

Handheld Video Microscope

OMC-750E

Handheld Optical Fiber Microscope

Instruction Manual



SAFETY SUMMARY

Personnel concerned with the operation of this instrument must thoroughly understand and follow the safety guidelines below. The manufacturer assumes no liability for the operator's failure to observe these guidelines.

Warning – Laser Radiation Hazard

Operators must always remember that laser radiation at or above 1mW has the potential to cause serious damage to the human eye.

Never look into the open end of an optical fiber where high level of laser radiation may be present.

Warning - Explosive Atmospheres

To avoid explosion, do not operate this instrument in the presence of flammable gases or fumes.

Caution

Operators should not operate this instrument with any of its covers removed, nor should they allow anyone else to do so.

Do not attempt to carry out any unauthorized service to this instrument. Always return the instrument to an authorized service centre for repair to ensure that safety features are maintained.

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Overview

Reliability and performance of a fiber optic link largely depends on the quality of interconnects. Contaminated connectors can cause the mating surfaces to separate leading to high insertion loss and back-reflection. Furthermore, some dirt particles can even scratch or dig into the glass causing permanent damage to the end-face of the connector. Therefore, inspection of fiber optic connectors should be performed whenever a connection is to be made.

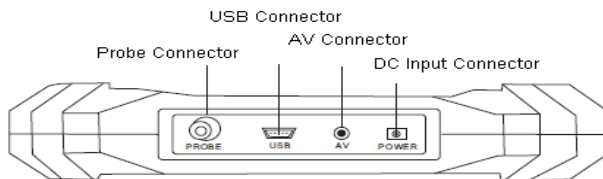
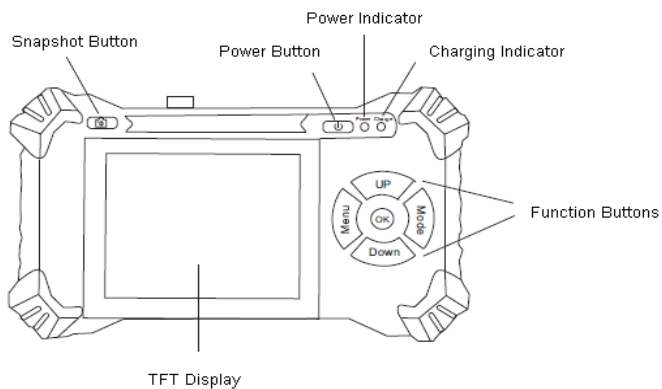
The OMC-750E is a handheld microscope specifically designed for fiber optic connector end face inspection.

Features

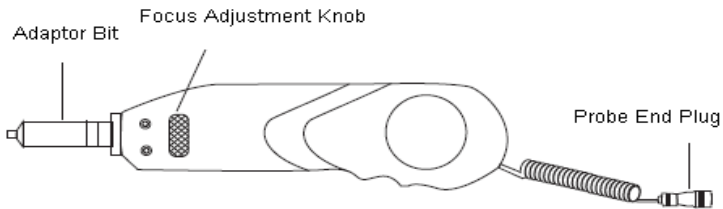
- FC/SC/ST/E2000/LC/MU/MPO compatible
- 3.5-inch TFT display
- Up to 250x overall magnification
- 4x digital zoom
- SD card storage up to 8G
- Snapshot, video recording and playback
- PC plug-and-play

Description

1. Main Unit



2. Probe



Operation

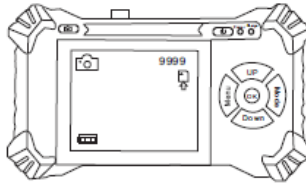
1. Main Unit

1.1 Power on/off

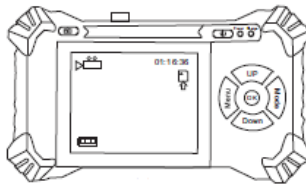
Press the Power Button briefly to turn the unit ON or OFF.

1.2 Screen capture and video recording

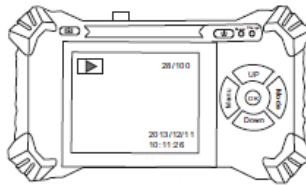
Press the Snapshot Button for instant screen capture or press the Mode Button and follow the screen menu to record and playback.



Snapshot Mode



Record Mode



Playback Mode

1.3 Battery charging

Charging of the internal battery will automatically start as soon as the charger is plugged into the main unit. The charging indicator will light until charging is complete.

2. Probe

2.1 Focus adjustment

Gently rotate the focus adjustment knob to bring the image into focus. Do not overturn the knob or damage to the optical system may occur.

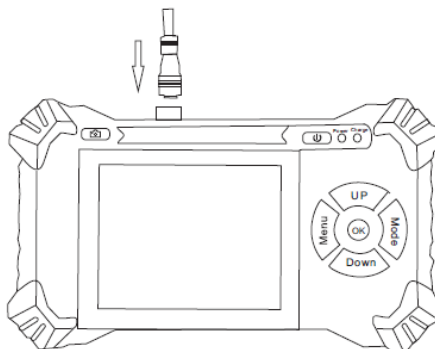
2.2 Adaptor bits

Always install adaptor bits gently and co-axially to avoid damage to the precision mechanism.



2.3 Connection with the main unit

When connecting, insert the end plug to the main unit's probe socket until a light click is heard. When disconnecting, simply grab and pull the outer ring of the plug.



Specifications

Mainframe	
Display	3.5" TFT-LCD, 320 x 240 pixels
Dimensions	170mm x 100mm x 30mm
Weigh(including battery)	261g
Power Supply	Replaceable battery or universal input 5V DC adapter
Battery	Rechargeable Li-Ion, 3.7V / 1450mAh
Battery life	> 3 hours (continuous)
Charger/AC adapter	US, EU, UK and Australian versions available
Image / Video Storage	8GB SD card
Operating Temperature	-20°C to 50°C
Storage Temperature	-30°C to 70°C

Inspection Probe	
Magnification	400X (9" monitor); 250x (3.5"monitor)
Detection Limit	0.5µm
Focus Control	Manual , in-probe
Principle	Bright field reflected light microscopy
Dimensions	180mm x 40mm x 40mm
Weight	153g

Standard Accessories	
Inspection Probe	x 1
Mainframe	x 1
AC power adapter/battery charger	x 1
Rechargeable battery pack	x 1
2.5mm tip for PC male connectors	x 1
1.25mm tip for PC male connectors	x 1
Tip for SC / FC PC female connectors	x 1
Tip for LC PC female connectors	x 1
Tip box	x 1
User Manual	x 1
Carrying case	x 1

Optional Accessories	
2.5mm tip for APC male connectors	
1.25mm tip for APC male connectors	
Tip for SC APC female connectors	
Tip for FC APC female connectors	
Tip for LC APC female connectors	