Kactoily 7-in-1 Aquarium WiFi Monitor
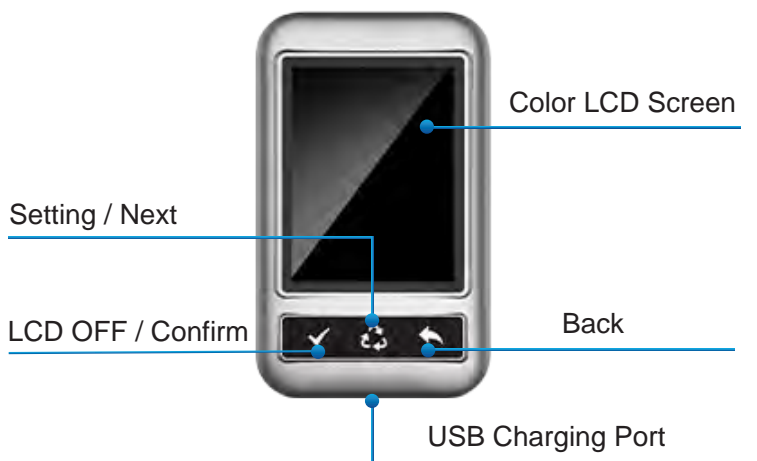
Catalog

Product Information

Color LCD Screen

Setting / Next

LCD OFF / Confirm

Back

USB Charging Port

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
Salinity	0.01%-25%	0.01%-5%(±0.1%) 5.1%-25%(±0.1%)	±2%F.S
Specific Gravity	1-1.222	/	/
ORP	0-±999mv	1mv	/

<2>

Product Installation

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
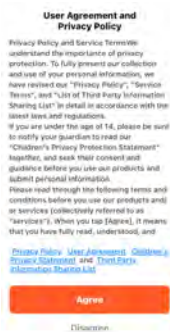
<3>

WiFi Connection
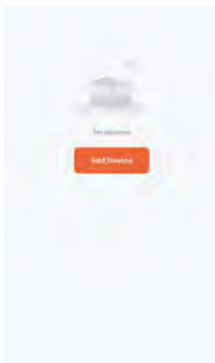

Tuya Smart

1. Download the APP.

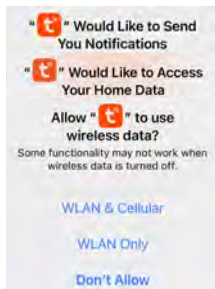2. Allow all the required access.

3. Agree with the terms.

4. Log in or Register.

5. Click 'Add Device'.

6. Click 'Continue'.

<4>

" ⬛ " Would Like to Send
You Notifications

" ⬛ " Would Like to Access
Your Home Data

Allow " ⬛ " to use
wireless data?

Some functionality may not work when
wireless data is turned off.

WLAN & Cellular

WLAN Only

Don't Allow

7. Allow all the required
access.

8. Please power up the display.

9. Long press the middle
button for 3 seconds and
release it.

Add Device

1 device(s) being added

Water Monitor
Being added

10. Click 'Water Monitor'.

Enter Wi-Fi Information

📶 2.4G WiFi

🔒

Next

11. Connect it to your
2.4GHz WiFi, and click
'Next'.

Water Monitor

°C

pH
7.94

Temperature
16.1°C

EC(us/cm)
435us/cm

TDS(ppm)
217ppm

Salinity(%)
0.02

SG
1.000

ORP(mV)
246mV

CL(mg/L)
0.0

Flow(L/min)
0.0L/min

Battery(%)
0%

Help   History

📷 Screen light

After-sales service
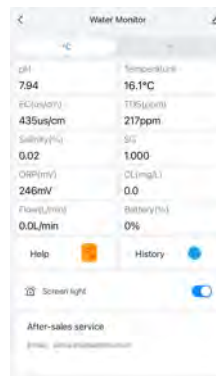
12. Connection completed!

Connection between Display & Probe

The display and probe are pre-connected at the factory and ready for use after calibration. If '!' continuously appears on the screen, it indicates a disconnection between the probe and the display.

*Please note that it's normal for "!" to briefly appear during regular use.

The reasons for the '!' symbol appearing are as follows:

1. The distance between the display and the probe is too far. Please reduce the distance accordingly.
2. Restoring the product to factory settings clears the connection, so the display and probe will need to be reconnected.
3. The probe is not powered on.

To connect the display and probe, follow these steps:

1. Reset the monitor to factory settings, ensuring the power remains on during the reset process.
2. Turn off the probe, then power it back on to complete the connection.

Basic Operation

LCD OFF

Press and hold ✓ for 3 seconds to turn off the screen light. A short press on any of the three buttons will turn the display back on.

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

<6>

Configure WiFi

Press and hold 🔃 for 3 seconds, then release. The display will beep 3 times, indicating that it's connecting to the network.
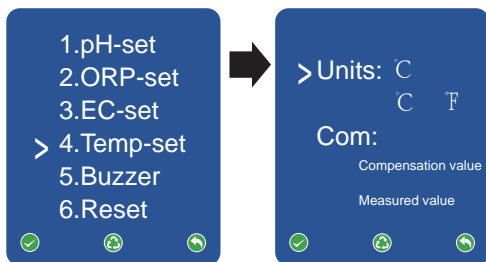
Remove the Monitor Connection from the APP

Press and hold ↩ for 3 seconds, then release. The monitor connection will be automatically deleted, allowing you to connect it to another mobile phone.

*This method will not delete historical data records.

Switching Temperature Units

1.pH-set
2.ORP-set
3.EC-set
> 4.Temp-set
5.Buzzer
6.Reset

> Units: ℃
℃ ℉
Com:
Compensation value
Measured value

1. Enter the settings menu by pressing the middle button.
2. Select 'Temp-set', by pressing the middle button again, and confirm your choice with the left button.
3. Use the left button to choose between Fahrenheit and Celsius.

<7>
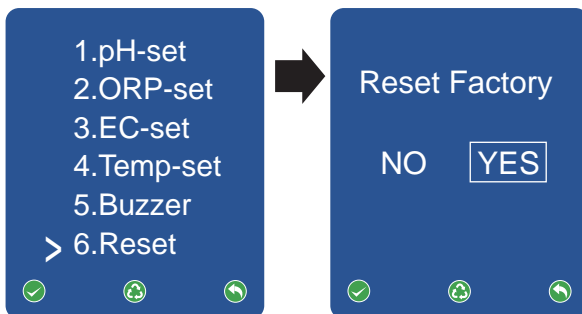
Factory Reset

1. Press the middle button to enter the settings menu.
2. Click the middle button to select 'Reset', and choose 'YES'.

Note: You can restore the device to its factory settings if you need to replace the probe or if the data display is abnormal. This will delete the data and require you to reconnect the display and the probe. Please perform this operation with caution.

Calibration and Adjustment

Before Calibration

1. Prepare three 250 ml glasses of purified water. Do not use mineral or tap water.
2. Completely dissolve the pH 4.0, 6.86, and 9.18 calibration powders in the three glasses of purified water.
3. Remove the protective cover from the probe.

<8>

3-point Calibration for pH
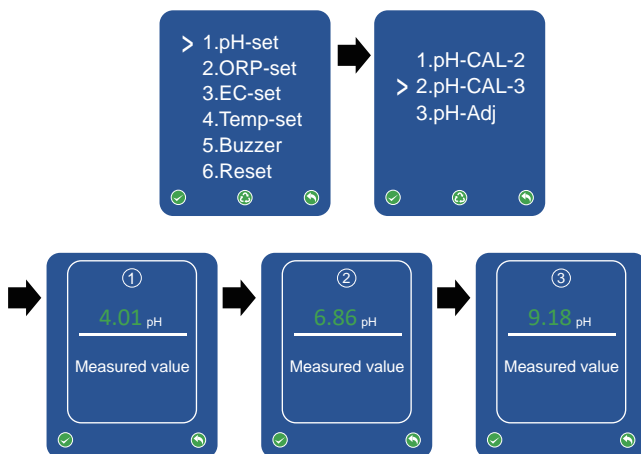
1. Press the middle button to enter the settings menu.
2. Press the left button to select the option, 'pH-set'.
3. Press the middle button to move to the option, 'pH-CAL-3'. Then press the left button to confirm, and the device will enter the pH 4.01 calibration screen.
4. Place the probe in the pH 4.01 calibration solution. The displayed value shows the current measurement.
5. Gently shake the probe to ensure full contact with the solution. Wait for the reading to stabilize, then press the left button to confirm.
6. After it switches to the pH 6.86 calibration screen, clean the probe in neutral or purified water, and wipe off any remaining liquid.
7. Place the probe in the pH 6.86 calibration solution. Shake it gently, wait for the reading to stabilize, then press the left button to confirm.
8. When the pH 9.18 calibration screen appears, clean the probe again, wiping off any remaining liquid.
9. Place the probe in the pH 9.18 calibration solution. Shake it gently, wait for the reading to stabilize, then press the left button to confirm.
10. Clean the probe thoroughly as before.

<9>
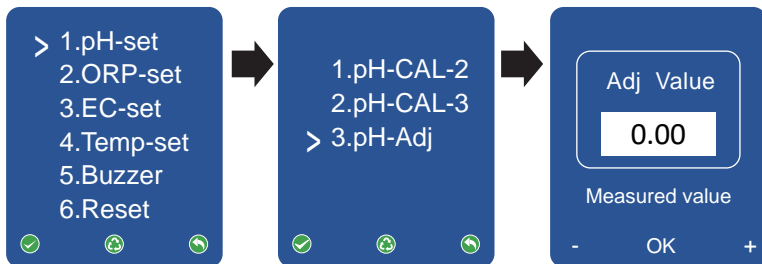
pH Adjustment

Feel free to adjust the measurement directly on the monitor if you need.

1. Press the middle button to enter the settings menu, then press the left button to select the option, 'pH-set'.
2. Press the middle button to navigate to 'pH-Adj', and then press the left button to confirm.
3. The monitor will enter the pH adjustment interface, with the default compensation value set to 0.
4. Use the left or right buttons to decrease or increase the value ('- / +'), then press the middle button to save your adjustment.

*The displayed value reflects the testing result.

EC Calibration

<10>
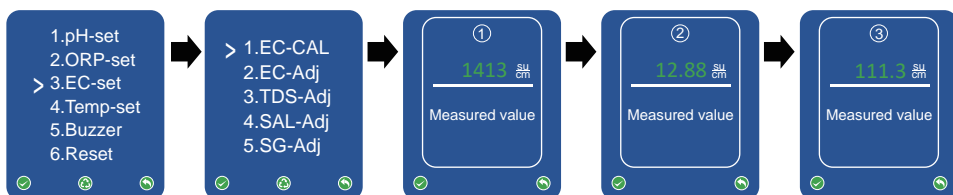
1. Press the middle button to enter the settings menu, then press it again to navigate to the option, 'EC-set.'
2. Press the middle button again to select 'EC-CAL', then press the left button to confirm. The device will enter the 1413 µS/cm calibration screen.
3. Place the probe in the 1413 µS/cm calibration solution. The displayed value reflects the current measurement.
4. Gently shake the probe to ensure full contact with the solution. Wait for the reading to stabilize, then press the left button to confirm.
5. Once it switches to the 12.88 mS/cm calibration screen, clean the probe with neutral or purified water, and wipe off any remaining liquid.
6. Place the probe in the 12.88 mS/cm calibration solution, shake it gently, and wait for the reading to stabilize. Press the left button to confirm.
7. When the 111.3 mS/cm calibration screen appears, clean the probe as before, and wipe off any remaining liquid.
8. Place the probe in the 111.3 mS/cm calibration solution, shake it gently, and wait for the reading to stabilize. Press the left button to confirm.
9. Clean the probe thoroughly as before.

EC Adjustment
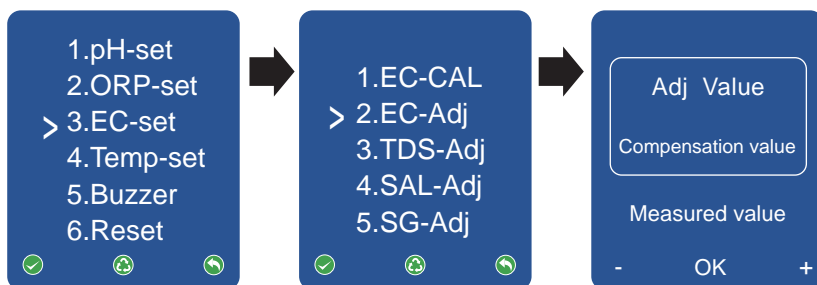
1. Press the middle button on the monitor to enter the settings menu.
2. Use the middle button to navigate to the option, 'EC-set', then press the left button to confirm.

<11>

3. Use the middle button to navigate to 'EC-Adj', then press the left button to confirm.
4. Use the left or right buttons to adjust the value ('- / +'), then press the middle button to save the setting.

TDS Calibration

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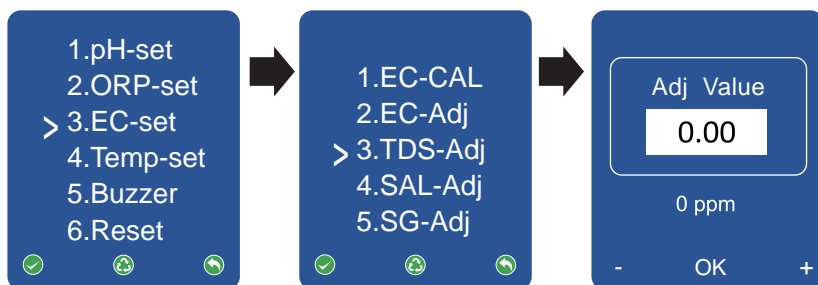
Salinity Calibration

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

SG Calibration

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

TDS Adjustment

1. Press the middle button on the monitor to enter the settings menu.

<12>

2. Use the middle button to navigate to the option 'EC-set', and press the left button to confirm.

3. Use the middle button to navigate to the option 'TDS-Adj', and press the left button to confirm.

4. Use the left or right buttons to adjust the value ('- / +'), then press the middle button to save the setting.

Temperature Adjustment
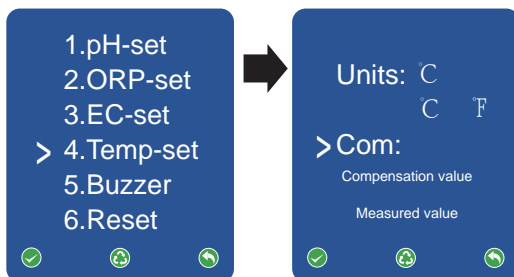
1. Enter the settings menu by pressing the middle button.

2. Access 'Temp-set', by pressing the middle button, and confirm your selection with the left button.

3. Press the middle button to select 'Com', then confirm with the left button.

4. Use the left or right button ('-/+') to adjust the setting, and press the middle button to save.

<13>

Frequently Asked Questions

Q: How deep do I need to place the probe underwater?
A: During regular use, please do not submerge the upper part of the probe in water.

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

Q: Do I need to calibrate the pH monitor when I first receive it?
A: 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.

Q: What should you do if the pH reading is too high after receiving the product?
A： This may be due to the pH solution not settling at the correct level during transit. Please shake the probe to allow the solution to fully contact the pH sensor.

Q: How should I calibrate the salinity?
A： Salinity can be calibrated either by calibrating the EC or by directly calibrating the salinity. For EC calibration, please refer to the manual. For direct salinity calibration, consult the instructional video on the APP's help page.

Q: Does the monitor emit any current into the water during data collection and processing?
A: No, the monitor does not emit any current into the water during data collection, processing, or transmission. It uses high-frequency forward and reverse pulses that do not send an electric current into the water, so it will not affect the fish.

<14>

Q: What does it mean if the monitor displays a "!" symbol?
A: The "!" symbol indicates that the display and the probe have been disconnected. This usually means the display cannot receive data from the probe, likely due to too much distance between them. To fix this, shorten the distance between the display and the probe.

Q: Why does the pH value keep fluctuating and show a low reading?
A: Please check if the pH probe is cracked. The likelihood of probe damage increases significantly when the temperature is below 20°C / 68°F. In winter, avoid placing the probe outdoors or in environments with low temperatures.

After-sales Service

This product comes with a 12-Month warranty. During this period, if the product is damaged due to manufacturing defects, it will be repaired or replaced free of charge.

The warranty does not cover the following circumstances:

1. Damage caused by natural disasters or other unavoidable events.
2. Damage resulting from improper handling, use, maintenance, or storage, including consumer disassembly or repairs.
3. Corrosion of the circuit board or power supply connector caused by exposure to water.

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

<15>

Product Information

Water level

Max Level
Keep water under the max level

Mid Level
Recommended level

Min Level
Need to be underwater

Max Level

Product Installation

<16>

Make sure to replace the sealed probe protective cover with the perforated one before use.
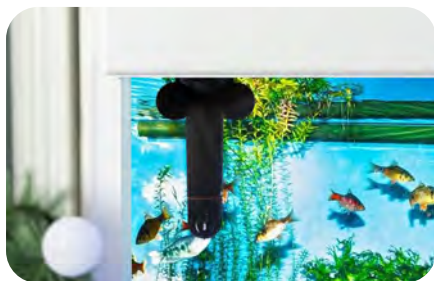
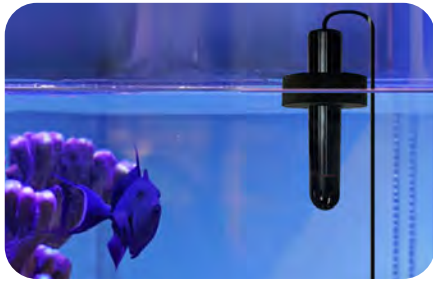Installation method 1   Installation method 2   Installation method 3

Applicable Scenarios

<17>

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in

<18>

accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To maintain compliance with FCC'S RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm between the radiator and your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

Certifed Device Probe FCCID:2BNZX-KY07-01US

<19>