JONARD TOOLS®

MADE FOR LIFE®

MULTI-FUNCTION OTDR-1000

INSTRUCTION MANUAL

SOFTWARE DOWNLOAD:

URL: https://jonard.com/OTDR-1000

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

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

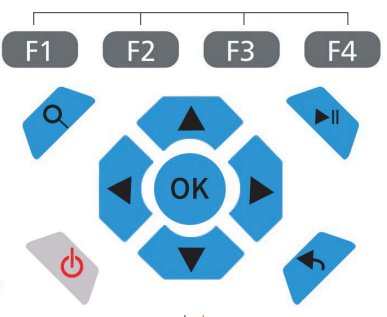
Main view

① Dust Cover
② 3.5 inch Color LCD
③ Function Keys

Key Overview

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

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:

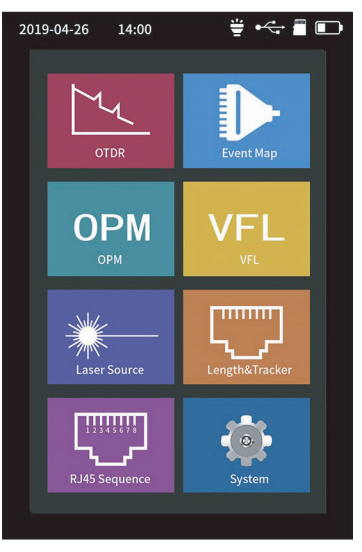
Time: Displays the date and time. Can be changed in the Settings.

Flashlight: Will appear when flashlight is on.

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

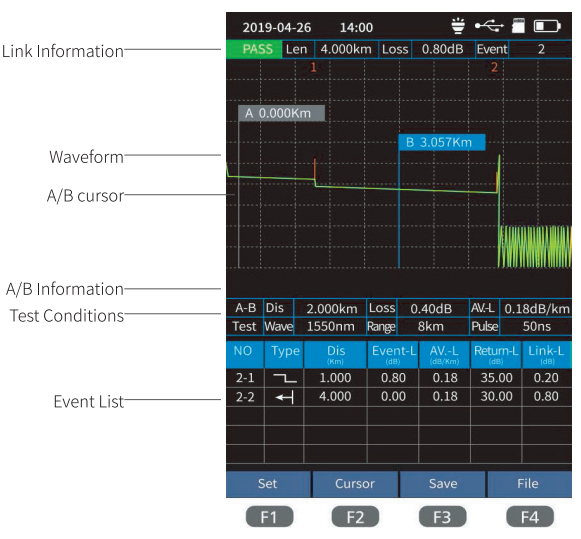
TF: Will appear if a TF card is inserted into the device.

Battery: Indicates the power level of the battery.



OTDR

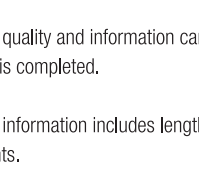
Function Keys:
F1: Enter the Settings of the OTDR
F2: Switch between the A and B cursors
F3: Saves your data
F4: Open a specified file or folder



OTDR Setting Interface

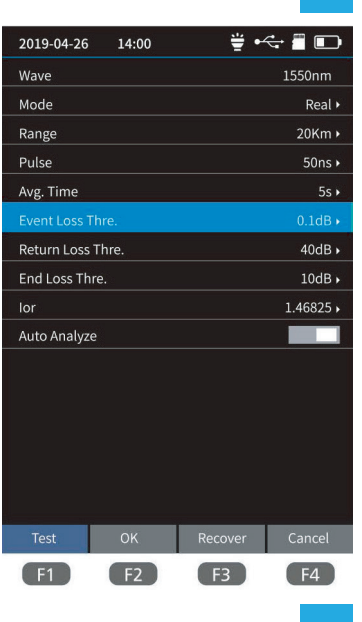
Press the directional keys to choose the parameter you want to change. Choose the settings using the up and down arrow keys, and confirm using the OK key.

For measurement parameters, change all the values that need to be chnaged, 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

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.

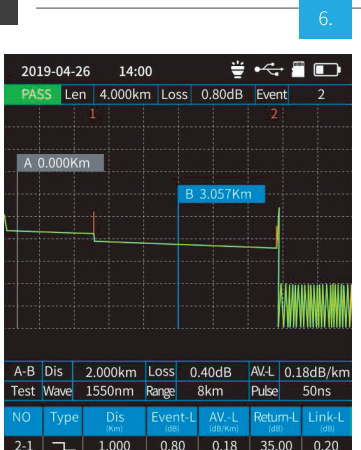
There are Four types of events:

Reflective event

Non-reflective event

Fiber splitter

Fiber end

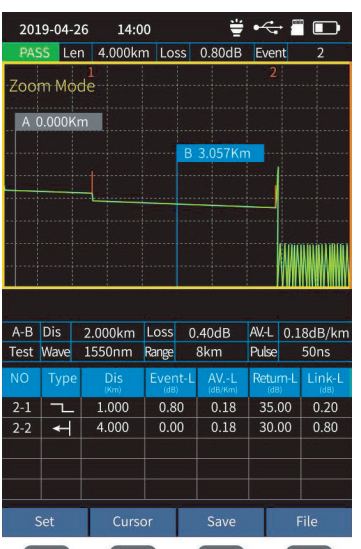


OTDR-Zoom mode

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



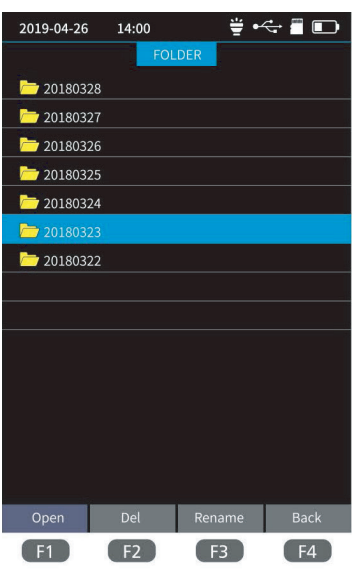
OTDR-File Save

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

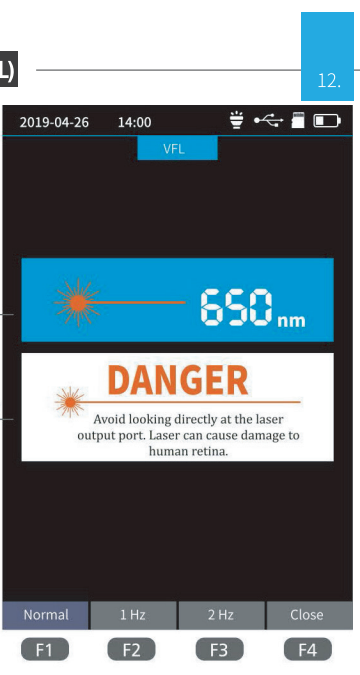
Formulas for Absolute, Relative, and Linear Power:
$P_{Abs.}=10lgP_{Lin.}/1mW$
$P_{Rel.}=P_{Abs.}-P_{Ref}$

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

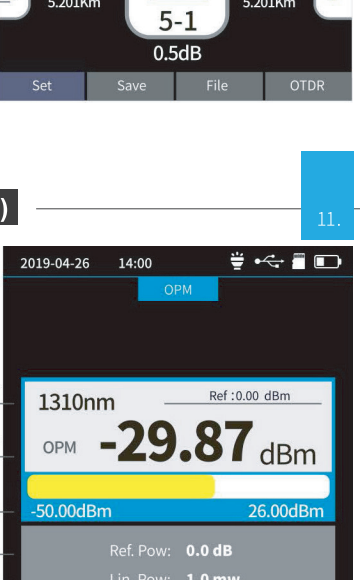


Laser Source (LS)

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.

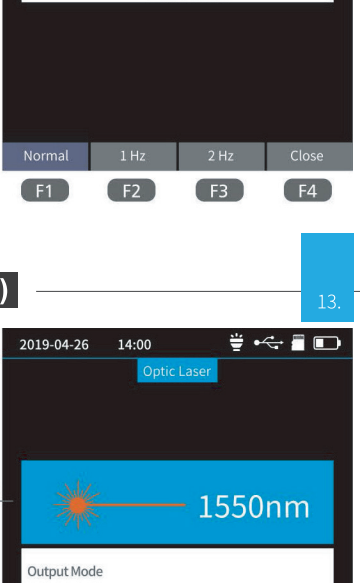
RJ45 Line Length & LineTracker

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 parrameter
F2: Open Help Dialogue
F3: System Software Update
F4: Confirm all changes to Settings

Switch Setting Entry ▲▼
Switch options of current entry ▶◀