

SALE 1970

ENJOY
THE CREATIVE FUN
OF ELECTRONICS!!!

SOLID STATE TEST INSTRUMENTS
CORTINATM STEREO COMPONENTS
BURGLAR/FIRE ALARM SYSTEMS
TRUVOHM[®] MULTIMETERS
ENVIRONMENTAL LIGHTING SYSTEMS
EICO CRAFT[®] PROJECT KITS
AUTOMOTIVE ELECTRONICS



Leadership in Creative
Electronics since 1945

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(1) The EICO Plant.

Manufacturing, warehousing, engineering, and office facilities are now consolidated in a new one-level, 100,000-sq. ft. completely air-conditioned plant.

(2) "WIRED" Assembly Lines.

For mechanical assembly, automatic printed circuit board assembly, hand-wiring and final-testing of EICO's "factory-wired" products. In the foreground is President Harry R. Ashley.

(3) "KIT" Packaging Dept.

Automated kit packaging production lines are capable of turning out over 3,000 kits a day.

(4) Raw Material Stores Dept.

High 24-foot ceilings provide storage-efficiency and fast access.

(5) Engineering/Research & Development Laboratories.

All engineering groups (audio, test, hobby, etc.) share latest modern facilities.

(6) Quality Control/ Standards Dept.

EICO's 25-year reputation for professionalism and value is part due to this department's adherence to strict Quality Control and standardization procedures.

(7) Electronic Data Processing Dept.

A 1440 IBM computer is utilized for inventory control, production scheduling and general accounting procedures.

EICO For over 25 years, EICO has been designing and manufacturing electronic products and is now the world's largest producer **LEADER** of electronic kits and factory wired equipment marketed exclusively through dealers and distributors **IN KIT DESIGN.** throughout the world.

Whatever your electronics interest, there's a wide range of versatile, professional EICO products for you to choose from, and each designed to provide you with the most pleasure and quality performance for your money.

The fact that more than 3 million EICO products are in use throughout the world attests to their quality and performance. EICO kits are so popular because they represent the best value and are available for inspection and immediate over-the-counter delivery at more than 2000 EICO dealers and distributors.

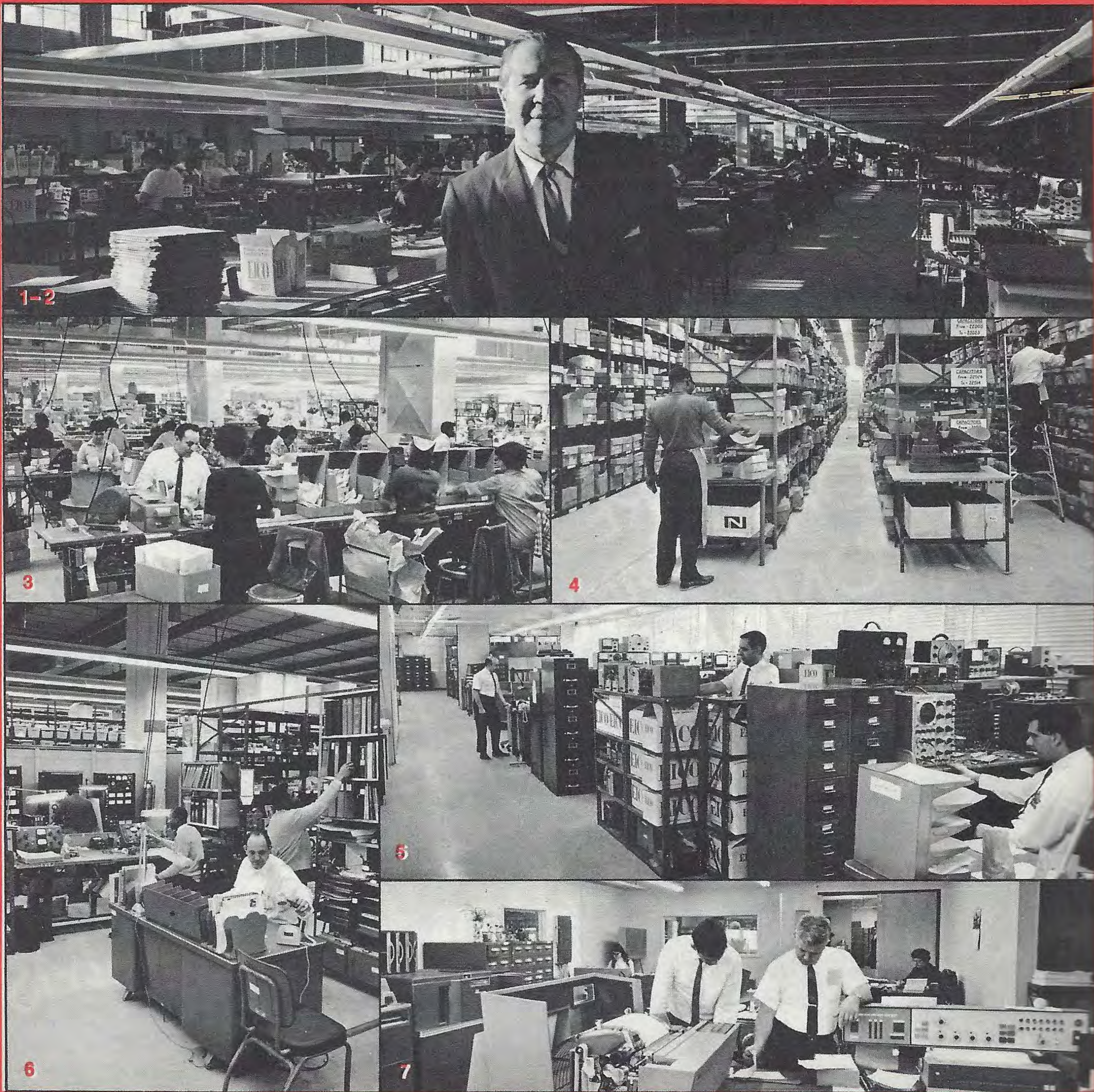
To build an EICO kit, you need only follow the simple and clearly presented step-by-step assembly and wiring procedures furnished with every EICO kit.

EICO uses only the best available components. All EICO kits, before being offered for sale, are beginner-tested to insure that construction procedures are clear, and easily performed.

We invite you to look through these pages and then come to your local EICO dealer to look over your selection before you buy.



EICO is a Member of The Institute of High Fidelity Mfgs., Hobby Industry Association of America, Association of Electronics Mfgs. (AEM) as well as other leading trade organizations.
EICO (OTC) a Public Company is traded in the Over-the-Counter market.



3 MILLION EICO PRODUCTS NOW IN USE...

**Built by People from every Walk of Life...
from Novice to experienced Electronic Engineers.**

Creative Pleasure... and Savings of 50% or more.

Responsive to consumer-researched demand, a dedicated team of Eico engineers creates a precision electronic design . . . then you, as you build the kit, bring the design to life with your own hands. There is just no substitute for the rare delight and inspiring sense of self-achievement in this experience. And . . . you save money too! Eico engineering gives you products worth 2 to 3 times the kit price. So that, building Eico kits is like earning money for enjoying yourself!



Beginner-Tested Step-by-Step Assembly & Operating Manuals

Even if you never held a soldering iron in your hand, you can build any Eico kit. Large "blow-up" diagrams and detailed parts list make identification easy; clear non-technical language leads you one step at a time to a perfect assembly. Nothing is left to chance.

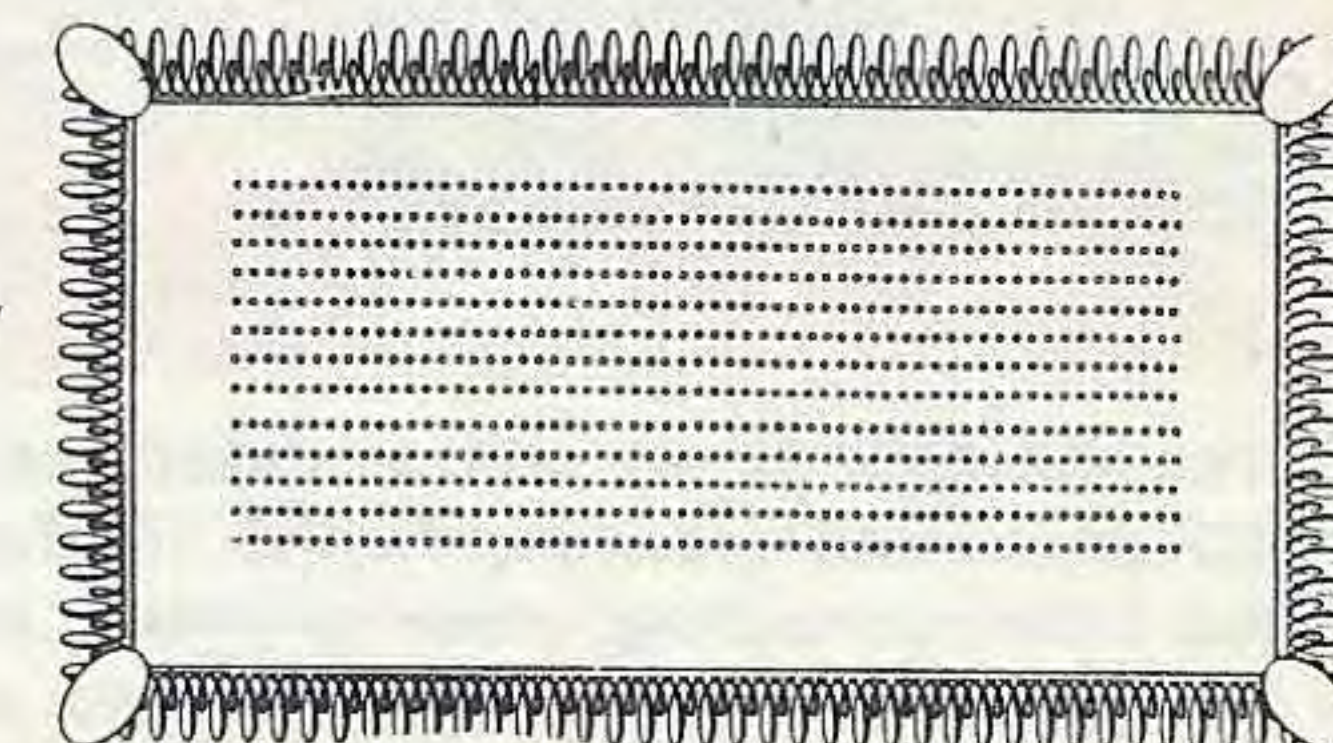
Uncompromising Engineering

Since 1945, Eico engineers have specialized in filling the creative needs of kit-builders everywhere. They pioneered the concept of integrating advanced electronic design with "buildability-by-the-novice." So respected for quality and economy had Eico become that people who had no time for kit-building asked Eico to make the kits available as ready-to-operate. That's why most Eico products are in both kit form and factory-assembled form.



The Famous Eico Warranty— One of the Strongest in the Industry

Because the quality of the design, parts and instructions of Eico products are high, Eico unhesitatingly guarantees all parts for 90 days; guarantees that all kits built to instructions (and all factory-assembled units) will meet or exceed published specifications; and guarantees service of every Eico product, if it is ever needed, for the lifetime of the unit, at the nominal charge stated in our service policy.



AT YOUR SERVICE: 2500 EICO ELECTRONIC CENTERS COAST-TO-COAST

The local Electronics Dealer in your neighborhood offers you a host of benefits. He's nearby. He stocks the complete Eico line so that you enjoy instant off-the-shelf availability of your choice, actual demonstration of the product, fast personal attention, and experienced technical guidance. You can browse, you can ask questions, you can compare actually *before* you buy. Furthermore — all these advantages are yours at *no extra cost*. You pay your dealer *only the nationally advertised price*. Liberal credit terms, too, if you want them.

AT YOUR SERVICE: FREE FACTORY CONSULTATION

Should you have any questions about the selection or applications

of any EICO product, you may at any time consult by mail with our technical correspondence staff. There's no charge for this service.

AT YOUR SERVICE: 200 AUTHORIZED SERVICE CENTERS COAST-TO-COAST

For your added convenience — Eico has set up a network of 200 service stations to make available to you on a local neighborhood basis the same high-quality technical service competence and replacement parts you get from our factory, should you ever need them. Your local Eico Dealer will give you a list of these stations, or you may write to the Eico Service Manager for it — it's free.

**AT YOUR SERVICE: EICO
WORLD WIDE** — Wherever you are in the free world, Eico equipment and service are available nearby. For name of the appropriate dealer write: EICO 283 Malta St. B'klyn, N.Y. 11207
Cable Address "Eicokits" N.Y.

CANADA
EICO Canada Limited
20 Millwick Drive
Weston, Ontario, Canada
Telex: 062-17557

EXPORT DIVISION
Roburn Agencies, Inc.
349 W. 14th Street
New York, N.Y. 10014

Military Personnel Overseas
Duty free Eico equipment is available at U.S. catalog prices (plus nominal surcharge for freight and handling.) Most equipment is available for 115/230 V.A.C. 50-60 Hz operation. EICO Military Sales Division
283 Malta Street
Brooklyn, New York 11207

**MAIL ORDER CUSTOMERS — USE HANDY ORDER FORM ON BACK OF
EICO "ELECTRONIC CENTER" — DEALER LISTING**

Easy to build **EICOCRAFT**® solid-state

Now everybody can enjoy

EICOCRAFT is a new exclusive original concept and product line designed and manufactured by EICO expressly for the purpose of introducing people of all ages to the exciting world of electronic kits.

If you — or a relative or friend — ever thought that kit building was expensive, or difficult, or a pleasurable activity reserved only for the experts — now for as little as \$2.50 for an EICOCRAFT MODEL EC-1000 can change your mind.

If you can follow simple step-by-step instructions, you can enter into the fascinating, rewarding world of electronic kit building.

You need no technical knowledge or experience to enjoy all the creative fun of building with your own hands a wide variety of fine professional electronic devices.

EICOCRAFT are true electronic kits

They are every bit as professional in quality, performance and opportunity for participation by the builder as the 20-year famous EICO line of kits for stereo, hi-fi, CB, ham gear and test instruments. Only the complexity has been reduced to make kit-building faster, easier and less expensive. You don't miss out on any ingredient of the self-expressive fun of building electronic kits.

For the educator: Easy, fast, educational, useful — and low-cost.

For the sophisticate: Convenient relaxing projects that are both "jiffy" and 100% professional. Many projects are "expandable" by adding kits together — your imagination is the only limitation.

ONLY EICOCRAFT® KITS HAVE ALL THESE FEATURES:

- Modern professional all solid-state circuitry
- The finest professional quality parts
- Pre-drilled copper-plated etched printed circuit boards
- Easy comprehensive step-by-step instructions

You can build 54 exciting new EICOCRAFT®



Aircraft Converter

The EC-2900 is an all-transistor battery operated RF converter operating in the 108-136 MHz band. No interconnecting wires needed. Just place the EC-2900 near your AM radio (home or car) inductive coupling to your radio makes it possible to tune in the exciting two-way broadcasts from local aircraft communications.

Model EC-2900 • \$7.95



Electronic Bongos

Battery-operated 3-transistor bongos circuit electrically produces the exciting percussive sounds of high-pitched and low-pitched bongos, tomtoms, bass drum, marimba, gongs and claves, when used in conjunction with an amplifier and speaker. An ideal accessory for use with electric guitars or other electronic musical instruments. May be mounted directly on or near the instrument itself.

Model EC-1600 \$7.95



'Treasure Finder'

Battery-operated beat-frequency metal locator can be used to locate both ferrous metals (iron, steel, etc.) and non-ferrous metals (gold, silver, copper, etc.) consists of two RF oscillators and a search loop. This distinctive audio signal pitch goes up when the EC-1900 locates buried ferrous metals, and the pitch goes down when it locates non-ferrous metal.

Model EC-1900 \$9.95



'Wireless' Sound/Lite Translator

To the EC-4400, just plug in up to 300 watts of colored lamps. Its built-in omni-directional super-sensitive transducer, pick-up will make any audio in the room modulate the lamps-so sound will be translated into simultaneous corresponding colors of light. The sensitivity control gives you adjustability of the color intensity.

Model EC-4400 \$14.95



'LIGHT CHASER'

Remember the "moving" lights on the theatre marquee? ... or surrounding some of the booths at the local carnival?

With the EC-4600 you can produce, in any custom serial arrangement of any color lamps, a similar sequence of "on-off" states that create the appearance of light "running around" in that configuration. (Max. 150 watts per channel).

Model EC-4600 \$19.95 \$29.95 Wired.



'VARASPEED' Motor Speed Control

Vary and control the speed of AC/DC and DC type motors in a smooth continuous manner while maintaining maximum torque capability at all times. Solid State circuit produces unusually low, smooth, operating speeds and wide speed-range variations of 50:1 to 100:1. Supplied complete with a vinyl clad steel case and heavy duty line cord with a grounded male plug. Handles up to 10 amps.

Model EC-3600 \$13.95

electronic project kits!

building electronic kits.

*Exciting new projects
Introduced monthly!*

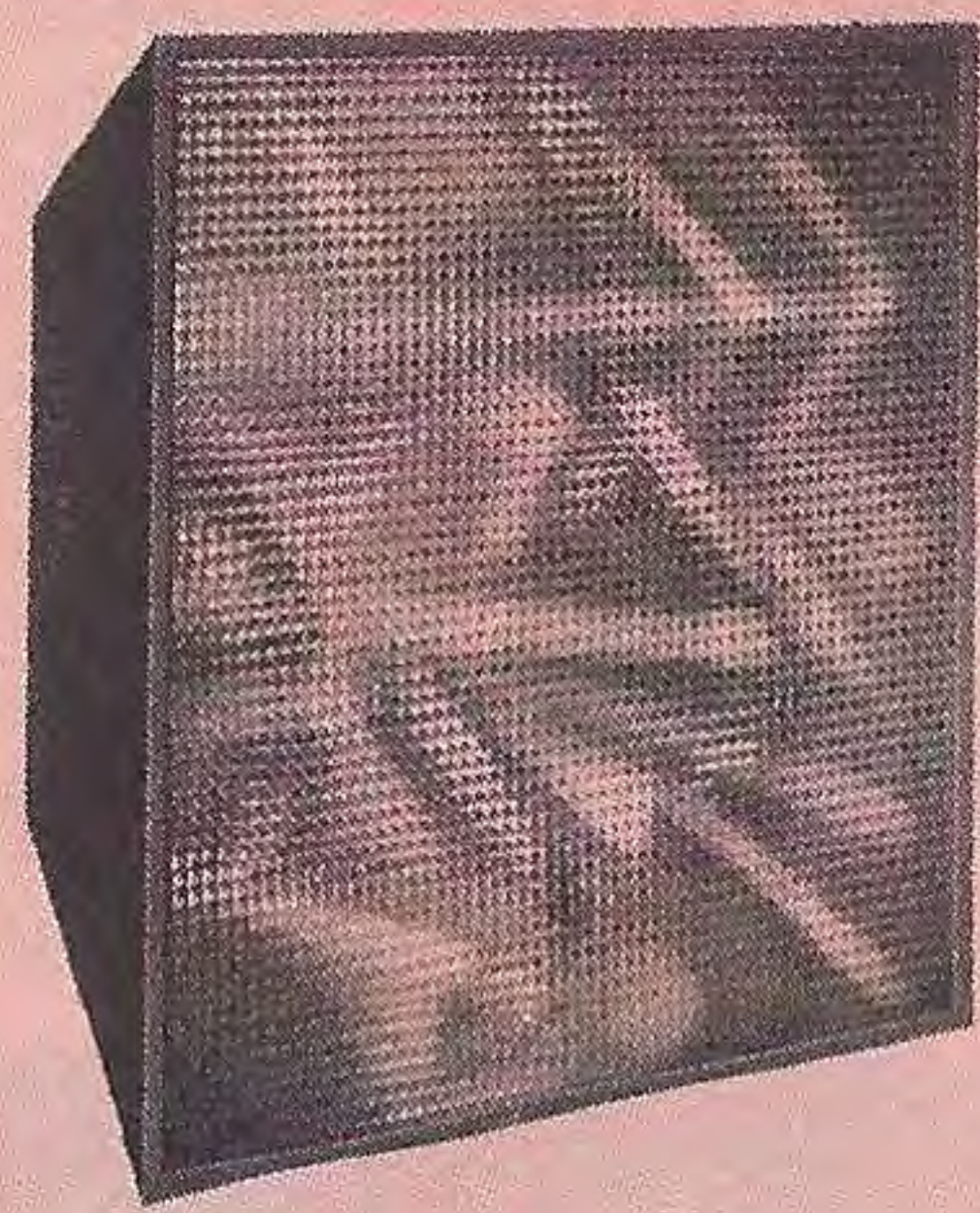
Excellent for . . .

- Science Fair Projects
- Merit Badge Awards
- Introductions to Electronics and Science
- Home and Hobby Projects
- Relaxation "Jiffy" Tasks

**No technical knowledge or
experience necessary**



Solid-State Kits in 1½-2 hours each.



**'Electric
Fiesta'**
Audio Color
Organ

Watch red, blue and green color dance to your favorite music beat. An entertaining display of multi-color three dimensional patterns vary to the amplitude of the sound source. The power circuits and speaker system(s) of your sound source (radio, recorder, hifi) are protected with an isolation transformer. Custom molded plastic cabinet. Size: 8" x 8" x 4¼".

Model EC-3800 \$14.95

NEW

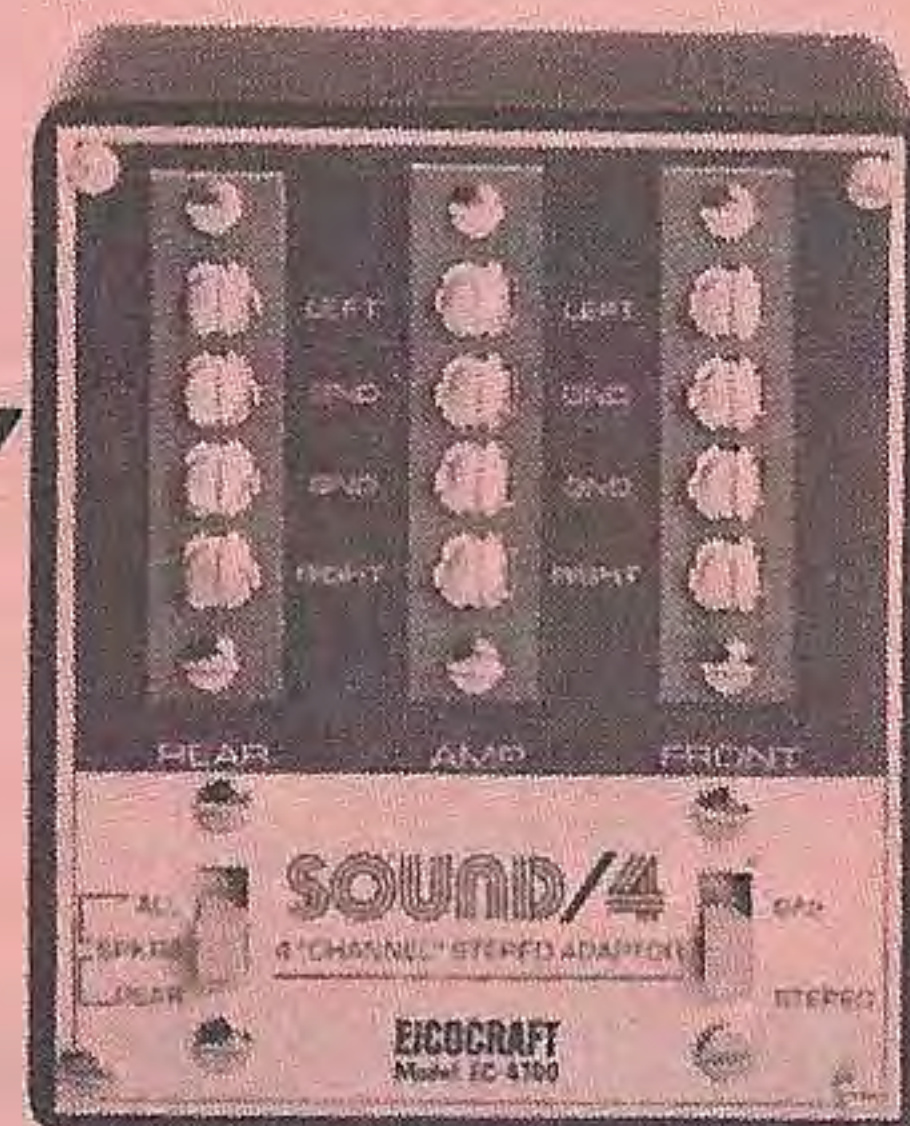


**3 Channel
Sound / Lite Translator**

With the EC-4300, you command 3 independent bands of audio frequencies to modulate 3 discrete strings or groupings of any color lamps. Just connect your hi-fi speaker, power amplifier, radio, recorder, phono, etc. to the EC-4300; and then plug each string of color lamps into its independent channel (up to 300 watts per channel).

Model EC-4300 \$14.95

NEW



'SOUND-4'
4 Channel
Stereo Adaptor

Convert your 2 Channel Stereo System to 4-Dimensional Sound with the EC-4700. Enjoy 4-Channel sound from your regular stereo records, tapes, and FM broadcasts using your existing stereo amplifier or receiver. Just add the "Sound 4" Adaptor and 2 speaker systems. You do not need an additional stereo amplifier.

Model EC-4700 \$9.95

EICOCRAFT KITS available include:

EC-100 Electronic Siren \$4.95
EC-101 Electronic Burglar Alarm \$6.95
EC-102 Electronic Fire Alarm \$6.95
EC-200 Electronic Intercom \$5.95
EC-300 Audio Power Amplifier \$5.95
EC-400 Electronic Metronome \$3.95
EC-500 Tremolo \$9.95
EC-600 Electronic Light Flasher \$3.95
EC-700 "Do Nothing" Mystifier \$4.95
EC-800 Photo Cell Nite Lite \$4.95
EC-900 Power Supply \$8.95
EC-1000 Code Oscillator \$2.50
EC-1200 AM Wireless Mike \$9.95
EC-1300 Electronic VOX \$8.95
EC-1400 Solid-State FM Radio \$9.95
EC-1500 Solid-State AM Radio \$8.95
EC-1700 HAM CB-VOX \$8.95
EC-1800 Electronic "TOX" \$8.95
EC-2000 Electronic Organ \$99.95
EC-2100 "Magic Switch" \$9.95
EC-2200 Electronic "Eye" \$9.95
EC-2300 Preamp \$8.95
EC-2400 "Bullhorn" \$8.95

EC-2500 "Fuzzbox" \$8.95
EC-2600 "Super Snoop" \$8.95
EC-2700 Police Converter (Lo) \$7.95
EC-2800 Police Converter (Hi) 7.95
EC-2900 Aircraft Converter \$7.95
EC-3000 8 Ohm Speaker \$1.95
EC-3100 2 Station Intercom \$10.95
EC-3200 Printed Circuit Kit \$5.95
EC-3300 Automotive "Light Guard" \$8.95
EC-3400 "Vari-Volt" Power Supply \$11.95
EC-3500 Mood Lite Control \$7.95
EC-3700 "Lightshow" Translator \$12.95
EC-3801 "Lightworks" Light Display \$8.95
EC-3802 "Oplite" Moire \$16.95
EC-3803 "Geometric Fantasy" \$11.95
EC-3804 Strobe Lite \$19.95
EC-3805 "Celestial Lites" \$16.95
EC-3806 "Wireless Electric Fiesta" \$17.95
EC-3900 "Super Mood Lite Control" \$12.95
EC-4000 "Electroplater" \$12.95
EC-4100 Stereo Headphones \$8.95
EC-4500 Door/Intercom \$10.95

BUILD YOUR OWN CUSTOM-DESIGNED CABINET IN MINUTES WITH FLEXI-CAB®



- Ideal for electronic projects, prototypes, etc.
- Fast, easy, push-together assembly.
- Decor styled, vinyl clad steel cabinets.

Enclose your project in a beautiful, professionally styled cabinet that you build in minutes.

FLEXI-CAB is the new way to make a custom cabinet using flat panels joined together with "links" of plastic with pre-cut mitered corners. All kits have a package of pressure sensitive identification and decorative labels, as well as a decorative strip for the front panel.

AVAILABLE IN 3 SIZES:
MODEL F-44 3" x 4" x 4" \$3.49
MODEL F-46 3" x 4" x 6" \$3.99
MODEL F-69 3" x 6" x 9" \$4.69

A versatile instrument for adventure and utility!

EICO TH-30 "Treasure Hunter" SOLID STATE METAL DETECTOR

NEW!

- Electronically detects ferrous and non-ferrous metals.
- Locate Plumbing Beams and Studs in the walls of your home.
- Find coins and souvenirs at beaches, parks, fields, caves, etc.
- Designed for the professional treasure hunter, hobbyist, home repairman.

Pays for itself many times over! Helps locate plumbing inside walls. Find buried pipes, conduit, property markers. Search for jewelry, coins, relics, souvenirs on beaches, fields, etc. So easy to use, absence of meters or dials leaves your eyes free to scrutinize terrain.

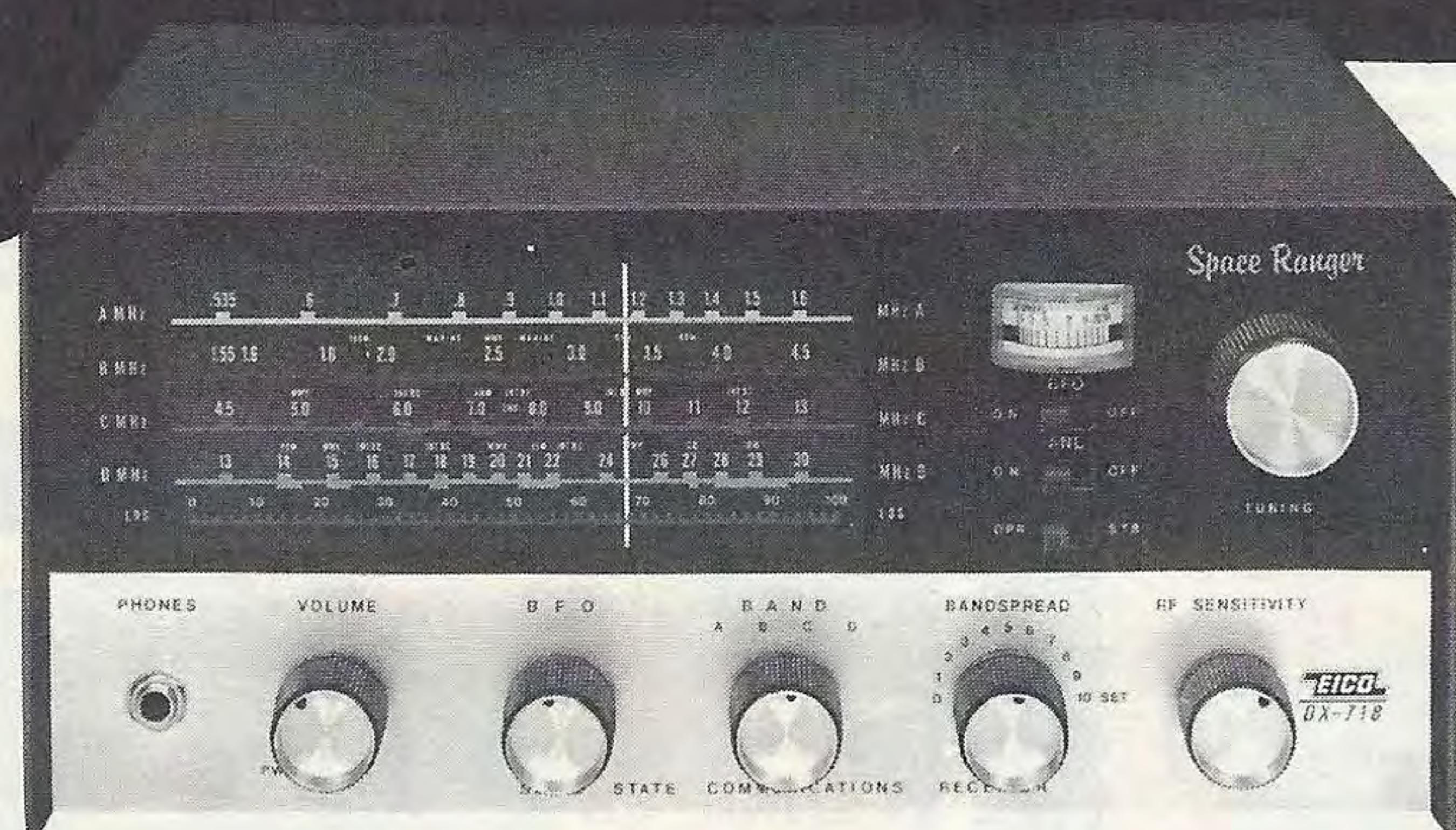
The TH-30 is a highly reliable all-transistor instrument. It uses five high gain transistors to provide you with enough sensitivity so that you can locate metal objects some distance below the ground. The signals are reproduced by an extremely efficient 2½" permanent magnet speaker. The entire unit is ruggedized to prevent damage from shock and weather. The super-sensitive detection coil is shock mounted and is not affected by variations in temperature.

The entire TH-30 weighs only 2½ pounds. You can take it with you anywhere when you go on vacation.



The TH-30 comes complete with a detachable handle for easy storage and includes a 9 volt transistor battery. Overall length: 40". Handle Length 36". Detector housing 9" Diameter x 1½" Deep.

TH-30 KIT \$30.95
WIRED \$37.50



EICO 718 "Space Ranger" 4 Band FET Solid State Communications Receiver

A Full Capability, Wideband SWL At Low Cost!

Wired only \$69.95

4 bands, continuous tuning, 535 kHz through 30 MHz—which includes the Amateur Radio bands of 160, 75, 40, 20, 15 and 10 meters and the 550 kHz to 1620 kHz AM radio broadcast band. Modern superheterodyne circuit with latest FET and Bipolar transistors. Built-in sensitive ferrite rod AM antenna and provision for external antenna. Band-spread tuning. Variable BFO for reception of CW code and SSB. Automatic Noise Limiter. Output transformerless power amplifier. Headphone jack for private listening.

SPECIFICATIONS: METER CALIBRATED: in "S" units. SEMICONDUCTORS: 1-FET transistor, 8-NPN transistors, 9 diodes. POWER REQUIREMENTS: 105-125 volts, 50/60 Hz AC, 5 watts, or 12 volt battery (8-1.5 volt size "D" cells). DIMENSIONS (HWD): 6" x 12½" x 8½". WEIGHT: 9½ lbs.



EICO TA-12 Solid State Telephone Amplifier with extension speaker

Wired only, \$15.95

- Permits "hands free" conversation
- All Solid State design for stability and reliability

Use the Eico Telephone Amplifier for convenience you've never known before. The TA-12 amplifies the sound from your telephone to normal room listening level without any electrical connection to the phone. In the home you can carry on a phone conversation "hands free" while doing your tasks around the room. The entire family can listen to calls from friends and relatives. In the office, the Eico TA-12 allows you to take notes, file, type — while talking on the phone. Supplied complete with attractively styled custom molded plastic cabinet, extension speaker and battery (9-volt). SIZE (HWD): 3" x 10" x 4". WEIGHT: 1¼ lbs.

EICO AMATEUR ACCESSORY GEAR



EICO 717 ELECTRONIC KEYER

- Accurately keys any CW transmitter with perfect machine-like Morse Code.
- A perfect electronic and esthetic match to the EICO 753 3-band Transceiver.

Kit \$69.95
Wired \$99.95

An always-welcome accessory for the CW ham—the fully automatic 717 Electronic Keyer provides self-completing clean-cut dots, dashes and spaces accurately timed and proportioned from 3 to 75 WPM in four overlapping switch-selected ranges, with vernier control of all speeds within each range. Because the output is via a high-speed dry-reed relay, having 25 VA-rated contacts, the 717 can simply attach to the key terminals of any type CW transmitter. The internal audio oscillator and 3" x 5" speaker, with variable tone and volume, keyed in parallel with the reed relay, enable aural monitoring of transmissions — also permit the 717 to act as a code practice oscillator. Plugging into rear panel headphone jack disconnects internal speaker.

■ Automatically makes dashes equal in time to 3 dots and sets the correct one dot spacing in a series of dots or dashes. ■ Automatically self-completes: once a dot or dash is begun, it becomes impossible to "break" the character. ■ Aural and front panel lamp monitoring. ■ Dot/Space Ratio — 1:1 electronically timed to within 2 milliseconds at all speeds. ■ Dash/Dot Ratio — 3:1 electronically timed to within 2 milliseconds at all speeds.

SPECIFICATIONS

5 tubes, 2 silicon rectifiers; 100-130 VAC, 50-60Hz, 40 watts. SIZE (HWD): 5½" x 8" x 8¼". WGT.: 9 lbs.

EICO 706 Code Practice Oscillator

Wired only \$14.95

- Includes Battery, Key and Earphone.



Invaluable aid for learning Morse Code with outstanding conveniences not found in other units. Unusually efficient speaker provides a clean, loud signal. Includes pitch control to obtain subjectively pleasing tone, phone jack for private use, and choice of tone, flashing light, or both together. Employs battery-operated transistor oscillator to provide many years of trouble-free service.

SPECIFICATIONS

TONE FREQUENCY RANGE: Approx. 500 to 2000 cps continuously variable. CONTROLS: PITCH, TONE, and/or LIGHT. CURRENT DRAIN (TONE): 40 ma at 3VDC. CURRENT DRAIN (LIGHT): 300 ma at 3VDC. CURRENT DRAIN (TONE AND LIGHT): 340 ma at 3VDC. TERMINALS: Key, Phones. CASE: High-impact bakelite. PANEL: Satin finish, deep-etched aluminum. SIZE (HWD): 5" x 3½" x 2". WEIGHT: 2 lbs.



- Covers all broadcast, FM, "ham" and TV bands in 8 overlapping ranges
- Accurately wound ($\pm 1\%$) plug-in coils

Kit \$34.95
Wired \$59.95

EICO 710 GRID-DIP METER

Basically a VFO with a microammeter in its grid circuit, the 710 determines frequency of other oscillators or tuned circuits; has a sensitivity control and phone jack to facilitate "zero beat" listening; and excels as an absorption wave meter. Ham uses: pretuning and neutralizing transmitters, power indication, locating parasitic oscillations, antenna adjustment, correcting TVI, general de-bugging with transmitter power off, determining C,L,Q. Electronic servicing uses: alignment of traps, filters, IF's, peaking compensation networks, and as signal or marker generator. Easy to hold and thumb-tune with one hand. Continuous coverage of broadcast, FM, ham and TV bands in 8 ranges. Brushed satin deep-etched aluminum panel; grey wrinkle steel case.

SPECIFICATIONS

FREQUENCY RANGE: 400 kc-250 mc in 8 overlapping ranges. METER MOVEMENT: 500 microamperes. PLUG-IN COILS: Accurately wound to $\pm 1\%$ accuracy, inside polystyrene forms. Labelled for easy identification. CIRCUIT: Exceptional stability is obtained with improved grid current stability over tuning range. TUNING: Tuning condenser, equipped with planetary drive of 1:7 ratio. TUBE: 6AF4(A) (Colpitts oscillator). SCALE: Rotating drum. 340° rotation. All scales on the drum are the same length for all ranges. Scale is illuminated by pilot light, is approximately 3¼" long. POWER REQUIREMENTS: 117V, 60 cps; 10 watts. POWER SUPPLY: Transformer-operated selenium rectifier. SIZE (HWD): 2¼" x 2½" x 6⅞". WEIGHT: 3 lbs.

★ Export Model available

EICO 715 HAM/CB TRANSCEIVER TEST SET

Kit \$39.95 Wired \$59.95

A modest investment that pays off in a lifetime of better communications performance.

At last — here's an all-professional test set that's designed for complete checking of both ham and CB equipment . . . and doesn't put a dent in your bank account. Reliable, compact, portable, quick and easy to use, it enables you to obtain maximum results from your ham or CB transceiver or transmitter. At the flick of a switch it obtains constant visual and/or audio indications of transmitter performance. Self-powered, it's excellent for both professional and hobbyist, in the shack or field. **Measure R.F. power output to 50 watts • Standing Wave Ratio (Fwd. & Ref. power) • Ideal for antenna adjustment • Modulation percentage • Direct Reading • Field Strength Meter • 50 Ohm built-in dummy load.**

SPECIFICATIONS

100 micro-amp meter for sensitive, accurate readings. SWR: 1-30. True RF power ranges: 10 watts (5%); 50 watts (10%). Modulation percentage 0-100%. Modulation distortion: headphone jack output. Relative field strength 1-10. Size (HWD): 4⅞" x 8⅞" x ½". Weight 5 lbs.





NEW!

'Fail Safe' BY EICO

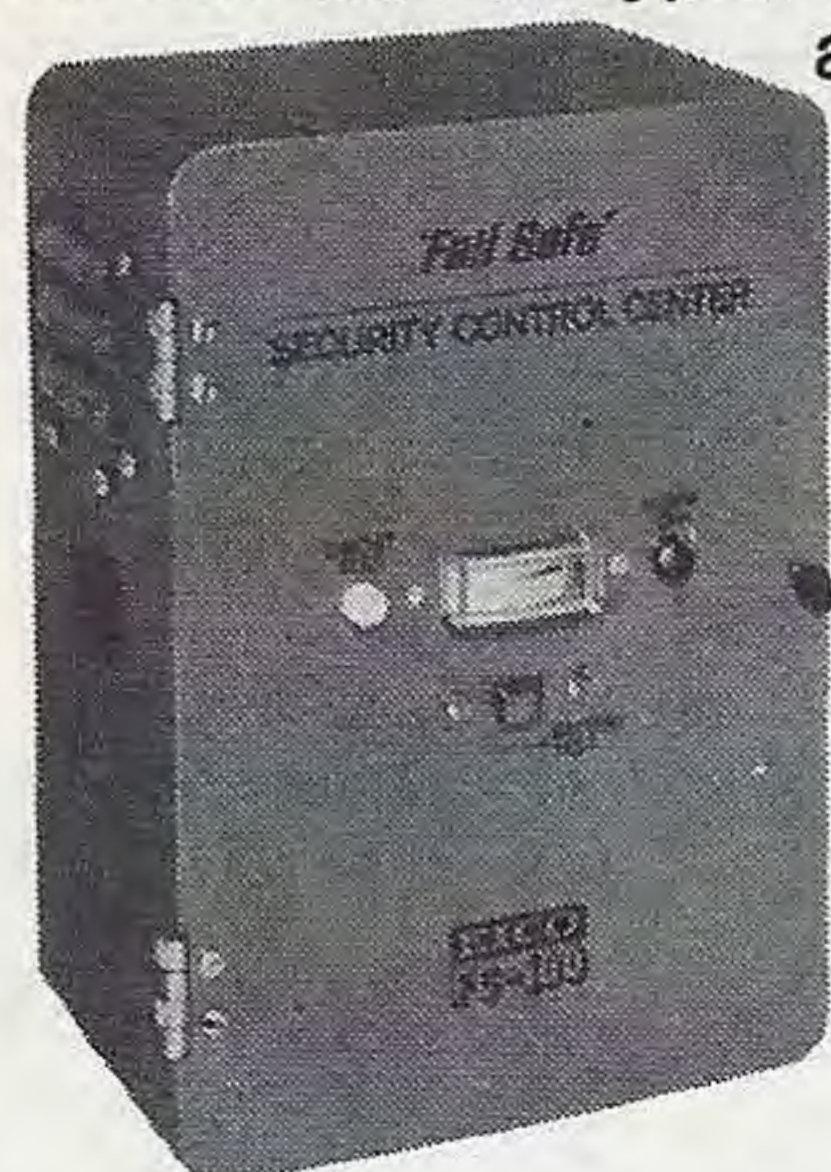
COMPLETE HOME SECURITY PROTECTION SYSTEM

The Professional Home Protection everyone can Install and Afford.

EICO FC-100 SECURITY CONTROL CENTER

- Start your custom Burglar/Hold-up/Fire Alarm System with the FC-100.
- Add on Sensors, Alarms and Accessories to suit your own needs.
- "Do-it-Yourself" Installers Handbook included.
- No technical knowledge needed-No soldering.
- Ideal for Apartment, Home and certain Commercial Installations.
- 100% Professional in Design, Reliability, Performance.

The FC-100 is an extremely flexible home protection device. It has been designed for use with all types of intruder and fire sensors. The alarm activating circuits accommodate burglar alarm bells, separate fire horns, as well as various combinations of fire and burglar alarm bells and horns. A Remote Station Control with signal lights (EICO A-65) can be installed at any number of locations to show that all doors and windows are closed and the alarm system is ready to be "armed." The simple circuit uses only two wires. For maximum safety, the fire alarm circuits are always on and cannot be turned off accidentally.



The EICO FC-100 Security Control Center is powered by a 117 VAC Power Supply (EICO A-75) which supplies 6 volts DC for operating the system. Space is provided for an optional standard 6 volt lantern battery for standby/emergency operation. In the event of an electrical power failure, the battery automatically supplies the power to keep the alarm system activated.

Each circuit in the EICO FC-100 has its own independent set of screw terminals that allow installation by someone unfamiliar with electrical wiring.

Model FC-100 \$59.95

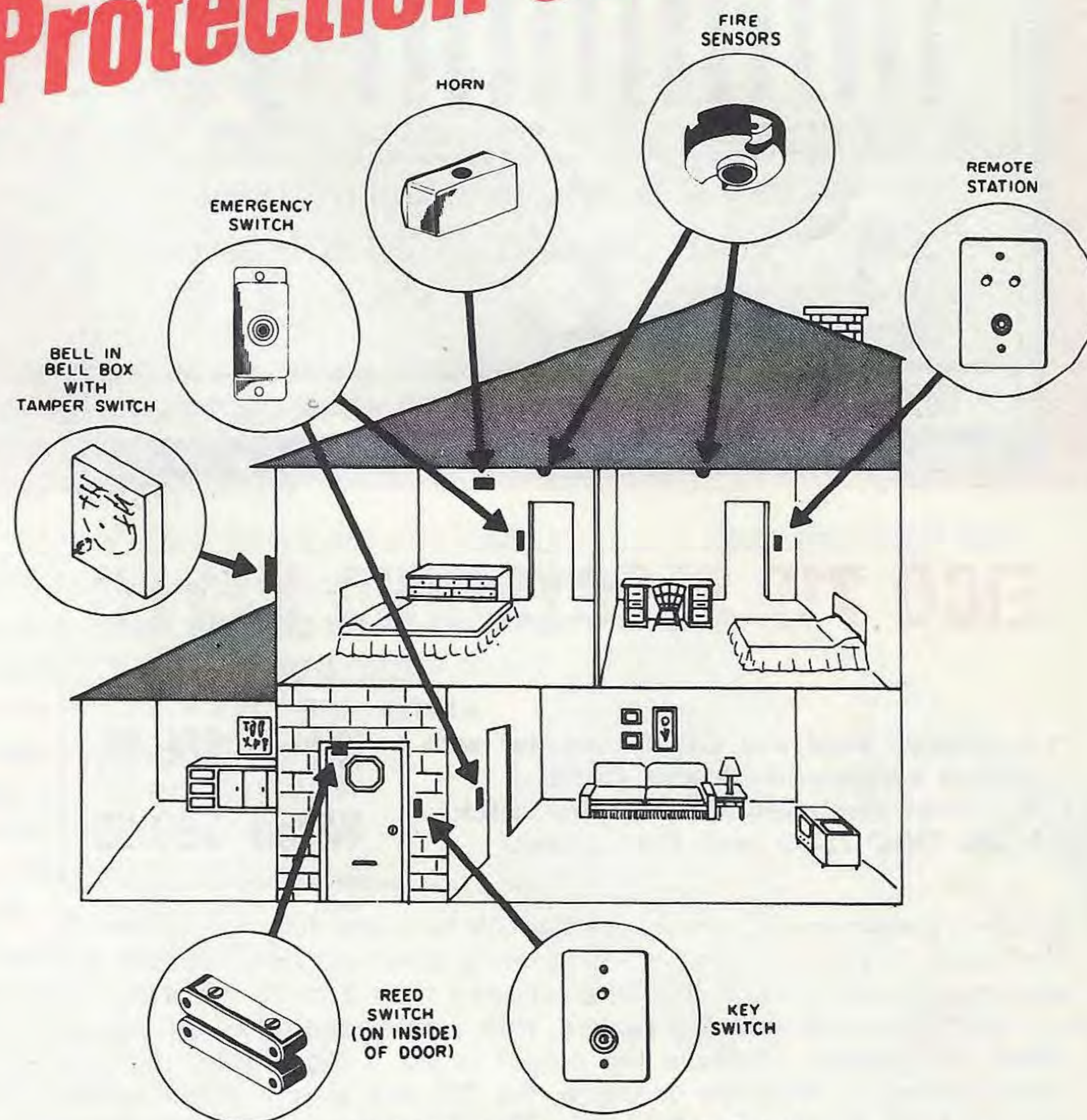
EICO SS-500 BURGLAR/HOLD-UP/FIRE ALARM SYSTEM

- Systems "HEART" is the EICO FC-100 Security Control Center.
- Additional Sensors, Alarms, Accessories may be added any time to meet future needs.
- "Do-it-Yourself" Installers Handbook included.

A basic home Burglar/Hold-Up/Fire Alarm Systems which combines a high reliability alarm control center with detectors, alarm accessories and an alarm bell.

The SS-500 system is supplied with the following: A-75 Power Supply; SA-25 8" Alarm Bell; A-45 Entrance Key-Switch with "system-on" signal light; A-65 remote station control with signal lights; SD-20 Fire Sensors; SD-10, Door/Window Contact Switches; SD-50 Tamper Switches; SD-40 Door Cords; A-35 Emergency Buttons; A-95 Installers Handbook; A-105 "Home Protected" Decals and 250 feet of hook-up wire. Additional remote stations, entrance key switches, alarm bells, signal horns as well as fire, smoke, intruder, freeze-up and water flooding detectors, are available as optional accessories.

Model SS-500 \$109.95



TYPICAL ALARM INSTALLATION



THIS BOOK MAKES IT POSSIBLE

"Do-it Yourself"

HOME SECURITY HANDBOOK

A comprehensive 40-page Homeowners Handbook which includes a wealth of information on professional home security as well as comprehensive installation procedures in clear non-technical language.

'Fail Safe' SECURITY ACCESSORIES

SENSORS:

- SD-10 Door/Window Magnetic Contact Reed Switches, N.O. (4 pairs) \$9.95
- SD-20 Heat/Fire Sensors, N.O. (135° F) (3 per package) \$8.95
- SD-24 Furnace-Attic Heat/Fire Sensors, N.O. (190° F) (2 per package) \$5.95
- SD-30 Window Foil Self Adhesive Blocks (6 per package) \$3.95
- SD-32 Window Protective Foil \$3.95
- SD-40 Door Cords (12", Two Wire) (2 per package) \$3.95
- SD-50 Tamper Switches, N.O. (2 per package) \$3.95

ALARMS:

- SA-15 Indoor Twin Klaxon Horn Alarm \$9.95
- SA-25 Indoor/Outdoor 8" Bell (6 volt D.C.) \$14.95

ACCESSORIES:

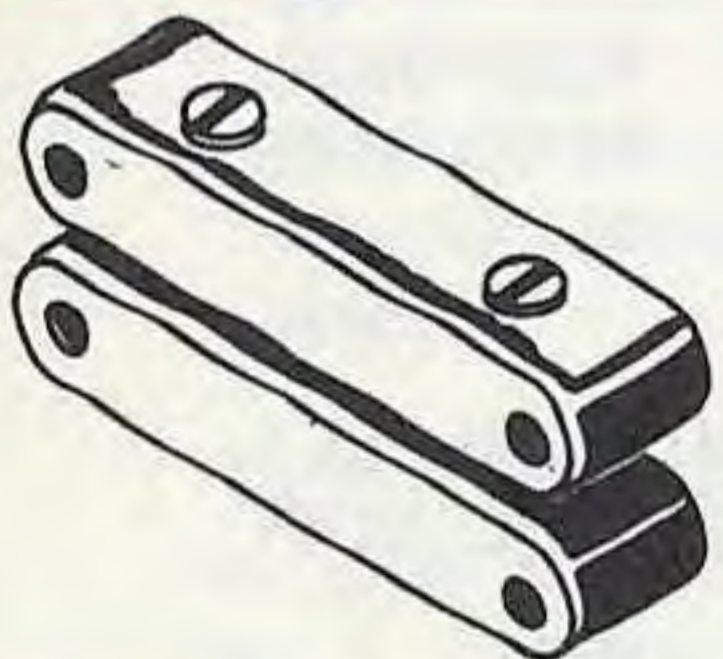
- A-35 Emergency Buttons (2 per package) \$2.95
- A-45 Entrance Key Switch (Momentary) with Signal Light \$9.95
- A-65 Remote Station Control with Signal Lights \$3.95
- A-75 Power Supply \$14.95
- A-95 Installers Handbook \$2.95
- A-105 Decals (6 per package) \$1.95

Here's what you get when you buy the EICO SS-500 Burglar/Hold up/Fire Alarm System.



FC-100 SECURITY CONTROL CENTER

The "heart" of the EICO "FAIL-SAFE" home protection system contains all circuits required for monitoring the burglar and fire detectors and sounding the alarm. It also includes two indicator lights; a white CIRCUIT TEST light which is used to check the status of the devices in the system, and a red ALARM ON light, which indicates that the system has been activated. A meter and battery test switch allows you periodically to check the condition of the 6-volt Lantern Battery (not supplied).



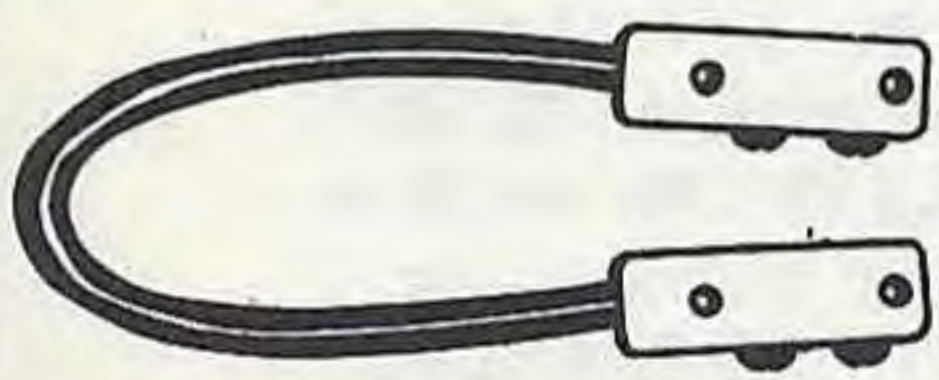
SD-10 DOOR/WINDOW MAGNETIC CONTACT REED SWITCHES (4 pairs)

These are the basic burglar/intruder sensors for doors and windows. They are two-piece units consisting of a normally-open reed switch encased in a plastic housing, and a bar magnet in a similar plastic housing.



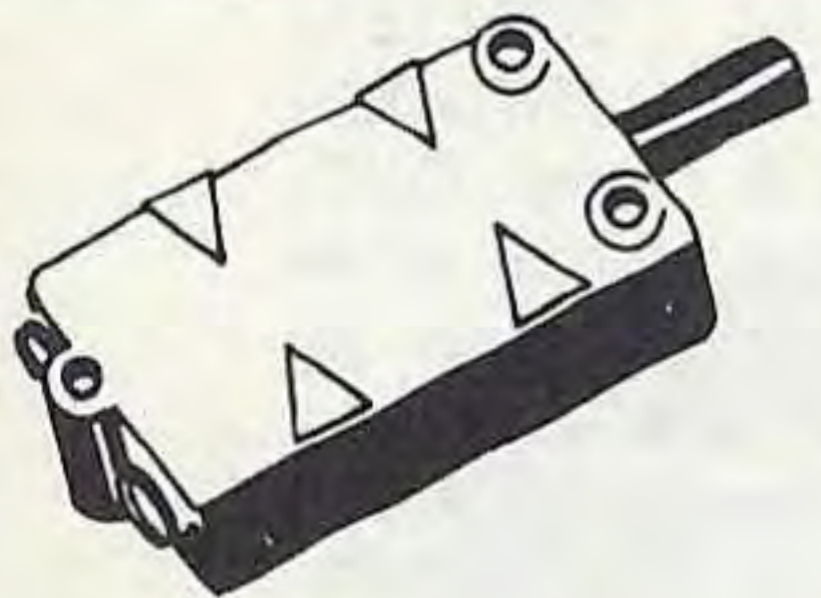
SD-20 HEAT/FIRE SENSORS (3)

The heat sensors are of the open circuit type. When a temperature of 135°F is reached they will set off the alarm. They can be used anywhere except normally warmer areas, such as attics and furnace rooms. For those locations use Model SD-24.



SD-40 DOOR CORDS 12", TWO WIRE (2)

These are to be used wherever movement of one part of the circuit is required, e.g. doors and windows. They are designed to withstand many years of flexing without damage.



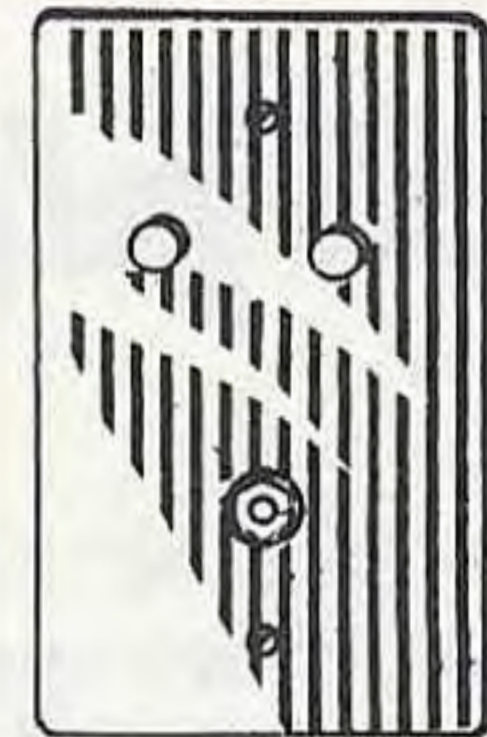
SD-50 TAMPER SWITCHES (2)

Tamper switches are particularly valuable for protecting the alarm bell and the Security Control Center, preventing an intruder from deactivating the alarm system.



SA-25 INDOOR/OUTDOOR 8" BELL

This is an extra-loud alarm bell that can be used for both the burglar and fire alarm circuits, and can be mounted either inside or outside the house.



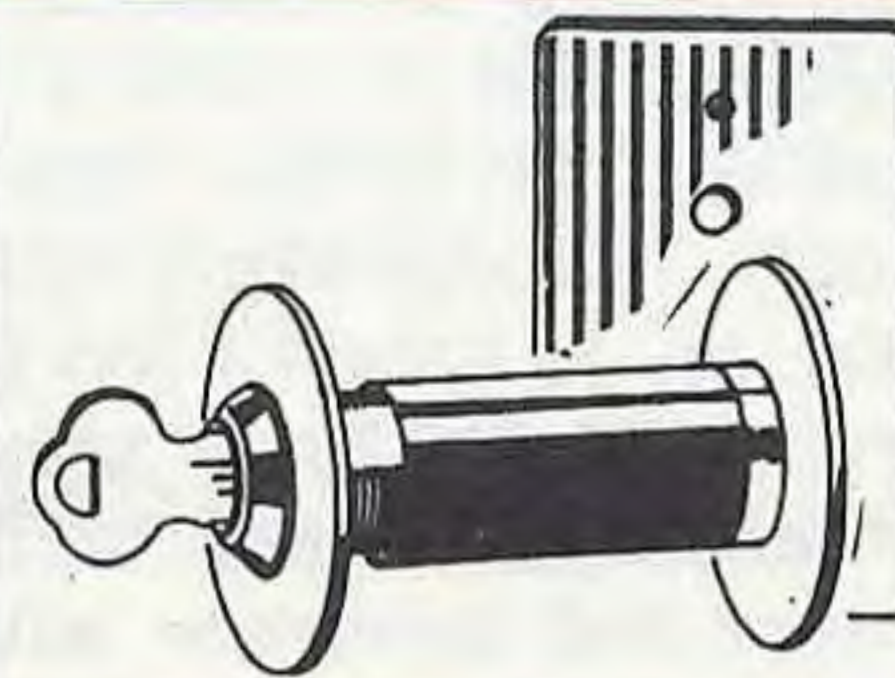
A-65 REMOTE STATION CONTROL WITH INDICATOR LIGHTS

Consists of a wall mounting plate, momentary switch, a white "CIRCUIT TEST" light, and a red "ALARM ON" light. The momentary switch turns the burglar alarm ON and OFF. The white light indicates that all intruder-detecting devices are operative (closed). The red light indicates that the system is "armed" and any intrusion will activate the alarm bell. If both lights are out, it indicates that at least one device in the system is not working (closing) properly, and all sensors (door, window, etc.) should be checked.



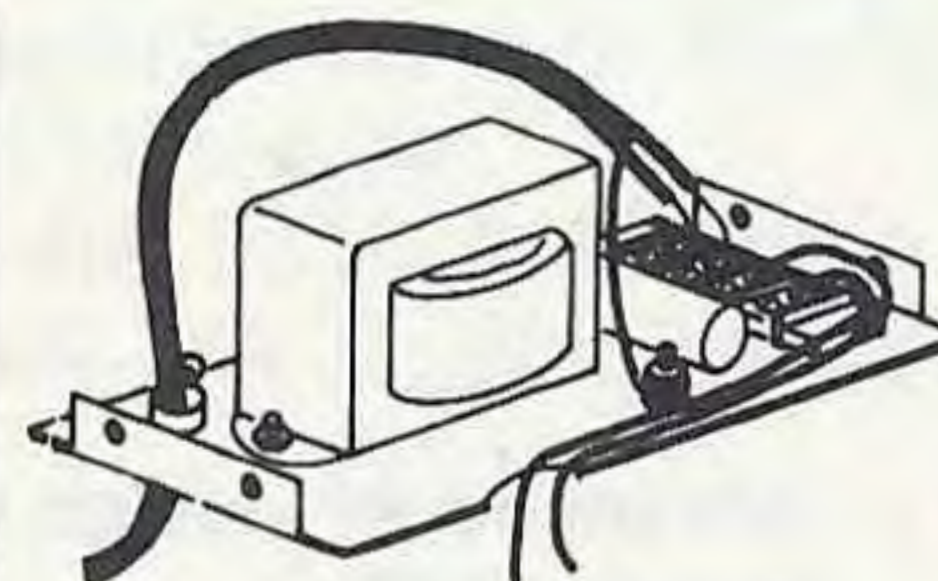
A-35 EMERGENCY BUTTONS (2)

Also known as a "panic button," this allows you to sound the alarm from any location if you need help. This emergency button overrides all other sensing devices, and can only be turned off by pushing the same button a second time.



A-45 MOMENTARY ENTRANCE KEY SWITCH WITH SIGNAL LIGHT

This switch enables you to get into your own home without setting off the alarm. A red light with mounting plate is associated with the key switch, both to assure you that your system is activated, and to warn intruders that the house is protected.



A-75 POWER SUPPLY

Supplies 6 volts DC for operating the system. In the event of electrical power failure, a 6-volt Lantern Battery (not supplied) will automatically supply the power to keep the alarm system activated. The A-75 also trickle charges the Lantern Battery when it is not in use.



A-95 INSTALLERS HANDBOOK

Gives complete instructions not only on how a home protection system functions and how to install all "fail-Safe" components, but also how to expand your SS-500 system with additional components.

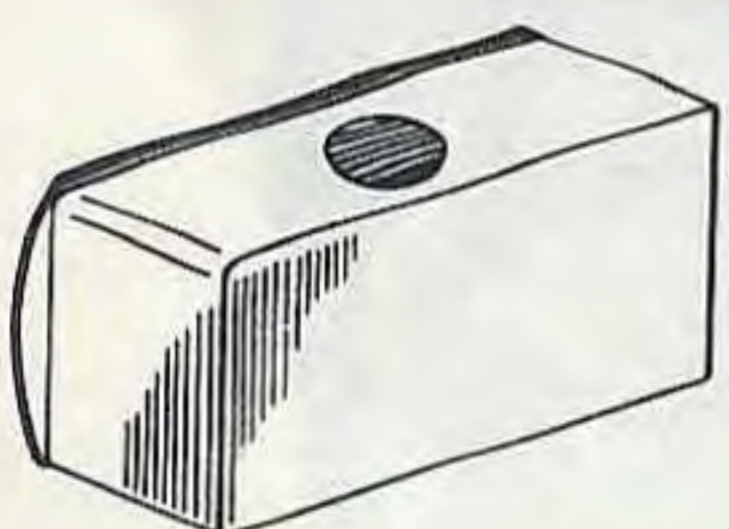


A-105 WARNING DECALS (6)

The mere knowledge that a home protection system is in operation is frequently enough to deter an intruder; these decals, should therefore be displayed prominently in several places.

ALARM HOOK-UP WIRE—250 feet of 2 conductor wires.

Additional security components can be added anytime to meet your future needs.



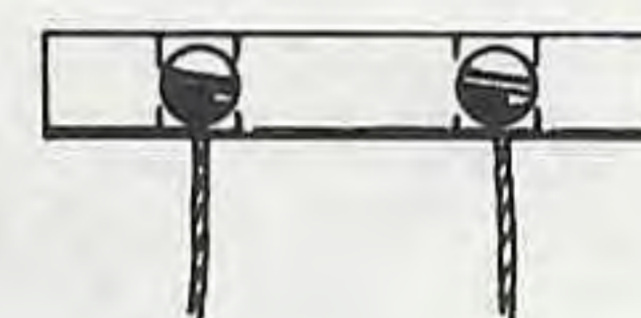
SA-15 INDOOR TWIN KLAXON HORN ALARM

Twin horns mounted inside a decorator styled housing, give a loud ear-piercing sound. Ideal as a separate fire warning alarm (indoors).



SD-24 FURNACE/ATTIC HEAT SENSORS (3)

Detects the presence of excessive heat. Will cause the fire alarm to sound when the temperature in the area in which it is located reaches 190°F.



SD-30 WINDOW FOIL ADHESIVE BLOCKS (6)

Self sticking window foil connectors are used to connect window foil to protection circuit wiring.



SD-32 WINDOW PROTECTIVE FOIL

Thin strip of electrically conductive metal foil used to protect glass areas. Supplied in a 1 lb. roll

Available soon... smoke/power failure sensor (SD-60), water/flood sensor (SD-70)... See your EICO "Fail-safe" distributor.

New QUATRASONIC™ *plus* CORTINA™ gives you four

CONVERT YOUR PRESENT STEREO SYSTEM TO 4 CHANNEL SOUND WITH QUATRASONIC™ by EICO

New EICO QA-4 4-Channel Stereo Adaptor

- Enjoy 4-dimensional sound hidden in standard stereo records, tapes and FM broadcasts.
- Just add the EICO QA-4 Adaptor and two speaker systems — No additional amplifiers required.

KIT \$17.95 WIRED \$29.29

The "hidden depths" of most modern stereo recordings or FM broadcasts are revealed when you use the EICO adaptor along with your stereo system. Sounds that are hidden in most stereo recordings are separated from the normal stereo information by the QA-4. These hidden sounds represent the original "concert hall ambience" of classical performances, as well as the full, rich realism inherent in popular music.

Through the QA-4, almost any stereo system can be used to revive the original concert hall ambience hidden in stereo recordings, and to uncover the front-to-back directionality normally imbedded in standard 2-channel stereo sources.



The two "rear" channels come to life through the use of two speakers connected to the EICO QA-4 and placed behind the listener. The two existing speakers normally used for stereo reproduction are also attached to the EICO QA-4, and are placed in the conventional positions. The full channel separation at the speakers so necessary for proper two and four channel stereo sound reproduction is preserved.

The EICO QA-4 can be used with any standard stereo amplifier or receiver with 4, 8 or 16 ohm speaker output terminals. No additional amplifiers are needed. Two controls are provided. The 4-position switch permits you to select 4-channel operation, front speakers only, rear speakers only, as well as providing facility to balance the gain of the stereo channels. Flexibility is enhanced by the effective rear speaker level control on the front panel. Supplied complete with 100 feet of hook-up wire. SIZE (HWD): 3 1/8" x 6 3/4" x 6 3/4". WEIGHT: 2 lbs.

CORTINA 3780 All-Silicon Solid State FET 50 Watt-AM-FM Stereo Receiver.

- Advanced RF design using Field Effect Transistors (FET).
- All-silicon circuitry for excellent temperature stability.
- New fast and reliable "Fun-to-Build" Kit assembly techniques. All critical circuits are pre-assembled and pre-aligned.
- Reliable Transformer power supply.
- Sleek, graceful "Low Silhouette" styling with "Black Magic" back-lit panel.
- Includes handsome Brazilian Rosewood vinyl-clad metal cabinet with custom molded end-caps.

KIT \$109.95 WIRED \$169.95

TUNER SPECIFICATIONS:

FM SECTION: TUNING RANGE: 88 MHz-108 MHz. USABLE SENSITIVITY (IHF): 3.5 uv for 30 db quieting. CAPTURE RATIO: less than 4. SIGNAL TO NOISE RATIO: 60 db. IMAGE REJECTION: 50 db. IF REJECTION: 70 db. SPURIOUS RESPONSE REJECTION: 70 db. SELECTIVITY ALTERNATIVE CHANNEL: 20 db. FULL LIMITING: 100 uv. AM SUPPRESSION: 40 db.

MPX SECTION: STEREO SEPARATION: 33 db. at 1 KHz. 19 KHz. SUPPRESSION: 35 db. 38 KHz. SUPPRESSION: 35 db.

AM SECTION: TUNING RANGE: 535 KHz.-1640 KHz. USABLE SENSITIVITY (IHF): 200 uv/m. SIGNAL TO NOISE RATIO: 45 db. SELECTIVITY: 30 db. IMAGE REJECTION: 40 db. IF REJECTION: 40 db.

AMPLIFIER/PREAMPLIFIER SPECIFICATIONS:

AUDIO SECTION: POWER (4 ohms): 50 watts (± 1db.) 32 watts (IHF) FREQUENCY RESPONSE: 20 Hz-20 KHz. HARMONIC DISTORTION: .75% at 1 KHz at 8 W. out, .4% at 1 KHz at 4 W. out. IM DISTORTION: 1.7% at 5 W. HUM AND NOISE: 70 db below rated output. CHANNEL SEPARATION: 45 db. INPUT SENSITIVITY: 2.8 mv magnetic phono input, 200 mv at all other inputs. INPUT IMPEDANCE: magnetic phono 47 K, all other inputs 100K ohms. DAMPING FACTOR: minimum 30 with 8 ohm load. RISE TIME: 4.5 u Sec. TONE CONTROL RANGE: treble ± 11 db.; bass ± 11 db. RIAA EQUALIZATION: ± 2 db. 50 Hz-15 KHz. TOTAL CONTINUOUS OUTPUT POWER (RMS): 22 W into 8 ohms. OUTPUT: stereo speaker systems with impedance of 4-16 ohms; tape recorder output (not affected by control settings) stereo headphone jack on front panel for all low impedance headphones. INPUTS: magnetic phonograph, auxiliary, tape. AC RECEPTACLE: one switched. POWER REQUIREMENTS: 105-130 VAC. 50/60 Hz. SIZE (HWD) 4" x 16 1/2" x 9 1/8" WT: 10 lbs.



COMPACT IN SIZE, MODEST IN PRICE

dimensional sound at budget prices!

CORTINA 3080 All-Silicon Solid State 50 Watt Stereo Amplifier.

- Full-capability controls for every program source.
- Includes Brazilian Rosewood vinyl-clad metal cabinet with custom molded end-caps.
- Perfect match to CORTINA 3300 AM-FM Stereo Tuner.

Here EICO has packaged the stereo amplifier section of the quality Cortina 3780 Receiver as a separate component. The kit features modular printed circuit board construction for quick error-free assembly and long-life performance. The extremely attractive low silhouette styling of the 3780 are retained here along with the handsome Brazilian cabinet and custom molded end caps.

KIT \$69.95 WIRED \$109.95

SPECIFICATIONS:

All amplifier electronic specifications are identical to those of the amplifier/preamplifier section of the 3780 Receiver. Size (HWD) 3 1/8" x 12 3/4" x 6 3/4". WT. 7 lbs.

CORTINA 3300 All-Silicon Solid-State FET AM-FM Stereo Tuner

- Perfect matching companion to Cortina 3080 Stereo Amplifier.
- Exceptional stereo reception.
- Includes Brazilian Rosewood vinyl-clad cabinet with custom molded end caps.

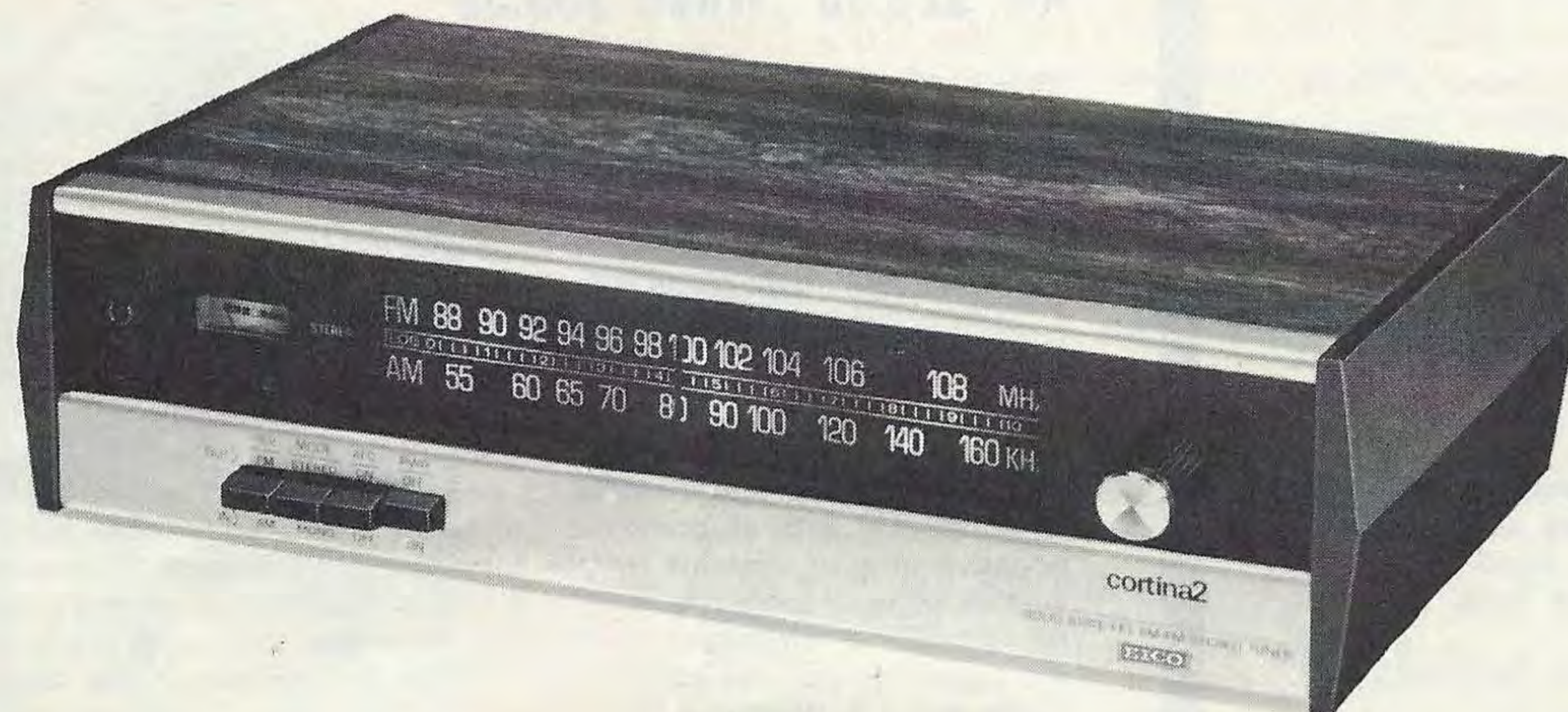
The complete AM and FM Stereo Tuner of the Cortina 3780 Receiver — here available as a separate component.

FIELD EFFECT Solid State AM and FM Stereo Tuner section is extremely compact and stable — and is supplied *pre-assembled* and *pre-aligned*. You build the power supply and assemble the mechanical elements.

KIT \$69.95 WIRED \$109.95

SPECIFICATIONS:

All its electronic specifications are identical to the tuner section of the 3780 Receiver. Size: (HWD) 3 1/8" x 12 3/4" x 6 3/4" Wt. 6 lbs.



Standard Cortina Line

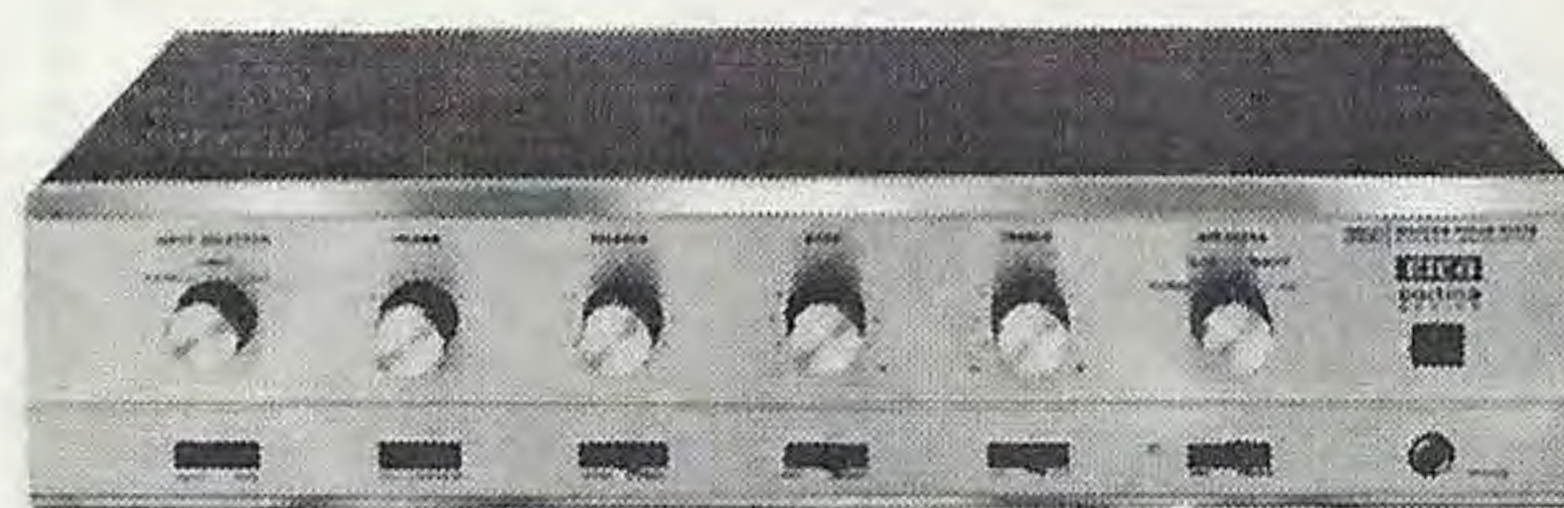
CORTINA 3070 All Silicon Solid State 80 Watt Stereo Amplifier

A medium power total-capability stereo amplifier of outstanding value. Specifications include: 80 Watts +db into ohms; 50 watts into 8 ohms (IHF). Harmonic Distortion less than 0.75%. Size (HWD) 3 1/8" x 10" x 7 3/4". Wt. 7 1/2 lbs. KIT \$99.95, WIRED \$139.95. Includes cabinet.



CORTINA 3150 All Silicon Solid State 190 Watt Stereo Amplifier

Designed especially for the discriminating purist, the 3150 is acclaimed as the best buy in High-power integrated amplifiers. Has total control and power amp facilities, and such specifications as: 190 Watts (+1db) into 4 ohms; 97 Watts into 8 ohms. Harmonic Distortion less than 0.15%. Power Bandwidth 20Hz to 20KHz. Size (HWD); 3 1/8" x 14 3/8" x 8 1/2". Wt. 10 1/2 lbs. KIT \$149.95, WIRED \$225.00. Includes cabinet.



CORTINA 3770 All Solid State 80 Watt AM-FM Stereo Receiver

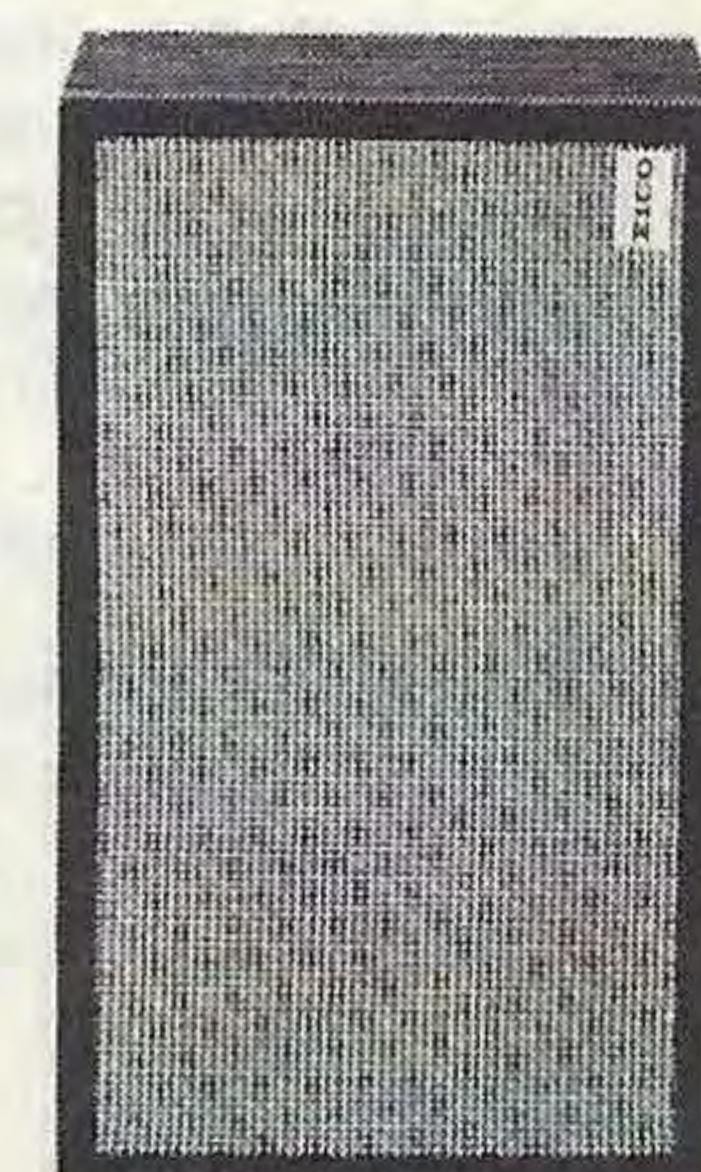
All on one chassis: The full capability 3070 Stereo Amplifier plus a precision AM-FM Stereo Tuner (whose RF Multiplex and IF sections are already pre-assembled and pre-aligned). Size (HWD) 4 1/8" x 16" x 9". Wt. 14 lbs. KIT \$189.95. WIRED \$279.95. Includes cabinet.

CORTINA 3570 All Solid State 80 Watt FM Stereo Receiver (same as 3770 less AM) KIT \$169.95, WIRED \$259.95. Includes cabinet.



EICO Speaker Systems

These high-efficiency bookshelf-size 2-way speaker systems employ the proven acoustic suspension design for very wide frequency response and clean natural sound. Cabinets are of selected walnut. Model HFS-8 \$49.95 13" x 22" x 6 1/2", 17 lbs. Model HFS-10 \$29.95 12" x 18" x 5 1/4", 11 lbs.



Tune up & Troubleshoot Any Car or Boat!



Wired Only \$49.95

NEW!

EICO 887-SOLID STATE ENGINE ANALYZER

- Compact-battery powered. Does everything much larger and more costly units can do.
- Use on any 6, 12 and 24 volt, 4, 6 and 8 cylinder, 2 and 4 cycle engines; negative or positive ground.
- Complete with "How-to-Use" tune-up and trouble shooting manual, test leads and batteries.

Keep your car or boat engine in tip-top shape with this completely portable, self-contained, self-powered universal engine analyzer. With its more than 30 separate, easy-to-perform tests, you can check your total ignition/electrical system including storage battery, generator, alternator, voltage regulator, alternator diodes, starter, starter solenoid, distributor, points, condenser, ignition coil, spark plugs dwell angle, carburetor, fuses, bulbs, switches, accessories as well as all electrical wiring. FUNCTIONS: DWELL ANGLE—The dwell angle meter provides quick check of distributor operation and spark advance.

RPM—The electronic tachometer helps you to set exact engine idle speed and automatic transmission shift points.

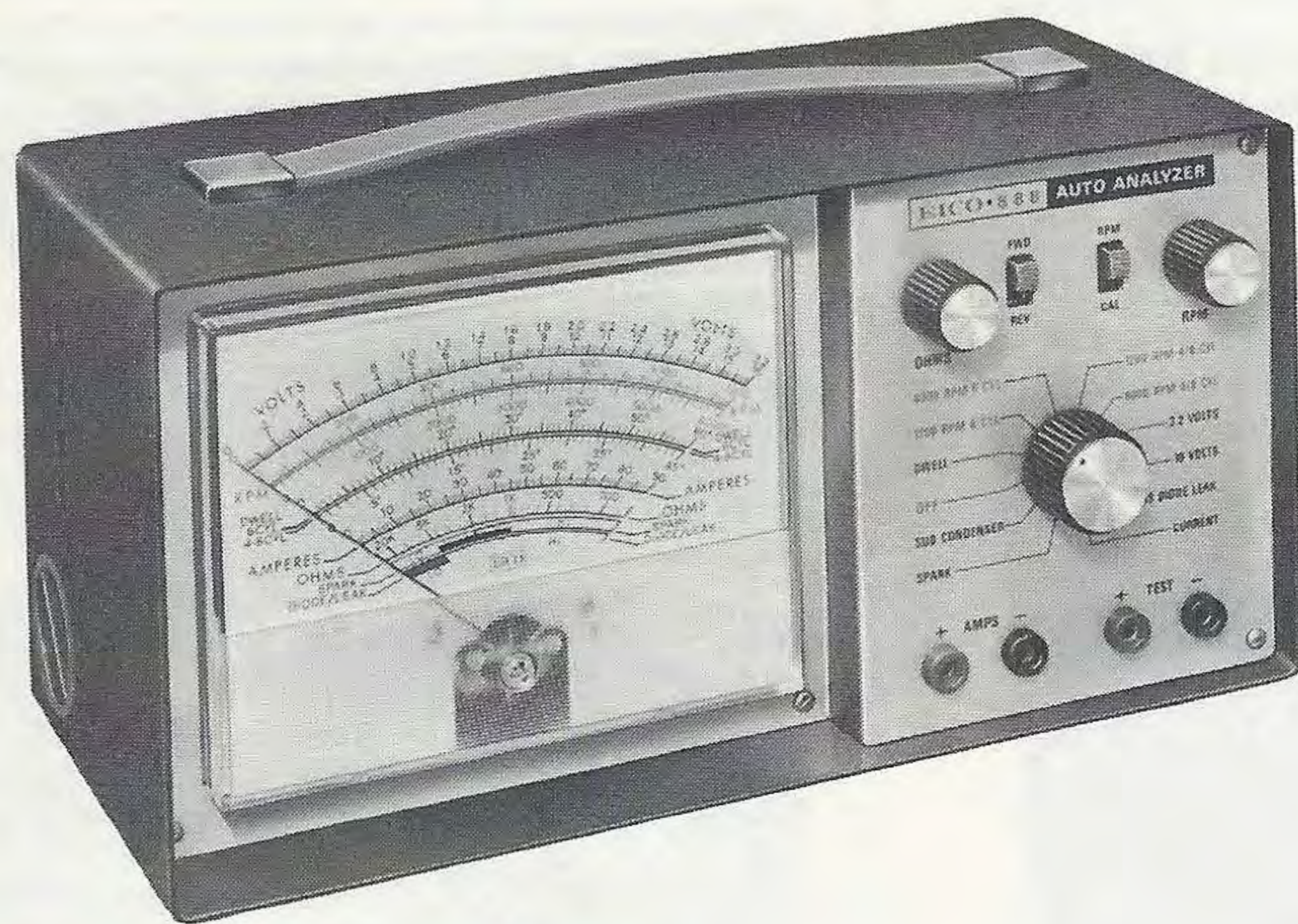
VOLTAGE—The ammeter (0-90 amperes) keeps tabs on the exact operation of generator/alternator and associated voltage regulator and whether they are adequately charging the battery.

RESISTANCE—The ohmmeter measures resistance from 0 to 100,000 Ω for checking alternator diodes (forward and reverse), coil, condenser, fuses, lamps, relays, horn wipers and all other electrical accessories. It locates open and shorted circuits and poor connections.

SPARK TEST—This 887 function checks the condition of the ignition spark system right at the plugs. SUBSTITUTE CONDENSER—Provides for substitution of 887's own condenser for car's suspected faulty condenser.

POWER REQUIREMENTS: 1-1½ volts AA cell, 1-9 volt NEDA #1604 battery.

SIZE (HWD): 4½" x 5½" x 2½". WEIGHT: 1 lb. 2 oz.



EICO 888 Solid State Universal Engine Analyzer

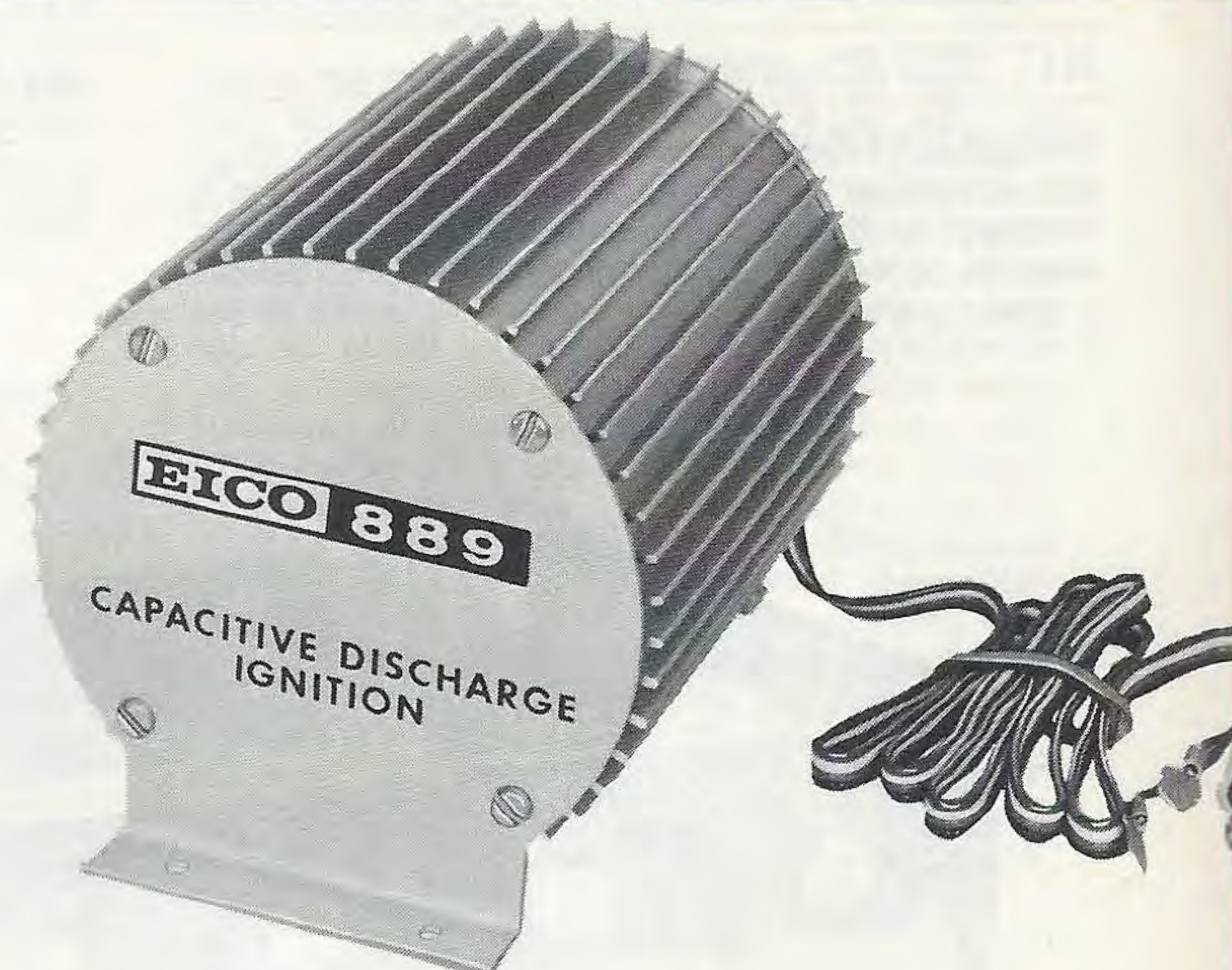
Kit \$54.95 Wired \$79.95

Keep your car or boat engine in tip-top shape with this completely portable, self-contained, self-powered universal engine analyzer.

Now you can electronically tune up and trouble-shoot engine performance exactly as the professionals do. Useful for 6- or 12-volt; 4, 6, or 8 cylinder engines; negative or positive ground. Performs over 30 engine and wiring tests. Includes a comprehensive tune-up and trouble-shooting manual. Large 6" D'Arsonval wide-view 2-color meter with 10 large, clear, easy-to-read scales: (Volts, Engine RPM, Dwell Angle, Amperes, Ohms, Spark Output, Diode/Leakage). Self-powered: you can take it into car or boat for actual car-running, boat-running tests.

The 888 comprises the latest solid state circuitry and conveniences. The RPM circuit employs 3 transistors with a Schmitt trigger pulse counter. Meter is recessed for full protection. Sturdy metal cabinet; handle for easy portability. Complete with "how-to-use" manuals with both test and calibration leads.

SIZE (HWD): 5¾" x 11½" x 5". WEIGHT: 6 lbs. Supplied less batteries (4 "D" cells required).



EICO 889 Solid State Capacitive Discharge Ignition System

Kit \$29.95 Wired \$39.95

Now discover for yourself the dramatic improvement in performance of your car, camper, jeep, truck, boat—any vehicle! EICO's new electronic achievement saves on gas, promotes better acceleration, gives your car that zip you've always wanted.

- Gas mileage is increased up to 25%
- Points and spark plugs last up to 5 times longer
- You go up to 5 times longer between tune-ups

EICO Model 889 Capacitive Discharge Ignition System makes possible complete fuel combustion which means greater acceleration, higher top speed, increased spark plug life (up to 100,000 miles), instant cold weather starting and a mileage increase of as much as 15%. The EICO Model 889 is compatible with all domestic and foreign cars and trucks with 12 volt, negative ground systems. In Kit form, the unit is easy to assemble—no special skills or tools required. The unit is moisture proof and not affected by underhood temperatures. All needed wiring, connectors and fasteners are supplied—you use your present coil and spark plug wires. Size: (HWD) 4¾" x 4¾" x 6; Weight: 4 lbs.

EICO INDUSTRIAL PRODUCTS

EICO industrial instruments are found in universities, technical schools, manufacturing facilities, laboratories, servicing organizations, utility companies and numerous other organizations

throughout the world.

EICO's quality and dependability are well known and appreciated by industrial users everywhere.

EICO 902 IM/HARMONIC DISTORTION METER & AC VTVM



- High quality tuning capacitor provides easy frequency setting
- Less than 0.7 volt input required for measurements

Wired only \$250.00

The EICO 902 is a unique audio test instrument combining IM and Harmonic Distortion Meters and a sensitive AC VTVM and db meter in one compact package. It offers the stability and accuracy needed for critical measurements in audio research, design, and development. Yet, its ease and speed of operation make it ideal for production testing, quality control and servicing.

For harmonic distortion measurement, the 902 incorporates a continuously variable 20-20,000 cps Wien Bridge rejection filter (in three ranges).

For IM distortion measurement, the 902 incorporates a 7 kc oscillator for the high frequency source and a filtered line-frequency signal for the low frequency source. External low frequency sources up to 400 cycles and high frequency sources down to 2 kc may be fed to the mixing bridge through panel jacks.

Used as an AC VTVM, the 902 provides a highest range of 300 V and a lowest range of 10 mV with uniformly excellent response at all levels. The AC VTVM section is employed in all instrument functions, and the linear 0-1, and 0-3 meter scales are used for all measurements. A decibel scale (-20 to +2) is also provided, based on 0 db = 1 mw in 600 ohms and permitting power measurements in dbm.

SPECIFICATIONS

IM DISTORTION: LF to HF ratios 4:1 and 1:1. TEST OUTPUT: 0-5 v. OUTPUT Z: 600 Ω or external. INPUT Z: 500k Ω . MINIMUM INPUT: 0.7 v. DISTORTION RANGES: 0.3, 1, 3, 10, 30%. ACCURACY: $\pm 5\%$ of full scale. RESIDUAL DISTORTION: 0.05%. HARMONIC DISTORTION; FREQUENCY RANGES: 20-200, 200-2000, 2000-20,000 cps. INPUT Z: 500k Ω . MINIMUM INPUT: 0.7 v. DISTORTION RANGES: 0.3, 1, 3, 10, 30, 100%. ACCURACY: $\pm 5\%$ of full scale. INTERNAL DISTORTION: 0.1%. AC VTVM; RANGES: .01, .03, 0.1, 0.3, 10, 30, 100, 300 volts RMS. Also db scale of -20 to +2. INPUT Z: 2M Ω . FREQUENCY RESPONSE: ± 0 db 10 cps to 100 kc, -3 db at 300 kc. ACCURACY: $\pm 4\%$ of full scale. POWER SUPPLY: V-R tube regulated. POWER REQUIREMENTS: 115 VAC, 60 cps, 60 watts. SIZE (HWD): 12 1/2" x 8 1/2" x 10 1/8". WEIGHT: 22 lbs. EXPORT MODEL: 115 and 230 VAC, 60/50 cps.

EICO 965 FARADOHM BRIDGE / ANALYZER



- Low bridge supply voltage permits testing of all types of capacitors
- Measures diode reverse and transistor quiescent current
- Measures insulation resistance and leakage currents

Wired only \$175.00

The Model 965 is an extremely flexible analyzer. It incorporates an RC bridge, a 6-range DC VTVM, and 11-range DC vacuum-tube microammeter and milliammeter and a built-in variable DC supply.

The bridge may be used for resistance and capacitance measurements, and also as a resistance-capacitance-inductance comparator with external standards.

A very low internal AC bridge supply voltage permits testing all types of capacitors without damage. The bridge may also be supplied from an external source. An external polarizing voltage may be applied to capacitors above .05. A sensitive detector amplifier gives sharply-defined null. Power factor measurement is provided for capacitors above 0.05uf on a calibrated control. A plug in shield is supplied to be used for small capacitors.

Leakage current and insulation resistance measurements may be made either to EIA standards, or for actual working conditions.

Overload protection is provided for the meter and the power supply, with overload signalled, by lighting up the meter. A unique INSTANT ZERO pushbutton permits instantaneous zero adjustment of the VTVM without changing any settings or connections. A special DISCHARGE switch position and a panel warning light assure safety in handling of components.

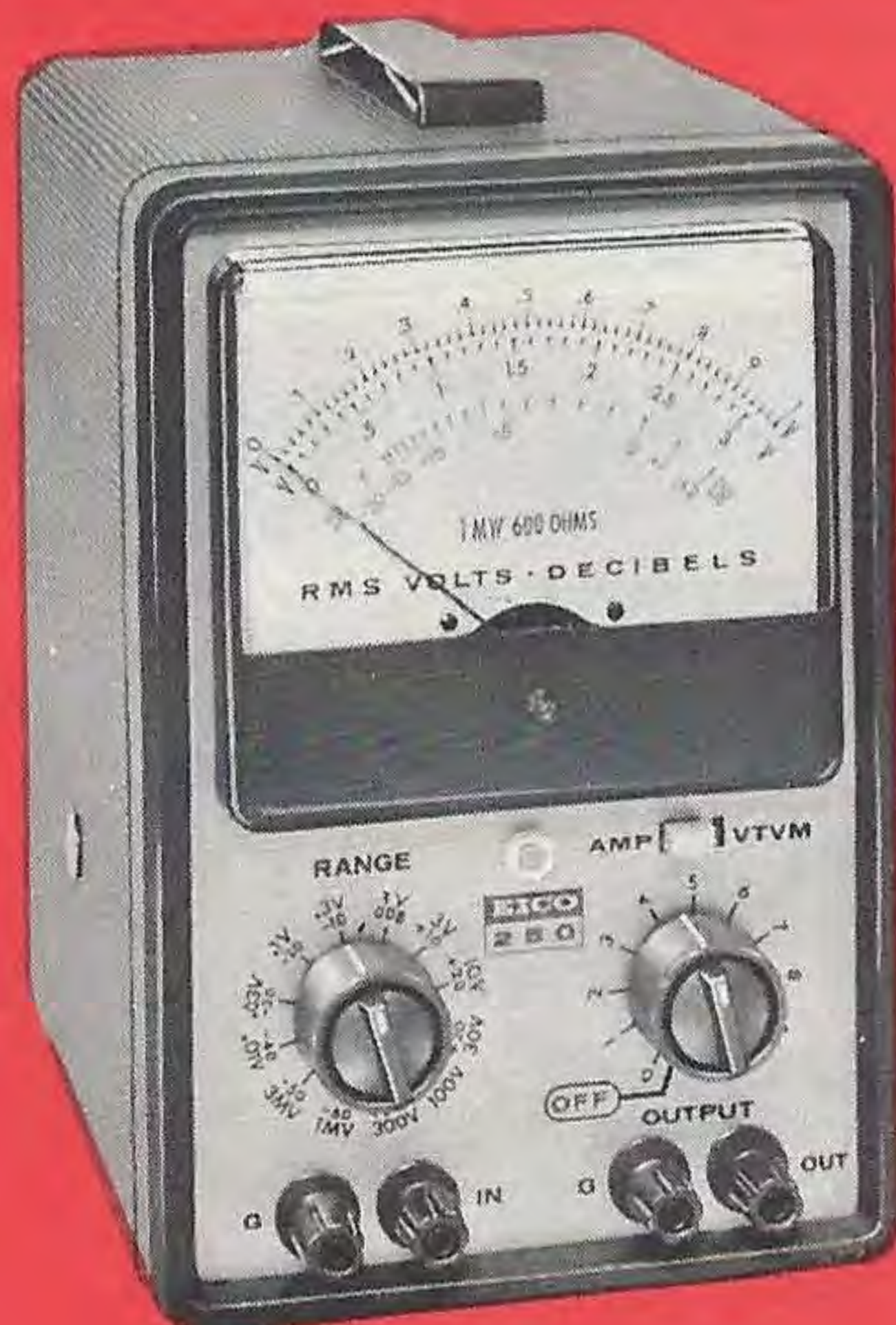
SPECIFICATIONS

CAPACITANCE RANGES: 5 pF-10000 pF, 500 pF - 1 μ F, .05 μ F - 100 μ F, 50 μ F, 5000 μ F. POWER FACTOR: 0-80% at 60 cps. RESISTANCE RANGES: 0.5 Ω -1K Ω , 50 Ω -100K Ω , 5K Ω -10M Ω , 5M Ω -500M Ω ; Higher Resistances up to 200,000M Ω can be measured with the metered variable DC supply. ; RCL COMPARATOR RANGE: .025-50 (ratio). BRIDGE SUPPLY VOLTAGE: Below 0.5 VAC RMS at line frequency, except 10 VAC RMS on lowest capacitance and highest resistance ranges. VARIABLE DC SUPPLY VOLTAGE RANGES: .4 V-1.5 V, 1.4 V-5 V, 4 V-15 V, 14 V-50 V, 40 V-150 V, 140 V-500 V; maximum output 10 mA. DC VTVM RANGES: 0-1.5 V, 5 V, 15 V, 50 V, 150 V, 500 V. Input Z 10M Ω DC VTAM Ranges: 0-.15 μ A, .5 μ A, 1.5 μ A, 5 μ A, 15 μ A, 50 μ A, 15 mA, .5 mA, 1.5 mA, 5 mA, 15 mA. Voltage drop across terminals 75 mV. ACCURACY: $\pm 5\%$ throughout, except on power factor below 30%. POWER REQUIREMENT: 115 VAC, 60 cps, 32-45 watts. SIZE (HWD): 8 1/2" x 12 1/2" x 9". WEIGHT: 18 lbs.

EICO 250 AC VTVM & AMPLIFIER

- Measures AC voltage from 100 μ V to 300 V
- Cathode follower input circuit for greater stability

Wired only \$99.95



The EICO 250 is a high sensitivity, wide-band AC VTVM and amplifier of laboratory accuracy and quality. It measures AC voltage from 100 microvolts to 300 volts in 12 ranges. A function selector switch on the panel converts the instrument to a wide-band amplifier with a gain of 60 db on the 1 mv range, and a maximum output of 5 volts RMS.

The instrument responds to the average value of the applied wave and reads in RMS value of a sine wave. The 0-1, 0-3 voltage scales are linear. The decibel scale is based on 0 db = 1 mw in 600 ohms, with 10 db interval between ranges.

SPECIFICATIONS

VOLTMETER VOLTAGE RANGES: 1, 3, 10, 30, 100, 300 RMS millivolts. 1, 3, 10, 30, 100, 300 RMS volts. DECIBEL RANGE: -80 to +52 db in 12 ranges. FREQUENCY RESPONSE: ± 0 db 10 c to 600 kc. INPUT IMPEDANCE: 10 megohms shunted by 15 mmf. ACCURACY: $\pm 3\%$ of full scale. TUBE COMPLEMENT: 2-6EJ7/EF184 frame-grid pentodes, 1-6FY5/EC97 frame-grid triode, 1-6X4 full-wave rectifier, 1-0A2 voltage regulator.

AMPLIFIER MAX. OUTPUT VOLTAGE: 5 RMS volts. MAX. GAIN (1 MV RANGE): 60 db. FREQUENCY RESPONSE: ± 0 , -3 db 8 c to 800 kc. MAXIMUM HUM & NOISE: -40 db with signals above 2 millivolts. INPUT IMPEDANCE: 10 megohms shunted by 15 mmf. OUTPUT IMPEDANCE: 5K ohms. TUBE COMPLEMENT: 2-6EJ7/EF184 frame-grid pentodes, 1-6FY5/EC97 frame-grid triode, 1-6X4 full-wave rectifier, 1-0A2 voltage regulator. POWER REQUIREMENTS: 105-125 VAC, 60 cps; 15 watts. SIZE (HWD): 8 1/2" x 5 3/4" x 7". WEIGHT: 10 lbs.

★ Export Model available

SAVE 50% OR MORE WITH EICO VTVM'S



EICO 235 PROFESSIONAL VTVM

- 1/2-Volt Full-Scale DC Transistor Servicing Range
- Deluxe Full-View 6" 200 Microamp Meter Movement
- Dual Purpose AC/DC Uni-Probe
- Including leads

Kit \$59.95
Wired \$84.95

*Terrific time-saver!
Only 1 probe performs all
functions — a half-turn
of probe-tip selects DC or
AC-OHMS!*



EICO 232 PEAK-TO-PEAK VTVM

- Dual Purpose AC/DC Uni-Probe
- Calibration without cabinet removal
- 7 non-skip ranges on every function

Kit \$34.95
Wired \$49.95

Designed with the stringent requirements of today's electronic technicians, engineers and experimenters in mind, the new Model 235 is not only excellent for servicing all FM, AM, mono/color TV, and precision electronic equipment; it is especially qualified for the exacting measurements encountered in solid-state circuitry — where even a difference as small as a few millivolts may distinguish between the proper or improper operation of a transistor circuit. Accurate measurements down to as little as 0.01 volts are quick and certain on the large, easy-to-read 6" meter on its 1/2-volt scale!

Unique ease and speed of operation and versatility are offered by the exclusive two-color coding and coordination of the positions of the function and range switches with the arcs of the meter scale. The dual purpose AC/DC Uni-Probe, another EICO exclusive, adds its famous versatility to the package. Both peak-to-peak and RMS AC voltages are read on separate scales in 7 overlapping ranges, up to 4.2KV. With its frequency response of 30Hz to 3MHz (and up to 250MHz with optional probe), the EICO 235 is ideal for all high frequency measurements.

Its very high input impedance (11 megohms) assures negligible circuit loading in precision DC voltage measurements from 0.01 volt to 1.5KV (in 8 overlapping ranges); and to 30KV with optional high-voltage probe. (EICO Model HVP-2).

Additional professional features of the 235 include: ceramic switches to assure non-arcing at all inputs within the capability of the unit; 1% tolerance precision resistors for greatest accuracy; seven overlapping resistance ranges covering 0.2Ω to 1000MΩ for precise resistance measurement; zero-center for TV-FM sound detector alignment; one zero center adjustment for all functions and ranges; and a transformer-powered supply for line isolation and removal of shock hazard. The outstanding balanced-bridge circuit is engineered for years of exceptional stability and accuracy.

The Model 235 also features the EICO-exclusive professional look—that has been welcomed by both serviceman and industrial users.

SPECIFICATIONS

8 DC Ranges: 0-0.5-1.5-5-15-50-150-500-1500 (to 30,000 volts with optional high voltage probe). 7 AC Peak-to-Peak Ranges: 0-4-14-42-140-1400-4200. 7 AC RMS Ranges: 0-1.5-5-15-50-150-500-1500. 7 Resistance Ranges covering: 0.2Ω to 1000MΩ. Frequency Response: 30cps to 3Mc ±1db (up to 250Mc with optional PRF probe). Input Resistance: DC 11MΩ; AC 1M shunted by 60mmf. Power Requirements: 117 VAC, 50 or 60 cps; 6 watts. 1% precision multiplier resistors. 3% accuracy on AC and DC scales. Employs 1 silicon rectifier, 1-12AU7A tube and 1-6AL5 tube. Dimensions (HWD): 8 1/2" x 7 1/2" x 5". Weight: 9 lbs. Supplied less battery — 1 "D" cell required.

The 232 is the established leader in VTVMs, and is well suited to color or monochrome TV servicing. You could spend two or three times more money for a VTVM and not get all the advanced engineering features of this precision instrument. By far the best professional VTVM value in electronics, the 232 features up-to-minute circuitry, design, functional simplicity and modern styling. The unit also boasts high sensitivity and precision, wide ranges and versatility — and day-in day-out dependability.

Use the 232 for all your TV/FM/AM/electronic servicing with the highest accuracy, getting true peak-to-peak measurements of complex voltage waveforms (necessary in TV servicing) and both peak-to-peak and rms measurement of sine wave AC voltages on separate scales. Use the 232 for resistance measurements, precision dynamic DC voltage measurements with negligible circuit loading, frequency response measurement, output meter and servicing electrical equipment.

A new balance bridge circuit yields exceptional stability and accuracy and the high impedance input results in negligible circuit loading. As an important safety feature, the large 4 1/2" meter can't burn out — thanks to a built-in protective circuit. There are seven non-skip ranges on all four functions.

Other features that make the 232 a valuable addition to the service bench are: zero center for TV-FM discriminator alignment, one zero adjustment for all functions and ranges, 1 per cent precision ceramic multiplier resistors, uniform 3 to 1 range ratio for extreme wide range accuracy and a transformer for isolation and safety.

The 232 has smart professional styling — satin finish, etched aluminum panel and grey wrinkle steel case. Nobody but EICO brings you such outstanding instrument performance for so low a price.

SPECIFICATIONS

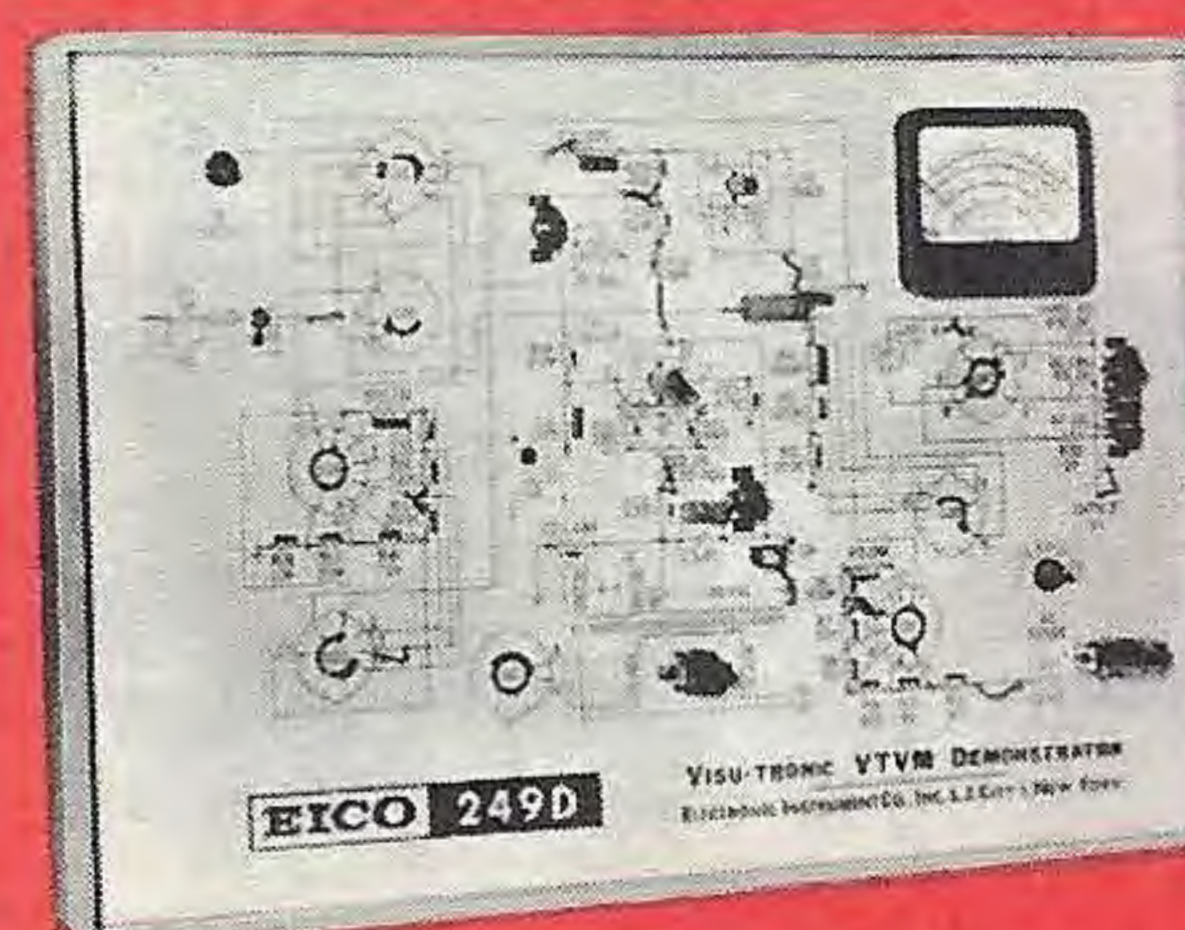
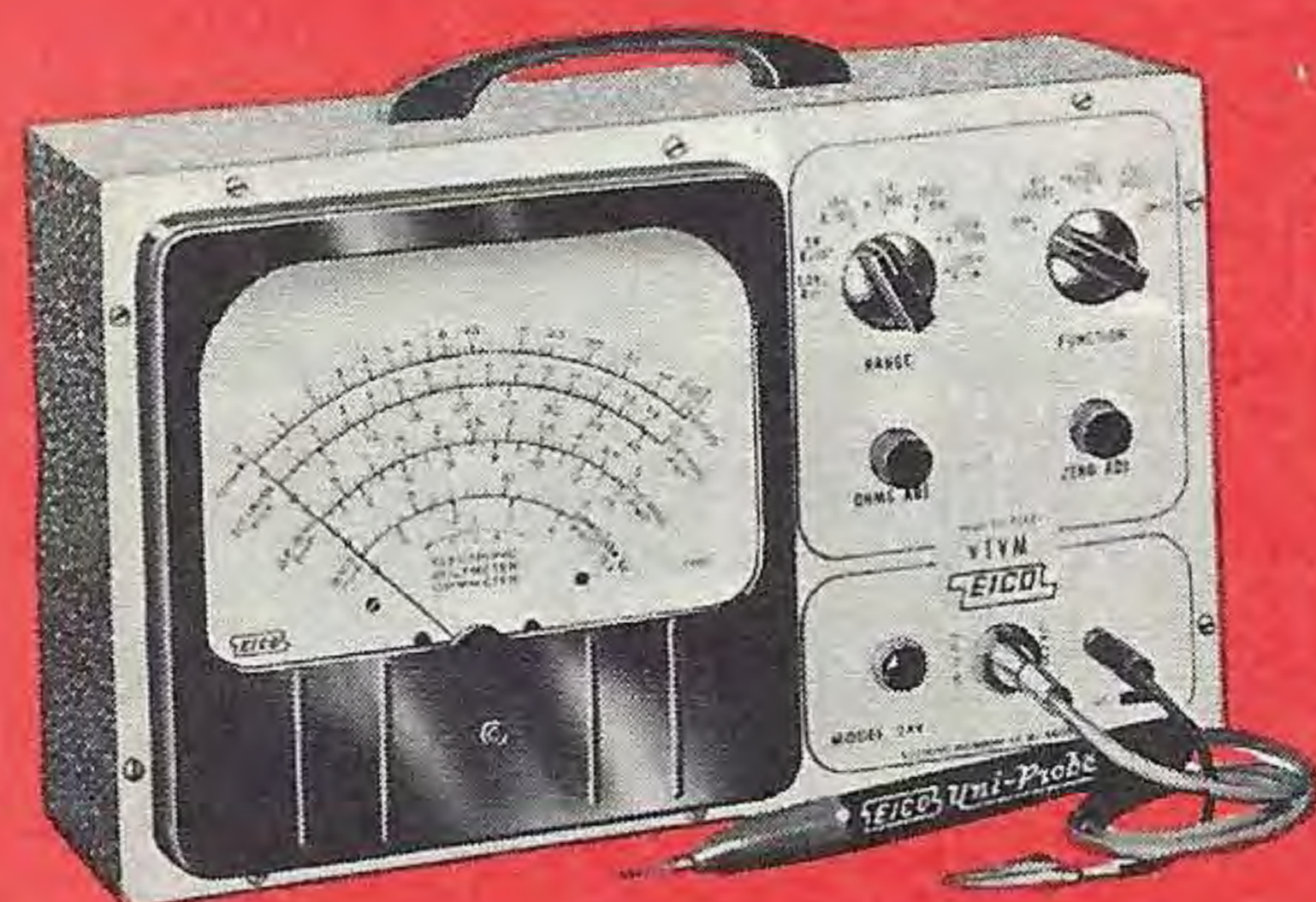
PEAK-TO-PEAK AC RANGES: 0-4, 14, 42, 140, 420, 1400, 4200 volts. RMS SINE VOLTAGE RANGES: 0-1.5, 5, 15, 50, 150, 500, 1500 volts. DC VOLTAGE RANGES: 0-1.5, 5, 15, 50, 150, 500, 1500 volts. Reads up to 30,000 volts with HVP probe using 1090-megohms Multiplier Resistor. FREQUENCY RESPONSE: 30 cps to 3 mc (up to 250 mc with PRF probe). OHMMETER: 0.2 ohms to 1000 megs in 7 ranges. TUBE COMPLEMENT: 12AU7, 6AL5, selenium rectifier. BATTERY: 1.5 v. WEIGHT: 5 lbs. POWER REQUIREMENTS: 117 VAC, 60 cps; 5 watts. SIZE (HWD): 8 1/2" x 5" x 5". INPUT IMPEDANCE: 11 megohms.

★ Export Model available

EICO 249 DELUXE VTVM

Kit \$44.95 Wired \$59.95

For those who want a quality VTVM with the ease and convenience of reading a large 7" meter, the EICO 249 meets the challenge. Incorporating all the outstanding and exclusive features of the EICO 232 VTVM including the Uni-Probe. The 249 is a solid, impressive piece of test equipment for bench or field use. Size: (HWD) 8 1/2" x 13" x 5". Wt.: 9 lbs. ★ Export Model available



VISU-TRONIC® TEACHING AIDS

EICO 249D VTVM DEMONSTRATOR

Kit \$89.95

Complete working model of EICO 249 vacuum tube volt-meter, including UNI-PROBE®, furnished in easy to assemble kit form. Provides dramatic classroom demonstration of principles of electronic instrumentation. SIZE (HWD): 27 3/4" x 40 3/4" x 3 1/2". Weight: 7 lbs.



NEW SOLID STATE FET MULTIMETERS

High quality, accurate
circuitry and features
usually found in TVOM's
costing much more.

Exclusive EICO Uniprobe
A half-turn of probe tip selects DC or AC-ohms.



EICO 242 SOLID STATE FET-TVOM

- Big 6 1/2" meter movement for improved accuracy in reading
- Measures resistance even in semiconductor circuits

Kit \$74.95 Wired \$99.95

The Model 242 solid-state FET-TVOM combines all of the capabilities of the Model 239 with numerous additional features. First, there is a big 6 1/2-inch meter for easier, more accurate readings. Second, there is the added versatility of seven non-skip milliamperage ranges. Finally, the extremely low voltage ohmmeter adds convenience and versatility when testing semiconductor circuits.

The highly accurate milliammeter section of the EICO 242 can be used for AC and DC measurements from 10 microamps to 1 Amp in seven convenient 10db steps. The precision meter responds to peak-to-peak, currents as well as voltages, on the seven AC ranges. However, the meter scale is calibrated in both peak-to-peak and the equivalent sinusoidal RMS voltages and currents for easy interpretation.

Like the Model 239, the Model 242 uses EICO's advanced-design FET input stage to give you high input impedance and eliminate circuit loading. Its low 1-Volt scale makes it ideal for semiconductor circuit work. The special low voltage ohmmeter circuit is extremely useful when troubleshooting transistorized equipment. In use, the semiconductors in a circuit under test will not affect resistance readings.

The Model 242 also incorporates the time-saving single all-purpose DC/AC-ohms-mA Uni-Probe (Multi-Probe) so that you use only one lead for all measurements.

Use of a balanced transistor meter circuit, good power supply regulation, and 1% multiplier resistors all assure long lasting stability and accuracy. The FET stage is fully protected against damage by fast-acting semiconductor and capacitor circuits.

SPECIFICATIONS: As Model 239 except for the following: AC & DC Current ranges in MA same as voltage ranges on 242; OHM-METER: Low voltage type; METER MOVEMENT: 6 1/2"; SIZE: (HWD) 7 1/2" x 8 1/2" x 5"; WEIGHT: 6 lbs.; POWER REQUIREMENTS: 105-132 volts AC 3 Neda #1604-9 volt batteries and 1-1.5 volt size D cell; 1.4 VA

EICO 240 SOLID STATE FET-TVM

Same as EICO 242 electronically, except it has a 4 1/2" meter. Does not have milliammeter ranges, SIZE (HWD): 8 1/2" x 5 3/4" x 5". WEIGHT: 6 lbs. **Model 240 \$59.95 Kit, \$79.95 Wired.**

EICO 239 SOLID STATE FET-TVM

- Compact, portable, battery operated FET-TVM
- Measures peak-to-peak AC voltages

Kit \$39.95 Wired \$59.95

Although designed primarily for semiconductor circuit testing, the Model 239 solid-state FET-TVM is more than capable of handling vacuum-tube circuitry. Many features will appeal especially to engineers or technicians working with semiconductor circuits.

The precision 1-Volt scale on the Model 239 lets you make accurate readings to as low as 0.05 Volt and can give good indications down to 0.01 Volt. Other high-accuracy scales give direct readings up to 1000 Volts. Using the EICO high-voltage probe (not supplied) this range can be extended up to 30,000 Volts.

The large 4 1/2-inch, 200 μ A meter responds to peak-to-peak voltages on the seven AC ranges. For added convenience the meter dial is calibrated in both peak-to-peak and equivalent sine wave RMS voltages so that either one can be read.

The wide-range ohmmeter covers from 0.2 to 1000 megohms in seven steps. A low voltage is used in the seven ohmmeter ranges to insure against damaging any semiconductors in equipment under test. However, the voltage is still high enough to allow for accurate testing of diodes and transistors. Another convenient feature of the Model 239 is the time-saving single probe for all measurements and eliminates the tangle of wires usually associated with similar multimeters.

The balanced transistor meter circuit and 1% resistors assure high stability and accuracy.

The advanced-design FET input stage provides extremely high input impedance (11 megohms DC). The FET is fully protected against damage by fast-acting semiconductor and capacitor circuits.

SPECIFICATIONS: AC RMS SINE WAVE AND DC VOLTAGES RANGES: 0-1, 3, 10, 30, 100, 300, 1000 volts; PEAK-TO-PEAK AC VOLTAGE RANGES: 0-2.8, 8.5, 28, 85, 280, 850, 2800 volts; INPUT IMPEDANCE: DC-11 megohms, AC-1 megohms; FREQUENCY RESPONSE: 25 Hz to 2 MHz (up to 250 MHz with PRF probe not supplied); OHMMETER: 0.2 ohms to 1000 megohms in 7 ranges; METER MOVEMENT: 4 1/2" 200 μ A movement; POWER REQUIREMENTS: 3 Neda #1604-9 volt batteries and 1-1.5 volt size D cell; SIZE (HWD) 8 1/2" x 5 3/4" x 5"; WEIGHT: 6 lbs.

EICO VTVM ACCESSORY PROBES

HIGH VOLTAGE PROBE HVP-2



Wired only \$9.95

For safe measurements up to 30,000 volts DC with any 11 Megohm input VTVM, the HVP-2 is the ideal probe. 1090 meg. for 235, 232, 249; Less connector—use MC1F for EICO VTVM's.

EXCLUSIVE UNI-PROBE®



Kit \$5.95 Wired \$7.95

Performs all functions. A half-turn of the probe tip selects DC or AC-ohms. Adapts to EICO or other VTVM's in just 15 minutes. Complete instructions supplied. Supplied less series isolating resistor or connector. Use 1 megohm for all EICO VTVM's. EICO VTVM's take MC1F connector.

RF PROBE PRF-11



Kit \$4.95 Wired \$6.95

For voltage measurements at radio frequencies up to 250 mc. Very useful for measuring TV and radio RF and IF stages. Accuracy $\pm 10\%$. Use with any 11 megohm VTVM. Supplied less connector. Use PRF-11 for all EICO VTVM's.

NEW!



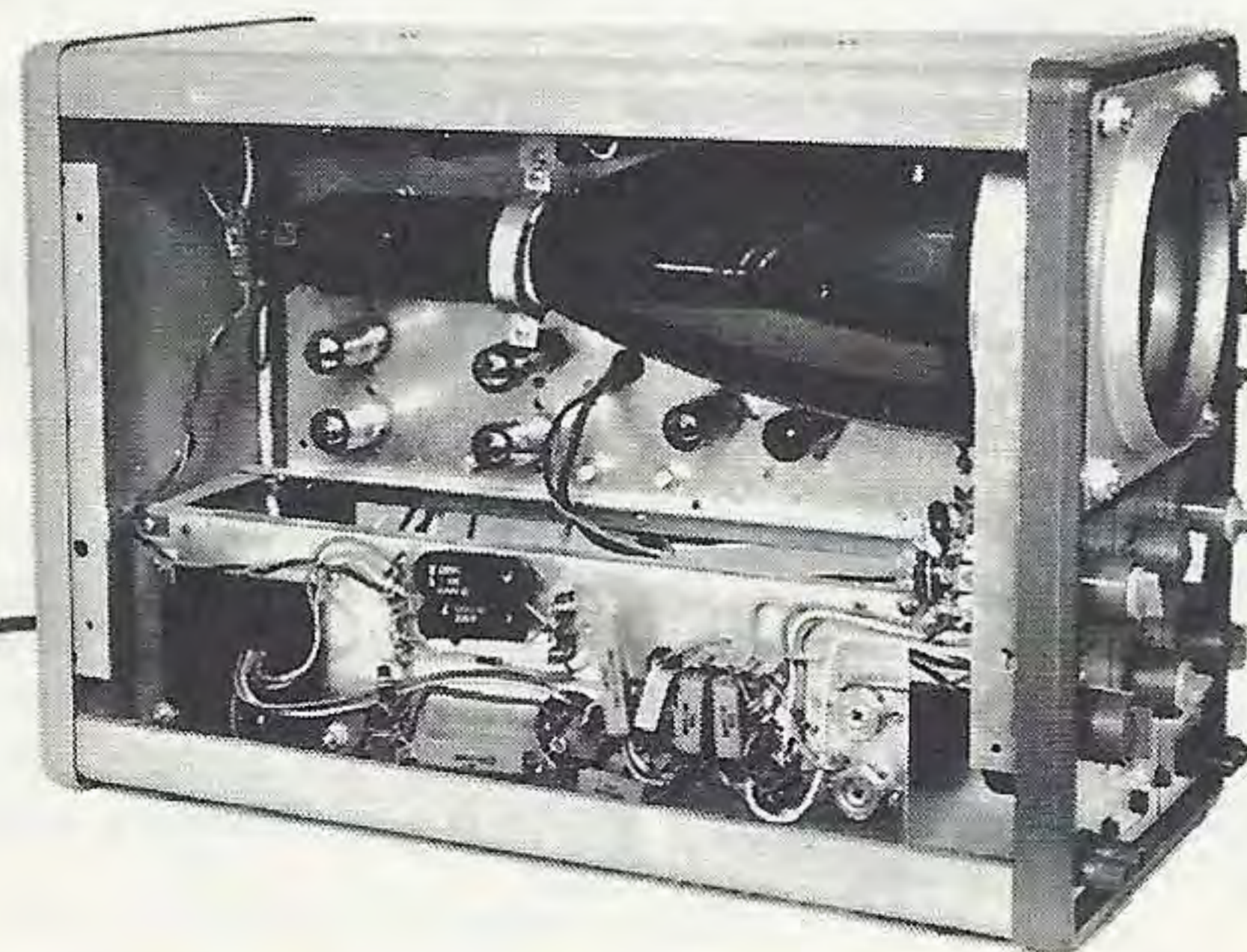
EICO 465 OSCILLOSCOPE/VECTORSCOPE

- DC— to 8 MHz (usable to 10 MHz)
- 5" flat-face CRT
- 12 mv rms/cm sensitivity
- An accurate Vectorscope

Kit \$179.95
Wired \$249.95

This truly professional 5" scope, with its preset TV-Vertical and TV-Horizontal sweep positions (30 and 7875 Hz), is ideal for all aspects of color and b/w TV servicing. Push-pull amplification and direct-coupling assure minimum distortion and excellent frequency response (± 1 , -5dB) from DC to 8 MHz. An accelerating potential of 1400 V and a mu-metal neck shield help provide a sharp, bright trace that is free of blooming and unaffected by external fields. A built-in Zener-diode calibration source provides a precise and stable square-wave calibration voltage for DC or AC voltage measurements. Drift-free vertical and horizontal positioning as well as distortionless vertical and horizontal trace expansion up to many times the screen diameter are provided. An automatic sync circuit, consisting of limiter and amplifier, insures a stable, steady display, even to 10 MHz, without sync voltage adjustments. Full retrace blanking eliminates confusing background trace. Illumination of the edge-lit calibration grid is variable by means of a potentiometer control. Four overlapping sweep ranges are provided from 10 Hz to 100 KHz, in addition to the preset TV-Vertical and TV-Horizontal positions. The EICO 465 is a complete precision vectorscope supplied with an accurately calibrated graticule and the required interconnecting cables. It can also be used most effectively as a curve tracer in conjunction with the new EICO Model 443 (see page 21).

SCOPE'S CABINET PANELS CAN BE EASILY REMOVED TO FACILITATE ALIGNMENT, SERVICING AND HEAT DISSIPATION.



SPECIFICATIONS:

VERTICAL AMPLIFIER: Frequency response from DC to 8 MHz, +1, -5dB (usable to 10 MHz); sensitivity 12 mv rms/cm (34 mv p-p/cm); input impedance 1 M Ω /35pf; square-wave calibration voltage 200 mV p-p, $\pm 1\%$. **HORIZONTAL AMPLIFIER:** Frequency response from DC to 1 MHz, +1, -3dB; sensitivity 17 mv rms/cm; input impedance 1 M Ω /35pf. **SWEEP RANGES:** 10-100-1K, 1K-10K, 10K-100K Hz; plus TV-VERT position (30 cps) and TV-HOR position (7875 cps). Synchronization may be (+) or (-) internal, external, or line frequency. **INTENSITY MODULATION INPUT:** 3V rms blanking; input impedance 2.2 M Ω . **VECTORSCOPE:** Negligible horizontal and vertical phase shift. **TUBE COMPLEMENT:** 2-6AU8, 2-12BY7, 1-12AZ7, 3-6BL8, 2-silicon diodes, 1-Zener diode, 1 CRT-5DEP. **POWER REQUIREMENTS:** 117 VAC, consumption approximately 140 watts. **SIZE (HWD):** 12 1/4" x 8 1/2" x 17 1/2". **WEIGHT:** 27 lbs.



EICO 435 WIDEBAND DIRECT-COUPLED 3" SCOPE

- 18 mv rms/cm sensitivity
- Zener diode calibration
- DC-4.5mc flat response
- TV-V & TV-H sweeps

Kit \$129.95
Wired \$179.95

Complete many more color or B & W TV service calls on location! The Model 435 is really portable (1/3 the usual size of 5" scopes), yet provides outstanding facilities and fine performance. Push-pull amplification (3 stages) and direct-coupling throughout the vertical amplifier. With the Zener diode calibration facility and the 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 50 mv to 500 V. Clarity and detail equal to 5" scopes are obtained with a far sharper and brighter trace (1600 V accelerating potential) on a flat-faced CRT; and distortionless V & H trace expansion is provided with drift-free V & H positioning up to many screen diameters. A mu-metal neck shield on the CRT minimizes the effect of external fields. Intensity and focus controls, and sawtooth (sweep) output are provided on the front panel; intensity modulation input is provided at the rear. DC balance and astigmatism adjusts are accessible without cabinet removal. Sync is fully automatic on all ranges and modes, with automatic sync limiter and amplifier eliminating sync voltage adjustment. An added circuit refinement eliminates any undesired intensity modulation of the trace by the sync voltage. Full retrace blanking and edge-lit calibration grid are provided.

SPECIFICATIONS

VERTICAL AMPLIFIER: Frequency response from dc to 4.5 mc, +1, -3db (useful to 10 mc); sensitivity 18 mv rms/cm (50 mv p-p/cm); input impedance 1 M Ω /35 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 1 cps to 500 kc, +1, -3db; sensitivity 0.7 v rms/cm; input impedance 4 M Ω /40pf. **SWEEP RANGES:** 10-100, 100-1K, 1K-10K, 10K-100K cps; plus TV-VERT position (30 cps) and TV-HOR position (7875 cps). Synchronization may be (+) or (-) internal, external, or line frequency. **POWER REQUIREMENTS:** 117 VAC, consumption approximately 110 watts. **SIZE (HWD):** 8 1/2" x 5 3/4" x 12 5/8" inches. **WEIGHT:** 18 lbs.

★ Export Model available

EICO 488 ELECTRONIC SWITCH

Kit \$34.95 : Wired \$54.95

★ Export Model available

Simultaneously observe 2 patterns on 1 scope. Compare voltage and current amplitudes, waveforms, frequencies and phase relationships. Continuously variable switching rates from less than 10 cps to over 2000 cps in 3 ranges. Useful as square wave generator.

Response dc to 30 kc (-2db); useful to 300kc. Maximum gain of 10. Maximum input 400 v p-p. Input impedance 100K, output impedance 50K Ω . Power Requirements: 117 VAC. Size: 6" x 8" x 6". Weight: 7 lbs.



PROVEN TOP QUALITY EICO OSCILLOSCOPES



EICO 427 SENSITIVE DIRECT-COUPLED 5" SCOPE

- 3.5 mv rms/cm sensitivity • Zener diode calibration
- Direct V plate connections • Automatic sync

Kit \$109.95 : Wired \$149.95

A very sensitive, general purpose oscilloscope with the facilities and quality required for service, production, or R & D of audio communications and industrial equipment. Push-pull amplification (3 stages) and direct-coupling throughout vertical amplifier. With Zener diode calibration and 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 10 mv to 500 v. The trace is sharp and clean, and free of "blooming." A trace may be expanded to 30 cm vertically and 20 cm horizontally, with instantaneous drift-free positioning to permit centering any part of expanded trace. Intensity, focus, astigmatism, dc balance controls and sawtooth sweep output are provided on the front panel; intensity modulation input is provided at the rear. Sync is fully automatic on all ranges and modes, with automatic sync limiter and amplifier eliminating sync voltage adjustment. Full retrace blanking.

SPECIFICATIONS

VERTICAL AMPLIFIER: Frequency response from dc to 500kc, +1, -3db (approximately -6db at 1 mc); sensitivity 3.5 mv rms/cm (10 mv p-p/cm) input impedance 1 M Ω /30pf. HORIZONTAL AMPLIFIER: Frequency response from 2 cps to 450kc, +1, -3db; sensitivity 0.18 V rms/cm; input impedance 10M Ω /40 mmf. SWEEP RANGES: 10-100, 100-1K, 1K-10K, 10K-100K cps. Synchronization may be (+) or (-) internal, external, or line frequency. POWER REQUIREMENTS: 117 VAC, approximately 55 watts. SIZE (HWD): 12½" x 8½" x 16⅞". WEIGHT: 23 lbs.

★ Export Model available



EICO 460 WIDEBAND DIRECT-COUPLED 5" SCOPE

- 5 mv rms/cm sensitivity • DC - 4.5mc flat response
- Automatic sync • TV-V and TV-H sweeps

Kit \$109.95 : Wired \$159.95

Ideal for color and B&W, TV servicing and production line testing, and excellent for audio and industrial work as well. Push-pull amplification (3 stages) and direct-coupling throughout vertical amplifier. With internal calibration voltage and 4-position frequency-compensated decade attenuator, either dc or peak-to-peak ac (or combination) measurements may be made from 25mv to 500V. Instantaneous, drift-free positioning permits centering any part of an expanded trace. Intensity and focus controls, 60 cps output jack and phasing control, sawtooth (sweep) output jack, intensity modulation (Z axis) input jack, and external capacitor jack for very low frequency sweeps are all on the front panel. DC balance and astigmatism adjustments are accessible without cabinet removal. Sync is fully automatic on all ranges and modes, with automatic sync limiter and amplifier eliminating sync voltage adjustment. Full retrace blanking. Edge-lit calibration grid.

SPECIFICATIONS

VERTICAL AMPLIFIER: Frequency response from dc to 4.5 mc, +1, -3db (useful to 10 mc); sensitivity 5 mv rms/cm (25 mv p-p/cm); input impedance 3 M Ω /35pf. HORIZONTAL AMPLIFIER: Frequency response from 1 cps to 400 kc, +1, -3db; sensitivity 0.24 v rms/cm; input impedance 5 M Ω /35pf. SWEEP RANGES: 10-100, 100-1K, 1K-10K, 10K-100K cps; plus EXT CAP position for very low frequency sweeps with external capacitor, TV-V position (30 cps) and TV-H position (7875 cps). Synchronization may be (+) or (-) internal, external, or line frequency. POWER REQUIREMENTS: 117VAC, approximately 95 watts. SIZE (HWD): 13 x 8½ x 16 inches. WEIGHT: 25 lbs.

★ Export Model available

EICO SCOPE ACCESSORY PROBES

- fully shielded • rugged terminal board mounting of all parts • shock mounted floating construction
- swivel action for ease of handling • color-coded for identification • easy accessibility of all parts



OSCILLOSCOPE DEMODULATOR PROBE PSD

Kit \$4.95 : Wired \$6.95

For signal tracing and checking of TV/radio RF and IF stages. Permits scope to be used as a waveform tracer, gain analyzer and alignment indicator in all these stages. Demodulates amplitude-modulated carriers between 150 kc and 250 mc.



OSCILLOSCOPE DIRECT PROBE PD

Kit \$3.95 : Wired \$4.95

Direct test probe for use in low-frequency or low-impedance circuits. Eliminates stray pick-up and signal re-radiation.



OSCILLOSCOPE LOW CAPACITY PROBE PLC

Kit \$4.95 : Wired \$6.95

For TV sync signal tracing and general tests in video, sync and sweep circuits. High impedance, low capacity probe is extremely useful for tracing waveforms in high impedance, high frequency and wideband circuits (as in TV), without distortion from overloading or frequency discrimination.



EICO 667 DYNAMIC CONDUCTANCE TUBE & TRANSISTOR TESTER

Kit \$99.95 : Wired \$149.95

- Tests the new tube types
- Separate plate, screen and grid voltages
- Individual element settings by lever switches

TYPES TESTED: 5 & 7-pin nuvistor, 7-pin miniature, 7-pin subminiature (in-line base), 8-pin subminiature, octal, loctal, combination 9 and 10-pin miniature, combination novar and pilot light, compactron (12-pin). In addition to receiving types, tests many small transmitting and special purpose tubes and pnp transistors. Use with Model 615 Adaptor for older type tubes — settings are already on the roll chart or supplement.

TRANSISTOR TEST: Two-step test for both npn and pnp signal transistors using internal DC power supply.

DYNAMIC CONDUCTANCE TUBE TEST: Composite indication of mutual conductance, plate conductance, and peak emission capability. Readings are on both numerical and quality zone scales. Rectifiers tested near maximum rated current for extra accuracy.

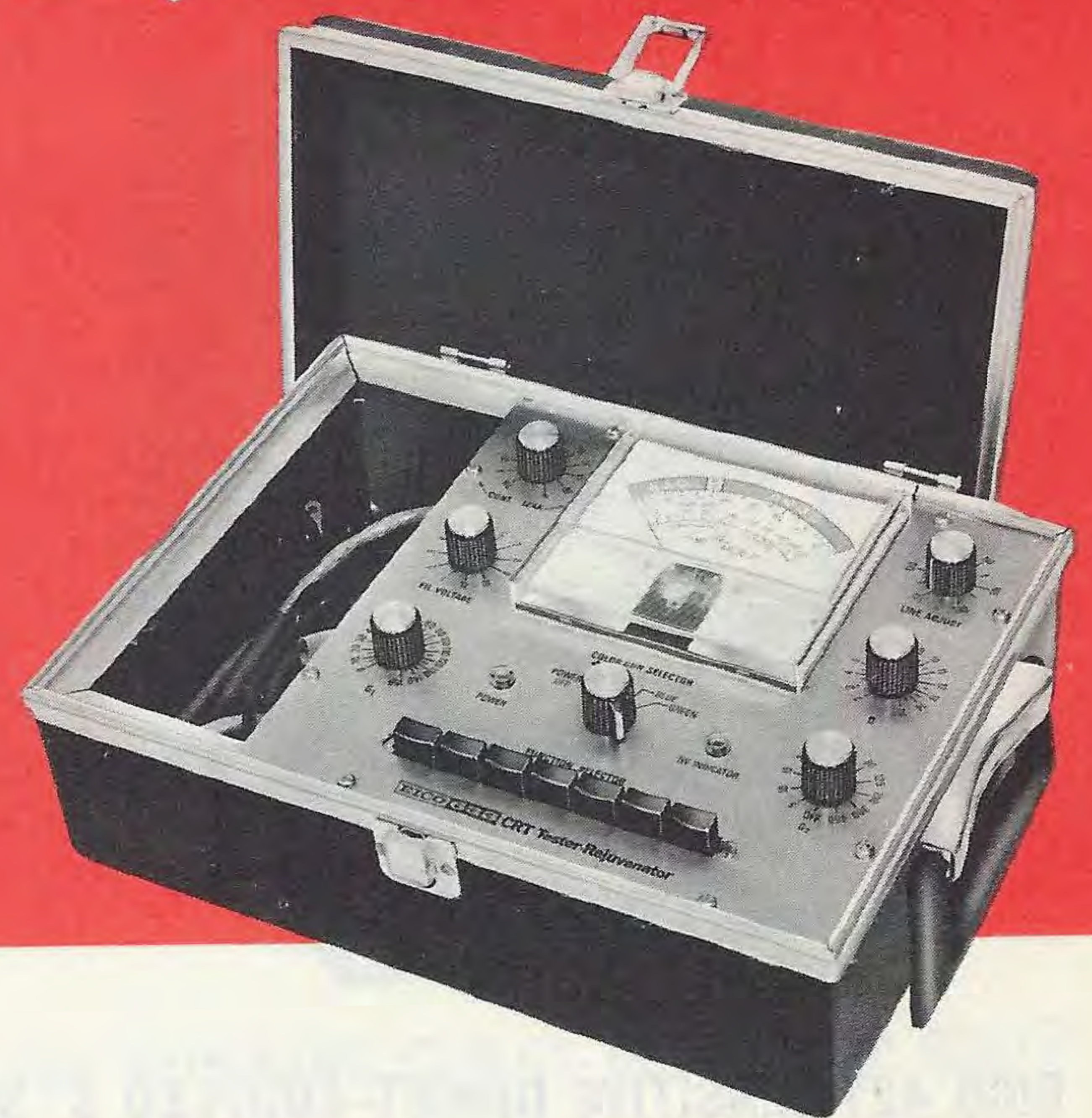
LEAKAGE/SHORT TEST: Direct-reading of inter-element leakage up to 20 MΩ. DC leakage test voltage is always applied in correct polarity to eliminate emission effects from readings. Accurate heater-cathode leakage achieved by isolation of heater and cathode from remaining tube elements during test. Push-button transfer switches (12) permit rapid insertion of tube elements in leakage test circuit.

IMPORTANT FEATURES: Each active tube element can be individually connected, by 12 six-position individual element lever switches to any of the following busses: plate voltage, screen voltage, grid voltage, filament voltage, ground (cathode and filament return), no connection. Two additional lever switches are used to select from 4 combination of 3 plate, 3 screen, and 3 ranges of control grid voltage (variable over each range with a 5% accurate wire-wound control) and 5 ranges of meter sensitivity (1% shunts and 5% accurate wire-wound control). Multi-section tubes have each section individually tested by rapid selection from 12 push button transfer switches while all sections are simultaneously drawing full-rated current. Pentodes are tested as pentodes, with no lumping together of tube elements.

Line-adjust rheostat for testing independent of tube filament loading or line voltage variation.

Gear-driven roll chart mechanism provides smooth trouble-free operation.

Power: 105-135 volts AC. Provided with pilot lamp and fuse. Size (HWD): 12" x 15" x 4½". Weight: 22 lbs.



MODEL 633 CRT TESTER & REJUVENATOR

- Continuity and leakage checked through transistorized VOM and read directly on meter.
- Check gray scale tracking ability.

Kit \$97.95 : Wired \$129.95

Use the Model 633 to test and rejuvenate the most expensive component in your television set — the picture tube. Its versatility makes this one test instrument applicable to black and white as well as to color CRT's. Each gun of the color tube is measured individually and numerically, providing you with required gray scale tracking information. The all solid state instrument is packaged in a small, lightweight carrying case for convenient portability.

The various tests and rejuvenating functions can be accomplished using the seven rotary controls and the seven push-button switches on the front panel of the Model 633. While one rotary control is used to compensate for variations in line voltage, a second one is used for calibrating the 100% meter reading. Three controls are used to supply the proper individual voltages to the filament, to the Grid 1 and to the Grid 2. The leakage switch allows you to measure continuity and the quantity of leakage between the various electrodes in the tube. Each of the three color guns is selected in turn by simply setting the Color Gun Selector switch to the required position.

The push button switches are used in the various rejuvenating and welding functions. They are also used for the life and emission tests as well as to measure the grid cutoff voltage.

Six different CRT tube sockets are supplied so that the EICO Model 633 can be conveniently connected to any known picture tube. A complete manual is provided indicating the settings on this instrument for all CRT's.

SPECIFICATIONS: METER SCALES: BAD-?-GOOD, % emission, 100KΩ to 10MΩ leakage; METER MOVEMENT: 200 microamperes ±2%, 4½" D'Arsonval; FILAMENT VOLTAGES: 1,2,3,4,5,6,7,8,9,10, 12; GRID 1 VOLTAGES: Variable 0 to -150; GRID 2 VOLTAGES: Variable 0 to +450; LIFE TEST VOLTAGE: Filament voltage minus 10%; BOOST VOLTAGE: Filament voltage plus 35%. WELD VOLTAGE: Filament voltage plus 85%; HIGH VOLTAGE: 350 volts; POWER REQUIREMENTS: 120 VAC, 50/60 Hz; SIZE (HWD): 5¾" x 12½" x 9¼"; WEIGHT: 9 lbs.

EICO 628 TUBE TESTER KIT \$59.95. WIRED \$79.95

ATTENTION EICO TUBE TESTER OWNERS:
NEW TUBE DATA AND SUBSCRIPTION PLAN
NOW AVAILABLE FOR ALL MODELS. Write to:
EICO Tube Data Division, 1744 Rockaway Ave.,
Hewlett, N.Y. 11557

& DEPENDABILITY



EICO 635 DELUXE PORTABLE ALL-PURPOSE TUBE TESTER

- "Take-it-anywhere" design expressed in a modern, rugged, scuff-proof, luggage case
- Compact (4"H, 12 1/2"W, 9"D) and lightweight, 4 1/2 lbs.
- Thoroughly professional, full-range modern versatility. Tests all standard tubes and even the new decals, magnovals, 7-pin nuvistors, and popular TV picture tubes
- Quick, accurate, dependable — and the price is modest indeed
- Complete with luggage case and Tube Manual

Kit \$49.95 Wired \$79.95

Now, no matter what the site — in the field or on the bench — and no matter what the tube, you can fast-check it with the new Model 635. Novars, nuvistors, compactrons, 10-pin types, battery-types, auto-radio types, foreign, hi-fi, industrials, decals, magnovals, 7-pin nuvistors, TV picture tubes — you name it, the new 635 will quickly tell you what you need to know to pass or fail the tube.

Tests for dynamic cathode emission, grid leakage, gas and shorts. 3 1/2" D'Arsonval meter — protected against accidental overload or burnout — in a meter bridge circuit for long-term precision. Neon lamp indicators for shorts, grid leak, and power. Extra-convenience features include long-lasting anti-corrosion phosphor bronze sockets, pin straighteners for all tube types, transformer isolation power supply. In sum, the new 635 has all the hallmarks of an EICO-engineered test instrument: 100% professionalism at lowest cost.

NEW MODEL 610A ADAPTER — Wired only \$15.95 TESTS ALL THE NEW TUBES

■ An eight socket unit that instantly modernizes your EICO Tube Tester for (Models 625, 666). Testing these new tube types: 10 Pin Min, 12 Pin Compactron, 5 and 7 Pin Nuvisor, 9 Pin Novar, 10 Pin Decal, 9 Pin Magnoval, 2 Pin Special Rectifier.

■ The handy flexible cable plug is simply inserted into the existing 9 pin socket of your EICO Tube Tester. Attach the testers grid cap to the adapter and the unit is ready to operate.

■ No switching is necessary. For Compactrons, simply rotate the tube as directed in the tube data manual.

615 TUBE TESTER ADAPTER Kit \$5.95 Wired \$11.95

Adapts EICO Models 628 and 667 tube testers for testing 4, 5, 6 or 7 pin tubes (older types), for which test sockets are not provided in those models.

MODEL CRU-TV PICTURE TUBE ADAPTER Wired only \$9.95

For testing color, black and white picture tubes with #667 and #628 tube testers. Includes 1-7 pin, 1-8 pin, 1-12 pin and 1-14 pin large CRT socket adaptors and cable.

NEW EICO 685 TRANSISTOR ANALYZER

IN AND OUT OF CIRCUIT DYNAMIC SEMICONDUCTOR
AND CIRCUIT AC ANALYZER



3 instruments in one! Nobody but Eico makes the troubleshooting of solid state equipment so quick, easy, versatile and precise for the professional electronics technician and engineer—and at such low cost!

- Performs the 4 basic tests on all types of FETs including pinch-off.
- Performs the 3 basic tests on all types of bipolar transistors.
- Tests for true transconductance and AC Beta, in and out of circuit.
- Tests all types of diodes and measures zener voltage.
- Tests SCRs, TRIACs, and UJTs.
- Incorporates easy-to-use DC Voltmeter and Ohmmeter.
- 50 uA taut band meter movement.

Kit \$99.95 Wired \$149.95

Nothing is left to "chance" or "guess." The 685 helps you bring to light everything you need to know for the swift location and diagnosis of any faults, whether they are semiconductor, resistive or voltage in nature. And you can say goodbye to the old-fashioned clumsy, destructive tasks of unsoldering three or four transistor leads from the printed circuit board!

In and out of circuit, the 685's multiple tests on bipolar transistors include an AC beta test with accurate readings from 2 to 1,000 on power and small signal devices, and from 2 to 100 on RF transistors. I_{CBO} and I_{CEO} measurements are easily read on the accurate compressed scale. Besides the 0-50,000 micromhos AC transconductance readings, I_{DSS} , I_{GSS} and pinch-off voltage readings on FETs are quickly made. With equal ease and precision, you can check the new enhancement and depletion devices. On the front panel you can easily read zener diode breakdown voltage and SCR gate turn-on voltage.

The ohmmeter-voltmeter meter scale has been uniquely compressed so that low values of R and V are read over a longer length of scale than are higher values. This provides accuracy where it is most needed plus the convenience of a single scale reading for all values of R and V.

SPECIFICATIONS:

Bipolar transistor tests: AC Beta (in and out of circuit) 2-100 (readings to 1000) at $I_C=0.2$ ma for RF devices, 2-100 and 2-1000 (readings to 1000 and 10,000 respectively) at $I_C=2$ ma for small signal devices, 2-100 and 2-1000 (readings to 1000 and 10,000 respectively) at $I_C=20$ ma for power devices; I_{CBO} 0-5 ma (30 μA center scale); I_{CEO} 0-5 ma (30 μA center scale); I_{CES} 0-5 ma (30 μA center scale). **FET tests:** AC trans-conductance (in and out of circuit) 0-5000 and 0-50,000 micromhos at $V_{DS}=5V$ and $V_{GS}=0$; I_{DSS} 0-50 ma linear scale; I_{GSS} 0-5 ma; V_p 0-20 volts at $V_{DS}=5V$. **UJT:** Determine condition of device. **SCR and Triodes:** Turn-on voltage (can measure turn-on current using external resistor and meter); Determine condition of device. **Signal Diodes and Rectifiers:** Determine condition of device from forward and reverse current tests. **Zener Diode:** 0-20 volts. **Voltmeter:** 0-500 volts (30 volts center scale), 1 Megohm resistance. **Ohmmeter:** 400 Ω to 10 M Ω (140 K Ω center scale). **Semiconductors:** 2-2N5172, 1-1N3600 (selected), 1-1N662, 2-1N34, 5-100 PIV, 500 ma rectifiers, 1-6.8 volt zener, 1-9.1 volt zener, 1-24 volt zener. **Meter Movement:** 50 μA , 2% Taut Band. **Power Requirements:** Domestic—120 VAC, 50/60 Hz, 10 watts; Export—115 VAC and 230 VAC, 50/60 Hz, 10 watts; Size (HWD): 12 1/2" x 8 1/2" x 6" Weight: 10 lbs.



EICO 680 TRANSISTOR & CIRCUIT TESTER

- Measures transistor ICBO, ICEO, DC Beta
- 20 K Ω /V VOM for testing transistor circuits
- Simple criteria for all tests in manual; no charts are needed

Kit \$39.95 Wired \$54.95

IMPORTANT FEATURES: ICBO (collector-base leakage current) and ICEO (collector-emitter leakage current) are measured accurately on microammeter ranges with sensitivity to 50 μ A full scale. Separate test positions are provided for signal and power transistors.

DC beta for signal transistors given directly by reading base current on a reciprocal scale (multiplied by appropriate range factor) to establish standard 1mA collector current indexed on scale. DC beta for power transistors can be approximated by calculating ratio of ICBO to ICEO.

AC Beta for signal transistors determined by reading base current settings required to establish two standard collector current, 0.75mA and 1.25mA, indexed on the scale (500 μ A shift). AC beta is obtained by dividing 500 by the base current difference in μ A, or referral to a chart in the manual which gives the result without calculation.

Quality of selenium rectifiers, germanium and silicon diodes determined by measurement of forward and reverse currents. Beta calibrate/zero ohms adjust also prolongs useful life of batteries.

SPECIFICATIONS

DC CURRENT ICBO/ICEO RANGES: 50 μ A, 500 μ A, 5mA, 50mA, 500mA. DC VOLT RANGES: 5V, 50V. RESISTANCE RANGES: Rx1 (0 to 2K Ω , 12 Ω center scale), Rx100 (0-200K Ω , 1200 Ω center scale), Rx10K (0 to 20M Ω , 120K Ω center scale). TRANSISTOR DC BETA RANGES: 2 to 30, 20 to 300. ACCURACY: $\pm$ 3% F.S.D. CONNECTORS: Three permanently connected clip-on test leads (C, B, E) or a panel socket for transistor connectors; two banana jacks for VOM test leads. CONTROLS: RANGE switch, MODE switch (NPN, PNP, VOM), TEST switch (ICBO, ICEO, PWR ICBO, PWR ICEO, B CAL, READ B), B CAL/O Ω adjust control. BATTERIES: 4 size AA, 1 size C. SIZE (HWD): 6 $\frac{3}{4}$ " x 5 $\frac{1}{4}$ " x 3". WEIGHT: 3 lbs. Less VOM leads.

EICO HVP-5 HIGH VOLTAGE PROBE WITH BUILT-IN METER

**Wired only
\$22.95**



Measurements up to 30,000 volts may be executed safely using the **EICO Model HVP-5 High Voltage Probe**. The built-in voltmeter is an essential convenience precluding the need of additional bulky equipment for performing checks on potentials of up to 30 kilovolts. Barriers are provided to isolate the high voltage tip from the probe handle and meter. The **HVP-5** has been designed in a modern, attractive package. The light weight and compact construction makes this probe a must for the TV serviceman as well as for any other technician and engineer requiring accurate and rapid high voltage measurements.



EICO 443 TRANSISTOR-DIODE CURVE TRACER

- Makes it possible for most general purpose oscilloscope to display direct readouts of the most meaningful data.

Kit \$99.95 Wired \$149.95

Diodes, rectifiers, signal and power transistor characteristics can be tested by the versatile Model 443 curve tracer. Circuit designers and service technicians will find it invaluable for determining the DC characteristics of a wide variety of silicon and germanium semiconductors. The output of the 443 can be displayed on most general-purpose oscilloscopes. Diode and rectifier characteristics that can be tested include Forward voltage (V), Forward current (I), Reverse current (I_r), and Peak Inverse Voltage (PIV). The PIV test voltage is variable from 0 to 1400 V. Transistor tests include those for h_{FE}, h_{OE}, I_{CEO}, V_{CE}(sat), and BV_{CEO}.

Other significant features of the Model 443 are:

- All silicon solid state printed-circuit construction
- Dual transformers for isolation and safety
- Flashing light indicates high voltage at diode test terminals
- Matching switch for comparing and matching transistors
- Direct-reading beta controls on front panel
- Built-in oscilloscope voltage calibrators
- Terminals for connecting external test sockets

SPECIFICATIONS:

TRANSISTOR TESTS: Beta (h_{FE}) displays family of 3 curves NPN/PNP: Signal Transistors (h_{FE}) at V_{CE}=10 volts I_c=12 MA.: Power Transistors (h_{FE}) at V_{CE}=10 volts I_c=1 amp.

DIODE/RECTIFIER TESTS: Peak Inverse Voltage (PIV) 5 Ranges - 1/10/50/100/200 Volts Per Division. Variable 0-1400 Volts Maximum. Reverse Current (I_r) - 3 Ranges - 1/10/100 microamps per division. Forward Current (I_f) - 2 Ranges - 10/100 milliamps per division - 1 amp maximum. POWER REQUIREMENTS: 117 VAC 6 Watts. SIZE (HWD): 3" x 11 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ ". WEIGHT: 10 lbs. U.L. APPROVED 3 wire grounded line cord.

EICO 944 FLYBACK TRANSFORMER & YOKE TESTER

Kit \$29.95 Wired \$44.95

Now you can make one of the most difficult TV servicing jobs a breeze. Here's fast, positive testing of flybacks and yokes, in or out of the set at lowest cost!

The 944 Flyback Transformer & Yoke Tester gives you positive checks on flybacks and yokes in seconds. Operation is on the extremely sensitive griddip principle, which shows up even one shorted turn! Exclusive separate calibration for air-core and iron-core flyback and yokes assures accuracy. The large easy-to-read 4 $\frac{1}{2}$ " meter has three separate colored scales. Continuity of coils, speakers, switches can also be checked. Size: 7" x 5" x 4" Weight: 5 lbs.



New Solid State Signal Generators

New Signal Tracer

EICO 379 Solid State Sine/Square Wave Generator

Here is a truly professional solid-state signal generator that provides simultaneous sine and square-wave outputs. Its wide frequency range makes it perfect for testing all types of high-fidelity as well as sonar equipment.

The wide-range Model 379 covers 20 Hz to 2 MHz in five bands. Its low-distortion Sulzer feedback circuit using an FET, provides clean signals over the entire frequency range for all types of testing. Since coverage is continuous, this generator is excellent for evaluating speaker systems.

The sinusoidal output voltage can be varied from zero to 7.5 Volts when driving a high-impedance load and up to 6.5 Volts when driving a 600-ohm load. Careful circuit design keeps variation in output level within ± 1 db on the four lowest bands and within ± 2 db on the high band. Although the distortion is specified as 0.25%, it is actually less than 0.1% over much of the audio spectrum. Simultaneously with the sine wave signals appearing at one pair of output terminals, excellent square waves of identical frequency appear at a second pair.

The square-wave output covers a range from 20 Hz to 200 kHz — only one decade less than the range covered by the sine-wave output. Output at the square-wave terminals can be varied from zero to 10 Volts peak-to-peak. Square-wave rise time is better than 0.1 microsecond at 20 kHz. You'll find this rise time far more than adequate for professional square-wave testing of the finest high-fidelity systems.

SPECIFICATIONS: FREQUENCY RANGE: sine wave — 20 Hz to 2 MHz, square-wave — 20 Hz to 200 kHz; OUTPUT VOLTAGE: sine wave — 0-7.5 volts rms into high impedance output, 0-6.5 volts into 600 ohms; square-wave — 0-10 volts peak-to-peak into high impedance, positive direction with zero ground; CALIBRATION ACCURACY: — 3% except for 5% 20 Hz to 100 Hz and 1 MHz to 2 MHz; MAXIMUM DISTORTION ACROSS AUDIO RANGE: 0.25%; RISE TIME AT 20 KHz: less than 0.1 microseconds; POWER REQUIREMENTS: 105-132 volts; 50/60 Hz AC, 10 VA; SIZE: (HWD) 7½" x 8½" x 8½"; WEIGHT: 9 lbs.



KIT \$69.95
WIRED \$94.50

EICO 330 Solid State RF Signal Generator

This wide-range solid-state RF signal generator is an invaluable tool for aligning television sets, AM and FM radios and other types of communications equipment.

A precision vernier control allows you to set r-f frequencies accurately and easily. The range from 100 kHz to 54 MHz is covered in five fundamental bands. Coarse and fine level controls assure accurate setting of both the modulated and unmodulated RF output.

A low distortion 400 Hz is generated by a parallel "T" feedback circuit around a low-noise transistor. This signal is available at the front panel for testing audio equipment and the audio section of a radio or TV set. The audio signal is also used to modulate all RF frequencies generated by the Model 330. A modulation level control on the front panel lets you set the percentage modulation up to 100%. An input is also provided for modulation from an external source.

All functions are chosen with the Signal Selector switch. You can conveniently pick the required radio frequency signal by simply placing this switch in the applicable position.

The Model 330 signal generator provided exceptionally good waveforms for both modulated and unmodulated RF signals. You'll find the Model 330 an indispensable aid anywhere that you need a clean modulated or unmodulated RF signal.

SPECIFICATIONS: RF FUNDAMENTAL FREQUENCIES: 100 kHz to 54 MHz in 5 bands; OUTPUT: more than 300,000 microvolts into 50 ohm load; RF COARSE ATTENUATION: three steps; RF FINE ATTENUATION: 0 to 100%; INTERNAL MODULATION: approximately 400 Hz from 0 to 100%; POWER REQUIREMENTS: 105 to 132 volts, 50/60 Hz AC, 1.7 VA; SIZE: (HWD) 7½" x 8½" x 5"; WEIGHT: 5 lbs.



KIT \$62.95
WIRED \$94.95

EICO 150 Solid State Signal Tracer

Here is a real "every-day" professional aid to convenient and rapid trouble-shooting of both solid-state and vacuum tube equipment. This multipurpose RF and audio signal tracer provides everything you need to track down defects in AM, FM, and TV receivers as well as in high fidelity and public address systems. You can easily and rapidly locate the defective sections in any audio or RF equipment.

Two shielded probes are used for fast signal tracing of both RF and audio circuits. A high input impedance bootstrapped emitter follower amplifier makes loading on the equipment under test completely negligible. The amplifier is a high-gain, low noise, low distortion unit that delivers a clean 400 mW to a high-efficiency 8-ohm speaker.

Both speaker and meter output indicators are provided. Thus, you can judge the quality of the equipment under test audibly on the built-in speaker as well as visually on the meter. The meter can also be used to compare accurately several different signal levels. The output can also be checked using an external load and oscilloscope.

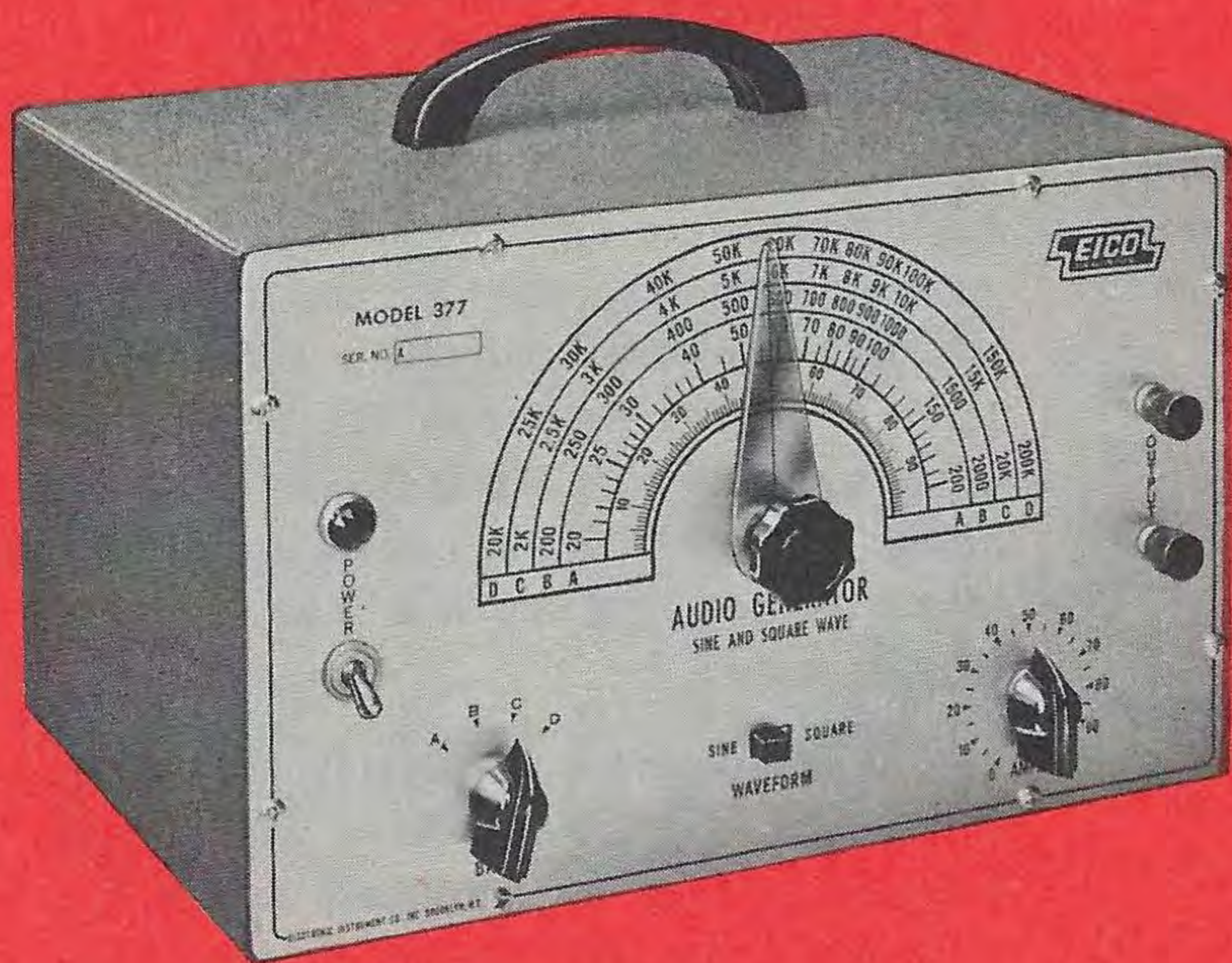
The Model 150 also provides a substitution output transformer and speaker. The output transformer can be substituted for a questionable one in any vacuum-tube or transistor amplifier. Similarly, the 8-ohm speaker, mounted on the front panel of the Model 150 may be used as a substitute for a suspected defective one in the equipment under test.

SPECIFICATIONS: OUTPUT: 400 mw; INPUT FOR RATED OUTPUT: RF — 1 mv, audio — 63 mv; HUM: better than 60 db below 400 mv; METER: 200 microamp movement; POWER REQUIREMENTS: 105 — 132 volts, AC, 50/60 Hz, 5 VA; SIZE: (HWD) 7½" x 8½" x 5"; WEIGHT: 6 lbs.



KIT \$49.95
WIRED \$79.95

OUTSTANDING SIGNAL GENERATING INSTRUMENTS



- High design standards maintained by costlier components
- R-C (Wien Bridge) oscillator circuit with 1% precision resistors
- Excellent calibration accuracy, stability and purity of waveform

EICO 377 SINE & SQUARE WAVE GENERATOR

Kit \$49.95 Wired \$64.95

The EICO 377 is expressly designed to fill the test instrument needs of the audio engineer, high-fidelity enthusiast and the radio-TV Serviceman. Its many modern features and its advanced circuitry and design make it particularly suitable for electro-acoustic experimentation, development work, as well as for TV service and wide-band amplifier work.

The 377 is another EICO exclusive instrument achievement. It is the equal in quality of separate professional sine and square wave generators each costing more than the 377 alone! Among its outstanding features, the 377 includes choke filtering in the power supply to minimize the hum level and high power output over a wide range of loads, coupled with constant output over a wide frequency range. These and the many other features of the 377 allow it to be used for a multitude of applications including amplifier testing and design, determining radio receiver fidelity and loudspeaker response, square wave testing of TV receivers, development of filter or compensating circuits and frequency measurements in conjunction with an oscilloscope such as the EICO 435.

SPECIFICATIONS

FREQUENCY RANGE: Sine wave, 20-200,000 cps in 4 bands. Square wave, 60-30,000 cps. (5% tilt at 60 cps, 5% rounding at 30,000 cps.) CALIBRATION ACCURACY: $\pm 3\%$ or 1 cps, whichever is greater. OUTPUT VOLTAGE: 10 V across 1000 ohms rated (100 milliwatts); drops to 8 V across 500 ohms, rises to 14 V across 10,000 ohms or higher. DISTORTION: Less than 1%. HUM: Less than 0.4% of rated output. TUBE COMPLEMENT: 2-6K6, 1-6SN7, 1-6SJ7, 1-6X5, and 1-3S6 3-watt lamp. POWER REQUIREMENTS: 117 VAC, 60 cps, 50 watts. SIZE (HWD): 7 $\frac{1}{8}$ " x 11 $\frac{1}{8}$ " x 7 $\frac{1}{8}$ ". WEIGHT: 13 lbs.

★ Export Model available



- Switch selectable frequency output
- One cycle to 110kc
- Attenuated output in 8 steps
- Metered output voltage
- Excellent frequency resettability

EICO 378 AUDIO GENERATOR

Kit \$69.95 Wired \$99.95

Especially designed for today's needs for more precision, versatility and reliability in audio signaling and testing.

Extreme versatility and positive error elimination are now yours for: testing audio amplifiers for gain and frequency response, as a signal source for various bridge measuring circuits, for modulation of RF signal generators, or any other application where a stable, accurate audio sine wave must be used. Based on a highly reliable circuit, the 378 produces a very low distortion sine wave signal over a very wide range of frequencies. Unlike most other audio generators that require interpretation of a dial setting with possible error, the frequency-determining elements of the 378 are not continuously variable; rather they are set by **positive-setting detent** switches that select combinations of 1% resistors and 2% capacitors which comprise the frequency-selecting network. This results in a precisely metered output controlled by 8-position decade and fine attenuators, fantastically low distortion and highly **accurate, repeatable switch-selected** frequencies from 1 cps to 110kc. The output level of this instrument can be set with great precision between 0 and 10 volts RMS (or between -70 and +22db) on a 4 $\frac{1}{2}$ -inch, 2% full-scale accuracy meter. Below 1 volt RMS output, the instrument is provided with a switch-selected internal 600 ohm load that can be disconnected as desired. All this in a man-sized instrument with well-spaced controls and a big 4 $\frac{1}{2}$ inch meter easy-to-read at normal working distance — a bench workhorse that takes you speedily through all your audio work without waste motion and annoying uncertainty. A bargain — pays for itself in the first job! For a complete audio test lab, team it up with the EICO 902 IM/HARMONIC DISTORTION METER.

SPECIFICATIONS

Switch selectable frequency output from cycles to kilocycles: one cycle steps (1-110 cps); 10 cycles steps (10-1100 cps); 100 cycles steps (100 cps-1.1kc); 1kc steps (1kc to 110kc); FREQUENCY ACCURACY: $\pm 5\%$. DISTORTION: Less than 0.1%, 20 cps-20kc. OUTPUT VOLTAGE RANGES: 0-3, 10V into hi-Z (10K min.); 0-003, .01, .03, .1, .3, 1V into ext. or internal 600 Ω load. OUTPUT METER ACCURACY: $\pm 5\%$ of full scale. POWER REQUIREMENTS: 120V, 50/60 cps, 40 watts. SIZE (HWD): 8 $\frac{1}{2}$ " x 12 $\frac{1}{2}$ " x 9". WEIGHT: 16 lbs.

NEW! EICO PSI-1 Solid-State Signal Injector Probe

Kit \$5.95 Wired \$9.95



- Pen-size, one-ounce, self-powered, self-contained signal generator covers 1,000 Hz with harmonics to 30 MHz. Perfect for on-the-spot signal tracing in the field.
- Helps trouble-shoot audio, IF & RF circuitry in any electronic equipment, transistorized or vacuum tube.

If you use the time-honored principles of signal tracing as a trouble-shooting technique, you'll appreciate how convenient and versatile the new EICO PSI-1 is. Now you can have a signal generator on your person wherever you go. No line cord, no bulk, no fumbling with probes. Just press a button — the PSI-1's transistor oscillator emits a strong harmonics-rich signal. You control the volume by varying the inductive coupling (distance) to the device under test; or you can inject directly by means of the pointed probe tip. **Use it once — you'll never want to be without it!**

SPECIFICATIONS

FREQUENCY: 1KHz approximately with harmonics to 30MHz. OUTPUT VOLTAGE: 50 volts peak-to-peak approximately, open circuit. OUTPUT IMPEDANCE: 10K ohm capacitive. INPUT DC VOLTAGE: 600 volts max. from output tip to case ground. POWER SOURCE: Two 1.5V batteries (Burgess No. NE, Eveready No. 912 or equivalent). SIZE: 5 $\frac{1}{8}$ " long x $\frac{1}{2}$ " O.D. WEIGHT: One ounce.

FOR COLOR AND BLACK & WHITE TV SERVICING

EICO 324 RF SIGNAL GENERATOR

Kit \$39.95 Wired \$54.95

Use it for color or B & W TV, AM/FM radio and communication gear alignment and signal tracing, or wherever a modulated or unmodulated RF signal from 150 kHz to 435 MHz is required.

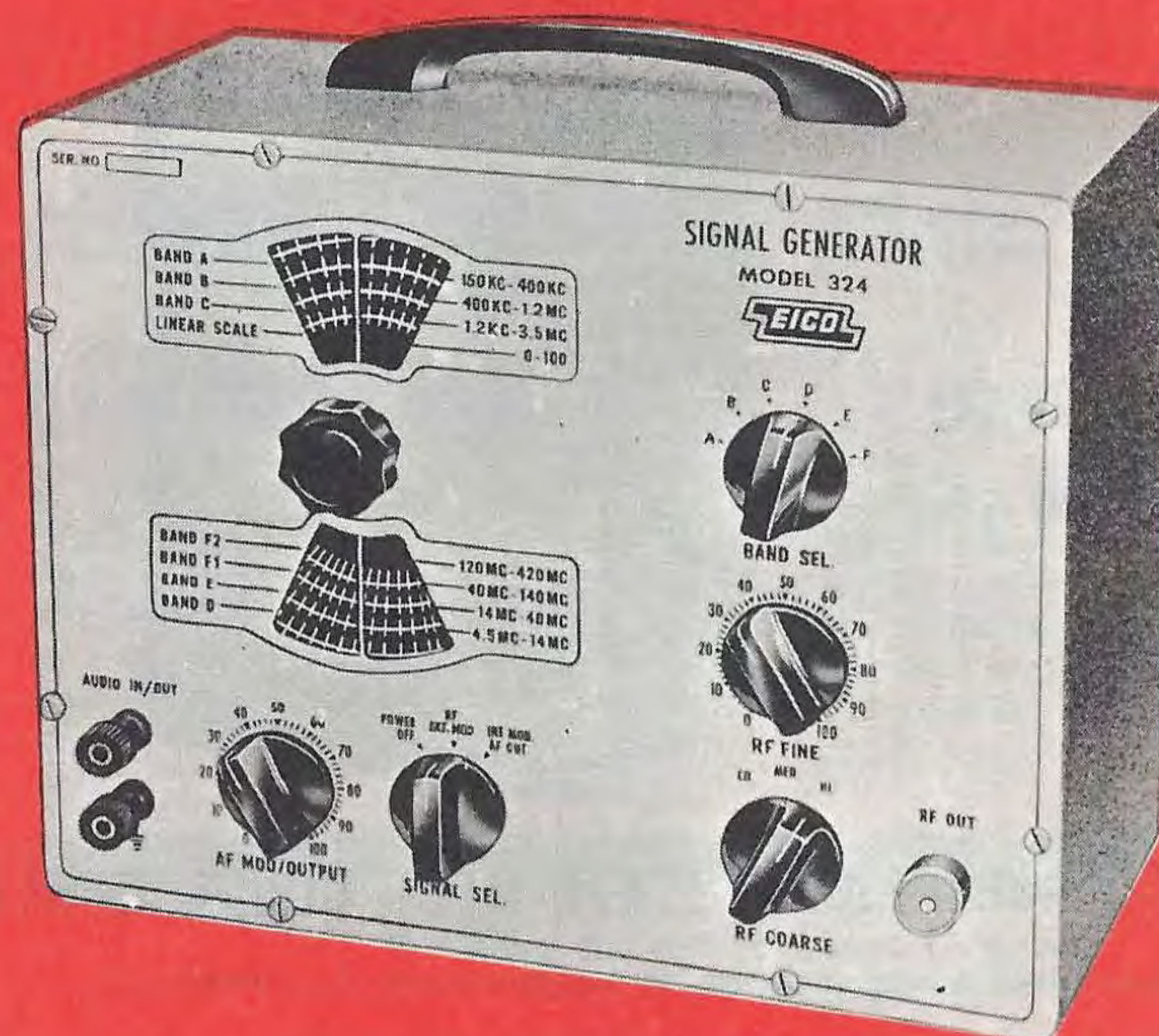
The excellent waveform provided by the RF oscillator is properly plate-modulated by a cathode follower. Modulation may be internal or external. The internal 400 Hz modulating signal is available separately. In the external modulation function, a stage of audio amplification is provided for the modulating signal, permitting up to 30% modulation from a 3-volt audio source. Percentage modulation by either the internal or an external source, as well as the separate audio output, is adjustable by a single panel control. Coarse and fine RF attenuators provide smooth control of the RF output signal.

Six tuning bands are employed to cover the fundamental frequency range from 150 kHz to 145 MHz. Calibration of the third harmonic of the highest fundamental provides the seventh tuning band from 111 mc to 435 MHz. The 6 to 1 vernier tuning dial permits exact setting of the output frequency.

Important construction points include the use of turret mounted, slug-tuned coils for maximum accuracy, copperplated chassis for minimized interference, line filters, shielded RF output cable and jack-top binding posts for audio in/out connections. Tubes: 12AU7, 12 AV7.

SPECIFICATIONS: RF OUTPUT FREQUENCY RANGE: 150 kHz to 145 MHz on fundamentals in 6 bands, 111 MHz to 435 MHz on calibrated harmonics. TUNING DIAL CALIBRATION ACCURACY: +1.5%. RF COARSE ATTENUATION: In two steps, each approximately 20 db. RF FINE ATTENUATION: Continuous 0 to max. INTERNAL AF MODULATING FREQUENCY: Approx. 400 Hz POWER REQUIREMENTS: 117, VAC, 60 Hz, 8 watts. SIZE (HWD): 8" x 10" x 4 3/4". WEIGHT: 8 lbs.

*Export Model available



- 150 kHz-435 MHz in 7 bands with +1.5% scale accuracy
- Variable int./ext. modulation, coarse and fine RF attenuators

EICO 369 TV-FM SWEEP & MARKER GENERATOR

Kit \$119.95 Wired \$169.95

The finest of all TV/FM Sweep Alignment Generators, the new EICO 369 has unequalled design features including controllable inductor sweep, variable and crystal marker oscillators, as well as a built-in post injection marker-adder. Provides the easiest, fastest visual alignment of color or black-and-white TV and FM receiver RF and IF circuits. Use it with a fine wide-band scope such as the EICO 435, 460, or 465.

The controllable inductor sweep circuit in the Model 369 is purely electronic and has no mechanical parts to wear and give trouble later. Five fundamental sweep ranges are provided from 3-220 MHz, with a 6:1 vernier dial for ease of operation. Retrace blanking and a 3-stage AGC circuit keep the amplitude of the swept signal constant.

The variable marker generator in the Model 369 has 4 ranges covering 2-225 MHz (to 75 MHz on fundamentals), with a 6:1 vernier dial to allow you to set the frequency accurately. A crystal marker oscillator is also provided that can be used to calibrate your variable marker dial. A 4.5 MHz crystal is supplied for TV sound alignment.

With the EICO 369, circuit response is not affected by markers, and markers are not affected by circuit response. Separate level controls for trace size and marker size on the front panel can be used independently. Tubes: 12AU7, 6BQ7A, 12AX7, 6DR7, 12AT7 and 6X4.

SPECIFICATIONS: SWEEP OSCILLATOR: Five fundamental sweep ranges 3-7.5 MHz, 6-16 MHz, 36-95 MHz and 75-220 MHz. Output levels controlled by four-step decade and continuous attenuators. Output impedance 50 ohms. SWEEP WIDTH: Continuous up to 20 MHz depending on range. PHASING: Narrow-range phasing control permits permanent adjustment of horizontal deflection signal for accurate alignment. MARKER OSCILLATOR: Fundamental ranges are 2-6 MHz, 6-20 MHz, 20-75 MHz, calibrated harmonic range 60-225 MHz. CRYSTAL MARKER OSCILLATOR: Uses 4.5 MHz crystal supplied. Crystal socket on panel permits higher or lower frequency crystals to be used. Automatically activated by insertion of crystal. Crystal marker is internally mixed with variable frequency marker. CABLES: RF output (50Ω termination), Demodulator Signal Cable (incorporating low-pass filter), Scope Cable (dual shielded cable carrying both vertical and horizontal scope input leads). POWER REQUIREMENTS: 117 VAC, 50 watts, 60 Hz. SIZE (HWD): 8 1/2" x 12 1/2" x 7". WEIGHT: 17 lbs.

*Export Model available



- Both variable and crystal marker oscillators
- Post injection marker circuit • supplied with cables

EICO PST-2 SIGNAL TRACER PROBE

The EICO Model PST-2 is a versatile Signal Tracer built into a small flashlight-size probe.

The range can be extended to 200 MHz with the demodulator probe tip. Overload is avoided by use of two attenuator probe tips. A sensitive plug earphone at the output is used to compare different signal levels, determine the level of distortion, and observe the general quality of the equipment under test.

SPECIFICATIONS: Gain: approximately 3000 at 1 kHz; Useable bandwidth: 50 Hz to 200 MHz; Input Impedance: 3500 ohms to 350,000 ohms. Output: 0.3 peak-to-peak volts; Noise level: -45 db; Distortion: Better than 5%; Probe and Probe Tips Supplied: 0 db, -20 db, -40 db and crystal demodulator; Power: 1-Size AA battery, 6 3/8" L. x 5/8" D. Weight: 2.2 oz.



Kit \$19.95 Wired \$29.95

- Complete with 3 probe tips & plastic pouch.

GREAT VALUES IN COLOR AND B&W TV SERVICE GENERATORS

\$225.00
Wired only



EICO 380A SOLID STATE NTSC COLOR GENERATOR

- Swing-out circuit boards for compactness & accessibility
- Rock-stable performance with 3 crystal oscillators

Compact, inherently rugged solid-state color signal and dot-bar generator. The only transistorized model providing completely standard, fully saturated NTSC color signals, including both chrominance and luminance signals exactly as specified. Color burst is precisely gated and delayed to N.T.S.C. standards. Phase angles for all colors are permanently established according to N.T.S.C. standards.

The design of the 380 assures the professional service engineer that apparent set trouble is not caused by a non-standard test signal. In addition to generating 11 different color signals, one at a time, for hue and demodulator adjustments, the Model 380 generates dots, crosshatch, horizontal lines, and vertical lines for convergence and linearity adjustments. Both a video output and an RF output, permitting direct connection to the antenna terminals of the TV set, are provided, with separate video and RF gain controls. Permits checks of hue and sync at different signal levels. Three crystal-controlled oscillators are employed for precise color burst and color information, convergence and sync signals free of jitter or crawl, and RF output on TV Channel 3.

SPECIFICATIONS

RF OUTPUT: 0-50,000 μ V into 300 Ω (62.25 Mc crystal controlled for TV Channel 3). VIDEO OUTPUT: Both positive and negative polarities, 0-10 d-d into 4.7 K Ω . NTSC COLORS PROVIDED:

COLORS	PHASE ANGLE (Degrees)	LUMINANCE LEVEL (VOLTS)
Yellow	12.5	0.89
I	57.0	0.54
Red	76.6	0.30
R-Y	90.0	0.34
Magenta	119.2	0.41
Q	147.0	0.27
B-Y	180.0	0.16
Blue	192.9	0.11
Cyan	256.6	0.70
Green	299.2	0.59
White		1.00

HORIZONTAL LINES: 13 (variable thickness) for vertical linearity and horizontal convergence adjustments. VERTICAL LINES: 10 (variable thickness) for horizontal linearity and vertical convergence adjustments. CROSSHATCH: 13 horizontal and 10 vertical lines for vertical and horizontal linearity, horizontal and vertical convergence adjustments. DOTS: 130 (variable size) for static and dynamic convergence adjustments. POWER REQUIREMENTS: 117VAC, 60 cps. SIZE (HWD): 8 1/2" x 5 3/4" x 6 3/8". WEIGHT: 8 lbs.

EICO 342 FM MULTIPLEX SIGNAL GENERATOR

Wired only, \$175.00



The 342 is essential in the test and alignment of multiplex circuits of stereo tuners, receivers and radios. With it, you can measure and adjust channel separation and balance, and check for the input level need for switch-over to stereo operation. It provides a composite audio output for direct injection into the multiplex section, as well as a signal modulating an FM RF carries with controlled deviation up to 75 kHz, for connection directly to the antenna terminals. Amplifiers for a stereo source permit FM MULTIPLEX STEREO demonstrations to customers.

'COLORMATE'



EICO 385 SOLID STATE COLOR BAR GENERATOR

- Completely portable, battery-operated solid state design
- Feeds directly to TV antenna terminals

The value leader — professionalism at lowest cost — only from EICO. Versatile "go-everywhere," 5-function solid state color generator in tote-easy, battery-portable/storage case. Advanced computer-type circuitry provides serviceman-minded advantages. 3 temperature-compensated crystal oscillators on one double-sided pc board for drift-free stability, and easy accessibility. Versatile color-coded gun killers in unique socket-adaptor assembly (no more fumbling!), store right in the case. Clips directly to TV antenna terminals (fast and sure!). Generates standard offset carrier type stable 10-bar display plus precision dots, crosshatch, and individual series of V&H lines. Low-drain operation on 6 "C" cells (not supplied) or with optional AC adapter/trickle charger. 13 transistors, 6 diodes, 3 crystals. Unusually small: 2 1/2"H, 8 1/2"W, 8 3/8"D; and light: 7 lbs. **Everything you need to do a fast, reliable job — and you save money too.**

Easy-to-assemble kit: \$69.95 Wired \$99.95



SOCKET-TYPE GUN KILLERS, WHICH STORE IN THE CASE, ALLOW ONE COLOR OR ANY COMBINATION OF TWO OR MORE COLORS TO BE ELIMINATED FROM THE DISPLAY ON THE PICTURE TUBE.

SPECIFICATIONS

SEPARATION: 40 db 200 Hz to 10 kHz; 30 db 50 Hz to 15 kHz. CARRIER SUPPRESSION: 40 db. COMPOSITE SIGNAL OUTPUT: 0-8 V p-p, continuously variable; output impedance 1.5 Ω . INTERNAL MODULATION: 1 kc; THD: less than 0.3%. EXTERNAL MODULATION OSCILLATOR REQUIREMENTS: 1 V RMS input for maximum output; input impedance 10K Ω . STEREO SOURCE MODULATION REQUIREMENTS: 1 V RMS input each channel for maximum output; input impedance 1M Ω . FM pre-emphasis provided. FM MULTIPLEX RF OUTPUT: 200 mv; output impedance 50 Ω . DEVIATION CONTROL: to $\pm$ 75 kHz. PILOT FREQUENCY: 19 kHz $\pm$ 2 cps (crystal controlled); adjustable phase $\pm$ 45° adjustable amplitude 0-15%. Pilot may be switched off. SIGNAL SELECTION: L+R, L-R, L only, R only, 19 kHz pilot only or stereo source FREQUENCY RESPONSE: $\pm$ 1 db 40 Hz — 15 kHz. TOTAL HARMONIC DISTORTION: Under 1% OSCILLOSCOPE SYNC SIGNALS: Switch select internal 1 kc or external oscillator or 19 kc pilot. POWER: 117 VAC, 50/60 cps. SIZE (HWD): 8 1/2" x 5 3/4" x 12 1/2". WEIGHT: 10 lbs.

VOM Convenience PLUS VTVM Accuracy.

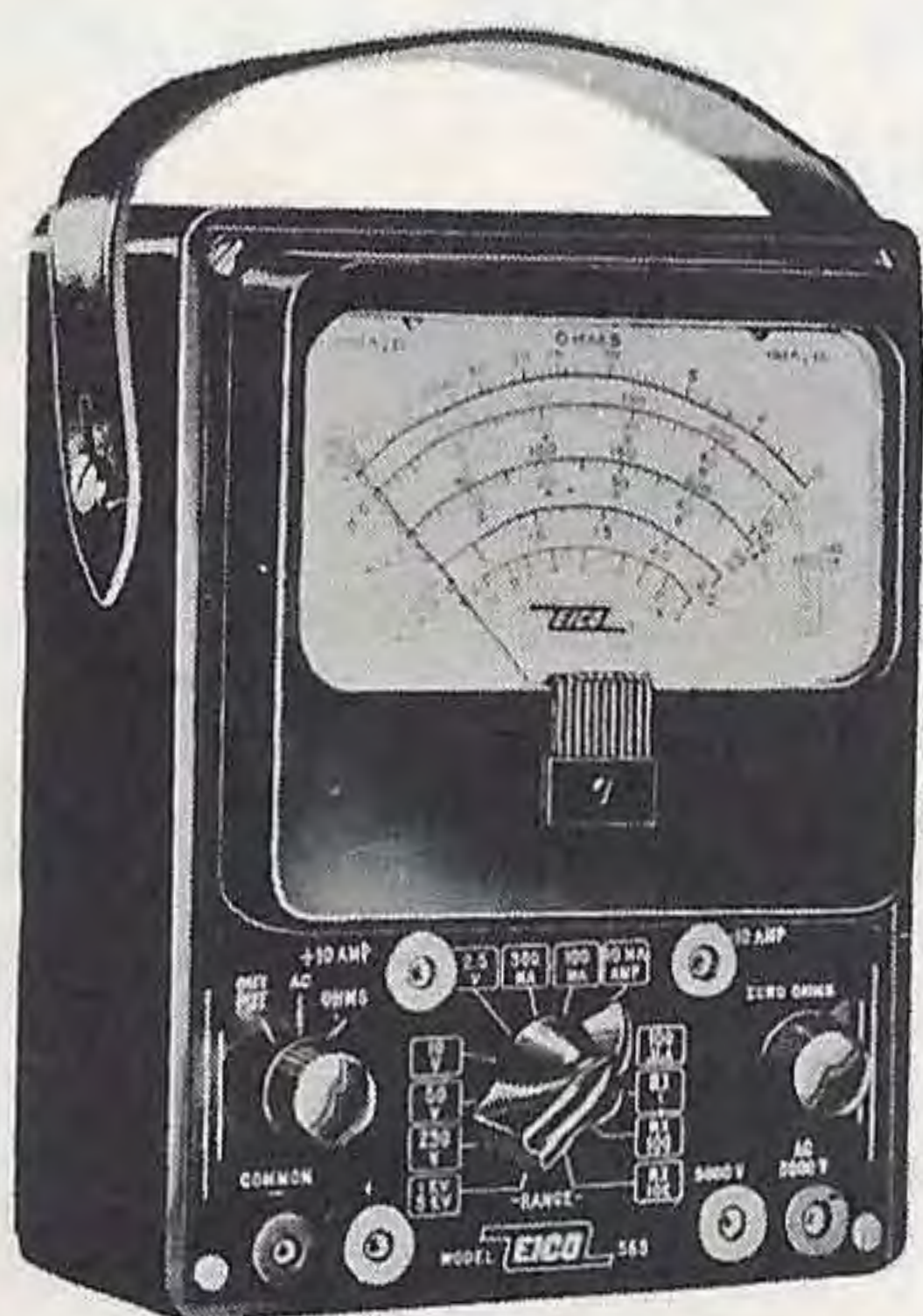
NEW EICO 230 SOLID STATE FET-TVOM Wired only \$49.95

- Battery operated
- 11 Megohm input impedance on dc, 1 Megohm on ac
- Measured Peak-to-peak ac voltages
- Large 4½" wide meter with mirror scale
- Battery check position on switch

The EICO Model 230 is small enough to take along with you on any service call yet has all the characteristics of a VTVM. This field effect transistor TVOM is powered by batteries. There are 18 useful ranges; 17 are selected by one switch. It surpasses most VTVMs by providing three important dc milliammeter ranges and a 0.3

volt dc range. Can be used with EICO high voltage, rf, etc. probes. Complete with batteries, leads and instruction manual.

SPECIFICATIONS—dc volts: 0 to 0.3, 1.2, 12, 30, 120, 300, 1200 volts, 11 Megohms; ac volts, rms: 0 to 3, 30, 120, 300 volts, 1 Megohm; ac volts, peak-to-peak: 8, 80, 320, 800 volts; Resistance: 0-2K, 200K, 20M, 2000MΩ; db: -20 to +51 db; Batteries: 1-1.5 volt AA cell, 1-9 volt Burgess 2U6 or equivalent (supplied); Size (HWD): 4½" x 5½" x 2½"; Weight: 1 lb. 2 oz.; Accessories: 1 pair test leads.



SLC-1
optional
case
\$5.95

- 20,000 ohms per volt sensitivity
- 31 range, 50-μv movement

EICO 565 V-O-M

Kit \$25.95 : Wired \$34.95

The 565 volt-ohm meter is the famous performance-proven EICO multimeter design with world-wide recognition for excellence in laboratory and field work. Complete battery operation makes it ideal for portable applications, field work and remote locations.

Measurements can be made of AC and DC voltage, DC current, resistance and decibels. Circuitry, ranges and physical layout have been carefully designed with the service man in mind for convenience, speed and ease of operation. Factory adjusted wire-wound potentiometers compensate for individual rectifier characteristics to assure accurate measurements. An output voltage range on

the 565 allows for measurement of signal voltages in circuits where dc is present.

SPECIFICATIONS

DC VOLTAGE: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 20,000 ohms/volt. AC/OUTPUT VOLTAGE: Ranges 0-2.5, 10, 50, 250, 1000, 5000 volts. Sensitivity 1000 ohms/volt. DC CURRENT: 0-100 μa, 10 ma, 100 ma, 500 ma, 10 amp. DECIBELS: -12 to +55 db in 5 ranges. RESISTANCE: Ranges: 0-2000 ohms, 0.2 megohms, 20 megohms (.2 ohms to 20 megohms). METER: 4½" size, 50 μa movement. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 4 lbs.

EICO 555 V-O-M

Kit \$29.95 : Wired \$39.95

Complete with leads

A highly precise 20,000 ohms per volt volt-ohm meter. Similar to EICO 565 V-O-M except that it employs 1% precision resistors.



- 1,000 ohms per volt sensitivity
- Seven AC/DC voltage ranges

EICO 536 V-O-M

Kit \$16.95 : Wired \$24.95

Considered the "tops" of its type, the EICO 536 gives you seven full-scale AC/DC ranges, to 5,000 volts. One unique feature of the 536 is that it is the only 1,000 ohm/volt meter with a 0-1 volt full scale range, making possible accurate low voltage readings. For example, on an instrument whose lowest full-scale range is ten, one-half volt will deflect the needle only 1/20th of the scale, but on the 536 the one-half volt will deflect the needle to mid-scale, for a highly precise reading.

The 2-pound meter is packaged in a high-

impact bakelite case, making it compact, sturdy and portable for any shop or field use. An advanced new AC rectifier circuit, employing a high quality rectifier in a half-wave hook-up, provides excellent linear characteristics. Every modern feature required in an instrument of this type is built-into the 536. Compare it with other units of similar design and see for yourself why EICO gives you the best — for less!

SPECIFICATIONS

AC/DC VOLTAGE RANGES: 0-1, 5, 10, 50, 100, 500, 5000 volts. AC/DC SENSITIVITY: 1000 ohms/volt. AC/DC CURRENT RANGES: 0-1 ma, 10 ma, 0.1 amp, 1 amp. OHMS RANGES: 0-5000 ohms, 100K ohms, 1 megohm. DB RANGES: -20 to +69 in 6 ranges. METER: 3" size, 400 μa movement. SIZE (HWD): 6½" x 3¾" x 2¾". WEIGHT: 3 lbs.

EICO 566 V-O-M

Kit \$19.95 : Wired \$27.95

Essentially a larger version of the 536, the 566 Volt-Ohm-Milliammeter possesses all the excellent circuitry and application advantages of the former, plus seven extra ranges. Added to this is the convenience of the large 4½" meter with 2-color scales. The 566 also boasts the accurate 0-1 volt scale featured on the 536 meter and can list among its features both shunt and series rectifier compensation for uniform accuracy. Other features include one set of precision divider resistors on AC and DC to minimize switching, a high-quality instrument rectifier in dual half-wave hook-up and a high-impact bakelite case.

There are seven AC/DC/Output ranges, four current ranges and three ohm scales. Six decibel ranges cover -20 to +69. You need only examine the 566 side-by-side with any comparable meter to agree that it is one more EICO "best buy" in professional service instruments.

SPECIFICATIONS

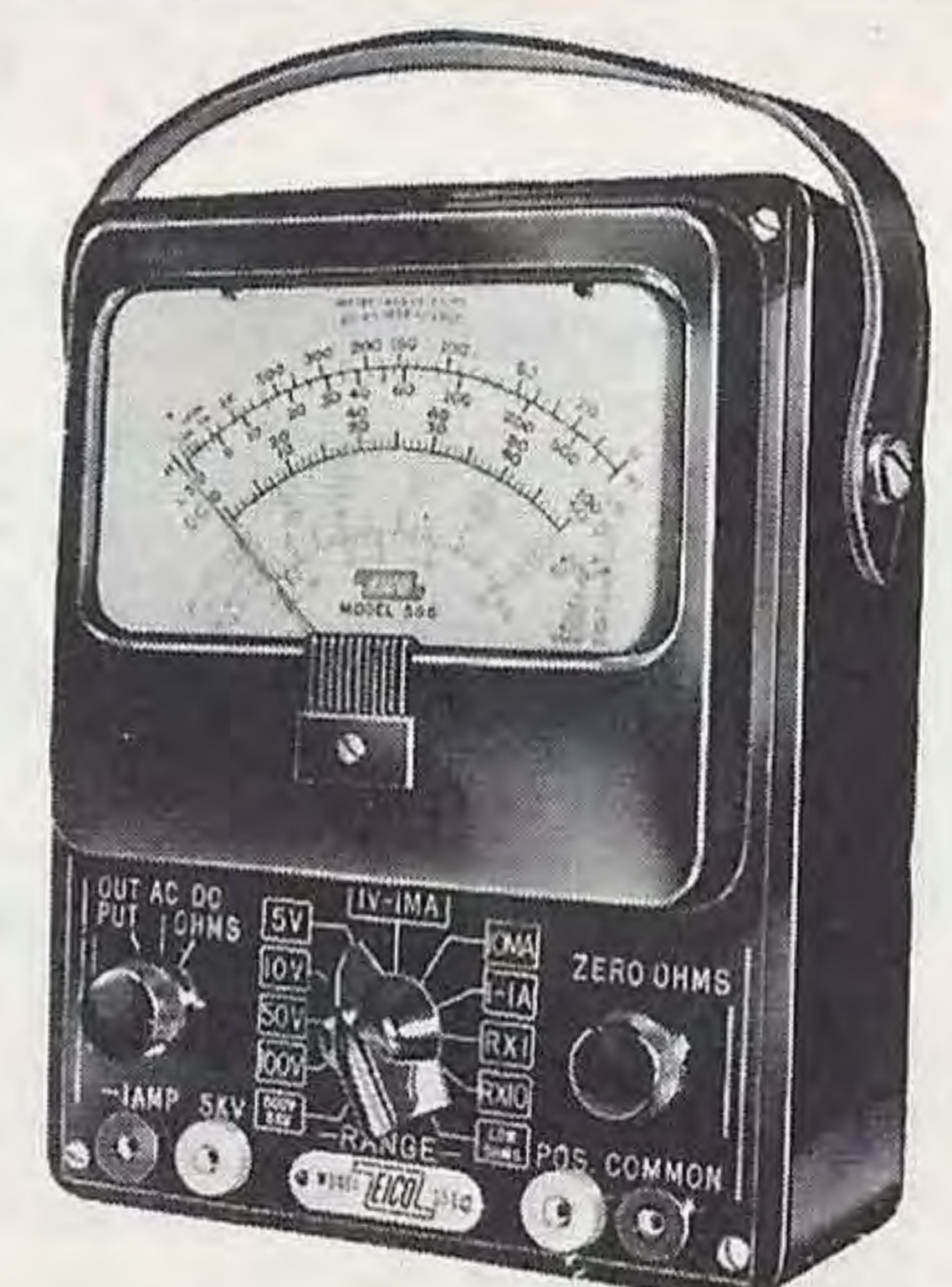
AC/DC/OUTPUT RANGES: 0-1, 5, 10, 50, 100, 500, 5000 volts. AC/DC SENSITIVITY: 1000 ohms/volt. AC/DC CURRENT RANGES: 0-1 ma, 10 ma, 0.1 amp, 1 amp. OHMS RANGES: 0-5000 ohms, 100K ohms, 1 megohm. DB RANGES: -20 to +69 in 6 ranges. METER: 4½" size, 400 μa movement. SIZE (HWD): 6¾" x 5¼" x 3". WEIGHT: 3 lbs.

EICO 556 V-O-M

Kit \$21.95 : Wired \$29.95

A precise 1000 ohms per volt V-O-M. Similar to EICO 566 except that it employs 1% precision resistors.

SLC-1
optional
case
\$5.95



- 1000 ohms per volt sensitivity
- 4½" meter with 2-color scales



- Wien Bridge with unique shunt resistance balancing circuit
- Capacity accuracy of $\pm 10\%$ at any point on the capacity dial
- Bright bar pattern gives sharp, unmistakable indications for accurate readings
- Supplied with Test leads

Kit \$34.95
Wired \$49.95

EICO 955 IN-CIRCUIT BRIDGE-TYPE CAPACITOR TESTER

A truly advanced, highly dependable in-circuit and out-of-circuit capacitor tester, the 955 provides exceptionally sensitive short and open tests.

In evaluating the 955, *ELECTRONICS WORLD* had this to say: "In actual use, tests were simple, fast and clearly indicative. But for the capacitance-measuring function, nothing more than a simple switch need be operated. . . . Part of the manufacturer's new line of industrial equipment, the 955 is sturdily and attractively housed."

A quick, easy glance at the electron-ray tube lets you know the status of shorts (closed bars indicate a short). A 60 cps test frequency and a maximum test voltage of 6.3 VAC (open leads), decreasing with decreasing impedance, are also featured. In normal situations open tests can be made on capacities as low as 15 pf, but with constant voltage supply, internal adjustment can be made as little as 5 pf sensitivity. For in-circuit testing, shunt resistance may be as low as 35 ohms for capacitors above 250 pf and 7 K ohm at 15 pf. The test frequency is approximately 19 mc and the voltage is very low.

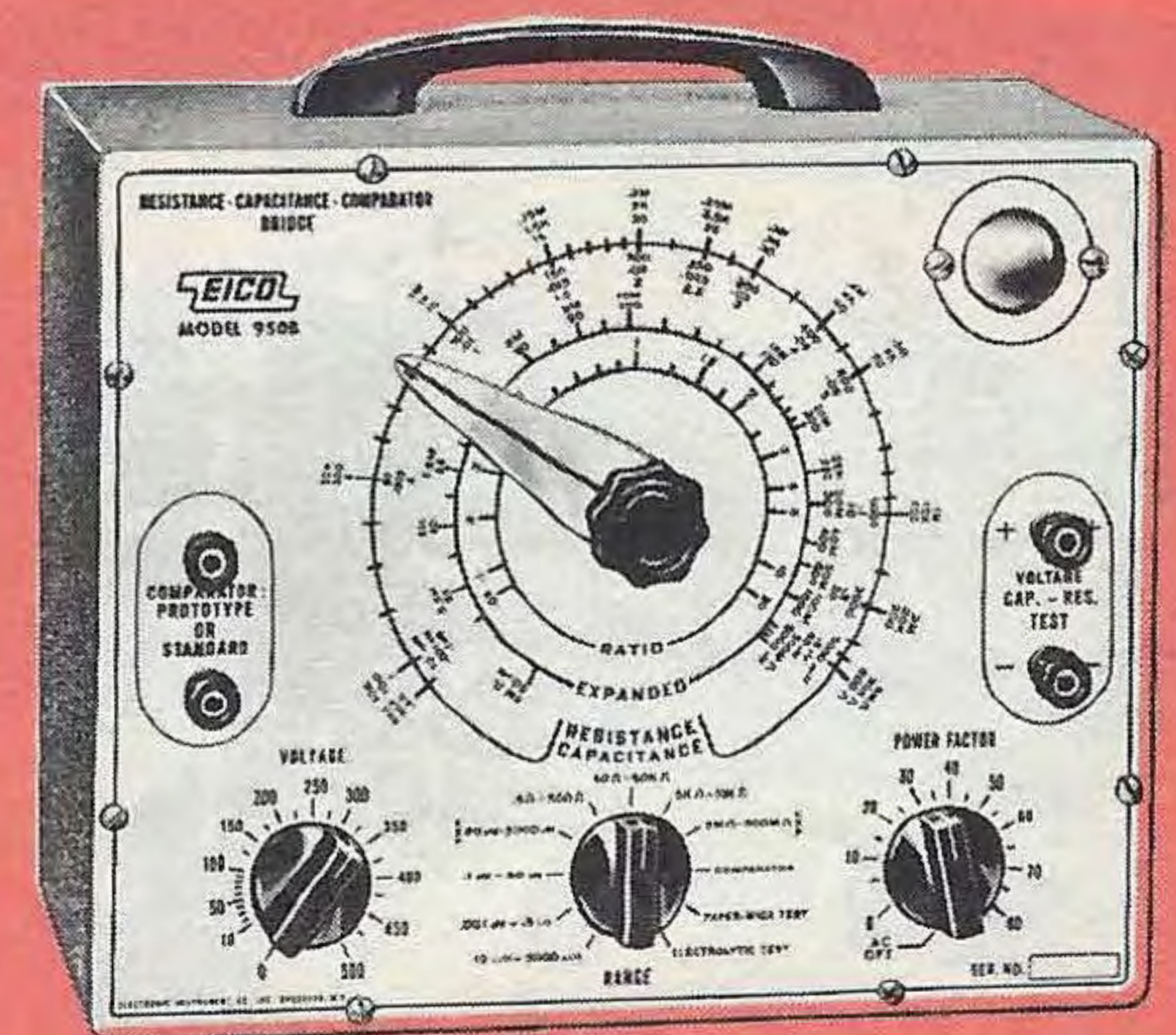
For capacity measurement the scale is screened on a 4" diameter heavy-gauge lucite disc. The reading point is just above the center of the bar pattern, and operating frequency of the bridge is 60 cps.

The $\pm 10\%$ accuracy is achieved by a sharp null indication (closed bars) when shunt resistance is balanced by the RC BALANCE control, and the .1-50 mfd CAPACITY dial is set at the correct capacitance value. The RC BALANCE control is calibrated in RC product (equivalent shunt resistance in kilohms multiplied by the capacitance in microfarads) in two ranges, 0.6 to 10.5 and 7 to infinity, selected by the RC RANGE switch. The very wide RC product range provided, with excellent spread permitting easy setting to any value, is the key to the accurate capacity measurement provided either in or out of circuit. For out-of-circuit measurements, the RC product value can be translated into dissipation or power factor by means of conversion charts in the manual.

SPECIFICATIONS

INDICATOR: Electron-ray tube EM84/6BG6. TEST SELECTOR: Three-position switch — SHORT, CAPACITY, OPEN. TEST LEADS: One coax type for all tests: detachable, with mic connector coupling to unit. SHORT TEST: Out-of-circuit or in-circuit short check, with shunt resistance as low as 1 ohm. Reliable up to 2000 uf. OPEN TEST: Out-of-circuit or in-circuit open test of capacitors as small as 15 pf with instrument adjusted normally. CAPACITY MEASUREMENT: From 0.1 to 50 μ f using Wien Bridge with unique shunt resistance balancing, permitting $\pm 10\%$ accuracy at any point on the capacity dial in out-of-circuit or in-circuit measurements. POWER REQUIREMENTS: 117 VAC, 60 cps, 8 watts. SIZE (HWD): 8 1/2" x 5 3/4" x 6". WEIGHT: 6 lbs.

★ Export Model available



Kit \$34.95
Wired \$49.95

EICO 950B R-C BRIDGE & R-C-L COMPARATOR

- Comparator range allows the use of complementary components as standards
- Continuously variable polarizing leakage test voltage from 0-500 VDC

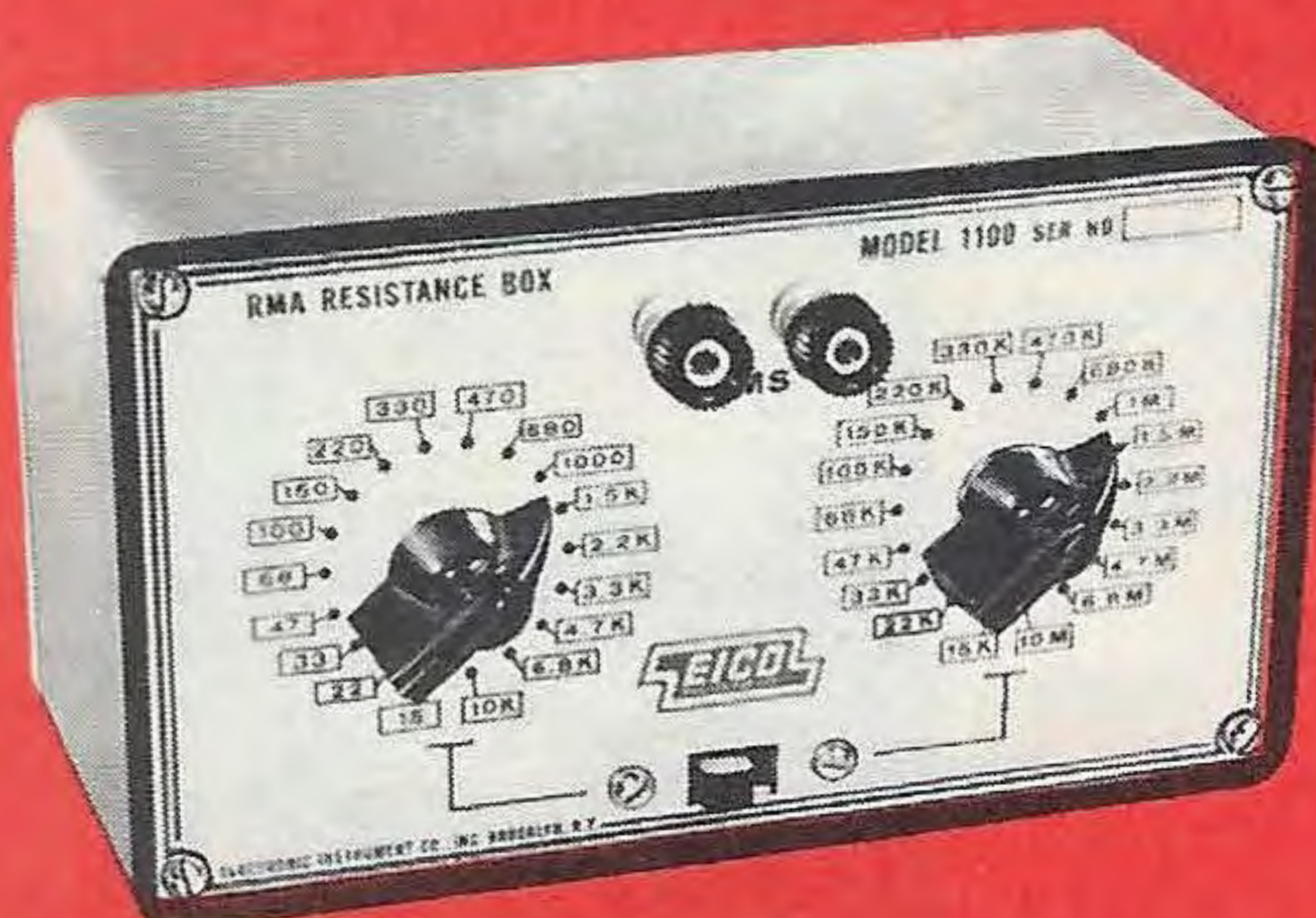
Here's a professional instrument that should be standard equipment in every laboratory and service shop. With the extremely valuable Comparator range — exclusive with EICO at this outstanding low price — the 950B is one more "best buy" from the service-man minded electronics laboratories of EICO.

Four separate capacity and an equal number of resistance ranges are featured in the 950B. The comparator range allows measurement of resistances, capacitances and inductances with a complementary component as a standard. You can depend upon the EICO 950B for rapidity and precision in the measurement of unknown resistors and condensers. Readings are taken directly from the calibrated front panel — without the need of complex and time consuming computations. Safe operation is assured by the transformer power supply.

SPECIFICATIONS

CAPACITY: 4 ranges, 10 μ f to 5000 μ f. RESISTANCE: 4 ranges, 0.5 ohms to 500 megohms. COMPARATOR: 1 range, ratio from .05 to 20 (400 to 1). DC POLARIZING VOLTAGE: 0 to 500 volts DC (continuously variable) $\pm 10\%$. TUBE COMPLEMENT: 1-1629, 1-6X5. POWER REQUIREMENTS: 117 volts AC, 60 cps. SIZE (HWD): 8" x 10" x 4 3/4". WEIGHT: 8 lbs. Optional Test leads available. ★ Export Model available

EICO 1100 EIA RESISTANCE SUBSTITUTION



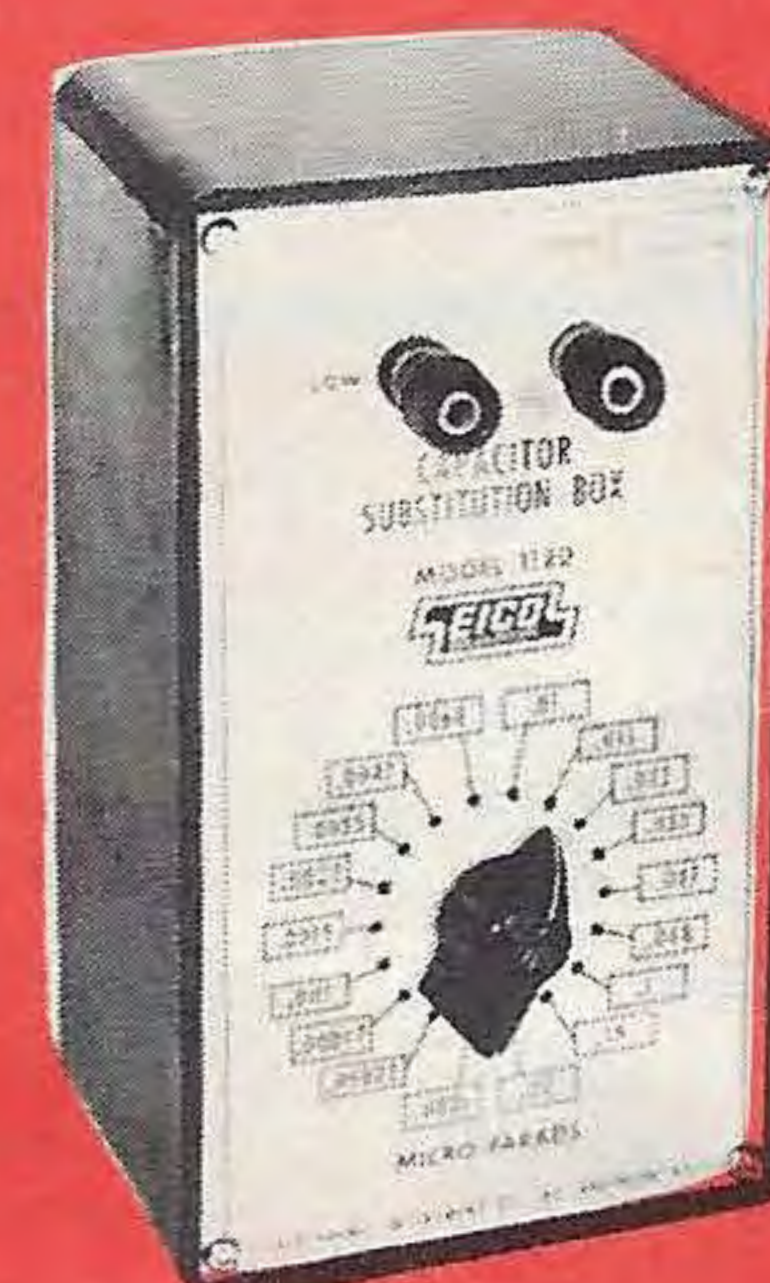
Kit \$12.95
Wired \$19.95

The EICO model 1100 EIA Resistance Substitution Box provides a means of rapidly substituting a wide range of EIA resistance values in a circuit to determine the best resistance value for a desired result or the value of a badly charred or otherwise illegible resistor.

SPECIFICATIONS

RESISTANCE RANGE: 15 ohms to 10 megohms in decade multiples of 15, 22, 33, 47, 68 and 100 ohms. RATED ACCURACY: $\pm 10\%$ at any setting. RATED POWER DISSIPATION: 1 watt at any setting. CONTINUOUS DUTY VOLTAGE RATING: 500 volts. TERMINALS: Five-way, jack-top binding posts. SIZE (HWD): 3 3/4" x 6 1/2" x 3 1/2". WEIGHT: 2 lbs. Supplied less leads.

EICO 1120 EIA CAPACITANCE SUBSTITUTION



Kit \$10.95
Wired \$16.95

The EICO 1120 is an excellent and logical companion to the 1100, and it affords the same multiplicity of servicing, development and time-saving advantages for capacitors as the 1100 does for resistors. Here, too, the price of the 1120 kit is less than the retail value of the capacitors alone!

SPECIFICATIONS

CAPACITORS (MFD): .0001, .00022, .00047, .001, .0015, .0022, .0033, .0047, .0068, .01, .015, .022, .033, .047, .068, .1, .15, .22. VOLTAGE RATINGS: Capacitors .0001 mfd through .00047 mfd: 500 volts, capacitors .001 mfd through .1 mfd: 600 volts, capacitors .015 and .22 mfd: 400 volts. TERMINALS: Five-way, jacktop binding posts. SIZE (HWD): 3 3/4" x 6 1/2" x 3 1/2". WEIGHT: 2 lbs.

Supplied less leads.



Kit \$39.95
Wired \$59.95

EICO 147 DELUXE MULTI-SIGNAL TRACER

- Employs both visual and aural signal monitors
- RF channel gain permits tracing up to receiver input

A professional deluxe instrument crammed with unsurpassed facilities and conveniences for extra-easy, extra-fast profitable servicing of AM, FM and TV receivers. Here's one of the most useful and convenient instruments the serviceman can use in the servicing of TV, FM, AM, audio and electronic equipment. The 147 is a deluxe signal tracer brought up to date by EICO engineers in the light of the serviceman's latest needs for this type of all-purpose instrument. Two separate input channels assure maximum adaptability for both RF and audio work, and RF gain is so high you can trace right up to the antenna terminals of the set under test. Now you can both see and hear the signal level in each stage — the eye tube and speaker give you both aural and visual monitoring. The valuable noise locator and calibrated wattmeter turn suppositions into certain answers — and fast! The 147 has everything you could ask for in a modern, up-to-date professional signal tracer, and then some more features no other tracer gives you. It's one more champion precision instrument, at lowest cost . . . from EICO.

Two probes, shielded RF crystal demodulator and direct probe, are provided. Individual panel receptacles provided for easy change-over from RF to audio tracing or vice versa. An extremely valuable noise locator circuit ferrets out noisy controls, resistors, capacitors, coils, transformers and cold solder joints. Calibrated wattmeter affords a rapid preliminary check of power consumption in equipment under test, detects B+ shorts, intermittent filament circuits, defective filters or bypass capacitors.

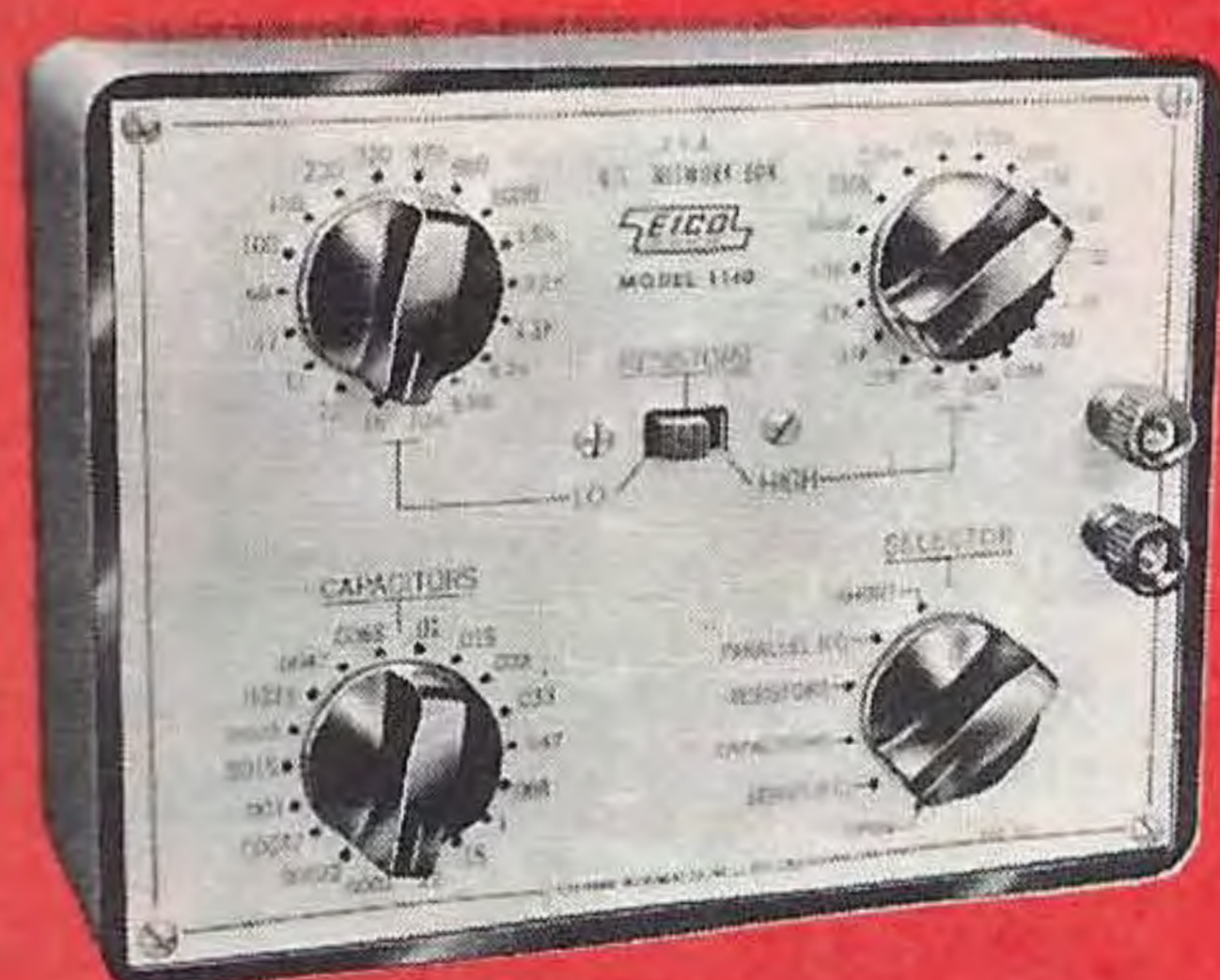
SPECIFICATIONS

TUBE & DIODE COMPLEMENT: 1-12AX7 as dual voltage amplifier, 1-6AQ5 as beam power amplifier, 1-1629 as electron-ray indicator, 1-6X4 as full-wave rectifier, 1-1N48 (germanium diode) as wattmeter rectifier. POWER REQUIREMENTS: 105-125 volts ac, 50/60 cycles. SIZE (HWD): 8" x 10" x 4 1/4". WEIGHT: 10 lbs.

★ Export Model available

Power consumption 40 watts.

EICO 1140 SERIES/PARALLEL R-C COMBINATION BOX *



*U.S. Patent

Kit \$19.95
Wired \$29.95

The EICO model 1140 Series/Parallel R-C Combination Box is an extremely valuable combination of the model 1100 Resistance Box and the model 1120 Capacitance Box, with additional switching facilities that permit selection of any resistance alone, any capacitance alone, or any combination of resistance and capacitance in series or parallel (1350 combinations) Open and short circuit positions are provided.

SPECIFICATIONS

RESISTORS: See Model 1100. CAPACITORS: See Model 1120. TERMINALS: Five-way jack-top binding posts. SIZE (HWD): 6 3/4" x 5 1/4" x 2 3/8". WEIGHT: 3 lbs.

Supplied less leads.

EICO 1180 DECADE CONDENSER BOX



Kit \$24.95
Wired \$34.95

The EICO model 1180 Capacitance Decade Box consists of three decade-capacitor assemblies mounted in a metal cabinet which serves as a shield. Each decade has eleven positions, 0 to 10 inclusive so that the decades overlap. The added capacity per step is 0.01 mfd for the largest decade, .001 mfd for the next decade, and .0001 mfd (100 mmf) for the smallest decade. Each decade consists of a ceramic wafer rotary switch and four capacitors whose values are 1 times, 2 times, and 4 times the added capacity per step for the particular decade.

Supplied less leads.

SPECIFICATIONS

VOLTAGE RATING: 350 volts DC continuous, 500 volts DC intermittent, 1000 volts DC test INSULATION RESISTANCE: Production test limit is 50,000 megohms at 1000 volts DC, but bulk of capacitors are well over 250,000 megohms. POWER FACTOR: Better than 0.001 ACCURACY: $\pm 1\%$. WEIGHT: 3 lbs.

EICO 1171 DECADE RESISTANCE BOX



Kit \$29.95
Wired \$39.95

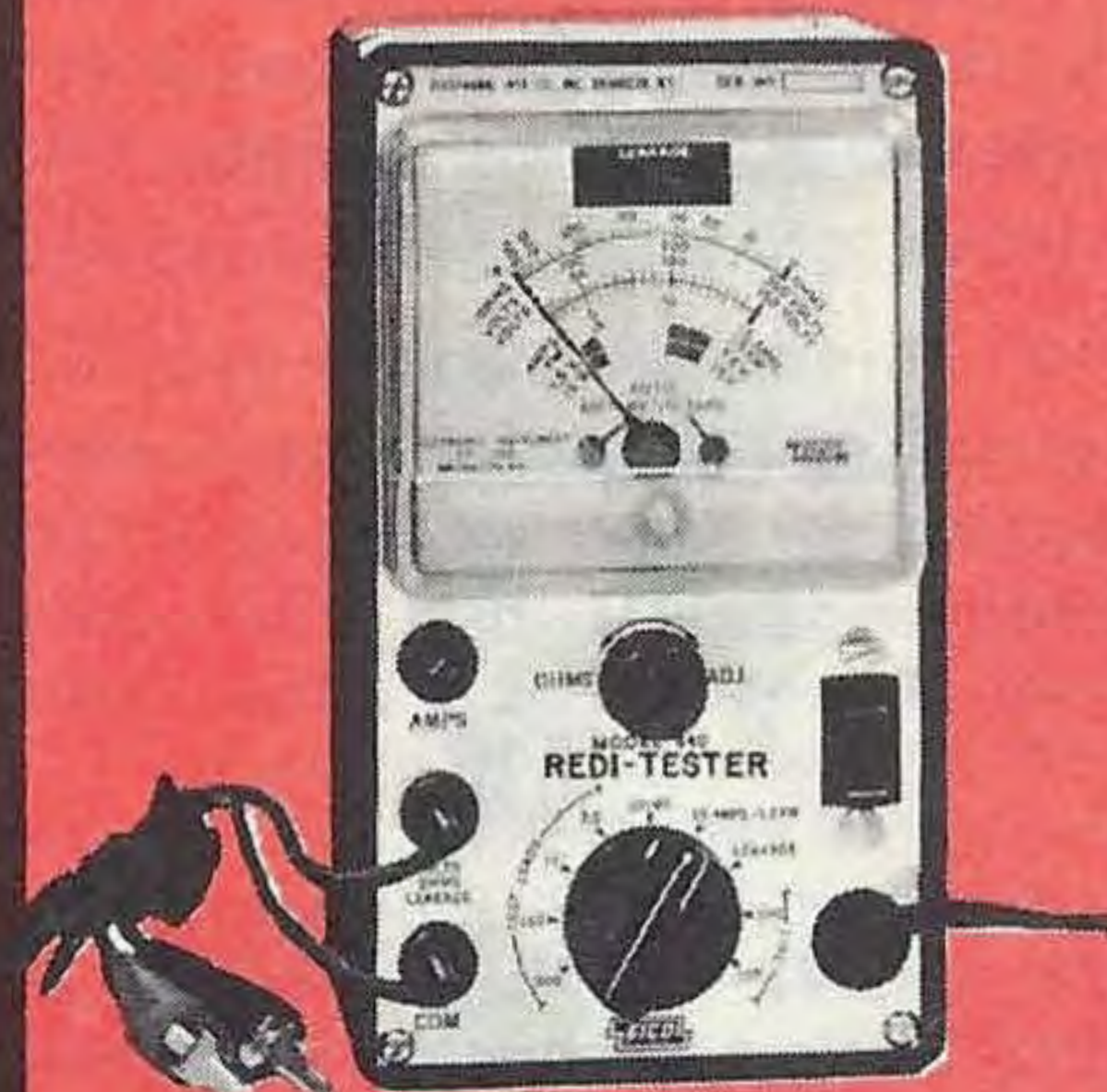
The EICO model 1171 Resistance Decade Box is a rugged and simple to operate piece of test equipment. Design application permits this instrument to be used in the laboratories of both the radio serviceman and the engineer.

The 1171 decade box provides standard resistances within known accuracies, enabling the technician to make tests to readily pin-point troubles and design new devices.

SPECIFICATIONS

RANGE: 0-99,999 ohms in 5 decades. CURRENT RATINGS: 350 ma (0-9 ohms) to 2.5 ma (10 K Ω to 100 K Ω). CABINET: Steel, baked enamel. PANEL: Aluminum, deeply etched panel. SIZE (HWD): 3 1/2" x 12" x 3". WEIGHT: 3 lbs. Supplied less leads.

EICO 540 READI-TESTER



Kit \$19.95
Wired \$29.95

Designed expressly for "do-it-yourself" home appliance & auto repair — easily finds defects in irons, fans, heaters, TV & radio tubes, batteries, ignition coils, etc. It is an all-in-one MULTI-RANGE AC/DC voltmeter, ammeter, ohmmeter, wattmeter, leakage checker. Extremely versatile, dependable, low in cost.

Provides "GOOD-BAD" readings on 6 V and 12 V automobile storage batteries, and permits checking of individual cells.

SPECIFICATIONS

VOLTAGE RANGES: 0-7.5, 15, 150 300 volts (AC/DC). CURRENT RANGE: 0-15 amps. RESISTANCE RANGE: 0-1000 ohms (direct reading). LEAKAGE TEST: Neon lamp circuit. WEIGHT: 3 lbs. SIZE (HWD) 6 1/2" x 3 3/8" x 3 1/2". Includes leads.

NEW!

EICO 585 BATTERY TESTER



Kit \$12.95
Wired \$15.95

Use the EICO Model 585 Battery Tester to check batteries rapidly while they operate under typical load conditions. Provision is made for the convenient testing of less-frequently used batteries. For this application, a maximum of two resistors for each battery to be tested, are connected to terminals on the front panel of the tester.

SPECIFICATIONS: TESTS POSITIONS (Volts): 1.5 (#6 cell), 1.5 (C, D cells) 1.5 (AA Cell), 4.5, 6, 9, 12, 22.5, 45, 67.5, spare. MAX. BATTERY VOLTAGE AND CURRENT TO BE TESTED IN SPARE POSITION: 250 volts, 500 milliamperes. METER: 15 ma, 90, Bad-Weak-Good scale. SIZE (HWD): 6 1/4" x 3 1/4" x 2" WEIGHT: 2 lbs. Test leads provided.



- Regulated B+ continuously variable 0-400 VDC
- Regulated bias supply continuously variable 0 to -150 VDC
- Ripple less than 3 millivolts RMS
- Both 6.3 and 12.6 VAC filament supplies

Kit \$79.95
Wired \$109.95

EICO 1030 REGULATED POWER SUPPLY

Now, at last, a low-priced reliable and versatile double power supply that can simultaneously deliver any regulated B+ or regulated bias voltage required for circuit design, production testing, workbench or school experiments.

The EICO Model 1030 delivers **exactly** the voltage needed to test any circuit, while **simultaneously** monitoring both voltage and current used by the circuit being tested.

The Model 1030 also delivers 6.3 VAC at 3 amperes, 6.3 VAC at 3 amperes center-tapped (both filament supplies are independent of each other), or 12.6 VAC at 3 amperes.

As an added feature, a front-panel switch is provided to turn off the high voltage to the circuit under test without shutting off the filament power to the test circuit or the power supply. This provides an "instant turn-on" action that eliminates wasted time in bench work.

The regulated B+ supply (0-400 VDC) consists of a high-current rectifier and a pair of parallel-connected, high-current, series-pass tubes, and a sensitive control tube, connected in an electronic filter arrangement. The screen grids of the series-pass tubes are supplied from a separate power supply contained within the Model 1030. Regulation of the B+ power supply is such that with loads of 100 MA applied, the output voltage will vary less than 0.3% or 3 volts, and, if the power line voltage varies as much as ± 10 volts, the output voltage will change as little as 0.5 volts. All this with a ripple of less than 3 mv RMS.

The independent bias supply (0 to -150 VDC) consists of a rectifier, a pi-type RC filter, and gas tube regulation. Like the B+ power supply, if the power line voltage varies as much as ± 10 volts, the bias voltage output will change as little as 0.5 volts. Ripple is less than 3 mv RMS.

SPECIFICATIONS

REGULATED B+: 0-400 VDC continuously variable; 0-100 MA continuous from 0-200 VDC, 0-125 MA intermittent from 0-200 VDC, 0-150 MA continuous from 200-400 VDC. **LOAD REGULATION:** Varies less than 1/3% or 0.3V (whichever is greater) from 0-100 MA. **LINE REGULATION:** varies less than 0.4% or 0.5V (whichever is greater) for a ± 10 V line variation. **RIPPLE:** Less than 3 mv RMS. **OUTPUT IMPEDANCE:** Less than 10 ohms from DC to 1MC. **REGULATED BIAS SUPPLY:** 0 to 150 VDC continuously variable. **CURRENT RANGE:** 0-2 MA. **LINE REGULATION:** Varies less than 0.4% or 0.5V (whichever is greater) for ± 10 V line variation. **RIPPLE:** Less than 3 mv RMS. **AC FILAMENT SUPPLIES:** 6.3 VAC at 3 amperes, and 6.3 VAC at 3 amperes center tapped; 12.6 VAC at 3 amperes by series connection of the two 6.3 VAC windings; and 6.3 VAC at 6 amperes by parallel connection of the two 6.3 VAC windings. **METERING:** Double-jewelled D'Arsonval Meters: voltmeter with switched ranges of 0-400 VDC (regulated B+) and 0-200 VDC (regulated bias supply); milliammeter with 0-200 MA scale for monitoring the regulated B+ supply. **POWER REQUIREMENTS:** 120 VAC, 50/60 cps, approximately 160 watts. **SIZE (HWD):** 8 1/2" x 12 1/2" x 9". **WEIGHT:** 21 lbs.



EICO 1060S BATTERY ELIMINATOR & CHARGER

- Specially designed for servicing all types of transistor equipment

Kit \$54.95 Wired \$74.95

The EICO 1060 is a versatile battery eliminator incorporating an extra low-ripple filter circuit.

Important exclusive features include automatic switching of ammeter range as you select either of the two voltage ranges (0-8 and 0-16 volts), continuous voltage adjustment with a variac-type transformer, heavy-duty silicon rectifiers, a fused primary and a secondary and automatic re-set overload relay.

The 1060 is ideal for servicing and powering 6 or 12-volt mobile and marine equipment.

SPECIFICATIONS

DC OUTPUT VOLTAGE RANGES: 0-8 volts, 0-16 volts. **AC RIPPLE:** 12 V range—0.3% @ 2 amps, 1.5% @ 10 amps. 6 V range—1.5% @ 2 amps, 4.5% @ 10 amps. **CURRENT RATINGS:** 0-8 volt range: 10 amps continuous, 20 amps intermittent. 0-16 volt range: 6 amps continuous, 10 amps intermittent. **METERS:** Voltmeter—0-20 volts. Ammeter—0-10, 0-20 amps. **POWER REQUIREMENTS:** 105-125 volts 60 Hz, 150 watts. **SIZE (HWD):** 8 3/4" x 10 1/2" x 7 3/4". **WEIGHT:** 18 lbs.



EICO 1078 METERED AC SUPPLY

- 0 to 140 VAC adjustable output voltage
- Separate output ammeter and voltmeter

Kit \$89.95 Wired \$119.95

NEW!



EICO 1032 REGULATED POWER SUPPLY

Kit \$44.95 Wired \$59.95

- REGULATED AGAINST LINE AND LOAD VARIATIONS
- 0-30 VOLTS CONTINUOUS OUTPUT WITH LOADS UP TO 500 MA.
- VOLTAGE AND CURRENT MONITORED BY METERS

The **EICO Model 1032** regulated low ripple power supply provides the voltages and currents most commonly needed in the service shop as well as in the engineering laboratory. It may also be used in the laboratory as a fixed bias supply or for fulfilling any other regulated voltage requirement. The applications are unlimited.

The adjustable 0-30 DC volts at the terminals of the instrument, is free of major variations with line voltage and load changes.

SPECIFICATIONS

Output voltage: 0 to 30 volts regulated. **Output Current:** 0 to 500 ma. **Voltage regulation:** 0.2 volts change from 0 to maximum load and 105-135 volt line. **Ripple:** less than 2.5 mv peak-to-peak. **Polarity:** positive. **DC Voltmeter:** 0-10 volts, 0-50 volts. **DC Milliammeter:** 0-500 ma. **Power Requirements:** 105-135 VAC, 50/60 Hz, 30 watts. **SIZE (HWD):** 3 3/4" x 8" x 4 3/4" **WT:** 5 lbs.



EICO 1025 SOLID STATE POWER SUPPLY

- Variable output voltage
- Output voltage monitored by dual-range voltmeter
- Load current measured by accurate milliammeter

Kit \$44.95 Wired \$54.95

The model 1025 provides a stable, continuously variable output voltage from 0-30 V. Two D'Arsonval meters monitor the voltage (2 ranges) and current of this highly versatile, all transistor DC power and bias supply. Maximum continuous load current is 300 mA. Maximum ripple at full load is only 0.005%. Fused for protection against short circuits. Included among the numerous applications for the 1025 are servicing of transistor or vacuum tube devices, TV and radio alignment and adjustment, recharging of small batteries, and light electroplating.

SPECIFICATIONS

OUTPUT VOLTAGE RANGE: 0-30 VDC, continuously variable. MAX. OUTPUT CURRENT CAPACITY (CONTINUOUS): 150 mA from 0-12 V, 200 mA from 12-24 V, 300 mA from 24-30 V. FUSE: 1/2 amp. METERS: Voltmeter-0-6 and 0-30; Milliammeter-0-500 mA. RIPPLE: (120 Hz.): 0.005% at full load. POWER REQUIREMENTS: 117V, 60 Hz. SIZE (HWD): 3 3/4" x 8" x 4 3/4". WEIGHT: 5 lbs.

The 1078 is a variable 0-140 AC power supply. The dual range ammeter and the voltmeter monitor the output. The supply is ideal for use in the laboratory, or on the production bench, in a quality control area and in the service shop. It is perfect for studying performance of equipment under varying load conditions as well as for exposing component failure by simulating high supply voltage conditions.

SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 AC OUTPUT VOLTAGE: 0-140 VAC (30-140 VAC voltmeter). OUTPUT CURRENT: Two ranges 0-2.5, 0-7.5 amperes. METER ACCURACIES: $\pm 3\%$ of full scale. POWER SWITCH: disconnects unit from both sides of line in off position. LINE CONNECTION: 3-wire cord and plug. LOAD CONNECTION: 3-wire outlet receptacle. SIZE (HWD): 8 1/2" x 5 3/4" x 7". WEIGHT: 16 lbs.



**NEW IMPROVED DESIGN
WITH RELIABLE
SILICON RECTIFIERS**

**Kit \$59.95
Wired \$79.95**

EICO 1064S BATTERY ELIMINATOR & CHARGER

- Automatic switching of ammeter range as voltage ranges are selected
- Two DC voltage ranges: 0-8 volts and 0-16 volts
- Simultaneous monitoring of both voltage and current on both ranges

Of the EICO 1064 Battery Eliminator and Charger, ELECTRONICS ILLUSTRATED had this to say: "Our checks showed the instrument's residual ripple to be low enough to permit its use with any transistorized device from the pocket portable to automobile hybrid receivers."

This supply delivers the smooth, undistorted DC necessary for servicing transistorized equipment or for any application where minimum ripple is mandatory. The extra-low ripple output is achieved through the use of a special L-C filter circuit consisting of a very heavy-duty iron choke and a dual 5000 mf, 20-volt electrolytic filter capacitor. The ability of this circuit to handle the full continuous as well as the higher rated intermittent current output of the instrument, without overloading or danger of burnout — on both current ranges — ensures that the many advantages of its highly filtered DC output are available for all conceivable applications.

Among the 1064's applications are charging 6 or 12-volt storage batteries, simulating various battery operating voltages for detecting intermittents and shorts in radio equipment, supplying DC for filament voltages in high-gain audio-circuit work, determining starting point in vibrators, determining voltage operating range of oscillator circuits, running small electrical appliances (shavers, trains, etc.).

The 1064 also serves well for marine purposes, operating boat lights, radio-phone, amplifiers, transmitters, bilge pump and other electrical utility units while at dock-side, eliminating the need for installing a costly secondary AC lighting system. A fused primary and a re-set overload relay on the secondary add to the durability and safety of the 1064.

SPECIFICATIONS

DC OUTPUT VOLTAGE RANGES: (Range selected by 6V-12V toggle switch) 0-8 volts, 0-16 volts. CURRENT RATINGS: 0-8 volt range: 10 amps continuous, 20 amps intermittent; 0-16 volt range: 6 amps continuous, 10 amps intermittent. AC RIPPLE: 0-16 volts range: 0.3% @ 2 amps, 1% @ 6 amps, 1.5% @ 10 amps; 0-8 volt range: 1.5% @ 2 amps, 2% @ 6 amps, 4.5% @ 10 amps. METERS: Voltmeter-0-20 volts. Ammeter-0-10, 0-20 amps. POWER REQUIREMENTS: 117 volts AC, 60 cps; 150 watts. SIZE (HWD): 8 1/2" x 5 3/4" x 7 1/2". WEIGHT: 16 lbs.

EICO 1020 POWER AND BIAS SUPPLY

Kit \$25.95 Wired \$39.95



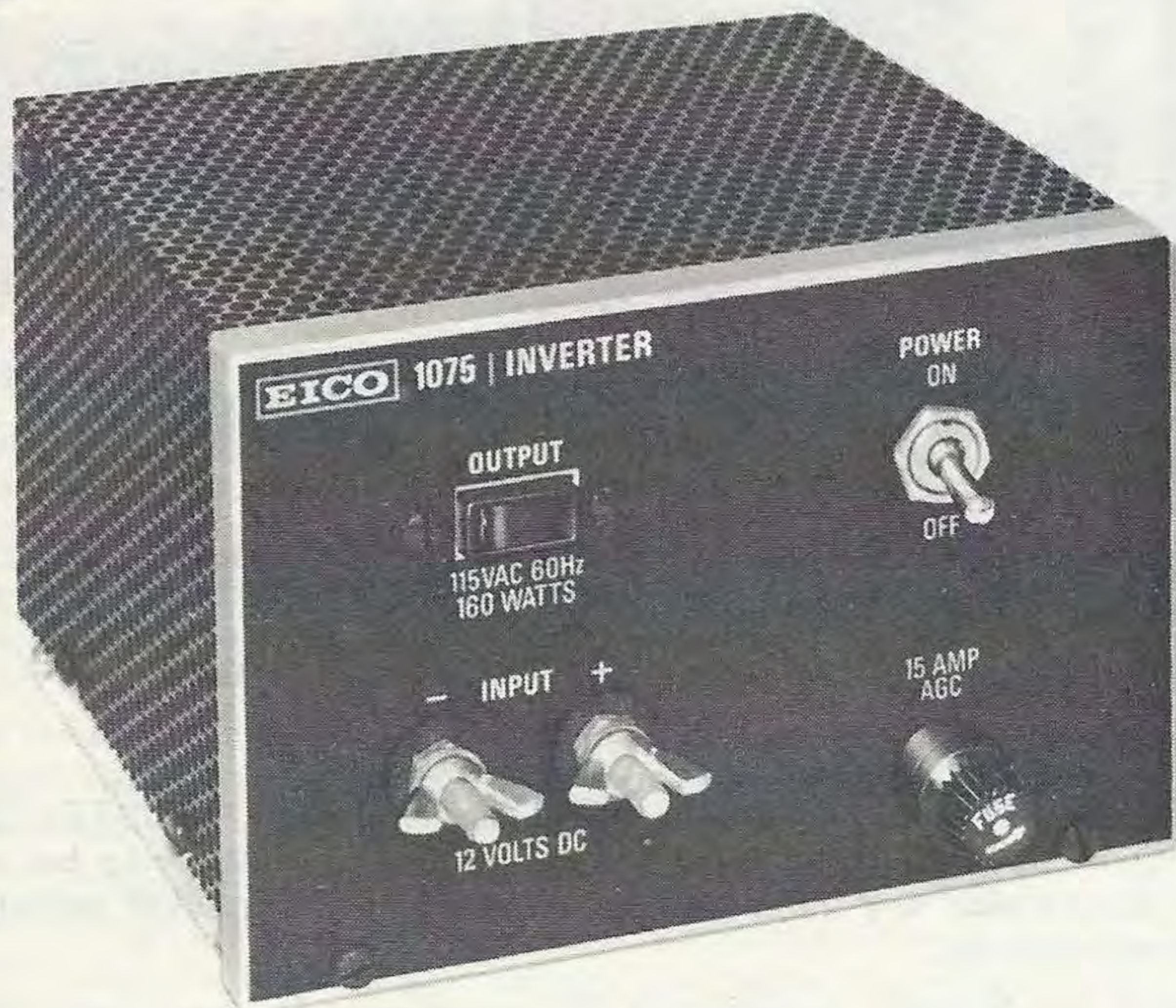
Highly versatile, stable and reliable, the Model 1020 is a completely transistorized, very low ripple, portable DC power and bias supply providing continuously variable output voltage monitored by a dual range voltmeter (0-6, 0-30 VDC). It comprises a power transformer, full-wave silicon rectifier circuit, electrolytic capacitor input filter followed by a two-power transistor (2-2N256) cascaded filter circuit. The maximum permissible load current varies from 150 ma in the 0-12 V range to 300 ma in the 24-30 V range. The maximum ripple (120 cps) at full load is only 0.005%. The unit is housed in a rugged grey wrinkle steel case 5" x 4" x 5 1/2" (HWD) and is fused for protection against short circuits.

Applications include: a universal power supply for servicing transistor devices, a variable bias supply to bias transistors or vacuum tubes, to offset AVC and AGC voltages in the alignment of TV and radio receivers or to cut off the color burst amplifier in color TV adjustment; a dc filament supply or a filament bias source, to recharge small storage batteries, or to do light electroplating.

SPECIFICATIONS: OUTPUT VOLTAGE RANGE: 0-30 VDC, continuously variable. MAX. OUTPUT CURRENT. CAPACITY (CONTINUOUS): 150 ma from 0-12 V, 200 ma from 12-24 V, 300 ma from 24-30 V. FUSE: 1/2 amp. will blow in case of short circuit to protect unit. Pilot lamp will remain lit even when fuse is blown but voltmeter will read zero. RIPPLE: (120 cps): 0.005% at full load. POWER REQUIREMENTS: 117V, 60 cps. SIZE (HWD): 5" x 4" x 5 1/2". WEIGHT: 5 lbs.

NEW! EICO SOLID STATE DC-TO-AC POWER INVERTERS FOR USE IN CARS, BOATS, TRAILERS, ETC.

Provides household
current anywhere.
Converts 12 volt
DC to 115 volt, 60
cycles AC.



EICO 1075 160 WATT INVERTER

KIT \$34.95 WIRED \$44.95

This model is identical to the Model 1070, but is capable of delivering 160 watts at 115 volts rms ac, to power appliances the smaller unit cannot handle. Leads from the two terminals on the front panel are to be connected directly to the storage battery. SIZE (HWD): 4" x 6" x 5 3/4" WEIGHT: 6 lbs.



EICO 1070 110 WATT INVERTER

KIT \$29.95 WIRED \$39.95

Change power delivered by the 12 volt dc storage battery on your car or boat into 115 volts rms ac. This lowest cost inverter will deliver 110 watts to power most small home appliances, electric shavers, etc. Plugs conveniently into a standard cigar lighter. Completely fused. SIZE (HWD) 4" x 6" x 5 3/4" WEIGHT 6 lbs.



EICO 1080 220 WATT INVERTER/CHARGER

KIT \$44.95 WIRED \$59.95

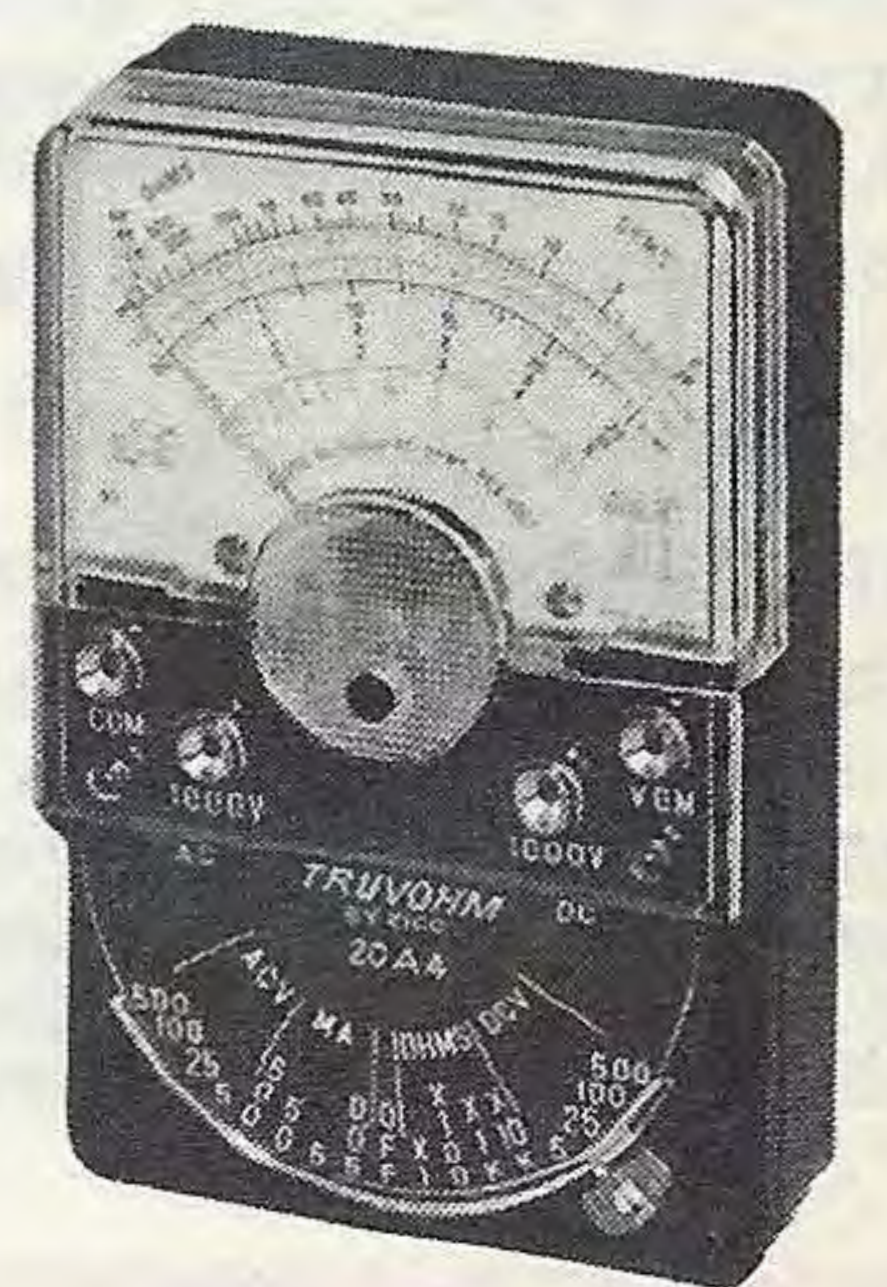
A solid 220 watts of power is available at 115 volts rms ac, when this unit is connected to the storage battery on your car, truck, boat, etc. With a "flip of the switch" the Model 1080 operates as a battery charger using the 117 volt ac supply available at home or boat dock. Install it permanently for use both as inverter and charger. Battery charger is rated 5 amps, automatically tapers current down to prevent overcharging.

SIZE (HWD): 4" x 6" x 5 3/4" WEIGHT: 7 lbs.

NEW MODEL 20A4

\$19.95

Complete with bat-
teries, test leads and
carrying case



PROFESSIONAL STANDARDS, VERSATILE HIGH IMPEDANCE

Read voltage, current and resistance accurately on each of the 18 precise ranges. Lever type range selector switch. Easy-to-read 3" meter. The 20,000 Ω /volt dc meter and 10,000 Ω /volt ac section can be used without disturbing most circuits. Read resistance accurately to 60 Megohms.

DC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 20,000 Ω /volt

AC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 10,000 Ω /volt

DC CURRENT: 0-5 μ A, 0-5, 50, 500 ma.

RESISTANCE: 0-6 K Ω , 0-600 K Ω , 0-6 M Ω , 0-60 M Ω

DECIBEL: -20 to +64 db

SIZE (HWD): 4 7/8" x 3" x 1 1/4". WEIGHT: 14 oz.

100,000
OHMS/VOLT

**MODEL
100A4**
\$39.95

Complete
with batteries
and test leads

Optional carrying
case SCL-1 \$5.95



**THE BEST BUY IN A BENCH-SIZE MULTIMETER . . .
LABORATORY ACCURACY AND PROFESSIONAL
VERSATILITY—AT LOWEST COST.**

With its DC sensitivity of 100,000 ohms/volt and AC sensitivity of 12,500 ohms/volt, the new 100A4 combines extremely minimal circuit loading with wide-ranging functional utility in a battery-operated, portable volt-ohm-milliammeter—thus satisfies the precision and flexibility requirements of electronic engineers, experimenters, hams, and electronic technicians. All the features you would expect in a fine quality laboratory instrument are also present: double-jewelled $\pm 2\%$ D'Arsonval meter movement; full-view 4-inch mirror-back two-color scale eliminates reading parallax; a matched pair of silicon diodes prevents accidental overload of meter movement. High-impact, custom-molded case protects against shock; integral handle for convenient positioning and portability.

DC VOLTAGE: 0 – 500 mV, 2.5, 10, 50, 250, 500 and 1000 volts
AC VOLTAGE: 0 – 2.5, 10, 50, 250 and 1000 volts
DC CURRENT: 0 – 10 μ A, 250 μ A, 2.5 mA, 250 mA and 10 Amp.
RESISTANCE: 0 – 20,000; 200K; 2 meg; 20 meg
DECIBELS: –20 to +62 in 5 ranges
ACCURACY: 2% Meter movement
INPUT RESISTANCE: 100,000 ohms/volt DC;
12,500 ohms/volt AC
SIZE: 7-1/2H x 5-1/4W x 3-1/4D

TRUVOHM

MULTIMETERS BY EICO

The Industry's greatest values in professional Volt-Ohm-Milliammeters . . . bar none

- Designed and manufactured to EICO's stringent standards of engineering and production.
- Completely professional in quality, performance, appearance, and long-term reliability.
- Backed 100% by the famous EICO Make-Good Guarantee.

MODEL 30A4

\$22.50

Complete
with batteries
and test leads
Optional carrying
case SCL-3 \$2.95

**LABORATORY
PRECISION AND
PROFESSIONAL
VERSATILITY —
A BEST BUY!**



One of the finest pocket portable instruments available anywhere — a **best buy**. This **laboratory-type**, wide-range multimeter has a mirror-back scale to eliminate reading parallax, $\pm 1\%$ temperature-stabilized resistors, and double-jewelled $\pm 2\%$ D'Arsonval meter movement protected against accidental overload by a pair of matched silicon diodes. For minimal circuit loading under testing conditions, this fine instrument has 30,000 Ω /volt DC and 10,000 Ω /volt AC characteristics, and comes in a handsome, custom-molded, high-impact plastic case. Also featured is a separate input for measuring AC voltages in the presence of DC. Truly a pocket laboratory instrument.

DC VOLTAGE: 0 – 0.6, 3, 12, 60, 300, 600, 1200, 3000 volts
AC VOLTAGE: 0 – 6, 30, 120, 600, and 1200 volts
DC CURRENT: 0 – 30 μ A, 60 mA, and 600 mA
RESISTANCE: X1 X100 X1K X10K
DECIBELS: –20 to +63 in 5 ranges
SENSITIVITY: 30,000 ohms/volt DC; 10,000 ohms/volt AC
SIZE: 5-7/8H x 3-3/16W x 1-11/16D

MODEL 30A3

\$17.50

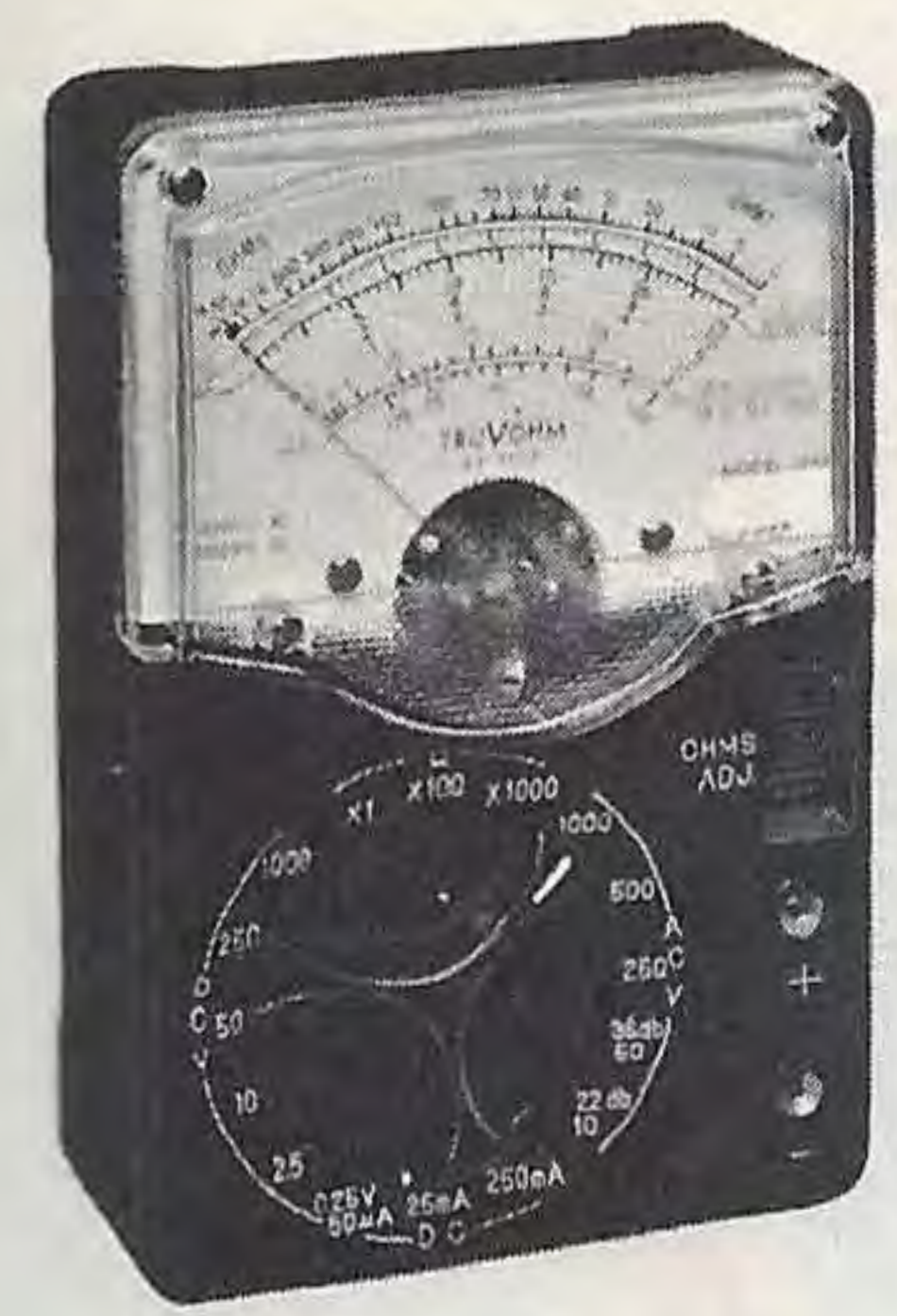
Complete
with batteries
and test leads
Optional carrying
case SCL-2 \$2.95

**PROFESSIONAL
VERSATILITY—AND
MORE PRECISION.**



When measurements must be precise and give minimal loading to the circuits being measured, you can depend on this palm-sized instrument. It has all the professional features of a fine high-priced multimeter including anti-parallax mirror-back scale, double-jewelled $\pm 2\%$ D'Arsonval meter, $\pm 1\%$ temperature-compensated precision film resistors, and 30,000 Ω /volt DC and 14,000 Ω /volt AC characteristics. The meter is protected from accidental burnout by a dual silicon diode overload protection circuit. High-impact molded case.

DC VOLTAGE: 0 – 0.6, 3, 12, 60, 300, 1200 volts
AC VOLTAGE: 0 – 12, 60, 300, 1200 volts
DC CURRENT: 0 – 60 μ A, 12 mA, 300 mA
RESISTANCE: X1 X100 X1000
DECIBELS: –10 to 23 (good to 7 KC)
ACCURACY: 2% Meter movement
SENSITIVITY: 30,000 ohms/volt DC; 14,000 ohms/volt AC
SIZE: 5-1/8H x 3-3/8W x 1-3/8D



MODEL 20A3

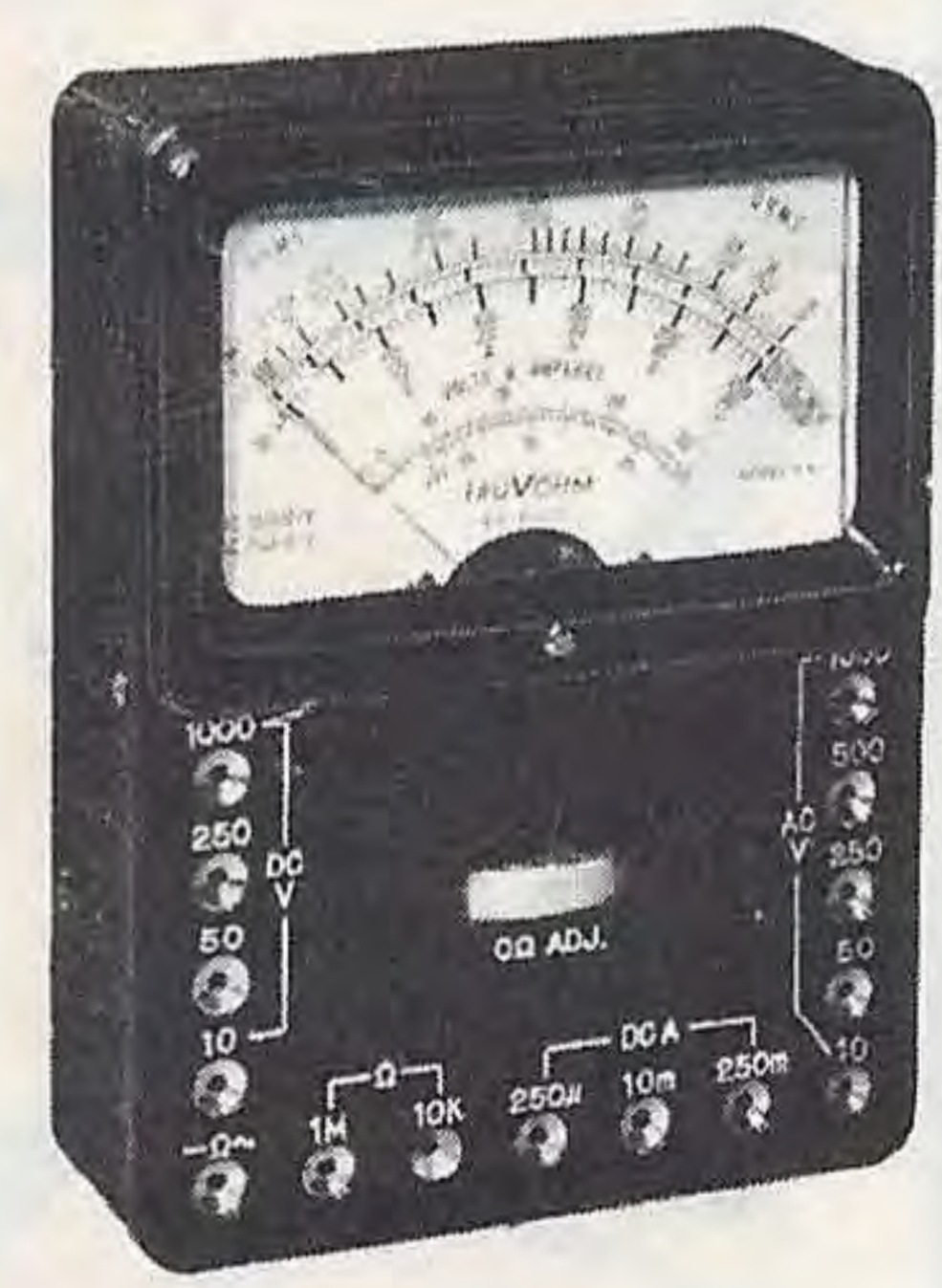
\$14.95

Complete
with batteries
and test leads
Optional carrying
case SCL-2 \$2.95

**PROFESSIONAL
VERSATILITY AND
LOW LOADING TOO.**

When your measurements must not appreciably disturb the circuits under test, here's a great buy. This modestly priced, high-precision, pocket portable instrument packs 16 different types of measurements in its custom-molded high impact case. Having 20,000 Ω /volt DC and 10,000 Ω /volt AC characteristics, it is ideally practical for general, though accurate, service. The easy-to-read meter features a rugged double-jewelled D'Arsonval movement made especially for us.

DC VOLTAGE: 0 – 0.25, 2.5, 10, 50, 250, and 1000 volts
AC VOLTAGE: 0 – 10, 50, 250, 500, and 1000 volts
DC CURRENT: 0 – 50 μ A, 25 mA, 250 mA
RESISTANCE: 0 – 7000 ohms, 700 k Ω , and 7 megohms
DECIBELS: –10 to +36 dB
ACCURACY: 2% Meter movement
SENSITIVITY: 20,000 ohms/volt DC; 10,000 ohms/volt AC
SIZE: 5-1/8H x 3-3/8W x 1-3/8D



MODEL 4A3

\$10.95

Complete
with batteries
and test leads
Optional carrying
case SCL-2 \$2.95

**PROFESSIONAL
VERSATILITY PLUS.**

This miniature $\pm 3\%$ accurate pocket portable is a small but versatile general utility instrument. The wide-visibility meter can be easily read in all 15 ranges. Excellent for repair and service work on both electrical appliances and radios in shop or home. Its high-impact plastic case enables it to take normal service wear in stride.

DC VOLTAGE: 0 – 10, 50, 250, 1000 volts
AC VOLTAGE: 0 – 10, 50, 250, 500, 1000 volts
DC CURRENT: 0 – 250 μ A, 10 mA, 250 mA
RESISTANCE: 0 – 10 k Ω and 1 megohm
DECIBELS: –20 to +36 dB
ACCURACY: 2% Meter movement
SENSITIVITY: 4000 ohms/volt DC;
2000 ohms/volt AC
SIZE: 4-3/4H x 3-7/16W x 1-9/16D



MODEL 1A1

\$7.95

Complete
with batteries
and test leads

**PROFESSIONAL
VERSATILITY IN A
NUTSHELL.**

Here's the go-everywhere lightweight, shirt-pocket instrument for the busy technician/hobbyist. Its rugged double-jewelled D'Arsonval meter and $\pm 1\%$ tolerance stabilized resistors are cushioned in a high-impact plastic case. With its eleven types of measurements and professional performance, it packs a lot of versatility in a convenient midsize.

DC VOLTAGE: 0 – 10, 50, 250, 1000 volts
AC VOLTAGE: 0 – 10, 50, 250, 1000 volts
DC CURRENT: 0 – 1, 100 mA
RESISTANCE: 0 – 150,000 ohms
ACCURACY: 2% Meter movement
SENSITIVITY: 1,000 ohms/volt, AC and DC
SIZE: 3-5/8"H x 2-3/16W x 1-1/8D

If not deliverable, do not return.



CATALOG

All prices and specifications subject to change without notice. Prices slightly higher in the West and Canada.

PRICES of imported items herein may be slightly higher than listed due to U.S. surcharge and/or currency revaluation.

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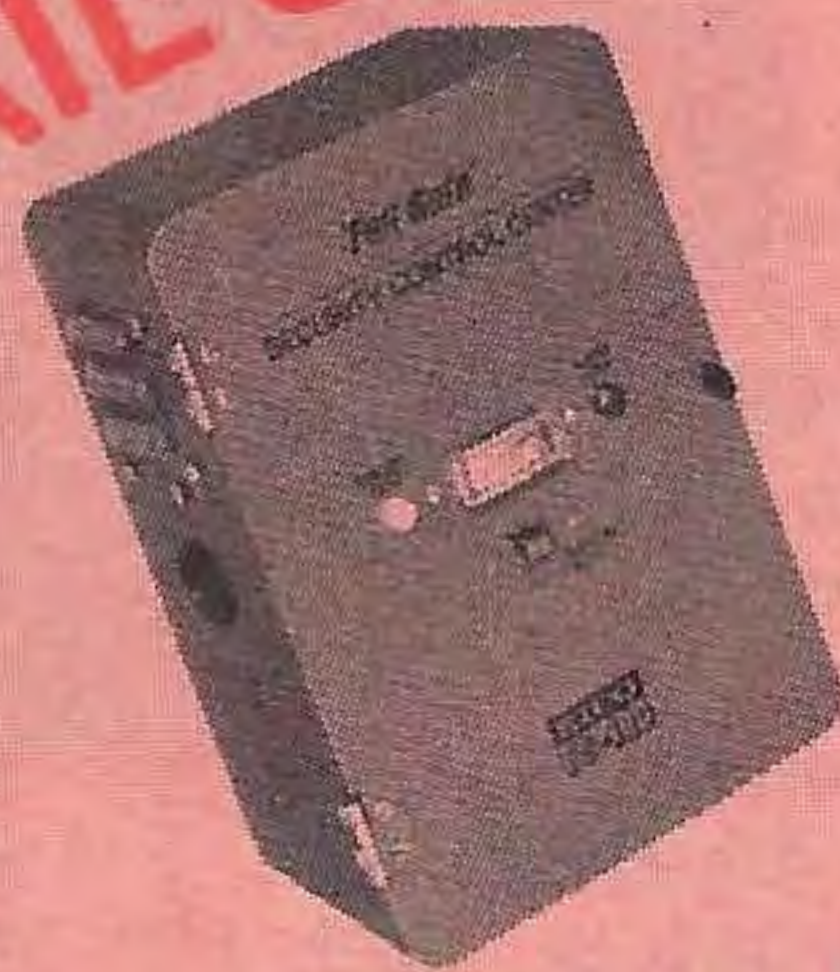
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NEW!
ENGINE ANALYZER



Solid State Car/Boat
Compact-battery powered
Does everything
much larger and
more costly
units can do.
EICO Model
887—See
page 12.

NEW!
'FAIL SAFE'



**Burglar/Fire Alarm
Systems**
a professional Home
Security System
everyone can
install
and afford.
See pages
8, 9.

NEW!
COLOR IMAGES



Electronic Art/Lighting
6 New Exciting
Audio Lighting
Products.

NEW!
EICOCRAFT



**5 New
Solid State Kits**
EC-4300, EC-4400
EC-4500
EC-4600
EC-4700
See page 6
4, 5.

NEW!
AUDIO-LIGHTING



**Color Organs, Strobes,
Blacklite**
Create your own
Lightshow
with
EICO audio
lighting
components.

New EICO 230
features
VOM convenience
with
VTVM accuracy!
See page
25.



NEW!
FET-TVOM

NEW!
POWER INVERTERS



Solid State—
3 New Models
to choose from.
110 watts,
160 watts,
220 watts.
See page
30.

NEW!
QUATRASONIC™



4 Channel Stereo Adapter
Converts your present
stereo system to
4-dimensional
Sound!
No additional
amplifier
required.
See page
10.