INSTRUCTION MANUAL
pH Meter

MP-103 CE

INSTRUCTION MANUAL

MP-103 pH/mV/Temp

CE

Introduction :

Thank you for selection the MP-103 microprocessor-based pH/mV/Temp tester. It is possible to measure a wide range of pH, ORP and Temperature.
We recommend that you read and follow the manual carefully.

Features :

※ Large LCD displays pH and Temperature simultaneously.
※ Microprocessor based. °C / °F switchable.
※ Splash proof housing and rubber protective holster with magnetic for hand free operation.
※ Automatic or manual temperature compensation.
※ Simple to calibrate by one keyboard for 3 points buffer.
※ Indicate percentage of slope(PTS) after calibration.
※ Low battery and consumption indicator.
※ Auto shut off after 10 minutes of non use.

Specifications :

	pH	ORP	Temp.
Range	0.00 ~ 14.00	−1999~1999	0~100 °C
Accuracy	±0.01+1digit	±1mV+1digit	±0.2°C+1digit
Resolution	0.01 pH	1 mV	0.1 °C
ATC/MTC	0 ~ 100 °C		
Calibration	4.00, 7.00, 10.01		
Power	9V or AC/DC adaptor		
Dimensions	Meter : 112 x 75 x 30 mm		
Weight	Meter : 135g (with battery)		

Accessories
Upon receiving the shipment, inspect the container and equipment for any signs of damage. Remove the packing list and verify that you have received all equipments:
Meter, pH electrode, Temp. probe, Buffer solution 4.00 & 7.00, 9V Battery, Operating manual.
Optional : AC Adaptor, ORP Electrode

Operating procedure :

Preparation
1. Open the battery compartment and connect the 9V battery.
2. Connect the electrode and T/probe to meter, and remove the protection cap from the electrode. Press (ON/CAL) button to turn the meter power on.
3. Rinse the electrode and T/probe with clean water and wipe it dry.

Calibration
1. Dip the electrode and T/probe into the buffer solution pH 7.00. Stir the electrode gently and wait until the display stabilized. Press and hold (ON/CAL) button to enter calibration mode until the display appears icon **CAL**, and then flash 7.00. When the display stop flashing and indicates "SA", then "End" while calibration is ending, and return to measurement mode.
2. Rinse the electrode and T/probe with clean water and wipe it dry. Dip the electrode and T/probe into the buffer solution pH 4.00(or pH 10.01) and the same as step 1. When the display stop flashing and indicates "%" (percentage of slope), then "SA", then "End" while calibration is ending, and return to measurement mode.
3. After slope calibration pH 4.00 or pH 10.01, 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 7.00 first, and then follow with buffer pH 4.00 or pH 10.01.

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

< ORP >
1. Insert ORP electrode, press (pH/mV) button to enter ORP measurement mode. Calibration is not necessary for ORP. Dip the electrode into sample solution to be measured. Stir the electrode gently and wait until a stable reading can be obtained.

Others
1. °C/ °F can be changed by press and hold (pH/mV) button 3 seconds.
2. Automatic temperature compensation(ATC) mode by insert T/probe. Manual temperature compensation mode by press (▲) and (▼) button.
3. Change a new battery when the battery indicator flashing.