



OTDR Testing Platform TB-700

User's Manual



■ 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.

Please ensure no signal in fiber before testing, active fiber may damage the device and not in warranty range.

■ 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 device can be recharged with a special battery, and cannot be mixed with different types or capacity batteries.

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.

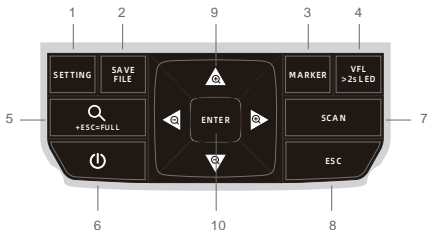
Storage:

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

※The manual is for reference only; All operations are subject to the physical device.



KEYS INTRODUCTION

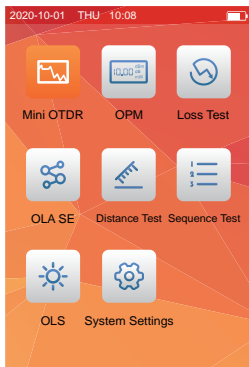
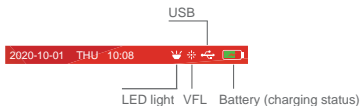


- 1 — Press to enter the corresponding measurement setting interface.
- 2 — Press to save current testing result or enter into the file list.
- 3 — Select the cursor in OTDR testing interface.
- 4 — Control VFL ON-GLINT-OFF, and press >2s to turn on/off LED light.
- 5 — Zoom in/out the OTDR testing waveform combining with Navigation and ESC buttons
- 6 — Long press to turn on/off the device. If OFF, it will pop up "Do you want to power off"
- 7 — Press to start the measurement.
- 8 — Press to back to previous menu.
- 9 — Navigation buttons for selecting operation
- 10 — Press to enter the next operation and confirm.

Main Menu

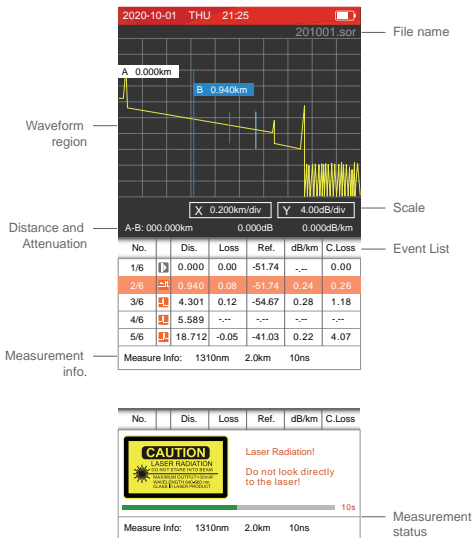
After booting, main menu shows in default. Press Navigation buttons to select the function module, then press “**ENTER**” button to enter into the corresponding interface.

Title Bar: Highlight when the function module is selected.



Mini OTDR

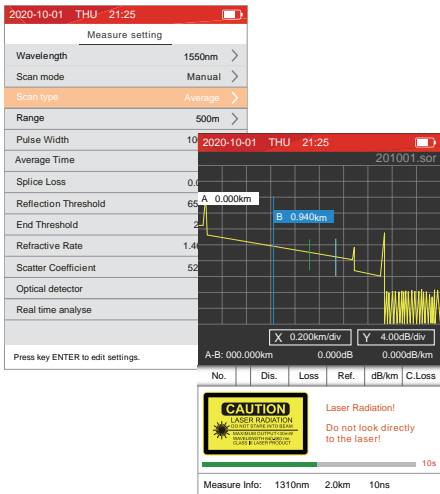
OTDR testing interface as following shows.



Mini OTDR--Measurement Settings

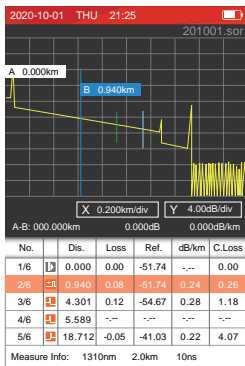
In OTDR interface, press “**SETTING**” button to enter into measurement setting interface.

Under OTDR or measurement setting interface, press “**SCAN**” button to start measurement. Press again to stop the testing during the measurement. If “Real time analyse” is ON when Real time scan type is set, then it will take average measurement again before stopping.

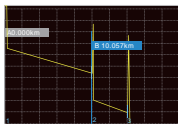


Mini OTDR--Waveform Analysis

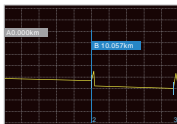
After testing or open the saved waveform, then event list shows, Max. 5 events listed, if more, press “” “” to view, and the cursor will be located in selected event, short press “” to choose the cursor, and scale current waveform by pressing combined buttons.




Y-axis zoom in






X-axis zoom in

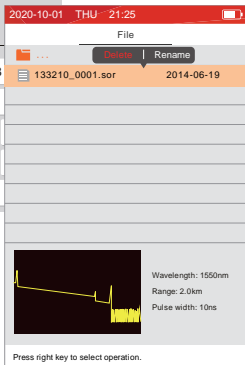
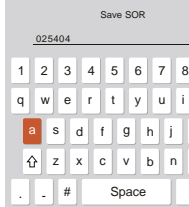
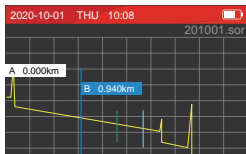


Mini OTDR--File

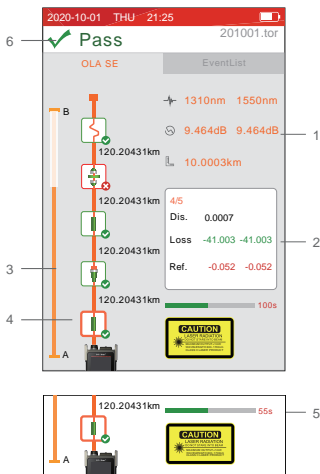
After testing, press "  " to save the result, and will pop up soft keyboard to edit the name. If "Auto name" is ON in system setting, then file will be auto-named when saving.

If no testing, press "  " button to the file list, then press "  " button to open the folder or file. If need to delete/rename the file, press "  " button to operate.

If select the target file, it will display the waveform thumbnail at the bottom.




- 1 — Measurement overview
- 2 — Details of selected event
- 3 — Location of each event
- 4 — Events and distance between events
- 5 — Measurement Status
- 6 — PASS/FAIL



OLA SE--Settings

In OLA SE interface, press " **SETTING** " button to enter into "Settings", and press " **ENTER** " and Navigation buttons to set the parameters.

In OLA SE or Setting interface, press " **SCAN** "button to start measurement.

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Settings

Pass/Fail Settings

Total loss threshold	20.000dB	>
ORL threshold	15.000dB	>
Loss threshold	0.300dB	>

Reflection threshold 40

Reflection loss threshold 0

Measure Settings

Splice loss

Reflection threshold

End threshold

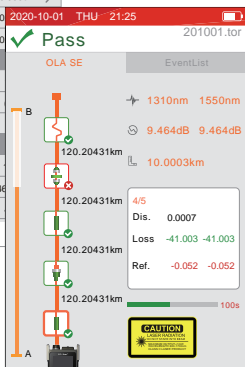
Optical fiber param



Wavelength



Refractive rate 1.46

Scatter coefficient










Press key ENTER to edit settings.












Press "  " button to check the event list, and press "  " button to save the data.




If no testing, press "  " button to enter the file list, then press "  " button to open the folder or file.

Press "  " button to delete or rename the folder or file.

2020-10-01 THU 21:25 			
 Pass		201001.tor	
OLA SE		EventList	
No.	Type	Dis./Len	Loss
1/5		0	--
1/6		0.04311	-41.033
2/6		0.06211	--
3/6		0.35688	-54.673
4/6		0.08561	--
5/6		0.04311	-41.033
6/6		0.35688	-46.023

2020-10-01 THU 21:25 	
File	
	20140617
	20140617
	20140618 Delete Rename
	20140619
	20140620
	20140619
	20140620
	20140621
Press right key to select operation.	

OPM

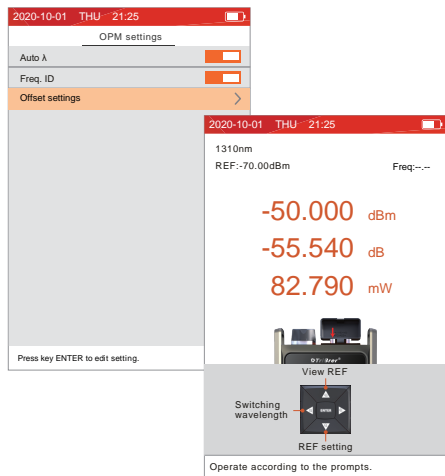
Connecting the fiber to the OPM port and press “  ” buttons to switch the wavelength 850/1300/1310/1490/1550/1625nm, set reference value, and check reference value.

Press “” to the OPM setting interface.

Auto λ : If ON, then OPM can identify the current wavelength in fiber automatically.

Freq. ID: Set ON/OFF to identify the frequency or not.

Offset settings: If not too accurate testing, user can do manual calibration by setting offset value of each wavelength.



The image displays two screenshots of the OPM device's interface. The top screenshot shows the 'OPM settings' menu with options for 'Auto λ ', 'Freq. ID', and 'Offset settings'. The bottom screenshot shows the main measurement screen for 1310nm, displaying power levels in dBm and mW, and a diagram of the device's controls.

OPM settings

- Auto λ ☐
- Freq. ID ☐
- Offset settings >

Press key ENTER to edit setting.

Main Measurement Screen (1310nm)



1310nm
REF:-70.00dBm
Freq:-.--

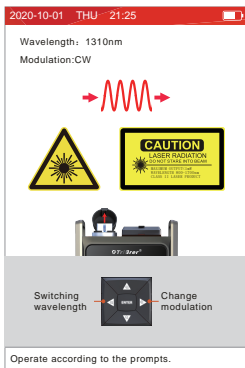
-50.000 dBm
-55.540 dB
82.790 mW

Device Diagram and Controls:

- View REF
- Switching wavelength
- REF setting

Operate according to the prompts.

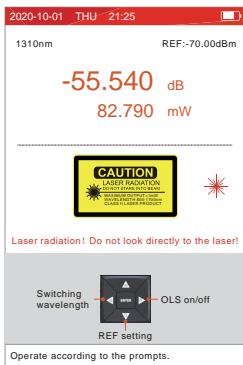
Connecting the fiber to OLS port, and press “ ” “ ” buttons to select the wavelength 1310/1550nm and modulation among continuous signal: 270Hz, 1kHz, 2kHz, 1kHz+Blink, 2kHz+Blink.



Loss Test

Loss test refers to testing the fiber loss of the passive network.

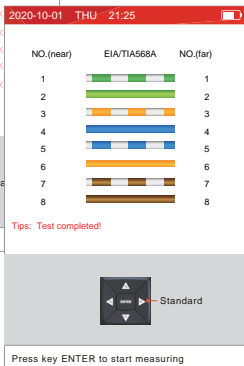
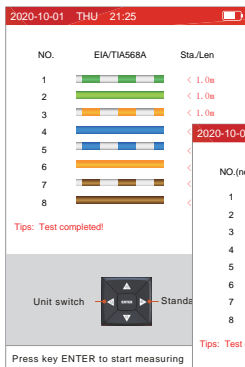
Inserting the standard fiber to OLS port and OPM port, turn on the OLS and set the reference value, then connecting the under-test fiber and check its loss value.



Connecting the host and remote cable module with a RJ45 cable, and start the measurement as prompts in the bottom.

Distance test: Support to test the length of common CAT5/6 cable

Sequence test: To check the connection quality of RJ45 terminations whether in right sequence order or abnormal situations such as poor/wrong connection, disconnection and so on.



System Settings

Set each parameter by Navigation and ENTER buttons.

- **Auto Power Off :**

Set the time for power-off or cancel the auto power-off function

- **Auto Name :**

Auto-name the file when saving, can be OFF

- **Auto backlight off :**

Set the LCD standby time: close or 15s~10min

- **Buttons backlight :** close or Low to High

Set backlight of buttons, convenient when working in dark condition

- **Brightness :**

Set LCD brightness(range 10~100)

- **Format storage :**

Delete all files in the device. If with TF card, delete all files in the SD card.

- **USB Connection :**

Connect the device to PC via USB cable to view internal or TF card saved data

- **OTG :**

Set whether to view the data in TF card when connecting the device to PC via USB cable

- **Factory Settings :**

Turn on when need to reset the device to factory settings, while device time and saved data remain unchanged.

