### MFJ-816 Instruction

Thank you for purchasing the MFJ-816 HF SWR Wattmeter. The MFJ-816 measures forward power, reflected power and SWR. The wattmeter measures power on two scales, 30 watts and 300 watts. The MFJ-816 is usable from 1.8 MHz thru 30 MHz.

#### Installation

- 1. Connect of a coax cable from the transmitter to the TRANSMITTER  ${\bf Coax}$  connector of the MFJ-816.
- 2. Connect the antenna cable to the ANTENNA coax connector of the MFJ-816.

Operation 1. To Measure SWR:

Set the push button to the FWD/SET position. Transmit a continuous carrier and set the SWR/POWER control for a full scale deflection on the meter. Set the push button to the REF/SWR position and read the SWR.

Note: The SWR sensitivity must be reset when power level is changed. This will maintain and accurate SWR reading.

### 2. To Measure Power

# 300 Watt Scale

Set the SWR/POWER control to the 300 mark. Set the push button to the FWD/SET position to read forward power and to REF/SWR to read reflected power. This scale reads maximum of 300 watts.

# 30 Watt Scale

The 30 watt scale can be used to measure forward and reflected power up to 30 watts. To measure forward power, set the push button to the FWD/SET position. To measure reflected power, set the push button to the REF/SWR position.

The 30 Watts position is not calibrated at the factory because of variations due to components tolerance. To calibrate the 30 watt scale, follow this procedure: Set the push button to the FWD/SET position and the SWR/POWER control to 300. Transmit a continuous carrier and not the power level on the 300 watt scale. Power from the transmitter should be set as close to 30 watts as possible without exceeding 30 watts. This will give the most accurate calibration. Now rotate the SWR/POWER control so that the reading on the 30 watt scale is the same as what was noted on the 300 watt scale. Mark the dial for the calibrated 30 watt range.

