



Operating Instructions for the *Accurate* pH 4 meter

Specification: *Accurate* pH 4 meter

Range:	0.0-14.0 pH
Resolution:	0.10 pH
Accuracy:	±0.10 pH - Suitable for Laboratory / Classroom Experiments.
Operating Temp:	33-120 Degrees Fahrenheit
Calibration:	2 point
Power supply:	DC 4 x 1.5 v four (4) LR1130 or equivalent)
Size:	160 x 25 x 24 mm
Weight:	75g

Water resistant to splashing of liquids.

Replacement or Repair Warranty: 12 months for defective parts and materials from date of manufacture except the electrode which has a 6 month warranty. Proof of purchase required. Warranty does not cover abuse. For warranty, return the meter to the place of purchase or call CWP Instruments at 888.433.6867 for a Return Authorization Number.

Operating Manual for the *Accurate* pH 4 Meter

1. Remove the electrode protector and switch the meter to the ON position.
2. If you are using this meter for the first time or the meter has not been used for a long time you will need to calibrate it for accurate readings. Skip to the calibration section, then return to step 3.
3. Dip the meter's electrode into a small sample of the solution to be tested. Stir gently, stop and wait for the displayed value to stabilize. The readout number is the pH value of the solution. Note: Never hold the meter's body over a large body of solution as you may drop it in and ruin the meter. Test small samples only. See pictures.
4. Immediately after finishing your test, dip or rinse the electrode in distilled water. Stir gently. Then use tissue paper to blot the excess water from the meter's body and the electrode's glass bulb. Replace cap. Note: As with all quality pH meters, do not allow the solution that you are testing to dry on the glass electrode or allow the glass electrode to dry. Also, blotting action must be carefully done in order not to damage the glass bulb.
5. When storing the pH meter switch the unit to the OFF position. Complete step 4. After step 4, place the electrode into the electrode storage bottle. Add CWP's Store It! solution to the bottle if needed and store the meter in a cool place out of direct sunlight and moisture. For extended storage time take the batteries out of the meter. As with any pH meter of this caliber, do not allow the electrode to dry out, as this will shorten the meter's life. For bulbs that have dried out, allow the electrode to sit in CWP's Store It!TM storage solution for 12 hours before calibration is attempted. If calibration can't be obtained after



soaking, place the meter's electrode into CWP's Rejuve It!™ cleaning solution and brush very lightly with a soft tooth brush to remove unwanted minerals and organics from the glass bulb. If the meter still can't be calibrated the electrode's life may be over and a new electrode should be purchased. If it is within the warranty period please return the meter from where it was purchased or send it to CWP Instruments 9220 SE Stark Street Portland, Oregon 97216.

6. If the unit cannot be switched ON or the display fades replace **all** of the old batteries with new batteries. Use only one brand of batteries. Never mix battery brands.

Calibration of the Accurate pH 4 Meter

This pH meter has a 2-point calibration system for superior accuracy. Both calibration screws are located inside the battery compartment. Battery compartment removal is necessary for calibration. Turn the cap counterclockwise for removal. Control Wizard Products recommends its brand of pH 7 and pH 4 calibration and storage solutions, as they are high quality products. Part # NT690, NT700, NT760, NT770



1. Turn the meter ON, remove the battery cap and pull the battery compartment out of the body. Let it hang to the side of the body. Place the meter's electrode into clean distilled water. Gently stir and then remove the meter from the water and blot the excess from the meter's body and glass electrode with a tissue.
2. Dip the meter's electrode into a 7.0 pH calibration solution. If the display reads 7.0 proceed to step 3. If the display does not show 7.0, adjust the calibration screw positioned at the top of the battery compartment to make it the display read 7.0.
3. Rinse the electrode with distilled water, blot dry and place it into 4.0 pH calibration solution to make sure the display reads 4.0. If the display does not show 4.0, adjust the calibration screw positioned at the bottom of the battery compartment to make it the display read 4.0.
4. Rinse the electrode with distilled water, blot dry and place it into 7.0 pH calibration solution. Adjust the calibration screw positioned at the top of the battery compartment to make it the display read 7.0. Calibration is now complete. Replace battery compartment.
5. Rinse the electrode with distilled water and blot the electrode with a tissue before making your test.

Battery Replacement: Make sure that the cap is screwed on tight after replacing batteries/calibrating or the meter will not be water resistant.

Note: Inaccurate readings with good batteries and a clean electrode generally mean the electrode needs to be replaced. Contact your local supply store for a replacement.

