USER'S GUIDE

OPTICAL POWER METER

English

WARNING

You are cautioned that changes or modifications not espressly approved in this document could void yout authority to operate this equipment.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTE

As the laser is harmful to the eyes, do not attempt to disassemble the cabinet.

CLASS I LASER PRODUCT

Precautions for Use

Use batteries

At the same time, can not use different style or different capacitance batteries.

And only charge the rechargeable batteries.

Avoiding condensation problems

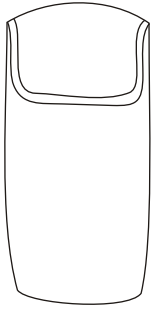
As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raising the room temperature suddenly, as condensation may form within the drive. If the temperature changes suddenly while using the drive, Stop using it and take out batteries for at least an hour.

Storage

When long time no use, must take out the batteries to avoid destroying the device.

Standard

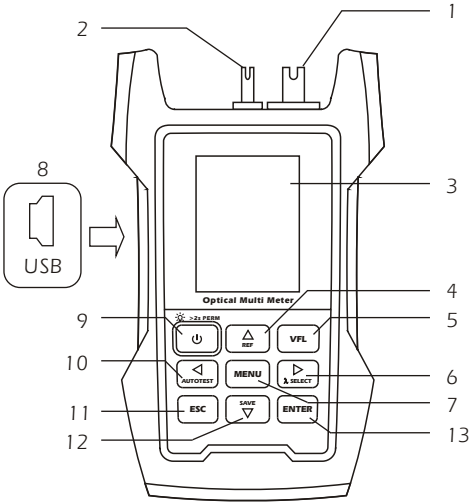
Host



Bag

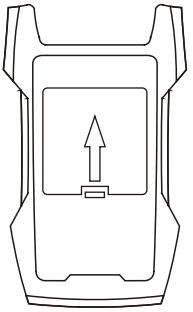
Manual

Description

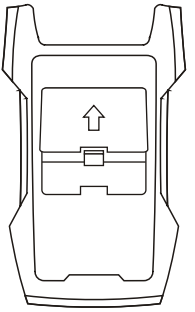


1- Optical Power Meter connector
2- Visual Fault Locator connector(optional)
3- Color LCD
4- REF key/Up key
5- Visual Fault Locator key
6- λ Select key/Right key
7- Menu key
8- USB charging port
9- Power key
10- AutoTest key/Left key
11- ESC key
12- Save key/ Down key
13- Enter key

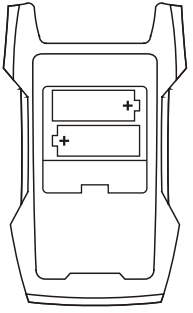
Installing the batteries



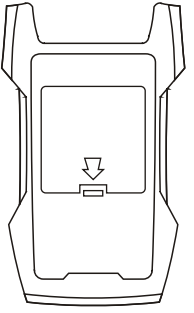
1.Press and push up



2.Open the lid

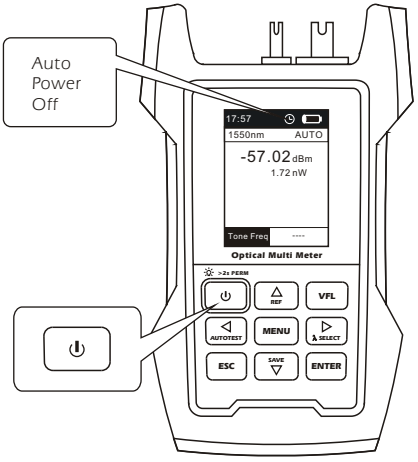


3.Installing the batteries



4.Push down and press

Power on/off, auto power off



Press " >2s PERM " key to turn on the device. Press it again for 2 seconds to shut down the device.

Device has power saving function. User can set the auto off time in the menu. After the setting time no key pressing, the device will auto power off.

User can cancel the auto power off function by pressing " >2s PERM " key to turn on device and keeping holding it over 2 seconds until the screen shows " " and auto off time in the menu will turn to 0.

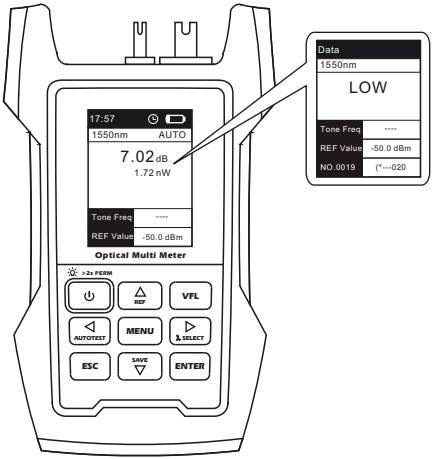
OPM- Measurement

After turning on the device, it shows the measurement interface of optical power meter. In the middle of screen, shows the measuring power value. Press " SELECT " key can select the wavelength. When wave detecting is ON, the screen will show AUTO. At the bottom of screen, shows the tone frequency. If no frequency detected or this function is OFF, it will show "----".

OPM- REF set

At the main measurement interface, short press " [△ REF] " key, it will show you the reference value you stored before, and the unit will turn to dB. Long press this key for 2 seconds, you can save the current value as a new reference.

OPM- Data reading



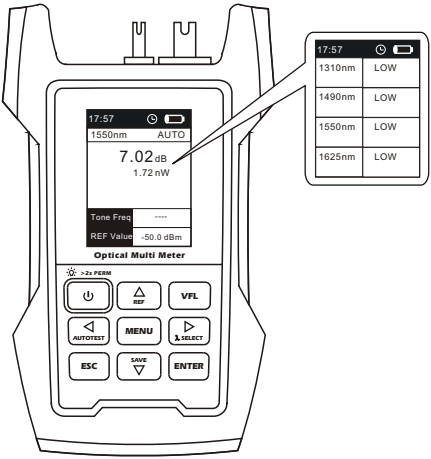
At the main measurement interface, short press

" SAVE " key , it can read the stored data. Press

" AUTOTEST " key or " SELECT " key can select the

different record data.

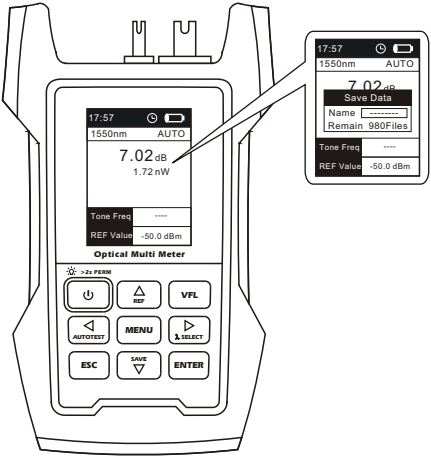
OPM- Auto Test



At the main measurement interface, short press " AUTOTEST " key , it can enter to auto test mode for single wavelength. Press it again to enter to auto test mode for multiple wavelengths. If you want to quit this function, you can press " AUTOTEST " key again.

During auto test, short press " REF " key can check the references for each wavelength.

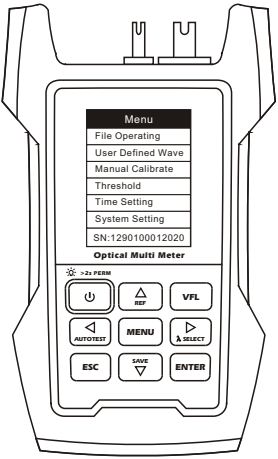
OPM- Data storage



At the main measurement interface or auto test interface, long press " SAVE " key, it can store the measuring data. You need to input the filename with 8 characters. Press " REF " key or " SAVE " key to select characters, press " AUTOTEST " key or " SELECT " key to shift. When finish naming, press " ENTER " key to save the data and back to the measuring interface.

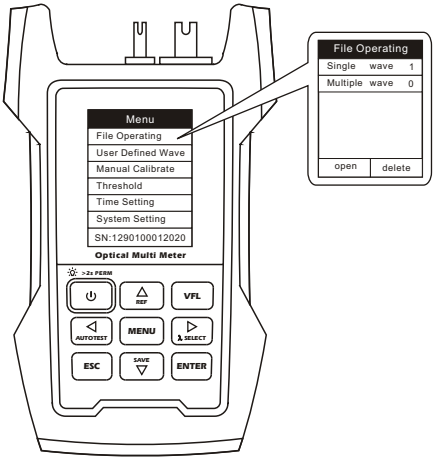
The device can save 1000 records totally.

Setting menu



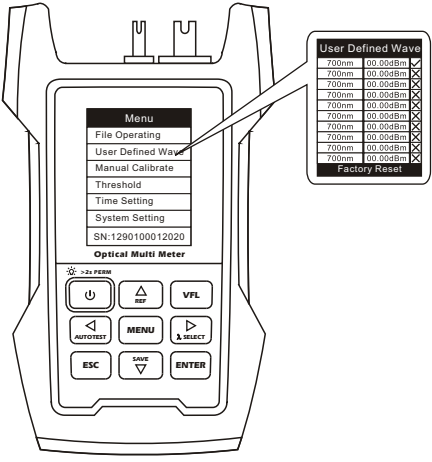
Short press " MENU " key, device will enter to setting menu. Setting menu includes File Operating, Optional Wave, Hand calibrate, Threshold, Time Setting and System Setting. Press " △ REF " key or " SAVE ▽ " key to select the function you need.

Setting menu- File Operating



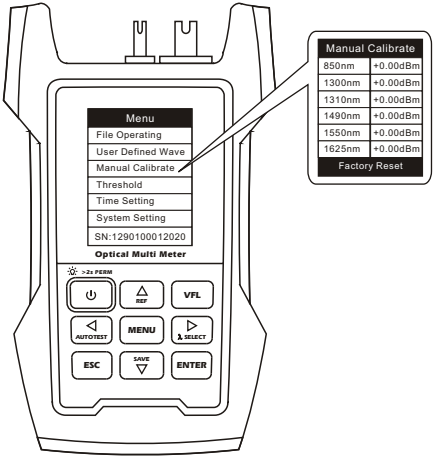
Move the cursor to File Operating and press " ENTER " key to enter. File includes Single wave and Multiple wave. Press " MENU " key to select open or delete the file. If you select open and press " ENTER " to enter wave data. For each data record, you can open, edit or delete. Press " ESC " key to cancel the operation.

Setting menu- User Defined Wave



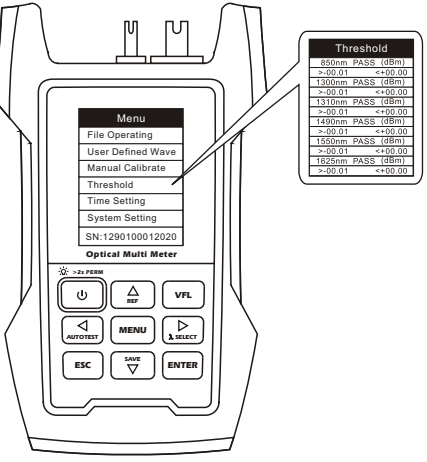
Move the cursor to User Defined Wave and press "ENTER" key to enter. You can set 10 groups of wavelength calibration values except for wavelengths of 850/1300/1310/1490/1550/1625nm. The range of calibration value is -30dBm～+0.00dBm. Press "ENTER" key to enter to set and press it again to save and quit setting. It only can be used when you change the "☒" into "☑".

Setting menu- Manual Calibrate



Move the cursor to Manual Calibrate and press " ENTER " key to enter. You can set offsets for six wavelengths, include 850/1300/1310/1490/1550/1625nm. The range of offset value is -5dBm～+5dBm. Press " ENTER " key to enter to set and press it again to save and quit setting.

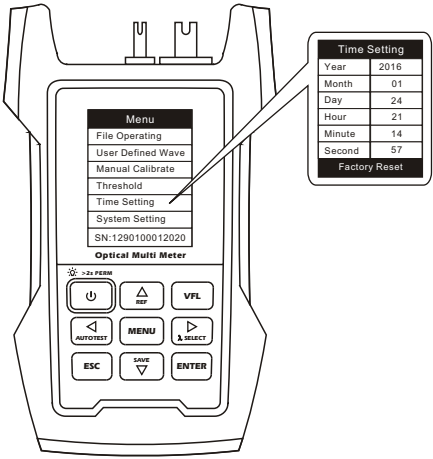
Setting menu- Threshold



Move the cursor to Threshold and press " ENTER " key to enter. You can set threshold for six wavelengths, include 850/1300/1310/1490/1550/1625nm. Press " ENTER " key to enter to set and press it again to save and quit setting.

At the Auto Test interface, if the measuring value is over threshold value, it will show in red words, otherwise it will be in black words.

Setting menu- Time Setting

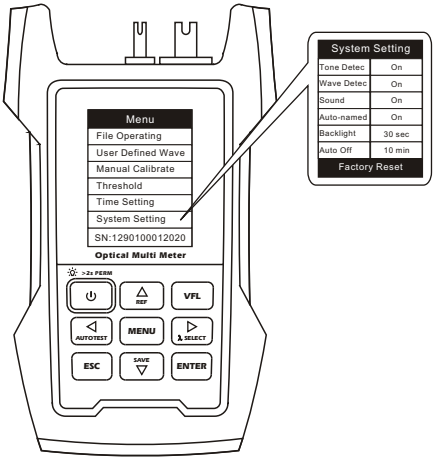


Move the cursor to Time Setting and press

" ENTER " key to enter. You can set the time information of year, month, day, hour, minute. Press

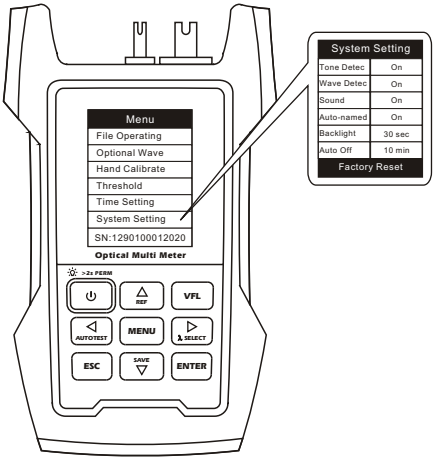
" ENTER " key to enter to set and press it again to save and quit setting.

Setting menu- System Setting



Move the cursor to System Setting and press " ENTER " key to enter. System Setting includes Tone Detec, Wave Detec, Sound, Auto-named, Backlight and Auto Off. Press " ENTER " key to enter to set and press it again to save and quit setting.

Setting menu- System Setting



Tone Detec: when set it On and detected frequency is 270Hz, 330Hz, 1kHz or 2kHz, it shows in red words in measuring interface.

Wave Detec: when set it On and device detects the specific frequency, it will switch to the wavelength automatically.

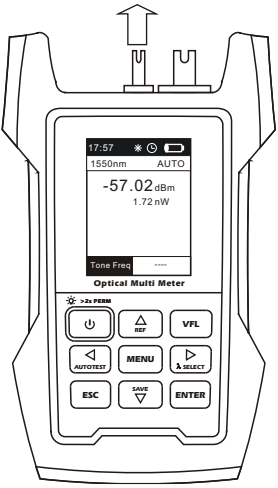
Sound: when set it On, the device will have beep when it turns on, identifies frequency or press the keys.

Auto-named: when set it On and save data, it can have memory about filenames, last three digits of filename will plus one automatically.

Backlight: set backlight time between 3sec and 120sec.

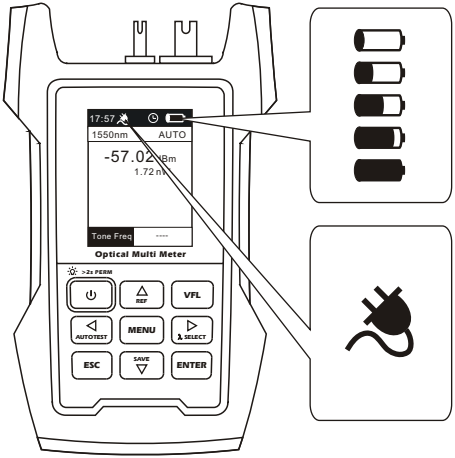
Auto Off: set auto off time between 1min and 10min.

Visual Fault Locator



The device builds in a VFL module. In the main measurement interface or auto test interface, press " VFL " key to shift the conditions: ON-> GLINT-> OFF.

Battery energy detect



Battery energy detect has five levels:

remain 80%---100%

remain 60%---80%

remain 40%---60%

remain 20%---40%

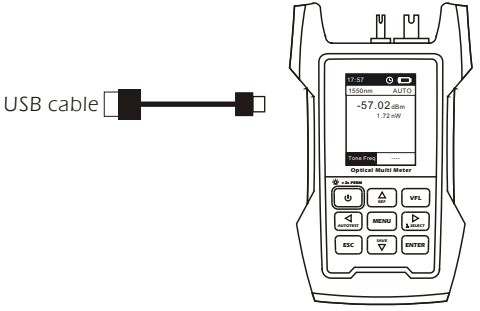
remain less than 20%

if the energy is too low, the beep will be on and the device will auto power off. If you plug in the AC adapter, it shows the charging icon. It chargeable batteries inside, it starts to charge.

Battery charge

First you must use the rechargeable batteries. When the energy is less than 20%, you should charge the batteries. Long time low energy, the life of the batteries will be short.

The device is charged throw an USB cable. For the batteries of 1300mAh, do not charge for more than 10 hours. If you do not stop recharging when it charges fully, the device will continue the trickle charge state, using small current to supply natural discharge. But this process is not more than 48 hours. And do not charge the non-rechargeable batteries, or the device will be destroyed and also lose the guarantee.



Detailed

OPM	
Wave response range	700～1700nm
Calibrate wavelength	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Measurement range	T:-70dB～+10dB(850nm@-60dB～+10dB) C:-50dB～+26dB(850nm@-40dB～+26dB)
Resolution	0.01dB(>60dBm), 0.1dB(<60dBm)
Accuracy	±0.2dB
Linearity	2%
Detector type	InGaAs

VFL(optional)	
Output wavelength	650nm±20nm
Output power	1mW or 10mW
Glint	2Hz

Others	
Battery supply	AA*3
Battery lifetime	>50H
Chargeable	Yes
Water proof	Prevent small splash
Operate temp	-10℃～+50℃
Store temp	-20℃～+60℃
Humidity	<90% no drew
Size	168mm*95mm*38mm
Weight	330g