Pro'sKit®

# Optical Laser Source

MT-7801/MT-7802/MT-7803

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.

# 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 with in the drive. If the temperature changes suddenly while using the drive, stop using it and take out batteries for at least an hour.

## Storage

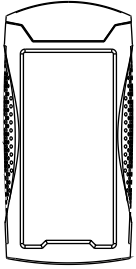
When long time no use, must take out the batteries to avoid destroying the device.

# Contents

# Check the accessories

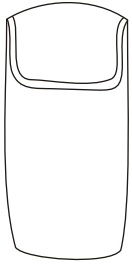
## Standard Edition


Host



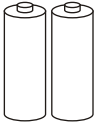
Damping Jacket


User's Guide

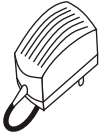


Packet

Optional

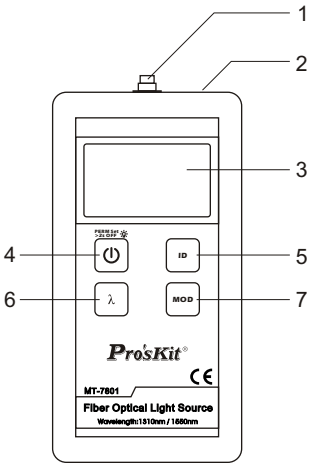


2x AA LR6 1.5V or rechargeable battery



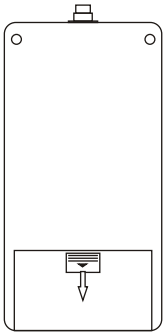
charger/ out put: 5v 500mA

# Description

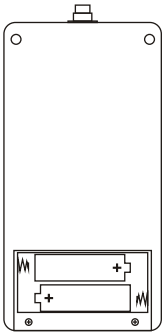



| | |
|---|---|
| 1 | Fiber optic adapter |
| 2 | Charging Socket |
| 3 | LCD |
| 4 | Power Button |
| 5 | Wavelength ID |
| 6 | Output wavelength switch button |
| 7 | Load modulation frequency |

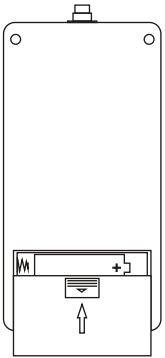
# Installing the battery



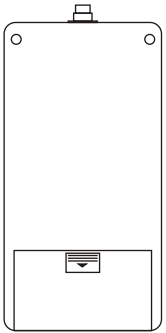
1.Pull the battery cover



2.Installing the battery



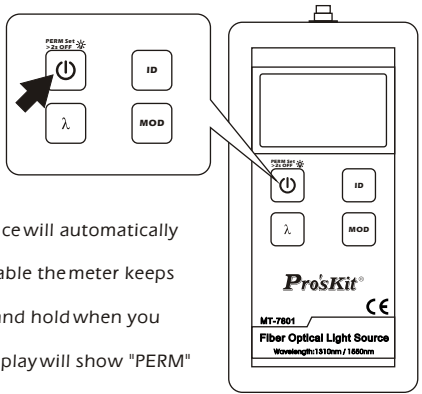
3.Push the battery cover



4.Complete

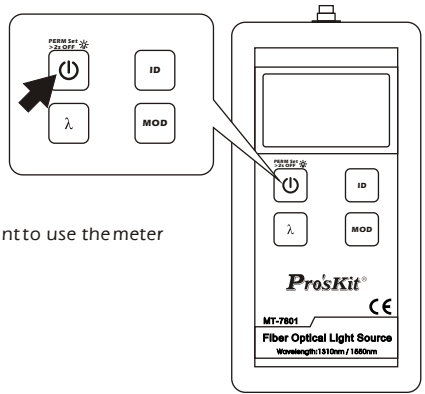
# On/Off and Permanent On

Press " ⏻ " button will turn on the meter. Press button again for two seconds or more will turn off the meter.



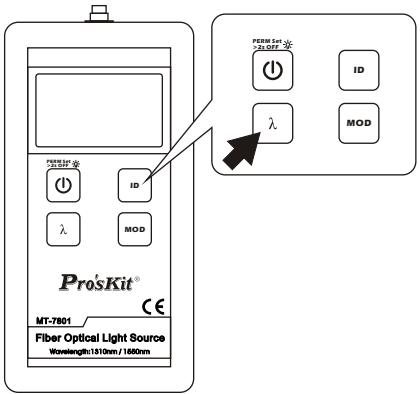

This meter has a power-saving function, normal boot and ten minutes without any operation, the device will automatically shut down. If you need to shield this function and enable the meter keeps on working, only need to press the " ⏻ " button and hold when you boot the instrument. After two seconds, the meter display will show "PERM" which means permanent power on.

# Backlight Function




Under boot status, short press the " " button, you can control the backlight function on or off. The backlight function is used when you want to use the meter at night or darker occasions.

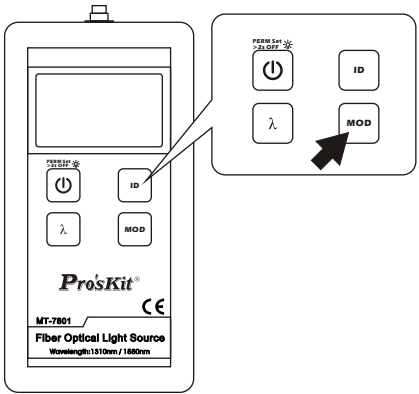
# Select Wavelength




After pressing " λ " button, you can select the required output wavelengths. Details refer to the parameters table.

The power meter or other measuring equipments should correspond the wavelength of the light source.

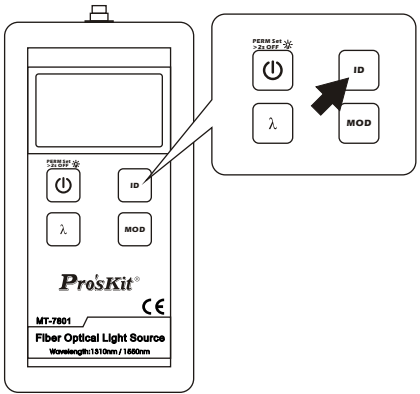
# Modulation wave output




After pressing " MOD " button, you can load a confirmed carrier frequency in the current output laser.

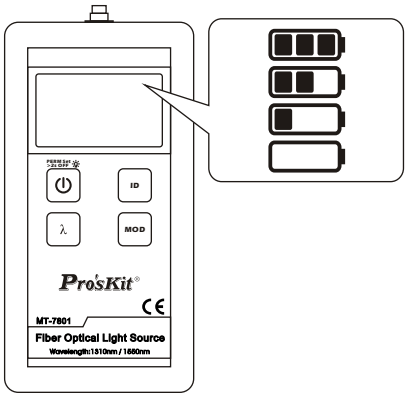
This instrument has three carrier frequencies for selecting: 270Hz, 1KHz, 2KHz.

# Wavelength identification




Press " ID " Button, it start the wavelength recognition function, and the upper left of the display screen shows 'Id'. When connect with the power meter supporting wavelength recognition function, it can show the current output wavelength of light source, and switch to measure the wavelength automatically.

# Power Indicator



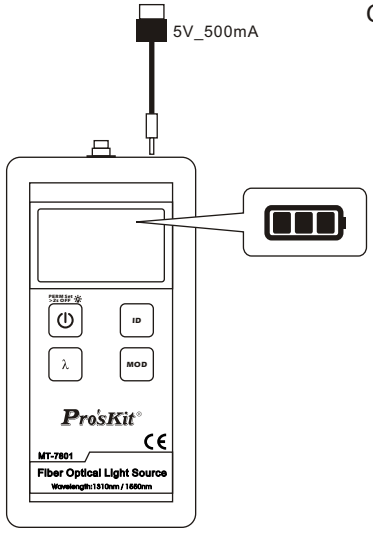

Four levels indication of power detection

Represents the remaining 80%---100% electricity

Represents the remaining 40%---80% electricity

Represents the remaining 20%---40% electricity

Represents the remaining electricity less than 20%




## Charge

The instrument has a charging function. When use rechargeable batteries and a low battery indication shows on the instrument, you should promptly shut down it and recharge. Long time undervoltage will shorten the lifetime of the rechargeable battery.

Connect the AC adapter to the device correctly, it can charge Automatically. Besides, computer USB port can also be used for charging. The battery remaining indicator keeps flashing during charging. It will stop when the charging is finished. The battery has finished the fast recharge and can be used directly. If you do not stop recharging at this time, the in strument will continue the trickle charge state, using small current to supply natural discharge. But this process is not more than 48 hours.

The instrument can still be used while charging. But do not plug in the AC adapter when it is not rechargeable battery inside, or it will cause a high temperature and combustion, even explosion.

# Meter Maintenance and Solution

## 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 un use for long time, should remove the batteries before storage.

## Fault and solution

| Failure name | Failure Cause | Solution |
|---|---|---|
| Cannot boot | Check the battery has power or not | Check the batteries are installed correctly |
| Immediately shutdown after booting | Check the battery has power or not | Replace or recharge the batteries |
| Can display, but all operations are valid | The instrument program is disordered | Reboot |
| Cannot charge | Using non-rechargeableable battery. | Reinstall the rechargeable batteries |
| Garbled | Incorrect reset | Reboot |

## Detail Parameters

| | MT-7801 | MT-7802 | MT-7803 |
|---|---|---|---|
| Wave source type | FP | FP | 1310nm/1550nm@FP 1490nm@DFB |
| Wavelength | 1310nm/1550nm(SM) | 850nm/1300nm(MM) | 1310nm/1490nm/1550nm(SM) |
| Output power | >-5dBm | >-10dBm | >-5dBm |
| Optical connector | SC/PC | | |
| Stability | ±0.05dBm/1 hour; ±0.1dBm/8 hour | | |
| Modulation wave | 270Hz, 1KHz, 2KHz | | |
| Auto off | 10 min（can be cancelled） | | |
| Low battery warning | Low battery energy | | |
| Operation voice prompts | Yes | | |
| Backlight | Yes | | |
| Body protection | Yes | | |
| Battery life | >40 hour | | |
| Storage Temp. | -20℃~+70℃, <90%RH | | |
| Operation Temp. | -10℃~+60℃, <90%RH | | |
| Power source | AA/LR6 1.5V X2 PCS（not include） | | |
| Size | 165mm*80mm*35mm | | |
| Weight | 280g | | |
| Individual packing | Color box | | |