

S6

HOTA S6 AC/DC Dual Smart Charger

Model: S6

Brand: HOTA

INTRODUCTION

The HOTA S6 AC/DC Dual Smart Charger is a versatile and powerful charging solution designed for various battery types, including LiHv, LiPo, LiFe, Lilon, Lixx (1-6S), NiZn, NiCd, NiMH (1-16S), Smart Battery (1-6S), Lead Acid (2-24V), and Enelop (1-16S). It features dual independent charging channels, offering both AC and DC input capabilities for flexible power options. This manual provides essential information for safe and efficient operation of your HOTA S6 charger.

SAFETY INSTRUCTIONS

Please read and understand all safety instructions before operating the charger. Failure to do so may result in fire, injury, or property damage.

- **Never leave the charger unattended** during operation. Always monitor the charging process.
- Ensure the charger is used in a **well-ventilated area**, away from flammable materials.
- **Do not charge damaged or swollen batteries.** Dispose of them properly.
- Verify the **correct battery type and cell count settings** before initiating a charge cycle. Incorrect settings can lead to battery damage or fire.
- Keep the charger away from moisture, dust, and direct sunlight.
- Use only the original or approved power cables and accessories.
- Do not attempt to disassemble or modify the charger. Refer all servicing to qualified personnel.
- Keep out of reach of children.

PRODUCT FEATURES

The HOTA S6 Smart Charger incorporates advanced features for efficient and safe battery management:

- **Dual XT60 Ports:** Equipped with two independent XT60 output ports for simultaneous charging of two batteries.
- **High Power Output:** Total AC output power up to 478W, with DC 325W × 2 charge power, supporting power distribution.
- **Multiple Battery Type Support:** Compatible with LiHv/LiPo/LiFe/Lilon/Lixx (1-6S), NiZn/NiCd/NiMH (1-16S), Smart Battery (1-6S), Lead Acid (2-24V), and Enelop (1-16S).

- **Comprehensive Protection:** Features short-circuit, overload, over-voltage, over-temperature, and over-current protection for enhanced safety.
- **USB-A and Type-C Outputs:** Includes 2x USB-A (5V / 2.1A) and 1x Type-C (Max 45W) output ports for charging external devices.
- **XT-60F Independent Output:** Supports connection to FPV monitors and other 12V devices.
- **Compact Design:** Optimized internal structure for a high power-to-volume ratio.

PRODUCT OVERVIEW

Familiarize yourself with the components and ports of your HOTA S6 charger.



Figure 1: Front and side view of the HOTA S6 Dual Smart Charger, showing the display screen and various ports. The screen displays charging information for two channels.



Figure 2: The HOTA S6 charger actively charging two batteries simultaneously via its dual XT60 output ports. This illustrates the dual-channel capability.



Figure 3: Rear panel of the HOTA S6 charger, highlighting the AC input (100-240V, 50-60Hz), DC input (10.5-30V), and a DC OUT 12V (Max 1A) port. The large fan grille is also visible.



Figure 4: Illustration of the cooling airflow through the rear fan of the HOTA S6 charger, demonstrating its active cooling system for stable operation.



Figure 5: The HOTA S6 charger held in a hand, providing a visual reference for its compact and portable dimensions.

SPECIFICATIONS

Parameter	Value
Input Voltage	AC 100-240V / DC 6.5-30V
Charge Current	0.1-15A × 2
Charge Power (DC)	325W × 2 (@ input voltage > 26V)
Charge Power (AC)	400W (Supports power distribution)
Discharge Power (Internal)	15W × 2 (Balance port 10W × 2)
Discharge Power (External)	325W × 2 (650W total)
Combined Charging Power	500W
Combined Charging Current	0.1-22A
Battery Type Support	LiHv/LiPo/LiFe/Lilon/Lixx: 1-6S; NiZn/Nicd/NiMH: 1-16S; Smart Battery: 1-6S; Lead Acid(Pb): 2-24V; Enelop: 1-16S
Balance Current	1600mA × 2
Discharge Current	0.1-3A × 2
USB-A Output	5V / 2.1A x2
Type-C Output	Maximum 45W
Dimensions	116mm x 116mm x 85mm (4.57 x 4.57 x 3.35 inches)
Net Weight	Approx. 800g

SETUP

1. Power Connection

- **AC Power:** Connect the supplied AC power cord to the AC input port on the rear of the charger (Figure 3). Plug the other end into a suitable AC outlet (100-240V).
- **DC Power:** Alternatively, connect a DC power source (6.5-30V) to the DC input port on the rear of the charger using an appropriate cable. Ensure correct polarity.
- The charger will power on and display the main interface.

2. Battery Connection

- Connect your battery's main discharge lead to one of the XT60 output ports on the front of the charger (Figure 2).
- For LiPo/LiHv/LiFe/Lilon batteries, also connect the battery's balance lead to the corresponding balance port next to the XT60 port. This is crucial for safe and balanced charging.

OPERATING INSTRUCTIONS

1. Navigating the Interface

The HOTA S6 features a color display and a scroll wheel/button for navigation. Rotate the wheel to scroll through options and press to select.

2. Charging a Battery

1. Connect the battery as described in the "Setup" section.
2. On the main screen, select the desired channel (CH1 or CH2).
3. Choose the battery type (e.g., LiPo, LiFe, NiMH) from the menu.
4. Set the cell count (e.g., 3S, 4S for LiPo) or voltage for Lead Acid batteries. The charger may auto-detect, but always verify.
5. Set the desired charge current (in Amps). Refer to your battery's specifications for safe charging rates (typically 1C for LiPo).
6. Select the charging mode (e.g., Charge, Balance Charge, Fast Charge, Storage). *Balance Charge* is recommended for LiPo/LiHv/LiFe/Lilon batteries to ensure cell voltage equalization.
7. Confirm the settings and start the charging process. The screen will display real-time charging data.
8. The charger will automatically stop when the battery is fully charged. Disconnect the battery once charging is complete.

3. Discharging a Battery

The charger supports internal and external discharge. Internal discharge is suitable for smaller capacities, while external discharge allows for higher power dissipation.

1. Connect the battery.
2. Select the discharge mode from the menu.
3. Set the discharge current and the desired cut-off voltage.
4. Start the discharge process.

4. Storage Mode

For LiPo/LiHv/LiFe/Lilon batteries, using the storage mode is crucial for prolonging battery life when not in use for extended periods. This mode charges or discharges the battery to a specific voltage level (e.g., 3.85V/cell for LiPo).

1. Connect the battery.
2. Select "Storage" mode.
3. Start the process. The charger will automatically adjust the battery to the optimal storage voltage.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the charger's exterior. Do not use solvents or abrasive cleaners.
- **Ventilation:** Ensure the cooling fan and vents are free from dust and obstructions to maintain proper airflow (Figure 4).
- **Storage:** Store the charger in a cool, dry place when not in use.
- **Cable Inspection:** Regularly inspect all cables and connectors for signs of wear or damage. Replace any damaged components immediately.

TROUBLESHOOTING

Problem	Possible Cause / Solution
Charger does not power on.	Check AC/DC power cable connection. Ensure power source is active and providing correct voltage.
"Connection Break" error.	Battery not properly connected to XT60 port. Balance lead not connected (for LiPo/LiHv/LiFe/Lilon). Damaged battery connector or cable.
"Cell Count Error" or "Voltage Error".	Incorrect cell count set for the battery type. Battery voltage does not match the selected cell count. Damaged battery cells.
Charger gets hot during operation.	Normal during high-power charging/discharging. Ensure adequate ventilation and clear fan vents. If excessively hot, reduce charge current or stop operation.
Charging process is very slow.	Charge current set too low. Battery internal resistance is high. Power supply insufficient (especially on AC if power distribution is active).

WARRANTY AND SUPPORT

This HOTA S6 Dual Smart Charger comes with a standard manufacturer's warranty against defects in materials and workmanship. Please retain your proof of purchase for warranty claims. For technical support, troubleshooting assistance, or warranty inquiries, please contact your retailer or the manufacturer's customer service department. Do not attempt to repair the unit yourself, as this may void the warranty.