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# PM2000A Wattmeter

# **Owner's Manual**



#### **SPECIFICATIONS**

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

4.5"W x 3.5"D x 4.5"H Meter Alodine plated aluminum case

I.3 LB

#### **INSTALLATION**

WEIGHT:

Install your PM2000A base wattmeter before any antenna tuner. This will give you an accurate means to measure the SWR of the antenna system. If the antenna is cut for the right frequency and a tuner is not required, connect the PM2000A as above.

An AC adapter is used to light the meter & power the peak reading circuitry, 12 Volts required at 40-50 ma. A 12v wall transformer is supplied with the wattmeter (For US only). Power Jack requires 2.1 mm plug center +.

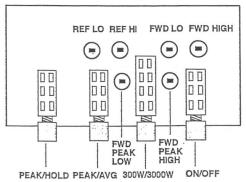
#### **CALIBRATION**

(not required as shipped)

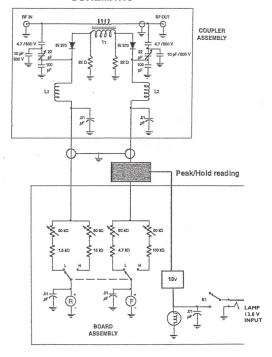
Using a calibrated source, adjust the meter calibration as follows: Terminate the wattmeter ins a known  $50\Omega$  dummy load through a calibrated wattmeter of known accuracy.

Pick a level on the 300 watt scale of the PM2000A of 100 watts. If the level is either low or high compared to the calibrated wattmeter adjust the pot on the 300 watt scale as noted in the drawing below to match the readings. As single tone = peak, same adjust for peak reading. Similarly on the high scale pick 500 watts to read on the calibrated wattmeter and adjust the forward 3000 watt pot to read the same on your PM2000A base wattmeter. Peak adjust as above for high power settings.

#### PC Board



## PM2000A BASE WATTMETER SCHEMATIC



#### 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 add if these readings are not the same in either the 300 watt or 3000 watt range. The PEAK/HOLD button if depressed will read PEAK in addition to holding at the peak value for 2 seconds approximately. NOTE: the PEAK/AVG must be depressed in order for HOLD to function properly.