

INSTRUCTION MANUAL

WM-3000

PEAK READING WATTMETER



305 Airport Road, Oceanside, California 92054 U.S.A.

CONGRATULATIONS.

One of the finest, high quality wattmeters available today is now with you. To fully appreciate the features and efficient operation available with your new wattmeter, we recommend you study the instruction manual thoroughly prior to operation.

GENERAL:

The WM-3000 is a precision built thru-line wattmeter providing P.E.P. and R.M.S. power indication.

Our newly designed flat frequency response directional coupler enables you to read forward power (from transmitter to antenna) and reflected power (from antenna to transmitter) with maximum accuracy from 3.5 MHz to 30 MHz.

UNDERSTANDING P.E.P.

With an S.S.B. transmitter, the output power occurs only sporadically during voice transmission and has no direct relationship between the peak and average power, the ratio of peak to average power varies widely with voices of different characteristics.

The power contained in the signal at the maximum peak is the basic transmitter rating. It is called the "peak envelope power," P.E.P. for short. This makes the Peak Reading Wattmeter essential for S.S.B.

General power meters indicate average or RMS (root mean square) value and calibrated by using a continuous sine-wave signal which a voice-modulated signal definitely is not. Such a power meter means little in peak envelope power of S.S.B.

SPECIFICATIONS:

Measuring method	Directional coupler
Power Range	0 — 200, 500, 1000, 2000 W
Impedance	50 ohm
Measuring accuracy	7%
Frequency range	3.5 — 30 MHz
Connector	SO-239
Power source, SSB only	117 V A.C. \pm 10%
Dimensions	8"W x 4"H x 5.2"D

INSTALLATION:

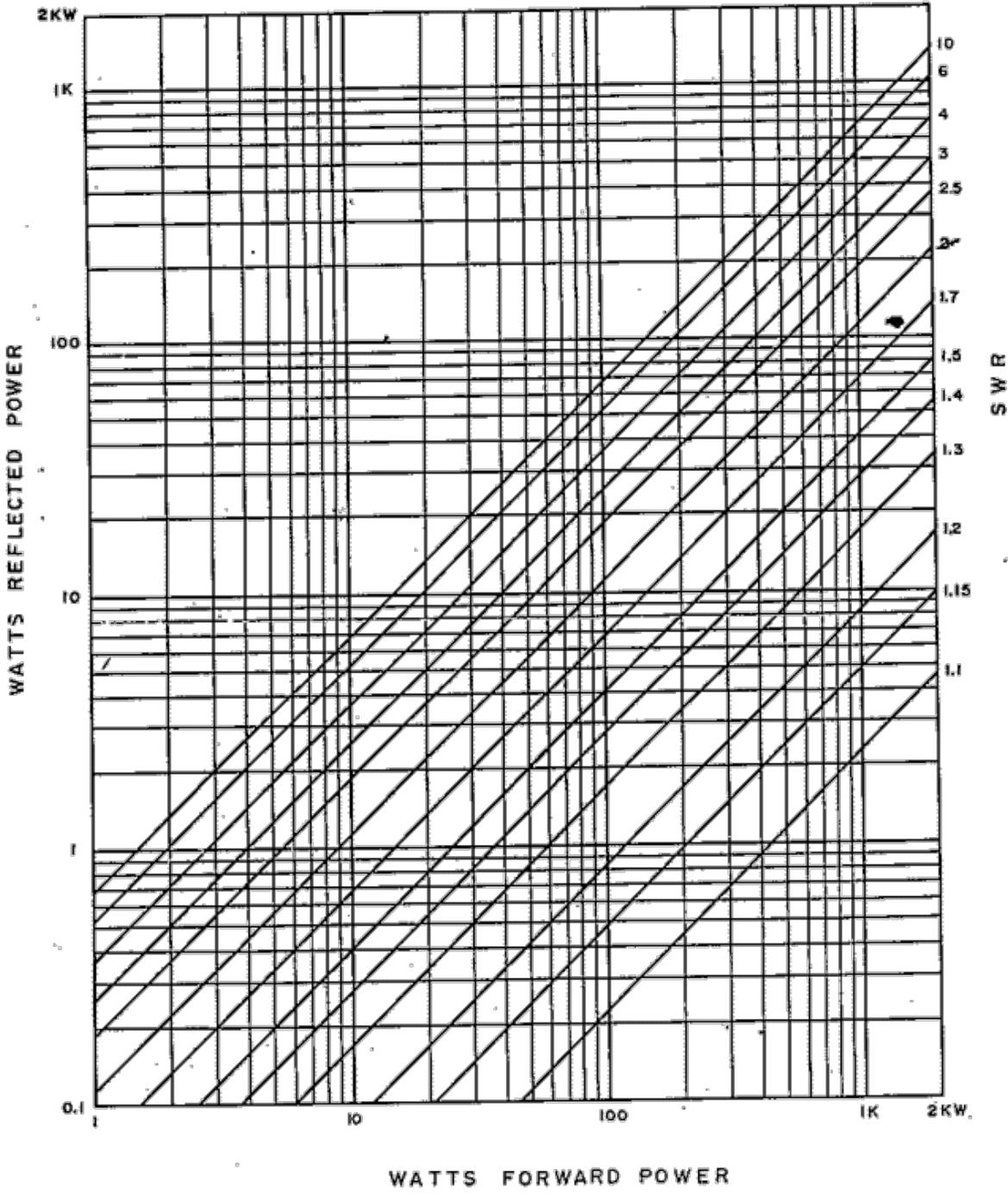
Installation of this unit is simple and the same as other thru-line wattmeters, except it requires a 117 volt A.C. source for peak indication.

Connect the antenna coax cable to the "ANTENNA" receptacle of this unit and connect a short coax jumper between the "TRANSMITTER" receptacle and the transmitter output.

POWER SOURCE:

This WM-3000 requires a 117VAC power source for peak readings. The power transformer has three taps on the primary for operation with 117, 100, or 230 volt A.C. supplies.

Remove the wire on tap No. 3 to No. 4 for 230 volt A.C., and to No. 2 for 100 volt A.C.



REPRODUCED FROM THE PROCEEDINGS OF THE IRE TRANSMISSION AND PROPAGATION GROUP, APRIL 1954, P. 100. BY PERMISSION OF THE IRE.