PH50T pH Meter Operation Manual

1. Specification

Parameters: pH, mV, Temperature
pH level: 0.001pH
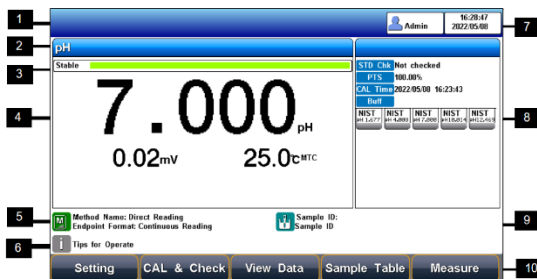pH range: (-2.000 ~ 20.000)pH
mV range: (-2000.00 ~ 2000.00)mV
Temperature range: (-10.0 ~ 135.0)℃
　　/(14.0 ~ 275.0) ℉

2. Screen Icons

2.1. Annotation

No.	Explanation
1	User ID
2	Measurement parameters
3	Reading states
4	Measurement information
5	Method management
6	Tips information
7	System time
8	Calibration information

No.	Explanation
9	Sample ID
10	Soft function buttons

2.2. Symbol

Symbol	Explanation
Reading	Reading status, display the measurement status of reading, stable, locked each indicates that the processing, stable, and reading completed.
PTS	The percentage slope of the pH electrode calibration data
ATC	Auto Temperature compensation
MTC	Manual temperature compensation
ORP	Redox potential value, in mV
Offset	Offset potential, in mV
M	Measurement method management, display the current method information
NIST pH 7.00	Standard solution for pH electrode calibration
👤	User ID
🔧	Sample ID

3. pH Operation Quick Guide
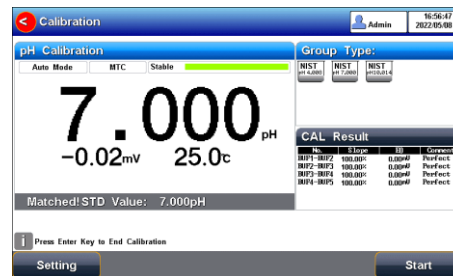
3.1. Preparation

1. Install the components of the instrument and connect the pH and temperature electrode.
2. Prepare standard buffer solutions such as pH4.01, pH7.00, pH10.01 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.
5. Select measurement method:

• The default measurement method of the instrument is "No.001 direct reading measurement method", pH measurement parameter, continuous reading mode, if adopting the default method for measurement, this step can be omitted.

• Press [M] to enter the measurement method management. You can select the method in the method list or create new methods as required.

6. The main measurement parameter settings of the instrument:

- Reading mode: supports continuous, timing and auto reading mode.
The default is continuous reading mode, you can choose according to your requirements, press the "Enter" key to complete the setting.

3.2. Calibration

1. Setting.
    1) Set the parameters (e.g. pH).
    2) Select NIST standard solution group, and check pH 4.01, pH 7.00 and pH 10.01 three standard solutions.
    3) Set the Auto Mode recognition.
2. After pressing the "Calibrate"-"pH Verification" key, the instrument enters the interface for selecting calibration type. Select "Calibration" to enter the pH electrode calibration interface.
3. Put the cleaned electrode into pH 4.01 standard solution. Wait for the instrument to display "Auto Mode Matched", or the instrument reading is stable, press "Start" to calibrate 1-point, after the completion of the instrument, display calibration results.

4. 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 "Next Point" to complete the calibration.

5. During the calibration process, press the "Enter" key to terminate the calibration, and the instrument will automatically display the window prompts whether to save the calibration results. After selecting, directly enter the start interface. interface. If the checked standard solution group is 6, automatically end the calibration after six 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. Press " Measure" to enter the measurement interface, after the reading is stabilized (the data stability mark is full), then measure.
3. Press the "Save" to save the measurement results. Press the "Output" to print the measurement result when connect to the printer.

Note: For accurate measurement, please calibrate and measure at the same temperature.