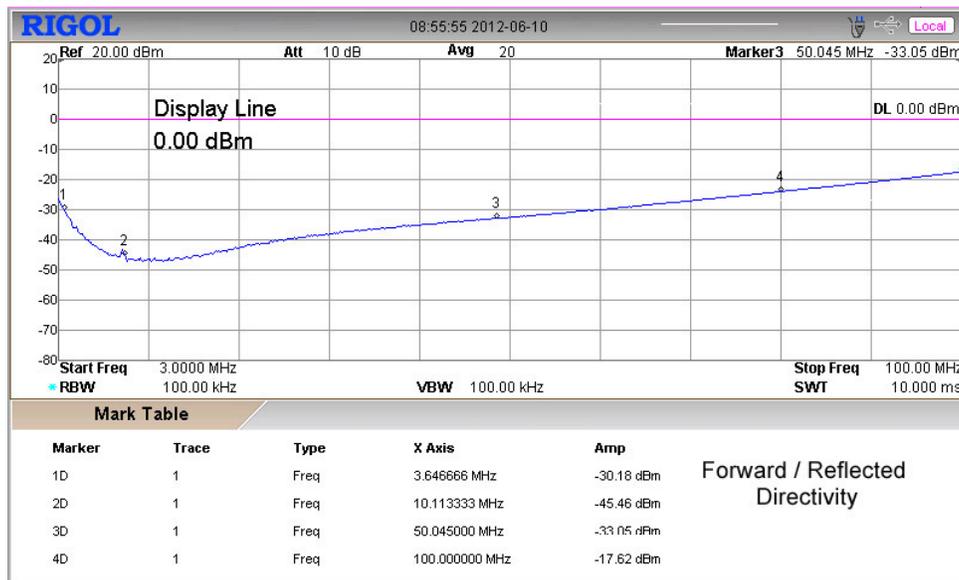




The DDC-1 dual directional coupler measures forward and reflected power of a device in a 50 ohm environment. It is more precise than a simple SWR meter since the reflected and forward power may be observed directly on an oscilloscope.

The RF IN port connects to the HF signal source. This source is normally the transmitter and or linear HF amplifier. The RF OUT connects to a 50 ohm load. This load can be a transmission line, antenna, or a dummy load. When the load completely absorbs the energy from the signal source, little if any power is reflected, thus, the signal output from the REFLECTED port is very low. The signal out of the FWD port indicates the amount of power (-30 dB) going to the load.



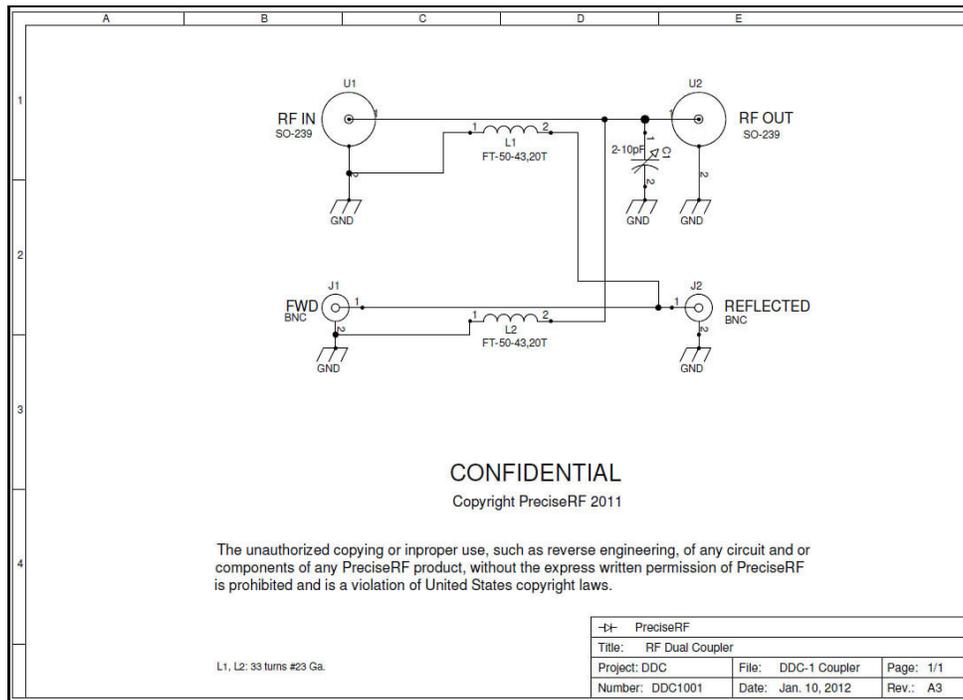
### Specifications

Max input power:	1,500 Watt PEP crest factor 4:1
Insertion loss:	Negligible (< .1 dB)
Bandwidth REFLECTED:	1-100 MHz
Bandwidth FWD:	1-100 MHz
VSWR:	1.1:1 or better
Return Loss:	> -25dB
Coupling:	FWD and REFLECTED port -30dB +/- 2db
Directivity:	>30dB typically (see Directivity Graph)
Connectors RF IN/OUT	SO-239
Connectors FWD/REFLECTED:	BNC
Dimensions:	Weight: .25lbs Dimensions: 2.5 x 1.4 x 1.2 in
Applications:	Measuring reflected and forward power with an oscilloscope of transmission lines, antennas and other 50 ohm loads.



Each DDC-1 Dual Directional Coupler comes completely assembled in a premium shielded die cast aluminum alloy A380 housing. The housing is blue baked enamel per Federal Standard 595 #25109 over primer wash per DOD-P-15328.

While carefully calibrated at the factory, the DDC-1 may be custom calibrated to meet your special application by adjusting C1. **CAUTION:** This calibration is only recommended for users who are skilled in making precision high frequency spectrum analyzer and tracking generator measurements.



All products are calibrated and tested to meet or exceed published specifications. The optional NIST calibration certificate is provided for users needing a calibration reference showing the actual performance achieved. This calibration is done using NIST traceable instruments. Some test and measurement equipment was calibrated at the PrecisionRF laboratory using NIST traceable instruments. The item calibrated may be used as a calibration reference only, and shall not be used as a NIST calibration standard. This certificate shall not be reproduced without the express written permission from the calibration facility.

PrecisionRF warrants its products to be free from defects in material and workmanship for one (1) year from the date of purchase. If you need support or service for your PrecisionRF product, whether the product is under warranty or otherwise, please contact PrecisionRF and arrange for a return or repair authorization. Manufactures Suggested Retail Price (MSRP). Prices and specifications subject to change without notice.

