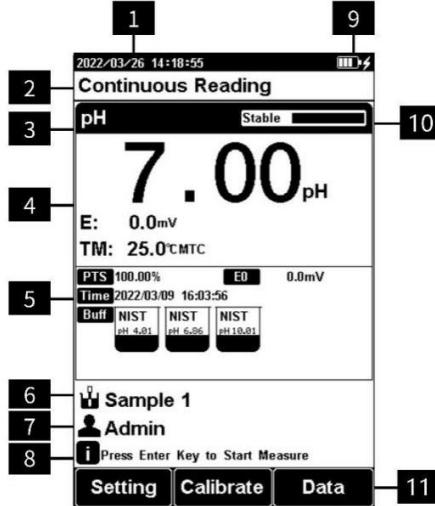


# PHB-31 pH Meter Operation Manual

## 1. Specification

Parameters: pH, mV, Temperature  
pH level: 0.01pH  
pH range: (-2.00 ~ 20.00)pH  
mV range: (-2000.0 ~ 2000.0)mV  
Temperature range: (-5.0 ~ 110.0)°C

## 2. Screen Icons



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F1 F2 F3



### 2.1. Annotation

No.	Explanation	No.	Explanation
1	System time	7	User ID
2	Reading mode	8	Tips information
3	Measurement parameters	9	Power information
4	Main measurement box	10	Reading State
5	Calibration information	11	Function buttons
6	Sample ID		

### 2.2. Symbol

Symbol	Explanation
Stable	Reading status
ATC	Auto Temperature compensation
MTC	Manual temperature compensation
PTS	The percentage slope of the pH electrode calibration data
BUFF	The standard buffer solution for calibration
Time	Time to Calibrate Electrodes

Symbol	Explanation
	Standard solution for pH electrode calibration
	User ID
	Sample ID
Auto Mode	Auto standard recognition
Manual Mode	Input standard
	Power information
	Charging

## 3. pH Operation Guide

### 3.1. Preparation

- 1 . Install the components of the instrument and connect the pH and temperature electrode.
- 2 . Prepare standard buffer solutions such as pH 4.01, pH 7.00, pH 10.01 standard solutions.
- 3 . Remove the protective cap at the lower end of the pH electrode, pull down the rubber cover at the upper end of the electrode. Expose the top hole, rinse the electrode with distilled water, and dry with filter paper.
- 4 . Press the power key to turn on the instrument.

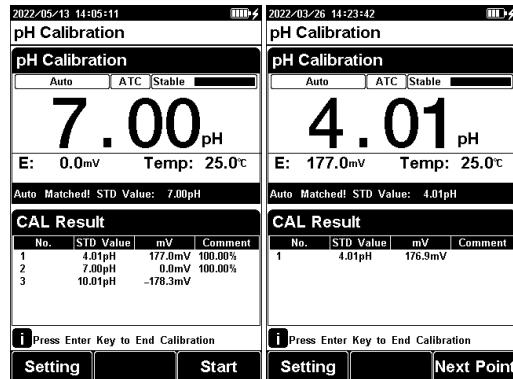
### 3.2. Calibration

- 1 . Setting.

- 1) Set the parameters (e.g. pH).
- 2) Select standard solution group (e.g., NIST pH 4.01, pH 7.00 and pH 10.01).
- 3) Set to automatic recognition.
- 2 . Enter to calibrate the pH electrode through the F2 "Calibrate"- "pH Calibration".
- 3 . Put the cleaned electrode into pH 4.01 standard solution, wait for the instrument to display "Auto Matched", after the reading is stable, press F4 to "Start".
- 4 . If only 1-point calibration is required, after 1-point calibration is completed, press the "Enter" key to complete the calibration.
- 5 . If multi-point calibration is required, please replace the pH7.01 and pH10.01 standard buffer solutions. After cleaning the electrode, put the electrode into the standard solution. After the instrument recognizes it successfully, the instrument reads stably, press the soft function key "Next Point" to complete the calibration.
- 6 . After completing the calibration, press the "Enter" key to complete the

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calibration, save the calibration results and end the calibration, directly enter the start interface. If the checked standard solution group is 5, automatically end the calibration after five points of calibration.



### 3.3. Measurement

- 1 . Setting.
  - 1) Set the parameters (e.g. pH).
  - 2) Set the reading mode (e.g., continuous reading, auto-reading, or timed format).
- 2 . Rinse the pH electrode with DI water, dry out.
- 3 . Put the electrode into test solution under test.
- 4 . Put the measurement end of the electrode into the sample solution.

- 5 . In the measurement status, press "Enter" to enter into measurement status.
- 6 . When the reading is stable, read the results.
- 7 . Press the "Save" to save the measurement results and print the result.
- 8 . During measurement, stored pH electrode in distilled or deionized water.
- 9 . After measurement, rinse the pH electrode with deionized water thoroughly.

