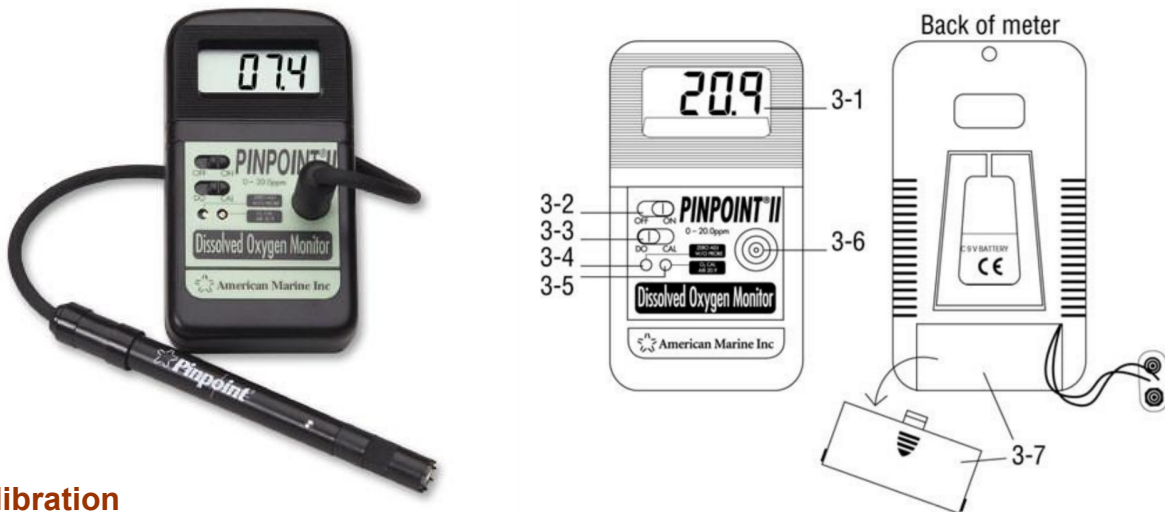


Measuring Dissolved Oxygen

PINPOINT® II Oxygen Monitor



Calibration

There are no manufacture recommendations for calibration. May want to calibrate before sampling at each facility/location. If sampling multiple facilities on the same day, Step 3, involving filling membrane cap with liquid electrolytes, should be performed during first calibration, but does not need to be repeated for subsequent calibrations.

1. Slide the bottom switch #3-3 to the CAL position (toward the right).
2. With the probe NOT CONNECTED turn the zero adjust screw #3-4 until the display reads 00.0.
3. Fill Membrane Cap with Electrolyte Fluid and screw onto probe body (finger tight only). Remove the dark blue silicone rubber cap at the end of the Membrane Cap.
4. Connect the probe to the meter by carefully lining up the pins on the plug to the input on the meter. Be sure to fully insert the connector.
5. Wait several minutes for the probe to polarize and stabilize on the meter.
6. Turn the O₂ calibration screw #3-5 so that the display will read 20.9 This is the percentage of Oxygen in our atmosphere and is widely considered to be a highly accurate calibration procedure.
7. Slide the bottom switch #3-3 to the DO position (toward the left). The monitor is now ready for use.

General Use

1. Rinse oxygen probe with tap water between uses to ensure it's clean.
2. Turn oxygen meter on.
3. Dip oxygen probe into your water sample to be measured, about 1 inch into the liquid.
4. Swirl probe so there is adequate flow in sample fluid and wait for a reading.
5. Record dissolved oxygen on the data sheet.

Measuring Dissolved Oxygen (continued)

Salinity Compensation for DO readings

1. Go to <https://water.usgs.gov/water-resources/software/DOTABLES/>
2. Scroll down to “Section A– Single-Value Computation
3. Enter the water temperature, salinity (ppt), and the DO measurement reading from the pinpoint DO meter. Select Submit. Record the adjusted oxygen solubility mg/L.

Inputs:		Results:	
Water temperature:	<input type="text" value="0"/> degrees Fahrenheit	Oxygen solubility:	mg/L
Barometric pressure:	<input type="text" value="760"/> mm Hg	Percent saturation:	percent
Salinity	<input type="text" value="0"/> $\mu\text{S/cm (SC)}$ or ‰ (salinity)		
[optional] Measured DO:	<input type="text" value="0"/> mg/L		
<input type="button" value="Submit"/> <input type="button" value="Reset"/>			

Replacement of membrane cap and liquid electrolytes (replace as needed)

1. Unscrew Membrane Cap from the probe body. Membrane cap is located 1-3/8" from the end of probe.
2. Fill a new Membrane Cap with electrolyte fluid. Screw the Membrane Cap onto the probe body (finger tight). A small amount of electrolyte fluid may leak out.
3. A dark blue protective silicone rubber cap is installed over the tip of the Membrane Cap. This will protect the clear Teflon Membrane surface during storage. This dark blue cap must be removed for both calibration and sample measurement. Reinstall the dark blue cap during storage.



Reference:

PINPOINT II High-Performance Dissolved Oxygen Monitor User's Guide

<https://cdn.shopify.com/s/files/1/0327/9765/files/OxygenMonitor.pdf>