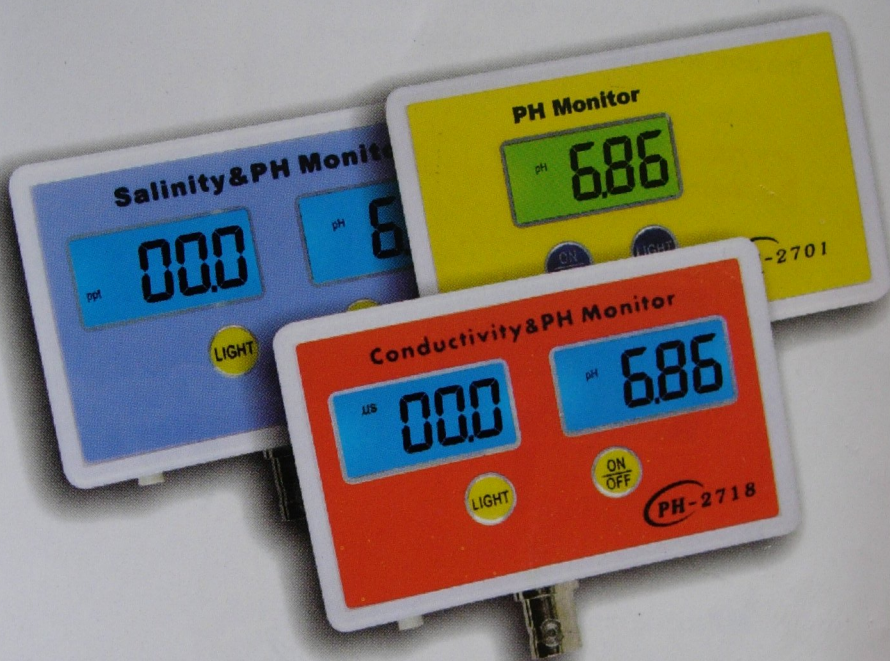




# PH-27XX Series WATER QUALITY MONITOR



## Operation

- Turns on the power source. The 【 DC/RB 】 switch must choose "DC".
- Turn the meter ON by pressing the ON/OFF key.
- Pressing the LIGHT key. lightens LCD the back light.
- Remove the PH ( ORP ) electrode protective cap, then submerge the PH ( ORP ) electrode and salinity ( EC.CF or TDS ) electrode into the sample to be tested.
- Stir gently, don't let some bleb on the electrode, wait for the stability symbol ( about 3 minutes ) . The display will show the PH ( ORP ) value and salinity ( EC.CF or TDS ) value .

**NOTE: Please use this monitor away from electronic ballast.**

## pH calibration

- Immerse the electrode into PH 6.86 buffer solution and then shake briefly.
- Regulate the trimmer with a screwdriver until the buffer solution value corresponding to the measurement temperature is obtained.
- Immerse the electrode into a PH4.01 or PH9.18 buffer solution, and briefly shake the electrode.
- After about one minute, until the buffer solution value is corresponding the measurement temperature is obtained.

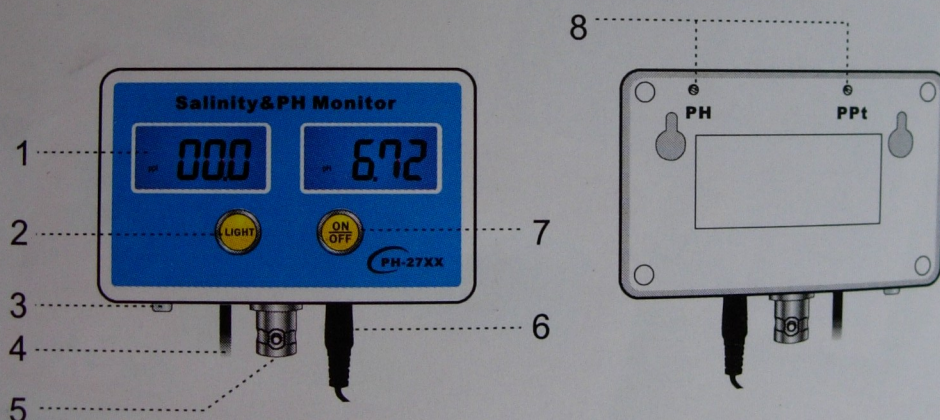
## EC/TDS/CF/Salinity calibration

- Rinse the electrode with alcohol.
- Immerse the tester up to the maximum immersion level in the appropriate calibration solution .
- Allow the reading to stabilize and using a small screwdriver adjust the calibration trimmer to match the solution value. E.g. calibrating TDS-2702 with 1382ppm solution, turn the trimmer to read "1382".

## General description

The water quality monitor has been specially designed for the maximum facility of use. The display on the front panel reveals the readings taken by the instrument. This instrument has the battery charge function, You will be able to carry out field measurement. Moreover, The monitor features a low battery indicator that alerts the user when the battery needs recharging.

## Structure description



- 1 Reading display
- 2 LIGHT key
- 3 DC/RB switch
- 4 Salinity ( EC .CF or TDS ) electrode input
- 5 PH ( ORP ) electrode input
- 6 DC input
- 7 ON/OFF key
- 8 Calibration trimmer

## Important

- The instrument must be recalibrated whenever.
- Approximately one month has passed from the last calibration.
  - The electrode has been used in particularly taxing conditions.
  - The utmost accuracy is required.

## Adaptor and battery recharge

- The adaptor is the power supplies as well as battery chargers.
- When use rechargeable battery, the "▢" symbol on the upper left of the LCD to indicate a low battery condition .Battery must be recharged.
- It will take approx 10 hours to completely charge the battery. The [ DC/RB ] switch must choose "RB".

## Maintain sensor

1. It had better cleaning the sensor with soft brush and calibrate the sensor during 2–3 weeks to make sure the reading within accuracy when measuring in a long time. please immerse the salinity ( EC.CF or TDS ) sensor in alcohol for cleaning.
2. Wash the pH ( ORP ) electrode sensor every time before you use. Then put it in 3mol/L KCL solution.
3. The pH ( ORP ) electrode sensor which is use to measure solution should not be dipped in distilled water, protein solution or other solution for long time.

## Mode Ratio

		pH	TDS1	TDS2	CF	ORP	Salinity	EC1	EC2	EC3
Range		0-14.00 pH	0-1999 ppm	0-19.99 ppt	0-199.9 CF	0-±1999 mV	0-199.9 ppt	0-1999 us/cm	0-19.99 ms/cm	0-199.9 ms/cm
Calibration solution		6.86pH	1382ppm	6.44ppt	128.8CF	256mV	35ppt	1413 us/cm	12.88 ms/cm	50ms/cm
MODE	2701	●								
	2702		●							
	2703			●						
	2704				●					
	2706					●				
	2707						●			
	2708							●		
	2709								●	
	2790									●
	2712	●	●							
	2731	●		●						
	2718	●						●		
	2791	●							●	
	2714	●			●					
	2771	●					●			
	2722		● ●							
	2776					●	●			

## Specific Gravity/Salinity Ratio(25°C)

Salinity (ppt)	5	6	7	8	9	10	11	12	13
Specific Gravity	1.004	1.005	1.005	1.006	1.007	1.008	1.008	1.009	1.010
Salinity (ppt)	14	15	16	17	18	19	20	21	22
Specific Gravity	1.011	1.011	1.012	1.013	1.014	1.014	1.015	1.016	1.017
Salinity (ppt)	23	24	25	26	27	28	29	30	31
Specific Gravity	1.017	1.018	1.019	1.020	1.020	1.021	1.022	1.023	1.023
Salinity (ppt)	32	33	34	35	36	37	38	39	40
Specific Gravity	1.024	1.025	1.026	1.026	1.027	1.028	1.029	1.029	1.030

## Specifications

### Range:

PH:	0.00 ~ 14.00PH	mV: -1999 ~ 1999mV
TDS:	0.00 ~ 1999ppm or 0.00 ~ 10.00ppt	
Salinity:	0.00 ~ 100.0ppt	CF: 0.0 ~ 199.9CF
EC:	0.00 ~ 1999us/cm or 0.00 ~ 19.99ms/cm or 0.0 ~ 199.9ms/cm	

**Accuracy:** PH:  $\pm 0.1$ PH      mV:  $\pm 5$ mV  
EC/TDS/CF/Salinity:  $\pm 2\%$ F · S

**Calibration:** 1 point

**Power:** DC5.6V/100mA or Rechargeable battery

**Operating Conditions :** 0-60°C RH 95%/max  
No disturbance of magnetic field or distinct tremble  
around instrument.

**Dimensions:** 88 × 55 × 22mm

**Weight:** 135g

## Warranty

This instrument is guaranteed from all defects in material and production for a period of one year from the date of purchase. If during these periods the repair or the replacement of the instrument is required and the damage is not due to negligence or erroneous operation by the user, please return the instrument to either your dealer or to our offices and the repair will be effected free of charge.