

Homcoice 7IN1

Homcoice 7-in-1 Water Quality Tester User Manual

Model: 7IN1 | Brand: Homcoice

INTRODUCTION

This user manual provides detailed instructions for the Homcoice 7-in-1 Water Quality Tester, Model 7IN1. This device is designed for precise measurement of various water parameters, including pH, Chlorine (FAC), Salinity, ORP, TDS, EC, and Temperature. Please read this manual thoroughly before use to ensure proper operation and maintenance.

PRODUCT OVERVIEW

Key Features

- **Comprehensive Multi-Parameter Detection:** Measures pH (0-14 pH), Chlorine (0.00-4.00 ppm), Salinity (0.01-25.00‰; 0-9990 ppm; 10.01-200.0 ppt), ORP (± 999 mV), TDS (0-9990 ppm and 10.01-200.0 ppt), EC (0-9990 $\mu\text{S}/\text{cm}$; 10.01-19.99 mS/cm; 20.1-200.0 mS/cm), and Temperature.
- **Three Salinity Display Modes:** PPM, PPT, and ‰ for pool salt (0-9999ppm), seawater (10-200ppt), and food (0.01-25%). Simplifies readings by eliminating complex unit conversions.
- **High Quality Construction:** Features IP67 waterproof ABS material, a high-resolution backlit LCD for clear readings, dual data display, and replaceable probe and battery for extended durability.
- **Portable and User-Friendly:** Compact and lightweight design ensures convenient transport and easy operation for various applications, including home, laboratory, and outdoor use.
- **Effortless and Lasting Accuracy:** Factory-calibrated with 3-point automatic recognition calibration (pH 4.00, 7.00, and 10.01) to ensure precise and reliable measurements.

Components

The Homcoice 7-in-1 Water Quality Tester includes the following components:

- 1 x Homcoice 7-in-1 Water Quality Tester
- 1 x Calibration Kit (pH buffer powders: 4.00, 7.00, 10.01; ORP buffer powder)
- 1 x User Manual

All details for high quality and for the long term use

Battery compartment
3.15V(LR44)button cell batteries

Power button

Mode/calibration key

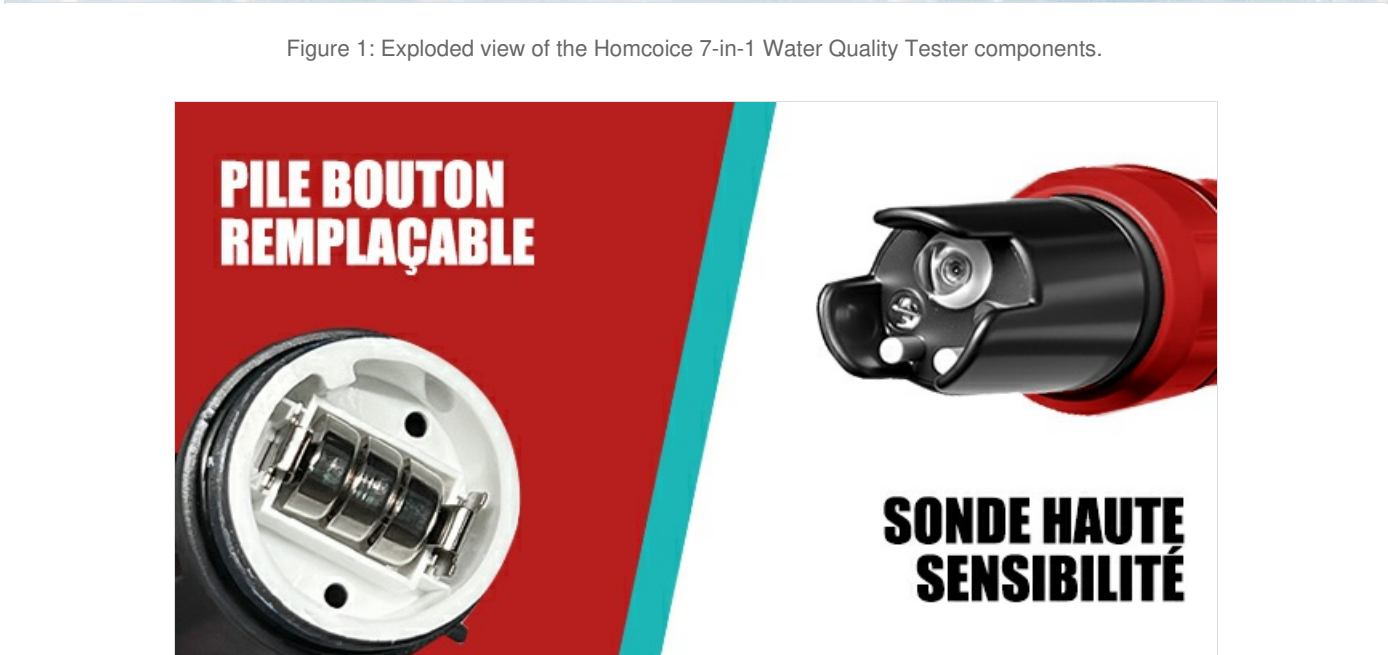
IP67 waterproof

Backlit LCD display

Data hold/temperature key

High-precision probes

Sponge with KCL solution



SETUP

1. **Unpack:** Carefully remove the tester and all accessories from the packaging.
2. **Battery Installation:** The device typically comes with batteries pre-installed. If not, open the battery compartment (refer to Figure 1) and insert 3.15V (LR44) button cell batteries, ensuring correct polarity.
3. **Initial Rinse:** Before first use, rinse the probe with distilled water.
4. **Calibration:** Although factory-calibrated, it is recommended to perform a calibration for optimal accuracy, especially after prolonged storage or if readings appear inconsistent. Refer to the "Calibration" section for detailed instructions.

OPERATING INSTRUCTIONS

General Usage

1. **Power On:** Press the **ON/OFF** button to turn on the device.
2. **Immerse Probe:** Dip the probe into the water sample up to the immersion line.
3. **Stabilize Reading:** Gently shake the meter to remove any air bubbles attached to the probe. Allow the reading to stabilize on the LCD screen. Values may fluctuate initially; wait for them to settle before recording.
4. **Switch Modes:** Press the **MODE/CAL** button to cycle through different measurement parameters (pH, EC, TDS, SALT, CL, ORP, TEMP).
5. **Hold Data:** Press the **HOLD/TEMP** button to freeze the current reading on the display. Press again to release.
6. **Power Off:** Press the **ON/OFF** button again to turn off the device.

Specific Parameter Testing Notes

- **Chlorine (FAC) Measurement:** For accurate free chlorine readings in pools, ensure the pool's pH is between 6.5 and 8, and the ORP is between 487 and 840 mV.
- **Salinity Measurement:** The device offers three display modes: PPM, PPT, and %. It automatically converts to PPT when PPM exceeds 9999.

7 IN 1 High Accuracy Water Quality Tester

Dual Data Display (Temperature is Always on Screen)

pH

EC

TDS

SALT

CL

ORP

TEMP

Temperature
Always On

Parameter	Range	Resolution	Accuracy
pH	0~14.00 pH	0.01 pH	±0.05 pH
EC	0-9990 μ S/cm	1 μ S/cm	±2%F.S
TDS	0-9990ppm	1ppm	±2%F.S
SALT	0.01-25.00%	0.01%	±2%F.S
CL	0.00~4.00 ppm	0.01ppm	/
ORP	± 999mV	1mV	±15mV
TEMP	0-60°C/32.0-140°F	0.1°C/0.1°F	±0.5°C

Figure 3: Overview of measurable parameters and their specifications.

DIGITAL CHLORINE(FAC)TESTER

Referred to as FAC(Free Available Chlorine), refers to chlorine in the form of hypochlorous acid, hypochlorite ions or dissolved elemental chlorine, which has a fast sterilization rate and strong bactericidal power, but disappears quickly, in mg/L(ppm).

CL
(Free Available Chlorine)

Range: 0.00~4.00 ppm
Resolution: 0.01ppm

This instrument is widely used in the following occasions:

- Measure the Free Available Chlorine(FAC).
- In the field of water purification, the free available chlorine is the core indicator to ensure the inactivation of microorganisms and prevent the spread of waterborne diseases, and is widely used in drinking water treatment, swimming pool disinfection, industrial cooling water system and wastewater reuse.



Figure 4: Digital Chlorine (FAC) Tester details and applications.



Conçu pour les piscines au chlore



Plage de pH idéale :
7,2-7,8 pH



Plage de chlore idéale :
1,0-3,0 ppm

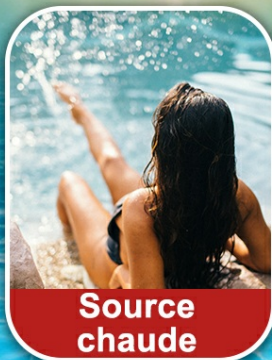
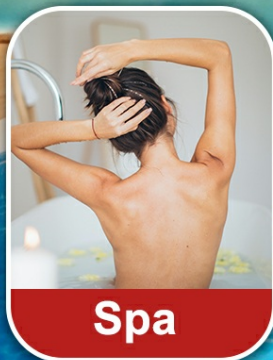


Plage ORP idéale :
650 mV-750 mV

Figure 5: Digital Chlorine Detection Tips for Chlorine Pools.



TESTEUR DE SEL NUMÉRIQUE



Gamme idéale pour piscine d'eau salée (pH : 7,2 à 7,8 ; Sel : 2700-3400ppm)

Figure 7: Digital Salt Tester applications.

DIGITAL ORP TESTER

Range: $\pm 999\text{mV}$
Resolution: 1mV
Accuracy: $\pm 15\text{mV}$



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



Figure 8: Digital ORP Tester details and applications.



Figure 9: Digital EC Tester for hydroponic applications.



Figure 10: Digital TDS Tester for drinking water applications.

Calibration

The Homcoice 7-in-1 Water Quality Tester is factory-calibrated. However, regular calibration is essential to maintain accuracy. The device supports 3-point automatic recognition calibration for pH (4.00, 7.00, 10.01) and includes ORP calibration powder.

1. **Prepare Solutions:** Dissolve the pH buffer powders (4.00, 7.00, 10.01) and ORP buffer powder in distilled water according to their respective instructions to create calibration solutions.
2. **pH Calibration:**
 - Turn on the meter.
 - Dip the probe into the pH 7.00 buffer solution.
 - Press and hold the **MODE/CAL** button for 6 seconds until the display flashes "CAL" and then the pH value (e.g., "7.00").
 - Wait for the reading to stabilize and stop flashing. The meter is now calibrated to pH 7.00.
 - Repeat the process for pH 4.00 and pH 10.01 solutions. Always calibrate to pH 7.00 first, then 4.00, and finally 10.01 for best results.

3. **ORP Calibration:** Follow similar steps using the ORP buffer solution.
4. **Rinse:** Always rinse the probe with distilled water after calibration.

EFFORTLESS AUTOMATIC THREE POINT CALIBRATION

Note: the water quality pen has been calibrated by manufacturer, use it directly.

Come with 3 packs of pH calibration powder and ORP calibration powder



Figure 11: Calibration powders and automatic three-point calibration process.

DÉTECTION AUTOMATIQUE EN TROIS POINTS, FACILE À CALIBRER



Figure 12: Automatic Three-Point Calibration procedure.

MAINTENANCE

- **Probe Cleaning:** Regularly clean the probe with distilled water after each use to prevent contamination and ensure accurate readings.
- **Probe Storage:** Keep the probe cap on when not in use. The sponge inside the cap should be kept moist with KCL solution (or distilled water if KCL is unavailable) to prevent the probe from drying out.
- **Battery Replacement:** When the battery indicator shows low power, replace the 3.15V (LR44) button cell batteries. Refer to Figure 1 for battery compartment location.
- **Avoid Harsh Chemicals:** Do not use abrasive cleaners or harsh chemicals on the device or probe.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Inaccurate or fluctuating readings	◦ Air bubbles on the probe ◦ Probe not properly cleaned ◦ Calibration needed ◦ Dried out probe	◦ Gently shake the meter during measurement. ◦ Clean the probe with distilled water. ◦ Perform a full calibration (see "Calibration" section). ◦ Re-hydrate the probe by soaking in KCL solution for several hours.

Problem	Possible Cause	Solution
Chlorine reading always 0 or incorrect	◦ Incorrect pH or ORP levels in pool water ◦ Sensor issue	◦ Ensure pool pH is 6.5-8 and ORP is 487-840 mV for accurate free chlorine display. ◦ Contact customer support if the issue persists after checking pH/ORP.
Device does not power on	◦ Dead batteries ◦ Incorrect battery installation	◦ Replace batteries with new 3.15V (LR44) button cells. ◦ Check battery polarity.

SPECIFICATIONS

Parameter	Range	Resolution	Accuracy
pH	0-14 pH	0.01 pH	±0.05 pH
EC	0-9990 µS/cm; 10.01-19.99 mS/cm; 20.1-200.0 mS/cm	1 µS/cm	±2% F.S
TDS	0-9990 ppm; 10.01-200.0 ppt	1 ppm	±2% F.S
Salinity (SALT)	0.01-25.00 %; 0-9990 ppm; 10.01-200.0 ppt	0.01 %	±2% F.S
Chlorine (CL/FAC)	0.00-4.00 ppm	0.01 ppm	N/A (Accuracy depends on pH/ORP)
ORP	±999 mV	1 mV	±15 mV
Temperature	0-60°C / 32-140°F	0.1°C / 0.1°F	±0.5°C

- **Model Number:** 7IN1
- **Material:** ABS
- **Waterproof Rating:** IP67
- **Power Supply:** 3.15V (LR44) button cell batteries
- **Recommended Uses:** Pools, aquariums, hydroponics, drinking water, spas, reverse osmosis/deionization systems.

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official Homcoice website. Keep your purchase receipt as proof of purchase.

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