

# **USER'S GUIDE**

## **OPTICAL FIBER IDENTIFIER**

**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

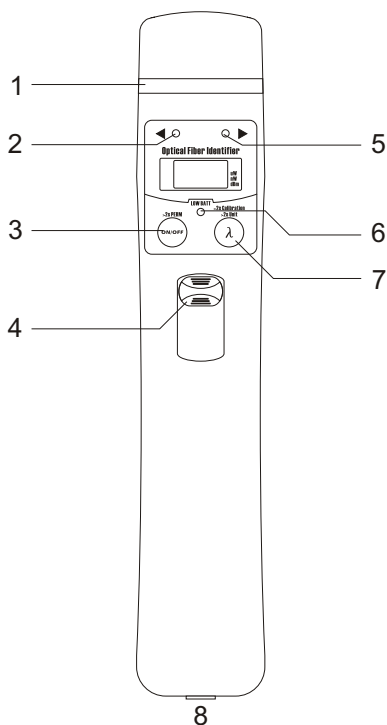
As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raising the room temperature suddenly, as condensation may form within the drive. If the temperature changes suddenly while using the drive, stop using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

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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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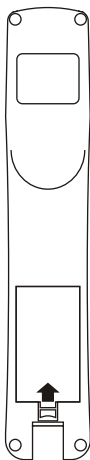
8-Connector of OPM/VFL( optional )

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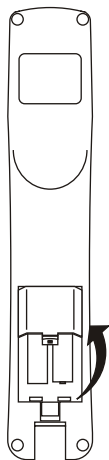
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## Battery set

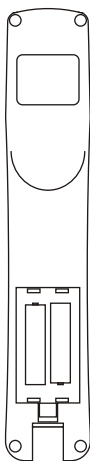
Warning: At the same time, can not use different style and different capacitance batteries.



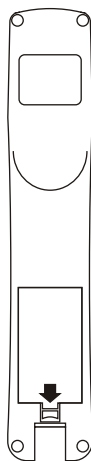
1. Push the tip



2. Open the battery slot



3. Replace the batteries

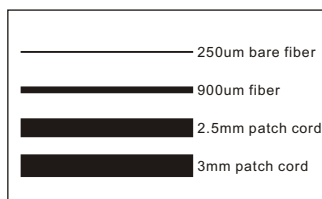


4. Close the battery slot

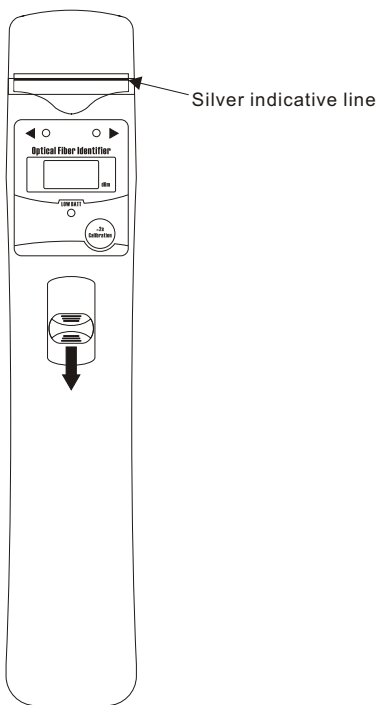
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## Available for different Fiber

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

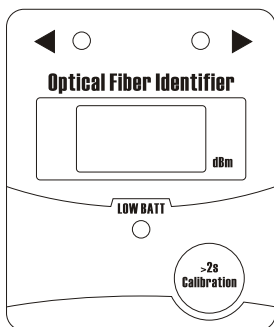
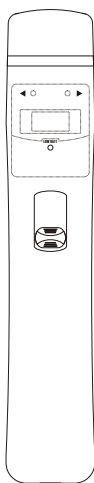


## Available for different Fiber

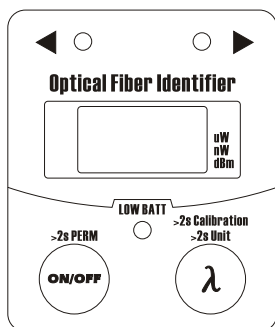


When testing 2.5mm and 3.5mm patch cord, the silver indicative line need to be seen to ensure a correct measurement

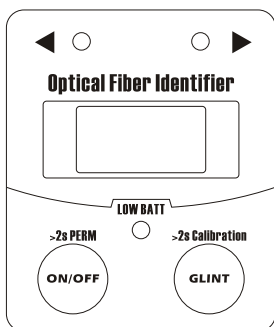
## Fiber Identification models



a. standard Optical Fiber Identifier



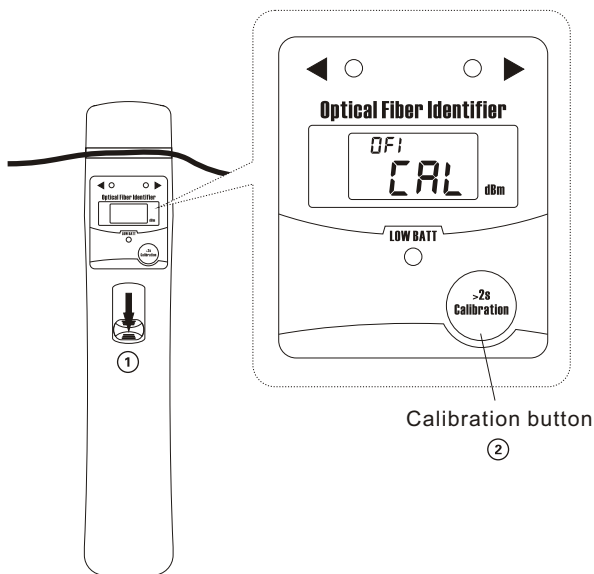
b. Optical Fiber Identifier with OPM mode



c. Optical Fiber Identifier with VFL mode

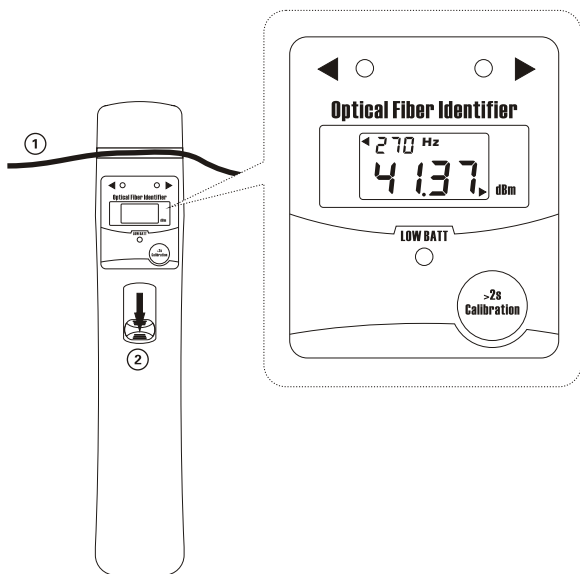
AFI430 serial has three models, include standard Optical Fiber Identifier, Optical Fiber Identifier with OPM mode and Optical Fiber Identifier with VFL mode. Different models with different buttons, which shown in the pictures above.

## Environment Light Calibration



Push down the trigger of the fiber identifier and hold, then long press the “>28 Calibration” button. Until the beep be on and the the screen shows "CAL", the environment light calibration is finished.

## Operation



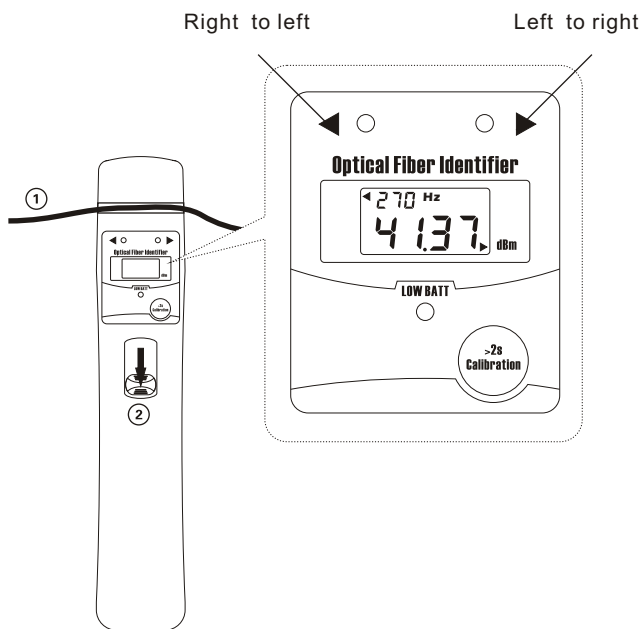
Put the fiber into the fiber location and push down the trigger to begin testing. After 1~3 seconds, it outputs the results.

The data in the LCD means 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.

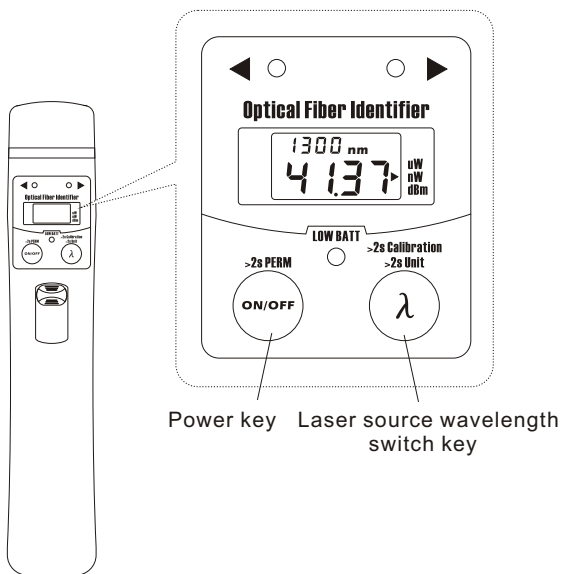




## Signal Direction



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.

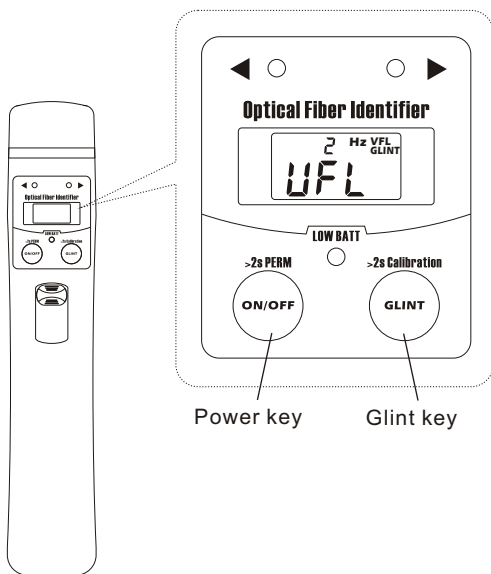
## Optical Power Meter





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.

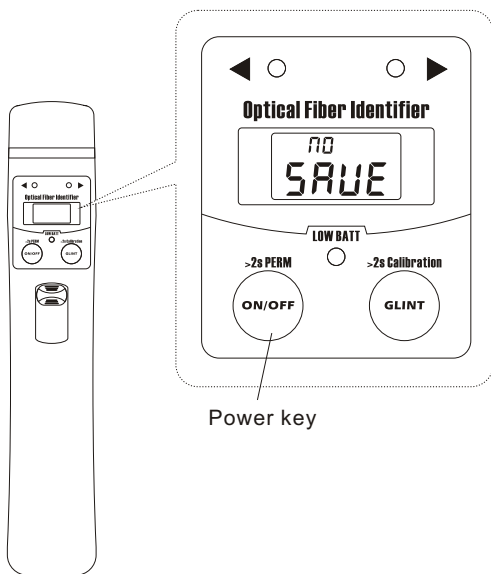
## Visual Fault Locator





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.

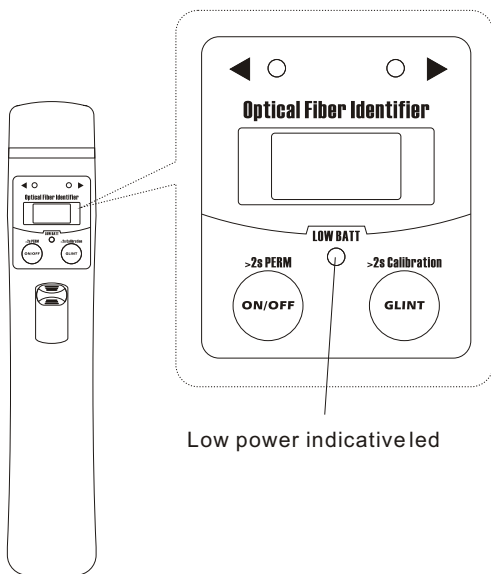
## Power saving



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

Press the “  ” key for 2 seconds when turn on the device, the autopower off will be cancelled and the screen will show "NOSAVE".

## Low power detecting



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.The long period no use ,please take out the batteries.

### Common malfunction

Described	Malfunction cause	Handle way
Can't turn on	No battery	Check battery setting
After turn on shut it immediately	Check battery capacities	Change battery
Wrong identification	Unavailable fiber	Change fiber
Display the messy code	Reset is incorrect	Reset
Can't identification	Wrong location	Test again

## Detailed parameter

Accuracy-CW	250um fiber@1550nm=-35dBm      250um fiber@1310nm=-30dBm 900um fiber@1550nm=-35dBm      900um fiber@1310nm=-30dBm 2.5mm fiber@1550nm=-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%.

