

STAR SERIES OXYGEN CALIBRATION GUIDE

Following is a quick and simple guide to preparing and calibrating your Orion Star Series Oxygen probe on **Air** (Water Saturated Air Calibration). For complete instructions, please refer to your meter's manual.

- 1.) Prepare the DO probe:
 - a. Unscrew the membrane cap and fill it $\frac{3}{4}$ full with DO probe electrolyte solution. Screw membrane cap onto probe—finger tight. The solution will overflow as you are tightening the cap, ensuring all air bubbles are displaced. Visually inspect to check for no bubbles on the inside of the membrane to optimize membrane performance.
 - b. Prepare the calibration sleeve by checking the sponge for moisture. If dry, wet with pure water, squeeze out excess water and replace in chamber. Be sure the inside of the calibration sleeve is dry before inserting the probe. Insert probe carefully into the calibration sleeve.
 - c. Connect the DO probe to the meter and turn power on. This is necessary to polarize the probe for 30-60 minutes before use.
 - d. Note: If you get a reading of zero and no temperature change indication, the probe is not connected. This watertight fitting must be firmly reconnected—once you see a shift in temperature, you can be sure it is completely connected.
- 2.) Press **Power** button to turn on meter.
- 3.) Use the **Line select** button to move the arrow icon to DO measurement line.
- 4.) Press the **Calibrate** Button:
 - a. meter will stabilize at about 102.3% saturation
 - b. Note: the default calibration mode is AIR—the recommended method for using the water saturated air calibration sleeve.
- 5.) Pressing **Measure** button will end the calibration and send you to measure mode.
- 6.) To change the units from % Saturation to Concentration in mg/L, use the **Line select** button to navigate; keeping DO on the top line, the middle line will scroll through with this choice. Select mg/L for oxygen readings. Ignore the other selections (bAr, PrES, SAL, SALF and CALt). The meter display should look like this when mg/L is selected:
 - a. On the first line: DO with default value of 0.01
 - b. On the second line: rES should read DO Concentration
 - c. On the third line: 0.01 mg/L resolution.