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## Heathkit HM-15 SWR Meter

If you have a ten dollar imported SWR meter and like it, as I do, you may wonder if a few bucks extra for the Heath HM-15 can be justified, as I did, but you may not have an opportunity to try them side by side, as I have. (They won't measure prepositional phases, so they won't really work in parallel.) Some of the Heath meter advantages that impressed me are reflected below.

Terminating resistors are supplied for both 72 and 52 ohm operation—a worthwhile provision. To change from one to the other requires removal of the chassis from the cabinet and application of a soldering iron, but this takes only a couple of minutes, and it isn't something you would do very often. The change could be made by switching, but the instant convenience gained would be too expensive in terms of added capacitance, asymmetry and associated problems which would have to be solved. It's nice to have the two impedance ranges simply and cheaply.

### Some HM-15 Specifications

**Operation:** Indicate percent of forward and reflected power, and voltage standing wave ratio.  
**Power Handling Capability:** One kilowatt of rf.  
**Impedance:** 50 or 75 ohms.  
**Frequency Coverage:** 160 through 6 meters.  
**Meter:** 100 microamperes.  
**Dimensions:** 9 1/4 x 3 5/8 x 2 5/8 inches.

The cabinet is attractive, stiff, and designed to sit prettily atop your transceiver—rubber feet on the bottom and coax connectors in the back. For mobile operation the HM-15 takes little room under the dash, and if it is mounted with screws through the cabinet top you can remove the chassis in about thirty seconds by unscrewing the two self-tappers on each end.

Besides being fun, kit-building is a relatively painless educational experience, and this is one kit you really can assemble in an evening. In fact, you can put it together, squirt your transmitter through it, check the SWR, test the surplus lengths of coax on hand, confirm the non-reactive behavior of your dummy load, roundtable for an hour (while you watch the HM-15 for evidence of carrier non-suppression) and still beat the kids to bed.

The manual is a useful bonus. A thoughtful effort has been made to explain clearly the theory and operation of SWR meters. With two charts and a couple of pages of text the manual makes the most of the benefits offered by the put-it-together-yourself approach. The limitations as well as the capabilities of SWR meters are noted, and the comments may leave you with an irresistible urge to dig out 73 articles on the taming and feeding of antennas. All to the good.

At \$14.95 the HM-15 is one of life's inexpensive necessities.

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