

■ WARNING

Any undefined change or modification of 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 rain or humidity.

To prevent electric shock, please do not open the shell, and it must be repaired by qualified personnel.

■ NOTE

As the laser is harmful to the eyes, don't look directly at the laser outlet and don't attempt to disassemble the cabinet.



■ PRECAUTIONS FOR USE

Using the battery:

The equipment can be charged by special batteries, and can not be mixed with batteries of different models or capacities.

Avoiding condensation:

Sudden changes in temperature should be avoided. Do not use the device immediately after moving the device from the cold area to the hot area, or when the room suddenly heats up, because the device may have condensation phenomenon. If the temperature changes abruptly, stop using it and take out the battery, and the power can be switched on after at least an hour.

Storage:

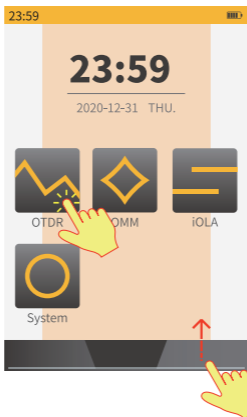
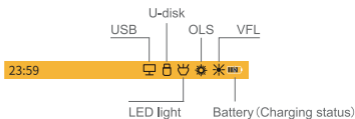
When the device is not used for a long time, please take out the battery to avoid the damage caused by battery leakage .

※ The content of this manual is for reference only, and everything is based on the actual product.

Main Menu

After booting, the device will enter main menu.

- Title bar icon will light up when the corresponding function is turned on.

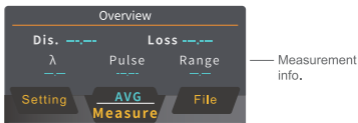
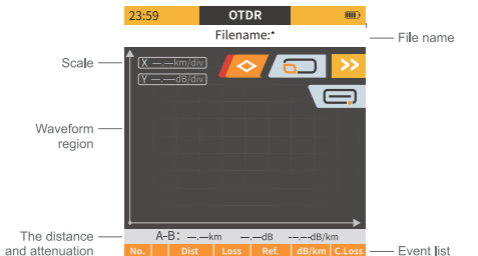


Click the function module to enter the corresponding function interface.

On the main interface of any function module, slide up from the bottom to return to the main menu.

OTDR measurement interface.

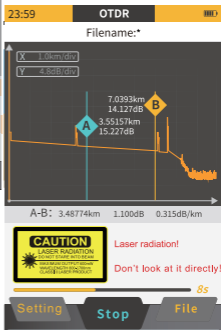
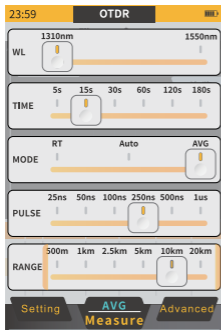
Click the "**+**" in the upper right corner to display the hidden icon, click "**◇**", and the options for resetting the cursor and showing/hiding the cursor will appear; click "**🔍**" to zoom in/out the waveform; click "**📄**" to check the testing overview.



OTDR--Measurement settings

Click " **Setting** " in the OTDR interface to enter the parameter setting interface. Click " **AVG Measure** " under OTDR/measurement interface to start testing based on current testing parameters.

Click " **Stop** " again to interrupt measurement during measurement. If the real-time analysis function is enabled during real-time measurement, an average measurement will be made before stopping.



OTDR—Advanced settings

Click "**Advanced**" in the OTDR interface to enter the advanced setting interface. Slide left/right to check advanced settings options.

When "—————" appears at the bottom of the screen, swipe up from the bottom of the screen to back to the previous interface.

23:59 **Adv. setting** 

Scatter coefficient

1310 1550
-79.6 dB -82.1 dB

Refractive rate

1310 1550
1.46770 dB 1.46832 dB

Reflect Threshold

-70.0 dB

Splice Loss

0.20 dB


End Threshold

3.0 dB

Reset



swipe up to return previous interface

23:59 **Adv. setting** 

Optical detection

Optical detection is off



Real time analyze

Real time analyze is on



XY scale display

Scale display turned on



Event/Overview display

Display event list



Auto save

Auto save is on



Please set the name and storage path

Name Save to



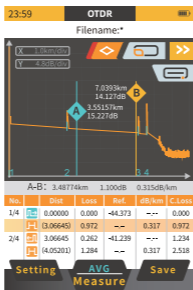
OTDR—Waveform Analysis

After the measurement or opening a saved waveform, it will display current selected testing overview and events list. Use following function icons to control the waveform zone.

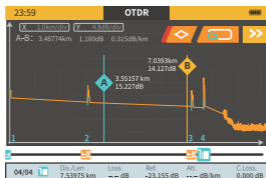
Click "  " to control the cursor reset, displayed or hidden.

Click "  " / "  " to zoom in/out the waveform.

Users can also zoom in/out the waveform by fingers, and double-click the waveform area to reset.



zoom in waveform interface



Click "**File**" to enter the file management interface.

If the Auto save function is turned on, the file name is automatically generated when saving.

When a file is selected, the selected file can be renamed, opened or deleted.

When sor. file selected, it will show waveform thumbnail in the bottom window.

Click "**Open File**" again to check more details of sor. file.

The screenshot displays the OTDR File Manager interface. At the top, the time is 23:59 and the title is "File Manager". Below the title bar, there is a "Host" dropdown menu showing a slash symbol. The main area contains a table of files:

No.	Name	Time
1/4	ScreenShot	11:08:12
2/4	20210101	13:05:30
3/4	20210102	15:28:16
4/4	20210103	19:28:07

Below the table, there are three buttons: "Delete", "Open File", and "Rename".

On the right side, there is a detailed view of the selected file "20210101". The title bar shows the time 23:59 and "File Manager". The "Host" dropdown menu shows a slash symbol and the file name "20210101". Below the title bar, there is another table of files:

No.	Name	Time
1/5	Test0001[1310nm 2...	10:12:10
2/5	Test0002[1550nm 1...	14:05:18
3/5	Test0003[1310nm 2...	16:04:32
4/5	Test0004[1310nm 5...	21:14:55
5/5	Test0005[1550nm 1...	21:21:13

Below this table, there are three buttons: "Delete", "Open File", and "Rename".

At the bottom of the detailed view, there is a waveform thumbnail showing a signal with a peak. The parameters displayed are:

- Wavelength (λ): 1550nm
- Range: 10km
- Pulse: 100ns

iOLA—Interface(OPTIONAL)

- 1 — Events and the distance between events
- 2 — Location of events
- 3 — Event list
- 4 — Details of the selected event
- 5 — Measurement status
- 6 — Pass/Fail

The screenshot displays the iOLA interface with the following components:

- Top Bar:** Shows the time 23:59, the application name iOLA, and a battery icon.
- Filename:** A field labeled "Filename:*" is present.
- Event Diagram (1):** A horizontal line with several event markers. The first marker is highlighted with a green box and a checkmark.
- Location Bar (2):** A horizontal bar with vertical tick marks representing event locations, labeled 'A' and 'B'.
- Event List Table (3):**

No.	Dis.	Loss		Ref.	
		1310	1550	1310	1550
1/12	0.00000	0.000	0.000	--	--
1-1	0.00000	0.000	0.000	--	--
1-2	0.00000	--	--	--	--
- Measurement Status (5):** Shows a plus sign, wavelength λ : 1310 1550, Loss: 12.703dB 10.330dB, Dist: 18.20881km, and a 11s timer. A yellow "CAUTION LASER RADIATION" warning box is present, along with the text "Laser radiation!".
- Buttons:** "Setting", "START Measure", and "File" buttons are visible.
- Measurement Status (6):** Shows the same data as above but with a red "Fail" warning icon.
- Buttons:** "Setting", "START Measure", and "Save" buttons are visible.

iOLA-link settings(OPTIONAL)

In the iOLA interface, click " **Setting** " to enter the link settings interface.

Swipe the screen to the left to enter more settings interface.

23:59 Link Settings



Scatter coefficient

1310 1550
-79.6 dB -82.1 dB

Refractive rate

1310 1550
1.46770 dB 1.46832 dB

Reflect Threshold

-70.0 dB

Splice Loss

0.20 dB

End Threshold

3.0 dB

Reset



23:59 Link Settings

Pass/Fail Setting

On

Total loss

20.0 dB

Loss threshold

0.30 dB

Reflect threshold

-40.00 dB

Reflect loss thre.

0.75 dB

Auto save

Auto save is off

Please set the name and storage path

Name

Test

Save to

Host



iOLA--Event list/file(OPTIONAL)

Click " **START Measure** " on the iOLA interface, event list interface or measurement setting interface to start the measurement according to the current measurement conditions. Click " **Save** " to save.

When there is no measurement currently, click the " **File** " button to enter the file manager interface. The iOLA is shared with the file manager interface of the OTDR.

When a file is selected, the selected file can be renamed, opened or deleted. (Only the tor file is displayed at this time)

23:59		iOLA				☰	
Filename:*							
No.	Dis.	Loss		Ref.			
		1310	1550	1310	1550		
1/12	0.00000	0.000	0.000	---	---		
1-1	0.00000	0.000	0.000	---	---		
1-2	0.00183	0.000	0.000	---	---		
	(0.01340)	---	---	---	---		
2/12	0.01340	0.385	0.739	-51.938	-53.136		
	(0.28744)	---	---	---	---		
3/12	0.30084	---	-0.299	---	---		
	(0.68706)	---	---	---	---		
4/12	0.98790	0.256	0.328	---	---		
	(0.34621)	---	---	---	---		
5/12	1.33411	0.249	0.518	-55.402	-55.458		
	(0.03534)	---	---	---	---		

Setting **START Measure** Save

23:59		File Manager		☰	
Host ▾		/		20210101	
No.	Name	Time			
1/4	Test0001.tor	08:05:11			
2/4	Test0002.tor	12:06:23			
3/4	Test0003.tor	14:08:11			
4/4	Test0004.tor	18:04:47			

Delete **Open File** Rename

Click " **SET** " to enter the OPM setting interface:

- Auto wavelength: select the power meter wavelength identification function on/off;
- Auto frequency: select the power meter frequency identification function on/off;
- Offset setting: If "ON", user can calibrate each wavelength power value as required.



Click "  " to change the working status of VFL: On->Glint->Off.


User also can control VFL by press VFL button on the right side.



Connecting the optical fiber to the OLS connector, then perform relevant operations according to the graphical interface.

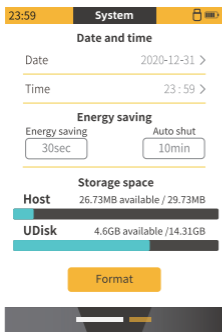
- Change modulation: continuous signal, 270Hz, 1kHz, 2kHz, 1kHz+ Blink, 2kHz+ Blink.
- Same wavelength as OTDR.





Click "  "in the main menu to enter the general setting interface:

- Energy saving: when there is no operation, the backlight brightness will be reduced after a specified time (30s-10min).
- Auto shut: used to set the time (10min-120min) for automatic shutdown and cancel automatic shutdown.
- Format: To format all data in the Host or U-disk.

Swipe the screen to the left to view language and version information.



23:59 **System**  

Date and time

Date 2020-12-31 >

Time 23:59 >

Energy saving

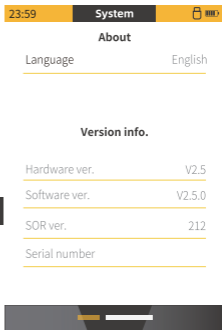
Energy saving 30sec Auto shut 10min



Storage space

Host 26.73MB available / 29.73MB

UDisk 4.6GB available / 14.31GB

Format



23:59 **System**  

About

Language English

Version info.





Hardware ver. V2.5

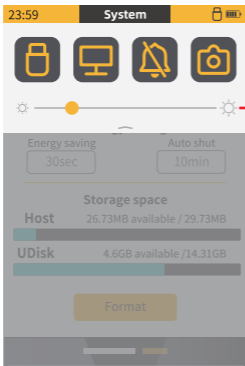
Software ver. V2.5.0

SOR ver. 212

Serial number

Swipe down from the top of the screen in any interface, and the navigation bar appears:

-  Connect to U-disk, then click to light up the icon, user can read files in the U-disk.
-  Connect to PC, then light up the icon, user can check and transfer the files to PC, meanwhile charging the device.
-  Click to control the buzzer ON/OFF.
-  Click to take a screenshot of current interface, and save it into " ScreenShot " file in the device.



Slide to adjust the LCD brightness.

