Precision Rated Optics

Work with a PRO!

PM-100 SERIES

Power Meter

Operation Guide

V5.27.16

Contents

1 Introduction

The 100 Series Power Meters work in conjunction with a laser source, automatically detecting the light wavelength at 850, 1300, 1310, 1490, 1550 and 1625nm. Ruggedized, lightweight and reliable, the 100 Series packs a lot of power into a reasonably-priced, easy-to-use unit.

A convenient “Low Battery” indicator reminds the user to recharge the battery, while the compact size delivers outstanding usability, typically only found on higher-priced units.

Sold, serviced and supported in the USA, the 100 Series Power Meters comes standard with a 2.5mm port and FC/PC, SC/ PC, ST/PC connectors, as well as a standard 3-Year warranty, rechargeable Li-ion battery, AC adaptor and soft carrying case.

Main Features:

- Easy-to-Use, Straight-Forward Operation
- Automatically Detects Light Wavelength
- Backlit LCD
- Ruggedized Design
- Sold, Serviced and Supported in the USA

2 Warranty

Three Years Limited Warranty

Products are warranted against the defective components and workmanship for a period of three years from the date of delivery to the original customer. Any product found to be defective within the warranty period would be returned to authorized service center for repair, replacement and calibration.

Exclusions

The warranty on your equipment shall not apply to defects resulting from the following:

- Unauthorized repair or modification including battery replacement
- Misuse
- Negligence
- Accident

Returning Product

To return product, you must contact PRO to obtain additional information if necessary. To serve you better, please specify the reasons for the return. All delivery and mails should be sent to the following address:

9999 Hamilton Blvd Suite 220 Breinigsville, PA 18031

3 Safety Information

Warning

- Never look directly into optical outputs or a fiber while the equipment is on. Invisible and visible laser beam may damage your eyes.
- Do not short-circuit the terminal of AC adapter I charger and the batteries. Excessive electrical current may cause personal injury due to fumes, electric shock or equipment damage.
- Connect AC power cord with the equipment and wall socket properly. While inserting the AC plug, make sure there is no dust or dirt on the terminals and both plugs are fully seated. Incomplete engagement may cause fuming, electric shock or equipment damage and may result in personal injury.
- Do not operate the equipment near hot objects, in hot environments, in dusty/ humid atmosphere or when condensation is present on the equipment. This may result in electric shock, product malfunction or poor performance.

4 Preparing for Operation

4.1 Unpacking the instrument

Packing material
We suggest that you keep the original packing material. Using the original packing material is your guarantee of protecting the instrument during transit.

Standard Accessories:
Power Meter, User Manual, Worldwide Compatible AC/DC Power Adaptor, Test Report, Adaptors: FC/PC, SC/PC, ST/PC, Built-in 2.5mm Universal Adaptor, Li-ion Battery, Carrying Case

Checking for damage in transit
After unpacking the instrument, check to see whether it was damaged in transit. This is particularly likely if the outer casing is clearly damaged. If there is damage, do not attempt to operate the instrument or to repair it without authorization. Doing so can cause further damage and you may lose your warranty qualification.

4.2 Discharged batteries

There is a battery indicator on the screen to show the remaining charge. There are four status the indicator may show, full, with 2 blacks, with 1 black and empty. If an empty battery indicator flashes it means the power is almost out, and that is when you should recharge the batteries by connect the AC adapter with the instrument. If the discharged batteries get to their limitations after long-time use, please replace it with a new one. To replace the batteries, please remove the battery plate on the back of instrument with a screwdriver.

When the battery charge is extremely low to supply the necessary power, the instrument will automatically switch off.

Note: The AC indicator is not displayed when power is supplied by battery. To eliminate the possibility of acid leakage, please take out the battery if the unit is not used for a long time.

4.3 AC operation

If the instrument is mainly used at one location, e.g. in a laboratory or test department, the AC adapter can be used to power it instead of batteries. There is a DC input jack on the top side of the instrument casing into which the output cable of the AC adapter is plugged. And when the AC adapter is plugged in, the AC Indicator on the LCD will be displayed.

Note:

- Power is supplied by the AC adapter even if battery is fitted. And the battery indicator is not displayed on the screen when AC adapter is plugged.
- Make sure that the operating voltage is within the range of the local AC voltage. e.g. INPUT: AC1 00-240V, 50-60Hz.

5 Operation

5.1 Display and controls

5.1.1 Keypad

The PRO-100 Series keypad is used to access a wide range of instrument functions.

Key	Function
ON OFF	Switches instrument on/off. Long keypress over 2 seconds while powering on is to activate the instrument without Auto-off function.
λ	Short keypress to display reference level of present test wavelength. Long keypress to set a new reference level of present test wavelength.
dBm/ dB/mW	Selects measurement wavelengths.
REF	Switches measurement units among dBm, dB and mw.
☼	Switches backlighting on/off.

5.1.3 LCD

5.2 Turning the instrument on and off

1) Press the "ON/OFF" key briefly. The instrument powers on, and backlighting switches on with the short beeper of the buzzer. Please check the battery capacity and the connection of the battery in the battery plate if it fails.
2) Press the "ON/OFF" key briefly again. The instrument powers off and backlighting switches off with the short beeper of the buzzer. When the battery capacity indicator flashes on the LCD, please recharge the battery or change new batteries. Otherwise, the instrument will be damaged by the shortage of the power.
3) Turn on/off the auto-off function the instrument powers off automatically if no key press in 10 minutes. Press the "ON/OFF" key for about 2 seconds to deactivate the auto-off function and the indicator will disappear on the LCD. The instrument will be power off if the battery capacity is too low to support the operation.

5.3 Setting the wavelength

Press the "A" key repeatedly until the desired wavelength is displayed. You can select from six possible wavelengths: 850nm, 1300nm, 1310nm, 1490nm, 1550nm and 1625nm. The instrument defaults to the wavelength of 1550nm.

5.4 Setting and checking reference level

Setting the reference level

Press and hold the "REF" key over 2 seconds to store the presently measured value as the new reference level for the current wavelength. Once the new reference level is set, the LCD displays 0.00dB with the beeper of the buzzer and the PRO-100 Series switches to the dB measurement mode.

Checking the reference level

Press the "REF" key to display the stored reference level for the current wavelength and a sign of "REF" will be displayed on the LCD to indicate that it is a reference value. The displayed value only lasts 1 second. The instrument switches to the dB measurement mode.

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