



Product Name	GAOTek Variable Optical Attenuator
Product SKU	GAOTEK-FOA-152
Product URL	https://gaotek.com/product/gaotek-variable-optical-attenuator-5/

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INTRODUCTION:

- The most compact and rugged portable attenuator on the market
- Three wavelengths: 1310nm / 1490nm / 1550nm
- Different attenuator range, 40 dB, 60 dB or 80 dB
- Can save current value as a reference
- Can save 10 tracks attenuation value
- Memorize the value after instruments shut down
- Energy save mode
- One-year warranty and Three-year recommended calibration interval



SPECIFICATIONS:

Standard



Carrying bag



Calibration certificate



Manual



Packing box

Optional



AC/DC adapter

MODEL	EVA 50-40	EVA 50-60	EVA 50-80
Attenuating Range	40 dB (SM)	60 dB (SM)	80 dB (SM)
Calibrated Wavelengths	1310 nm	1490 nm	1550 nm
Fiber Mode	SM	SM	SM
Attenuating Mode	Digital	Digital	Digital



Display Resolving Power	0.1 dB	0.1dB	0.1 dB
Display	LCD, 128*64	LCD, 128*64	LCD, 128*64
Max Input Power	< +21 dBm	< +21 dBm	< +21 dBm
Return Loss	> 40 dB	> 40 dB	> 40 dB
Insertion Loss	< 2.5 dB	< 2.5 dB	< 2.5 dB
Connector	FC/PC (or customize)	FC/PC (or customize)	FC/PC (or customize)
Uncertainty	± 0.5 dB	± 0.5 dB	± 0.5 dB
Repeatability	± 0.2 dB	± 0.2 dB	± 0.2 dB
RS-232	Optional	Optional	Optional
Auto Power Off	No Operation in 10 Minutes (can be cancelled), Low Battery Energy	No Operation in 10 Minutes (can be cancelled), Low Battery Energy	No Operation in 10 Minutes (can be cancelled), Low Battery Energy
Battery Charge	Yes	Yes	Yes
Operate Time	Above 20 Hours	Above 20 Hours	Above 20 Hours
Power Supply	3* AA Batteries or AC/DC Adapter	3* AA Batteries or AC/DC Adapter	3* AA Batteries or AC/DC Adapter
Display Range	0~60 dB	0~60 dB	0~60 dB
Adjustable Wavelength Range	1260 nm ~ 1625 nm	1260 nm ~ 1625 nm	1260 nm ~ 1625 nm
Fiber Type	9/125 um	9/125 um	9/125 um
Setting Type	On Device & Program (Optional)	On Device & Program (Optional)	On Device & Program (Optional)
Direction	Simplex	Simplex	Simplex
Display Mode	Real dB or REF dB	Real dB or REF dB	Real dB or REF dB
Backlight Function	Yes	Yes	YES
Result Displayed In	dB	dB	dB
AC/DC Adapter	9V/1A	9V/1A	9V/1A
Charge	< 12 H	< 12 H	< 12 H
Normal Range of Use	- 10 °C ~ + 60 °C	- 10 °C ~ + 60 °C	- 10 °C ~ + 60 °C
Storage and Transport	- 20 °C ~ + 70 °C	- 20 °C ~ + 70 °C	- 20 °C ~ + 70 °C
Relative Humidity	< 90 % no dew	< 90 % no dew	< 90 % no dew
Size	190 mm * 92 mm * 50 mm	190 mm * 92 mm * 50 mm	190 mm * 92 mm * 50 mm
Net Weight	300g	300g	300g

- At 20 ± 3 °C, CW with FC/PC connector, 1550 nm



GENERAL SPECIFICATIONS:

Size (H*W*D)	190mm * 90mm * 40mm
Weight	About 450 g
Storage Temperature	-20 -- +60 , < 90%RH
Operating Temperature	-10 -- +50 , < 90%RH

ORDERING INFORMATION:

EVA50-XX Model:

- a) EVA50-40 = 40 dB
- b) EVA50-60 = 60 dB
- c) EVA50-80 = 80 dB

USERS GUIDE:

a) WARNING:

- You are cautioned that changes or modifications not expressly approved in this document could void our 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:

a) USE BATTERIES:

- At the same time, can not use different styles or different capacitance batteries. And only charge the rechargeable batteries.

b) AVOID CONDENSATION PROBLEM:

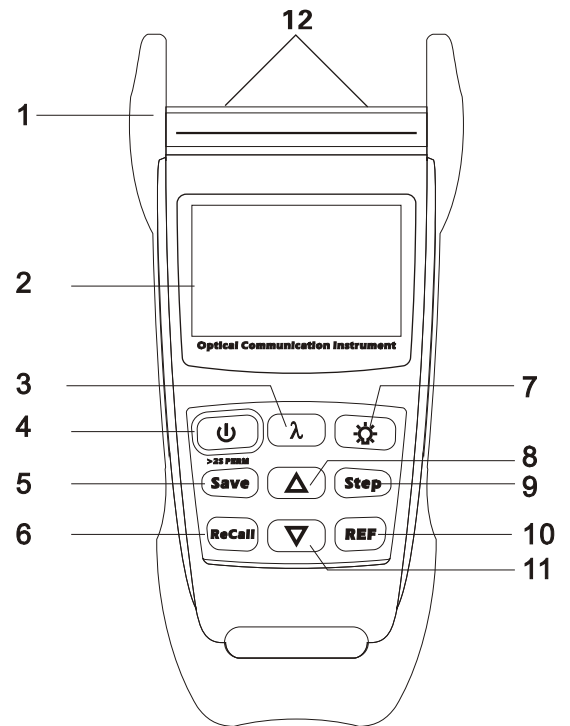
- As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raise the room temperature suddenly, as condensation may form within the drive. If the temperature changes suddenly while using the drive, stop using it and take out the batteries for at least an hour

c) STORAGE:

- When a long time is no use, take out the batteries to avoid destroying the device.

MANUAL GUIDE:

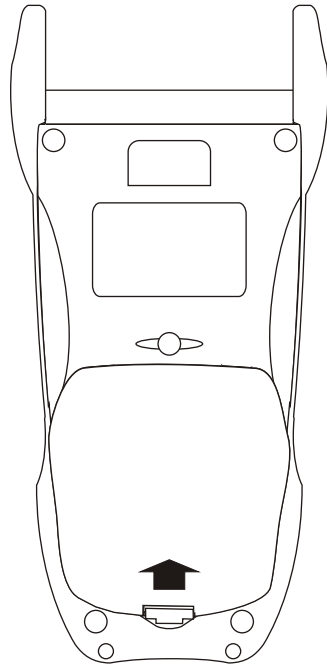
- I. Protection rubber
- II. LCD displays the status and the attenuation value
- III. Wavelength shift key
- IV. Power key
- V. Save key
- VI. Recall key
- VII. Backlight key
- VIII. Attenuation value increases key
- IX. Attenuation Step key
- X. Reference set key
- XI. Attenuation value reduces key
- XII. Connector (Standard: FC/PC)



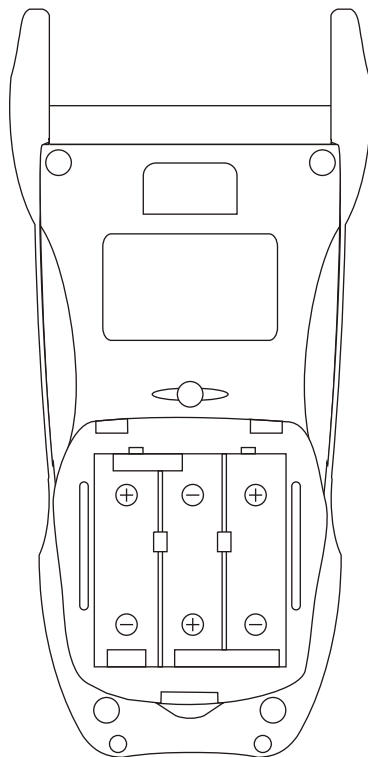
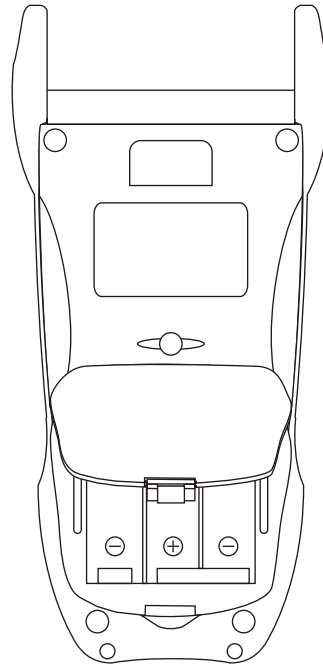
SET BATTERIES:

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

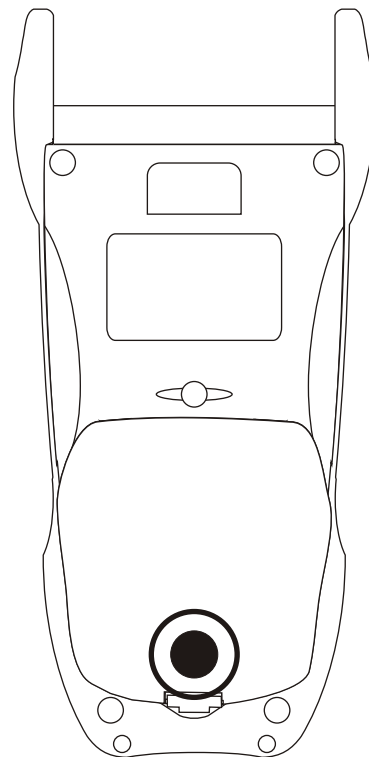
1. Press and push down



2. Open the lid

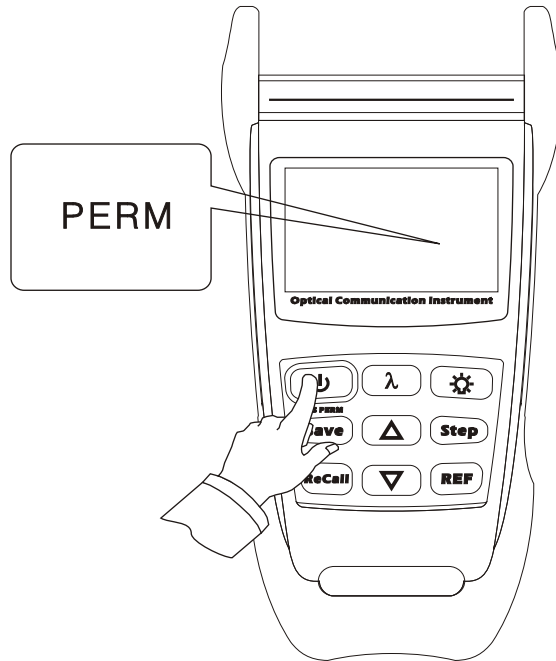


3. Place the batteries



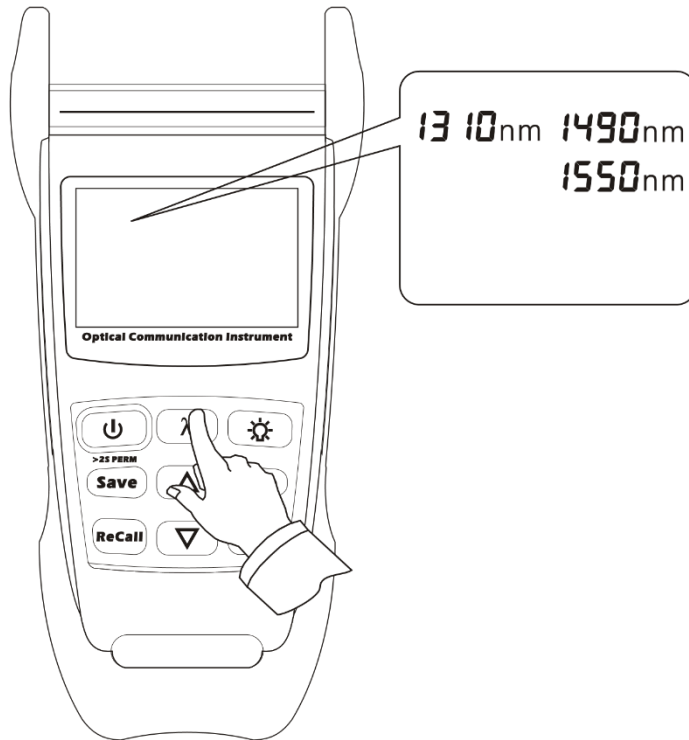
4. Close the lid and push up

POWER ON/OFF, AUTO POWER-OFF:



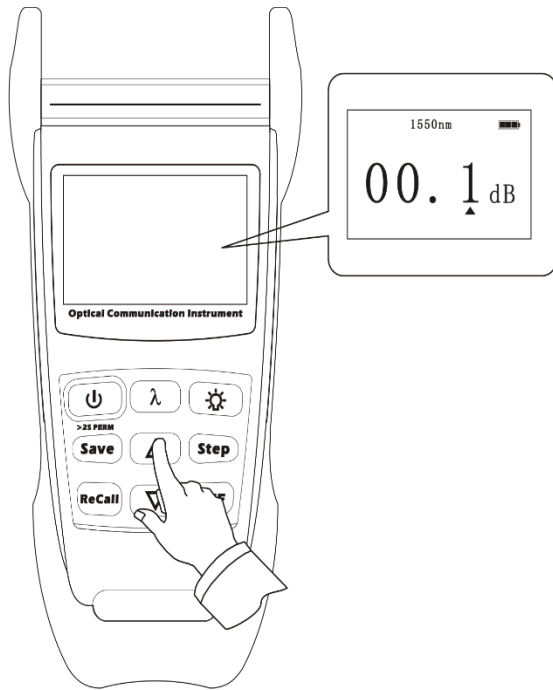
- Press the "ON/OFF" key to turn on the device with auto power off (For about 10 minutes no key pressed, it will auto power off).
- Keep pressing the "ON/OFF" key for 2 seconds when turning on the device, the auto power off will be canceled, and the LCD will show "PERM".
- Also, press it to shut the device.

WAVE SELECT:



- Press the “ λ ” key to shift the wavelength and the corresponding wavelength will be on the LCD.
- It has three wavelengths
 - a) 1310nm
 - b) 1490nm
 - c) 1550nm.

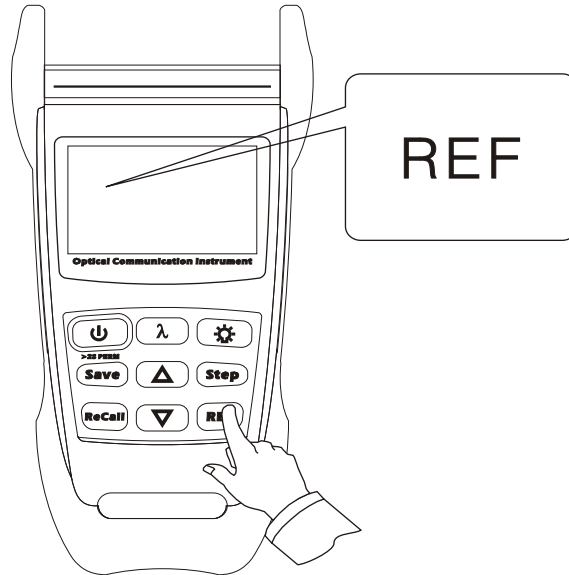
ADJUST THE ATTENUATION VALUE:



- Press the “ Δ ” key to increase the attenuation value and press the “ ∇ ” key to reduce the attenuation value.
- The Max. attenuation value is 60.0dB and the Min. attenuation value is 00.0 dB.

REFERENCE:

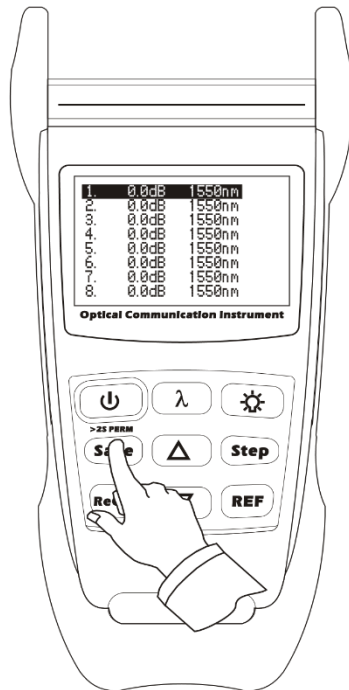
- Press the “REF” key value, and it will be
- It will be canceled again.



to set the reference of attenuation displayed on the LCD.
when you press the "REF" key

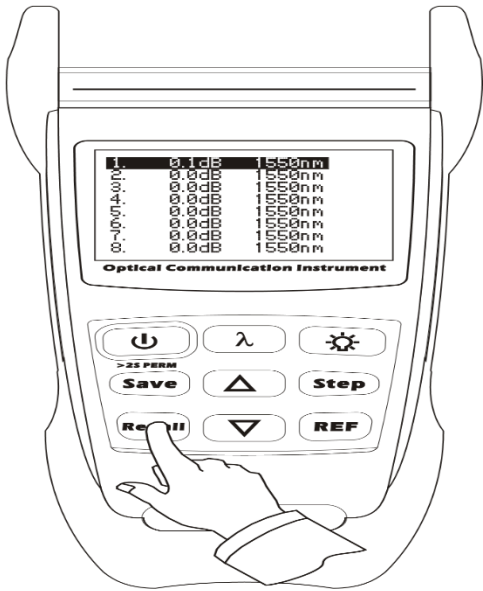
SAVING THE ATTENUATION VALUE:

- Press the "Save" key to save menu. It can save eight
- Press the “ ▽ ▲ ” key to key to save.
- If you do not want to save



save the attenuation value and it will enter the values.
 select the different record and press the “Save”
 the value you can press the “Recall” key.

RECALL:

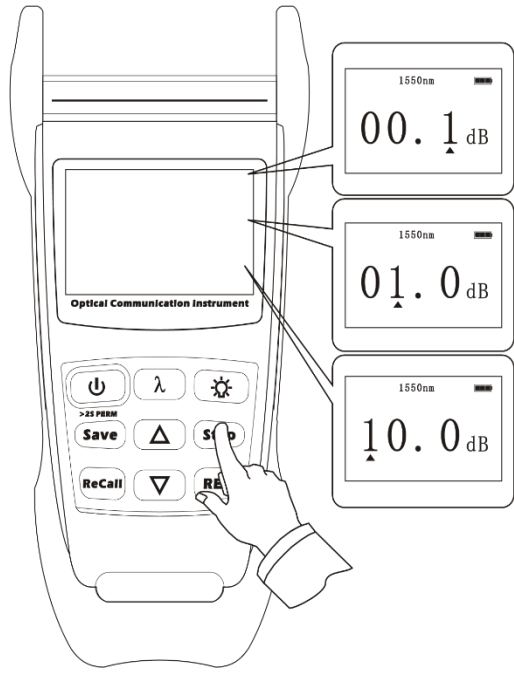


- Pressing the Recall key can shift the eight records that you have saved.

SELECT THE ATTENUATION STEP:

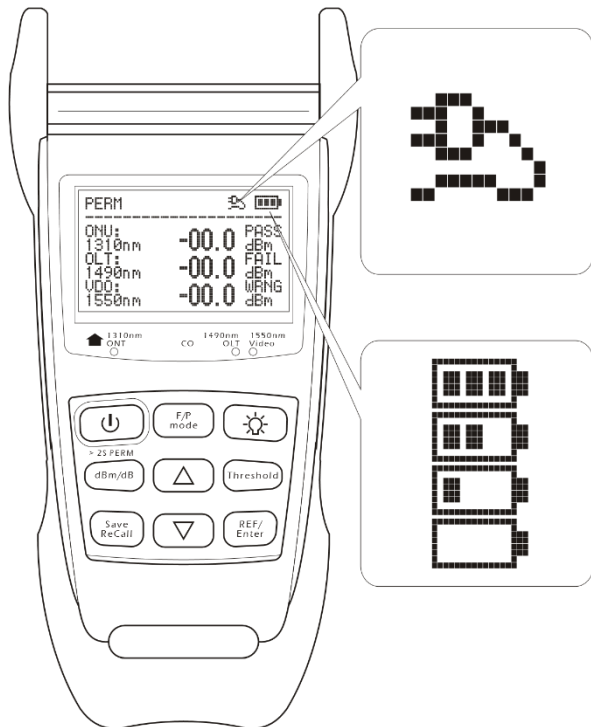
Press the "Step" key to select





- It has three steps:
 - a) 0.1dB
 - b) 1dB
 - c) 10dB



the different attenuation steps.

BATTERY ENERGY DETECT:



-  Remains: 80% - 100%
-  Remains: 40% - 80%
-  Remains: 20% - 40%
-  Remains : 0% - 20%



BATTERY CHARGE:

First, you must use the rechargeable batteries. When the energy is less than 20%, you should charge the batteries. Long time low energy, the life of the batteries will be short. When charging, the charging state LED will be red. After charging fully, the LED will be green. Don't charge for more than 12 hours. If charging while using the device, the time will be longer. The rechargeable batteries must be in the device when you use the AC/DC adaptor for charging. Do not charge the non-rechargeable batteries or the device will be destroyed and also lose the guarantee.

MAINTENANCE AND CALIBRATION:

a) ROUTINE ATTENTION:

- I. The fiber-optical adapter should be kept clean.
- II. Please store the device in a dry and ventilated place.
- III. For long periods of no use, please take out the batteries.

b) 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
Can't charge	Use non-rechargeable batteries	Change battery
Display the messy code	Reset is incorrect	Reset
The operation does not have a reaction	Program is disorderly	Reset