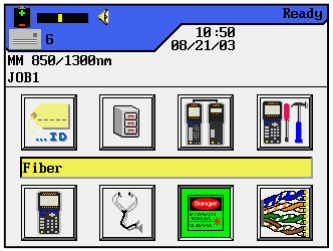
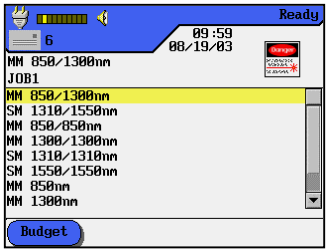
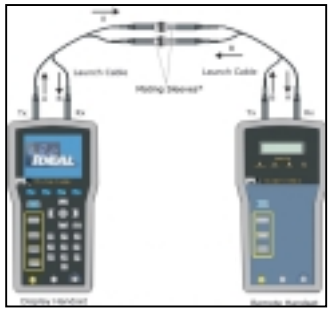






FIBERTEK™ ACCESSORY FIELD CALIBRATION QUICK REFERENCE CARD

PREPARING EQUIPMENT FOR FIELD CALIBRATION

Note: The FIBERTEK accessory kit includes the necessary jumpers and adapters to test 50µm, 62.5µm (multimode kits), and 9µm (single mode kits) cabling systems with ST™ style connectors. Optional cable kits are available to test SC, LC and MTRJ connectors.

FIBERTEK requires a daily field calibration to set the reference level for the laser transmitters on each of the fiber modules. It is recommended that both the display and remote handsets be turned on with the FIBERTEK modules attached for 3-5 minutes before performing the calibration. This allows the lasers to come up to operating temperature providing increased accuracy and stability.

Field Calibration Setup:

Step 1

Attach the FIBERTEK adapters to the remote and display handsets. Either adapter can be attached to either handset; it is a matter of preference as to which adapter is connected to the display or remote handset. Turn on the display and remote handsets and allow to warm-up for 3-5 minutes.

Step 2

Select the proper fiber optic test setting to match the FIBERTEK modules attached to the LANTEK by selecting the **Fiber Optic** icon from the main LANTEK **Ready** screen and pressing the **ENTER** key. Then choose the appropriate fiber wavelength option that corresponds to the modules in the handsets. Press the **ENTER** key to use the default loss budget settings or press the **Budget** soft-key to set custom values for the loss budget. See page 10 of the FIBERTEK Users Guide for detailed information on setting the loss budget.

Step 3

Connect one of the 2m (6ft) duplex jumpers to the display handset. When looking down at the LANTEK handsets, the fiber connector on the left is the laser transmitter (Tx), and the connector on the right is the detector (Rx). Note which color connector (boot color) is connected to the Tx/Rx ports to maintain correct polarity during testing.

Step 4

Connect the second 2m jumper to the remote handset making sure to connect this jumper to the opposite ports as the jumper on the display handset (reverse the colors). Using the supplied couplers, connect the two jumpers together. Match the colors together at this connection. This will ensure that the transmit signal (Tx) from one module arrives at the receive (Tx) port of the other module.

FIELD CALIBRATION FOR FIBER OPTICS

There are two general methods used for calibration. These methods are described in TIA/EIA 526-7, and 525-14 standards and are commonly described as Method A, and Method B.

Method 'A' Calibration Setup

Method 'A' calibration uses two launch cables and a set of couplers. This is the recommended calibration procedure for FIBERTEK, as it does not require disconnecting launch cables from the modules after calibration.

Method 'B' Calibration Setup

The calibration setup for Method 'B' is used for single fiber test systems and should not be used to calibrate FIBERTEK when using dual modules. This method requires the user to disconnect the launch cable from the power meter after calibration, and then add a second launch cable for testing, possibly causing erroneous results.

To calibrate the tester, perform the following (Method 'A'):

Step 1

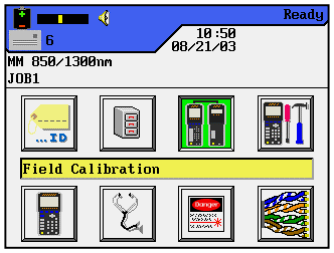
Choose the **Field Calibration** icon form the main LANTEK **Ready** screen and press the **ENTER** key. Make certain the test jumpers are compatible with the fiber under test. When the jumpers are connected as previously described, press the **Start** soft-key. The field calibration process takes approximately one minute.

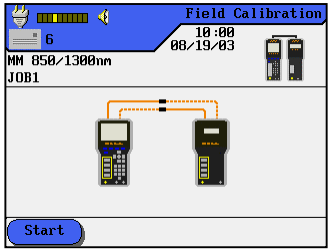
Step 2

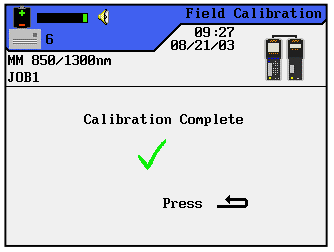
If the field calibration is successful, a ✓ will be displayed along with a message indicating the calibration is complete. At this point the LANTEK is ready for field-testing. It is important the jumpers **are not disconnected from the handsets** anytime after calibration. Doing so will require another field calibration to compensate for the change in alignment that occurs when the connectors are disturbed at the handsets.

Disconnect the two 2m jumpers from each other, then add the 1m (3ft) duplex jumper to one of the 2m jumpers. This additional jumper corrects the calibration by adding another connector pair, meaning that measurements made with FIBERTEK will include the cable and connectors at both sides.

In the event the field calibration fails, thoroughly clean all connectors and repeat the calibration process. When cleaning, use only 99% or better isopropyl alcohol (IPA) or other solution designed for use in fiber optic connectors. Wipe the connector with a lint free tissue designed for use with optical lenses. Approved materials are included in the IDEAL Fiber Cleaning Starter Kit.







IDEAL INDUSTRIES, Inc
9145 Balboa Avenue
San Diego, CA 92123
Tel: 800-854-2708
Fax: 858-278-5141
http://www.idealindustries.com