

CAMWAY CAM002C

CAMWAY Digital Battery Capacity Tester (Model CAM002C) Instruction Manual

Model: CAM002C | Brand: CAMWAY

1. INTRODUCTION

This manual provides instructions for the safe and effective use of the CAMWAY Digital Battery Capacity Tester. This device is designed to measure the capacity and voltage of various battery types, including LiPo, LiFe, Li-ion, NiMH, and NiCd. Please read this manual thoroughly before operating the device.

2. PRODUCT OVERVIEW

The CAMWAY Digital Battery Capacity Tester is a compact and portable device for checking battery status. It features an LCD screen for clear display of information and intuitive buttons for navigation.



Figure 2.1: Detailed view of the CAMWAY Digital Battery Capacity Tester's LCD screen and buttons, with labels for Battery Type, Voltage, Mode, Capacity Bar, and Capacity Percentage.

Lightweight and Portable



Figure 2.2: The CAMWAY Digital Battery Capacity Tester held in hand, demonstrating its compact and portable design.

3. KEY FEATURES

- **Versatile Compatibility:** Works with LiPo, LiFe, Li-ion batteries (2s-7s) and NiMH, NiCd batteries (4s-7s).
- **Comprehensive Display Modes:** Shows battery cell voltages, total voltage, lowest cell voltage, highest cell voltage, voltage gap between highest and lowest cells, and remaining battery capacity percentage.
- **Compact and Lightweight:** Product dimensions are 8.4 x 5 x 1.6 cm, with a weight of 45g, making it easy to carry.
- **Durable Construction:** Designed for high quality, safety, and durability.
- **Note on Cables:** Connector leads/cables are not included with the tester. Please use the cables provided with your specific batteries.

4. SPECIFICATIONS

Attribute	Detail
-----------	--------

Attribute	Detail
Brand	CAMWAY
Model	CAM002C
Power Source	Battery Powered
Style	Digital
Color	Black
Item Weight	45 Grams
Measurement Type	Battery Tester
Item Dimensions (L x W x H)	8.4 x 5 x 1.6 cm (3.31 x 1.97 x 0.63 inches)



Figure 4.1: A table detailing the compatibility and display features for different battery types (LIPO, LIFE, Li-Ion, NiCd, NiMH), including input cells, total voltage, total cell battery capacity, individual cell voltage, lowest cell voltage, highest cell voltage, and voltage difference.



Figure 4.2: Image showing the dimensions of the CAMWAY Digital Battery Capacity Tester: 84mm length, 50mm width, and 16mm thickness.

5. SETUP AND CONNECTION

The battery tester operates by drawing power directly from the battery being tested. No external power source is required.

5.1. Connecting Lithium Batteries (LiPo, LiFe, Li-ion)

Connect the balance plug of your lithium battery to the multi-pin connector on the right side of the tester, labeled "Lithium". Ensure the plug is inserted correctly, aligning the negative terminal (usually black wire) with the "ve" indicator.

Your browser does not support the video tag.

Video 5.1: An instructional video demonstrating the correct and incorrect ways to connect a lithium battery to the CAMWAY Digital Battery Capacity Tester. It also highlights the interface for Ni-MH and Ni-Cd batteries.

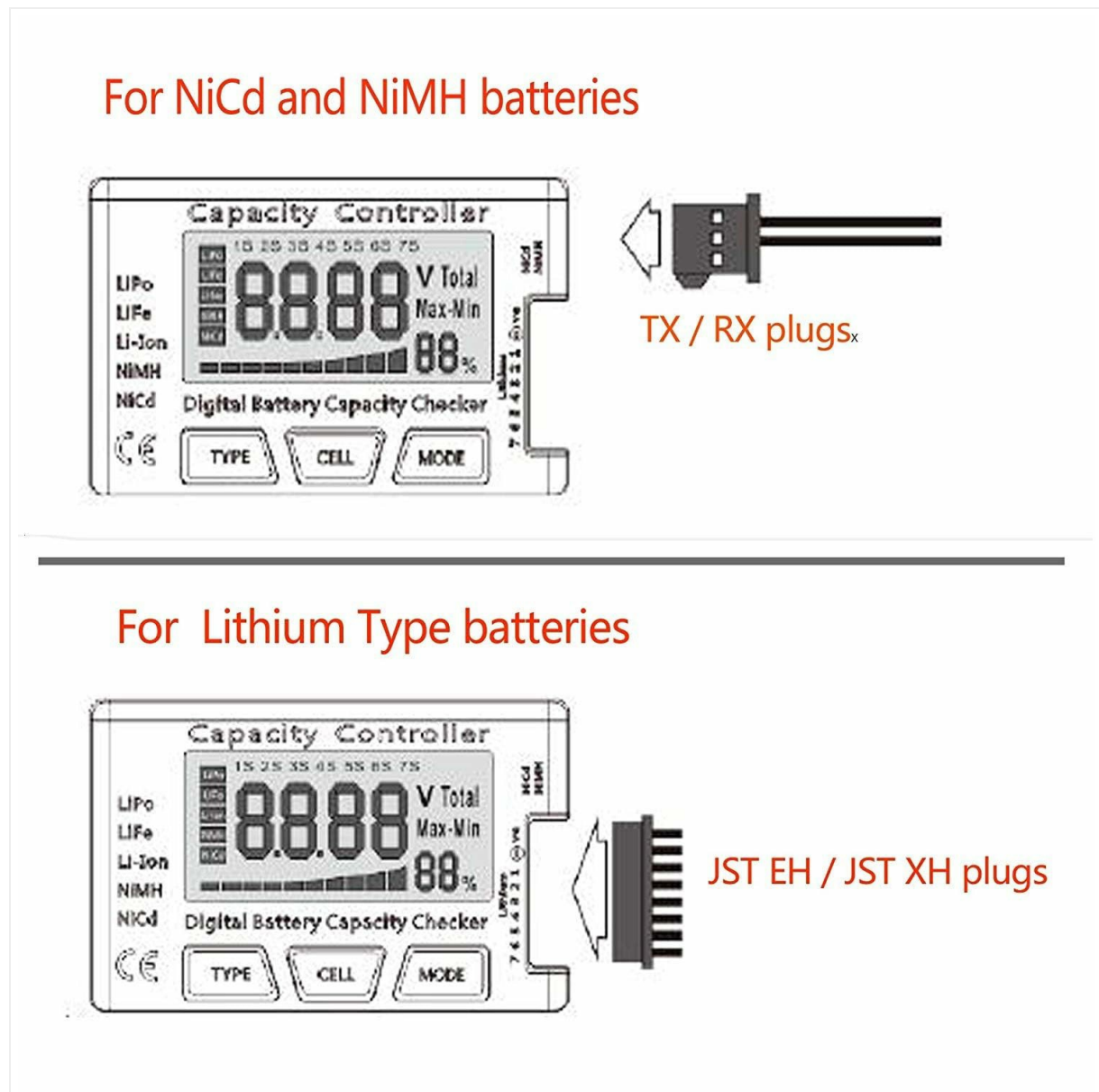


Figure 5.1: Diagram illustrating the correct connection points for NiCd/NiMH batteries (TX/RX plugs) and Lithium-type batteries (JST EH / JST XH plugs) on the capacity controller.

5.2. Connecting NiMH/NiCd Batteries

For NiMH and NiCd batteries, connect the battery's main discharge plug to the 2-pin connector on the right side of the tester, labeled "NiCd NiMH".

Important Note:

The tester does not include connector leads/cables. Please use the cables that come with your specific batteries.

6. OPERATION

6.1. Power On

The device powers on automatically once a battery is correctly connected.

6.2. Selecting Battery Type (for Lithium batteries)

For Lithium batteries (LiPo, LiFe, Li-ion), press the **"TYPE"** button to cycle through the battery types until the correct type is displayed on the screen.

6.3. Viewing Cell Voltages

Press the **"CELL"** button to display the voltage of each individual cell in a multi-cell battery pack.

6.4. Display Modes

Press the **"MODE"** button to cycle through various display modes:

- Total Voltage
- Lowest Cell Voltage
- Highest Cell Voltage
- Voltage Gap (difference between highest and lowest cell voltage)
- Remaining Battery Capacity (%)



LiPo



LiFe



Li-ion



NiCd/NiMH

Figure 6.1: The CAMWAY Digital Battery Capacity Tester displaying a LiPo battery's voltage (3.132V) and remaining capacity (1%). The image also shows icons for LiPo, LiFe, Li-ion, and NiCd/NiMH battery types.

7. MAINTENANCE

To ensure the longevity and accuracy of your CAMWAY Digital Battery Capacity Tester, follow these maintenance guidelines:

- **Cleaning:** Keep the device clean and dry. Use a soft, dry cloth to wipe the exterior. Avoid using abrasive cleaners or solvents.
- **Storage:** Store the tester in a safe, dry place away from direct sunlight, extreme temperatures, and moisture when not in use.
- **Handling:** Handle the device with care to prevent physical damage. Avoid dropping or subjecting it to strong impacts.

8. TROUBLESHOOTING

If you encounter issues with your battery tester, refer to the following troubleshooting steps:

8.1. No Display After Connection

- **Battery Charge:** Ensure the battery being tested is charged sufficiently to power the tester. The tester draws power from the connected battery.
- **Connection Verification:** Double-check that the battery connector is fully and correctly inserted into the appropriate port on the tester. Refer to the "Setup and Connection" section for correct orientation.
- **Physical Damage:** Inspect the battery connector and the tester's ports for any visible damage or bent pins.

8.2. Incorrect Readings

- **Battery Type Selection:** Confirm that the correct battery type (LiPo, LiFe, Li-ion) is selected using the "TYPE" button.
- **Battery Balance:** If testing a multi-cell lithium battery, ensure the battery is properly balanced. An unbalanced battery can lead to inaccurate individual cell readings.
- **Cross-Reference:** Compare readings with another known accurate voltage meter or charger if available to verify the tester's accuracy.

9. WARRANTY AND SUPPORT

This product comes with a standard manufacturer's warranty. For specific warranty details, including coverage period and terms, please refer to the product packaging or contact CAMWAY customer support directly.

For technical assistance, troubleshooting not covered in this manual, or general inquiries, please visit the official CAMWAY website or contact their customer service department through the contact information provided on the product packaging or website.