User's Guide

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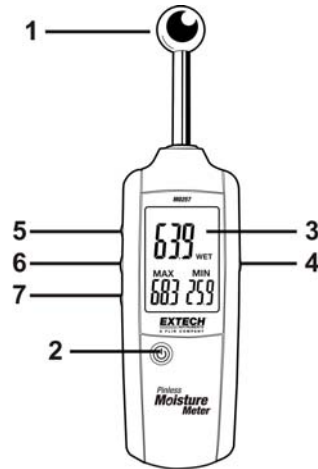
Pinless Moisture Meter

Model MO257

Introduction

Congratulations on your purchase of the Extech MO257 Pinless Moisture Meter. The pinless moisture sensor monitors the moisture in wood and other building materials without causing surface damage. High frequency sensing technology allows the meter to take non-invasive moisture measurements. User programmable alarms alert the user if moisture measurements exceed alarm set-points. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.
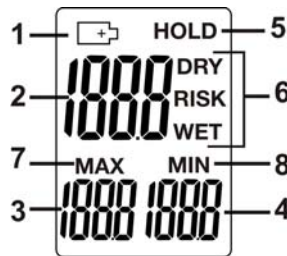
Meter Description

1. Measurement sensor
2. Power ON-OFF button
3. LCD display
4. Measure (MEAS) button
5. UP and BACKLIGHT button
6. SET button
7. DOWN button

Battery compartment located on rear of unit

LCD Display

1. Low Battery icon
2. Main LCD display
3. MAX reading
4. MIN reading
5. HOLD function
6. Measurement alert
7. MAX mode icon
8. MIN mode icon

Battery Replacement

1. Turn off the meter
2. Remove the Philips head screw located on the rear of the unit
3. Lift off the rear battery cover
4. Replace the three (3) 'AAA' 1.5V batteries
5. Secure the rear battery cover

Operation

Pinless Moisture Measurements

1. Press the power ⏻ button to turn the meter on.

2. Before first use the meter must be calibrated to a known dry area as described below.

3. To calibrate, press the MEAS button immediately after powering the meter. The display will audibly beep and visually flash the CAL display icon. Keep the measurement sensor at least 3 to 4" (8 to 10 cm) from any object during calibration.

4. When the calibration is complete the beeping and flashing stop. The calibration reading must not exceed 0.5. If so, re-calibrate ensuring that hands or other objects are kept clear of the measurement sensor.

5. The meter should be calibrated whenever it is moved from one measurement area to another.

6. To take a measurement, hold the meter and position the sensor so that it is very near or directly touching the surface under test. The meter can sense moisture to a depth of 0.79 to 1.57" (20 to 40mm).

7. IMPORTANT NOTE: The position of the hand can greatly affect a reading. Do not move or reposition the hand that holds the meter while taking measurements or when calibrating the unit.

8. The LCD indicates a relative moisture reading in numeric digits from 0.0 to 100.0 and with programmable alarm alerts (DRY, RISK, and WET).

9. Press the MEAS button to hold (freeze) a reading on the LCD (the HOLD icon will appear on the LCD). The meter will hold the reading for 30 seconds before automatically shutting the meter down.

10. The MAX and MIN display areas indicate the highest and lowest readings encountered since the measurement session was started.

11. If the battery symbol appears or if the meter does not switch ON, replace the batteries.

Alarm Settings

Two high alarm points can be set for Moisture measurements: A **RISK** Alarm (0 to 50 setting range with a default setting of 30 units) and a **WET** Alarm (50 to 100 setting range with a default setting of 60 units).

Moisture Alarm Setup Procedure:

1. Press the SET button. The RISK display icon will appear flashing on the LCD indicating that a RISK alarm can now be programmed.

2. Use the up/down buttons to select the desired RISK Alarm value.

3. Press the SET button when the desired setting is displayed.

4. The WET icon will appear flashing on the LCD indicating that the WET Alarm is ready to be programmed.

5. Use the up/down buttons to select the desired Wet Alarm setting.

6. Press SET to complete the programming.

7. Now, if the moisture measurement is higher than the RISK setting, the meter will beep once every two seconds and if the moisture measurement is higher than the WET setting the meter will beep four times per second.

Auto Power Off

To conserve battery energy, the meter will enter a sleep mode after approx. 30 minutes of inactivity. Press the power button to wake the meter.

Backlit LCD

Press the up/backlight button to switch the backlighting ON or OFF.

Specifications

Function	Range	Accuracy
Moisture Range	0.0 to 100.0	Relative only
Measurement Depth	0.79 to 1.57" (20 to 40mm)	

Display type	Backlit LCD
Display digits	Three (3) numeric displays; each displaying from 0.0 to 100.0
Display icons	HOLD, DRY, RISK, WET, MIN, MAX and low battery icon
Operating Temperature	40 to 110°F (4 to 43°C)
Operating Humidity	90%, 32-86°F (0-30°C), 75%, 86-104°F (30-40°C), 45%, 104-122°F (40-50°C)
Power Supply	Three (3) 1.5V 'AAA' batteries
Auto Power Off (APO)	After 30 minutes of inactivity
Dimensions	9.2 x 2.5 x 1.1" (235 x 63 x 28mm)
Weight	7.7oz (218g)

Moisture Comparison Table (typical)

Material	Display units	Moisture status
Gypsum	< 30	DRY
	30 - 60	RISK
	> 60	WET
Cement	< 25	DRY
	25 - 50	RISK
	> 50	WET
Wood	< 50	DRY
	50 - 80	RISK
	> 80	WET

MO257 V1.0 04/10

Warranty

Calibration and Repair Services

Extech offers repair and calibration services for the products we sell. Extech also provides NIST certification for most products. Call the Customer Care Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.

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Support line (781) 890-7440

Technical Support: Extension 200; E-mail: support@extech.com

Repair & Returns: Extension 210; E-mail: repair@extech.com

Product specifications subject to change without notice

For the latest version of this User Guide, Software updates, and other up-to-the-minute product information, visit our website: www.extech.com
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