Wireless Connectivity Moisture Meter

(Pin + Remote Pin + Pinless Type)

Model no: MS-W98U3

MEET® MULTI FUNCTIONAL ELECTRICAL ELECTRIC INSTRUMENTS

Technology

Duplex Communication with Smart Phone / Tablet

New Data Logger Compatible

CE

OPERATION MANUAL

Specifications

- Operating voltage: 1 x 9V (6F22 / 6LR61 / 1604)
- Operating current: < 70mA max.
- Low battery indication: < 6.5V, an icon ' ▭▬ ' display
- Extreme low battery: Auto Power Off when below 5.5V within < 10 secs.
- Display: a) Large 0- 99.9 LCD with backlight display
  b) Green; Yellow; Red Tri-Color dot LED display
- Resolution: a) 0.1% (LCD)
  b) 32 dot (LED)
- Accuracy: a) Pin Probe mode: ±(5% rdg +5 digits)
  b) Pinless mode: Relative reading (REL)
- Measuring range: 6.0-87.6 (%WME) or 0.1-99.9 (REL)
- Operating temperature: 0 °C ~50 °C (32 ºF ~ 122 ºF)
- Operating humidity: 80% RH max.
- Non-destructive measuring depth: 100mm / 4.0 inches max.

Advanced features

- Selectable measurement '% WME' or 'REL'
- User Pre-set selectable mode. ie. APO, Alarm etc.
- Dual display LCD+LED
- Measure wood / concrete moisture
- Standalone mode (without wireless module)
- Wireless connectivity transmit data to Smart phone / Tablet with iOS APPS or Android APPS (require wireless module, sold separately)
- Data logger compatible (require wireless with memory module MS-WMBM1, sold separately)
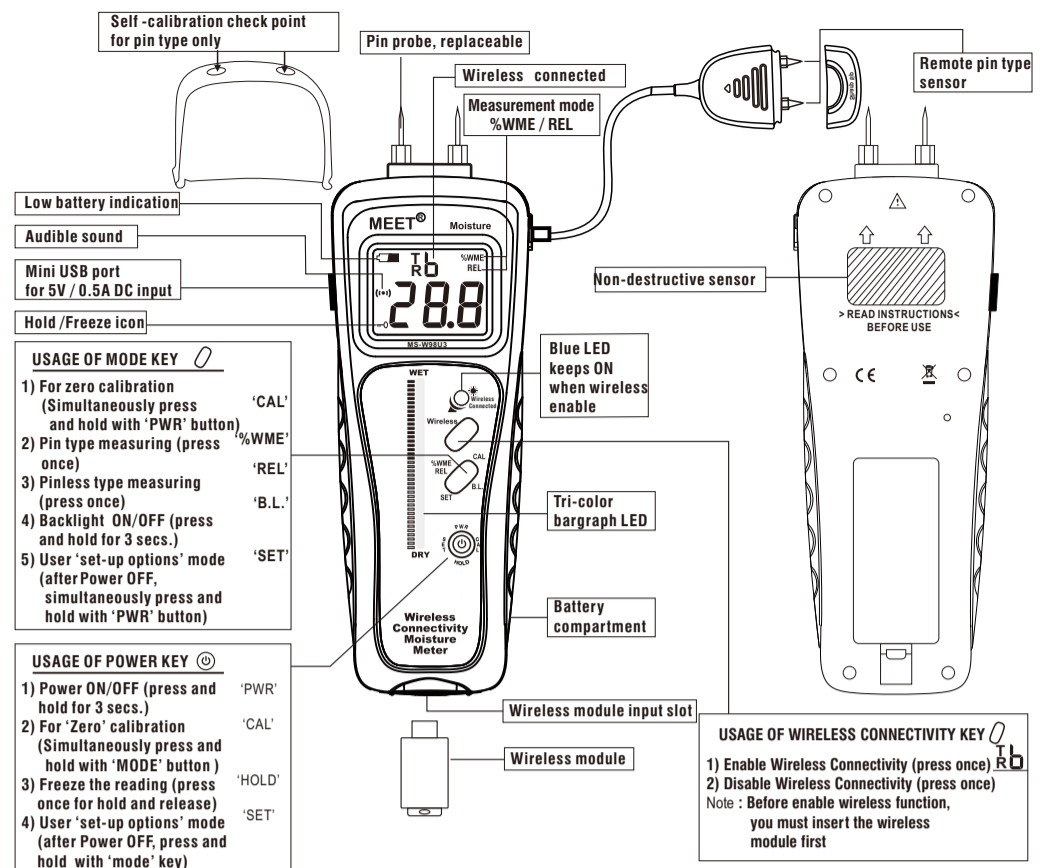- Patented / Patent pending removable wireless module

How to replace battery

Replace 9V alkaline block type battery when low battery warning ' ▭▬ ' indicates on LCD.
Remove the battery cover and replace a fresh battery.
To avoid chemical leakage from the battery, remove the battery if you are intended not to use the meter in short time

Using external mini USB input power supply

- For long duration operation / monitoring / data logging, use an external power adaptor or battery power bank which have output 5.0V / 0.5A DC and with mini USB plug.
- External power input automatically cut-off the internal battery source of the meter.
- For long duration operation / monitoring / data logging, set the 'APO' (Auto Power Off) selection option to 'OFF'. Please refer to 'User Set-up Options' and set 'OPTION' 2 with 'Setting' 0.

–1–

USAGE OF MODE KEY

1) For zero calibration (Simultaneously press and hold with 'PWR' button) — 'CAL'
2) Pin type measuring (press once) — '%WME'
3) Pinless type measuring (press once) — 'REL'
4) Backlight ON/OFF (press and hold for 3 secs.) — 'B.L.'
5) User 'set-up options' mode (after Power OFF, simultaneously press and hold with 'PWR' button) — 'SET'

USAGE OF POWER KEY

1) Power ON/OFF (press and hold for 3 secs.) — 'PWR'
2) For 'Zero' calibration (Simultaneously press and hold with 'MODE' button) — 'CAL'
3) Freeze the reading (press once for hold and release) — 'HOLD'
4) User 'set-up options' mode (after Power OFF, press and hold with 'mode' key) — 'SET'

USAGE OF WIRELESS CONNECTIVITY KEY

1) Enable Wireless Connectivity (press once)
2) Disable Wireless Connectivity (press once)
Note : Before enable wireless function, you must insert the wireless module first

Introduction

MEET's Wireless connectivity moisture meter MS-W98U3 integrated with pin type and non-destructive type sensor also a wired remote pin type sensor.

Usage of non-destructive type sensor is the only choice for estimating the moisture on surface and depth penetrate upto 4 inches of the wood or building materials by 'Relative' 'REL' readings.

If accurate readings are important, the remote pin type sensor measure the surface moisture (marred by pinholes, specially finished wood) by 'wood moisture equivalent' '%WME' readings.

The meter is designed for use in wide applications, such as:

- For building construction, home / office / factory renovation, water damage restoration, such as locating water leaks behind walls, above ceilings, below floors, measuring content on bricks, concrete, wood before sealing, treating, painting, wall papering. Check for moisture on or below the surface of carpet, or sub-flooring.
- For wood working, measure moisture content before finishing, painting processing.
- For textile industries, regular check moisture content on fabrics, clothes, leather, quality check to prevent mold.
- For printing industries, check moisture content on paper before printing.

One of the most advance features of MS-W98U3 is 'Wireless Connectivity' to Smart phone / device. The meter works as 'standalone' mode when without wireless module. Also, works with wireless by using wireless module. The meter transmit or receive the data from / to Smart phone / Tablet / PC (Require different modules, sold separately) through free download iOS or Android APPS.

Extra feature of data logger is also compatible when using 'Wireless with memory module ' MS-WMBM1

–2–

BEFORE OPERATION

Step 1.

- Press and hold both button ' ⏻ ' and ' ⌀ ' until scrolling 'SEtUP' display on screen and with short beep.
- Follow up 'User Set-Up Options' to set up desired function.

Notes:

1. ' 0=0 ' Left hand digit indicates as '**OPTION**' function, use the button ' ⏻ ' as confirmation.
   Right hand digit indicates as '**SETTING**' mode. use the button ' ⌀ ' as selection.
2. Without pressing the confirm button ' ⏻ ' the meter goes to measuring mode after 30 seconds.

Step 2.

a) ' 0=0 ' Right hand digit changes from 0 →1↵ when pressing the button ' ⌀ ' each time. After selected the desired number, you **must** press the confirmation button ' ⏻ ' to confirm the SETTING.

b) ' 1=0 ' Right hand digit changes from 0 →1→ 2 →3↵ when pressing the button ' ⌀ ' each time. After selected the desired number, you **must** press the confirmation button ' ⏻ ' to confirm the SETTING.

c) ' 2=0 ' Right hand digit changes from 0 →1→ 2 → 3↵ when pressing the button ' ⌀ ' each time. After selected the desired number, you **must** press the confirmation button ' ⏻ ' to confirm the SETTING.

d) ' 3=0 ' Right hand digit changes from 0→1→2↵ when pressing the button ' ⌀ ' each time. After selected the desired number, you **must** press the confirmation button ' ⏻ ' to confirm the SETTING.

e) ' 4=0 ' Right hand digit changes from 0 → 1↵ when pressing the button ' ⌀ ' each time. After selected the desired number, you **must** press the confirmation button ' ⏻ ' to confirm the SETTING.

f) You have 30 seconds to confirm each option setting, meter automatically exit to measuring mode after 30 seconds.

g) After confirmed by pressing the button ' ⏻ ', the meter is ready for use.
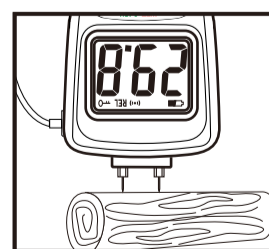
h) Factory default setting:

0=0 (Factory default setting); 1=0 (Selected beeper starts from 17.0 / 17.0%);
2=1 (Selected OFF after 3 minutes) ; 3=1 (Selected backlight ON) (1 Min.);
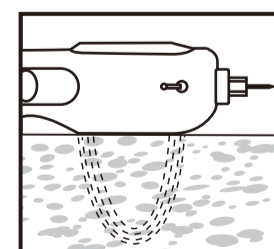4=0 (Selected manual calibration);

–3–

User Set-Up Options

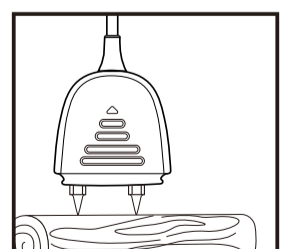| OPTION Function Setting by ' ⏻ ' button	SETTING Mode Setting by ' ⌀ ' button	Set up information
0 (Default setting)	0	Factory default loaded
	1	User default setting loaded. Back light turns ON for 30 secs.
1 (Beeper)	0	Beeper beeps with increasing frequency from nominal 17.0 value in REL mode and 17.0% WME in Measure mode.
	1	Beeper beeps with increasing frequency when start measuring.
	2	Beeper beeps when switching from one operational mode to the other.
	3	Beeper is **OFF**. NO " (••) " display
2 (Auto power off)	0	Auto switch **OFF** is not active, meter can only be switched **OFF** by pressing " ⏻ " and holding it for 3 seconds.
	1	Auto switch **OFF** is active, meter switches **OFF** after 3 minutes.
	2	Auto switch **OFF** is active, meter switches **OFF** after 5 minutes.
	3	Auto switch **OFF** is active, meter switches **OFF** after 10 minutes.
3 (Backlight)	0	Backlight OFF.
	1	Backlight ON.(1 min.)
	2	Backlight always ON.
4 (Calibration option)	0	Manual calibration.
	1	Auto Calibration after power ON.

Usage of moisture sensor

Pin type sense

Non-destructive deep penetrate from the surface to measure moisture in 'REL' reading.

Remote pin type sense, moisture '% WME' reading

–4–

Wireless Connectivity

1. Operating the Smart phone / Tablet and the meter
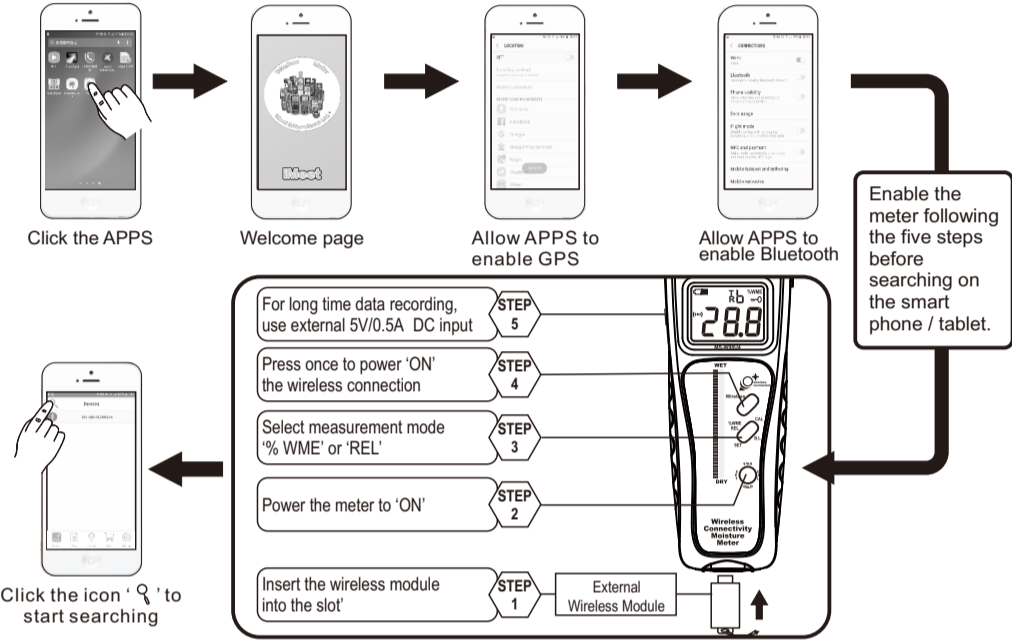
- Need external wireless module, either
  a) MS-WMB1 (external wireless module)
  b) MS-WMBM1 (external wireless with memory module, for data logging)

- Download free 'iDMMD' / 'iMEET' iOS APPS from App Store or scan below QR code.

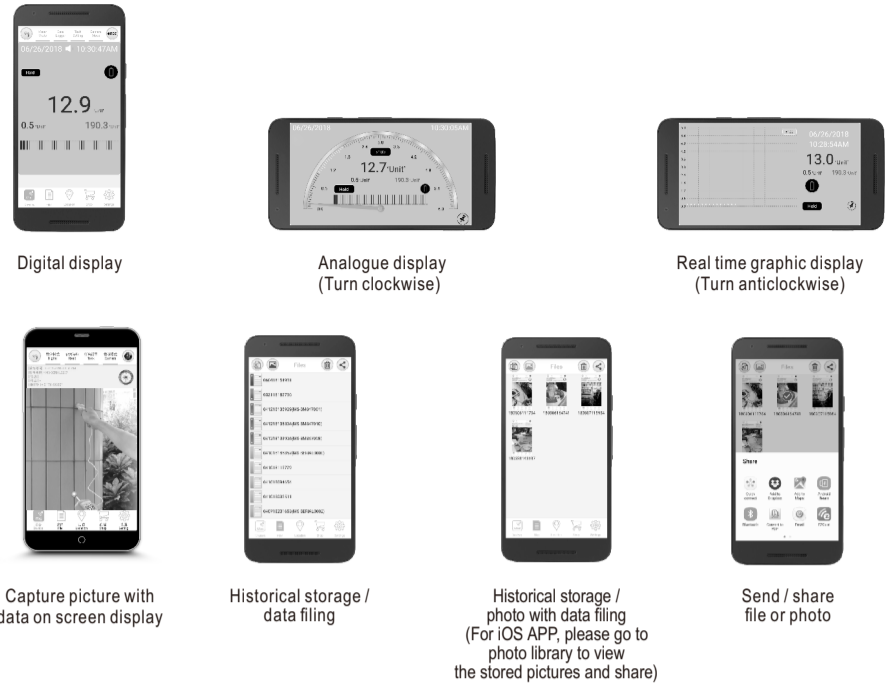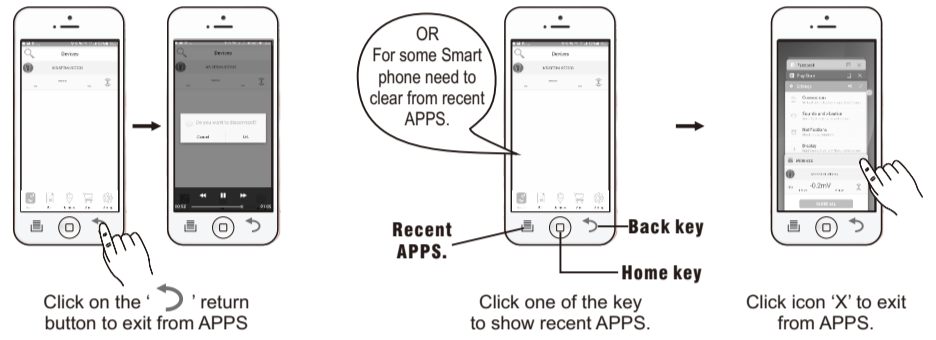- Download free 'iMEET' Android APPS from Google Play Store or scan below QR code.

iMeet

Get it on
Google play

OR

iMeet

Download for
Android

iMeet

Download on the
App Store

- Click the APPS icon to start connectivity.

Click the APPS

Welcome page

Allow APPS to enable GPS

Allow APPS to enable Bluetooth

Enable the meter following the five steps before searching on the smart phone / tablet.

Click the icon ' 🔍 ' to start searching

For long time data recording, use external 5V/0.5A DC input	STEP 5
Press once to power 'ON' the wireless connection	STEP 4
Select measurement mode '% WME' or 'REL'	STEP 3
Power the meter to 'ON'	STEP 2
Insert the wireless module into the slot'	STEP 1 → External Wireless Module

2. Reading display on Smart phone / Tablet

Digital display

Analogue display
(Turn clockwise)

Real time graphic display
(Turn anticlockwise)

Capture picture with data on screen display

Historical storage / data filing

Historical storage / photo with data filing
(For iOS APP, please go to photo library to view the stored pictures and share)

Send / share file or photo

3. Exit from wireless connectivity function

Click on the ' ↻ ' return button to exit from APPS

OR
For some Smart phone need to clear from recent APPS.

Recent APPS.

Back key

Home key

Click one of the key to show recent APPS.

Click icon 'X' to exit from APPS.

Note:

A. Remember to disconnect the 'Wireless connectivity' APPS from the Smart phone / Tablet when not in use.
B. You may connect the 'Wireless connectivity' if you need to always monitor the meter, but this will restrict the other user can't use the meter at same time.

4. Data logging

☞ Use part no. MS-WMBM1 external wireless with memory module for data logger

- For long time recording, use external USB power and set Auto power OFF to always OFF $2=0$ (2=0) from SET-UP option.
- Setting option for data logging is included in same APPS.

110__98 V02