

## SPECIFICATIONS

### RANGE

**MC310** 0.0 to 10.0 mS/cm

**MC410** 0 to 1990 ppm

### RESOLUTION

**MC310** 0 to 1990 mg/L (ppm) / 1 mg/L

**MC410** 10 ppm

### ACCURACY (@25°C)

±2% Full Scale

### SETPOINT

**MC310** 1.0 to 5.0 mS/cm

**MC410** 100 to 1900 ppm

### ALARM

active when the measure is below/above than the setpoint, in according with the BELLOW/ABOVE switch

### TEMP. COMPENSATION

Automatic, from 0 to 50°C

### ENVIRONMENT

0 to 50°C, 95% RH max.

### PROBE

**MA812/2** (included)\*

### POWER SUPPLY

12 VDC adapter (included)

### DIMENSIONS

148.5 x 82.5 x 32 mm

### WEIGHT

180 g (meter only)

(\*) To be replace by technical personnel only

## CERTIFICATION

Milwaukee Instruments conform to the CE European Directives.



**Disposal of Electrical & Electronic Equipment.** Do not treat this product as household waste. Hand it over to the appropriate collection point for the recycling of electrical and electronic equipment.

RoHS  
COMPLIANT



Please note: proper product prevents potential negative consequences for human health and the environment. For detailed information, contact your local household waste disposal service or go to [www.milwaukeeinstruments.com](http://www.milwaukeeinstruments.com) (USA & CAN) or [www.milwaukeeinst.com](http://www.milwaukeeinst.com).

## RECOMMENDATION

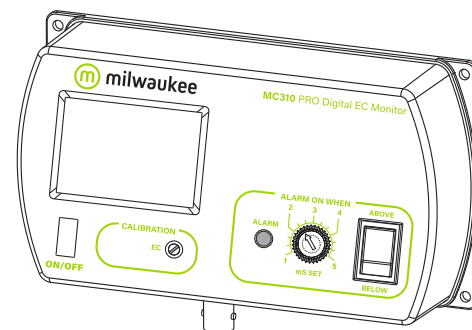
Before using this product, make sure it is entirely suitable for your specific application and for the environment in which it is used. Any modification introduced by the user to the supplied equipment may compromise the meter's performance. For your and the meter's safety do not use or store the meter in hazardous environment. To avoid damage or burn, do not perform any measurement in microwave ovens.

## WARRANTY

These instruments are warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. Probe is warranted for 6 months. This warranty is limited to repair or free of charge replacement if the instrument cannot be repaired. Damage due to accidents, misuse, tampering or lack of prescribed maintenance is not covered by warranty. If service is required, contact your local Milwaukee Instruments Technical Service. If the repair is not covered by the warranty, you will be notified of the charges incurred. When shipping any meter, make sure it is properly packaged for complete protection.

## USER MANUAL

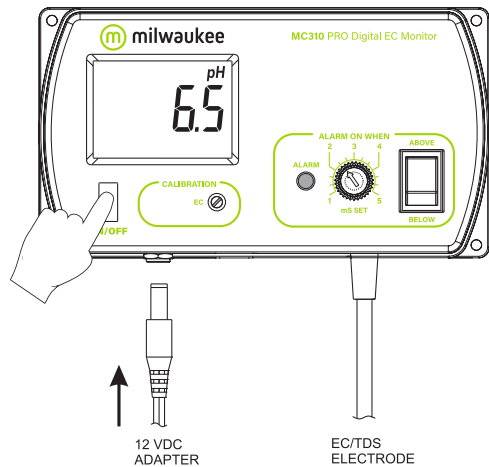
# MC310 & MC410 PRO Digital EC Monitors



[milwaukeeinstruments.com](http://milwaukeeinstruments.com) (USA & CAN)  
[milwaukeeinst.com](http://milwaukeeinst.com)



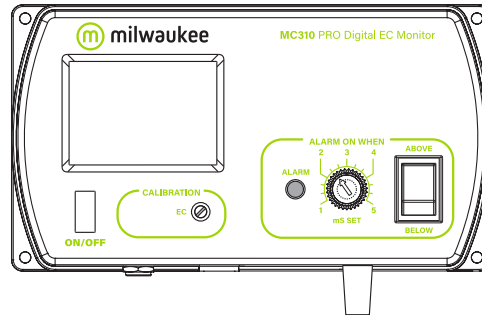
## OPERATION



- Connect the supplied 12 VDC power adapter to the meter and to the mains.
- Make sure the meter has been calibrated before taking any measurements (see Calibration Procedure).
- Immerse the tip (4cm) of the Conductivity probe into the sample.
- Turn the instrument on by pressing the ON/OFF key.
- Wait for thermal equilibrium to be reached and the meter will start continuous monitoring.
- Set the BELLOW / ABOVE alarm activation switch in the desired position.
- A blinking alarm will indicate when the measured EC or TDS value is lower/higher than the setpoint (in accordance the BELLOW / ABOVE switch).

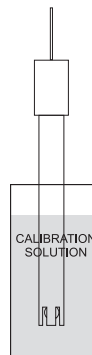
## SETPOINT

- The setpoint can be selected by adjusting the central front knob to the desired value.
- The selectable range for **MC310** is from 1.0 to 5.0 mS/cm. The selectable range for **MC410** is from 700 to 1900 ppm.



## CALIBRATION PROCEDURE

- Clean the probe with alcohol and let it dry (if a more thorough cleaning is required, brush the metal pins with fine sandpaper and then rinse with water).
- Open a sachet of suitable conductivity calibration solution and immerse the probe, making sure that metal pins are completely submerged.



Use **M10031** (1413  $\mu\text{S}/\text{cm}$ ) for **MC310** and **M10442** (1500 ppm) for **MC410**.

- Turn the meter on by pressing the ON/OFF key.
- Wait until the reading stabilize for temperature variations, and then adjust the EC/TDS calibration trimmer on the front panel with the supplied screwdriver until the display shows: "1413"  $\mu\text{S}/\text{cm}$  for **MC310** and "1500" ppm for **MC410**.

The calibration is now complete and the meter is ready for use.

The instrument should be re-calibrated at least once a month, or when the probe is changed.

## OPTIONAL ACCESSORIES

<b>M10031B</b>	1413 $\mu\text{S}/\text{cm}$ cal. solution, 20 mL sachet (25 pcs)
<b>M10039B</b>	5.00 mS/cm cal. solution, 20 mL sachet (25 pcs)
<b>M10442B</b>	1500 ppm cal. solution, 20 mL sachet (25 pcs)
<b>MA812/2</b>	Conductivity probe with 2 m cable