

USER MANUAL



6-in-1 Digital Water Quality Tester

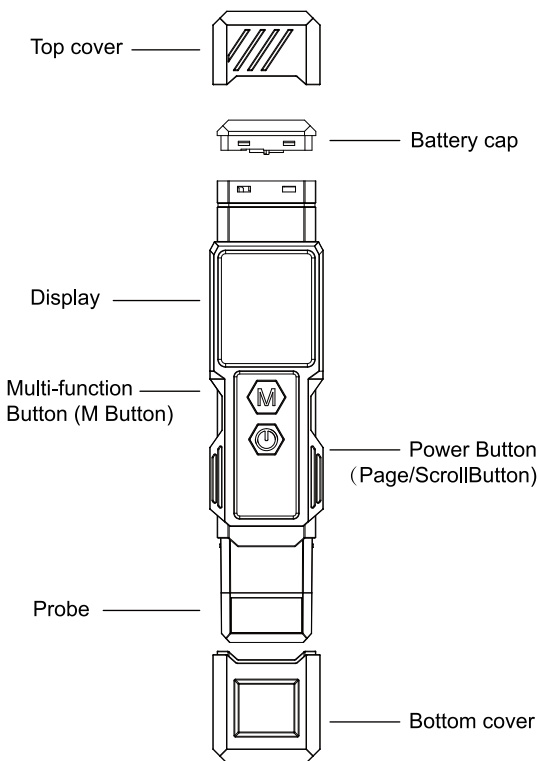
Please read the instruction manual carefully before use

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Product Overview

Device Overview



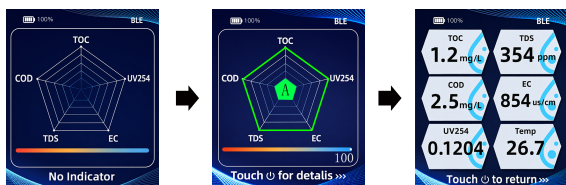
Button Functions:

1. **Measurement** — Short press to start measuring.
2. **Calibration** — Press and hold for 5 seconds to enter calibration mode.
3. **Auto-Measurement Mode** — Press and hold the  button and the  button simultaneously for 4 seconds to enter auto-measurement mode.

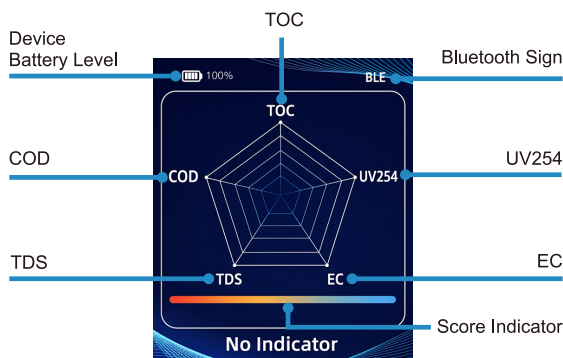
Button Functions:

1. **Power On/Off** — Press and hold to turn the device on or off.

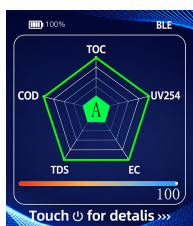
2. Scroll Pages — Short press to switch between pages (as shown in the figure below).



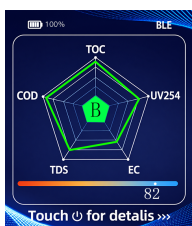
Display



Four Measuring Results: A B C D



A(Excellent):90-100



B(Good): 80-90



C(Average): 60-80



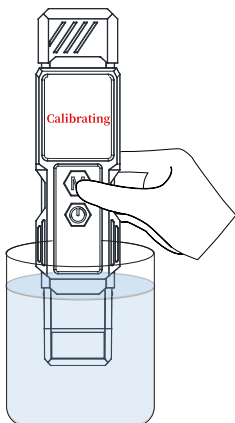
D(Poor): < 60

Specifications

Dimensions	175mmX38mmX21mm
Net Weight	80g (excluding batteries)
Measurement Target	Tap Water, Purified Water, Bottled Water, Groundwater, Surface Water, Pool Water, Well Water, (Non-Industrial/Domestic Water Only)
Power Supply	DC 3V (2AAA batteries in series, or 2 in parallel and 2 in series)
Standby Current	<5uA
Operating Conditions	Indoors or outdoors in non-corrosive environments; temperature: 10-40°C; no condensation
Storage condition	-10°C~70°C, keep dry and free from frost
TOC (Total Organic Carbon)	Measurement Range: 0~20mg/L; Display Resolution: 0.1mg/L; Repeatability: <±0.2mg/L; Accuracy: 10%F.S
COD (Chemical Oxygen Demand)	Measurement Range: 0~20mg/L; Display Resolution: 0.1mg/L; Repeatability: <±0.2mg/L; Accuracy: 10%F.S
UV254 (Ultraviolet Absorbance)	Measurement Range: 0-0.2au/cm; Display Resolution: 0.0001au/cm, Repeatability: <±0.001au/cm, Accuracy: 10%F.S
TDS (Total Dissolved Solids)	Measurement Range: 0-2000ppm; Display Resolution: 1ppm; Repeatability: <±10ppm; Accuracy: 5%F.S
EC (Electrical Conductivity)	Measurement Range: 0~4000us/cm; Display Resolution: 1us/cm; Repeatability: <±20 uS/cm; Accuracy: 5%F.S
TEMP (Temperature)	Measurement Range: 0-80°C; Display Resolution: 0.1°C; Repeatability: <±0.2°C; Accuracy: ±0.5°C
Zero drift	< (3 × display resolution) / 24h

Calibration

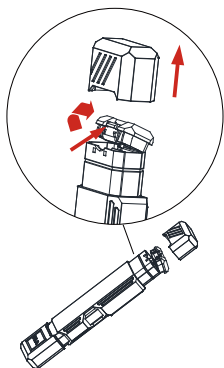
Perform calibration before first use.



1. Prepare a cup of purified water (with no minerals) or distilled water.
2. Remove the bottom cover and fully immerse the probe (transparent sensing body) in the water.
3. While the device is on, press and hold the  Button for 5 seconds to enter calibration mode.
4. The device will beep when calibration is complete.

Basic Operation

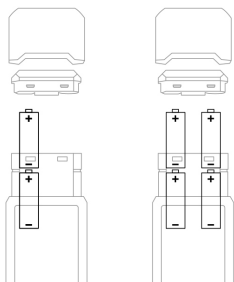
Battery Installation & Replacement



1. Remove the Top Cover.
2. Press the latch (as shown) to release and remove the battery cap.
3. Insert the AAA batteries, ensuring the positive (+) terminal faces outward. (The device supports either 2 or 4 batteries.)

Attention

Correct Battery Installation



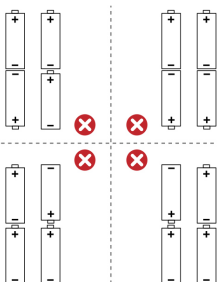
2 AAA batteries:
one side, (+)
ends up.



4 AAA batteries for
longer use: 2 per
side, (+) ends up.

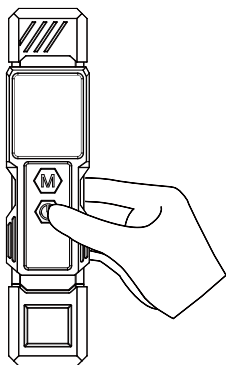


Incorrect Battery Installation



 Incorrect battery installation may prevent the device from powering on, and leakage can damage internal components, causing the device to stop functioning.

Powering the Device



Power ON:

When the device is off, press and hold the Power Button to turn it on.

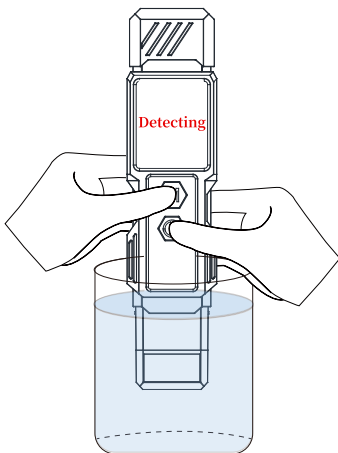
A startup beep will sound to indicate the device is powered on.

Power OFF:

When the device is on, press and hold the Power Button to turn it off.

If there is no operation for 60 seconds, the device will turn off automatically.

Automatic Measurement Mode



Entering Automatic Measurement Mode: Press and hold both the  button and the  button simultaneously for 4 seconds after powering on. The device will beep three times, indicating that it has successfully entered Automatic Measurement Mode.

Automatic Measurement: The device will automatically perform a measurement every 5 seconds, and the display updates in real time with no manual operation required.

Exiting Automatic Measurement Mode: Press and hold both the  button and the  button simultaneously for 4 seconds to exit the mode.

Water Quality Score Method

TOC	COD	TDS	Water Quality	Indicator Color	Score
0-1	0-1	< 100	A(Excellent)	BLUE	90-100
1-1.5	1-1.5	100-300	B(Good)	GREEN	80-90
1.5-5	1.5-3	300-1000	C(Fair)	YELLOW	60-80
>5	>3	> 1000	D(Poor)	RED	< 60

Standard Reference Values for Water Quality Parameters

	TOC	COD	TDS	EC	UV254
RO Water	< 1 mg/L	< 1 mg/L	< 50 mg/L (ppm)	< 100 uS/cm	< 0.015
Tap water	< 5 mg/L	< 3 mg/L	< 1000 mg/L (ppm)	< 2000 uS/cm	< 0.055

Reference source: GB5749-2022 & internal test calibration guidelines.

Precautions

1. Do not immerse the device beyond the lower edge of the power button to prevent water damage.
2. Insert the probe at a slight angle and move it gently to avoid air bubbles.
3. Be sure to use purified water with no minerals or distilled water for calibration. Using other water(e.g, tap or mineral water) will result in calibration failure or incorrect readings.
4. Calibrate before first use to ensure accurate readings.
5. Before calibration, clean the probe to remove any water or debris. This prevents contamination of the calibration solution, which could lead to calibration failure.
6. For consecutive measurements, keep an interval of at least 10 seconds between tests to prevent slight continuous drift in the readings.
7. Due to thermal response delay, allow the probe to stabilize in the water for about 10 seconds before measuring to ensure accurate readings.
8. Avoid vibrations, bumps, or drops. Recalibrate the device if any occur.
9. If the probe is contaminated, rinse it with purified water before reuse.
10. For long-term storage, remove the batteries and store the device in a cool, dry place.
11. Optimal operating range: 50–104°F/10–40°C. Do not use the device outside this range. Measurements beyond this range may require recalibration, and extreme temperatures can permanently damage it.
12. Do not use alcohol or other organic solvents to clean the probe, as they may cause permanent damage.

13. Do not use the tester to test corrosive liquids, such as soda, tea, or wastewater. It is intended for testing domestic and natural water only.

14. Do not press the  button while the probe is not immersed in water, as this may cause the device to detect air readings, leading to inaccurate measurements.

Even the most precise instruments may have slight deviations. If the measurement results are close to the limit value or beyond the expected range, please use other equipment to retest and ensure data accuracy.