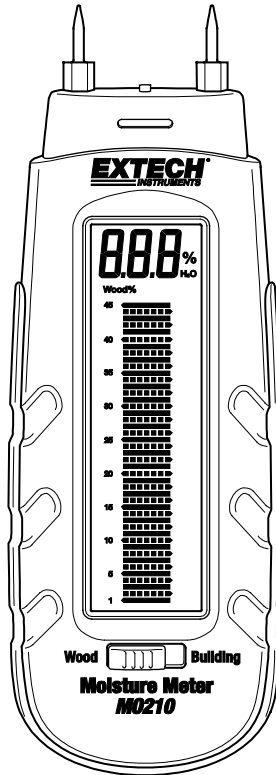


# EXTECH<sup>®</sup>

# USER GUIDE

## Moisture Meter

Model MO210



Additional User Manual translations available at [www.extech.com](http://www.extech.com)

## ***Introduction***

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Thank you for selecting the Extech Model MO210. This device is shipped fully tested and calibrated and, with proper use, will provide years of reliable service. Please visit our website ([www.extech.com](http://www.extech.com)) to check for the latest version of this User Guide, Product Updates, and Customer Support.

## ***Cautions***

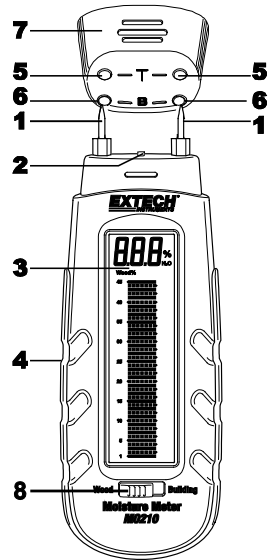
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- The electrode measurement pins are extremely sharp. Use care when handling this instrument. Cover the pins with the protective cap when the instrument is not in use
- This device is not a toy and must not reach children's hands. It contains hazardous objects as well as small parts that the children could swallow. In case a child swallows any of them, please contact a physician immediately
- Do not leave the battery and packing material lying around unattended; they can be dangerous for children if they use them as toys
- In case the device is going to be unused for an extended period of time, remove the battery to prevent them from draining
- Expired or damaged batteries can cause cauterization on contact with the skin. Always, therefore, use suitable hand gloves in such cases
- See that the battery is not short-circuited. Do not throw the battery into a fire.

# Description

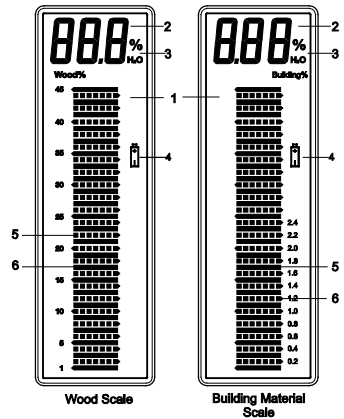
## Meter Description

1. Measurement electrode pin
2. Cutoff switch
3. LCD (detail below)
4. Hand grip
5. Verification Test Points
6. Battery check Test Points
7. Removable cap
8. Material Selector Switch



## Display Description

1. Graphical Display
2. Numerical Reading
3. Units
4. Low Battery Indicator
5. Solid lines – even number
6. Dashed lines – odd number



## Operation

**CAUTION:** The electrode measurement pins are extremely sharp. Use care when handling this instrument. Cover the pins with the protective cap when the instrument is not in use.

1. Remove the protective cap to expose the electrode pins.
2. The meter automatically switches ON when the cap is removed.
3. The meter automatically shuts OFF when the cap is replaced.
4. To conserve battery life, the meter automatically shuts off after 15 minutes when the cap is left off. To revive the meter after an Auto Power OFF, simply press the yellow cut-off switch momentarily.
5. Slide material selection switch to read wood moisture or building moisture.
6. Carefully push the electrode pins as far as possible into the material under test. Note that the pins should be inserted into wood perpendicular to the wood's fiber structure.
7. Take several readings in several locations on the material for the best representation of the amount of moisture present.
8. Read the measurement values on the display.
9. Replace the protective cap when finished.

### Reading the Display

1. The LCD display has two scales
2. The wood scale indicates wood moisture from 6 to 44%.  
The building materials scale indicates moisture content from 0.2 to 2.4%. To calculate the Wood % equivalent multiply the building material reading by 20.  
(example – 0.6% building x 20 = 12 %WME)

#### Drywall (Gypsum) - use the WOOD setting

3. A continuous line indicates an even number. A dotted line indicates on odd number.
4. The battery icon appears when the batteries are weak and require replacement.

### Auto Power OFF

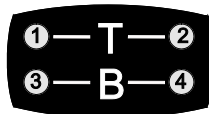
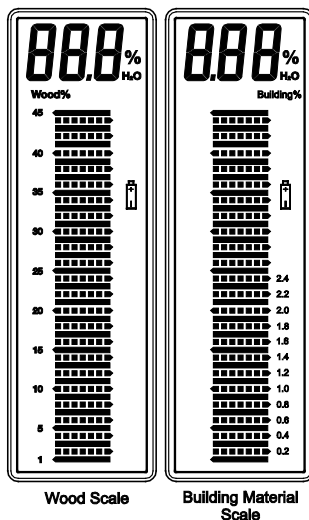
With the protective cap removed, the meter will turn off after 15 minutes to conserve battery life. Press the yellow cutoff switch momentarily to restart the meter. Always secure the protective cap when the instrument is not in use.

### Instrument Measurement Verification check

1. With the meter wood moisture position, touch the electrode test pins to the two test points 1 and 2 at the top of the protective cap labeled 'T'.
2. With the unit on and the electrode pins touching the 'T' test points, the meter should read 27% ( $\pm 2\%$ ). If not, the meter may require repair.

### Battery Check

1. With the meter wood moisture position, touch the electrode test pins to the two test points 3 and 4 at the top of the protective cap labeled 'B' (see diagram).
2. With the unit on and the electrode pins touching the 'B' test points, the meter should read > 44% ( $\pm 2\%$ ) on the wood moisture scale. If not, replace the batteries.



## Battery Replacement

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If the instrument does not switch on, displays the low battery symbol, or if the Battery Check yields less than 44% on the wood moisture scale, replace the batteries as follows:

1. Remove the Phillips head screw from the belt clip/battery compartment located on the rear of the instrument.
2. Remove the batteries taking note of their orientation and polarity.
3. Install three (3) new CR-2032 button batteries observing polarity.
4. Secure the battery compartment with the Phillips head screw.

### Battery Safety Reminders

- Please dispose of batteries responsibly; always observe local, state, and federal regulations with regard to battery disposal.
- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install new batteries of the same type.

### Electrode Pin Replacement

To replace the two electrode pins:

1. Remove the protective cap
2. Unscrew the electrode pins
3. Install the new pins
4. Replace the protective cap

### Maintenance

- Always keep the instrument dry
- Prevent dirt from accumulating at the electrode pins

## Specifications

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Display	Dual measurement scale LCD with bargraph metering
Measurement principle	Electrical resistance
Range	Wood: 6 to 44%, Building materials: 0.2 to 2.4%
Electrode length	9.5mm (0.375")
Electrode pins	Integrated, replaceable
Auto Power OFF	After approx. 15 minutes
Power supply	Three (3) CR-2032 button cells
Meter housing	Impact-proof plastic
Operating Temperature	32 to 104°F (0 to 40°C)
Operating Humidity	85% Relative Humidity maximum
Dimensions	5.1 x 1.6 x 1.0" (130 x 40 x 25mm)
Weight	108.3g. (3.82 oz)

## ***Two-year Warranty***

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*Teledyne FLIR warrants this Extech brand instrument to be free of defects in parts and workmanship for two years from date of shipment (a six-month limited warranty applies to sensors and cables). To view the full warranty text please visit: <http://www.extech.com/support/warranties>.*

## ***Calibration and Repair Services***

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Teledyne FLIR offers calibration and repair services for the Extech brand products we sell. We offer NIST traceable calibration for most of our products. Contact us for information on calibration and repair availability, refer to the contact information below. Annual calibrations should be performed to verify meter performance and accuracy. Product specifications are subject to change without notice. Please visit our website for the most up-to-date product information:

[www.extech.com](http://www.extech.com).

## ***Contact Customer Support***

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Customer Support Telephone List: <https://support.flir.com/contact>

Calibration, Repair, and Returns: [repair@extech.com](mailto:repair@extech.com)

Technical Support: <https://support.flir.com>

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