

# User Guide

# **EXTECH**<sup>®</sup>

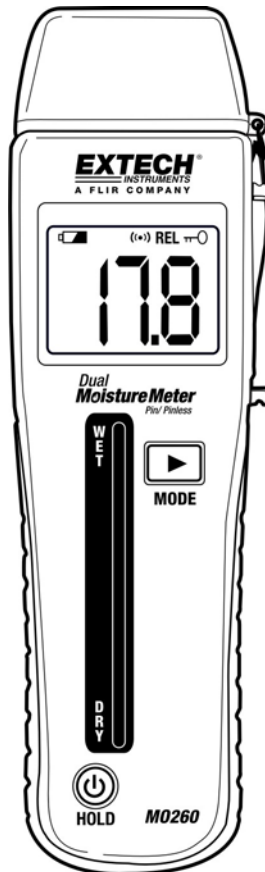
**INSTRUMENTS**

A FLIR COMPANY

## Dual Moisture Meter

Pin / Pinless Moisture Meter

### Model MO260



## ***Introduction***

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Congratulations on your purchase of the Extech MO260 Moisture Meter. The MO260 detects moisture in wood and other materials such as particle board, carpeting, and ceiling/bathroom tiles using the non-invasive method (pinless); the MO260 also measures moisture in sheet rock and other building materials using the pin method. This meter is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

## ***Features***

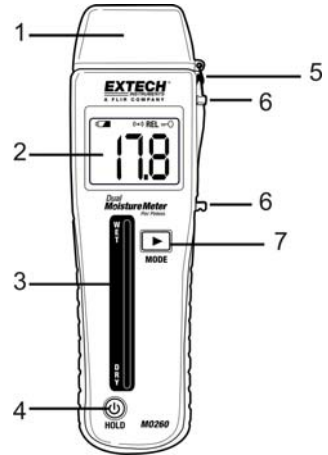
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- %WME (wood moisture equivalent) pin moisture reading
- Relative (REL) pinless moisture reading for non-invasive measurement
- Digital LCD readout with backlighting feature and tri-color LED bargraph
- Quickly indicates the moisture content of materials
- Pinless measurement depth to 0.75" (22mm) below the surface
- Electro-magnetic sensing technology for pinless operation
- Built-in calibration check and calibration zero
- Replaceable measurement electrode pins
- Low battery indication
- Cap protects pins during storage
- Cap can be snapped onto the side of the housing during use
- Complete with 9V battery, replacement pins, protective cap, and pouch case

## Description

### Meter Description

1. Electrode pins protective cap
2. LCD display
3. Tri-color Bargraph
4. HOLD / POWER key
5. Protective cap attachment
6. Protective cap holders
7. MODE button

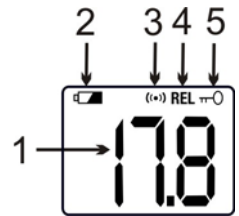


### Notes:

- Battery/Spare Pin compartment located on the rear of the instrument
- Electrode pins located beneath the protective cap
- Calibration points located at the top of protective cap

### LCD Display Description

1. Measurement reading
2. Battery status icon
3. Audible alert icon
4. Measurement mode icon
5. Display HOLD icon



### Bargraph Display Description

The bargraph indicates WET / DRY measurements using three LED colors: Green (for dry), Amber (for moderate moisture), and Red (for very moist). As the reading moves up the bargraph scale from the DRY indicator to the WET indicator, the LED color changes from green, to amber, and then to red.



## Operation

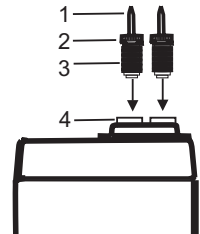
### Electrode Pins

**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.


The electrode pins are replaceable / removeable and must be inserted before the meter can be used. To insert or replace the pins refer to the illustration and instructions below. Replacement pins are stored in the battery compartment at the rear of the meter.

- a) Remove the protective cap at the top of the meter by pushing it toward the back of the meter.
- b) To remove the pins, loosen the locknut at the base of the electrode pins
- c) Install the new pins and tighten the locknuts
- d) Replace the protective cap


1. Electrode pins
2. Locking nuts
3. Threaded posts
4. Electrode jacks at top of meter



### Basic Operation for Pin Measurements

1. Remove the protective cap to expose the electrode pins. The cap snaps off easily if it is pushed towards the rear of the meter. The cap can be affixed to the side of the meter using the protective cap holders (6).
2. Press the  key to turn the meter ON / OFF.
3. Press the **MODE** key to select the Wood Moisture Equivalent (%WME) mode of operation.
4. Carefully push the electrode pins a minimum of 0.07" (2mm) into the material under test. Note that the pins should be inserted into wood perpendicular to the wood's fiber structure. For high moisture readings, it may take several minutes for the meter reading to stabilize.
5. Take several readings in several locations on the material for the best representation of the amount of moisture present.
6. Read the measurement values on the LCD digital display and the LED bar graph
7. Replace the protective cap when finished.

### Basic Operation for Pinless Measurements

1. Ensure that the protective cap is attached to the meter covering the pins.
2. Press the  key to turn the meter ON.
3. Press the **MODE** key to select the Relative (REL) mode of operation.
4. The pinless moisture detector is located at the rear of the instrument, just behind the display. Place the meter so that the sensor is touching the surface of the material under test.
5. Take several readings in several locations on the material for the best representation of the amount of moisture present.
6. Read the measurement values on the LCD digital display and the LED bar graph.

### Calibration Zero for Pinless Mode

1. Switch the meter to the Pinless mode of operation (REL mode).
2. Ensure that the meter is not near any objects or surfaces. Hold the meter near the bottom to avoid contact with the pinless sensor.
3. Press and Hold the MODE button for 3 seconds until rEL appears in the display. Release the MODE button and the display will blink for several seconds and then switch back to the normal display mode.
4. The display should now read zero indicating that the calibration is complete.
5. If an E32 error is displayed, try the zero calibration again with the pins further away from any objects or surfaces.

### Calibration Check for Pin Mode

1. Switch the meter to the Pin mode (%WME).
2. The two calibration check points are located in the holes at the top of the protective cap.
3. Insert the electrode pins into the two holes at the top of the protective cap to make contact with the test circuit.
4. The display should now read 18.2 indicating that the calibration is verified. If the reading is not correct, return the meter for service.

## LCD Backlight ON/OFF

With the meter switched ON, pressing and holding both front panel buttons (MODE and HOLD) switches the LCD backlight ON and OFF.

## Data Hold feature

The Data Hold function freezes the reading in the display. Press the **HOLD** key momentarily to activate the Data Hold function. The reading will freeze and the 'key' display icon will appear. Press the **HOLD** key again to exit the Data Hold function (the 'key' display icon will switch off).

## Meter Setup

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- To enter the setup mode:  
With the meter switched OFF, press and hold both front panel buttons (MODE and HOLD buttons) simultaneously for two seconds. The display should now read '0 = x' where '0' is the OPTION and 'x' is the SETTING.
- Use the MODE (right arrow) button to change the SETTING.
- Use the HOLD button to scroll through the OPTIONS.
- The available OPTIONS and SETTINGS:

OPTIONS	SETTINGS	SET-UP INFORMATION
0	0	Switches all settings to '0' (Factory Default*)
	1	Others settings can now be changed. In addition, Backlight switches ON for 30 seconds and then automatically switches OFF.
1	0	Audible alert beeps with increasing frequency from a nominal 17.0 (REL) or 17% (WME) measurement value upwards
	1	Audible alert divided into 3 frequency levels
	2	Audible alert beeps when user switches from one mode to another
	3	Beeper OFF. Audio alert display symbol switches OFF
2	0	Auto Switch OFF is not active. User must manually switch the unit OFF
	1	Auto Switch OFF active. Switches OFF after 3 minutes
	2	Auto Switch OFF active. Switches OFF after 5 minutes
	3	Auto Switch OFF active. Switches OFF after 10 minutes
3	0	Backlight OFF
	1	Backlight ON

**\*FACTORY DEFAULT SETTINGS: 0=0, 1=0, 2=0, 3=0**

## Battery Replacement

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If the instrument does not switch ON or displays the low battery symbol, replace the battery as follows:

1. Slide off the rear battery compartment cover
2. Replace the 9V battery
3. Secure the battery compartment
- 4.



You, as the end user, are legally bound (**EU Battery ordinance**) to return all used batteries, **disposal in the household garbage is prohibited!** You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold!

**Disposal:** Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle

## Maintenance

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- Always keep the instrument dry
- To clean, wipe the meter with a damp cloth. Use a mild detergent if necessary but never use abrasives or solvents.
- Prevent dirt from accumulating at the electrode pins

## Specifications

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Display	Backlit LCD digital display and tri-color LED bargraph scale
Resolution	0.1%
Accuracy	Pin mode: $\pm$ (5% rdg + 5 digits) Pinless mode is a relative reading only
Measurement principle	Electrical resistance (pins) Electromagnetic sensor (pinless)
Range	0.0 to 99.9 %Relative (pinless) 6.0 to 94.8 %WME (pins)
Electrode pin length	11mm (0.44")
Electrode pin type	Integrated, replaceable
Power supply	9V alkaline battery
Low Battery Indication	Battery symbol displayed on LCD
Meter housing	Impact-proof plastic
Operating Temperature	32 to 122°F (0 to 50°C)
Operating Humidity	80% Relative Humidity maximum
Dimensions	8 x 2.3 x 1.7" (203 x 58 x 43mm)
Weight	7.2 oz (204g)

## Warranty

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**EXTECH INSTRUMENTS CORPORATION** (a FLIR company) warrants this instrument to be free of defects in parts and workmanship for **three years** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department for authorization. Visit our website [www.extech.com](http://www.extech.com) for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

### Calibration and Repair Services

Extech offers repair and calibration services for the products we sell. Extech also provides NIST certification for most products. Call the Customer Service Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.

**Support lines: U.S. 877-439-8324, Intl. 603-324-7800**

Technical support: Option 3; E-mail: [support@extech.com](mailto:support@extech.com)

Repair & Returns: Option 4; E-mail: [repair@extech.com](mailto:repair@extech.com)

**Product specifications subject to change without notice**

Visit our website: [www.extech.com](http://www.extech.com)

Extech Instruments Corporation, 9 Townsend West, Nashua, NH 03063

*ISO 9001 Certified since 1995*

## Garantie

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**EXTECH INSTRUMENTS CORPORATION (une société FLIR)** garantit que cet instrument est exempt de défautuosité ou de défaut de fabrication pendant une période de **trois ans** à compter de la date de livraison (une garantie limitée de six mois est applicable pour les sondes et les câbles). S'il s'avère nécessaire de retourner l'instrument pour un dépannage durant ou après la période de garantie, contactez le service à la clientèle pour obtenir une autorisation de retour. Visitez notre site Web au [www.extech.com](http://www.extech.com) pour des informations. Un numéro d'autorisation de retour (AR) doit être émis avant que tout produit puisse être retourné à Extech. L'expéditeur est responsable des frais d'expédition, de transport, d'assurance et d'emballage adéquat afin de prévenir les dommages durant le transit. Cette garantie ne s'applique pas aux défauts résultant d'une action de l'utilisateur tels un mauvais usage, un câblage adéquat, un fonctionnement hors des spécifications, un entretien ou un dépannage inadéquat, ou une modification non autorisée. Extech décline précisément toute garantie implicite ou garantie marchande ou d'adaptation à un usage particulier et ne pourra être tenu responsable d'aucun dommage direct, indirect, accidentel ou consécutif. La responsabilité totale d'Extech se limite à la réparation ou au remplacement du produit. La garantie énoncée ci-dessus est inclusive et aucune autre garantie, qu'elle soit écrite ou orale, n'est stipulée ou sous-entendue.

### Service de calibrage et de réparation

Extech offre un service de calibrage et de réparation pour toute sa gamme de produits. Extech fournit également une certification NIST pour la plupart de ses produits. Contactez le Service Clients pour de plus amples informations concernant les services de calibrage disponibles pour ce produit. Extech vous recommande de procéder à un test de calibrage annuel afin de vérifier régulièrement les performances et la précision de votre appareil.

**Appui de produit U.S. 877-439-8324, Intl. 603-324-7800**

Service d'assistance technique: l'option 3, email: [support@extech.com](mailto:support@extech.com) -

Réparations et retours: l'option 4, email: [repair@extech.com](mailto:repair@extech.com)

**Spécifications produit sujettes à modifications sans préavis**

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## Garantía

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EXTECH INSTRUMENTS CORPORATION garantiza este instrumento libre de defectos en partes o mano de obra durante **tres años** a partir de la fecha de embarque (se aplica una garantía limitada a seis meses para los cables y sensores). Si fuera necesario regresar el instrumento para servicio durante o después del periodo de garantía, llame al Departamento de Servicio a Clientes para autorización. Visite nuestra página en Internet [www.extech.com](http://www.extech.com) para Información de contacto. Se debe otorgar un número de Autorización de Retorno (RA) antes de regresar cualquier producto a Extech. El remitente es responsable de los gastos de embarque, flete, seguro y empaque apropiado para prevenir daños en tránsito. Esta garantía no se aplica a defectos resultantes de las acciones del usuario como el mal uso, alambrado equivocado, operación fuera de las especificaciones, mantenimiento o reparación inadecuada o modificación no autorizada. Extech específicamente rechaza cualesquier garantías implícitas o factibilidad de comercialización o aptitud para cualquier propósito determinado y no será responsable por cualesquier daños directos, indirectos, incidentales o consecuentes. La responsabilidad total de Extech está limitada a la reparación o reemplazo del producto. La garantía precedente es inclusiva y no hay otra garantía ya sea escrita u oral, expresa o implícita.

### Servicios de reparación y calibración

**Extech ofrece servicios completos de** reparación y calibración para todos los productos que vendemos. Extech además provee certificación NIST para la mayoría de los productos. Llame al Departamento de Servicio al Cliente para solicitar información de calibración para este producto. Extech recomienda realizar calibraciones anuales para verificar el desempeño y precisión del medidor.

**Ayuda de producto: U.S. 877-439-8324, Intl. 603-324-7800**

Soporte Técnico Opción 3, e-mail [support@extech.com](mailto:support@extech.com)

Reparación / Retornos: Opción 4, e-mail [repair@extech.com](mailto:repair@extech.com)

**Las especificaciones del producto están sujetas a cambios sin aviso**

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