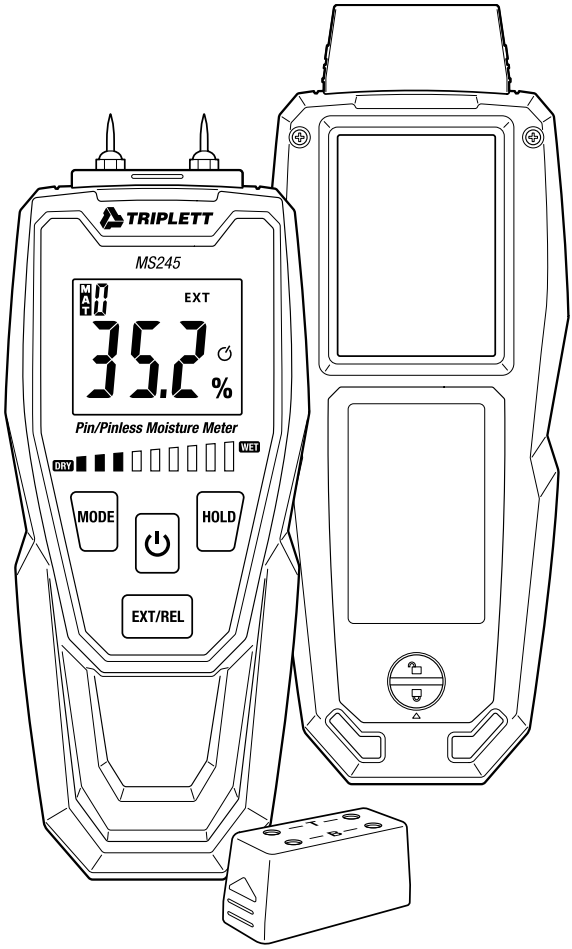
TRIPLETT

USER MANUAL

MS245

Pin/Pinless Moisture Meter



v.2.0-06/26

INTRODUCTION

Thank you for purchasing the Triplett MS245 Pin/Pinless Moisture Meter. Designed for versatility, accuracy, and ease of use, the MS245 provides both pin and non-invasive pinless moisture measurements for wood and a wide range of building materials. With audible and visual moisture alerts, color-coded LED bargraph indicator, a backlit LCD display, and convenient features such as Data Hold and built-in verification test, the meter helps you quickly assess moisture levels in a variety of applications. Whether you are performing home inspections, water damage restoration, woodworking, painting, or quality control in manufacturing environments, this instrument delivers the reliable performance needed to identify moisture-related issues and make informed decisions.

Please read this manual carefully to familiarize yourself with the meter's features and functions, and ensure safe, accurate operation.

What's in the box:	**Stay updated:**
• MS245 meter • Protection Cover with built-in Pin Function Verification Test • 2 × Metal Moisture Pins (installed) • 1 × 9V battery • User Manual	For the most recent version of this user manual, visit www.triplett.com and search for "**MS245**". You can also find the latest specifications, FAQs, and product datasheets on our website.

SAFETY

Use the meter only as specified in this manual; otherwise, the protection provided by the meter and its warranty may be voided.

CAUTION: The moisture meter's metal pins are sharp. Avoid contact with skin and keep fingers away from them during use. Cover the pins with the protective cap when the instrument is not in use.

Operating Environmental Conditions

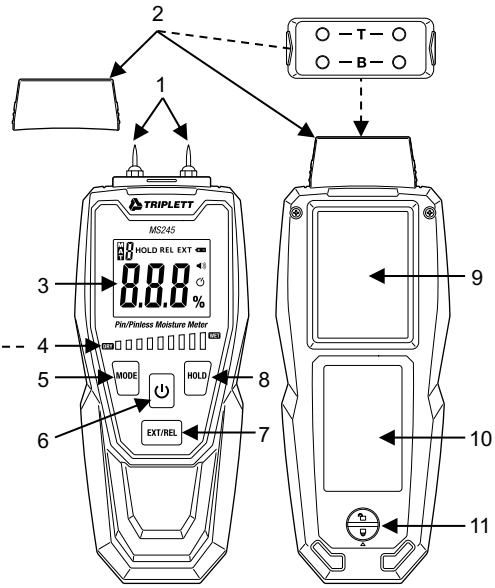
- Altitude: ≤2000 meters
- Relative Humidity: 80%RH max
- Operating Temperature: 32 to 104°F (0 to 40°C)

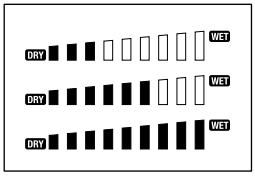
Maintenance and Cleaning

- Servicing not covered in this manual should be performed only by qualified personnel. Visit www.triplett.com/support for support.
- Periodically wipe the housing with a soft, damp cloth and mild detergent (if necessary). Do not use solvents, abrasives, or alcohol-based cleaners.
- Keep the metal pins and pinless sensor clean and dry before and after use.
- Do not immerse the meter in liquids or allow moisture to enter.

METER DESCRIPTION

1. Metal Pins for Moisture Testing
2. Protective Cover with built-in Timber (T) and Building (B) Pin Function Verification Test
3. LCD Display
4. Color LED Bargraph
5. MODE Button
6. ⏻ Power Button
7. EXT/REL Button (for Pin/Pinless function)
8. HOLD Button
9. Pinless (REL) Moisture Sensor (rear of meter)
10. Battery Cover
11. Battery Cover Lock

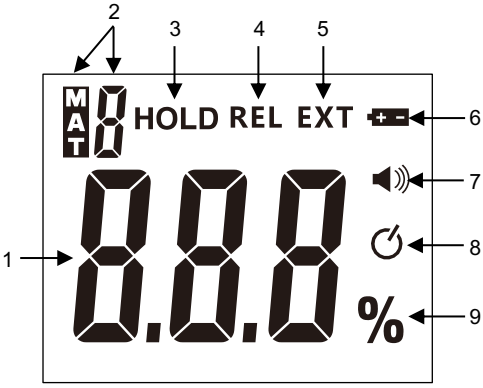




Color LED bargraph indicates low (green), medium (yellow), or heavy (red) moisture detection.

DISPLAY DESCRIPTION

1. Moisture Measurement Value
2. Material Type Number
3. HOLD – Data Hold
4. REL – Pinless Function
5. EXT – Pin Function
6. Low Battery Indicator
7. Audible Alarm Indicator
8. Auto Power Off Indicator
9. % (Percent Moisture Unit)



SPECIFICATIONS

Function	Material	Range	Resolution	Accuracy
Pin Moisture Function	Wood	6 to 99%	0.1%	±2%
	Build	0.2 to 2%	0.1%	±0.1%
Pinless Moisture Function	Hardwood	0 to 35%	0.1%	±4%
	Softwood	0 to 55%	0.1%	±4%
	Drywall	0 to 100% Relative (See Appendix for others)	0.1%	Relative Readings
Operating Temperature	32 to 104°F (0 to 40°C), <80%RH			
Storage Temperature	14 to 104°F (-10 to 40°C), <70%RH			
Power	1 × 9V battery			
Dimensions	2.80 × 6.97 × 1.32" (71 × 177 × 33.5mm)			
Weight	7.27oz (206g), battery included			

OPERATING INSTRUCTIONS

Install the battery before operating. See Battery section.

Power and Auto Power Off (APO)

1. Press the ⏻ power button to turn the meter ON. Avoid touching the pinless sensor on the rear of the meter while powering the meter ON or the moisture alarm will beep if the function is on Pinless (REL) mode.
2. The ↺ icon appears on the display indicating that Auto Power Off feature is active. The meter is defaulted to automatically power off after 10 mins of inactivity to prolong the battery life.
3. To disable the APO feature, press and hold the **MODE** button. The ↺ icon will disappear indicating that the APO feature has been disabled.
4. To enable the APO feature, press and hold the **MODE** button. The ↺ icon will appear indicating that the APO feature is enabled.
5. Long press the ⏻ power button at any time to turn the meter OFF.

Display Backlight

1. The backlight feature of the display will be ON by default when the meter is turned ON.
2. After ~10 seconds of inactivity (no button presses), it will turn OFF.
3. Short press the ⏻ power button to turn the backlight ON.

Data Hold

1. To freeze a reading on the display, press the **HOLD** button. The HOLD indicator will appear on the display and the reading will freeze.
2. To resume measurement, press **HOLD** and the indicator will disappear.

Pinless (REL) and Pin (EXT) Functions

Use the Pinless function to scan for moisture conditions. Switch to Pin function to confirm the moisture level reading. Switch between the Pin and Pinless functions by pressing the **EXT/REL** button. The REL or EXT will appear on the display.

- **REL** = Pinless Moisture Function (uses the rear sensor to measure)
- **EXT** = Pin Moisture Function (uses the installed metal pins to measure)

PINLESS (REL) MOISTURE FUNCTION

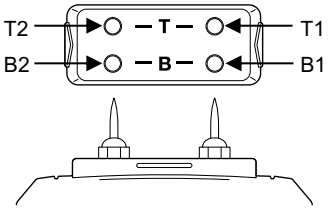
1. Avoid touching the pinless sensor on the rear of the meter. Press the ⏻ power button to turn the meter ON. REL on the display indicates you are in the Pinless function. If EXT is on the display, press **EXT/REL** button to switch to REL.
2. Refer to the Material Table below to identify the Material Number matching the area being measured.
3. Short press the **MODE** button to reach the Material Number (MAT 0 to 9 indicated on the display) before you start measuring.
4. Once the Material Number is displayed, place the meter flat on the surface ensuring the pinless sensor has direct contact to the area being measured. Slowly glide the sensor to scan through the area and observe the moisture readings and LED bargraph. For best result, the area measured should be flat.
5. The table below shows the moisture condition of the material. When the Red LED segments of the bargraph lights on, the meter will beep and the alarm icon 🔊 will appear indicating elevated moisture conditions.

Material Table for Pinless (REL) Function and Color LED Indication Range

Material Number	Materials	Typical Application	Green LED	Yellow LED	Red LED	Range
0	Drywall	Interior walls & ceilings	10 to 40%	>40%	>70%	0 to 100%
1	Masonry	Brick, block and stone	9 to 35.8%	>35.8%	>62.7%	0 to 89.5%
2	Hardwood	Hardwood flooring	3.5 to 14%	>14%	>24.5%	0 to 35.0%
3	Softwood	Lumber, studs & framing	5.5 to 22%	>22%	>38.5%	0 to 55.0%
4	Anhydrite Screed (Wt%)	Specialty flooring underlayment	0.4 to 1.4%	>1.5%	>2.5%	0 to 3.5%
5	Anhydrite Screed (CM%)	Specialty flooring underlayment	0.2 to 0.6%	>0.6%	>1.1%	0 to 1.5%
6	Cement Screed (Wt%)	Concrete floor underlayment	0.5 to 1.7%	>1.7%	>3.3%	0 to 4.7%
7	Cement Screed (CM%)	Concrete floor underlayment	0.3 to 1.2%	>1.2%	>2.1%	0 to 3.0%
8	Concrete	Slabs and foundations	0.6 to 2.4%	>2.4%	>4.2%	0 to 6.0%
9	Gypsum Screed	Specialty flooring underlayment	1.0 to 4.0%	>4.0%	>7.0%	0 to 10.0%
Note: CM% is Carbide Method Percentage and Wt% is Water by Weight Percentage/Gravimetric Method.						

PIN (EXT) FUNCTION VERIFICATION TEST

1. Press the ⏻ power button to turn the meter ON.
2. EXT on the display indicates you are in the Pin Moisture function. If REL is on the display, press **EXT/REL** button to switch to EXT.
3. Press **MODE** button to select the material to be measured: Wood (MAT 0) or Building Materials (MAT 1).
4. Remove the protective cover and put the metal testing pins on the metal inputs to the right (T1) and left (T2) of the T (Timber) row or to the right (B1) and left (B2) of the B (Building) row located on the top of the protective cover. See illustration on the right. Be cautious while handling the sharp pins.



5. If the meter is functioning properly, the meter will display the following measurement reference range listed below.

Material	Material Number	Inputs	Reference Range
Wood	MAT 0	T1 and T2	18.3% ±2%
Wood	MAT 0	B1 and B2	25.9% ±2%
Building	MAT 1	T1 and T2	0.8% ±0.1%
Building	MAT 1	B1 and B2	1.2% ±0.1%

PIN (EXT) MOISTURE FUNCTION

If you have not conducted the verification test, see the Pin Function Verification Test section above first.

1. EXT on the display indicates you are in the Pin Moisture function. If REL is on the display, press **EXT/REL** button to switch to EXT.
2. "- - -" will appear on the display if no material contact on the metal pins.
3. Refer to the Material Table for Pin Function to identify what Material Number matches the area being measured.
4. Short press the **MODE** button to get to the Material Number (MAT 0 for Wood or MAT 1 for Building Materials) before you start measuring.
5. Once the Material Number is selected, remove the protective cover to expose the metal pins on top of the meter. Be cautious while handling the meter with sharp pins. Avoid contact with skin and keep fingers away from them during use.
6. Insert the metal pins into the area being tested and observe the moisture reading and the color LED bargraph.

7. The table below shows the moisture condition of the material. When the Red LED segments of the bargraph lights on, the meter will beep and the alarm icon 🔊 will appear indicating elevated moisture conditions.
8. Cover the pins with the protective cap when the meter is not in use.

Material Table for Pin (EXT) Function and LED Indication Range

Material Number	Materials	Typical Application	Green LED	Yellow LED	Red LED	Range
0	Wood	2 × 4s, lumber, framing	10 to 40%	>40%	>70%	6 to 99%
1	Building	Drywall, plywood, OSB, concrete	0.2 to 0.8%	>0.8%	>1.4%	0.2 to 2%

QUICK START MEASUREMENT GUIDE

1. Power **ON** the meter
2. Select the correct material to be measured
3. Start with **Pinless (REL)** function to scan the area
4. Compare suspect areas to known dry areas
5. Use **Pin (EXT)** function to confirm the exact location
6. Monitor the Green, Yellow, and Red LED bargraph indicators

BATTERY INSTALLATION/REPLACEMENT & DISPOSAL

1. Unscrew the battery cover lock from the rear of the meter and remove the battery cover.
2. Install the battery or replace out the old battery with a new one if the low battery indicator appears on the display.
3. Observe correct polarity and snap on the new battery. Carefully slide in the battery wires and the battery into the battery compartment.
4. Align the battery cover in place and fasten the battery cover lock securely.

Battery Disposal



- Never dispose used or rechargeable batteries in household wastebin.
- As consumers, users are legally required to take used batteries to a collection site or stores that sell batteries.
- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install the same type.

Meter Disposal

Do not dispose of this instrument in household wastebin. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

CERTIFICATIONS



This product complies with applicable CE requirements, is RoHS compliant, and has been tested to applicable IEC standards.

WARRANTY

Triplett offers warranty to the original purchaser of its products. We guarantee that our products will be free from defects in workmanship and materials for two (2) years from the purchase date.

This warranty does not cover:

- Products purchased from unauthorized distributors.
- Items that have been repaired or altered by unauthorized individuals.
- Damage from misuse, abuse, misapplication, negligence, or accidents.
- Products with altered, defaced, or removed serial numbers.
- Accessories, including batteries.

For product support, registration, FAQs, or to request calibration or repair services, visit www.triplett.com/support.

Imagery is for reference and may be enhanced for clarity. Actual product appearance and screen content may vary slightly. Specifications are subject to change without notice. For the latest information, visit www.triplett.com.

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