YSI Pro20,Pro20i Dissolved Oxygen Meter User Guide

Contents

YSI Pro20,Pro20i Dissolved Oxygen Meter

Product Information

Specifications

- Model: Pro20 / Pro20i
- Item #: 605645
- Calibration Options: % saturation, mg/L, ppm
- Salinity Compensation: ppt (parts per thousand)

FAQ

- **Q:** How do I know if One Touch Cal is enabled?
  - **A:** The instrument will indicate “Calibrating %DO” on the display if One Touch Cal is enabled.

Product Usage Instructions

Installing the DO Membrane:

1. Prepare the O2 probe solution and let it sit for 1 hour to avoid air bubbles.
2. Remove the red protective cap or used membrane and rinse the sensor tip.
3. Fill a new membrane cap with the probe solution and thread it onto the sensor.
4. Screw the probe sensor guard on moderately tight.

Setting Sensor & Membrane Type:

- Configure the Sensor Type for the installed sensor by following the initial setup instructions upon powering on.
- Use the Menu key to adjust sensor or membrane type after the initial configuration.

Barometer Calibration:

1. Ensure accurate barometer reading for precise DO% calibrations and readings.
2. Adjust barometer reading from the run screen to match local true pressure.

DO Calibration:

1. Calibrate in % saturation, mg/L, or ppm. Enable One Touch Cal for easy calibration.
2. Moisten the sponge in the cal/transport sleeve and install it on the probe.
3. Stabilize DO sensor (if polarographic) or proceed directly (if galvanic).
4. Ensure accurate barometer reading and salinity correction values.
5. Press and hold the Cal key for three seconds to start calibration.

Salinity Compensation Calibration:

- Adjust salinity compensation value in ppt by highlighting and entering values on the run screen.

This Pocket Guide is meant to serve as a quick reference in calibrating and operating the Pro20/Pro20i. It is not intended to replace the information found in the User Manual.

Installing And Settings

Installing the DO Membrane

1. Prepare the O2 probe solution according to the instructions on the bottle. After mixing, allow the solution to sit for 1 hour. This will help prevent air bubbles from later developing under the membrane.
2. Remove, and discard the red protective cap or used membrane from the sensor.
3. Thoroughly rinse the sensor tip with distilled or deionized water.
4. Fill a new membrane cap with probe solution. Avoid touching the membrane portion of the cap.
5. Thread the membrane cap onto the sensor, moderately tight. A small amount of electrolyte will overflow.
6. Screw the probe sensor guard on moderately tight.

Setting Sensor & Membrane Type

The instrument’s Sensor Type must be configured for the sensor installed. Failure to do this may result in damage not covered under warranty.

The instrument will step you through an initial configuration when powered on for the first time. This allows you to set the language, sensor, and membrane options. Use the up or down arrow keys to highlight the appropriate language, sensor, and membrane, then press enter to confirm. To change the sensor or membrane type after the

initial configuration, press the Menu key.

Barometer And DO Calibration

Barometer Calibration

The barometer reading must be accurate to ensure accurate DO% calibrations and DO readings.

If your barometer requires an adjustment:

1. Determine your local barometric pressure (BP) in mmHg from a mercury barometer, an independent laboratory, or from a local weather service. If the BP reading has been corrected to sea level, use the following equation to determine the true BP in mmHg for your altitude.
   True BP = (Corrected BP in mmHg) – {2.5 * (Local Altitude in feet/100)}
2. From the run screen, use the up or down arrow keys to highlight the barometer box then press enter.
3. Use the up or down arrow keys to adjust the barometer reading to the local, true barometric pressure.
4. Press enter to confirm and save the barometer adjustment.

DO Calibration

The Pro20/Pro20i can be calibrated in % saturation, mg/L, or ppm. Calibration of any option (%, mg/L, or ppm) will automatically calibrate the others. The Pro20/Pro20i can be calibrated with the press of one key when One Touch Cal is enabled in the System Setup menu.

The following procedure outlines the % saturation calibration option with and without One Touch Cal enabled.

1. Moisten the sponge in the cal/transport sleeve with a small amount of water and install it on the probe. The cal/transport sleeve ensures venting to the atmosphere. Make sure the DO and temperature sensors are not immersed in the water.
2. Turn the instrument on. If using a polarographic sensor, wait 10 minutes for the DO sensor to stabilize. Galvanic sensors do not require a warm up time.
3. Ensure the barometer reading and salinity correction values along the bottom of the screen are accurate.
4. Press and hold the Cal key for three seconds.
5. If One Touch Cal is enabled, the instrument will indicate Calibrating %DO on the display and automatically calibrate the sensor to the barometer reading and salinity correction value.
6. If One Touch Cal is not enabled, highlight % or %Local and press Enter. The Pro20/Pro20i will display the current DO% and temperature readings along with the % calibration value. Wait at least 3 seconds, then, once the DO% and temperature readings are stable, press Enter to complete the calibration.
7. Calibration Successful will display for a few seconds to indicate a successful calibration and then the instrument will return to the run screen.
8. If the calibration is unsuccessful, an error message will display on the screen. Press the Cal key to exit the error message and return to the run screen.

Salinity Compensation Calibration

The Pro20/Pro20i uses an inputted salinity value in ppt (parts per thousand) to compensate dissolved oxygen

mg/L values.

To adjust the salinity compensation value:.

1. Use the up or down arrow keys to highlight the salinity box on the run screen, then press enter.
2. Use the up or down arrow keys to adjust the salinity compensation value to the salinity of the water you are testing.
3. Press enter to confirm and to save the new salinity compensation value.

Taking Measurements

The Pro20/Pro20i can be calibrated in % saturation, mg/L, or ppm. Calibration of any option (%, mg/L, or ppm) will automatically calibrate the others. The Pro20/Pro20i can be calibrated with the press of one key when One Touch Cal is enabled in the System Setup menu.
The following procedure outlines the % saturation calibration option with and without One Touch Cal enabled.

1. Turn the instrument on and wait 5-15 minutes if using a polarographic sensor.
2. To take readings, insert the probe into the sample. Move the probe in the sample at a rate of at least 6 inches per second until the readings stabilize.
3. Highlight Save and press Enter to store the reading. The instrument will confirm that the reading was successfully saved.

Contact Information

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NEED HELP?

SCAN OR CLICK HERE TO CONTACT US

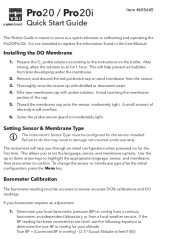
Air-Met Scientific

- www.airmet.com.au

Visit YSI.com/Pro20 or YSI.com/Pro20i to find the User Manual, specs, and accessories.

Item# 605645 Dwg# 605645

Documents / Resources

	YSI Pro20,Pro20i Dissolved Oxygen Meter [pdf] User Guide Pro20 Pro20i, Pro20 Pro20i Dissolved Oxygen Meter, Dissolved Oxygen Meter, Oxygen Meter, Meter

References

- User Manual