



**millsltd.com**

# **USER'S GUIDE**

**OPTICAL FIBER IDENTIFIER**

**C00-6435**

**English(GB)**

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## **WARNING**

You are cautioned that changes or modifications not expressly approved in this document could void your 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**

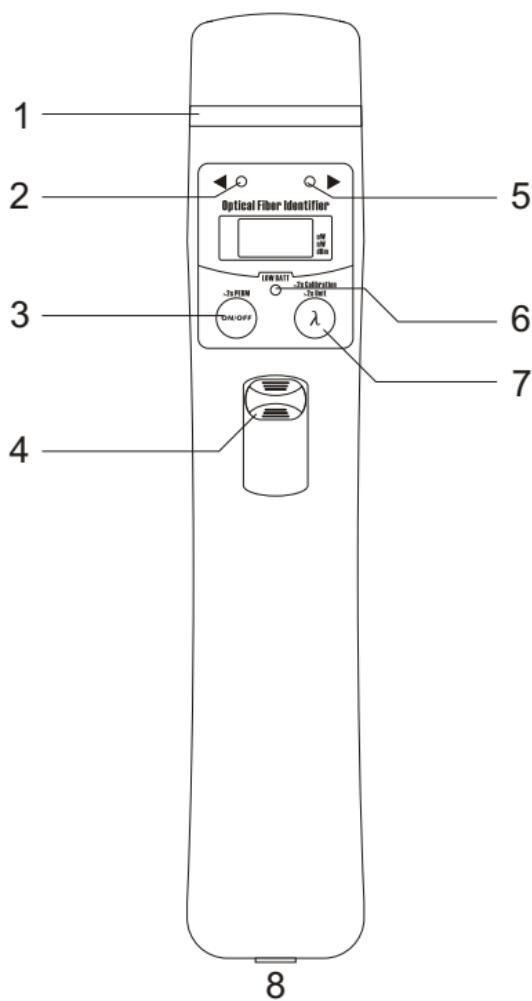
As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raising the room temperature suddenly, as condensation may form within the drive. If the temperature changes suddenly while using the drive, stop using 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.

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## Description



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1-Fiber location

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2-Left indicative led

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3-Power key of visual fault locator and optical powermeter

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4-Trigger of the fiber identifier

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5-Right indicative led

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6-Power indicative led

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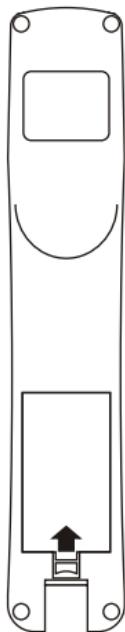
7-Calibration button

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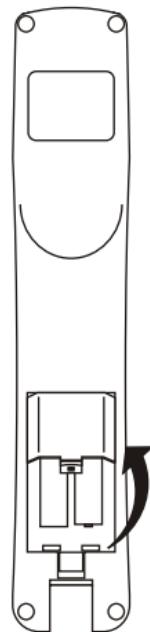
8-Connector of OPM/VFL( optional )

## Battery set

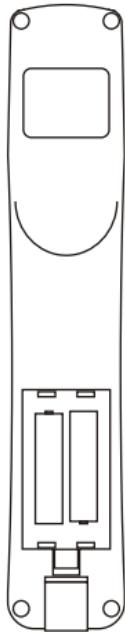
Warning:At the sametime, can not usedifferent style and different capacitance batteries.



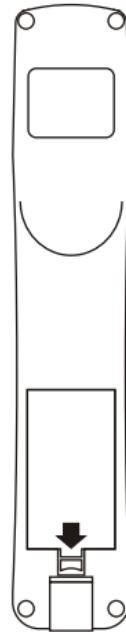
1.Push the tip



2.Open the battery slot



3.Replace the batteries

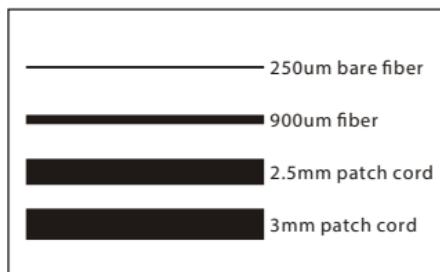


4.Close the battery slot

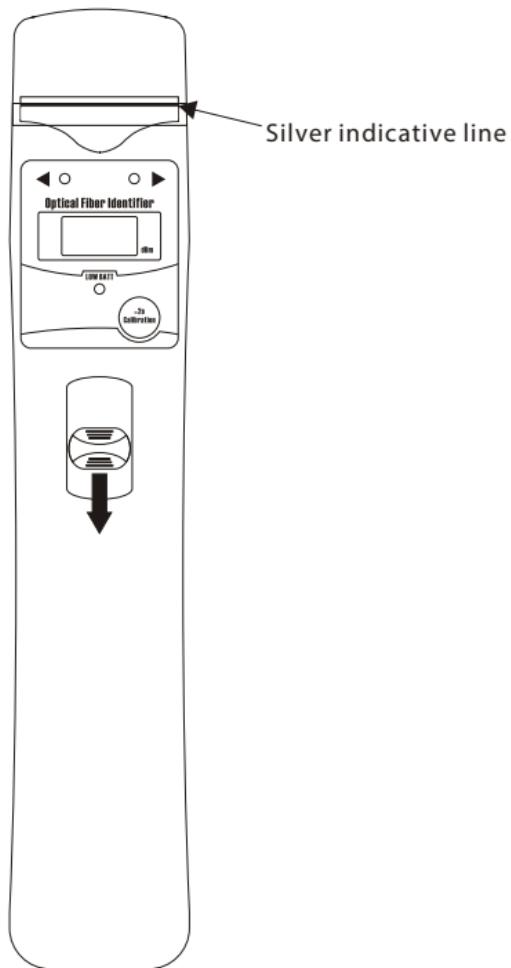
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## Available for different Fiber

1. Available for 800nm~1700nm laser signal
2. Based on non-destructive technology
3. No need to replace the clamp block for different fiber

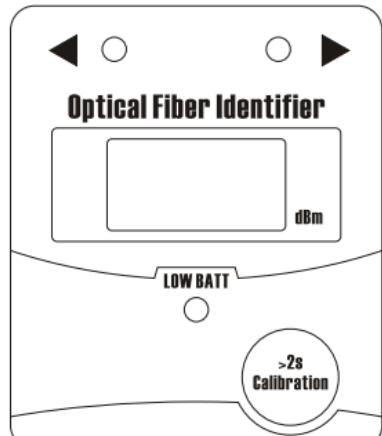
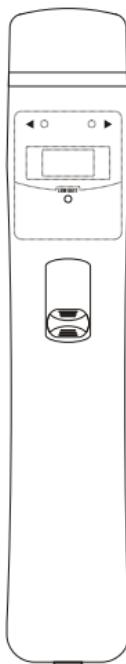


## Available for different Fiber

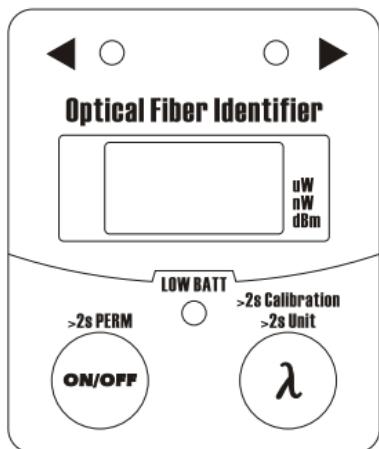


When testing 2.5mm and 3.5mm patch cord, the silver indicative line needs to be seen to ensure a correct measurement

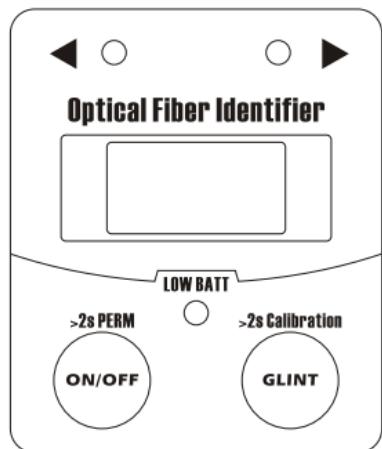
## Fiber Identification models



a.standard Optical Fiber Identifier



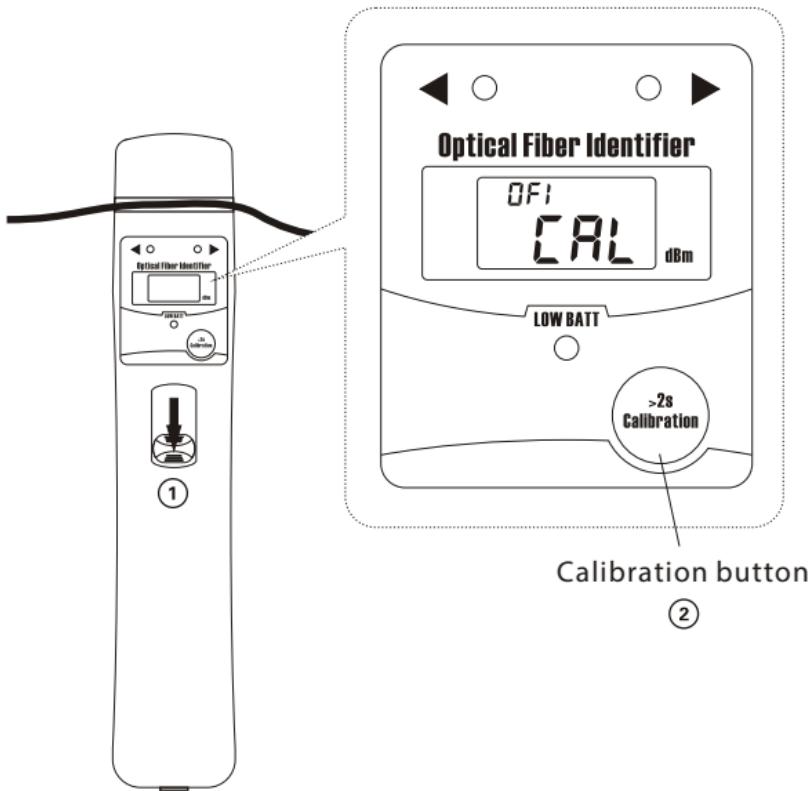
b.Optical Fiber Identifier with OPM mode



c.Optical Fiber Identifier with VFL mode

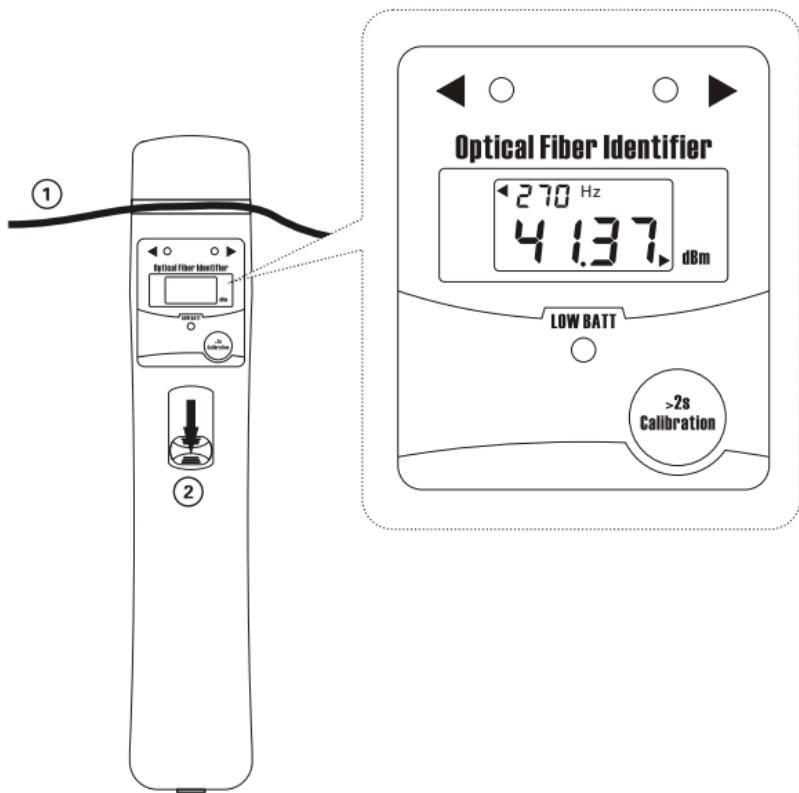
AFI430 serial has three models, include standard Optical Fiber Identifier, Optical Fiber Identifier with OPM mode and Optical Fiber Identifier with VFL mode. Different models with different buttons, which shown in the pictures above.

## Environment Light Calibration



Push down the trigger of the fiber identifier and hold, then long press the “” button. Until the unit beeps and the the screen shows "CAL", the environment light calibration is finished.

## Operation

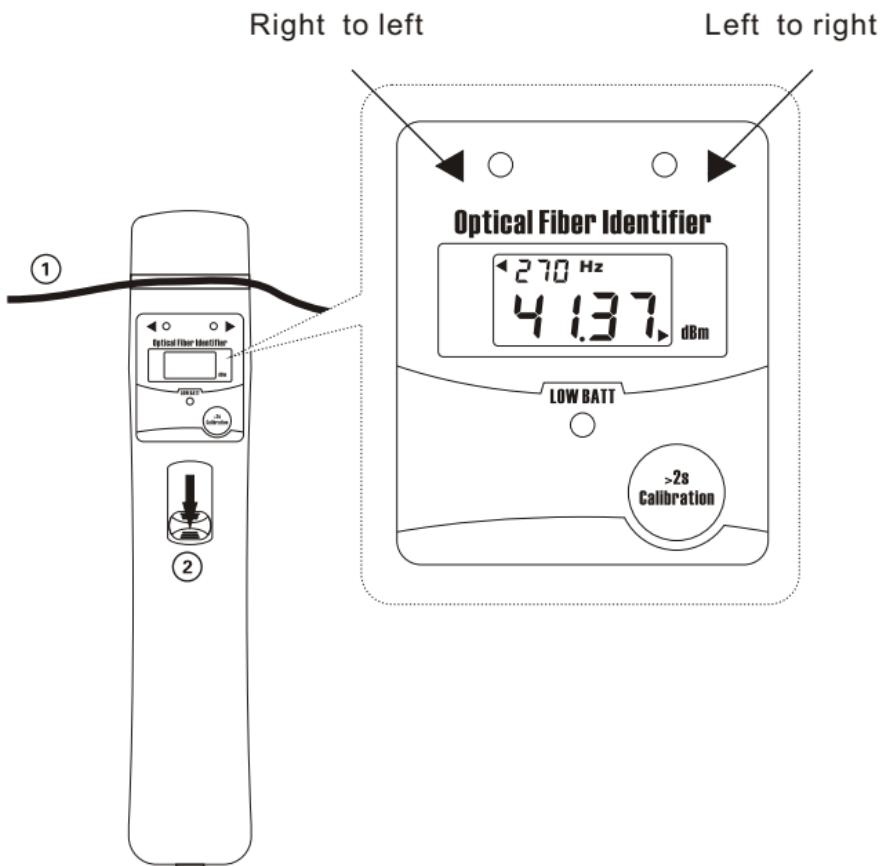


Put the fiber into the fiber location and push down the trigger to begin testing. After 1~3 seconds, it will output the results.

The data in the LCD shows the signal intensity, if the power value is over +5dBm, it will be "HI", if the value is less than -40dBm, it will be "LO".

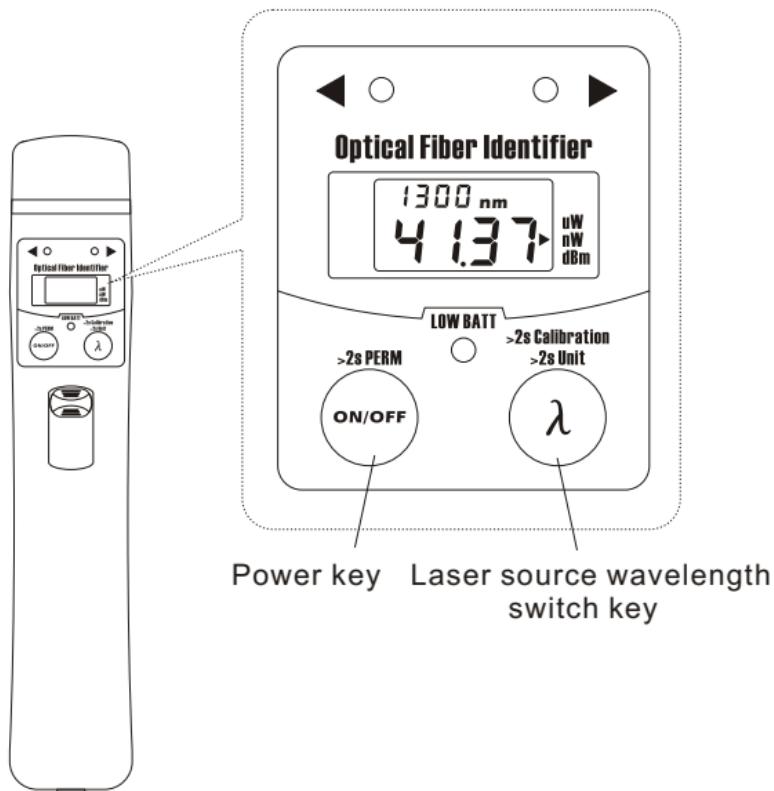
Carrier frequency: 270Hz, 1KHz, 2KHz and OFI.

## Signal Direction



It is the main function to test the direction of the signal in the fiber. When signal is transporting in the fiber, the corresponding indicative led will be on.

# Optical Power Meter



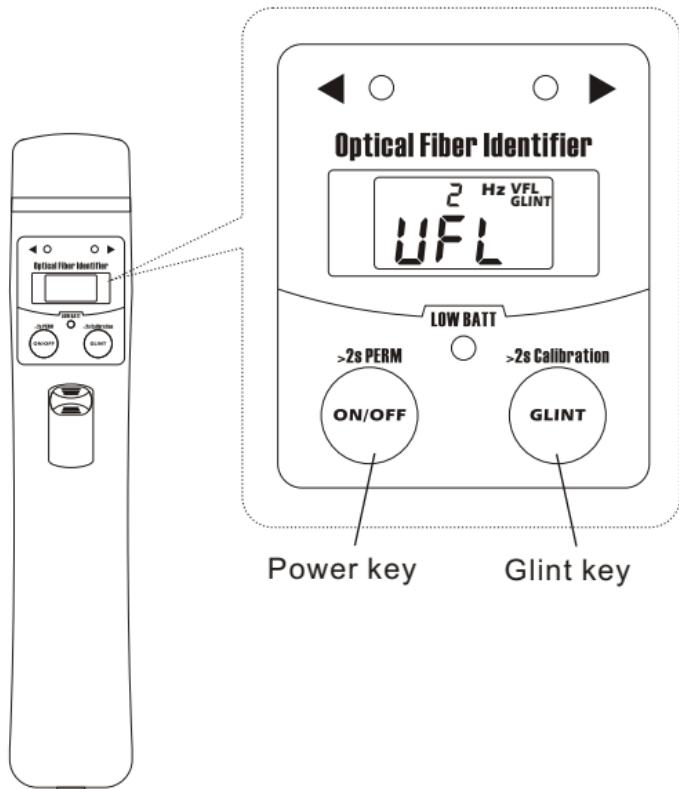
When the optical fiber identifier has OPM mode, press

“” key to turn on the device, short press “” key

to select the laser source wavelength.

Open the cap in the bottom of the device and connect the fiber correctly, the device will calculate the power value automatically. The screen will show the corresponding wavelength and power value.

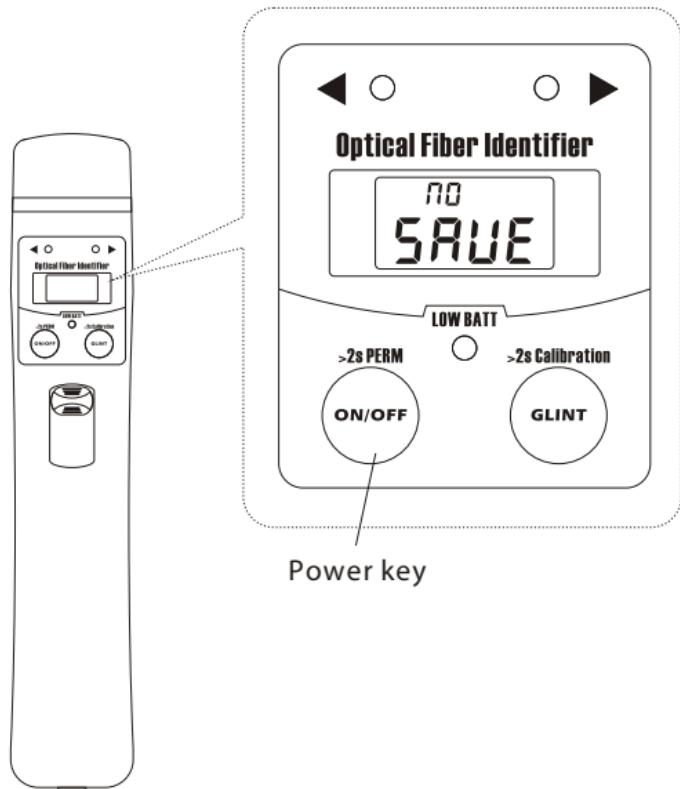
# Visual Fault Locator



When the optical fiber identifier has VFL mode, press “” key to turn on the device, press again to shut down.

Open the cap in the bottom of the device, and press the “” key to open or close the flash laser.

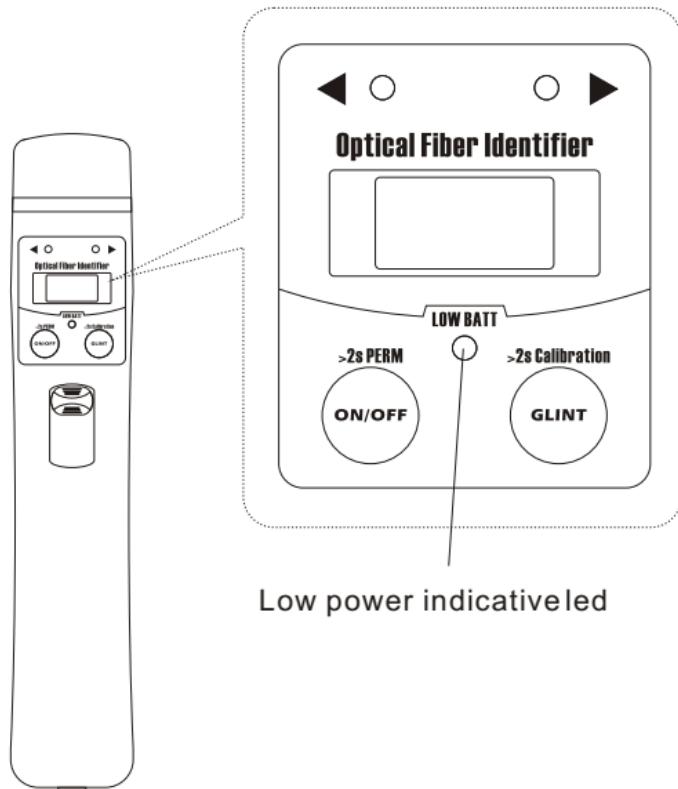
## Power saving



Press “” to turn on the optical power meter or visual fault locator with auto power off (After 10 minutes if no key pressed, it will auto power off.)

Press the “” key for 2 seconds when turning on the device, the auto power off will be cancelled and the screen will show "NO SAVE".

## Low power detecting



Low power indicative led

When the power indicative led turns to red, it means low battery energy, please replace the batteries, otherwise the device will auto power off.

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## Maintenance and calibration

### Routine attention

1.Fiber-optical adapter should keep clean.

2.Please store the device in dry and ventilated place.

3. Please remove batteries if the device is not being used regularly to prevent battery leakage.

### Common malfunction

Described	Malfunction cause	Solution
Can't turn on	No battery	Check battery setting
After turn on, it shuts down immediately	Check battery capacity	Change battery
Wrong identification	Unavailable fiber	Change fiber
Display corrupted code	Reset is incorrect	Reset
Can't identify	Wrong location	Test again

## Detailed parameter

Accuracy-CW	250um fiber@1550nm=-35dBm 900um fiber@1550nm=-35dBm 2.5mm fiber@1550nm=-30dBm	250um fiber@1310nm=-30dBm 900um fiber@1310nm=-30dBm 2.5mm fiber@1310nm=-25dBm
Max. Input		+5dBm
Detector Type		InGaAs
Wave respond		800nm~1700nm
Insertion Loss		<2.5dB typical value
Frequency Identify		270Hz/1KHz/2KHz
Fiber Type		Φ 250um/900um/2.5mm/3mm fiber
Sound Warn		Yes

### Optical Power Meter

Calibration Wave	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Accuracy	±0.02dB
Optical Adapter	2.5mm UPP

### Visual Fault Locator

Wave Output	635nm~670nm
Power Output	1~30mW customized
Optical Adapter	2.5mm UPP
Battery Type	AA size Alkaline cell or Ni-MH cell
Battery life	>6000 times
Operate Temp °C	0---+50
Store Temp °C	-20---+70
Size	40 (L) *42 (W) *230 (H)
Weight	250g

Φ 3mm fiber measurement performance decreases 30%, fiber with black coating can not be measured, fiber with deep color coating performance decreases 10%~50%.

