#### SPECIFICATIONS

Range	0.00 to 2.50 ppm
Resolution	0.01 ppm
Accuracy	±0.04 ppm ±4% of reading @ 25 °C
Typical EMC Dev.	±0.01 ppm
Light Source	Light Emitting Diode @ 525 nm
Light Detector	Silicon Photocell
Method	Adaptation of the Standard Methods for the Examination of Water and Wastewater, 20 <sup>th</sup> edition, Ascorbic Acid method. The reaction between phosphate and the reagent causes a blue tint in the sample.
Environment	0 to 50°C (32 to 122 °F) max. 95% RH non-condensing
Battery Type	1 x 1.5V AAA
Auto-Shut Off	After 3 minutes of non-use and 2 minutes after reading
Dimensions	81.5 x 61.0 x 37.5 mm (3.2 x 2.4 x 1.5")
Weight	64 g (2.25 oz.)

#### **OPTIONAL ACCESSORIES**

#### **Reagent Sets**

MI512-25	Phosphate powder reagent,
WIJIZ-ZJ	25 pcs.

#### Other Accessories

MI0011	Glass cuvettes (2 pcs.)
MI0013	Stoppers for cuvettes (2 pcs.)

## 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.



# X



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

#### 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 tester's performance. For vour and the tester's safety do not use or store the tester in hazardous environment. To avoid damage or burn, do not perform any measurement in microwave ovens.

#### WARRANTY

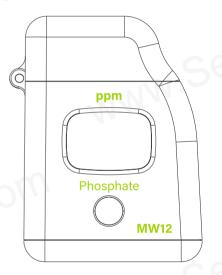
This instrument is warranted against defects in materials and manufacturing for a period of 2 years from the date of purchase. This warranty is limited to repair or free of charge replacement if the instrument cannot be repaired. Damage due to accidents, misuse, tampering or lack of prescribed maintenance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



## **USER MANUAL**

# **MW12** Digital Phosphates Tester



milwaukeeinstruments.com (USA & CAN) milwaukeeinst.com



#### PRELIMINARY EXAMINATION

Please examine this product carefully. Make sure that the instrument is not damaged. If any damage occured during shipment, please notify your dealer.

Each MW12 tester is supplied complete with:

- Two Sample Cuvettes and Caps
- Six powder reagents for Phosphate Low Range
- 1 x 1.5V AAA Battery
- Instruction Manual

### FUNCTIONAL DESCRIPTION



- 1. Dust cover
- 2. Cuvette with cap
- 3. Cuvette holder
- 4. Liquid Crystal Display
- 5. Button

### OPERATION

• Turn the tester on by pressing the button. After all the segments are displayed, "C.1", "Add" appears with "Press" blinking, the tester is ready.



• Fill the cuvette with 10 mL of unreacted sample and replace the cap. Place the cuvette into the tester and close the tester's cap.



• Press the button. When the display shows "Add", "C.2" with "Press" blinking the tester is zeroed.



• Remove the cuvette, open it and add the content of one packet of **MI512-0** reagent. Replace the cap and shake gently for 2 minutes until the powder is completely dissolved. Replace the cuvette into the tester.



• Wait for 3 minutes and then press the button or press and hold the button until the timer is displayed on the LCD.



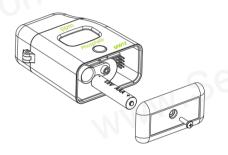
• The instrument directly displays the concentration of phosphate in ppm. The tester automatically turns off after 2 minutes.



### BATTERY REPLACEMENT

To save the battery, the instrument shuts down after 3 minutes of non-use and 2 minutes after reading. One fresh battery lasts for a minimum of 5000 measurements, depending on the light level. When the battery capacity is under 10 % "bAt" appears on the LCD at start-up.

If the battery is empty and accurate measurements can't be taken any more, the instrument shows "bAd" then "bAt" each for 1 second and turns off. To restart the instrument, the battery must be replaced with a fresh one.



To replace the instrument's battery, follow the steps:

- Turn the instrument off by holding the button until the tester shuts off.
- Turn the instrument upside down and remove the battery cover with a screwdriver.
- Remove the battery from its location and replace it with a fresh one.
- Insert the battery cover and replace the screw with a screwdriver.