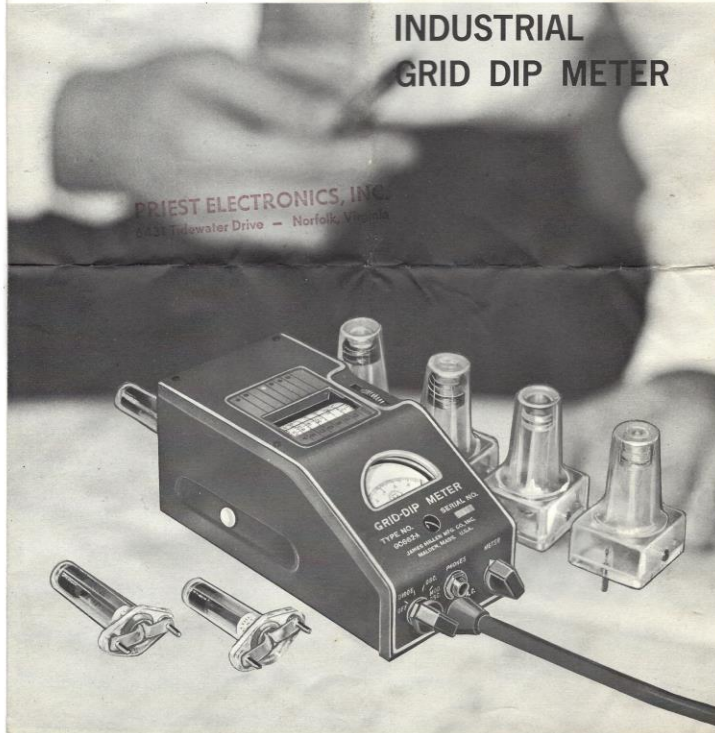




# JAMES MILLEN MANUFACTURING COMPANY, INC.

## LABORATORY and INDUSTRIAL GRID DIP METER



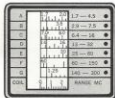
### SINGLE HAND-HELD GRID DIP METER



**CONVENIENT**, one-hand operation permits thumb-setting on any segment of its frequency range; frees second hand.

### HAND-CALIBRATED

**EACH DIAL** is individually calibrated by hand to assure extremely precise settings and highly accurate readings on seven scales.



### EASY-TO-READ 1-MILLIAMPERE METER



**RUGGED METER** is placed on the distinctive, sloping panel for maximum reading accuracy from the large, easy-to-read scale.



### PROTECTION FOR COILS AND PROBES



**FORM-FITTED**, individual molded covers completely enclose the coils and probes for assurance of permanence of calibration.

### DESIGNED FOR BATTERY USE

**CONNECTIONS** are available for battery operation when used away from A.C. power lines; i.e. antenna installations and measurements.



# JAMES MILLEN



## 90662-A INDUSTRIAL GRID DIP METER

*"Designed for Performance"*

### Laboratory and Industrial Grid Dip Meter

The No. 90662-A Industrial and Laboratory Grid Dip Meter is hand calibrated from 225 KC. to 300 MC. Calibration accuracy is  $\pm 0.5\%$ . Frequencies from 1.7 MC. to 300 MC. are directly calibrated on a large easily read drum dial. Seven plug-in inductor/probes with molded contour-fitting protective covers are used to cover the frequency range from 1.7 to 300 MC. In addition, four plug-in low frequency inductor/probes cover the frequency range of 225 KC. to 2 MC. The calibration of the low frequency coils is plotted on a sealed plastic-protected card, using the linear logging scale on the drum dial.

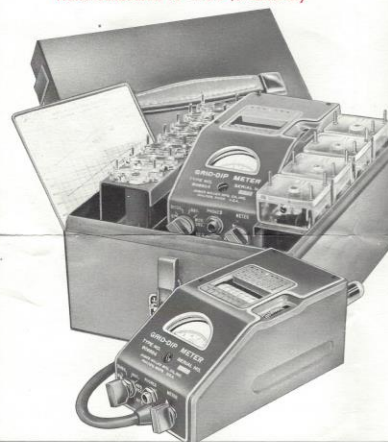
Full scale meter deflection and controllable sensitivity are provided by a rugged 1 ma. meter and a transistor d.c. amplifier. Meter deflection is controlled by a knob on the panel. Full scale deflection and maximum sensitivity are provided at all frequencies throughout the range of 225 KC. to 300 MC.

The No. 90662-A contains a built-in transistor tone modulator. A panel knob selects the mode of operation: Off, Diode Wavemeter, Oscillating Grid Dip Meter, Modulated Oscillating Grid Dip Meter.

The No. 90662-A incorporates features desired for both industrial and laboratory application, including accurate calibration, full frequency range, excellent sensitivity at all frequencies, modulation, easily read dial, three wire grounding-type power cord and suitable carrying case.

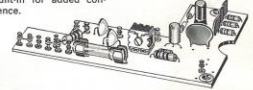
The Milten Industrial Grid Dip Meter is a calibrated stable RF oscillator with a d.c. amplifier and a rugged one milliamperemeter to read grid current. The frequency determining coil is plugged into the unit so that it may be used as a probe. It is complete with a built-in transformer type A.C. power supply and internal terminals to provide connection for battery operation where it is desirable to use the unit on antenna measurements and other usages where A.C. power is not available. Compactness has been achieved without loss of performance or convenience of usage. The incorporation of the r-f oscillator, power supply, d.c. amplifier, modulator, indicator, and probe into a single one hand held unit provides maximum convenience for checking all types of circuits.

Frequency coverage from 225 k.c. to 300 m.c.  
Hand-calibrated to  $\pm 0.5\%$  accuracy



### TRANSISTOR DC AMP AND BUILT-IN MODULATOR

MILLEN designed amplifier for maximum sensitivity on all coil ranges. Modulator is built-in for added convenience.



**PRINTED CIRCUITRY**  
**UNIQUE** Milten design utilizes modern circuitry without loss of performance.

### G.E. LEXAN BACK PLATE

**MODERN**, high impact strength low-loss back plate molded of G.E. Lexan. Will withstand rough use without cracking or breaking. Molded Lexan polycarbonate plate offers greatly improved toughness while maintaining low r.f. losses.



### U/L APPROVED, INDUSTRIAL CONNECTOR



**5-FT. CORD**, 3-prong plug is excellent for heavy-duty industrial use, and small enough to fit standard duplex receptacle.



### No. 90672 ANTENNA BRIDGE

The 90672 Antenna Bridge is an r-f bridge which uses a Grid Dip Meter as a source of signal. It is a sensitive bridge for measuring impedances in the range of 5 to 500 ohms for unbalanced impedances and 20 to 2000 ohms for balanced input (using baluns) at radio frequencies up to 140 MC. Baluns available for measurement of balanced loads.



### No. 90651 STANDARD GRID DIP METER

For use by radio amateurs and servicemen. The No. 90651 Grid Dip Meter covers the frequency range of 1.7 to 300 MC. with a printed dial scale and calibration accuracy of  $\pm 2\%$ . D.C. amplifier, modulator, and carrying case not supplied. Low frequency coils separately available.

### No. 90661 INDUSTRIAL GRID DIP METER

The No. 90661 Grid Dip Meter covers the frequency range of 1.7 to 300 MC. and is hand calibrated with calibration accuracy of  $\pm 0.5\%$ . It is supplied with a carrying case and three wire grounding type power cord. D.C. amplifier, modulator, and low frequency coils are not supplied although a plug-in modulator and low frequency coils with  $\pm 2\%$  calibration are available separately.

