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**9341-50
DIGITAL MOISTURE METER
OPERATION MANUAL**



General Introduction

9341-50 is a material moisture, temperature, humidity all-in-one multi functions Meter. The Meter is ideal for measuring moisture of wood and concrete buildings.

① Features:

- ◆ Provide temperature, humidity and moisture measuring.
- ◆ Measure seven kinds of materials through manual mode.
- ◆ Maximum and Minimum Moisture readings.
- ◆ Display Hold.
- ◆ LCD Display, moisture bar display.
- ◆ Units switch.
- ◆ Backlight display.
- ◆ Auto off (when not in use for 10 minutes)

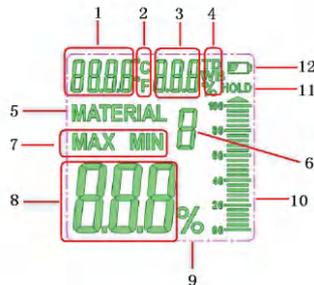
② Components

2.1 Figures and Components



- ① Terminals Protective Cover.
- ② LCD Display
- ③ On/Off Button: Press once to turn the Meter on, press for 1 sec to turn it off.
- ④ Temperature/Moisture Switch:
Switch between Temp: °C/°F and
Moisture: % / WB / TD;
The Meter exit switching mode if "Enter" button is not pressed in 8 seconds.
- ⑤ Backlight Button
- ⑥ Display Hold Button
- ⑦ Switch between testing materials
- ⑧ Maximum/Minimum Display Button
- ⑨ Enter Button

2.2 LCD Display



- 1—Current Temperature
- 2—Temperature Unit
- 3—Current Moisture
- 4—Moisture Unit
- 5—Material
- 6—Material Label
- 7—Maximum/Minimum
- 8—Moisture Readings Display
- 9—Moisture Unit
- 10—Simulated Moisture Bar
- 11—Measure/Hold
- 12—Low Battery Indicator

Safety Regulations

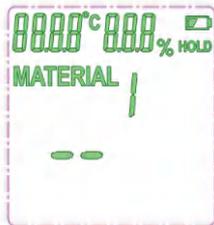
1. Operate the Meter between -10~50°C (14~122°F).
2. Avoid shaking, dropping or taking any kind of impacts when using or transporting the Meter.
3. To avoid possible electric shock or personal injury, repairs or service not covered in this manual should be performed only by qualified personnel.
4. Check the terminals every time before operate the Meter. Do not operate the Meter if the terminals are damaged or one or more functions are not working properly.
5. Avoid exploring the Meter to direct sunlight to ensure and extend the life of the Meter.
6. Do not place the Meter in strong magnetic field, it may cause false readings.
7. Use only the batteries indicated in the Technical Spec.
8. Avoid exploring the battery to humidity. Replace the batteries as soon as the low battery indicator appears

Key function

① Power On/Off

When the Meter is off, press 'On/Off' button to turn on the Meter. The Meter will display as in below figure and shows the current temperature humidity.

When the Meter is on, press 'On/Off' button to turn off the Meter. If you do not operate this product within 5 minutes, it will automatically turn off after 10 minutes.



② Choosing Materials

Press 'Material' button to choose from materials 1 to 7 and repeat. Choose proper number correspondingly as following:

1. Beech, Spruce, Larch, Birch, Cherry, Walnut
2. Oak, Cedar, Maple, Ash Tree, Citigroup, Tamarisk
3. Smoothing Cement, Concrete
4. Anhydrite Screed
5. Cement Mortar
6. Lime Mortar, Plaster
7. Brick

③ Measure/Hold

To hold the readings, press 'Hold' button till the Hold is displayed on the top right corner.

To cancel hold of the readings, press 'Hold' button again till the Hold indicator disappear, the Meter will now show current readings.

④ Maximum/Minimum

To show the maximum of the moisture readings, press 'MAX/MIN' button till 'MAX' is displayed.

To show the minimum of the moisture readings, press 'MAX/MIN' button till 'MIN' is displayed.

To show current moisture readings, press 'MAX/MIN' button till the LCD does not display 'MAX' nor 'MIN'.

In 'MAX' or 'MIN' mode, if the 'MAX/MIN' button is not pressed for 5 minutes, the Meter will switch back to current moisture readings.

⑤ Switch between Functions

Press 'Unit' button to switch between functions °C, °F, %, 'WB' and 'TD' (Symbols flash). Press 'Enter' button to confirm selection. If no selection is confirmed in 8 seconds, the Meter will exit switching mode.

⑥ **Backlight Display**

Press the backlight button to turn on the backlight, press again to turn it off. The backlight will turn off by itself when turn off the Meter.

⑦ **Others**

If the LCD display is dim or not display clearly, replace a new battery.

To ensure accurate readings, measure multi locations with the Meter.

To measure woods, stick the Probe in the wood, wait for at least 5 seconds to obtain stable readings.

Keep the Meter away from any heat source or possible temperature disturbance (ex. Hand).

Technical Specification

◆ **Measurement Specification:**

Electric Conductivity (Resistance Sensor) Range:
0.0~60.0%;

Temperature (Temperature Sensor) Range:
-10.0~50.0°C (14.0~122.0°F)

◆ **Units:**

Material Moisture: %
Environment Humidity: %, WB, TD
Environment Temperature: °C, °F

◆ **Materials Moisture Range:**

- Material 1: Beech, Spruce, Larch, Birch, Cherry, Walnut 8.5~60.0%
- Material 2: Oak, Cedar, Maple, Ash Tree, Citigroup, Tamarisk 6.8~53.4%
- Material 3: Smoothing Cement, Concrete 0.9~24.5%
- Material 4: Anhydrite Screed 0.0~12.2%
- Material 5: Cement Mortar 0.7~9.2%
- Material 6: Lime Mortar, Plaster 0.5~11.1%
- Material 7: Brick 0.0~17.8%

◆ **Resolution:**

- Material Moisture: 0.1%
- Temperature : 0.1°C, 0.1°F
- Humidity: 0.1%

◆ **Accuracy (perform under temperature of 25°C):**

- Conductivity: ±2%
- Temperature: ±2°C (-10°C ~ +50°C)
- Humidity: ±10% (0...100%)

◆ **Sample Interval:**

- Material Moisture Sample Speed: 240ms; LCD refresh time: 1.5s
- Temperature Sample Speed: 240ms; LCD refresh time 1.5s
- Humidity Sample Speed: 240ms; LCD refresh time 3.5s

- ◆ **Operation Temperature:** -10~50°C (14~122°F)
- ◆ **Storage Temperature:** -40~60°C (-40~140°F)
- ◆ **Batteries:** 2AAA
Life of Batteries: 200 hrs (Backlight off)
- ◆ **Size:** 130×56×29mm
- ◆ **Weight:** 206g

Maintenance and Repair

① Repair

- ◆ Please follow the steps closely if the Meter is not functioning properly:
- ◆ Check the batteries, replace new batteries if low battery indicator '  ' appears.
- ◆ Follow operation manual to confirm every procedure.
- ◆ Repairs or services not covered in this manual should be performed only by the authorized service center or qualified personnel.

② Replace Batteries

Follow below steps to replace batteries:

- ◆ Turn off the Meter.
- ◆ Loosen the battery compartment door screw, and remove the door from the case bottom.
- ◆ Remove the batteries and replace the batteries with new batteries.
- ◆ Reattach the battery compartment door to the case bottom and tighten the screw.

③ Calibration

To ensure the accuracy of the Meter, Scheduled calibration is recommended and should be performed only by qualified personnel. Calibrate the Meter annually is recommend. Calibration frequency can be higher or lower to every three years depend of the frequency of the usage.

Standard Delivery

Name	Quantity
Main unit	1 pc
Battery (AAA)	2 pcs