FT0024-US

Ultrasonic Water Level Meter
MODEL: FT0024-US | BRAND: GENERIC

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Generic FT0024-US Ultrasonic Water Level Meter. This device is designed to accurately monitor the liquid level in tanks, displaying depth, indoor temperature, time, and providing low battery and liquid level alarms. Please read this manual thoroughly before use to ensure proper function and longevity of the product.

Product Overview

The FT0024-US system consists of a display unit and an ultrasonic sensor. The display unit provides real-time data, while the sensor measures the water level and temperature within the tank.

Key Features:

- Ultrasonic measurement for accurate water level detection.
- Integrated temperature sensor.
- Time display function.
- Low battery alarm for both display unit and sensor.
- Adjustable liquid level alarms.
- 100-meter range for wireless communication between sensor and display.

Figure 1: The complete FT0024-US system, showing the main display unit on the left and the ultrasonic sensor unit on the right with its lid open.

Display Unit Components:

- **LCD Display:** Shows depth, indoor temperature, time, and battery status.
- **Buttons:** Typically include 'SET', 'ALARM', 'UP', 'DOWN' for configuration and navigation.
- **Battery Compartment:** Located on the rear, for power supply.

Figure 2: A detailed view of the display unit, illustrating the various readings such as water depth (2.50 M), indoor temperature (26.5°C), current time (10:20 PM), and battery level indicators.

Setup

1. Battery Installation:

1. **Display Unit:** Open the battery compartment cover on the back of the display unit. Insert the required batteries (e.g., 2 x AA, not included) according to the polarity markings. Close the cover securely.
2. **Sensor Unit:** Open the sensor unit's cover. Insert the required batteries (e.g., 6 x AAA, not included) according to the polarity markings. Ensure the O-ring seal is properly seated before closing the cover tightly to maintain water resistance.

2. Sensor Placement:

- Mount the sensor unit at the top of the tank, ensuring the ultrasonic transducer faces directly down towards the liquid surface.
- Ensure there are no obstructions between the sensor and the liquid surface that could interfere with the ultrasonic signal.

- The sensor should be positioned to avoid direct contact with the liquid and away from any inlets or outlets that might cause turbulence.

3. Initial Power-On and Pairing:

- Once batteries are installed in both units, the display unit should automatically power on and attempt to connect with the sensor.
- Allow a few minutes for the units to establish a wireless connection. A signal strength indicator on the display unit will confirm successful pairing.
- If pairing fails, ensure both units are within the 100-meter wireless range and free from significant interference. You may need to restart both units.

4. Basic Settings:

- **Time Setting:** Press the 'SET' button to enter time setting mode. Use 'UP'/'DOWN' buttons to adjust hours and minutes. Press 'SET' again to confirm.
- **Unit Selection:** If applicable, use the 'SET' button to cycle through unit options (e.g., meters/feet for depth, Celsius/Fahrenheit for temperature).

Operating Instructions

1. Reading the Display:

- **Depth:** The large numerical display shows the current liquid depth in the tank.
- **Indoor Temperature:** Displays the ambient temperature around the display unit.
- **Time:** Shows the current time.
- **Battery Level:** Separate icons indicate the battery status for the display unit and the sensor unit.
- **Water Level Indicator:** A graphical representation of the tank's fill level.

Figure 3: The display unit illustrating various water level readings. The left display shows a full tank (5.00 M depth), while the right display indicates a low water level (0.50 M depth) with a low level alarm icon activated.

2. Setting Alarms:

- **Liquid Level Alarms:** Press the 'ALARM' button to enter alarm setting mode. Use 'UP'/'DOWN' buttons to set desired high and low liquid level thresholds. An audible alarm will sound and an icon will flash when the liquid level crosses these thresholds. Press 'ALARM' again to confirm and exit.
- **Low Battery Alarm:** This alarm is typically pre-set and activates automatically when battery levels are critically low for either unit.

Maintenance

1. Cleaning:

- **Display Unit:** Wipe with a soft, dry cloth. Do not use abrasive cleaners or immerse in water.
- **Sensor Unit:** Periodically inspect the ultrasonic transducer for dirt, dust, or mineral buildup. Gently clean with a soft, damp cloth. Ensure the sensor is dry before re-installation.

2. Battery Replacement:

- Replace batteries in both the display and sensor units when the low battery indicator appears.
- Always use new batteries of the specified type and ensure correct polarity.
- For the sensor unit, ensure the O-ring seal is clean and properly seated when closing the battery compartment to maintain water resistance.

Troubleshooting

Problem	Possible Cause	Solution
No reading on display / Display blank	No power to display unit; Sensor not connected or powered; Out of range.	Check display unit batteries. Check sensor unit batteries. Ensure units are within 100m range. Restart both units.
Inaccurate liquid level reading	Sensor obstructed; Sensor not properly aimed; Turbulence in tank.	Ensure sensor has a clear path to liquid. Reposition sensor. Avoid placing sensor near inlets/outlets.
Low battery alarm active	Batteries are low in either display or sensor unit.	Replace batteries in the indicated unit (display or sensor).
No wireless connection	Units too far apart; Interference; Sensor not powered.	Move display unit closer to sensor. Check for large metal objects or electronics causing interference. Verify sensor batteries.

Specifications

- **Model Number:** FT0024-US (RZZOIVVTT-FT0024-US)
- **ASIN:** B0FSDDKZTT
- **Wireless Range:** Up to 100 meters (line of sight)
- **Item Weight:** Approximately 1.76 ounces (display unit)
- **Package Dimensions:** Approximately 0.39 x 0.39 x 0.39 inches
- **Manufacturer:** Generic
- **Functions:** Ultrasonic Water Level Measurement, Temperature Display, Time Display, Low Battery Alarm, Liquid Level Alarms.

Warranty and Support

For warranty information and technical support, please refer to the documentation provided at the time of purchase or contact your retailer or the manufacturer directly. Keep your purchase receipt as proof of purchase for any warranty claims.

For further assistance, please visit the manufacturer's website or contact their customer service department using the contact details provided with your product packaging.