GENERAL®

DPH7011

USER'S MANUAL

Digital pH Meter

INTRODUCTION:

Thank you for purchasing the micro-processor based waterproof pH/mV/Temp tester. It is used to measure a wide range of pH, ORP and Temperature with a replaceable electrode. Please read and follow the manual carefully.

FEATURES:

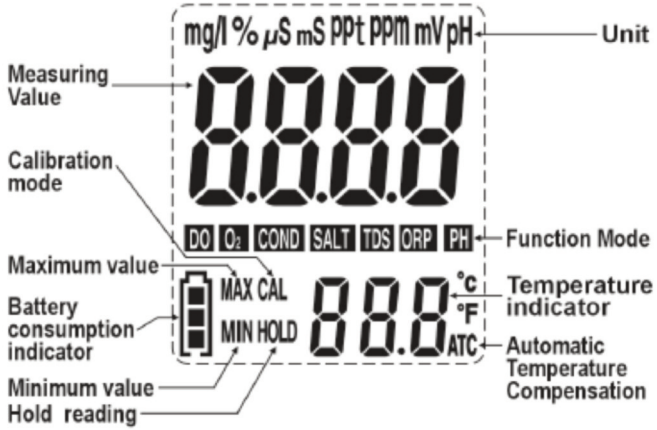
- Large LCD displays pH and Temperature simultaneously
- Automatic Temperature Compensation (ATC)
- Degree °F/°C switchable
- Icon PH , ORP and unit pH, mV, °F, °C for easy recognition while selecting function modes
- Displays MIN/MAX value and Data Hold
- Low battery indicator
- Automatically shuts off after 10 minutes of non-usage
- Easy to replace pH or ORP electrode module
- Waterproof to IP 57 standard
- Floats on water

SPECIFICATIONS:

	pH	ORP	Temp.
Range	-2 to 16.00	-1000 to 1000	32° to 194°F (0 to 90°C)
Accuracy	±0.01 + 1 digit	±2 + 1 digit	±0.4°F + 1 digit (±0.2°C + 1 digit)
Resolution	0.01 pH	1 mV	0.1°F (0.1°C)
ATC	32° to 194°F (0 to 90°C)		
Calibration	pH 4.00, 7.00, 10.01		
Power Source	4 "AAA" batteries		
Dimensions	Meter: 7.7" x 1.6" x 1.4" (195 x 40 x 36mm)		
	Kit: 9.1" x 8.1" x 2" (230 x 205 x 50mm)		
Weight	Meter: 4.8 oz (135 g) (with battery) Kit: 24.7 oz (700 g)		

DEVICE DESCRIPTION:

DISPLAY DESCRIPTION:



FUNCTIONS OF KEYBOARD:

POWER/CALIBRATION

1. Press button to switch power On or Off
2. Press and hold button to enter Calibration mode

FUNCTION MODE

1. Press and hold button to change degree °F or °C

HOLD/MIN&MAX

1. Press button to enter Hold mode
2. Press and hold button to enter Minimum/Maximum mode
   Press button down lightly to get Minimum/Maximum value
3. Press and hold button again to exit this mode and return to Measurement mode

OPERATING PROCEDURE:

ACCESSORIES

Upon receiving the shipment, inspect the container and equipment for any signs of damage. Verify that you have received all the items listed below:
Meter, Buffer Solution pH 4 & 7, Soaking Solution, Lanyard, Battery (installed), Instruction Manual and Carrying Case. Optional: ORP electrode, Buffer pH 10.01

PREPARATION

1. Remove the protective cap and unscrew the soaking solution from the meter to rinse the electrode with clean water and wipe it dry. Don't leak soaking solution from bottle and place the protective cap back on the bottle at the end of usage.
2. Press CAL button to turn the meter power on.

CALIBRATION

<pH>

1. Make sure the sensor is pH electrode or check the icon **PH** appears in the LCD display.
2. Dip the electrode into the buffer solution pH 7. Stir gently and wait until the display is stabilized. Press and hold CAL button to enter calibration mode until the icon **CAL** appears on the display, and flashes 7.00. When the display stops flashing and indicates "SA", then "End" while calibration is ending and returns to measurement mode.
3. Rinse the electrode with clean water and wipe it dry. Dip the electrode into the buffer solution pH 4. Stir gently and wait until the display is stabilized. Press and hold CAL button to enter the calibration mode until the icon **CAL** appears on the display, and then flash 4.00. When the display stops flashing and indicates "%" (percentage of slope), it will then display "SA", then "End" while calibration is ending, and then return to measurement mode.
4. After slope calibration pH 4 or pH 10, the display will indicate percentage of slope (PTS) to show the status of electrode. If the PTS is below 70% or above 130%, the electrode must be replaced. A slope of 100% is ideal.
   Note: (1) Icon "SA" will not appear if the calibration fails.
   (2) When doing a 2 or 3 point calibration, Calibrate with buffer pH 7 first, and then follow with buffer pH 4 or pH 10.

MEASUREMENT

<pH>

1. After calibration, rinse the electrode with clean water and wipe it dry.
   Dip the electrode into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.

＜**ORP**＞

1. Insert ORP electrode and the icon **ORP** will show on the LCD display automatically.
2. Calibration is not necessary for ORP. It could be tested with a specific ORP solution to check if electrode is good or bad.
3. Rinse the electrode with clean water and wipe it dry. Dip the electrode into sample solution to be measured. Stir gently and wait until a stable reading can be obtained.
   Note: (1) "_ _ _ _" will appear in the display when it is over the measuring range.
   (2) After measurement, rinse the electrode with clean water. Replace the protective cap and soaking bottle. The soaking bottle should always be kept wet by adding soaking solution.

FUNCTIONS MODE

1. Press (H/M) button to enter the Hold function mode. The icon HOLD will appear and the reading value in the display can be locked. Return to Measurement mode while pressing the button again.
2. Press and hold (H/M) button to enter the measuring Maximum and Minimum function mode. Hold button until a flashing icon of MAX and MIN appears in the display. The value of maximum and minimum will appear in the display while pressing the button lightly. To exit this mode, press and hold (H/M) button until icon MAX and MIN disappear, and returns to Measurement mode.
3. Press and hold (MODE) button to change °F or °C.

Note: (1) The display can not auto shut off under the status of MAX/MIN mode.
(2) Change a new battery when the battery indicator is flashing.

MAINTENANCE:

BATTERY REPLACEMENT

1. Loosen the screw with a screwdriver on the battery compartment cap.
2. Replace with fresh 4 "AAA" batteries and note polarity.
3. Replace the battery compartment cap and tighten the screw.

Note: (1) Be sure batteries are in the correct position by polarity.
(2) Don't loosen the O-ring which has been mounted on cap.

ELECTRODE REPLACEMENT

1. Unscrew the electrode collar counterclockwise and remove it completely.
2. Pull the electrode module out from the tester.
3. Plug in a new electrode module into the tester socket carefully.
4. Place and tighten the electrode collar to make a good seal.

APPLICATIONS:

Agriculture • Anti-freeze recycling • Aquarium • Boiler • Chemical industry • Cooling tower • Drinking water • Fish farming • Food industry • Garden husbandry • Hydroponic Laboratory usage • Plating industry • Swimming pool & Spa • Water treatment

Calibration Certificate

This certificate guarantees that this product has been inspected and tested in accordance with the published specifications.

The instrument has been calibrated by using equipment which is already calibrated to standards traceable to International standards.

Model: DPH7011

Serial no.: _____

Date: _____

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