

OPTIONAL ACCESSORIES

MA921B/2	ORP Electrode with BNC connector and 2 m cable
M10000B	Electrode rinse solution, 20 mL sachet (25 pcs)
MA9015	Electrode storage solution, 230 mL bottle
MA9310	12 VDC/230 VAC power adapter
MA9311	12 VDC/115 VAC power adapter

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.

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.milwaukeeinstruments.eu](http://www.milwaukeeinstruments.eu).



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

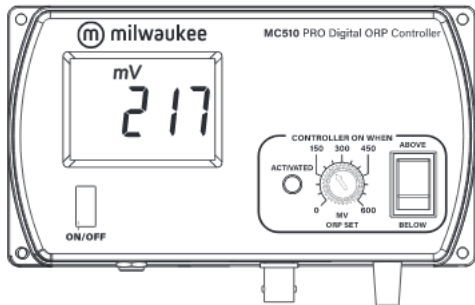
This instrument is warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. Probe is warranted for 6 months. This warranty is limited to repair or free of charge replacement if the instrument cannot be repaired. Damage due to accidents, misuse, tampering 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.

We reserve the right to modify the design, construction and appearance of our products without advance notice.

USER MANUAL

MC510

PRO Digital ORP Controller



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

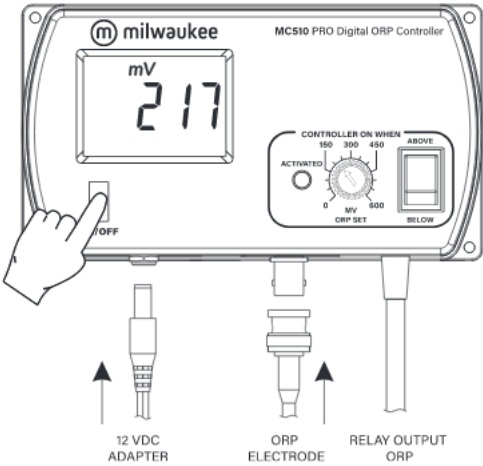


# PRELIMINARY EXAMINATION

Each controller is supplied complete with:

- MA921B/2 ORP electrode
- 12 VDC/230 VAC power adapter
- Instruction manual

# OPERATION



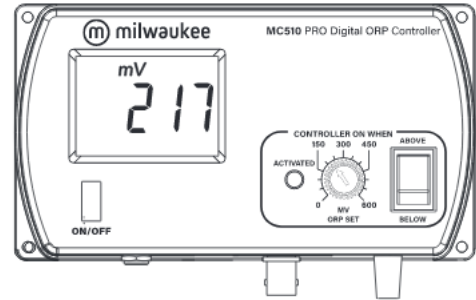
- Connect the supplied 12VDC power adapter to the meter and to the mains line.
- Connect the ORP electrode to the BNC socket on the bottom of the meter.
- Always remove the electrode protective cap before taking any measurement. If the electrode has been left dry, soak the tip ( $\approx 2.5$  cm) in MA9015 Storage Solution for a few hours (or overnight) to reactivate.
- Turn the instrument on by pressing the ON/OFF key.
- Allow the reading to stabilize and the meter will start continuous monitoring.
- The meter is factory calibrated.
- A blinking alarm will indicate when the measured ORP value is lower or higher than the setpoint, depending on user selection.

**Note:** The power contact is not protected by fuse inside the meter. It is recommended to protect it outside, against failure.

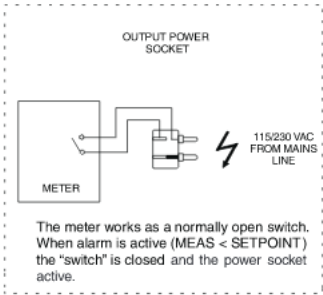
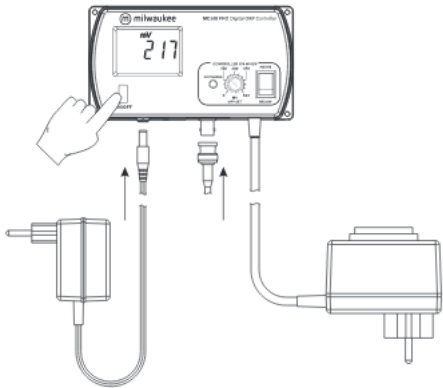
**WARNING:** when the alarm led is blinking, the mains voltage is present in the output power socket.

# SETPOINT

- The setpoint can be selected by adjusting the central front knob to the desired value.
- The selectable range for MC510 is from 0 to 600 mV.
- The nature of the setpoint can be selected by setting the switch to the desired position (ABOVE or BELOW).



# INSTALLATION PROCEDURE



# SPECIFICATIONS

Range	$\pm 1000$ mV
Resolution	1 mV
Accuracy (@ 25 °C)	$\pm 5$ mV
Setpoint	0 to 600 mV
Alarm	active when the measure is lower/higher than setpoint depending on user selection
Output Power Socket	active when the measure is higher/lower than selected setpoint (5 A max) depending on user selection
ORP Electrode	MA921B/2 (included)
Environment	0 to 50 °C, 95 % RH max.
Power Supply	12 VDC (included)
Power Drivers	115 VAC, 2 A, 60 Hz or 230 VAC, 1 A, 50 Hz
Dimensions	148.5 x 82.5 x 32 mm
Weight	180 g (meter only)