveniently—a luxurious table model cabinet in every sense of the word.

• **Push-Button Tuning.** Here is Automatic Push-Button Tuning at its very best—offered for the first time at so low a price in a 1939 Farm Radio. Push-button Tuning is front-adjusted and can be easily and quickly set for the selection of any of four favorite stations. Once set, you just push a button for the station of your choice, and it comes in perfectly, instantly each time—tuned right on-the-head for maximum radio enjoyment with the greatest tuning convenience.

Amazing New ONE BATTERY RADIOS

Knight 4 TUBE 6 VOLT SUPERHET



R.C.A. & HAZELTINE
LICENSED

The Knight 4 Tube 6 Volt Superhet is presented in a beautiful cabinet made of choice selected two-toned solid walnut. Top and bottom are in rich, dark walnut finish, while the raised body band is of a lustrous, contrasting lighter shade. Louvre openings in front provide for best acoustical results together with smart styling. Size: 12" long, 7 3/4" deep, and 7 1/2" high. Beautiful new Slide-Rule Dial (3 3/4" x 1 1/2") enhances the cabinet beauty and makes tuning easier and more accurate. Has horizontal-traveling pointer; calibrated both in kilocycles and meters.

- SLIDE-RULE DIAL
- SYNCHRONOUS VIBRATOR
- P.M. DYNAMIC SPEAKER
- FULL-ACTING A.V.C.
- LOW-DRAIN TUBES
- TUNES POLICE CALLS
- BEAUTIFUL CABINET

Through the use of such latest developments as the new synchronous type vibrator and dual and triple-purpose tubes, the Knight 4 Tube 6 Volt Superhet achieves a brilliance in performance and tone quality equal to many 6 and 7 tube sets—yet its price and operating cost are amazingly lower.

• **Economical Operation.** The Knight 4 uses only one 6 Volt storage battery and does not require any "B" or "C" Batteries; battery drain is only 1.9 amps. This efficient receiver costs you practically nothing to run. It combines the latest desirable features found in all-electric sets with remarkable economy of operation so important to the purchaser of a battery-operated set.

• **Powerful New Circuit.** R.C.A. and Hazeltine licensed; uses newest low-drain tubes: 6A8G as Converter-Osc.; 6K7 as I.F. Amp.; 6Q7G as Diode Det.-A.V.C. 1st Audio; 6G6G as Beam-Power Pentode Output. Other features: dual-purpose synchronous vibrator, found only in finest 6 volt sets; A.V.C.; rubber-covered battery cable, highest quality standard components throughout, etc.

• **Amazing Performance.** The Knight 4 covers 174 to 560 meters (535-1720 K.C.) for clear, powerful reception of American standard Broadcast reception plus upper Police channels. Rich, mellow tone is assured by the new type 5-inch P.M. Dynamic speaker—a revelation in such a low-priced battery receiver.

• **Splendid Value.** The Knight 4 Tube 6 Volt Superhet in table cabinet as illustrated above, complete with 6" speaker and R.C.A. tubes. Less battery. Shpg. wt., 13 lbs. Code: HOME.

E10831. Retail Value, \$32.50.
NET PRICE EACH.....

\$1545

E10458. Knight 6 volt 15-plate Storage Battery. Shpg. wt., 42 lbs. NET...\$5.95



R.C.A. & HAZELTINE LICENSED

AMERICA'S FINEST
6 VOLT RADIO

- PUSH-BUTTON TUNING
- 3 FULL WAVE BANDS
- SLIDE-RULE DIAL
- R.F. ON ALL BANDS
- 5-INCH P.M. SPEAKER
- FULL-ACTING A.V.C.
- 3-GANG COMPLETE
- WITH TONE CONTROL

Knight 7 TUBE 6 VOLT SUPERHET

For those who want a quality 6 volt receiver which offers all the de luxe features of the finest A.C. sets—powerful 3-band reception, stirringly realistic tone quality, smart styling, and extreme economy in operation—ALLIED presents the Knight 7 Tube 6 Volt Superhet. Prove it to yourself—try it out in your own locality under our liberal Free Trial, Money-Back terms—and you'll agree that it's a radio that will set the standards for battery radio value for years.

• **World-Wide Range.** The Knight 7 tunes 3 full bands to bring you every worth-while program: 12.5 to 40 meters (7500-24,000 K.C.) for thrilling foreign and domestic Short Wave programs; 40 to 120 meters (2500-7500 K.C.) for Short Wave amateur, police, and aircraft signals; and 175 to 556 meters (540-1720 K.C.) for your choice of the best American and Canadian Standard Broadcast programs. No other 6 volt radio approaches the Knight for sensitivity and selectivity—it brings the entire living world of radio into your own home.

• **Slide-Rule Dial.** Both the efficiency and beauty of the Knight 7 are enhanced by the accurate, simple-to-use Slide-Rule Dial with vertical pointer. The top scale is calibrated in kilocycles for standard Broadcast; the lower scales in megacycles for Short Wave.

• **R.F. On All Bands.** An outstanding feature generally found only in the finest custom-built receivers. Increases sensitivity tremendously.

• **Electric Eye.** Incorporated in the dial face. Scientifically precise, it shows you when you are tuned in perfectly. You just watch the shadow in the glowing eye; when it is narrowest your station is tuned "on the head."

• **Push-Button Tuning.** Just push a button—and there's your favorite Broadcast station! Here's a feature not usually found on battery radios. Will tune any six of your favorite Broadcast stations. Once you set the buttons they operate without further adjustment.

• **Real Economy.** The Knight 7 works entirely from a single 6-volt storage battery. No "B" or "C" batteries are required. Operating costs are extremely low, especially when used with Gas Generator (Page 45) or Windcharger (Page 167).

• **Powerful 1939 Circuit.** The Knight 7 employs a superhet circuit which is fully licensed by R.C.A. and Hazeltine. Latest low drain tubes are used: 6S7 as R.F. Amplifier; 6K8 as Osc.-Mod.; 6S7 as I.F. Amplifier; 6T7G as 2nd Det.-A.V.C. 1st Audio; 6G6G as A.F. Driver; 6Z7G as Class "B" Output, and 6N5 as Electric Eye. Battery drain is only 2.6 amps., yet full 3 watts output is developed—unusual for a battery receiver.

• **Superlative Tone.** Never before has a battery receiver achieved such a remarkable fidelity of tone! The special 8" P.M. speaker of the Knight 7 assures the finest wide-range tonal reproduction rendered with a clarity and fullness that will amaze you. Continuously Variable Tone Control allows for personal emphasis of either treble or bass. Bass Booster reinforces and builds up the bass register.

• **Additional Features.** Full A.V.C. to prevent fading or blaring; wave-band indicator knob; 3-gang rubber-mounted tuning condenser; 7 knob circuits; phono connection, etc.

• **Luxurious Table Model.** The finest cabinet ever chosen to house a battery radio. Of two-toned, matched selected walnut woods, with grille overlay bars and side-fluting to add to distinguished appearance. Will harmonize in any interior. Size: 12 3/4" wide x 9 1/2" deep x 9" high.

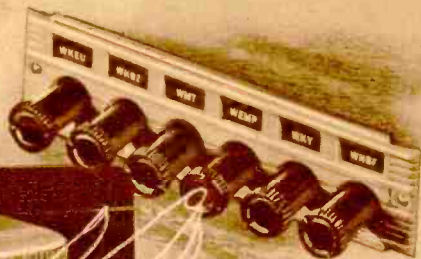
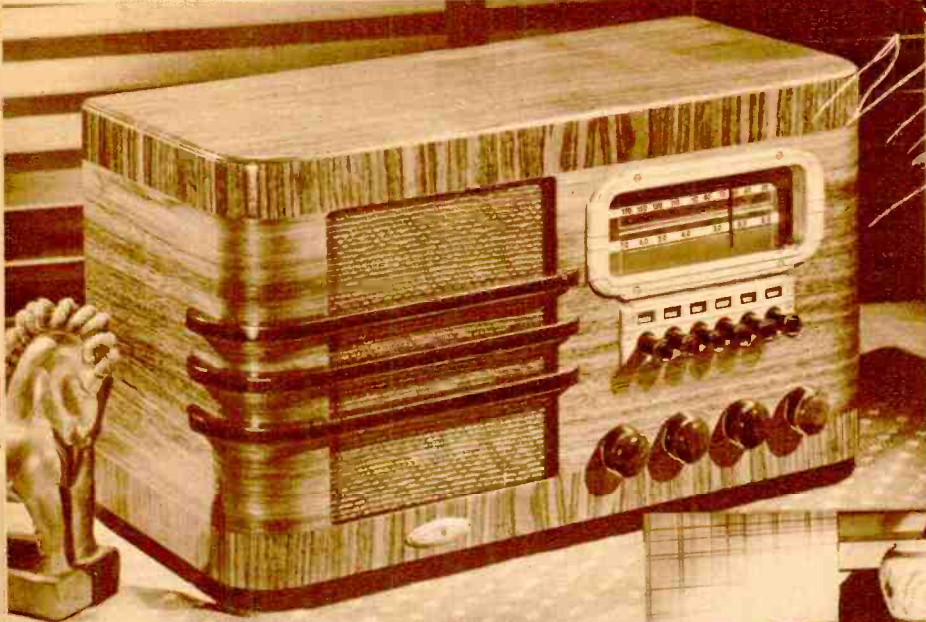
• **Table Model Complete.** The Knight 7 Tube 6 Volt Superhet is offered complete with 8" speaker and R.C.A. tubes, as illustrated above. Less 6-volt battery. Shpg. wt., 32 lbs. Code: WAGON.

E10906. Retail Value, \$84.50.
NET PRICE EACH.....

\$4185

E10459. Knight 6-volt 19 plate Heavy-Duty Storage Battery. Shpg. wt., 53 lbs. NET...\$7.49

At Sensational Low Prices!



**OUTSTANDING
NEW FEATURES**

- Push-Button Tuning
- 6" Slide-Rule Dial
- Synchronous Vibrator
- New P. M. Speaker
- With Tone Control
- Low-Drain Circuit
- Full-Acting A. V. C.
- Efficient Wave Trap
- Full 2 Watts Output

***Knight 6* TUBE 6 VOLT SUPERHET**

If we're exceptionally proud of this 1939 Knight 6 Tube 6 Volt Superhet it's because we know that it incorporates the finest in engineering skill, quality-built parts, and artistic cabinetry—at a price that is unbeatably low. It's ALLIED's challenge to the battery radio industry and we're backing it up 100% with our Free Trial, Money-Back Guarantee! Buy this set—try it out under your own operating conditions—listen to it bring in Broadcast and Short Wave stations with an ease and fidelity you never dreamed possible in a battery radio—and if it doesn't out-perform any other 6 tube 6 volt set you ever heard, we'll gladly refund your full cash purchase price!

- **Push-Button Tuning.** Automatic, simple, fool-proof, the Push-Button Tuning System of the Knight 6 will tune any 6 of your favorite Broadcast stations. Just push a button—and there's the station you want, accurately tuned for perfect reception! Station tabs are included for all important American stations. Convenient manual tuning is also provided.
- **Powerful Reception.** The Knight 6 covers two complete bands powerfully and dependably: 16.5 to 53 meters (5650 to 18,100 K.C.) for Short Wave police, aviation, and amateur phone, as well as fascinating foreign reception on the popular 19, 25, 31, and 49 meter foreign Short Wave channels. The second band covers 174 to 560 meters (535 to 1720 K.C.) for upper police channels and all American and Canadian standard Broadcast stations. Here is virtually three band reception!
- **Slide-Rule Dial.** Latest 1939 type—an innovation that makes for simpler, more accurate tuning. Measures 6" x 2 3/4". Pointer travels horizontally over attractively-colored dial. Has easy-to-read calibrations, marked in kilocycles for the Broadcast band and in megacycles for Short Wave. Popular stations and channels are clearly indicated.
- **Latest 1939 Circuit.** The circuit of the Knight 6 is of the newest superhet type, licensed by the famous R.C.A. and Hazeltine laboratories. Every tube works: 6D8G as Converter; 1H4G as Oscillator; 6S7G as I.F. Amp.; 6T7G as Diode Det.-A.V.C.-1st Audio (triple-purpose); 6L5G as Audio Driver; and 1J6G as Class "B" P.P. Output. The circuit also employs the new synchronous vibrator for combined alternator and rectifier. Since the vibrator acts as a tube, the Knight 6 attains a power and performing ability usually associated only with 7 and 8 tube sets.
- **Low-Cost Operation.** The Knight 6 operates solely from a 6-volt storage battery and does not require any "B" or "C" batteries. Battery drain is extremely low—1.8 amps.—yet the power output is more than 2 watts, unusual for a 6 tube battery set. That's real economy!

- **Splendid Tone.** A full-sized 6" P.M. Dynamic speaker is incorporated in the table model of the Knight 6 (8" in the console and chassis models). All programs are handled smoothly and effortlessly, being reproduced with a rich, bell-like quality of tone not found even in many A.C. receivers. You'll like the vivid tonal realism of the Knight 6!
- **Other Value Features.** Full Automatic Volume Control to maintain uniform volume on all programs; Continuously Variable Tone Control so that you may emphasize either bass or treble as you desire; "On-Off" switch; separate coils for each band; I.F. Wave Trap to prevent code from breaking through on the Broadcast band; rubber-floated, heavy-duty tuning condenser; 3 foot battery cable with clips attached, etc.
- **Beautiful Cabinet.** An attractive, pleasingly-proportioned cabinet houses the sturdy chassis of the Knight 6. Instrument panel is of horizontally striped walnut with top and bottom hand trims of vertically striped walnut. Curved grille bars accentuate the flowing lines, and add to the graceful design. Size: 18" long, 10 1/4" high, and 8" deep.
- **A Superb Value.** The Knight 6 Tube 2 Band 6 Volt Superhet is offered in the handsome table model cabinet illustrated above, complete with R.C.A. tubes and 6" speaker. Less 6-Volt battery.

Shpg. wt., 23 lbs. Code: WHEEL.
E10825. Retail Value, \$52.50. **\$25.85**
YOUR NET PRICE.....
E10458. Knight 6-volt 15-Plate Storage Battery. Shpg. wt., 42 lbs. **\$5.95**
NET.....



R.C.A. & HAZELTINE LICENSED

6 TUBE 6 VOLT CONSOLE MODEL

The Knight 6 Tube 6 Volt Superhet is available in the luxurious new low-boy console shown above. Incorporating the same efficient chassis, but with an 8" P.M. Dynamic Speaker, it has a large baffle area for finest tone quality. Instrument panel is of striped walnut, and is sloped for best visibility. Entire cabinet is hand-rubbed to a rich walnut finish, and reflects careful craftsmanship. Size: 32" wide, 36" high, 13 1/4" deep. Supplied complete with 8" speaker and R.C.A. tubes. Less 6-volt battery. Shpg. wt., 66 lbs. Code: CREAM.

E10827. Retail Value, \$77.50. **\$38.50**
NET PRICE EACH.....
E10458. Knight 6-Volt 15-Plate Storage Battery. Shpg. wt., 42 lbs. **NET.....\$5.95**

6 TUBE 6 VOLT CHASSIS MODEL

The chassis model of the Knight 6 makes a perfect replacement for obsolete battery sets. Incorporates all the features described above, including an 8" speaker. Ruggedly built for long, dependable service. Size: 14 1/4" x 7 1/4" x 8". Complete with R.C.A. tubes and 8" speaker. Less 6-volt battery. Shpg. wt., 19 lbs. Code: FENCE.
E10829. Retail Value, \$47.50.
YOUR NET PRICE.....
E10458. Knight 6-Volt 15-Plate Storage Battery. Shpg. wt., 42 lbs. **NET.....\$5.95**

\$23.45

NEW 2-WAY FARM RADIO

6 TUBE 6 VOLT-110 VOLT SUPERHET



At just the flip of a switch the **Knigh 6 Two-Way Farm Radio** will play from either a 6-volt storage battery or from 110 Volts A.C. Either way its performance equals that of any A.C. radio.

If you expect the high-lines soon, you don't have to go without radio now—the 1939 **Knigh 6 Two-Way Farm Receiver** gives you perfect reception from either a 6-volt storage battery or from 110 Volts A.C. A product of the highest engineering skill and ingenuity, the **Knigh 6** is the most advanced, versatile performer yet developed. It's really two high-grade sets in one, and no matter which type of current you use, you'll be getting the finest type of reception!

• **Powerful 2-Band Reception.** The **Knigh 6** covers 16.5 to 54 meters (535-1730 K.C.) for long-range Short Wave reception of aviation, ship and airplane signals, as well as the important 19, 25, and 49 meter foreign channels; and 175 to 560 meters (5650-18,100 K.C.) for police calls and for powerful reception of all American and Canadian standard Broadcast stations.

• **Glorious Tone Quality.** Superb reproduction of all programs is an outstanding feature of the **Knigh 6**. You'll thrill to this new concept of radio performance which is attained by a brilliant new circuit coupled to the finest type of P.M. dynamic speaker (full 6" type in the table model) which reproduces with finest fidelity.

• **1939 Circuit Design.** A rugged superhet circuit, fully licensed by R.C.A. and Hazeltine, uses latest low-drain tubes: 6D8G as 1st Det.; 6L5G as Osc.; 6T7G as Audio Amp.-Diode Det.-A.V.C. (triple-purpose); 6S7G as I.F. Amp.; 606G as Power Output; and 6Z5G as Rectifier. Other latest features include: Full A.V.C. to maintain uniform volume on all programs; Continuously Variable Tone Control; Litz-wound high-gain coils; full-length cable with battery clips and A.C. plug, etc.

• **Economical Operation.** The new two-in-one **Knigh 6** is a marvel for economy whether you operate it from 6 volts or 110 volts. Low-drain tubes and skillful circuit design assure maximum savings without any sacrifice in efficiency. You can save as much as \$15 to \$18 a year on battery operation; 110 volt operation is on a par with the lowest-drain A.C. radios.

• **Push-Button Tuning.** The finest available. Has 8 push-buttons—6 for tuning your favorite

Broadcast stations automatically, one for clearing to manual tuning, and one as Short Wave band switch; can be set for any 6 desired local stations. Manual tuning is also provided for.

• **Slide-Rule Dial.** Both efficient and attractive; makes for accurate, easy logging of stations. All popular Broadcast stations and important Short Wave channels are marked. Upper scale is calibrated in kilocycles for Broadcast; lower scale in megacycles for Short Wave. Size: 8 1/4" x 5 1/4" An easy-to-tune modern dial.

• **Handsome Table Cabinet.** Body is of beautiful horizontally striped walnut, top and bottom of striking "V" matched woods. Attractive grille bars add richness to appearance. Cabinet has finest acoustical qualities. Size: 18" x 11 1/4" x 9".

• **Two-In-One Radio Complete.** The **Knigh 6 Two-Way 6 Tube Superhet** in table model cabinet shown below, complete with speaker and Raytheon tubes.

Shpg. wt., 27 lbs. Code: WHEAT. Less battery.

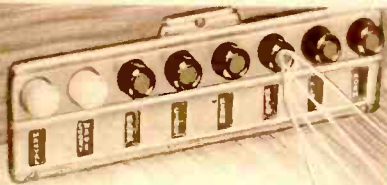
E10882.

Retail Value, \$59.95.

NET PRICE EACH.....

E10458. **Knigh 6-volt, 15-plate Storage Battery.** Shpg. wt., 42 lbs. NET.....\$5.95

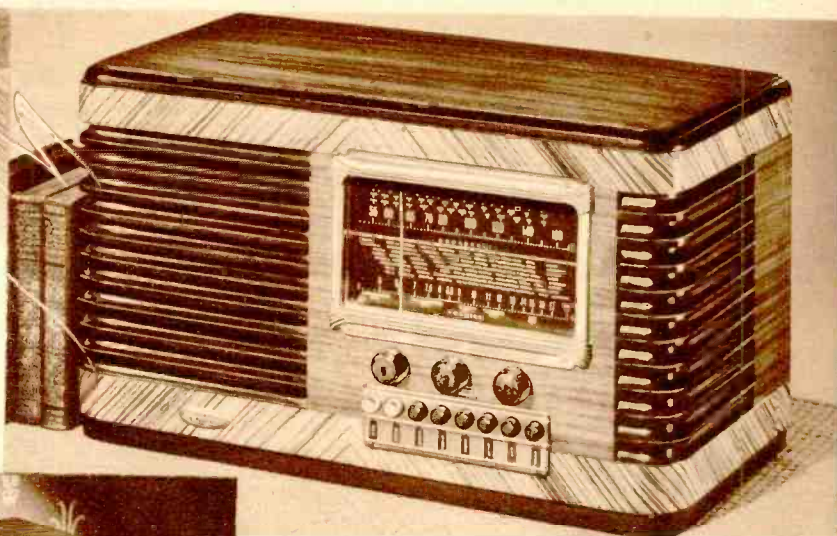
\$29⁹⁵



OUTSTANDING NEW FEATURES

- PUSH-BUTTON TUNING
- SLIDE-RULE DIAL
- NEW P. M. SPEAKER
- WIDE-RANGE TUNING
- FULL-ACTING A. V. C.
- TONE CONTROL
- NEW LOW-DRAIN TUBES

R.C.A. & HAZELTINE LICENSED



For camps, cottages, trailers, and for those who expect high lines soon, the **Knigh 6** offers the last word in radio design—two-way reception at the turn of a switch. Works perfectly from either 6-volts D.C. or 110 volts A.C. Use it in the city on A.C.—in the country from a 6-volt storage battery—either way you get A.C. performance, convenience and luxury—at a price that marks this set as 1939's outstanding radio value! Take advantage of our Free Trial, Money-Back Guarantee (See Page 10)—try it yourself in your own place—you'll be proud and delighted when you experience the thrilling performance, versatility and economy of the **Knigh 6!**

6 TUBE 6 VOLT-110 VOLT CONSOLE

The **Knigh 6 Tube Two-Way Superhet** is available in a modern console model as illustrated at the left. Front panel is of beautiful burl walnut, sloped for the perfect tuning angle. Top and curved sides are of choice walnut, furnishing a harmonious note. Entire cabinet is hand-rubbed to a high finish. Size: 37" x 27" x 11 1/2".

• The **Knigh 6 Console Model** includes all the features described above; incorporates an 8" speaker for finest tone quality; complete 2-band reception—16.5 to 54 and 175 to 560 meters (535-1730 and 5650-18,100 K.C.)—for the finest in Short Wave and Broadcast reception, Push-Button Tuning, Slide-Rule Dial, A.V.C., Tone Control, R.C.A. and Hazeltine licensed circuit, etc. Complete set, as shown, with 8" speaker and Raytheon tubes. Shpg. wt., 54 lbs. Code: TULIP. Less 6-volt battery.

E10884.
Retail Value, \$83.50.
NET PRICE EACH.....

\$41⁴⁵

E10458. **Knigh 6-Volt 15-Plate Storage Battery.** Shpg. wt., 42 lbs. NET.....\$5.95

6 TUBE 6 VOLT-110 VOLT CHASSIS

Here's an ideal chassis for modernizing old battery radios. Measures: 14" long, 8 3/4" deep, 9" high. Includes all features described above: 2 Full Bands, Push-Button Tuning, Slide-Rule Dial, A.V.C., Tone Control, low-drain tubes, etc. The perfect two-in-one chassis—for either 6 volts or 110 volts. Supplied complete with 8" P.M. speaker and Raytheon tubes. Shpg. wt., 18 lbs. Code: SFRAY. Less 6-volt battery.

E10886. Retail Value, \$56.50.
NET PRICE EACH.....

\$27⁹⁵

E10458. **Knigh 6-Volt, 15-Plate Storage Battery.** Shpg. wt., 42 lbs. NET.....\$5.95





1939 FEATURES

- PUSH-BUTTON TUNING
- 6" DYNAMIC SPEAKER
- WITH TONE CONTROL
- TWO BAND RANGE
- FULL-ACTING A.V.C.
- BEAM POWER TUBES
- NEW 1939 CIRCUIT
- INDIVIDUAL COILS

R.C.A. & HAZELTINE LICENSED

6 TUBE 2 BAND 32 VOLT FARM PLANT RADIO

Power to bring you the finest radio programs from everywhere—tonal brilliance never before obtainable in a 32 volt set—economy of operation that will amaze you—that's the **Knight 6 Tube 32 Volt Superhet** for 1939! We believe that the **Knight 6** is so far superior to any other 32 volt set in spite of its extremely low price that we invite you to try it out under our Free Trial, Money-Back Guarantee! Once you enjoy the beauty and performance of this set, once you hear its outstanding, rich tone quality, you'll know why we are so proud of this 1939 **Knight 6**!

- **Two Full Bands.** The **Knight 6** covers 16.5 to 556 meters (5750-18100 K.C.) for Short Wave police, airplane, amateur and ships-at-sea signals, as well as foreign reception on the popular 19, 25, 31, and 49 meter bands; and 174 to 556 meters (540-1739 K.C.) for long-distance reception of American and Canadian standard Broadcast programs.
- **All-Electric Operation.** No batteries are required for operating the **Knight 32-Volt Superhet**—just plug it into the nearest 32 Volt D.C. source, and you're ready to enjoy all the luxury, convenience and economy of the finest modern A.C. radio receivers. Here is 1939's finest 32 Volt radio at a price everyone can afford.

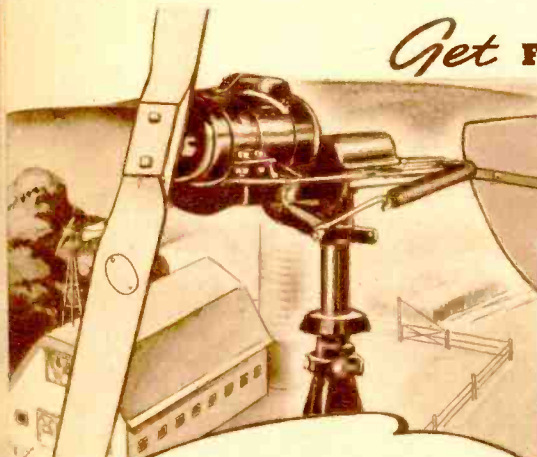
- **Push-Button Tuning.** ALLIED is first with Push-Button Tuning in a 32 Volt radio. Automatic, accurate, and dependable, this tuning system enables you to tune any four of your favorite broadcast stations automatically. Buttons may be easily set from front for your favorite local stations. Set can also be tuned in the regular manual method.
- **Powerful 1939 Circuit.** An entirely new superhet circuit has been chosen for the **Knight 6**. Licensed by R.C.A. and Hazeltine, it uses: 6K8 as Osc.-Mod. (dual-purpose); 6K7 as I.F. Amp.; 607G as Det.-A.V.C.-1st Audio (triple-purpose); 6CS6 as Audio Driver; and 2-25L6G as Push-pull Beam Power Output. These last two tubes contribute greatly to the extra power and tone quality of the **Knight 6**. The circuit is designed for greatest efficiency and economy. Total drain is only 1.05 amps.
- **Magnificent Tone.** The **Knight 6** stands head and shoulders above all other 32 volt sets for full-bodied, bell-like tone quality. The heavy-duty 6" dynamic speaker, plus the 2 Beam Power Tubes and efficient Tone Control, result in unmatched tonal excellence. You'll enjoy the way in which this new **Knight** model reproduces each program with broadcast studio tone quality.

Latest Features. Full A.V.C. for uniform volume and freedom from fading; rubber-mounted tuning condenser and chassis; "Thermometer" dial; individual coils for each band; Beam Power tubes, etc. These are features seldom found in ordinary 32 volt radios. They are additional proof that the **Knight 6** is truly a deluxe receiver—yet it is offered at a price easily within anyone's reach.

- **Beautiful Cabinet.** The cabinet which houses the **Knight 6** is a model of superb craftsmanship and designing. Gracefully proportioned, it has top and bottom of richly colored dark woods which contrast handsomely with the lighter, horizontally grained walnut instrument panel. Attractive grille bars on front and side add a pleasing streamlined note. Size: 19" wide, 11" high, 8 1/2" deep.
- **Table Model Complete.** The **Knight 32-Volt 6 Tube Superhet** is offered complete with 6" dynamic speaker and R.C.A. tubes. For 32-volt operation. Shpg. wt. 19 lbs. Code: GRAIN. **E10920.** Retail Value, \$58.95. **NET PRICE EACH....**

\$29.45

Get FREE POWER with a WINDCHARGER



Rurlpower

GAS ENGINE FARM PLANTS

Get rid of time-wasting drudgery, poor lighting, and weak radio performance—purchase one of the new dependable, low-cost Farm Power Plants described on Page 45! Available in 6-volt, 32-volt, and 110-volt A.C. models, all gas-engine driven and incorporating the latest improvements for efficient, economical power and lighting service. Also, see Page 46 for light plant wire, bulbs, and accessories.

NEW: ELECTRIC FENCE CONTROLLERS

New, sensational, and revolutionary are the 6-volt, 32-volt and 110-volt A.C. Electric Fences shown on Pages 46-47! Low in cost, reliable, and economical, they will keep live-stock safely enclosed within restricted areas.

Now! Get FREE power from the wind with the finest, most reliable Windcharger ever made. This new, perfected Rurlpower Windcharger offers true economy in storage-battery charging—costs nothing to operate; saves you the expense of dry batteries, of carrying heavy batteries to town for recharging. Delivers up to 16-20 amperes of direct 6-volt current. Employs a newly-designed, exclusive heavy-duty generator which has been especially developed for the Rurlpower Windcharger. The Windcharger assures better radio performance because it eliminates the nuisance of run-down batteries.

The Rurlpower Windcharger quickly and efficiently charges any 6-volt Storage "A" Battery, or, used with the resistor below, will charge any 2-volt storage battery. Has automatic cut-out; automatic propeller speed governor. Generator has oil-sealed ball bearings; cuts in at 320 R.P.M. Has airplane type propeller with copper-sheathed leading edges. Ball-bearing Turntable maintains double tension contact; permits free rotation of power head. Turntable brake automatically corrects position for any wind. Easily started and stopped with simple pull down wire attached to swivel-collar. To install, mount Windcharger and 10-foot tower on unobstructed roof or in high, open place; attach wires from generator outlet to storage battery—the wind does the rest. May also be used for limited lighting service with heavy-duty batteries such as shown on page 43.

E10610. Rurlpower Windcharger complete. Includes heavy-duty generator and head-mechanism, wired and ready to mount; 10-foot Tower, Propeller, Tail Vane, Ammeter on panel, Cut-out, Battery clips, etc. Complete instructions supplied. Shpg. wt. 75 lbs. **NET Price, \$29.95.**

NET PRICE COMPLETE WITH 10 FOOT TOWER. \$19.75

E10031. 2-Volt Resistor for charging 2-Volt Storage Battery from Windcharger line. NET..... 55c
When purchased complete with any Knight 6-Volt Radio, the Windcharger is available at the reduced price of..... \$17.50

More Joy on the Road with these

R.C.A. & HAZELTINE
LICENSED

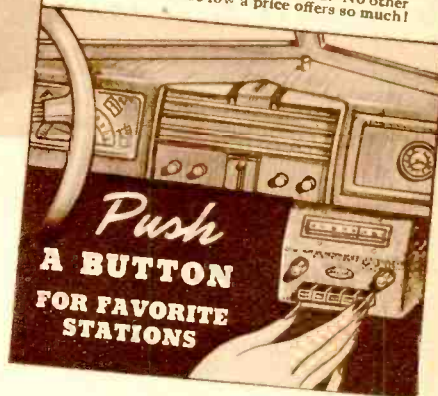


The
PACEMAKER

\$14⁹⁵ Each
In Lots
of 3

**Knight 5 TUBE
AUTO SUPERHET**

Think of it—a powerful high-grade 1939 Auto Radio with genuine high-grade 1939 Button Tuning at an unbelievably low price! Here's the latest advance made in Auto Radio design. It offers you a choice of five favorite stations which can be tuned instantly, automatically, perfectly—without once taking your eyes off the road. No other Auto Radio at so low a price offers so much!



Push
**A BUTTON
FOR FAVORITE
STATIONS**

1939's most amazing car radio design! Offers the last word in Auto Radio versatility, convenience, driving security and enjoyable performance. Fits any car perfectly. The first driving ALLIED is first with the latest in a Push-Button Tuning Auto Radio—and at the lowest price on the market!

• **AUTOMATIC TUNING.** You can tune any of five favorite stations on the Knight 5 just by pressing a button—and you don't have to take your eyes off the road! Buttons are instantly adjustable for any five stations selected. Each button is geared directly to the tuning condenser for positive, accurate tuning. This tuning system withstands vibration and can't get out of adjustment. Does not interfere with regular manual tuning.

• **NEW SLIDE-RULE DIAL.** The latest 1939 rectangular full-vision dial is incorporated in the Knight 5 Auto Radio. Has full-vision easy-to-read scale. Both dial, controls and push-buttons are inclined slightly to face the driver and to provide full-vision and safety while driving. The entire auto radio assembly mounts neatly to the lower edge of the car instrument panel.

• **ALL-ELECTRIC RADIO.** You get luxurious all-electric operation anywhere you drive, with the new Knight 5. Has built-in vibrator power supply of the finest construction. No suppressors are required. Latest Superhet circuit design, licensed by R.C.A. and Hazeltine, uses five new tubes to achieve 7 tube efficiency and performance. Tubes used are: 6A8G as Conv. Osc.; 6K7 as I.F.; 6Q7G as Det.-A.V.C.-1st Audio; 6K6G as Power Output; 6X5G as Rectifier.

• **OUTSTANDING FEATURES.** Additional features include: Full A.V.C. to maintain uniform volume; 5-inch Electro-dynamic Speaker of highest quality; full 2 watts power output; 6 tuned circuits; 7 to 8 microvolts sensitivity; 535 to 1530 k.c. range; plug-type antenna connection on case; fused "A" lead, etc. All components are in a single sturdy steel case, 12" x 6" x 6"; beautifully finished in tan crackle. The Knight 5 has been built with the care and precision required in the automotive field. It will withstand vibration and shock to give stable, enjoyable performance. The Knight 5 is offered at a price that makes available to all the finest in car radio design.

• **SET COMPLETE.** The 1939 Knight 5—America's Safety First Auto Radio—is offered complete as described above with R.C.A. tubes. Shipping weight, 15 lbs. Code: RIDE. E10390. Retail Value, \$24.95.

**NET PRICE EACH, \$15.95.
NET PRICE, LOTS OF 3, EACH**

\$14⁹⁵

(See page 150 for suitable and efficient new Auto Aerials.)

LATEST FEATURES

- AUTOMATIC TUNING
- ALL-ELECTRIC RADIO
- NEW SLIDE-RULE DIAL
- SUPPRESSORLESS
- FULL-ACTING A.V.C.
- 2 WATTS OUTPUT
- DYNAMIC SPEAKER
- SAFETY-FIRST RADIO
- PLUG ANTENNA CONN.
- 6 TUNED CIRCUITS

SPECIALS IN AUTO RADIO ACCESSORIES

MOTOR-NOISE FILTER

A new scientifically designed Auto Radio noise and spark plug suppressor eliminator. Easy to install; does not interfere with the car ignition system. Assures noise-free auto radio reception. Unit consists of a combination high-frequency filter and adjustable balancing circuit which completely eliminates use of spark plug suppressors. Interference is always "balanced out" regardless of frequency, by means of manual inductance control. Filter is housed in shielded metal container fitted with mounting bracket. Installed in series with the antenna at receiver. A really efficient and dependable auto filter unit.

E5489. YOUR PRICE \$1.25

**FRONT WHEEL NOISE
SUPPRESSORS**

Effectively eliminates all noises caused by static pick-up of front wheels of car. Designed for easy installation in hub caps of car wheels.

E5488. PER PAIR \$1.00



**RCA-VICTOR M-34
VIBRATOR
ASSEMBLY**

A genuine R.C.A. Replacement part. An exact replacement vibrator, part No. 7604, for the R.C.A. M-34 auto set. Sealed; fully adjusted and ready to install. Will operate on from 4 to 8 volts input. Rubber-mounted in double aluminum can. Size 4 1/2" high x 2 1/4" diameter. Built with typical R.C.A. quality to give efficient lasting service. An excellent replacement and exact duplicate of the original. Priced attractively low so that you need not make replacement with inferior unit.

E7335. Part 7604. \$3.53
List. \$6.00. NET

BASE FOR ABOVE

R.C.A. Part No. 6577. Capacitor and base assembly for vibrator No. 7604. Contains two .04 mfd. condensers.

E7336. Part 6577. YOUR PRICE \$4.60

SHIELDED AERIAL LEAD-IN

For efficient installation of auto antenna. Filler wrapped around No. 18 conductor, with close-fitting shielding overall. The highest quality shielded aerial lead-in wire you can buy, yet priced attractively low. Ideal for auto radio installations.

E2444. 1/4" DIAM. 5c
Per Ft.
100 Ft. \$4.35
E2443. 1/2" DIAM. 7c
Per Ft.
100 Ft. \$5.95

ANTENNA CONNECTOR

For Auto Radio sets, to connect antenna lead to set.
E6254. EACH \$6c
PER DOZ. 60c

ALLIED has available the most complete selection of high-grade Auto Aerials ever offered. See our listings on Page 150.

Powerful New 1939 Auto Radios!

Knight 6 TUBE SUPERHET

- ALL-ELECTRIC RADIO
- SUPPRESSORLESS
- 3-GANG CONDENSER
- R. F. PREAMPLIFIER
- SINGLE HOLE MOUNT
- WITH TONE CONTROL
- FULL-ACTING A. V. C.
- 3 WATTS OUTPUT
- 6" DYN. SPEAKER
- FITS ALL MAKE CARS

Get the ultimate in car radio enjoyment with the new 1939 Knight Super Six Auto Radio! Every advantageous engineering development, every new car radio feature has been incorporated to provide the finest possible radio performance and utility in any automobile. Here is a set designed with the ruggedness, precision and quality demanded by the automotive industry. Unparalleled at any price for total brilliance, large dependable power and outstanding new refinements.

• **Fits All Cars.** The Knight 6 is completely contained in a single tan-colored crackle-finished steel case, 8 $\frac{3}{4}$ " x 7" x 7 $\frac{3}{4}$ ". Has single hole mounting for quick, easy installation.

• **No Suppressors.** Six advanced filter circuits provide reception absolutely free from ignition noises. No need for spark plug suppressors. Will give splendid noise-free radio performance.

• **Low-Drain Tubes.** The powerful R.C.A. and Hazeltine licensed circuit uses the following tubes: 6K7 as R.F.; 6A8G as 1st Det.-Osc.; 6K7 as Amp.; 6Q7G as Det.-A.V.C.-1st Audio; 6K6G as Power Output; 6X5G as Rectifier.

• **3 Watts Output.** The Knight Super Six develops a full undistorted output of 3 watts—the result of a powerful 6K6G output stage. Makes possible marvelously full and rich tone which is ably handled by the full-size 6" Electro-dynamic speaker. You will appreciate the fine full tone of this splendidly designed Auto Radio.

• **Tone Control.** Continuously Variable Tone Control is incorporated to add enjoyment to every program. An "extra-value" feature of this De luxe Knight 6 Tube Auto Radio Superhet.

• **Full A.V.C.** Automatic Volume Control has been brought to a high point of perfection in the Knight 6. No fading, no reduction of volume, no matter what programs you are tuning or wherever you drive. You'll notice the difference in this receiver.

• **No-Glare Dial.** The splendid new dial of the Knight 6 is a real safety feature. It is easy to read—no glare or distraction. Dial mounting kits are available to fit any car.

• **New Features.** Additional features are: R.F. pre-amplifier for super-sensitivity at a minimum noise-level—sensitivity is 1.5 to 1 microvolts; 10 K.C. Selectivity; 2 Position Antenna Plug for matching aerials of various capacities; 6 Tuned Circuits; 3-Gang Condenser; Fused "A" lead, etc. Tuning range is 535 to 1550 K.C. A De luxe Auto Radio in every detail of design and performance.

• **A Great Car Radio Value.** The Knight Super Six Auto Radio as described is offered complete with built-in speaker, R.C.A. tubes, flexible shafts, tuning mechanism and hardware. Requires either of tuning control heads listed at right. Shipping weight, 20 lbs. Code: MOTOR.

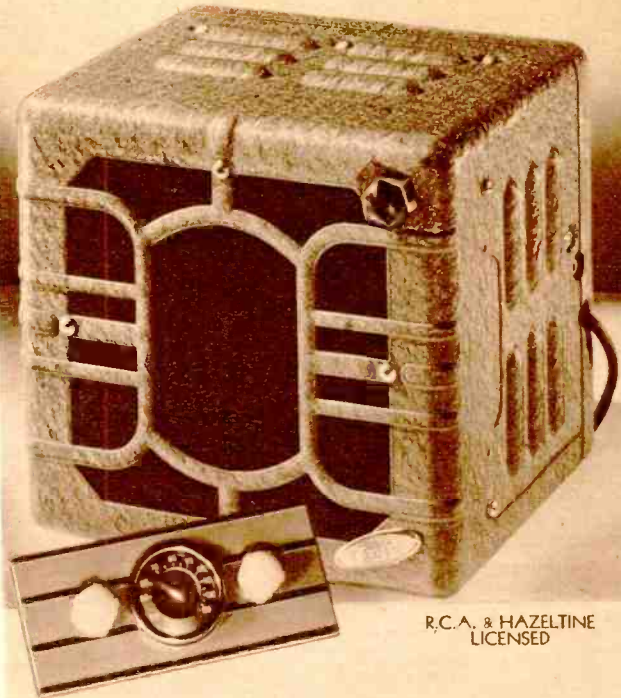
E10891. Retail Value, \$39.95.

NET PRICE EACH, \$22.95.

YOUR NET PRICE, LOTS OF 3, EACH.....

(See Page 10 for suitable Auto Aerials.)

\$21⁹⁵



R.C.A. & HAZELTINE
LICENSED

SPECIAL CONTROL MOUNTING KITS

E10940. TYPE A. Universal control which adapts tuning mechanism of Knight 6 Auto Radio to fasten to lower edge of dash instrument panel. Makes an attractive installation in cars which do not have custom-control provision on dash.
YOUR PRICE EACH.....99c

E10941. TYPE B. Custom control for mounting on dash panel of cars equipped with ash tray compartment. When ordering, be sure to specify make, model and year of car, indicating whether de luxe or standard.
YOUR PRICE EACH.....\$1.47

These controls are for use only with 1938-1939 Knight Auto Radios—will not fit Auto Radios of other makes.

TAKE *It Anywhere!*
PLAY *It Anywhere!*

R.C.A. & HAZELTINE
LICENSED

Knight 4 TUBE PORTABLE

ALLIED does it again—brings you the first really practical compact portable radio you can actually use anywhere! Made possible by the development of the sensational new 1 $\frac{1}{2}$ volt tubes which draw 60% less current than ordinary battery set tubes. Gives excellent performance with unusually long battery life. The Knight 4 Portable Receiver is a complete radio in itself, entirely self-contained in a sturdy leatherette-covered cabinet, measuring only 13"x8 $\frac{1}{4}$ "x8". Weighs only 13 lbs.

• **NEW 1 $\frac{1}{2}$ VOLT CIRCUIT.** The Knight 4 Portable tunes 173 to 556 meters (540-1730 K.C.) for powerful enjoyable reception over the entire standard Broadcast band. The R.C.A. and Hazeltine licensed development of the sensational new 1 $\frac{1}{2}$ volt tubes—the most amazing advance in circuit uses the new 1 $\frac{1}{2}$ volt tubes—(dual-purpose); 1N5G as L.F. Amp.; 1H5G as Det.-A.V.C.-1st Audio (triple-purpose); 1A5G as Ten Output. Multi-purpose tubes achieve actual six-tube efficiency. Automatic Volume Control assures uniform volume and freedom from fading.

• **LOW-DRAIN FOR ECONOMY.** Amazing battery economy is achieved by the Knight 4 Portable using the newly developed super-economical 1 $\frac{1}{2}$ volt tubes. "A" drain is only .2 amperes; "B" drain is only 8 milliamperes. Never before has there been possible such amazing economy of operation in a portable receiver. Special compact "AB" Power Pack which fits in cabinet will give 200 hours of service.

• **EVERYTHING BUILT-IN.** A full 5" P.M. dynamic speaker is built into the receiver reproducing every program with exceptional fidelity. An attached 25 foot flexible antenna gives added convenience for quick operation. The novel "thermometer" dial makes tuning simple. The complete, compact, portable "AB" Power Pack is self-contained in the cabinet for exceptional convenience.

• **SMART WEATHERPROOF CABINET.** The Knight 4 Tube Battery Portable is supplied in a compact carrying case finished in black, waterproof leatherette. Has a convenient carrying handle. Will carry anywhere and play everywhere. Ideal for motoring, fishing, hiking and camping trips; in parks, on boats, trains, at picnics, on the beach. A versatile receiver that costs practically nothing to operate. Supplied complete with Sylvania tubes as described, but less the "AB" Power Pack. Shpg. wt., 20 lbs. Code: TRAIL.

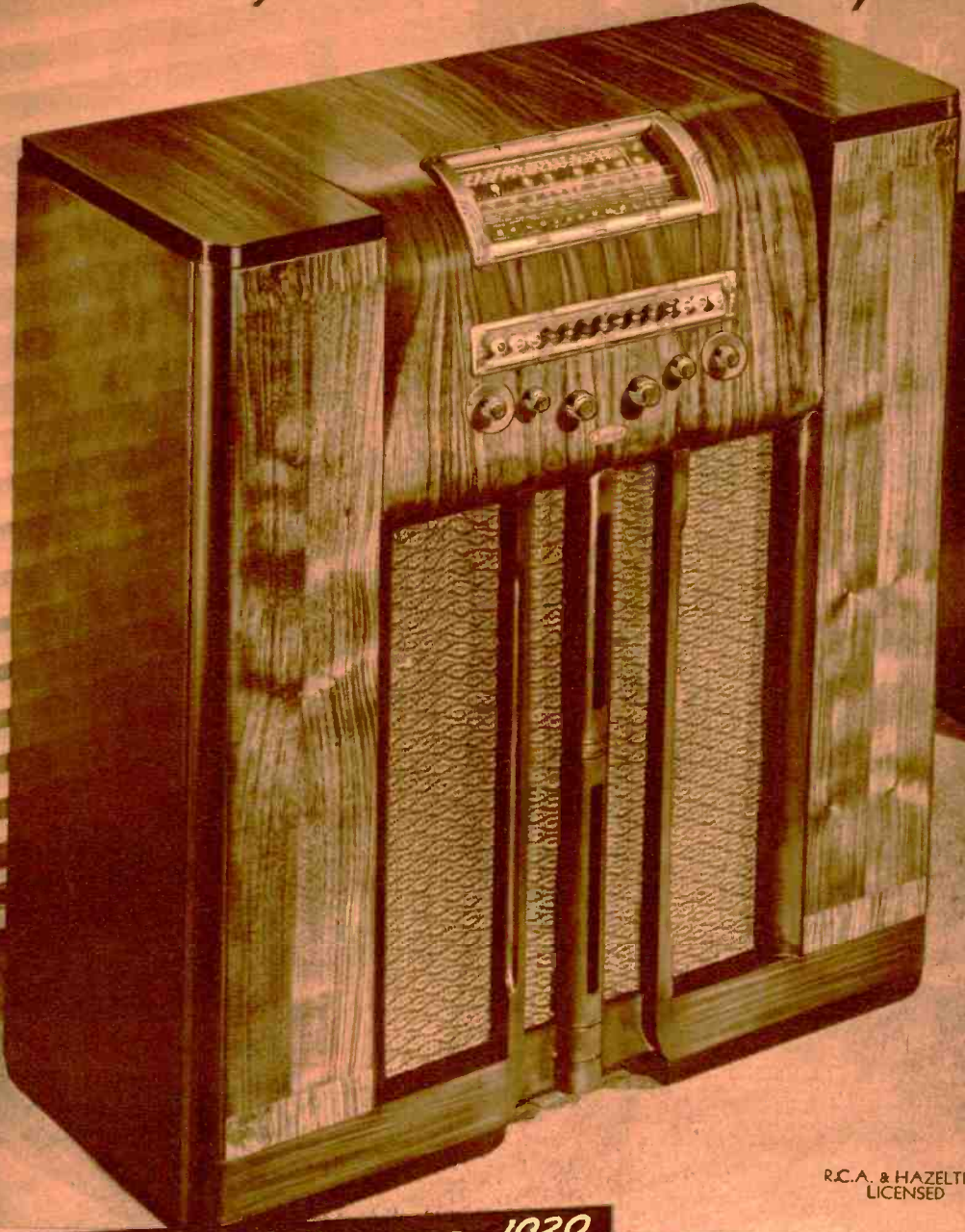
E10925.
Retail Value, \$32.50.
NET PRICE EACH, \$15.85.
PRICE, LOTS OF 3, EACH
E10045, Special "AB" Power Pack.
NET.....\$2.95

\$14⁹⁵

169



Stirring Tone - World Reception



R.C.A. & HAZELTINE
LICENSED

AMERICA'S DELUXE RADIO FOR 1939

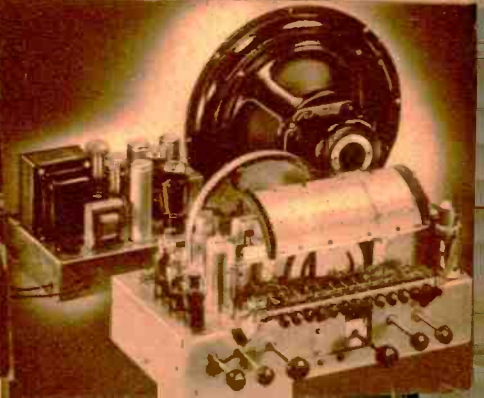
PUSH-BUTTON
TUNING

20 WATTS OUTPUT

172

NEW
"TILT-TUNER"
CONSOLE

HIGH-FIDELITY



Knight 16 TUBE A. C. 3 BAND SUPERHET

THE ELECTRIC-TUNING RADIO RECOMMENDED BY LEADING TESTING LABORATORIES

- ELECTRIC TUNING
- PUSH-BUTTON TONE CONTROL
- R.F. ON ALL BANDS
- BEAM POWER OUTPUT
- 18 A.F.C. ACTION
- SEPARATE BASS AMPLIFIER
- FULL-DELAYED A.V.C.
- WAVE BAND INDICATOR
- NEW WATTS OUTPUT
- 15" EXPANDER SPEAKER
- 2 STAGES OF I.F.
- PHONO CONNECTION

Here's America's greatest 1939 Radio Receiver—the de luxe performer that sets new standards by which all other radios must be judged! Packed with every new feature, every latest refinement to achieve the very utmost in radio performance. Just check these amazing specifications:

- **ELECTRIC PUSH-BUTTON TUNING.** The Knight 16 offers you the most perfect of Electric Push-Button Tuning Systems. Select any one of your eight favorite stations just by pushing a button! Tuning is precise, smooth—right on the head each time. Anyone can easily adjust the simple, fool-proof mechanism that tunes eight stations in eight seconds. Additional buttons are provided as follows (for the first time in any radio receiver): one for "on-off" switch; one for switching to phono in case phono attachment is used; one to make the change from Push-Button to manual tuning; three for Tone Control. This ingenious Push-Button System makes the Knight 16 the first truly automatic radio receiver in history!
- **WORLD-WIDE RECEPTION.** America's greatest long-distance radio, the Knight 16 gives complete coverage of everything that's broadcast; tunes 16 to 54 meters (5650-18100 K.C.) and 5 to 175 meters (1715-5650 K.C.) for powerful, consistent, enjoyable Short Wave foreign and domestic programs, police, amateur and aviation signals; and 175 to 560 meters (535-1730 K.C.) for magnificent coverage of all American and Canadian standard Broadcasts. A special wave-band knob and plate indicator are provided so that you always know the band you are tuning.
- **LATEST SLIDE-RULE DIAL.** The perfect companion to Push-Button Electric Tuning—for precise manual tuning of all programs. Ingeniously tilt-mounted for easy visibility and "no-stoop" tuning. Each band has an individual full-length scale. Names of popular stations and country locations are indicated on both Broadcast and Short Wave bands. Calibrations are in kilocycles and megacycles, easy to read and tune. A horizontal-traveling pointer is featured. This new Slide-Rule Dial is a distinct advance in tuning arrangements.
- **SUPER-POWERFUL CIRCUIT.** Newest octal tubes are used throughout the R.C.A. and Hazeltine licensed circuit as follows: 6K7G as R.F. Amp.; 6L7G as 1st Det.; 6J5G as Osc.; 6J7G as Frequency Control; 6K7G as I.F. Amp.; 6K7G as 2nd I.F. Amp.; 6K7G as A.F.C. -I.F. Amp.; 6H6G as A.F.C. Rect.; 6H6G as Signal and A.F.C. Rect.; 6P8G as Phono and Audio Amp.; 6J5G as 1st Bass Amp.; 6J5G as 2nd Bass Amp.; 2-6L6G as Push-button Class "AB" Output; 2-5Z3 as Rect.
- **AUTOMATIC FREQUENCY CONTROL.** Automatic Tuning reaches its greatest peak in accuracy and efficiency with the Knight 16 through the use of a perfected A.F.C. circuit. Found only in custom-built receivers. You simply can't tune "off-tone" with this feature. The A.F.C. circuit automatically snaps each program into perfect focus anywhere within range of the station signal you are tuning. You get perfect tonal reception on every program because you are tuned in precisely.
- **R.F. ON ALL BANDS.** An exclusive new de luxe feature found only in sets selling at much higher prices. Affords the utmost in sensitivity, selectivity and low noise level. Makes possible consistently dependable reception on all three bands. Two double-tuned I.F.'s are also incorporated. (Sensitivity is absolute 2 MV measured at 50 milliwatts on all bands! Selectivity is 8 to 10 K.C. at 10 x power!) This is amazing proof of the performing superiority of the 1939 Knight 16.

- **FULL-DELAYED A.V.C.** Only the finest radios have this wonderful feature. Absolutely overcomes fading even on the weakest signals. Equal intensity and uniform volume strength are given to all incoming signals picked up by the supersensitive circuit. A three-gang rubber-floated condenser tunes with hairline sharpness for unprecedented selectivity.
- **GIANT POWER OUTPUT.** The Knight 16 has an amazing power output of 18 watts undistorted. It is ably handled by a special newly developed giant 12-inch super-dynamic speaker with additional three-inch expander ring. Actually a 15-inch Expander Type Speaker. This valuable feature provides proper acoustical balance for any program in any size room. The Knight 16 develops a quality of tone that will never cease to delight you. It reproduces both speech and music with life-like fidelity, unfolding new worlds of tonal depth and beauty that will thrill even the most critical.
- **BASS AMPLIFIER.** Into the Knight 16 there has been built a special, separate bass amplifier channel. This circuit design innovation—previously found only in laboratory and Broadcast studio instruments—handles bass frequencies exclusively and realistically, without affecting or cutting off the high notes. Has separate bass control knob with 10 positions.
- **PUSH-BUTTON TONE CONTROL.** Found only in the 1939 Knight 16. Three buttons are provided for varying tone to give bass or treble emphasis as desired. Assures perfect acoustical correction for every room. Provides absolute and completely effective response at either or both ends of a musical range extending from 30 to 6000 cycles; does not cut off frequencies. Gives complete mastery of the entire tonal range from highest treble to lowest bass. Imagine it—you get the tonal emphasis you want just by pushing a button! Together with the 10-position bass channel control knob, the Knight 16 offers 42 separate tonal variations for the most complete tonal control ever incorporated in any radio receiver.
- **MAGNIFICENT 1939 CONSOLE.** The console of the Knight 16 is magnificently styled in the latest 1939 low-boy trend. The cabinet has a tilted dial panel of matched burl walnut, set off by beautifully grained pilasters of choice walnut with contrastingly grained top and bottom band trims. Beautifully hand-rubbed to a lustrous piano finish. The cabinet measures 34 3/4" wide, 37 1/2" high, 14" deep.
- **CONSOLE MODEL COMPLETE.** The 1939 Knight 16 Tube All-Wave Superhet with Push-Button Tuning in console as illustrated at the left, complete with 12-inch speaker and R.C.A. tubes. For 110 volts, 60 cycles, A.C. Shpg. wt., 110 lbs. Code: DREAM.

E10880.
Retail Value, \$169.50.
YOUR NET PRICE EACH.....

\$83.50

16 TUBE PHONO-RADIO

The year's most magnificent complete musical instrument is the new Knight 16 Tube Phono-Radio Combination of all phonograph records as well as all radio programs. Equipped with the latest R.C.A. de luxe Record Changer. This new instrument offers you the entire world of musical entertainment just when you want it. Incorporates the de luxe 16 Tube Radio described above, providing powerful World-Wide radio reception, marvelous fidelity. The Record Changer plays eight 10-inch or 12-inch records automatically or will play 10-inch and 12-inch records in mixed sequence. Has new top-loading offset head with straight grain walnut side panels; has record compartments at sides. Dimensions: 40" wide, 38" high, 18" deep. For 110 volts, 60 cycles, A.C. Shpg. wt., 190 lbs. Code: FLARE.

E10881. Retail Value, \$350.00.
NET PRICE EACH.....

\$169.50

Only the very finest components, fully conforming to the highest standards of modern radio science, are used in the construction of the chassis of the Knight 16 as illustrated at left. Two separate chassis—tuner and amplifier—have been assembled with utmost precision to assure the very finest stability. All vital circuits are thoroughly shielded; extra safety factors are incorporated at all important points. Built like a battleship, the chassis of the Knight 16 will provide years of dependable service. Only when you have experienced the actual thrill of hearing this de luxe receiver in operation can you fully appreciate its magnificent full-bodied tone, its glorious distance reach, its tremendous reserve power. We invite you to try this receiver under your own operating conditions—with full protection under our Free Trial and Money-Back Guarantee offer (see Page 10 for details). Put it through every conceivable test—notice how powerfully it tunes stations on every band—listen to its marvelous rendition of every type of program—and you will agree that, without qualification, this is one of the very finest radio instruments America's great radio industry has ever produced, that in every detail of construction and operation, the Knight 16 is truly a supreme achievement—worthy of a proud position in even the most luxurious setting.



AUTOMATIC RECORD CHANGER

Glorious Musical Entertainment!

Knight 8 TUBE PHONO-RADIO

The thrill of perfect all-wave radio reception—the satisfaction of high-fidelity reproduction of phonograph records—and the luxury of a magnificent cabinet in the modern trend are combined in this quality-built musical instrument to provide lasting joy and entertainment. This new Knight 8 Tube De Luxe Phono-Radio Combination is truly a luxury instrument for those who want only the best.

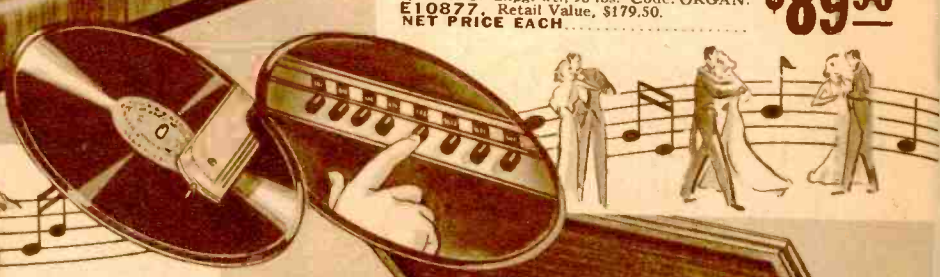
• **ALL-WAVE SUPERHET CIRCUIT.** The radio portion of the Knight 8 Tube Phono-Radio is built around a new R.C.A. and Hazeltine licensed Superhet circuit. Continuous tuning range from 16.5 to 565 meters (535 to 18,000 K.C.) covers everything that's on the air: standard Broadcast, foreign Short-Wave programs, Aviation, Amateur, Police Calls and Ships-at-Sea. A full 3½ watts undistorted output (5 watts maximum) is developed. Tubes used are: 6A7—1st Det.; 6D6—I.F. Amp.; 76—Osc.; 6—Phase Inverter; 75—2nd Det.-A.V.C.—1st Audio (triple purpose); 2—41—P.P. Output; 80—Rectifier.

• **RADIO'S GREATEST FEATURES.** Incorporates the finest features: Automatic Push-Button Tuning for any 6 selected stations; 8¼" x 5¼" Slide-Rule Dial with separate scales for each band; continuously variable Tone Control; full Automatic Volume Control; heavy-duty 3-gang rubber-mounted condenser; Bass Compensation and Bass Booster; Preselector Stage; Individual Coils on each band, and many others. An oversized 10" concert-dynamic speaker reproduces every delicate nuance, every shade of tone in a magnificently faithful manner.

• **AUTOMATIC RECORD CHANGER.** The phono portion incorporates the finest equipment ever designed for wide-range phono reproduction. The genuine R.C.A. record changer automatically plays 8—10" or 7—12" records in sequence without your lifting a finger! A new top-loading R.C.A. crystal pickup with triple-sealed crystal cartridge captures the full significance of every musical note. You have never really heard modern electrically recorded music until you hear it on the Knight 8!

• **MODERN MASTERPIECE CABINET.** To house this glorious instrument fittingly, an entirely new deluxe cabinet has been designed. Accommodates radio and phono side-by-side under hinged lid. Of expensive matched walnut woods, hand-rubbed to a rich piano finish. Console measures: 36" wide, 35" high, 16" deep.

• **SET COMPLETE.** Knight 8 Tube Phono-Radio in console at left with R.C.A. tubes, Automatic Record Changer, and 10" speaker. For 110 volts, 60 cycles A.C. Shpg. wt., 95 lbs. Code: ORGAN. **\$89⁹⁵**
E10877. Retail Value, \$179.50.
NET PRICE EACH.



Knight

10 TUBE PHONO-RADIO

The charmingly beautiful period console shown at right provides a luxury setting for one of the finest musical instruments ever built. The grace and distinction of fine cabinetry, the precision of skilled radio construction, and the perfection of modern phonograph reproduction have been molded into a harmonious whole—resulting in a type of instrument that has heretofore been available only in expensive custom-built installations.

• **R.C.A. LICENSED SUPERHET CIRCUIT.** Latest 1939 de luxe features include: All-wave reception range of 12.5 to 40, 40 to 136, 173 to 556 meters, tuning foreign Short-Wave, standard Broadcast, Police, Aviation, Ships-at-Sea, and Amateur transmission; Electric Push-Button Tuning of any 8 selected stations; 9" Slide-Rule Dial; full Amplified Automatic Volume Control; full rubber-floated 3-gang tuning condenser and chassis; 4-position Tone Control; Electric Eye; Bass Compensation; Bass and Treble Boosters; R.F. on all Bands; Individual Coils on each Band; tremendous Push-Pull Beam Power Output of 14 watts undistorted (20 watts maximum); doublet antenna connection, etc. Tubes used are: 2—6K7; 1—6K8; 1—6Q7G; 1—6AE6G; 1—6AF6G; 2—6L6; 1—6C5G; 1—5Z3. A 12" speaker gloriously handles the full power output.

• **LUXURY PHONO EQUIPMENT.** No element has been omitted to provide 1939's finest phonograph reproduction. Genuine R.C.A. automatic record changer will play 8—10" or 7—12" records entirely automatically. R.C.A. offset head crystal pickup, properly balanced and adjusted, takes from the record grooves exactly what the recording studio has put there—every overtone, every crescendo or pianissimo passage is perfectly rendered with high-fidelity realism.

• **SET COMPLETE.** The deluxe 10 Tube Knight Phono-Radio is offered complete with R.C.A. tubes, automatic record-changer, and 12" speaker in the lovely period console pictured at right. Rich walnut woods are carefully matched and rubbed by hand to a lustrous finish. Cabinet has space for record albums. Measures: 41" wide, 35" high, 16" deep. Shpg. wt., 155 lbs. For operation from 110 volts, 60 cycles, A.C. Code: CHOIR.

\$124⁵⁰

E10902. Retail Value, \$250.00.
174 YOUR NET PRICE, EACH...



R.C.A. & HAZELTINE LICENSED

Fine Phono-Radio
Enjoyment at LOW COST!



R.C.A. &
 HAZELTINE
 LICENSED

Knight 5 TUBE PHONO-RADIO

For little more than the usual price of a radio only, you can now enjoy the double utility of a fine radio receiver plus excellent reproduction of your favorite recordings. No other comparable unit (and we've ransacked the market to find out) offers so much for so little as this **Knight 5 Tube A.C.-D.C. Superhet Phono-Radio**. Compare these **5 Tube** features: *** EFFICIENT RADIO CIRCUIT**. A newly designed five tube circuit incorporates latest developments for most enjoyable reception. Covers 175 to 545 meters (550 to 1720 K.C.) for powerful standard Broadcast American and Canadian programs, plus upper channel Police Calls. Has full Automatic Volume Control to maintain steady, unvarying volume level on all stations. Uses latest tubes to develop actual 8-tube efficiency: a strong 2 watts undistorted output. *** EASY TO TUNE**. Circuit develops new 2 1/2" dial calibrated in kilocycles and meters, has large, clear brand-markings and is fully illuminated. *** FINEST PHONO EQUIPMENT**. The very latest phonograph equipment assures superb rendition of all records. A self-starting, high-quality, synchronous motor maintains including 12" size. A new offset arm accommodates all records, even on 12" records. Ingenious cabinet design brings out every special switch, thus eliminating all traces of surface noise. Has to phono and also starts phono-motor. *** SET COMPLETE**. In hand-A.C. or D.C. (Phono operates only from 110 volts, 50-60 cycles. Shpg. wt., 23 lbs. Code: GLOW. **E10820**. Retail Value, \$44.50. **NET EACH, \$24.95.** **YOUR PRICE, LOTS OF 3, EACH**.....

\$2375

Knight RECORD PLAYER

Turn your radio set into a phono-radio combination—at surprisingly low cost—with this new 1939 improved model **Knight Record Player**. Requires only two simple connections to reproduce all recordings through your radio set amplifying circuit with the tonal fidelity attainable only through electrical reproduction.

*** PLAYS ALL RECORDS**. All standard 78 R.P.M., 8-, 10-, and 12-inch records are accommodated. The high-grade wide-range magnetic pickup assures exceptionally accurate reproduction and brings out of each recording exactly what the artist has put into it. Built of quality materials throughout, the **Knight Record Player** is the first choice of record-lovers who want only the best. It offers you the opportunity to enjoy endless hours of the world's finest recorded entertainment—reproduced with all the tonal beauty of the original performance.

*** SPECIFICATIONS**. Incorporates self-starting synchronous type motor maintaining uniform speed of 78 R.P.M.; provided with 8" felt-covered turntable. Full-size lightweight magnetic pickup maintains proper balance and pressure to minimize record wear. Combination volume control and "on-off" switch is mounted on motor board. Pickup arm rest is provided.

*** FULL-SIZE CABINET**. The walnut-finished hand-rubbed case measures 13 1/2" wide, 7" high, 10 1/2" deep. All visible metal parts are stately bronze finished. With 3 1/2-foot pickup cord and 6-foot A.C. line cord. For operation from 110 volts, 60 cycles, A.C. Shpg. wt., 13 lbs. **E10050, Knight Record Player.** **NET EACH, \$9.95.** **NET PRICE, LOTS OF 3, EACH**.....

\$945



RCA RECORD PLAYER

This low-cost compact Model R-93-C Record Player by RCA-Victor has proved to be a real sensation. Since its release a short time ago thousands have been bought by price-wise music lovers everywhere, and still the demand grows! It's a real achievement—priced pleasingly low—and is unusually attractive and practical. A compact wood case (11" x 9" x 6") houses the newly designed A.C. phono motor and pickup. Cabinet has neat roll-over top and front panel (no cover). Improved, full rubber-cushioned synchronous motor maintains constant speed of 78 R.P.M. 6" turntable (manually started) will handle all records up to full 12" size. Latest crystal pickup with true-tracking tone arm and angle-set head provide finest tracking accuracy. Volume control and "on-off" switch are conveniently mounted on top face. The RCA-Victor Model R-93-C Record Player may easily be connected to any radio receiver operating from 110 volts, 60 cycles A.C. Most **Knight Radios** of 7 tubes or over are already equipped for **phonograph connection**. All records are reproduced through radio set amplifying system with the full tone of the set. Enjoy your favorite artists on recordings; the RCA Victor Model R-93-C Record Player offers ideal low-cost record-playing facilities so that you can always hear "the music you want . . . when you want it." For operation from 110 volts, 60 cycles, A.C. Shpg. wt., 11 lbs. **E10060, RCA-Victor Model R-93-C Record Player.** **\$897**

\$897



Knight PLAYER-AMPLIFIER

Entirely complete and self-contained, this new **Knight Record Player-Amplifier** offers a host of features seldom available in instruments priced so low. In addition to the finest record-playing equipment, the unit includes a complete built-in 8 1/2 watt amplifier providing glorious reproduction of all 78 R.P.M. phonograph records. There is nothing else to buy. Simply plug into any 110 volts, 60 cycles A.C. outlet for immediate operation. (Requires no radio connection.) *** FINEST PICKUP**. A new, full-floating, high-fidelity Crystal pickup—the finest made—assures perfect tracking. Equipped with offset tangent arm and locking device. Maintains proper needle pressure to reduce record wear. The finest type phono motor is included. *** DE LUXE AMPLIFYING EQUIPMENT**. An expertly designed four tube amplifier furnishes a powerful 8 1/2 watts undistorted output. Tubes used are: 1-80, 2-6V6G, 1-6N7G, providing a Push-Pull output with degenerative coupling. Essentially the amplifier is two units in one, with separate channels for bass and treble. Equalizer network combining 5-position tone control with volume control assures perfectly stabilized volume at all tone ranges. Bass equalization feature provides correct, bass emphasis at any tone setting. A full 8" heavy-duty Dynamic speaker reproduces each note perfectly. *** PLAYER-AMPLIFIER COMPLETE**. Supplied in hand-rubbed solid walnut case 12" x 14" x 9". Lid closes on all records, eliminating needle scratch and surface noise. With tubes. For operation on 110 volts, 60 cycles A.C. Shpg. wt., 33 lbs. **E10051, Knight Player-Amplifier.** **NET PRICE, EACH**.....

\$3585



NEW
Beauty
NEW
Power

\$66⁴⁵

Each, Lots of 3

R.C.A. & HAZELTINE
LICENSED

Knight 12 TUBE 3 BAND A.C. SUPERHET

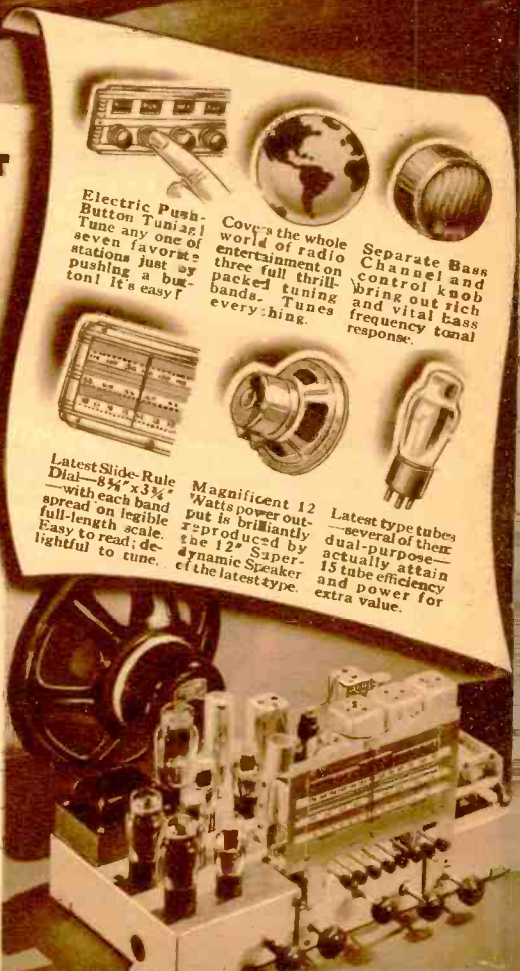
ALLIED offers a 1939 radio masterpiece in this entirely new 12 Tube Console model. It has been created for those who appreciate perfect musical reproduction and powerful long-distance reception—and for those who want the most for their radio dollar. This new-styled model incorporates all of the newest and most advantageous radio features and refinements for maximum radio enjoyment—at an amazingly low price.

- **Push-Button Tuning.** The latest automatic electric type. Has provision for the selection of any of seven favorite stations. Initial adjustment is made from the front, at the buttons, and is amazingly simple, one setting required for each station. Will operate thereafter without further adjustment.
- **Tunes 3 Full Bands.** The Knight 12 covers three wave bands: 16 to 53 meters (5650-18100 K.C.) and 53 to 175 meters (1710-5650 K.C.) for consistently reliable Short Wave foreign, amateur, police and aviation signals; and 174 to 560 meters (535-1720 K.C.) for powerful American and Canadian standard Broadcasts. Tunes everything on the air. In addition to Push-Button Tuning, an easy-to-read giant 8-inch Slide-Rule Dial is featured with illuminated translucent colored scales and horizontal-traveling pointer. Shows kilocycles for Broadcast and megacycles for Short Wave.
- **Brilliant 1939 Circuit.** The following R.C.A. tubes are used in the splendid new R.C.A. and Hazeltine licensed circuit: 6K7 as R.F. Amp.; 6K8 as Conv.-Osc. (dual-purpose); 6K7 as 1st I.F. Amp. (double-tuned); 6K7 as 2nd I.F. Amp. (double-tuned); 6H6G as Signal-diode and A.V.C. (dual-purpose); 6C5G as special A.V.C. Amp.; 6J5G as 1st Audio; 6J5G as Bass Amplifier; 6J5G as Phase Inverter Audio Amp.; 2-6V6G as Push-Pull Beam Power Output; 5V4G as Rectifier.
- **Latest Features.** R.F. on all bands—a wonderful asset that results in greater sensitivity and more dependable distance tuning. Amplified A.V.C.—the latest development in A.V.C. circuits—keeps the signal intensity equal on all stations. Three-Gang Condenser—the finest new rubber-floated type available. Special Temperature Compensation—a new feature that insures the maintenance of permanent stability of all oscillator circuits in any climate. Phono Connection—for added enjoyment when used with a Phonograph Record Player (see Page 175).
- **Rich, Golden Tone.** The outstanding characteristic of the Knight 12. Achieved by the magnificent full 12 watts output of the 1939 circuit and beautifully handled by the giant 12-inch Super-dynamic Speaker. Further enhanced by the variable Tone Control and the new Bass Channel Amplifier with separate Bass control.
- **Magnificent Console.** A superb new console that will rank as 1939's most luxurious. Designed in the popular new low-boy trend, featuring a choice of splendid woods. The instrument panel is sloped for convenient visibility and tuning ease, and is of beautifully marked walnut. Side pilasters and top are of choice walnut with contrastingly-grained top and bottom band trim. 34 3/4" wide, 37 1/4" high, 14" deep.
- **Console Model Complete.** The Knight 12 is offered complete in console as illustrated with R.C.A. tubes and 12" speaker. For 110 volts, 60 cycles. Code: ULTRA. E10821. Retail Value, \$139.95.
NET EACH, \$69.95.
NET PRICE, LOTS OF 3, EACH.....

\$66⁴⁵

- **Chassis Model.** The Knight 12 is also available in chassis form only. Exactly as described above, with 12-inch speaker, but less cabinet. Size: 19 1/2" x 12 1/2" x 9 1/2". Complete with escutcheon, push-button tuning and R.C.A. tubes. For 110 volts, 60 cycles, A.C. Shpg. wt., 36 lbs. Code: TORCH. E10822. Retail Value, \$112.50.
NET EACH, \$54.85. PRICE, LOTS OF 3, EACH.....

\$51⁸⁵



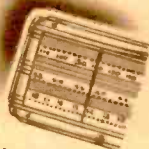
Electric Push-Button Tuning
Tune any one of seven favorite stations just by pushing a button! It's easy!



Covers the whole world of radio entertainment three full thrill-packed tuning and vital bass every-thing.



Separate Bass Channel and control knob bring out rich and vital bass frequency tonal response.



Latest Slide-Rule Dial—8 1/2" x 3 1/4" —with each band spread on legible full-length scale. Easy to read; delightful to tune.



Magnificent 12 Watts power output is brilliantly reproduced by the 12" Super-dynamic Speaker of the latest type.



Latest type tubes—several of their dual-purpose—actually attain 15 tube efficiency and power for extra value.



LOW-COST RADIO AND RECORD ENTERTAINMENT!

R.C.A. AND HAZELTINE LICENSED



Knight 5 TUBE AC-DC T.R.F. PHONO-RADIO

To meet the demand for a satisfactory low-cost phono-radio combination, **ALLIED** is first to present this fine new **Knight 5** tube (with ballast) instrument. It will afford endless enjoyment of both radio and records, inexpensively and with the utmost convenience of operation.

- **LATEST AC-DC RECEIVER.** The receiver used in this **Knight 5** Tube Phono-Radio tunes the regular broadcast range of 175 to 560 meters (535 to 1730 K.C.). Tunes all popular standard broadcast programs plus upper channel Police Calls. Features a 2" x 2 1/2" pillow dial.
- **SPLENDID NEW CIRCUIT.** The carefully engineered R.C.A. and Hazeltine licensed circuit utilizes 6D6 as R.F. Amp.; 6C6 as Det.; 251.6G as Audio Power Output; 252.5 as Rectifier; L55BG as Ballast.

- **OUTSTANDING POWER.** The **Knight 5** offers you surprising power seldom achieved in a compact receiver. Output undistorted is 1 1/2 watts; peak output is 2 watts. This outstanding power is beautifully reproduced by the 5-inch super-dynamic speaker.
- **ADDED FEATURES.** R.F. Amplifier assures greater stability and distance reach; an iron-core antenna coil adds exceptional sensitivity. Has built-in aerial. The receiver operates on 110 volts, 40-60 cycles, A.C. or D.C. (phonograph operates on 110 volts, 60 cycles A.C. only).
- **FINEST PHONO EQUIPMENT.** Uses a developed R.C.A. 78 R.P.M. constant-speed synchronous motor and latest R.C.A. Crystal pick-up. Plays all records up to and including 12-inch size. Phono has separate volume control.

- **MODEL LESS LID.** Illustrated at right above. Attractive walnut cabinet. Measures: 11" x 10" x 7". Complete with R.C.A. tubes. Shpg. wt., 15 lbs. Code: SONG. **\$15.95**
- E10863. Retail Value, \$20.95. NET EACH, \$16.95. LOTS OF 3, EACH,
- **MODEL WITH LID.** Illustrated at left above. Same as above, but cabinet is larger and has lid (closes on all size records). Of choicely-grained walnut with rolled ends and shaped sides. Size: 14" x 11 1/2" x 11 1/2". Complete with R.C.A. tubes. Shpg. wt., 19 lbs. Code: SWING. **\$18.95**
- E10864. Retail, \$34.95. NET EACH, \$19.95. LOTS OF 3, EACH,

Knight 5 TUBE AC SUPERHET PHONO-RADIO

The **Knight 5** Phono-Radio is also available in a Superhet model at an attractive low price. It offers exceptionally fine entertainment both from radio programs as well as from phonograph records. Delivers excellent power and fine tone.

- **NEWEST AC SUPERHET.** The radio portion of the **Knight 5** covers the regular broadcast range of 175 to 560 meters (535 to 1730 K.C.). This band tunes all standard Broadcast United States and Canadian programs as well as the upper channel Police Calls. Tuning is made enjoyable and easy by the full-view 2" x 2 1/2" pillow dial calibrated in kilocycles and in meters.
- **1939 CIRCUIT.** R.C.A. and Hazeltine licensed, assuring the latest improvements from these great laboratories. Utilizes the latest tubes: 6D6 as 1st Det.-Osc. (dual-purpose); 6D6 as 6A7 as 1st Det.-A.V.C.-1st Audio (triple I.F.); 75 as 2nd Det.-A.V.C.-1st Audio (triple purpose); 41 as Power Output; 80 as Rectifier. This tube line-up achieves six tube efficiency.

- **EXCEPTIONAL TONE.** The latest type of 5-inch super-dynamic speaker is utilized for flawless reproduction of the exceptional power developed by the superhet circuit. Normal output is 1 watt; peak output is 1 1/2 watts. Tone quality on both radio and phonograph is surprisingly realistic with unusually fine fidelity.
- **LATEST IMPROVEMENTS.** The **Knight 5** develops unusual sensitivity through the use of dual and triple-purpose tubes and a super-designed superhet circuit. Full Automatic Volume Control is incorporated to maintain uniform volume and freedom from fading.
- **NEWEST PHONO EQUIPMENT.** The latest genuine R.C.A. 78 R.P.M. synchronous motor is employed for dependable constant-speed service. The latest type R.C.A. Crystal pickup is utilized for exceptionally true tonal response. Plays all record sizes up to and including 12". Phono has separate volume control.

- **MODEL LESS LID.** Illustrated at right above. An attractive, harmoniously designed cabinet, built of pleasingly-grained walnut with roll top front and back. Size: 14" x 10" x 7". Complete with R.C.A. tubes in cabinet less lid. Shpg. wt., 18 lbs. Code: FUGUE. **\$17.95**
- E10867. Retail, \$34.95. NET EACH, \$18.95. LOTS OF 3, EACH,
- **MODEL WITH LID.** Illustrated at left above. Same as above, but in larger cabinet with roll top front and back. Beautifully built of horizontally-grained walnut. Size: 14" x 11 1/2" x 11 1/2". Complete with R.C.A. tubes. Shpg. wt., 20 lbs. Code: TONAL. **\$20.95**
- E10868. Retail, \$30.95. NET EACH, \$21.95. LOTS OF 3, EACH,

Knight 6 TUBE AC-DC PHONO-RADIO

A fine new 1939 Phono-Radio instrument of exceptional quality. Brings you splendid reproduction both of radio programs and phonograph records. The 6 tube (with ballast) superhet receiver used in this instrument tunes two full bands: 43 (with 183 meters (2200 to 7000 K.C.) for Short Wave amateur, aviation and police signals, including the 49 meter foreign channel; 175 to 560 meters (535 to 1720 K.C.) for all regular Broadcast programs and upper police channels. Features include: latest type slide-rule dial for easy tuning; full A.V.C. for freedom from fading and for uniform volume; individual coils on each band and rubber-floated tuning condenser for exceptional sensitivity and stability; 25 foot attached antenna for convenient operation. The circuit is R.C.A. and Hazeltine licensed; uses the following R.C.A. tubes: 6A8G as 1st Det.-Oscill.; 6K7 as I.F.; 607G as 2nd Det.-A.V.C.-1st Audio; 251.6G as Beam Power Output; 252.6G as Rectifier; 165R4G as Power Regulator. Achieves 2 watts undistorted output which is flawlessly handled by a new 5-inch super-dynamic speaker. Radio works on 110 volts, 40-60 cycles, A.C. or D.C. (phonograph operates only on 110 volts, 60 cycles, A.C.).

- **HIGH GRADE PHONO.** The **Knight 6** Phono-Radio incorporates a high-grade synchronous 78 R.P.M. motor of the self-starting type; has offset-head Crystal pickup of exceptionally fine tonal response. A switch is provided for changing from radio to phonograph.
- **6 TUBE PHONO-RADIO COMPLETE.** The **Knight 6** is offered complete in the attractive cabinet illustrated at right. Has exclusive new **ALLIED** louvre grille. Size: 14 1/2" x 15" x 11 1/2". Complete with R.C.A. tubes. Shpg. wt., 35 lbs. Code: RANGE. **\$26.45**
- E10818. Retail Value, \$54.45. NET EACH, \$27.95. LOTS OF 3, EACH,



R.C.A. AND HAZELTINE LICENSED

What a Value!

Brilliant Tone!

New Beauty, and —

AUTOMATIC TUNING!



R.C.A. AND HAZELTINE LICENSED

KNIGHT 6 TUBE AC-DC 2 BAND SUPERHET

We've picked this sensational model as 1939's greatest Radio Value! It's an amazing stand-out—an entirely new 2-Band 6 Tube AC-DC Superhet (with ballast) with every new and important feature—PLUS Push-Button Automatic Tuning—at a price that simply defies all competition. It's the most versatile, the most powerful, the truest-toned and best-looking receiver you will find anywhere this year at this smashing low price.

- **PUSH-BUTTON TUNING.** The best-working system yet developed. Offers you a choice of any four of your favorite stations. Just push a button—and there's your program, tuned in perfectly, precisely, easily. Each button is directly geared to the tuning condenser; adjustment is made in a few seconds; operation is instantaneous, and you always tune right on the head. Regular tuning is easy, too, by means of the genuine 3" x 1 1/2" slide-rule type dial that's clearly and legibly calibrated with colored scales on an attractive gold face.
- **FULL 2 BAND RANGE.** The new Knight 6 tunes from 45 to 139 meters (2200 to 7000 K.C.) to bring in Short Wave Amateur, aviation and police signals, as well as programs from the fascinating 49 meter foreign band. The second band covers 174 to 560 meters (835 to 1720 K.C.) and times the upper police channels and all American and Canadian regular broadcast stations. These two bands cover practically everything of importance.
- **UNUSUAL VERSATILITY AND POWER.** Operating equally well from either 110 Volt 40-60 cycle current A.C. or D.C., the Knight Dual-Wave 6 will play practically anywhere. (May also be used on 220 volts A.C. or D.C. with adapter listed below.) Has built-in antenna for added convenience. This new 1939 performer has amazing reserve power for every requirement. Output is full 2 watts undistorted, achieved by the use of a highly efficient 251.6 Beam Power output stage. Volume is beautifully and adequately handled by the new 5-inch super-dynamic speaker, and tone is rendered with amazing fullness and reality.
- **BRILLIANT 1939 CIRCUIT.** The R.C.A. and Hazeltine licensed Superhet circuit of the new Knight 6 assures the finest and latest developments from these great laboratories. Latest R.C.A. tubes are used as follows: 6A8G as 1st Det.-Osc. (dual-purpose); 6K7 as I.F.; 6O7G as 2nd Det.-A.V.C.-1st Audio (triple-purpose); 251.6G as Beam Power pentode output; 2526G as Rectifier; 168R4G as power regulator. This tube line-up means more gain, bigger output, more thoroughly enjoyable tone quality.
- **EXTRA-VALUE FEATURES.** The new Knight AC-DC 6 has full A.V.C. action to assure uniform volume and freedom from fading. Multi-purpose tubes give added-tube power and efficiency. Individual coils for each band and rubber-floated tuning condenser assure better stability of operation. The 25 foot attached antenna permits instant convenient operation.
- **ADVANCED STYLING. ALLIED** has designed a new and exclusive gem of a cabinet for the Knight AC-DC 6. It is triumphantly executed in solid walnut of the choicest graining. Soft lines are featured throughout with harmoniously raised center band. A unique and exclusive new feature is the sloped push-button panel inset, designed for easy-vision tuning. The entire cabinet is hand-rubbed to a splendid two-tone finish. Measures: 12" x 7" x 7 1/4".
- **KNIGHT AC-DC 6 COMPLETE.** The Knight Dual-Wave 6 Tube AC-DC Superhet is offered in the beautiful cabinet illustrated above, complete with R.C.A. tubes. For operation from 110 volts, 40-60 cycles A.C. or D.C. Code: ROYAL. Shipping weight, 16 lbs.

\$12⁹⁵

E10800. Retail Value, \$25.00
 NET PRICE EACH, \$13.85
 YOUR PRICE, LOTS OF 3, EACH

E9145. 220 Volt Adapter for above set. NET 59c

WITH THESE AMAZING FEATURES

- PUSH-BUTTON TUNING
- TUNES 2 FULL BANDS
- SLIDE-RULE TYPE DIAL
- 2 WATTS POWER OUTPUT
- FULL-ACTING A.V.C.
- 5 INCH DYNAMIC SPEAKER
- BUILT-IN ANTENNA
- LATEST R.C.A. TUBES
- 110 VOLTS A.C. OR D.C.
- SOLID WALNUT CABINET



Tune any four favorite stations just by Pushing a Button! Easy to adjust—easy to tune!