# **OPERATION MANUAL**

# WALL MOUNT PH/TEMPERATURE MONITOR





#### INTRODUCTION

Congratulations on your purchase of this pH & Temp. monitor. Please read this manual completely and keep the manual for future reference. Recommended to soak the electrode for at least 30 min. before using to clear up the lazy effect or to make the electrode wet if the pH electrode dries out.

#### Features:

- ◆Large display with smart backlight
- ◆Name card compact size for all locations
- ◆Accurate pH and temperature reading
- Low battery indicator.
- ◆°C/°F unit switchable.
- ◆Power by 4pcs AA batteries.
- ◆Multi points calibration.
- ♦One touch only for calibration.

## MATERIAL SUPPLIED

#### This package contains:

- √ The meter x 1
- ✓ AA alkaline battery x 4
- ✓Built in temp. probe x 1
- √ Replaceable pH probe x 1
- ✓ Wall mount hanger & nylon screw x 2
- ✓ Operation manual x 1
- ✓ Paper box x1

### Optional accessories:

Replaceable pH probe: 86P6, full glass 86P7, sharp tip 86P1, flat surface 86P2, general purpose 86P4, low ionic strength 8605P, 1.7m long, only for 8605

### **POWER SUPPLY**

The meter is powered by 4 pcs AA batteries. To check the battery when:

- First time use
- 2. The low battery icon flashes on LCD
- 3. The meter can not be powered on

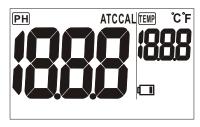
#### To install the batteries:

- Turn off the meter and remove the battery cover.
- Replace the old batteries with 4 new AA batteries.
- Make sure the batteries are in place and the polarity is correct.
- 4. Put back the battery cover.

#### NOTE:

Remove battery from instruments that you do not plan to use for a month or more. Do not leave battery in instrument.

## **KEYPAD & LCD INDICATOR**



Keypad:

"Power": short press to turn on or turn off the monitor

"Unit": short press to switch between °C and °F "Backlight": Press key could light up the backlight for 30 sec. While the backlight is on, reading is also updated every second.

"CAL": Long press to enter calibration mode.

#### **OPERATION**

### Step 1: Check the probe status

Remove the probe protection bottle from probe to expose the electrode. Check the appearance of pH glass bulb, the pH glass bulb should be integrated, clear and not dried out.

### Step 2: Power up the monitor

Please read above power supply section first for battery installation.

Once the batteries are installed, short press "POWER" key to power on the monitor. To turn it off, press "POWER" key again.

## Step 3: Calibration

Calibration is executed before shipment but it is still necessary and should be done regularly. The advanced calibration design of the this monitor features automatic buffer recognition to avoid errors. Please refer to calibration section for the details.

### Step 4: Get your reading

Dip the electrode into the test solution and stir gently. You should see the pH & temperature reading update on LCD. The ph monitor will update reading every second in the first 5 mins. Then, it goes into power saving mode and only update reading every 10 mins. In this way, it can provide battery life time for at least 3 months.

### Step 5: Temperature unit switch

The monitor is default as °C , you may short press " UNIT " key to switch to °F.

### Step 6: Smart backlight design

To assist you check the reading easier in dim place, press "BACKLIGHT" key could light up the backlight for 30 seconds. While the backlight is on, reading is also updated every second.

### **CALIBRATION**

The advanced calibration design of the meter features automatic buffer recognition to avoid errors. Besides, screw driver is not needed, simply press buttons on monitor to complete the multiple points calibration. At least two points calibration is recommended and you may start from pH 7.

Please use fresh pH calibration buffer and don't re-use the buffer.

### Calibration steps:

- 1. Power on the meter.
- 2. Place the electrode into a buffer solution (4,7or10), pH7 should be calibrated first and then 4 or 10 pH for better accuracy.
- 3. *Long* press "CAL" key for more than 1 second to enter pH calibration mode. The icon "CAL" will appear on the LCD and then pH value (4,7 or 10) will be displayed on the LCD
- If the buffer is incorrectly inserted or the probe is damaged or aging, the monitor will escape calibration mode automatically after 10 seconds. Text "End" will appear on the LCD in one second and then will go back to normal status.
- 5. If the electrode detects the pH buffer correctly, you will see a stable reading flashing. You may press " **UP** " or "**DOWN** " key to match the reading exactly with your buffer. The adjustable range is 3.50 to 4.50, 6.50 to 7.50 and 9.50 to 10.50.
- 6. When the electrode reads a stable value and user stops pressing any keys, the meter will automatically save the value and then escape the calibration mode. You should see a "SA" text appears first and then a "End" to indicate the calibration is done.
- 7. Rinse the probe with de-ionized water before next calibration point.
- 8. Repeat above 2~7 to continue second point calibration.

### **MAINTENANCE**

- √Please always keep the pH glass bulb wet by using the storage bottle to protect and store the electrode.
- ✓Always rinse the pH electrode in de-ionized water or rinse solution (tap water.....) before next use.
- √ Never touch or rub glass bulb in order to last pH electrode life.
- ✓ Make sure the electrode is clean. Between measurements, rinse the electrode with deionised water. If the eletrode has been exposed to a solvent immiscible with water, clean it with a solvent miscible with water e.g. ethanol or acetone and rinse carefully with water.

### **TROUBLESHOOTING**

### Power on but no display

- 1) Make sure the time of pressing power key is more than 100 mS.
- Check the battery are in place and make good contact and correct polarity.
- 3) Replace with new batteries and try again.
- 4) Move away the batteries for one minute and then put back again.

#### Reading no change

The ph monitor updates reading every second in the first 5 mins. Then, it goes into power saving mode and only update reading every 10 mins to save power.

To fresh reading anytime you want, just press backlight. While the backlight is on, reading is also updated every second.

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#### ♠ LCD display " - - - "

Out of pH range, too acidic/or too alkaline.

### ◆ "H." Or "L."

Out of temp. range, too cold/or too hot.

### pH value fluctuate quickly

It is normal when the electrode is not immersed in the water but exposed in air.

### **♦ Slow response**

Clean probe by immersing the electrode in tap water for 10-15 minutes, then rinse thoroughly with distilled water or use a general purpose electrode cleaner.

SPECIFICATION	
pH range	0.00~14.00
pH accuracy	+/-0.1
pH resolution	0.01
Temp. range	-5.0~60.0°C
Temp. accuracy	+/-0.5°C
Temp. resolution	0.1
ATC	ATC
LCD size	26(H)x44(W)mm
Operating temp.	0~50°C
Operating RH%	Humidity<80%
Storage temp.	-10~50°C
Storage RH%	Humidity < 90%
Sensor life time	>3 months (with good maintenance)
Dimension	90(L)x63(W)x31(H)mm
Battery	AA x 4pcs
Backlight	Green Backlight
Standard Package	Meter/Probe/Battery/ Manual/Box

#### WARRANTY

The meter is warranted to be free from defects in material and workmanship for a period of one year from the date of purchase. This warranty covers normal operation but 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 used to be taken apart.

#### **RETURN AUTHORIZATION**

Authorization must be obtained from the supplier before returning items for any reason. When requiring a RA (Return Authorization), please include data regarding the defective reason, the meters are to be returned along with good packing to prevent any damage in shipment and insured against possible damage or loss.

### Accuracy, the Zenith of Measuring / Testing Instruments!

Hygrometer/Psychrometer

Thermometer

Anemometer

Sound Level Meter

Air Flow meter

Infrared Thermometer

K type Thermometer

K.J.T. type Thermometer

K.J.T.R.S.E. type Thermometer

pH Meter

Conductivity Meter

T.D.S. Meter

D.O. Meter

Saccharimeter

Manometer

Tacho Meter

Lux / Light Meter

Moisture Meter

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