FS FHOM-201 Power Meter + Laser Source Handheld Optical Multimeter User Guide

Fiber Testers
OPTICAL MULTIMETER
Quick Start Guide V1.0

Contents

Introduction

The handheld optical multimeter is the integration of a power meter, optical light source, or visual fault locator,

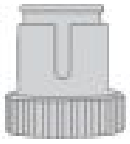
used to measure the optical power loss of the fiber link. It is
widely used in the fiber-optic line project construction, testing, and maintenance, such as digital data networks, telecommunication networks, and cable television. The figures
below display the product images of the two optical multimeters.

FHOM-201

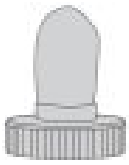
FHOM-103

Accessories

FROM-201



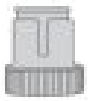
SC Adapter x1



ST Adapter x1

FC Adapter x1

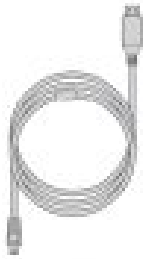
FROM-103



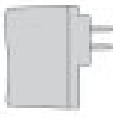
SC Adapter x1

ST Adapter x1

FC Adapter x1



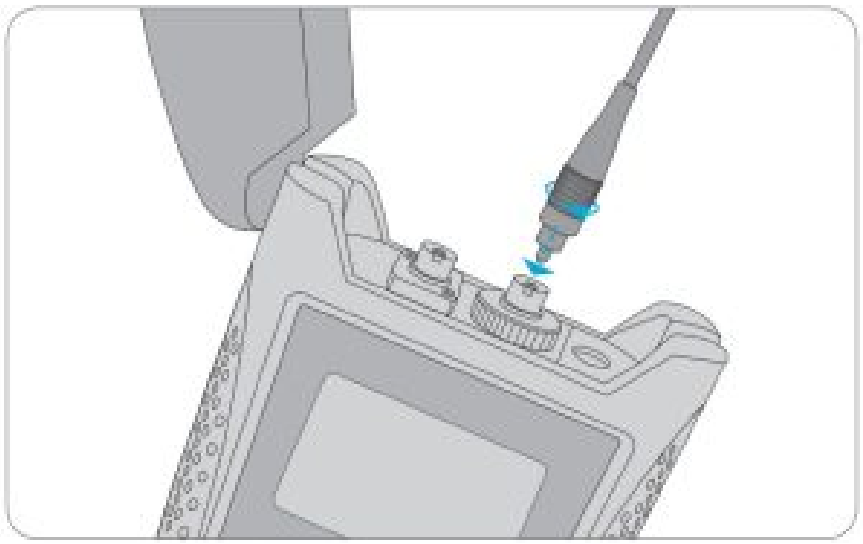
USB Cable x1



AC Adapter x1

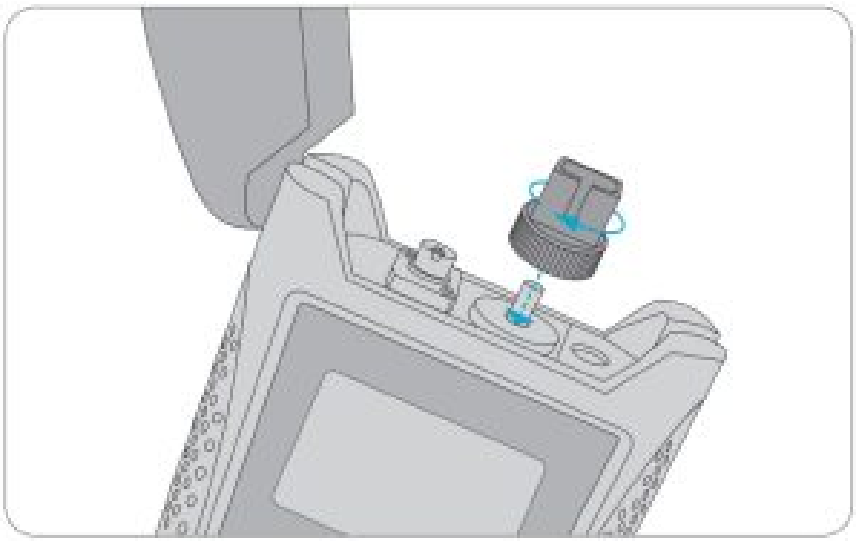
Installing

Inserting FC Cables

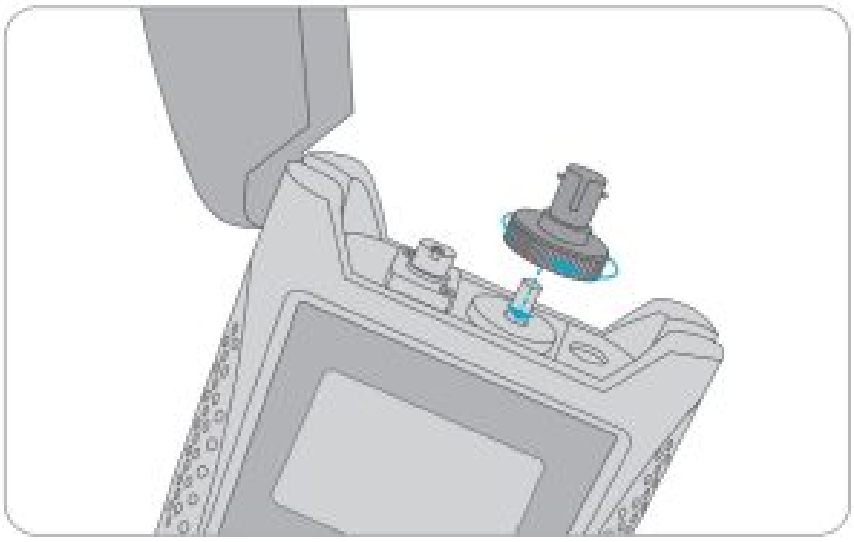


Install FC fiber cable.

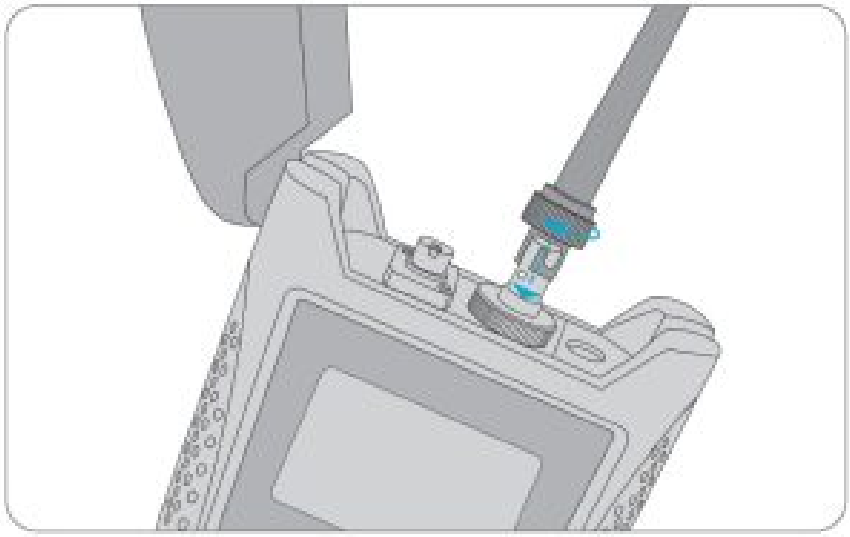
Inserting ST Cables



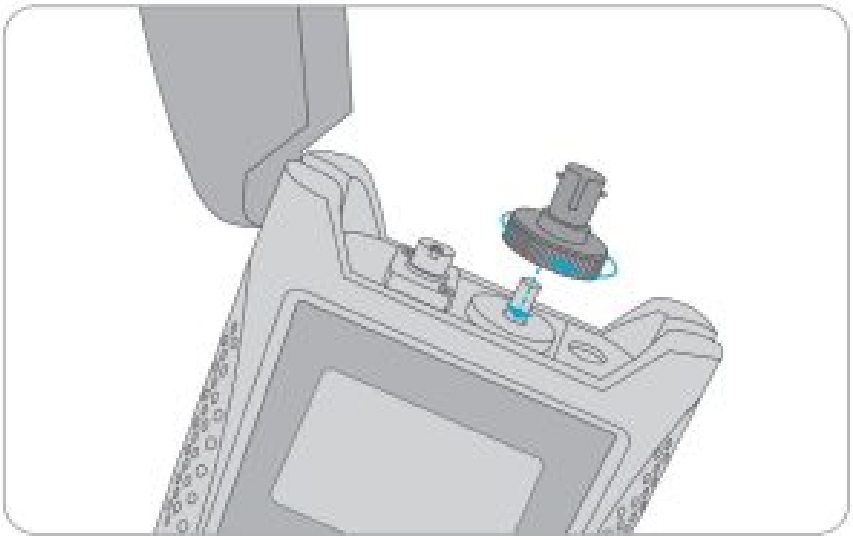
1. Install ST connector.



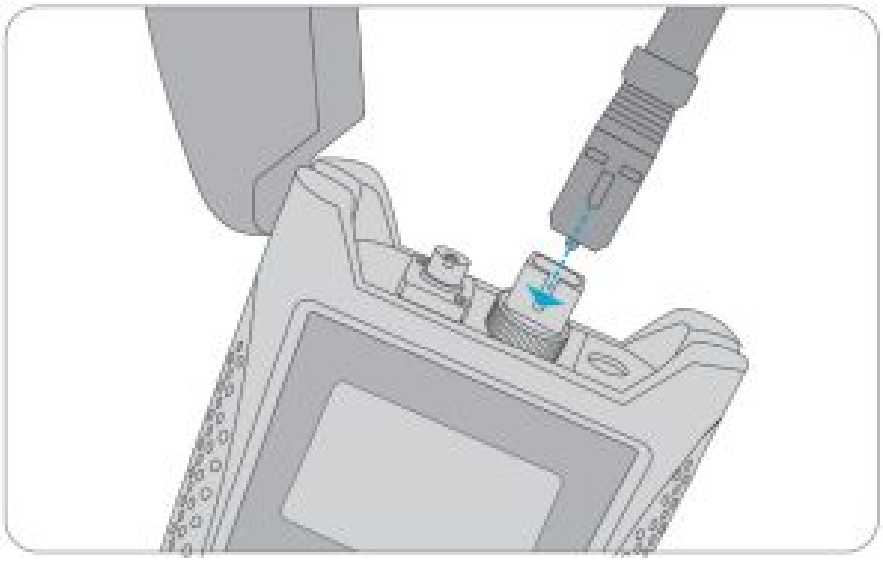
2. Install ST fiber cable.



Inserting SC Cables



1. Install SC connector.



2. Install SC fiber cable.

FROM-201

Function Introductions

Button	Description
	Power/Backlight Button
	Menu Setting Button
	Up Button
	Save/Query Button
	REF Setting Button
	OPM Reference Check/Set Button
	Laser On/Off Button
	Modulation Button
	OLS Wavelength/Down Button

Operation Instructions

1. **Power On/Off and Auto-off Function :**

   Press  button to turn on the instrument, then press for 2 seconds or longer to turn off. This multimeter has a power-saving function. If 10 minutes without any operation, the instrument will automatically shut down. If you need to shield this function and enable the multimeter to keep on working, only need to press  button and hold on when you boot the meter. After 2 seconds, the instrument will display  which means permanent power on.
2. **Backlight Function:**

   When the instrument is powered on, short press  button to turn on/off backlight. The backlight function supports you to use the multimeter at night or on darker occasions, and you can set levels 0-9. If set as 0, backlight off, and no backlight even press button.
3. **Menu Setting**

   Press the  button to switch each setting interface, then press  or  button to modify the specification. If all finished, press for 2 seconds to exit the menu setting. MENU

4. **OPM – Select Wavelength**

   According to the project's demand, we need to measure optical signals of different wavelengths. Then we need to select a corresponding wavelength to measure the
   optical power. If the measured wavelength is different from the wavelength we selected on OPM, it will lead to the measuring values meaningless. After turning it on, press the  button to switch OPM wavelength from 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm.

5. **OPM – Data Storage/Query**

   On the OPM interface, long press  button, the display will show "SAVE" and storage number at the top left of the screen and will flash together 3 times. At the same time, the display will show the currently stored power value on the screen. After 2 seconds, the multimeter will restore the measuring interface, and save the current measurements in the instrument.

   The multimeter can store 1000 records. Each storage number automatically increases one by one, if, over the limit, the first data will be overwritten and so on.

   On the measuring interface, short press  button to the data-saving interface, you can RECORD -2s SAVE RECORD -2s SAVE

FROM-103

Function Introductions

Button	Description
	Power/Backlight Button
	OPM Wavelength Shift/WAVE ID Button
	VFL On/Off Button
	OPM Data Save/Recall Button
	OPM Unit Shift Button
	OPM Reference Check/Set Button
	Laser Source On/Off Button
	Laser Source Wavelength Shift Button
	Laser Source Modulation Button

Operation Instructions

1. **Power On/Off and Auto-off Function:**

   Press  the button to turn on the instrument with auto power off. If 10 minutes with any operation, it will automatically shut down.

   Press  the button for 2 seconds when turning on the instrument, the auto-off function will be canceled, and the LCD will show “PERM”. Also, press it for 2 seconds to turn off the instrument.

2. **Backlight:**

   When the instrument power on, press  the button to turn on or turn off the backlight.

3. **OPM – Select Wavelength**

   When testing, you must select the right wavelength. Press  the button for shifting the wavelength from 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm.

4. **OPM – WAVE ID (optional)**

   Long press  button to turn on the WAVE ID and display “id ” at the same time.

   Long press again to exit the WAVE ID.

5. **OPM – Select Unit:**

   Press Unit button for shifting the unit from: dBm, nW/uW/mW, after pressing REF button, it shifts to dB. After power off, the current unit will be saved. nW/uW/mW: 1mW = 1000uW, 1uW = 1000nW dBm: (dBm) = 10*log (mW) dB: (dB) = dBm – REF Unit REF

6. **OPM – Reference**

   Press REF button to check the reference value you set last time. And if keep pressing for 2 seconds, you can store the current dBm as a new reference value. Then it automatically shifts to dB. dB=dBm – REF REF You can store the REF value for each wavelength.

7. **OPM – Data Storage:**

   Short press Save the button to check the data storage.

   Press λ the button and Unit button to change the previous/next record. Long press Save the button to save the current value.

8. **OLS On/Off**

   Press Laser ON the button to turn on/off the laser source output. Laser ON

9. **OLS – Select Wavelength/WAVE ID**

   Short press λ the button to shift the wavelength. Long press (>2s) the button to turn on the WAVE ID function, the wavelength glints on LCD. Long press it again to turn off the function.

10. **OLS – Modulation Select**

    Press MOD the button to shift from 270Hz, 1KHz, 2KHz. MOD

11. **Visual Fault Locator (optional)**

    The instrument can be built in an optional VFL module. Press VFL button to shift the conditions: on-> glint-> off. VFL

12. **Battery Energy Detect**

	Sufficient power
	More power
	Less power
	Insufficient battery power

13. **Battery Charge**

    When you use rechargeable batteries and the meter indicates insufficient power, it should be turned off and charged. Long time under voltage will cause the life of the

    battery to be shortened.

    When charging, the battery indicator on the LCD will flash. After charging fully, the indication will stop flashing and show full. Don’t charge for more than 48 hours.

If charging while using the device, the time will be longer. Rechargeable batteries must be in the device when you use the AC/DC adaptor for charging.

And do not charge the non-rechargeable batteries, or the device will be destroyed and also lose the guarantee.

Maintenance

1. The interface is sensitive, please carefully plugin and pull out connectors.
2. Keep using one type of optical adapter to avoid excess loss from different connectors.
3. Please use a dust-proof cap for protection to avoid being scratched or contaminated when not in operation.
4. It is important to keep all optical connectors and surfaces free from oil, dirt, or other contamination to ensure proper operation.
5. In order to avoid the electric shock, please do not disassemble the components. Disobeying the standard instruction may lead to safety issues.
6. Remove the batteries when the battery power becomes weak or when the instrument is not in use for extended periods. This will prevent damage to the multimeter from battery leakage at such time.

Online Resources

Download: https://www.fs.com/download.html
Help Center: https://www.fs.com/service/help_center.html
Contact Us: https://www.fs.com/contact_us.html

Product Warranty

FS ensures our customers that any damage or faulty items due to our workmanship, we will offer a free return within 30 days from the day you receive your goods.

Warranty: All-Optical Multimeters enjoy a 1-year limited warranty against defects in materials or workmanship. For more details about the warranty, please check at https://www.fs.com/policies/warranty.html

Return: If you want to return item(s), information on how to return can be found at https://www.fs.com/policies/day_return_policy.html

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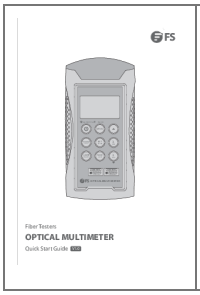
Documents / Resources

	FS FHOM-201 Power Meter + Laser Source Handheld Optical Multimeter [pdf] User Guide FHOM-201, FHOM-103, Power Meter Laser Source Handheld Optical Multimeter