

YSI 556 Cheat Sheet

Conductivity Calibration

- 1) Make sure the Sonde is attached to the probe assembly securely.
- 2) Turn Unit on.
- 3) **Press ESC key** to return to Main Menu.
- 4) Highlight Calibrate and **press Enter.**
- 5) **Select Conductivity** from the Calibration Menu and **press Enter.**
- 6) **Select Specific Conductance** from the Conductivity Calibration Menu and **press Enter.**
- 7) **Enter the specific conductance value** for your calibration solution (F.E.I. uses a 1409 umho/cm solution)
- 8) Fill Cal Cup making sure Conductivity solution covers the conductivity probe.
- 9) Wait for the reading to stabilize, then **press the Enter key** to accept calibration.
- 10) Unit is now calibrated.
- 11) If unit displays ***OUT OF RANGE***:
 - Return to the conductivity calibration menu
 - Select Specific conductance
 - When you are prompted to enter a value - **Press the Enter key and ESC key together simultaneously.** (This will set the sensor back to factory default, erasing any erroneous information that may have been stored in the sensor).

Dissolved Oxygen Calibration

- 1) Return to calibration menu.
- 2) Select DO Calibration and **press Enter.**
- 3) Select DO % and **press Enter.**
- 4) Enter the Barometric pressure for your area (the standard we use for Pittsburgh is 760.0 mmHg. A value for your site can be found on the internet or local news channel.) and **press Enter.**
- 5) Since we are performing a saturated air calibration, we need to make sure there is a little bit of moisture in the bottom of the cal cup. (calibrating to 100% saturation)
- 6) Wait for the reading to stabilize and **press Enter.**
- 7) If unit displays ***OUT OF RANGE***:
 - Return to the DO Calibration Menu
 - Select DO % and **press enter**
 - When you are prompted to enter the Barometric pressure – **Press the Enter key and ESC key together simultaneously.** (this will set the sensor back to the factory default, erasing any erroneous information that may have been stored in the sensor).
- 11) If you are still getting out of range messages on sensor – ***Replace the DO membrane cap.***
 - Unscrew old membrane cap.
 - Using sand disc clean the DO electrode.

- Rinse electrode.
- Fill new membrane cap with KCL solution.
 - Screw on new cap, making sure there are no air bubbles.

PH Calibration

- 1) Return to calibration menu.
- 2) Select pH and **press Enter**.
- 3) Select the number of calibration points you would like and **press Enter**.
- 4) Enter your pH value(s) in any order.
- 5) Wait for reading to stabilize, **press the Enter key**.
- 6) Meter displays “*calibrated*” at top of screen – **press Enter** again to go to next pH
- 7) Repeat steps 4, 5, and 6 for 2 and 3 point calibrations
- 8) If unit displays ***OUT OF RANGE***:
 - Return to pH calibration menu
 - Select 1 point calibration and **press Enter**.
 - When you are prompted to enter a pH value – **Press the Enter key and - the ESC key together simultaneously** (this will set the sensor back to factory default, erasing any erroneous information that may have been stored in the sensor).

ORP Calibration

- 1) Fill cal cup with ZOBELL solution.
- 2) Go to RUN mode and record TEMP reading in ZOBELL.
- 3) Return to calibration menu.
- 4) Select ORP and **press Enter**.
- 5) Fill cal cup with ZOBELL solution.
- 6) Using the Ag/AgCl table provided with the ZOBELL solution and the Temp reading recorded earlier, **set the ORP value and press Enter**.
- 7) Wait for reading to stabilize and **press the Enter key**.
- 8) You have now successfully calibrated ORP.
- 9) If unit displays ***OUT OF RANGE***:
 - Return to ORP calibration menu.
 - When you are prompted to enter an ORP value – **Press the enter key and the ESC key together simultaneously** (this will set the sensor back to factory default, erasing any erroneous information that may have been stored in the sensor).

Short Term Storage: (Less than one month)

- 1) Store with moist paper towel at bottom of cal cup.
- 2) Normal tap water will work.
- 3) **Do Not Use Distilled Water** – this draws the electrolyte reference solution out of the pH sensor causing loss of sensor life.

Long Term Storage: (One month or longer)

- 1) Remove pH sensor and store in pH 4 buffer solution.
- 2) Remove DO membrane cap – clean electrode with disc sander and store with a dry (no KCL solution) membrane cap.
- 3) Conductivity and Temperature sensor can be stored in dry air.