USER'S GUIDE Handheld measuring instrument

Optical laser source

English

WARNING

You arecautioned that changes or modifications notespressly 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. Referservicing to qualified personnel only.

NOTE

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



CALSS I LASER PRODUCT

Precautions for Use

Use batteries

At the sametime, can not usedifferent style or different capacitance batteries.

And only chargethe rechargeable batteries.

Avoiding condensation problems

As much as possible, avoid sudden temperature changes. Do not attempt to use thedrive immediately after movingit from a coldto a warm location, toraising the room temperature suddenly, as condensation may form with in the drive. If the temperature changes suddenly while using the drive,

Stop using itand take outbatteries for atleast an hour.

Storage

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





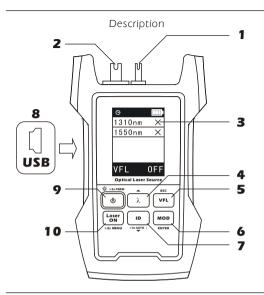












- 1-VFL connector
- 2-Laser Source connector

3-LCD

- 4-Laser source wavelength shifting key
- 5-VFL on/offkey(ESC key)
 - 6-Laser source modulation key(ENTER key)

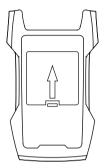
7-Laser source wave ID key(Auto WAVE ID key)

8-USB

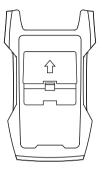
9-Power key

10-Laser source on/offkey(Menu key)

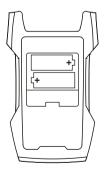
Installing the batteries



1.Press and pushup



2.Open the lid



3.Installing the batteries



3.Push down and press

Power on/off, auto power off



Press " () " key to turn on the device. Pressit again

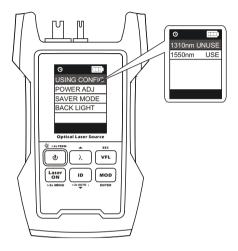
for 2 seconds to shut the device.

Device has powersaving function. After 10minutes no key pressing, the device will auto power off.

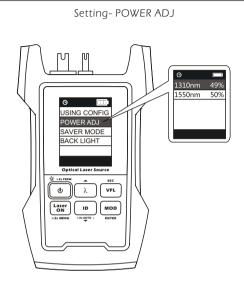


Long press " $\left[\begin{array}{c} \text{Laser} \\ \text{ON} \end{array} \right]$ " key, device will enter setting menu. Setting functions include USING CONFIG, POWERADJ, SAVER MODE and BACKLIGHT. Press " $\left[\begin{array}{c} \lambda \end{array} \right]$ " key or " $\left[\begin{array}{c} \text{ID} \\ \text{Stages} \end{array} \right]$ " key to select the function you needed.

Setting- USING CONFIG



UNUSE: the wavelength will be skipped when operating.



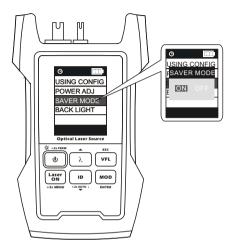
Move the cursor to POWER ADJ, then press ENTERkey

to enter it.

Press "
$$(Laser)$$
" key to select the wavelength.
Then press " (λ) " key or " (D) " key to adjust the

output power.

Setting- SAVER MODE



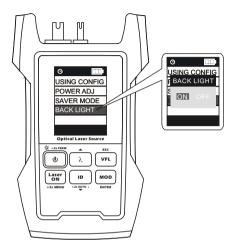
Move the cursor to SAVER MODE, then press ENTERkey to

enter it.

Press "Laser " key to select the saver mode ON or OFF. Jan MRNU " key to save the selection and back to the setting menu.

At ON status, and no keypressed in 10 min, the device will auto power off.

Setting- BACK LIGHT



Move the cursor to BACK LIGHT, then pressENTER key to

enter it.

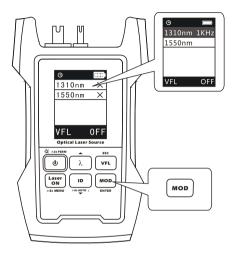
Press "Lesser" key to select the back light ON or OFF. -zz MENU key to save the selection and back to the setting menu.

At ON status, and no keypressed in 10 seconds, the LCD will auto off.



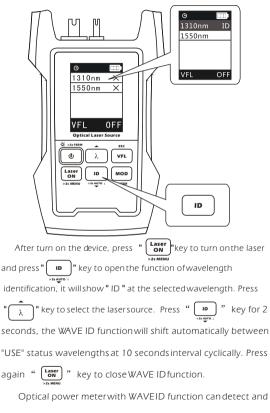
After turn on the device, press " $(\underbrace{\mathsf{Laser}_{ON}}_{23 \text{ MENU}})$ " key to turn on the laser and press " (λ) " key to shift the wavelength. NOTE: UNUSE status wavelength will be skipped.

Modulation selection



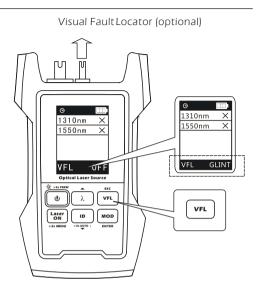
After turn on the device, press "Laser on " key to turn on statemen " key to shift the modulation between CW, 270Hz, 1KHz and 2KHz.

Wavelength ID



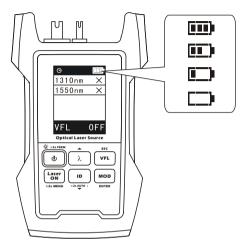
change to the same wavelength when it works with the laser

source at WAVE ID function.



The device can build in a optional VFL module, press the VFL key to shift the conditions: CW-> GLINT->OFF.

Battery energy detect





Remain80%---100%



Remain40%---80%



Remain20%---40%

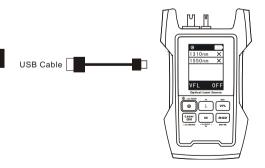


If the energy is too low, the beep will be on and device will auto power off.

Battery charge

First you mustuse the rechargeablebatteries. 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 formore 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	
Wavelength	1~5 wavelengths of 850/1300/1310/1490/1550/1625
Spectral width	850nm, 1300nm, 1310nm, 1550nm@10nm 1490nm, 1625nm@5nm
Output power	850nm>-10dBm 1300nm,1310nm,1550nm,1490nm,1625nm>-6dBm
Laser type	850nm,1300nm,1310nm,1550nm@FP 1490nm,1625nm@DFB
Short time Stabilization	±0.05dBm@60min
Long time Stabilization	±0.1 dBm@8 Hours
Frequency	270Hz/1KHz/2KHz
OP Adapter	FC/PC (or Customize)
VFL part	
Wavelength	650nm
Output power	1mW or 10mW
Power supply	AA*3
Battery life	>50H
Chargeable	Yes
Water proof	Prevent small splash
Operate temp	-10°C~+50°C
Store temp	-20°C~+60°C
Humidity	<90% No dew
Size	168mm*95mm*38mm
Weight	330g

Testingcondition:1550nm 23 \pm 2 °C , 40%~60% humidity, using standard optic fiber