RCYAGO BLE-C600

RCYAGO BLE-C600 Smart Tester User Manual

Model: BLE-C600

1. Product Overview

The RCYAGO BLE-C600 is a smart, multi-functional Bluetooth tester designed for precise measurement of various water quality parameters. It accurately measures pH, Total Dissolved Solids (TDS), Electrical Conductivity (EC), Oxidation-Reduction Potential (ORP), Specific Gravity (S.G), Salinity, and Temperature. This device connects seamlessly with the YINMIK mobile application, offering cloud-based data management, real-time data transmission, and customizable parameter settings, making it ideal for a wide range of applications from household drinking water to hydroponics and laboratory use.

The RCYAGO BLE-C600 Smart Tester in use, measuring water parameters in a glass.

2. Product Components

Familiarize yourself with the main components of your BLE-C600 tester:

- **Main Unit:** Houses the display, control buttons, and battery compartment.
- **High-Precision Probe:** Contains the various sensors for measurement.
- **Protective Cap:** Covers the probe when not in use to keep it moist and protected.
- **Control Buttons:** ON/OFF, HOLD/TEMP, MODE/CAL.
- **LCD Display:** Shows measurement readings and status indicators.
- **Immersion Line:** Indicates the minimum depth for accurate measurement.

An exploded view of the BLE-C600 tester, highlighting its main components such as the battery compartment, backlit display, control keys, immersion line, protective cap, and high-precision probe.

A detailed diagram showing the various electrodes within the BLE-C600 probe, including the TDS/EC/Salinity sensor, Temperature Sensor, Reference Electrode, ORP sensor, and Glass pH Sensor.

3. Getting Started

3.1 Battery Installation

The BLE-C600 tester is powered by 3 x 1.5V button batteries (included). To install or replace batteries:

1. Unscrew the battery compartment cap at the top of the device.
2. Insert the 3 x 1.5V button batteries, ensuring correct polarity (+/-).
3. Securely screw the cap back on.

3.2 App Download and Connection

The BLE-C600 works with the YINMIK mobile application for enhanced functionality and data management.

1. Download the YINMIK app from your device's app store (iOS App Store or Google Play Store).
2. Ensure Bluetooth is enabled on your mobile device.
3. Turn on the BLE-C600 tester by pressing the 'ON/OFF' button.

4. Open the YINMIK app. The app should automatically detect and connect to the tester via Bluetooth. Follow any on-screen prompts to complete the pairing process.

4. Operating Instructions

4.1 Basic Measurement

To take a basic measurement:

1. Ensure the tester is clean and calibrated.
2. Remove the protective cap from the probe.
3. Turn on the tester by pressing the 'ON/OFF' button.
4. Immerse the probe into the solution to be tested, ensuring the immersion line is covered. Gently stir the solution to remove air bubbles.
5. Wait for the readings to stabilize on the LCD display.
6. Press 'HOLD/TEMP' to hold the current reading. Press again to release.
7. To switch between measurement modes (pH, TDS, EC, ORP, S.G, Salinity), press the 'MODE/CAL' button.
8. After use, rinse the probe with distilled water and replace the protective cap.

4.2 Calibration

Regular calibration ensures the accuracy of your measurements. The BLE-C600 supports a 5-point pH calibration.

4.2.1 pH Calibration Process

The tester comes with calibration powders for Asia Standard (pH 4.00, pH 6.86, pH 9.18) and EU Standard (pH 7.00, pH 10.01). Prepare calibration solutions according to the powder instructions (typically dissolving in 250ml of distilled water).

1. Turn on the tester.
2. Rinse the probe with distilled water and dry it gently.
3. Immerse the probe into the first calibration solution (e.g., pH 6.86 for Asia Standard).
4. Press and hold the 'MODE/CAL' button until 'CAL' appears on the display. The tester will automatically recognize the buffer solution.
5. Wait for the reading to stabilize and for the calibration to complete (the display will indicate completion).
6. Rinse the probe with distilled water.
7. Repeat steps 3-5 for the remaining calibration solutions (e.g., pH 4.00 and pH 9.18 for Asia Standard).
8. For best accuracy, calibrate regularly and always start with the neutral buffer (pH 6.86 or 7.00).

4.3 Using the YINMIK Mobile App

The YINMIK app enhances your testing experience with advanced features:

- **Real-time Data Synchronization:** View all measured parameters simultaneously on your phone.
- **Cloud-Based Data Management:** Save, manage, and share your test data without loss.
- **Customizable Parameter Settings:** Set upper and lower limits for pH, EC, ORP, etc. If a reading exceeds your preset range, the value will display in red on the app interface, alerting you to abnormal conditions.

- **Backlight Control:** Control the backlight of the tester's LCD display directly from the app.

The YINMIK mobile application interface demonstrating how to set maximum and minimum measurement limits for pH, EC, and ORP. Values exceeding these limits will be displayed in red.

Illustration of the BLE-C600 tester synchronizing data with the YINMIK mobile app via Bluetooth, showing real-time parameter display and control options like backlight.

4.4 Measurement Parameters Explained

- **pH:** Measures the acidity or alkalinity of a solution (0-14 pH range).
- **TDS (Total Dissolved Solids):** Measures the total concentration of dissolved substances in water (in ppm).
- **EC (Electrical Conductivity):** Measures the ability of water to conduct electricity, indicating the concentration of ions (in µS/cm).
- **ORP (Oxidation-Reduction Potential):** Measures the ability of a solution to act as an oxidizing or reducing agent (in mV).
- **S.G (Specific Gravity):** Measures the density of a solution relative to water.
- **Salinity:** Measures the salt content of water (in ppt).
- **Temp (Temperature):** Measures the temperature of the solution (in °C or °F).

5. Care and Maintenance

5.1 Cleaning the Probe

To ensure accurate readings and prolong the life of your tester:

- Always rinse the probe thoroughly with distilled or deionized water after each use.
- Do not use tap water for rinsing as it may contain minerals that can contaminate the probe.
- Gently wipe the probe with a soft cloth or tissue. Avoid rubbing the glass bulb vigorously.
- If the probe is heavily soiled, soak it in a mild cleaning solution (e.g., pH electrode cleaning solution) for a short period, then rinse thoroughly.

5.2 Storage

Proper storage is crucial for the longevity of the pH electrode:

- Always store the probe with the protective cap filled with a few drops of KCL storage solution or pH 4.00 buffer solution. Never store it dry.
- If storage solution is not available, distilled water can be used for short-term storage, but KCL solution is recommended for long-term.
- Store the tester in a cool, dry place, away from direct sunlight and extreme temperatures.

6. Troubleshooting Guide

If you encounter issues with your BLE-C600 tester, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
Inaccurate readings	Probe is dirty or dry; Needs calibration; Expired calibration solution.	Clean and re-moisten probe; Perform 5-point calibration; Use fresh calibration solutions.
Tester does not turn on	Dead batteries; Incorrect battery installation.	Replace batteries; Check battery polarity.
Bluetooth connection issues	Bluetooth off on phone; App not updated; Interference.	Ensure Bluetooth is on; Update YINMIK app; Move closer to tester; Restart both devices.
Readings fluctuate excessively	Air bubbles on probe; Contaminated sample; Damaged probe.	Gently stir solution; Use clean sample; Contact support if probe is damaged.
App displays red values	Measurement exceeds preset limits.	This is an alert feature. Review your set limits in the app or adjust your solution.

7. Technical Specifications

Specification	Detail
Model Number	BLE-C600
Measurement Parameters	pH, TDS(ppm), EC(Conductivity), ORP, S.G, Salinity(ppt), Temp
pH Range	0-14 pH

Specification	Detail
pH Resolution	0.01 pH
Calibration	5-point automatic calibration (pH 4.00, 6.86, 9.18, 7.00, 10.01)
Display Style	Digital LCD with backlight
Material	Glass (probe)
Batteries	3 x 1.5V Button Battery (included)
Connectivity	Bluetooth (YINMIK Mobile App)
Dimensions	23.37 x 8.13 x 5.08 cm
Weight	181 g

8. Common Applications

The RCYAGO BLE-C600 Smart Tester is versatile and can be used in various settings:

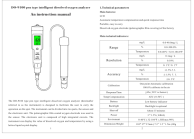
- **Household Drinking Water:** Ensure the quality and safety of your tap water.
- **Hydroponics:** Monitor nutrient solutions for optimal plant growth.
- **Aquariums & Fish Tanks:** Maintain healthy water parameters for aquatic life.
- **Swimming Pools:** Check water balance for safety and comfort.
- **Laboratories:** For general testing and educational purposes.
- **Sewage Treatment & Water Purification:** Monitor water quality in various stages.

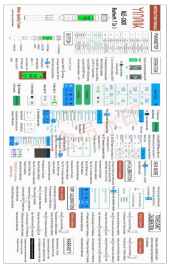
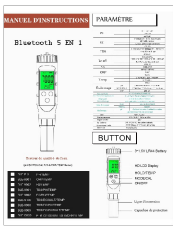
A collage of images showing various common applications for the BLE-C600 smart tester, including fish tanks, drinking water, hydroponics, swimming pools, aquariums, and laboratory use.

9. Warranty and Support

For warranty information, technical support, or any inquiries regarding your RCYAGO BLE-C600 Smart Tester, please refer to the contact information provided with your purchase or visit the official RCYAGO website. Please retain your proof of purchase for warranty claims.

Related Documents - BLE-C600

	DO-9100 Pen Type Intelligent Dissolved Oxygen Analyzer Instruction Manual This document provides instructions for the DO-9100 pen type intelligent dissolved oxygen analyzer, covering its features, technical parameters, operation, maintenance, and troubleshooting.

	[RCYAGO SGW07 Dual Water Timer User Manual] Comprehensive user manual for the RCYAGO SGW07 Dual Water Timer. Learn about product overview, specifications, installation, automatic watering programs, manual watering, rain delay, troubleshooting, and battery status for your garden irrigation system.
	[YINMIK BLE-C600 Bluetooth 7-in-1 Water Quality Tester: Instructions and Specifications] Comprehensive guide for the YINMIK BLE-C600 Bluetooth 7-in-1 Water Quality Tester, covering setup, operation, calibration, features, and warranty information.
	[YINMIK BLE-9908 Bluetooth Water Quality Tester pH Calibration Guide] Instructions for calibrating the YINMIK BLE-9908 Bluetooth 4-in-1 Water Quality Tester, detailing its parameters, range, and operation for accurate water quality testing.
	[BLE-C600 Multi-Parameter Water Quality Tester Manual] Instruction manual for the BLE-C600 multi-parameter water quality tester, covering its features, operation, and calibration for pH, EC, TDS, Salt, SG, and ORP.
	[Etekcity MSR-C600 Digital Clamp Multimeter User Manual] User manual for the Etekcity MSR-C600 Digital Clamp Multimeter, detailing its features, operation, safety precautions, and specifications for electrical measurements including AC/DC voltage, AC current, resistance, diode, and continuity testing.