

WOOD/BUILDING MATERIAL MOISTUREMETER (MT1904)

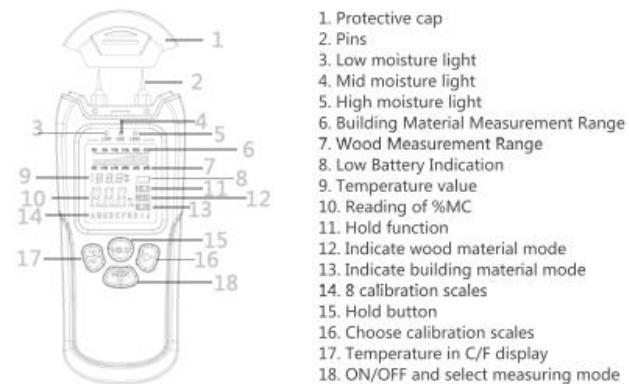
Thanks for choosing our wood moisture meter(MT1904). Your product is covered by 12-month warranty. If you have any problems or questions, please feel free to contact us via email: service@tavool.com. We will provide you the best solution according to your exact issue.

Product Application:

This Moisture Meter is an essential instrument used in many industries to detect moisture content in materials. The measuring result will indicate moisture content in percent (%MC).




- Home and building inspectors rely on moisture meters to identify potential problems and damage to structures from moisture buildup.
- Woodworking industries, such as furniture makers, use wood moisture meters to insure a quality product.
- Flooring contractors use moisture meters to determine ideal conditions when installing a floor over a concrete slab or subfloor.

Product Display:



1. Protective cap
2. Pins
3. Low moisture light
4. Mid moisture light
5. High moisture light
6. Building Material Measurement Range
7. Wood Measurement Range
8. Low Battery Indication
9. Temperature value
10. Reading of %MC
11. Hold function
12. Indicate wood material mode
13. Indicate building material mode
14. 8 calibration scales
15. Hold button
16. Choose calibration scales
17. Temperature in C/F display
18. ON/OFF and select measuring mode

Product Notes:

1. Automatic Power-off in 10 minutes without operation.
2. Low Battery Indication: Symbol "  "shown on the display
3. Temperature in C/F display: Press button 17 to switch
4. ON/OFF and select measuring mode: Press button 18 "  " to turn on/off, and choose the measuring mode (WOOD/BLDG).
5. Button 14 for Eight(8) calibration scales(A, B, C, D, E, F, G, H). Based on different types of wood materials, press button 16 "  " to choose the calibration scales. If you can't find the mode for some kinds of woods in the list, please feel free to contact us via email: service@tavool.com

Product Features:

1. Measurement Range:
Wood: the scale A woods: 6%-60% (Humidity measurement range for scale A woods is 6%-60%)
Building Material: 0-40% (When measuring plaster walls, accurate humidity values will be measured; when measuring other materials, such as carpets and floors, the humidity readings are only for reference. Close to 0%, means the humidity is low; Close to 40%, means the humidity is high)
2. Accuracy Error: Wood: $\pm 2\%$, Temperature: $\pm 2^{\circ}\text{C} / \pm 4^{\circ}\text{F}$
3. HOLD function to freeze the measurement
4. Operating Environment: Temperature: 0 ~ 40°C , Relative Humidity < 75%
5. Low/Mid/High moisture light: Know about the situation of material moisture from the Low/Mid/High moisture light
6. Calibration board: Put measure pins on the calibration board to calibrate before using , the result would be more accurate

Two Measuring Modes

1. **Wood Measuring Mode:** the moisture contents of wood products such as hardwood flooring, cabinets, furniture, lumber, slats, beams, plywood, paneling, conglomerates, window frames, forestry wood, rolled products, building materials and more can be measured.
2. **Building Measuring Mode:** quickly know the moisture level in your walls, wood, and masonry can give you an estimate of the potential for mold growth throughout your home and finding moisture is the first step in early mold prevention.

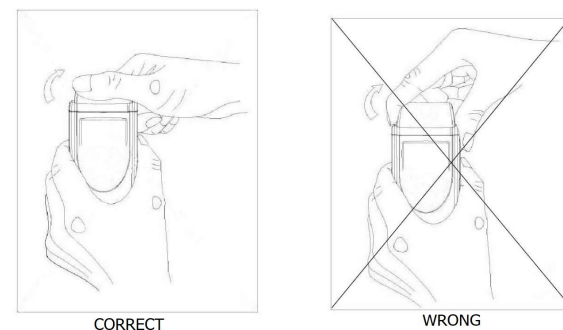
Battery Installation:

Requires 2*AAA battery .



Battery compartment is located on the back of the moisture meter.

1. Open battery door on back case.
2. Connect 2 new AAA batteries, **please match the "+" "-" pole of battery correctly**
3. Replace the cover, and the moisture meter is now ready for use.


Front Cover Operation:



Operation Instruction:


1. **Turn On the Unit :** Press the "  " button once to turn on the instrument, press the "  " button for a while to turn off the instrument.

2. **Selecting desired Measurement Mode :**

- ① After turn on the instrument, press the "  " button to select desired measurement mode.

The two measurement modes are as follows:

- a. **Wood moisture measurement mode ("WOOD" display)**
- b. **Building material moisture measurement mode ("BLDG" display) .**

Wood moisture measurement mode has 8 calibration scales(A, B, C, D, E, F, G, H), based on different types of wood materials. Check the Calibration Tables first, and then short press the "  " button switch to the calibration scale matched.

- ② After the desired measurement mode is selected, you can start measurement. If exceed the max, the moisture value will display: _____, below the min, the moisture value will display: _____

3. **Performing Measurement**

To perform moisture measurement, drive the probes into the wood or building material to be measured, read the value on the display.

4. **Low/Mid/High moisture light**

When you test the moisture of material, LED screen not only provides you the exact measure value, and Low/Mid/High moisture light also indicates whether the measure value is low, mid or high.

5. **Environment temperature measurement:**

Press the "C/F" button to switch C/F. If the temperature too low, it will display LO, if the temperature too high, it will display HI.

6. **Freeze the measurement**

- ① After turn on the instrument, press the "HOLD" button to save measured value, the "HOLD" icon will show on the screen. By pressing the "HOLD" button shortly, the measuring mode will get reactivated.

7. **Automatic Power-Off Feature**

If you don't operate the instrument (or the reading does not change) for about 10 minutes, the instrument will be turned off automatically.

8. **Calibration board:**

Calibration board is located inside the protective cover. Before using, put the measure pins on the calibration board to calibrate, then the measure value would be re-recorded. .

Usage Steps:

Step 1: Set the device to read whatever material you're using, choose the mode (wood or building material) or choose the right calibration scales of the

wood.

Step 2: Place both pins onto surface of the material for several seconds (ensure it is stable).

Step 3: Read the LCD display indicating moisture content of the surface and hold the reading.

Common Questions and Answers:

1. **Why I get a different results on the same spot at few times?**

Answer: Please ensure you select a correct measuring mode and the correct calibration scales. And please also make sure the pins are penetrated into the test surface.

2. **Just how accurate are moisture meters readings?**

Answer: The answer is that moisture meter accuracy can vary depending on a few different factors, such as:

- (1) What material you're testing;
- (2) The type of moisture meter you're using, pin-type is the best way to get an accurate %MC.
- (3) Whether or not the moisture meter has the appropriate scale for the material being tested;
- (4) The procedures used for testing moisture


3. **What can I do if the pins of the moisture meter are broken/rusted?**

Answer: The pins of our moisture meter is made of stainless steel, it is not easy to get broken or rusted. And if you lost the pins, please just contact us.

4. **Suddenly stop working or can not turn on; readings can not change.**

Answer: Please check the battery and try to replace new battery. Install the battery and then connect it again. If the problem still exists, please contact us via email: service@tavool.com

WARNING:

1. Keep the instrument dry.
2. Keep the probe clean.
3. Keep the instrument and battery out of reach of infants and children.
4. When measuring, it should be measured in the environment where the product is placed. If the air humidity is too high or too low, the measurement error will be relatively large. If you move to other environments (the difference between ambient temperature and humidity is large), please put the product in place for at least 10 minutes before measuring. At the same time, the measuring position should be far away from the strong electric field.
5. When the symbol "  " appears, it indicates the battery is in low-power mode and should be replaced.

Calibration

Tables of Wood

Abies alba (B)
 Abies grandis (A)
 Abies procera (J)
 Acacia Wood (A)
 Acanthopanax ricinifolius (A)
 Acer macrophyllum (A)
 Acer pseudoplatanus (F)
 Acer saccharum (A)
 Aetoxicon punctatum (G)
 Afara (A)
 Aformosa (G)
 Aformosia elata (G)
 Afzelia (E)
 Afzelia spp (E)
 Agathis australis (E)
 Agathis palmerstoni (J)
 Agathis robusta (J)
 Agba (J)
 Amblygonocarpus andogensis (A)
 Amblygonocarpus obtusungulis (A)
 Amboyina (G)
 Araucaria angustifolia (B)
 Araucaria bidwilli (B)
 Araucaria cunninghamii (C)
 Ash, American (B)
 Ash, European (A)
 Ash, Japanese (A)
 Ayan (C)
 Baguacu, Bracllian (F)
 Balsa (A)
 Bamboo (A)
 Banga Wangra (A)
 Basswood (G)
 Beech, European (C)
 Berlina (B)
 Berlina grandiflora (B)
 Berlina spp (B)
 Betula alba (J)
 Betula alleghaniensis (J)
 Betula pendula (J)
 Betula spp (J)
 Binvang (E)
 Birch, European (J)
 Birch, Yellow (A)
 Bisselon (E)
 Bitterwood (F)
 Blackbutt (C)

Bosquiea (A)
 Bosquiara phoberos (A)
 Boxwood, Maracaibo (A)
 Brachylaena hutchinsii (J)
 Brachystegia spp (B)
 Calophyllum brasiliense (H)
 Camphorwood, E African (C)
 Canarium schweinfurthii (B)
 Canarium, African (B)
 Cardwellia sublimes (C)
 Carya glabra (F)
 Cassipourea elliotii (F)
 Cassipourea melanosana (F)
 Castanea sutiva (C)
 Cedar, West Indian (J)
 Cedar, Western Red (C)
 Cedar, Japanese (B)
 Cedrela odorata (J)
 Ceratopetalum apetalum (G)
 Chamaecyparis spp (18-28%mc) (C)
 Chamaecyparis spp (8-18%mc) (J)
 Cherry and Apple Wood (A)
 cherry and apple wood (H)
 Cherry, European (J)
 Chestnut (C)
 Chlorophora excelsa (F)
 Coachwood (G)
 Cordia alliodora (F)
 Cordia, American Light (F)
 Croton megalocarpus (J)
 Cryptomelia japonica (B)
 Cupressus spp (A)
 Cypress, E African (A)
 Cypress, Japanese (18-28%mc) (C)
 Cypress, Japanese (8-18%mc) (J)
 Dacryium franklinii (B)
 Dahoma (A)
 Dalbergia latifolia (A)
 Danta (C)
 Diospyros virginiana (G)
 Dipterocarpus (Keruing) (F)
 Dipterocarpus zeylanicus (A)
 Distemonanthus benthamianus (C)
 Douglas Fir (B)
 Dracontomelium mangiferum (B)
 Dryobanlops spp (A)
 Dyera costulata (C)
 Elm (D)
 Elm (D)
 Elm, English (E)
 Elm, Japanese Grey Bark (B)
 Elm, Rock (E)

Elm, White (E)
 Empress Tree (J)
 Endiandra palmerstoni (C)
 Entandrophragma angolense (H)
 Entandrophragma cylindricum (C)
 Entandrophragma utile (J)
 Erimado (F)
 Erythrophleum spp (C)
 Eucalyptus acmncicides (C)
 Eucalyptus crebra (B)
 Eucalyptus diversicolor (A)
 Eucalyptus globulus (B)
 Eucalyptus maculate (A)
 Eucalyptus marginata (C)
 Eucalyptus microcorys (A)
 Eucalyptus obliqua (C)
 Eucalyptus pilularis (C)
 Eucalyptus saligna (B)
 Eucalyptus wandoo (J)
 Fagus sylvatica (C)
 Ficea abies (C)
 Fir, Douglas (B)
 Fir, Grand (A)
 Fir, Noble (J)
 Flindersia brayleyana (B)
 Fraxinus Americana (B)
 Fraxinus excelsior (A)
 Fraxinus japonicus (A)
 Fraxinus mardshurica (A)
 Gequ, Nohor (H)
 Gonystylus macrophyllum (G)
 Gossweilodendron balsamiferum (J)
 Gossypiospermum proerox (A)
 Greenheart (C)
 Grevillea robusta (C)
 Guarea cedrata (H)
 Guarea thomsonii (J)
 Guarea, Black (J)
 Guarea, White (H)
 Guibortia ehie (B)
 Gum, American Red (A)
 Gum, Saligna (B)
 Gum, Southern (B)
 Gum, Spotted (A)
 Gurjun (A)
 Hemlock, Western (C)
 Hevea brasiliensis (H)
 Hiba (J)
 Hickory (F)
 Hyedunani (B)
 Intsia bijuga (B)
 Jarrah (C)
 Jelutong (C)
 Juglans nigra (A)

Juglans regia (C)
 Kapur (A)
 Karri A
 Kauri, New Zealand (E)
 Kauri, Queensland (J)
 Keruing (F)
 Khaya ivorensis (J)
 Khaya senegalensis (E)
 Kuroka (A)
 Larch, European (C)
 Larch, Japanese (C)
 Larch, Western (F)
 Larix decidua (C)
 Larix kaempferi (C)
 Larix leptolepis (C)
 Larix occidentalis (F)
 Lime (E)
 Liquidamper styraciflua (A)
 Locust/Robinia pseudoacacia (A)
 Locust/Robinia pseudoacacia (A)
 Loliondo (C)
 Lovoa klaineanaL (J)
 Lovoa trichiloides (J)
 Iroko (F)
 Lronbank (B)
 Maesopsis eminii (J)
 Mahogany, African (J)
 Mahogany, West Indian (B)
 Makore (B)
 Mansonia (B)
 Mansonia altissima (B)
 Maple, Pacific (A)
 Maple, Queensland (B)
 Maple, Rock (A)
 Maple, Sugar (A)
 Matai (E)
 Meranti, Red (dark/light) (B)
 Meranti, White (B)
 Merbau (B)
 Millettia stuhimannii (A)
 Mimusops heckelii (B)
 Missanda (C)
 Mitragyna ciliata (E)
 Muhuhi (J)
 Muninga (G)
 Musine (J)
 Musizi (J)
 Myrtle, Tasmanian (A)
 Nauclea diderrichii (H)
 Nesogordonia papaverifera (C)
 Nothofagus cunninghamii (A)
 Oak (White/Red) (A)
 Oak (White/Red) (A)
 Ochroma lagopus (A)

Ochroma pyramidalis (A)
 Ocotea rodiaei (C)
 Ocotea usambarensis (C)
 Octomeles sumatrana (E)
 Olea hochstetteri (B)
 Olea welwitschii (C)
 Palaquium spp (A)
 Paulownia tomentosa (J)
 Pecan (E)
 pecan (E)
 Pericopsis elata (G)
 Picaenia excelsa (C)
 Picea jezoensis (18-28%mc) (C)
 Picea jezoensis (8-18%mc) (J)
 Picea sitchensis (C)
 Pine, Scots (A)
 Pine, Sugar (C)
 Pine, Yellow (A)
 Pinus caribaea (C)
 Pinus contorta (A)
 Pinus lampertiana (C)
 Pinus nigra (C)
 Pinus palustris (C)
 Pinus pinaster (B)
 Pinus ponderosa (C)
 Pinus radiate (C)
 Pinus spp (B)
 Pinus strobus (A)
 Pinus sylvestris (A)
 Pinus thunbergii (B)
 Pipadeniastrum africanum (A)
 Piptadenia africana (A)
 Podocarpus dactyloides (B)
 Podocarpus spicatus (C)
 Podocarpus totara (E)
 Poplar, Black (A)
 Populus spp (A)
 Prunus avium (J)
 Pseudotsuga menzesii (B)
 Pterocarpus angolensis (G)
 Pterocarpus indicus (G)
 Pterocarpus soyausii (F)
 Pterygota bequaertii (A)
 Pterygota, African (A)
 Pyinkado (E)
 Qucensland Walnut (C)
 Queensland Kauri (J)
 Quercas Alba (A)
 Quercas Alba (A)
 Quercus robur (A)
 Quercus spp (A)
 Quercus cerris (E)
 Quercus delegatensis (C)
 Quercus gigantean (C)

Ramin (G)
 Redwood, Baltic (European) (A)
 Redwood, Californian (B)
 Ricinodendron heudelotti (F)
 Rosewood, Indian (A)
 Rubberwood (H)
 Santa Maria (H)
 Sapele (C)
 Sarcocephalus diderrichii (H)
 Scottellia coriacea (E)
 Sen (A)
 Sequoia sempervirens (B)
 Seraya, Red (C)
 Shorea smithiana (C)
 Shorea spp (B)
 Silky Oak, African (C)
 Silky Oak, Australian (C)
 Southern Cypress (A)
 southern cypress (A)
 Split California Black Oak (A)
 Spruce, Japanese (18-28%mc) (C)
 Spruce, Japanese (8-18%mc) (J)
 Spruce, Norway (European) (C)
 Spruce, Sitka (C)
 Sterculia rhinopetala (A)
 Sterculia, Brown (A)
 Stringybark, Messmate (C)
 Stringybark, Yellow (C)
 Swietania candollei (A)
 Swietania mahogani (B)
 Sycamore (F)
 Syncarpia glomulifera (C)
 Syncarpia laurifolia (C)
 Tallowwood (A)
 Tarrietia utilis (C)
 Taxus baccata (C)
 Teak (F)
 Tectona grandis (F)
 Terminalia superba (A)
 Thuja plicata (C)
 Thujopsis dolabrat (J)
 Tieghamella heckelii (B)
 Tilia americana (G)
 Tilia vulgaris (E)
 Totara (E)
 Triploehiton scleroxylon (G)
 Tsuga heterophylla (C)
 Turpentine (C)
 Ulmus americana (E)
 Ulmus procera (E)
 Ulmus thomasi (E)
 Utile (J)
 Walnut (C)
 walnut (C)

Walnut, African (J)
 Walnut, American (A)
 Walnut, European (C)
 Walnut, New Guinea (B)
 Walnut, Queensland (C)
 Wandoo (J)
 Wawa (G)
 White Pine (A)
 white pine (A)
 Whitewood (C)
 Xylia dolabriformis (E)
 Yew (C)
 Zelkova Serrata (B)

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 ➤ **NOTE:**
 ① If the wood type is not listed on the table ,which can be divided into hardwood and soft wood. Hardwood choose "A" mode, Softwood choose "H" mode.

② Protimeter Mini, Surveymaster and MMS instruments display Standard Scale A. Protimeter Timbermaster displays all scales.

The calibration data in this table are based on standard tests by oven-drying of commercial samples of the various wood species, between 7% and fibre saturation. Above fibre saturation point (25% -30%) readings are approximate only and generally apply to wood that has dried and been re-wetted. The instrument is calibrated for wood at 20°C (68F). If the temperature of the wood varies by more than 5°C, the meter reading can be corrected approximately by adding ½% for every 5°C below 20°C or subtracting ½% for every 5°C above 20°C. Readings higher by 1%-2% may be obtained where wood has been impregnated with a water-borne preservative. High readings obtained with some ply-woods of peculiar composition must be treated with caution.