



## Operating Instructions for the *Accurate* pH 1 meter

### Specification: *Accurate* pH 1 meter

Range: 0.0-14.0 pH

Resolution: 0.1 pH

Accuracy:  $\pm 0.1$  pH Suitable for Laboratory / Classroom Experiments.

Operating Temp: 33-120 Degrees Fahrenheit

Calibration: 2 points

Power supply: DC 4 x 1.5 v (Button Battery GPA76)

Size: 142 x 28.8 x 15 mm

Weight: 75g

Water proof to 1 inch (25 mm) below display only. Avoid splashing on or above display.

Replacement or Repair Warranty: 6 months for defective parts and materials from date of manufacture. Proof of purchase required. Warranty does not cover submersion in liquids or abuse.

### Operating Manual for the *Accurate* pH 1 Meter

1. Remove the protective cap 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 meters 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 dip the meter into 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, put a *few drops* of distilled water on the sponge inside the cap to keep the glass bulb moist but not soaking. Then put the cap onto the pH meter and store it 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 meters life. Dry glass electrode syndrome is not covered under this warranty.* Do not store with the meter's electrode submerged in water or solutions.
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 1 Meter

This pH meter has a 2-point calibration system for superior accuracy. Point 1 is the trimmer at the back for pH 4.0. Point 2 is a trimmer inside the battery compartment for pH 7.0. Control Wizard Products recommends its brand of pH calibration solutions, as it is a high quality product.

1. Turn the meter ON and place it 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 between 6.9 and 7.1 proceed to step 3. If the display does not show between 6.9 and 7.1, adjust point 2 trimmer inside the battery compartment to adjust the display to read 7.0 pH with the supplied screwdriver.
3. Once again place the meters electrode into clean distilled water. Gently stir and then remove the meter from the water and blot the excess from the meter with a tissue.
4. Dip the electrode into a 4.0 pH calibration solution. If the display does not show 4.0 pH, adjust point 1 to make the display read 4.0 pH. Use the supplied screwdriver.
5. Calibration is complete. Rinse the electrode with distilled water and blot the meter with a tissue before making your test. Go to step 3 under Operating Manual.

