



MULTI-FUNCTION OTDR-1000

INSTRUCTION MANUAL

WARNING

To avoid eye damage, DO NOT look directly at the optical interface or the end of the optical fiber.

To reduce the risk of fire or electrical shock, do not use this device in thunderstorms or humid environments.

Do not attempt to open the housing of this device. If repairs are needed, it must be repaired by the manufacturer.

ATTENTION

Battery: The charging voltage of the battery is 5V between 0°C ~ 50°C. If ambient temperature exceeds this range, charging will terminate.

The device should also be charged at least once every month to maintain battery performance.

Use the included power supply (or another one that's 5V) to prevent any damage to the battery.

Fiber End Face Cleaning: Before testing, clean the end face of the fiber optic cable using cleaning solution or alcohol and a cotton swab.

LCD screen: The display of this series of instruments is 3.5 inch color LCD. In order to maintain good viewing effect, please keep the LCD screen clean and clean. When cleaning, the LCD screen can be cleaned by wiping with soft fabric.

Brief

1.



Top view

- ① OTDR/LS Port
- ② OPM Port
- ③ VFL Port
- ④ Flashlight

Left side

- ① Micro USB
- ② Charging LED Indicator
- ③ TF Card Port

Right side

- ① RJ45 Interface
- ② Reset button

Bottom view

- ① RJ45 Remote tester

Main view

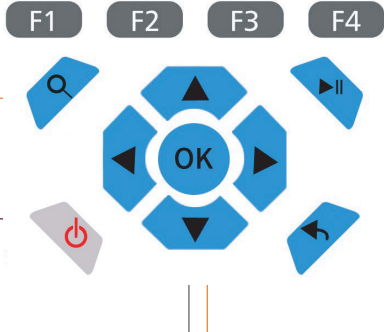
- ① Dust Cover
- ② 3.5 inch Color LCD
- ③ Function Keys

Key Overview

2.

Function keys

Correspond to the operations on the bottom of the screen



Zoom key

Allows you to zoom in or out.
Use with directional keys to operate.

ON/OFF key

Short press to turn on.
Long press to turn off.
Short press while the device is on to turn flashlight on/off

OK key

Enter the next level of interface, Enter function

Measure key

Starts or stops OTDR testing while in the OTDR interface

Exit key

Return to the previous menu

Directional keys

Allow you to move left, right, up, or down

Main Interface

3.

When the device is powered on, the main menu will be displayed automatically.

There are 8 different modules to choose from, which can be selected using the direction keys and entered using the OK key.

The following symbols may also appear on the top of the screen:



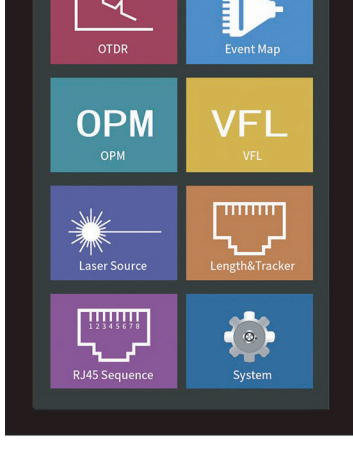
Time: Displays the date and time. Can be changed in the Settings.

Flashlight: Will appear when flashlight is on.

USB: Will appear when connected to a computer via USB.

TF: Will appear if a TF card is inserted into the device.

Battery: Indicates the power level of the battery.



OTDR

4.

Function Keys:

- F1:** Enter the Settings of the OTDR
- F2:** Switch between the A and B cursors
- F3:** Saves your data
- F4:** Open a specified file or folder

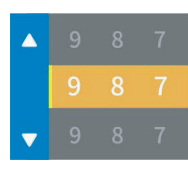


OTDR Setting Interface

5.

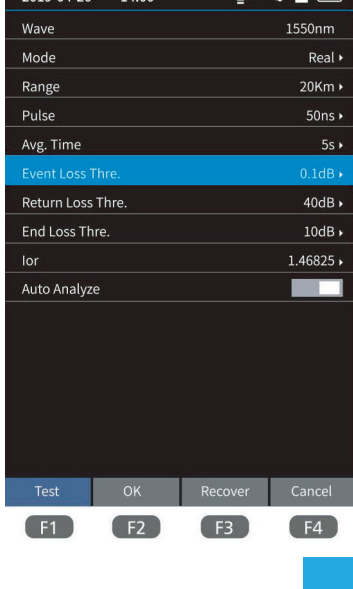
Press the directional keys to choose the parameter you want to change. Choose the settings using the up and down arrow keys, and confirm using the OK key.

For measurement parameters, change all the values that need to be changed, then press the OK key. The function keys will not work while the parameters are open.



Function Keys:

- F1:** Test the fiber optic cable using the current settings
- F2:** Select different settings to enter. Same as the OK key.
- F3:** Reset to factory settings.
- F4:** Cancel current selection



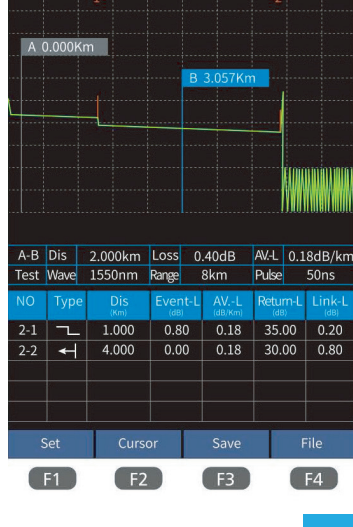
Test Results

6.

Link quality and information can be viewed from the top after the test is completed.

Link information includes length, total loss, and number of events.

Detailed event information can be viewed from the event list.



OTDR-Zoom mode

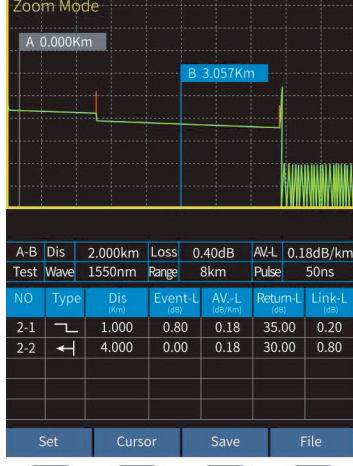
7.

Press  to enter zoom mode



- X-axis direction zoom in ►
- X-axis direction zoom out ◄
- Y-axis direction zoom in ▲
- Y-axis direction zoom out ▼

Press  1:1 display



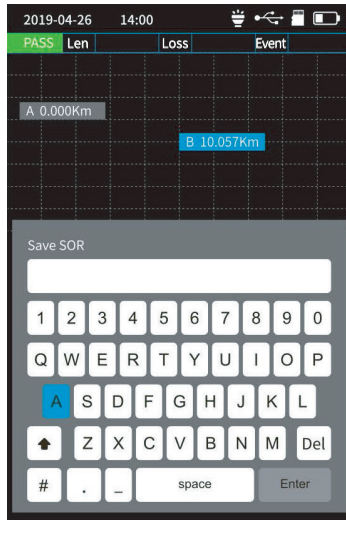
OTDR File Saving:

Press **F3** to save the results after testing is complete. The keyboard will pop up, and you can enter the name of the file using the directional keys and OK key. When done, press **Enter** to save the file.

If the automatic save (OTDR) function is turned on in “System Settings”, the results it will be saved automatically after the testing is complete.

Auto-Save Function:

To turn on the auto-save function, enter the System Settings on the main screen and turn on Auto-Save. The OTDR-1000 will now automatically save the test results after doing an average test or auto-test.



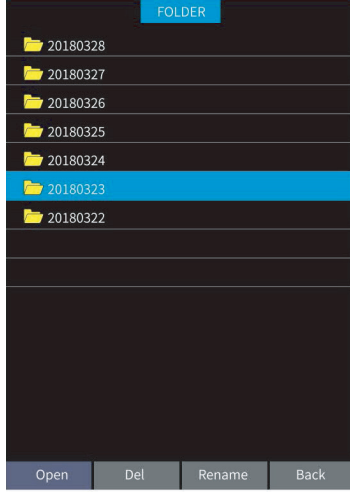
OTDR-File Operation

OTDR-File Operation:

Press **F4** while in the OTDR module to enter the file list. Press the **ENT** key to open a folder or file.

Function Keys:

- F1:** Open file
- F2:** Delete file
- F3:** Rename file
- F4:** Return to the main menu



Event Map (iOLM)

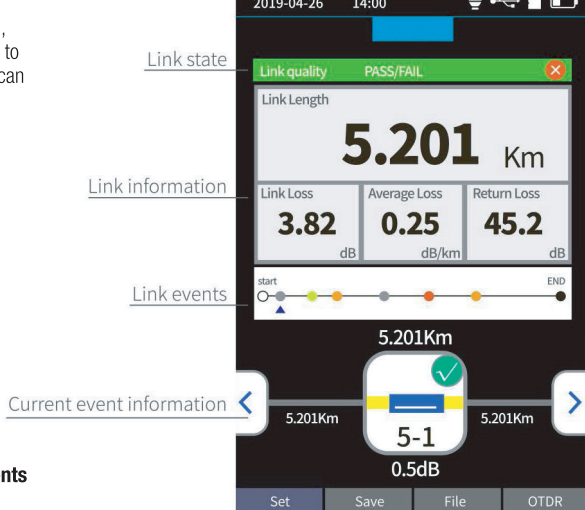
The Event Map displays the link quality, length, events, and other information clearly and easy to understand. In this module, the function keys can be used to perform different actions.

Function Keys:

- F1:** Set the parameters and test
- F2:** Save the results after testing
- F3:** File Manager
- F4:** Return to the OTDR module



Press left and right buttons to switch events



Power Meter (OPM)

Select the OPM module to identify and measure the relative power of fiber optic cables using 270/330/1k/Zk/Hz frequencies.

Function Keys:

- F1:** Switching wavelength
- F2:** Setting Reference Power
- F3:** Zero Reference Power
- F4:** Enter the Calibration Mode

Formulas for Absolute, Relative,**and Linear Power:**

$$P_{Abs.} = 10 \lg P_{Lin.} / 1mW$$

$$P_{Rel.} = P_{Abs.} - P_{Ref}$$



Visual Fault Locator (VFL)

Use the VFL module to shine 650 nm red light into fiber optic cables to detect faults.

CAUTION: Do not look directly into the laser output port. Laser can cause eye damage.

F1: Turn on VFL

F2: Pulse Mode at 1 Hz

F3: Pulse Mode at 2 Hz

F4: Turn off VFL



Laser Source (LS)

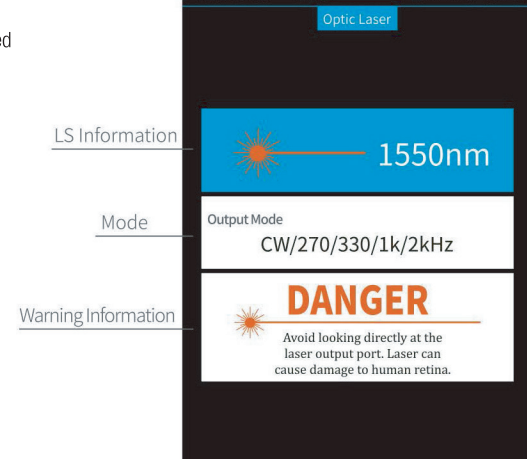
Select the Laser Source module if you need a stabilized laser source for power measurements or other tests.

There are 5 modes of this Laser Source:

CW, 270 Hz, 330 Hz, 1 kHz, and 2 kHz

Function Keys:

- F1:** Open LS
- F2:** Turn off LS
- F3:** LS Wavelength Settings
- F4:** LS Mode Settings

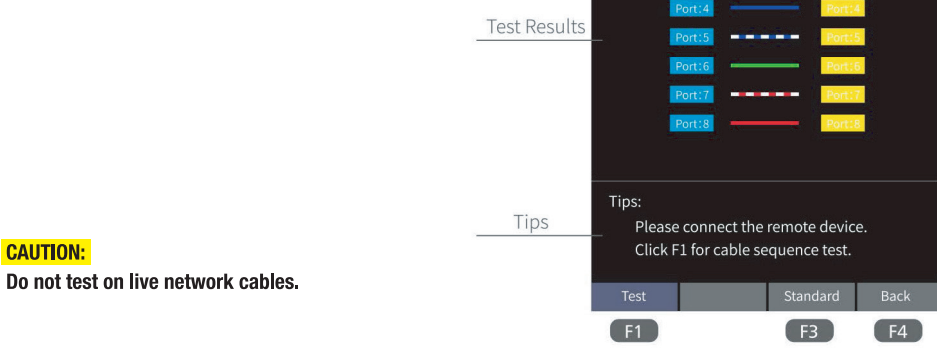


RJ45 Sequence

Select the RJ45 Sequence module to test the connections of CAT5/6 network cables.

Function Keys:

- F1:** Start Testing
- F3:** Change Sequence Test Method
- F4:** Return to Main Menu

**CAUTION:**

Do not test on live network cables.

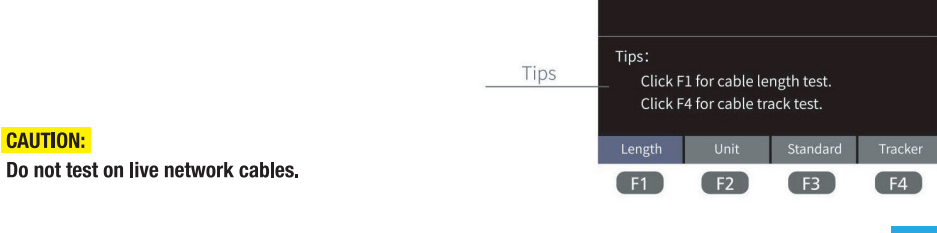
RJ45 Line Length & LineTracker

Select the RJ45 Line Length & LineTracker module to measure the length and trace network cables.

Note: A tracing probe is needed to trace the cables. The OTDR-1000 does not include a tracing probe.

Function Keys:

- F1:** Start Line Length Test
- F2:** Switch Line Length Unit
- F3:** Switch Line Sequence Test Standard
- F4:** Start Line-tracker Function

**CAUTION:**

Do not test on live network cables.

System Settings

Set up automatic shutdown, backlight brightness, time, language, and other information.

Function Keys:

- F1:** Change the chosen parameter
- F2:** Open Help Dialogue
- F3:** System Software Update
- F4:** Confirm all changes to Settings



Switch Setting Entry ▲▼
Switch options of current entry ►►

