

# INSTRUMENTS



**EICO 150 Solid State Signal Tracer**  
Superb for convenient and rapid troubleshooting of any audio or rf equipment. Measure relative gain visually on the built-in meter and/or aurally using the speaker to judge audible quality. 400 mW output power from amplifier section. Transformer and speaker in EICO Model 150 can be substituted for suspected components in defective equipment being checked. A shielded rf crystal demodulator as well as a direct probe are provided.  
**Kit and Wired**

**EICO 147 Multi-Signal Tracer**  
Two separate input channels assure maximum applicability to both rf and audio work. Magic eye tube and speaker provide both visual and aural signal monitoring. Calibrated wattmeter to measure power consumption of equipment being tested. Output for VTVM or oscilloscope. Built-in transformer or speaker may be used as substitutes for suspected components in defective equipment. Complete with shielded rf crystal demodulator and direct probes.  
**Kit and Wired**

**EICO PS1-1 Signal Injector Probe**  
Perfect on-the-spot signal source for use in the field. Supplies 1 KHz signal with harmonics to 30 MHz. Helps troubleshoot audio, if and rf circuitry in any electronic equipment, whether it be transistorized or vacuum tube. Self-powered, self-contained solid state, portable probe instrument.  
**Kit and Wired**

**EICO 950 R-C Bridge**  
A versatile and truly useful service instrument for direct measurement of capacity from

10pF to 5000µF and resistance from 0.5 ohm to 500 meg. ohms. Includes a direct reading ratio scale for comparing values of two capacitors. A variable 0-500 dc polarizing voltage can be applied to electrolytic capacitors. The magic eye tube indicates when bridge is balanced as well as leakage. Read power factor directly.  
**Kit and Wired**

**EICO 955 In-Circuit Capacitor Tester**  
Measures capacitors between 0.1 mf and 50 mf. Checks for shorts and opens when the capacitor is connected in the circuit or after it has been removed from the circuit. Determine dissipation or power factor. Bright bar pattern on eye tube gives sharp indications for accurate readings. Only one co-ax type test lead required for all tests.  
**Kit and Wired**

**EICO 565 Volt-Ohm Milliammeter**  
A performance-proven multimeter featuring 20,000 ohms/volt dc sensitivity, the EICO Model 565 boasts 31 ranges. There are seven accurate dc voltage ranges from 0.25 volt to 5000 volts and six ac and dB ranges from 2.5 volts to 5000 volts and -12 dB to -55 dB. DC current can be measured on five ranges from 50µA to 10 Amperes. Resistance is measurable on three ranges to 20 megohms. Output voltage setting removes dc components when measuring signal voltages. 5% resistors used throughout. Large 4½", 50µV meter movement.  
**Kit and Wired**

**EICO 555**—Same as Model 565 except that it employs 1% precision resistors.  
**Kit and Wired**

# & AUTO TESTERS



**EICO 710 Grid Dip Meter**  
The handiest instrument for a service engineer, lab technician, experimenter or "ham" for determining the frequency of an oscillator. Covers broadcast, FM, TV and Ham bands in 8 overlapping ranges (40 KHz-250 MHz). **Kit and Wired**

**EICO 715 Transceiver Test Set**  
Reliable, portable, self powered, quick and easy-to-use, the 715 enables you to obtain maximum results from your ham or CB transceiver or transmitters. Measures R.F. power output to 50 watts, SWR (1-30), modulation percentage (0-100%) and relative field strength (1-10). Includes built-in 50Ω dummy load. Ideal for antenna adjustment. **Wired only**

**EICO 540 Appliance/Car Tester**  
Enables you to find defects in irons, fans, heaters, TV and radio tubes, ignition coils, auto batteries, etc. AC/DC voltage ranges 0-7.5, 15, 150, 300 volts. Current range 0-15 amps resistance range 0-1000Ω. Neon lamp for leakage test.  
**Kit and Wired**

**EICO 888 Solid State Universal Engine Analyzer**  
Keep your car or boat engine in tip-top shape with this completely portable engine analyzer. Useful for 6- or 12-volt; 4, 6, or 8 cylinder engines; negative or positive ground. Large 6" D'Arsonval meter with 10 large, clear, easy-to-read scales. Measure voltage, engine RPM, dwell angle, current, resistance, spark and diode leakage. Includes a comprehensive tune-up and trouble-shooting manual.  
**Kit and Wired**

# INVERTER



**EICO 1064 Deluxe Battery Eliminator**  
Heavy duty model. Dual range (0-8V @ 10A continuous, 0-16V @ 6A continuous). Voltmeter reads 0-20VDC, ammeter reads 0-10 amps and 0-20 amps, automatically switched by voltage selector switch.  
**Kit and Wired**

**EICO 1080 Power Inverter/Charger**  
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.  
**Kit and Wired**

**Battery Eliminators and Chargers provide power for battery operated marine and automotive equipment. Also gives safe current level for slow charge of storage batteries.**

**EICO 1060 Battery Eliminator**  
Dual range (0-8V @ 10A continuous, and 0-16V @ 6A continuous). Has voltmeter and ammeter, automatic reset overload relay for secondary protection. Fused primary. AC ripple 0.3%.  
**Kit and Wired**

# MULTIMETERS



**Model 100T6-VOM/Transistor Tester**  
Combines a sensitive volt-ohm-µA-MA-A-Meter with a direct reading transistor tester. Dual silicon diode protection safeguards the 7.5 µA full-band movement. Measures DC millivolts, volts, microamps, milliamps and amperes. AC volts, decibels, measures capacitance, resistance. In addition, direct reading of transistor Alpha, Beta and Ico (leakage) for NPN and PNP transistors. DC sensitivity 100K ohm/volt-AC sensitivity 10,000 ohms/volt. Complete with test leads and batteries.

**MODEL 100C3 Multi-Meter**  
Exceptionally wide range and sensitivity. DC voltage from 0.3V full scale to 3000V F.S. AC voltage from 6V to 600V (F.S.) D.C. current from 12 µA to 300 MA, resistance to 200 megΩ, capacitance, decibels, all direct-reading on the 8.5 µA full-band movement with built-in overload protection and mirror-backed scale. Complete with test leads and batteries.

**MODEL 100A4**  
All the features you expect in a lab quality instrument—100,000 Ω/V DC sensitivity, 12,500 Ω/V AC sensitivity, 2% accuracy, double-jewelled meter movement with anti-parallax mirror-backed scale, silicon diode overload protection. Measures DC volts from 0.5V to 1000V full scale, AC volts from 2.5V to 1000V full scale, DC current from 10µA to 10A full scale, resistance to 20 megohms, and Dd from -20 to +62 in 5 ranges. Handsome, functional high-impact case with carrying handle—complete with test leads and batteries.

**MODEL 30A4**  
An outstanding pocket-portable multimeter with laboratory type accuracy and capability. Features a double-jewelled 2% accuracy movement with silicone diode overload protection, mirror backed scale, 1% temperature-compensated resistors. Wide range of scales on DC and AC volts, decibels DC current and resistance. Measures AC component of a fluctuating DC voltage. Sensitivity 30,000 Ω/V on DC and 10,000 Ω/V AC. Complete with test leads and batteries.

**MODEL 30A3**  
Accuracy in small sized convenience. The 2% double-jewelled movement is overload protected and has a full-width mirror-backed scale. Sensitivity is 30,000 Ω/V on DC and 14,000 Ω/V on AC. Measures DC voltage from 0.6V F.S. to 1200V F.S. in six ranges, DC current from 60 µA to 300 mA, AC voltage from 12V (FS) to 1200V (FS). Decibels and resistance. Complete with test leads and batteries.

**MODEL 20A4**  
This versatile instrument is a sensitive and accurate service tool. The full width meter with expanded easy-to-read scales and the unique lever-type selector switch combine to provide maximum accuracy. AC and DC voltage scales: 0.5V, 25V, 100V, 500V and 1000V. DC current 50 µA, 5, 500 MA. Ohms scales RX1, RX100, RX1K, RX10K. Calibrated dB scale. Sensitivity 20,000 Ω/V DC—10,000 Ω/V AC. Complete with test leads and batteries.

**MODEL 20A3**  
A fine utility multimeter with 20,000 Ω/V DC sensitivity and 10,000 Ω/V AC characteristic. Double jeweled movement. Measures DC & AC volts, DC current, resistance & dB with accuracy usually found only in larger instruments. Complete with batteries and test leads.

**MODEL 4A3**  
A pocket-sized multimeter that gives all the features and accuracy of a full-sized unit. 14 ranges of AC & DC voltage, DC current, ohms and decibels. Complete with test leads and batteries.

**MODEL 1A1**  
A shirt-pocket instrument for the busy technician or experimenter. Features a double-jewelled movement and 1% resistors, and a high-impact molded case. Measures AC and DC voltage at 1000 Ω/V, DC current and resistance in eleven direct-reading ranges. Complete with test leads and batteries.

**MODEL 300C—Portable AC Ammeter/Voltmeter**  
This compact, light weight unit measures AC current without breaking the circuit. Insulated jaws snap around a single conductor and the meter gives instant reading. A pointer lock permits you to take the measurement, lock the reading, and read the voltage after the meter has been disengaged. To increase the versatility of this instrument, AC voltage scales of 0-150, 300, 600, and a resistance scale of 0-1000 Ω (with 30 ohm center scale) have been added to the AC current scales of 0-6, 15, 60, 150, 300 amperes.

**Accessory Carrying Cases**

Model SLC-1, for 100A4

Model SLC-2, for 20A3, 30A3, 4A3

Model SLC-3, for 30A4

Distributed by

Eico Electronic Instrument Co., Inc., 283 Malta Street, Brooklyn, New York 11207



CTC 6174

# PROFESSIONAL TEST INSTRUMENTS

oscilloscopes

VTVM's, VOM's

generators

tube/transistor testers

power supplies

probes

kit & wired

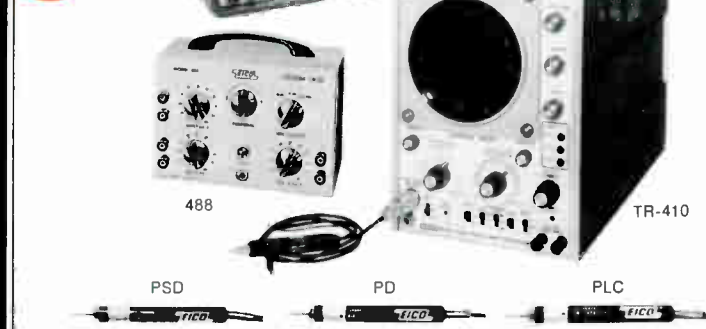
a complete line of electronic test and measuring instruments for industry, laboratories, schools and radio-tv servicing.

Laboratory Precision at Lowest Cost Since 1945

CONDENSED CATALOG



# OSCILLOSCOPES & PROBES



**EICO 460 Wideband DC 5" Scope**  
By far the best scope value—a standard in the industry. Vertical response from dc to 4.5 MHz makes this instrument ideal for use in TV service. Convenient four position ac and dc calibrated gain attenuator is necessary to make precise signal voltage measurements. Fully automatic sync is provided with special switch positions for synchronizing TV signals. Built-in sweep ranges from 10 Hz to 100 kHz (can be extended by connecting different value capacitors to terminal on front panel).

**Kit and Wired**

**EICO 465 5" Oscilloscope/Vectorscope**  
Meeting all professional requirements for displays from dc to 10 MHz, the 465 is ideal for use in TV service. Besides having convenient preset TV vertical and horizontal sweep frequency switch positions, the 465 is complete with graticule and leads so that it can be used as a precision vectorscope. Vertical Sensitivity: 12 mv rms/cm; Input Z: 1 Mohm/35 pF; Calibrating voltage. Horizontal Response: dc to 1 MHz; Sensitivity: 17 mv rms/cm.

**Kit and Wired**

**EICO 488 Electronic Switch**  
Converts any conventional oscilloscope to a dual-trace scope. Compare phase, amplitude and frequency of two waveforms as they are displayed simultaneously. Switching frequencies continuously variable from less than 10 Hz to more than 2 KHz.

**Kit and Wired**

**EICO 435 Wideband DC 3" Scope**  
Lightweight and compact for convenient portability, the 435 boasts features usually available only in high priced instruments. D-C push-pull vertical amplifier provides a useful response from dc to 10 MHz. Add this to the special TV Vertical and Horizontal sweep frequency settings, and the 435

becomes the ideal instrument for use in the field as well as at your service center. Sync is automatic on all ranges.

**Kit and Wired**

**EICO 427 Direct Coupled 5" Scope**  
A rugged, sensitive general-purpose scope for service or industry. Push-pull direct coupled vertical amp with response from DC to 500 KHz. Vertical sensitivity is 3.5 mv rms/cm. Horizontal amp freq response from 2 Hz to 450 KHz. Horizontal sensitivity is 180 mv rms/cm.

**Kit and Wired**

**TR-410 Solid State Triggered Sweep Scope**  
The most versatile scope ever devised in the price range! Fully protected FET high impedance input. Vertical sensitivities from 0.01 v/cm to 20 v/cm. DC frequency response: DC to 10 MHz (−3 dB). AC frequency response: 2 Hz to 10 MHz (−3 dB). Rise time: 35 nanoseconds with 3% maximum overshoot. Input Impedance: 1 meg/35 pF. Horizontal Sensitivity: 250 mv/cm, continuously variable. Frequency response: DC to 1 MHz. Input Impedance: 100K ohms/40 pF. Sweep: triggered or free-running, calibrated in 19 ranges from 0.5  $\mu$ sec/cm to 0.5 sec/cm, continuously variable. Three peak-to-peak calibrating voltages: 10V, 5V, 2V. Use as vectorscope when servicing color TV.

**Wired only**

**EICO PSD Demodulator Probe** for signal tracing modulated signals in all RF and IF stages in TV and radio, from 150 KHz to 250 MHz.

**Kit and Wired**

**EICO PD Direct Probe** for tracing waveforms in low impedance and low frequency circuits.

**Kit and Wired**

**EICO PLC Low Capacity Probe** especially useful when checking high frequency and high impedance circuits.

**Kit and Wired**

operated solid state design. 4 1/2" meter movement. Accurate readings to as low as .05 volt on the 1 volt scale. Seven 11 megohms dc ranges to 1000 volts (to 30,000 volts with optional HVP probe). AC in seven ranges to 1000 volts rms (to 2800 volts peak-to-peak) can be read directly from the dual calibration on the meter dial. Measure resistance accurately to 1000 megohms in 7 ranges. Includes exclusive Uniprobe.

**Kit and Wired**

**EICO 242 Deluxe FET-TVOM**  
As modern as today's technology, this fine solid state instrument can be powered by ac or by battery for portability. Measures ac or dc current from 10  $\mu$ A to 1A in addition to providing all of the Eico 239 capabilities. Low ohmmeter voltage allows you to measure resistance even in semiconductor circuits. Large 6 1/2" meter movement. Professional looking cabinet. Complete with exclusive Multi-probe for all functions.

**Kit and Wired**

**EICO 249 Deluxe VTVM**  
Same outstanding features of the 232 plus extra convenience and readability of a large 7" meter.

**Kit and Wired**

**EICO 235 Professional VTVM**  
A must for the engineer or technician who works on equipment ranging from color TV to solid state devices. Measure dc on eight ranges from 0.5 volt to 1500 volts (to 30 KV with optional HVP-2 probe). 11 megohms input impedance. Seven peak-to-peak ac measuring ranges from 1.5 to 1500 volts rms (to 4200 volts peak-to-peak). Frequency response to 3 MHz is extended to 250 MHz with optional PRF-11 probe. Seven resistance ranges to 1000 megohms. Complete with exclusive Uniprobe.

**Kit and Wired**

**EICO 239 Portable FET-TVOM**  
The industry's lowest cost professional FET-TVOM. Completely portable, battery

operated solid state design. 4 1/2" meter movement. Accurate readings to as low as .05 volt on the 1 volt scale. Seven 11 megohms dc ranges to 1000 volts (to 30,000 volts with optional HVP probe). AC in seven ranges to 1000 volts rms (to 2800 volts peak-to-peak) can be read directly from the dual calibration on the meter dial. Measure resistance accurately to 1000 megohms in 7 ranges. Includes exclusive Uniprobe.

**Kit and Wired**

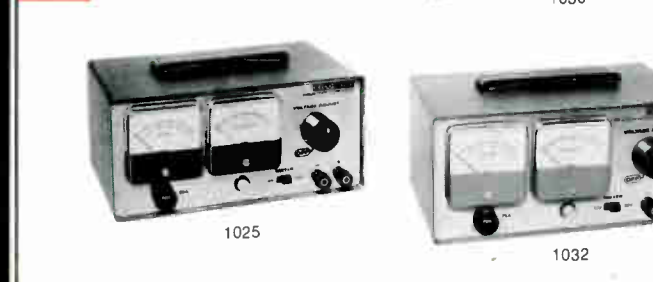
**EICO 242 Deluxe FET-TVOM**  
As modern as today's technology, this fine solid state instrument can be powered by ac or by battery for portability. Measures ac or dc current from 10  $\mu$ A to 1A in addition to providing all of the Eico 239 capabilities. Low ohmmeter voltage allows you to measure resistance even in semiconductor circuits. Large 6 1/2" meter movement. Professional looking cabinet. Complete with exclusive Multi-probe for all functions.

**Kit and Wired**

# INSTRUMENTS



# POWER SUPPLIES



**EICO 324 RF Signal Generator**  
A rugged, dependable unit which has proven itself over many years. Provides fundamental frequencies from 150 MHz to 145 MHz in six bands and calibrated harmonics to 435 MHz Vernier tuning. Modulate signal using built in 400 Hz oscillator or an external source. Step and continuously variable attenuators are adjustable from the front panel. 400 Hz signal can be used for testing audio circuits. Shielded rf output cable included.

**Kit and Wired**

**EICO 330 Solid State RF Generator**  
This precision discrete frequency sine wave generator is designed to meet the need for accuracy and stability by engineers, schools and industry. The range is 1 Hz to 110 KHz. Frequencies may be selected in 1 Hz steps by switches. Output voltage can be read from the large 4 1/2" meter calibrated in RMS volts and dB. Output is adjustable from 0-10V rms.

**Kit and Wired**

**EICO 342 FM Multiplex Generator**  
The 342 provides all signals required for alignment and test of FM stereo receivers. Select L, R, L+R, L-R, 19 KHz or stereo source output. Signal can be injected directly into the multiplex section of the receiver or used to modulate rf in the Eico 342. Modulated rf may be fed to the antenna terminals of the tuner. Determine channel separation, triggering sensitivity and SCA rejection. Crystal controlled 19 KHz pilot frequency. Adjustable composite level control.

**Wired only**

**EICO 369 TV-FM Sweep & Marker Generator**  
A must for TV and FM alignment applications. Provides five fundamental sweep ranges using a controllable inductor. Covers frequencies from 3 MHz to 220 MHz. Vernier tuned. Sweep width is variable to 20 MHz over most of the range. The vernier tuned marker generator covers the 2-75 MHz range on fundamentals and the 40-225 MHz range on calibrated harmonics. Crystal can be inserted for a stable fixed marker oscillator to check dial calibration. Complete with scope cables and 4.5 MHz crystal.

**Kit and Wired**

**EICO 385 Solid State Color Bar Generator**  
This mighty midget is the ultimate in portability and performance. Generates the standard offset carrier type stable 10 bar color display as well as horizontal lines, vertical lines, crosshatch and dot patterns. Output cable connects directly to TV receiver antenna terminals. Versatile color-coded gun killer is stored in the portable case.

**Kit and Wired**

**EICO PST-2 Signal Tracer Probe**  
This penlight-sized instrument is a versatile service tool. The high-gain amplifier with a usable bandwidth from 500 Hz to 200 KHz can be extended to 200 MHz by means of the snap-on demodulator tip. Input impedance is 3.5K ohm-350K ohms depending upon tip used. Complete with three tips, earphone and pouch.

**Kit and Wired**

**EICO 1020 Power & Bias Supply**  
Solid state design provides dependable operation. Two position slide switch selects meter voltage range (0-6VDC or 0-30VDC). Voltage is continuously variable from 0 to 30 volts. Maximum permissible load current is 300 ma. The 120 Hz ripple is less than 0.005% at full load. Circuit is protected by a fast-acting fuse.

**Kit and Wired**

**EICO 1032 Solid State Regulated Power Supply**  
A fully regulated laboratory grade dc power supply. Will deliver up to 500 ma at any voltage from 0 to 30 volts with negligible ripple. Virtually unaffected by line fluctuations from 105 to 135 volts and load current variations from 0 to 500 ma. Separate voltmeter and ammeter to monitor output. Circuit protected by fuse.

**Kit and Wired**

**EICO 1025 Solid State Power Supply**  
Solid state dc power supply. Continuously variable output voltage from 0-30V, is monitored by a dual range voltmeter. Load current can be varied from 0 to 300 ma and measured on the built-in milliammeter. Features extremely low ripple for servicing or designing transistorized equipment. Fused output for circuit protection.

**Kit and Wired**

**EICO 1030 Regulated Power Supply**  
Two independent regulated, continuously variable dc supplies plus two 6.3 VAC (or one 12.6 VAC) filament supplies in one versatile unit. Delivers 0-400 VDC at 150 mA and 0-150 VDC bias voltage at 2 MA. One meter indicates the output voltage from both dc supplies and a second meter indicates the current delivered to a load by the 0-400V supply.

**Kit and Wired**

# TESTERS



**EICO 667 Tube and Transistor Tester**  
Gives a composite indication of mutual conductance and peak emission capabilities of almost all domestic and foreign receiving tubes. Also provides direct-reading leakage test between the different elements, to 20 Megohms. Special test to indicate if tube is gassy. You can also check small transmitting and special purpose tubes, voltage regulators, cold cathode rectifiers, etc. Accessory EICO Model CRU adaptor can be used to test all types of picture tubes. Checks also provided for bipolar transistors. Complete with Tube Data Manual.

**Kit and Wired**

**EICO 633 CRT Tester and Rejuvenator**  
Portable, all solid state CRT tester is designed to rapidly test and rejuvenate color as well as black and white picture tubes. Each gun of color tube can be measured individually and numerically, providing you with gray scale tracking information. Continuity and leakage checked through transistorized VOM and read directly on the large 4 1/2" 200 $\mu$ A d'Arsonval meter. Complete with 6 CRT sockets for all types of picture tubes and tube data manual.

**Kit and Wired**

**EICO 635 Portable Tube Tester**  
Fast-check nearly any tube including TV picture tubes, Novars, nuvistors, compactrons, 10-pin types etc. Tests for dynamic cathode emission, grid leakage, gas and shorts. 3 1/2" D'Arsonval meter is protected against accidental overload and burnout. Extra-convenience features include pin straighteners for all tube types, transformer isolated power supply, and lightweight luggage-type carrying case.

**Kit and Wired**

**EICO 443 Transistor-Diode Curve Tracer**  
This versatile instrument makes it possible to use most general purpose scopes to display transistor characteristics. Display a family of 3 curves for npn and pnp transistors and note the leakage and dynamic collector resistance. Read beta directly from the calibrated dial. Compare beta of two transistors. Also checks PIV of diodes and rectifiers to 1400 volts, reverse current to 1 microampere per division and forward current to 1 ampere. Built-in oscilloscope voltage calibrators.

**Kit and Wired**

**EICO 680 Transistor & Circuit Tester**  
Versatile Transistor and Circuit Tester provides accurate measurement of basic transistor and diode characteristics required for quality testing, plus a 20 k $\Omega$ /V VOM normally required for testing and troubleshooting transistor circuits. Measures transistor  $I_{CEO}$ ,  $I_{CBO}$  and DC Beta. Simple criteria for all tests detailed in manual; no charts needed.

**Kit and Wired**

**EICO 685 Solid State Transistor Analyzer**  
In-and-out of circuit dynamic semiconductor and circuit analyzer. Perform multiple tests on bipolar transistors including 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. Check ac beta at 0.2 ma, 2 ma and 20 ma collector current.  $I_{CBO}$  and  $I_{CEO}$  measurements are made to 5 ma and read on the convenient and compressed scale. Besides the 0-50,000 micromhos AC transconductance readings,  $I_{BSS}$ ,  $I_{BSS}$  and pinch-off voltage tests are readily performed on all types of FETs. You can also check the new enhancement and depletion type FET's. Read zener diode breakdown voltage. Also tests diodes, SCR's, Triacs and UJT's.

**Kit and Wired**

# FET TVOM, VTVM's & PROBES



**EICO 232 Peak to Peak Measuring VTVM**  
The established leader in professional VTVMs. Large 4 1/2" meter movement. Seven ranges for each function. Measure dc to 1500 volts (to 30 KV with optional HVP-2 probe). 11 megohms input impedance. Zero center for FM discriminator adjustment. Direct reading rms or peak-to-peak scales for all ac measurements to 1500 volts rms or 4200 volts peak-to-peak. Frequency response is 30 Hz to 3 MHz (extended to 250 MHz with optional PRF-11 probe). Measure resistance from 0.2 ohms to 1000 megohms. Complete with exclusive dual purpose AC/DC Uniprobe.

**Kit and Wired**

**EICO 249 Deluxe VTVM**  
Same outstanding features of the 232 plus extra convenience and readability of a large 7" meter.

**Kit and Wired**

**EICO 235 Professional VTVM**  
A must for the engineer or technician who works on equipment ranging from color TV to solid state devices. Measure dc on eight ranges from 0.5 volt to 1500 volts (to 30 KV with optional HVP-2 probe). 11 megohms input impedance. Seven peak-to-peak ac measuring ranges from 1.5 to 1500 volts rms (to 4200 volts peak-to-peak). Frequency response to 3 MHz is extended to 250 MHz with optional PRF-11 probe. Seven resistance ranges to 1000 megohms. Complete with exclusive Uniprobe.

**Kit and Wired**

**EICO 239 Portable FET-TVOM**  
The industry's lowest cost professional FET-TVOM. Completely portable, battery

operated solid state design. 4 1/2" meter movement. Accurate readings to as low as .05 volt on the 1 volt scale. Seven 11 megohms dc ranges to 1000 volts (to 30,000 volts with optional HVP probe). AC in seven ranges to 1000 volts rms (to 2800 volts peak-to-peak) can be read directly from the dual calibration on the meter dial. Measure resistance accurately to 1000 megohms in 7 ranges. Includes exclusive Uniprobe.

**Kit and Wired**

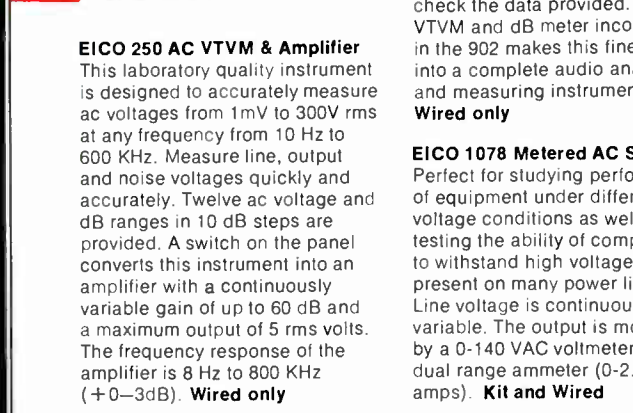
**EICO 242 Deluxe FET-TVOM**  
As modern as today's technology, this fine solid state instrument can be powered by ac or by battery for portability. Measures ac or dc current from 10  $\mu$ A to 1A in addition to providing all of the Eico 239 capabilities. Low ohmmeter voltage allows you to measure resistance even in semiconductor circuits. Large 6 1/2" meter movement. Professional looking cabinet. Complete with exclusive Multi-probe for all functions.

**Kit and Wired**

# BOXES



# INDUSTRIAL INSTRUMENTS



**EICO 1100 Resistance Substitution Box**  
Provides a means of rapidly substituting a wide range of EIA resistance values in a circuit. Switch is 15 ohms to 10 Mohms in decade multiples of 15, 22, 33, 47, 68 and 100 ohms.

**Kit and Wired**

**EICO 1120 Capacitor Substitution Box**  
Affords a multiplicity of servicing, development and time saving advantages by enabling you to substitute different value capacitors into a circuit. A rotary switch allows you to select any standard size capacitor between 100 pF and 0.22  $\mu$ F.

**Kit and Wired**

**EICO 1140 Series/Parallel RC Combination Box**  
A valuable combination of the EICO Model 1100 resistor box and EICO Model 1120 capacitor box. Open circuit and short circuit positions are also provided.

**Kit and Wired**

**EICO 1171 Decade Resistance Box**  
Ideal for determining exact resistor values. An instant performance comparison can be made of a circuit using a standard EIA value resistor with the performance of the same circuit when using the ideal value resistor in the EICO 1171. Range: 0-99,999 ohms in 5 decades. One ohm steps.

**Kit and Wired**

**EICO 1180 Decade Condenser Box**  
Useful for rapid experimental determination of exact capacitor values required in a circuit. Precision 1% capacitors, 100 pF to 0.111  $\mu$ F, are arranged in three decades in precise 100 pF steps.

**Kit and Wired**

**EICO Model 902 IM/Harmonic Distortion Analyzer**  
Intermodulation and harmonic distortion specifications are vital statistics supplied by just about every manufacturer of quality audio equipment. The precise EICO Model 902 permits an engineer or service technician to check the data provided. The AC VTVM and dB meter incorporated in the 902 makes this fine unit into a complete audio analyzer and measuring instrument.

**Wired only**

**EICO 1078 Metered AC Supply**  
Perfect for studying performance of equipment under different line voltage conditions as well as for testing the ability of components to withstand high voltage surges present on many power lines. Line voltage is continuously variable. The output is monitored by a 0-140 VAC voltmeter and a dual range ammeter (0-2.5, 0-7.5 amps).

**Kit and Wired**



Test Equipment □ Burglar Fire Alarms □ Hobbyist & Automotive Electronics

# '81 EICO CATALOG

The Newest and Best Values in Do-it-Yourself Kits  
and Factory Assembled Electronic Equipment

**EICO**®

Laboratory precision  
at lowest cost!

meter over-load protected.  
Complete with batteries and test  
leads. Also see page 18-19.

variable rate speed control. Cube  
design. See page 31.

musical beat. 4 frequency  
controlled channels. Walnut  
grained cabinet 18" x 11" x 7"  
(HWD). See page 31.

Assembled

Assembled

With Graticule and Leads for Vectorscope Use!

## 465 oscilloscope/ vectorscope



- DC to 8 MHz (useable to 10 MHz) ■ 5" Flat-Face CRT
- 12 mV rms/cm Sensitivity ■ An Accurate Vectorscope

This truly professional 5" scope, with its preset TV-Vertical and TV-H 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 -5 db) from DC to 8 MHz. An accelerating potential of 1400V 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 10Hz to 100 kHz, in addition to the preset TV-Vertical and TV-H Horizontal positions. The EICO 465 is a complete precision vectorscope supplied with an accurately calibrated graticule and the required interconnecting cables.

### SPECIFICATIONS

**VERTICAL AMPLIFIER:** Frequency response from DC to 8 MHz, +1, -5db (useable to 10 MHz); sensitivity 12 mV RMS/cm (34 mV p-p/cm); input impedance 1 megohm/35 pf; square-wave calibration voltage 200 mV p-p,  $\pm 1\%$ . **HORIZONTAL AMPLIFIER:** Frequency response from DC to 1 MHz, +1, -3 db; sensitivity 17 mV rms/cm (48 mV p-p/cm); input impedance 1 Megohm/35 pf. **SWEEP RANGES:** 10-100 Hz, 100-1000 Hz, 1-10 kHz, 10-100 kHz; plus TV-VERT position (30 Hz) and TV HOR position (7875 Hz). Synchronization may be (+) or (-) internal, external, or line frequency. **INTENSITY MODULATION INPUT:** 3V rms blanking; input impedance 2.2 megohms. **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:** 117VAC, consumption approximately 140 watts. **SIZE (HWD):** 12 1/4" x 8 1/2" x 17 1/2". **WEIGHT:** 27 lbs.

\*Export Model Available.

Kit

Assembled

Our Best 'Scope Value. . . An Industry Standard!

## 460 wideband 5" oscilloscope



- 1 DC - 4.5 MHz Flat Response
- Automatic Sync ■ TV-V and TV-H Sweeps

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 30 mV to 500 V. Instantaneous, drift-free positioning permits centering any part of an expanded trace. Intensity and focus controls, 60 Hz 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. Full retrace blanking. Edge-lit calibration grid.

### SPECIFICATIONS

**VERTICAL AMPLIFIER:** Frequency response from DC to 4.5 MHz +1, -3 db (useful to 10 MHz); sensitivity 12 mV rms/cm (30 mV rms/inch); input impedance 3 Megohm/35 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 1 Hz to 600 kHz, +1, -3 db; sensitivity .55 V rms/cm (1.4 V rms/inch); input impedance 5 Megohms/35 pf. **SWEEP RANGES:** 10-100 Hz, 100-1000 Hz, 1-10 kHz, 10-100 kHz; plus EXT CAP position for very low frequency sweeps with external capacitor, TV-V position (30 Hz) and TV-H position (7875 Hz). Synchronization may be (+) or (-) internal, external or line frequency. **POWER REQUIREMENTS:** 117 VAC, approximately 95 watts. **SIZE (HWD):** 13" x 8 1/2" x 16". **WEIGHT:** 25 lbs.

\*Export Model Available.

Kit

Assembled

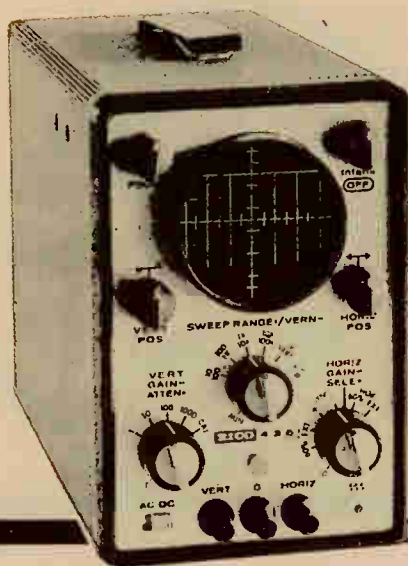
## scope accessory probes





Lightweight and Portable!

# 435 wideband dc 3" oscilloscope



- 18 mV rms/cm Sensitivity ■ TV-V and TV-H Sweeps
- Zener Diode Calibration ■ DC-4.5 MHz Flat Response

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 are obtained with a sharp and bright 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. Edge-lit calibration grid.

## SPECIFICATIONS

**VERTICAL AMPLIFIER:** Frequency response from DC to 4.5 MHz, +1, -3 db (useful to 10 MHz); sensitivity 18 mV rms/cm (50 mV p-p/cm); input impedance 1 Megohm/35 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 1 Hz to 500 kHz, +1, -3 db; sensitivity 0.7 V rms/cm; input impedance 4 Megohms/40 pf. **SWEEP RANGES:** 10-1 100 Hz, 100-1000 Hz, 1-10 kHz, 10-100 kHz; plus TV-VERT position (30 Hz) and TV-H HOR position (7875 Hz). 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 3/4". **WEIGHT:** 18 lbs.

\*Export Model Available.

Kit

Assembled

## Probes to Add Versatility and Flexibility to Your 'Scope!

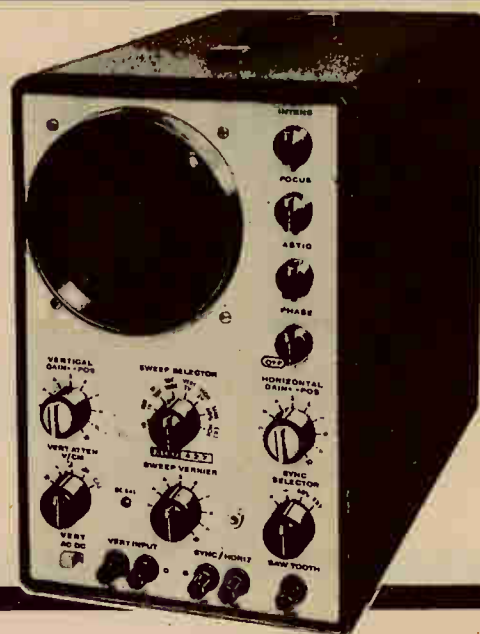
**PSD 'Scope Demodulator Probe** For signal tracing and checking of TV/radio RF and IF stages. Permits scope to be used as waveform tracer, gain analyzer and alignment indicator in all stages. Demodulates AM carriers between 150 kHz and 250 MHz. Kit Assembled

**PD Direct Probe** Use in low frequency or low impedance circuits. Direct Test Probe eliminates stray pick-up and signal re-radiation. Kit Assembled

**PLC Low Capacity Probe** For tracing TV sync signals and general tests in video, sync and sweep circuits. Hi-Z, low capacity probe is useful for waveform tracing in high-impedance, high frequency and wideband circuits (as in TV), without distortion from overloading or frequency discrimination. Kit Assembled

Rugged, Sensitive, General-Purpose 'Scope!

# 427 sensitive dc 5" oscilloscope



- 3.5 mV rms/cm Sensitivity ■ Zener Diode Calibration
- Direct V-Plate Connections ■ Automatic Sync

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 the expanded trace. Intensity, focus, astigmatism, DC balance controls and sawtooth sweep output are provided on the front panel; intensity modulation input is provided on 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 500 kHz, +1, -3 db (approximately -6 db at 1 MHz); sensitivity 3.5 mV rms/cm (10 mV p-p/cm) input impedance 1 Megohm/30 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 2 Hz to 450 kHz, +1, -3 db; sensitivity 0.18 V rms/cm (0.5 V p-p/cm); input impedance 10 Megohms/40 mmf. **SWEEP RANGES:** 10-100 Hz, 100-1000 Hz, 1-10 kHz, 10-100 kHz. Synchronization may be (+) or (-) internal, external or line frequency. **POWER REQUIREMENTS:** 117 VAC, approximately 55 watts. **SIZE (HWD):** 12 1/2" X 8 1/2" X 16 7/16". **WEIGHT:** 23 lbs.

\*Export Model Available.

Kit

Assembled

## DLP-6 digital logic probe



Detects pulses as short as 50 nanoseconds. Indicating the logic state of a circuit, the all-new Eico IC Digital Logic Memory Probe provides detection capabilities for pulse durations as short as 50 nanoseconds. Indicator system consists of three light-emitting diodes (LED's). Bottom LED lights for logic 0; top LED lights for logic 1. Center LED comes on to indicate positive or negative going transition. Remains in on state for 200 ns regardless of pulse duration. Memory switch causes stretch LED to remain on permanently after positive or negative pulse occurs. Logic levels can be tested on any DTL or TTL IC system, including calculators, numerical control systems, computers or telephone systems. Kit Assembled

Digital Accuracy at Low Cost!

## 272 digital multimeter



**NEW!**

- High Accuracy — 0.5% on DC Volts
- Low Price and Factory Assembled
- Large LED Readout — Easy to Read
- Completely Portable — Battery Operated
- Fully Overload Protected — Auto Overload Indication
- Automatic Zero, Automatic Polarity

The EICO 272 is the low-cost multimeter of choice for digital accuracy. All readings are direct on three large bright LED readouts with an accuracy of 0.5 percent of reading on DC volts and 1.0 percent of reading on all other functions. It is not necessary to readjust the zero setting when you change range or interchange the leads for opposite polarity. Both zero setting and polarity indication are fully automatic. Also, when you are measuring a voltage or current that is over the range, an automatic flashing display appears. The DMM is fully protected against overload by means of diodes and a fuse. The industry-standard 10-megohm input impedance provides minimum circuit loading. Battery supply consists of four easy-to-obtain penlite cells and there is a convenient built-in test point for checking the batteries. The attractive low-profile case uses recessed range and mode switches along with recessed test-lead receptacles. Supplied with test leads and batteries.

### SPECIFICATIONS

**FUNCTION:** Measures up to 1000 DC volts, up to 600 AC volts, up to 1000 DC and AC milliamperes, resistance in kilohms. **RANGE:** Four ranges — 1 (.999), 10 (9.99), 100 (99.9), 1000 (999) selected by switching to appropriate position. Decimal point is automatically positioned. Highest range for resistance only is 1000 kilohms or 1 megohm. **READOUT:** Three 0.3 in. LED digits plus negative polarity indicator. **OVERRANGE INDICATION:** Display flashes when input exceeds value of range selected. **POLARITY INDICATION:** (DC volts and DC current) Automatic with minus sign shown for negative polarity. **ACCURACY:** DC volts,  $\pm 0.5\%$  of reading. All other functions,  $\pm 1\%$  of reading. For all ranges add  $\pm 1$  digit to accuracy indicated. **SAMPLING TIME:** 250 ms. **PROTECTION:** Fuse and diode, spare fuse included. **OPERATING TEMPERATURE RANGE:** 0 to 40°C. **POWER SOURCE:** Four AA carbon-zinc or alkaline penlite cells. Jack for AC adapter. **INPUT TERMINALS:** Recessed with polarity indicated. **SIZE (HWD):** 6"  $\times$  3 3/4"  $\times$  1 1/4". **WEIGHT:** 11 oz.

**Assembled**

Extraordinary Performance and Value!

## 270 digital multimeter kit



**Includes functional tilt stand!**

- Flashing Over-Range Indicator
- 3 1/2 Digits
- Auto Polarity, Overload Protected

Featuring 3 1/2 digits, the EICO 270 is a compact, battery-operated DMM that belongs on every test bench and in every field service caddy. It measures AC and DC Volts, AC and DC Current, and Resistance in 21 ranges. Polarity indicators and overload protection are provided, and 0.5 inch LED displays give easiest-to-read digital readout to 1999. The 270 has a basic 0.5% DC accuracy, 10 Megohm input impedance, low voltage drop in all current ranges, automatically-flashing over-range indicator when input exceeds the value of the range selected. Low profile design for ultra-modern appearance. Supplied with test leads and functional tilt stand. (Batteries not included.) Optional AC Adaptor Model BA-27.

### SPECIFICATIONS

**FUNCTION:** Measures AC and DC volts, AC and DC milliamperes and k $\Omega$ . **RANGE:** 4 ranges—2, 20, 200, and 2000 for all functions (additional 20 Megohm range for resistance) selected by switching to the appropriate position. Decimal point automatically positioned. **READOUT:** Four 0.5" LED digits. **OVERRANGE INDICATION:** Display flashes when input exceeds value of range selected. **POLARITY INDICATION** (DC volts and DC current): Automatic; minus sign shown with plus sign implied. **ACCURACY** (Lowest range, other ranges slightly higher): DC volts  $\pm 0.3\%$  of reading. AC Volts, AC current  $\pm 0.7\%$  of reading  $\pm 0.3\%$  of full scale. DC current, resistance 0.5% of reading. For all ranges add  $\pm 1$  digit to accuracy indicated. **READING RATE:** 2 1/2 per second on DC and K ohm range. **OPERATING TEMPERATURE RANGE:** 0° to 50°C. **POWER SOURCE:** Four "c" size batteries alkaline, or carbon-zinc with jack for AC adaptor. (Batteries and AC adaptor not supplied). **CURRENT CONSUMPTION:** Less than 100 mA. **BATTERY LIFE:** Better than 50 hours of continuous use with alkaline batteries. **INPUT TERMINALS:** In k $\Omega$  mode, polarity of terminals as indicated on front panel. **SIZE (HWD):** 7 1/4"  $\times$  5"  $\times$  2 1/2". **WEIGHT:** 1 1/2 lbs.

**Kit only**



Deluxe FET-TVOM is AC or Battery Powered!

# 242 solid state fet-tvom



Includes  
UNI-PROBE

- Big 6 1/2" Meter Movement for Improved Reading Accuracy
- Measures Resistance in Semiconductor Circuits

The Model 242 solid-state FET-TVOM combines all of the capabilities of the Model 239 with numerous additional features. There is a big 6 1/2" meter for easier, more accurate readings. The added versatility of seven non-skip milliampere ranges and the extremely low voltage ohmmeter which adds convenience and versatility when testing semiconductor circuits. The highly accurate millimeter section of the EICO Model 242 can be used for both AC and DC measurements from 10 microamperes to one ampere in seven convenient 10 db 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 to both peak-to-peak and the equivalent sinusoidal RMS voltages and currents for easy interpretation.

The Model 242 also incorporates the time saving single all purpose DC/AC/OHMS/MA Multi-Probe so that you use only one lead for all measurements.

## SPECIFICATIONS

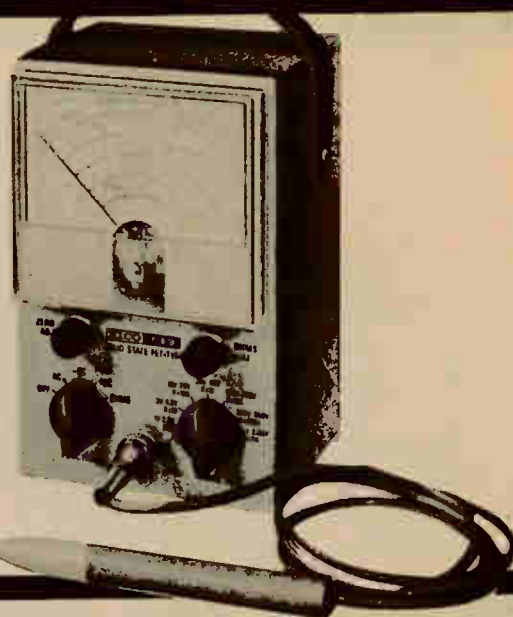
Same as Model 239 except for the following: AC & DC Current ranges in MA same as voltages range on 242; OHM METER: Low-voltage type. METER MOVEMENT: 6 1/2" SIZE: (HWD) 7 1/2" X 8 1/2" X 5". WEIGHT: 6 lbs. POWER REQUIREMENTS: 105-1132 volts AC, or 3 NEDA #1604-9-volt batteries and 1 - 1.5 volt size "D" cell; 1.4 VA.

Kit

Assembled

Industry's Lowest-Cost FET-TVOM!

# 239 solid state fet-tvm



Includes  
UNI-PROBE

- Compact, portable, battery-operated
- Measures peak-to-peak AC Voltages

Ideal for semiconductor circuit testing, the Model 239 features 1-volt scale for accurate readings as low as 0.05 volts. Provides good indications down to 0.01 volt. Other scales provide accurate readings up to 1000 volts and with high-voltage probe (not included) voltage range can be increased to 30,000 volts. Large, easy-to-read (4 1/2" 200 μA) meter, is calibrated in seven ranges of peak-to-peak and equivalent sine wave RMS.

Ohmmeter covers 0.2 to 1000 Megohms in seven steps. Applied voltage is low enough to protect sensitive components, yet high enough to provide accurate testing of diodes and transistors. High stability and accuracy provided by balanced transistor meter circuit and 1% precision resistors. 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. Another convenient feature of the Model 239 is the time-saving single probe for all measurements thereby eliminating the tangle of wires usually associated with similar multimeters.

## SPECIFICATIONS

AC RMS SINE WAVE AND DC VOLTAGE 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 μA movement; POWER REQUIREMENTS: 3 Neda #1604-9 volt batteries and 1-1.5 volt size D cell; SIZE (HWD): 8 1/2" X 5 1/4" X 5"; WEIGHT: 6 lbs.

Kit

Assembled

## vtvm accessory probes



**UNI-PROBE UP** 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 isolating resistor or connector. Use 1 Megohm for all EICO VTVM's. EICO VTVM's use MCIF connectors.

Kit Assembled



**RF PROBE PRF-11** For voltage measurements at radio frequencies up to 250 MHz. Useful for measuring TV and radio RF and IF stages. Accuracy ±10%. Use with any 11 Megohm VTVM. Supplied less connector. Use PRF-11 for all EICO VTVM's.

Kit Assembled

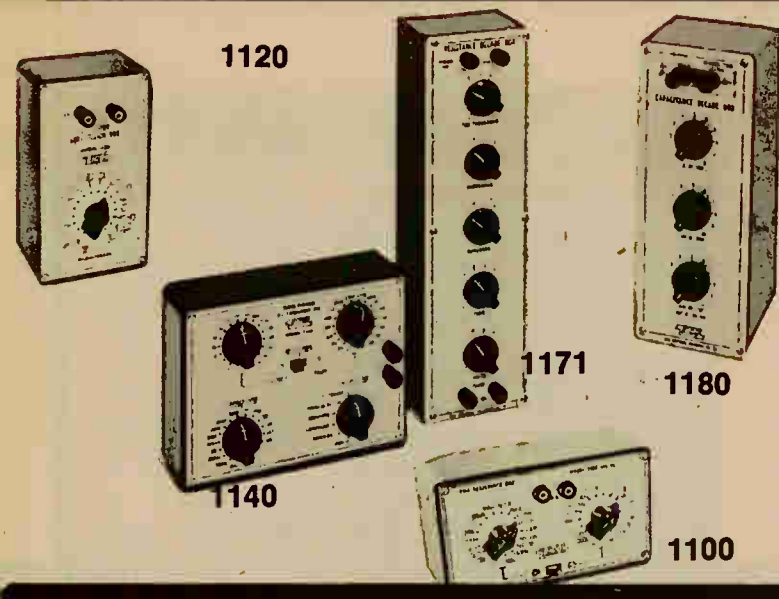


**HIGH-VOLTAGE PROBE HVP-2** For safe measurements up to 30,000 volts DC with any 11 Megohm input VTVM, the HVP-2 is the ideal probe. 1090 meg. for 235, 232, 249; Supplied less connector - Use MCIF for EICO VTVM's.

Assembled

Real Time Savers! A Must for Every Serviceman!

# substitution & decade boxes



## 1100 Resistor Substitution Box

Enables rapid substitution of wide range of EIA resistance values from 15 ohms to 10 megohms in decade multiples of 15, 22, 33, 47, 68, 100 ohms. Uses standard 1-watt,  $\pm 10\%$  EIA resistors. Convenient 5-way, jack-top binding posts. Handsome satin aluminum front panel. SIZE (HWD):  $3\frac{3}{4}'' \times 6\frac{1}{2}'' \times 3\frac{1}{2}''$ . WEIGHT: 2 lbs.

Kit

Assembled

## 1120 Capacitor Substitution Box

Enables rapid substitution of a wide range of EIA capacitance values from 0.0001 to 0.22 mfd. in an operating circuit to determine value needed for optimum performance and to find value of badly damaged or illegible capacitors. Minimum accuracy  $\pm 10\%$ . Capacitors conservatively rated at 600 volts. Convenient 5-way jack-top binding posts. SIZE (HWD):  $3\frac{3}{4}'' \times 6\frac{1}{2}'' \times 3\frac{1}{2}''$ . WEIGHT: 2 lbs.

Kit

Assembled

## 1140 Resistor-Capacitor Substitution Box

Provides a means of rapidly substituting a wide range of EIA resistance or capacitance values in a circuit to determine the best value of a badly charred or otherwise illegible resistor or capacitor. You can easily select 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

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. 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: Fiveway, jacktop binding posts. SIZE (HWD):  $6\frac{3}{4}'' \times 5\frac{1}{4}'' \times 2\frac{3}{8}''$ . WEIGHT: 3 lbs. Supplied less leads.

Kit

Assembled

## 1171 Decade Resistance Box

Ideal for determining exact resistor values. An instant performance comparison can be made of a circuit using a standard value resistor with the performance of the same circuit when using the ideal value resistor in the EICO 1171.

### SPECIFICATIONS

RANGE: 0-99,999 ohms in 5 decades. One ohm steps. CURRENT RATINGS: 350 mA (0-9 ohms) to 2.5 mA (10  $\Omega$  to 100 k $\Omega$ ). SIZE (HWD):  $3\frac{1}{2}'' \times 12'' \times 3''$ . WEIGHT: 3 lbs. Supplied less leads.

Kit

Assembled

## 1180 Decade Capacitance Box

Useful for rapid experimental determination of exact capacitor values required in a circuit. Precision 1% capacitors, 100 pf to 0.111 mfd, are arranged in three decades in precise 100 pf steps. 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 pf) for the smallest decade.

### SPECIFICATIONS

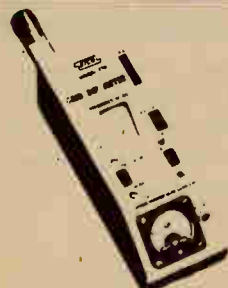
VOLTAGE RATING: 500 volts DC continuous. ACCURACY:  $\pm 1\%$ . SIZE (HWD):  $9'' \times 3\frac{1}{2}'' \times 3\frac{1}{2}''$ . WEIGHT: 3 lbs. Supplied less leads.

Kit

Assembled

New Solid State 9V Battery Operated Design!

## 710-A grid-dip meter



Invaluable for determining frequency of other oscillators or tuned circuits. With it, transmitters and transceivers can be pre-tuned. Exceptionally stable circuit and diode detector give a better, cleaner "dip" on the easy-to-read meter. Also useable as absorption-type frequency meter. Complete with six numerically coded plug-in coils which cover all broadcast, FM, amateur and TV bands in 8 overlapping ranges.

### SPECIFICATIONS

FREQUENCY RANGE: 1.5 to 250 MHz with 6 plug-in coils. METER MOVEMENT: 500 microampere. MODULATION: Approximately 2kHz; sine wave CRYSTAL OSCILLATOR: 1-15 MHz POWER SUPPLY: 9 Volt battery; 006p, or equivalent CURRENT CONSUMPTION: 2mA, Max. SIZE: (HWD)  $2'' \times 2\frac{3}{4}'' \times 7''$ . WEIGHT: 1.1 lbs.

Assembled

## 540 appliance tester



Designed expressly for "do-it-yourself" home appliance and auto repair - easily finds defects in irons, fans, heaters, TV and 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):  $6\frac{1}{2}'' \times 3\frac{3}{8}'' \times 3\frac{1}{2}''$ . Includes leads and batteries.

Kit

Assembled



# EICO PRICE SCHEDULE

OCTOBER 1980

Model No.	Kit	Wired	Model No.	Kit	Wired	Model No.	Kit	Wired	Model No.	Kit	Wired	Model No.	Kit	Wired
<b>TEST EQUIPMENT</b>			<b>HAM/CB TESTERS</b>			<b>ACCESSORY PROBES</b>			<b>SECURITY PRODUCTS</b>			<b>ALARM ACCESSORIES</b>		
<b>SIGNAL TRACERS</b>			700	79.95	109.95	PSD	9.95	12.95	<b>ALARM SYSTEMS</b>			A-35	—	4.95
147	89.95	109.95	706	—	15.95	PD	7.95	10.95	SS-200	—	119.95	A-45	—	17.95
150	109.95	139.95	710-A	—	99.95	PLC	9.95	12.95	SS-500	—	229.95	A-65	—	5.95
<b>VTVM'S, DMM'S</b>			715	—	69.95	PLD	—	19.95	SS-501	—	259.95	A-67	—	14.95
232	84.95	114.95	FE-250	—	49.95	HVP-2	—	15.95	<b>AUTO BURGLAR ALARMS</b>			A-95	—	2.95
235	109.95	149.95	<b>BRIDGES, ETC.</b>			HVP-5	—	34.95	ASA-301-A	—	39.95	A-105	—	2.95
239	—	94.95	902	—	379.95	UP	8.95	12.95	ASA-310-A	—	59.95	A-125	—	3.50
242	129.95	169.95	944	64.95	94.95	PSI	7.95	13.95	<b>CONTROL CENTERS</b>			A-135	—	6.95
270	89.95	—	950	79.95	104.95	PST-2	19.95	29.95	FC-100	—	124.95	A-137	—	6.95
272	—	79.95	955	64.95	—	<b>EICOCRAFT KITS</b>			FC-90	—	99.95	A-145	—	5.95
274	—	89.95	<b>POWER SUPPLIES</b>			DLP-6	19.95	29.95	<b>SENSORS</b>			A-155	—	329.95
276	—	79.95	1020	49.95	69.95	CPC-3	—	4.95	SD-10	—	14.95	A-185	—	41.95
BA-27	—	9.95	1030	164.95	209.95	<b>EICOCRAFT KITS</b>			SD-11	—	9.95	PCE-10	—	49.95
<b>GENERATORS</b>			1032	74.95	104.95	EC-100	9.95	—	SD-12	—	7.95	AL-5	—	13.95
324	89.95	129.95	1040	—	19.95	EC-600	7.95	—	SD-16	—	7.95	<b>AUTOSOUND</b>		
330	119.95	164.95	1045	—	49.95	EC-700	8.95	—	SD-18	—	6.50	C-215	—	79.95
369	—	329.95	1064	119.95	154.95	EC-900	12.95	—	SD-20	—	18.95	C-220	—	99.95
377	—	154.95	1078	129.95	179.95	EC-1000	7.95	—	SD-24	—	12.95	C-225	—	119.95
378	144.95	189.95	1080	89.95	109.95	EC-1300	11.95	—	SD-28	—	11.95	C-230	—	79.95
379	124.95	164.95	<b>SUBSTITUTION BOXES</b>			EC-1400	12.95	—	SD-30	—	5.95	C-250	—	79.95
388	—	109.95	1100	—	24.95	EC-1500	11.95	—	SD-32	—	7.95	C-290	—	69.95
<b>OSCILLOSCOPES</b>			1120	—	29.95	EC-1600	9.95	—	SD-40	—	7.95	<b>CORTINA STEREO</b>		
435	209.95	299.95	1140	—	59.95	EC-1700	12.95	—	SD-42	—	10.95	SA-3080	—	269.95
460	214.95	269.95	1171	34.95	49.95	EC-1900	15.95	—	SD-50	—	4.95	ST-3020	—	209.95
465	—	359.95	1180	—	59.95	EC-2000	13.95	—	SD-54	—	25.95	SC-3100	—	199.95
480	—	499.95	<b>TRUVOHM</b>			EC-2300	9.95	—	SD-56	—	4.95	SA-4130	—	199.95
<b>VOM'S</b>			1-A-1	—	11.95	EC-2600	11.95	—	SD-58	—	12.95	SA-4160	—	239.95
536	44.95	54.95	4-A-3	—	24.95	EC-2700	9.95	—	SD-62	—	10.95	ST-4120	—	159.95
540	21.95	29.95	4-A-4	—	21.95	EC-2800	9.95	—	SD-64	—	19.95	SC-4200	—	249.95
565	41.95	59.95	20-A-2	—	24.95	EC-2900	9.95	—	SD-72	—	29.95	SR-3220	—	209.95
<b>TUBE/TRANSISTOR TESTERS</b>			20-A-3	—	34.95	EC-3000	2.95	—	<b>SIGNALING DEVICES</b>			SR-2030	—	279.95
CRU	—	26.95	20-A-4	—	34.95	EC-3600	19.95	—	SA-15	—	14.95	SR-2050	—	339.95
635	109.95	149.95	30-A-3	—	39.95	EC-3700	14.95	—	SA-17	—	39.95	<b>AUTO DIGITAL</b>		
660	—	325.00	30-A-4	—	44.95	EC-4300	26.95	—	SA-19	—	15.95	CT-10	—	59.95
660-P	—	225.00	50-A-3	—	44.95	EC-4700	10.95	—	SA-25	—	24.95	DT-05	—	39.95
667	259.95	344.95	100-A-4	—	64.95	<b>EICOCRAFT IC KITS</b>			SA-27	—	26.95	<b>HOBBY ELECTRONICS</b>		
688	18.95	31.95	300-C	—	49.95	EC-5000	14.95	—	<b>ALARM ACCESSORIES</b>			BW-300	34.95	59.95
<b>CARRYING CASES</b>			SCL-1	—	5.95	EC-5100	12.95	—	<b>ALARM SYSTEMS</b>			FA-40	—	29.95
			SCL-2	—	2.95	EC-5200	9.95	—	SS-200	—	119.95	3431	—	59.95
			SCL-3	—	2.95	EC-5400	12.95	—	SS-500	—	229.95	3477	—	29.95
			SCL-3A	—	2.95	EC-5500	9.95	—	SS-501	—	259.95			
						EC-5600	12.95	—						
						EC-5700	9.95	—						

Prices subject to change without notice.

**EICO ELECTRONIC INSTRUMENT CO., INC.**

108 New South Road, Hicksville, N.Y. 11801 (516) 681-9300



# MAIL ORDER FORM

1. Fill out the order blank completely. Include Zip Code and Phone number. We accept BankAmericard, Master Charge and American Express.
2. ***In a Hurry? Order by Phone!***

**516/681-9300**

**9:00 A.M.-5:00 P.M. EST.**

**Sorry, no collect calls**

**\*We accept credit card orders on the phone**



## GENERAL INFORMATION

**GENERAL INFORMATION**  
All shipments are carefully inspected and insured before shipment. If your order is lost or damaged, notify the transportation company and us at once. Do not return merchandise to us until authorized to do so, otherwise you may lose your right to file claims for loss or damage.

**PARCEL POST**

**Parcel Post charges** must be included in your remittance. Please include sufficient postage; all overpayments will be returned. Although some items may be less than 30 lbs. in weight, the size of the package may exceed the parcel post regulations (72 inches in combined length and girth). Then shipment will be made by "Railway Express."

## HOW TO FIGURE PARCEL POST CHARGES

Use the zone chart at right and the first 3 numbers of your zip code to determine your zone. Then refer to the Parcel Post rate chart below

For example, if your Zip Code is 10036, use the first 3 numbers (100) and check the zone chart for your zone, which is 5. Parcel Post charge for a kit weighing 10 pounds is therefore \$1.88. Add insurance and COD fees, if desired.

## PARCEL POST RATES

Wage of 1 grand and smaller including bonus	1st rank	2nd rank	3rd rank	4th rank	5th rank	6th rank	7th rank	8th rank	9th rank	10th rank
2	1.115	0.735	0.391	0.156	0.172	0.184	0.180	0.122		
3	1.23	1.45	1.83	1.73	1.88	2.04	2.24	2.81		
4	1.29	1.94	1.83	1.83	2.00	2.23	2.90	3.90		
5	1.36	1.77	1.77	1.92	2.14	2.43	2.97	4.00		
6	1.43	1.71	1.94	2.01	2.29	2.63	3.30	3.79		
7	1.47	1.78	1.90	2.11	2.41	2.83	3.29	3.17		
8	1.51	1.90	2.07	2.18	2.58	3.22	3.68	4.66		
9	1.94	1.85	1.95	2.20	2.89	3.21	3.83	4.95		
10	1.97	1.98	1.97	2.30	2.88	3.12	3.99	4.82		
11	1.80	1.94	2.17	2.50	3.00	3.81	4.42	4.73		
12	1.64	1.98	2.22	2.54	2.99	3.77	4.47	4.73		
13	1.67	2.62	2.37	2.63	3.17	3.89	4.72	6.81		
14	1.70	2.65	2.32	2.89	3.25	3.99	4.98	6.82		
15	1.77	2.69	2.37	2.89	3.25	3.99	4.98	6.82		

Zip Code Prefecture	Zone	Zip Code Prefecture	Zone
008-008	8	260-261	2
010-088	5	262-278	8
070-088	4	278	8
080-088	5	280-282	8
		284-288	8
100-108	5	288-293	8
110-118	4	294-295	8
120-123	4	298-297	8
124-125	4	298-299	8
127-128	4		
128	8	300-303	4
130-137	8	308-307	8
153	8	308-319	8
154-160	8	320-324	8
181	8	325-328	8
182-183	4	330	8
184-185	8	330-362	4
188-189	4	364	8
		365-388	4
200-232	4	380-381	8
233-237	8	387	8
		387-388	8

<u>Zip Code</u> <u>Province</u>	<u>Zone</u>	<u>Zip Code</u> <u>Province</u>	<u>Zone</u>
370-398	4	478	1
387	5	479-489	1
388	4	490-491	1
390-397	5	492	1
		493-499	1
400-406	3	499-499	1
407-409	3		
410-412	3	500-618	1
413-427	4	520-674	1
428	4	575	1
424-429	4	576-678	1
427-432	3	530-634	1
433-436	2	635-639	1
437-471	2	640	1
458	2	641-644	1
460-467	3	647-648	1
463	2	649	1
485-489	1	550-606	1
467-489	2	507	1
470-472	3	510-612	1
473	2	613-689	1
474-475	3	590-687	1
476-477	3		

<b>Zip Code</b> <b>Perkins</b>	<b>Zone</b>	<b>Zip Code</b> <b>Perkins</b>	<b>Zone</b>
800-609	2	873-676	4
810-618	7	873-721	4
820-673	4	878-037	3
824-672	4	833	4
878-698	4	845-636	3
888-676	5	840-847	4
880-687	4	850-884	4
888-693	3	850-885	4
700-727	0	880-886	4
723-727	4		
728-788	5		
788	6	800-621	1
770-778.5	5	877-078	3
778-788	6	820-834	4
760-787	7	838-860	3
793-788	0	981	1
		860-678	4
800-803	5	877-078	3
804-805	0	880-887	4
808-807	8	988-884	4
808-816	0	880-888	4
820-827	4	880-889	4

**EICO ELECTRONIC INSTRUMENT CO., INC.**

108 New South Road

**Hicksville, N.Y. 11801**

**SOLD TO:**

STREET

CITY

STATE

ZIP CODE

[illegible]

Total for Goods

Amount for Tax

### Postage and Insurance

**TOTAL CASH PRICE**

**AMOUNT ENCLOSED**

Total Weight in Pounds	
------------------------	--

- ☐ BANKAMERICARD
- ☐ MASTER CHARGE
- ☐ AMERICAN EXPRESS

Bank No.

4 numbers above  
YOUR name

CREDIT CARD NO.

**EXPIRATION DATE**

**SIGNATURE**

**SALES TAX.** We are required by law to collect Sales Tax in certain counties and states. Please add Sales Tax if applicable where you live.

**TYPOGRAPHICAL ERRORS.** EICO is not responsible for erroneous printing of prices or specifications.

## OUR GUARANTEE

**OUR GUARANTEE**  
All merchandise is shipped in the original factory sealed cartons. Every item we sell comes to you with full manufacturer's warranty.

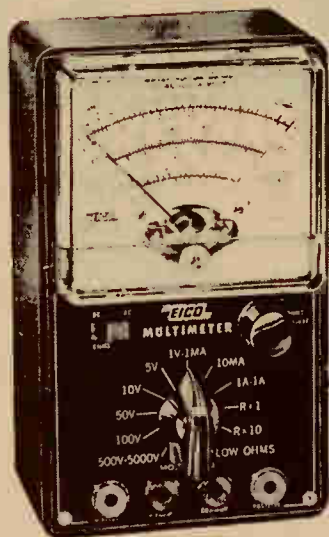
## WARRANTIES AND REPAIRS

**WARRANTIES AND REPAIRS**  
We are dealing with top manufacturers who maintain repair facilities around the country. Consult the list of authorized warranty stations usually packed with the item, or notify us to provide you with a listing of your nearest warranty center.



Designed With The Technician in Mind!

## 536 general purpose vom



- 1000 Ohms Per Volt Sensitivity
- Seven AC/DC Voltage Ranges

The EICO 536 gives you seven full-scale AC/DC ranges, to 5000 volts. One unique feature of the 536 is the 1000 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.

### 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, 100 kilohms, 1 Megohm. DB RANGES: -20 to +69 in 6 ranges. METER: 3" size, 400 microampere movement. SIZE (HWD): 6 1/2" x 3 3/4" x 2 3/4". WEIGHT: 3 lbs. Supplied less batteries and leads.

Kit

Assembled

## 570 deluxe multitester



Low voltage and low current scales make this unit ideal for servicing transistor and integrated circuitry. The large, two-color, mirror-back scales make reading it a snap, and you get seven ranges of DC voltage with polarity reversal at 20,000 ohms per volt and six ranges of AC voltage (both to a maximum

of 5 kV). Dual silicon diodes provide overload protection to guard the meter movement. There are five DC current ranges all the way up to 10 amps, 6 db ranges for audio work, and four resistance ranges to 50 Megohms. The convenient carrying handle also serves to tilt the unit up for use on the bench and "off" position on the selector switch keeps your batteries from running down. The unit comes with test leads and batteries, wired only. You'll wonder how you ever got along without this handy tool! Includes batteries and leads.

Assembled

Belongs in Every Tool Kit!

## 565 portable vom



- 20,000 Ohms Per Volt Sensitivity
- 31 Range, 50 Microvolt Movement

A performance-proven multimeter featuring 20,000 ohms/volt DC sensitivity, the EICO 565 boasts 31 ranges. There are seven accurate DC voltage ranges from 0.25 volt to 5000 volts and -12 db to -55 db. DC current can be measured on five ranges from 50 microamperes to 10 amperes. Resistance is measurable on three ranges to 20 Megohms. Output voltage setting removes DC components when measuring signal voltages. 5% resistors used throughout. Large 4 1/2", 50 micro-ampere meter movement.

### 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 ua, 10 mA, 100 mA, 500 mA, 10 amp. DECIBELS: -12 to +55 db in 5 ranges. RESISTANCE: 0-2000 ohms, 0.2 Megohms, 20 Megohms (.2 ohms to 20 Megohms). METER: 4 1/2", 50 microampere movement. SIZE (HWD): 6 3/4" x 5 1/4" x 3". WEIGHT: 4 lbs. Supplied less batteries and leads.

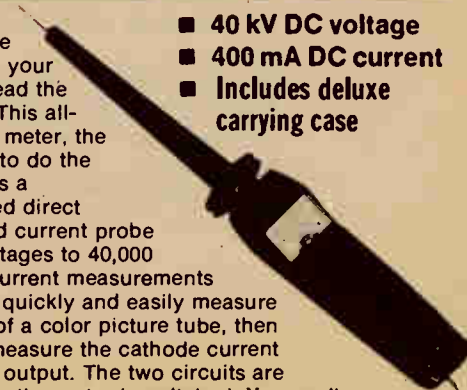
Kit

Assembled

## HVP-5 hi-voltage probe

You'll never have to balance a meter with one hand, hold a test lead in your other hand, and try to read the scale at the same time! This all-in-one unit contains the meter, the probe and it's designed to do the complete job for you! It's a completely self-contained direct reading high voltage and current probe that safely measures voltages to 40,000 volts DC and separate current measurements to 400 mA DC. You can quickly and easily measure the high anode voltage of a color picture tube, then by flipping the switch, measure the cathode current drawn by the horizontal output. The two circuits are completely separate only the meter is switched. You can't damage the probe by putting it in a current position while measuring voltage.

- 40 kV DC voltage
- 400 mA DC current
- Includes deluxe carrying case



Assembled



# TRUVOHM<sup>®</sup> MULTIMETERS

The EICO Truvohm<sup>®</sup> multimeter line consists of a series of low-cost, high-quality factory-assembled VOMs with a wide range of sensitivities. The deluxe line includes a highly sensitive 100k ohms/volt bench-size multimeter and a clamp-on current tester. The standard line includes six instruments ranging from a simple, inexpensive 1000 ohms/volt meter to a 20,000 ohms/volt mirrored-scale meter. All Truvohm<sup>®</sup> multimeters are top value for your dollar.

## DELUXE LINE

*The Best Buy in a Bench-Size Multimeter*

### **100A4** 100k ohms/vdc vom

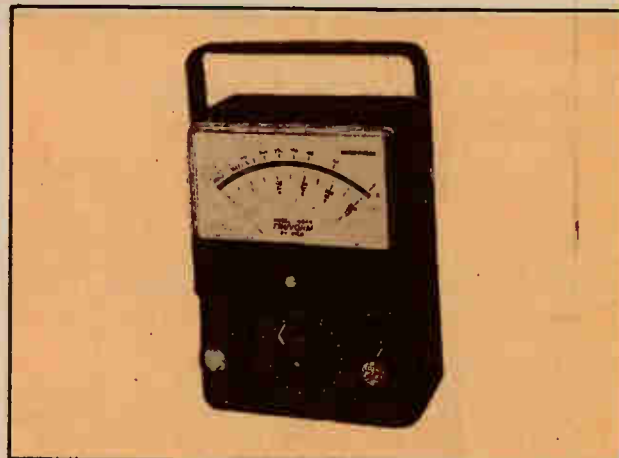
- Meter Overload Protected
- Complete With Batteries and Test Leads
- Optional Carrying Case SLC-1

With DC sensitivity of 100,000 ohms per volt and AC sensitivity of 12,500 ohms per volt, the 100A4 combines extremely minimal circuit loading with functional utility. Silicon diodes prevent accidental overload of meter movement.

#### SPECIFICATIONS

DC VOLTAGE: 0-500 mV, 2.5, 10, 50, 250, 500 and 1000 volts. AC VOLTAGE: 0-2.5, 10, 50, 100, 250 and 1000 volts. DC CURRENT: 0-10, 250  $\mu$ A; 2.5, 25, 250 mA; 10 amp. RESISTANCE: 0-20 k $\Omega$ , 200 k $\Omega$ ; 2 Megohm; 20 Megohm. DECIBELS: -20 - +62 in 5 ranges. ACCURACY: 2% meter movement. INPUT RESISTANCE: 100,000 ohms/volt DC; 12,500 ohms/volt AC. SIZE (HWD): 7 1/4" X 5 1/4" X 3 1/4".

**Assembled**



*Portable AC Voltmeter/AC Ammeter/Ohmmeter*

### **300C** clamp-on current tester

- Current Measurements Without Breaking the Circuit
- Reads With No Contact
- Complete With Battery, Test Leads, Carrying Case

Compact, lightweight versatile instrument measures AC current without breaking the circuit. "Clamp-On" insulated jaws snap around single conductor. Meter instantly indicates correct reading. Test leads plug in for voltage and resistance checks. Rotary scale reveals only one range at a time. Pointer lock freezes readings; measure in dark, read in light. Accuracy  $\pm 3\%$ .

#### SPECIFICATIONS

MEASUREMENT RANGES: AC CURRENT: 0-6, 15, 60, 150, 300 A. AC VOLTAGE: 0-150, 300, 600 V. RESISTANCE: 0-1000  $\Omega$  (center scale: 30 ohms); SIZE (HWD): 7 1/4" X 2 1/4" X 1 1/4". WEIGHT: 2 lbs.

**Assembled**





## STANDARD LINE

### 30A4 30 k ohms/vdc

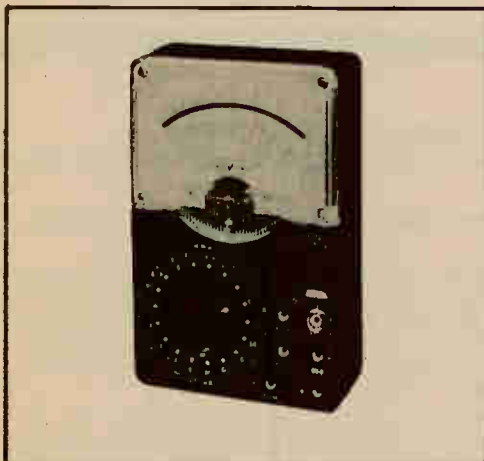
- Meter Overload Protected
- Complete With Batteries and Test Leads
- Optional Carrying Case SCL-3

Laboratory-type, wide range multimeter has a mirror-back scale,  $\pm 1\%$  temperature-stabilized resistors, and double-jeweled  $\pm 2\%$  D'Arsonval meter movement protected against accidental overload. For minimal circuit loading, has 30,000 ohm/volt DC and 10,000 ohm/volt AC characteristics. Separate input for measuring AC voltages in presence of DC.

#### SPECIFICATIONS

DC VOLTAGE: 0.06, 3, 12, 60, 300, 600, 1200, 3000 volts. AC VOLTAGE: 0-6, 30, 120, 600, 1200 volts. DC CURRENT: 0-30  $\mu$ A; 0-6, 60, 600 mA. RESISTANCE: 0-10 k $\Omega$ ; 1, 10, 100 Megohm. DECIBELS: -20 - +63 in 5 ranges. SENSITIVITY: 30,000 ohms/volt DC; 10,000 ohms/volt AC. SIZE (HWD):  $5\frac{1}{4}" \times 3\frac{3}{16}" \times 1\frac{11}{16}"$ .

Assembled



### 30A3 30 k ohms/vdc

- Meter Overload Protected
- Complete With Batteries And Test Leads
- Optional Carrying Case SCL-2

Has all the professional features of a fine, high-priced multimeter including an anti-parallax mirrorbacked scale, double-jeweled  $\pm 2\%$  D'Arsonval meter,  $\pm 1\%$  temperature-compensated precision film resistors, and 30,000 ohms/volt DC and 14,000 ohms/volt AC characteristics.

#### SPECIFICATIONS

DC VOLTAGE: 0-0.6, 3, 12, 60, 300, 1200 V. AC VOLTAGE: 0-12, 60, 300, 1200 V. DC CURRENT: 0-60  $\mu$ A; 12, 300 mA. RESISTANCE: 0-10 k $\Omega$ ; 1, 10 Megohm. DECIBELS: -10 to +23. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  full scale. SENSITIVITY: 30 k ohms/volt DC, 14 k ohms/volt AC. SIZE (HWD):  $5\frac{1}{4}" \times 3\frac{3}{8}" \times 1\frac{1}{4}"$ .

Assembled



### 20A4 20 k ohms/vdc

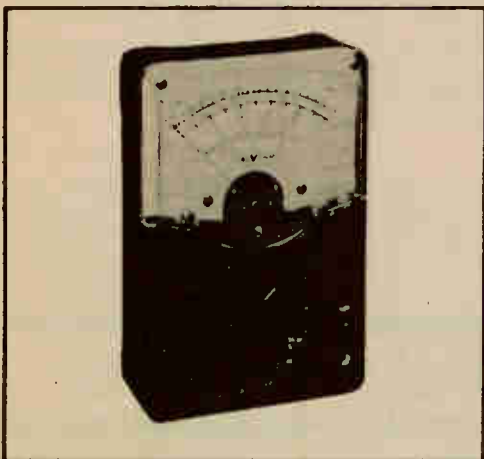
- Complete with Batteries, Test Leads and Carrying Case

Versatile instrument with lever type range selector switch. Read voltage, current and resistance accurately on each of the 18 precise ranges. Easy-to-read 3" meter. The 20,000 ohms/volt DC meter and 10,000 ohms/volt AC section can be used without disturbing most circuits. Read resistance accurately to 60 Megohms.

#### SPECIFICATIONS

DC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 20,000 ohms/volt. AC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 10,000 ohms/volt. DC CURRENT: 0-50  $\mu$ A; 0-5, 50, 500 mA. RESISTANCE: 0-6 k $\Omega$ , 0-600 k $\Omega$ , 0-6 Megohms, 0-60 Megohms. DECIBELS: -20 - +64 db. SIZE (HWD):  $4\frac{1}{4}" \times 3" \times 1\frac{1}{4}"$ .

Assembled



### 20A3 20 k ohms/vdc

- Complete with Batteries and Test Leads
- Optional Carrying Case SCL-2

Packs 16 ranges for measurements in custom-molded, high-impact case. With 20,000 ohms/volt DC and 10,000 ohms/volt AC characteristics, it's ideally practical for general and accurate service. Easy-to-read meter has a rugged, double jeweled D'Arsonval movement.

#### SPECIFICATIONS

DC VOLTAGE: 0-0.25, 2.5, 10, 50, 250, and 1000 volts. AC VOLTAGE: 0-10, 50, 500, and 1000 volts. DC CURRENT: 0-50  $\mu$ A; 25, 250 mA. RESISTANCE: 0-7000 ohms, 700 k $\Omega$ , and 7 Megohms. DECIBELS: -10 to +36 db. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  full scale. SENSITIVITY: 20,000 ohms/volt DC; 10,000 ohms/volt AC. SIZE (HWD):  $5\frac{1}{4}" \times 3\frac{3}{8}" \times 1\frac{1}{4}"$ .

Assembled

### 4A4 4 k ohms/vdc

- Complete with Batteries and Test Leads
- Optional Carrying Case SCL-2

This pocket portable is a versatile, general utility instrument. Make readings easily on all 17 ranges. Easy-to-read 3" meter with mirror-back scale. Diode protected. High-impact plastic case.

#### SPECIFICATIONS

DC VOLTAGE: 0-0.25, 2.5, 10, 50, 250, 500, 1000 volts. AC VOLTAGE: 0-10, 50, 250, 1000 volts. DC CURRENT: 0-250  $\mu$ A, 25 mA, 250mA. RESISTANCE: 0-2, 200 k $\Omega$ , 2 megohms. DECIBELS: -20 -  $\pm 62$  dB. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  full scale. SENSITIVITY: 4000 ohms/volt DC, AC. SIZE (HWD):  $5" \times 3\frac{1}{2}" \times 1\frac{1}{4}"$ .

Assembled



### 1A1 1 k ohms/vdc

- Complete With Batteries and Test Leads

The go-everywhere shirt pocket instrument for the busy technician/hobbyist. Rugged, double-jeweled D'Arsonval meter and  $\pm 1\%$  stabilized resistors are cushioned in high-impact plastic case.

#### SPECIFICATIONS

DC VOLTAGE: 0-10, 50, 250, 1000 volts. AC VOLTAGE: 0-10, 50, 250, 1000 volts. DC CURRENT: 0-1, 100 mA. RESISTANCE: 0-100 k $\Omega$ . SENSITIVITY: 1000 ohms/volt AC and DC. SIZE (HWD):  $3\frac{1}{2}" \times 2\frac{3}{16}" \times 1\frac{1}{4}"$ .

Assembled





Constant Check of Frequency!

## 700 frequency counter

**NEW!**



- Operates Automatically on Transmit
- 10 MHz Crystal Timebase ■ Covers all 40 CB Channels

The EICO 700 offers the accurate ( $\pm 1$  PPM) digital readout experimenters always needed but could not afford for a hobby. Put this compact Frequency Counter to work in your car or, with an optional power supply, on your test bench. The 700 covers frequencies from 5 Hz to 27 MHz on five, large, bright LED displays. Insertion losses of less than 70 mA enables you to leave this counter permanently in the circuit to give you constant readings of your transmit frequency to three decimal places. Slide switch selects kHz or MHz. In standby mode, only the decimal point is illuminated. Operates through all 40 CB frequencies, uses standard SO-239 connectors and mobile mounting bracket makes installation simple.

For experimenters and audio hobbyists the tool is invaluable, especially for calibrating amplifiers. Unit operates from audio frequencies through the RF range. Can be driven directly with 5 volt TTL signals.

### SPECIFICATIONS

INPUT SENSITIVITY: 500 millivolts RMS-DC to 3 MHz, 500 millivolts RMS linearly increasing to 5 volts RMS-3 to 27 MHz. IMPEDANCE: 2,000 ohms at 27 MHz. FREQUENCY RANGE: DC to 27 MHz. DISPLAYS: Five 0.5" LEDs. OVERLOAD: Diode-protected input. ACCURACY:  $\pm$  one digit  $\pm$  time base stability. READOUT: kHz or MHz. TIME BASE-CRYSTAL FREQUENCY: 10 MHz  $\pm$  10 ppm accuracy,  $\pm 1$  ppm stability. POWER REQUIREMENTS: 8-14 V DC at 1.2 amps. BASE STATION: (117 V AC) Use regulated power supply (1.5 amp min.). SIZE (HWD): 2 1/8" x 5 5/16" x 6 1/4". WEIGHT: 1.6 lbs.

Kit

Assembled

## 715 ham/CB tester

*Most Versatile Tester  
You'll Ever Own!*



An essential for amateur or CB radio operators, the EICO "Trans-match" Model 715 is a portable, four function device that tests voltage-standing wave ratio, calibrates, offers two power ranges, a modulation meter and field strength meter. Unit includes a built-in 50-ohm dummy load and a headphone output jack. No electrical connection required to the transmitter, built-in antenna samples transmitted signal with zero insertion loss. This excellent and valuable piece of test equipment helps to take the guesswork out of your transmissions. SIZE (HWD): 5" x 7" x 4". WEIGHT: 4 lbs.

Assembled

Digital Readout Of Time And RPM At A Glance!

## CT-10 digital quartz car clock/tachometer



**NEW**

- Brilliant green fluorescent digital display
- Clock power fail indicator, seconds flash and AM/PM indicator
- Tach reads up to 9900 RPM in 100 RPM increments

Combination full function digital quartz clock and computerized tachometer features large fluorescent digital display. The EICO CT-10 enables you to drive at your car's most fuel-efficient RPM. Improves acceleration by letting you shift your manual transmission at optimum RPM... or adjust your automatic transmission to shift at correct RPM. Reads up to 9900 RPM in 100-RPM increments.

The digital clock has no moving parts... assuring uncommon accuracy and reliability. Displays hours and minutes in boldly illuminated digital numerals. Display light goes out when ignition is turned off but clock runs continuously. Flashing indicator shows clock is operational. Convenient pushbuttons set time.

The EICO CT-10 has a built-in photo sensor for automatic brightness control and is protected against voltage reversals. Simple 3-wire hook-up. For 4, 6 or 8-cylinder cars with 6 or 12-volt negative-ground systems. Operates in cars with electronic ignition, too.

### SPECIFICATIONS

DISPLAY: 2-digit for Tachometer, 4-digit for Clock, 0.3" green fluorescent tube. ACCURACY: 3.58 MHz quartz crystal;  $\pm$  seconds/month for clock,  $\pm$  of reading ( $\pm 1$  count) for Tachometer. OPERATING TEMPERATURE: -20°C to 85°C. POWER CONSUMPTION: 1.2 W (clock only 0.01 W). POWER SOURCE: +12V D.C. (Negative Ground).

## DT-05 digital tachometer

**NEW!**

- Reads up to 9900 RPM in 100 RPM increments
- Brilliant green fluorescent display
- Internal 3.58 MHz crystal oscillator



This computerized tachometer enables you to drive at your car's most fuel-efficient RPM. Improves acceleration by letting you shift your manual transmission at optimum RPM... or adjust your automatic transmission to shift at correct RPM. Reads up to 9900 RPM in 100-RPM increments. Simple 3-wire hook-up. For 4, 6 or 8-cylinder cars with 6 or 12-volt negative-ground systems. Operates in cars with electronic ignition.

Assembled



Uncommon Accuracy And Reliability!

# DC-01 digital quartz car clock

**NEW!**



- Incredibly precise timekeeper
- Large L.E.D. digital display
- Power fail indicator, seconds flash and AM/PM indicator

Advanced solid-state IC technology eliminates all moving parts... assuring uncommon accuracy and reliability. Displays hours and minutes in boldly illuminated digital numerals. Display light goes out when ignition is turned off but clock runs continuously. Flashing indicator shows clock is operational. Convenient pushbuttons set time. Built-in photo sensor for automatic brightness control. Protected against voltage reversals. Simple 3-wire hook-up. For 4, 6, or 8-cylinder cars with 6 or 12-volt negative-ground systems.

## SPECIFICATIONS

DISPLAY: 4-digit, 0.3" red L.E.D. ACCURACY: 3.58 MHz quartz crystal;  $\pm$ seconds/month for clock. OPERATING TEMPERATURE: -20°C to 85°C. POWER CONSUMPTION: 0.01 W. POWER SOURCE: +12V DC (Negative Ground).

**Assembled**

# EC-3600 motor speed control kit



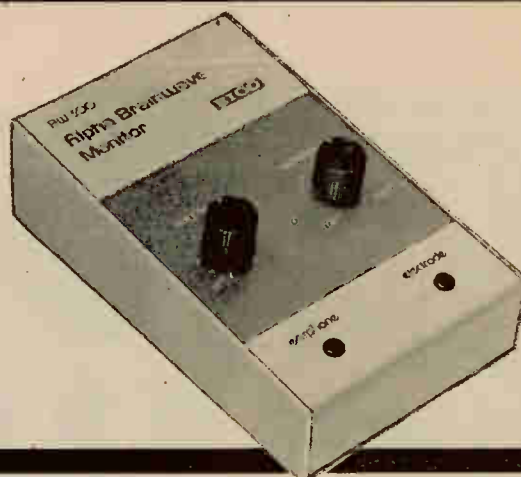
## EICO 3600 VARASPEED MOTOR SPEED CONTROL

Now you can control the speed of any AC motor from zero to full range continuously. Handles up to 9 amps. Makes any electric motor a constantly-variable speed motor and any motor-driven device a variable-speed device. Comes with custom cabinet and three foot, grounded plug linecord for added safety. SIZE (HWD): 2" X 4" X 6". WEIGHT: 1 lb.

**Kit**

Learn to Relax!

# BW-300 alpha brain-wave monitor



- Professional-Type Biofeedback System
- Five-Microvolt Sensitivity

Alpha brain wave signals, which fall within a narrow frequency range roughly centered about 10 Hz, seem to be closely related to mental states such as meditation, tranquility, relaxation, heightened awareness, and elation. The Model BW-300 allows the user to detect and recognize the presence of these self-generated signals. Continued practice with the Model BW-300 is recognizing the onset and presence of Alpha signals generally facilitates achieving this state both in the amplitude of the monitored signals and their more consistent production, indicating a deeper state of relaxation.

After using the BW-300 you will learn how to relax fully and completely without the unit! The BW-300 is completely safe, simple-to-use, and battery operated. Simply attach the electrodes and put on the earphones. As you do, you will be able to hear your own Alpha brainwave generation in the form of a tone that varies in frequency with your own mental state. Unit comes complete with everything you need including stethoscopic earphone, electrodes headband and contact cream as well as complete instructions.

## SPECIFICATIONS

AMPLIFIER: Sensitivity 5 microvolts. POWER: one 9-volt battery (not included). CONTROLS: Volume (with on-off switch), sensitivity. Plug-in jacks for earphone and electrode. SIZE (HWD): 1" X 3 1/2" X 6". WEIGHT: 1/2 lb.

**Kit**

**Assembled**

# EC-4300 3-channel sound/light translator kit



Create your own exciting colored light show with this translator. Simply connect the unit to your hi-fi speaker, power amplifier, radio, phono or tape recorder and plug in three different colored floodlights or strings of colored lights (up to 300 watts per channel). The display will change color and pulsate in stereo with the music. Use two for stereo, turn your room lights low, and see the mood created by the music. SIZE (HWD): 2" X 4" X 6". WEIGHT: 1/2 lb.

**Kit**



An Audio Test Lab in One Instrument!

# 902 im/harmonic distortion meter & ac vtvm



- High Quality Tuning Capacitor Provides Easy Frequency Setting
- Less Than 0.7 Volt Input Required For Measurements

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.

For harmonic distortion measurement, the EICO 902 incorporates a continuously-variable 20 - 20,000 Hz Wien Bridge rejection filter (in three ranges). For IM distortion measurement, the 902 features a 7 kHz oscillator for the high-frequency source. External low frequency sources up to 400 Hz and high frequency sources down to 2 kHz may be fed to the mixing bridge through panel jacks.

## SPECIFICATIONS

IM DISTORTION: LF to HF ratios 4:1 and 1:1. TEST OUTPUT: 0-5 V. ACCURACY:  $\pm 5\%$  of full scale. RESIDUAL DISTORTION: 0.05%. HARMONIC DISTORTION: FREQUENCY RANGES: 20-200, 200-2000, 2000-20,000 Hz. INPUT Z: 500  $\Omega$ . 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: 2 Megohms. FREQUENCY RESPONSE:  $\pm 0$  db 10 Hz to 100 kHz. ACCURACY:  $\pm 4\%$  of full scale. POWER SUPPLY: V-R tube regulated. POWER REQUIREMENTS: 115 VAC, 60 Hz. SIZE (HWD):  $12\frac{1}{2}'' \times 8\frac{1}{2}'' \times 10\frac{1}{2}''$ . WEIGHT: 22 lbs. EXPORT Model: 115 and 230 VAC, 50-60 Hz.

\*Export Model Available.

Assembled

379.95

# 1078 metered ac supply



- 0 to 140 V AC Adjustable Output Voltage
- Separate Output Ammeter and Voltmeter

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

## SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 VAC OUTPUT VOLTAGE: 0-140 V AC (30-140 V AC 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):  $8\frac{1}{4}'' \times 5\frac{1}{2}'' \times 7''$ . WEIGHT: 16 lbs.

\*Export Model Available.

Kit

Assembled

Checks Flybacks and Yokes in Seconds!

# 944 flyback transformer & yoke tester



- Makes Tests In or Out of Set
- Positive Answers in Seconds

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 and Yoke Tester gives you positive checks on flybacks and yokes in mere seconds. Operation is based on the extremely sensitive grid dip principle which shows up even one shorted turn. Exclusive separate calibration for air core and iron core flybacks 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 (HWD):  $7'' \times 5'' \times 4''$ . WEIGHT: 5 lbs.

## SPECIFICATIONS

OSCILLATOR FREQUENCY: Approx. 600 Hz Interrupted 60 times per second. TEST VOLTAGE: 100 rms V (short test), 60 rms V (continuity test). METER:  $4\frac{1}{2}''$  50 ua 2000 ohm. Color-coded scale: Short test, continuity test, 0 - 100 linear reference. POWER REQUIREMENTS: 115 VAC, 50/60 Hz. SIZE (HWD):  $7'' \times 5'' \times 4''$ . WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

# 1040 filtered power supply



- Plays all 12-VDC Tape Decks, AM/FM Radios
- Serves As A Battery-Less 12 Volt DC Source

Plug the Model 1040 into any 120 VAC line and you can bring all your 12-volt DC mobile equipment into the house for added pleasure! Your CB radio, automotive tape deck, car stereo system, even HAM equipment. It can also serve as a charger for all 12-

volt batteries, works equally well with boats and cars. Input is 120 VAC, 50-60 Hz; output is 12 V DC at 4.0 amperes continuous, 5.0 ampere surge.

## SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 V AC. OUTPUT VOLTAGE: 12 V DC at 4 amps. OUTPUT CURRENT: 4 amp continuous at rated voltage, 5 amp surge. SIZE (HWD):  $4\frac{1}{2}'' \times 4\frac{1}{2}'' \times 6''$ . WEIGHT: 2 $\frac{1}{2}$  lbs.

Assembled



A "Must" For Service Shops and Labs!

## 950 rc bridge & rcl comparator



- Comparator Range allows the Use of Complementary Components as Standards
- Continuously Variable Polarizing Leakage Test Voltage From 0-500 VDC

A versatile and truly useful service instrument for direct measurement of capacity or resistance over a wide range of values. For leakage testing of electrolytics, a continuously variable polarizing test voltage from 0 to 500 VDC is provided. Bridge balance and leakage are indicated by magic-eye tube. The bridge provides 4 capacitance ranges from 10  $\mu\text{f}$  to 5000  $\mu\text{f}$ . A comparator range permits comparison measurement of capacitance, resistance or inductance against a standard. Power supply is transformer operated.

No computations or involved formulas are required, as all readings are taken directly from the unique panel indicator. Accurate readings are assured by use of the magic eye indicator. This laboratory-grade instrument belongs in every service shop.

### SPECIFICATIONS

CAPACITY: 4 ranges, 10  $\mu\text{f}$  to 5000  $\mu\text{f}$ . 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 Hz. SIZE (HWD): 8" X 10" X 4". WEIGHT: 8 lbs. Optional test leads available.

\*Export Model Available.

Kit

Assembled

## 1043 regulated power supply



- Converts 115 V AC to 13.6 V DC ( $\pm 0.5$  volts)
- IC Regulated (Less Than 2% Regulation Line and Load)

Now you can enjoy your CB transceiver, car stereo or tape player in your own home with absolutely no "hum" or ripple! It is regulated by integrated circuits for 13.6 volts at 2.2 amps of direct current. Featured is a special foldback current limiting circuit that holds

the short circuit current to approximately 1 A. Additional protection is afforded by line fusing.

### SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 V AC. OUTPUT VOLTAGE: 13.6 V DC at 2.2 A. CURRENT PROTECTION: Current in excess of 3 1/2 amps limited to approx. 1 A. SIZE (HWD): 4 1/2" X 4 1/2" X 8". WEIGHT: 3 lbs.

Assembled

Tests Capacitors In or Out of Circuit!

## 955 in circuit bridge-type capacitor tester



- Wien Bridge With Unique Shunt Resistance Balancing Circuit
- Capacity Accuracy of  $\pm 10\%$  at Any Point on The Capacity Dial

A truly advanced, highly dependable in-circuit and out-of-circuit capacitor tester. Provides extraordinarily sensitive open and short tests. A Wien Bridge with unique shunt resistance balancing provision permits in-circuit capacity measurements even when the shunting resistance is comparatively low. Measures capacitors in or out of circuit, without unsoldering, between 0.1 mf and 50 mf. Checks for shorts and open circuits. Measures RC product, convertible into dissipation or power factor. Line adjust control provides maximum sensitivity regardless of line voltage variations. Exceptionally attractive unit with professional laboratory styling. Transformer operated and protected by fuse in extractor-post mount. Only one co-ax type test lead required for all tests.

### SPECIFICATIONS

CAPACITY MEASUREMENTS: 0.1 to 50 mf with 10% accuracy. SHORT TEST: Reliable up to 2000 mf with shunt resistance as low as 1 ohm. OPEN TEST: Checks capacitors as small as 15 mmf with normal adjustments, down to 5 mmf with constant voltage and internal adjustment. POWER REQUIREMENTS: 105-130 VAC. 60 Hz, 8 watts. SIZE (HWD): 8 1/2" X 5 1/4" X 6". WEIGHT: 6 lbs.

\*Export Model Available.

Kit

Assembled

## 1045 regulated power supply



- Provides High-Current Capability to Power Most Automotive Equipment
- Operates With Minimum Ripple, Even Under Heavy Loads

The EICO Model 1045 Power Supply plugs into your wall outlet and converts the 120 volt alternating current to 13.6 volts direct current of 6.0 amperes, more than enough to handle the most draining of your car's electronic or audio equipment! As a servicing aid on the test bench, it's a necessity.

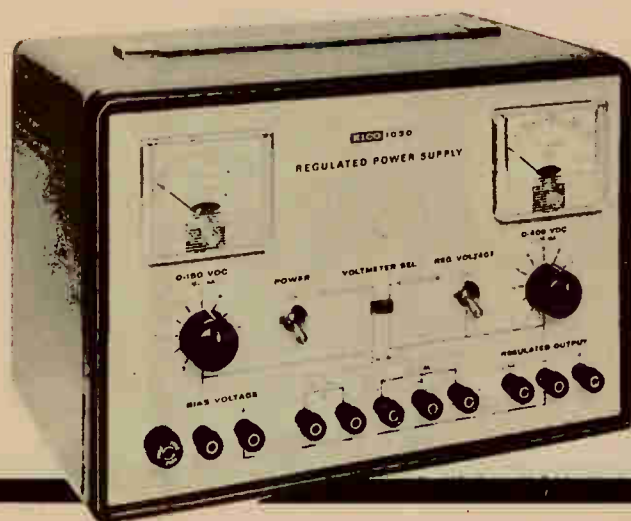
### SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 V AC. OUTPUT VOLTAGE: 13.6 V DC. OUTPUT CURRENT: 6.0 amps. SIZE (HWD): 4 1/2" X 5" X 8". WEIGHT: 5 lbs.

Assembled

Independent, Regulated, Variable DC Supplies

## 1030 regulated power supply



- Regulated B+ Continuously Variable 0-400 V DC
- Regulated Bias Supply Continuously Variable 0 to -150 V DC
- Both 6.3 and 12.6 V AC Filament Supplies

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

### SPECIFICATIONS

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

Kit

Assembled

With Extra-Low Ripple!

## 1064 battery eliminator and 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

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. A fused primary and a re-set overload relay on the secondary add to the durability and safety of the 1064. Among the 1064's applications are charging 6 or 12-volt storage batteries and simulating various battery operating voltages. The 1064 also serves well for marine purposes, operating boat lights, radio-phones, amplifiers, transmitters, bilge pump and other electrical utility units while at dockside, eliminating the need for installing a costly secondary AC lighting system.

### SPECIFICATIONS

DC OUTPUT VOLTAGE RANGES: (Range selected by 6 - 12 V 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% at 2 amps, 1% at 6 amps, 1.5% at 10 amps; 0-8 volt range: 1.5% at 2 amps, 2% at 6 amps, 4.5% at 10 amps. METERS: Voltmeter 0-20 volts. Ammeter 0-10, 0-20 amps. POWER REQUIREMENTS: 117 volts AC, 60 Hz; 150 watts. SIZE (HWD): 8 1/2" x 5 1/2" x 7 1/2". WEIGHT: 16 lbs.

Kit

Assembled

## 1060 battery eliminator and charger



- Ideal For Servicing And Powering 6 or 12 Volt Mobile And Marine Equipment

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.

### SPECIFICATIONS

DC OUTPUT VOLTAGE RANGES: 0-8 volts, 0-16 volts. AC RIPPLE: 12 V range-0.3% at 2 amps, 1.5% at 10 amps; 6 V range-1.5% at 2 amps, 4.5% at 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 1/2" x 10 1/2" x 7 1/2". WEIGHT: 18 lbs.

Kit

Assembled



Operate AC Appliances from Car or Boat Battery!

## 1080 220-watt charger/inverter



- Operate AC Appliances from Car or Boat Battery
- Portable Power for PA System and Ham Gear
- Does Double Duty as Battery Charger

With 220 watts of power, you can operate many AC operated units from your car or boat battery! Radio, phonograph, CB equipment suddenly becomes mobile when you use the EICO Model 1080. On field trips or family picnics, the 1080 provides a 117 V AC supply for public address systems, for ham equipment, etc. Then, simply flip the switch and the 1080 does double duty as a battery charger. Plug the line cord into any 117 V AC supply, and recharge your car or boat battery! You can use dockside AC or the AC in your home or garage. As a battery charger, the 1080 is rated at 5 amps. It automatically tapers the current to prevent overcharging.

### SPECIFICATIONS

OUTPUT VOLTAGE: 117 V AC, 60 Hz. AC OUTPUT POWER: 220 W. INPUT VOLTAGE: 12 V DC. INPUT CURRENT: 3½ A (no load), 18 A (full load). BATTERY CHARGING RATE: 6 A maximum. SIZE (HWD): 6" × 6" × 8". WEIGHT: 8 lbs.

Kit

Assembled

Regulated Laboratory-Grade DC Power Supply!

## 1032 regulated power supply



- Regulated Against Line and Load Variations
- 0-30 Volts Continuous Output with Loads up to 500 mA
- Voltage and Current Monitored by Meters

Regulated low ripple power supply that 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.

A regulated DC supply serves many applications in both laboratory and service shop. This unit, small enough to fit on a shelf over a test bench, only needs lead wires connected to the terminals to provide instant and necessary voltages at the technician's finger tips. A front-panel mounted fuse provides protection for the unit should the load current exceed the supply's capabilities. The supply is equipped with a fold-flat handle for easy portability around the shop.

### SPECIFICATIONS

OUTPUT VOLTAGE: 0-30 volts regulated. OUTPUT CURRENT: 0-500 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 MILLIAMETER: 0-500 mA. POWER REQUIREMENTS: 105-135 VAC, 50/60 Hz, 30 watts. SIZE (HWD): 3½" × 8" × 4½". WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

## 1020 power and bias supply



- Complete Supply For Test Applications

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). The maximum permissible load current is 300 mA. The maximum ripple (120 Hz) at full load is only 0.005%. 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 voltage in the alignment of TV and radio receivers.

### SPECIFICATIONS

OUTPUT VOLTAGE RANGE: 0-30 V DC, continuously variable. MAX. OUTPUT CURRENT CAPABILITY (CONTINUOUS): 300 mA. 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 Hz): 0.005% at full load. POWER REQUIREMENTS: 117 V, 60 Hz. SIZE (HWD): 5" × 4" × 5½". WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

# Introducing professional home protection

## Eico SS-500 Burglar/Fire alarm system.

The finest low-cost complete security system EICO offers. Built around the famous EICO FC-100 Security Control Center and hailed by electronics magazines as the one that "works better than many so-called professional or industrial systems." The SS-500 consists of all the basic elements required to protect an average home or small

business. Additional sensors and components can be added at any time to expand the system. Included is the do-it-yourself installer's Home Security Handbook which makes you an instant expert in the field. It's the professional protection that you've been looking for at a price you can afford. By installing your own, you can save. By doing it with the SS-500 you save without sacrificing quality.

### SS-500 Complete System Assembled



#### The SS-500 consists of these components:

**Control Center, EICO FC-100.** The heart of any security system is the control center and the EICO FC-100 is the ideal way to begin your own. Included as part of the SS-500 complete system or available separately, the FC-100 has all the features required to build your own complete security system. The unit includes all the electronic circuitry needed to operate the system. On its panel are two indicator lamps: a white "circuit test" light checks the entire system to see that it is functioning properly and a red "alarm on" lamp to indicate that the system has been activated. A built-in 117-volt AC supply provides the low DC voltage required to operate the entire system. Should your line power fail for any reason, a battery (not supplied) takes over and maintains the system in full operation. A front-panel meter and battery-test switch allow you to check the battery condition at any time. The FC-100 mounts easily with two screws. It is supplied with warning decals and the Home Security Handbook.

SIZE (HWD) 9" x 6" x 5". WEIGHT: 3 lbs. **FC-100 Control Center alone, assembled \$99.95**

**SA-25 8-inch Indoor/Outdoor Alarm Bell.** Extra-loud, runs on 6 to 12 volts DC. **A-45 Momentary-Entrance Key Switch with Signal Light.** Lets you enter your own home without setting off alarm. Red light signals that system is activated, warns intruders your home is protected. **A-65 Remote Station Control with Indicator Lights.** Complete with wall-mounting plate, momentary switch, white circuit-test light, red alarm-on light. **SD-20 Heat/Fire Sensor.** Detectors that set off an alarm when they sense temperature of 135°F (57°C). May be used anywhere except in normally warmer areas such as attics and furnace rooms. **SD-10 Door and Window Magnetic Contact Switches.** Basic burglar/intruder sensors for doors and windows. Each unit consists of a reed switch and a bar magnet. **SD-50 Tamper Switches.** Used for protecting the alarm bell and Security Control Center from intrusion for deactivation. **SD-40 Two-Wire Door Cords.** Used to carry the system's protective electrical circuit unbroken across gaps such as the hinge side of a door. **A-35 Emergency Buttons.** Also known as "panic buttons," they permit you to sound an alarm from any location. **A-135 Alarm Hook-up Wire.** Specially insulated for dependable conducting of alarm system's protective electrical current. **A-137 Alarm-Bell Hook-up Wire.** Special-gauge wire for connecting alarms to control center. SS-500 system includes 50 feet (15.24m). **A-105 Warning Decals.** The more conspicuous your security system is, the more effective it can be to deter intruders. Six decals standard with SS-500 system. **A-95 "Do-it-Yourself" Home Security Handbook.** Everything you need to know to install an EICO security system yourself.





# everyone can install and afford.

## EICO SS-125 Burglar/Fire Alarm System



UL-listed. A basic home protection system you can add components to for any degree of protection you want. Its "expandability concept" is **Complete, assembled**

built around the EICO FC-125 Security Control Center with its time-delay feature. All components in the basic system are UL-listed.

**The SS-200 consists of these components:**

**FC-125 Security Control Center with Time-Delay.** With no key switches or indicator lights outside your home, the EICO FC-125 is simplicity itself. Only the main door is connected to the time-delay circuit, so that the rest of your home is protected by an instant response. The time-delay allows ample time to leave the home, activates the system only after the front door closes. When you re-enter, sounding of the alarm is delayed long enough to let you turn off the system. At night, turn off the time-delay and the entire system responds instantly. Has built-in 10-minute alarm cut-off to comply with most recent local rulings. 24-hour panic and fire circuits. Different sound for fire or intrusion. Operates from 120 VAC house current, with automatic switchover to self-contained battery if power fails. Power supply trickle-charges battery when not in use.

**FC-125 Security Control Center alone, assembled**  
**SA-25 8-inch Indoor-Outdoor Alarm Bell.**

**AD-20 Heat/Fire Sensors.**

**SD-24 Furnace/Attic Heat Sensor.**

**SD-10 Door and Window**  
**Magnetic Contact Switches.**

**A-35 Emergency Button.**

**A-135 Alarm Hook-up Wire.**

**A-105 Warning Decals.**

**A-95 "Do-it-Yourself" Home**  
**Security Handbook.**



## EICO SS-200 Burglar/Fire Alarm System



Ideal for apartments, stores, offices. High protection at low cost. A completely self-contained, solid-state professional burglar and fire alarm system **Complete, assembled (supplied**

that runs on its own battery power, with a time-delay feature that activates the system only after you leave the premises and shut the exit door.

**less 12 V lantern battery)**

**The SS-200 consists of these components:**

**FC-90 Security Control Center.**

Protected by a steel cabinet further protected by front and rear tamper switches. Permits addition of closed-circuit intrusion detectors and open-circuit fire sensors to enlarge the system at any time. Terminals provided for fire warning horn so that fire alarm sounds differently from intrusion alarm. Operates on standard 12-volt lantern battery, not included.

**FC-90 Control Center alone, assembled**

**SD-10 Door and Window**  
**Magnetic Contact Switches.**

**Interior On/Off Switch.**

**A-35 Emergency Button.**

**A-135 Alarm Hook-up Wire.**

**A-105 Warning Decals.**



## EICO A-155 Automatic Telephone Dialer

- Exclusive, Patented No-stick No-Jam Tape Transport ■ Two-channel, Eight-message Capacity
- AC Operation with Battery Standby Power



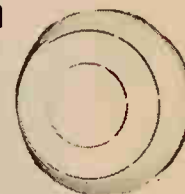
Automatically summons police or fire departments, alerts neighbors, calls your office, or makes any other desired phone calls. Simply connect to proper terminals of FC-100 Security Control Center which will then trigger the operation of the automatic telephone dialer when the alarm is set off. Uses new solid-state circuits for greater protection against phone-line transients and better audio fidelity. Uses unique silent dialing system that eliminates relay clatter. Has line-seizure function to prevent interruption should an extension phone be lifted and a line release to keep incoming calls from interfering with the operation of the automatic dialer. Line-disconnect relay keeps dialer unconnected from phone line until activated. Automatic disconnect and reset. Unit can be wired directly to phone line or into a telephone coupler. Operates from 117 V AC line with battery standby power. SIZE (HWD): 9" X 9 3/4" X 6 1/2". WEIGHT: 14 lbs.

**Assembled**

## EICO SD-75 Battery-powered Smoke/Fire Sensor/Alarm

Provides earliest possible warning of fire. Its ionization chamber senses invisible particles of gas from combustion even before smoke may appear. Long-life battery provides about one year's protection. "Trouble" signal sounds when battery is low. U.L. listed.

**Assembled**



## EICO ASA-310 Electronic-Siren Auto Burglar Alarm System

- No Visible Key Switch to Mount in Fender ■ Digital Solid-state Logic Design
- Automatic Timer/Cut-off ■ Hidden Time-delay Switch Inside Car



No drilling holes in your fender. A hidden switch controls a time-delay circuit so that you have 15 seconds after setting it to leave your car, 15 seconds to turn off the switch when you re-enter. Siren gives off piercing high-low sound that attracts attention anywhere. Solid-state automatic cut-off turns off siren after five minutes to comply with most local regulations. Operates on principle of voltage-detection so that when door is opened, causing interior light to go on, system senses voltage drain and activates alarm. Operates with all 12-volt, negative-ground systems. SIZE (HW): 4" X 8". WEIGHT: 4 lbs.

**Assembled, ready to install**

## EICO ASA-301 Electronic Siren Auto/Burglar Alarm System

Features penetrating high/low emergency sound. Voltage-sensor reduces installation time from hours to only minutes. One wire connected to any hot lead is all that is required after installing key switch and mounting siren.

**Assembled, ready to install**

## EICO PCE-10 Photoelectric Relay System



Interrupt its beam and it can activate an alarm system, signal traffic, or simply count traffic. All solid-state, with an effective range up to 50 feet. Features a control for adjusting sensitivity so that changes in ambient light will not affect the unit. Can be set for continuous operation so that alarm remains on even after beam is restored, or for intermittent duty so that it self-resets. Complete with full installation instructions. Operates from 117-V AC lines. SIZE, EACH (HWD): 3 1/2" X 7" X 3".

**Pair, assembled, ready to install**



# Tailor your EICO security system to your needs or beef-up the system you have, with these EICO security components.

## Contact Switches for Doors and Windows

**SD-10 Door/Window Magnetic Contact Switches.** Basic burglar/intruder sensors for doors and windows. Two-piece units consist of a reed switch and a bar magnet. Four complete units to a package. U.L. listed.

**SD-12 Leaf Contact Switches.** Handy multi-purpose switch for protecting case-ment, jalousie, and double-hung windows, sliding doors, and screens. Includes mounting mini-brackets. Two to a package.

**SD-16 Vibration Contact Switch.** (Normally closed). Protects walls, ceilings, large glass windows, skylights and virtually any area vulnerable to forced entry. Adjustable sensitivity.

**SD-18 Door Jamb Contact Switches.** (Normally closed). Multipurpose bullet-nose switches easily concealed directly in door jamb. Ideal for protecting doors, win-dows. Two to a package.

## Sensors for Fire and Smoke

**SD-20 Heat/Fire Sensors.** When the temperature reaches 135°F (57°C), sensors set off the alarm. Can be used anywhere except in normally warmer areas such as attics and furnace rooms. For these areas use Model SD-24. Three sensors to a package. U.L.

**SD-24 Furnace/Attic Heat Sensors.** Cause the fire alarm to sound when tempera-tures in the area in which it is located reaches 190°F (88°C). Two to a package. U.L.

**SD-28 Flash-Fire Heat Detector.** Detects an abnormal rate of rise in air tempera-ture typical of flash fires. Sounds alarm if temperature rises 5°F in 20 seconds or if factory-preset temperature of 135°F (57°C) is exceeded. U.L. listed.

## Bells, Sirens, and Other Signaling Devices

**SA-25 Indoor/Outdoor 8" Bell.** Extra-loud alarm bell usable for both burglar and fire alarm circuits, indoors or outdoors. Operates on 6-12 V DC. U.L. listed.

**SA-27 Steel Bell Box.** Heavy-gauge steel, with safety plate with mounting holes for SA-25 alarm bell and SD-50 tamper switches (not included). Hammertone rust-retardant finish. SIZE (HWD): 12" X 9" X 4".

**SA-15 Indoor Klaxon Horn Alarm.** Twin horns mounted in decorator-styled housing sound a loud, ear-piercing warning. Ideal for indoor fire alarm system. Operates on 6-12 V DC.

**SA-17 Dual-Channel Electronic Siren.** Ideal for any 6-12 volt system as replace-ment or adjunct to alarm bell. Dual channel provides a steady tone which can serve as a fire alert, plus high-low warbler for intrusion.

**A-185 Time/Automatic Alarm Cut-off.** Automatically shuts off alarm bell or horn after about ten minutes. Required in many localities and permits alarm to do its job without overly disturbing neighbors.

## Protection for Windows, Glass Doors, Skylights

**SD-32 Glass-Protection Foil.** Self-sticking metal foil that conducts security-circuit current over interior surface of glass to detect cracking or breaking of glass by intruder. 200-foot (64.3 m) roll.

**A-125 Foil Protector/Adhesive.** Dual-purpose clear acrylic formulation cements foil to glass and provides durable coating to protect foil from scratching and wear. 2-oz. applicator bottle.

**SD-30 Foil Adhesive Blocks.** Self-sticking foil connectors to link glass-protec-... foil to protection circuit wiring. Package of 6.

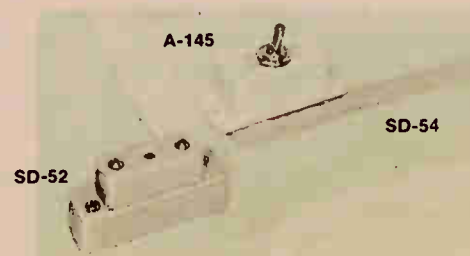
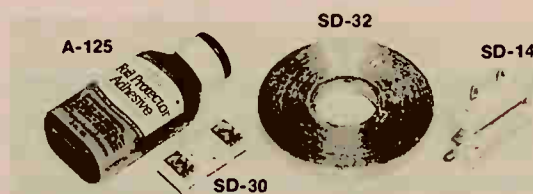
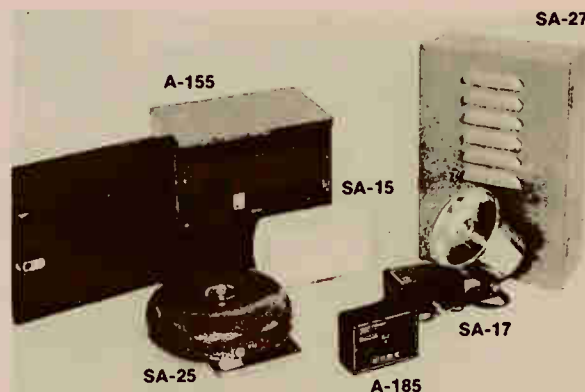
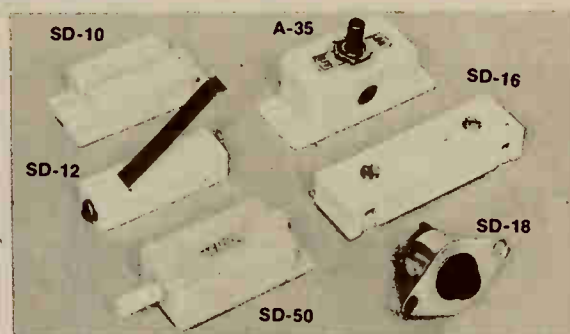
**SD-14 Multi-Purpose Foil Contact Switches.** Exclusive switches for protecting double-hung, sliding, tilting, and swinging windows as well as sliding patio and glass doors. Package of two pairs.

## Special-purpose Switches and Trips

**A-145 By-Pass Switches.** Versatile switch lets you by-pass protection on a par-ticular door or window. Permits window to be left open for ventilation or door open for constant traffic while rest of your home is protected. Package of two.

**SD-52 Electric Trip-Cord.** Revolutionary new design in trip-cords for closed-circuit alarm systems. Exclusive dual-circuit trap for protecting doorways, staircases, hallways, cellars, etc. Fully insulated. Includes 20 feet (7 m) of two-conductor clear plastic hook-up wire.

**SD-54 Under-Mat Floor Switch.** Ideal for securing hard-to-protect stairways, hall-ways, entrances which should be monitored but not locked. Also ideal for shop en-trances during business hours. Ultra-thin hermetically sealed vinyl construction.



# EICOCRAFT®

# Project Kits

- Educational, useful, fun to build
- Pre-drilled printed circuit boards
- Reliable solid state circuitry
- Easy step-by-step-instructions

Exclusive "Panel Mounts" gives your project a professional appearance.

## EC-100 ELECTRONIC SIREN

Excellent for all attention-getting and signalling purposes such as alarms for burglary, fire, automobile, bicycle, personal attack, etc. Sound effects for model railroads, slot car racers, tape recordings, etc. Includes Speaker. Supplied less 9 volt battery.

## EC-700 ELECTRONIC "MYSTIFIER"

Fascinating battery-operated relaxation oscillator circuit of 6 blinking neon lights. A never ending entertainment "conversation piece"—for desk, den, mantle, it makes an excellent gift "for the one who has everything." Supplied less 9 volt battery.

## EC-1400 FM RADIO

Receives the FM broadcast band from 88 MHz through 108 MHz. It may be utilized as a private listening personal radio (with the earphone supplied), or as an FM tuner when coupled to an audio amplifier such as EICOCRAFT EC-300. Supplied less 9 volt battery.

## EC-1700 HAM/CB VOX

This solid-state voice-operated switch has variable time delay and anti-vox circuits. Use it with your transmitter and receiver and your voice will operate the unit from transmit to receive! Gives you hands-free versatility!

## EC-2300 AUDIO PREAMP

Solid state preamplifier accepts any of five inputs and allows them to be connected through an emitter follower to the amplifier or public address unit. If you're converting your phono from ceramic to magnetic cartridge, this is a must!

## EC-2800 AIRCRAFT CONVERTER

Tune the 108-136 MHz band and hear two-way broadcasts from local aircraft on your broadcast band receiver. Supplied less 9 volt battery.

## EC-400 ELECTRONIC METRONOME

Precision electronic metronome incorporating a relaxation oscillator circuit which produces accurate adjustable impulses through a loudspeaker (included) — from approximately 10 to 360 beats per minute. Supplied less 9 volt battery.

## EC-900 AC POWER SUPPLY

Converts house-current AC volts (110-125 volts AC) to 6 to 9 volts DC. Reliable, transformer-operated, transistors power supply. Full-wave bridge rectifier uses silicon diodes and high capacity filtering for 6 to 9 volts DC output. Useful to power most EICOCRAFT kits.

## EC-1500 AM RADIO

Receives the AM broadcast band from 500 kHz through 1600 kHz. It may be utilized as a private-listening personal radio (with the earphone supplied), or as an AM tuner when coupled with an audio amplifier such as EICOCRAFT EC-300. Supplied less 9 volt battery.

## EC-1900 TREASURE FINDER

This battery-operated metal locator can pay for itself! Locates both ferrous (iron, steel, etc.) and non-ferrous (gold, silver, platinum, copper) metals. Boasts two RF oscillators and search loop; has distinctive audio indicator. Supplied less 9 volt battery.

## EC-2600 "SUPER SNOOP"

It's so sensitive that you can use it as a hearing aid, private listening device or professional stethoscope! Has a crystal mike feeding a low-noise 3-transistor amplifier, then to an efficient earphone. 9 volt battery not supplied.

## EC-2900 POLICE/FIRE CONVERTER (HI-BAND)

Now your AM radio (in car or home) can be used to tune in the entire, exciting 152-174 MHz band VHF communications bands used by police and fire departments that transmit AM only. Supplied less 9 volt battery.

## EC-600 LIGHT FLASHER

This battery-operated, 2-transistor multivibrator circuit makes two lights flash alternately. Great attention getter or warning light. Makes an excellent warning light for cars or boats, and, if you're a hiker, put the lamps on the back of your knapsack! Use 6 volt lantern battery not supplied.

## EC-1000 CODE OSCILLATOR

Can be used to monitor your code - just connect it in parallel to your existing transmitter key. Includes Speaker and Key (pushbutton). Supplied less 9 volt battery.

## EC-1600 ELECTRONIC BONGOS

Now you can electronically produce the exciting percussive sounds of high-pitched and low-pitched bongos, tom toms, bass drum, marimba, gongs and claves. Operates in conjunction with any amplifier and speaker. An ideal accessory for use with electronic musical instruments.

## EC-2000 ELECTRONIC ORGAN

One-octave electronic organ (with a built-in preamplifier) can be fed to any audio amplifier. Two or more of these organs can be played in harmony to produce graceful chord structures.

## EC-2700 POLICE/FIRE CONVERTER (LO-BAND)

Now your AM radio (in car or home) can be used to tune in the entire, exciting 30-50 MHz band VHF communications bands used by police and fire departments that transmit on AM only. Supplied less 9 volt battery.

## EC-1300 ELECTRONIC VOX

This transistorized, audio-activated relay has an adjustable variable time delay and allows you to control any electrical circuit with the sound of your voice. Makes a great control for tape recorders; can serve as a "commercial killer" for TV too.

## 7 IC EICOCRAFT KITS

The IC or integrated circuit is the heart of these new EICOCRAFT kits. Integrated circuits permit the scientific combining of several circuits into a small module. The result is a new ease of construction for the kit builder.

## EC-5000 SCA ADAPTER

This adapter permits you to listen to the official FCC licensed background music that is uninterrupted and commercial-free. Use with any FM receiver or FM radio and take advantage of music the way banks and restaurants do! **\$12.95**  
*\*This adaptor is intended for personal use only.*

## EC-5100 ESP TESTER

How intuitive are you? This Tester will help you find out! The four lamps light in random fashion and all you have to do is guess which is next. Requires a six-volt battery.

## EC-5200 "DECISION MAKER"

Never flip a coin again! Let the EICO EC-5200 do it for you. When a decision has to be made only one of the two LED's remains lit, indicating either a "yes" or a "no" answer. It's lots of fun! Requires a six-volt battery.

## EC-5400 STEREO POWER AMPLIFIER

You get two watts per channel of continuous power with inputs for microphone, phono, tape recorder, etc. Drives 8-ohm speaker systems. For even more flexibility, use with EC-5500, below.

## EC-5500 STEREO PREAMP

Permits you to drive any stereo amplifier with low-level inputs, such as magnetic cartridge, dynamic mike, etc. Provides NAB and RIAA equalization, 90 db channel separation. Requires 12 volt battery.

## EC-5600 ELECTRONIC LOCK

Forget about your "High-security" locks! This one has 'em all beat. You must press three of the five buttons in proper sequence within a 10 second interval for this lock to work. (125 to 1 chance of opening). Digital (MOS) circuitry! In this combination lock requires a 6 volt battery.

## EC-5700 UNIVERSAL POWER AMPLIFIER

This 2-watt general purpose amplifier accepts any input source such as mike, phono, or tape recorder; works with 8-ohm speaker. Makes an excellent hailing horn or P.A. system.



TURN YOUR MUSIC INTO A DAZZLING DISCO LIGHT SHOW

# discolites



3431



3477



4300

## EICO 3431 AUDIO COLOR ORGAN

- MUSIC BECOMES BURSTS OF LIGHT
- 4 CHANNELS, FREQUENCY-CONTROLLED

The EICO Color Organ adds exciting sights to your sound system. Just connect the 3431 to the speaker leads of any sound source. Without affecting the sound, the audio signal is separated into four frequency bands, each with brilliantly colored light patterns, red for bass, blue for low-midrange, green for upper-midrange and amber for treble. The lights pulsate in time to the music creating dazzling patterns of color. Line isolation provides source protection. Walnut grained cabinet. Size: (HWD) 18" x 10" x 7" Weight: 8 lbs.

## EICO 3477 ELECTRONIC STROBE LIGHT

- "FREEZES" THE ACTION AT DISCOS, ETC.
- 1-10 FLASH-PER-SECOND RATE CONTROL

Flash any room like a disco with intensive blue-white light... Under strobe light, dancing takes on a new dimension. Decor-enhancing walnut-grained cabinet in cube design. Variable-speed control provides 1-10 flashes per second; plug-in type high-intensity xenon flash tube. Dazzling output from 4" reflector. Each side 6". Weight: 1 lb. Assembled.

## EICO 4300 SOUND/LITE TRANSLATOR

- 3 CHANNELS, FREQUENCY CONTROLLED
- 400 WATTS PER CHANNEL

Highten your pleasure in music listening with an audio light show. The EICO Sound to Light Control lets you modulate 3 independent colored lamp circuits with the intensity of your music. Just plug in your favorite colored flood or spotlights and connect to the speaker leads of your music system. Features 3 frequency sensitive channels with individual controls for low, mid and high ranges. 400 Watts per channel. Size: (HWD) 2" x 4" x 6". Weight: ½ lb. Kit and wired.

**NEW!**

## EICO C-215 CASSETTE IN-DASH STEREO FM-AM CAR RADIO

- EZ-Install System
- Fast forward with lock position
- Stereo and tape LED
- Adjustable shafts
- FM Local/Distant switch
- Output power: 10 Watts RMS



The EICO C-215 is loaded with deluxe operating and performance features. Engineered for factory-installed looks and performance at a price to please any car stereo buff. Complete with AM-FM band selector switch, Locking Fast-Forward-Eject control switch, slide load cassette, tape run and stop LED indicator. Other deluxe features include FM local/distant switch, stereo indicator light, illuminated dial scale and stereo balance control. Adjustable shafts for installation in most cars, vans and trucks. Supplied with mounting hardware, power cord, and step-by-step installation instructions.

EICO ELECTRONIC INSTRUMENT CO., INC.  
108 New South Road, Hicksville, N.Y. 11802

If not deliverable, do not return.



As Requested through Radio-Electronics

ISSUE  
A  
RS NC.

Bulk Rate  
U.S. Postage  
**PAID**  
Flushing, N.Y.  
Permit No. 575

## CATALOG

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

Printed in U.S.A.

# THE NEW ONES FROM S.O.



### NEW! DIGITAL MULTIMETERS

Low-cost DMM kits and assembled units with laboratory accuracy. See Page 8



### NEW! SCOPES

Three new lab quality Solid State Scopes combine performance with economy. See Pages 4 & 5



### NEW! COUNTER FOR CB'ers/HOBBYISTS

Operates automatically on transmit. Great value in kit or assembled form. See Page 20.



### NEW! FUNCTION GENERATOR

Professional instrument that meets all your signal requirements! See Page 11



### NEW! FREQUENCY COUNTER

Digital precision you can rely on. Optional prescaler extends range to 250 MHz. See Page 5



### NEW! IC COLOR BAR GENERATOR

Digital MOS LSI circuit design. Pocket sized, battery operated. See Page 13

Distributed by





# 1985 CATALOG

The Newest and Best Values in Do-it-Yourself Kits and Factory Assembled  
Electronic Equipment ☐ Test Equipment ☐ Burglar/Fire Alarms  
☐ Truvohm Multimeters ☐ Accessory Probes ☐ Eicocraft Kits  
☐ Hobbyist & Automotive Electronics



# TRUVOHM® MULTIMETERS

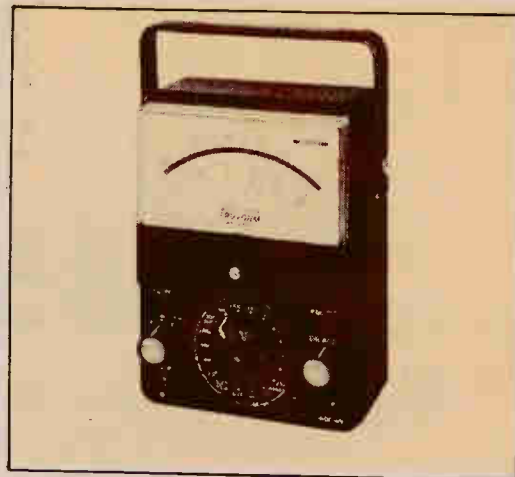
## 100-A-4 100k ohms/vdc

- 28 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- 10-AMP DC AND AC CURRENT RANGE
- COMPLETE WITH TEST LEADS AND BATTERIES
- OPTIONAL CARRYING CASE SCL-1

All the features you expect in a lab quality instrument. Combines extremely minimal circuit loading with functional utility. 10 Amp DC and AC current range adds to the units versatility. Easy-to-read 4½" meter has an anti-parallax mirror back 3-color coded scale. ±1% temperature-stabilized resistors and double jewelled ±2% D'Arsonval meter movement protected against overload by dual silicon diodes.

### SPECIFICATIONS

DC VOLTAGE: 0.5, 2.5, 10, 50, 250, 500, 1000V AC VOLTAGE: 2.5, 10, 50, 250, 1000V DC CURRENT: 10μA, 250μA, 2.5mA, 25mA, 10A AC CURRENT: 10A RESISTANCE: 20KΩ, 200KΩ, 2MΩ, 20MΩ DECIBELS: 20 to ± 62dB in 5 ranges ACCURACY: DC ± 4%, AC ± 3% Resistance ± 3% (OF FULL SCALE) SENSITIVITY: 100,000 Ω/V DC, 12,500 Ω/V AC BATTERIES: TWO 21.5V (UM-2/°C) SIZE (HWD): 7½ x 5¼ x 3¼ WT: 8 oz



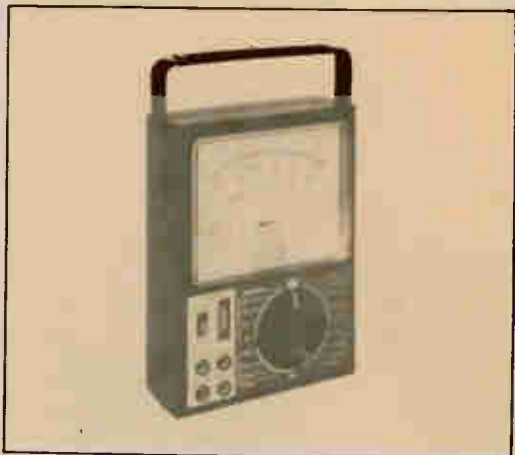
## 50-A-3 50k ohms/vdc

- 43 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- RANGE DOUBLER SWITCH
- COMPLETE WITH TEST LEADS AND BATTERIES

The best buy in a bench-size multimeter. Range doubler switch (V-A/2-V-Ω-A) effectively doubles the number of AC and DC scales available. The low DC ranges are ideal for testing solid state circuits. Read resistance accurately to 20 megohms. 10 amp DC current range. Easy-to-read 4½" meter has an anti-parallax mirror back 3-color coded scale. ±1% temperature-stabilized resistors and double jewelled ±2% D'Arsonval meter movement protected against overload by dual silicon diodes. OFF range shunts meter during transportation.

### SPECIFICATIONS

DC VOLTAGE: 0.25, 2.5, 10, 50, 250, 1000V AC VOLTAGE: 10, 50, 250, 1000V DC CURRENT: 50μA, 5mA, 50mA, 500mA, 10mA RESISTANCE: 2KΩ, 20KΩ, 200KΩ, 2MΩ, 20MΩ DECIBELS: 20 to ± 62dB 8 ranges ACCURACY: DC ± 4%, AC ± 4% Resistance ± 3% (OF FULL SCALE) SENSITIVITY: 50,000 Ω/V DC, 10,000 Ω/V AC BATTERIES: One 1.5V, One 9V (006B) SIZE (HWD): 6½ x 4¾ x 2 WT: 8 oz



## 30-A-4 30k ohms/vdc

- 30 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- DC 12A RANGE AND POLARITY SWITCH
- COMPLETE WITH TEST LEADS AND BATTERIES
- OPTIONAL CARRYING CASE SCL-3

Laboratory-type, wide-range multimeter features a safety fuse protected ohm circuit. 12 amp DC Current range and capacitance measurement scale. Resistance to 50 megohms. 3000 DC Volts range. Easy-to-read 3½" meter has a 3-color coded mirror-back scale. ±1% temperature-stabilized resistors and double jewelled ±2% D'Arsonval meter movement protected against overload by dual silicon diodes.

### SPECIFICATIONS

DC VOLTAGE: 0.6, 3, 12, 60, 300, 600, 1,200, 3,000V AC VOLTAGE: 6, 30, 120, 300, 1200V DC CURRENT: 30μA, 6mA, 60mA, 600mA, 12A RESISTANCE: 5KΩ, 500KΩ, 5MΩ, 50MΩ CAPACITANCE: 50pF — 0.01μF (AC120V), 200pF — 0.04μF (AC 30V), 1,000pF — 0.2μF — (AC 6V) DECIBELS: 20 to 63dB in 5 ranges SENSITIVITY: 30,000 μV DC, 10,000 μV AC BATTERIES: ONE 1.5V (UM-3/°AA), One 15V (NEDA 220 SIZE (HWD): 5½ x 3¾ x 1¼ WT: 6 oz



## 300-C "clamp-on" current tester

- PORTABLE AC VOLTMETER/AC AMMETER/OHMMETER
- "CLAMP-ON" INSULATED JAWS
- CURRENT MEASUREMENTS WITHOUT BREAKING CIRCUIT
- SAFETY FUSE PROTECTED OHM CIRCUIT
- COMPLETE WITH TEST LEADS, OHM PROBE, BATTERY AND CARRYING CASE

This compact, light weight unit measures AC current without breaking the circuit. Insulated jaws snap around a single conductor and the meter gives instant reading. Test leads plug in for voltage and resistance checks. Measure AC voltage to 600V, AC current to 300A and resistance to 5000Ω with ohms Test Probe (safety fuse protected). 3-color-coded meter scale.

### SPECIFICATIONS

AC VOLTAGE: 150, 300, 600V AC CURRENT: 15, 60, 300A RESISTANCE: 5KΩ (MIDSCALE 200Ω) BATTERY: One 1.5V (UM-3/°AA) SIZE (HWD): 7" x 2" x 1½" WT: 8 oz





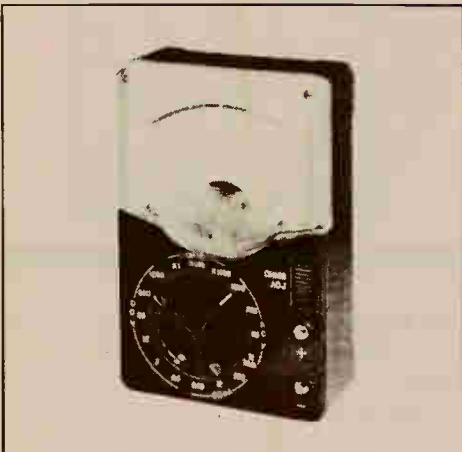
## 30-A-3 30k ohms/vdc

- 17 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- COMPLETE WITH TEST LEADS AND BATTERIES
- OPTIONAL CARRYING CASE SCL-2

Has all the professional features of a fine high-priced multimeter. For minimal circuit loading, has 30,000Ω/Volt DC and 14,000Ω/Volt AC characteristics. Easy-to-read 3" meter has an anti-parallel mirror back color coded scale,  $\pm 1\%$  temperature stabilized resistors and double jewelled  $\pm 2\%$  D'Arsonval meter movement protected against overload by dual silicon diodes.

### SPECIFICATIONS

DC VOLTAGE: 0.6, 3, 12, 60, 300, 1200V AC VOLTAGE: 12, 60, 300, 1200V DC CURRENT: 60μA, 12mA, 300mA RESISTANCE: 10kΩ, 1MΩ, 10MΩ DECIBELS: -10 to  $\pm 23$ dB ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  Resistance  $\pm 3\%$  (OF FULL SCALE) SENSITIVITY: 30,000 Ω/V DC, 14,000 Ω/V AC BATTERIES: TWO 1.5V (UM-3/AA) SIZE (HWD): 5 x 3 1/4 x 1 1/2 WT: 6 oz



## 20-A-4 20k ohms/vdc

- 23 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- LEVER TYPE RANGE SELECTOR SWITCH
- COMPLETE WITH TEST LEADS / BATTERIES
- INCLUDES DELUXE FITTED CARRYING CASE

Versatile instrument with lever type range selector switch. Read voltage, current and resistance accurately on each of the 23 ranges, safety fuse protected ohm circuit. Resistance can be measured accurately to 50 megohms. Easy-to-read 3" meter has an anti-parallel mirror-back color coded scale,  $\pm 1\%$  temperature stabilized resistors and double jewelled  $\pm 2\%$  D'Arsonval meter movement protected against overload by dual silicon diodes. OFF range shunts meter during transportation.

### SPECIFICATIONS

DC VOLTAGE: 5, 25, 100, 500, 1000V AC VOLTAGE: 5, 25, 100, 500, 1000V DC CURRENT: 50μA, 5mA, 50mA, 500mA RESISTANCE: 6kΩ, 600kΩ, 6MΩ, 50MΩ DECIBELS: -20dB to  $\pm 62$  in 5 ranges ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  Resistance  $\pm 4\%$  (OF FULL SCALE) SENSITIVITY: 20,000 Ω/V DC, 10,000 Ω/V AC BATTERIES: ONE 1.5V (UM-3/AA) One 15V (W-10) SIZE: 4 3/4 x 3 x 1 1/4 WT: 6 oz



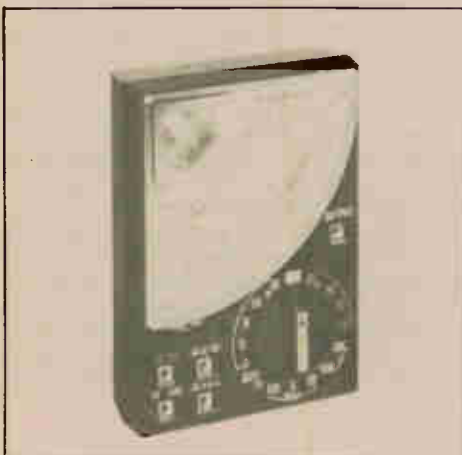
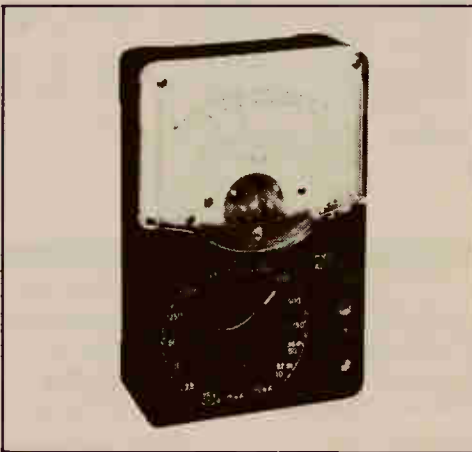
## 20-A-3 20k ohms/vdc

- 19 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- 250 m/V AND 50μA RANGES
- COMPLETE WITH TEST LEADS AND BATTERIES
- OPTIONAL CARRYING CASE SCL-2

A fine utility multimeter with 20,000 Ω/V AC characteristic. Measures DC and AC volts, DC current, resistance and dB with accuracy usually found only in larger instruments. Easy-to-read 3" meter has an anti-parallel mirror-back color coded scale,  $\pm 1\%$  temperature stabilized resistors and double jewelled  $\pm 2\%$  D'Arsonval meter movement protected against overload by dual silicon diodes.

### SPECIFICATIONS

DC VOLTAGE: 0.25, 2.5, 10, 50, 250, 1000V AC VOLTAGE: 10, 50, 250, 500, 1000V DC CURRENT: 50μA, 25mA, 250mA RESISTANCE: 7kΩ, 700kΩ, 7MΩ DECIBELS: 10dB to  $\pm 36$ dB in 2 ranges ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  Resistance  $\pm 4\%$  (OF FULL SCALE) SENSITIVITY: 20,000 Ω/V DC, 10,000 Ω/V AC BATTERIES: TWO 1.5V (UM-2/AA) SIZE (HWD): 5 x 3 1/4 x 7 1/4 WT: 6 oz



## 20-A-2 20k ohms/vdc

- 21 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- SAFETY FUSE PROTECTED CIRCUIT
- COMPLETE WITH TEST LEADS / BATTERY
- OPTIONAL CARRYING CASE SCL-2

A tremendously precise 20,000Ω/V DC VOM at a amazingly low price. Features a safety fuse protected circuit and "Good-Bad" battery check scale. Easy-to-read 3" meter has an anti-parallel mirror-back color coded scale,  $\pm 1\%$  temperature-stabilized resistors and double jewelled  $\pm 2\%$  D'Arsonval meter movement protected against overload by dual silicon diodes. OFF range shunts meter during transportation.

### SPECIFICATIONS

DC VOLTAGES: 5, 25, 50, 250, 500, 1000V, Bat. Ck 0-1.5V AC VOLTAGE: 10, 50, 100, 500, 1000V DC CURRENT: 50μA, 25mA, 250mA RESISTANCE: 60kΩ, 6MΩ DECIBELS: -20dB to  $\pm 22$ dB in 4 ranges ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  Resistance  $\pm 4\%$  (OF FULL SCALE) SENSITIVITY: 20,000 Ω/V DC, 10,000 Ω/V AC BATTERY: 1.5V (UM-2/AA) SIZE (HWD): 4 1/2 x 3 1/4 x 1 1/4 WT: 5 oz

## 4-A-4 4k ohms/vdc & ac

- 18 RANGES
- METER OVERLOAD PROTECTED
- MIRROR-BACK SCALE
- 250mV LOW DC RANGE
- COMPLETE WITH TEST LEADS AND BATTERIES
- OPTIONAL CARRYING CASE SCL-2

A compact-sized multimeter that gives all the features and accuracy of a full-size unit. 250mV DC ranges ideal for checking solid state circuits. Easy-to-read 3" meter has an anti-parallel mirror-back 3-color coded scale,  $\pm 1\%$  temperature-stabilized resistors and double jewelled  $\pm 2\%$  D'Arsonval meter movement protected against overload by dual silicon diodes.

### SPECIFICATIONS

DC VOLTAGE: 0.25, 2.5, 20, 50, 250, 500, 1000V AC VOLTAGE: 10, 50, 250, 1000V DC CURRENT: 0.25, 25, 250mA RESISTANCE: 2kΩ, 200kΩ, 2MΩ DECIBELS: -10dB to 22dB ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  resistance  $\pm 3\%$  (OF FULL SCALE) SENSITIVITY: 4000 Ω/V DC AND AC BATTERIES: Two 1.5V (UM-3/AA) SIZE (HWD): 5 1/4 x 3 1/2 x 1 1/2 WT: 6 oz



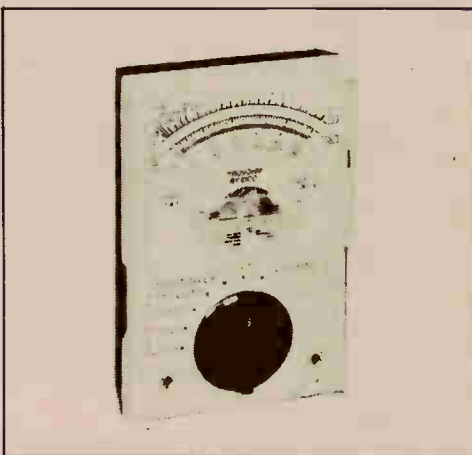
## 1-A-1 2k ohms/vdc

- 12 RANGES
- MIRROR-BACK SCALE
- METER OVERLOAD PROTECTED
- 100mA DC RANGE
- COMPLETE WITH TEST LEADS AND BATTERY

The go-everywhere shirt-pocket instrument for the busy technician/hobbyist. Features 2000Ω/V DC and AC sensitivity and convenient 100mA DC range. Easy-to-read meter has a anti-parallel mirror-back color-coded scale and precision meter movement protected against overload.

### SPECIFICATIONS

DC VOLTAGE: 10, 50, 250, 1000V AC VOLTAGE: 10, 50, 250, 1000V DC CURRENT: 100mA RESISTANCE: 10kΩ, 1MΩ DECIBELS: -10 to  $\pm 22$ dB ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  Resistance  $\pm 3\%$  (of Full Scale) SENSITIVITY: 2000 Ω/V DC AND AC BATTERY: 1.5V (UM-3/AA) SIZE (HWD): 3 3/4 x 2 1/4 x 1 1/4 WT: 3 oz

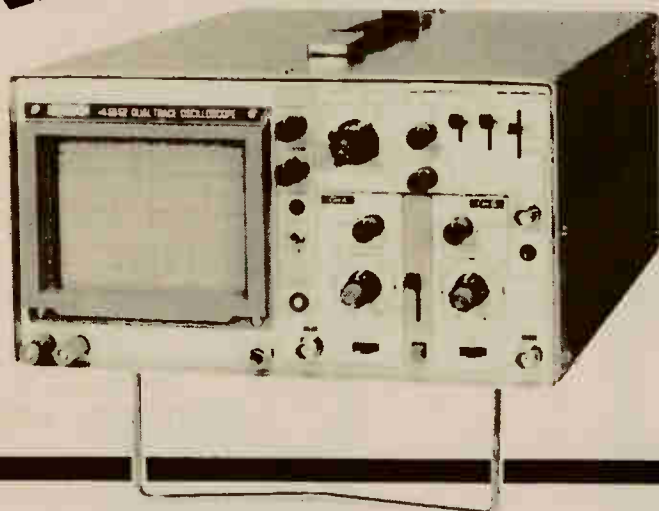


Ideal for logic and digital design and troubleshooting

# 482 dual trace 20 MHz 5" oscilloscope

**NEW!**

**Exclusive Built-In  
Component Tester!**



- 5 mV/cm Sensitivity • 100% Solid State
- Automatic Triggering • Includes 10:1 Probes
- Automatic Selection of Alternate or Chop Mode
- Add and Subtract Mode • 17.5 Nanosec Rise Time

Versatile and easy to use, the EICO 482 has features not usually found in oscilloscopes in this price range. The Model 482 offers DC to 20MHz bandwidth, AC DC coupling, 11 position calibrated attenuator, 5 mV/cm sensitivity, and automatic shift between chop and alternate as sweep time is changed. Gives you 19 calibrated sweeps from 0.5 microsecond per centimeter to 500 microseconds per centimeter. 17.5 nanosec rise time for easy viewing of high speed pulses and wave forms. Automatic trigger from either channel, including TV sync, extends convenience and versatility. Add & subtract modes, (with Ch-2 invert), permits quick analysis of signals, amplitude, etc. Front panel X-Y operation makes it ideal for phasesshift, analysis, sweep alignment and vectorscope service. A built in component Quick-Tester enables you to check diodes, transistors, resistors and capacitors. The wave form tells its condition at a glance! The five inch Cathode Ray Tube has a bright green display and a molded bezel for use with cameras. A full-regulated power supply provides stable voltages regardless of line and load fluctuations, and a calibration voltage of 0.5 volts peak-to-peak square wave is available for probe adjustment. Included with the Model 482 are two low-capacity high-impedance probes (the EICO Model PLD) that minimizes circuit load during test. The PLD probe has a 3-position switch which selects 10:1 or direct modes, or a reference position that grounds the tip through the 9 megohm resistor. This "top-of-the-line" scope is a professional instrument designed by professionals for professionals.

## SPECIFICATIONS

**VERTICAL DEFLECTION:** Deflection Factor; 5mV to 10V/DIV on 11 ranges in 1-2.5 step with fine control, Bandwidth; DC: DC to 20MHz (-3dB), AC: 10Hz to 20MHz (-3dB), Risetime; 17.5nsec, Overshoot; Less than 3%, Input Impedance; 1 megohm shunted by 20pF  $\pm$  3pF, Operating Modes; CH-A, CH-B, DUAL, ADD, Chop Frequency; 200kHz approx., Channel Separation; Better than 60dB at 1kHz, CH-B Polarity; CH-B can be inverted. **TIME BASE:** Type; Automatic and triggered. In automatic mode, sweep is obtained without input signal, Sweep Time; 0.5usec to 0.5sec/DIV on 19 ranges and X-Y In 1-2.5 step with fine control, Magnifier; x5 at all ranges, Linearity; Less than 3%. **HORIZONTAL DEFLECTION:** Deflection Factor; 5mV to 10V/DIV on 11 ranges in 1-2.5 step with fine control, Frequency Response; DC to 1MHz, Input Impedance; 1 megohm shunted by 20pF  $\pm$  3pF, Max Input Voltage; 300V DC + AC peak or 600 Vp-p, X-Y Operation; X-Y mode is selected by SWEEP TIME/DIV switch. CH-A: Y axis. CH-B: X axis. **TRIGGERING:** Sensitivity; INT: 1 DIV or more, EXT: 1 Vp-p, Source; INT, CH-A, CH-B, LINE, EXT, Slope; Positive and Negative, continuously variable level control: Pull for AUTO, Range; 20Hz to 20MHz, Filters; AC, HF-REJ, TV, TV Sync; Vertical and Horizontal Sync separator circuitry allows any portion of complex TV video waveform to be synchronized and expanded for viewing. TV-H(Line) and TV-V(Frame) sync are switched automatically by SWEEP TIME/DIV switch. TV-V: 0.5sec/DIV to 0.1msec/DIV, TV-H: 50usec/DIV to 0.5usec/DIV. **CRT:** 130mm tube (approx. 2KV), Intensity Modulation; TTL Level, Max Input: +50V (DC + AC peak). Calibration Voltage; 0.5Vp-p  $\pm$  5%, 1kHz Square Wave, Power Requirements; AC: 117V, 50/60Hz, Weight; 8kg approx.

**Assembled**

All new! All solid state state-of-the-art circuitry!

# 460-S wideband dc 5" oscilloscope

**NEW!**



- 1 DC - 4.5 MHz Flat Response
- Automatic Sync • TV-V and TV-H Sweeps
- 20 MV/cm Sensitivity • 100% Solid State
- Five-Inch Bright Display CRT

The NEW 460-S is an outstanding value. Styling is all NEW and MODERN, with high brightness CRT and filter, wave-forms are clear and easy to observe. Its sturdy compact construction, and portability make it ideal for use anywhere even field service. The 460's advanced design features make it ideal for use in the TV service field, production testing, labs and schools. Bandwidth extends to 4.5MHz with a sensitivity of 20 mV/p-p/Cm or better. It is completely solid state and features FET's in input circuits, DC coupled amplifiers, phase (up to 140) line frequency sweep and vertical calibration voltage. Either DC or peak-to-peak AC (or combination) measurements may be made from 30 mV to 500V. Instantaneous, driftfree positioning permits centering any part of any expanded trace. Intensity and focus controls, 60 Hz 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.

## SPECIFICATIONS

**VERTICAL AMPLIFIER:** Sensitivity; 20mV p-p/cm or better. Bandwidth (-3dB); DC: DC to 4.5MHz, AC: 2Hz to 4.5Hz. Input impedance; 1 Megohm: Less than 45pf in shunt. Input Control; x1, x10, x100, and fine adjuster. Calibration voltage: 0.1V p-p at line frequency. Input voltage (maximum); 600V (p-p + DC) **HORIZONTAL AMPLIFIER:** Sensitivity; 300mVp-p/CM or better. Bandwidth (-3dB); DC to 600 KHz input impedance; 1 Megohm: less than 40pf in shunt. Input Voltage (max); 100V (p-p + DC). **SWEEP RANGES:** 10 to 100,000Hz sawtooth in 4 ranges plus EXT CAP position for very low frequency sweeps with external capacitor. Special TV-V and TV-H positions provide 30Hz and 7875Hz sweeps respectively for convenience in TV servicing. Synchronization; " + " internal, " - " internal, 60Hz (phase controlled), or external. **POWER:** 117vac, 50/60Hz (export model 220V) approx. 15 VA. **SIZE:** (HWD) 280 x 176 x 440mm. **WEIGHT:** 7.9kg.

**Assembled**



Extraordinary Performance and Value!

# 274 3½ digit LCD digital multimeter

**NEW!**



**INCLUDES CARRYING CASE**

- AUTO POLARITY, AUTO ZERO • 26 RANGES
- ACCURACY BETTER THAN 1.0% DCV
- FULLY OVERLOAD PROTECTED
- 10 MEGOHM INPUT IMPEDANCE
- OVER RANGE INDICATION "1"
- LOW BATTERY INDICATION "BT"
- SUPPLIED COMPLETE WITH TEST LEADS, BATTERY AND CARRYING CASE
- OPTIONAL AC ADAPTOR AVAILABLE

Extraordinary performance and value in a low cost battery operated DMM. Outstanding features include Auto Polarity/Zero, Auto Overload indication, Low Battery indication and floating decimal. Protected against overload on all ranges. Current ranges protected by both diodes and a fuse. Supplied complete with deluxe carrying case.

## SPECIFICATIONS

DC VOLTAGE: 0.2, 2, 20, 200, 1000V AC VOLTAGE: 0.2, 2, 20, 200, 700V DC CURRENT: 0.2, 2, 20, 200mA, 1A AC CURRENT: 0.2, 2, 20, 200mA, 1A RESISTANCE: 200 ohm, 2, 20, 200, 2 megohm, 20 megohm. ACCURACY: 0.9% Typical DCV Accuracy, .2% of full scale +/- 1 digit. BATTERIES: One 9V (006P rectangular).

**Assembled**

## PLD-2 low capacity/10:1 probe

**NEW!**



For use with wideband oscilloscopes to 40MHz and most frequency counters. Slim-body, lightweight construction, three-position switch for 10:1 or direct modes. BNC connector. All accessories included.

## SPECIFICATIONS:

AT X10 POSITION: Attenuation; 1/10 +/- 2%, Frequency range; dc-40 MHz, Input resistance: 10 megohm (Connected to oscilloscope of 1 megohm input), Maximum input; 250 VRMS or 600 Vdc, Compensation range; 20 to 40 pF.

AT X1 POSITION: Frequency range; DC-5 MHz, Input resistance; 1 megohm (Connected to oscilloscope of 1 megohm input), Input capacity; Less than 250 pF (Connected to oscilloscope of less than 50 pF), Maximum input; 250 VRMS or 600 Vdc, Connector; BNC, Cable Length; 4'9" (1.47m).

**Assembled**

New industry leader in price and performance!

# 275 3½ digit LCD digital multimeter

**NEW!**



**INCLUDES CARRYING CASE**

- AUTO POLARITY, AUTO ZERO • 14 RANGES
- ACCURACY BETTER THAN 0.8% DCV
- FULLY OVERLOAD PROTECTED
- 10 MEGOHM INPUT IMPEDANCE
- OVER RANGE INDICATION "1"
- LOW BATTERY INDICATION "BT"
- SUPPLIED COMPLETE WITH TEST LEADS, BATTERY AND CARRYING CASE

Digital accuracy at Lowest cost. New 4 function, 9 volt battery operated portable DMM is supplied complete with carrying case. Outstanding features include Auto Polarity/Zero, Auto Overload indication, Low Battery indication and floating decimal. Protected against overload on all ranges. Current ranges protected by both diodes and a fuse.

## SPECIFICATIONS:

DC VOLTAGE: 0.2, 2, 20, 200, 1000V AC VOLTAGE: 0, 200, 500V DC CURRENT: 0, 2, 20, 200mA. RESISTANCE: 2, 20, 200K ohm, 2 megohm. ACCURACY: 1.0% Typical DCV Accuracy, .2% of full scale +/- digit BATTERIES: One 9V (006P rectangular).

**Assembled**

## BT-1 BATTERY TESTER

**NEW!**



- ACCURATELY TESTS ALL POPULAR TESTS
- 1½ VOLT AA, C & D CELLS, 9V BATTERIES USED IN WATCHES, CALCULATORS, ETC.

Tests all popular types: 1½V-AA, C, D and 9V batteries; 1.35-1.65V watch and calculator batteries and 1.35-4.5V hearing-aid batteries. Tests silver oxide, mercury, carbon-zinc and alkaline. Test is made accurately with proper load connected across battery terminals. Large easy-to-read color-coded scale. Non-polar test leads and instructions incl. 4 x 3 x 1¼."

**Assembled**

Extraordinary Performance and Value!

# 270 digital multimeter kit



- Flashing Over-Range Indicator
- 3½ Digits
- Auto Polarity, Overload Protected

Featuring 3½ digits, the EICO 270 is a compact, battery-operated DMM that belongs on every test bench and in every field service caddy. It measures AC and DC Volts, AC and DC Current, and Resistance in 21 ranges. Polarity indicators and overload protection are provided, and 0.5 inch LED displays give easiest-to-read digital readout to 1999. The 270 has a basic 0.5% DC accuracy, 10 Megohm input impedance, low voltage drop in all current ranges, automatically-flashing over-range indicator when input exceeds the value of the range selected.

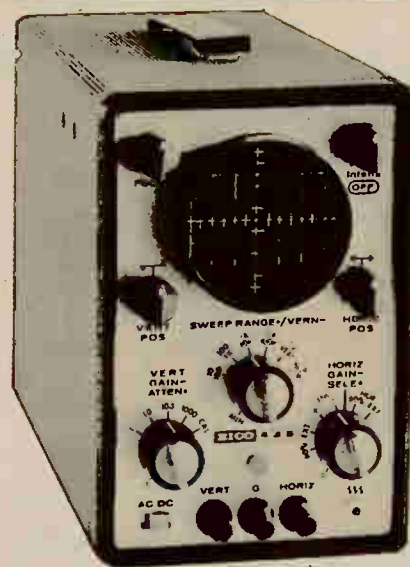
## SPECIFICATIONS

**RANGE:** 4 ranges-2, 20, 200, and 2000 for all functions (additional 20  
**ACCURACY** (Lowest range, other ranges slightly higher): DC volts  $\pm 0.3\%$  of reading. AC Volts, AC current  $\pm 0.7\%$  of reading  $\pm 0.3\%$  of full scale. DC current, resistance 0.5% of reading. For all ranges add  $\pm 1$  digit to accuracy indicated. **READING RATE:** 2½ per second on DC and K ohm range. **OPERATING TEMPERATURE RANGE:** 0° to 50°C. **POWER SOURCE:** Four "c" size batteries alkaline, or carbon-zinc with jack for AC adaptor. (Batteries and AC adaptor not supplied). **CURRENT CONSUMPTION:** Less than 100 mA. **BATTERY LIFE:** Better than 50 hours of continuous use with alkaline batteries. **SIZE (HWD):** 7¼" X 5" X 2¾". **WEIGHT:** 1½ lbs.

Kit only

Lightweight and Portable!

# 435 wideband dc 3" oscilloscope



- 18 mV rms/cm Sensitivity
- TV-V and TV-H Sweeps
- Zener Diode Calibration
- DC-4, 5 MHz Flat Response

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 are obtained with a sharp and bright 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. Edge-lit calibration grid.

## SPECIFICATIONS

**VERTICAL AMPLIFIER:** Frequency response from DC to 4.5 MHz, +1, -3 db (useful to 10 MHz); sensitivity 18 mV rms/cm (50 mV p-p/cm); input impedance 1 Megohm/35 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 1 Hz to 500 kHz, +1, -3 db; sensitivity 0.7 V rms/cm; input impedance 4 Megohms/40 pf. **SWEEP RANGES:** 10-1 100 Hz, 100-1000 Hz, 1-10 kHz, 10-100 kHz; plus TV-VERT position (30 Hz) and TV-H HOR position (7875 Hz). Synchronization may be (+) or (-) internal, external or line frequency. **POWER REQUIREMENTS:** 117 VAC, consumption approximately 110 watts. **SIZE (HWD):** 8½" X 5¾" X 12¾". **WEIGHT:** 18 lbs.

\*Export Model Available.

Kit

Assembled

## scope accessory probes

## Probes to Add Versatility and Flexibility to Your 'Scope!



**PSD 'Scope Demodulator Probe** For signal tracing and checking of TV/radio RF and IF stages. Permits scope to be used as waveform tracer, gain analyzer and alignment indicator in all stages. Demodulates AM carriers between 150 kHz and 250 MHz. **Kit Assembled**

**PD Direct Probe** Use in low frequency or low impedance circuits. Direct Test Probe eliminates stray pick-up and signal re-radiation. **Kit Assembled**

**PLC Low Capacity Probe** For tracing TV synch signals and general tests in video, sync and sweep circuits. Hi-Z, low capacity probe is useful for waveform tracing in high-impedance, high frequency and wideband circuits (as in TV), without distortion from overloading or frequency discrimination. **Kit Assembled**



Distortion-Free!

# 378 audio generator



- Switch Selectable Frequency Output
- One Hz to 110 kHz    ■ Metered Output Voltage
- Output Attenuated in 8 Steps

Especially designed for today's need for precision, versatility and reliability in audio testing and signalling. 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 or RF signal generators, or any other applications where a stable, accurate audio sine wave signal over a very wide range of frequencies must be used. The 378 produces a very low distortion signal. 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. This results in a precisely metered output controlled by 8-position and fine attenuators. The output level of this instrument can be set with precision between 0 and 10 volts RMS (or between -70 and +22 db) on a 4 1/2", 2% full-scale accuracy meter. For a complete audio test lab, team the 378 with the EICO 902 IM/Harmonic Distortion Meter.

## SPECIFICATIONS

Switch selectable frequency output from Hz to kHz: One Hz steps (1-110 Hz); 10 Hz steps (10-1100 Hz); 100 Hz steps (100 Hz - 1.1 kHz); FREQUENCY ACCURACY:  $\pm 5\%$ . DISTORTION: Less than 0.1%, 20 Hz - 20 MHz. OUTPUT VOLTAGE RANGES: 0-3, 10 V into hi-Z (10 k $\Omega$  min.); 0-003, .01, .03, .1, .3, 1 V into ext. or int. 600 ohm load. OUTPUT METER ACCURACY:  $\pm 5\%$  of full scale. POWER REQUIREMENTS: 120 V, 50/60 Hz, 40 watts. SIZE: (HWD) 8 1/2" X 12 1/2" X 9". WEIGHT: 16 lbs.

\*Export Model Available.

Kit

Assembled

## PSI-1 signal injector probe



If you troubleshoot by signal tracing, you'll find this an invaluable tool. Carry it in your pocket when you go on field service calls, and you can inject signal whenever and wherever you need it. Just press the button! The PSI-1 injects signals rich in harmonics and you control volume by spacing the inductive coupling to the unit under test.

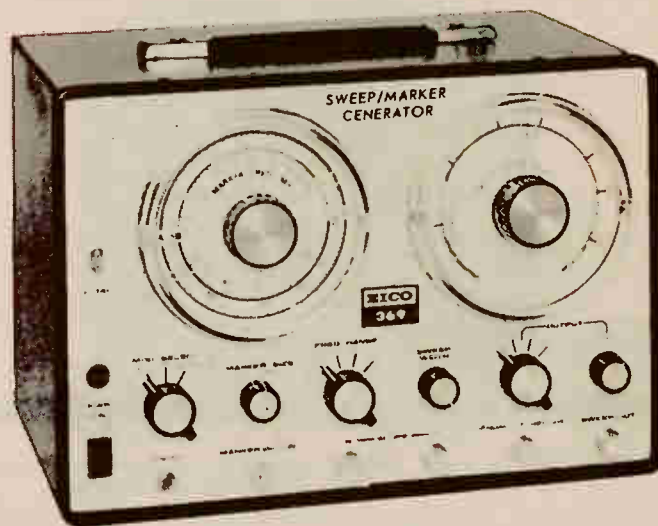
SPECIFICATIONS: 1 kHz with harmonics to 30 MHz. OUTPUT VOLTAGE: 50 V peak-to-peak, open circuit. OUTPUT IMPEDANCE: 10 k $\Omega$  capacitive. INPUT: DC volts 600. Max. POWER SOURCE: Two 1.5 V batteries. SIZE: 5 1/2" long, 1/2" O.D. WEIGHT: One oz.

Kit

Assembled

Advanced Service Capability For Your Test Bench!

# 369 sweep/marker generator



- Frequency Range 2-250 MHz
- New Improved Solid State Circuit Design
- Both Variable and Crystal Marker Oscillators
- Post Injection Marker Circuit • Complete with Cables

The new Solid State 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. The 369 provides the easiest, fastest visual alignment of color or black-and-white TV, CATV and FM receiver RF and IF circuits. Use it with any fine wide-band scope such as the EICO 460 or 482. The controllable inductor sweep circuit is purely electronic and has no mechanical parts to wear out. Five fundamental sweep ranges are provided from 2-250 MHz. The variable marker generator has 4 ranges covering 2-250 MHz. A crystal marker oscillator is provided that can be used to calibrate the 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.

## SPECIFICATIONS

SWEEP GENERATOR: FREQUENCY RANGE: 2-250 MHz, continuously adjustable, SWEEP WIDTH: 20 MHz, maximum, SWEEP RATE: At line frequency, 60 or 50 Hz. OUTPUT VOLTAGE: 0-50 mV, approx., from a 75 ohm source, LINEARITY: Within 10%. MARKER GENERATOR: FREQUENCY RANGE: 2-250 MHz in four bands. CRYSTAL OSCILLATOR: 1-14 MHz. MARKER METHOD: post-injection, internal or with external signal. MODULATION: Internal 1 kHz for AM. POWER SUPPLY: 115V, 50/60 Hz, as specified 8VA; approx. SIZE (HWD):

Assembled

## PST-2 signal tracer probe

This penlight-sized instrument is a versatile service tool. The high-gain amplifier with a useable bandwidth from 500 Hz to 200 kHz can be extended to 200 MHz by means of the snap-on demodulator tip.



SPECIFICATIONS: FREQUENCY: 1 kHz approximately with harmonics to 30 MHz. OUTPUT VOLTAGE: Approximately 50 volts peak-to-peak open circuit. OUTPUT IMPEDANCE: 10 k $\Omega$  capacitive. INPUT DC VOLTAGE: 600 volts max. from output tip to case ground. POWER SOURCE: Two 1.5 volt batteries (Burgess No. NE, Everready No. 912 or equivalent). SIZE: 5 1/2" long by 1/2" O.D. WEIGHT: One oz.

Kit

Assembled

# 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 multi-purpose 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. 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 accurately compare 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**

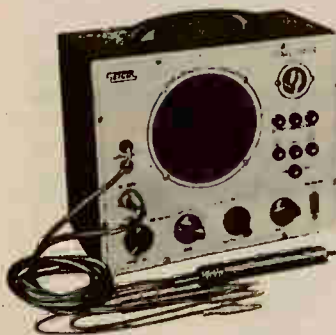
OUTPUT: 400 mW; INPUT FOR RATED OUTPUT: RF - 1 mV, audio - 63 mV; HUM: Better than 60 db below 400 mV. METER: 200 microampere movement. POWER REQUIREMENTS: 105-132 volts AC, 50/60 Hz, 5 VA. SIZE (HWD): 7½" X 8½" X 5". WEIGHT: 6 lbs.

\*Export Model Available.

Kit

Assembled

## 147 signal tracer



Two separate input channels assure maximum applicability to both RF and audio work. Magic eye tube and speaker provide both visual and aural signal monitoring. Calibrated wattmeter to measure power consumption of equipment being tested. Output for VTVM or oscilloscope. Built-in transformer or speaker may be used as substitutes for suspected components in defective equipment. Complete with shielded RF crystal demodulator and direct probes.

**SPECIFICATIONS:**

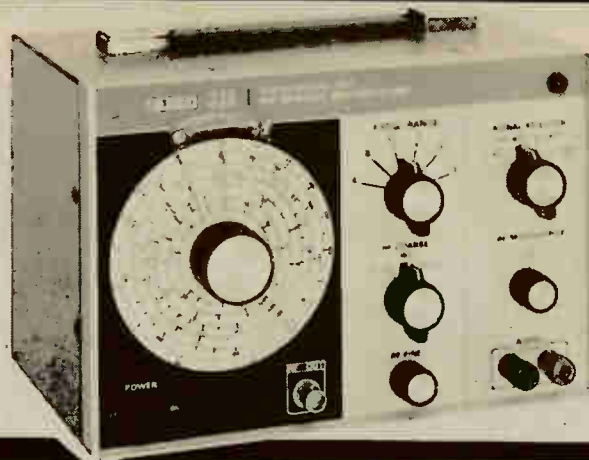
POWER REQUIREMENTS: 105-125 VAC, 50/60 Hz. SIZE (HWD): 8" X 10" X 4¼". WEIGHT: 11 lbs.

\*Export Model Available.

Kit

Assembled

# 330 solid state rf signal generator



This wide-range solid-state RF signal generator is an invaluable tool for aligning television sets, AM, FM radios, CB and other types of communications equipment. 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 placing this switch in the applicable position.

**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: 3 steps. RF FINE ATTENUATION: 0-100%. INTERNAL MODULATION: Approximately 400 Hz from 0 to 100%. POWER REQUIREMENTS: 105-132 volts, 50/60 Hz, 1.7 VA. SIZE (HWD): 7½" X 8½" X 5". WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

## 324 rf signal generator

A rugged, dependable unit which has proven itself over many years. Provides fundamental frequencies from 150 kHz to 145 MHz in six bands and calibrated harmonics to 435 MHz vernier tuning. Modulate signal using built-in 400 Hz oscillator or an external source. Step and continuously variable attenuators are adjustable from the front panel. 400 Hz signal can be used for testing audio circuits. Shielded RF output cable included.

**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 4¼". WEIGHT: 8 lbs.

\*Export Model Available.

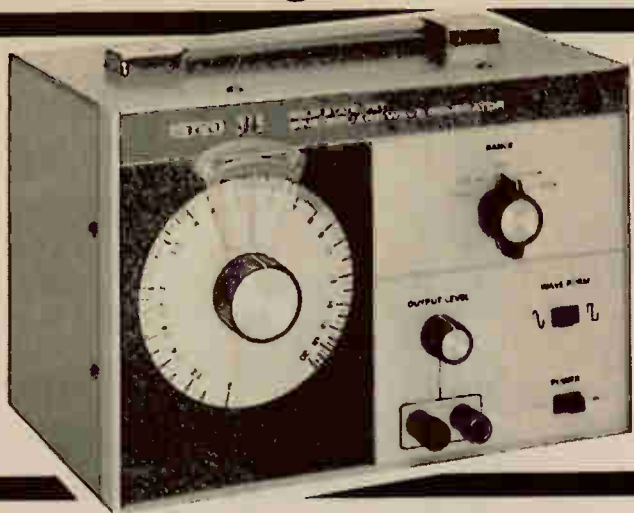
Kit

Assembled



Simultaneous Sine and Square Wave Outputs!

## 379 solid state sine/square wave generator



Here is a truly professional wide-range signal generator that 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. The sinusoidal output voltage can be varied from 0 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  $\pm 1$  db on the four lowest bands and within  $\pm 2$  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 at one pair of output terminals, excellent square waves of identical frequency appear at the 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 0 to 10 volts peak-to-peak.

### SPECIFICATIONS

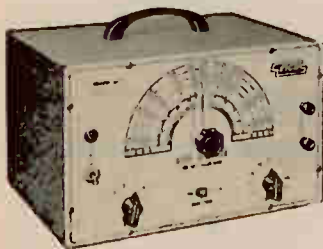
FREQUENCY RANGE: Sine wave - 20 Hz to 2 MHz, square wave - 20 Hz to 200 kHz. OUTPUT VOLTAGE: Sine wave - 0 - 7.5 volts RMS into high-impedance output, 0 - 6.5 volts into 600 ohms. Square wave - 0 - 10 volts peak-to-peak into high impedance, positive direction with zero ground. CALIBRATION ACCURACY:  $\pm 3\%$  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):  $7\frac{1}{2}'' \times 8\frac{1}{2}'' \times 8\frac{1}{2}''$ . WEIGHT: 9 lbs.

\*Export Model Available.

Kit

Assembled

## 377 sine/square wave generator



Fills requirements of audio engineer, technician and hobbyist. Frequency range: 20-200,000 Hz on sine wave, 60-30,000 Hz square wave. Output voltage: 10 V across 100 ohms. Distortion: less than 1%. Because the output is constant over a wide frequency range, the distortion is low and the square wave has a good rise time.

### SPECIFICATIONS:

FREQUENCY RANGE: Sine wave - 20-200,000 Hz in 4 bands; square wave - 60-30,000 Hz (5% tilt at 60 Hz, 5% rounding at 30,000 Hz). CALIBRATION ACCURACY:  $\pm 3\%$  or 1 Hz, whichever is greater. OUTPUT VOLTAGE: 10V across 10,000 ohms or higher. DISTORTION: Less than 1%. HUM: Less than 0.4% of rated output. POWER REQUIREMENTS: 117 VAC, 60 Hz, 50 watts. SIZE (HWD):  $7\frac{1}{2}'' \times 11\frac{1}{2}'' \times 7\frac{1}{2}''$ . WEIGHT: 13 lbs.

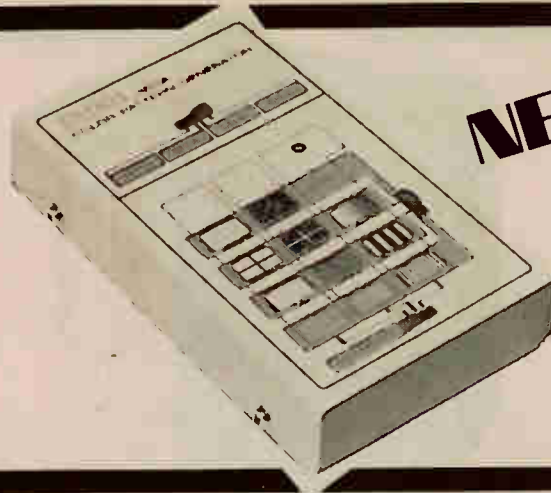
\*Export Model Available.

Kit

Assembled

Digital Logic IC Design for Compact Reliability

## 388 portable IC color bar pattern generator



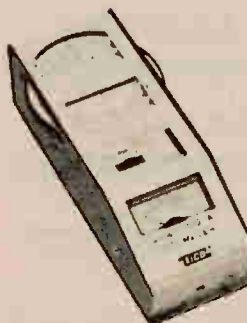
The 388 is truly the most advanced pocket-size color generator. A single MOS LSI IC provides 11 digitally controlled, stable FCC-Specified patterns. The 388 operates by simply connecting its output cable to the TV's VHF terminals. Two matrix slide switches select any one of the 11 patterns. The RF carrier frequency is adjustable for coverage on channels 3, 4, or 7. Harmonics of 7 ch provides usable UHF signals on channels 23 and 51. Crystal controlled chroma and timing oscillators assure precision, accuracy and stability. Video output signal switch enables you to locate color shifts and internal ghosts from IF or Video Stages. A non-modulated carrier signal is available for frequency calibration at BATTERY CHECK position. 75 ohm RF output impedance, usable up to 300 ohm antenna input. One 9-volt battery provides a minimum of 16 hours of continuous operation before replacement is required. To test battery condition, a battery-check LED indicator is provided.

### SPECIFICATIONS

VIDEO OUTPUT: 0-500mV, 750ohm. RF OUTPUT FREQUENCIES: a) CH-A (3ch): 61.25MHz b) CH-B (4ch): 67.25MHz c) CH-C (ch7) 175.25MHz d) (23ch): 525.75MHz (harmonics of CH-C) e) (52ch): 876.25MHz (Harmonics of CH-C). RF OUTPUT: 0-25mVrms, 75ohm. SUBCARRIER: 3.563795MHz. BATTERY OPERATIVE VOLTAGE: 6-10V. BATTERY: 9V (006P) or equivalent. BATTERY CHECK: LED indicator. CURRENT DRAIN: approx. 10mA. SIZE & WEIGHT: approx. 90 x 150 x 35mm, 500g. ACCESSORIES: Output cable.

Assembled

## 710-A grid-dip meter



- New Solid State Design
- Battery Operated

Invaluable for determining frequency of other oscillators or tuned circuits. With it, transmitters and transceivers can be pre-tuned. Exceptionally stable circuit and diode detector give a better, cleaner "dip" on the easy-to-read meter. Also useable as absorption-type frequency meter. Complete with six numerically coded plug-in coils which cover all broadcast, FM, amateur and TV bands in 8 overlapping ranges.

### SPECIFICATIONS:

FREQUENCY RANGE: 1.5 to 250 MHz with 6 plug-in coils. METER MOVEMENT: 500 microampere. MODULATION: Approximately 2kHz; sine wave CRYSTAL OSCILLATOR: 1-15 MHz POWER SUPPLY: 9 Volt battery; 006p, or equivalent CURRENT CONSUMPTION: 2mA, Max. SIZE (HWD)  $2'' \times 2\frac{5}{8}'' \times 7''$ . WEIGHT: 1.1 lbs.

Assembled

## 232 peak-to-peak vtvm



- 7 Non-Skip Ranges on Every Function
- Calibration Without Cabinet Removal
- Dual-Purpose AC/DC Uni-Probe

By far the best professional VTVM value in electronics, the 232 features performance proven circuitry, and functional simplicity.

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.

A 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 4½" meter can't burn out — due to the 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.

### 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 Megohm Multiplier Resistor. FREQUENCY RESPONSE: 30 Hz to 3 MHz (up to 250 MHz with PRF probe). OHMMETER: 0.2 ohms to 1000 Megohms in 7 ranges. BATTERY: 1.5 volt. WEIGHT: 5 lbs. POWER REQUIREMENTS: 117 VAC, 60 Hz, 5 watts. SIZE (HWD): 8½" × 5" × 5". INPUT IMPEDANCE: 11 Megohms.

\*Export Model Available.

Kit

Assembled

## DLP-6 digital logic probe



Detects pulses as short as 50 nanoseconds. Indicating the logic state of a circuit, the all-new Eico IC Digital Logic Memory Probe provides detection capabilities for pulse durations as short as 50 nanoseconds. Indicator system consists of three light-emitting diodes (LED's). Bottom LED lights for logic 0; top LED lights for logic 1. Center LED comes on to indicate positive or negative going transition. Remains in on state for 200 ns regardless of pulse duration. Memory switch causes stretch LED to remain on permanently after positive or negative pulse occurs. Logic levels can be tested on any DTL or TTL IC system, including calculators, numerical control systems, computers or telephone systems.

Kit

Assembled

## 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

The Model 235 is especially qualified for the exacting measurements encountered in solid-state circuitry. Accurate measurements down to 0.01 volts are quick and certain. Both peak-to-peak and RMS AC voltages are read on separate scales in 7 overlapping ranges, up to 4.2 kV. With its frequency response of 30 Hz to 3 MHz (and up to 250 MHz 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 volts to 1.5 kV (in 8 overlapping ranges); and to 30 kV with the optional probe. (See EICO Model HVP-2) Additional professional features of the 235 include: Ceramic switches, 1% tolerance precision resistors, seven overlapping resistance ranges, zero-center adjustment for all functions and ranges, and a transformer powered supply.

### 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: 0.2 Ohms to 1000 Megohms. FREQUENCY RESPONSE: 30 Hz to 3 MHz ±1 db (up to 250 MHz with optional PRF probe). INPUT RESISTANCE: DC 11 Megohm; AC 1 Megohm shunted by 60 pf. POWER REQUIREMENTS: 117 VAC, 50 or 60 Hz; 6 watts. 1% precision multiplier resistors. 3% accuracy on AC and DC scales. DIMENSIONS (HWD): 8½" × 7½" × 5". WEIGHT: 9 lbs. Supplied less battery - 1 "D" cell required.

\*Export Model Available

Assembled

## 250 ac vtvm & amplifier



This laboratory-quality instrument is designed to accurately measure AC voltages from 1 mv to 300 v RMS at any frequency from 10 Hz to 600 kHz. Measure line, output and noise voltages quickly and accurately.

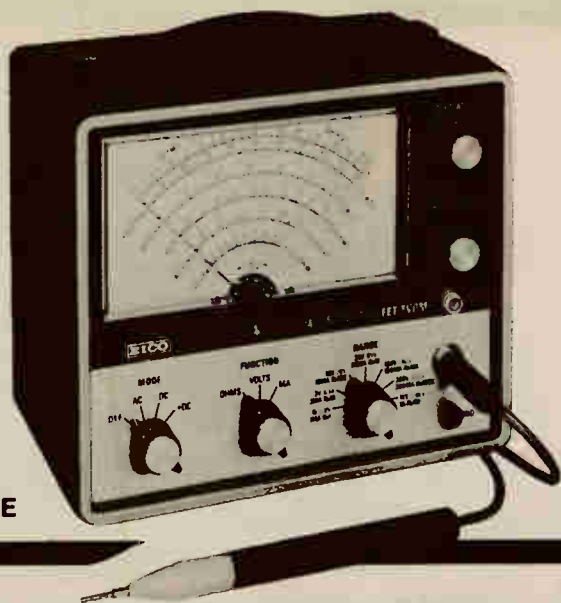
**SPECIFICATIONS:** VTVM VOLTAGE RANGES: 1, 3, 10, 30, 100, 300 RMS millivolts. 1, 3, 10, 30, 100, 300 RMS volts. DECIBEL RANGE: -80 to +52 in 12 ranges. INPUT IMPEDANCE: 10 megohms. AMP. OUTPUT VOLTAGE: 5 RMS volts. INPUT IMPEDANCE: 10 megohms. POWER 105-125 VAC, 60 Hz., 15 watts. SIZE (HWD): 8½" × 5½" × 7". WEIGHT: 10 lbs.

\*Export Model Available.

Assembled



# 242 solid state fet-tvom



Includes  
UNI-PROBE

- Big 6 1/2" Meter Movement for Improved Reading Accuracy
- Measures Resistance in Semiconductor Circuits

The Model 242 solid-state FET-TVOM combines all of the capabilities of the Model 239 with numerous additional features. There is a big 6 1/2" meter for easier, more accurate readings. The added versatility of seven non-skip milliampere ranges and the extremely low voltage ohmmeter which adds convenience and versatility when testing semiconductor circuits. The highly accurate milliammeter section of the EICO Model 242 can be used for both AC and DC measurements from 10 microamperes to one ampere in seven convenient 10 db 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 to both peak-to-peak and the equivalent sinusoidal RMS voltages and currents for easy interpretation.

The Model 242 also incorporates the time saving single all purpose DC/AC/OHMS/MA Multi-Probe so that you use only one lead for all measurements.

## SPECIFICATIONS

Same as Model 239 except for the following: AC & DC Current ranges in MA same as voltages range on 242; OHM METER: Low-voltage type. METER MOVEMENT: 6 1/2" SIZE: (HWD) 7 1/4" X 8 1/2" X 5". WEIGHT: 6 lbs. POWER REQUIREMENTS: 105-1132 volts AC, or 3 NEDA #1604-9 volt batteries and 1 - 1.5 volt size "D" cell; 1.4 VA.

Kit

Assembled

# 239 solid state fet-tvm



Includes  
UNI-PROBE

- Compact, portable, battery-operated
- Measures peak-to-peak AC Voltages

Ideal for semiconductor circuit testing, the Model 239 features 1-volt scale for accurate readings as low as 0.05 volts. Provides good indications down to 0.01 volt. Other scales provide accurate readings up to 1000 volts and with high-voltage probe (not included) voltage range can be increased to 30,000 volts. Large, easy-to-read (4 1/2" 200μA) meter is calibrated in seven ranges of peak-to-peak and equivalent sine wave RMS.

Ohmmeter covers 0.2 to 1000 Megohms in seven steps. Applied voltage is low enough to protect sensitive components, yet high enough to provide accurate testing of diodes and transistors. High stability and accuracy provided by balanced transistor meter circuit and 1% precision resistors. 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. Another convenient feature of the Model 239 is the time-saving single probe for all measurements thereby eliminating the tangle of wires usually associated with similar multimeters.

## SPECIFICATIONS

AC RMS SINE WAVE AND DC VOLTAGE 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 μA movement; POWER REQUIREMENTS: 3 Neda #1604-9 volt batteries and 1-1.5 volt size D cell; SIZE (HWD): 8 1/2" X 5 1/4" X 5"; WEIGHT: 6 lbs.

Kit only

## vtvm accessory probes



**UNI-PROBE UP** 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 isolating resistor or connector. Use 1 Megohm for all EICO VTVM's. EICO VTVM's use MCIF connectors. Kit Assembled



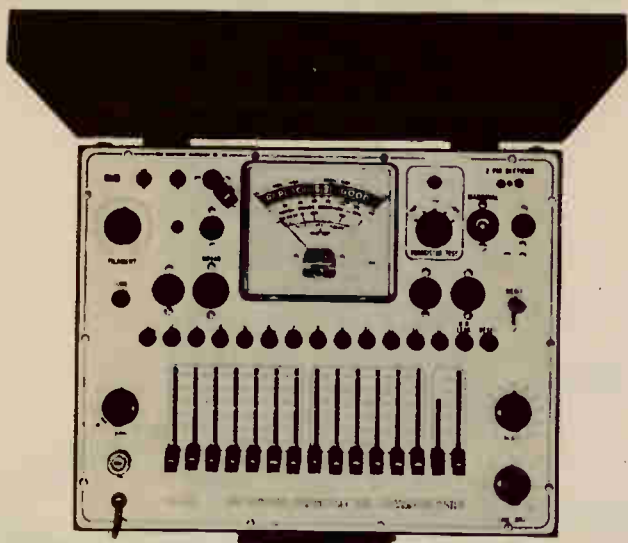
**RF PROBE PRF-11** For voltage measurements at radio frequencies up to 250 MHz. Useful for measuring TV and radio RF and IF stages. Accuracy ±10%. Use with any 11 Megohm VTVM. Supplied less connector. Use PRF-11 for all EICO VTVM's. Kit Assembled



**HIGH-VOLTAGE PROBE HVP-2** 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; Supplied less connector - Use MCIF for EICO VTVM's. Assembled

Checks Mutual Conductance and Peak Emission!

## 667 dynamic conductance tube & transistor tester



- Tests New Tube Types
- Separate Plate, Screen and Grid Voltages
- Individual Element Settings by Level Switches

**TYPES TESTED:** 5- and 7-pin Nuvistors, Novars, Magnoval, Compactrons, 7- and 9-pin miniatures, 9-pin - 1 center pin miniature, 5-, 6- and 7-pin sub-miniature (in-line base), 8-pin sub-miniatures (circular base), Decal, Loctal, Octal, and the special two-pin rectifiers. In addition to receiving types, both domestic and foreign, many small transmitting and special-purpose tubes, voltage regulators, cold-cathode rectifiers, electron-ray indicators and ballast tubes are tested. Tests N-P-N and P-N-P transistors. Pilot lamps are tested in center of Magnoval Socket. Accessory Model CRU adaptor for testing color and black-and-white picture tubes.

**TRANSISTOR TEST:** Two-step test for both N-P-N and P-N-P 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 Megohms. 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 combinations 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. Complete tube data manual included.

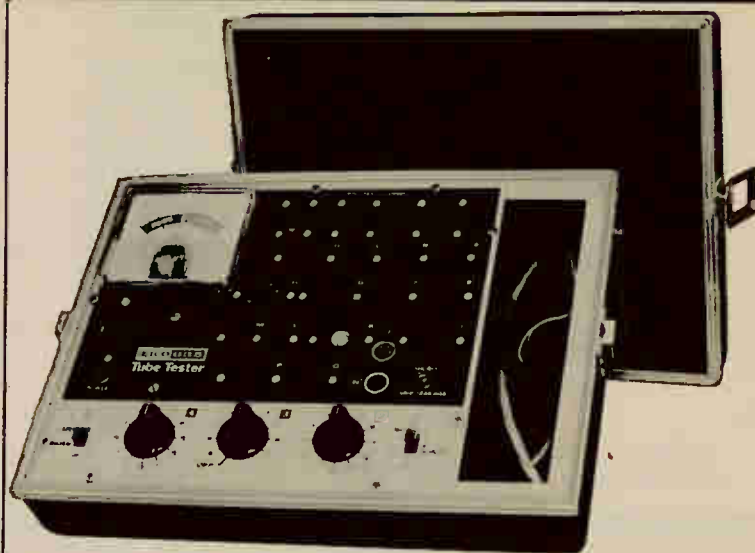
**POWER:** 105-135 VAC. **SIZE (HWD):** 12" X 15" X 4 1/2". **WEIGHT:** 22 lbs.

**Kit**

**Assembled**

Portable Tester for Home or Shop!

## 635 de-luxe portable all purpose tube tester



- Tests All Standard Tubes, Including The New Decals, Magnovals, 7-pin Nuvistors and Popular TV Pic. Tubes
- Complete With Luggage Case and Tube Manual.

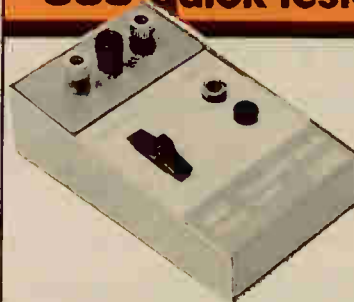
In the field or on the bench, you can fast check nearly any tube with EICO's Model 635. Novars, nuvistors, compactrons, 10-pin types, battery types, auto-radio types, foreign, hi-fi, industrials, decals, magnovals, 7-pin nuvistors, TV picture tubes - You name it, the new 635 will quickly tell you what you need to know to pass or fail the tube! Tests for dynamic cathode emission, grid leakage, gas and shorts. 3 1/2-inch D'Arsonval meter, protected against accidental burnout or overload - 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 contacts in sockets, pin straighteners for all tube types, transformer-isolation power supply. **SIZE (HWD):** 4" X 12 1/2" X 9". **WEIGHT:** 4 1/2 lbs.

**Kit**

**Assembled**

**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

## 688 transistor/diode quick tester



- Checks Diodes, Transistors, Resistors or Capacitors
- Makes Tests In or Out of Circuit
- Power Limiting Prevents Damage to Unit Being Tested

Connect the EICO 688 to your oscilloscope, and touch the component with the probe. The waveform tells its condition at a glance! All test data is included in a handy reference manual to eliminate fumbling with charts and cards. **SIZE (HWD):** 2 1/2" X 3 1/4" X 5 1/2". **WEIGHT:** 1 lb.

**Kit**

**Assembled**



Designed With The Technician in Mind!

## 536 general purpose vom



- 0-1 Volt Full Scale Range
- 1000 Ohms Per Volt Sensitivity
- Seven AC/DC Voltage Ranges

The EICO 536 gives you seven full-scale AC/DC ranges, to 5000 volts. One unique feature of the 536 is the 1000 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.

### 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, 100 kilohms, 1 Megohm. DB RANGES: -20 to +69 in 6 ranges. METER: 3" size, 400 microampere movement. SIZE (HWD): 6½" × 3¾" × 2¾". WEIGHT: 3 lbs. Supplied less batteries and leads.

Kit

Assembled

## 540 appliance/ tester



Designed expressly for "do-it-yourself" home appliance and auto repair - easily finds defects in irons, fans, heaters, TV and 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): 6½" × 3¾" × 3½". Includes leads and batteries.

Kit

Assembled

Belongs in Every Tool Kit!

## 565 portable vom



Optional Carrying Case SCL-1

- 10 Amp DC Current Range
- 20,000 Ohms Per Volt Sensitivity
- 31 Range, 50 Microvolt Movement

A performance-proven multimeter featuring 20,000 ohms/volt DC sensitivity, the EICO 565 boasts 31 ranges. There are seven accurate DC voltage ranges from 0.25 volt to 5000 volts and -12 db to -55 db. DC current can be measured on five ranges from 50 microamperes to 10 amperes. Resistance is measurable on three ranges to 20 Megohms. Output voltage setting removes DC components when measuring signal voltages. 5% resistors used throughout. Large 4½", 50 microampere meter movement.

### 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 ua, 10 mA, 100 mA, 500 mA, 10 amp. DECIBELS: -12 to +55 db in 5 ranges. RESISTANCE: 0-2000 ohms, 0.2 Megohms, 20 Megohms (2 ohms to 20 Megohms). METER: 4½", 50 microampere movement. SIZE (HWD): 6¾" × 5¼" × 3". WEIGHT: 4 lbs. Supplied less batteries and leads.

Kit

Assembled

## HVP-5 hi-voltage probe

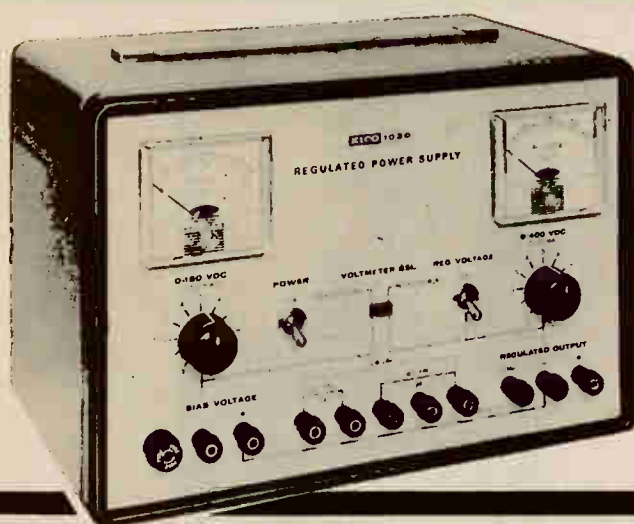
You'll never have to balance a meter with one hand, hold a test lead in your other hand, and try to read the scale at the same time! This all-in-one unit contains the meter, the probe and it's designed to do the complete job for you! It's a completely self-contained direct reading high voltage and current probe that safely measures voltages to 40,000 volts DC and separate current measurements to 400 mA DC. You can quickly and easily measure the high anode voltage of a color picture tube, then by flipping the switch, measure the cathode current drawn by the horizontal output. The two circuits are completely separate only the meter is switched. You can't damage the probe by putting it in a current position while measuring voltage.

- 40kV DC voltage
- 400 mA DC current
- Includes deluxe carrying case



Assembled

# 1030 regulated power supply



- Regulated B+ Continuously Variable 0-400 V DC
- Regulated Bias Supply Continuously Variable 0 to -150 V DC
- Both 6.3 and 12.6 V AC Filament Supplies

A reliable and versatile double power supply than can simultaneously deliver any regulated B+ or regulated bias voltage required for circuit design, production testing, workbench or school experiments.

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

#### SPECIFICATIONS

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

Kit

Assembled

# 1064 battery eliminator and 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

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 heavyduty 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. A fused primary and a re-set overload relay on the secondary add to the durability and safety of the 1064. Among the 1064's applications are charging 6 or 12-volt storage batteries and simulating various battery operating voltages. The 1064 also serves well for marine purposes, operating boat lights, radio-phone, amplifiers, transmitters, bilge pump and other electrical utility units while at dockside, eliminating the need for installing a costly secondary AC lighting system.

#### SPECIFICATIONS

DC OUTPUT VOLTAGE RANGES: (Range selected by 6 - 12 V 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% at 2 amps, 1% at 6 amps, 1.5% at 10 amps; 0-8 volt range: 1.5% at 2 amps, 2% at 6 amps, 4.5% at 10 amps. METERS: Voltmeter 0-20 volts. Ammeter 0-10, 0-20 amps. POWER REQUIREMENTS: 117 volts AC, 60 Hz; 150 watts. SIZE (HWD): 8 1/2" X 5 3/4" X 7 1/2". WEIGHT: 16 lbs.

Kit

Assembled

# 1078 metered ac supply, 0-140V



- 0 to 140V AC Adjustable Output Voltage
- Separate Output Ammeter and Voltmeter

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

#### SPECIFICATIONS:

FREQUENCY: 50/60Hz. INPUT VOLTAGE: 120 AC OUTPUT VOLTAGE: 0-140V AC (30-140V AC voltmeter). OUTPUT CURRENT: Two ranges 0-2.5, 0-7.5 amperes. METER ACCURACIES:  $\pm 1\%$  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 receptable. SIZE (HWD): 8 1/2" X 5 3/4" X 7". WEIGHT: 16 lbs.

\* Export Model Available.

Assembled



Operate AC Appliances from Car or Boat Battery!

## 1080 220-watt charger/inverter



- Operate AC Appliances from Car or Boat Battery
- Portable Power for PA System and Ham Gear
- Does Double Duty as Battery Charger

With 220 watts of power, you can operate many AC operated units from your car or boat battery! Radio, phonograph, CB equipment suddenly becomes mobile when you use the EICO Model 1080. On field trips or family picnics, the 1080 provides a 117 V AC supply for public address systems, for ham equipment, etc. Then, simply flip the switch and the 1080 does double duty as a battery charger. Plug the line cord into any 117 V AC supply, and recharge your car or boat battery! You can use dockside AC or the AC in your home or garage. As a battery charger, the 1080 is rated at 5 amps. It automatically tapers the current to prevent overcharging.

### SPECIFICATIONS

OUTPUT VOLTAGE: 117 V AC, 60 Hz. AC OUTPUT POWER: 220 W. INPUT VOLTAGE: 12 V DC. INPUT CURRENT: 3½ A (no load), 18 A (full load). BATTERY CHARGING RATE: 6 A maximum. SIZE (HWD): 6" X 6" X 8". WEIGHT: 8 lbs.

Kit

Assembled

Regulated Laboratory-Grade DC Power Supply!

## 1032 regulated power supply



- Regulated Against Line and Load Variations
- 0-30 Volts Continuous Output with Loads up to 500 mA
- Voltage and Current Monitored by Meters

Regulated low ripple power supply that 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.

A regulated DC supply serves many applications in both laboratory and service shop. This unit, small enough to fit on a shelf over a test bench, only needs lead wires connected to the terminals to provide instant and necessary voltages at the technician's finger tips. A front-panel mounted fuse provides protection for the unit should the load current exceed the supply's capabilities. The supply is equipped with a fold-flat handle for easy portability around the shop.

### SPECIFICATIONS

OUTPUT VOLTAGE: 0-30 volts regulated. OUTPUT CURRENT: 0-500 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 V AC, 50/60 Hz, 30 watts. SIZE (HWD): 3½" X 8" X 4¼". WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

## 1020 power and bias supply



- Complete Supply For Test Applications

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 V DC). The maximum permissible load current is 300 mA. The maximum ripple (120 Hz) at full load is only 0.005%. 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 voltage in the alignment of TV and radio receivers.

### SPECIFICATIONS

OUTPUT VOLTAGE RANGE: 0-30 V DC, continuously variable. MAX. OUTPUT CURRENT CAPABILITY (CONTINUOUS): 300 mA. 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 Hz): 0.005% at full load. POWER REQUIREMENTS: 117 V, 60 Hz. SIZE (HWD): 5" X 4" X 5½". WEIGHT: 5 lbs.

\*Export Model Available.

Kit

Assembled

An Audio Test Lab in One Instrument!

# 902 im/harmonic distortion meter & ac vtvm



- High Quality Tuning Capacitor Provides Easy Frequency Setting
- Less Than 0.7 Volt Input Required

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.

For harmonic distortion measurement, the EICO 902 incorporates a continuously-variable 20 - 20,000 Hz Wien Bridge rejection filter (in three ranges). For IM distortion measurement, the 902 features a 7 kHz oscillator for the high-frequency source. External low frequency sources up to 400 Hz and high frequency sources down to 2 kHz may be fed to the mixing bridge through panel jacks.

## SPECIFICATIONS

IM DISTORTION: LF to HF ratios 4:1 and 1:1. TEST OUTPUT: 0-5 V. ACCURACY:  $\pm 5\%$  of full scale. RESIDUAL DISTORTION: 0.05%. HARMONIC DISTORTION: FREQUENCY RANGES: 20-200, 200-2000, 2000-20,000 Hz. INPUT Z: 500  $\Omega$ . 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: 2 Megohms. FREQUENCY RESPONSE:  $\pm 0$  db 10 Hz to 100 kHz. ACCURACY:  $\pm 4\%$  of full scale. POWER SUPPLY: V-R tube regulated. POWER REQUIREMENTS: 115 VAC, 60 Hz. SIZE (HWD): 12 1/2" x 8 1/2" x 10 1/2". WEIGHT: 22 lbs. EXPORT MODEL: 115 and 230 VAC, 50-60 Hz.

\*Export Model Available.

**Assembled**

Checks Flybacks and Yokes in Seconds!

# 944 flyback transformer & yoke tester



- Makes Tests In or Out of Set
- Positive Answers in Seconds

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 and Yoke Tester gives you positive checks on flybacks and yokes in mere seconds. Operation is based on the extremely sensitive grid dip principle which shows up even one shorted turn. Exclusive separate calibration for air core and iron core flybacks and yokes assures accuracy. The large, easy-to-read 4 1/2" meter has three separate colored scales. Continuity of coils, speakers, switches can also be checked. SIZE (HWD): 7" x 5" x 4". WEIGHT: 5 lbs.

## SPECIFICATIONS

OSCILLATOR FREQUENCY: Approx. 600 Hz Interrupted 60 times per second. TEST VOLTAGE: 100 rms V (short test), 60 rms V (continuity test). METER: 4 1/2" 50  $\mu$ a 2000 ohm. Color-coded scale: Short test, continuity test, 0 - 100 linear reference. POWER REQUIREMENTS: 115 VAC, 50/60 Hz. SIZE (HWD): 7" x 5" x 4". WEIGHT: 5 lbs.

\*Export Model Available.

**Kit**

**Assembled**

## substitution boxes

### NEW! 1140 Resistor-Capacitor Substitution Box

Provides a means of rapidly substituting a wide range of EIA resistance or capacitance values in a circuit to determine the best value of a badly charred or otherwise illegible resistor or capacitor. You can easily select any resistance alone, any capacitance alone, or any combination of resistance and capacitance in series or parallel. Open and short circuit positions are provided.

## 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. 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): 6 1/4" x 5 1/4" x 3 3/8". WEIGHT: 3 lbs. Supplied less leads.

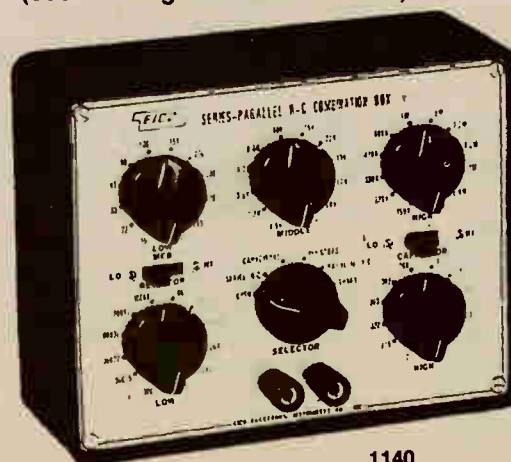
**Assembled**

### 1100 Resistor Substitution Box (NOT SHOWN)

Enables rapid substitution of wide range of EIA resistance values from 15 ohms to 10 megohms in decade multiples of 15, 22, 33, 47, 68, 100 ohms. Uses standard 1-watt,  $\pm 10\%$  EIA resistors. Convenient 5-way, jack-top binding posts. SIZE (HWD): 3 1/4" x 6 1/2" x 3 1/2". WEIGHT: 2 lbs. (Not shown).

**Assembled**

- New Compact Functional Design
- Increased Capacitance Ranges-NOW 24!
- 36 Resistors in standard values from 15 ohms to 10 meg ohms (1watt power rating, tolerance  $\pm 10\%$ )
- 24 Capacitors from 100 pf to 0.68  $\mu$ f (600 V rating tolerance  $\pm 10\%$ )

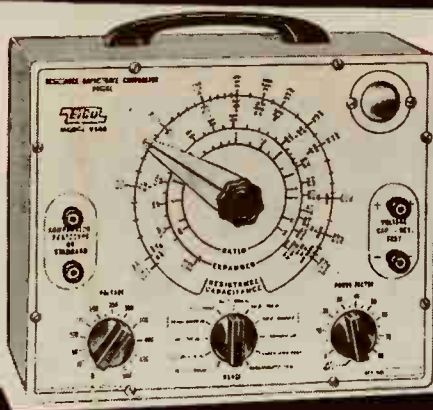


1140



A "Must" For Service Shops and Labs!

## 950 rc bridge & rcl comparator



- Comparator Range allows the Use of Complementary Components as Standards
- Continuously Variable Polarizing Leakage Test Voltage From 0-500 VDC

A versatile and truly useful service instrument for direct measurement of capacity or resistance over a wide range of values. For leakage testing of electrolytics, a continuously variable polarizing test voltage from 0 to 500 VDC is provided. Bridge balance and leakage are indicated by magic-eye tube. The bridge provides 4 capacitance ranges from 10  $\mu$ f to 5000  $\mu$ f. A comparator range permits comparison measurement of capacitance, resistance or inductance against a standard. Power supply is transformer operated.

### SPECIFICATIONS

CAPACITY: 4 ranges, 10  $\mu$ f to 5000  $\mu$ 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 Hz. SIZE (HWD): 8" x 10" x 4". WEIGHT: 8 lbs. Optional test leads available. \*Export Model Available.

Kit

Assembled

Constant Check of Frequency!

## 700 frequency counter



- Operates Automatically on Transmit
- 10 MHz Crystal Timebase
- Covers all 40 CB Channels

The EICO 700 offers the accurate ( $\pm$  1 PPM) digital readout experimenters always needed but could not afford for a hobby. Put this compact Frequency Counter to work in your car or, with an optional power supply, on your test bench. The 700 covers frequencies from 5 Hz to 27MHz on five, large, bright LED displays. Insertion losses of less than 70 mA enables you to leave this counter permanently in the circuit to give you constant readings of your transmit frequency to three decimal places. Slide switch selects kHz or MHz.

### SPECIFICATIONS:

INPUT SENSITIVITY: 500 millivolts RMS-DC to 3 MHz, 500 millivolts RMS linearly increasing to 5 volts RMS-3 to 27 MHz. IMPEDANCE: 2,000 ohms at 27 MHz. FREQUENCY RANGE: DC to 27 MHz. DISPLAYS: Five 0.5" LEDs. OVERLOAD: Diode-protected input. ACCURACY:  $\pm$  one digit  $\pm$  time base stability. READOUT: kHz or MHz. TIME BASE-CRYSTAL FREQUENCY: 10 MHz  $\pm$  10 ppm accuracy,  $\pm$  1 ppm stability. POWER REQUIREMENTS: 8-14 V DC at 1.2 amps. BASE STATION: (117 V AC) Use regulated power supply (1.5 amp min.). SIZE (HWD): 2 3/8" x 5 5/16" x 6 1/8". WEIGHT: 1.6 lbs.

Kit

Assembled

## decade boxes

### 1171 Decade Resistance Box

Ideal for determining exact resistor values. An instant performance comparison can be made of a circuit using a standard value resistor with the performance of the same circuit when using the ideal value resistor in the EICO 1171.

### SPECIFICATIONS

RANGE: 0-99,999 ohms in 5 decades. One ohm steps. CURRENT RATINGS: 350 mA (0-9 ohms) to 2.5 mA (10  $\Omega$  to 100 k $\Omega$ ). SIZE (HWD): 3 1/2" x 12" x 3". WEIGHT: 3 lbs. Supplied less leads.

Assembled

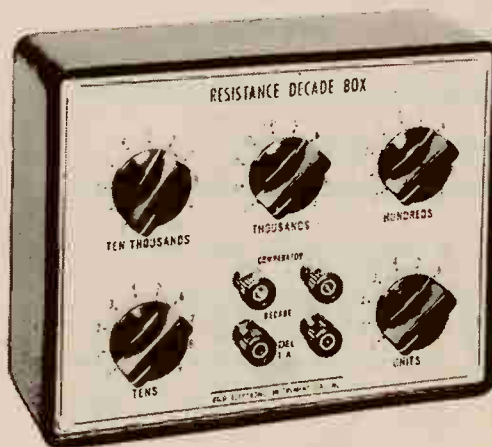
### 1180 Decade Capacitance Box

Useful for rapid experimental determination of exact capacitor values required in a circuit. Precision 1% capacitors, 100 pf to 0.111 mfd, are arranged in three decades in precise 100 pf steps. 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 pf) for the smallest decade.

### SPECIFICATIONS

VOLTAGE RATING: 500 volts DC continuous. ACCURACY:  $\pm$ 1%. SIZE (HWD): 9" x 3 1/2" x 3 1/2". WEIGHT: 3 lbs. Supplied less leads.

Assembled



1171



1180

Learn to Relax!

# BW-300 alpha brain-wave monitor



- Professional-Type Biofeedback System
- Five-Microvolt Sensitivity

Alpha brain wave signals, which fall within a narrow frequency range roughly centered about 10 Hz, seem to be closely related to mental states, such as meditation, tranquility, relaxation, heightened awareness, and elation. The Model BW-300 allows the user to detect and recognize the presence of these self-generated signals. Continued practice with the Model BW-300 is recognizing the onset and presence of Alpha signals generally facilitates achieving this state both in the amplitude of the monitored signals and their more consistent production, indicating a deeper state of relaxation.

After using the BW-300 you will learn how to relax fully and completely without the unit! The BW-300 is completely safe, simple-to-use, and battery operated. Simply attach the electrodes and put on the earphones. As you do, you will be able to hear your own Alpha brainwave generation in the form of a tone that varies in frequency with your own mental state. Unit comes complete with everything you need including stethoscopic earphone, electrodes headband and contact cream as well as complete instructions.

## SPECIFICATIONS

AMPLIFIER: Sensitivity 5 microvolts. POWER: one 9-volt battery (not included). CONTROLS: Volume (with on-off switch), sensitivity. Plug-in jacks for earphone and electrode. SIZE (HWD): 1" X 3½" X 6". WEIGHT: ½ lb.

Kit Assembled

# 1040 filtered power supply



- Plays all 12-VDC Tape Decks, AM/FM Radios
- Serves As A Battery-Less 12 Volt DC Source

Plug the Model 1040 into any 120 VAC line and you can bring all your 12-volt DC mobile equipment into the house for added pleasure! Your CB radio, automotive tape deck, car stereo system, even HAM equipment. It can also serve as a charger for all 12-

volt batteries, works equally well with boats and cars. Input is 120 VAC, 50-60 Hz; output is 12 V DC at 4.0 amperes continuous, 5.0 ampere surge.

## SPECIFICATIONS

FREQUENCY: 50/60 Hz. INPUT VOLTAGE: 120 V AC. OUTPUT VOLTAGE: 12 V DC at 4 amps. OUTPUT CURRENT: 4 amp continuous at rated voltage, 5 amp surge. SIZE (HWD): 4½" X 4½" X 6". WEIGHT: 2½ lbs.

Assembled

Hi-Powered Stereo Amp for your car!

# C-290 Stereo Amplifier Graphic Equalizer

ULTRA-COMPACT SIZE!

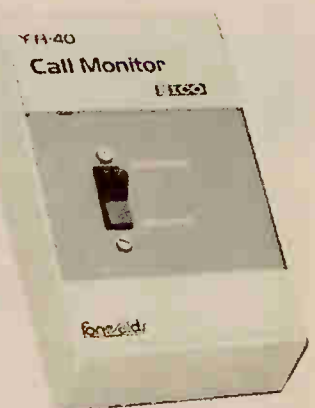


- 5-Band Equalizer
- 40 Watts Total (20/Ch)
- Compact size (HWD)
- Fader Control
- Power-on Indicator

Convert your car stereo into a high-powered Hi-Fidelity system! It's just the thing for great sound in all vehicles — vans, trucks, and boats. Compact amplifier (20 watts RMS/channel) delivers plenty of power for high-fidelity sound and the equalizer gives you the tonal compensation needed to match your car's acoustics. Front/rear fader control balances 4-speaker systems. Boost or reduce the frequency response to suit your individual listening preference. Separate on/off pushbutton with "power on" indicator. Mounting bracket for in/under dash installation.

- Installs in Minutes
- Great for Keeping "Business by Phone" Records

# FA-40 "CALL MONITOR" Telephone Recording Control



Now you can keep an accurate record of your telephone conversations.\* The "Call Monitor" provides a convenient permanent means of automatically recording both incoming and outgoing calls. A cassette recorder starts when the phone (or its extension) is lifted and stops automatically as soon as the call is completed. An "On/Off" switch permits playback without unhooking the FA-40 from your phone line or recorder.

\*Federal law requires that only one party in the conversation be informed that the call is being monitored.

Assembled



Hi Performance in-dash car stereo!

## AC-400 AM/FM Stereo Auto-Stop Cassette



- Short Chassis
- Adjustable Shafts
- 7 Watts Per Channel
- Local/Dist. Switch
- Locking Fast Forward

Engineered for factory-installed looks and performance at a price to please any car stereo buff. Complete with AM-FM band selector switch, Locking Fast-Forward-Eject control switch, slide load cassette, tape run and stop LED indicator. Other deluxe features include FM local/distant switch, stereo indicator light, illuminated dial scale and stereo balance control. Adjustable shafts for installation in most cars, vans and trucks supplied complete with trim plate & front piece for a professional looking fit. 10 watts RMS total output power. 12V DC, negative ground.

Easy-to-install "Keyless" Auto Burglar Alarm

## ASA-310 electronic siren auto alarm



- No Key Switch to Mount in Fender!
- Digital IC Logic Design • Automatic Timer/Cut-Off
- Hidden Time-Delay Switch Inside Car! • Auto Re-set

There are no fender holes to drill. A hidden switch controls the time-delay circuit so you have 15 seconds after setting it to leave the car, 15 seconds to locate the switch and turn it off after re-entry. Siren gives off a piercing "hi-lo" sound that will surely attract attention. Solid state automatic cut-off turns siren off after five minutes to comply with most local regulations. Operates on the principle of "voltage detection" so that when a door is opened causing the interior light to go on, the system senses a voltage drain and activates alarm. Operates with all 12-volt, negative ground systems. SIZE (HWD): 4" x 8" x 3".

## ASA-301 electronic siren auto alarm



- Voltage Sensor Eliminates Wiring of Doors
- Emergency Vehicle "Hi'Lo" Sound
- Digital IC Logic Design

Features penetrating "Hi'Lo" emergency sound. "Voltage Sensor" reduces installation time from hours to only minutes. One wire connected to any hot lead is all that is required after installing key switch and mounting siren.

## PCE-10 Photo-Electric Relay System



- Signal System Announces Customers
- Rings Bells, Buzzers
- Range Up To 50-Ft. Between Units

This all solid-state System has an effective range of up to 50 feet, and features an adjustable sensitivity control so ambient light changes will not affect the unit. Can be set for continuous duty so alarm remains on even after beam is restored, or for intermittent duty so that it is self-resetting. Can be used in security systems, as an annunciator, or for counting. Comes with complete installation instructions. Operates from 117 volt AC lines. SIZE (EACH, HWD): 3 1/2" x 4" x 3". WEIGHT: 6 lbs.

Assembled



## EICO 706 Code Practice Oscillator

- 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 3 VDC. CURRENT DRAIN (TONE AND LIGHT): 340 ma at 3VDC. TERMINALS: Key, Phones. CASE: High-impact bakelite. PANEL: Satin finish, deep-etched aluminum. SIZE (HWD): " x 3 5/8" x 2". WEIGHT: 2 lbs.

Assembled

**EICOCRAFT®**

# Project Kits

- Educational, useful, fun to build
- Pre-drilled printed circuit boards
- Reliable solid state circuitry
- Easy step-by-step-instructions

Exclusive "Panel Mounts" gives your project a professional appearance

**EC-100 ELECTRONIC SIREN**

Excellent for all attention-getting and signalling purposes such as alarms for burglary, fire, automobile, bicycle, personal attack, etc. Sound effects for model railroads, slot car racers, tape recordings, etc. Includes Speaker. Supplied less 9 volt battery.

**EC-600 LIGHT FLASHER**

This battery-operated, 2-transistor multivibrator circuit makes two lights flash alternately. Great attention getter or warning light. Makes an excellent warning light for cars or boats, and, if you're a hiker, put the lamps on the back of your knapsack! Use 6 volt lantern battery not supplied.

**EC-700 ELECTRONIC "MYSTIFIER"**

Fascinating battery-operated relaxation oscillator circuit of 6 blinking neon lights. A never ending entertainment "conversation piece"—for desk, den, mantle, it makes an excellent gift "for the one who has everything." Supplied less 9 volt battery.

**EC-900 AC POWER SUPPLY**

Converts house-current AC volts (110-125 volts AC) to 6 to 9 volts DC. Reliable, transformer-operated, transistors power supply. Full-wave bridge rectifier uses silicon diodes and high capacity filtering for 6 to 9 volts DC output. Useful to power most EICOCRAFT kits.

**EC-1000 CODE OSCILLATOR**

Can be used to monitor your code - just connect it in parallel to your existing transmitter key. Includes Speaker and Key (pushbutton). Supplied less 9 volt battery.

**EC-2900 POLICE/FIRE CONVERTER (HI-BAND)**

Now your AM radio (in car or home) can be used to tune in the entire, exciting 152-174 MHz band VHF communications bands used by police and fire departments that transmit AM only. Supplied less 9 volt battery.

**EC-1300 ELECTRONIC VOX**

This transistorized, audio-activated relay has an adjustable variable time delay and allows you to control any electrical circuit with the sound of your voice. Makes a great control for tape recorders; can serve as a "commercial killer" for TV too.

**EC-1400 FM RADIO**

Receives the FM broadcast band from 88 MHz through 108 MHz. It may be utilized as a private listening personal radio (with the earphone supplied); or as an FM tuner when coupled to an audio amplifier such as EICOCRAFT EC-300. Supplied less 9 volt battery.

**EC-1500 AM RADIO**

Receives the AM broadcast band from 500 kHz through 1600 kHz. It may be utilized as a private-listening personal radio (with the earphone supplied), or as an AM tuner when coupled with an audio amplifier such as EICOCRAFT EC-300. Supplied less 9 volt battery.

**EC-1900 TREASURE FINDER**

This battery-operated metal locator can pay for itself! Locates both ferrous (iron, steel, etc.) and non-ferrous (gold, silver, platinum, copper) metals. Boasts two RF oscillators and search loop; has distinctive audio indicator. Supplied less 9 volt battery.

**EC-2300 AUDIO PREAMP**

Solid state preamplifier accepts any of five inputs and allows them to be connected through an emitter follower to the amplifier or public address unit. If you're converting your phono from ceramic to magnetic cartridge, this is a must!

**EC-2700 POLICE/FIRE CONVERTER (LO-BAND)**

Now your AM radio (in car or home) can be used to tune in the entire, exciting 30-50 MHz band VHF communications bands used by police and fire departments that transmit on AM only. Supplied less 9 volt battery.

**EC-2800 AIRCRAFT CONVERTER**

Tune the 108-136 MHz band and hear two-way broadcasts from local aircraft on your broadcast band receiver. Supplied less 9 volt battery.

**EC-5600 ELECTRONIC LOCK**

Forget about your "High-security" locks! This one has 'em all beat. You must press three of the five buttons in proper sequence within a 10 second interval for this lock to work. (125 to 1 chance of opening). Digital (MOS) circuitry in this combination lock requires a 6 volt battery.

**EC-5700 UNIVERSAL POWER AMPLIFIER**

This 2-watt general purpose amplifier accepts any input source such as mike, phone, or tape recorder; works with 8-ohm speaker. Makes an excellent hailing horn or P.A. system.

**EC-5000 SCA ADAPTER**

This adapter permits you to listen to the official FCC licensed background music that is uninterrupted and commercial-free. Use with any FM receiver or FM radio and take advantage of music the way banks and restaurants do!

*\*This adaptor is intended for personal use only.*

**EC-5100 ESP TESTER**

How intuitive are you? This Tester will help you find out! The four lamps light in random fashion and all you have to do is guess which is next. Requires a six-volt battery.

**EC-5200 "DECISION MAKER"**

Never flip a coin again! Let the EICO EC-5200 do it for you. When a decision has to be made only one of the two LED's remains lit, indicating either a "yes" or a "no" answer. It's lots of fun! Requires a six-volt battery.

**EC-5400 STEREO POWER AMPLIFIER**

You get two watts per channel of continuous power with inputs for microphone, phono, tape recorder, etc. Drives 8-ohm speaker systems. For even more flexibility, use with EC-5500, below.

**EC-5500 STEREO PREAMP**

Permits you to drive any stereo amplifier with low-level inputs, such as magnetic cartridge, dynamic mike, etc. Provides NAB and RIAA equalization, 90 db channel separation. Requires 12 volt battery.

## EC-4300 3-CHANNEL SOUND/LITE TRANSLATOR KIT



- Frequency Controlled
- 3 Channels
- 400 Watts Per Channel
- Separate Color Controls

Heighten your pleasure in music listening with an audio light show. The EICO Sound to Light Control lets you modulate 3 independent colored lamp circuits with the intensity of your music. Just plug in your favorite colored flood or spotlights and connect to the speaker leads of your music system. Features 3 frequency sensitive channels with individual controls for low, mid and high ranges. 400 Watts per channel. Size: (HWD) 2" x 4" x 6". Weight: ½ lb. Kit and wired.

20

## 3431 4-CHANNEL AUDIO COLOR ORGAN



- Music Becomes Bursts of Light
- 4 Channels, Frequency-Controlled

The EICO Color Organ adds exciting sights to your sound system. Just connect the 3431 to the speaker leads of any sound source. Without affecting the sound, the audio signal is separated into four frequency bands, each with brilliantly colored light patterns, red for bass, blue for low-midrange, green for upper-midrange and amber for treble. The lights pulsate in time to the music creating dazzling patterns of color. Line isolation provides source protection. Walnut grained cabinet. Size (HWD) 18" x 10" x 7" Weight: 8 lbs.

**Assembled**



# A weekend of work protects your family for a lifetime!

In one weekend with a pair of pliers and a screwdriver, you can give your family and home a lifetime of protection from intruders and fire.

At the same time you'll save enough money to cover more than the cost of the system.



**Here's what the EICO SS-500 offers:**

- 3-way protection from burglary/holdups/fire at about one-third the cost of a professionally installed system.
- Complete, ready to install. Step-by-step instruction book makes you an expert—no soldering, no complications.
- Tailor your system to protect a small apartment, a large house or business.
- Top-rated by electronics magazines.

Made by a name known for quality electronic products—EICO.

**EICO<sup>®</sup>**



# EICO 'DO-IT-YOURSELF' HOME SECURITY PROTECTION SYSTEM

## The Professional Home Protection everyone can Install and Afford.

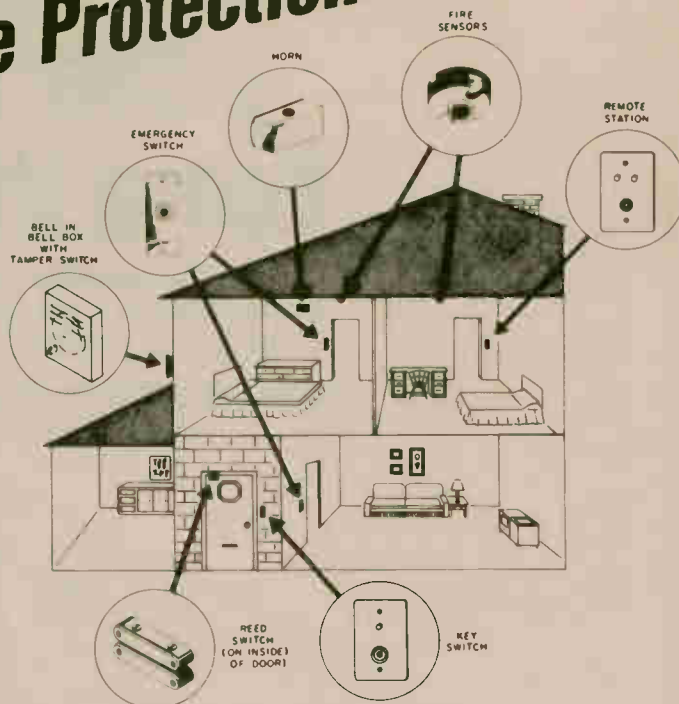
### EICO SS-500 BURGLAR/HOLD-UP/FIRE ALARM SYSTEM

- Systems "HEART" is the EICO FC-100 Security Control Center.
- Additional Sensors, Alarms, Accessories may be added *any time* to meet future needs.
- AC Operated-Automatic Transfer to Battery Operation in the event of Power failure
- "Do-it-Yourself" Installers Handbook included.



The EICO SS-500 Security System offers you the kind of professional protection you have been looking for, at a price you can afford. The System has been designed on the EICO exclusive "Expandability Concept" that enables you to "add-on" protection to meet your own special requirements. Virtually any professional security sensing device can be easily added to the EICO SS-500.

The system is supplied with the following: FC-100 Security Control Center; 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 6 Warning Decals; A-135 (2) Alarm Circuit Hook-Up Wire and A-137 Alarm Bell Hook-Up Wire.



TYPICAL ALARM INSTALLATION



### "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.

A-95 Handbook

### Acclaimed by Editors and Consumers!

"The EICO SS-500 Home Protection system works as well as, if not better, than many so-called "professional" or industrial systems—at a lot less cost. Fact is, the system has more features than much "professional" equipment. And it certainly works a lot better than many do-it-yourself systems presently on the market that are supposedly intended for the average home owner."

(Test Report Summary E/E Magazine)

"Wiring the Eico system is a breeze".....  
(Electronics Illustrated)

"We found that installing the security system is easy, and the only tools we needed were a screwdriver and a knife. We picked an arrangement from the manual, suitable to our needs, and went to work. In a matter of hours, the job was completed." (Popular Electronics)

### 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.
- AC Operated-Automatic Transfer to Battery Operation in the event of Power failure
- No technical knowledge needed-No soldering.
- Ideal for Apartment, Home and certain Commercial Installations.
- 100% Professional in Design, Reliability, Performance.

The first professional Alarm Control Center designed for easy "Do-it-Yourself" installation. The FC-100 is the "heart" of the EICO home protection system.

It contains all circuits required for monitoring the burglar and fire detectors and sounding the alarm. It includes two indicator lights; a white "circuit test" light which automatically checks the status of the burglar alarm sensors in the system, and a red "alarm on" light, which indicates that the system has been activated. A built-in 117 VAC power supply supplies 6 volts DC for operating the system. In the event of power failure, the FC-100 automatically switches over to battery operation. The power supply also trickle charges the lantern battery when it is not in use. A meter and battery test switch allows you to check the condition of the battery. Each circuit in the FC-100 has its own set of screw terminals that allow easy installation.

Includes A-95 Security Handbook and A-105 warning decals.



# TO SUIT YOUR NEEDS.

## Contact Switches For Doors, Windows, Etc.

**SD-10 DOOR/WINDOW MAGNETIC CONTACT SWITCHES (4 pairs)** C.C. Basic burglar/intruder sensors for doors and windows. Two piece units consist of a reed switch and a bar magnet.

**SD-16 VIBRATION CONTACT C. C.** Protect walls, ceilings, large glass windows, skylights and virtually any area vulnerable to forced entry. Adjustable sensitivity.

**SD-18 "DOOR JAMB" CONTACT SWITCHES C.C. (2)** Multipurpose, bullet nose switch easily concealed directly in door jamb. Ideal for protecting doors, windows, etc.

**A-35 EMERGENCY BUTTONS (2)** Also known as a "panic button," allow you to sound the alarm from any location. (SPST)

**SD-50 TAMPER SWITCHES (2)** Valuable for protecting the alarm bell and the Security Control Center, preventing an intruder from deactivating the alarm system.

## Protect Against Fire

**SD-20 HEAT/FIRE SENSORS (3)** O. C. When a temperature of 135° F (57° C) is reached they will set off the alarm. Can be used anywhere except in normally warmer areas such as attics and furnace rooms. For those locations use Model SD-24.

**SD-24 FURNACE/ATTIC HEAT SENSORS (2)** O. C. Will cause the fire alarm to sound when the temperature in the area in which it is located reaches 190° F (88° C).

## Bells, Sirens, Signaling Devices

**SA-15 INDOOR KLAXON HORN ALARM 6-12 V DC** Twin horns mounted inside a decorator styled housing give a loud ear-piercing sound. Ideal as an indoor fire warning alarm.

**SA-25 INDOOR/OUTDOOR 8" BELL 6-12 V DC** Extra-loud alarm bell can be used for both the burglar and fire alarm circuits, and can be mounted indoors or outdoors. WEIGHT: 2 lbs.

**SA-27 STEEL BELL BOX** Constructed of heavy gauge steel. Includes safety plate with mounting holes for SA-25 8" alarm bell and SD-50 tamper switches (not supplied). Hammertone rust retardant finish. SIZE (HWD): 12" x 9" x 4". WEIGHT: 10 lbs.

**EICO A-155 AUTOMATIC TELEPHONE DIALER** Summons help automatically in case of

## Switch Mats

**A-145 "BY-PASS" SWITCHES (2)** Versatile switch allows you to "by-pass" protection on a particular window or door. You can leave a window open for ventilation or a door open for constant traffic while the rest of your home is protected.

**SD-54 FLOOR SWITCH MAT 30" x 30" O. C.** Ideal for providing security for hard-to-protect passageways such as those passageways such as those located at sliding glass doors, stairways and hallways. Ultra-thin hermetically sealed vinyl construction.

Fire or Theft. 2 Channel Capacity up to 4 messages per channel. AC operation with DC standby power. WEIGHT: 18 lbs. assembled.

**A-185 BELL TIME/AUTOMATIC CUT-OFF** The A-185 will automatically shut off the alarm bell or horn after about ten minutes. This accessory is required in many localities and permits the alarm to do its job without overly disturbing neighbors. assembled

**SA-17 DUAL CHANNEL ELECTRONIC SIREN** Ideal for any 6-12 volt system as either a replacement or an adjunct to the alarm bell. Dual channel provides a steady tone which can serve as a fire alert, "Hi-Lo" warbler for intrusion. A real attention-getter! assembled

## Protect Your Windows, Glass Doors, Etc.

**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** Self-sticking metal foil used to protect glass areas. Supplied in handy 200' roll.

**A-125 FOIL PROTECTOR/ADHESIVE-2 OZ. APPLICATION BOTTLE** Dual purpose clear ACRYLC formulation. Provides durable protective coating on foil.

## Entrance Key Switches, Remote Stations

**A-45 MOMENTARY ENTRANCE KEY SWITCH WITH SIGNAL LIGHT** 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 to assure you that your system is activated, and to warn intruders that the house is protected.

**A-65 REMOTE STATION CONTROL WITH**

**INDICATOR LIGHTS** Consists of a wall mounting place, momentary switch, white "CIRCUIT TEST" light, and red "ALARM ON" light.

**SD-40 DOOR CORDS 12", TWO WIRE (2)** To be used whenever movement of one part of the circuit is required, e.g. doors and windows.

## Emergency Dialer

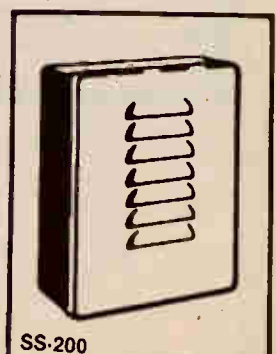
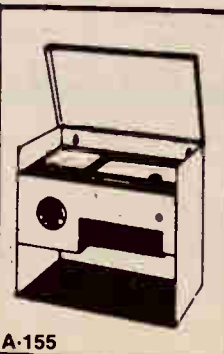
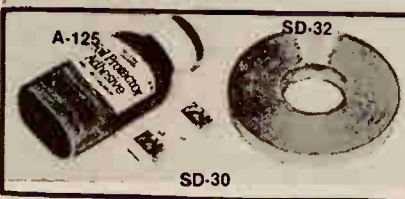
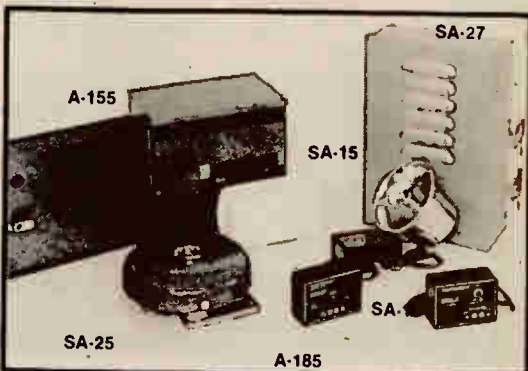
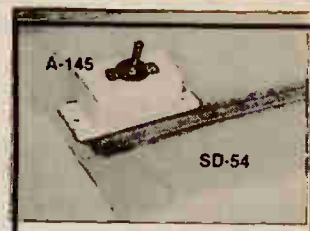
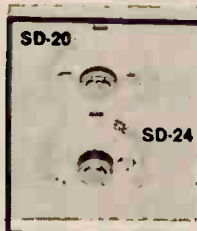
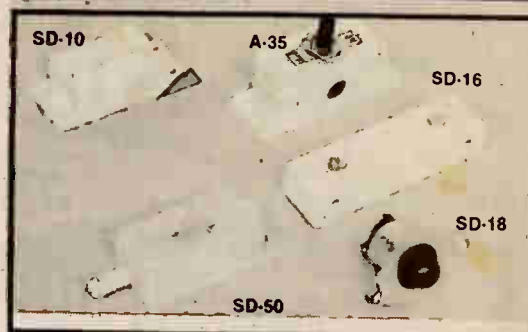
**EICO A-155 AUTOMATIC TELEPHONE DIALER** Summons help automatically in case of Fire or Theft.

2 channels, one for fire and the other for police messages (or any 2 numbers you desire). These 2 separate channel inputs are simply connected to the burglar and fire terminals of the EICO FC-100 Security Control Center. 2 Channel Capacity up to 4 messages per channel on supplied cartridge. AC operation DC standby power. Built-in Test Speaker. "Line Release" prevents incoming calls from interfering with emergency dial-out. "Automatic Stop" resets itself for emergency readiness. "Line Seizure" prevents interruption of emergency dial-out by the lifting of an extension phone. "Time Delay" (15-30 seconds) are programmed into the emergency message.

## Time Delay System

**EICO SS-200 SOLID STATE BURGLAR/FIRE ALARM SYSTEM**

The ideal self-contained solid state alarm system for apartments, stores, professional offices, etc. as no holes need be drilled for entrance door shut locks. The alarm system is activated after you leave the premises. A 20 second "Time Delay" allows you sufficient time to shut the alarm off upon entering. Additional intrusion detectors ("closed circuit") and Fire Sensors ("open circuit") may be added at any time to meet your own special requirements. EICO SS-200 System Includes: FC-90 Security Control Center, 3 window contacts (C.C.), 1 exit door contact (O.C.), interior ON/OFF switch, panic/battery test button, 4 warning decals, 100' hook-up wire, security handbook, operates on standard 12 volt lantern battery (not supplied).



EICO ELECTRONIC INSTRUMENT CO., INC.  
108 New South Road, Hicksville, N.Y. 11802

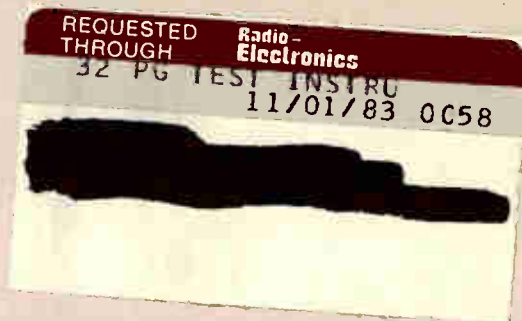
If not deliverable, do not return.



## CATALOG

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

Printed in U.S.A.



Bulk Rate  
U.S. Postage  
PAID  
Long Island City, N.Y.  
Permit No. 147

## Our 40 years of leadership

For over 40 years, EICO has been designing and manufacturing electronic products. It is now the world's largest producer of electronic kits and factory-wired equipment marketed exclusively through dealers and distributors throughout the world. There's a wide range of versatile, professional EICO products to satisfy nearly every electronics interest, each designed to provide the most pleasure and performance for the money.

The fact that more than 3 million EICO products are in use through the world attests to their quality and performance. EICO products are available for inspection and immediate over-the-counter delivery at more than 1500 EICO dealers and distributors.

*Laboratory Precision at  
Lowest Cost Since 1945*

# EICO OFFERS THE BEST TEST INSTRUMENT VALUES FOR YOUR BUDGET.

### Superb "No Compromise" Engineering

EICO's engineering leadership, backed by 36 years of development experience, gives you instruments with truly outstanding capabilities, operating convenience, and freedom from performance difficulties. There are many fine points in EICO circuit design, not revealed in specifications, that make EICO not just good value but excellent instruments by any standards.

### Beginner-Tested Assembly Manuals

The instruction books have been written to carry you along, step-by-step, with clear, non-technical instructions and simple, graphic diagrams. Every EICO instruction book is fully tested, both by electronics experts and by beginners. Further, you work with the finest parts, subjected to the most stringent quality control in the industry.

### Local Service and Products

See EICO at your local dealer. There are over 1500 authorized dealers coast-to-coast, who stock the complete EICO line. You can enjoy instant, off-the-shelf availability for your choice of EICO kits or fully-wired instruments. You get

actual demonstrations of the products, fast, personal attention, and experienced technical guidance. For your added convenience, EICO has over 200 local service stations should you ever require service or replacement parts.

### At Your Service—Worldwide!

Wherever you are in the free world, EICO equipment and service are always available nearby. For the name of your nearest appropriate dealer, write: EICO Electronic Instrument Co., Inc.  
108 New South Road  
Hicksville, N.Y. 11801  
Phone: (516) 681-9300  
Cable "EICOKITS," Telex: 127412

### CANADA

EICO Canada Ltd. Post Office Box 268  
Richmond Hill, Ontario, Canada L4C 4Y2  
Phone: (416) 773-4331

### EXPORT DIVISION

Roburn Agencies, Inc., 111 Eighth Avenue  
New York, N.Y. 10011 (212) 989-9539

### 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 VAC 50-60 Hz operation.

Distributed by





Leadership in Creative Electronics  
since 1945

# EICO CATALOG

The Newest and Best Values in Do-it-Yourself Kits  
and Factory Assembled Electronic Equipment.

It's easy  
to build  
EICO  
Kits!



Test Equipment • Stereo • Burglar / Fire Alarms • Hobbyist & Automotive Electronics

## QUICK INDEX

Amateur Accessory Gear	6
Automotive Electronics	7
Eicocraft Kits	4, 5
Home Security Products	10, 11
Stereo/Quad Components	8, 9
Truohm Multimeters	31
Test Equipment	12, 31
Industrial Instruments	12
Inverters	30
Probes	15, 17
VTVM's/TVM's	16, 17
Oscilloscopes	13, 14, 15
Generators	21, 22, 23
Tube/Transistor	
Testers	18, 19, 20
Resistance/Decade	
Boxes	26, 27
Power Supplies	28, 29
Multimeters	25, 31

# EICO For over 25 years, EICO has been designing and manufacturing electronic products and is now the world's largest producer of electronic kits and factory wired equipment marketed exclusively through dealers and distributors 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 Professional Electronics Engineers, Radio Industry Association of America, Association of Electronic Mfg. (AEM) as well as other leading trade organizations.

EICO (EICO) a Public Company is traded in the Over-the-Counter market.

### (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.





# 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!

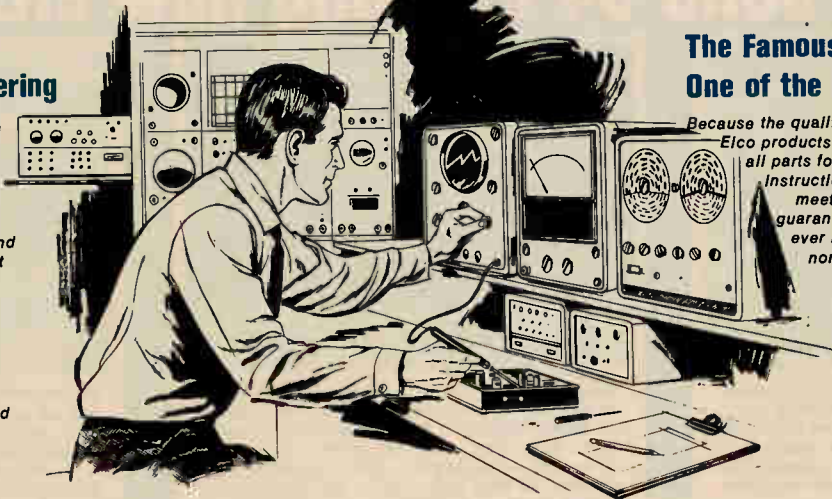


## Beginner-Tested Step-by-Step Assembly & Operating Manuals

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.  
Telex: 127412

**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

# Easy to build **EICOCRAFT**<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup>



### Aircraft Converter

The EC-2800 is an all-transistor battery operated RF converter operating in the 108-136 MHz band. No interconnecting wires needed. Just place the EC-2800 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-2800



### Electronic Bongos

Battery-operated 3-transistor bongos circuit electrically produces the exciting percussive sounds of high-pitched and low-pitched bongos, toms, 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



### '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



### '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



### '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

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



# 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 "Jifty" 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

**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

**NEW**



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

### EICO CRAFT KITS available include:

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

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

### 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.

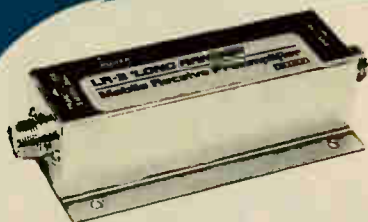
FLEXI-CAB is the new way to make a custom cabinet using flat panels joined together with "links" of plastic with pre-cut mitered corners. All kits have a package of pressure sensitive identification and decorative labels, as well as a decorative strip for the front panel.

#### AVAILABLE IN 3 SIZES:

MODEL F-44 3" x 4" x 4"  
MODEL F-46 3" x 4" x 6"  
MODEL F-69 3" x 6" x 9"

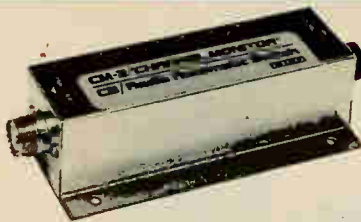
# EICO CB ACCESSORIES

Add Versatility, Performance to your CB Transceiver!



## EICO LR-3 "LONG RANGER" MOBILE RECEIVER PREAMPLIFIER

Increases the effective range of your communications by bringing in those distant/weak signals. Boosts receiver sensitivity up to 20 db. RF "sniffer" circuit provides automatic transmit/receive switching. 2-30 MHz Frequency range.



## EICO CM-2 "CHANNEL MONITOR" CB/RADIO AUTOMATIC SWITCH

Listen to your car radio knowing that if a CB call comes in, you won't miss it! When a call does come in, your radio is automatically silenced by an exclusive RF "sniffer" circuit and the CB call comes through your radio speaker. When you transmit the car radio is silenced automatically.



## EICO 700 CB FREQUENCY COUNTER

The first and only low cost in-line mobile frequency counter for the serious CB'er/Hobbyist. Operates automatically on transmit... less than 70 mils current drain in standby/receive. Five large .5" LED readouts. Frequency range 10 Hz to 27 MHz (covers all 40 CB channels). HWD 1 3/4" x 5" x 6".



## EICO 715 "TRANSMATCH" HAM/CB TESTER

Portable 4-function tester, SWR meter/calibrator (1-30), two range power meter (0-10 or 0-50 watts), modulation meter (0-100%), and field strength meter (1-10). Includes built-in 50 ohm dummy load and headphone output jack.



## EICO 725 SWR/POWER METER

Dual meters, coupled with front panel switching provide convenient and accurate measures of SWR (1:3 max.) and true RF power output in three ranges to 1000 watts. Can be kept in-line. Frequency range 3 to 55 MHz. 50 ohms impedance.



## EICO 735 1000 WATT INLINE WATTMETER

Provides a constant observation of true RF output power for any transmitter. Three power ranges to 1000 watts. Frequency range 3 to 144 MHz.



## EICO 1040 4 AMP FILTERED POWER SUPPLY

Operate any 12 VDC mobile unit on 117 VAC. Enjoy your mobile CB rig, tape deck or radio at home. Automatic overload protection.



## EICO 1045 6 AMP REGULATED POWER SUPPLY

IC regulated, continuous duty low ripple 13.6 VDC supply. Automatic foldback current limiting protection circuit.



## EICO ASA-310 "KEYLESS" ELECTRONIC SIREN AUTO ALARM

Voltage sensor detects any intrusion. No wiring of doors. Time-delay eliminates need for key-switch, "Hi-Lo" sound. Solid State automatic timer shuts alarm off after 5 minutes.



## EICO CBC-2 "ROADMATE" CB CONVERTER

Converts any AM or AM/FM car radio to a CB receiver. Monitors all 40 CB channels. No special antenna or license required. Does not affect normal car radio operation.



## EICO CBR-5 "BIG EARS" CB RECEIVER

Slip this compact battery operated receiver over your car's sun visor and you're all set to receive the nearest of the 40 CB transmitting channels. No license required.



## EICO PM-4 CB "POWER MIKE"

Amplified microphone boosts "talk power" of your CB rig by increasing gain 15 db. Assures 100% Modulation. For both relay and electronically switched CB's.



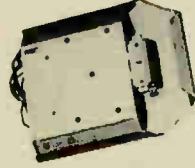
## EICO RS-12 CB PAGING SPEAKER

Hi-performance, weatherproof, reflex horn speaker provides excellent clarity and projection. 5 watts capacity. 8 ohm impedance. 5 1/2" diameter, length 6".



## EICO PAS-10 CB EXTENSION SPEAKER

Assures clear, intelligible voice reception. Includes 9' cord/mini-plug and mounting bracket. Handles up to 5 watts, 8 ohm impedance. HWD 5" x 5" x 2".



## EICO SLM-14 CB MOUNTING BRACKET

For easy slide-in or -out CB use. No wires or antenna to disconnect. Key lock built-in to prevent CB theft.



# Tune up & Troubleshoot Any Car or Boat!



## EICO 888 Solid State Universal Engine Analyzer

Kit      Wired

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): 5 1/4" x 11 1/2" x 5". WEIGHT: 6 lbs. Supplied less batteries (4 "D" cells required).

● Flick of a Switch  
for instant return  
to Standard Ignition!



## EICO 889 Solid State Capacitive Discharge Ignition System

Kit      Wired

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) 4 1/4" x 4 1/4" x 6; Weight: 4 lbs.

## EICO SS-200 TIME DELAY BURGLAR ALARM SYSTEM

Wired only

- Complete ready-to-install
- "Time Delay" eliminates need for on/off entrance Key Switch
- Extra Bonus—EICO A-95 Security Handbook

The ideal self-contained closed circuit alarm system for apartments, stores, professional offices. The system is activated only after you leave your apartment and close the exit door. There is no need to rush out for fear the alarm will ring before you can get out. There is also a 20 second "TIME DELAY" allowing you sufficient time to shut the alarm off upon entering. "TIME DELAY" features eliminates the need to drill holes in apartment doors for shunt locks. Opening any protected door or window, cutting of the alarm wires or tampering with the cabinet will cause the alarm to sound.

**EICO SS-200 System includes:** Tamperproof, steel cabinet with 8" bell; front and rear tamper switches, switch lock with 2 keys, 3 window contacts (C.C.), 1 exit door contact (O.C.), interior ON/OFF switch, panic/battery test button, 4 warning decals, 100' hook-up wire, security handbook, operates on standard 12 volt lantern battery (not supplied).



## EICO 706 Code Practice Oscillator

Wired only

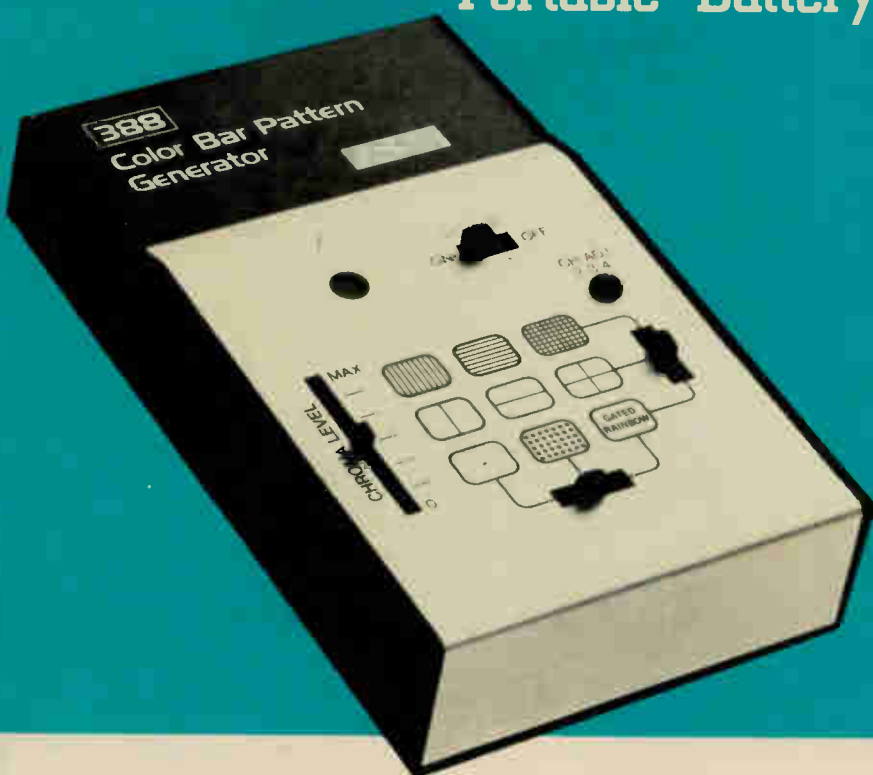
- Includes Battery, Key and Earphone.

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.

# NEW!!

## EICO 388-Color Bar Pattern Generator

Portable • Battery Operated • IC Digital Design



### OUTSTANDING FEATURES

- Battery Operated with LED Indicator
- All Functions on a Single LSI Chip
- 9 Digitally Controlled Stable Patterns
- Crystal Controlled Chroma and Timing Oscillators
- RF Adjustable, Channels 2, 3, 4
- Chroma Level Adjustable from 0-150%
- Powered by two 9V Batteries (not included)

The New EICO 388 Solid State Portable Color Bar Pattern Generator offers outstanding performance in a convenient "shirt-pocket" size. It's the ideal low-cost tool for in-the-field service.

A single MOS LSI IC provides 9 digitally controlled, stable, FCC-Specified patterns necessary for the proper alignment of any black & white or color TV receiver. The 388 operates by simply connecting its output cable to the TV's VHF terminals. Two matrix slide switches select any one of the 9 patterns. The RF carrier frequency is adjustable for coverage on channels 2, 3, or 4. Crystal controlled chroma and timing oscillators assure precision, accuracy and stability. The Chroma level is adjustable from 0-150% for the gated rainbow pattern. The 388 uses two 9-volt transistor batteries (heavy duty type) which provide a minimum of 15 hours continuous operation.

The 388 is truly the most advanced pocket-size color generator in the field today offering all the performance features you need in the palm of your hand!

### SPECIFICATIONS:

**Display patterns—Gated Rainbow:** 10 bars for chrominance adjustments. **Single Dot:** For static convergence adjustments. **Dot Raster:** For final convergence, non-linearity or pincushioning. **Single Vertical Line:** For horizontal centering. **8 Vertical Lines:** For width and non-linearity adjustment. **Single Horizontal Line:** For vertical centering. **Eight Horizontal Lines:** For height and non-linearity. **Crossbar:** For centering and positioning. **Cross-hatch:** For final convergence, pin cushioning and non-linearity correction. **Chroma Carrier:** 3563.795 KHz crystal controlled. **RF Carrier:** Adjustable to channel 2, 3, and 4. **RF output level:** 500  $\mu$ V min. into 300 ohms. **Video Modulation:** 50% (approx.). **Power Requirement:** Two 9-volt transistor batteries (heavy duty type), Eveready No. 1222 or equivalent, NEDA 1604-D. **Dimensions:** (HWD) 1 7/8" x 3 7/8" x 6". **Weight:** 12 oz.



# NEW!!

## EICO 390 Sweep / Function Generator

.2Hz to 200kHz • Sine, Square, Triangle • Linear & Log Sweep



Whether your interest is in analog or digital electronics, or whether you are a serviceman or electronic hobbyist, you can now afford a function generator that meets all your signal requirements for now and in the future.

The Model 390 generates discrete sine, square, and triangle waveforms over the very broad frequency range of .2Hz to 200kHz—more than enough for the most exacting work. And, what's more, at the flick of a switch, you can have a choice of either linear or logarithmic sweep with a choice of slow, medium, or fast rates. Now you can actually see those frequency/response curves come to life!

With its 50-ohm output impedance and complete attenuation controls, the Model 390 can handle everything from checking the response of an audio amplifier to driving digital circuits and with its low-frequency triangle output, even driving servo systems!

### Frequency Range .2Hz to 200kHz

Four switch selectable ranges which overlap.

### Linear Sweep, Logarithmic Sweep

Linear or logarithmic sweep available in three sweep rates and in four frequency ranges. This sweep capability is a new addition to the versatile function generator.

### 1000:1 Tuning Dial

Calibrated tuning dial with 1000 to 1 range over any one of four frequency ranges.

### Variable Control 10 Volts peak-to-peak

Variable control on all three functions—sine, square, triangle through a front panel BNC connector.

### Calibrated Attenuator

Six position calibrated attenuator in discrete 10db steps with a total of 50db of attenuation.

### Auxiliary Sine, Square, Triangle

Rear panel low level outputs for the three signals simultaneously.

### VCO for External Frequency Control

The 390 can be controlled externally in any one of four sweep ranges of frequency.

### BNC Front Panel Output

BNC output from all three output signals—sine, square, triangle.

### SPECIFICATIONS

FREQUENCY RANGE: .20Hz to 200kHz. FUNCTIONS: Sine—.5dB, .2Hz to 200kHz distortion less than 1%, 20Hz to 20kHz. TRIANGLE: Nonlinearity less than 2%, symmetry less than 2%. SQUARE: Rise time less than 200 nanoseconds terminated in 50 ohms. ATTENUATOR: 0 to 62dB with switching in 10dB steps and potentiometer vernier. OUTPUT: 10-volts peak-to-peak into 50 ohms. OTHER OUTPUTS: 600 ohm sine for audio matching, low-level triangle, 5-volts TTL compatible square wave that may be used as sync signal, direct access to square, triangle, sine and generator control voltage. INPUT: Frequency control voltage input 0-4 volts. POWER REQUIREMENTS: 117-VAC, 50-60Hz, 6VA. DIMENSIONS: 4 1/2" x 6 1/2" x 9 1/2". WEIGHT: 4.8 pounds.

# NEW! EICO 'DO-IT-YOURSELF' 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.
- AC Operated-Automatic Transfer to Battery Operation in the event of Power failure
- No technical knowledge needed-No soldering.
- Ideal for Apartment, Home and certain Commercial Installations.
- 100% Professional in Design, Reliability, Performance.

The first professional Alarm Control Center designed for easy "Do-it-Yourself" installation. The FC-100 is the "heart" of the EICO home protection system.



It contains all circuits required for monitoring the burglar and fire detectors and sounding the alarm. It includes two indicator lights; a white "circuit test" light which automatically checks the status of the burglar alarm sensors in the system, and a red "alarm on" light, which indicates that the system has been activated. A built-in 117 VAC power supply supplies 6 volts DC for operating the system. In the event of power failure, the FC-100 automatically switches over to battery operation. The power supply also trickle charges the lantern battery when it is not in use. A meter and battery test switch allows you to check the condition of the battery. Each circuit in the FC-100 has its own set of screw terminals that allow easy installation.

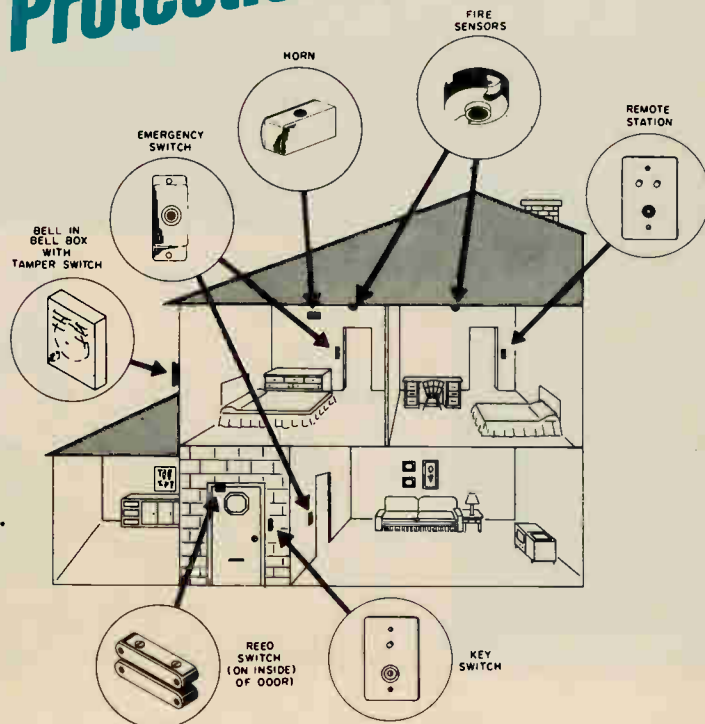
Includes A-95 Security Handbook and A-105 warning decals.

### 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.

The EICO SS-500 Security System offers you the kind of professional protection you have been looking for, at a price you can afford. The System has been designed on the EICO exclusive "Expandability Concept" that enables you to "add-on" protection to meet your own special requirements. Virtually any professional security sensing device can be easily added to the EICO SS-500.

The system is supplied with the following: FC-100 Security Control Center; 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 6 Warning Decals; A-135 (2) Alarm Circuit Hook-Up Wire and A-137 Alarm Bell Hook-Up Wire.



TYPICAL ALARM INSTALLATION



### "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.

A-95 Handbook

### EICO A-95 HOME SECURITY HANDBOOK

Save hundreds of dollars in alarm installation and monthly service charges. The EICO A-95 Home Security Handbook is a comprehensive 40 page booklet which can be easily understood by anyone. Written in clear non-technical language, it contains complete instructions not only on how a home protection system functions and how to install all EICO security devices, but also how to expand your EICO system. Before you purchase any security system for your home, we suggest you read the A-95 handbook and see how easy EICO makes it to "Do-it-Yourself."

### Acclaimed by Editors and Consumers!

"The EICO SS-500 Home Protection system works as well as, if not better, than many so-called "professional" or industrial systems—at a lot less cost. Fact is, the system has more features than much "professional" equipment. And it certainly works a lot better than many do-it-yourself systems presently on the market that are supposedly intended for the average home owner."

(Test Report Summary E/E Magazine Aug. 1972)

"Wiring the Eico system is a breeze".....  
(Electronics Illustrated August 1972)

"We found that installing the security system is easy, and the only tools we needed were a screwdriver and a knife. We picked an arrangement from the manual, suitable to our needs, and went to work. In a matter of hours, the job was completed." (Popular Electronics Sept. 1972)



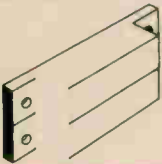
# Here's what you get when you buy the **ELCO SS-500** Burglar/Hold up/Fire Alarm System.



## FC-100 SECURITY CONTROL CENTER

The "heart" of the ELCO 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).

**FC-100**



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

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-10**



## SD-20 HEAT/FIRE SENSORS (3) O.C.

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-20**



## 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-40**



## 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.

**SD-50**



## SA-25 INDOOR/OUTDOOR 8" BELL 6-12VDC

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.

(See SA-27 Steel Bell Box)

**SA-25**



## A-135 PROTECTIVE CIRCUIT HOOK-UP WIRE—100 FEET

Two parallel running clear plastic covered 22 gauge conductors are insulated from each other. One lead is silver colored and the other copper for easy identification. Used for burglar and fire alarm protective circuits.

**A-135**

(SS-500 includes two 2A-135's)



## 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.

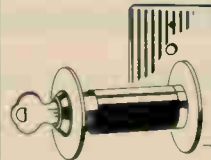
**A-65**



## 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-35**



## 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-45**



## 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. Assembled with FC-100.



## 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-95**



## 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.

**A-105**



## A-137 ALARM BELL WIRE—50 FEET

Two parallel running insulated 18 gauge conductors are insulated from each other. Ideal for alarm bell wiring. Lies flat for gluing to surfaces too hard for stapling.

**A-137**

**Additional security components can be added any time, at your own pace, to suit your own needs.**

SD-12 Leaf Contact Switches C.C. (2/pkg.)  
SD-14 Multi-Purpose Foil Contacts (2/pkg.)  
SD-16 Vibration Contact C.C.  
SD-18 Door Jamb Contacts C.C. (2/pkg.)  
SD-28 "Flash Fire" Heat Detector O.C. 135°  
SD-30 Window Foil Connectors (6/pkg.)  
SD-32 Window Foil (1 lb. roll)  
SD-40 Door Cords (12") (2/pkg.)  
SD-42 Disconnecting Door Cord (2 wire)

SD-52 Electric Trip Cord  
SD-54 Floor Switch Mat (30" x 30") N.O.  
SD-56 "Pilferage Sentinel" C.C.  
SD-58 Window Sill Alarm Switch 24" O.C.  
SD-60 Smoke/Power Failure Detector  
SD-62 Freeze Detector O.C.  
SD-64 Water/Flood Detector  
SA-15 Indoor Horn Alarm (Twin Klaxon)  
SA-17 Electronic Siren (6-12 VDC)

SA-27 Steel Bell Cabinet (For 8" Bell)  
A-85 "Open"-to-"Closed" Circuit Coupler  
A-125 Foil Protector/Adhesive  
A-145 "By-Pass" Switches (2 pkg.)  
A-155 Automatic Emergency Dialer  
A-165 Alarm Circuit Multitester  
A-175 Electronic Strobe Alert  
A-177 Automatic Light Alert  
A-185 Bell Timer/Automatic Cut-Off

# 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

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 $\Omega$  or external. INPUT Z: 500k $\Omega$ . 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 $\Omega$ . 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 $\Omega$ . FREQUENCY RESPONSE:  $\pm 0$  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 1/4". WEIGHT: 22 lbs. EXPORT MODEL: 115 and 230 VAC, 60/50 cps.

★ Export Model available

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

Wired only



## EICO 965 FARADOHM BRIDGE/ANALYZER

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.

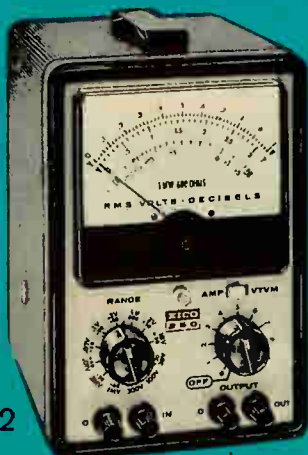
Overload protection is provided for the meter and the power supply, with overload signalled, by lighting up the meter. A unique INSTANT ZERO pushbutton permits instantaneous zero adjustment of the VTVM without changing any settings or connections. A special DISCHARGE switch position and a panel warning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

### SPECIFICATIONS

CAPACITANCE RANGES: 5 pF-10000 pF, 500 pF - 1  $\mu$ F, .05  $\mu$ F - 100  $\mu$ F, 50  $\mu$ F, 5000  $\mu$ F. POWER FACTOR: 0.80% at 60 cps. RESISTANCE RANGES: 0.5 $\Omega$ -1K $\Omega$ , 50 $\Omega$ -100K $\Omega$ , 5K $\Omega$ -10M $\Omega$ , 5M $\Omega$ -500M $\Omega$ ; Higher Resistances up to 200,000M $\Omega$  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 $\Omega$  DC VTAM Ranges: 0-.15  $\mu$ A, .5  $\mu$ A, 1.5  $\mu$ A, 5  $\mu$ A, 15  $\mu$ A, 50  $\mu$ 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.

- 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



## EICO 250 AC VTVM & AMPLIFIER

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

Wired only

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:  $\pm 0$  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-OA2 voltage regulator.

AMPLIFIER MAX. OUTPUT VOLTAGE: 5 RMS volts. MAX. GAIN (1 MV RANGE): 60 db. FREQUENCY RESPONSE:  $\pm 0$ . -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-OA2 voltage regulator. POWER REQUIREMENTS: 105-125 VAC, 60 cps, 15 watts. SIZE (HWD): 8 1/2" x 5 1/4" x 7". WEIGHT: 10 lbs.

★ Export Model available



# EICO TR-410 SOLID STATE TRIGGERED SWEEP 10 MHz OSCILLOSCOPE

100% Solid State Circuit Design  
Triggered Horizontal Sweep  
DC to 10MHz Bandwidth  
Use as Vectorscope for Color TV Servicing  
Flat faced CRT  
Sweep Synchronized Gate Output  
Z-Axis Input  
Edge Lit Calibrated Screen

TR-410 Wired only

INCLUDES EXCLUSIVE DUAL PROBE  
Convert quickly from direct to  
10:1 low capacity operation



EICO introduces the first laboratory quality, high performance, wideband Triggered Sweep Oscilloscope, at a price you can afford. The EICO TR-410's advanced design features make it ideal for use in the TV service field, production testing in R&D labs and in schools. The fully automatic triggered sweep and wide 10 MHz bandwidth extend the scope's versatility. The sweep is automatically synchronized or "locked-in" with complex TV signals. The all solid state circuit includes a fully protected F.E.T. input stage. A unique dual probe enables you to convert quickly from direct to 10:1 low capacity operation. The dual probe is included at no additional charge (\$19.95 value). Compare the EICO TR-410 with any similarly priced scope and see for yourself the extra performance features and value in the TR-410. Never before has so much been built into a low cost solid state triggered sweep scope.

## FEATURES

- Three calibration voltages (2, 5 and 10) ■ Quick Connect BNC connector at Vertical Input ■ Front panel adjustable Horizontal and Vertical DC balance controls ■ Vertical and Horizontal selection of AC or DC modes of amplification ■ Gate signal is available at a jack to enable user to synchronize other equipment to trace on scope ■ Flat faced CRT ■ Z Axis input ■ Rear panel astigmatism control ■ Removable cabinet sides, top and bottom ■ Operates on a standard 120 volt line, a low 100 volt line and a 220-230 volt line ■ Standard bezel and bushings for camera mounting ■ Single rotary probe for direct and 10:1 measurements

## SPECIFICATIONS

**VERTICAL AMPLIFIER:** SENSITIVITY: .01V/cm to 20V/cm in 11 steps continuously variable within each step. FREQUENCY RESPONSE: DC, DC to 10 MHz (-3 db) AC, 2 Hz to 10 MHz (-3 db). RISE TIME: 35 nanoseconds. OVERSHOOT: 3% or less. INPUT IMPEDANCE: 1 megohm, shunted by 35 pf. MAXIMUM INPUT VOLTAGE: 600 volts p.p., 300 volts (DC/AC peak).

**HORIZONTAL SWEEP CIRCUITS:** SWEEP MODES: Triggered and free running sweeps. CALIBRATED SWEEP RATES: 0.5 microsecond/cm to 0.5 second/cm in 19 steps. Continuously variable within each step. TVH: Approx. 12.75 microsecond/cm. TVV: Approximately 3.3 microsecond/cm. MAGNIFICATION: Sweep rates magnified 5 times.

**TRIGGERING:** MODES: Internal, line and external (2V (P-P) or higher input). SYNC POLARITY: Positive or negative. SYNC RANGE: 20 Hz to 10 MHz with deflection of 10 mm or more on screen.

**HORIZONTAL AMPLIFIER:** SENSITIVITY: 250 mV/cm, continuously variable. FREQUENCY RESPONSE: DC to 1 MHz (-3 db) with sensitivity set to maximum. INPUT IMPEDANCE: 100,000 ohms, shunted by 40 pf.

**OTHER SPECIFICATIONS:** CALIBRATION VOLTAGES: 10V (p-p), 5V (p-p) and 2V (p-p); square wave at approximately 1 KHz. GATING OUTPUT: Square wave synchronized to the sweep of 1V (p-p) or higher amplitude. INTENSITY CONTROL VOLTAGE: 15V (p-p) or more. POWER REQUIREMENTS: 100/120/230 VAC, 50/60 Hz, 20 VA. DIMENSIONS: (HWD) 11"x8"x18". WT: 17 lbs.



## EICO 300C "CLAMP-ON" CURRENT TESTER Wired only

- Portable AC Voltmeter/AC Ammeter/Ohmmeter
- Current Measurements Without Breaking the Circuit
- Complete with Battery, Test Leads & Carrying Case

Compact, lightweight versatile instrument measures AC current without breaking the circuit. "Clamp-On" insulated jaws snap around single conductor. Meter instantly indicates correct reading. Test leads plug in for voltage and resistance checks. Rotary scale reveals only one range at a time. Pointer lock freezes readings; measure in dark, read in light. Accuracy  $\pm 3\%$ . Dimensions:  $7\frac{1}{2}" \times 2\frac{1}{2}" \times 1\frac{1}{2}"$ . Wt. 2 lbs.

**MEASUREMENT RANGES:** AC Current: 0-6, 15, 60, 150, 300. AC VOLTAGE: 0-150, 300, 600. Resistance: 0-1000 (center scale: 30 ohms)

# EQUIP YOUR BENCH WITH PERFORMANCE



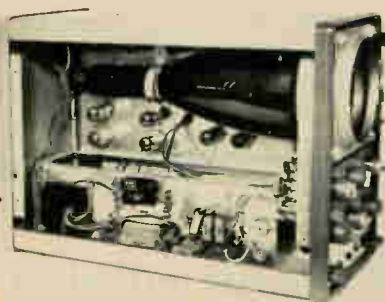
## EICO 465 OSCILLOSCOPE/VECTORSCOPE

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

Kit  
.....  
Wired

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 ( $\pm 1$ , -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).

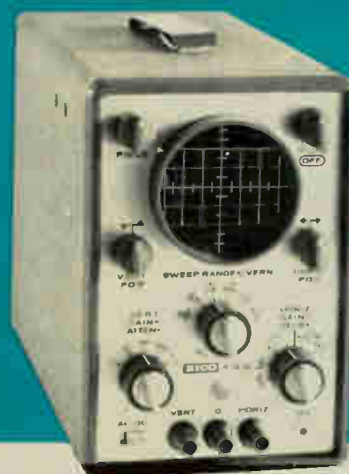
SCOPE'S CABINET PANELS CAN BE EASILY REMOVED TO FACILITATE ALIGNMENT, SERVICING AND HEAT DISSIPATION.



### SPECIFICATIONS:

**VERTICAL AMPLIFIER:** Frequency response from DC to 8 MHz,  $\pm 1$ , -5dB (usable to 10 MHz); sensitivity 12 mv rms/cm (34 mv p-p/cm); input impedance 1 M $\Omega$ /35pf; square-wave calibration voltage 200 mv p-p,  $\pm 1\%$ . **HORIZONTAL AMPLIFIER:** Frequency response from DC to 1 MHz,  $\pm 1$ , -3dB; sensitivity 17 mv rms/cm; input impedance 1 M $\Omega$ /35pf. **SWEEP RANGES:** 10-100-1K, 1K-1 OK, 1 OK-100K Hz; plus TV-VERT position (30 Hz) and TV-HOR position (7875 Hz). Synchronization may be (+) or (-) internal, external, or line frequency. **INTENSITY MODULATION INPUT:** 3V rms blanking; input impedance 2.2 M $\Omega$ . **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-50EP. **POWER REQUIREMENTS:** 117 VAC, consumption approximately 140 watts. **SIZE (HWD):** 12 1/4" x 8 1/2" x 17 1/2". **WEIGHT:** 27 lbs.

★ Export Model available



## 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  
.....  
Wired

Complete many more color or B & W TV service calls on location! The Model 435 is really portable (1/2 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,  $\pm 1$ , -3dB (useful to 10 mc); sensitivity 18 mv rms/cm (50 mv p-p/cm); input impedance 1 M $\Omega$ /35 pf. **HORIZONTAL AMPLIFIER:** Frequency response from 1 cps to 500 kc,  $\pm 1$ , -3dB; sensitivity 0.7 v rms/cm; input impedance 4 M $\Omega$ /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 1/4 x 12 1/4 inches. **WEIGHT:** 18 lbs.

★ Export Model available

## EICO 488 ELECTRONIC SWITCH

Kit  
.....  
Wired

★ Export Model available

Simultaneously observe 2 patterns on 1 scope. Compare voltage and current amplitudes, waveforms, frequencies with phase relationships. Continuously variable switching rates from less than 10 cps to over 2000 cps in 5 ranges. Useful as square wave generator.

Response dc to 30 kc ( $\pm 2$ dB useful to 30kc). Maximum gain of 10. Maximum input 40 v p-p. Input impedance 100K. Output impedance 50K $\Omega$ . Power Requirements: 117 VAC. Size: 8" x 5" x 3". Weight: 7 lbs.

★ Export Model available





# 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

Wired

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 MΩ/30pf. HORIZONTAL AMPLIFIER: Frequency response from 2 cps to 450kc, +1, -3db; sensitivity 0.18 V rms/cm; input impedance 10MΩ/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 16½". WEIGHT: 23 lbs.

★ Export Model available



## EICO 460 WIDEBAND DIRECT-COUPLED 5" SCOPE

- DC - 4.5mc flat response
- Automatic sync • TV-V and TV-H sweeps

Kit

Wired

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.

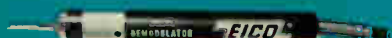
### SPECIFICATIONS

VERTICAL AMPLIFIER: Frequency response from dc to 4.5 mc, +1, -3db (useful to 10 mc); sensitivity 12 mv rms/cm; input impedance 3 MΩ/35pf. HORIZONTAL AMPLIFIER: Frequency response from 1 cps to 400 kc, +1, -3db; sensitivity .55 v rms/cm; input impedance 5 MΩ/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 flexing construction
- swivel action for ease of handling • color-coded for identification • easy accessibility of all parts



### OSCILLOSCOPE DEMODULATOR PROBE PSD

Kit

Wired

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 25 mc.



### OSCILLOSCOPE DIRECT PROBE PD

Kit

Wired

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

Wired

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.

# 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  
Wired



## EICO 232 PEAK-TO-PEAK VTVM

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

Kit  
Wired

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: 0-4-14-42-140-420-1400-4200. 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.

★ Export Model available

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.

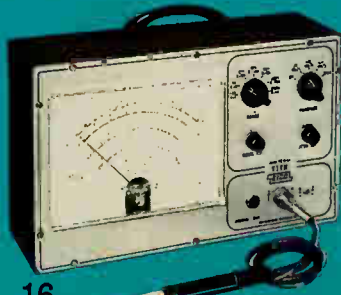
★ Export Model available

## EICO 249 DELUXE VTVM

Complete with batteries and leads

Kit Wired

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



16



## VISU-TRONIC™ TEACHING AIDS

### EICO 249D VTVM DEMONSTRATOR

Kit

Complete working model of EICO 249 vacuum tube voltmeter, including UNI-PROBE®, furnished in easy to assemble kit form. Provides dramatic classroom demonstration of principles of electronic instrumentation on 6 color Demo Board. SIZE (HWD): 24" x 39" x 3 1/2". Weight: 7 lbs.





Discover your Alpha Brainwaves with this professional Biofeedback System.

## BW-300 Alpha Brainwave Monitor

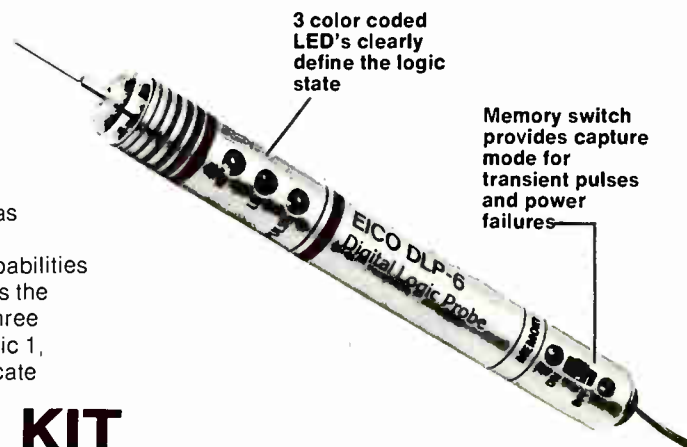
EICO introduces a price breakthrough in the fantastic new field of brainwave biofeedback... a completely safe, battery operated, biofeedback system that offers features and sensitivity comparable to professional models costing much more. The BW-300 will detect your Alpha Brainwaves (which occur when you are totally relaxed) and produce a tone varying in frequency according to your mental state. As you relax you will hear yourself producing "Alpha" Reliable all Solid State IC circuit design features an active filter that isolates Alpha Brainwaves and a high-gain low-noise amplifier providing 5-microvolt sensitivity for easy Alpha recognition. The EICO BW-300 is supplied complete with stethoscopic earphone, electrode headband, contact cream and complete instructions. Uses one 9 V transistor battery, (not included).

**KIT**  
WIRED

## EICO DLP-6 Digital Logic Probe

A must for every field serviceman for fast, accurate testing of logic levels in any DTL or TTL integrated circuit system such as numerical control systems, computers or telephone systems. The EICO Digital Logic Memory Probe provides detection capabilities for pulse durations as short as 50 nano-seconds and indicates the logic state of any DTL or TTL IC circuit. Readout consists of three light emitting diodes (LED's). Bottom LED lights green for logic 1, center LED lights red for logic 0, top LED lights yellow to indicate positive or negative going transition and remains in "ON" state for 200 ns regardless of pulse duration. Memory switch enables stretch LED to remain lighted after a positive or negative pulse occurs.

**KIT**  
WIRED



## EICO 688 Transistor/Diode Quick Tester

Until now the only way to test semiconductors was to remove them from the circuit possibly damaging them with a hot soldering iron and then having to replace them, taking care to avoid heat damage again, if they tested good. Now all you need to do is connect the EICO 688 to your oscilloscope and touch the semiconductor with the probe. The waveform tells its condition at a glance! Switch selector for "in" or "out" of circuit testing, assures that the correct current is applied to the semiconductor under test. Checks all diodes and transistors (except MOS FETS). All test data is included in a handy reference manual.

**KIT**  
WIRED

Two-color extra large mirrored scale

Handle to adapt unit for bench use

Reverse Polarity Switch

## EICO 570 Deluxe Multitester

The EICO 570 with its low voltage, low current scales is ideal for testing and servicing the latest transistor and integrated circuitry. Seven ranges of DC voltage with polarity reversal capability at 20,000 ohm/volt and 6 ranges of AC voltage (both to a max of 5000 V) provide more than sufficient ranges and scaling to service a wide variety of equipment. Dual silicon diode overload protection safeguards the meter movement. 5 DC current ranges to 10 Amps, 6 db ranges for audio measurements and 4 resistance ranges to 50 meg ohms round out the 570's versatility. Supplied complete with batteries and test leads. Wired only.

## New and Improved! EICO HVP-5 High Voltage Probe

A self-contained, direct reading, high voltage and current measuring probe providing for the safe measurement of voltage up to 40,000 Volts DC, and for separate current measurements up to 200 mA DC. It enables you to accurately measure the high anode voltage of a color picture tube and with a flick of the switch, monitor the cathode current drawn by the horizontal output tube or the output stage. The two circuits are completely separate. Only the meter is switched. The EICO HVP-5 can not be damaged by placing the function switch in a mA position while measuring high voltage. This feature allows the technician to switch from the mA position to the HV position without disrupting the operation of the set under test. Wired only.

Built-in-Meter with 2 color scales

3 Position Function Switch—KV, Lock, mA



## EICO 1040 Solid State DC Power Supply

Quietly converts 115 Volts AC to 12 Volts DC. Handles 4 amps continuous and 6 amps maximum. Enables you to enjoy your car stereo tape player or CB rig at home. Also can be used to power a household burglar alarm or trickle-charge 12 volt car batteries. Automatically shuts off in case of an accidental overload. Wired only.



# EICO INTRODUCES foneaids

A NEW CONVENIENCE IN TELEPHONE COMMUNICATION.



**foneaids** are a unique line of telephone related products designed to add a new measure of convenience and versatility to your phone communications. Foneaids are self-contained and completely portable. They will operate with most telephones and their handsome design harmonizes with any home or office decor.

#### **FA-10 "CALL VALET" Automatic Phone Answering Adaptor**

Your very own answering service! A reliable low cost telephone record/answering device for taking those important calls when no one is at home. The "Call Valet" can be used as an "announce only" device utilizing one cassette recorder (for applications where recording the caller's message is unnecessary) or as a complete message recording system using 2 cassette recorders. **Kit** **Wired**

#### **FA-20 "CALL TIME LIMITER" Automatic Call Time Reminder**

Now you can limit long (and expensive) phone conversations at home or office! The FA-20's solid state electronic circuit starts timing automatically when the phone (or its extension) is lifted. A beep tone will periodically be heard on the phone line after a predetermined amount of time has elapsed. The "reminder" time tones can be pre-set from 3 minutes to approximately 10 minutes. Automatically resets for the next call. **Kit** **Wired**

#### **FA-30 "CALL SILENCER" Phone Call Annunciator**

Don't be disturbed by a ringing phone. The "Call Silencer" will announce an incoming call by a blinking red light and/or a pleasing beep tone. A convenient switch selects normal ring or silent call. The party calling still

hears the standard ring. The FA-30 can be used as an alert for remote areas. **Kit** **Wired**

#### **FA-40 "CALL MONITOR" Automatic Phone Recording Switch**

Now you can keep an accurate record of your telephone conversations.\* The "Call Monitor" provides a convenient permanent means of automatically recording both incoming and outgoing calls. A cassette recorder starts when the phone (or its extension) is lifted and stops automatically as soon as the call is completed. An "On/Off" switch permits playback without unhooking the FA-40 from your phone line or recorder. **Wired**

\*Federal law requires that only one party in the conversation be informed that the call is being monitored.

#### **FA-50 "CALL GUARD" Electronic Combination Phone Lock**

A handy item for your business, home or anywhere calls must be controlled. This unique electronic telephone combination lock prevents unauthorized outgoing calls while not interfering with incoming calls. Only persons with the exact combination can call out. Can be remote operated. **Wired**

#### **FA-60 "TRANSFER CALL" Phone Call Diverter and 3-Way Conference Call Connector\***

\*Requires phone with two separate phone numbers. Now your important phone calls can reach you in seconds... outside your home or office! The FA-60 enables your secretary (or anyone in your office or home) to transfer your calls to another phone wherever you may be. Also useful as a 3-way conference call connector to talk to two outside parties simultaneously. **Wired**

Customer-owned equipment connected to telephone company equipment may be subject to local tariff.

## EICO SD-75 Smoke/Fire Detector

- Installs in minutes...no wiring
- Detects smoke and invisible combustion gases
- Beeps automatically when battery change is required
- Supplied complete with long life battery.

This self contained, battery operated, high performance ionization-type combustion products detector will detect fire in the earliest stage and will warn you with a loud sustained alarm. It is ideal for the home, apartment, mobile home and small business office.

Installation is quick and simple as no wiring is required. The unit mounts directly to the ceiling with just 2 screws. The SD-75 operates on one single battery (included) which is constantly monitored. A trouble signal will sound to alert you when battery is low. Operating on the principle of ionization, the SD-75 will sense the presence of invisible gases of combustion or smoke which in most fires appear before smoke and flames are detected.



**24 Hour Life Saving Protection!**



- 100% Solid State Circuit Design
- Voltage Sensor Eliminates Wiring of Doors
- "Keyless" Operation—No Fender Holes to Drill
- Hidden Entrance—Exit Time Delay Switch Mounts Inside of Car
- Emergency Vehicle "Hi-Lo" Sound

## EICO ASA-310 'Keyless' Electronic Siren Auto Burglar Alarm System

The EICO ASA-310 is a quality electronic siren alarm system that combines advanced solid state electronics technology with easy "do-it-yourself" installation. One wire connected to any hot lead is all that is required after installing the "hidden" on/off switch and mounting the siren.

EICO's exclusive voltage sensing circuit detects any disturbance to the car's electrical system. (Such as light going on when door is opened). Before leaving the car, all you need do is flip the "hidden" switch to the "ON" position. 15 seconds later the system is armed (you have plenty of time to exit from the car). Upon returning to the car you have 15 seconds to turn off the alarm. Can be used in any 12 volt negative ground car, truck, mobile home, camper or boat.

- Solid State Circuit Design
- Simple Installation—No Wiring of Doors
- Includes Built-in Voltage Sensor

## EICO ASA-301 Electronic Siren Auto Burglar Alarm System

Electronic siren alarm featuring the penetrating "Hi-Lo" sound now heard from police and other emergency type vehicle sirens. Exclusive "Voltage Sensor" reduces installation time from hours to only minutes. One wire connected to any hot lead is all that is required after installing key switch and mounting siren. No time consuming wiring of doors.



# Introducing 7 NEW EICOCRAFT IC PROJECT KITS!

- Educational, fun-to-build
- Drilled and etched PC Boards
- Comprehensive step-by-step instructions
- Complete with "Panel Mounts" for professional appearance



## The New IC Technology



Eicocraft Integrated Circuit Kits are the result of a fantastic technological advance in the

electronic sciences providing new standards in accuracy and dependability. Eicocraft IC projects provide hours of enjoyment for electronics enthusiasts, hobbyists and students. Each kit includes an IC which is a space-age device containing many transistors, diodes, and resistors, all assembled on a tiny piece of material referred to as a "chip."

## EC-5000 SCA Adaptor

Listen to the official FCC licensed background music service (SCA) on your FM radio or FM receiver. The EC-5000 is a decoder adaptor which makes it possible to hear uninterrupted commercial free programs offered by many FM broadcast stations. This adaptor is intended for personal use only. It is illegal for commercial establishments who are not SCA subscribers to use it.

## EC-5100 ESP Tester

Now you can test your friends, relatives, co-workers or classmates power of extra sensory perception. The EC-5100 is an electronic device consisting of 4 lights (LED's), which light in a random sequence. By pushing a "stop button" you try to "guess" which LED will light up. Great for parties, science projects, etc.

## EC-5200 "Decision Maker"

An invaluable aid for the busy executive who can use help in making those everyday important "yes" or "no" decisions. It's fun, foolproof, honest (no way to tamper with the circuit) and interesting. When operating, only one of the two random flashing lights (LED's) will remain lit indicating a "yes" or "no" decision.

## EC-5400 Stereo Power Amplifier

A versatile power amplifier that delivers 2 Watts per channel of continuous power! Operates over a supply voltage of 9 to 26 volts DC (Battery or D.C. supply). The EC-5400 accepts a wide variety of high level sources such as microphone, phono cartridge, tape recorder etc. Drives 8 ohm speaker systems. Interconnects with the EC-5500 stereo preamp to form a high quality stereo amplifier.

## EC-5500 Stereo Pre-Amp

A Preamplifier that offers outstanding value and specifications! Features NAB & RIAA equalization, 60 db channel separation, high input impedance and low output noise. The EC-5500 accepts a wide range of inputs: stereo tape player/recorder, phono, tape head, FM stereo receiver, microphone. The EC-5500 may be interconnected with the EC-5400 stereo power amplifier to form a high quality stereo amplifier.

## EC-5600 Electronic Lock

More than a fascinating toy, the EC-5600 is a unique, workable, digital (MOS) electronic combination lock. Ideal for use in automobile and home alarm systems as well as garage door openers, etc. The user must push 3 out of 5 buttons, in the proper sequence, within a 10 second interval. This corresponds to 1 chance opening out of 125.

## EC-5700 Universal Power Amplifier

A high-quality solid state battery operated general purpose 2-watt audio amplifier. The EC-5700 accepts a wide variety of input sources, such as a microphone, phono cartridge, tape recorder, radio, etc. Two EC-5700's can be operated as a stereo system when supplied with left and right channel signals from a tape recorder, stereo phono cartridge or any other 2 channel source. Use with any 8 ohm loudspeaker.

## Electronic Tool Kit

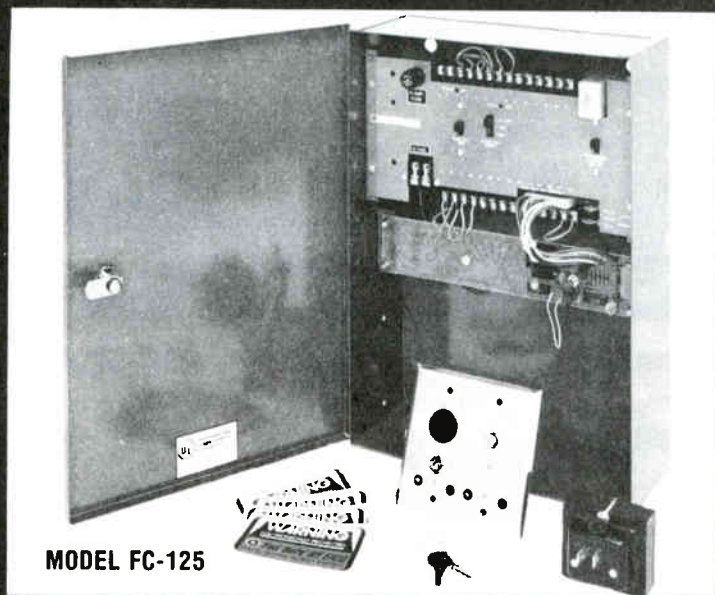
*Ideal Tools for Kit Builders and Experimenters!*

All you need for almost any electronic kit. Eight piece set includes the most popular tools. 30-watt pencil type soldering iron, diagonal plier, long nose plier, 2 screwdrivers (standard and Phillips), calibrated wire stripper, solder and a solder aid tool.

# !NEW!

# EICO **PRO-INSTALLER** SOLID STATE U.L. LISTED BURGLAR/FIRE ALARM CONTROL CENTER.

- Solid State Circuitry
- Entrance-Exit Time Delay
- Automatic Bell Timer/Cut-off
- Two zone supervised Burglar Protection Circuit
- Automatic switchover to battery power in event of emergency
- Supervised Fire Protection Circuit
- 24 Hour Panic Circuit
- Remote Fire Trouble Alert
- Remote Station Operation
- One (1) Remote Station Control with Pushbutton and Indicator Lights
- Different Sound for Burglary and Fire
- Locked Heavy Gauge Steel Cabinet
- Plug-in Low Voltage 6 VDC Power Supply
- Underwriter Laboratories (U.L.) Listed



## THE MOST VERSATILE HOME BURGLAR/FIRE ALARM NOW AVAILABLE

Advanced Solid State design and high component quality are combined to give you outstanding features and dependable performance. The FC-125 provides supervised two-zone closed circuit protection against burglary, as well as constant 24 hour supervised fire and panic emergency protection circuits.

### CONVENIENT REMOTE STATION OPERATION

Remote stations (EICO A-46, A-66) permit operation of the entire system from any point in the home. Each remote station has a green indicator to show that all of the protected openings are properly closed, and a red indicator light which shows that the system is on. If there is an opening in the protective circuit; both lights will be out.

### "TIME DELAY" ELIMINATES NEED FOR ENTRANCE KEY SWITCH

The entrance-exit time delay circuit offers the same closed circuit protection as found on the balance of the Burglar Alarm System, but only the main door is connected to the delay. All other doors and windows will respond instantly and the time delay can be converted to instant at night.

### U.L. APPROVED SUPERVISED FIRE ALARM CIRCUIT

A separate 24 hour supervised fire alarm circuit operates in conjunction with heat sensors (EICO SD-20/24). The FC-125 is supplied with a Fire Supervisory Remote Plate; whereby a trouble signal is annunciated by a LED indicator and a piercing tone.

### AUTOMATIC SWITCHOVER TO BATTERY POWER IN EVENT OF EMERGENCY

A low voltage plug-in power supply supplies 6 VDC to operate the system and sound the alarm bell (up to 4 Bells may be used). In the event of a power failure the FC-125 will automatically switch over to standby battery operation. The FC-125 sounds a pulsating (intermittent) ring for fire and a steady ringing sound for burglary.

### BUILT-IN AUTOMATIC BELL CUT-OFF

The Bell Timer/Automatic Cut-Off will shut the alarm bell off after approximately 20 minutes (adjustable from 3-20 min.). In the event of a momentary break in the circuit ("swinger"), the FC-125 will automatically reset itself.

### SPECIFICATIONS:

Input AC Voltage: 120VAC, 60 HZ. Input AC Current: 60 Milliamps Typical (280 MA maximum). Output DC Voltage: 6VDC at 3.2 amps. System Current Drain: Under 20 Milliamps

(at 6VDC Stand-by). Stand-by Power: 6VDC at 3.1 amps maximum. Burglary Protection Circuits Resistances: Loop #1 and #2 200 ohms maximum ea., Loop #3 (time-delayed) 1K ohms maximum. Fire Protection Circuit Resistance: 500 ohms maximum. Set-Reset Circuit Resistance: 2K ohms maximum. Dry Sets of Contacts: 1 amp at 28VDC, 1/4 amp at 120VAC or DC. Size (HWD): 12 1/2" x 10 1/2" x 4". Weight: 11 pounds.

### OPTIONAL ACCESSORIES

#### EICO A-46 ENTRANCE KEY SWITCH CONTROL STATION

For operating the FC-125 with a Key Switch instead of the entrance-exit time-delay circuit. Stainless steel mounting plate, red alarm set light and pick proof switch lock.

#### EICO A-66 REMOTE CONTROL STATION

Momentary pushbutton switch provides on/off function, green line check light, red alarm set light, stainless steel mounting plate.

#### EICO OA-1 POLICE CONNECT RELAY MODULE

A plug-in reversing relay module for connection to direct line of police (where permitted), Central station, answering service etc.

#### EICO OA-2 DIALER RELAY MODULE

Permits the FC-125 to be used with an Automatic Emergency Telephone Dialer (such as the EICO A-155).

#### EICO OA-3 GELL CELL BATTERY CHARGER CIRCUIT

Optional factory installed regulated power supply for installations which specify 6 ampere hour standby rechargeable Gell Cell Battery (or 20 ampere hour standby —Model OA-4).

### EICO's FC-125-S BURGLAR/FIRE ALARM SYSTEM

The FC-125-S is a complete security system featuring the EICO FC-125 Burglar/Fire Alarm Control Center. The System has been designed on the EICO "EXPANDABILITY CONCEPT" that enables you to "add-on" protection to meet your own special requirements.

The FC-125-S Burglar/Fire System includes the following U.L. Listed components: FC-125 Burglar/Fire Alarm Control Center, 8" Alarm Bell, (3) 135 degree Heat Sensors, (1) 190 degree Heat Sensor, (6) Magnetic Door/Window Switches, (1) Panic Button, 200' Alarm Hook-up Wire, Insulated Wiring nails, (6) Warning Decals, (1) Installation Handbook.



# EICO PRICE SCHEDULE

DECEMBER 1976

Model No.	Kit	Wired	Model No.	Kit	Wired	Model No.	Kit	Wired	Model No.	Kit Only	Model No.	Wired Only	
TEST EQUIPMENT			TEST EQUIPMENT			FA-40 — 24.95			EICOCRAFT KITS			SECURITY PRODUCTS	
147	69.95	99.95	955	49.95	69.95	FA-50 — 19.95				(New "Panel Mounts" Packaging)			SD-10 9.95
150	84.95	119.95	1020	44.95	59.95	FA-60 — 19.95				EC-100 8.95		SD-11 9.95	
232	54.95	79.95	1025	54.95	79.95	HOBBY ELECTRONICS			EC-400 6.95		SD-12 5.95		
235	84.95	119.95	1030	119.95	159.95	TK-5 — 10.95				EC-600 6.95		SD-14 7.95	
239	64.95	94.95	1032	64.95	89.95	PCE-10 — 39.95				EC-700 7.95		SD-16 7.95	
240	—	99.95	1060	79.95	99.95	BW-300 34.95 59.95				EC-900 11.95		SD-18 5.95	
242	109.95	139.95	1064	99.95	109.95	STEREO COMPONENTS			EC-1000 6.95		SD-20 11.95		
249	64.95	99.95	1078	119.95	149.95	3080 74.95 —				EC-1300 10.95		SD-24 8.95	
250	—	150.00	1040	—	19.95	TD-8 — 49.95				EC-1400 11.95		SD-28 10.95	
324	64.95	89.95	1045	—	49.95	QA-4 — 29.95				EC-1500 10.95		SD-30 4.95	
330	84.95	129.95	1080	64.95	79.95	ENVIRONMENTAL LIGHTING			EC-1600 9.95		SD-32 5.95		
342	—	250.00	1100	14.95	22.95	3420 — 39.95				EC-1700 11.95		SD-40 5.95	
369	189.95	249.95	1120	13.95	19.95	3449 — 69.95				EC-1900 14.95		SD-42 10.95	
C5	—	11.95	1140	29.95	39.95	3470 — 44.95				EC-2000 12.95		SD-50 4.95	
C4.5	—	7.95	1171	34.95	49.95	3475 39.95 —				EC-2300 9.95		SD-52 5.95	
377	79.95	99.95	1180	29.95	39.95	3477 — 29.95				EC-2600 10.95		SD-54 19.95	
378	99.95	139.95	TRUVOHM MULTIMETERS			BLS-10 — 39.95				EC-2700 9.95		SD-56 4.95	
379	99.95	129.95	1-A-1 — 9.95			SECURITY SYSTEMS			EC-2800 9.95		SD-58 12.95		
380-A	—	250.00	4-A-3 — 21.95			FC-125 S — 359.95				EC-2900 9.95		SD-62 10.95	
385	89.95	129.95	20-A-3 — 26.95			SS-200 — 89.95				EC-3000 2.95		SD-64 19.95	
388	—	89.95	20-A-4 — 29.95			SS-400 — 89.95				DELUXE PROJECTS			SD-72 29.95
390	—	169.95	30-A-3 — 31.95			SS-500 — 159.95				EC-3600 19.95		SD-74 29.95	
427	149.95	219.95	30-A-4 — 37.95			SS-501 — 189.95				EC-3700 12.95		SD-75 39.95	
435	179.95	239.95	100-C-3 — 44.95			ASA-301 — 49.95				EC-3800 19.95		SD-76 39.95	
443	—	159.95	100-A-4 — 54.95			ASA-310 — 59.95				EC-4300 19.95		SA-15 10.95	
460	159.95	209.95	100-T-6 — 69.95			CITIZENS BAND			EC-4400 19.95		SA-17 39.95		
465	249.95	329.95	300-C — 54.95			7723 — 139.95				EC-4600 34.95		SA-19 14.95	
540	21.95	29.95	SLC-1 — 5.95			700 — 99.95				EC-4700 10.95		SA-25 19.95	
536	29.95	39.95	SLC-2 — 2.95			715 — 69.95				EICOCRAFT IC KITS			SA-27 17.95
555	44.95	64.95	SLC-3 — 2.95			725 — 39.95				EC-5000 12.95		A-35 3.95	
565	39.95	59.95	ACCESSORY PROBES			735 — 29.95				EC-5100 10.95		A-45 13.95	
570	—	49.95	PSD 6.45 8.95			755 — 9.95				EC-5200 9.95		A-65 4.95	
610A	—	20.95	PD 5.45 7.95			CA-10 — 24.95				EC-5400 10.95		A-67 12.95	
CRU	—	24.95	PLC 6.45 8.95			CA-20 — 19.95				EC-5500 9.95		A-75 24.95	
633	139.95	179.95	PRF-11 6.45 8.95			CBC-2 — 29.95				EC-5600 11.95		A-95 2.95	
635	74.95	109.95	HVP-2 — 10.95			CM-2 — 29.95				EC-5700 8.95		A-105 1.95	
667	149.95	209.95	HVP-5 — 29.95			LR-3 — 29.95				EICOCRAFT KITS (STD)			A-125 2.45
680	64.95	79.95	UP 7.45 9.95			PM-4 — 24.95				EC-102 6.95		A-135 4.95	
685	129.95	179.95	PSI 6.95 10.95			CBR-5 — 24.95				EC-500 9.95		A-137 5.95	
688	14.95	22.95	PST-2 19.95 29.95			PAS-10 — 10.95				EC-1800 8.95		A-139 6.95	
706	—	14.95	DLP-6 19.95 19.95			RS-12 — 12.95				EC-2100 9.95		A-145 4.95	
710	59.95	79.95	FONEAIDS			SLM-14 — 9.95				EC-2400 8.95		A-155 299.95	
880	—	34.95	FA-10 29.95 39.95						EC-2500 8.95		A-185 27.95		
885	—	59.95	FA-20 19.95 29.95						EC-3300 8.95		FC-100 89.95		
888	69.95	99.95	FA-30 19.95 29.95						EC-3500 7.95		FC-125 299.95		
889	34.95	44.95							EC-3900 12.95		FC-90 69.95		
902	—	350.00							EC-4000 12.95		FC-80 59.95		
944	49.95	79.95											
950	49.95	69.95											

Prices subject to change without notice.

**EICO ELECTRONIC INSTRUMENT CO., INC.** 283 Malta Street, Brooklyn, N.Y. 11207





## 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 6½" meter movement for improved accuracy in reading
- Measures resistance even in semiconductor circuits

#### Kit Wired

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 6½-inch meter for easier, more accurate readings. Second, there is the added versatility of seven non-skip milliammeter 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: 6½"; SIZE (HWD): 7½" x 8½" 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

★ Export Model available

#### EICO 240 SOLID STATE FET-TVM

Same as EICO 242 electronically, except it has a 4½" meter. Does not have milliammeter ranges, SIZE (HWD): 8½" x 5¼" x 5". WEIGHT: 6 lbs. Model 240 Kit, Wired.

★ Export Model available

### EICO 239 SOLID STATE FET-TVM

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

#### Kit Wired

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 4½-inch, 200µA 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: 4½" 200µA movement; POWER REQUIREMENTS: 3 Neda #1604-9 volt batteries and 1-1.5 volt size D cell; SIZE (HWD): 8½" x 5¼" x 5"; WEIGHT: 6 lbs.

## EICO VTVM ACCESSORY PROBES

### HIGH VOLTAGE PROBE HVP-2



Wired only

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 Wired

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 Wired

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

# EICO TUBE TESTERS KNOWN FOR QUALITY ACCURACY



## EICO 667 DYNAMIC CONDUCTANCE TUBE & TRANSISTOR TESTER

Kit

Wired

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

**TYPES TESTED:** 5 & 7 pin Nuvistors; Novars; MAGNOVAL; compactrons; 7- and 9-pin miniatures; 9-pin + 1 center pin miniature; 5-, 6-, & 7-pin sub-miniatures (in-line base); 8-pin sub-miniatures (circular base); Decal octals; loctals; and the special two-pin rectifiers. In addition to receiving types, both domestic and foreign, many small transmitting and special-purpose tubes, voltage regulators, cold cathode rectifiers, electron-ray indicators, and ballast tubes are tested. Tests n-p-n and p-n-p transistors. Pilot lamps are tested in center of MAGNOVAL socket. Accessory Model CRU adaptor for testing color and black and white picture tubes.

**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.

Complete Tube Data Manual provided.

18 Power: 105-135 volts AC. Provided with pilot lamp and fuse. Size (HWD): 12" x 15" x 4 1/2". 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

Wired

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%, 4 1/2" 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): 5 1/4" x 12 1/2" x 9 1/4"; WEIGHT: 9 lbs.

**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, 12½"W, 9"D) and lightweight, 4½ lbs.
- Thoroughly professional, full-range modern versatility. Tests all standard tubes and even the new decal, 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      Wired

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, decal, 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. 3½" 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 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 Nuistor, 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 —Wired only

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

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      Wired

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  $\mu A$  center scale);  $I_{CEO}$  0-5 ma (30  $\mu A$  center scale);  $I_{CES}$  0-5 ma (30  $\mu A$  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 $\Omega$  to 10 M $\Omega$  (140 K $\Omega$  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  $\mu A$ ; 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): 12½" x 8½" x 6" Weight: 10 lbs.



## EICO 680 TRANSISTOR & CIRCUIT TESTER

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

### Kit      Wired

**IMPORTANT FEATURES:** ICBO (collector-base leakage current) and ICEO (collector-emitter leakage current) are measured accurately on microammeter ranges with sensitivity to 50  $\mu$ 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  $\mu$ A shift). AC beta is obtained by dividing 500 by the base current difference in  $\mu$ 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  $\mu$ A, 500  $\mu$ A, 5mA, 50mA, 500mA. DC VOLT RANGES: 5V, 50V. RESISTANCE RANGES: Rx1 (0 to 2K $\Omega$ , 12 $\Omega$  center scale), Rx100 (0-200K $\Omega$ , 1200 $\Omega$  center scale), Rx10K (0 to 20M $\Omega$ , 120K $\Omega$  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 $\Omega$  adjust control. BATTERIES: 4 size AA, 1 size C. SIZE (HWD): 6 $\frac{1}{4}$ " 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



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.

# Semiconductor Curve Tracer



## EICO 443 TRANSISTOR-DIODE CURVE TRACER

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

### Kit      Wired

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<sub>r</sub>), and Peak Inverse Voltage (PIV). The PIV test voltage is variable from 0 to 1400 V. Transistor tests include those for hFE, h<sub>OE</sub>, I<sub>CEO</sub>, V<sub>CE</sub>(sat), and BV<sub>CEO</sub>

### 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 (hFE) displays family of 3 curves NPN/PNP: Signal Transistors (hFE) at V<sub>CE</sub> = 10 volts I<sub>c</sub> = 12 MA.: Power Transistors (hFE) at V<sub>CE</sub> = 10 volts I<sub>c</sub> = 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<sub>r</sub>) - 3 Ranges - 1/10/100 microamps per division. Forward Current (I<sub>f</sub>) - 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      Wired

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. ★ Export Model available





# New Solid State Signal Generators

## 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 and 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  $\pm 1$  db on the four lowest bands and within  $\pm 2$  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. ★ Export Model available



KIT  
WIRED

## 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. ★ Export Model available



KIT  
WIRED

# New Signal Tracer

## 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. ★ Export Model available



KIT  
WIRED

# 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                      Wired

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 1-356 3-watt lamp. POWER REQUIREMENTS: 117 VAC, 60 cps, 50 watts. SIZE (HWD):  $7\frac{1}{4}'' \times 11\frac{1}{4}'' \times 7\frac{1}{4}''$ . WEIGHT: 13 lbs.

★ Export Model available



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

## EICO 378 AUDIO GENERATOR

Kit                      Wired

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 $\Omega$  load. OUTPUT METER ACCURACY:  $\pm 5\%$  of full scale. POWER REQUIREMENTS: 120V, 50/60 cps, 40 watts. SIZE (HWD):  $8\frac{1}{2}'' \times 12\frac{1}{2}'' \times 9''$ . WEIGHT: 16 lbs.

★ Export Model available

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

Kit                      Wired



- 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:  $5\frac{1}{4}''$  long x  $\frac{1}{2}''$  O.D. WEIGHT: One ounce.



# FOR COLOR AND BLACK & WHITE TV SERVICING

## EICO 324 RF SIGNAL GENERATOR

### Kit Wired

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 Wired

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 3/4" L. x 5/8" D. Weight: 2.2 oz.



### Kit Wired

- Complete with 2 probe tips & plastic pouch

# GREAT VALUES IN COLOR AND B&W TV SERVICE GENERATORS

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.

### SPECIFICATIONS

RF OUTPUT: 0.50,000 V p-p into 50Ω (82.25 Mc crystal controlled for TV Channel 3). VIDEO OUTPUT: Both positive and negative polarities, 0-10 v into 4.7 KΩ. HORIZONTAL LINES: 12 (variable thickness) for vertical linearity and horizontal convergence adjustments. VERTICAL LINES: 12 (variable thickness) for horizontal linearity and vertical convergence adjustments. CROSSHATCH: 12 horizontal and 12 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 1/4" x 9 1/2". WEIGHT: 8 lbs.

**'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 circuit-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-draw operation on 6 "C" cells (not supplied) or with optional AC adapter/trickle charger. 13 transistors, 6 diodes, 3 crystals. Unusually small: 2 1/4"H, 8 1/2"W, 3 1/4"D, and light: 7 lbs. Everything you need to do a fast, reliable job — and you save money too.

Easy-to-assemble kit:

Wired



## EICO 342 FM MULTIPLEX SIGNAL GENERATOR

Wired only,

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.

### 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 1.5Ω. INTERNAL MODULATION: 1 kc; THD: less than 0.3%. EXTERNAL MODULATION OSCILLATOR REQUIREMENTS: 1 V RMS input for maximum output; input impedance 10KΩ. STEREO SOURCE MODULATION REQUIREMENTS: 1 V RMS input each channel for maximum output; input impedance 1MΩ. FM pre-emphasis provided. FM MULTIPLEX RF OUTPUT: 200 mv; output impedance 50Ω. DEVIATION CONTROL: to ±75 kHz. PILOT FREQUENCY: 19 kHz ±2 cps (crystal controlled); adjustable phase ±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: ±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 1/4" x 12 1/4". WEIGHT: 10 lbs.



## EICO 710 GRID-DIP METER

- Covers all broadcast, FM, "ham" and TV bands in 8 overlapping ranges

Kit  
Wired

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: pre-tuning 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 ±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 3 3/4" long. POWER REQUIREMENTS: 117V, 60 cps; 10 watts. POWER SUPPLY: Transformer-operated selenium rectifier. SIZE (HWD): 2 1/4" x 2 3/4" x 6 7/8". WEIGHT: 3 lbs.

★ Export Model available



# PORTABLE VOM'S TOPS IN ACCURACY & PERFORMANCE



SLC-1  
optional  
case

- 20,000 ohms per volt sensitivity
- 31 range, 50- $\mu$ v movement



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

## EICO 565 V-O-M Kit : Wired

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  $\mu$ a, 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:  $4\frac{1}{2}$ " size, 50  $\mu$ a movement. SIZE (HWD):  $6\frac{1}{4}$ " x  $5\frac{1}{4}$ " x 3". WEIGHT: 4 lbs.

## EICO 555 V-O-M Kit : Wired

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.

## EICO 536 V-O-M Kit : Wired

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:  $3\frac{1}{2}$ " size, 400  $\mu$ a movement. SIZE (HWD):  $6\frac{1}{4}$ " x  $3\frac{3}{4}$ " x  $2\frac{1}{4}$ ". WEIGHT: 3 lbs.

## EICO 566 V-O-M Kit : Wired

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  $4\frac{1}{2}$ " 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:  $4\frac{1}{2}$ " size, 400  $\mu$ a movement. SIZE (HWD):  $6\frac{1}{4}$ " x  $5\frac{1}{4}$ " x 3". WEIGHT: 3 lbs.

## EICO 556 V-O-M Kit : Wired

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

SLC-1  
optional  
case



- 1000 ohms per volt sensitivity
- $4\frac{1}{2}$ " meter with 2-color scales

## EICO 715 HAM/CB TRANSCEIVER TEST SET Wired Only

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):  $4\frac{7}{8}$ " x  $8\frac{1}{8}$ " x  $\frac{1}{2}$ ". Weight 5 lbs.



# EQUIP YOUR LAB WITH DEPENDABLE EICO TEST



- 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  
.....  
Wired

## 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  $\mu$ 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 1/4" x 6". WEIGHT: 6 lbs.

★ Export Model available



Kit  
.....  
Wired

## 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  $\mu$ f to 5000  $\mu$ 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  
.....  
Wired

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 1/4" x 6 1/4" x 3 1/4". WEIGHT: 2 lbs. Supplied less leads.

## EICO 1120 EIA CAPACITANCE SUBSTITUTION



Kit  
.....  
Wired

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 1/4" x 6 1/4" x 3 1/4". WEIGHT: 2 lbs. Supplied less leads



# INSTRUMENTS AND SAVE



Kit  
.....  
Wired

## 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 3/4". WEIGHT: 10 lbs.

★ Export Model available

Power consumption 40 watts.

## EICO 1140 SERIES/PARALLEL R-C COMBINATION BOX



Kit  
.....  
Wired

The EICO Model 1140 Series/Parallel R-C Combination Box is an extremely valuable combination of the model 1171 Resistance Box and the model 1180 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 1171 CAPACITORS: See Model 1180 TERMINALS: Five-way locking binding posts. SIZE (HWD): 4 1/2" x 6 1/2" x 2 1/2". WEIGHT: 3 lbs. Supplied test leads.



Kit  
.....  
Wired

## EICO 1180 DECADE CONDENSER BOX

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 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: 500 volts DC continuous. ACCURACY: ±1%. SIZE (HWD): 9" x 3 1/2" x 3 1/2". WEIGHT: 3 lbs.



Kit  
.....  
Wired

## EICO 1171 DECADE RESISTANCE BOX

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 $\Omega$  to 100 K $\Omega$ ). 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 APPLIANCE/CAR TESTER EICO 540 READI-TESTER

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 1/4" x 3 1/2". Includes leads.



Kit  
.....  
Wired

## EICO 585 BATTERY TESTER

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 3/4" x 2" **WEIGHT:** 2 lbs. Test leads provided.



Kit  
.....  
Wired



- Regulated B+ continuously variable 0-400 VDC
- Regulated bias supply continuously variable 0 to -150 VDC
- Ripple less than 3 millivolts RMS
- 60th 6.3 and 12.6 VAC filament supplies

Kit  
Wired

## 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 of 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  $\pm 10$  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  $\pm 10$  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 1/2% 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  $\pm 10$ 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  $\pm 10$ 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. ★ Export Model available



## EICO 1060S BATTERY ELIMINATOR & CHARGER

- Specially designed for servicing all types of transistor equipment

Kit      Wired

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 1/4" x 10 1/2" x 7 1/4". WEIGHT: 18 lbs.



## EICO 1078 METERED AC SUPPLY

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

Kit      Wired

NEW!



## EICO 1032 REGULATED POWER SUPPLY

Kit      Wired

- 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 current supply supplies the voltages 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:  $\pm 0.5\%$  with average load 50 ma maximum load and 100-150 volt line. Ripple less than 2.5 mv peak-to-peak. Power source: DC VOLT meter: 0-30 volts, 0-50 volts. DC Milliammeter: 0-500 ma. Power Requirements: 100-125 VAC 50/60 cps 50 watts. SIZE (HWD): 8 1/2" x 8 1/2" x 7 1/2" lbs.





## EICO 1025 SOLID STATE POWER SUPPLY

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

### Kit      Wired

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): 300 mA. FUSE: ½ amp. METERS: Voltmeter—0-6 and 0-30; Milliammeter—0-500 mA. RIPLE: (120 Hz.): 0.005% at full load. POWER REQUIREMENTS: 117V, 60 Hz. SIZE (HWD): 3¾" x 8" x 4¾". WEIGHT: 5 lbs.

★ Export Model available

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: ± 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): 8½" x 5½" x 7". WEIGHT: 16 lbs.



NEW IMPROVED DESIGN  
WITH RELIABLE  
SILICON RECTIFIERS

Kit  
Wired

## 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 RIPLE: 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): 8½" x 5½" x 7½". WEIGHT: 16 lbs.

## EICO 1020 POWER AND BIAS SUPPLY

Kit      Wired



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 silicon transistor circuit. The maximum permissible load current is 300 ma. 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 5½" (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): 300 ma. FUSE: ½ 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. RIPLE: (120 cps) 0.005% at full load. POWER REQUIREMENTS: 117V, 60 cps. SIZE (HWD): 5" x 4" x 5½". WEIGHT: 5 lbs

★ Export Model available

# 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 WIRED

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 1080 220 WATT INVERTER/CHARGER

### KIT WIRED

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.



## EICO 1070 110 WATT INVERTER

### KIT WIRED

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 PCE-10 Photo-Electric Relay System

### Wired only,

- Solid state circuit
- Variable sensitivity control
- Effective range to 50 feet

Use the EICO PSD-10's invisible light beam as an intruder alarm, for counting people or objects, or as an announcing system. When beam is broken, the PCE-10 can sound a 110 VAC bell or buzzer, or provide a pulse to activate an electronic counter. Units can be separated by up to 50' in darkened areas; up to 15' in brightly lit areas. Can be set for continuous duty (alarm remains on indefinitely when beam is broken) or intermittent duty (alarm resets automatically after circuit is tripped. 110 VAC, 60 Hz. Size (Each) HWD 3 1/2" x 4" x 3". 6 lbs.



# NEW!

## MODEL 100T6

Complete with batteries and test leads

- Taut band meter overload protected



Two complete test instruments in one cabinet. Combines an extremely sensitive 100,000  $\Omega/V$  VOM with an easy-to-operate direct reading transistor tester (measures alpha, beta & leakage). Sensitive 7.5  $\mu A$  taut band meter movement protected by dual silicon diodes. VOM RANGES-DC MILLIVOLTS: 0-0.12, 0.6 V at 100,000 ohms per Volt. DC VOLTS: 0-3, 12, 30, 120, 600V at 100,000 ohms per Volt. AC VOLTS: 0-6, 30, 300, 600 V at 10,000 ohms per Volt. DC MICROAMPERES: 0-12, 600  $\mu A$  at 250 mV. DC MILLIAMPERES: 0-12, 300 mA at 250 mV. DC AMPERES: 0-12 A at 250 mV. DECIBELS: -20 to +58 dB. OHMS: Rx10, Rx1K, Rx0.1M. CAPACITANCE: 0-0.04, 0.2  $\mu F$ . Transistor Tester Functions (measured directly for most PNP and NPN transistors). Alpha: 0-0.9965. Beta: 0-285. ICO: (Collector-Base leakage Current) 0-12, 48  $\mu A$ . SIZE: 6 7/8" H x 5 1/4" W x 2 1/2" D.

# TRUVOHM MULTIMETERS BY EICO

- Designed and manufactured to EICO's stringent standards of engineering and production.
- Completely professional in quality, performance, appearance, and long-term reliability.

## MODEL 100A4

- Meter overload protected

Complete with batteries and test leads

Optional carrying case SCL-1 \$5.95



The best buy in a bench-size multimeter. With DC sensitivity of 100,000 $\Omega/V$  & AC sensitivity of 12,500 $\Omega/V$ , the 100A4 combines extremely minimal circuit loading with functional utility. Silicon diodes prevents accidental overload of meter movement. DC VOLTAGE: 0-500mV, 2.5, 10, 50, 250, 500 and 1000 volts. AC VOLTAGE: 0-2.5, 10, 50, 250 and 1000 volts. DC CURRENT: 0-10, 250 $\mu A$ ; 2.5, 25, 250mA; 10 Amp. RESISTANCE: 0-20K; 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 1/2" H x 5 1/4" W x 3 1/4" D.

## NEW! MODEL 100C3

Complete with batteries and test leads

- Taut band meter overload protected



Laboratory type wide range instrument in a compact case. Features 100,000  $\Omega/V$  DC and 10,000  $\Omega/V$  AC sensitivity, 8.5  $\mu A$  taut band meter movement (overload protected) and a low 0.3 volt DC range for testing semiconductor circuits. Measure resistance to 200 megohms using built-in battery. DC VOLTAGE: 0-0.3, 1.2, 6, 30, 300 at 100K ohm/V; 0-600, 3000 at 20K ohm/V. AC VOLTAGES: 0-6, 30, 120, 300, 600 at 10,000 ohm/V. DC CURRENT: 0-12  $\mu A$ , 600 $\mu A$ , 12 ma, 300 ma. RESISTANCE: 0-2K, 20K, 200K, 200 Meg. CAPACITANCE: 0-0.01, 0.2  $\mu F$ . DECIBELS: -20 to +58 dB. SIZE 5 1/4" H x 3 3/8" W x 1 1/8" D.

## MODEL 30A4

- Meter overload protected

Complete with batteries and test leads

Optional carrying case SCL-3 \$2.95



Laboratory precision and professional versatility. This laboratory-type, wide-range multimeter has a mirror-back scale,  $\pm 1\%$  temperature-stabilized resistors, and double-jewelled  $\pm 2\%$  D'Arsonval meter movement protected against accidental overload. For minimal circuit loading, has 30,000 $\Omega/V$  DC and 10,000 $\Omega/V$  AC characteristics. Separate input for measuring AC voltages in presence of DC. DC VOLTAGE: 0.06, 3, 12, 60, 300, 600, 1200, 3000 volts. AC VOLTAGE: 0-6, 30, 120, 600, 1200 volts. DC CURRENT: 0-30 $\mu A$ ; 0-6, 60, 600 mV. RESISTANCE: 0-10K, 1M, 10M, 100M. DECIBELS: -20 to +63 in 5 ranges. SENSITIVITY: 30,000 ohms/volt DC; 10,000 ohms/volt AC. SIZE: 5 7/8" H x 3 3/4" W x 1 1/4" D.

## MODEL 30A3

- Meter overload protected

Complete with batteries and test leads

Optional carrying case SCL-2 \$2.95



Has all the professional features of a fine high-priced multimeter including an anti-parallax mirror-back scale, double-jewelled  $\pm 2\%$  D'Arsonval meter,  $\pm 1\%$  temperature-compensated precision film resistors, and 30,000 $\Omega/V$  DC and 14,000 $\Omega/V$  AC characteristics. Meter 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 1200V. AC VOLTAGE: 0-12, 60, 300, 1200V. DC CURRENT: 0-60 $\mu A$ ; 12, 300mA. RESISTANCE: 0-10K, 1M $\Omega$ , 10M $\Omega$ . DECIBELS: -10 to 23. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  of full scale. SENSITIVITY: 30,000 $\Omega/V$  DC; 14,000 $\Omega/V$  AC. SIZE: 5 1/8" H x 3 3/8" W x 1 1/8" D.

## MODEL 20A4

Complete with batteries test leads and carrying case

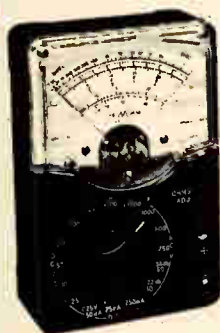


Versatile instrument with lever type range selector switch. Read voltage, current and resistance accurately on each of the 18 precise ranges. Easy-to-read 3" meter. The 20,000 $\Omega/V$  DC meter and 10,000 $\Omega/V$  AC section can be used without disturbing most circuits. Read resistance accurately to 60 megohms. DC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 20,000 $\Omega/V$ . AC VOLTAGE: 0-5, 25, 100, 500, 1000 volts at 10,000 $\Omega/V$ . DC CURRENT: 0-50 $\mu A$ , 0-5, 50, 500 ma. RESISTANCE: 0-6 K $\Omega$ , 0-600 K $\Omega$ , 0-6 M $\Omega$ , 0-60 M $\Omega$ . DECIBEL: -20 to +64 db. SIZE: 4 5/8" H x 3 W x 1 1/4" D.

## MODEL 20A3

Complete with batteries and test leads

Optional carrying case SCL-2 \$2.95



Packs 16 ranges for measurements in custom-molded high impact case. With 20,000 $\Omega/V$  DC & 10,000 $\Omega/V$  AC characteristics, it's ideally practical for general and accurate service. Easy-to-read meter has a rugged double-jewelled D'Arsonval movement. DC VOLTAGE: 0-0.25, 2.5, 10, 50, 250 & 1000 volts. AC VOLTAGE: 0-10, 50, 500 and 1000 volts. DC CURRENT: 0-50 $\mu A$ ; 25, 250mA. RESISTANCE: 0-7000 ohms, 700K $\Omega$ , & 7 megohms. DECIBELS: -10 to +36 db. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  of full scale. SENSITIVITY: 20,000 $\Omega/V$  DC; 10,000 $\Omega/V$  AC. SIZE: 5 1/8" H x 3 3/8" W x 1 1/8" D.

## MODEL 4A3

Complete with batteries and test leads

Optional carrying case SCL-2 \$2.95



This pocket portable is a versatile general utility instrument. Make readings easily on all 14 ranges. Large meter face. High-impact plastic case. DC VOLTAGE: 0-10, 50, 250, 1000 volts. AC VOLTAGE: 0-10, 50, 250, 500, 1000 volts. DC CURRENT: 0-250 $\mu A$ , 10mA, 250mA. RESISTANCE: 0-20K, 2 Meg. DECIBELS: -20 to +62 db. ACCURACY: DC  $\pm 3\%$ , AC  $\pm 4\%$  of full scale. SENSITIVITY: 4000 $\Omega/V$  DC; 2000 $\Omega/V$  AC. SIZE: 4 1/4" H x 3 3/8" W x 1 1/8" D.

## MODEL 1A1

Complete with batteries and test leads



The go-everywhere shirt-pocket instrument for the busy technician/hobbyist. Rugged double-jewelled D'Arsonval meter &  $\pm 1\%$  stabilized resistors are cushioned in high-impact plastic case. DC VOLTAGE: 0-10, 50, 250, 1000 volts. AC VOLTAGE: 0-10, 50, 250, 1000 volts. DC CURRENT: 0-1, 100mA. RESISTANCE: 0-100,000 ohms. SENSITIVITY: 1,000 $\Omega/V$  AC & DC. SIZE: 3 1/2" H x 2 3/8" W x 1 1/8" D.

EICO ELECTRONIC INSTRUMENT CO., INC.  
283 Malta Street, Brooklyn, N.Y. 11207

If not deliverable, do not return.



## CATALOG

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

Printed in U.S.A.

REQUESTED THROUGH POPULAR ELECTRONICS

ISSUE

ITEM

Bulk Rate  
U.S. Postage  
**PAID**  
Flushing, N.Y.  
Permit No. 575

# NEW EICO 7723

## Compact 23 Channel Mobile CB 2-Way Radio With Full Power and Performance Features!



- **SYNTHESIZED 23-CHANNEL OPERATION**  
No additional crystals required
- **DUAL-CONVERSION RECEIVER**  
Provides better sensitivity, selectivity
- **ACTIVE AUTOMATIC GAIN CONTROL**  
Prevents fading, blasting
- **FULLY-VARIABLE SQUELCH**  
Keeps receiver quiet in the absence of incoming signals
- **POSITIVE OR NEGATIVE GROUND**  
Use with ANY 12VDC Automobile, Camper, or Truck

The EICO 7723 is compact but loaded with deluxe operating and performance features. Solid State throughout, with innovations such as diode send/receive switching (no relays) and push pull audio for big sound with low battery drain. In addition to the features above, you'll find a large 1 1/4" dual function meter providing constant S-meter service in the receive mode and RF monitoring when in transmit. A convenient front panel switch converts the 7723 to a power amplifier for public address use essential in any emergency. You'll have the advantages of a full-size plug-in microphone, back lit channel selector, on-the-air LED indicator and built-in

automatic noise limiting. Supplied with mounting bracket, power cord, and step-by-step installation instructions.

### SPECIFICATIONS:

Frequency: 23 Channels, 27 MHz, synthesized circuit,  $\pm 0.005\%$  tolerance. Power Input to Final Stage: 5 watts. RF Power Output: 4 watts (FCC Maximum). Receiver: Dual-Conversion superhetrodyne circuit. Sensitivity: 1 uv for 500 MW output & 10db S/N ratio. AGC: 80db. Audio Output: More than 3W at 10% distortion. Size: (HWD) 1 3/4" x 5" x 8 1/2" Wt: 3 lbs.

Distributed by