## Operating Instructions for the Accurate Pen pH Tester WP

Specification:

Range:

0.10-14.00pH

Resolution:

0.10pH

Accuracy:

+0.10 pH

Operating Temp:

5-50 °C (ATC)

Calibration:

2 points

Power supply:

DC  $4 \times 1.5V$  (Button battery)

Features: Waterproof;

Low power consumption;

Automatic switch-off function: After 10 minutes without pushing buttons,

the meter will be switched off automatically . Automatic Temperature Compensation(ATC)

Plug: Replaceable electrode (pH-902A Changeable electrode / pH-901A Fixed electrode).

Operating Manual

1. Remove the Protective cap and switch on the unit.

2. If it is the first time of use, or used for a long time, calibrate the unit.

3. Dip the electrode into sample solution . Stir gently and Wait for a few seconds till the displayed value is stable . The readout is the pH value .

4. After using, dip the electrode into distilled or de-ionized water. Stir gently. Then use tissue paper to gently suck the water from the glass bulb. This action must be very careful in order not to make any damage to the glass bulb.

5. When storing the pH meter , switch off the unit , put a few drops of distilled water or de-ionized water on the sponge inside the cap , to rinse the glass bulb . Then put the cap onto the pH meter .

6. If the unit cat not be switched on or the display fades, replace all the batteries.

## Calibration

The pH meter has a 2 points calibration system. Point 1 is a trimmer aside the battery compartment. Point 2 can be seen when you take the battery compartment out. It is under point 1. (see the figure)

1. Clean the electrode with distilled or de-ionized water.

2. Dip the electrode into 6.86 pH (or 7.00 pH) buffer solution . If the display does not show between 6.80 – 7.00 pH, adjust point 1 at the back to make it display 6.90 pH.

3. Clean the electrode with distilled or de - ionized water

4. Dip the electrode into 4.01 pH buffer solution . If the display dose not show between 3.90 - 4.10 pH, adjust point 2 is a trimmer aside of the battery compartment . to make it display 4.00pH .

5. Clean the electrode with distilled or de - ionized water

6. Dip the electrode back to 6.86 pH buffer solution . If the display is correct, calibration finishes . If it is not correct , repeat procedure 2 to 6 .

## Notes:

- 1. This pH meter use special glass as PH probe. It is suitable for pH measurement of aquatic liquid. Storage time is 8 to 10 months.
- 2. Calibration is needed for the first time of use, or after long time of storage. Calibrate at least one point to ensure the accuracy.
- 3. Before measuring different liquidst, the pH probe should be cleaned with de-ionized water, to prevent cross-contamination among different liquids.
- 4. If the display fade or apparently in-accurate, replace the batteries. Calibration is needed after that.
- 5. When measure, wait for a few seconds to read the stabilized display as the pH value.
- 6. Do not measure sticky, dirty liquids or liquids with oil. They will contaminate the glass probe surface and (or) clog the junction. This will lead to wrong measurement, and cause damage of the probe.
- 7. If the probe is used for above mentioned sticky, dirty or oil liquid by accident, clean the probe immediately with de-ionized water, suck it dry with a tissue paper. Than use cotton with 99% purity alcohol to wipe the glass probe surface gently. Then clean the probe once again with de-ionized water.

