

Quick Card

T-BERD[®]/MTS-5800 Modular Test Set E4100 OTDR Module Optical Light Source option

This procedure describes how to use an E4100-series OTDR module as an Optical Light Source (OLS). If optional, the OTDR module can operate as an OLS or Optical Power Meter, but not both at the same time.

Equipment Requirements:

- T-BERD/MTS-5800 equipped with the following:
 - Fiber Optics Software Release V17.22 or greater
 - E4100 Series OTDR Module
 - E410TDRLS Light Source option
- Fiber optic cleaning and inspection tools
- Launch Cable (patch cord) with connectors matching the OTDR port and Fiber Under Test
- Optical Coupler to connect Launch Cable to Fiber Under Test



Figure 1: Equipment Requirements

The following information is required to complete the test:

- Type of Fiber (Multimode or Single Mode)
- Type of Connectors (SC UPC, SC APC, LC UPC, etc.)
- Wavelength(s) to be tested (850nm, 1300nm, 1310nm, 1550nm, etc.)

Fiber Inspection Guidelines:

- Use the VIAVI P5000i or FiberChek Probe microscope to inspect both sides of every connection being used (OTDR Port, Launch Cable, bulkhead connectors, patch cords, etc.)
- Focus the fiber on the screen. If dirty, clean the connector.
- If it appears clean, run inspection test.
- If it fails, clean the fiber and re-run inspection test. Repeat until it passes.

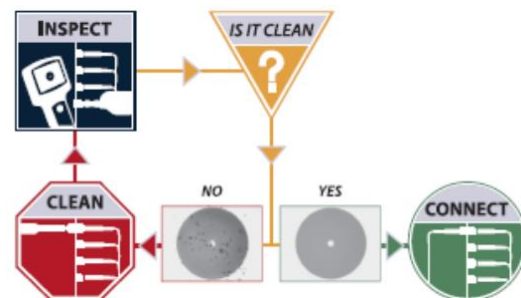


Figure 2: Inspect Before You Connect (IBYC)

Connect to Fiber Under Test (FUT):

All fibers and connectors should be inspected and clean prior to connection, as described on page 1. The Light Source may be connected to the FUT via an optical patch panel (OPP) or an optical coupler:

1. If the interface to the FUT is a patch cord, connect the patch cord to an optical coupler with the same connector type.
2. Inspect the FUT connected to the coupler or OPP.
3. Inspect the other fiber end face of the Launch Cable.
4. Connect the Launch Cable to the coupler or OPP.

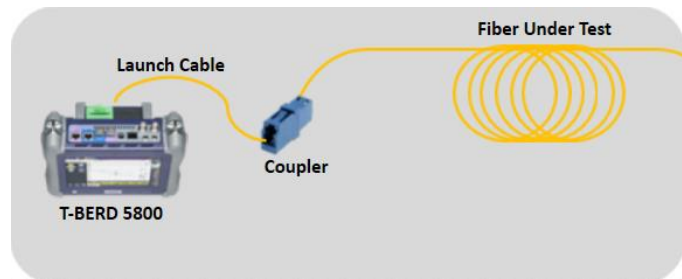


Figure 3: Connecting the Launch Cable to the FUT with a coupler

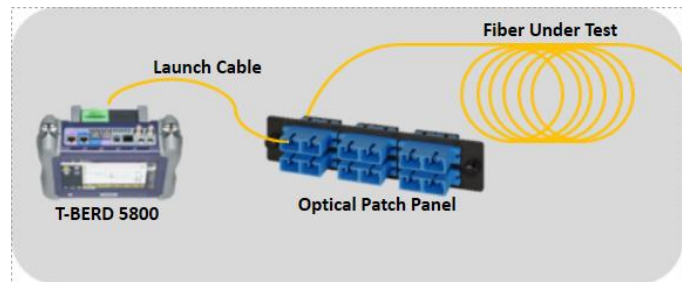

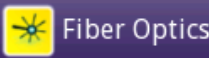



Figure 4: Connecting the Launch Cable to an OPP

Operate the Light Source

1. Press the Power button  to turn on the T-BERD/MTS-5800.
2. Tap the **Fiber Optics** icon  in the Status Bar at the top of the T-BERD/MTS-5800.
3. Tap the **Home** icon  to display the Home screen, showing the **SOURCE** icon(s).

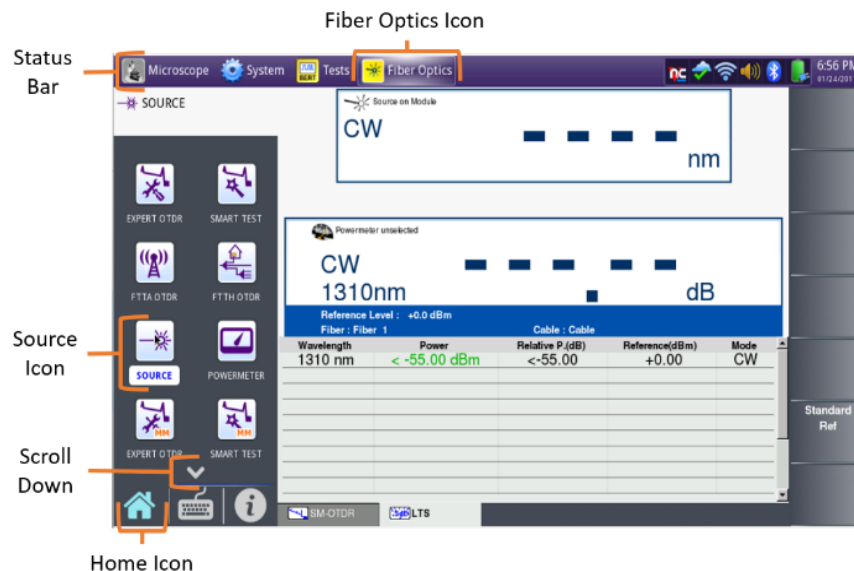





Figure 5: Home View

4. Tap the desired **SOURCE** icon   until it is yellow and highlighted . The Results view will be shown with Light Source settings in the box labeled **Source on Module**.

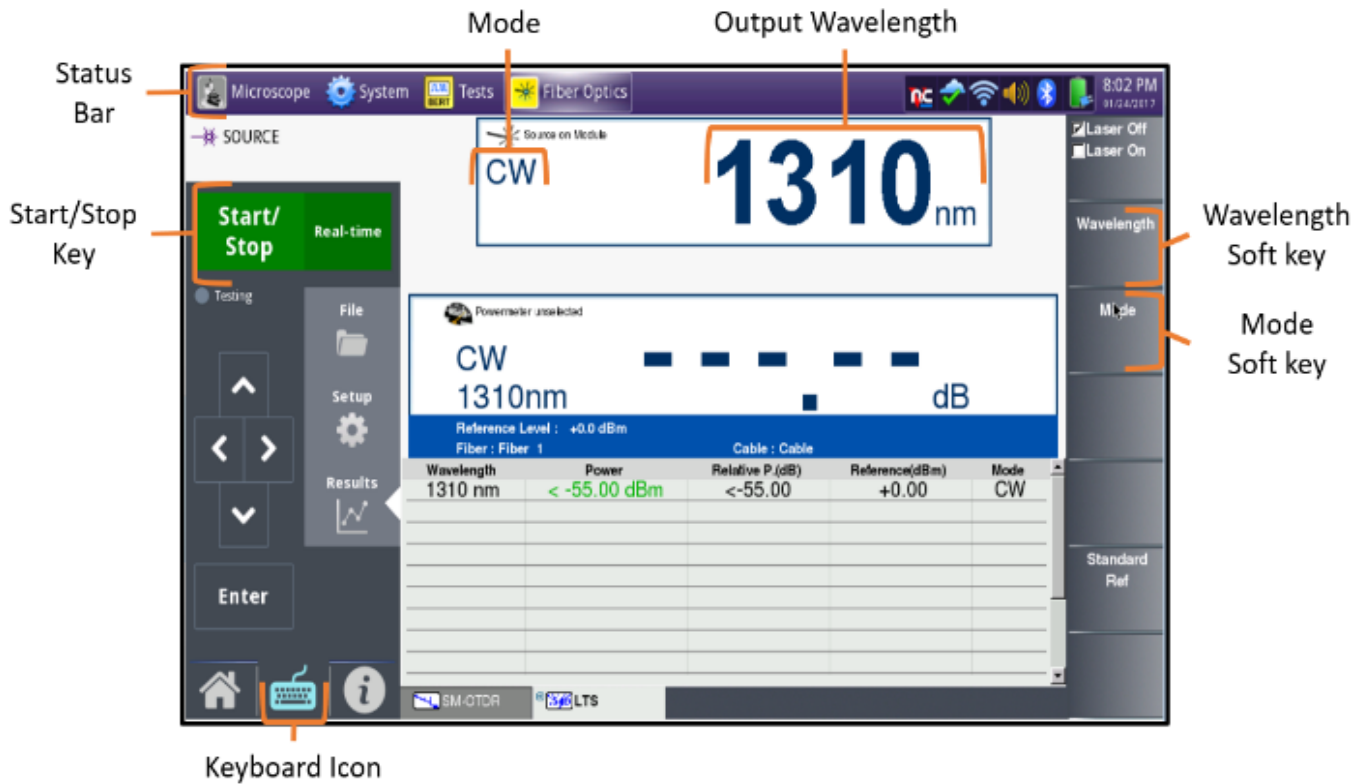
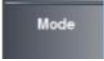


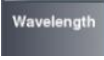



Figure 6: Results View

5. Tap the **Mode** soft key  to select **CW** (Continuous Wave).
6. Tap the **Start/Stop** key  to turn the laser on. The laser warning symbol  will be displayed.
7. Tap the **Wavelength** soft key  to select the desired Output Wavelength (850nm, 1300nm, 1310nm, 1550nm, etc.)
8. Repeat Step 7 for all wavelengths to be tested.
9. At the conclusion of the test, tap the **Start/Stop** key  to turn the laser off. Disconnect the Launch Cable from the fiber under test. **Do not disconnect the Launch Cable from the OTDR port or power off the T-BERD/MTS-5800 until all testing is complete.**