



DEM ABPM All Band Power Meter

10 KHz to 10 GHz low level power meter

PREFACE:

The DEM ABPM is the all band, portable power meter developed by W1GHZ and described on his web site at www.w1ghz.org/new/portable_powermeter.pdf. It is recommended reading before you start assembly of this kit. The paper titled "Portable RF Sniffer and Power Meter" discusses the compilation of designs by W7ZOI, W7PUA, WW2R, and W1GHZ then explains the evolution of the final product. The web page explains the circuits in detail providing individual test data of the power detector circuits. The page also discusses the methods of calibration, and the final use of the circuit when complete. Be sure to review the references at the end of the web page for further technical information and data sheets of the power detector chips. Other circuit designs are available at that site that will compliment is kit. Feel free to browse around for other ideas.

CIRCUIT DESCRIPTION:

Now called the DEM ABPM in the Down East Microwave Inc. catalog, is actually two individual power detection circuits combined through a simple switch connected to a bar graph voltage meter. It is all neatly place in an enclosure with a self contained battery to make a complete portable RF power detecting device that fits in your pocket. The ABPM has two individual inputs (SMA connectors) that are limited by the frequency response of the detector chips they are connected too. The Bar graph display can be operated as a running bar graph or as individual ascending / descending segments to conserve battery power. The ABPM also has an external meter connection so that more precise "measurements of change" device may be used by connecting a digital or analog voltmeter directly to the detector circuits. One of the references on W1GHZ's web site describes an audio tone indicator and how it can be used with this device.

As for the kit in general, all components, hardware, connectors, and assembly instructions are the responsibility of Down East Microwave Inc. Please call us if you find any components missing, broken, or incorrect. Please reframe from contacting W1GHZ with complaints such as fit and form or missing or damaged components. He is not employed by DEMI and has no control of company functions. DEMI has agreed to compile and distribute this kit with the original circuit board and components available from the DEMI standard inventory. If you wish to discuss circuit functions, modifications, or further uses of the circuit, Paul will be happy to, If contacted through his website at www.w1ghz.org. with any details concerning these maters. You may also drop him a line in regard to how you enjoyed this kit or any concerns on how DEMI is managing the distribution of this kit to the armature radio public.