

# SOIL MOISTURE METER

## M-700S

### Operation Manual



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## G. M-700S Specifications

<b>Measurement range</b> (% WME)		5.5 ~ 55.0%
<b>Accuracy (at 25°C)</b>		±3% (difference as the testing materials.)
<b>Resolution</b>		0.1%
<b>Display</b>		Multi-Functions Digital LCD display
<b>Operating Range</b>		-10 ~ +50°C (with temp. compensated)
<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, Parameter modification, Power Indicating and low power warning.
<b>Power Supply</b>		One 9V Battery ,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>	150 mm , Cable: 1 meter (Pin Type)
<b>Weight</b>		Approx.180g, (6.3 oz) including battery
<b>Option Accessories</b>		1. AC Adaptor (No.7019) 2. 250mm Twin Electrodes (No.701P) 3. 300mm Single Electrode (No.7013S)

# A. Introductions

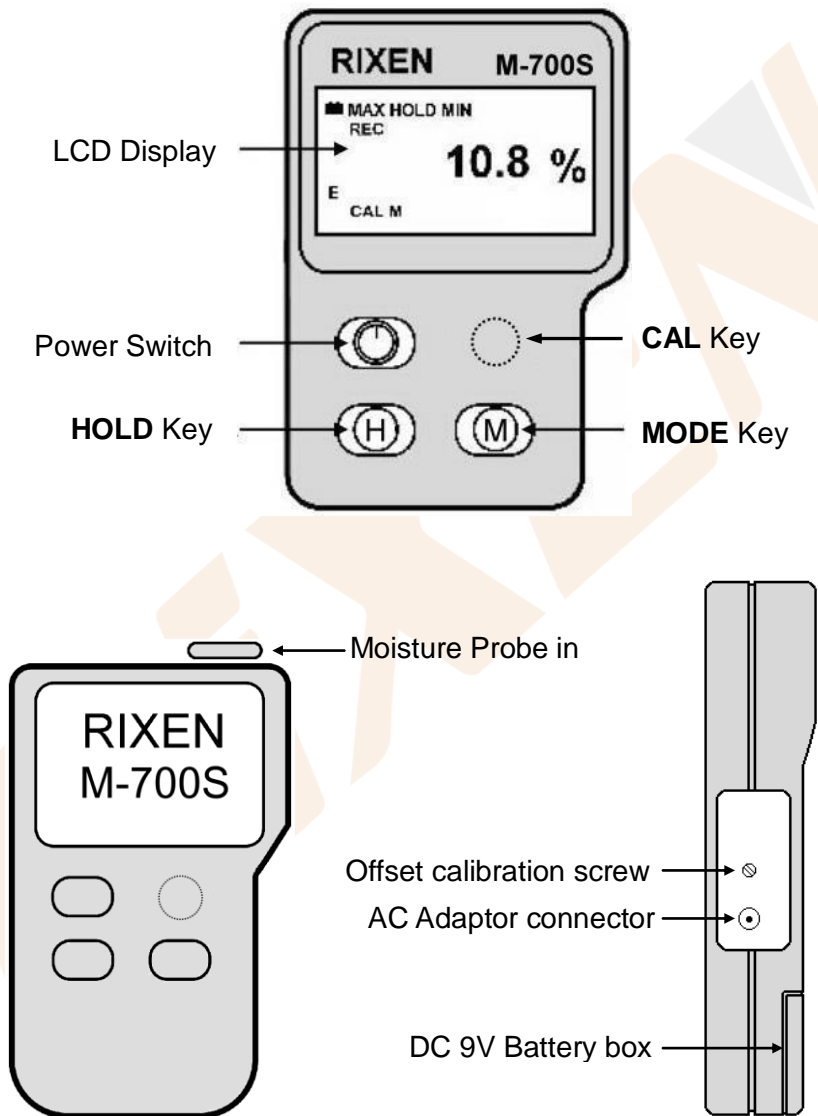
The Soil Moisture Meter **M-700S** is the complete instrument for measuring moisture levels of soils. Read moisture reading of soils from high accurate digital LCD indicator. Press **REC** (Record) and **H-D** (Hold) keys can record the maximum and minimum reading, which can be applied at majority sampling and quality control. **M-700S** built-in calibration function for checking condition of instrument. Just press **CAL** (Calibration) key and adjust calibration screw to calibration by yourself. **M-700S** is very suit for different environment, and has temperature compensate function to let reading more accurate, fast and stable.

**※Soil Moisture Meter: After well revised coefficient & calibration, M-700S is a powerful, fast and accurate soil moisture meter.**

# 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 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. 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  $-15 \sim +55^{\circ}\text{C}$ . 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.*

### **Calibration Method:**

Turn off the meter. Keep the 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 16.4% ( $\pm 0.5$ ). If need to calibrate, please use screwdriver to calibrate from right-side of meter.

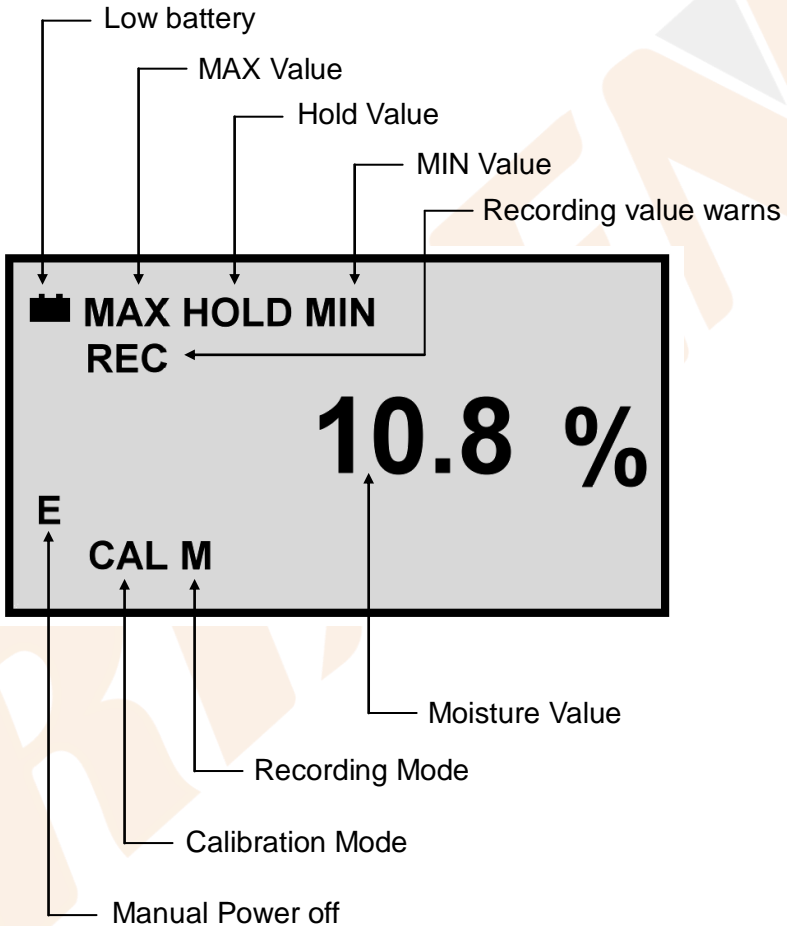
※ After calibration, please turn off the meter to save .

**【 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 **H** key to stop record function (display indicates “**HOLD**”). Press **H** key again to read MAX reading (display indicates “**MAX HOLD**”). Press **H** key again to read MIN reading (display indicates “**HOLD MIN**”).
- ※ Press **H** key will delete all readings and return to normal mode (“**MAX HOLD MIN**” will disappear).
7. **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).