BENETECH®

**Model : GM760**
**GM761**

# PH Meter
# Instruction Manual

Version:760/761-EN-03

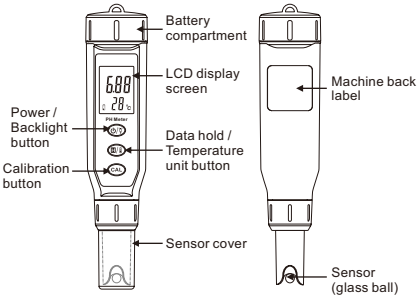


## A.Introduction

This product is of high accuracy, and is stable, reliable, and portable. It can be used in measuring the PH value of the solution and the temperature of the liquid to be measured. It can be applied in the field of industry, electricity, agriculture, medicine, food, scientific research, and environmental protection.

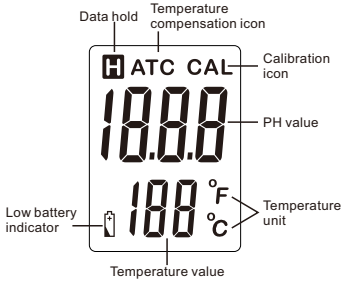
Product Features:
(1)Measuring PH value of the solution
(2)Measuring the temperature of the solution
(3)LCD backlight hold
(4)Data hold
(5)Temperature unit switch
(6)Power off memory
(7)Solution temperature compensation
(8)Low battery indication

## B. Components of the product






## C. LCD Display




Display instructions

| | |
|---|---|
| [ H ] | The reading is locked, and the data will remain unchanged |
| [ATC] | Calculation after temperature compensation |
| [CAL] | Entering calibration model |
| [Lo] | PH value is lower than 0 |
| [Hi] | PH value is above 14 |
| [NUL] | No sensor connection detected |
| [ ] flickering | Low power, the product will automatically shut down if the state of low power lasts for long, please replace the battery in time |



## D. Operation Instructions

1.Power on/off
Short press on the button " ⏻/☼ " to turn on the machine, and long press on " ⏻/☼ " to turn it off.
2.Backlight
The backlight is turned on by default. Short press on " ⏻/☼ " to turn off the backlight. Backlight will turn off automatically if there is no operation for about 1 minute.
3.Data hold
When the machine is turned on, short press on the button " H/🌡 " and then [ H ] will display on the screen, which means that PH value has been locked. If you turn off the machine at that time, the PH value will be saved.
4.Temperature unit switch
Long press the button " H/🌡 " to switch the temperature unit between ℃/℉.
5.Calibration
(1)Sequential calibration
SA1:PH=4.0 / 4.00
SA2:PH=6.8/ 6.86
SA3:PH=9.1/ 9.18
automatic calibration --- automatically identify the calibration solution in sequence of 4.00-6.86-9.18 and save the calibrated.
In the power-on state, long press on the button " CAL " , the LCD will display [CAL] and flash [SA1] at the same time. After putting the product sensor into PH=4.00 solution (the glass ball should be completely submerged), short press on the " CAL " , the ADC value will be displayed. Wait for the ADC value to stabilize and record the value by short pressing the " CAL " again (or wait for 3 minutes to auto-calibrate the point). Remove the sensor from the solution and rinse the sensor with water for 1 minute, then wipe it clean gently with a paper towel. When the LCD flashes [Sa2], put the sensor into the solution with PH=6.86. Repeat the above steps to complete the calibration of SA1~SA3 and then display [End]. Wait for 1 minute and exit calibration automatically.During calibration, if [Err] appears, it means that the glass sphere touches the solution in the wrong order or the sensor is



wrong. It is necessary to quit and recalibrate or perform single-point calibration.
(2) Single-point calibration
Before single point calibration, a sequential calibration is required (not sequentially calibrated at the factory).
Long press on " CAL " , LCD will display [CAL] and flash [SA1] at the same time, short press on " H/🌡 " to switch [Sa1]-[SA2]-[SA3]-[CAC] in order. After selecting the corresponding calibration point, press the " CAL " briefly to display the ADC value. Wait for the ADC value to stabilize, then short press on the " CAL " again to record the value. Finally, short press on the " H/🌡 " to switch to [CAC] and short press on the " CAL " to end the single point calibration. If single point calibration SA3, the calibration will be inished automatically.

## E. Technical parameters

| Model | GM760 | GM761 |
|---|---|---|
| PH measuring range | 0.0 ~ 14.0 | 0.00 ~ 14.00 |
| PH resolution ratio | 0.1 | 0.01 |
| PH measuring error | ±0.1 | ±0.05 |
| Temperature measuring range | 0~60℃（32~140℉） | |
| Temperature resolution ratio | 1℃ | |
| Temperature error | ±1.0 ℃ | |
| Power supply | Button Battery LR44 1.5V * 3 | |
| Display | LCD big screen display | |
| Working environment temperature | 0~60℃ | |
| Working environment humidity | ≤85%RH | |
| Backlight | White backlight | |



| | |
|---|---|
| Size | 41*42*189.23mm |
| Weight | 83. 8g |

## F. Attention

1. Before the first use or calibration, please pour an appropriate amount of cache liquid into the protective cover to completely soak the sensor and let the suction rod completely wet (when the rod is dry, soak it for more than 2 hours).
2. Storage method: After use, the sensor should be washed with water, and then soaked in cache liquid for storage for next use;
3. The calibration solution should not be in contact with the air for a long time (4 hours), otherwise the calibration result will be affected. Therefore, a new solution should be used for each calibration.
4. After the sensor is soaked in an acid or alkali solution for a long time, clean it and wipe it with a paper towel before measuring it. Otherwise, the measurement result will be affected.
5. Please refer to the powder usage instructions for calibration solution ratio.

## G. Accessories

| | |
|---|---|
| PH Meter | 1PCS |
| PH4.00 Powder | 1PCS |
| PH6.86 Powder | 1PCS |
| PH9.18 Powder | 1PCS |
| Instruction Manual | 1PCS |
| Button Battery LR44 1.5V | 3PCS |
| Cache solution | 1PCS |

Specific Declarations:
Our company shall hold no any responisibility resulting from using output from this product as an direct or indirect evidence.
We reserves the right to modify product design and specification without notice.

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