PH-3509 Waterproof pH/EC/TDS/Salinity &Temperature Meters

SPECIFICATIONS:

Range	PH	0.0～14.0PH
	EC	0~1999μs/cm 0~19.9mS/cm
	TDS	0~1999ppm 0~19.9ppt
	Salinity	0-42.0‰
	Temp	0～50℃
Resolution	PH	0.1PH
	EC	1μs/cm（<1999 μs/cm） 10us/cm（>1999 us/cm） 0.1mS/cm
	TDS	1ppm(<1999ppm) 10ppm(>1999ppm) 0.1ppt
	Salinity	0.1‰
	Temp	0.1℃
Accuracy	PH	±0.1PH
	EC	±2%F. S
	TDS	±2%F. S
	Salinity	±2%F. S
	Temp	±0.5℃
Automatic Temperature Compensation	0℃～50℃	

Battery Type	3×1.5V(AG13)
Operating Temperature	0℃～50℃
PH Calibration	two points（4.01，6.86） or One point（6.86）calibration
Auto-off	After 8 minutes
Dimensions	188mm×35mm×35mm
Weight	98g

OPERATION

1. Remove the protective cap. Turn on the meter.

2. First rinse the electrode with distilled water and suck it with filter-paper.

3. Immerse the electrode in the solution to be tested.

4. Stir gently and wait for the reading to stabilize. Do not tap it against the glass.

5. Short press the "MODE" button, choice the PH or EC(TDS/Salinity) for measuring.

6. In the EC MODE, Long press the "MODE" button (about 5 seconds) to switch the display of EC value, TDS value and Salinity value on the screen successively („us", "ppt“, "ppm", "ms","‰",).

7.After use, turn off the meter. Rinse the electrode with distilled water to minimize contamination.

8.Always replace the protective cap after use.

Switching Temperature Modes

Short press the ‘TEMP/CAL’ button to switch between Celsius and Fahrenheit.

CALIBRATION

1. PH

For a single-point calibration

1)Pour a small quantity of pH6.86, pH4.01 and pH9.18 solution into clean beakers.

2)For a particularly accurate calibration, it is advised to use two beakers for each buffer solution: one for rinsing the electrode, one for the calibration. In this way, the risks of contaminating the buffer solution are reduced to a minimum.

3)Turn on the meter. Press the „MODE“ button, choice the PH for measuring.

4)Immerse the electrode in a pH6.86 buffer solution and gently shake it until the reading to stabilize.

5)Press and hold the ‘TEMP/CAL’ button about 5 seconds until 686 appears on the display. Release the button, Until the displayed value is consistent with the pH value of the standard buffer solution at this temperature. Rinse the electrode with distilled water.

6)Immerse the electrode in a PH4.01(or PH9.18) buffer solution, gently shake the electrode and waiting for the reading to stabilize. The showing value and buffer solution's ph value is within error range.

For a two-point calibration

1)Pour a small quantity of pH6.86, pH4.01 and pH9.18 solution into clean beakers.

2)For a particularly accurate calibration, it is advised to use two beakers for each buffer solution: one for rinsing the electrode, one for the calibration. In this way, the risks of contaminating the buffer solution are reduced to a minimum.

3)Turn on the meter. Press the „MODE“ button, choice the PH for measuring.

4)Immerse the electrode in a pH 6.86 buffer solution and gently shake it until the reading to stabilize.

5)Press and hold the ‘CAL’ button about 5 seconds until 686 appears on the display. Release the button. Until the displayed value is consistent with the pH value of the standard buffer solution at this temperature. Rinse the electrode

with distilled water.

6)Immerse the electrode in a pH 4.01 buffer solution and gently shake it until the reading to stabilize.

7)Press and hold the ‘CAL’ button about 5 seconds until 400 appears on the display. Release the button. Until the displayed value is consistent with the pH value of the standard buffer solution at this temperature. Rinse the electrode with distilled water.

8)Immerse the electrode in a PH9.18 buffer solution, gently shake the electrode and waiting for the reading to stabilize. The showing value and buffer solution's ph value is within error range.

The calibration of the instrument's pH range is now complete.

Note: It is always recommended to carry out a two-point calibration for better accuracy.

Important:

The ph meter should be recalibrated under following situations:

*The meter has been used for long time since the last calibration or use.

*The meter has been used in particularly continual conditions.

*The utmost accuracy is required.

*Do not long press the "TEMP/CAL" button at ordinary times, otherwise the meter needs to be recalibrated.

2. EC

1)Turn on the meter. Press the „MODE” button, choice the EC-ms for measuring.

2)Immerse the electrode in the distilled water. Activate it about five minutes.

3)Immerse the electrode in EC calibration solution (12.88mS/cm at 25℃). And stir it gently.

4)Allow the reading to stabilize, Press and hold the ‘CAL’ button about 5 seconds until 12.88 appears on the display. Release the button. Until the displayed value is consistent with the EC value of the standard buffer solution at this temperature. Rinse the electrode with distilled water.

5)Immerse the electrode in EC calibration solution (1.43mS/cm at 25℃). And stir it gently. until the display value is the same as the value of calibration solution or approaching the value in the error range.

6)Rinse the electrode with distilled water and suck it with filter paper.

The calibration of the instrument's EC range is now complete.

3. Salinity(‰)

1)Turn on the meter. Press the „MODE“ button, choice the Salinity-‰ for measuring.

2)Immerse the electrode in the distilled water. Activate it about five minutes.

3)Immerse the electrode in EC calibration solution (35ppt or 35‰ at 25℃). And stir it gently.

4)Allow the reading to stabilize, Press and hold the ‘CAL’ button about 5 seconds until 35.0 appears on the display. Release the button. Until the displayed value is consistent with the salinity value of the standard buffer solution at this temperature.

5)Rinse the electrode with distilled water and suck it with filter paper.

The calibration of the instrument's Salinity range is now complete.

BATTERY REPLACEMENT

When the battery character appears on the display, indicating that the voltage is insufficient, please replace the battery.

Unscrew the battery case and replace all batteries, while paying attention to the correct polarity.

Batteries should only be replaced in a non-hazardous area and using the battery type specified in this instruction manual.

ELECTRODE REPLACEMENT

1.Remove the protective cap.

2.Unscrew the plastic ring on the top of the electrode.

3.Pull out the electrode and replace it with a new one.

Make sure the gaskets are in place before screwing back the ring.

WARRANTY

These instruments are warranted from all defects in material and manufacturing

or a period of one year from the date of purchase.

If during this period, the repair or the replacement of parts are required were

the damage is not due to negligence or erroneous operation by user, please

return the parts to either dealer or our offices, and the repair will be affected free of charge.