

WATER QUALITY METER

USER MANUAL



SCAN THE QR CODE
to download the
USER MANUAL
in different languages
and **SOFTWARE**

TUTORIAL VIDEO ON HOW TO USE

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INTRODUCTION

The water quality tester is primarily used to assess the quality of drinking water, including tap water, purified water, and groundwater. It can also be used to detect salinity in seawater and aquaculture applications. The instrument uses the UV absorbance method to measure COD, TOC, and UV275 water quality parameters in drinking water. Additionally, it measures TDS, conductivity, salinity, hardness, and specific gravity by detecting the electrical conductivity between electrodes. When testing drinking water, the instrument features an intelligent scoring function that indicates water quality on a four-level scale (Excellent, Good, Average, and Poor) through the LCD backlight color. The instrument also includes temperature compensation, ensuring excellent repeatability and measurement accuracy.

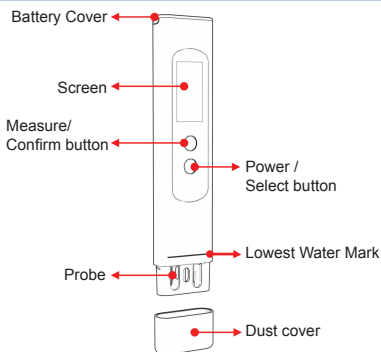
Product Standards:

- GB5749-2020 Standards for Drinking Water Quality
- GB/T5750-2023 Standard Examination Methods for Drinking Water
- JJG 821-2005 Verification Regulation of Total Organic Carbon Analyzer
- JJG 376-2007 Verification Regulation of Electrolytic Conductivity Meters
- JJG 761-2016 Electrode-type Salinity Meter Verification Procedure

FEATURES

1. 9-in-1 Water Quality Tool:
 - COD (Chemical Oxygen Demand),
 - TOC (Total Organic Carbon),
 - UV275 (Ultraviolet Absorption Value),
 - TDS (Total Dissolved Solids),
 - EC(Electrical conductivity),
 - SAL (Salinity),
 - GH (Hardness),
 - S.G. (Specific Gravity),
 - Temperature
2. Instrument with Color Display and Backlight for Water Quality Assessment and Scoring.
3. Instrument with Ambient Temperature Compensation for consistent and accurate measurements.
4. Its small, portable, pen-like design makes it simple to use and carry.

PARTS



OPERATION

POWER ON/OFF

Power on:

Short press (⏻) button to display the version and serial number of the instrument, then the instrument will enter the measurement interface.

Power off:

Long press (⏻) button to shut down the tester or it will automatically shut down after 3 minutes of inactivity.

CALIBRATION

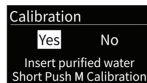
The instrument needs to be calibrated when used for the first time or after a long period of inactivity.

NOTE: Calibrate the instrument with Purified Water only (labeled as "Purified Drinking Water"), not with mineral or natural drinking water.

1. Prepare a cup of Purified Water capable of immersing the instrument up to its lowest water mark.
2. Long press (⏻) button to enter the calibration interface in measuring mode.
3. On the calibration interface, short press (⏻) button to select the [Yes/No] option.
4. Short press (⏻) button to confirm the selection.
5. Insert the probe into Purified Water to its lowest water mark and short press (⏻) button to start calibration.
6. After the calibration is completed, "Calibration successful!" will be displayed, and it will return to the measurement page.

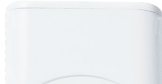
If calibration fails, possible reasons include:

- Not placing the instrument in pure water
- Contaminated probe (please rinse with clean water before calibrating)
- Light source attenuation (please return to the factory for inspection and maintenance)

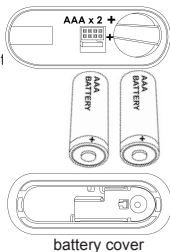


BATTERY INSTALLATION

Battery compartment



Battery compartment



1. Open the battery compartment cover.
2. Insert two AAA 1.5V batteries, ensuring correct polarity. Close the cover securely.

MEASUREMENT

- Short press (⏻) button to measure after inserting the instrument's probe into the water sample to its lowest water mark.
- The water quality will be graded based on the test results, and the display will show different backlight colors: red for poor, yellow for average, green for good, and blue for excellent.

Scoring judgement:

TOC(mg/L)	0-1.25	1.25-2.5	2.5-5.0	5.0-12.5
COD(mg/L)	0-0.75	0.75-1.5	1.5-3	3-7.5
TDS(ppm)	0-250	250-500	500-1000	1000-2000
Score	90-100	80-90	60-80	<60
Judgment	Excellent	Good	Average	Poor
Backlight color	Blue	Green	Yellow	Red

INTERFACE

Measure drinking water

COD	TOC	TDS
0.0	0.0	4
100 (Excellent)		

100 (Excellent)
90-100: Excellent
82(Good)
80-90: Good
76 (Average)
60-80: Average
58(Poor)
0-60: Poor

Measure saline water:

SAL	GH	S.G.
1.12	1465	1.0059
(Saline Water)		

(Saline Water)
0.3% < SAL ≤ 5.0%
(Hypersaline Water)
SAL > 5.0%

Measurement Interface

SAL	0.00	%
GH	0	ppm
S.G.	0.9963	
1/3		

COD	0.0	mg/L
TOC	0.0	mg/L
TDS	4	ppm
2/3		

UV275	0.0	au/cm
EC	7	us/cm
T	33.4	°C
3/3		

SETUP AND CALIBRATION

- Press and hold (⏻) button for 3 seconds in the off state to enter the Main Menu with four sub-options: Language, Tolerance, Reset, Exit.
- Briefly press (⏻) button to select an option, and short press (⏻) button to confirm the selection.

Language: English

Tolerance
Reset
Exit

LANGUAGE

- Short press (⏻) button to enter the language option.
- Press (⏻) button to choose the right language, then press (⏻) button to confirm your selection.

中文 English

TOLERANCE

- Short press (⏻) button to enter the tolerance interface and short press (⏻) or (⏻) button to adjust the TDS tolerance.
- Long press (⏻) button to save.

Tolerance
TDS 20
Short Push ⏻ Adjust ↑
Short Push M Adjust ↓

Tolerance
TDS 10
Long Push ⏻ Save
Long Push M Exit

RESET

- Short press (⏻) button to enter the reset interface.
- Short press (⏻) button to choose [Yes] or [No] option
- Short press (⏻) button to confirm your selection.

Exit: Briefly press (⏻) button to exit the setup interface and enter the measurement interface.

SPECIFICATIONS

Parameters	Range	Resolution	Accuracy
COD (Chemical Oxygen Demand)	0~100mg/L	0.01mg/L	0~5mg/L: ±0.5mg/L; 5~100mg/L: ±10% of the standard value
TOC (Total Organic Carbon)	0~100mg/L	0.01mg/L	0~5mg/L: ±0.5mg/L; 5~100mg/L: ±10% of the standard value
UV275 (Ultraviolet Absorption Value)	0~1.0au/cm	0.001au/cm	0~0.1au/cm: ±0.01au/cm; 0.1~1.0au/cm: ±10% of the standard value
TDS (Total Dissolved Solids)	0~2000ppm	1ppm	0~100ppm: ±5ppm; 100~2000ppm: ±5% of the standard value
EC (Electrical conductivity)	0~4000us/cm	1us/cm	0~200us/cm: ±10us/cm, 200~4000us/cm: ±5% of the standard value
SAL (Salinity)	0~26%	0.01%	0~5%: ± 0.25%; 5~15%: ± 5%H; 15~26%: ± 10% of the standard value
GH (Hardness)	0~1000ppm	1ppm	
S.G. (Specific Gravity)	0.9800~1.2000	0.0001	
Temperature	0~50°C	0.1°C	± 2°C

Measurement Object	Tap water, Purified water, Bottled water, Ground water, Surface water (non-sewage), Seawater, aquaculture, etc.
Display	240*135, 1.14 inch TFT color screen
Power Supply	2 AAA alkaline dry batteries
Size	157*37*14mm
Weight	68 grams
Working Temperature	0~50°C
Storage Temperature	0~60°C, 0~85% RH (no condensation)
Supply Voltage	DC3V
Operating Current	20mA
Operating Power Consumption	60mW

PRECAUTION

1. Do not use the device with corrosive liquids like beverages, tea, or sewage.
2. Clean the probe to prevent contamination of pure water during calibration.
3. Calibrate the instrument with purified water only (labeled as "Purified Drinking Water"), not with mineral or natural drinking water.
4. Clean the probe after measuring to avoid mixing different liquids, which may cause errors in test results.
5. Use the instrument within the temperature ranging from 0 to 50°C. If used beyond this range, calibrate before use as extreme temperatures can cause permanent damage.
6. Do not use alcohol or other organic solutions to clean the contact probe, as it may cause permanent damage.
7. Calibrate the instrument when used for the first time or after a period of inactivity.
8. Remove the battery when the instrument is not used for a long time.

PACKING LIST

- 1 x Water Quality Meter
- 2 x AAA alkaline battery
- 1 x User Manual

SERVICE

1. The gauge has a one-year warranty. If it works abnormally, please send it to our company for maintenance.
2. We provide spare parts and lifelong maintenance services.
3. We offer gauge calibration services and free long-term technical support.