LYCEBELL T8-W7L

LYCEBELL 7-in-1 Water Quality Tester Instruction Manual

MODEL: T8-W7L

1. Product Overview

This manual provides instructions for the LYCEBELL 7-in-1 Water Quality Tester, Model T8-W7L. This device is designed to accurately measure multiple water parameters including pH, Electrical Conductivity (EC), Total Dissolved Solids (TDS), Oxidation-Reduction Potential (ORP), Specific Gravity (S.G), Salinity, and Temperature. It is suitable for various applications such as testing drinking water, aquariums, aquaculture, laboratories, and pools.

Key Features

- Measures pH, EC, TDS, Salinity, S.G, ORP, and Temperature.
- Large LCD display for clear readings.
- Easy-to-use operation with HOLD/TEMP button for locking readings and switching temperature units.
- IP67 waterproof and dust-proof rating for durability.
- High-precision titanium alloy probe.
- Instant one-touch calibration.

Image 1.1: The LYCEBELL 7-in-1 Water Quality Tester in use, highlighting its multi-functionality and clear LCD screen.

2. Product Components and Dimensions

The device consists of a main body with an LCD screen, control buttons, a high-precision probe, and a battery compartment. Understanding these components is essential for proper operation and maintenance.

Image 2.1: Detailed diagram illustrating the components of the water quality tester, including the HD LCD screen, ON/OFF button, HOLD/TEMP button, MODE/CAL button, high-precision probe, pen cap, and battery location. Dimensions are also shown: 7.2 inches (183mm) length and 1.18 inches (37mm) width.

3. Setup

Battery Installation

The device uses three 1.5V button batteries. To install or replace batteries, unscrew the cap at the top of the device. Insert the batteries according to the polarity markings. Securely screw the cap back on.
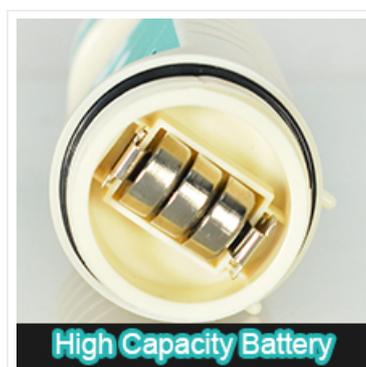

Image 3.1: A close-up view of the battery compartment, showing the placement of the three 1.5V button batteries.

Initial Power On

Press the "ON/OFF" button to power on the device.

4. Operation

Taking Measurements

1. Remove the protective cap from the probe.
2. Rinse the probe with distilled water and blot dry with a clean tissue.
3. Press the "ON/OFF" button to turn on the meter.
4. Dip the electrode into the solution to be measured, ensuring the liquid level is below the immersion line.
5. Gently stir the solution and wait for the reading to stabilize on the LCD display.

Switching Measurement Modes

Press the "MODE/CAL" button to cycle through the different measurement modes: pH, EC, TDS, Salinity, S.G, ORP, and Temperature. The current mode will be displayed on the screen.

Image 4.1: The meter's display cycling through various measurement modes such as pH, µS/cm (EC), ppm (TDS), % (Salinity), S.G, and mV (ORP).

Holding Readings and Temperature Unit Switching

Press the "HOLD/TEMP" button briefly to lock the current reading on the display. Press it again to release.

Long-press the "HOLD/TEMP" button to switch between Celsius (°C) and Fahrenheit (°F) temperature units.

Calibration

The meter offers instant one-touch calibration. Refer to the included calibration powders for specific instructions on preparing calibration solutions.

1. Prepare the calibration solution (e.g., pH 6.86, pH 4.00, pH 9.18 for pH calibration).
2. Turn on the meter and select the desired measurement mode (e.g., pH).
3. Dip the probe into the calibration solution.
4. Long-press the "MODE/CAL" button until the calibration mode is activated (usually indicated by a flashing reading or "CAL" on the screen).
5. The meter will automatically recognize the standard solution and calibrate itself. Wait for the reading to stabilize and the calibration to complete.
6. Rinse the probe with distilled water after calibration.

Note: *Regular calibration is crucial for maintaining measurement accuracy, especially for pH.*

5. Maintenance

Probe Care

Always keep the probe clean. After each use, rinse the electrode with distilled water.

Store the probe with the protective cap on, ideally with a small amount of KCL storage solution or distilled water to prevent the electrode from drying out.

Image 5.1: A close-up view of the highly sensitive electrode probe, emphasizing the importance of its cleanliness for accurate measurements.

Waterproof Rating

The device has an IP67 waterproof rating, meaning it is protected against dust ingress and short-term immersion in water (up to 1 meter for 30 minutes). Avoid prolonged submersion or exposure to high-pressure water.

Image 5.2: The water quality tester being used near a pool, demonstrating its IP67 waterproof capability.

Battery Replacement

Replace batteries when the low battery indicator appears on the screen or when the device fails to power on. Follow the battery installation steps in the "Setup" section.

6. Troubleshooting

Inaccurate Readings

- **Calibration:** Ensure the meter is regularly calibrated according to the instructions, especially if readings seem inconsistent. Use fresh calibration solutions.
- **Probe Cleanliness:** A dirty probe can lead to inaccurate readings. Clean the probe thoroughly with distilled water. For stubborn deposits, a mild cleaning solution recommended for pH electrodes may be used, followed by thorough rinsing.
- **Temperature Compensation:** The meter has automatic temperature compensation. Ensure the temperature of the sample is within the operating range.
- **Battery Level:** Low battery can affect performance. Replace batteries if needed.

Device Not Powering On

- Check battery installation and ensure batteries are correctly oriented.
- Replace batteries with new ones.

Display Issues

If the display is dim or flickering, replace the batteries.

7. Specifications

Technical Specifications

Image 7.1: A detailed table outlining the measurement ranges, resolutions, and accuracies for each parameter (TDS, EC, PH, SALT, S.G, TEMP, ORP).

Measurement Parameters

Index	Range	Resolution	Accuracy
TDS	0-200000ppm; 10.1-100.0ppt (effective range)	0.1ppm; 0.1ppt	±2% F.S
EC	0-200000μS/cm; 10.1-200.0mS/cm (effective range)	1μS/cm; 0.1mS/cm	±2% F.S
PH	0.00-14.00	0.01	±0.05
SALT	0.01-25.00%; 0-10000ppm; 10.1-200.0ppt	0.01%; 1ppm; 0.1ppt	0.01-5.00% (±0.1%); 5.1%-25.00% (±1%); ±2% F.S
S.G	1.000-1.222	/	/
TEMP	0-60°C / 32-140°F	1°C / 1°F	±0.5°C
ORP	±1999mV	1mV	±2mV

General Specifications

Attribute	Value
Product Dimensions	4.2 x 2.1 x 5.3 inches
Item Weight	10.6 ounces
Manufacturer	LC
Item Model Number	T8-W7L
ASIN	B0CNPFZ5QM

8. Warranty and Support

Warranty Information

Warranty information for this product is not available in the provided data. Please refer to the product packaging or contact LYCEBELL customer support for details regarding warranty terms and conditions.

Customer Support

For technical assistance, troubleshooting, or any other support inquiries, please contact LYCEBELL customer service. Contact details are typically found on the product packaging or the official LYCEBELL website.