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How do I calibrate my TDS meter?

Basically what these meters do is measure the flow of electrical current between the two metal posts in the probe. The more salts/nutrients that are in the water, the higher the reading. A TDS/PPM/EC meter needs to be regularly calibrated. If the meter is used daily then the meter should be calibrated weekly. If the meter is used less than daily then it should be calibrated once every two to three weeks. You don't want to leave it much longer than this because as the battery life decreases the meter loses its calibration. Every time you replace the batteries on your meter or even take the batteries out of your meter you should recalibrate. You should check the meter regularly for cracks and salt deposits on the electrode. Always allow the calibration solution to warm up to room temperature, especially if the solution is stored in the refrigerator.

The calibration method of your TDS/PPM/EC meter will depend on what model you have.

Hanna Primo TDS Tester

Please Note: This meter requires calibration solution 1382ppm.

1. Place electrode into clean water to rinse it.
2. Shake off excess water
3. Switch the meter on.
4. Place meter into calibration solution 1382ppm, ensure that the calibration solution covers the probe between the "MIN" and "MAX" marks that is marked on the probe.
5. Press "ON"/"OFF" button, but keep pressing the button until "CAL" appears on the screen then release the button.
6. The meter will then flash "1382" on the screen, keep the probe in the solution until the meter has calibrated itself (the meter will cease flashing "1382" and will now be in the reading mode).
7. Your meter is now calibrated.

Hanna TDS Tester (DiST1 / HI98300)

1. Place electrode into clean water to rinse it.
2. Shake off excess water
3. Place meter into calibration solution (i.e. 1500ppm or 989ppm).
4. Turn the calibration screw until the meter reads the same as the calibration solution.
5. Your meter is now calibrated.

Hanna EC/TDS/Temp Waterproof Tester (DiST5 / HI98311)

1. This meter can be calibrated using either PPM or EC. If you are using Genesis calibration solution by Green Air to calibrate your Hanna HI98311 meter, you will need to change the conversion factor to correctly your calibrate meter. See "Changing the Calibration Factor for Hanna Meters" to do this correctly.
2. Place electrode into clean water to rinse it.
3. Shake off excess water.
4. Make sure that the meter is in the ppm reading mode and not in the pH or μS (EC)
5. Place meter into calibration solution (i.e. 1500ppm (0.7 conversion factor)).
6. Press the MODE button and keep holding down the button until CAL appears on the screen.
7. Release the MODE button
8. The meter will now display the calibration solution that is required to calibrate the meter. "CAL" will also flash on the meter screen during calibration. DO NOT USE ANY OTHER SOLUTION OTHER THAN WHAT IS DISPLAYED ON THE METER SCREEN TO CALIBRATE YOUR METER.
9. Once your meter is calibrated then it will go back into ppm reading with the solution temperature just below the ppm reading.
10. Your meter is now calibrated.

Hanna pH/EC/TDS/Temp Waterproof Tester (HI98129)

1. This meter can be calibrated using either PPM or EC. If you are using Genesis calibration solution by Green Air to calibrate your Hanna HI98311 meter, you will need to change the conversion factor to correctly your calibrate meter. See "Changing the Calibration Factor for Hanna Meters" to do this correctly.
2. Place electrode into clean water to rinse it.
3. Shake off excess water.
4. Make sure that the meter is in the ppm reading mode and not in the pH or μS (EC)
5. Place meter into calibration solution (i.e. 1500ppm (0.7 conversion factor)).
6. Press the MODE button and keep holding down the button until CAL appears on the screen.

7. Release the MODE button
8. The meter will now display the calibration solution that is required to calibrate the meter. "CAL" will also flash on the meter screen during calibration. DO NOT USE ANY OTHER SOLUTION OTHER THAN WHAT IS DISPLAYED ON THE METER SCREEN TO CALIBRATE YOUR METER.
9. Once your meter is calibrated then it will go back into ppm reading with the solution temperature just below the ppm reading.
10. Your meter is now calibrated.

Hanna Gro'Chek Portable pH/TDS/EC Meter (HI9813-0)

1. These meters are easy to calibrate.
2. Place electrode into clean water to rinse it.
3. Shake off excess water.
4. Press the PPM button to get the meter into ppm mode.
5. Place the ppm probe into the ppm calibration solution.
6. Adjust the PPM dial until the ppm reading on the meter is the same as that for the solution.
7. Your meter is now calibrated.

Hanna Gro'Chek Portable pH/TDS/EC/°C Meter w/Cal-Check Feature (HI9813-6)

1. These meters are easy to calibrate.
2. Place electrode into clean water to rinse it.
3. Shake off excess water.
4. Press the PPM button to get the meter into ppm mode.
5. Place the ppm probe into the ppm calibration solution.
6. Adjust the PPM dial until the ppm reading on the meter is the same as that for the solution.
7. Your meter is now calibrated.
8. Nutra-Dip Continuous Tri Meter (pH/TDS/Temp)
9. This meter is easy to calibrate.
10. Place electrode into clean water to rinse it.
11. Shake off excess water.
12. Place the ppm probe into the ppm calibration solution.
13. Adjust the PPM adjustment screw until the ppm reading on the meter is the same as that for the solution.
14. Your meter is now calibrated.

Oakton Waterproof TDS Tester – Low

1. The calibration screw for these meters is found next to the batteries in the battery compartment.
2. Place electrode into clean water to rinse it.
3. Shake off excess water.
4. Place the ppm probe into the ppm calibration solution.
5. Adjust the PPM screw in the battery compartment until the ppm reading on the meter is the same as that for the solution.
6. Your meter is now calibrated.

Changing the Calibration Factor for Hanna Meters (HI98311 and HI98129)

1. To change the conversion factor on these meters make sure the meter is reading in ppm mode.
2. Hold down the MODE button until TEMP appears on the screen. Before TEMP appears on the screen you will notice that CAL will appear first TEMP will appear after this.
3. At this point if you press the hold button you will be able to change you meter's reading from °C to °F.
4. Press the MODE button, the conversion factor will now appear. It should read 0.5; press the hold button until it reads 0.7. This will be the correct conversion factor for your meters if you are using the Genesis calibration solutions.
5. Press MODE button, the Beta factor will appear. DO NOT CHANGE THIS, it should remain at 1.9.
6. Press MODE button again until your meter returns back to the ppm reading.
7. Your Hanna meter is now ready to be calibrated using the Genesis calibration solutions.

EC Conversion Table				
EC	Hanna	Eutech/ Oakton	Truncheon	CF
MS/CM	PPM (0.5)	PPM (0.64)	PPM (0.74)	
0.1	50	64	70	1
0.2	100	128	140	2
0.3	150	192	210	3
0.4	200	256	280	4
0.5	250	320	350	5

0.6	300	384	420	6
0.7	350	448	490	7
0.8	400	512	560	8
0.9	450	576	630	9
1.0	500	640	700	10
1.1	550	704	770	11
1.2	600	768	840	12
1.3	650	832	910	13
1.4	700	896	980	14
1.5	750	960	1050	15
1.6	800	1024	1120	16
1.7	850	1088	1190	17
1.8	900	1152	1260	18
1.9	950	1260	1330	19
2.0	1000	1280	1400	20
2.1	1050	1344	1470	21
2.2	1100	1408	1540	22
2.3	1150	1472	1610	23
2.4	1200	1536	1680	24
2.5	1250	1600	1750	25
2.6	1300	1664	1820	26
2.7	1350	1728	1890	27
2.8	1400	1792	1960	28
2.9	1450	1856	2030	29
3.0	1500	1920	2100	30
3.1	1550	1984	2170	31
3.2	1600	2048	2240	32

Only place storage solution in the well of the cap if you are using the Hanna Combo Meter (HI98129). It's not good to store the EC/TDS/CF/PPM probe in a storage solution; keep it dry. Never reuse your calibration solutions. Never pour your used calibration solutions back into the calibration solution bottles; this will contaminate the unused solution.

If the TDS meter is a waterproof meter and you change the batteries be careful not to damage and of the O-rings or gaskets as this will allow water enter the meter causing damage. If the O-rings are damaged or lost and water/fluids get into the meter the warranty will become void.