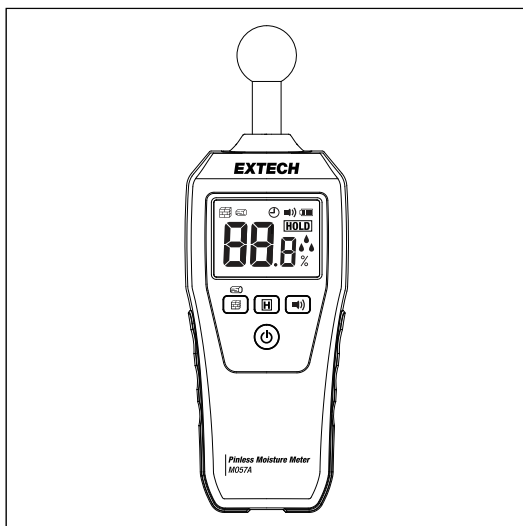


EXTECH

USER MANUAL

Pinless Moisture Meter MO57A



Introduction

Thank you for selecting the Extech MO57A Pinless Moisture Meter. The MO57A uses 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 10.2 cm (4 in.).

To indicate moisture level the MO57A provides a digital reading, audible tones, and 'moisture droplet' icons. Audible tones (three levels of intensity) and droplet icons (1, 2, or 3) increase in proportion to increased moisture. Additional features include Auto Power OFF and Display 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 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.

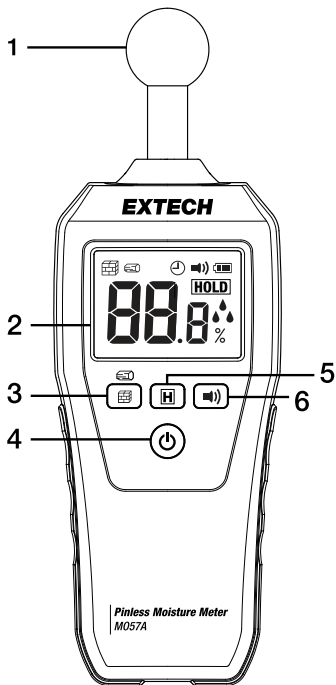
The MO57A also produces audible tones and 'moisture droplet' display icons to indicate moisture level. The audible tone rate and number of droplets increase as the moisture level increases. When measuring, keep hand stationary on the meter while holding and moving the meter, as hand movement can affect the readings.

Description

Meter

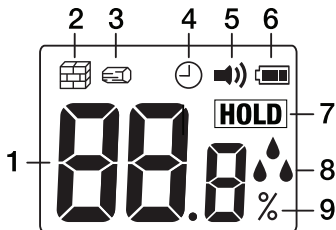
1. Pinless sensor
2. Display (LCD)
3. Material select button
4. Power button (long press)
5. Display 'hold' button
6. Beeper control button

Battery compartment on rear of meter.







Display

1. Moisture reading
2. Building material mode
3. Wood mode
4. Auto Power OFF (APO) active
5. Beeper enabled
6. Battery power status
7. Display hold mode
8. Moisture drop icons (one drop for low moisture, two for medium, three for high)
9. Percent moisture unit (relative)




Control Buttons

Button icon	Button Name	Description
	Power	Long press to switch ON-OFF.
	Material select	Short press to toggle Wood and Building Material modes.
	Display Hold	Short press to freeze reading on the display (HOLD will appear). Press again to exit.
	Beeper control	Short press to enable/disable beeper. When enabled, the beeper icon will be displayed.

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 batteries when the battery icon appears empty or flashing, 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

Short press the hold button (**H**) to freeze the displayed reading. 'HOLD' is displayed when the display hold mode is active. Press again to return to the normal operating mode.

Beeper ON/OFF




The beeper defaults to ON. To switch the beeper OFF, 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 (1 to 3 drops), and listen for the audible beeping (faster beeping indicates higher moisture). 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 batteries.

1. Remove the battery cover by pushing the compartment latch (bottom, back of meter).
2. Replace the three (3) AAA batteries, observing correct polarity.
3. Replace the battery cover securely.
4. Dispose of batteries 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 batteries 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

General Specifications

Display	Color LCD with multi-function indicators
Auto Power OFF (APO)	After three (3) minutes (approx.) with 0% display reading
Power supply	Three (3) 1.5 V 'AAA' batteries
Power consumption	< 15 mA (average)
Low battery indication	Battery icon appears empty or flashing
Dimensions	8.0 x 2.7 x 1.3 in. (203 x 68 x 32.5 mm)
Weight	6 oz. (170 g) without battery

Measurement Specifications

Sensor type	Pinless spherical sensor
Measurement type	Nondestructive, electromagnetic sensing
Automatic calibration	Pinless mode in open air
Measurement indication	Digital, moisture droplet icons (1 to 3) and audible tones (3 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)

Environmental Specifications

Operating conditions	41 to 133°F (5 to 45°C); < 80 % RH
Storage conditions	32 to 122°F (0 to 50°C); < 85 % RH
Operating altitude	6562 ft. (2000 m)

Compliance and Safety

EMC	CE, FCC Part 15B
Drop test (shock)	4 ft. (1.2 m) per EN 61010-1
Vibration	Random vibration per MIL-PRF-28800F Class 2

Customer Support

Customer Support Local Telephone List:

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

Returns (RMA):

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

Warranty

Teledyne FLIR warrants this Exttech 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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