



# ORP Meter

## Operation Manual



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# USER MANUAL

 STRIVE FOR CLEAR WATER

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**Model: 8552**

EMSW22012601

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Operating Temp.: 0°~60°C (32~140°F)

Operating Humidity: 0~80% RH

Battery Life: >200 hrs continuous use

## 9. TERMS OF THE WARRANTY

As original purchaser of this equipment have purchased from Emaux Water Technology Co Ltd, through Authorized International Distributor or Dealer, warrants its products free from defects in materials and workmanship under normal use during warranty period. The warranty period begins on the day of purchase and extends only to the original purchaser. It is not transferable to anyone who subsequently purchases the product from you. It excludes all expendable parts.

During the warranty period, Emaux authorized reseller will repair or replace defective parts with new parts or, at the option of Emaux, serviceable used parts that are equivalent or superior to new parts in performance.

This Limited Warranty extends only to products purchased from Emaux authorized reseller. This Limited Warranty does not extend to any product that has been damaged or rendered defective

- (a) as a result of accident, misuse or abuse;
- (b) as a result of an act of God;
- (c) by operation outside the usage parameters stated herein;
- (d) by the use of parts not manufactured or sold by Emaux;
- (e) by modification of the product;
- (f) as a result of war or terrorist attack; or
- (g) as a result of service by anyone other than Emaux authorized reseller or authorized agent.

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, EMAUX MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. EMAUX EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS OF THIS EXPRESS LIMITED WARRANTY.

### ORP electrode cleaning:

If sensing element got contaminated, it will result in slow response and inaccurate reading. Clean it as following:

- (1) If contamination is a mineral matter, put sensing element in HCL solution 0.1N for 10 minutes and then rinse it with distilled water.
- (2) If the contamination is oil or grease coating, clean sensing element with detergent and rinse with distilled water.

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## 7. TROUBLESHOOTING

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### Power on but no display

1. Make sure the time of pressing power key is more than 1 second.
2. Check the battery are in place and make good contact and correct polarity.
3. Replace with new batteries and try again.
4. Move away the batteries for one minute and then put back again.

### Slow response

Clean probe by immersing the electrode in tap water for 10-15 minutes, then rinse thoroughly with distilled water or use a general-purpose electrode cleaner.

### LCD display E02, E03

Out of ORP measuring range. Check in normal condition first, if remaining showing E02 or E03, the electrode is out of order.

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## 8. SPECIFICATION

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Accuracy	±	4mV
Power Saving		Auto Power Off
Measurement range		-999mV ~ +999mV
Resolution		1mV
Hold Data		√
Waterproof		IP65
Size		165mm(L)x35mm(W)x32mm(T)

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## 1. Product Overview

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Congratulations on your purchase of this pen type ORP meter. Please read the manual completely before using this meter. Filing and keeping the manual for future reference. Recommended to soak the electrode for at least 30 min. before using to clear up the lazy effect or to make the ORP electrode wet.

### **1.1 Features**

- (1) IP65 Waterproof housing.
- (2) Big display for easy reading.
- (3) Data hold to freeze readings. Pen size, easy to fit in pocket. Low battery indicator.
- (4) Pen size, easy to fit in pocket.
- (5) Low battery indicator.
- (6) Auto power off.
- (7) Power by 4pcs LR44 batteries.

### **1.2 Material Supplied**

#### This package contains:

The meter x 1  
LR44 button battery x 4  
Operation manual  
Color box or plain box

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## 2. POWER SUPPLY

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The meter is powered by 4 pcs LR44 batteries.

To check the battery when:

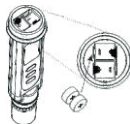
1. First time use
2. The battery symbol appears on LCD
3. The meter cannot power on

To install the batteries:

1. Turn off the meter.
2. Loose the battery cover in counter- clockwise direction. (DON'T discard the black washer!)
3. Replace the old batteries with four new button cells LR44.
4. Make sure the batteries are in place and the polarity is correct.
5. Put back the battery cover & washer and turn it tightly in clockwise direction

**NOTE:**

Remove battery from instruments that you do not plan to use for a month or more. Do not leave battery in instrument.



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### 3. LCD Display and KEYPAD

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The main display shows the measured ORP reading.

Hold = Data hold



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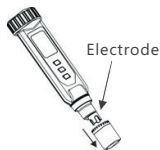
### 4. OPERATION


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1. Remove the probe cover from meter to expose the electrode out. It is normal if you find white crystals are present on the cap or electrode assembly.



For pH meters, please always make the sponge wet to keep the electrode in a good storage condition.

Remove the cover from the bottom of meter to expose the electrode.




2. Dip the electrode into the test solution. Press "  " to power on the meter and stir it to get a stable reading.



3. Press "  " to freeze current readings. The text "Hold" will appear on the LCD. Press "  " again to release the hold mode.





4. Turn off the meter by pressing "  " button.
5. Once finishing the measurement, clean the electrode, put back the cap, store the meter under the 0~50 °C.

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### 5. AUTO POWER OFF (SLEEP FUNCTION)

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This meter will shut off automatically 20 minutes of inactivity. For operating longer time, you can disable the sleep mode.

To disable the auto power off: Before power on, pressing "  " + "  " keys simultaneously until a "n" appeared on the screen and then release keys to return to normal mode.

**NOTE:** The disable sleep mode will be invalid after every power off.

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### 6. MAINTENANCE

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Preparation:

Before using, remove the cover, then soak electrode into distilled water and rinse, and then take out and make dry. Now the electrode is ready for use.

NOTE:

Do not rub sensing element forcibly

Test the electrode:

- (1) Put electrode in buffer solution of pH 7.00 with saturated quinhydrone. After stirring, mV reading (E1) should be 86±15mV.
- (2) Rinse electrode with distilled water, then set it in buffer solution of pH4.01 with saturated quinhydrone. After stabilizing, record mV meter reading (E2). The difference between E1 and E2 should be 165mV.

Storage:

- (1) Rinse the electrode with distilled water during the interval of each use.
- (2) Keep ORP electrode wet. If not use for long period of time, it should be rinsed and stored in the provided soaking bottle which is filled with soaking solution.