EXFO MAX-730D-SM1

EXFO MAX-730D-SM1 OTDR User Manual

Model: MAX-730D-SM1

1. Introduction

This manual provides essential information for the safe and effective operation of the EXFO MAX-730D-SM1 Optical Time Domain Reflectometer (OTDR). The MAX-730D-SM1 is a fully featured, entry-level, dedicated OTDR with a tablet-inspired design, optimized for testing through optical splitters for seamless end-to-end FTTH characterization and troubleshooting.
It is designed for FTTx/PON testing, access network testing, metro links testing, and live fiber troubleshooting.

2. Safety Information

WARNING: Laser Radiation
This device emits invisible laser radiation. Avoid direct exposure to the beam. Always use appropriate eye protection when operating or working near the device. Refer to the laser warning labels on the device for specific classifications and precautions.
Do not attempt to open or service the device beyond routine cleaning as described in this manual. Refer all servicing to qualified personnel.
Ensure the device is used in a well-ventilated area and within the specified environmental conditions.

3. Package Contents

Upon unpacking, verify that all components are present and undamaged. The standard package for the EXFO MAX-730D-SM1 typically includes:

- EXFO MAX-730D-SM1 OTDR Unit
- Power Adapter/Charger
- SC/UPC Adapter (pre-installed or included)
- Soft Carrying Case
- USB Cable
- Quick Start Guide (not included in this digital manual)

- Calibration Certificate



Figure 3.1: EXFO MAX-730D-SM1 unit placed on its soft carrying case.

4. Setup

4.1 Charging the Battery

Before first use, fully charge the device battery. Connect the power adapter to the charging port (8-16V 2A) located on the top rear of the unit. The charging indicator will illuminate.



Figure 4.1: Top view of the EXFO MAX-730D-SM1, highlighting the power input (8-16V 2A) and USB ports.

4.2 Powering On/Off

To power on the device, press and hold the power button located on the front panel below the screen until the display illuminates. To power off, press and hold the power button again until the shutdown prompt appears, then confirm.



Figure 4.2: Front view of the EXFO MAX-730D-SM1, displaying the touchscreen and the power button on the right.

4.3 Connecting the Fiber

Locate the OTDR port on the top rear of the unit. Ensure the SC/UPC adapter is securely attached. Carefully clean the fiber connector end-face before inserting it into the OTDR port. Connect the fiber to be tested to this port.

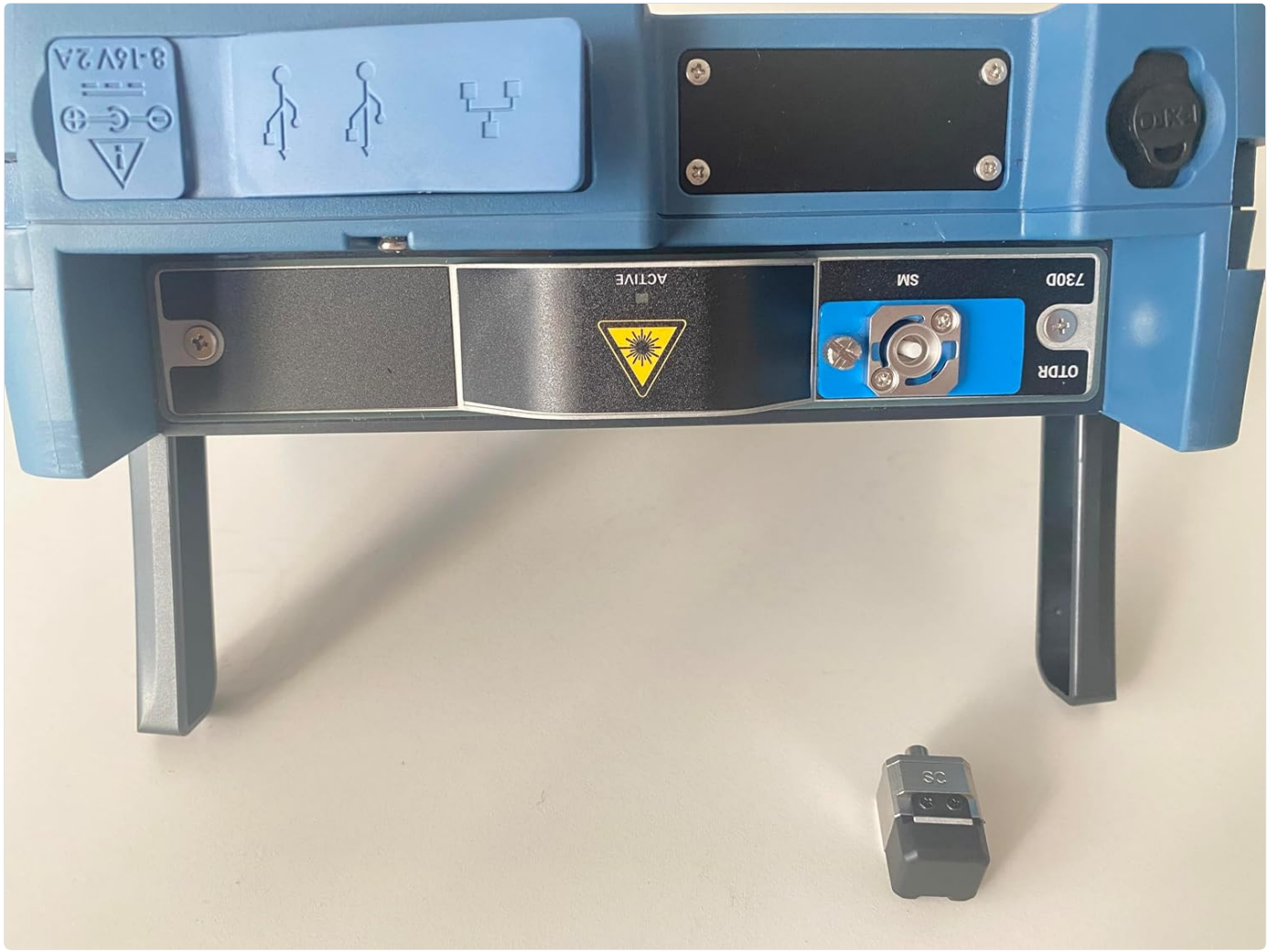


Figure 4.3: Rear view of the EXFO MAX-730D-SM1, showing the OTDR port with the blue SC/UPC adapter and the "ACTIVE" laser warning label.



Figure 4.4: Close-up top view of the EXFO MAX-730D-SM1, detailing the OTDR port, SM module designation, and laser warning.



Figure 4.5: Side view of the EXFO MAX-730D-SM1, illustrating the protective cover over additional ports and the visible OTDR module.

5. Operating Instructions

5.1 Navigating the Interface

The MAX-730D-SM1 features a 7-inch outdoor-enhanced touchscreen. Navigate through menus and settings by tapping on icons and options. Use the physical home button to return to the main menu.

5.2 Performing an OTDR Test

1. Ensure the fiber is properly connected to the OTDR port.
2. From the main menu, select the "OTDR" application.
3. Choose the appropriate test parameters (e.g., wavelength, pulse width, range) based on the fiber type and length.
4. Initiate the test. The device will display the trace and analyze the fiber.
5. Review the results, including event table and trace analysis. The iOLM (Intelligent Optical Link Mapper) feature provides one-touch multiple acquisitions with clear go/no-go results in a straightforward visual format.

5.3 Saving and Reporting Results

Test results can be saved internally on the device. The unit supports industry-leading onboard PDF reporting and post-processing, allowing for easy generation and sharing of test reports.

6. Maintenance

6.1 Cleaning the OTDR Port

Regularly clean the OTDR port and fiber connectors to ensure accurate measurements. Use only approved fiber optic cleaning tools and solutions. A dirty connector can significantly impact measurement accuracy and potentially damage the device.

6.2 Battery Care

To maximize battery life, avoid fully discharging the battery frequently. Store the device in a cool, dry place when not in use for extended periods. The device offers up to 12 hours of autonomy on a full charge.

6.3 Swap-Out Connector

The MAX-730D-SM1 features a Swap-Out connector, which can be replaced when necessary for optimal performance over time without undue service cost and downtime. Refer to the official EXFO documentation or contact support for replacement procedures.

7. Troubleshooting

7.1 No Power

- Ensure the battery is charged. Connect the power adapter and allow it to charge for at least 30 minutes before attempting to power on.
- Verify the power adapter is correctly connected and functioning.

7.2 Inaccurate Measurements / No Trace

- Clean the fiber optic connectors and the OTDR port thoroughly. This is the most common cause of measurement issues.
- Ensure the correct test parameters (wavelength, pulse width, range) are selected for the fiber being tested.
- Check for damaged fiber or connectors.
- Verify the fiber is securely connected to the OTDR port.

7.3 Device Freezes / Unresponsive

- Perform a soft reset by pressing and holding the power button until the device restarts.
- If the issue persists, contact EXFO technical support.

8. Specifications

The following table outlines the key specifications for the EXFO MAX-730D-SM1 OTDR:

Feature	Specification
Model Number	MAX-730D-SM1
OTDR Module	1310/1550nm
Dynamic Range	39/38dB
Connector Type	SC/UPC Adapter
Event Dead Zone (EDZ)	0.5 m
Attenuation Dead Zone (ADZ)	2.2 m
PON Dead Zone	30 m

Feature	Specification
Display	7-inch outdoor-enhanced touchscreen
Battery Autonomy	Up to 12 hours
Dimensions (L x W x H)	19.29 x 11.42 x 15.35 inches
Weight	12 Pounds
Power Source	Battery Powered
Color	Blue

9. Warranty and Support

9.1 Warranty Information

The EXFO MAX-730D-SM1 comes with a 3-year warranty. Please retain your proof of purchase for warranty claims. The warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper maintenance.

9.2 Technical Support

For technical assistance, troubleshooting beyond this manual, or warranty service, please contact EXFO customer support. Refer to the official EXFO website for the most current contact information and support resources.
You can also find more information and support at the official EXFO website:www.exfo.com

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