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PM2000A Wattmeter

Owner's Manual



SPECIFICATIONS

METER RANGE:	300 AND 3000 WATTS ranges
MAX POWER RATING:	2000 WATTS
FREQUENCY RANGE:	1.8 to 60 MHz
DIMENSIONS:	4.5"W x 3.5"D x 4.5"H Meter
WEIGHT:	1.3 LB

INSTALLATION

Install your PM2000A base wattmeter between the transmitter and any antenna tuner. If the antenna is cut for the right frequency and a tuner is not required, connect the PM2000A output directly to the antenna.

12 Volts at 40-50 ma is required to power the metering circuitry and lamp. Power Jack requires a 2.1 mm plug, center positive.

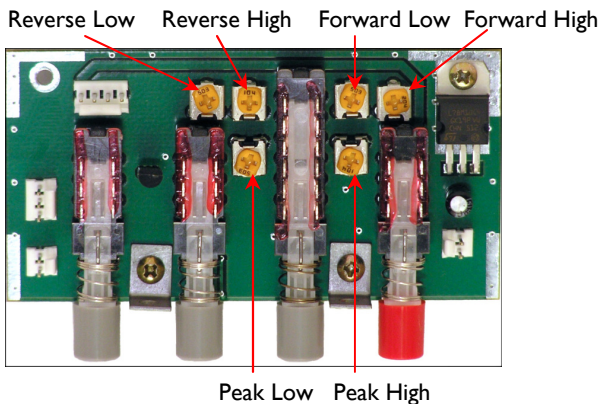
OPERATION

Select the proper meter range (300 or 3000W) for your operating power using the front panel push button. The cross-needle meter displays forward and reflected power, and SWR is indicated on the Red scale where the needles intersect.

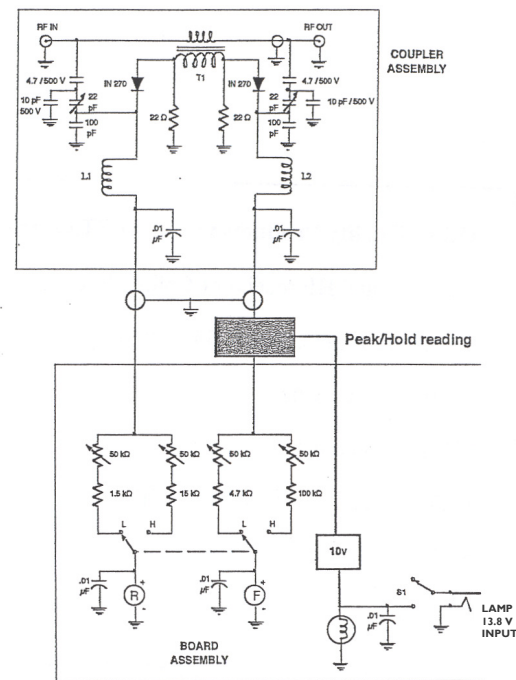
PEAK READING

The PM2000A is capable of reading peak values in the SSB mode. Depressing the front panel button PEAK to read peak will activate the active circuitry and the meter will exhibit fast attack and a delay of about 1-1.5 secs. The peak value will be about 95-100% of peak SSB power. Depending on the voice characteristics this may be higher.

Single tone as it reads on the meter will read the same in peak mode as single tone power (average) equals single tone in peak mode. This is the way you check to see if the CW single tone power in the AVG position will be the same in the peak mode. There are 2 level controls that you can adjust if these readings are not the same in either the 300 watt or 2000 watt



PM2000A BASE WATTMETER SCHEMATIC



range. The PEAK/HOLD button, if depressed, will read PEAK and hold at the peak value for approximately 2 seconds . NOTE: the PEAK/AVG must be depressed in order for PEAK HOLD to function properly.

CALIBRATION

(Calibrated at factory, only required if factory settings are changed.)

Terminate the wattmeter in a known 50Ω dummy load through a calibrated Wattmeter of known accuracy.

Set the range to 300W. Feed a continuous signal of 100 Watts. If the level is either low or high compared to the

calibrated Wattmeter, adjust the Forward Low pot in the figure below to match the readings. As single tone equals peak, adjust Peak Low for same reading.

Similarly, on the 2000W scale, feed 500 Watts to read on the calibrated Wattmeter and adjust the Forward High pot to read the same. Set Peak High adjust for same reading. Since you are feeding a 50Ω load, the Reverse High and Low pots should be adjusted for a reading of zero.