



Antenna Analyzer Open-Short-Load Calibration Set



DXE-OSL-CAL-SET

DX Engineering OSL Calibration Sets provide the high quality standards required to take advantage of the **Open-Short-Load** calibration capability on specific **RigExpert** Analyzer models, AA-55ZOOM and above. The advantage of this ability is to adjust for the coax cable being used, so the analyzer will display the “true” characteristics of the antenna under test, as if the analyzer were connected directly to the antenna feedpoint.



The inherent analyzer calibration has its “reference plane” set to the analyzer connector. However, the advanced RigExpert analyzer models allow “recalibration” to be toggled on, to use these **Open-Short-Load** calibration standards to reset the reference plane. Calibrating with these standards at the far end of any 50Ω coaxial cable assembly subtracts the electrical parameters of that coaxial cable and its specific length, referred to as “nulling” the cable. This allows the analyzer’s measurement reference plane to be moved to the far end of that transmission line for accurate measurement of any antenna in its proper operating location.

DX Engineering OSL Calibration Set standards are manufactured using high quality silver-plated chassis mount SO-239 (UHF female) connectors. They are self-explanatory in their appearance. The **Open** standard has no connection from center to shield, the **Short** standard has a short circuit tab soldered from center to shield and the **Load** standard has a shroud over a potted, extremely accurate, 50Ω load resistor. They include a beaded tie to keep them together in your analyzer tool kit.



Customer Supplied Coaxial Cable

The procedure for using the Open-Short-Load standards is described in the applicable RigExpert manual Annex titled **Calibration**. To reset the reference plane of the analyzer to the end of a coaxial cable, in order to accurately measure an antenna, perform an Open-Short-Load calibration on the specific coaxial cable assembly to be used,



1. Select Calibrate in the Main Menu (or press F+ 2 keys)
2. Follow the on three step on-screen instructions, sequentially connecting the **Open, Short and Load** standards to the end of the coaxial cable to be used.
3. To apply calibration to any sweep, toggle on or off that specific cable null calibration by pressing F+2 and the “CAL” icon will appear at the bottom corner of the analyzer screen.

Warranty

All products manufactured by DX Engineering are warranted to be free from defects in material and workmanship for a period of one (1) year from date of shipment. DX Engineering’s sole obligation under these warranties shall be to issue credit, repair or replace any item or part thereof which is proved to be other than as warranted; no allowance shall be made for any labor charges of Buyer for replacement of parts, adjustment or repairs, or any other work, unless such charges are authorized in advance by DX Engineering. If DX Engineering’s products are claimed to be defective in material or workmanship, DX Engineering shall, upon prompt notice thereof, issue shipping instructions for return to DX Engineering (transportation-charges prepaid by Buyer). Every such claim for breach of these warranties shall be deemed to be waived by Buyer unless made in writing. The above warranties shall not extend to any products or parts thereof which have been subjected to any misuse or neglect, damaged by accident, rendered defective by reason of improper installation, damaged from severe weather including floods, or abnormal environmental conditions such as prolonged exposure to corrosives or power surges, or by the performance of repairs or alterations outside of our plant, and shall not apply to any goods or parts thereof furnished by Buyer or acquired from others at Buyer’s specifications. In addition, DX Engineering’s warranties do not extend to other equipment and parts manufactured by others except to the extent of the original manufacturer’s warranty to DX Engineering. The obligations under the foregoing warranties are limited to the precise terms thereof. These warranties provide exclusive remedies, expressly in lieu of all other remedies including claims for special or consequential damages. SELLER NEITHER MAKES NOR ASSUMES ANY OTHER WARRANTY WHATSOEVER, WHETHER EXPRESS, STATUTORY, OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS, AND NO PERSON IS AUTHORIZED TO ASSUME FOR DX ENGINEERING ANY OBLIGATION OR LIABILITY NOT STRICTLY IN ACCORDANCE WITH THE FOREGOING.

©DX Engineering 2022

DX Engineering®, DXE®, DX Engineering, Inc.®, Hot Rodz®, Maxi-Core®, DX Engineering THUNDERBOLT®, DX Engineering Yagi Mechanical®, EZ-BUILD®, TELREX®, Gorilla Grip®, Stainless Steel Boom Clamps, Butternut®, SkyHawk™, SkyLark™, SecureMount™, OMNI-TILT™, RF-PRO-1B®, AFHD-4® are trademarks of PDS Electronics, Inc. No license to use or reproduce any of these trademarks or other trademarks is given or implied. All other brands and product names are the trademarks of their respective owners. Specifications subject to change without notice.

Technical Support

If you have questions about DX Engineering products, or if you experience difficulties during the installation, contact DX Engineering at (330) 572-3200. You can also e-mail us at: DXEngineering@DXEngineering.com

Information and Instruction Sheet Updates

Every effort is made to supply the latest information or instruction sheet revision with each product. Occasionally an information or instruction sheet will be updated between the time your DX Engineering product is shipped and when you receive it. Please check the DX Engineering web site (www.dxengineering.com) for the latest revision information or instruction sheet.

© DX Engineering 2022
DX Engineering - 1200 Southeast Ave. - Tallmadge, OH 44278 USA
Phone: (800) 777-0703 - Tech Support and International: (330) 572-3200 - Fax: (330) 572-3279
E-Mail: DXEngineering@DXEngineering.com

DXE-OSL-CAL-SET-INS Rev 1



DXE-OSL-CAL-SET-INS