



SWR/POWER METER USER MANUAL

Model : RX-27, RX-103, RX-203, RX-403, RX-503

INTRODUCTION

This SWR & POWER meter is a highly accurate RF meter for measuring Forward Power, Reversed Power, & VSWR.

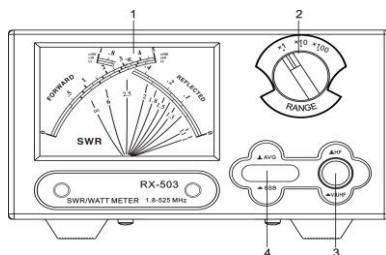
Main Features:

1. Large cross needle meter display simultaneously Forward and Reversed power with SWR
2. Forward RF power readings (switchable to indicate either average power or Peak Envelope Power for SSB and AM transmitters), reversed RF power readings, and VSWR ratio.
3. True Directional Coupler for increased accuracy over frequency
4. LED Backlighting provides smooth, even illumination for ease of reading
5. Three Color Scale for improved readability

SPECIFICATIONS

MODEL	RX-27	RX-103	RX-203	RX-403
Frequency Range	26-30 MHz (27 MHz cal.)	1.6 - 60 MHz	1.8 - 200 MHz	125 - 525 MHz
Power Range	0 - 2KW	0 - 2KW	0 - 200W	
Power Scale	20/200/2KW	20/200/2KW	2/20/200W	
Maximum Power	2KW	2KW	200W	
Accuracy : LOW power	(AVG) +/- 10%, (PEP) +/- 15%			
Accuracy : HIGH (2) power	(AVG) +/- 5%, (PEP) +/- 10%			
Minimum Power for SWR	1-3W (varied by model)			
Input/Output Connectors	M type			M or/and
Weight (Net)	770 g	780 g	790 g	800 g
Insertion Loss	Less than 0.1 dB			
Testing Function	Fwd/Rev Power, PEP, SWR			
Input/Output Impedance	50 OHM			
Dimension (W/H/D) mm	140 x 84 x 122			
Accessories	Operation Manual, 13.8 DC Wire			

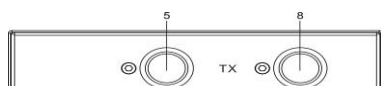
<FRONT PANEL>



<FRONT & REAR PANEL>

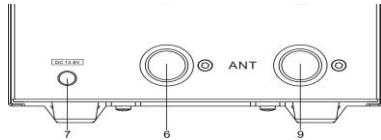
1. Meter Display : Indicates FWD/REV power in watts
2. Range switch : Selects RF power range multiplier x
3. HF/VUHF band switch (round push button) : Select HF or VUHF (depressed). Available on RX-503 only.
4. AVG/SSB (elliptical push button) : Selects Average Power (depressed) PEP RF Power readings

<REAR PANEL>



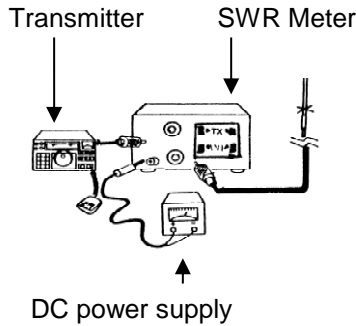
<REAR PANEL>

5. TX connector : Coax connector to transmitter 50 ohm
6. ANT connector : Coax connector to 50 ohm antenna
7. 13.8V DC connection (via power supply) for meter LED

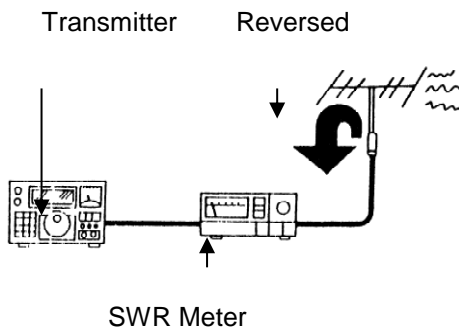
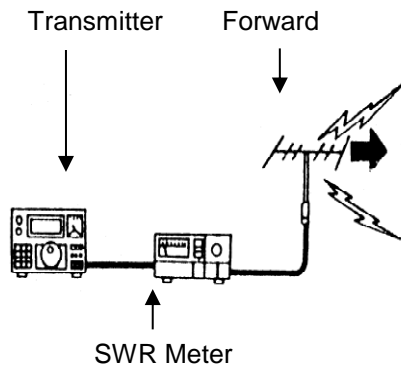


(watch out the LED wire must be correctly connecte
 Black to '-'. Wrong connection will cause LED burn
 8 & 9. 2nd pair of TX/ANT connector : available on RX-

<INSTALLATION>



<OPERATION>



<FORWARD POWER MEASUREMENT>

<REVERSE POWER MEASUREMENT>

<VSWR MEASUREMENT>

1. Set the RANGE switch to the proper meter multiplier the expected power level of the intended measurement corresponds to 20/200/2K Watts forward and 5/50/5 full scale. On RX-203,403, 503 this corresponds to 2 forward and 0.5/5/50W watts reflected full scale.
2. Set the HF/VHF band switch (round push button) to the intended measurement (this corresponds to R)
3. Set the radio transceiver to transmit mode and read corresponding to the RANGE selected
4. When the AVG/PEP button is 'out', the meter reads When the button is 'depressed', the meter reads P_{avg} for use with SSB and AM transmissions. In this mod slow rise and decay time.
5. The beauty of cross needle meter is Forward, Reverse can be read simultaneously.

[CAUTION]

1. Since the meter movement is very sensitive, avoid excessive mechanical shock to the meter.
2. Watch the absolute maximum power could be applied different models you bought.
3. The meter must never be reverse connected. Always connections to transmitter and antenna as indicated
4. Do not expose the meter to excessive temperatures, strong magnetic fields.

Power [PEP],

RX-503
1.8 - 525 MHz
Standard N type
950 g

and VSWR ratio

1, x 10, x 100

HF (out) or

(out) or SSB

1 RF output

1 system

.ED illumination

