

briidea HRWL-01W

Briidea HRWL-01W Fresh Water Tank Level Indicator User Manual

Model: HRWL-01W | Brand: briidea

1. INTRODUCTION

The Briidea HRWL-01W Fresh Water Tank Level Indicator is designed to provide accurate and hygienic monitoring of fresh water levels in RVs, caravans, and boats. This non-contact sensor system helps users keep track of their water supply, ensuring timely refills and preventing empty tanks. This manual provides comprehensive instructions for the installation, operation, and maintenance of your device.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Non-Contact Detection:** Ensures fresh water remains clean and hygienic as the sensor does not touch the water.
- **Real-time Monitoring:** Provides immediate water level feedback via an LED display.
- **Wide Application:** Suitable for RVs, boats, caravans, and other off-grid applications.
- **Power-Down Memory:** Retains settings after initial configuration, eliminating the need for re-setup after power interruptions.
- **Broad Voltage Compatibility:** Operates on DC 7-32V power supply.
- **Detection Depth:** Supports detection depths up to 400 cm.

2.2 Components

The Briidea HRWL-01W system includes the main LED indicator panel and a non-contact water level sensor.

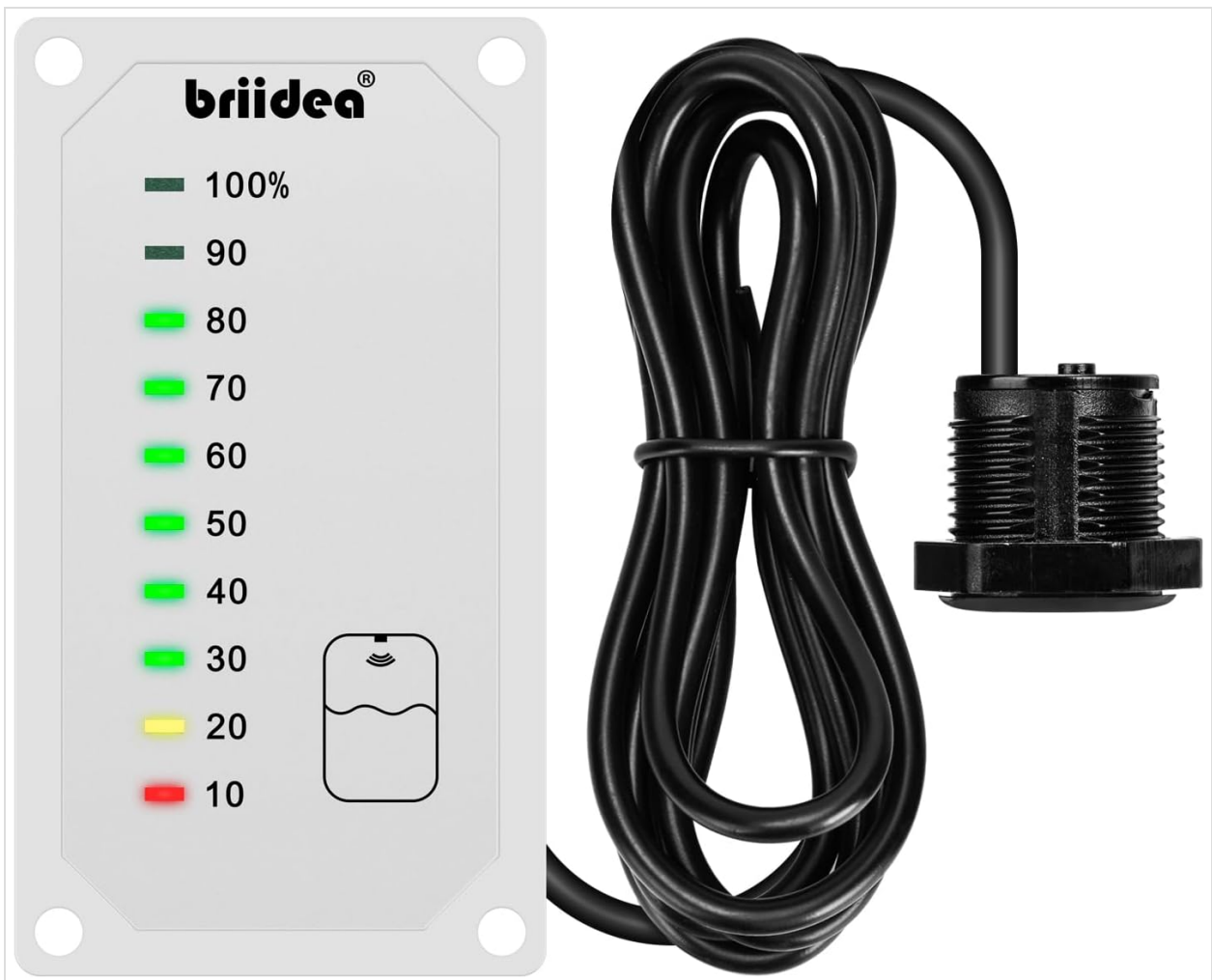


Figure 1: Briidea HRWL-01W Indicator Panel and Non-Contact Sensor. The image shows a white rectangular LED indicator panel on the left, displaying water levels from 10% to 100% with corresponding colored lights. On the right, a black cylindrical non-contact sensor with an attached cable is shown.

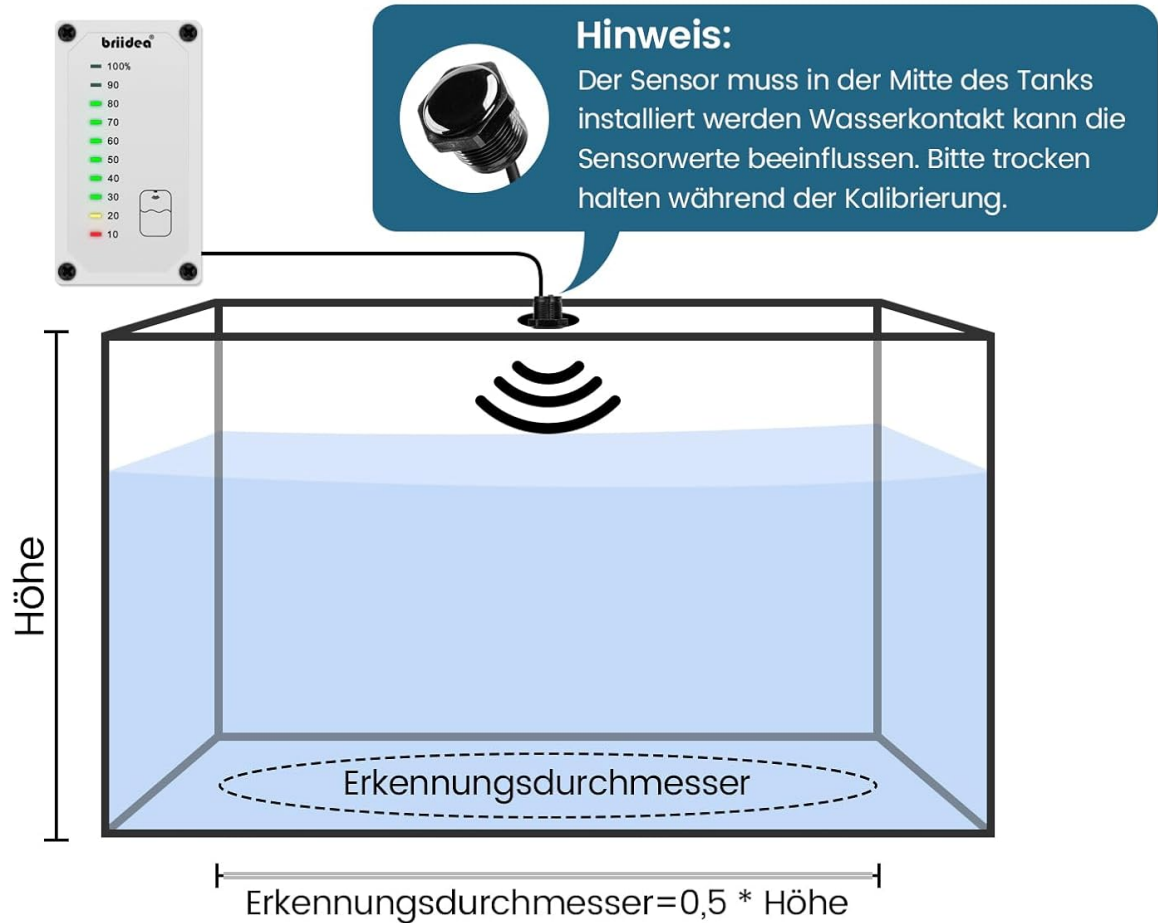
3. IMPORTANT CONSIDERATIONS FOR INSTALLATION

For optimal performance and accurate readings, please observe the following critical points:

- **Sensor Placement:** The sensor should be installed in the **center** of the water tank.
- **Tank Dimensions:** The water tank's length-to-height ratio should ideally be **1:0.5** (meaning the length is twice the height). Please verify your tank dimensions for compatibility before installation.
- **Calibration Condition:** Ensure the sensor is **dry** during the calibration process. Direct contact with water during calibration can affect sensor values and accuracy.
- **Metal Tanks:** Be aware that some metal water tanks may compromise the accuracy of the measurement.

Berührungslose Erkennungsmethode

Um sicherzustellen, dass Ihr Frischwasser sauber und hygienisch ist



Bitte bestätigen Sie vor dem Kauf, dass das Längen- und Höhenverhältnis des Wassertanks vor dem Gebrauch 1:0,5 beträgt

Figure 2: Non-Contact Detection Method and Tank Ratio. This diagram illustrates the sensor's placement in the middle of the tank and highlights the recommended tank length-to-height ratio of 1:0.5 for accurate detection.

4. SETUP AND INSTALLATION

4.1 Wiring Instructions

Connect the indicator panel to your DC power source (7-32V) and the sensor as shown in the diagram below. Ensure all connections are secure and correctly polarized.

EINFACHE VERKABELUNG

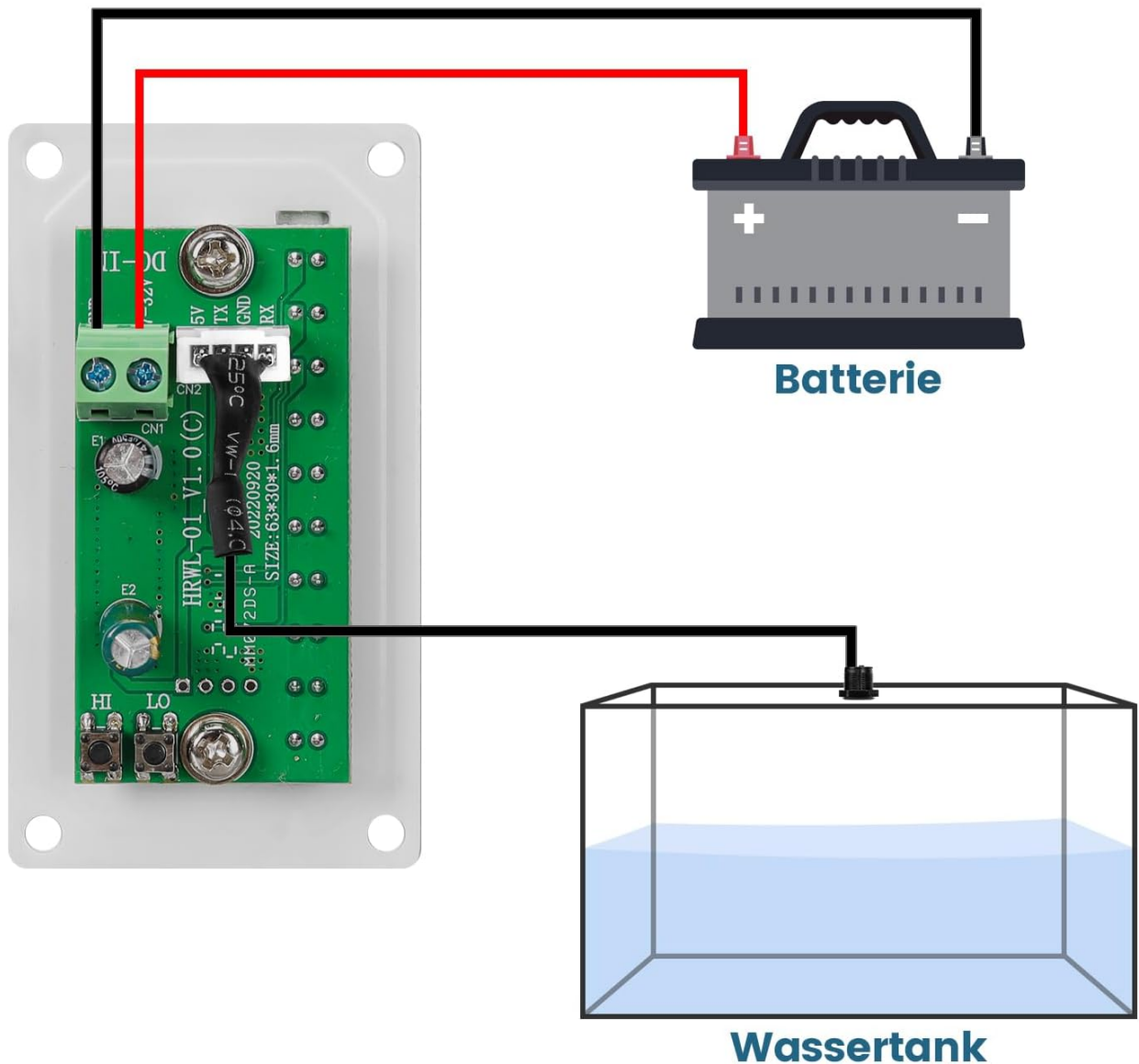


Figure 3: Simple Wiring Diagram. The diagram shows the indicator panel connected to a battery (power source) and the water tank sensor. Red wires typically indicate positive connections, and black wires indicate negative/ground connections.

4.2 Sensor and Panel Mounting

1. Mount the indicator panel in a visible location within your RV or caravan. The panel is designed for wall mounting.
2. Install the non-contact sensor on the exterior of your fresh water tank, ensuring it is positioned in the center of the tank for optimal accuracy.
3. Ensure the sensor is dry during initial setup and calibration.

LED-ANZEIGELEUCHE

Mehrfarbige Lichter informieren Sie auf einen Blick über den aktuellen Wasserstand im Tank

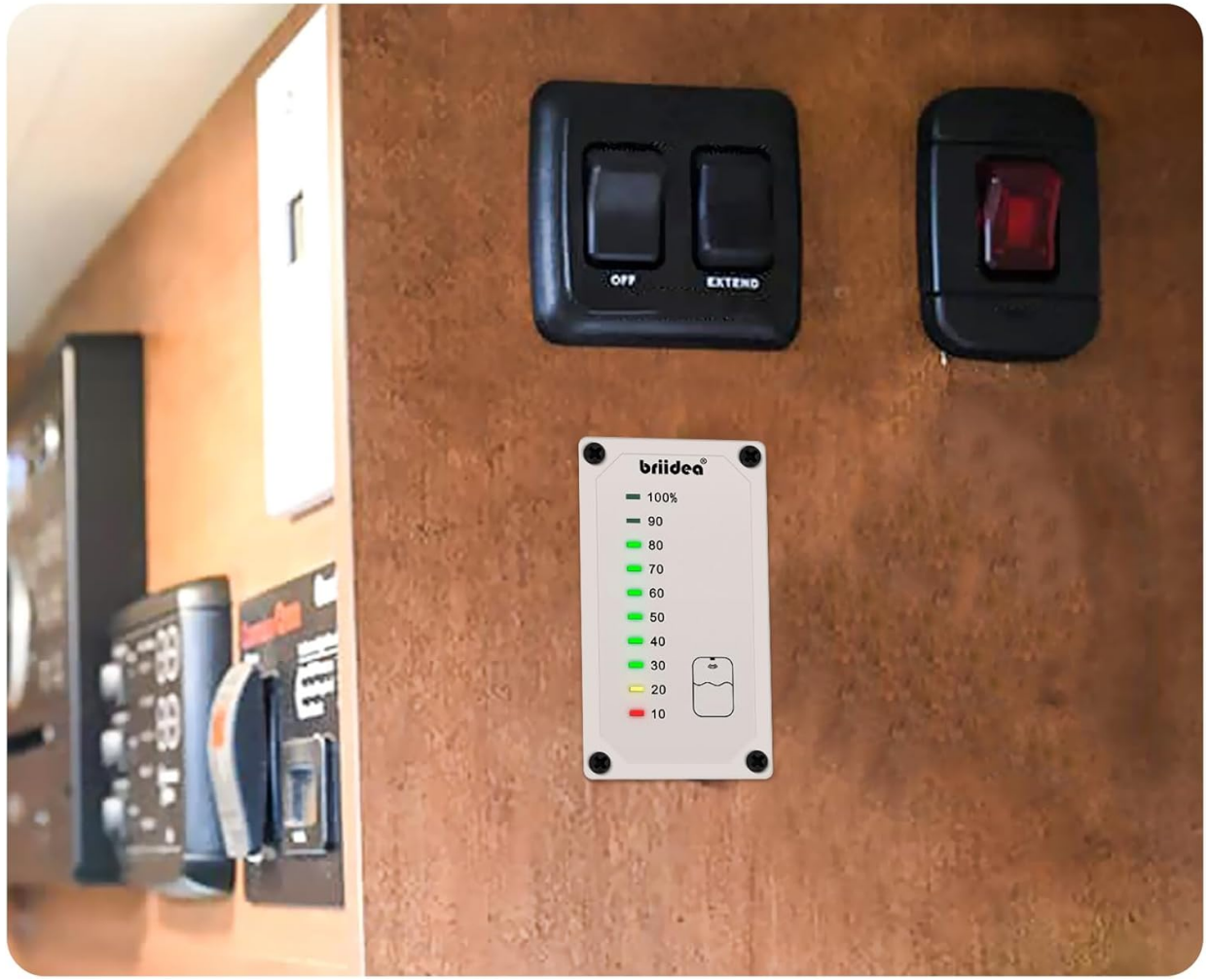


Figure 4: LED Display in Context. This image shows the Briidea HRWL-01W indicator panel mounted on an interior wall of an RV, next to other control switches, demonstrating its discreet integration.

5. OPERATING INSTRUCTIONS

5.1 Powering On

Once correctly wired and powered, the indicator panel will illuminate, displaying the current fresh water level.

5.2 Reading the Display

The LED display shows water levels in increments from 10% to 100%. Different colored lights may indicate various levels (e.g., green for high, yellow for medium, red for low). Refer to the panel's markings for specific percentage indications.

5.3 Power-Down Memory Function

The device features a Power-Down Memory function. After the initial setup and calibration, the settings are saved. In the event of a power interruption or when the device is turned off and on again, it will retain its previous configuration, eliminating the need for re-calibration.



Figure 5: Indicator in RV Interior. This image shows the Briidea HRWL-01W indicator panel seamlessly integrated into the kitchen area of an RV, providing a clear view of the water level.

6. MAINTENANCE

- **Sensor Cleanliness:** While the sensor is non-contact, ensure its exterior surface remains clean and free from debris that could obstruct its operation.
- **Calibration:** If you suspect inaccurate readings, re-calibrate the sensor. Always ensure the sensor is dry during calibration.
- **Power Supply:** Ensure a stable DC 7-32V power supply to prevent erratic behavior.

7. TROUBLESHOOTING

- **Inaccurate Readings:**
 - Verify sensor placement: Is it in the center of the tank?
 - Check tank dimensions: Does your tank meet the 1:0.5 length-to-height ratio?
 - Ensure sensor is dry during calibration.

- Consider if your tank is metal, which can affect accuracy.
- **No Display/Power:**
 - Check all wiring connections for looseness or incorrect polarity.
 - Verify the DC power supply is within the 7-32V range and functioning correctly.
- **Sensor Malfunction (e.g., if sensor gets wet):** The sensor is designed for non-contact use. If it comes into direct contact with water, it may malfunction or provide incorrect readings. Ensure the sensor remains dry and is installed externally to the tank.

8. SPECIFICATIONS

Model	HRWL-01W (br-042)
Brand	briidea
Control Method	Touch
Mounting Type	Wall Mount
Sensor Technology	Ultrasonic Sensor
Power Source	Corded Electric
Input Voltage	DC 7-32 Volts
Compatible Devices	RV, Boat, Caravan
Item Weight	160 g
Package Dimensions	11.2 x 9.4 x 3.4 cm



Figure 6: Product Dimensions. This image provides the physical dimensions of the indicator panel (8.5 cm height, 4.7 cm width) and the sensor (2.9 cm diameter, 2.4 cm height) with a 1.5 m cable.

9. APPLICATION EXAMPLES

The Briidea HRWL-01W is versatile and can be used in various mobile and off-grid settings to monitor fresh water levels.



Breite Anwendung

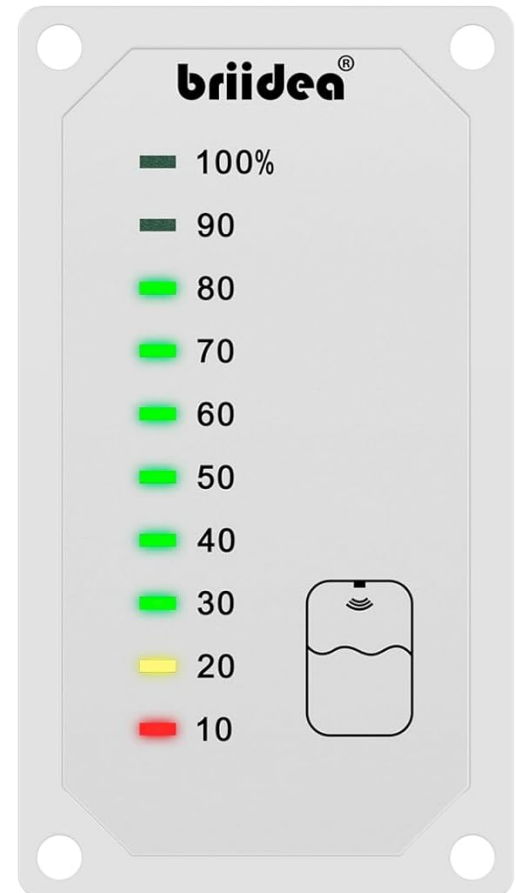


Figure 7: Wide Application. This collage shows the Briidea HRWL-01W indicator alongside images of various vehicles and setups, including RVs, caravans, and boats, illustrating its broad compatibility for water level monitoring.

10. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the product packaging or contact briidea customer service directly. Keep your purchase receipt for warranty claims.