Instruction Manual
Combination pH electrode

I. GENERAL DESCRIPTION

This electrode is a combined electrode by a glass electrode and reference electrode, it is a PH value measuring sensor.

It is widely used in the measurement of solution PH value.

The electrode is you buy the elaborate precision analysis of test sensors, the product before leaving the factory after thorough testing. If you carefully follow these instructions and maintenance, will be able to obtain the best test results and extend the life of the electrode.

II. SPECIFICATIONS

Product Name:	pH Electrode Probe 300cm
Model:	E-1325M
Display Range:	0~14.0 pH
Measuring Temperature:	0 ~ 50°C
Zero:	±0.25 pH
Alkali Error:	15 mV
PTS:	>98.5%
Response Time:	<1 minuto
Internal Impedance:	<250MΩ
Repeatability:	<0.017
Noise:	<0.5 mV

III. OPERATION AND MAINTENANCE

1) Preparatory work before the test

1. The use of the Electrode protection bottle electrode. After use, please inserted the electrode into the cap, and then tighten the bottle.

2. Before the test, remove the electrode protection bottle or rubber sleeve (dip the solution for 3MKCL, if crystals exudation, which is a normal phenomenon and does not affect the use of electrodes).

3. Observe whether the sensitive bulb all filled with liquid, if any air bubbles, you should gently swinging the electrode down (just like swinging the thermometer), to remove air bubbles within the sensitive bulb, otherwise it will affect the accuracy of the test.

(2) Electrode and PH meter calibration and testing

1. Let the pH electrode linked the PH instrument 's input terminal and connected correctly.

2. The standardization should according to the instrument manual, after completed the calibration, to be measured.

(3) pH ELECTRODE MAINTENANCE

1. After used, rinse the electrode with distilled water to minimize contamination and and suck it with filter-paper.

Please store it in the protective bottle, and be injected into the solution to activate before the next test.

2. If longer period of time not to use the Electrode , it should be rinsed them cleanly and blotting up the residue distilled water.

3. The electrode should avoid long-term soaking in distilled water or protein solution, and should prevent contact with silicone grease.

4. The glass bulb can not contact with hard objects any damage and friction will cause the electrode failure.

5. After long-term used , the electrode slope and response speed may become lower. Please immerse the electrode in 4% HF for 3-5 seconds or dilute HCL solution for 1-2 minutes, and immersed in sodium chloride (4M) solution to make new variable after washing with distilled water.

6. If the test solution containing easily contaminated sensitive bulb or substance clogged the liquid junction, made the electrode passivation, and appear response speed significantly slow down and the slope to reduce or unstable readings these phenomenon, if so, you should be according to the nature of the pollutant and choice the suitable cleaning solution to maintain the electrode.

Contaminant	Cleaning Agent
Organic lipids	Below 1M concentration of hydrochloric acid
Organic metal oxides	Dilute soap or detergent
Resin, Polymeric hydrocarbon substances	Acidic enzyme solution
Protein stowball sediment	Acidic enzyme solution
Alcohol, acetone, ether	Dilute bleach solution of hydrogen peroxide
Dye substances	Dilute bleach solution of hydrogen peroxide

7. Those who need to measure the organic solvent which can dissolve a polycarbonate resin, please use the PH combination electrode with glass body. (Model 65-IP pH combination electrode).

8. When you use the above method for electrode maintenance and upkeep still can not be calibration and normal measurement, it shows the electrode can not be restored to respond, replace the electrode.

9. Electrode life for one year for normal use, improper due to a bad environment or maintenance will shorten the electrode life.