



USER MANUAL

OPTICAL TIME-DOMAIN REFLECTOMETR SNR-OTDR
(1310/1550 nm, 24/22 dB, VFL, OPM, OLS)

SNR-OTDR-01N

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Warning

When using this instrument, please do not look directly at the optical interface or the end of the optical fiber with your eyes avoid eye damage! Except for 1625nm/1650nm , all the others are non-on-line test wavelength. it will cause damage to the internal devices of the instrument if it is used forcibly! Any change or modification not explicitly permitted in this manual will deprive you of the right to operate the equipment. To reduce the risk of fire or electric shock, do not expose the equipment to thunderstorm or humid environment. In order to prevent electric shock,do not open the shell, it must be repaired by the qualified personnel designated by the manufacturer.

Attention

Battery: The battery in the machine is a special 1lithium-ion polymer battery.The charging voltage is 5v,and the charging temperature ranges from 0°C~50°C. when the ambient temperature is too high the charging will automatically terminate, The instrument battery should be charged every one month to avoid battery failure due to self-discharge after long time storage.The temperature range of the battery during long-term storage is - 20c~45°C.

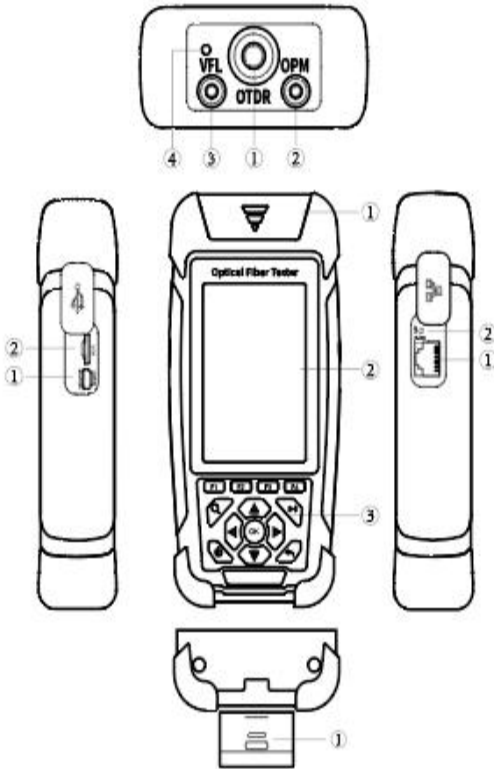
Please use the special AC adapter attached to this instrument and use the external power supply strictly according to the specifications,otherwise the equipment may be damaged.

Fiber End Face Cleaning: Before testing. clean the end face of the tested optical fiber joint with alcohol-cotton.

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.

Due to the need of design improvement , the contents are subject to change without notice.

1. Brief



Top view

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

Left side

- 1.Micro USB
- 2.TF Card Port

Right side

- 1.RJ45 Interface
- 2.Reset button

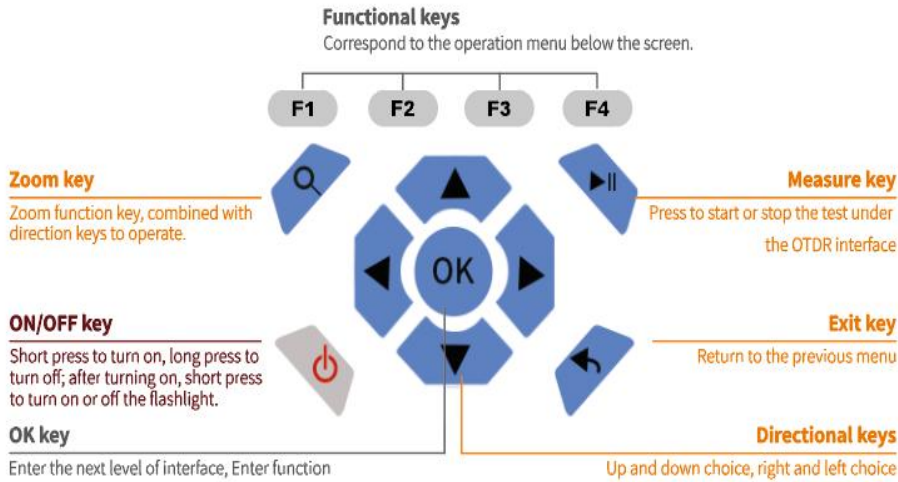
Bottom view

- 1.RJ45 tester

Main view

- 1.Dust Cover
- 2.3.5 inch Color LCD
- 3.Function Keys

2. Functional Keys

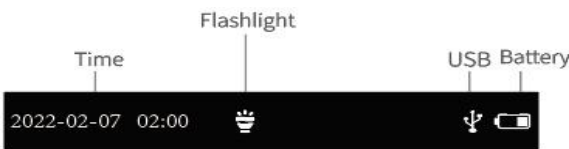


3. Main Interface

Turn on and enter the main menu.

There are eight functional modules.

Select the module by pressing the direction keys, and then press the “OK” key to enter the corresponding functional interface.



4. OTDR

F1:Enter the parameter setting interface

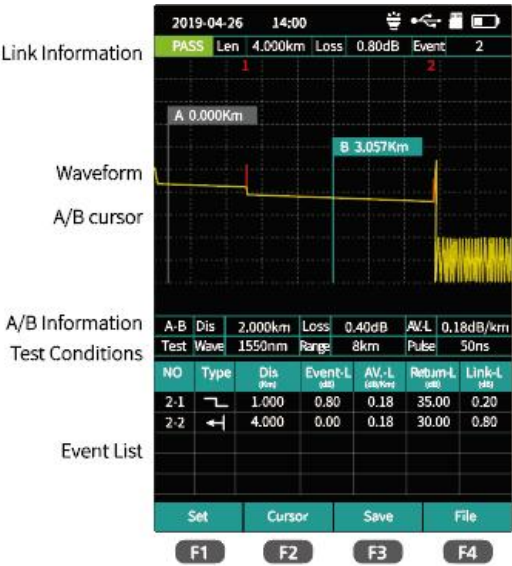
F2: Switching A/B cursor

F3: Enter the save interface

F4: File or Folder operation

Attention

This function pls don't make live fiber testing.



5. OTDR setting Interface

OTDR setting interface

Enter the parameter setting interface
Multi-digit settings, through the left
and right key positioning cursor, up
and down selection.

▲▼: Choosing settings items.

Press OK button to confirm or edit
corresponding measurement
parameters.



F1:Test F2:OK F3:Recovery
F4:Cancel



6. 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.

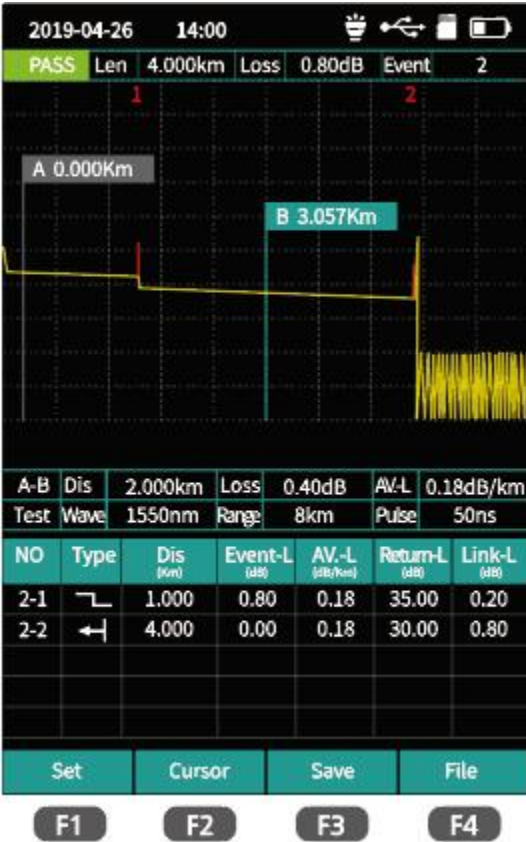
There are Four types of events:

Reflective event


Non-reflective event

Fiber splitter

Fiber end



7. 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  to exit zoom mode



8. OTDR-File Save

OTDR-File Save

Press “F3” (Save) key to save file after test complete, pop up the keyboard, enter the name of the file, and press Enter to save the file. If the automatic save (otdr) function is turned on in “system Settings”, it will be saved automatically after the test complete without manual operation.

Auto-save function

Enter the system settings, open the auto-saving function, the instrument will automatically save the test files after the average or auto-test.



9. OTDR-File Operation

OTDR-File Operation

Press “F4” to enter the file list.

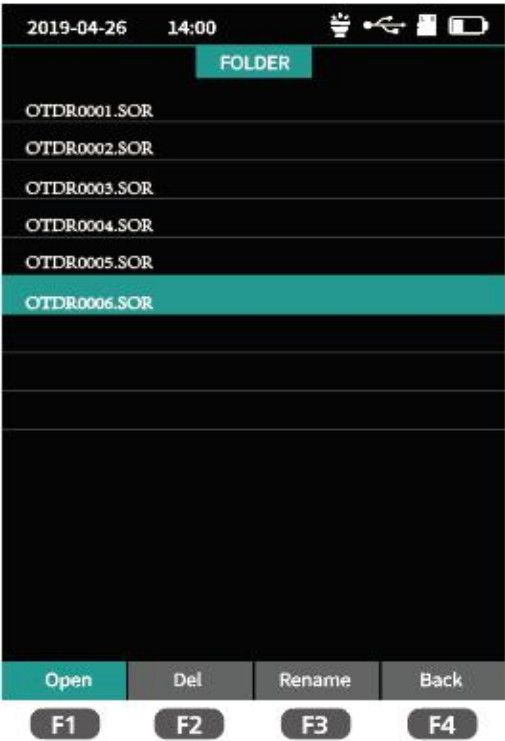
Press the “OK” key to open a folder or File

F1:Open file

F2:Delete file

F3:Rename file

F4;Return to main menu



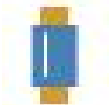
10. iLOM(Event Map)

The function can be tested automatically by one key, and the information of the length of the link, the type of event point and the position of break point can be displayed in a graphical form. The result is clear and easy to understand.

Left/Right key: Switching events.



The starting point of the link, after the guiding fiber is added to the front



Drop event, representing fusion point



Rising event, caused by the inconsistency of



refractive index of two sections of fiber Connector, square flange, SC, LC etc



Optical fiber macro bending



Optical fiber splitter



End of link



11. OPM

This function is used to test the power of optical signal and insertion loss of various devices and optoelectronic components. It can identify and measure the frequency of 270/330/1k/2kHz frequency optical signal.

F1: Switching wavelength

F2: Setting Reference Power

F3: Zero Reference Power

F4: Enter the Calibration Mode

Absolute power, relative power and linear power are converted as follows:

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

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



12. VFL

Visible red light (650 nm) is injected into the optical fiber, and the position of the optical fiber fault point can be judged conveniently and accurately by observing the leakage position on the measured fiber. It is suitable for the detection of bare optical fibers, jumpers and other high loss sections caused by near-end faults and micro-bending of optical fibers and cables which can leak red light.

Avoid looking directly at the laser output port.

Laser can cause damage to human retina.

F1: Open VFL

F2: VFL flash at 1 Hz

F3: VFL flash at 2 Hz

F4: Turn off VFL



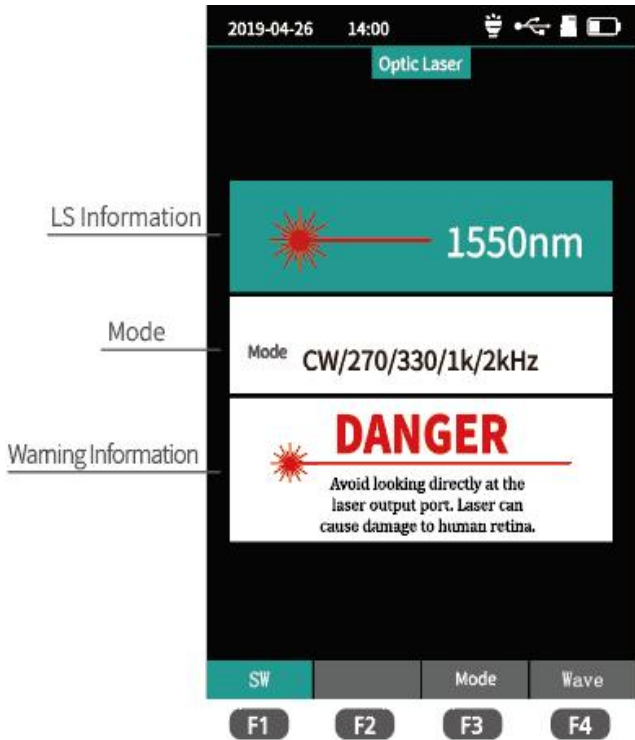
13. LS-Laser Source

The wavelength of stabilized laser source is the same as OTDR wavelength. It is used to measure the parameters of telecommunication, CATV LAN cable, insertion loss, isolation loss and echo loss of optical passive devices, and wavelength responsiveness of detectors. There are five modes of light source: CW, 270 Hz, 330 Hz, 1kHz and 2kHz.

F1: Open/Close LS

F3: Switch LS Mode

F4: Switch LS Wavelength



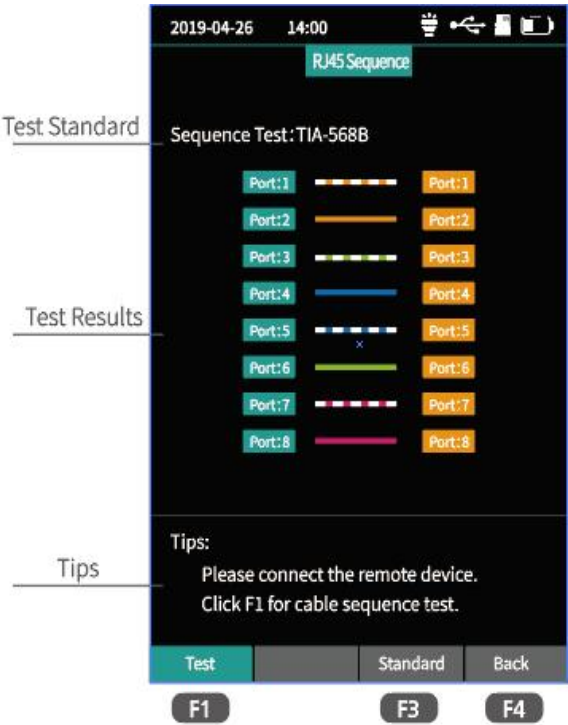
14. RJ45 Sequence

RJ45 line sequence measurement.

F1: Start Test

F3: Switch Line Sequence Test Standard

F4: Return to the main menu



Attention

Pls cut off the electricity before test

15. System settings

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

F1: Optional for switching the current menu

F3: System Software Upgrade

F4: Confirmation settings



Switch settings entry



Switch options of current entry

