

pH Meter Calibration

Key Points

1. After receiving a new pH meter, soak it for one day in pH 7 calibration solution in order to hydrate the bulb.
2. Always use 2 point calibration. Calibrate the pH meter to 7.0 with the yellow, “Buffer Solution, pH 7.00± 0.02,” and to 10.0 with the blue “Buffer Solution, pH 10.00± 0.02,” **prior to** each sampling event – preferably within 12 hours of sampling. Before calibrating, you may want to soak the meter (no deeper than the cap line) overnight in the yellow 7.0 Buffer (what we call “calibration”) solution or tap water, to ensure the bulb is hydrated. If the bulb is dry, the meter won’t work properly. If the meter still won’t work properly, and you know the bulb is hydrated, you may need new batteries. If new batteries don’t solve the problem, the meter itself may be bad and needs replacing.
3. **To calibrate**, turn the meter on using the button on top. Pour yellow 7.0 calibration solution and blue 10.0 calibration solution into two separate clean dry cups. Rinse the meter with distilled water or tap water and gently blot the end dry with a paper towel. Submerge the meter up to the cap line in the 7.0 calibration solution and adjust the screw labeled pH 7 on the back of the meter with a screwdriver until the meter reads 7.0. Rinse the meter with distilled water or tap water and gently blot the end dry with a paper towel. Next, submerge the meter up to the cap line in the 10.0 calibration solution and adjust the screw labeled pH 10 on the back of the meter with a screwdriver until the meter reads 10.0. After calibrating the pH meter, volunteers should **turn the meter off**, replace the cap, and discard their calibration solution. Since it’s a salt solution, it can go down the drain. **DO NOT** put used solution back in the bottle or you risk contamination.
4. **Do not submerge the meter below the cap line.** Water may damage the electronics if submerged.
5. When storing the meter, put a small piece of paper towel in the bottom of the cap. Pour enough pH 7 calibration solution in the cap to wet the paper towel. Pour off the excess. This will keep the bulb hydrated in between uses.