

HTRC H4AC DUO

HTRC H4AC DUO Dual LiPo Battery Charger Instruction Manual

Model: H4AC DUO

1. INTRODUCTION

The HTRC H4AC DUO is a versatile dual-channel balance charger designed for various battery types, including Li-ion, LiPo, LiFe, NiCd, NiMH, LiHV, and PB batteries. It features independent charging channels, allowing two different batteries to be charged simultaneously. This charger is equipped with an integrated AC power supply and can also operate on DC input. Its compact design and user-friendly interface make it suitable for hobbyists and professionals alike.

2. SAFETY INSTRUCTIONS

- Always read the entire instruction manual before using the charger.
- Never leave the charger unattended while it is connected to a power source or charging batteries.
- Ensure the charger is used in a well-ventilated area, away from flammable materials.
- Only charge rechargeable batteries that match the specifications of this charger. Charging incompatible batteries may result in fire, explosion, or serious injury.
- Do not use AC power and DC power cables simultaneously.
- Verify battery type, cell count, and charging current settings are correct before starting a charge cycle.
- Keep the charger away from moisture, dust, and direct sunlight.
- Do not attempt to disassemble or modify the charger.

3. PACKAGE CONTENTS

Carefully unpack all items and check against the list below:

- 1 x HTRC RC Battery Charger (H4AC DUO)
- 1 x AC Power Cable
- 1 x DC Cable

- 2 x XT60 Plug 2-in-1 Adapter
- 2 x T-Crocodile Clip
- 2 x Balance Board with Pin Cord
- 2 x 4mm to Deans Charge Cable
- 2 x T-Tamiya Connector
- 1 x User Manual



Image: The HTRC H4AC DUO charger, its retail box, AC cable, XT60 cables, and other accessories included in the package.

4. PRODUCT OVERVIEW

The HTRC H4AC DUO charger features a compact design with two independent charging channels. It includes a clear LCD screen for displaying charging status and settings, along with intuitive buttons for operation.

Built in cooling fan, easy heat dissipation.



Image: Detailed views of the HTRC H4AC DUO charger, highlighting key components such as the 1.7-inch screen, cooling fan, XT60 output ports, balance sockets, ON/OFF switch, and AC 100-240V input.

Key Components:

- **1.7" Screen:** Displays charging information, battery status, and settings.
- **Cooling Fan:** Built-in fan for efficient heat dissipation during operation.
- **Balance Socket 1 & 2:** For connecting battery balance leads (2-4 cells).
- **Output 1 & 2 (XT60 Output):** Main charging ports for connecting batteries.
- **Channel 1 Start/Stop Button:** Initiates or terminates charging for Channel 1.
- **CH Switch Button:** Toggles between Channel 1 and Channel 2 display.
- **Channel 2 Start/Stop Button:** Initiates or terminates charging for Channel 2.
- **ON/OFF Switch:** Powers the charger on or off.

- **AC 100-240V Input:** Power input for AC operation.



Our H4AC DUO balance charger used for 2S-4S (7.4V-14.8V) LiPo battery.

The charger is very small, light and portable, built in balance port, balance charging, it can charge battery better and faster, and maximize battery life and performance.



LiPo 2S
7.4V



LiPo 3S
11.1V



LiPo 4S
14.8V

Image: The HTRC H4AC DUO charger illustrating the built-in cooling fan system for effective heat dissipation.

5. SETUP INSTRUCTIONS

Follow these steps to prepare your HTRC H4AC DUO charger for use:

1. **Connect Power:** Plug the AC power cable into the charger's AC input port and then into a suitable wall outlet. Alternatively, connect the DC cable to a 11-18V DC power source. *Do not use both AC and DC power simultaneously.*



Image: Connecting the AC power cable to the charger.

2. **Connect Battery Main Lead:** Connect the main power lead of your battery (e.g., XT60 connector) to the corresponding XT60 output port (Output 1 or Output 2) on the charger.



Image: Connecting the battery's XT60 connector to the charger's output port.

3. **Connect Balance Lead:** For LiPo, Li-ion, LiFe, and LiHV batteries, connect the battery's balance lead to the

appropriate balance socket (Balance Socket 1 or 2) on the charger. This is crucial for safe and balanced charging.



Image: Connecting the battery's balance port to the charger's balance socket.

4. **Power On:** Flip the ON/OFF switch to power on the charger. The screen will illuminate.

Dual LiPo charger, balance charge, easy to charge.

This is a balance charger, please connect the balance port.
Perfect for your 7.4V 11.1V 14.8V LiPo battery.



Image: The HTRC H4AC DUO charger with two LiPo batteries properly connected to both channels, ready for charging.

6. OPERATING INSTRUCTIONS

6.1. Selecting a Channel

Press the **CH** (Channel Switch) button to toggle between displaying information for Channel 1 and Channel 2 on the screen.

6.2. Starting a Charge Cycle

1. Ensure the battery is correctly connected to the desired channel (main lead and balance lead, if applicable).
2. Select the desired channel using the **CH** button.
3. The charger will automatically detect the battery type and cell count for LiPo/Li-ion/LiFe/LiHV batteries. Verify that the displayed information (e.g., LiPo-3S, 11.1V) matches your battery.
4. Press the **Start/Stop** button (1 for Channel 1, 2 for Channel 2) to begin the charging process. The screen will display "CHARGE" mode, indicating active charging.

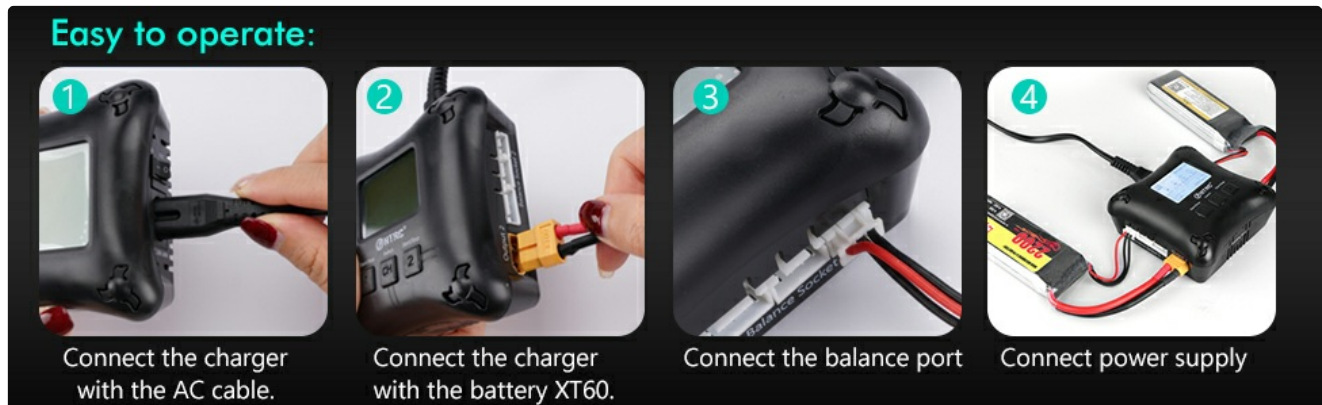


Image: The charger's screen displaying "CHARGE" mode, individual cell voltages, total voltage, and charging current for a LiPo battery.

6.3. Understanding the Display

During charging, the screen provides real-time information:

- **Mode:** Indicates "CHARGE" when active, "IDLE" when stopped or finished.
- **Cell Voltages:** Shows individual cell voltages for balanced charging.
- **Total Voltage:** Displays the overall battery voltage.
- **Current:** Shows the charging current in Amperes (A).
- **Capacity:** Displays the charged capacity in milliampere-hours (mAh).
- **Time:** Shows the elapsed charging time.

6.4. Stopping a Charge Cycle

To stop charging at any time, press the corresponding **Start/Stop** button (1 or 2) for the active channel. The charger will automatically stop charging when the battery is full, displaying "IDLE" mode.

7. BATTERY COMPATIBILITY

The HTRC H4AC DUO charger supports a wide range of battery types:

- **Li-ion/LiPo/LiFe/LiHV:** 1-6 cells
- **NiCd/NiMH:** 1-15 cells
- **PB Battery:** 2-20V
- **Smart Battery:** I, II, III (5-27V, 0.1-6A)

Note: Only charge rechargeable batteries that meet these specifications. Always select the correct battery type before

charging.

8. SPECIFICATIONS

Feature	Specification
AC Input Power	150W (CH1+CH2=150W), 100-240V
DC Input Power	240W (CH1+CH2=240W), 11-18V
Charge Current	0.1-10A * 2
Discharge Power	10W
Discharge Current	0.1-2A * 2
LiPo/Li-ion/LiFe/LiHV Cell Count	1-6S
NiCd/NiMH Cell Count	1-15S
PB Battery Voltage	2-20V
Product Dimensions	3.54 x 1.57 x 3.54 inches (1.57"D x 3.54"W x 3.54"H)
Item Weight	5.9 ounces (5.92 ounces)
Output Voltage	25 Volts (Max)



Image: The HTRC H4AC DUO charger with its physical dimensions (3.54 inches width, 1.57 inches depth, 3.54 inches height) clearly indicated.

9. MAINTENANCE

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- **Cleaning:** Regularly clean the charger's exterior with a soft, dry cloth. Do not use solvents or abrasive cleaners. Ensure ventilation openings are free from dust and debris.
 - **Storage:** Store the charger in a cool, dry place away from direct sunlight and extreme temperatures. Disconnect it from all power sources and batteries when not in use.
 - **Cable Inspection:** Periodically inspect all cables and connectors for any signs of damage, fraying, or corrosion. Replace damaged cables immediately.

10. TROUBLESHOOTING

- **Charger Not Powering On:** Ensure the AC or DC power cable is securely connected and the power switch is in the 'ON' position. Check the power outlet or DC power source.
- **Charging Not Starting:** Verify that the battery's main lead and balance lead (if applicable) are correctly and securely connected. Ensure the correct battery type and cell count are recognized on the display. Press the correct Start/Stop button for the selected channel.
- **Error Messages:** If an error message appears on the screen, refer to the specific error code (if provided) in the full user manual for detailed instructions. Generally, disconnect the battery and power, then reconnect and try again.
- **Unusual Heat or Smell:** Immediately disconnect the charger from the power source and battery if you notice excessive heat, smoke, or an unusual smell. Do not use the charger again and seek professional assistance.

11. WARRANTY AND SUPPORT

Information regarding specific warranty terms and customer support contact details for the HTRC H4AC DUO charger was not available in the provided product data. Please refer to the official HTRC website or the documentation included with your purchase for warranty claims and technical support.