

Taidacent H56CH

Taidacent H56CH Digital Hall Coulomb Counting Battery Monitor User Manual (100V 400A)

Comprehensive instructions for the H56CH Battery Monitor with Buzzer Alarm Function.

1. INTRODUCTION

The Taidacent H56CH Digital Hall Coulomb Counting Battery Monitor is designed to accurately measure and display battery parameters such as voltage, current, capacity, and power. This device is suitable for lead-acid and lithium battery systems, providing essential information for battery management. This manual provides detailed instructions for the proper installation, operation, and maintenance of your H56CH battery monitor.

2. SAFETY PRECAUTIONS

- **Wiring:** Always follow the wiring diagram strictly. The coulomb counter must be connected to the **negative circuit** of the battery. Connecting it to the positive circuit is strictly prohibited and may cause damage to the device or system.
- **Environmental Conditions:** Avoid prolonged exposure to direct sunlight. Do not expose the device to extreme temperatures below -20°C or above 60°C for extended periods.
- **Installation:** Ensure the device is securely fixed using the buckle mechanism after creating the appropriate rectangular hole.
- **Power Source:** This device is designed for battery-powered systems within the specified voltage range.

3. PRODUCT SPECIFICATIONS

Product Model	H56CH
Working Voltage	9~100V
Current Range	400A (for this model)
Capacity Range	0~99999Ah

Display Mode	LCD with Backlight (Green)
Working Current	7.5mA
Backlight Off Current	3.5mA
Accuracy (Capacity, Voltage, Current)	1% (± 1 word)
Dimensions	79 x 43 x 27mm
Hole Size	76.5 x 39.5mm
Display Size	49 x 24mm
Working Temperature	-10~+65°C
Lead Length	Standard 15CM
UPC	792323453181

4. PACKAGE CONTENTS

The package typically includes:

- Taidacent H56CH Digital Hall Coulomb Counting Battery Monitor
- Current Sensor (Shunt)
- Connecting Cables (standard 15CM lead length)

5. SETUP AND INSTALLATION

5.1 Physical Installation

1. **Prepare Panel:** Open a rectangular hole on the panel of your device or enclosure according to the specified hole size (76.5 x 39.5mm).
2. **Insert Monitor:** Place the H56CH coulomb counter into the prepared rectangular hole.
3. **Secure Device:** Press firmly to engage the buckle mechanism, ensuring the monitor is securely fastened.

5.2 Wiring Instructions

Important: The coulomb counter must be connected to the **negative circuit** of the battery. Do not connect it to the positive circuit.

All wires from the positive (or negative) terminal of the battery must pass through the current sensor (shunt) for accurate measurement. The correct connection will show a positive current value during charging and a negative current value during discharging on the coulomb counter display.



Image 1: Taidacent H56CH Digital Hall Coulomb Counting Battery Monitor and its accompanying current sensor (shunt). The monitor displays battery percentage, capacity, voltage, current, and power. The shunt is connected via a cable to the monitor.

If the displayed current is incorrect (e.g., negative during charging), reverse the orientation of the current sensor (shunt) to correct the measurement direction.

6. OPERATING INSTRUCTIONS (AUTOMATIC MODE)

The automatic mode is recommended for ease of use.

6.1 Initial Current Calibration

- After initial installation, if the coulomb counter displays a non-zero current when there is no load, the current needs to be cleared.
- Ensure no current is flowing through the sensor (no load connected).
- Refer to the device's buttons (up, down, settings) to find the current clearing function.

6.2 Battery Capacity Reset

When using the battery gauge for the first time or after replacing the battery, the displayed capacity value may not be accurate. A zero-capacity operation is required:

1. **Discharge Battery:** Fully discharge the battery until it is empty.
2. **Reset Capacity:** Press and hold the designated button (refer to device for exact button) for 3 seconds. The capacity value and percentage on the display will clear.
3. **Full Charge:** Begin charging the battery. The capacity will automatically display 100% once fully charged. This process is automatic and does not require further customer settings.

6.3 Manual Capacity Adjustment (Special Case)

If, after the battery is fully charged by the charger, the capacity does not display 100%, you can manually adjust it:

- While the charger is still connected, press and hold the "up" button. This action will manually set the displayed capacity to 100%.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the display and casing. Avoid abrasive cleaners or solvents.
- **Environmental Protection:** Protect the device from direct sunlight and extreme temperatures (below -20°C or above 60°C) to ensure longevity and accurate operation.
- **Wiring Integrity:** Periodically check all wiring connections to ensure they are secure and free from corrosion or damage.

8. TROUBLESHOOTING

- **Incorrect Current Reading (e.g., positive during discharge):** This indicates the current sensor (shunt) is connected in reverse. Reverse the orientation of the shunt to correct the current direction.
- **Non-Zero Current at No Load:** If the display shows current when no load is connected, perform a current clearing operation. Ensure no load is present, then refer to the operating instructions or device buttons for the specific clearing procedure.
- **Inaccurate Capacity Display:** If the capacity reading seems incorrect, perform a battery capacity reset as described in Section 6.2. Ensure the battery is fully discharged before resetting.
- **Capacity Not 100% After Full Charge:** If the battery is fully charged but the display does not show 100% capacity, use the manual capacity adjustment method described in Section 6.3 (press and hold the "up" button while charging).
- **No Display/Power:** Check all power connections to ensure they are secure and that the battery voltage is within the specified working voltage range (9-100V).

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Taidacent customer support through their official channels or the retailer from whom the product was purchased. Please have your product model (H56CH) and purchase details available when contacting support.

You can visit the [Taidacent Store on Amazon](#) for more information.