

# 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**

Need more help? **CONTACT US.**

[www.cd50.net/408](http://www.cd50.net/408)

## INTRODUCTION

The Water Quality Meter is designed for use in applications such as tap water, purified water, and ground water. This instrument measures the COD, TOC, and UV275 parameters of drinking water using ultraviolet absorption spectrophotometry. It also measures the TDS and electrical conductivity of water through electrode conductance. The instrument features an intelligent scoring system and uses the LCD backlight color to display four levels of water quality: fine, good, average, and poor. It includes an accurate and repeatable temperature correction feature.

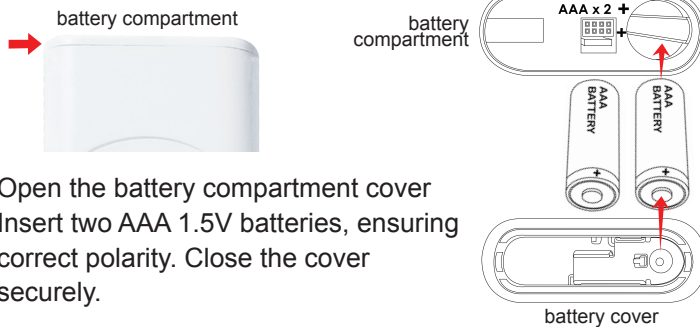
### Product Standards:

- GB5749-2006: Standards for Drinking Water Quality
- GB/T5750-2006: Standard Examination Methods for Drinking Water
- JJG821-2005: Verification Regulation of Total Organic Carbon Analyzer
- JJG376-2007: Verification Regulation of Electrolytic Conductivity Meters

## FEATURES

- 6-in-1 Water Quality Tool: COD, TOC, UV275, TDS, EC and Temperature
- Instrument with Color Display and Backlight for Water Quality Assessment and Scoring
- Instrument with Ambient Temperature Compensation for consistent and accurate measurements.
- Its small, portable, pen-like design makes it simple to use and carry.

## BATTERY INSTALLATION



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

## OPERATION

### POWER ON/OFF

#### Power on:

Short press  $\odot$  button to display the version and serial number of the instrument, then the instrument will enter the measurement interface.

#### Power off:

Long press  $\odot$  button to shut down the tester or it will automatically shut down after 3 minutes of inactivity.

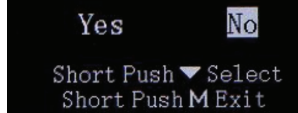
## CALIBRATION

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.

- Prepare a cup of Purified Water capable of immersing the instrument up to its lowest water mark
- Long press  $\odot$  button to enter the calibration interface in measuring mode.

### Calibration



- On the calibration interface, short press  $\odot$  button to select the [Yes/No] option,
- Short press  $\odot$  button to confirm the selection.
- Insert the probe into Purified Water to its lowest water mark and short press  $\odot$  button to start calibration.
- 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)




## MEASUREMENT

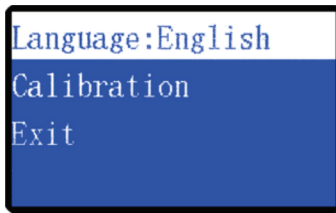
- Short press  $\odot$  button to measure after inserting the instrument's probe into the water sample to its lowest water mark.
- The water quality will be graded based on the test results, and the display will show different backlight colors: red for poor, yellow for general, green for good, and blue 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	Fine	Good	Average	Poor
Backlight color	Blue	Green	Yellow	Red

## SETUP AND CALIBRATION

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





### LANGUAGE

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



### CALIBRATION

Short press  button to enter the calibration interface and follow the same process as in calibration part.

**Exit:** Briefly press  button to exit the main interface and enter the measurement interface.

4

## SPECIFICATIONS

Parameters	Range	Resolution	Accuracy
COD (Chemical Oxygen Demand)	0~100mg/L	0.01mg/L	0~5mg/L: $\pm 0.5\text{mg/L}$ ; 5~100mg/L: $\pm 10\%$ of the standard value
TOC (Total Organic Carbon)	0~100mg/L	0.01mg/L	0~5mg/L: $\pm 0.5\text{mg/L}$ ; 5~100mg/L: $\pm 10\%$ of the standard value
UV275 (Ultraviolet Absorption Value)	0~1.0au/cm	0.001au/cm	0~0.1au/cm: $\pm 0.01\text{au/cm}$ ; 0.1~1.0au/cm: $\pm 10\%$ of the standard value
TDS (Total Dissolved Solids)	0~2000ppm	1ppm	0~100ppm: $\pm 5\text{ppm}$ ; 100~2000ppm: $\pm 5\%$ of the standard value
EC (Electrical conductivity)	0~4000 $\mu\text{s/cm}$	1 $\mu\text{s/cm}$	0~200 $\mu\text{s/cm}$ : $\pm 10\mu\text{s/cm}$ ; 200~4000 $\mu\text{s/cm}$ : $\pm 5\%$ of the standard value
Temperature	0~50°C	0.1°C	$\pm 1^\circ\text{C}$

Measurement Object	Tap water, Purified water, Bottled water, Ground water, Surface water (non-sewage), and other drinking water
Display	240*135 1.14 inch TFT color screen
Power Supply	2 AAA alkaline dry batteries
Size	157*37*14mm
Weight	68g
Working Temperature	0~50°C
Storage Temperature	0~60°C, 0~85%RH (no condensation)

5

## PRECAUTIONS

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.

6

## PACKING LIST

- 1 x Water Quality Meter
- 2 x AAA alkaline battery
- 1 x User Manual
- 1 x Certificate / Warranty card

## 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.

7