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NOTE—Types and ranges of meters shown in this
catalog which are marked † are carried in stock.
Other ranges and types listed are built to order.

It is felt that radio meter
requirements are answered
completely in this catalog,
but if you fail to find
what you want, write to—
BURTON-ROGERS CO.
857 Boylston St.,
Boston, Mass.

Copyright 1927
Standard
B-Eliminator Voltmeter

Standard Ranges:
0-100
0-500 volts

Resistance
1000 ohms per volt

Without question, the so-called B-Eliminator, or Socket-Power Plate-supply for Radio has come to stay.

An ordinary voltmeter drawing a fairly large amount of current may be extremely accurate, but is not suitable for work with a B-Eliminator.

HOYT has brought out a standard instrument with a resistance of 1,000 ohms per volt. (Current drawn for total scale deflection: 1 Milliampere.)

This meter is recommended for ordinary dealers' service, as well as for laboratory and precision work. Two scales are supplied; 0-100 volts for measurement of voltage from the lower taps of the plate-supply device and for testing filament voltage of tubes connected with filament in series, and 0-500 volts for determining the voltage delivered by high voltage units, including those using the No. 210 tube.

<table>
<thead>
<tr>
<th>PRICE</th>
<th>U.S.</th>
<th>Canada</th>
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<tbody>
<tr>
<td></td>
<td>$28.00</td>
<td>$39.20</td>
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</table>

Also supplied on special order with additional scale of either 0-10
volts or 0-100 M. A.

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<table>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Leather Carrying Case</td>
<td>6.00</td>
<td>8.40</td>
</tr>
</tbody>
</table>
Service Set-Tester
Model 300†

The HOYT SERVICE SET TESTER furnishes the Radio Dealer or Service Man with a compact, accurate instrument, for making extremely rapid continuity tests of Radio set wiring in all kinds of Radio sets, without changing any connections in the set or disturbing the set or its accessories. Tubes may also be tested for plate current under working conditions.

The HOYT SERVICE SET TESTER is equipped with a Moving Coil Meter, resistance 1000 ohms per volt—sufficiently sensitive for practical and reliable voltage readings of B-Eliminator output. The meter has a 3¾ inch scale and is equipped with four ranges, 0-10 and 0-500 volts, 0-25 and 0-100 milliamps. A knife-edge pointer is used and the damping is excellent.

A two-foot flexible lead, permanently attached to the instrument, terminates in a plug which, with the usual adaptors, fits all set sockets. External binding posts with which the meter is also equipped and a set of rubber-covered leads with prods makes available the three scales of the meter, for external tests of A and B batteries, the B-Eliminator voltages and current up to 100 milliamperes.

The complete device is mounted in a handsomely finished hardwood box, 9" by 7" by 4", with leather carrying handle and rubber feet. Complete instructions are provided with each instrument.

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<th></th>
<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>PRICE</td>
<td>$65.00</td>
<td>$91.00</td>
</tr>
</tbody>
</table>
Universal Test Set and Tube-Tester

Model 200†

The HOYT Model 200 Universal Radio Test Set and Tube Tester supplies the progressive Radio dealer, manufacturer or owner with a single, highly accurate piece of equipment, for making rapidly and surely every necessary Radio test.

AS A TEST-SET

It provides a meter with seven ranges as follows:

<table>
<thead>
<tr>
<th>Current</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 Milliamps</td>
<td>0-10 volts,</td>
</tr>
<tr>
<td>0-50 Milliamps</td>
<td>0-50 volts,</td>
</tr>
<tr>
<td></td>
<td>resistance, 2,000 ohms</td>
</tr>
<tr>
<td></td>
<td>0-500 volts,</td>
</tr>
<tr>
<td></td>
<td>resistance, 10,000 ohms</td>
</tr>
<tr>
<td></td>
<td>resistance, 100,000 ohms</td>
</tr>
<tr>
<td>0-500 Milliamps</td>
<td>0-5 Amperes</td>
</tr>
</tbody>
</table>

The Radio Service Man need carry only this test set, in its light case with leather handle, to find out everything he needs to discover about any Radio set or accessory.

AS A TUBE-TESTER

As a tube-tester, the HOYT Model 200 gives direct and rapid readings of the mutual conductance, and amplification factor (mu) of all kinds of Radio tubes, including high mu tubes and power tubes. By a very simple and easily operated Graphic Calculator chart, under the cover, the plate impedance may be obtained instantly without figuring.

<table>
<thead>
<tr>
<th>PRICE</th>
<th>U. S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$150.00</td>
<td>$210.00</td>
</tr>
</tbody>
</table>

†
Tube Tester Model 100

For Dealers’ Counter-Tests

This is the standard instrument in use by thousands of Radio and Electrical Dealers, for making counter tests on Radio tubes when they are purchased. It has a highly accurate meter and tubes of all types may be rapidly checked on it for their condition, insuring that the purchaser gets tubes which are fully up to standard. Its operation is very simple and may be learned by anyone in a few moments. Binding posts are provided so that the necessary batteries for operation are quickly and immediately attached. With each tube tester a comprehensive instruction book is furnished. This book will be sent free to anyone interested.

U. S. Canada

PRICE—Model 100 $35.00 $49.00

Tube Tester Attachment

Model 100-A

This attachment consists of a center zero voltmeter and a potentiometer, mounted in a solid mahogany block. The connections are made to the binding posts on Model 100 marked for C battery.

With this attachment, complete characteristic curves of all tubes can be obtained and plotted. Its use is fully described in an instruction book on the HOYT Tube Tester Model 100.

U. S. Canada

PRICE—Model 100A $14.00 $19.60

Extra leads complete with clips and full information for testing the new A. C. Tubes, 1.00 1.40
Radio Rotary Meter

Style 2

Ranges—
15 Milamps
75 "
7.5 Amps.
7.5 Volts
150 "

The HOYT RADIO ROTARY METER is a voltammeter of unique and exclusive design (patented). It combines in one convenient unit five ranges, necessary for all testing on radio receiving sets, tubes, batteries, battery chargers.

The meter itself is of the D’Arsonval type, with a resistance of 70 ohms per volt. The moving system turns on hardened pivots, resting in sapphire bearings. The scale of each meter is hand calibrated. The whole instrument is enclosed in a heavily nicked case, 2½" in diameter, giving a scale length of approximately 1¾". It is possible easily to read quantities as small as ¼ milliamperes or ⅛ volt. Dimensions of base are 4½ by 3¾".

The Radio Rotary Meter is fully described in an 8-page pamphlet which gives 16 different Radio tests, with wiring diagrams, packed with each instrument or sent on request.

<table>
<thead>
<tr>
<th></th>
<th>U. S.</th>
<th>Canada</th>
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<tbody>
<tr>
<td>PRICE (with pair of leads)</td>
<td>$24.00</td>
<td>$33.60</td>
</tr>
<tr>
<td>Leather case extra—</td>
<td>6.00</td>
<td>8.40</td>
</tr>
<tr>
<td>Tube-base plug and leads</td>
<td>1.50</td>
<td>2.10</td>
</tr>
</tbody>
</table>

HOYT RADIO ROTARY METER—Style 3

In answer to a demand for a compact rotary meter equipped with higher ranges Hoyt now offers Style No. 3. The construction and appearance is the same as Style 2. The ranges are as follows:

<table>
<thead>
<tr>
<th>0-20 milampere</th>
<th>0-10 volts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-100 &quot;</td>
<td>0-200 &quot;</td>
</tr>
<tr>
<td>0-10 amperes</td>
<td>U. S.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRICE</th>
<th>U. S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$27.00</td>
<td>$37.80</td>
</tr>
</tbody>
</table>
A B C Battery Tester

For Dealers' Counter Tests

Ranges: 0-50 volts
0-50 amps.

The Hoyt A-B-C Tester is a combination voltammeter, five inches in diameter, conveniently mounted so that it can be set or screwed on the dealer's counter and used quickly and accurately to check radio batteries as they are sold. It is rugged in construction, its movement is precise, and its long scale, easily visible to the customer's eye, assures him he is given fair value in the batteries he is purchasing.

Dry cells can be tested rapidly by simply laying them on the tracks provided and pushing them against button. Current given shows at once on Meter dial. Leads are provided for testing B batteries in 45 volt blocks and these are long enough so that B batteries can be tested without removal from packing case.

The scale of the meter is marked in red at 22½ and 45 volts for easy reading of B battery voltage. Quicker to use than a pocket meter and always ready for use.

The meter is fool proof and will not test dry cells until one of the Voltmeter leads is plugged into the jack on the meter frame, thereby insuring long life and no burned out coils. It is a confidence builder because the customer sees the results of the battery test before his eyes and knows with a glance the meter making the test is an accurate instrument.

<table>
<thead>
<tr>
<th></th>
<th>U. S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRICE</td>
<td>$28.00</td>
<td>$39.20</td>
</tr>
</tbody>
</table>
Pocket A. C. Voltmeter
Type 5370

Standard Range—
0-150 volts†
With Multiplier
0-300 volts

The HOYT Type 5370 Pocket A. C. Voltmeter is a special instrument for testing the line-voltage in the electric-lighting system. It has become a necessity with the advent of B Eliminators and Battery-Chargers in Radio. Very frequently improper operation of these vital accessories is entirely due to insufficient line voltage.

The case is 2" in diameter, 1" deep, nickel-plated. Dial has hand-calibrated scale about 1½" long. Terminals are plugs, protected by rubber cover and connected by silk-covered leads to a specially designed socket plug which may be pushed into any electric-light socket in any position and contact made without danger of short-circuits. Although calibrated for A. C. readings, the meter is correct within two percent on D. C. above 90 volts.

Complete with leads, socket plug, and packed in light, well made pocket carrying case.

Note: This meter is not intended for permanent connection across A. C. lines, and is not so guaranteed.

<table>
<thead>
<tr>
<th></th>
<th>U. S.</th>
<th>Canada</th>
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<tbody>
<tr>
<td>PRICE—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-150v.</td>
<td>$11.00</td>
<td>$15.40</td>
</tr>
<tr>
<td>0-150, 300v.</td>
<td>16.00</td>
<td>22.40</td>
</tr>
</tbody>
</table>

Extra pair of leads with clips instead of special plug 90 1.26
Special Pocket Meters
Type 5062—D. C.† Voltmeter

Double Range
0.75 Volts
and
0.150 Volts

Type 5062 supplies the need for a precision type of Pocket Meter for service or owner use. Equipped with jewelled bearings, moving coil movement and packed in leather case.

Type 5063†
Milliammeter D. C.

Double Range
0.15 MA.
and
0.75 MA.

The Type 5063 is a special pocket meter made as a milliammeter. It is particularly useful for checking the amount of current passing through the resistors of B-Eliminators and current taken by plates of power tubes, and being a moving-coil instrument gives really accurate results. Supplied with leather case.

PRICE—

5062 or 5063 with leather pocket case $11.50 $16.10
2 leads (extra) .90 1.26

U. S. Canada
Power Tube Plate-Milliammeter

For Correction of Audio Distortion

Standard Range—
0.25 Milamperes
2¼" Case (Nickel)
1¼" deep

Easily attached to any set by cord and plug built into case.

With the increasing use of the new power tubes, it becomes necessary to know when the proper additional B and C battery voltage is applied to them. Too little B battery will not give full volume without distortion, and too little C battery will cause blasting in the speaker. On the other hand, too much C battery will throttle down the output and seriously distort it. A milliammeter in the plate lead is the only sure indicator for proper grid-bias. The HOYT power tube plate Milliammeter is built especially for this duty. To attach, remove one tip from the loud-speaker plug and insert in the HOYT phone-Plug Milliammeter. Then insert the meter-tip in the phone-plug on set. The plate milliammeter will then register the B current draw of the power tube and by adjusting the B and C batteries until the needle stays still, distortionless amplification is assured.

An additional lead is packed with each meter so that the instrument when placed in the minus "B" battery lead, can readily be used to determine the plate current draw of all the tubes in the set.

Can be furnished in higher Milliampere Ranges at a slight increase in price.

<table>
<thead>
<tr>
<th>U. S.</th>
<th>Canada</th>
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<tbody>
<tr>
<td>PRICE</td>
<td>$8.50</td>
</tr>
</tbody>
</table>
Pocket Meters

1927-8 SERIES OF HOYT POCKET METERS

Are cased in handsome brown cases except No. 1 which is finished in nickel. They are of the polarized-vane type, but are built with an unusually high resistance for this type of meter (14 ohms per volt) so that their use does not put an excess load on the batteries under test, nor do they become warm and inaccurate when a number of batteries are tested in quick succession.

POCKET AMMETER Type 1½

Range—0-35 Amps.

For testing individual dry cells in dry cell operated sets. The resistance of the meter is such that if a cell shows a reading of 25 to 30 amperes it is considered good.

<table>
<thead>
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<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>PRICE</td>
<td></td>
</tr>
<tr>
<td>$1.00</td>
<td>$1.40</td>
</tr>
</tbody>
</table>

POCKET VOLTOMETER Type 11½

Bakelite Case

Range—0-50 Volts

Used for testing “B” batteries. Its total range is 50 volts, the scale is hand calibrated, and the 22½ and 45-volt points are marked in red, and special markings indicate when batteries are new or should be discarded.

<table>
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<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>PRICE</td>
<td></td>
</tr>
<tr>
<td>$2.25</td>
<td>$3.15</td>
</tr>
</tbody>
</table>
Pocket Meters

Type 11A

POCKET VOLTMETER Type 11-A†
Two Ranges—0-10 and 0-50 Volts
A convenient “A” “B” and “C” battery voltmeter.

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Canada</th>
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<tbody>
<tr>
<td>$3.00</td>
<td>$4.20</td>
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</table>

POCKET VOLTMETER Type 11 Special†
This instrument is being furnished for reading “B” battery voltages up to 150 volts.

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<thead>
<tr>
<th>U.S.</th>
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<tbody>
<tr>
<td>$3.50</td>
<td>$4.90</td>
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</table>

POCKET VOLTMETER Type 11-B
Range 0-10 Volts
For testing “A” batteries.

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>$1.25</td>
<td>$1.75</td>
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</table>

POCKET VOLTAMMETER Type 21†
Two Ranges—0-10 Volts, 0-35 Amps.
This meter is made for testing dry cells and 6-volt storage batteries.

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<thead>
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<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>$1.50</td>
<td>$2.10</td>
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POCKET VOLTAMMETER Type 31†
Two Ranges—0-50 Volts, 0-35 Amps.
This meter combines in one instrument the Types 1 and 11.

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<th>U.S.</th>
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<tbody>
<tr>
<td>$3.00</td>
<td>$4.20</td>
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</tbody>
</table>
Cell-Check

This is a low-priced instrument, developed by HOYT, to enable the Radio owner to determine at any time the condition of the charge in the cells of his storage "A" battery without bothering to determine the specific gravity of the acid. This means no more soiled hands, burned rugs or clothing. It is used exactly like a commercial cell-tester for automotive battery use. The prods are pushed down on the terminals of each cell in the battery and the reading noted in the small meter conveniently mounted at the end of the handle. A special scale reads direct the condition of the battery. The meter has a center zero, so that it can be used to indicate polarity. No reversal of contacts is necessary in testing from cell to cell.

An instrument no radio owner can afford to be without, as it shows battery condition under real load conditions and not with a small current draw as taken by a voltmeter only.

PRICE—Complete

<table>
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<tr>
<th></th>
<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>$2.50</td>
<td>$3.50</td>
<td></td>
</tr>
</tbody>
</table>
The HOYT Type 17 Meters shown on pages 13 to 17 of this booklet are all equipped with d’Arsonval type moving-coil movements, resistance 70 ohms per volt unless otherwise noted, of permanent accuracy. Cases are 2 in. diameter. All scales are hand-calibrated against frequently checked laboratory standards.

**Filament Voltmeter**

Type 17—D. C. Flush†

Mounting

Range 0-6 volts

Standard finish is black. For control of filament voltage on any set. 

*Marked in red at 3 and 5 volts*

U. S. Canada

**PRICE** $7.00 $9.80

**Super-Control Meter**

Type 17A Range 0-6 volts†

For instant connection to tip jacks provided on Radiolas 20, 25, 26 and 28, or the filament supply of any set. When permanently connected across an A Battery and trickle charger combination it serves as a constant check on the A Battery condition.

U. S. Canada

**PRICE** $8.00 $11.20
Two Range Voltmeter

For A and B Batteries

Type 17 D. C.—Flush Mounting

Double Range—

0-7.5 Volts

and

0-150 Volts

with built in push button switch

As the power necessary for the successful operation of a receiving set using D. C. tubes depends entirely on the “A” and “B” batteries, it follows that a method of testing these batteries is essential, and where many of the modern sets or attachments are made with the batteries quite inaccessible, an indicator right on the set is advisable.

Type 17, Two Range Voltmeter is equipped with the same moving coil system used in the Filament Voltmeter and is so constructed that the smaller range is left in the circuit continually, while the “B” battery voltage is found by pressing the button which comes through the glass. The black scale is for “A” battery and the red scale for “B” batteries. The meter is equipped with a readily accessible zero adjuster.

Prices shown are for standard finish—other finishes may be obtained if specified at slightly higher cost.

PRICE—Standard Finish is black—

U. S. Canada

$9.00 $12.60

Special high resistance type, 200 ohms per volt, for use with B-Eliminators

$11.00 $15.40
"Tip-In" Voltmeter

For Radiola 20 Only
Type 17 B-20†

Range
0-6 Volts
Red mark at 3 volts

A special filament control Voltmeter equipped with Tips correctly spaced vertically for insertion in the jacks provided in the Radiola 20 sets.

The case is finished in green-bronze to match the Radiola hardware.

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<th>U.S.</th>
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<tbody>
<tr>
<td>PRICE</td>
<td>$6.50</td>
<td>$9.10</td>
</tr>
</tbody>
</table>

"Tip-In" Voltmeter

For Radiola 28
Type 17 B-28†

Type 17 B-28 Tip-In Voltmeter with proper Tips for use with Radiola No. 28 can also be supplied. Movement, case, and scale, similar to 17 B-20.

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>PRICE</td>
<td>$6.50</td>
<td>$9.10</td>
</tr>
</tbody>
</table>
Milliammeter

Type 17 D. C.—Flush Mounting

Standard Single Ranges

0-5 Milampere
0-50
0-100

The amount of “B” battery current used by a radio receiving set is an important item in the cost of operation and maintenance. Partial short circuits or insufficient grid-biasing voltage with high B voltage may result in excessive and unnecessary use of B current and the consequent premature running down of the “B” batteries.

A milliammeter in the negative “B” lead between the set and the battery gives a constant check on the current consumption through the plates of all tubes. With such a meter, individual tubes may be tested for plate draw and emission, correct grid bias worked out, short circuits and other difficulties instantly detected and corrected.

Where a “B” battery eliminator is used, a milliammeter of the moving coil type is essential, so that the operator may know what the device is delivering.

Standard finish is black enamel. The ranges listed above are most commonly used. Other ranges may be supplied and other finishes at slightly higher cost.

<table>
<thead>
<tr>
<th>U. S.</th>
<th>Canada</th>
</tr>
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<tbody>
<tr>
<td>PRICE—(except 0-5 range)</td>
<td>$7.00</td>
</tr>
<tr>
<td>0-5 MA.</td>
<td>8.00</td>
</tr>
</tbody>
</table>
Improved Combination Meter

Type 17C—D. C. with Multi-Switch†
Flush Mounting

3 Ranges—0-6 volts, 0-180 volts, 0-30 milampere

This unit may be attached to any set, together with its Multi-Switch which has a single-hole mounting, and will read on one meter the A-battery voltage, the B-battery voltage, and the B-battery current. The Milliammeter may be used for adjusting the amplifier B and C Voltages for distortionless amplification. It takes the place of three meters ordinarily used in connection with a receiving set.

Its second use is for the construction of the HOYT Home Built Tube Tester. With the addition of a rheostat, a tube socket, a small panel, approximately 5 x 8 inches, and a cigar box, the experimenter may build at home, a reliable tube-tester at small cost.

Full instructions and drawings will gladly be forwarded to anyone desiring to make the HOYT Home Built Tube Tester.

Standard finish of meter is black—switch dial, silver. Complete with Multi-Switch.

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<tr>
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<th>U. S.</th>
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</thead>
<tbody>
<tr>
<td>PRICE</td>
<td>$13.00</td>
<td>$18.20</td>
</tr>
</tbody>
</table>
A. C. Meters
Type 536

Single Ranges—
0-2 Volts
0-5 "
0-15 " +
0-25 "
0-3 Amperes
0-10 "
0-15 "

Flush Mounting—Narrow Black Rim

The 0-2 and 0-5 Volt ranges are for use with sets employing the A. C. tubes, both of filament and heater types. The use of the Hoyt 536 A. C. meter will insure that specified voltages are being supplied.

This is an attractive and inexpensive A. C. Meter for use as described above, or for transmitting or power tubes employing A. C. on the filaments. It is built on the repulsion or soft iron principle. The case is 2 inches in diameter.

Supplied either as voltmeter or ammeter.

Standard finish is black.

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<tr>
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<th>U. S.</th>
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<tbody>
<tr>
<td>PRICE</td>
<td>$5.00</td>
<td>$7.00</td>
</tr>
</tbody>
</table>

Special ranges and finishes furnished at slight increases in price.
Hot Wire Ammeter

A. C. or D. C.—New Model

Ranges—
0.1 amperes†
0.3 "

Flush Black—2¼" case

For measuring output of radio transmitting sets, meters which are not affected by change of frequency are necessary. For this purpose, two principles of construction are used:—the hot wire and the thermo-couple.

The operation of a hot wire meter depends on the expansion and contraction of a wire over which the current to be measured passes. Naturally, the other parts within the case are affected also, which requires the use of a zero adjuster; but with the HOYT HOT WIRE meter, these variations have been compensated for by the design, and the operation of the meter is very satisfactory. In the improved model, a new zero adjuster and a better method of fastening the hot wire have been developed, which insure permanence, both mechanically and electrically.

U. S. Canada
PRICE—Standard Finish— $7.50 $10.50
Miniature Portable Meter
Types 508-M, FM-30, 508-MG

Where a number of circuits must be tested at the same time making several meter readings necessary, or where the shop or laboratory bench is crowded with other test equipment, HOYT offers the miniature portable meters as the best equipment to meet this condition.

The HOYT standard, small but accurate, moving coil No. 508 or F-30 meters are mounted in solid mahogany blocks arranged for easy reading at a convenient angle.

<table>
<thead>
<tr>
<th>BLOCK</th>
<th>U.S.</th>
<th>Canada</th>
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<tr>
<td>10 M.A. to 50 amps.</td>
<td>11.00</td>
<td>15.40</td>
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<tr>
<td>FM-30 up to 150 volts</td>
<td>18.00</td>
<td>25.20</td>
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<tr>
<td>10 M.A. to 50 amps.</td>
<td>18.00</td>
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Miniature Galvanometer
Type 508-MG

A sensitive galvanometer for all low current-flow indication such as D. C. bridge measurements, can also be supplied in the same convenient mounting. The scale is centre zero with thirty divisions each way. The movement is so adjusted that 1 volt impressed on it through 60,000 ohms causes a pointer deflection of one division.

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Electrical Units

Volt
The practical unit of electromotive force or potential.

Ampere
The practical unit of rate of current flow.

Milampere
One one-thousandth of an ampere. The unit in which B battery (plate current) consumption in radio tubes and sets is measured.

Ohm
The practical unit of resistance to electrical current flow.

Megohm
One million ohms.

Relation Between Volts, Amperees and Ohms
The current, (in amperes) flowing continually in one direction in an electrical circuit is equal to the electromotive force, \( E \) (in volts) divided by the resistance, \( R \) (in ohms) or
\[
I = \frac{E}{R}
\]

Coulomb
The unit of electrical quantity:—that quantity of electricity which passes through a conductor in 1 second when the rate of current flow is 1 ampere.

Farad
The unit of electrical capacity. It is that capacity whose potential will be raised 1 volt by the addition of a charge of 1 coulomb. As the Farad is too large a unit for practical purposes the—

Microfarad
1 one-millionth of a Farad is generally used.

Henry
The unit of inductance. When a charge of current of 1 ampere per second will induce a counter pressure or potential of 1 volt, the circuit possesses an inductance of 1 Henry. For practical purposes in Radio, inductances are measured by millihenries and
\[
\frac{1}{1,000} \quad \text{and} \quad \frac{1}{1,000,000} \quad \text{Henry}
\]
respectively.

Watt
The practical unit of electrical power—amperes times volts equal watts. One kilowatt equals 1,000 watts. One horse-power equals 746 watts.