

MOISTURE METER (MM1E)

OPERATING INSTRUCTIONS:

PLEASE READ ALL OF THE INSTRUCTIONS BEFORE USING THE METER.

BATTERY INSTALLATION:

Requires one standard 9V battery (included).
Battery compartment is located on the bottom of the meter.

1. Lift clip to access the battery compartment.
2. Connect a new 9V battery.
3. Replace the cover and securely snap in place.
The meter is now ready for use.

OPERATION:

1. Remove the protective Cap from the unit.
2. Press the center button to turn the unit on. The power LED will illuminate.
3. Press the two pins firmly against surface to be measured.
4. LED's will illuminate to indicate % moisture content of the material being measured.

MOISTURE READINGS:

Green: 8% - 12% indicates "air-dry" conditions.

Yellow: 14% - 16% indicates increased moisture.

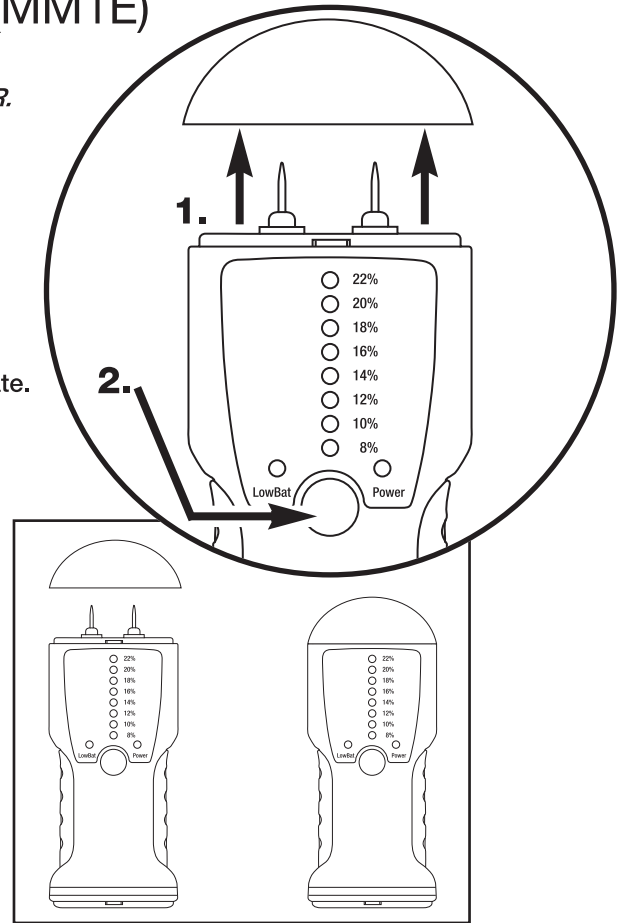
Red: 18% - 22% indicates excess moisture.

1 YEAR WARRANTY LIMITED TO MANUFACTURERS DEFECTS ONLY.

WARNINGS:

⚠ *REPLACE THE BATTERY WHEN THE "Low-Battery LED" GLOWS.*

⚠ *REPLACE THE PIN PROTECTION CAP AFTER USE.*



Medidor de humedad (MM1E)

INSTRUCCIONES DE OPERACIÓN:

LEA TODAS LAS INSTRUCCIONES ANTES DE USAR ESTE MEDIDOR.

INSTALACIÓN DE LA PILA:

Requiere una pila de 9V (incluye). El compartimiento para la pila está en la parte inferior del medidor.

1. Para abrir el compartimiento de la pila levante el clip.
2. Conecte una pila nueva de 9V.
3. Reinstale la tapa y asegúrela en posición. Ahora el medidor está listo para usar.

OPERACIÓN:

1. Retire la tapa protectora de la unidad.
2. Encienda la unidad oprimiendo el botón central. El diodo luminoso de encendido se iluminará.
3. Presione las puntas de las dos sondas contra la superficie del material cuya humedad se desea medir.
4. Un diodo luminoso se encenderá para indicar el contenido de humedad en el material.

MEDICIONES DE HUMEDAD:

Verde: 8% a 12% indica condiciones de "aire Seco".

Amarillo: 14% a 16% indica humedad elevada.

Rojo: 18% a 22% indica exceso de humedad.

1 AÑO DE GARANTÍA LIMITADA SÓLO PARA LOS DEFECTOS DE FABRICACIÓN.

ADVERTENCIA: ⚠ *Cambie la pila cuando el diodo indicador de "Pila Baja" se encienda.* ⚠ *Reinstale la tapa protectora de las puntas de las sondas después de cada uso.*

Hygromètre (MM1E)

DIRECTIVES D'UTILISATION:

VEUILLEZ LIRE TOUTES LES DIRECTIVES AVANT D'UTILISER L'HYGROMÈTRE.

INSERTION DE LA PILE:

Exige une pile standard de 9V (fournie). Le compartiment de la pile est situé sur la partie inférieure de l'hygromètre.

1. Soulevez la pince pour avoir accès au compartiment de la pile.
2. Connectez une pile neuve de 9V.
3. Remettez en place le couvercle et enclenchez-le solidement. L'hygromètre est maintenant prêt à utiliser.

UTILISATION:

1. Retirez le couvercle protecteur de l'appareil.
2. Appuyez sur le bouton central pour mettre l'appareil sous tension. La DEL d'alimentation s'allumera.
3. Poussez les deux sondes solidement contre la surface à mesurer.
4. Les DEL s'allumeront pour indiquer le pourcentage d'humidité dans le matériel à mesurer.

RELEVÉS D'HUMIDITÉ:

Vert: 8% à 12% indique des conditions de la « sécheresse de l'air ».

Jaune: 14% à 16% indique une humidité accrue.

Rouge: 18% à 22% indique une humidité excessive.

GARANTIE LIMITÉE D'UN AN SUR LES DÉFAUTS DE FABRICATION SEULEMENT.

AVERTISSEMENTS: ⚠ *Remplacez la pila si la DEL de « pile faible » s'allume.*

⚠ *Remettez en place le couvercle protecteur après l'usage.*

HOW-TO GUIDE

Thank you for purchasing the General Tools & Instruments MM1E Pin-Style Moisture Meter. This How-To Guide is designed to help you maximize the usefulness of your new General product. Since 1922, General has been providing the best product at the best value for the household, hobby and professional needs.

Wondering how your new General MM1E moisture meter can help you get your projects done right? Well, moisture is a critical factor to consider when you are doing home restoration, painting, or woodworking projects. Here are just a few of the projects you can use your MM1E with to help save money and achieve better results.

HELPFUL HINTS: WHAT DO THE LED INDICATORS MEAN?

LED Indicator	Readiness of Wood, Drywall, and Concrete
Red 22%	Wet, drying or leakage inspection is needed immediately
Red 20%	Wet, drying or leakage inspection is needed immediately
Yellow 18%	Wet, drying or leakage inspection is needed immediately
Yellow 16%	Moist, needs to be dried further
Yellow 14%	Moist, needs to be drier
Green 12%	Considered Dry when relative humidity is as high as 63%
Green 10%	Considered Dry when relative humidity is as high as 58%
Green 8%	Dry, ready to be painted, sealed or treated

INSTRUCTIONS:

- Make sure the enclosed "9V" battery is properly installed in the unit before using.
- Press the center button on the front of the unit to turn the meter on.
- After each use, place the protective cap back on to cover the sharp pins. (Note that the cap will only securely snap on to the meter with the dimples aligned. Look inside the cap and you'll notice one dimple in the front and two in the back. These align with the notches on the pin platform of the meter.)
- If the LowBat(tery) light is on, replace the battery.

1. PAINTING OVER WOOD

To the painter, moisture trapped in the subsurface is a big problem affecting their work. The Moisture Meter, as an early warning device, should be used to determine if the wood is dry enough to be painted, saving the painter time, labor and money later on.

- Before painting, insert the MM1E's pins into the wood to get a moisture reading.
- Make sure to measure several separate places to get an overall picture.
- If the green LED (8% or 10%) lights up, the wood is dry enough to paint.
- If green LED (12%) lights up, depending on the specific weather around, the wood might or might not be dry enough. If you are in a dry climate, it's best to wait until LED reads 10% or less. If you are in a humid climate, 12% moisture level in wood is considered dry. You can start painting.



2. INSPECTING A SUSPECTED WET SPOT INSIDE YOUR HOME

Many times climatic changes produce a wet winter with rain, sleet and heavy snow which can cause severe damage to roofs, decks and cedar siding. If a homeowner's roof leaked or basement flooded, most likely they still have wet insulation within a dry wall, behind paneling or in the wood. This trapped moisture has the potential to turn into mold and mildew. A Moisture Meter is able to tell the homeowner if and how much moisture is within their walls.

- Firmly insert MM1E's pins into the area suspected of moisture. If you can't push the pins in relatively easily, you need to drill two pin size holes 3/4" (2cm) apart and about 2mm deep, then insert the pins.
- Take readings from several places to compare and pinpoint.
- If any of the red LED's illuminate (18–22%), your wall or ceiling is wet! Call a professional company for treatment options before the wetness turn into a bigger problem.
- If any of the yellow LED's illuminate (14 or 16%), you may have some moisture trapped in your wall or ceiling. This can be addressed with heat and extra ventilation to dry out the area.
- After a few days of ventilation (opening windows, blowing fans, turning on heaters, etc), check the suspected area again. If any of the green LED's illuminate, your moisture problem should be resolved. If not, call a professional company for moisture treatment.



3. CHECKING IF CONCRETE IS DRY ENOUGH BEFORE FINISHING OR INSTALLING FLOOR COVERING

Water is an essential ingredient in concrete, but uncontrolled excessive moisture can create a whole host of problems with finishing and covering concrete such as adhered floor coverings and coatings. Ensuring an acceptable degree of dryness before installing a floor covering is the key to avoiding later problems including: adhesive breakdown of adhered finish floor coverings, microbial growths, and flooring expansion, such as cupping of wood strips or planks, etc.

- Rest pins of MM1E firmly against the concrete; do not try to insert them by force.
- Take readings from several spots.
- If any of the red or yellow LED's illuminate, the concrete is too wet.
- If the green LED's (8 and 10%) illuminate, the concrete is dry enough.
- If the 12% green LED lights up, depending on the specific weather around you, the concrete might or might not be dry enough. If you are in a dry climate, it's best to wait until the LED reads 10% or less. If you are in a humid climate, 12% moisture level is considered dry.
- You can also use a pinless (non-invasive) moisture meter to measure concrete for moisture content readings beneath the surface.



Be advised: The MM1E is our basic model of moisture meters with 2% LED graduations. We are very satisfied with its accuracy and versatility at the price level that is friendly to DIY and home use. To satisfy the demand of a higher accuracy in industrial and commercial use we recommend that you visit www.generaltools.com and check out our complete line of digital and analog, pin and pinless (non-invasive) moisture meters at various price points and degrees of accuracy.