

USER MANUAL



4-in-1 Hydroponic Monitor

Please read the instruction manual carefully before use

Our Mission

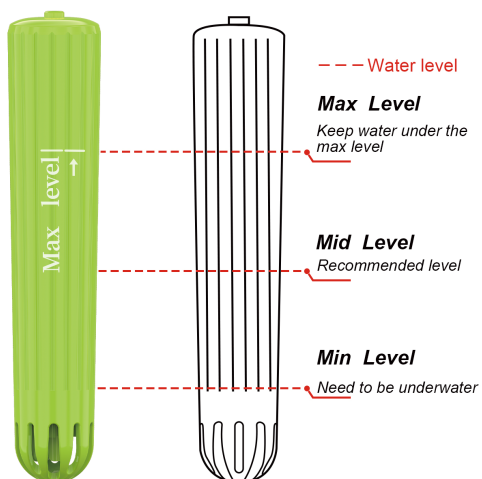
To make water quality management smarter, more reliable, and simpler for families around the world.

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Product Information

Probe



Display



✓ LCD OFF:

Press and hold this button for 3 seconds to turn off the screen light. Short pressing any of the three buttons will reopen the display.

***Note: Turning off the screen will not affect data collection or analysis.**

🔄 Configure the WiFi:

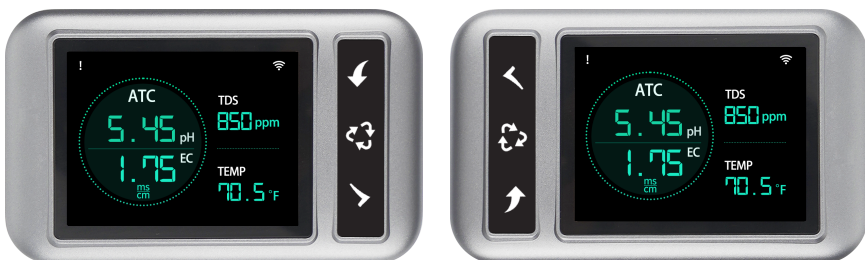
Press and hold the button for 3 seconds and then release it, the display will beep 3 times to indicate that it is being connected to the network.

***Note: If you want to disconnect from Wi-Fi, press and hold the middle button for 3 seconds after connecting, then release it to disconnect.**

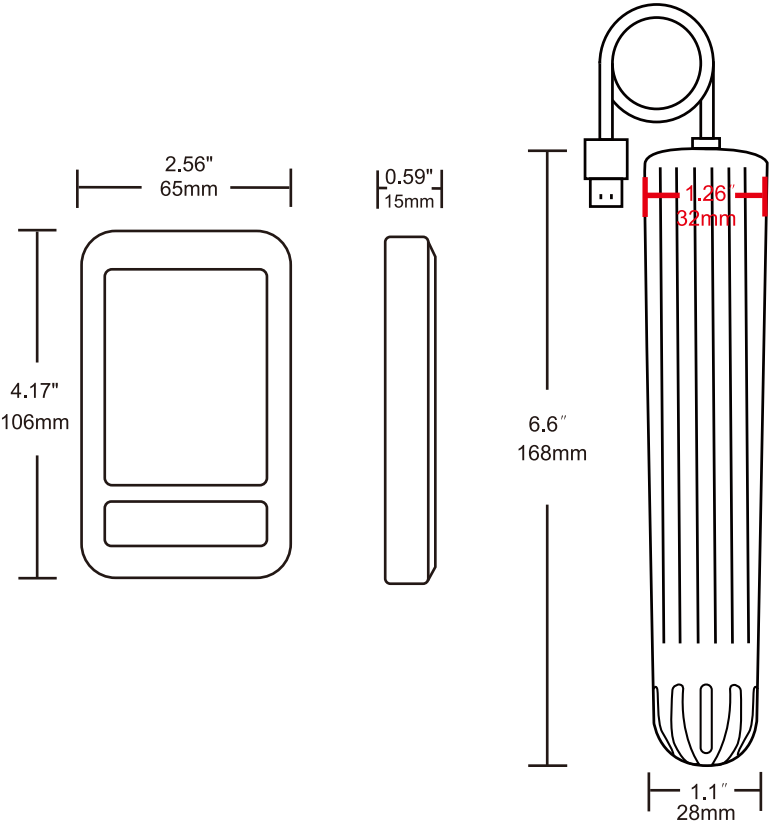
↶ Switch Screen Orientation:

Press and hold the button for 3 seconds, then release it. The screen orientation will change, as shown below.

***Note: The display is not waterproof. Please handle it with care to avoid water damage.**



Product Size



Product Setup

Display

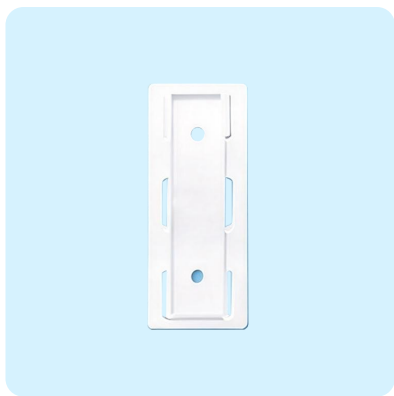
Option One:



1.Remove the sticky adhesive backing film.



2.Glue the bracket to a smooth area.



3.Attach the other part of the bracket to the back or side of the display.

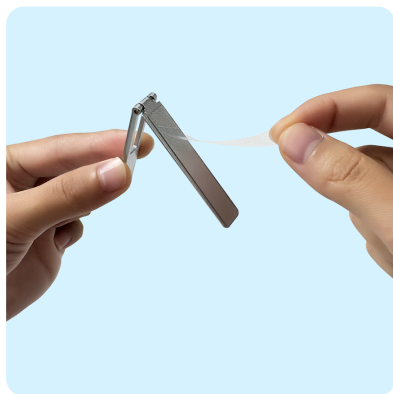


4.Secure the display by running it down the track to the bottom.

Option Two:



1. Unfold the stand.
(Note: Peel off the protective film on the corner magnet to make storage easier later.)



2. Remove the protective film from the adhesive side of the stand.



3. Attach the display to the adhesive side of the stand.



4. You can adjust the angle of the stand as needed.

Measuring Range

Parameter	Range	Resolution	Accuracy
pH	0-14	0.01	±0.05
Temperature	0-60°C 32-140°F	0.1 0.5	±0.1 ±0.1
Total Dissolved Solids	0-999ppm 1-20ppt	1ppm 1ppt	±5%F.S
Electrical Conductivity	0-999us/cm 1-400ms/cm	1us/cm 1ms/cm	±5%F.S

Connection Between Display & Probe

The display and probe are successfully connected before leaving the factory, so they will automatically pair upon first use. If "!" continuously appears on the screen, it indicates a disconnection between the probe and the display.

***Please note that it is normal for "!" to appear for a short period of time during daily use.**

The reasons for showing "!" are as follows:

- 1.The distance between the display and the probe is too far. Please shorten the distance appropriately.
- 2.Restore the product to factory settings will clear the connection between them, and they will need to be reconnected.
- 3.The probe is not powered up.

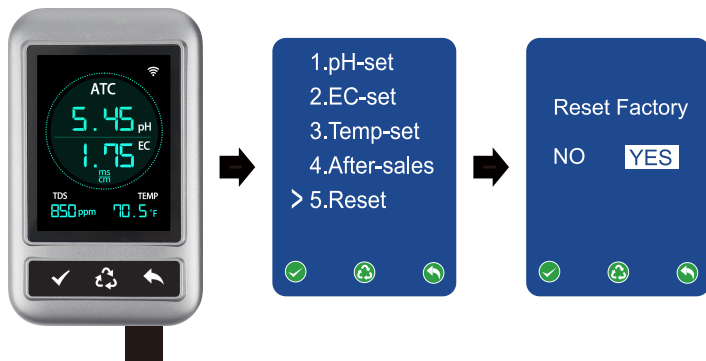
Reconnect Display and Probe When '!' Appears

- 1.Reset the monitor to factory settings (please keep the display and probe power on during the restoration process).
- 2.Power off the probe, then power it on again to complete the connection.

Note : After restoring the device to factory settings, both pH and EC must be recalibrated before use to ensure accurate readings.

Basic Operation

Factory Reset



1. Press the middle button to enter the settings interface.
2. Press the middle button to choose the fifth option, "Reset," and press the left button to confirm.

Note: You can restore it to its factory settings if you need to replace the probe or if the data display is abnormal. In this case, the data will be deleted and you'll need to reconnect the display and the probe.

This operation should therefore be performed with caution.

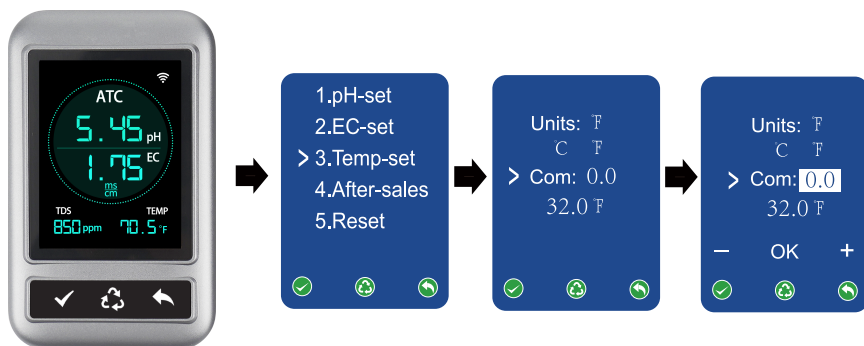
Temperature Unit Switching



1. Press the middle setting button to enter the settings interface.
2. Press the middle button to access the third option "Temp-set", and press the left button to confirm your choice.
3. Press the left button to select Fahrenheit or Celsius.

Calibration and Adjustment

Temperature Adjustment

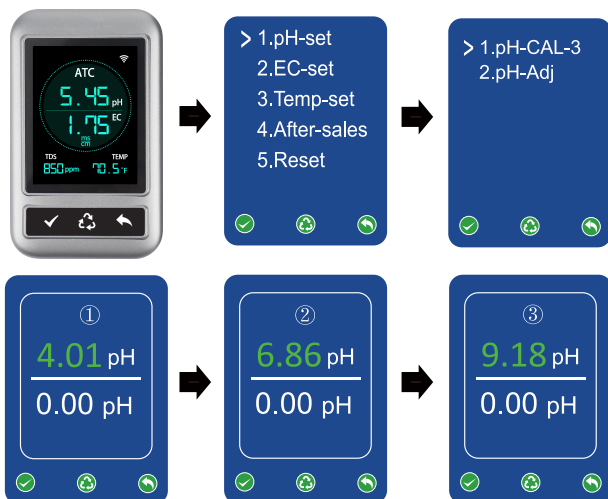


1. Press the middle setting button to enter the settings interface.
2. Press the middle button to access the third option "Temp-set", and press the left button to confirm your choice.
3. Press the middle button to select "Com" and press the left button to confirm.
4. Directly press the left or right button "-/ +" to adjust it, and then press the middle button to save it.

pH Calibration

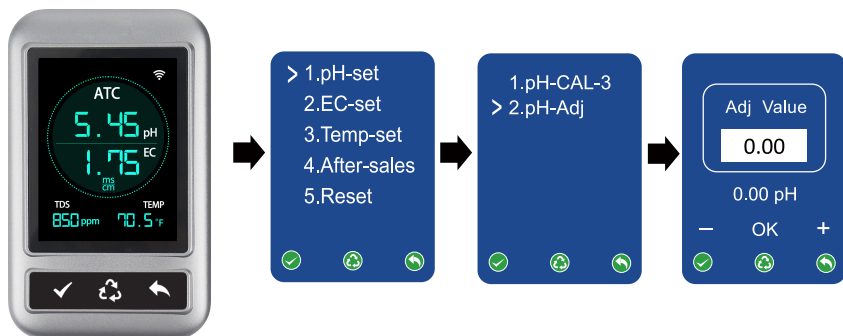
1. Prepare three 250 ml glasses of purified water with no minerals or distilled water. Do not use tap water.
2. Completely dissolve the pH 4.01, 6.86, and 9.18 calibration powders in the three glasses of prepared water.
3. Remove the protective cover from the probe.

Three-point pH Calibration (4.01-6.86-9.18)



4. Press the middle setting button to enter the settings interface.
5. Press the left button to select the first option, "pH-set."
6. Press the left button again to choose "pH-CAL-3." The device will enter the pH 4.01 calibration interface.
7. Put the probe into the pH 4.01 calibration solution, gently shake it to ensure full contact with the solution. Wait for the reading to stabilize, then press the left button to confirm. The screen will automatically switch to the pH 6.86 calibration page.
【To ensure optimal accuracy, allow the probe to remain in the pH 4.01 calibration solution for 5 seconds before proceeding to the next step.】
8. Clean the probe in neutral water or purified water and gently wipe off any remaining liquid.
9. Put the probe into pH 6.86 calibration solution, shake it up and down and wait for the reading to stabilize. Wait for the reading to stabilize, then press the left button to confirm. The screen will automatically switch to the pH 9.18 calibration page.
【To ensure optimal accuracy, allow the probe to remain in the pH 6.86 calibration solution for 5 seconds before proceeding to the next step.】
10. Clean the probe again as before and wipe off any remaining liquid.
11. Put the probe into pH 9.18 calibration solution, shake it up and down and wait for the reading to stabilize, then press the left button to confirm. Wait for the reading to stabilize, then press the left button to confirm.
【To ensure optimal accuracy, allow the probe to remain in the pH 9.18 calibration solution for 5 seconds before proceeding to the next step.】
12. Clean the probe as before.
13. pH calibration completed.

pH Adjustment



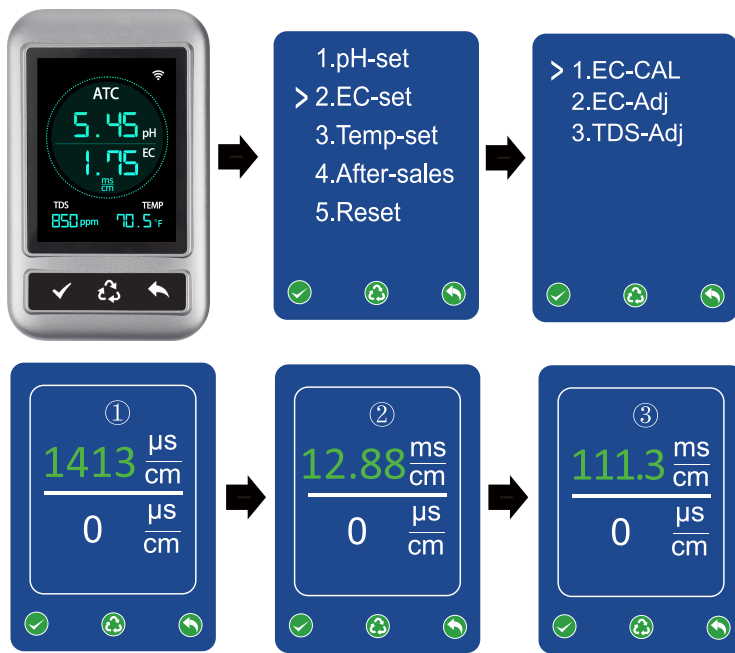
Feel free to adjust the measurement directly on the monitor if it shows a difference from other pH testing products.

1. Press the middle setting button to enter the settings interface.
2. Press the left button to select the first option, "pH-set."
3. Press the middle button to choose "pH-Adj", then click the left button to confirm.
4. The screen will enter the pH adjustment interface, with the compensation value set to 0 by default.
5. Press the left or right buttons ("-" / "+") to adjust the value as needed, then press the middle button (OK) to save your setting.

【To ensure optimal accuracy, allow the probe to remain in the water for 5 seconds.】

EC Calibration

Note: To ensure the accuracy of the EC reading, keep the probe suspended and avoid contact with the container.



1. Press the middle setting button to enter the settings interface.
2. Press the middle button to access the second option "EC-set", and press the left button to confirm your choice.
3. Press the left button again to enter the "EC-CAL." The device will enter the 1413 μ S/cm calibration interface.
4. Suspend the probe into the 1413 μ S/cm calibration solution, gently shake it to ensure full contact with the solution. Wait for the reading to stabilize, then press the left button to confirm. The screen will automatically switch to the 12.88mS/cm calibration page.

【To ensure optimal accuracy, allow the probe to remain in the 1413 μ S/cm calibration solution for 5 seconds before proceeding to the next step.】

5. Clean the probe in neutral water or purified water and gently

wipe off any remaining liquid.

6. Suspend the probe into the 12.88mS/cm calibration solution, gently shake it to ensure full contact with the solution. Wait for the reading to stabilize, then press the left button to confirm. The screen will automatically switch to the 111.3mS/cm calibration page.

【To ensure optimal accuracy, allow the probe to remain in the 12.88mS/cm calibration solution for 5 seconds before proceeding to the next step.】

7. Clean the probe again as before and wipe off any remaining liquid.

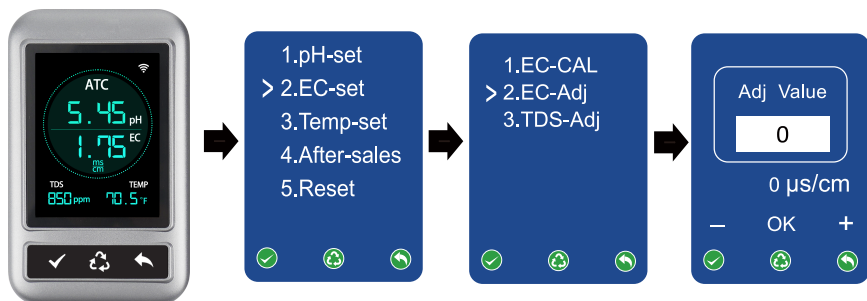
8. Suspend the probe into 111.3mS/cm calibration solution, shake it up and down and wait for the reading to stabilize, then press the left button to confirm. Wait for the reading to stabilize, then press the left button to confirm.

【To ensure optimal accuracy, allow the probe to remain in the 111.3mS/cm calibration solution for 5 seconds before proceeding to the next step.】

9. Clean the probe as before.

10. EC calibration completed.

EC Adjustment

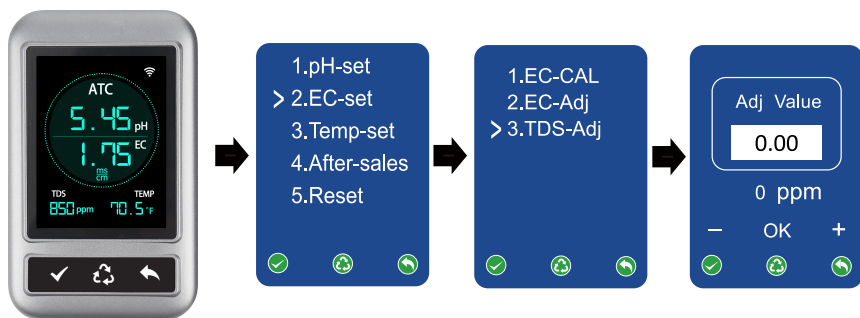


1. Press the middle setting button to enter the settings interface.
 2. Press the middle button to access the second option "EC-set", and press the left button to confirm your choice.
 3. Press the middle button to choose the "EC-Adj", and press the left button to confirm.
 4. The screen will enter the EC adjustment interface, with the compensation value set to 0 by default.
 5. Press the left or right buttons ("- / "+") to adjust the value as needed, then press the middle button (OK) to save your setting.
- 【To ensure optimal accuracy, allow the probe to remain in the water for 5 seconds.】**

TDS Calibration

TDS calibration is not performed separately. When you calibrate EC, TDS will be calibrated simultaneously.

TDS Adjustment



1. Press the middle setting button to enter the settings interface.
2. Press the middle button to access the second option "EC-set", and press the left button to confirm your choice.

3. Press the middle button to choose the "TDS-Adj", and press the left button to confirm.
4. The screen will enter the TDS adjustment interface, with the compensation value set to 0 by default.
5. Press the left or right buttons ("-" / "+") to adjust the value as needed, then press the middle button (OK) to save your setting.
【To ensure optimal accuracy, allow the probe to remain in the water for 5 seconds.】

Frequently Asked Questions

1. Why are there some white marks on the probe when I received the product? Has this product been used?

Not at all.

1. The white marks are from the protective solution (KCl) that we applied to the sealed protective cover to help preserve the probe.
2. The protective solution is saturated, volatile, and easy to crystallize. Once the solution has overflowed and volatilized, it appears as white crystals. Simply rinse the probe gently with clean water to remove the crystals and ensure proper functionality.

2. Is it necessary to calibrate the pH when I receive it?

It is ready for use upon receipt. If the measurements show any discrepancies, please use the device after calibration or manual adjustment of the values.

3. How deep do I need to place the probe underwater?

During regular use, please do not submerge the upper part of

the probe in water.

Although the probe is completely waterproof, submerging it too deeply may cause excessive water pressure, which can shorten the lifespan of the pH probe.

4. How should I proceed if the measurements do not change with different pH buffer solutions when calibrating?

Please click "Reset" to restore factory settings and re-calibrate.

5. What does it mean if it shows "!" on the monitor?

It means that the display and probe have been disconnected. In this case, the display cannot receive data from the probe due to the distance. Please shorten the distance between the display and the probe.

6. What should I do if the measurements are abnormal?

First, check the following conditions:

1. Have you removed the sealed protective cap from the probe?
2. Whether the connecting wire is tightened.
3. Restore factory settings.
4. Recalibration with calibration solutions.

7. What is the relationship between the two units of TDS, ppt and ppm?

To simplify value checks, the unit switches from PPM to PPT when the TDS exceeds 1000. (1 PPT = 1000 PPM)

8. When does the probe need to be replaced?

1. Incorrect use, such as immersing the upper part of the probe results in inaccurate measurement.
2. Water is too dirty, causing probe blockages and damage.
3. Incorrect storage, let the probe be exposed to the air for a long time without water and the protection cap.

9. How should I store the device when it's not in use?

To ensure measurement accuracy during storage, always keep the probe moist. Thoroughly moisten the sponge inside the sealed probe cap with purified water, then securely place the cap onto the probe to prevent it from drying out. Avoid exposing the probe to air for extended periods.

Please always store the device at standard room temperature (15°C–30°C / 59°F–86°F). Especially during winter, keep the probe indoors in a heated environment to prevent freezing and potential damage. Avoid exposing the device to extreme conditions to ensure optimal performance and prolong its lifespan.

Note: Even highly precise instruments may have minor errors. If results are near the limit or outside the expected range, please retest using other equipment, recalibrate, or contact us if needed.

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