

Pro'sKit®

MT-7615/MT-7616

4 In 1 Fiber Optical Power Multimeter

User's Manual



WARNING

You are cautioned that changes or modifications not expressly approved in this document could void your authority to operate this device.

To reduce the risk of fire or electric shock, do not expose this device 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 IIIB LASER PRODUCT

Precautions for Use

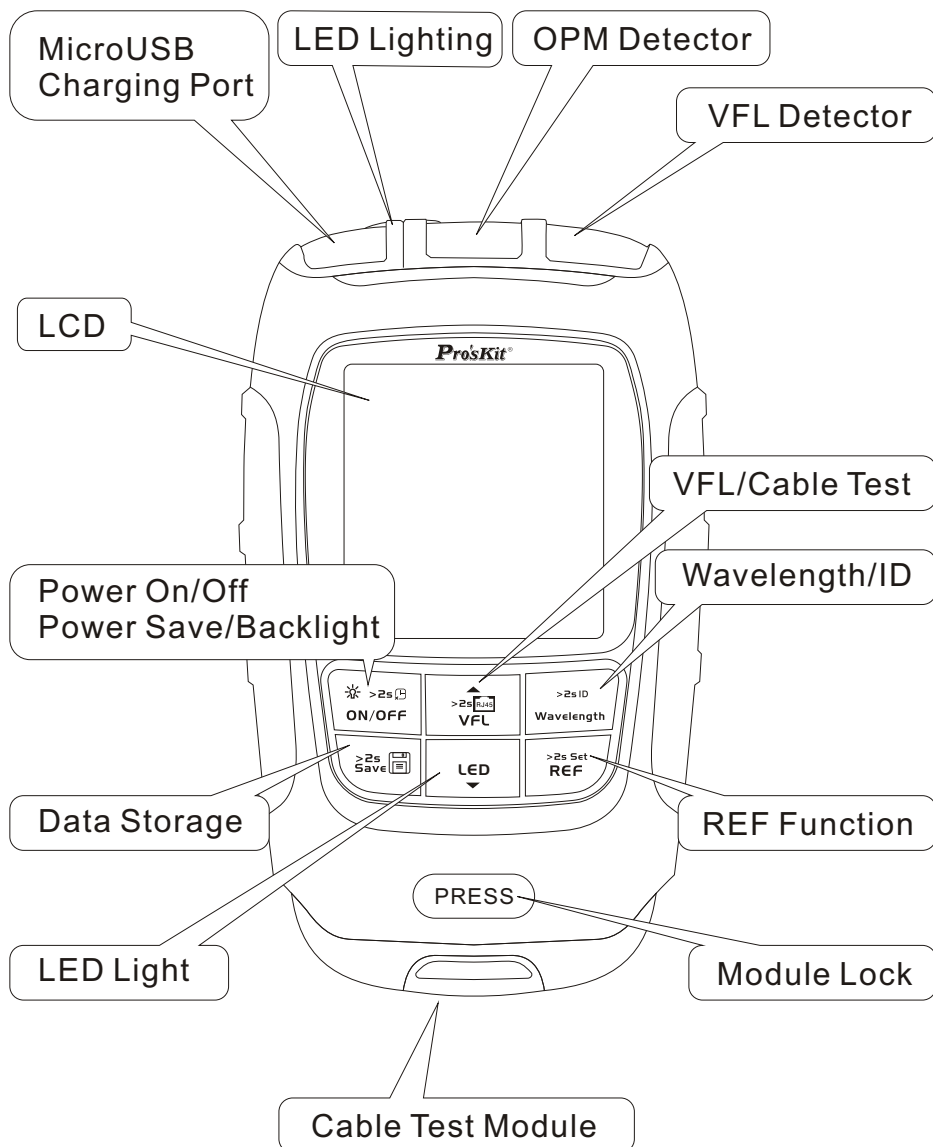
Use batteries

1. Please use right original AC/DC adapter to charge; Do not keep the device in charging status when not use; and be sure fully charge the device if re-use after long-term placed.
2. Keep the device away from water, fire or high temperature environment.
3. Do not dissemble, open or destroy the inside lithium battery, or set it on fire, which may lead to explosion or release toxic substances; Please keep the device away from strong shock or vibration.
4. Please obey local laws and regulations to solve the discarded products.

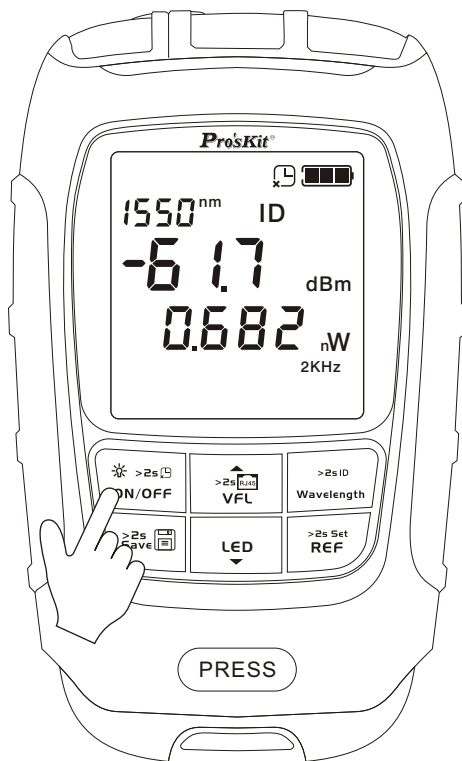
Avoiding condensation problems





As much as possible, avoid sudden temperature changes. Do not attempt to use the device immediately after moving it from a cold to a warm location, or raising the room temperature suddenly, as condensation may form with in the device.

Description

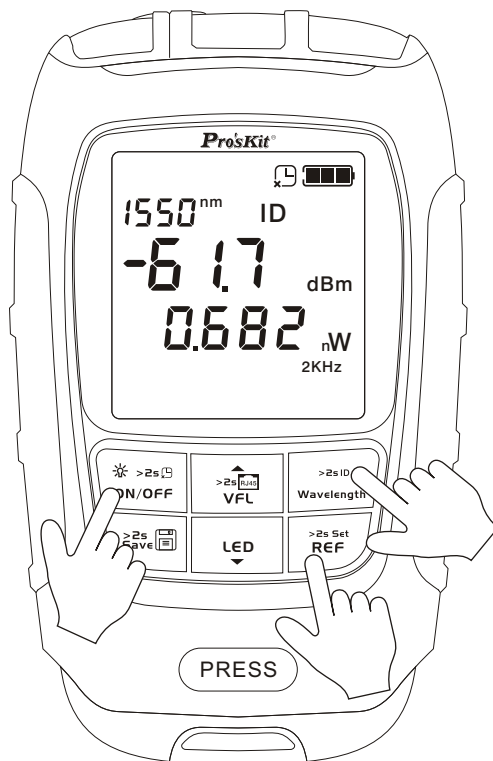




On/Off and Auto-off






Short press "  " to turn on the device with auto-off function; to cancel the function, long press "  " untill "  " appears . After device on, short press "  " to turn on/off backlight, long press to turn off the device.

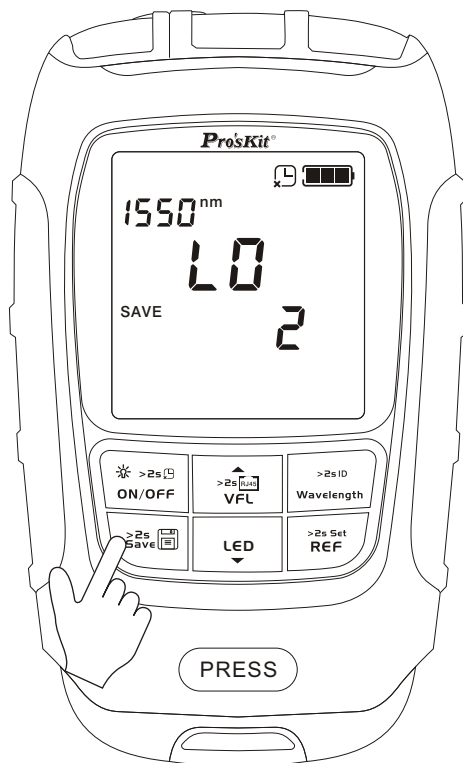
Optical power meter and Offset(self-calibration)Setting


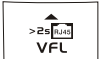




Turn on the device and enter OPM interface, short press " " key to switch unit and check REF value; long press to set current value as new REF value. Press " " key to select the wavelength; long press to open WAVE ID function.

Long press " " and " " key at the same time to turn on the device and enter the Offset setting interface; press up/down key to set, the range is [-5, +5]; then press " " key to confirm the setting.

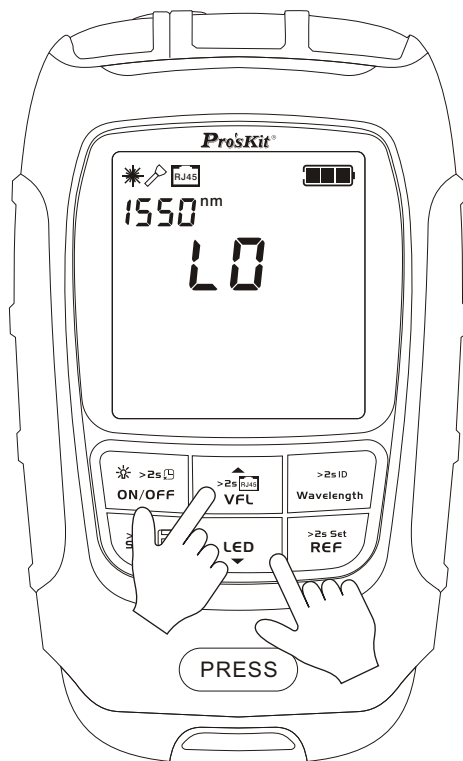
Data Storage






Long press " " to save the current OPM value, Max 500 data storage; the initial data will be covered after more than 500 data are saved. Short press to check the saved data, switch pages by " " and " ".

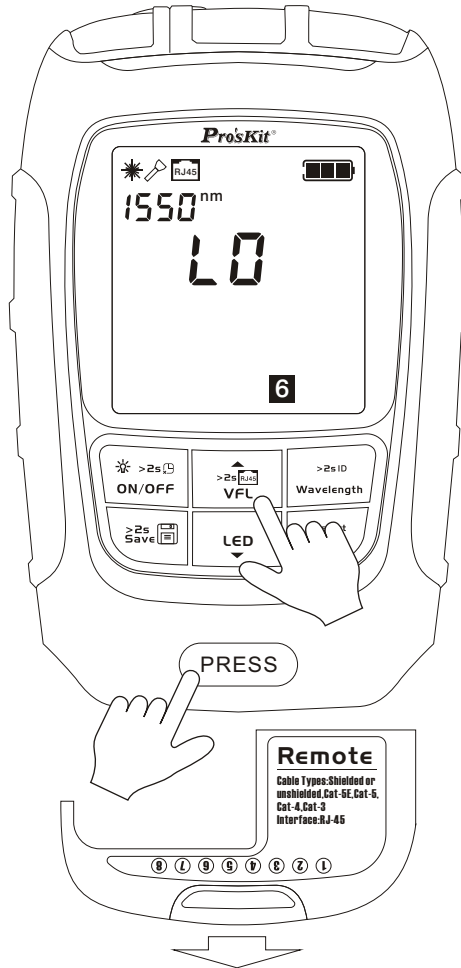
Press " " again to exit data storage.


VFL/Cable Test and LED Lighting



- Short press " " to switch VFL output mode. Long press " " to turn on/off cable test mode .
- Short press " " to turn on/off LED lighting.

Cable Test Module



Press the module lock "press" key to pull out the module to test network cable , and push it back after testing; then make sure the module is locked tightly. Long press "  " to open the network test, and the measurement will start automatically after the network cable is connected.

Power Indicator



Four levels indication of power detection



Remain 80%---100%



Remain 40%---80%



Remain 20%---40%



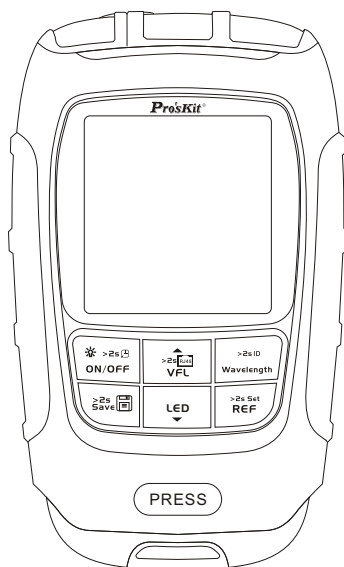
Remain less than 20%

Charge

The device has a charging function. When the power is less than 20%, you should promptly shut down it and recharge. Long time undervoltage will shorten the lifetime of the rechargeable battery.

Insert Micro USB cable to 5V/1A charging adapter, power bank or computer to charge the device, and charging time should be within 24 hours.

5V/1A



Meter Maintenance

General maintenance

Optical fiber connect the adapter should avoid contacting with hard objects and keep clean. Should be stored in a dry and ventilated place to avoid moisture.

When unuse for long time, charge the battery every 3 months, and charge 50%~80% of the power.

Troubleshooting

Failure	Failure Cause	Solution
Cannot boot	Battery is dead	Charge the battery
Immediately shutdown after booting	Low battery	Charge the battery
The operation is invalid after starting up	The instrument program is disordered	Reboot
Large measurement error	The end face of the light port is dirty	Clean the light port

Specification

	MT-7615	MT-7616
Detector Type	InGaAs	
Wavelength Response Range	700-1700nm	
OPM Connector	2.5mm universal connector	
Measurement Wavelengths	850/980/1270/1300/1310/1490/1550/1577/1625/1650nm	
Measurement Range	-70~+10dBm	-50~+30dBm
Resolution	0.01dB	
Accuracy*	$\pm 0.2\text{dB}$ (1310/1550nm) $\pm 0.3\text{dB}$ (850/980/1300/1490/1625/1650nm) $\pm 1\text{dB}$ (1270/1577nm)	
Unit	dB, dBm, mW, uW, nW	
Modulation Detection	270/1k/2kHz	
Data Storage	500 groups	
Wavelength Memory	Yes	
WAVE ID	Yes(Only for Prokits' light source products)	
User Self-calibration	Yes	
REF	Yes	
Back Light	Yes	
Output Power	15mW	30mW
Testing Distance*	10-12km @SM	14-16km @SM
VFL Connector	2.5mm universal connector	
Wavelength	650 \pm 20nm	
Operation Mode	CW/2Hz Glint	
Network Application	UTP network cable	
Interface	RJ45 (UTP/8P8C)	

Specification

Testing Type	Network sequence
Testing Distance	600m
Illumination	LED
Auto Power-off	Yes(no operation in 10 minutes)
Low Battery Indicator	Battery level
Charging Socket	Micro USB
Working Time	>50 hours(only OPM)
Power Source	3.7V/450mAh
	Li-ion
Operation Temperature	-10~50℃
	<90%RH
Size	98*59*27mm
Weight	100g

* at 20℃ ±2℃, 40%-60%RH, with standard testing fiber

* MT-7615 Accuracy range: +3dBm~-60dBm, Others as following:

±0.8dB: +3dBm~+6dBm, -60dBm~-65dBm@1550nm wavelength

±3.0dB: +6dBm~+10dBm, -65dBm~-70dBm@1550nm wavelength

* MT-7616 Accuracy range: +23dBm~-40dBm, Others as following:

±0.8dB: +23dBm~+26dBm, -40dBm~-45dBm@1550nm wavelength

±3.0dB: +26dBm~+30dBm, -45dBm~-50dBm@1550nm wavelength

* Testing distance will be influenced by environment and visual sensitivity

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