

Dissolved Oxygen/Temp Waterproof Tester



Index

Introduction

Features

Specifications

Accessories

Device Description

Probe Description

Display Description

Preparation

Calibration

Advanced Setting

Membrane Cap Replacement

pH

Cl

TDS

ORP

DO

Conductivity

Turbidity

Introduction :

Thank you for purchasing/ buying our product, the microprocessor-based waterproof DO/O2/Temp tester. You can now measure a wide range of Dissolved Oxygen and temperature, with a replaceable probe. Please read the manual carefully before using the tester.

Features :

- + A large LCD, which displays simultaneously DO or O2 and temperature
- + A Waterproof IP-57 standard having a rugged design convenient for field use. The tester floats on water.
- + Automatic temperature Compensation, Manual Salinity (MSC) and Altitude (MAC) Compensation. Both Centigrade and Fahrenheit degrees can be read by switching to required mode.
- + The Icons for DO, O2 and for units, mg/L, ppm, %, oC, oF are easily recognizable, especially during selecting function mode.
- + Displays Maximum /Minimum value and data hold.
- + There is an indicator for low battery and consumption.
- + The DO probe module is easily replaceable.

Specifications :

	DO	O2	Temp.
Range	0~20.00 mg/L 0~20.00 ppm	0~200.0 %	0~90 °C ±0.2+1 digit
Accuracy	±0.2+1 digit	±0.2+1 digit	0.1 °C
Resolution	0.01 mg/L	0.10 %	
Compensation	ATC: 0~50 °C MSC: 0~50 ppt MAC: 0-20000 ft		

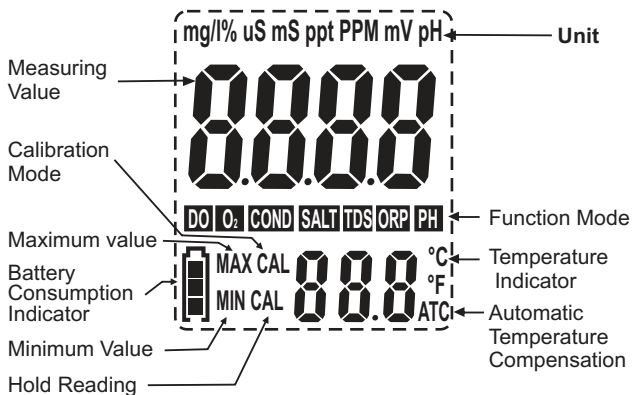
Accessories :

Meter, Membrane Cap x 2, Electrolyte x 50 ml, Plastic burette, Lanyard, Battery (has been installed), Introduction manual, Carrying case.




Probe Description




Display Description







Functions of Keyboard :

	Power/calibration 1. Press Button to switch power On or Off. 2. Press and hold button to enter calibration mode.
	Function Mode 1. Press to switch DO (mg/l), DO (ppm) and O2 (%) 2. Press and hold button to change degree oC or oF
	Hold/Max and Min 1. Press Button to enter hold mode 2. Press and hold button to enter maximum/minimum mode. In this mode press button light to get Maximum and Minimum value. 3. Press Hold button again to exit this mode and return to measurement mode.

Preparation :

1. Remove the protection cap and probe cap from meter.
2. Remove the membrane cap carefully.
3. Fill the membrane cap with the electrolyte solution up to the bottom of the threads on the inside of the cap, (please see step 8~11 in "Membrane Cap Replacement" below for details).
4. Press  button to turn the meter power on.


Calibration

1. Remove the probe cap. Press  to turn on power and then press  to choose **O₂** mode. Wait for 10 to 30 minutes for probe to polarize. After the probe has completely polarized, the reading should be approx. 101.7% (saturation)
2. While holding the probe in air, press and hold  for 3 sec. to enter the calibration mode. The display will appear CAL and flash 101.7%. When the display stops flashing, it should indicate "SA", then "END". This is when calibration ends. The display now should return to measurement mode.
3. Optional Zero Oxygen calibration. (This calibration improves measurement accuracy for very low or very high DO measurements). Place the probe in Zero oxygen solution, such as 5% sodium sulfite, wait for stability and press and hold  to enter calibration. Stability in a zero solution may take many minutes, depending on the probe history.

Note : 1. If the tester display is not 0% when the probe is not connected, calibrate it in air without probe to bring it to 0%.

Measurement





<DO>

1. Remove the probe cap and turn on the power. Wait for 10 minutes to 30 minutes for probe to polarize. The reading should be approx. 101.7% (saturation) after the probe has completely polarized.
2. Select the desired units of measure by pressing  until they are shown in the display.
3. Place the probe in the sample to be measured. Stir the probe in the sample to remove any trapped air bubbles from the membrane surface.
4. Allow the meter to stabilize, for the final measurement value.

Note :

1. The larger the difference in temperature between probe and the solution the longer it will take for the reading to stabilize. Stabilization time can vary from ten (10) seconds to five (5) minutes.
2. After using, cover the probe with probe cap. The sponge contained in the cap should be moistened (not soaked) with DI (distilled water) or clean tap water.







Function mode

1. Press  button to enter "Hold Function Mode". The icon HOLD will appear, and the value shown on display, can be locked. Press the button again to return to measurement mode.
2. Now to enter maximum and minimum function mode, press the hold  button until the icon MAX and MIN appears on the display. The maximum and minimum value will show on the display when the light button is pressed. To exit this mode, press and hold  button until icon MAX and MIN disappear, return to measurement mode.
3. Press and hold  button to change Degree °C or °F.

Note :

1. The display cannot shut off by itself (auto) under MAX/MIN mode.
2. The battery needs to be changed/replaced ,when battery indicator flashes on.

Advanced Setting

1. Press  to choose DO mode
2. Press and hold  to enter menu. Now press  to choose SaLC (Salt Compensation) or ALtC (Altitude Compensation) and then press  to confirm.
3. Press  (up) and  (down) to set Salt Compensation from 0 to 50 ppt, or set Altitude Compensation from 0 to 20K ft.

Membrane Cap Replacement

1. Do not touch the membrane as skin oils will interfere with the oxygen permeability rate of the membrane. Replace the cap carefully.
2. It is recommended that the probe remains attached to the meter during this replacement process.
3. Unscrew the cap firmly and carefully separate it from the probe.
4. Discard the old electrolyte solution from the Cathode and Anode.
5. Use the supplied polishing strip to clean, polish, shine, and/or remove scratches from the cathode. Be sure to moisten the cloth before polishing the cathode. Do not over-polish the sensitive gold cathode.
6. Set the new replacement membrane cap on the flat surface. Leave the cap in this position during the replacement process.
7. Fill the membrane cap with the electrolyte solution up to bottom of the threads on the inside of the cap.
8. Tap the membrane cap to release and prevent air bubbles in the electrolyte solution.
9. Keeping the cap in a fixed position on a flat surface, carefully insert the probe into the new cap by first dipping and removing the probe several times from the cap. With each dip, push the probe progressively deeper into the bonded cap. Finally, screw the probe slowly onto the cap until fully tightened. The dipping and removal technique minimizes the introduction of air bubbles into the electrolyte solution. Air bubbles in the electrolyte can affect measurements.
10. It is normal that excess electrolyte solution will leak out from the cap during this replacement, as it minimizes the introduction of air pockets. Clean off the excess electrolyte before use.

Note :

1. We recommend changing the electrolyte when it becomes yellow.
2. Re-calibrate and re-polarize the meter once the membrane cap has been replaced or reinstalled.



Dissolved Oxygen/Temp
Waterproof Tester

Warranty Card*

Customer Name/ Address : _____

Dealer Name/ Address: _____

Bill No. _____

Date -: _____

Product details

Dealer Stamp
& Sign



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