CT-6021A Pen pH Meter Instruction Manual

☮ Caution

- Please read the manual carefully before using the meter.

- The glass electrode at the bottom of the pen is fragile, please use it carefully after taking off the protection cap. Any damage may cause the invalid of the electrode.

- The duration period of the glass electrode is one year from the date of purchase whether you use it or not, please change the electrode in time.

- The electrode can not be used under the dry condition, always soak the electrode into the distilled water or purified water for 5 – 30 minutes to activate before use.

FEATURES	
*Range: 0.0 to 14.0 pH	LCD indicates both pH & Temp.
* Pen type digital pH meter, all in one, pH electrode is included, easy to use.	* Data hold function for freezing the desired value
* Water proof and protection	* Auto power off without any operations after 10 mins
* Supplied with a set of pH 4.01, pH 6.86, pH 9.18 buffers	*Microcomputer circuit, intelligent function, high accuracy
* Easy to change the pH electrode	* Compact size, light weight
* Options temperature measurement, ℃ or ℉	* Power supply by DC 1.5 V battery (LR44, BAT) x 4 PCs
* Build in temperature sensor, ATC (auto temperature compensation)	*Available for wide applications, such as aquarium, beverage, fish hatcheries, food processing, photography, laboratory, quality control, school & colleges, swimming pools, water conditions
* Auto calibration for pH 4.0, pH 6.8 and pH 9.1	

SPECIFICATIONS		
Display	LCD, size : 20 mm x 27 mm. Consumption	
Measurement Range	pH	0.0 to 14.0 pH
Temp.	0 to 50 ℃ (32 to 122 ℉)	
Resolution	pH	0.1 pH
Temp.	0.1 ℃, 1 ℉	
Accuracy	pH	± 0.1 pH * After calibration
Temp.	± 1 ℃, ± 2 ℉	
pH Calibration	pH 4.0, pH 6.8 and pH 9.1, 3 points calibration	
Operating Humidity	Less than 80% RH	
Dimension	188 x 38 mm (electrode included).	
Weight	82 g (electrode included).	

OPERATING INSTRUCTION

Do not screw the probe cap at the bottom of the pH meter, pull it out directly!

* Hold Feature

A flashing dot will be displayed during the measuring mode, Press HOLD to freeze the current reading. Press HOLD again to release the hold mode.

*Temperature Measurement ℃ or ℉

The default temperature measurement is ℃.If you need to convert temperature measurement, operating in accordance with the following method：While the meter is off, press CAL and ON/OFF at the same time until the '℃' or '℉' appears on the LCD. Press CAL to select the'℃' or '℉',after selecting press HOLD to save after selecting . The display will show the symbol 'SA'and then back to normal

* Automatic Temperature Compensation (ATC)

The product is capable of measuring the temperature and making compensation automatically, 'ATC' shows at the left corner of the screen.

* Calibration

1. Prepare 4.01, 6.86 and 9.18 pH buffers, Use 6.86 pH buffer for the mid-range buffer first. The pH values for the buffers are given for 25 °C. If the sample temperature is not 25 °C, the pH values displayed for the buffers will reflect the correct pH value for the sample temperature. If the electrode is dry, submerge it in distilled water for 10 minutes before calibration. Ensure that the calibrating buffers are fresh.
2. Press ON/OFF to turn the meter on, submerge the probe in the buffer while stir gently. Then keep it still until a stable reading is reached. Press CAL for 3 seconds until the Text 'CAL' appears. Then release CAL, the meter will identify the current buffer value automatically, and display 6.86 in the LCD. The result will be saved while the text 'SA' displayed after 2 seconds. The meter will back to measuring mode after 1 second while text 'End' showed.
3. If text 'End' is showed after press CAL, it means the calibration buffer is not fresh or the probe is aging.
4. Do not take out the probe from the buffer until text 'End' is showed in the LCD.
5. Same steps as calibrating pH 4.01 and 9.18.

* If Out of the Range

- If the pH value is lower than 0 or higher than 14, '-- -- --' will be displayed.
- When the temperature is too low or too high, 'L' or 'H' will be displayed.

* Low Power Indication

Change batteries if all the texts in the LCD are flashing.

* MAINTENANCE

Products from the date of purchase, one year free warranty (not including glass electrode and a battery) The following are not covered by the warranty: Damage caused by improper use (such as battery leakage, broke, etc.), the working temperature exceeds 50 ℃, the appearance of damage, more than the warranty period and the product are disassembled.

* WARRANTY

The meter is warranted to be free from defects in material and workmanship for one year from the date of purchase. This warranty does not cover battery, misuse, abuse, alteration, tampering, neglect, improper maintenance or damage resulting from leaking batteries. Proof of purchase is required for warranty repairs. Warranty is void if the meter has been taken apart.

Note:

How to prepare the buffer solution Solid material for pH4.01, pH6.86, pH9.18 buffer solution are provided in a set of sachets. Glass jars or beakers are recommended as the solution containers. Take making the 250ml buffer solution of pH 6.86 as an example:

(1) Put the pH 6.86 buffer material (in the green sachet) in a jar (the volume should be no less than 250ml).

(2) Fill the jar with 250ml distill water.

(3) Place a glass stick in the solution, swirling it until the white powder dissolved.

(4) Store the buffer solution in the cool and dry place. Attach a label on it for further use.

(5) For the further calibration, Ensure that there is a constant supply of fresh buffer solution in contact with the probe. Discard the solution after use.