

Avair AV-201 SWR and power meter



The metal-boxed meter is capable of working in the range 1.8-160MHz.

Whether you have just obtained your Foundation licence or have moved on, allowing the use of more power, all shacks need a power meter.

The Avair AV-201 SWR and power meter is a small, compact device suitable for amateurs at all stages of their amateur career. I say this as it is capable of reading power in ranges of <5W, <20W and <200W. It also has a small push-button switch on the back that will allow it to read up to 1kW.

The metal-boxed meter, capable of working in the range 1.8-160MHz, measures 155mm wide by 103mm deep by 63mm tall and includes a 66mm-wide direct-reading power/SWR meter.

Out of the box

On the front panel is a small meter adjustment screw for zeroing the meter, a power range switch (200W, 20W and 5W), a function switch marked POWER, CAL, and SWR, plus a Power switch marked REF, FWD and OFF.

Also on the front is a switch that enables you

to select peak (PEP) or average (AVG) power readings, plus a large knob marker "CAL", which is used for SWR calibration.

On the back is the aforementioned 1kW/200W switch, input and output SO-239 sockets, plus a socket for the supplied 13.8V power lead that enables the meter's LED illumination.

A sticker announces that caution should be taken to restrict usage to a maximum of 30 seconds for readings up to 1kW and 10 seconds for up to 3kW.

In use it is relatively easy to measure power – just switch to the appropriate power range and make sure "FWD" is selected on the power switch. Selecting FM and keying the microphone will give you a reading on the meter.

Power readings

If you wish to take a power reading in SSB mode, you have two choices. Either select "AVG" with the large blue button on the front, key the microphone and talk, or select PEP and do the same. The PEP setting dampens the meter's movement and allows a more accurate measurement when using SSB.

To take an SWR reading, it is easier to do this in CW or FM mode to give a constant carrier.

Again, selecting the appropriate power range, switch the function to "CAL", key the microphone or Morse key and adjust the meter until it reads full scale (marked by the letters "CAL" on the meter).

Then simply flick the function button to SWR, key the rig again, and read off the SWR. This process becomes second nature once you have done it a few times.

Conclusion

So all-in-all, the AV-201 is a classic, compact SWR/power meter for HF, 6m, 4m and 2m, that would fit into any shack. Its small size also makes it suitable for /P operation. Its 5W and 20W settings make it particularly suitable for Foundation licensees and QRP operators.

The AV-201 costs £59.95 and is available from Waters and Stanton in Portsmouth (<https://hamradiostore.co.uk>). Our thanks to Peter Waters, G30JV for the loan of the meter.

Steve Nichols, G0KYA
infotechcomms@googlemail.com