

Homcoice CL501

Homcoice 5-in-1 Water Quality Tester

Model: CL501

INTRODUCTION

The Homcoice 5-in-1 Water Quality Tester is a versatile and precise instrument designed to monitor key parameters of water quality. This device accurately measures pH, total residual chlorine (Cl₂), Oxidation-Reduction Potential (ORP), Hydrogen (H₂), and Temperature. It is an essential tool for maintaining optimal water conditions in various environments, ensuring health and safety.

Its robust design, high-resolution display, and user-friendly calibration make it suitable for both professional and home use across a wide range of applications, from swimming pools to drinking water and hydroponic systems.

PRODUCT FEATURES

- **High-Precision Detection:** Accurately measures pH (0-14.00 pH, ± 0.01 pH accuracy), total residual chlorine (0-4.00 ppm, ± 0.01 ppm accuracy), ORP (± 2 mV accuracy), hydrogen (± 10 ppb accuracy), and temperature (0-60 °C, ± 0.1 °C accuracy).
- **Health and Safety Focus:** Helps maintain optimal chlorine levels (typically 1-3 ppm for free chlorine in pools) to prevent bacterial growth and irritation, ensuring a safe swimming environment.
- **High Quality Construction:** Made with high-quality IP67 waterproof ABS material, featuring a high-resolution backlit LCD, dual data display, and replaceable probe and battery for durability and long-term use.
- **Effortless Automatic Calibration:** Factory calibrated, with an easy-to-use 3-point automatic recognition calibration method (pH 4.00, 6.86, and 9.18) to ensure consistent measurement accuracy.
- **Wide Range of Applications:** Ideal for monitoring water quality in swimming pools, RO/DI systems, aquariums, spas, hot tubs, and hydroponics. Hydrogen-rich water measurement supports understanding its benefits for human cells.

5 IN 1 High Accuracy Water Quality Tester

Dual Data Display (Temperature is Always on Screen)



Parameter	Range	Resolution	Accuracy
pH	0~14.00 pH	0.01 pH	±0.01 pH
Cl ₂	0.01~4.00 ppm	0.01 ppm	±0.01 ppm
H ₂	0~10000 ppb (0.001~10.000 ppm)	2 ppb (0.002 ppm)	±10 ppb (±0.01 ppm)
ORP	±1999 mV	1 mV	±2 mV
TEMP	0-60°C / 32.0-140°F	0.1°C / 0.1°F	±0.1°C / °F

Detailed parameters, ranges, resolution, and accuracy for the 5-in-1 water quality tester.

WHAT'S IN THE BOX

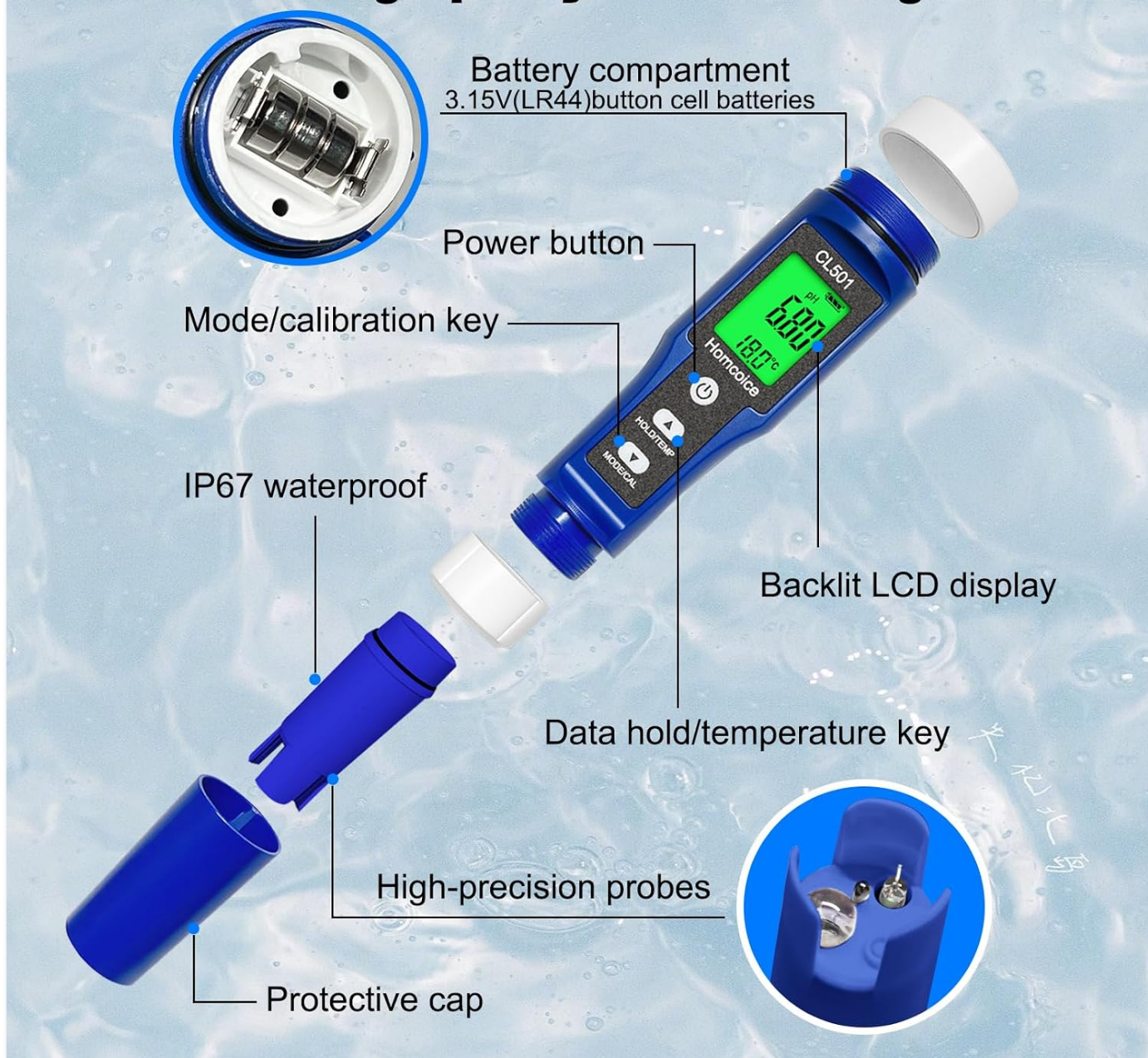
Your Homcoice 5-in-1 Water Quality Tester package includes the following items:

- 1x Homcoice 5-in-1 pH and Chlorine Meter
- 1x User Manual
- 1x Set of pH Calibration Powders (pH 4.00, 6.86, 9.18)
- 1x ORP Calibration Powder



The Homcoice 5-in-1 Water Quality Tester and included calibration powders.

All details for high quality and for the long term use



Detailed view of the meter's components, highlighting its high-quality construction.

SETUP

Battery Installation

The device uses button cell batteries (3.15V(LR44)). To install or replace batteries:

1. Unscrew the battery compartment cap located at the top of the meter.
2. Insert the batteries according to the polarity indicators.
3. Securely screw the cap back on.



Replaceable button cell batteries and sensitive probe design.

Initial Calibration

The water quality tester is factory calibrated. However, for optimal accuracy, especially after prolonged storage or if readings appear inconsistent, calibration is recommended. The device supports automatic 3-point pH calibration and ORP calibration.

pH Calibration Procedure:

1. Prepare 250ml of distilled water for each pH buffer powder (pH 4.00, pH 6.86, pH 9.18). Dissolve one packet of pH buffer powder into each 250ml of distilled water.
2. Turn on the meter.
3. Immerse the electrode into the pH 6.86 buffer solution.
4. Press and hold the 'MODE/CAL' button for 6 seconds until the display shows 'CAL' and the pH value starts flashing.
5. The meter will automatically recognize the buffer solution and calibrate. Once stable, it will display 'END' and return to measurement mode.
6. Rinse the electrode with distilled water.
7. Repeat steps 3-5 for pH 4.00 and pH 9.18 buffer solutions. Always calibrate pH 6.86 first, then 4.00, and finally 9.18 for best results.

ORP Calibration Procedure:

1. Prepare 250ml of distilled water for the ORP buffer powder (256mV @ 25°C). Dissolve the packet into the distilled water.
2. Turn on the meter.
3. Immerse the electrode into the ORP buffer solution.
4. Press and hold the 'MODE/CAL' button for 6 seconds until the display shows 'CAL' and the ORP value starts flashing.
5. The meter will automatically recognize the buffer solution and calibrate. Once stable, it will display 'END' and return to measurement mode.

RILEVAMENTO AUTOMATICO A TRE PUNTI, FACILE DA CALIBRARE

Vengono fornite con tre polveri di calibrazione del pH e polveri di calibrazione ORP

pH Buffer Powder	pH Buffer Powder	pH Buffer Powder	ORP Buffer Powder
PH 4.00 @ 25° C	PH 6.86 @ 25° C	PH 9.18 @ 25° C	ORP
250ml Solution Powder	250ml Solution Powder	250ml Solution Powder	250mV (25°C) (± 15mV) 50mV @ 25°C/77°F

Tenere premuto il pulsante MODE/CAL per 6 secondi

6.86 Fulmini 3 volte

Precisione costante

Procedura per la calibrazione del pHmetro

Visual guide for the pH calibration process.

OPERATING INSTRUCTIONS

The Homcoice 5-in-1 Water Quality Tester is designed for ease of use. Ensure the electrode is clean before each measurement.

General Measurement Steps:

1. Remove the protective cap from the electrode.
2. Press the power button to turn on the meter.
3. Immerse the electrode into the water sample, ensuring the sensor is fully submerged but not exceeding the water level line indicated on the device (approximately 3 cm depth).
4. Gently stir the meter to remove any air bubbles and allow the reading to stabilize.
5. Read the values displayed on the backlit LCD screen. The dual display shows pH/ORP/H₂/Cl₂ and temperature simultaneously.
6. Press the 'HOLD/TEMP' button to hold the current reading. Press again to release.
7. After use, rinse the electrode with distilled water and replace the protective cap.

Retroilluminazione chiaramente visibile e nessuna lettura errata



The backlit LCD display ensures clear readings in all lighting conditions.

Specific Measurements:

Chlorine (Cl₂) Measurement:

The meter measures total residual chlorine. This is crucial for pool and spa maintenance. Ideal chlorine levels for pools are typically between 1.0 and 3.0 ppm.

DIGITAL CHLORINE TESTER

Referred to as residual chlorine, is a water quality parameter for chlorine disinfection. The total amount of available chlorine remaining in the water after the reaction of the water with the added chlorine, in mg/L.

Cl_2
(Total residual chlorine)

Range: 0.01~4.00 ppm
Resolution: 0.01ppm
Accuracy: ± 0.01 ppm

This instrument is widely used in the following occasions:

- Measure the total residual chlorine of aqueous solutions, including free chlorine (Cl_2), hypochlorite (OCl^-) and nitrogenous compounds of chlorine (e.g. chloramine T).
- Measure residual chlorine in drinking water, cooling tower water, industrial and domestic wastewater.
- Process applications that use chlorine as an insecticide and disinfectant, such as industrial water quality control, hot spring water, swimming pool water, and food processing.



The digital chlorine tester provides accurate readings for various applications.



Progettato per piscine a cloro



Intervallo di pH ideale:
7,2-7,8 pH



Intervallo di cloro ideale:
1,0-3,0 ppm



Intervallo ORP ideale:
650 mV-750 mV

Ideal ranges for pH, chlorine, and ORP in pool water.

Hydrogen (H₂) Measurement:

The meter can measure hydrogen concentration in ppb (parts per billion) or ppm (parts per million). Hydrogen-rich water is believed to help remove excess free radicals from human cells.

DIGITAL H₂ METER

Range: 0-10000ppb(0.001-10.000ppm)

Resolution: 2ppb(0.002ppm)

Accuracy: ± 10 ppb(± 0.01 ppm)

1ppm=1000ppb

H

Hydrogen water

Hydrogen-rich water can effectively remove excess free radicals from human cells.

O

The harm of free radicals

It is produced during the body's metabolism, which leads to the destruction of other oxygen molecules, the appearance of wrinkles, diseases, etc.



Drinking hydrogen-rich water often can delay aging



Understanding hydrogen water and its benefits.

ORP Measurement:

ORP (Oxidation-Reduction Potential) indicates the water's ability to break down contaminants. Higher ORP values generally mean better water quality and sanitization. Ideal ORP for pools is typically between 650 mV and 750 mV.

DIGITAL ORP TESTER

Range: $\pm 1999\text{mV}$

Resolution: 1mV

Accuracy: $\pm 2\text{mV}$



Drinking Water
Treatment:
 $-50\text{mV} \sim +350\text{mV}$



Swimming Pool Water
Treatment:
 $650\text{mV} \sim 750\text{mV}$



Aquaculture:
 $200\text{mV} \sim 400\text{mV}$



Wastewater Treatment:
 $-200\text{mV} \sim +200\text{mV}$



ORP values for various water applications.

Temperature Measurement:

The meter continuously displays temperature, which is important for accurate pH and ORP readings as these values are temperature-dependent.

Altri scenari applicativi

È adatto per il monitoraggio della qualità dell'acqua in diversi campi e i parametri scientifici garantiscono la sicurezza



Trattamento
dell'acqua potabile



Acquari (d'acqua
dolce e salata)



Spa e vasche
idromassaggio



Torri di raffreddamento
industriali

The Homcoice 5-in-1 Water Quality Tester is suitable for a wide range of applications.

MAINTENANCE

Cleaning the Electrode:

Always rinse the electrode thoroughly with distilled or deionized water after each use to prevent contamination and ensure accurate future readings. Do not use tap water for rinsing as it may contain impurities that affect the sensor.

Storage:

Store the meter with the protective cap securely in place. If the electrode becomes dry, soak it in pH 4.00 buffer solution for at least 30 minutes before use to rehydrate it.

Battery Replacement:

When the battery indicator on the display shows low power, replace the batteries as described in the 'Battery Installation' section. Use LR44 button cell batteries.

TROUBLESHOOTING

Important Notes and Warnings:

- **Water Level:** Although the instrument is IP67 waterproof, the measured water level line should not exceed the electrical extreme or be completely submerged. The recommended depth is approximately 3 cm (height of the protective cover).
- **Short Circuit Risk:** If the electrode is immersed too deeply during measurement, it may short-circuit due to water ingress, causing the pH reading to remain at 0. If this occurs, remove the electrode, air dry it, and reinstall.
- **Sampling:** When sampling water for measurement, avoid areas near chlorine sources or with poor circulation. Take an adequate sample quantity, as insufficient quantity can lead to inaccurate measurements.
- **Chlorine Detection:** Chlorine in tap water can be difficult to detect. To verify the residual chlorine value, you can use water containing bleach or a hypochlorous acid-based disinfectant.

Common Issues:

- **Inaccurate Readings:** Ensure the meter is properly calibrated. Recalibrate if necessary. Clean the electrode thoroughly. Ensure the sample size is adequate and free from air bubbles.
- **Chlorine Reading Always 0:** This can be a common issue. First, ensure proper calibration. If the issue persists, try testing with a known chlorine source (e.g., diluted bleach solution) to verify sensor functionality. Ensure the electrode is fully submerged and the water is well-circulated.
- **Display Not Turning On:** Check battery installation and ensure batteries are not depleted. Replace batteries if needed.

SPECIFICATIONS

Parameter	Range	Resolution	Accuracy
pH	0 - 14.00 pH	0.01 pH	±0.01 pH
Total Residual Chlorine (Cl ₂)	0 - 4.00 ppm	0.01 ppm	±0.01 ppm
Hydrogen (H ₂)	0 - 10000 ppb (0.001 - 10.000 ppm)	2 ppb (0.002 ppm)	±10 ppb (±0.01 ppm)
ORP	±1999 mV	1 mV	±2 mV
Temperature	0 - 60 °C (32.0 - 140.0 °F)	0.1 °C / 0.1 °F	±0.1 °C / °F

- **Model Number:** CL501
- **Dimensions:** 19.5 x 4.8 x 4.7 cm
- **Weight:** 120 grams
- **Waterproof Rating:** IP67
- **Power Source:** Button cell batteries (LR44)
- **Country of Origin:** China

WARRANTY AND SUPPORT

Homcoice is committed to providing high-quality products and excellent customer service. For any questions, technical support, or warranty claims, please refer to the contact information provided on the product packaging or the official Homcoice website.

Please retain your purchase receipt as proof of purchase for any warranty-related inquiries.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question