

Supplement

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This supplement contains information necessary to ensure the accuracy of the above manual. This manual is distributed as an electronic manual on the following CD-ROM:

CD Title:	DTX Fiber Test Kit
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Page 1

Replace the second paragraph under, **Introduction** with the following:

The DTX-FTK now includes a DTX-MFM2 Fiber Module instead of the DTX-FOM Optical Power Loss Meter. All instances of "DTX Fiber Optic Meter" and "DTX-FOM" may be replaced with "DTX-MFM2".

The DTX-MFM2 module provides the same functionality as the DTX-FOM module, with equal or better performance. It includes an additional feature: a visual fault locator (VFL).

Note

Before using the DTX-MFM2 module, update the DTX tester's software to the latest version. The latest version is available on the Fluke Networks website. See the DTX CableAnalyzer Users Manual for instructions.

This supplement describes the DTX-MFM2 features you can use with the DTX-FTK Fiber Test Kit. For information on other DTX-MFM2 Fiber Module features, see the *DTX Fiber Modules Users Manual*, which is available on the Fluke Networks website.

Page 3

Replace Figure 1 with the following Figure 1. Add the following Figures 2 and 3, the section **Installing the Connector Adapter**, and the **Caution**.

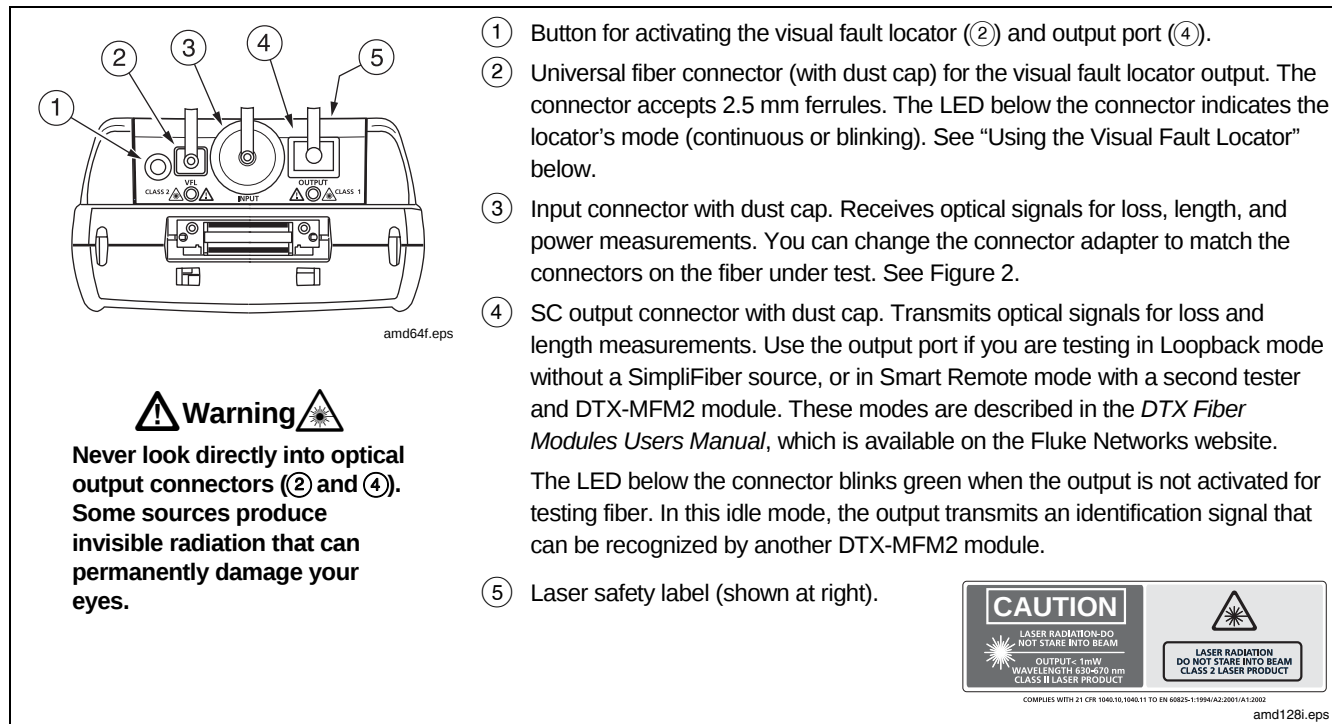


Figure 1. DTX-MFM2 Fiber Module Features

Installing the Connector Adapter

You can change the fiber module's input connector adapter to connect to SC, ST, LC, and FC fiber connectors shown in Figure 2. Matching the connector adapter to the connectors on the fiber under test simplifies the reference and loss test connections. It eliminates the need for the extra adapter and short patch cord shown in the *DTX Fiber Test Kit Users Manual*.

Additional adapter styles may be available. Check the Fluke Networks web site for updates.

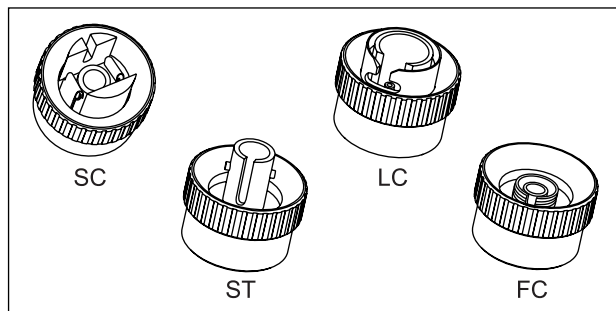


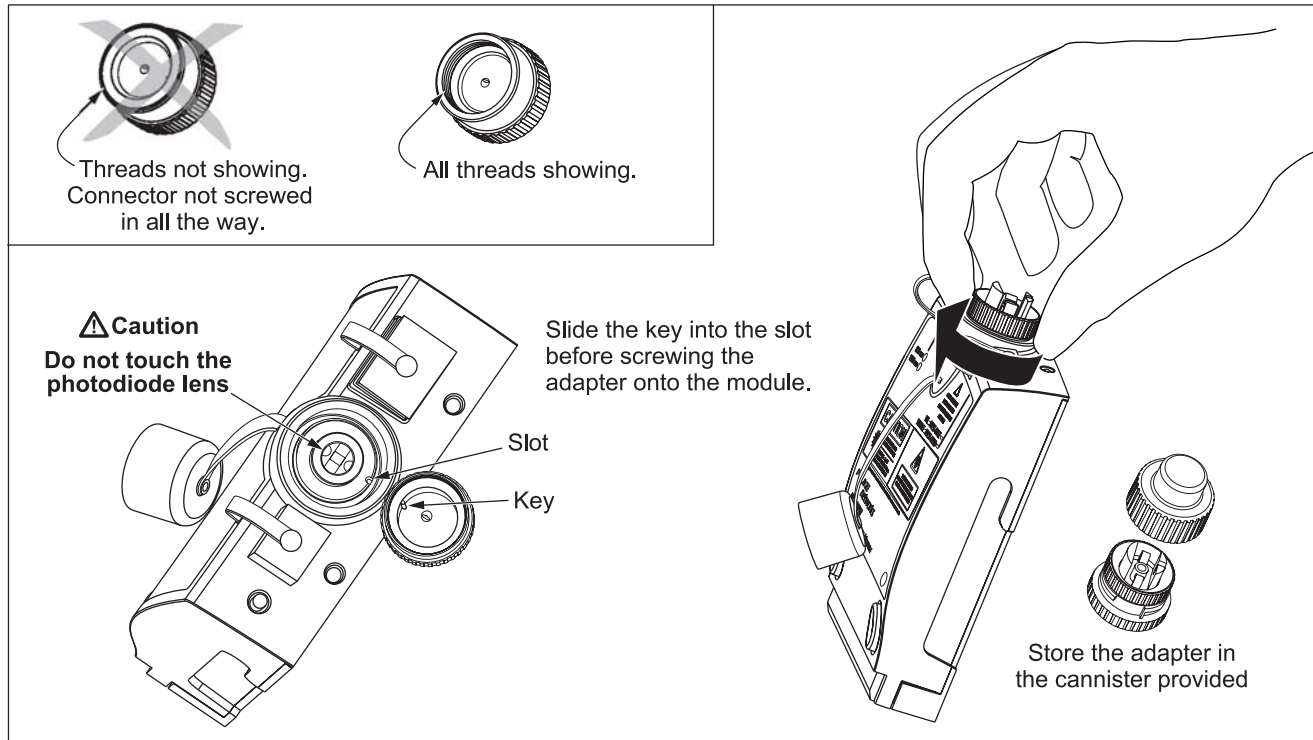
Figure 2. SC, ST, LC, and FC Connector Adapters

⚠ Caution

- Cover all connectors with dust caps when not in use.
- Store the connector adapters for the fiber module in the canisters provided.
- Do not touch the photodiode lens (see Figure 3).
- Do not overtighten the adapter or use tools to tighten the adapter.

To install a connector adapter, refer to Figure 3 and do the following:

- 1 Locate the slot in the fiber module connector and the key on the adapter ring.
- 2 Holding the adapter so it does not turn in the nut, align the adapter's key with the module connector's slot and slide the adapter onto the connector.
- 3 Screw the nut onto the module connector.

**Figure 3. Installing the Connector Adapter**

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Page 4

Under **Care and Usage Instructions**, replace the third bullet with the following and add the following sections:

- To help ensure the most accurate test results, use the following cleaning procedures.

Cleaning the Output Connector

Note

Use a 2.5 mm foam swab for cleaning the fiber module's output connector.

- 1 Dip the tip of a foam swab in fiber optic solvent; then touch the swab to a dry wipe.
- 2 Touch a new, dry swab to the solvent spot on the wipe.
- 3 Push the swab into the connector; twist it around 3 to 5 times against the endface, then remove and dispose of the swab.
- 4 Dry the connector with a dry swab by twisting it around in the connector 3 to 5 times.
- 5 Inspect connectors with a fiber microscope, such as the Fluke Networks FiberInspector Video Microscope before making connections.

Cleaning the Input Connector

Note

Typically, the input connector requires cleaning only if it has been touched.

- 1 Remove the connector adapter to expose the photodiode lens (see Figure 3).
- 2 Use the method described in steps 1 and 2 above to dampen a swab with alcohol.
- 3 Twist the damp swab around against the lens 3 to 5 times; then twist a dry swab around against the lens 3 to 5 times.

Page 8

Under **Care and Usage Instructions**, delete the 2nd bullet and add the following section **Cleaning the Output Connector**:

Cleaning the Output Connector

Note

Use a 2.5 mm foam swab for cleaning the fiber module's output connector.

- 1 Dip the tip of a foam swab in fiber optic solvent; then touch the swab to a dry wipe.
- 2 Touch a new, dry swab to the solvent spot on the wipe.

- 3 Push the swab into the connector; twist it around 3 to 5 times against the endface, then remove and dispose of the swab.
- 4 Dry the connector with a dry swab by twisting it around in the connector 3 to 5 times.
- 5 Inspect connectors with a fiber microscope, such as the Fluke Networks FiberInspector Video Microscope before making connections.

Page 11

Under **Configuring the Fiber Settings**, replace the first sentence with the following:

To configure the **Fiber Loss** settings, complete the following:

Replace step 3, with the following:

- 3 Select the **Fiber Loss** then press H to display the **Fiber Loss** menu.

Page 12

For **Remote End Setup** in Table 2, delete "The other settings do not apply to the DTX-FTK." and add the following:

For the **Remote End Setup**, you may use Loopback mode to test fibers without the SimpliFiber source. You may also use Smart Remote mode if you have a second tester and DTX-MFM2 module. These modes are described in *the DTX Fiber*

Modules Users Manual, which is available on the Fluke Networks website.

Page 19

Delete step 6b and add the following Caution:

Caution

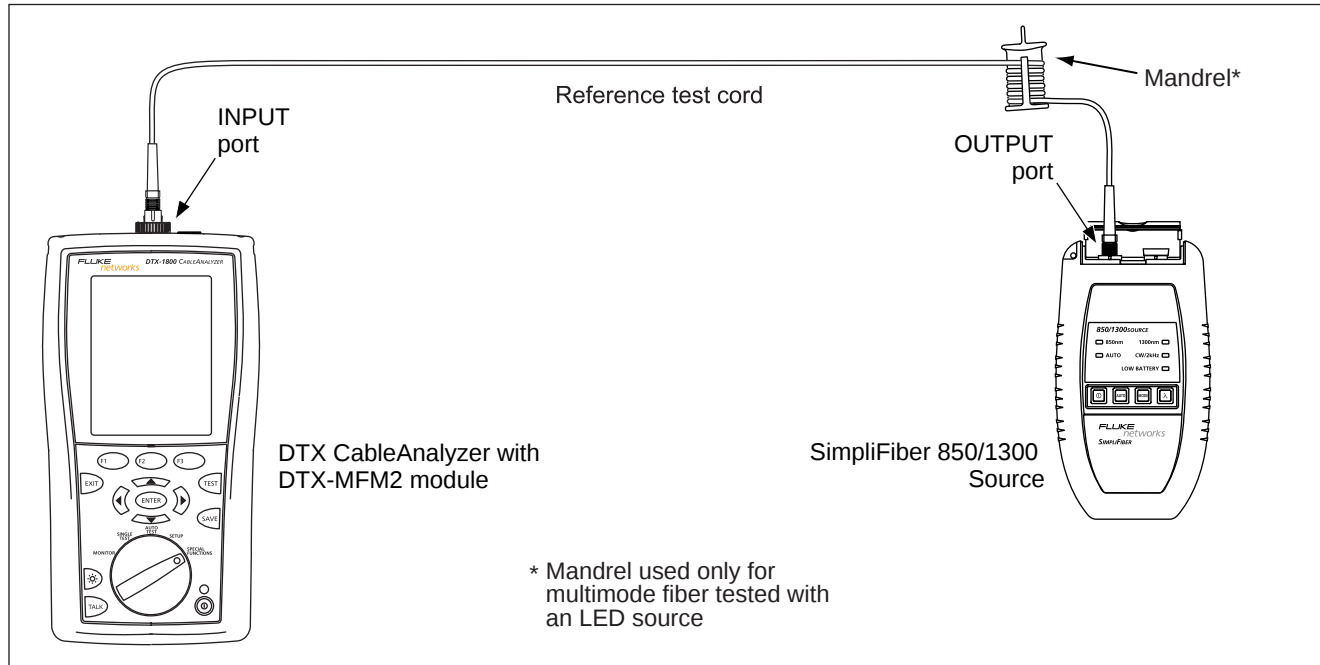
Make sure the source is in continuous wave mode. If the CW/2kHz LED is not lit or is blinking, press .

After step 9, add the following:

Select the appropriate wavelength for the far end source; then press II.

Pages 20-23

Replace Figures 5, 6, 7, and 8 on pages 20-23 with the following four figures:

**Figure 5. Reference Connections**

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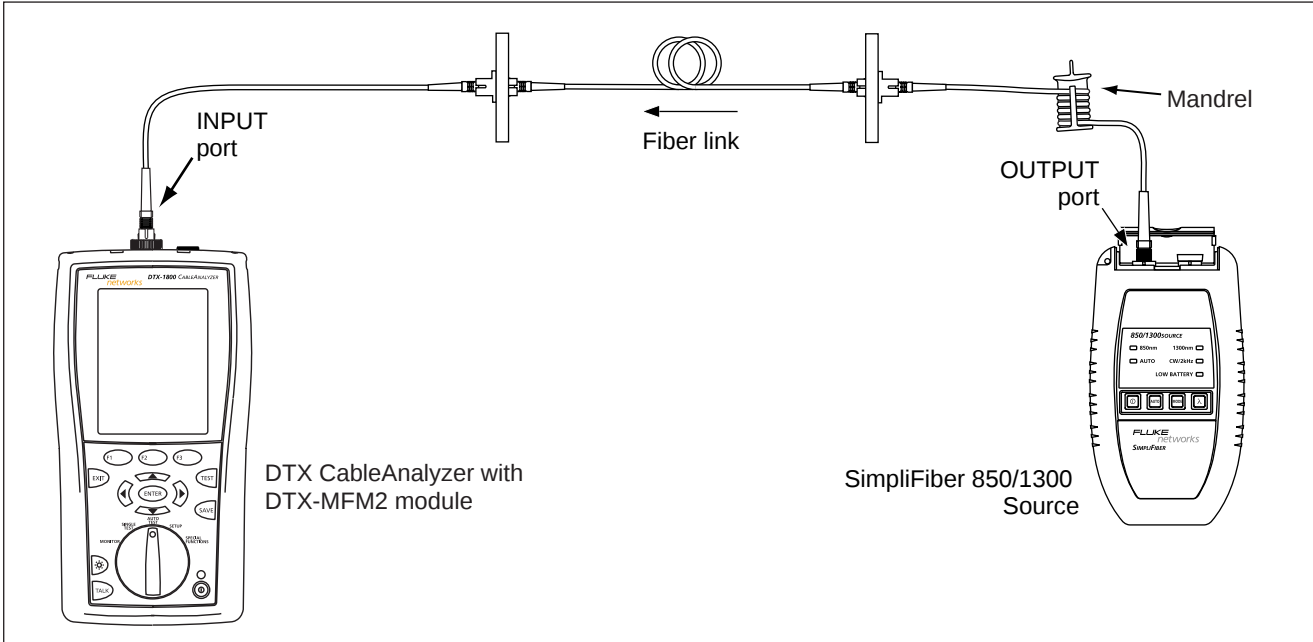


Figure 6. Connection Diagram: Far End Source Mode

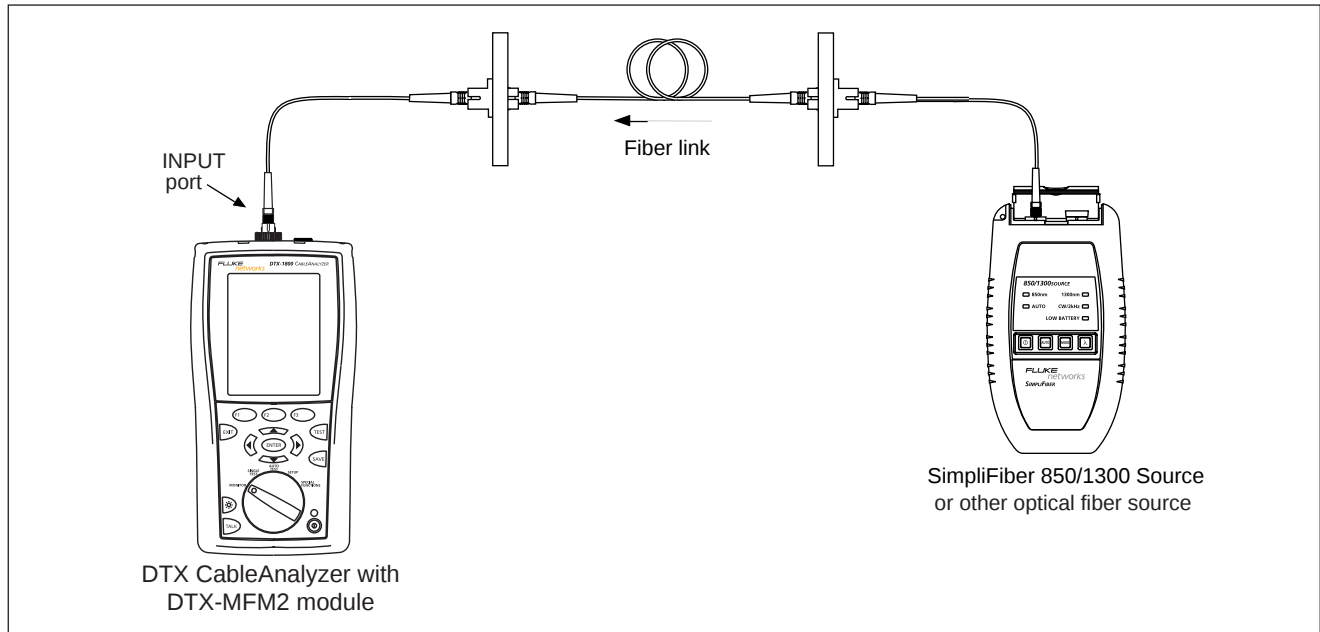


Figure 7. Connection Diagram: Monitoring Optical Power at the End of a Link

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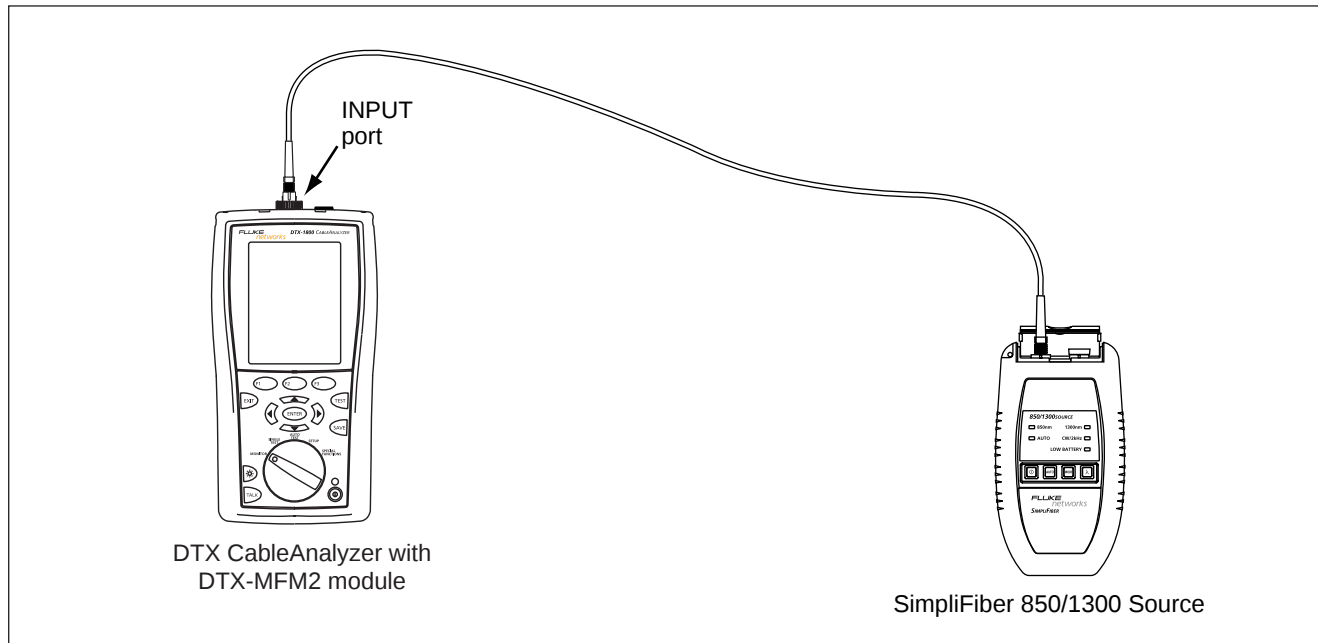


Figure 8. Connection Diagram: Monitoring Optical Power at the End of a Link

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Page 25

Delete step 3b, and add the following Caution:

Caution

Make sure the source is in continuous wave mode. If the CW/2kHz LED is not lit or is blinking, press .

After step 5, add the following:

Select the appropriate wavelength for the far end source; then press Π .

Page 28

Delete step 3b, and add the following Caution:

Caution

Make sure the source is in continuous wave mode. If the CW/2kHz LED is not lit or is blinking, press .

After step 5, add the following:

Select the appropriate wavelength for the far end source; then press Π .

Page 29

Delete step 2b, and add the following Caution:

Caution

Make sure the source is in continuous wave mode. If the CW/2kHz LED is not lit or is blinking, press .

After the second bullet, under step 3 add the following:

- Select the appropriate wavelength for the far end source; then press Π .

Page 32

Add the following sections:

Using the Visual Fault Locator

The DTX-MFM2 fiber module includes a visual fault locator (VFL) that helps you quickly check fiber continuity, trace fibers, and locate faults along fibers and in connectors.

The visual fault locator port accepts connectors with 2.5 mm ferrules (SC, ST, or FC). To connect to other ferrule sizes, use a patch cord with the appropriate connector at one end and a SC, ST, or FC connector at the tester end.

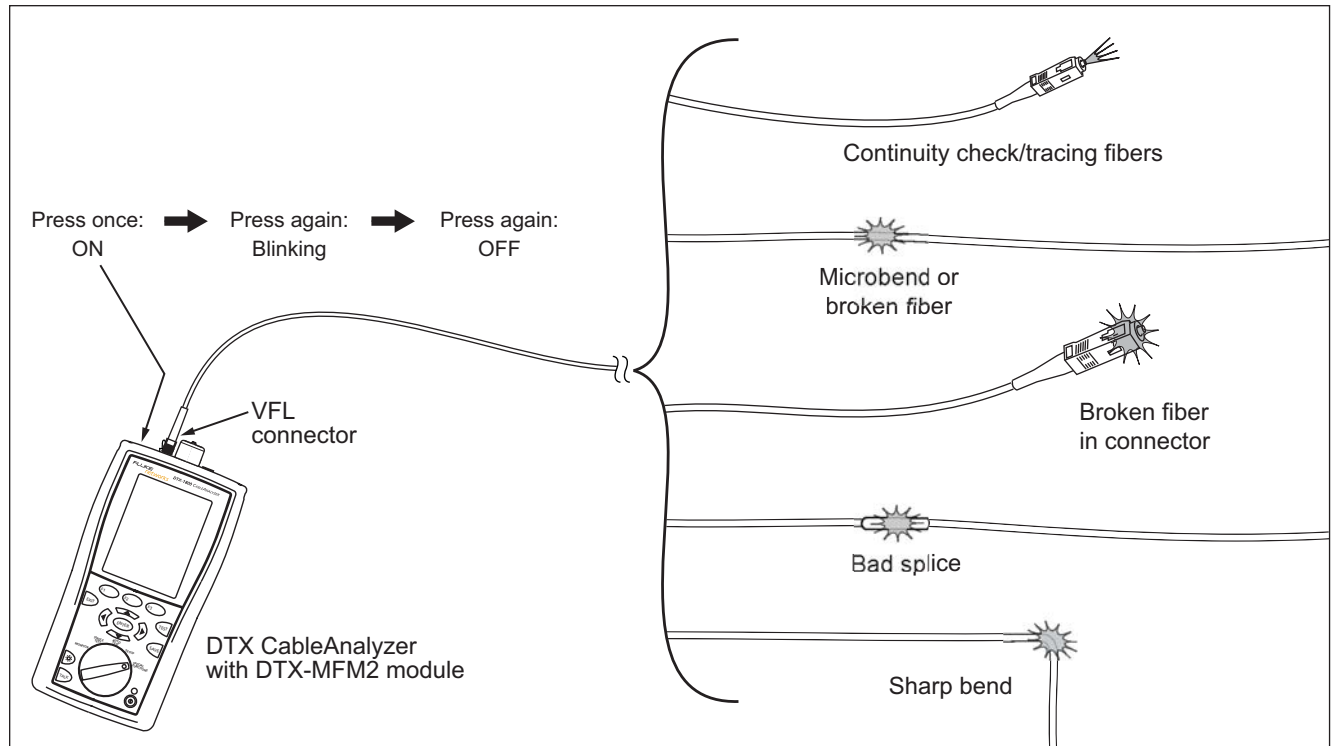
To use the VFL, do the following:

- 1 Clean the connectors on the reference test cord, if used, and the fiber to be tested.
- 2 Connect the fiber directly to the tester's VFL port or connect using the reference test cord.

- 3 Turn on the visual fault locator by pressing the button near the VFL connector, as shown in Figure 13. Press again to switch to flashing mode. Press again to turn off the locator.
- 4 Look for the red light to locate fibers or faults (Figure 13):
 - To check continuity or trace fiber connections, look for the red light at the end of the fiber. View the VFL's light indirectly by holding a white card or paper in front of the fiber connector emitting the light.
 - To locate faults, move along the fiber from either end, looking for a red glow coming from the fiber jacket or a connector housing.

Note

The locator's light may not be visible through dark-colored fiber jackets.



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Figure 13. Using the Visual Fault Locator

Page 34

For step 3, use the DTX-MFM2 module with the connections shown in the original reference connection diagram on page 20 of the *DTX-FTK Fiber Test Kit Users Manual*. These connections use two patch cords and an adapter.

After step 5 add the following:

Select the appropriate wavelength for the far end source;
then press **II**.

Page 35

Use the DTX-MFM2 module with the connections shown.

Page 37

Use the DTX-MFM2 module with the connections shown.

Page 38

Delete step 5b, and add the following Caution:



Make sure the source is in continuous wave mode. If the CW/2kHz LED is not lit or is blinking, press **MODE.**

After step 6c, add the following:

Select the appropriate wavelength for the far end source;
then press **II**.

Page 39

Use the DTX-MFM2 module with the connections shown.

Page 40

After step 8, add the following:

Select the appropriate wavelength for the far end source;
then press **II**.

Page 43

In Table C-1 replace the DTX-MFM, DTX GFM, and DTX-SFM modules with the following:

Option or Accessory	Model Number
DTX-MFM2 Multimode Fiber Module, 850 nm/1300 nm	DTX-MFM2
DTX-GFM2 Gigabit Fiber Module, 850 nm/1310 nm	DTX-GFM2
DTX-SFM2 Singlemode Fiber Module, 1310 nm/1550 nm	DTX-SFM2

Page 44

In Table C-1, delete the DTX-FOM Fiber Optic Meter Module.

Page 45

In Table C-1, replace Kit NF430 with NFC-Kit-Case.

Page 47

The specifications for the DTX-FOM module also apply to the DTX-MFM2 module, with the addition of the visual fault locator specifications given below.

For complete specifications on the DTX-MFM2 module, see the *DTX Series CableAnalyzer Technical Reference Handbook*, which is available on the Fluke Networks website.

Visual Fault Locator

Output power*	316 μ w (-5 dBm) $\leq$ peak power $\geq$ 1.0 mw (0 dBm)
Operating wavelength	650 nm nominal
Spectral width (RMS)	$\pm$ 3 nm
Output modes	Continuous wave and pulsed mode (2 Hz to 3 Hz blink frequency)
Connector adapter	2.5 mm universal
Laser safety	Class II CDRH
* Into SMF-28 singlemode fiber, continuous wave and pulse modes, SC/UPC connector.	