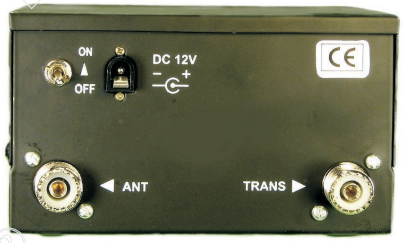
# SX-144/430 SWR POWER METER

This SWR power meter is a measurement isntrument with high performance. It can measure Forward Power (Pf), Reflection Power (Pr) and SWR simultaniously when testing and QSO transmitting. There are two scales to be optional. The antenna SWR can be read out directly at the cross point of two scales of two pointer.

FRONT PANEL



REAR PANEL

**Specifications:**

Frequency Range: 120 - 500 MHz
Imput/Output Impedance: 50Ω
Power Range: 0 at 500W
Forward / Reflection power ratio: 5:1
Forward Power: 10W/100W/500W (3 steps)
Reverse Power: 2W, 20W, 100W (3 steps)
Power measuring accuracy: ±10% (F.S.)
Meter Illumination: 12 VDC
Weight: 600 g
Size (LxBxH): 130 mm x 140 mm x 80 mm
Note: This meter does not cover the CB frequencies.

**Accessories Included**

Instruction Manual (1)
Special connecting wire (1)

**Connections:**

SO-239: for Antenna Coax
SO-239: for Transmitter Coax Jumper
DC-12V: for 12V power cord connect's to 12V power supply/source (Included) for Lighted Meter

**Controls:**

3 Position Range Control: 10W, 100W, 500W
Backlight of Meter: ON/OFF mini toggle switch (located on rear panel)

**Operation**

- The virtual load of 50Ω can be use to obtain precision power measurement.
- The forward power is indicated on the left-hand scale.
- The reflection power is dindicated on the righ-hand scale.
- The SWR can be read out at the corssing point of corresponding red line of two pointer.

**Mathematical verification**

$$\frac{\sqrt{Pf} + \sqrt{Pf}}{\sqrt{Pf} - \sqrt{Pf}}$$

Pf= Forward Power
Pr= Reflected Power

Calculate the effective transmission power by subtracting Reflection Power (Pr) from Forward Power (Pf).
At “100W” and “500W” steps, the dial scale value multiplies 10 and 50 respectively to get power reading of 100W and 500W.
Connect 12VDC power source to 12 VDC plug, the meter light will iluminate (Suitable to use in dark place). The red wire to “+” terminal and black wire to “-” terminal.