A MESSAGE FROM OUR PRESIDENT!

Radio Dealers and Servemen: -

Here is your copy of the Radolek Broadcaster containing listings of -

New Merchandise. Special money-saving Bargains. will bring YOU more business and more PROFITS. Important price reductions on merchandise listed in your 1935 Radolek Profit Guide are also included.

In your 1935 Radolek Profit Guide I have given of radio parts. I am going to try to keep this great book continuously up-to-date in every respect by periodical publication of the Radolek Broadcaster. Keep these booklets with your 1935 Radolek Merchandise and price information along with other valuable features that will help make YOUR business more Profitable to YOU. I want always to do my part in helping YOU to occupy a more important position in your community.

The Radolek Company is the only large organization in this kind of business, as far as we know, that will not solicit business from YOUR Customers. Our policy is to sell at wholesale prices only to those individuals and organizations that we believe are rightfully entitled to receive wholesale prices. We further protect the interests of every Radio Dealer and Service-man by promptly passing on to YOU the benefit of any price reductions at the time they are announced by the manufacturer.

Here at Radolek we are constantly striving to merit all of your business. We try to keep every item we handle of the highest quality. Our prices to YOU are as low or lower than those of any distributor of new merchandise. In your 1935 Radolek Profit Guide every item is accurately illustrated and carefully described. The prices are right! We ship better than 95% of all orders the same day they are received by us.

Your for Better SERVICE,

W. C. Brown
RADOLEK COMPANY

See Pages 14 and 15 For New Reduced Prices On TUBES TRANSFORMERS and RESISTORS

RADOLEK CO. 601 W. RANDOLPH ST. CHICAGO
RESISTANCE INDICATOR
Calibrated Variable Resistance Box
Provides any value of resistance between 0 and 100,000 ohms! Convenient for temporary substitution in circuits having an open resistor. Contains three 25,000 ohm wire wound resistors, wired in series with a special 25,000 ohm, 15 watt, potentiometer. The first half of the potentiometer is 1,000 ohms, the balance 24,000 ohms. A mechanical knob and an ebonized aluminum scale, calibrated in ohms, permits quick easy selection of resistance. Insulated pin jacks are connected to the resistors, the values of which may be added to any value selected on the potentiometer scale. A socket size brown bakelite case, modernistic dial and wire of a Wheatstone Bridge. Dial scale and a convenient substitute for the calibrated slide wire box which matches the other Radolek instruments. Available in a walnut case, 5" x 3" x 21/4". Your price, $2.70. Stock Number 3X2547. More fully described on page 56 of your 1935 Profit Guide.

MEGOHM INDICATOR
Extends Range of Resistance Box
Provides ten values of resistance between 0.1 megohm and 1 megohm in 0.1 megohm steps. Used with the Resistance Box, practically any resistance in a receiver may be duplicated for test purposes. Two rapid resistant capacity switches, rotary type, select value desired. Moderate size and ebonized metal calibrated indicating plate. Contacts are made through two pin jacks in one end of the brown bakelite box which matches the Resistance Indicator. Your price, $3.50. Stock Number 3X2546. See page 56 of your 1935 Profit Guide for more complete details.

WHEATSTONE BRIDGE
For Accurate Resistance Measurements
A convenient substitute for the calibrated slide wire of a Wheatstone Bridge. Dial scale and circuit diagram on ebonized aluminum plate. This instrument matches the above indicators in appearance and size, having the same style brown bakelite case. A mechanical dial and insulated pin jacks. Radolek offers this genuine Wheatstone Bridge at the lowest price for which this type of equipment has ever been sold, only $1.95. Our stock number 3X2544. Aeronautics requires no condensers, standard resistors, and a small step down transformer, or an audio signal generator. Resistance measurements as accurate as three possible with instruments costing $20 to $30, may be made with this Wheatstone Bridge.

CONDENSER BOX
Capacity Substitute for Test Use
Provides standard capacity values for use in circuits suspected of having an open condenser. Contains a calibrated S. L. C. Condenser or 0.001 Mfd, maximum capacity and six paper capacitors of 0.005, 0.01, 0.1, 0.25, 0.5, 1.0 Mfd. These electrolytic filter condensers rated for 450 volts, 2.5, 6, 8 Mfd. Provides any value of capacity between 0 and 25,000 microfarrads in 0.1 microfarrad steps. This Condenser Box is given on page 21 of your Profit Guide.

SELECTIVE ANALYZER KIT
Modernizes Your Test Equipment!
This kit includes—circuit opening pin jacks, tube sockets, switches, analyzer plugs, bakelite case matches the other Radolek Indicators. You save $2.25. Stock Number 3X2526. Fully described on page 35 of your Radolek Profit Guide.

NEON LEAKAGE TESTER
Consists of a kit of parts for making a handy Neon Leakage Tester. When assembled this Indicator will check circuit continuity up to 5 megohms with 115 Volt A. C. supply. Polarity of high voltage supply may be connected in parallel with any parallel combination of the paper condensers. Toggles switch, controls each condenser, automatically discharging each capacity as it is switched out of the parallel circuit. A feature of this Condenser Box, is the Neon Bulb which is employed for polarity indications, for distinguishing A. C. from D. C. circuits, and approximating voltage. The Neon Bulb may also be used as an output indicator. The Radolek Condenser Box supplied in a walnut case, 5" x 3" x 21/4" deep, is sold complete at $6.95, Stock Number 3X5898. The circuit of the Condenser Box is given on page 35 of your Profit Guide.
Sales Tips Which Bring More Business

Get acquainted with prospective customers. Take an active part in organizations which you are entitled to join, such as church societies, political clubs, community fund drives, and business men's luncheon clubs. Volunteer for duties which others like to evade. In this way, you will increase your acquaintances and the various radio conventions. Advertising published in newspapers will attract your attention upon the subject. Advertise in your club papers, using your picture, and your name and address. If you are a member of Bailey's newspaper club, exercise your right to publish any interesting news you want to. Don't hesitate to write to the club, asking that your name be added to its roll. If you use personal letters, he used a Kodak to make a picture of the member of the club. He wrote to each of these people. When he wanted to mail the most, he used personal letters. If you are a member of the Radolek advertising group, you can get an attractive illustrated display advertisement with your name and address, and address. You will receive one card or blotter a month. Every statement or letter to a customer should receive at least one card or blotter a month. It is valuable publicity for you.

This aggressive service may often be viewed as a letter in a newspaper, in which every prospect is made to see your radio new mail. If you experience any trouble with your radio, please don't hesitate to call. My phone number is 3-2414.

**Coordinated Advertising Will Insure Your Success!**

Successful servicemen advertise constantly. Every practical means you can employ to bring your name before your customers will help to increase your business. Reach your new prospects, and old customers, with a properly planned variety of advertising that will make your newspaper organization the only one, which the radio owner his next when the receiver goes bad. Use your newspaper to reach a large number of prospects for a low cost. You should have at least one advertisement a week in newspapers. Every statement or letter to a customer should have a blotter inserted. You can count on a steady return of business from direct mail advertising, if mailed correctly. It is expensive.

Volunteer for duties which others like to evade. A club, such as church societies, is eligible to join. Such clubs may be available to your club paper advertisements.

If you use Radolek's newspaper service, you will receive a copy of the Radio Call. Here is a copy of a letter, which every prospect is made to see. You can get an attractive illustrated display advertisement with your name and address, and address. You will receive one card or blotter a month. Every statement or letter to a customer should receive at least one card or blotter a month. It is valuable publicity for you.

**Coordinated Advertising Will Insure Your Success!**

Successful servicemen advertise constantly. Every practical means you can employ to bring your name before your customers will help to increase your business. Reach your new prospects, and old customers, with a properly planned variety of advertising that will make your newspaper organization the only one, which the radio owner his next when the receiver goes bad. Use your newspaper to reach a large number of prospects for a low cost. You should have at least one advertisement a week in newspapers. Every statement or letter to a customer should have a blotter inserted. You can count on a steady return of business from direct mail advertising, if mailed correctly. It is expensive.

Volunteer for duties which others like to evade. A club, such as church societies, is eligible to join. Such clubs may be available to your club paper advertisements.
THE INSTALLATION OF AUTO RADIO

By F. D. Whitten, Philco Radio & Television Co., of Ill.

A good fundamental knowledge of the best methods of installing an Auto Radio should prove to be the most profitable to a Radio Service man. We hope the following outline of various steps in an installation with recommended procedure will be of some help to our customers along this line—Ed.

The aerial is the most important feature of an Auto Radio installation. Our experience with hundreds of Philco Transistorite installations is that the best aerial is one located in the top of the car. The best material to use is 18 mesh copper screen (see page 129 of the Profit Guide) extended the length of the top. In order to mount this screen the head lining must be dropped down, then the screen can be tacked to the box. Cut the screen long enough so it can be bent back on the side of the boxes where the head lining is tacked in place.

In order to get the most pick-up, mount the screen at least 6 inches from the metal in the sides and ends of the top, a distance of 2½ to 3 inches. The screen should be only the same distance from the dome light also. Also the dome light must be grounded to the frame of the car. If the leads to the dome light run diagonally across the top from the windshield column to the dome light, they should be removed and run along the sides of the top to the bows nearest the dome light.

Some tops are equipped with wire netting for air if cleared of grounds and spaced from the metal top and dome light as recommended in the preceding paragraph. If cut away from the sides, the netting must be laced to the sides of the top to the bow.

On tops that have metal cross braces the use of a roof aerial is not practical. In these cases a good axle-to-roof aerial (stock number 4D10179) is very efficient due to a 6 inch suspended portion which rides very close to the ground and increases its pickup considerably.

The lead-in for roof aerials should be soldered to the reverse of the screen on the side of the car on which the set is to be located, so that when run down the windshield column it will be close to the set. It is not advisable to shield the lead-in all the way, but only from the point where it leaves the windshield column to the set. Ground the shield at the windshield column and at the set. Lead-in wires are very often the cause of intermittent reception if not soldered—never depend on a hand twisted wire joint in car radio work.

The actual location of the set is usually determined by the space available. The hot water heater installed on the right side under the dash, the available space above such as the depth of the glove box when it is at all possible locate the set under the dash rather than in the engine compartment or under the floor board. If set is to be installed on the engine compartment it will probably be necessary to install a filter condenser between the coil and the motor of the suppression coils to eliminate interference. The filter condensers numbers 3B11606, 3B11607 and 3B11608 in the Profit Guide are especially designed for this purpose and are recommended.

It is best to run the “A” battery lead directly to the storage battery. This assures a steady voltage supply and a minimum of interference. Avoid making the connection at the battery, it is possible there or at the battery may cause the generator to feed direct current and burn up the vibrator or tubes.

Elimination of Interference

With aerial and radio properly installed the next step is the installation of suppression material. A standard suppression kit is usually supplied consisting of a suppressor for each spark plug, a filter condenser and two by-pass condensers—one for the “A” lead at the coil and one for the “A” lead at the amplifier or filter condenser and two by-pass condensers—one for the “A” lead at the coil and one for the “A” lead at the amplifier. Acceptable suppressors and filter units. These extra filters should be located close to the source of interference. They are fully described on pages 58, 81 and 129 of the 1935 Radolek Profit Guide. On page 94 will be found the suggested positions of interference and are especially designed for this purpose.

Most new cars require a slight peening of the distributor rotor to prevent any capacitance interference from the sparking at that point. Each spark motor lead wire must have the motor head bonded to the bulkhead with low resistance tinned copper braided. Allow sufficient length for maximum vibration of the motor. Sandpaper the ends of the motor leads. A good connection is made to the chassis of the receiver. The tuning control bracket should make good electrical contact with the steering column. With the correct use of hand and care the motor will run smoothly without any objectional noise originating in the car from reaching the set.

Auto Radio Noise Suppression

See top of page 59 the Radolek Profit Guide. The Radolek Profit Guide contains the 10 most common causes of Auto Radio interference with recommendations for its suppression. One of the Radolek companies has the most complete line of suppression material in the entire country.

THE RADOLEK COMPANY

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Page 4

New Wire Wound Auto Spark Suppressors

Save Gas and Improve Auto Radio Performance

The new Ward Leonard Inductive Spark Suppressors are fast selling accessories. Increased motor efficiency resulting immediately in more speed and less gas consumption appeals to every motorist!

The principle of suppression of ignition noise interference is to "damp” the oscillatory discharge of the spark, thus preventing radiation interference from the ignition cables. Resistance type suppressors “damp” the oscillatory discharge by reduction of the spark voltage which often impairs motor performance.

The inductive type suppressors have one thousand times the damping effect of any hundred ohm resistance. The intensity of the spark is not reduced but increased by the wire wound suppressor, an impedance of many thousands ohms. "Dances" the oscillatory discharge. The slightly exaggerated oscillatory curves indicate the spark voltage characteristic with inductive suppression. (Diagram "A") and with Ward Leonard Inductive suppressors in diagram "B". The effect of substituting inductive suppressors for carbon units, is quieter radio performance, increased motor efficiency, and usually from 2 to 5 miles more road range for a given tank of gas that is possible with high resistance suppressors. While the feature of economy is your best selling point, easier starting in all kinds of weather, and quicker warm up are the clinching sales points.

Ward Leonard Inductive Suppressors are fully described on page 129 of the 1935 Radolek Profit Guide.

*Engineer, Ward Leonard Co.

PUNCHES

For Socket and Condenser Mounting Holes

3X4615—For 1½" holes, 5 pieces, $1.05
3X4616—For 1½" holes, 5 pieces, $1.05
3X4617—For ¾" holes, 5 pieces, $1.05
3X4618—For %" holes, 5 pieces, $1.05

List Price, Each, $3.00. YOUR PRICE, Each, $1.76.

YOUR PRICE, Set of Four, $6.75

Stamping holes in sheets metal (chassis, etc.). Easily used in locations not possible to drill or tap. Much more practical and faster. Make clean cut, round holes with blow of hammer in 18 gauge and lighter. Simply drill %" guide hole in metal stock to be punched. Insert guide pin in hole, place die below punch above. Hold punch firmly and drive through stock. For active servicemen, small manufacturers, engineers and laboratories a complete set of these dies will save their cost in a week or so. Tools are made of hardened steel, burnished and oiled. With reasonable care each tool will punch over a thousand holes in any ordinary metal stock. These tools open up a new field of work for engineers. Engineers in designing and constructing custom built Radio receivers, amplifiers, test instruments and other special instruments.

THE RADOLEK COMPANY
A Million Football Fans Are Your Prospects For PHILCO Auto Radio!

- Four Fast Selling Models!
- A Complete Price Range!
- The Easiest Set to Install!
- Your Opportunity for Big Profits!

PHILCO is America's most popular Auto Radio! Thousands of experienced dealers have found that it is easier to sell PHILCO Auto Radios with it. PHILCO is not restricted to big stores, every radio serviceman or radio dealer can now offer the full line of fast selling auto radio on the market. You can sell PHILCO to your customers; it's the right radio to sell and is advertised more extensively than any other make. Concentrate your efforts on the profitable market PHILCO has pioneered for you.

Football and radio's biggest selling feature! Millions of football fans drive to the college and high school games every weekend. Auto radio brings them the entertainment they desire before the game and the scores of other events as they drive home. PHILCO Auto Radios have proved their superiority in thousands of cars. PHILCO Auto Radios sell with less effort than any other make. You can reach the big market of football enthusiasts in your community with PHILCO Auto Radios. Be ready for immediate sales. Order your PHILCO Auto Radios today.

Easy to install, free from service! PHILCO experience covers thousands of new and old cars that have taught their engineers how to build perfectly shielded and filtered receivers which will work in any automobile. Highly perfected noise suppression equipment accompanies every receiver. No experience is necessary to install a PHILCO Auto Radio. Simply everyone who desires to service a PHILCO set. PHILCO clear tone tubes are factory tested in every PHILCO Auto Radio.

Sell Auto Radios NOW! It will pay you to push the PHILCO line.

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PHILCO MODEL 11

For Description and Your Net Prices, see pages 134 and 135 of Your 1935 Radolek Profit Guide.

Complete price range! Fits every class of car owners. PHILCO Auto Radios retail from the popular price of $19.50 for the model 11, to the Deluxe Model 890 at a retail price of $75.00. In between are the models 19 and 200 at $45.00 and $55.00 list; each higher price instrument gives the customer more value for his money, and gives you more profit. Radolek's attractive wholesale prices listed on pages 134 and 135 of the 1935 Radolek Profit Guide assure you of these greater returns on your business.

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Triumph Model 300 MultirangeMeter

Small, Accurate and Convenient
Your Price: Only $19.50

Study these 16 points before you buy or build a Multi-range, all-purpose Test Instrument:

1. Eleven Ranges of Five Scales: 5-1000 ohms per V. on A.C. and/or D.C. scales.
2. 1.0-1000 ohms per V. on a special High Resistance Meter.
4. Rated 10/100/1000 volts on A.C. scale.
5. Rated 5/50/500 millivolts on D.C. scale.
6. Reverse ohm scale, reading 0/1000 ohms.
7. Medium ohm scale, reading 0/1 megohm.
8. 15 megohm scale, reading 0/15 megohm.
9. 15 megohm scale, reading 0/15 megohm.
10. Current reading from 0.01 to 100 milliamperes.
11. Current reading from 0.01 to 100 milliamperes.
12. Current reading from 0.01 to 100 milliamperes.
13. Uses 1 V. flash light battery.
14. Used in connections which necessitate high resistance.
15. Accurate with all scales.
16. Furnished with 36-Test Leads.

Price, $19.50

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Philco Shadow Output Monitor Model 012
An Essential Output Indicator For Adjusting A Radio Set
Your Net Price, $7.50

The newest Testing Device available to Radio Servicemen. The Shadowgraph Tuning Meter indicates maximum signal by the width of the shadow appearing on the celluloid screen surface. A self-contained flashlight battery supplies power to the pilot bulb which is controlled by a switch on the top of the tuning meter. A copper-cored reed is connected between the push-pull power tubes and to the plate and grid of a single power tube. Maximum shadow width is obtained when aligning push-pull emitters or tuning transformers with a modulated input signal. The width of the shadow is proportional to the square of the output signal. The attractive amber screen upon which the double shadow appears makes color alignment very simple. The Philco Shadowgraph Tuning Meter is particularly recommended for use with PHILCO Model 92 Signal Generator described on page 32 of your Radolek Profit Guide. Model 012. Your Net Price, $7.50.

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Radolek is an Authorized Philo Parts Distributor. We carry a complete line of Philo Replacement Parts and Accessories and can give you immediate service on any Philco item you may require.
"Build-it-Yourself" Kits

A Police Call Alarm that Works!

The Radolek Portable Tube Short Checker Kit, described on page 35 of the 1935 Radolek Profit Guide, makes an excellent accessory for a custom-built Volt-Ohmometer. The parts include the neat brown box-like illustrated above; the diagram of which is illustrated below. The six 3X2453 resistors, if ordered from stock number 3X7808 at 15¢ each, will be supplied with insulation which permits the resistors to be stacked without danger of shorting. Terminals 4 and 5 in the diagram below may be permanently connected to the ohmmeter circuit. When a tube is inserted, its either does not move the ohmmeter, which indicates an open filament, or raises a reading of 1200 ohms, indicating a good filament and no interelement short or a reading of less than 12,000 ohms which indicates internal leak or short circuit. In the diagram below, similar numbers are wired together. Your price for a complete kit of parts is $2.10. Our stock number is 3X2451.

There's Profit in "P.A." BUILD YOUR OWN AMPLIFIERS with RADOLEK KITS

15 Watt AC Amplifier Kit

110 Volt 60 Cycle Operation

We are offering until Nov. 1st ONLY our most popular amplifier in kit form at a unusually low price. It is a radio man to build one of these amplifiers and actually experience the superior performance of Radolek Amplifiers. Page 35 of the 1935 Radolek Profit Guide describes the fundamental construction of the Wheatstone Bridge. The circuit diagram of the Wheatstone Bridge is illustrated below. Complete specifications accurately describe this service accessory.

Practical Tube Short Checker

For 110 volt, 60 cycle operation

Easy to Build—Simple to Operate and—Economical to Own

Protect your regular tube tester or analyzer from shorted tubes! Turn every tube in this short checker first. Know instantly if there is cathode leak or leakage, open filament or any trace of intermittent short in any type of filament or rectifier tube or rectifier tube having standard size base prims. This modern short checker is available in a kit of essential parts which permits construction of the unit as a custom built unit faster than and as a complete kit which can be assembled as an independent unit for police or business service. In the circuit diagram, all points are connected together.

The principle of operation: Alternate current, 105 to 125 volts, 25 or 60 cycle may be employed. Terminals 3 and 4 closed, the line voltage is distributed across the tapped choke and the resistance limits the neon bulb. The resistance of this choke on 60 cycle A.C. is approximately 20,000 ohms. The variable resistor is adjustable to approximately 100,000 ohms where the neon bulb is about to light. A filament reading at this instant is approximately 1/6th of the choke and 6/5ths across the neon bulb. The filament reading of the 20,000 ohms impedance will have the neon bulb illuminated at its critical voltage. With the slightest trace of short the resistance of the choke varies from a few ohms to approximately 1/6th of the choke (which then becomes an auto-transformer) down to only a few ohms. The current drawn by the neon bulb is so small that even a delicate 30 tube filament is not required. This complete kit is illustrated below.

Wheatstone Bridge

The Most Accurate Method of AC and DC Resistance Measurement.

Good servicemen use a Wheatstone Bridge for accurate resistance measurements, for capacity comparisons, and for impedance measurements. The new Radolek Wheatstone Bridge is the simplest and most compact instrument of its kind. It employs ordinary headphones instead of the old fashioned ballistic galvanometer for determination of line balance position. A C from the secondary of a filament transformer supplies the signals for tuning balance. The principle application of the Bridge is measurement of small resistances and inductances which cannot be accurately measured on ordinary ohmmeters. For exact work, a few Electrical Precision resistors listed on page 60 of the 1935 Radolek Profit Guide should be selected at standard of resistance for comparison. Values of 0.1, 0.5, 1.0, 2.5, and 5.0 ohms should be selected. To determine the value of an unknown resistor select a precision resistor of approximately similar value, substitute the unknown in X, the known resistance in R. The procedure is given in all electrical textbooks. Your price for a complete kit of parts is only $1.25. Our stock number is 3X2541.

The circuit diagram of the Wheatstone Bridge is illustrated below. Complete specifications accurately describe this service accessory.
NEW TRIPLETT "MASTER" TEST EQUIPMENT

The Triplett Master Unit Testers have been designed with the idea of providing the simplest, most compact, accurate and useful service equipment on the market regardless of price. This Master line of equipment contains many new features and useful features which will enable the serviceman to speed up repairs on any radio set.

We have in stock all the latest improved models of Triplett test equipment.

Triplet Model 1230
"Master" Signal Generator

In this new Model 1230, Triplett has produced a precision stabilized, all-wave, continuously variable Signal Generator at a price within reach of practically every Radio Serviceman. Provides frequencies from 100 KC to 18 megacycles, either modulated or unmodulated. A special frequency stabilized circuit employing a type 30 tube generates the r.f. oscillation, while a second type 30 tube generates nearly 100 cycle note. The small amount of current required is furnished by one 225 volt and three 10 volt plate batteries. These batteries permit oscillator to be independent of the radio. Power is taken from the oscillator in a manner that does not upset circuit function. Individual shielding provided wherever critical shielding is required. Range switch and controls are made easy by three output jacks and attenuator. Tubes and batteries furnished. Size 27/4"x6"x4". List $27.00. Your Price, $15.02.

Triplet Model 1210
"Master" Unit Tube Tester

It is impossible to place a tube in the socket of this new emission type tester for all types of tubes. Its 30¼" Triplett D'Arsonval meter reads GOOD and BAD values on three colored scale. Only three simple operations required to test all types of tubes; only one operation for shorts. Two selector switches provide for short, leakage, and quality tests without removing tube from socket. Insensitivity between elements indicated correctly on meter. A third selector switch selects proper filament voltage; a fourth switch is set for the type tube to be tested. Chart furnished for all switch settings thus line voltage regulator. Rectifier tube furnished. Wood case. Size 27/4"x6"x4¼". 3X2584—List, $30.00. Your Price, $19.60.

Counter Case for Model 1210 Tube Tester

The Triplet 1220 Free-Point tester unit us-d with the Triplet 1200 or any other suitable volt. ohm, milliammeter enables the making of voltage tests between any tube elements including chassis current tests in series with any tube element, resistance tests between any two elements or socket contacts including chassis. The jacks are so arranged that the source of external voltage may be applied to any tube element. This permits testing tube characteristics. A 4 prong, a 5 prong, a 6 prong, and a combination large and small base 7 prong socket are mounted on the backplate panel and the contacts marked according to RMA standards. One end of the connector cable is permanently connected to the switch type jacks, the other end terminates in a 6 prong latch type plug. 4, 5, large 7, and a small 7 prong latch type adapters are included. Instructions, guarantee and registration cards are furnished. Wood case. Size 27/8"x6"x4¼". 3X2585. List Price, $11.50. Your Price, $8.16.

Triplet 1200 "Master" Volt-Ohm-Milliammeter

This new instrument has two exclusive and very interesting features (1) The large rectangular meter used is so mounted that it may be tilted at any angle in the case to avoid parallax, and (2) the meter employs a separate movement for A.C. and D.C., both of which are accurate within 2%. The tilting feature enables the user to make accurate readings with ease in practically any position, while the double movement feature provides separate scales for A.C. and D.C. and makes all readings simple and direct. No mental arithmetic necessary. The scale figures are extremely large and clear. They are all arranged in horizontal lines—no twisting of the head while reading them.

A.C. and D.C. Ranges

D.C. Ranges: 0/10/100/500/1000 volts at 2000 ohms per volt; 0/1/10/100 milliamperes; 0/1500 ohms, 0/1.5/3 megohms.

A.C. Ranges: 0/100/250/500/1000 volts at 100 ohms.

Only three selector switches provide for the tests. Two for all D.C. Voltage, milliamperes, and resistance, A.C. voltage and current measurements. A fourth jack is used when measuring output voltage. This output jack contains a blocking condenser which prevents the flow of D.C. A single selector switch makes for extremely simple operation. Individual zero adjustments for the various ohmmeter scales permit a four-setting selector switch from one range to the other without adjustment of the meter movement. 3X2587—Model 1200 complete. List, $47.50. Your Price, $21.24.

Carrying Cases

Single Unit Case

4 Unit Case
Comprised of solid oak and covered with attractive black grained leatherette. Has extra large compartment to accommodate all the accessories necessary for the tests. 4 testers. Size 17x11x5¾" high. 3X2589. Model 1204. Carrying Case. List Price, $9.90. Your Price, $5.88.

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NEW SUPREME TESTERS  
With the New Supreme Fan Type Meters

All the Supreme Instruments illustrated in your big 1935 Radolek Profit Guide are now furnished with the new Supreme Laboratory Type Meter illustrated. The new fan shape makes the scale full 5 inches long which spreads out the readings and permits greater accuracy and speed. Designed in an attractive molded bakelite case. Meter is sturdy and accurate and of high quality in appearance, with Supreme’s reputation for excellence.

New Standard Model 333 Analyzer

Last season thousands of servicemen bought the Model 333 Analyzer at $39.50. This season Supreme has added a new standard model of the 333 at a lower price in addition to the Deluxe Model illustrated in your 1935 Radolek Profit Guide. This new instrument at $29.35 brings Supreme design and quality to thousands of service men who could not previously afford a Supreme because of the price. The standard 333 Analyzer provides point-to-point tests for voltage, current and resistance directly from the socket through the analyzer cable without removing the chassis from the cabinet. Reads A.C. and D.C. voltages on 4 scales: 0-5/125/500/1250, 1000 ohms per volt. Reads D.C. mills on 0-6/125 scales. Self-contained 4½ volt battery operates ohmmeter with ranges of 0-2000 and 0-200,000 ohms. The low scale reads down to 1 ohm with 35 ohms in the center of the scale. Other ranges selected through multipolar switch. Output measurements directly through analyzer cable without adapters. Contained in a handsome hardwood carrying case with cover and handle. A high-grade instrument at a new low price. 3X2557—Your Net Cash Price, $29.35.

New Supreme Model 85 Counter Type Tube Checker

Many service men and dealers have asked Supreme for a good looking counter tester. Here it is, and the features of the portable Model 85 including the famous neon leakage test and the direct reading "English" scale that your customers can understand. The Model 85 really picks out the bad tubes. Result: More sales for you and more profit. If you have an old style tube tester that doesn’t find and reject all the bad tubes you may be losing the cost of a Model 85 every week or month. Mounted in a beautiful walnut finish cabinet with matched walnut front and top. Sloping walnut panel and bronze escutcheons. Hidden slide in base carries full operating data. Tests all tubes correctly.

We Sell these Instruments on Time Payments—Write Us for Terms!

New Supreme Fan Type Meter Kit

With this new Supreme Model 310 Laboratory Type fan shaped Meter Kit you can build your own AC-DC Volt-Ohm-Milli-ohmmeter with ranges of 0/5/125/500/1250 volts AC or DC—(1000 ohms per volt) 0/150 mils DC and 0/2000 and 0/350,000 ohms with a 4½ volt battery or 0/2 megohms with a 45 volt battery. Meter has 5” scale. Bakelite case with round extension which mounts in 2½” hole. 3X2559—Meter only. Your Net Cash Price, $6.12. 3X2560—Copper Oxide Rectifier for Meter. Your Net Cash Price, $2.69.

New Circuit for Radolek

Triplet Foundation Meter

Extend the range of your Triplet Foundation Meter to 1½ megohms! An extra resistance of 10,500 ohms has been added to the original circuit to permit use of a 45 volt battery. Electroad Precision resistors listed on page 69 of the 1935 Radio Profit Guide should be employed. With the new circuit, multiply the high ohm scale reading by 10. The midscale reading which was formerly 4500 ohms, now reads 45,000 ohms. This makes this new type ohmmeter for test panel use which you can assemble. This meter is listed on page 37 of your 1935 Radolek Profit Guide.

Supreme Model 85 Tube Checker


New Readrite Model 720 Point-to-Point Tester

Designed for fast, efficient service work. Requires minimum manipulation, is extremely flexible and so arranged that voltage and current can be measured in any tube circuit. Resistances, continuities and capacities are also quickly measured. Point-to-point tests are made through an 8 conductor cable and plug connected to the set socket. The tester socket terminals are arranged according to RMA standards. With this method it is not necessary to remove the chassis from the cabinet to localize defects. All meter ranges are available by connecting through the single pair of leads. Regardless of the arrangement of the different tube elements the No. 720 will make it possible to increase or decrease the voltage values as applied to the tube elements, the break in leads also made use of for this purpose.

Separate AC and DC Meters

Rugged, simple, speedy and accurate in use. The D.C. scales are 15, 150, 300 and 600 volts, 15 and 150 milli-amperes. The A.C. scales are 10, 25, 150 and 750 volts. Scales are clearly lithographed on all metal dials. No mental arithmetic required. Overloading of the meter is prevented as far as possible by the single selector switch and the single pair of jacks for all meter ranges. 3X2591—Furnished complete with all instructions, resistance and capacity charts, cords, registration and guarantee cards. Size: 10½”x3½”x8”. List Price, $25.00. Your Price, $14.70.

Model 730

The same as the No. 730 but equipped with a Triplet DC voltmeter having 1000 ohms per volt resistance. 3X2592. List Price, $31.00. Your Price, $18.23.

Special October and November Bargain

Flashlight Screw Driver

Puts the Light Directly on the Screw

Radolek offers this combination flashlight and screwdriver during this month only at very low prices.$

The full size insulated secure grip handle is the compartment for a standard two cell flash lamp. Bulb is a standard size, the cover is a flashlight. The light is easily turned on at the top of handle and shines directly upon your work from the base of the handle. Screws are quickly and efficiently handled in dark places. Fine tool steel blade fits all sizes of radio screws. bulb is included. 3X4747—that Screw Driver, Less Batteries. Your Price, 48c.

3X39—No. 1 Uni-Cell Batteries (2 required) Two for 12c.
ceeding stage is then matched to the nearest standard I. F. band. It is usually safe to retune it to the output of the receiver. When the frequency is reproduced nearest that to which the I. F. tube has been tampered with, the best signal reproduction unless trouble in the speaker. The next step in trouble analysis is the amplifier. Lack of field current or an open voice coil might be the cause of the stage has been tampered with, the best signal reproduction unless trouble in the speaker. The next step in trouble analysis is

case. Designed for 110 to 125 volts, 60 cycle A.C. Size of the portable oak case, 11¼"x12½"x9½". When ordering request stock number 1X2543.

How To Use An All Wave Signal Generator
For Alignment and Performance Testing

The new all wave oscillators provide an audio signal which will save many hours of tedious service analysis on audio amplifiers. In testing a receiver which is not working because of some minor defect, the audio signal may be supplied to the grid of the power tube, if the 400 cycle note is heard in the speaker, apply the signal to the grid of the first audio tube and then to the grid of the detector. Each stage of amplification should provide a stronger signal reproduction unless there is trouble in the stage. Open audio transformers, shorted plate coupling condensers, incorrect bias voltage on the tube or possible potential reaching the grid of an audio tube are possible troubles within the amplifier. Lack of field current or an open voice coil might be the cause of trouble in the speaker.

The next step in trouble analysis is through the I. F. stages. For this test adjust the oscillator to produce a modulated signal. If the I. F. peak frequency is known, tune the oscillator to this frequency. Otherwise connect the oscillator to the I. F. tube grid in the stage preceding the second detector and tune over the I. F. bands. When the frequency is reproduced nearest that to which the I. F. stage is tuned, the strong modulated signal should be easily identified in the output of the receiver. If the tuning of the stage has been tampered with, it is usually safe to reuse it to the nearest standard I. F. band. The preceding stage in then matched to the same frequency. Always short the oscillator tuning condenser in the set while endeavoring to identify the I. F. frequency. If this is not done, the signal-generator may "beat" with the set's oscillator and cause false harmonic signals which would be hard to identify.

As a check on the receiver's oscillator, adjust the generator signal and tune your oscillator to a frequency above or below the broadcast wave until a signal is obtained. Stop the modulator of your oscillator, then you can compare the electronic connections and output with unmodulated wave of your instrument. If the receiver's oscillator is not defective, produce a modulated wave at the high frequency end of the broadcast band and adjust the trimmers of the tuning condensers for maximum signal response. If the receiver has the all wave feature, each wave band is checked with your oscillator and the trimmers adjusted for best performance.
Join the I. R. S. M.
By Ken Hathaway, Exec. Secretary

Are you making money in the Radio Service business?

The fundamental purpose of the Institute of Radio Service Men, is to create better conditions within the ranks of the service men throughout the country, which will make possible a decent living in the profession of radio service business.

Starting with a basic code of ethics which embodies the principles of a radio service man's obligations to his customer, to his fellow servicemen, and to himself, the members of the Institute have changed radio service from a trade to a profession.

They have fostered sectional groups at local meetings and annual conventions. They have established a forum for the exchange of ideas and the advancement of technical knowledge and promotion of better business relations. The cumulative effect of these efforts is a national project for the approval or classification of Radio Service Men under government supervision. All the work of the Institute is for your benefit—to increase your earning ability—to bring you standards of radio service from a trade to a profession, which permits growth and advancement.

You receive direct benefit from membership in the Institute of Radio Service Men. The membership is open to all radio servicemen and to those who desire to enter direct contact with thousands of other men in the same line of business. After the Radiolek membership, you can participate in any of the programs of the Institute—check corners, correspondence courses, and general knowledge and appreciation courses. You will be provided with the best of equipment and new ideas, learn of successful ways to increase your business, and be up to date with regard to every new development in radio.

In communities where the Sectional Groups of the I. R. S. M. are repre-

Learn about the Institute of Radio Service Men, how to become a member of the Institute of Radio Service Men, and how to get in care of the Radolek Co., for full details of how you can become a member of the I. R. S. M.

SPARTON 930 Filter Condenser Block
A Special Bargain

Each diode of the original part used in the Model 930 Sparton re-generator is matched with greater uniformity of muri-in safety. Total capacity 6.1 mfd. Indi-

PHILCO 90A

Half of the succession of the radio hobbyist caused by the open-circuiting of any one of the three audio coupling condensers, the open-circuiting of the form of the A. M. coupling lead, either within the condenser housing or at the ex-

WIN PRIZES FOR YOUR PROBLEMS

COME ON, BOYS! Let's make this column a source of helpful information for all. No name and address is read the Radolek Broadcast. Trade your tough problems and your solution of them for merchandise awards.

Here are the Prizes Offered

1st Prize . . . $10.00 Merchandise Credit
2nd Prize . . . 5.00 Merchandise Credit
3rd Prize 2.50 Merchandise Credit
Every Honorary Mention

The New Crystal Mike
Its Advantages Over Other Types

The active element in the Crystal Microphone is a Piezo Astatic Crystal Element, which generates a voltage when pressure is applied, in the Piezo Astatic Crystal Microphone.

This pressure is applied through the medium of a diaphragm made from extremely thin duralium formed in such a manner as to transmit the pressure directly to the crystal with a given sound wave. This sensitive diaphragm responds to every variation in the form of the sound wave and instantly generates in the crystal element a voltage proportional to the intensity of the sound wave. The diaphragm and crystal is insulated within a strong case which protects it from harm.

Once the crystal is finished and tested, no further adjustments are re-

This new type Piezo Astatic Crystal Microphone is available at $12.95.

Win A Prize
Association Secretaries

Win a fine "Minutes of Meetings" record book for your radio association, and a copy of "The New Crystal Mike," when you send the list of the names of members not present. Send the list to Radolek, and we will forward your "Minutes of Meetings" book and "The New Crystal Mike" to the names of members not present. Send the list to Radolek, and we will forward your "Minutes of Meetings" book and "The New Crystal Mike" to the names of members not present.

The cumula-

THE RADOLEK COMPANY

THE RADOLEK COMPANY

Philco 90, 90A

"Piping and intermittent reception on this model 930 has usually caused damage to the circuit of one of the radio coupling condensers, the open-circuiting of the form of the A. M. coupling lead, either within the condenser housing or at the ex-

Copyright 1934 by W. C. Braun

Page 10

"Piping and intermittent reception on this model 930 has usually caused damage to the circuit of one of the radio coupling condensers, the open-circuiting of the form of the A. M. coupling lead, either within the condenser housing or at the ex-

www.bibliothek.de/...
A Message from the Lab.

The Radolek Scientific Super Service Laboratory is equipped with the most modern of the latest automobile diagnostic tools. Every engineer in our laboratory is a master in his chosen field and we guarantee workmanship so high that you may carry it with you in your pocketbook. The convenience of this laboratory permits rapid and accurate work. In the addition the huge stock of thousands of items available for immediate replacement in defective equipment eliminates the delays which might be occasioned if the repairs were being made in a laboratory not associated with a large distributor.

Every effort is made to hold the cost of the repairs to the lowest figure which will permit high quality workmanship. When estimated, estimates are furnished for a moderate service fee which applies as part of the total bill only if the work is authorized. Upon request, a retail statement is furnished quoting twice your actual cost which permits you to secure a legitimate profit on each job, if you desire to show your customer the bill.

We prefer the larger and more definite work for the following reasons: (1) Large components can be handled as single items, thus reducing labor. Large amplifiers can be re-built or repaired within 6 hours as an average. (2) Estimating time is shorter. Large components are easily identified. Experienced radio engineers who have conducted a radio service business for a number of years will respect you as a high-class Serviceman who charges everyone the same prices.

A Complete Check Is Made

The set was an odd looking six tube job, with chassis and speaker mounted together. Evidently designed for A.C. or D.C. service with a 2255 rectifier. Tubes are not boxed on the big Hickok A.C. 47 wattmeter. While an assistant performed this task, the chief toolster set to work. Starting at the rectifier socket, he traced the circuit with a continuity tester. In-vective condenser in the circuit which would baffle less experienced men to trace. Next the large steel scale of the A.C. Wattmeter came into play. Each resistor and coil was measured and the value noted on a diagram. Then the wattage appeared across one filter condenser and its position in the circuit was marked with a felt pen for future tests. Next a Weston Capacity Meter was employed to test each condenser. The leaky unit, which was marked 4 Mfd., indicated less than 1 Mfd. capacity. Without disturbing the setup, with a Sprague cardboard case condenser of the same physical size and full 4 Mfd. capacity, the chief tested these other tests, the chief observed a tug on the 2255 wattmeter indicating that one plate circuit was weak. A Raytheon test tube was substituted temporarily.

As the set was connected to the line, the chief watched the wattmeter creep up as the tubes heated. That tube complex shouldn't draw over 9 watts and it should have indicated 75 watts which was within the safe range of the series resistor mounted under the chassis. The next voltage on the tube pins was checked and noted on the diagram for future reference. Optimistic chief connected the aerial, but only a faint signal would carry a 90-day guarantee.

Standard Charges for Sure Profits—This Schedule is Recommended

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Standard Rate</th>
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<tr>
<td>Labor charge: Within five mile range</td>
<td>$1.00 first half hour, $1.50 each succeeding hour</td>
</tr>
<tr>
<td>Shop service:</td>
<td>$1.50 per hour or flat rate for first 30 minutes</td>
</tr>
<tr>
<td>Tube service:</td>
<td>$9.50 delivery charge within first zone, $0.05 extra each succeeding five mile zone. Flat rate jobs taken to the shop and delivered back within 48 hours. Neutralizing and aligning by Tesla, R.P. and I.P.</td>
</tr>
<tr>
<td>Speaker cone adjustment</td>
<td>$3.00</td>
</tr>
<tr>
<td>Equalizing by Tesla, R.P. and I.P.</td>
<td>$3.50</td>
</tr>
<tr>
<td>Installation of tone control</td>
<td>$1.00</td>
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<tr>
<td>Volume control replacement minimum</td>
<td>$2.50</td>
</tr>
<tr>
<td>Power pack replacement labor or</td>
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</tbody>
</table>

Follow a Set through the Radolek Laboratory!

A Brief Story of One Receiver, Sent to the Radolek Scientific Super Service Laboratory.

The letter accompanying the first set received has been typical of the many which accompany radio sets to the laboratory for repair. It read like this: 'This set, which has no name, was brought to my shop for repair. I am not familiar with its circuit and do not have an immediate frequency. It works very faintly on local stations. Kindly repair it, putting it in as good shape as possible. I do not want to spend over $7.00 on it, as I don't believe the customer will stand over $12 or $14 for the repair. The tubes seem O.K. and if any have to be replaced, I prefer to do so from my own stock.'
Keystone Condensers

Keystone Condensers are built especially for the Radolek Company by leading manufacturers. These condensers are compact dry electrochemical units constructed from best quality materials. Capacities are of permanent value and have an extremely low leakage factor. They are free from such defects as corrosion and metal dust and suffer a temporary increase in leakage current that is an abnormal voltage is applied. Following an overload the condenser returns to its normal low leakage without the necessity of any reforming. Keystone condensers are not harmed by extremes of operating temperatures or shipping temperatures in winter or in summer. In your 1935 Radolek Price Guide on pages 76 and 77, is listed a Keystone condenser for every requirement.

**PRICES REDUCED**

**Keystone Dry Electrolytic in Tubular Fibreboard Cases**

**Volts peak**

Moisture-proof tough fibreboard tubular containers sealed with high melting point compound and winded with flexible 6 inch leads with high voltage rubber and braid insulation. Leads treated for acid resistance. Lead type 6/32 meandering stud riveted flush with sides of container. Mounting centers.

<table>
<thead>
<tr>
<th>Size</th>
<th>Container Code</th>
<th>Stock Number</th>
<th>Your Price</th>
<th>Tan Delta</th>
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<td>3x7548</td>
<td>3x1749</td>
<td>$2.50</td>
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<td>18</td>
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<tr>
<td>1/4&quot;</td>
<td>3x7549</td>
<td>11754</td>
<td>$0.30</td>
<td>60</td>
<td>22</td>
</tr>
</tbody>
</table>

**Type AR**

Specifically designed for use in replacements in auto radio Vibrator Units. Includes: Matching Capacitor, Can with Flexible Leads, 1500 D.C. Working Volts.

<table>
<thead>
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<th>Size</th>
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<td>11754</td>
<td>$0.30</td>
<td>60</td>
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**Type LR**

Specifically designed for use in replacements in auto radio Vibrator Units. Includes: Matching Capacitor, Can with Flexible Leads, 1500 D.C. Working Volts.

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<td>3x7549</td>
<td>11754</td>
<td>$0.30</td>
<td>60</td>
<td>22</td>
</tr>
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</table>

**Sprague Vibration Condensers**

1.4 x 3.50. Mounting centers

- Studs riveted flush with sides of container.
- Leads tinned for easy soldering.
- Rubber and braid insulation.
- Stock 3a7592, 3a7596, 3a7597.

**Contents of Model 34 Kit**


**Kit 35**

- Same as above except without Line Filter, Aerial and Ground equipment. Stock Number 3X8468. List $8.00. Your Price, $5.91.

**Two New TOBE All-Wave Aerial Kits**

**Essential for Noise-Free Reception and Maximum Range of Wave or Dual Wave Receivers**

The TOBE All-Wave Aerial Filterizer is the latest development in aerial filters and lead-in systems. This scientifically engineered product is designed to keep man-made static out of the receiver. It has an overload capacity of 20 kilowatts and from 500 kilowatts to 25 megawatts can be loaded upon to provide greatly improved reception from any short-wave or all-wave receiver when substituted for the usual aerial lead-in.

**High Fidelity**

In designing the TOBE ALL-WAVE FILTERIZER system, the three fundamental requirements for aerial installation have been kept in mind.

1. The aerial must be efficient at all frequencies.
2. The lead-in must be protected against noise pick-up.
3. The aerial must be easily installed.

The resultant simplicity of installation is achieved by use of one length of aerial wire in which it is not necessary to insert insulators, special cross-over blocks or other devices which increase the difficulty of installing the aerial. Moreover it is not necessary to connect the lead-in transmission line at any special point on the aerial. The aerial transformer, which is used for coupling the aerial to the transmission line, is so designed that it may be supplied from any part of the aerial or one of the aerial supporting wires, and its electrical characteristics are such that the efficiency of the aerial is practically constant over the entire receiving range. The construction of the TOBE All Wave Aerial Kit is such that it may be carried from the aerial to the receiver without special provision. The lead-in employs a balanced construction so that radio noise or man-made static that would be picked up on a plain lead-in are balanced out and the receiver will not receive any of the signal picked up on the aerial.

**Additional Vibrator Units Now Available**

Radolek has a complete line up of replacements for auto radio receivers listed on page 124 of your 1935 Radolek Price Guide. The volume sales of practically all the vibrators included in this listing have proven to us that there is a real demand among your customers for these units. Solicit auto radio repair business and get your share of the replacement vibrato business. We can supply any vibrators you require.

**Seventeenth Type Tubes**

Eight leading Parts Manufacturers Combine Their Engineering and Manufacturing Facilities to introduce this Remarkable Build-It-Yourself All-Wave Superhet.

The All Star receiver is completely AC operated from the 110 volt 60 cycle line. This super-sensitive receiver employs a continuous band-spread arrangement which allows any crowded short-wave channel to be spread over 270 degrees of the illuminated aerial tuning dial. Full dynamic speakers, mounted in small, self-contained units in one room only. The beat-note oscillator is incorporated in the cabinet to eliminate the necessity of test instruments or tedious adjustments.

**Uses Standard Parts**

Only standard parts are used in the All Star receiver. They are manufactured by Thomas, Cornell-Dubilier, Hammarlund, Ohmite, Electrical, Heyden and Crowe, and others.

Write us for your copy of the All Star News which we will give you a complete list of the necessary parts as well as a complete description of this receiver. These parts are all available from Radolek at the published list prices less your regular discount of 10% and 20%.

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THE RADOLEK COMPANY

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The R.C.A. Worldwide Antenna System was developed with two important objectives in mind. First, to reduce the effect of man-made static and second, to secure a maximum of signal strength over the entire short wave band. The most effective short wave antenna is horizontal and its greatest electrical signal is at right angles to its length. Every aerial system has a particular point at which it is most efficient. However, two dissimilar antenna systems can be connected to the same transmission line without either being damaged. The overall performance of the combination will be satisfactory over a wider band of frequency than a single aerial. The doublet antenna is the most satisfactory type for short wave reception. To secure different resonance points with the doublet, a crossover connection is made. The short doublet is resonant at about 14 megacycles, and the long doublet at about 24 megacycles. The short doublet, produces another resonance point at about 24 megacycles. The long doublet in itself is resonant at about 14 megacycles. The resultant response is relatively uniform over the most important part of the short wave section. Charged to the resonant doublets, produces an electric signal of sufficient magnitude to be additive to the signal from the short portion of the doublet, producing a resultant of sufficient magnitude to be additive to the signal from the short doublet. A resistor is also connected from one side of the primary to ground, to prevent the antenna system from being grounded, which causes periodic static in the receiver. The entire antenna should be erected flat on the workbench and the secondary coil be connected to the ground. Where the antenna picks up interference it should be pointed at the source of the interference. For European reception, the antenna should be pointed North and South, which is at right angles to the majority of European signals. The Radolek Co. lists the R.C.A. Worldwide Antenna System on page 142 of your 1935 Radolek Profit Guide. Your net price is $5.53. Stock Number 3X8528

RCA SERVICE NOTES FOR 1931-32-33

Here is a new convenience for all Dealers and Service Engineers, RCA-Victor Service Notes, famous for their completeness, handbound between stiff fabric covers. Diagrams and parts lists for every model issued during the period covered by these books. Each volume contains over 500 pages, and opens flat on the workbench. In addition to service notes, each volume contains additional information such as Impedance, Inductance and capacity charts, antenna length charts for Short-wave Receivers, reception charts for time and season of Short-wave Receivers. Impedances available: 1% resistance, 4 ohms, or 6 ohms. Intermediate, or high input may be selected for changable impedances. In many cases, they were not sufficient to differentiate in small variations of volume. For the antenna system, the impedance has cost two or three times the low price of the TMV-121-A. In many cases, they were not sufficiently sensitive and would frequently go out. The TMV-121-A is so constructed that it will not ordinarily burn out and sells to the Service Engineer for only $3.92. Our stock number 3X2500.

RCA Victor 2-Speed Pick-up For 33-1/3 and 78 R.P.M. Records

Cobra head type pick-up head. The arm is designed to eliminate low frequency cut-off. A U-shaped block which vibrates as a whole on the low frequencies and yet absorbs the armature vibration on the frequencies eliminates any bad peaks in the frequency range. The output of the pick-up is substantially flat from 50 to 5000 cycles. Arm is heavily weighted to provide best needle pressure on both 33% and 78 r.p.m. records. Base of arm is mounted in a rubber cushion so that the pick-up rides free at all times. Attractive Brown crackle finish.

3X2967—Low Impedance. Can be used for home recording with special weight listed below. Armature power transformers and also for use on typewriter heads. Impedance at 1000 cycles, 7 ohms. DC resistance 300 ohms. List Price, $8.90. Your Price, $7.70.


Home Recording Weight 3X2996 fits over pick-up head. The correct weight for making the low impedance pick-up number 3X2967 a close-free loading for all recording purposes. List Price, $1.20. Your Price, 75c.

See Pages 27, 32 and 142 of Your 1935 Radolek Profit Guide for Listings of Other RCA-Victor Products

No Burnouts with This New $4 Output Indicator!

A New RCA Instrument for Use with Any Oscillator—Uses Neon Lamp!

Just Announced! R.C.A. M.V.-121-A Visual Output Indicator, a companion instrument for the famous TMV-57-B Test Oscillator described on page 32. In your 1935 Radolek Profit Guide, you will find this new indicator ideal for all types of service work. An extremely accurate Indicator of output is needed.

RCA Auto Radio Lock

New RCA Auto Lock Fits All Makes of Auto Receivers

Auto Sets are easy to install—just repeat electrical connections made at the time of original installation. New RCA Auto Lock is a rubber cushion so that the pick-up rides free at all times. Attractive Brown crackle finish.

3X2967—Low Impedance. Can be used for home recording with special weight listed below. Armature power transformers and also for use on typewriter heads. Impedance at 1000 cycles, 7 ohms. DC resistance 300 ohms. List Price, $8.90. Your Price, $7.70.


Home Recording Weight 3X2996 fits over pick-up head. The correct weight for making the low impedance pick-up number 3X2967 a close-free loading for all recording purposes. List Price, $1.20. Your Price, 75c.
STANCOR Transformer PRICE REDUCTIONS

In line with our Price Reduction Policy our customers have received the benefit of these low prices since the time they were first announced by the manufacturer on September twenty-fifth.

These new prices reflect the tremendous progress Stancor has made. Increased sales resulting from our new 1935 sales campaign and increased production have justified the reduced prices without any sacrifice in quality or workmanship. Stancor transformers are exact duplicates of the original types in most cases and in many instances a wider margin of safety is provided.

Stancor Exact Duplicate Power Transformer

We are showing our Stock Numbers and Stancor Part Numbers of the New Reduced List and Net Prices. See your 1935 Radolek Profit Guide for Alphabetical Listing of Radolek Set Manufacturers and Receiver Models.

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Reduced Prices

On I. R. C. Metallized Resistors and Motor Radius suppressors

NOW ONLY 12c

3 Watt Sizes Now 12c

The Radolek Co. has ordered all orders received on or after September 1st at these new low prices. On page 56 of Your Radolek Profit Guide on stock numbers for all values of I. R. C. resistors are specified. Use the numbers when ordering and we will ship at the reduced prices.

I. R. C. RADOLEK Stock Price List

| All Sizes of Old List New List Your Price |
|-----------------------------------------|--------------------------------------|-------------|
| 1/2 Watt                                | 25c                                 | 20c         |
| 1 Watt                                  | 25c                                 | 20c         |
| 2 Watt                                  | 25c                                 | 20c         |

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CONTINENTAL CARBONITE Resistor and Suppressor PRICES REDUCED

On page 59 of Your 1935 Radolek Profit Guide all values of Continental "Certified" resistors and all models of carbonite suppressors are listed. Make your selection from your Profit Guide and use these new prices.

Continental Resistor Price List

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Toke Condenser Analyzer

Taken Gusswerk at Out of Continental 3x8505, Your Price $1137

Tape Condenser Analyzer

Taken Gusswerk at Out of Continental 3x8505, Your Price $1137

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THE RADOLEK COMPANY
### REDUCED TUBE PRICES!

These List and Net Prices for Arcturus, Philco, Gold Seal and Raytheon Tubes are now in effect, superseding the old List and Net Prices.

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### Make Radolek Your Tube Headquarters

Make Radolek Your Tube Headquarters. We carry the leading nationally advertised brands and prepare to make immediate shipment on all orders. Our complete selection and 24-hour service enable you to operate a successful Tube business with a minimum investment in stock. Prices quoted in your 1935 Radolek Profit Guide are correct for all tubes not listed below.
Amplifier Characteristics and Specifications

1-15 watts undistorted power output (up to 20 watts can be obtained with negligible distortion).
2-Four stages—Seven tubes—Highest gain ever secured in one unit (approximately 152 D.B.).
3—For one or two crystal, carbon, velocity, or condenser "mikes".
4-No matching transformers or current supply necessary with crystal "mikes".
5—Dual "mike" mixing and fading circuit.
6—Individual "mike" tone and volume controls.
7—Phono or radio input circuit can be mixed with one "mike".
8—Master tone control.
9—Master volume control.
10—Tremendous bass—Brilliant highs. Uniform frequency response from 40 to 8000 cycles within 2 D.B.
11—Output power level meter.
12—Three minute installation—Standard socket plug-in connection for two "mikes" and three speakers.
13— Forty watts field supply for one to eight speakers with strong high fidelity signals.
14—Universal output taps for all standard speaker voice coils (5 to 15 ohms).
15—Three transmission line impedances (250, 500, 1000 ohms).
16—Hum level lower than in finest quality A.C. radio receiver.
17—Complies with Underwriters Laboratories requirements—Fused power line—Bottom protecting plate—Ample provision for ventilation.

High Fidelity Tone Quality

A Super Power Amplifier! Combines a Dual Pre-Amplifier and Mixer With a High Gain Power Amplifier Which Supplies its own Speaker Field Currents! Includes Individual Mike Tone and Volume Controls and Master Tone and Volume Controls! Volume Level Indicator! Every feature that could possibly be desired in an amplifier is incorporated in this complete Public Address amplifier. Sufficient power is delivered to supply from one to eight speakers with strong high fidelity signals. Original quality of the sound is accurately maintained. Individual controls for regulating tone and volume of each input and master controls for regulating tone and volume of the entire output are all built in. Designed for Crystal or Velocity Ribbon Microphones to be used without external pre-amplifiers; single or double button carbon microphones may be used with suitable current supply and Mike-to-grid transformers. Any two microphones may be used independently or simultaneously. Either microphone may be mixed with the other mike so as to feature the pick-up of one mike. Formerly a number of pieces of apparatus were needed to accomplish only a part of these functions. Radolek has simplified and combined all this apparatus in one complete compact amplifier.

Finest Professional Appearance

Only tested quality parts are used in the construction of the Radolek Four Stage Amplifier. Chassis and all transformers are finished in a rich baked-on black enamel. Etched metal indicating plates insures highest efficiency. Ample ventilation areas operating temperature at lowest point. All transformers, chokes, main filter condensers and output amplifier tubes are fully and separately shielded. All wiring and parts easily accessible. Layout diagram, and schematic hook-up diagram furnished.

The Power Supply

The power supply uses a 5Z3 rectifier with an extra heavy filter system. In addition to supplying all the necessary voltages for the receiver, it provides 400 volts at 100 ma's in separate filter banks. This circuit is independent of the filter system and bleeds through heavy resistors until suitable speaker fields are connected. The circuit is arranged for 8-500 ohm or 6-1000 ohm, or 2-2000 ohm speakers or any combination of speakers and resistors which will equal 6000 ohms.

Output Level Indicator

An audio power level meter visually indicates the output level at all times—this feature is particularly valuable if the operator cannot hear the speakers.

Price List

3X10659—Amplifier exactly as described. Less tubes. List Price, $42.63
Your Price $40.00

3X10658—As above except with 7 matched tubes. List Price, $49.00
Your Price $46.00

The Radolek Company
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