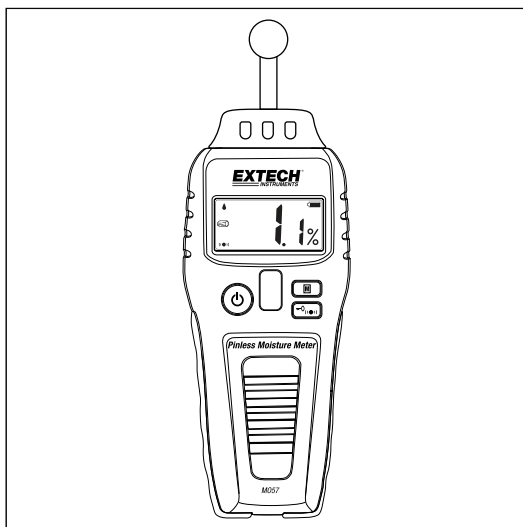


EXTECH

USER MANUAL

Pinless Moisture Meter MO57



Introduction

Thank you for selecting the Extech MO57 Pinless Moisture Meter. The MO57 employs a nondestructive spherical sensor that safely glides over surfaces to measure the relative moisture in wood and other building materials (wallboard, sheet rock, cardboard, plaster, concrete, and mortar) at any angle to a depth of 4 in. (10.2 cm).

To indicate moisture level the MO57 provides a digital reading, audible tones, and 'moisture droplet' icons. Audible tones (eight levels of intensity) and droplet icons (1, 2, or 3) increase in proportion to increased moisture. Additional features include Auto Power OFF and Display Lock (hold).

This meter ships fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website to check for the latest version of this user manual, product updates, and customer support.

Measurement Considerations

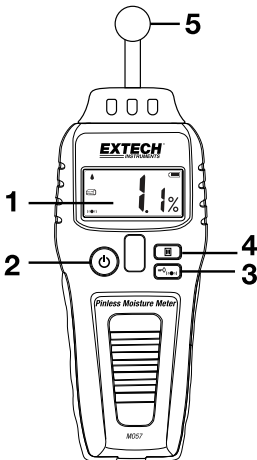
To measure moisture, the sensor emits and senses low-power electromagnetic signals. The displayed reading in percent is an average of the moisture content measured over the measurement surface area, to the maximum depth of penetration (4 in. [10.2 cm]). Moisture that is closer to the surface has a greater effect on the displayed average.

Placing the sensor on a surface whose thickness is less than the maximum depth of penetration may result in unreliable moisture readings; in these cases, stack material on top of the measured surface to increase the thickness.

The MO57 also produces audible tones and 'moisture droplet' display icons to indicate moisture level. The audible tone rate and number of droplets increase as the moisture level increases. When measuring, keep hand stationary on the meter while holding and moving the meter, as hand movement can affect the readings.

Description

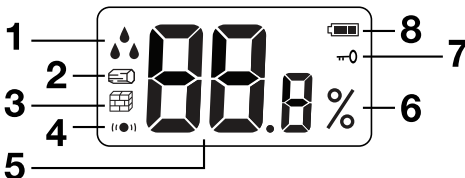
Meter



1. Display (LCD)
2. Power button
3. Display Lock and Beeper button
4. Material selection button
5. Sensor

Note: Battery compartment on rear of meter.




Display



1. Droplet icons (1: low; 2: medium; 3: high)
2. Wood mode
3. Building material mode


4. Beeper active
5. Moisture reading
6. Moisture unit (%); relative reading
7. Display lock
8. Battery status

Control Buttons

Button symbol	Button name	Description
	Power	Long press to power ON-OFF
	Material group selection	Press to toggle wood and building materials
	Display lock and Beeper control	Short press to lock/unlock display Long press to toggle beeper ON-OFF

Operation


Powering the meter

1. Long press the power button  to switch the meter ON or OFF.
2. The meter emits audible tones and performs a self-calibration upon start-up. Keep the measurement sensor at least 3 to 4 in. (8 to 10 cm) from hands and objects during calibration. The calibration reading must not exceed 0.5. If so, recalibrate ensuring that hands and objects are clear of the sensor. Note: Calibrate each time the meter is moved to a new measurement location.
3. Replace the battery when the battery symbol appears or if the meter does not switch ON.

Auto Power OFF (APO)

The meter will automatically power OFF if the reading remains 0% for 3 minutes. If the meter detects readings other than 0%, it will not automatically power OFF.

Display (Hold) Lock

Short press the Display Lock button  to freeze the displayed reading. The lock icon is visible on the display when Display Lock is active. Press again to return to the normal operating mode.

Beeper ON/OFF

The beeper defaults to ON. To switch the beeper OFF, long press the beeper button (●). When the beeper is active, the audio icon will be visible.

Pinless Moisture Measurements





1. Short press the Material Select button  to toggle the Wood and Building Material modes of operation. The displayed icon indicates the selected mode.
2. To take a measurement, hold the meter and position the sensor so that it is directly touching the surface under test (at any angle). The meter can sense moisture to a depth of 4 in. (10.2 cm).
NOTE: The position of your hand can affect the reading. Do not move or reposition the hand that holds the meter while taking measurements or when powering the unit.
3. Observe the displayed relative readings, view the displayed droplet icons (more drops indicate higher moisture levels), and listen for the audible beeping (faster beeping indicates higher moisture; there are eight intensity levels). As discussed in the Measurement Considerations section, the displayed reading is an average of the moisture measured over the tested surface area to the maximum penetration depth.
4. Long press the power button to power OFF the meter.

Table 1 Relative Moisture Reading Reference

		Wood or Building material
Total range >		0.1 to 99.9
	LOW	0.1 to 9.9
		10.0 to 16.9
	MEDIUM	17.0 to 23.9
		24.0 to 29.9
		30.0 to 39.9
	HIGH	40.0 to 59.9
		60.0 to 69.9
		70.0 to 99.9

Maintenance

Battery Replacement

When the battery status icon appears empty or flashing, replace the battery.

1. Remove the battery cover by pushing the compartment latch (bottom, back of meter).
2. Replace the 9 V battery observing correct polarity.
3. Replace the battery cover securely.
4. Dispose of battery responsibly and within applicable legal regulations.



Do not dispose of used batteries or rechargeable batteries in household waste.

Care and Cleaning

- Store the meter in an environmentally stable, dust-free environment, out of direct sunlight.
- Remove the battery from the instrument if the meter is to be stored for long periods or if the battery power symbol appears empty (or flashing) on the display.
- To clean the meter case, wipe with a damp cloth, do not use solvents or abrasives.

Specifications

Display	LCD with multifunction indicators
Sensor type	Pinless spherical sensor
Measurement type	Nondestructive, electromagnetic sensing
Measurement indication	Digital, moisture droplet icons, and audible tone with eight levels of intensity
Measurement ranges	Low: 0.1 to 16.9%; Medium: 17.0 to 39.9%; High: 40.0 to 99.9%
Measurement depth	4 in. (10.2 cm)
Resolution	0.1 %
Accuracy	n/a (relative readings only)

Auto Power OFF (APO)	After three (3) minutes (approx.) with 0% display reading
Power supply	One (1) 9 V battery (consumption: < 40 mA)
Low battery indication	< 7.5 V DC (approx.)
Low battery APO	< 5.5 V DC (approx.). APO will occur within 20 seconds (approx.)
Operating conditions	41 to 133°F (5 to 45°C); < 80 % RH
Storage conditions	32 to 122°F (0 to 50°C); < 85 % RH
Dimensions	8.3 x 2.8 x 1.3 in. (210 x 70 x 33 mm)
Weight	5.5 oz. (155 g) without battery

Customer Support

Customer Support Local Telephone List:

<https://support.flir.com/contact>

Returns (RMA):

<https://customer.flir.com/Home>

Warranty

Teledyne FLIR warrants this Extech brand instrument to be free of defects in parts and workmanship for two years from date of shipment. To view the full warranty text, please visit the support site, link below.

<https://www.flir.com/support-center/warranty/>

Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

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