

SWR/WATT METER

SWR-4, SWR-5 User Manual

PRODUCT MAIN FEATURE

This wattmeter series offer many innovative features typically not found at this price level

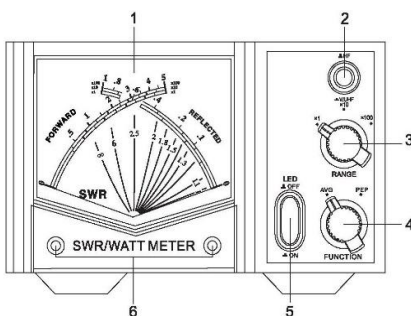
- DC Grounded Antenna connector prevents electrostatic buildup
- True Directional Coupler increases accuracy
- Low Bias Schottky Diode Detector increases linearity
- Precision, large (104mm) Cross 'X' Meter simultaneously displays FWD/REF/SWR
- Individual Meter Scale for each power range increases reading accuracy
- LED backlighting
- Three Color Scale for improved readability
- Rugged metal cabinet with speckled black finish and designer style grey injection molded front panel aesthetically complements modern transceivers
- DC Power Cable Included.
- Precision True Active PEP Circuit (for SWR-4 only)

SPECIFICATION

Model	SWR-4	SWR-5
Frequency Range	1.6~60 MHz (6m/HF)	1.6 - 525 MHz (Duel sensors)
Power Range	0 - 2KW	0 - 200W
Power Scale	20/200/2KW	2/20/200W
Maximum Power	2KW	200W
Accuracy	± 10% of Full Scale or better	
Insertion loss	Less than 0.2dB	
Min. Power (Forward)	1W	
Testing Function	Forward, Reflected Power, SWR, PEP (Active PEP SWR-4)	
Input/Output Impedance	50 ohm	
Input/Output Connectors	SO-239 M type	SO-239 M type
Input power	9-14 VDC 200 mA maximum	
Dimension (W/H/D)	184 (W) x 118 (H) x 131 (D) m/m	
Weight (Net)	900 g	1,070 g

OPERATION

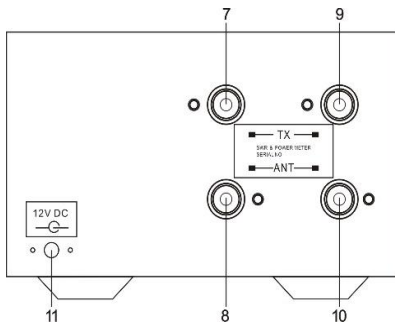
<FRONT PANEL>



<DESCRIPTION>

1. Indicator Display : Indicates FWD/REF power in watts and VSWR ratio
2. HF/VU HF band switch (black, round push button) : Select HF (out) or VUHF (depressed). Available on SWR-5 only.
3. Range switch : Selects RF power range 2W, 20W, 200W
4. AVG/PEP switch : Select Average or SSB PEP
5. Elliptical ON/OFF push button : LED backlight ON/OFF
6. Zero adjust screw of analog cross needle meter

<REAR PANEL>

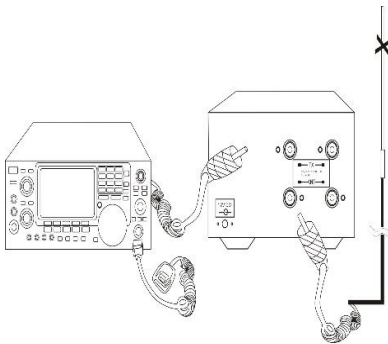


<DESCRIPTION>

- 7. TX connector : Coax connector to transmitter 50 ohm RF output
- 8. ANT connector : Coax connector to 50 ohm antenna system
- 9 & 10. : 2nd pair of TX/ANT connector : Available on SWR-5 only
- 11. 12V DC connection (via power supply) for meter LED illumination

Note : DC power is only required to run the meter backlight or active circuitry in SWR-4. Except SWR-4, this meter will function without DC power in the AVG mode even switch off

<INSTALLATION>



<FORWARD, REFLECTED PWR, SWR MEASUREMENT>

- A. Set the RANGE switch to the expected power level of the intended measurement
- B. In SWR-4, it corresponds to 20/200/2000 watts forward and 5/50/500 watts reflected full scale (Fwd : Ref = 4 : 1)
In SWR-5, it corresponds to 2/20/200 watts forward and 0.5/5/50 watts reflected full scale (Fwd : Ref = 4 : 1)
- C. (Push or release) the HF/VUHF band push knob (black/round button) to the frequency of the intended measurement (corresponds to SWR-5 only)
- D. Set the radio transceiver to transmit mode and read the scale corresponding to the RANGE selected
- E. When switch to 'AVG', the meter reads average RF power. When switch to 'PEP', the meter reads Peak Envelope Power for use with SSB and AM transmissions. In this mode, there will be a slow rise and decay time
- F. Push LED ON/OFF button when LED light is needed (in SWR-4, it also activate PEP active mode)

[CAUTION]

- 1. Since the meter movement is very sensitive, avoid excessive vibration or mechanical shock
- 2. Watch absolute maximum power could be applied to the meter by different models you bought
- 3. The meter must never be reverse connected. Always observe the correct connections to transmitter and antenna as indicated on the rear sockets
- 4. Do not expose the meter to excessive temperatures, high humidity, or strong magnetic fields
- 5. Contact your local dealer for service

CE / RoHS

Designed in Taiwan