

# Operating Manual for the Accurate pH Tester Pen

## Specifications:

<b>Range:</b>	0.10-14.00pH	<b>Resolution:</b>	0.10pH
<b>Accuracy:</b>	+0.10 pH	<b>Operating Temp:</b>	40-120 °F or 5-50 °C (ATC)
<b>Calibration:</b>	2 point system	<b>Power supply:</b>	DC 4 × 1.5V (LR1130 Button battery)

- Features**.....Waterproof design protects the meter  
.....Low power consumption extends battery life  
.....Auto-off function turns power off automatically after 10 minutes  
.....Automatic Temperature Compensation (ATC) for accurate readings  
.....Replaceable Glass Test Tip Electrode that screws on for a solid connection  
..... (pH-902A Changeable electrode / pH-901A Fixed electrode )

## Operating Instructions

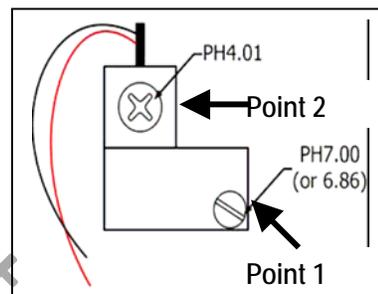
1. Remove the protective cap and press the ON/OFF button to turn on .  
(Calibrate the unit with known pH liquid for first time use, or using after long-term storage)
2. Dip the electrode into sample solution. Stir gently and wait for a few seconds until the display value stabilizes. The readout is the pH value.
3. After testing is completed dip the electrode into distilled or de-ionized water. Stir gently, then use a soft cloth to gently dry the water from the glass test tip.  
**CAUTION:** Use care when drying the tip to avoid damaging the test tip.
4. When storing the pH meter - turn the unit off, put a few drops of distilled water or de-ionized water on the sponge inside the cap, put the cap on the pH meter. The sponge with liquid will keep the test tip clean and ready for the next use. It is now properly stored.
5. If the unit cannot be turned on or the display fades, replace all of the batteries .

## Calibration

The pH meter has 2 calibration points. **Point 1** is inside the battery compartment at the top.

**Point 2** can be seen it when you remove the battery carrier, it's located below the battery . (see figure below)

1. Clean the glass test tip electrode with distilled or de-ionized water.
2. Dip the electrode into 6.86pH (or 7.00pH) buffer solution. If the display does not show between 6.80 – 7.00 pH , adjust **point 1** to make it display 6.90pH .
3. Clean the glass test tip electrode with distilled or de-ionized water.
4. Dip the electrode into 4.01 pH buffer solution. If the display does not show between 3.90 – 4.10 pH , adjust **point 2** inside the battery compartment to make it display 4.00pH .
5. Clean the glass test tip electrode with distilled or de-ionized water.
6. Dip the electrode back to 6.86 pH buffer solution. If the display is correct recalibration is completed, if not, repeat procedure 2 thru 6.



## Notes:

1. This pH meter uses a special glass PH probe. It is suitable for pH measurement of liquid.  
Storage time is 8 to 10 months.
2. Calibration is required for first time use or after long term storage. Calibrate at least one known point to ensure the accuracy.
3. Before measuring different liquids, the pH probe should be cleaned with distilled or de-ionized water, to prevent cross-contamination among different liquids.
4. If the display does not turn on, fades or is apparently in-accurate replace the batteries. It is recommended to re-calibrate after replacing the batteries.
5. When measuring for pH wait for a few seconds for reading to stabilized for the pH value.
6. Do not measure dirty ,sticky or oily liquids. They will contaminate the test tip probe surface. This will lead to wrong pH values and could damage of the probe.  
(If the probe is used for above mentioned dirty, sticky or oil liquid by accident, clean the probe immediately with de-ionized water and a dry soft cloth, then use a cotton swab with 99% pure alcohol to gently wipe the test glass tip probe. Clean the probe once again with distilled or de-ionized water).