

# YAESU YS-60

## IN-LINE WATTMETER & SWR BRIDGE

### FOR 1.6 - 60 MHz

The YS-60 is a handsome compact measuring instrument which provides a convenient means for monitoring both average and peak transmitter power output and reflected power, and voltage standing wave ratio (VSWR) of antenna systems in two-way HF and lowband VHF radio stations. The small size and color-coordinated housing make this an ideal addition to any Yaesu transceiver, for transmitter power levels from as little 3 watts (or less for power measurements) up to 2 kilowatts. Three functions provide monitoring of either forward or reflected average transmitter output power for CW, AM, FM and FSK modes, or peak envelope power (PEP) for SSB modes, and VSWR for testing and monitoring the performance of transmitting antenna systems. The efficient, linear circuit design assures accurate measurements with less than 0.1dB insertion loss over the entire specified frequency range.

### Connections and Controls

#### (1) Meter

Five meter scales are provided, the lower three of which are marked for power measurements: 0 - 20, 0 - 200 and 0 - 2000 watts, respectively. The upper scales are for SWR measurements, with the outermost for SWR measurements with power levels more than 20 watts, and the inner of these two scales for SWR measurements at power levels less than 20 watts.

#### (2) RANGE Selector

This 3-position lever switch selects the 20-, 200- or 2000-watt power scale for average or PEP measurements.

#### (3) FUNCTION Selector

This 3-position lever switch selects POWER, CAL (calibrate, prior to swr measurement), or SWR (after calibration).

#### (4) CAL - AVG/PEP Knob

This knob serves two functions: pressing or pulling it selects AVG (average) or PEP (peak) power measuring modes, respectively; and, while in the depressed position, rotating it calibrates the meter for SWR measurements.

#### (5) POWER Selector

This 3-position lever switch selects forward (FWD) or reverse (REV) power measurement, or turns the YS-60 OFF.

#### (6) Zero Adjustment

This slotted control should be adjusted so that the meter needle rests on the

"0" scale markers while the YS-60 is switched off.

#### (7) TX Jack (indicated on label plate)

This type SO-239 coaxial jack accepts RF input directly from the transmitter, transceiver or RF power amplifier via short length of coaxial cable with type PL-259 plugs on each end.

#### (8) ANT Jack

This type SO-239 coaxial jack provides (measured) transmitter power to the antenna system. Note that the impedance of the antenna system at this point must be 50 ohms for proper operation, so an antenna matching unit, if used, should be connected between this jack and the antenna itself. A 50-ohm dummy load, if used, may also be connected here.

#### (9) DC 13.8V Supply Leads

Connect these leads to an 11 - 15V DC source for 200 mA to supply the meter pilot lamps and internal opamp circuits.



