

# M-700 MOISTURE METER

## Operation Manual



# INDEX

<b>A. Introductions</b>	-----	<b>1</b>
<b>B. Features</b>	-----	<b>1</b>
<b>C. The Panel and Shape</b>	-----	<b>2</b>
<b>D. The LCD Display</b>	-----	<b>3</b>
<b>E. Operation Instructions</b>	-----	<b>4 ~ 6</b>
<b>F. Calibration Tables</b>	-----	<b>7</b>
<b>G. Precaution</b>	-----	<b>8</b>
<b>H. Specifications</b>	-----	<b>9</b>

## H. Specifications

<b>Measurement range (% WME)</b>		5.5 ~ 99.9% (Digital LCD Display)
<b>Accuracy (at 25°C)</b>		±1% (difference as the testing materials.)
<b>Resolution</b>		0.1%
<b>Operating Range</b>		-10 ~ +50°C (with temp. compensated)
<b>No. of wood calibration scales</b>		8 (choose form “MODE” key)
<b>Sampling rate</b>		Approx. 1 reading/Sec.
<b>Main Functions</b>		Auto/Manual turn off, Hold function, Record Maximum & Minimum values, Built-in Calibrator, Wood Calibration Scales, Low Battery warning.
<b>Power Supply</b>		9V Battery × 1 pc or AC Adaptor (option)
<b>Battery Life</b>		Approx. 250 hours (continues)
<b>Dimensions</b>	<b>Meter</b>	168 × 73 × 33 mm (6.6 ×3.0×1.3 inch)
	<b>Probe</b>	L: 120 mm, Cable: 1.2 meter (Pin Type)
<b>Weight</b>		Approx. 180g, (6.3 oz) including battery
<b>Option Accessories</b>		1. Roller Type Moisture Probe(No.7012) 2. AC Adaptor .....(No.7019) 3. Extension Of Electrodes pin (No.701P) 5cm ~ 20cm

## G. Precaution

1. The power supply is 9V Battery, and can option to use AC adaptor. Please notice the power supply when operation.
2. When measuring, please don't touch the moisture probe, and don't use the moisture probe and outside moisture probe simultaneously to avoid wrong measuring value.
3. Notice: The range of temperature compensate is  $-10 \sim +50^{\circ}\text{C}$ . If temperature difference is too far between indoor and outdoor. Please wait few minutes before measuring to get accurate value.
4. Please keep dry of moisture probe, to avoid become rusty to effect measuring value.
5. When calibration. Please be sure the moisture probe is not in measuring.

**【 Notice 】** *To measuring special materials, Please contact your local distributors.*

**【 Notice 】** *Don't repair or modify by yourself. Please contact your local distributors.*

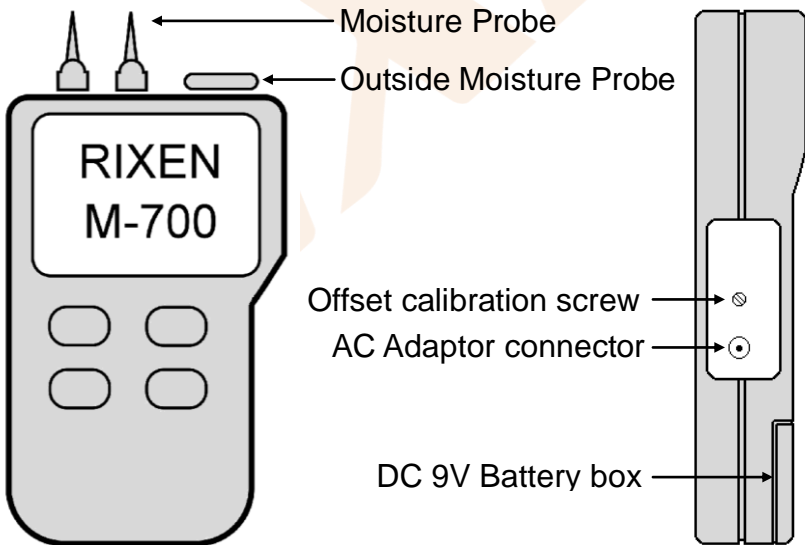
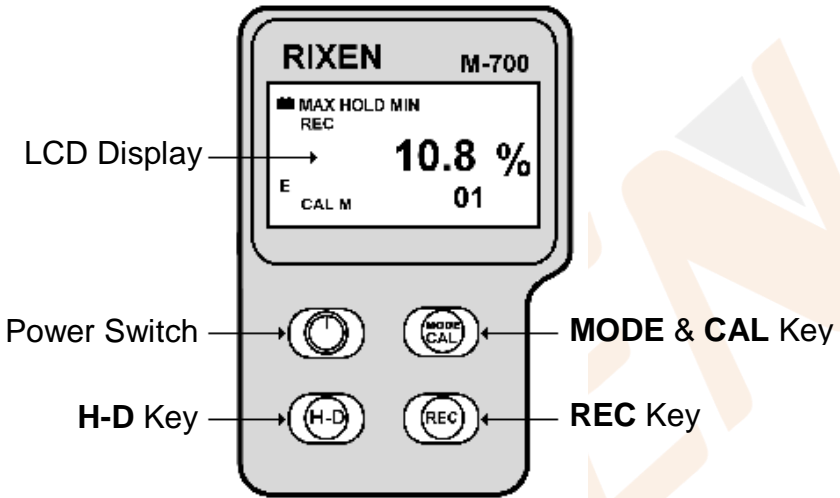
# A. Introductions

The Moisture Meter **M-700** is the complete instrument for measuring moisture levels in materials. Read moisture reading of materials from high accurate digital LCD indicator. Press **MODE** key to choice 8 kinds of calibration scales, correspond different types of woods and materials to get more accurate moisture reading. Press **REC** (Record) and **H-D** (Hold) keys can record the maximum and minimum reading, which can application for majority sampling and quality control. **M-700** built-in calibration function for checking condition of instrument. Just press **CAL** (Calibration) key and adjust calibration screw to calibration by yourself. **M-700** is very suit for different environment, and has temperature compensate function to let reading more accurate, fast and stable. **M-700** can application for Wood, Bamboo, Building, Leather, Cloth, Medication, Paper, Powder, Ceramics, Cement and Apply a reference value to moisture levels, etc.

# B. Features

- High accurate, Auto. temperature compensated.
- Function of Auto / Manual Power off and Data Hold ,Records MAX / MIN reading.
- According to measuring material, suitable different type of probes.
- Built-in 8 calibration scales according different type of wood.
- Built-in calibration function for checking condition of instrument.
- One 9V battery powered, As well as AC powered using an adaptor (Option).
- Fast response, Stability, Rugged Design.

# C. The Panel and Shape





# F. Calibration Tables

(For Wood)

01	02	03	04	05	06	07	08
Pacific maple	Japan china fir	Europe fine-grained wood	Britain elm tree	Quassia	Bodhi tree	Christmas tree	Europe birch
The torrid zone balsa wood	Japan elm	Camphor tree	White elm tree	Hickory tree	Persimmon tree	Pomegranate tree	India China fir
Yellow birch	Douglas fir wood	West America redwood	New Zealand pine wood	West American fallen leaf pine	Amboyna	Rubber tree	Africa redwood mahogany padauk
Yellow poplar	Southern ocean rubber wood	Chestnut tree		Padauk	Alive tree		Europe cherry wood
Africa cypress	American redwood	Japan cypress 18~28mc		Fig tree			Japan cypress 8~18mc
American red rubber wood	Africa alive tree	Green hard hardwood		Teak tree			Japan spruce 8~18mc
Oak	Southern ocean pine	West American hemlock spruce					Africa walnut tree
Scotland pine	Japan pine	Philippine mahogany					
Yellow pine		Fallen leaf pine					
Europe redwood		Malaysia oak					
American walnut tree		American pine tree					
		Korean pine					
		Japan spruce 18~28mc					
		Europe spruce					
		Europe walnut tree					
		Yew					

### **Calibration Method:**

Turn off the meter. Keep the  MODE (CAL) key pressed and press  key to turn on the power. When display indicate symbol “**CAL**” to enter calibration Mode. The indication reading should be 18.4% ( $\pm 0.5$ ). If need to calibrate, please use screwdriver to calibrate from right-side of meter.

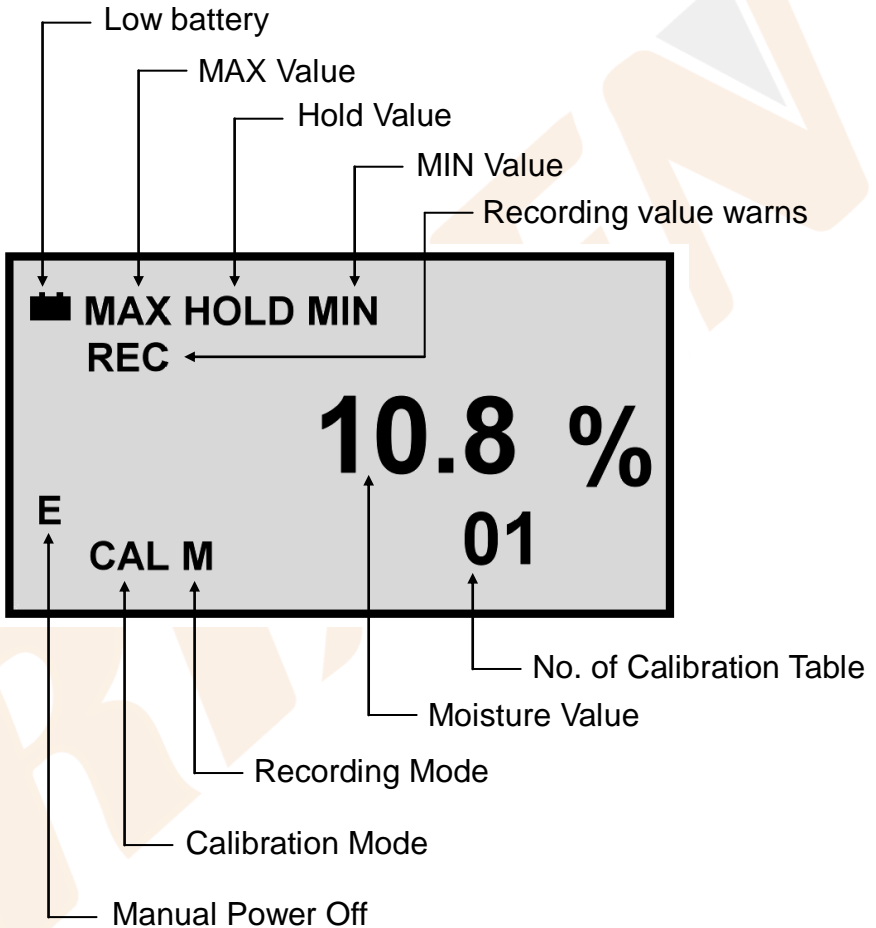
※ After calibration, please turn off the meter to save .

**【 Notice 】** *The calibration reading will have deviations in the operation ambient.*








**【 Notice 】** *When calibration, please make sure the probe suspended in midair and can't contact any object.*








# D. The LCD Display



## E. Operation Instructions

- 1. Turn On:** Press  key to turn on the Meter, It will run to set up inside Automatic temperature compensation in few seconds. (display 8888).
  - ※ Meter will be auto turn off after 30 seconds.
- 2. Manual Turn Off:** Keep the  key Pressed and press  key to turn on the power, The display will indicate symbol “E” to enter Manual Power off mode.
  - ※ Must press  key to turn off the power.
- 3. Moisture Measuring:** Insert two pins top of the meter (or optional probe) to materials would like to test, and read moisture value from display.
  - ※ When use roller type Moisture Probe, please be sure both wheels are press on material and slip slightly.
- 4. Hold Function:** Press  key before the electrodes pins leave the testing material to hold the reading.
  - ※ Press  key three times to return normal mode.
- 5. MAX, MIN (Record):** Press  key before the electrodes pins leave the testing material to record the reading. Display indicates symbol “M” and flashing “REC”. Repeat above method to compare the requisite majority readings.

6. **MAX, MIN (Recall)**: After step 5. **MAX.MIN.(Record)**, press  key to stop record function (display indicates “HOLD”). Press  key again to read MAX reading (display indicates “MAX HOLD”). Press  key again to read MIN reading (display indicates “HOLD MIN”).
- ※ Press  key will delete all readings and return to normal mode (“MAX HOLD MIN” will disappear).
7. **Setting Calibration Scales**: When power on, press  key to set 8 types of wood calibration scales (*Ref. page. 7, Calibration Tables*). Will indicate 1 ~ 8 code under display.
- ※ Meter will pre-set the calibration scale to No.1 after turn on the power.
8. **Confirm and Calibration**: The instrument has pass through strict quality control and precise calibrate. Please calibrate when follows situation.
- ※ The measuring reading than actual reference value is too far.
  - ※ Measuring reading is not stable to indicate.
  - ※ Using in the ambient environment which is high temperature and high humidity.
  - ※ Adjustment for test special materials.
  - ※ After repair probe or change new probe (pins).