### SPECIFICATIONS

RANGE	0.0 to 14.0 pH
RESOLUTION	0.1 pH
ACCURACY (@25°C)	±0.2 pH
TYPICAL Emc deviation	±0.1 pH
pH ELECTRODE	SE-220 (included)
ENVIRONMENT	0 to 50°C, 95% RH max.
BATTERY TYPE	1 x 9V alkaline (included)
BATTERY LIFE	approximately 300 hours of use
DIMENSIONS	143 x 80 x 32 mm
WEIGHT	220 g (with battery) meter 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.

**Disposal of waste batteries.** This product contains batteries. Do not dispose of them with other household waste. Hand them



CE

**RoHS** 

compliant

over to the appropriate collection point for recycling. Please note: proper product and battery disposal 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 (USA & CAN) or www.milwaukeeinst.com.



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

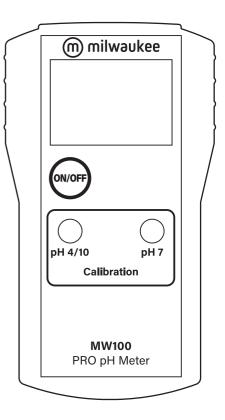
This instrument is warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. Probe is warranted for 6 months. This warranty is limited to repair or free of charge replacement if the instrument cannot be repaired. Damage due to accidents, misuse, tampering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

Milwaukee Instruments reserves the right to make improvements in design, construction and appearance of its products without advance notice.

SATISFACTION GUARANTEED

# **USER MANUAL**

# **MW100** PRO Portable pH Meter

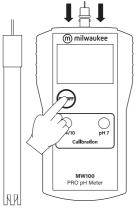


milwaukeeinstruments.com (USA & CAN) milwaukeeinst.com



### **OPERATION**

- The meter is supplied complete with a 9V battery. Slide off the battery compartment cover on the back of the meter. Install the battery into the battery clip connector while observing polarity.
- Always remove the electrode protective cap before taking any measurement. If the electrode has been left dry, soak the tip (bottom 2.5 cm) in rinse solution (**M10000B**) for a few minutes to reactivate it.



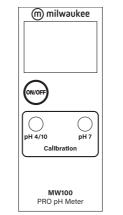
- Connect the pH electrode to the BNC socket on the top of the meter.
- Make sure that the meter has been calibrated before taking any measurements (see Calibration Procedure).
- Immerse the tip (2.5 cm) of the pH electrode into the sample.
- Turn the instrument on by pressing the ON/OFF key.
- Allow the reading to stabilize before taking measurements.
- After measurements, switch the meter off and store the electrode with a few drops of storage solution (SE-220) in the protective cap.

## **CALIBRATION PROCEDURE**

- Remove the protective cap from the electrode.
- Rinse tip off with distilled water or a small quantity of pH 7.
- Immerse the electrode tip into a new sachet of pH7 calibration solution and allow the reading to stabilize.
- Adjust the pH7 (OFFSET) calibration trimmer to display "7.0 pH".
- Open a new sachet of pH4 calibration solution and use a small quantity to rinse the electrode.



- Immerse the electrode tip inside the pH4 sachet and allow the reading to stabilize.
- Adjust the pH4/pH10 (SLOPE) calibration trimmer to read "4.0 pH".



- The calibration is now complete and the meter is ready to take measurements.
- It is suggested the meter be calibrated at least once a month, after a prolonged period of inactivity, and after electrode replacement.

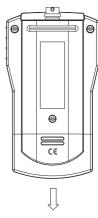
### **BATTERY REPLACEMENT**

When the battery becomes weak the meter will display "  $\textcircled{\mbox{\sc end}}$  ".

When the low battery indicator appears, the battery has only about 50 hours of working time left. A low battery will result in unreliable measurements.

Prompt battery replacement is required. Battery replacement must only take place in a non-hazardous area using an alkaline 9V battery.

Turn the meter off, slide the battery compartment cover located at the rear of the meter off and replace the 9V battery with a new one. Make sure the battery contacts are fully engaged in the connector, seat the battery in its compartment and replace the cover.



### **OPTIONAL ACCESSORIES**

M10004B	pH 4.01 buffer solution, 20 mL sachet (25 pcs)
M10007B	pH 7.01 buffer solution, 20 mL sachet (25 pcs)
M10010B	pH 10.01 buffer solution, 20 mL sachet (25 pcs)
M10000B	Electrode rinse solution, 20 mL sachet (25 pcs)
MA9015	Electrode storage solution, 220 mL bottle
MA950	Portable meter wall mounting kit
SE-220	pH electrode with BNC connector and 1 m cable