

TDS Monitor

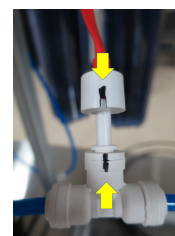
Usage

1. Press the "POWER" button.
2. To display the TDS level of the feed (tap) water, slide the switch to the IN side. To display the TDS level of the product (filtered) water, slide the switch to the OUT side.
3. The displayed TDS will be most accurate after approximately 10 seconds of runtime.
4. Determining filter effectiveness depends on your particular system. For this RO system, for example, the OUT position measures the final product water and if it indicates anything higher than zero, it's time to replace the resin. However, the resin is color indicating which gives a visual indication of it's expiration so, if the color of the resin does NOT agree with this, then check the calibration.
5. If the "x10" icon appears on the IN side, this means the TDS level is above 999 ppm. Therefore, multiply the reading by 10. For example, if the display shows 143 ppm with the 'x10' icon, the actual TDS level is 1430 ppm. (If the 'x10' icon does not appear, the reading on the display is the actual TDS level). For most drinking water, you will not see the 'x10' icon.
6. Turn off the unit. It will automatically shut off after 10 minutes.

Calibration

Your monitor was factory calibrated to 342 ppm. This level is suitable for most tap water/filtered water applications, so it is ready to use out of the box. However, you may need to re-calibrate based on your needs, as well as from time-to-time to ensure best results. To calibrate:

1. Purchase a certified calibration solution that is correct for your needs. The calibration solution should be NaCl. HM Digital's 342 ppm NaCl is recommended.
2. Disconnect both T-fittings from their tubes. Do not remove the sensor from the T! Ensure the orientation of the sensor to the fitting is correct, make sure the black lines on the sensor and the fitting are lined up. Shake any water out.
3. For better accuracy, calibrate to a flowing solution. If this is not possible, you can calibrate to a still solution. Turn on the monitor and place one T-fitting (with the sensors in it) into the calibration solution. You will get a reading. Ensure the fitting is completely filled with solution and there are no air bubbles. **This step is critical for proper calibration.**
4. If the reading on the TDS unit display (for reading the calibration solution) does not match the solution reference number, adjust the reading up or down by gently turning the small Phillips head screw inside the hole on the rear of the TDS display clockwise or counterclockwise to raise or lower the reading.
5. There is one calibration screw to calibrate both the IN and OUT sensors simultaneously. You only need to calibrate one sensor, so just place the selector switch on the OUT position (located on the front of the TDS unit display).
6. **If calibrating to a still (not flowing) solution, calibrate to 3% above the level of calibration solution (this is the most common practice).** This will accommodate for the lack of flowing water, which the monitor is programmed for. For example, if the calibration solution is 342 ppm, adjust the screw until it reads 352 ppm. If you are calibrating to a flowing solution, calibrate to the level of the solution.
7. Your monitor is now calibrated. It is advisable to cut new ends on the compression lines before re-connecting the T-fittings to avoid potential leaks. You are now ready to run.



Troubleshooting

Issue	Potential Solution(s)
"Err" display (error)	1. The water is out of the monitor's TDS range. 2. The sensor cable is loose or unplugged. Check connection.
Incorrect readings	1. Re-calibrate the monitor. 2. Change the batteries.
Faded display	1. Change the batteries.
The "OUT" reading is higher than the "IN" reading	1. Check your connections. The sensors may be reversed.