

UP600+

Generic UAV Ultra Power UP600+ 1200W Dual Channel Drone Battery Charger

Instruction Manual

INTRODUCTION

Thank you for choosing the Generic UAV Ultra Power UP600+ Dual Channel Drone Battery Charger. This high-performance charger is designed for LiPo/LiHV batteries with 2-6S cell counts, offering a total charge power of 1200W (2x600W). It features dual independent charging channels, a clear LCD display, and various charging modes to ensure efficient and safe battery management for your drones.

Please read this manual thoroughly before operating the charger to ensure proper use and to maximize the lifespan of your batteries and charger.

PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact your retailer.

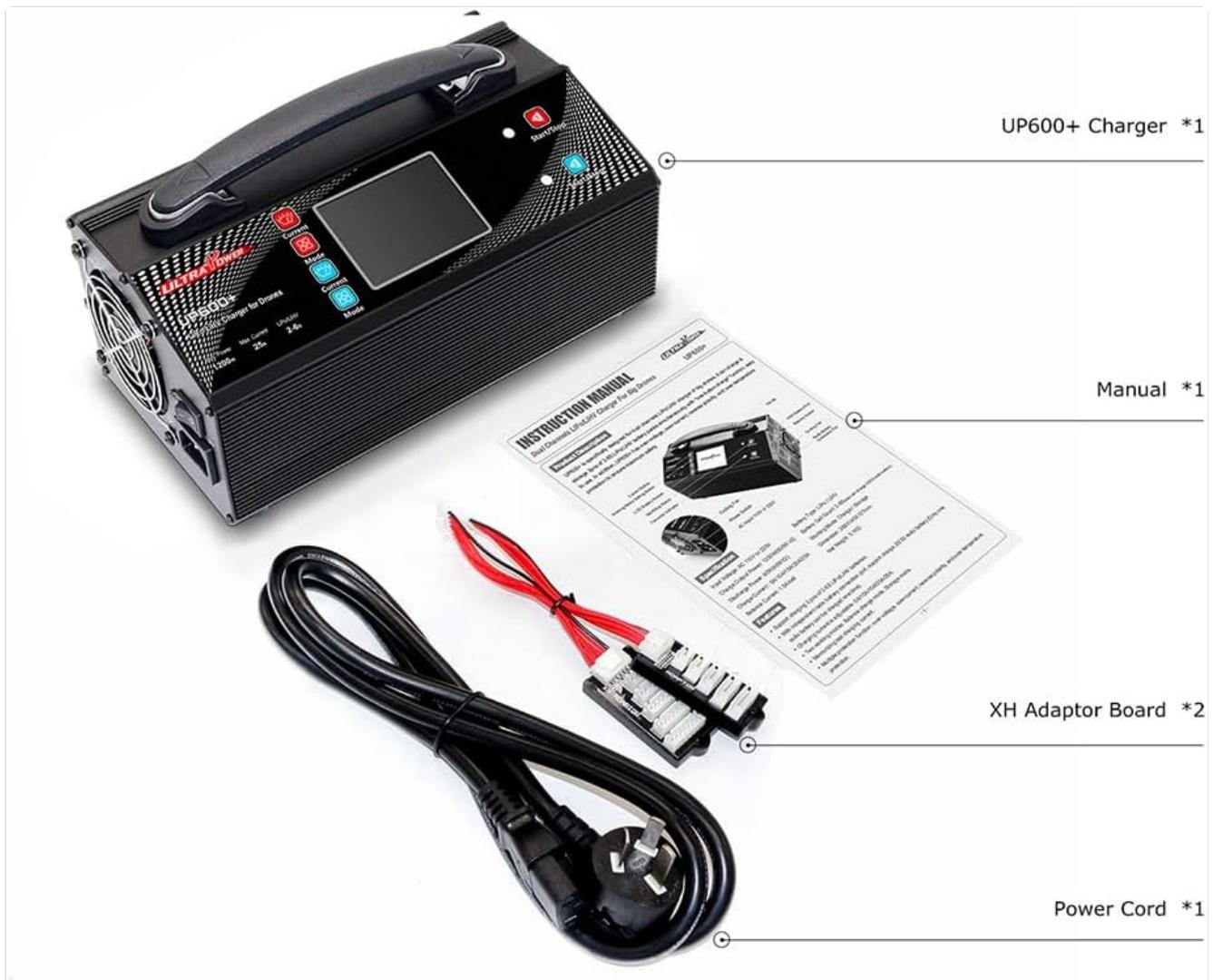
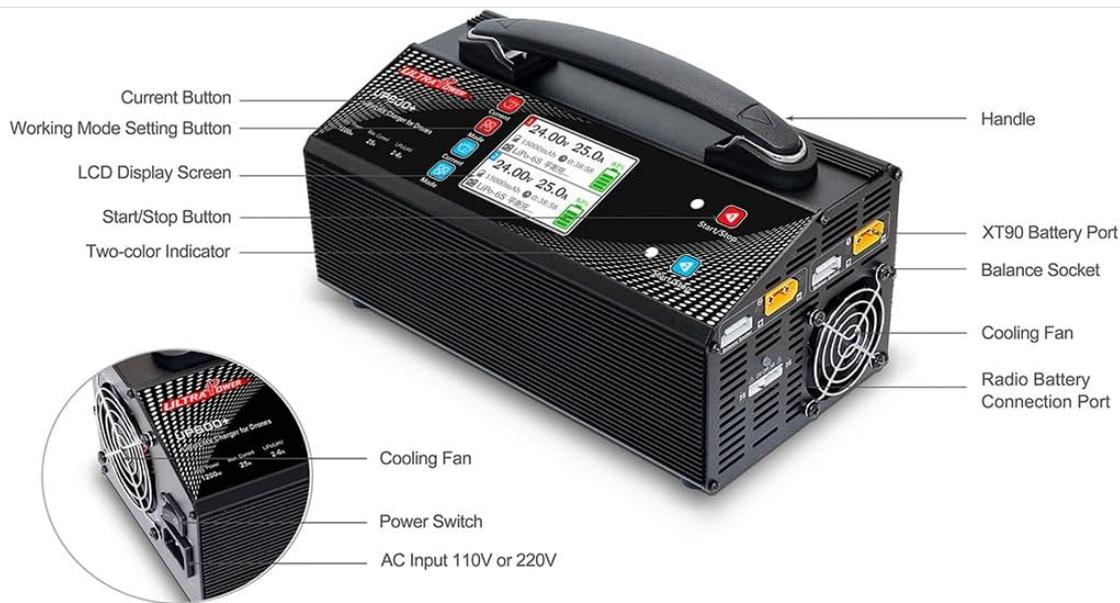


Figure 1: Package Contents. This image displays the contents typically found in the UP600+ charger package, including the main charger unit, the instruction manual, two XH adaptor boards, and a power cord.

- UP600+ Charger Unit (x1)
- Instruction Manual (x1)
- XH Adaptor Board (x2)
- Power Cord (x1)

PRODUCT OVERVIEW AND FEATURES

The UP600+ charger is equipped with advanced features for efficient and safe battery charging.



Specification

Input Voltage	AC 110V/220V
Charge Output Power	1200W(600W x2)
Discharge Power	80W(40WX2)
Charge Current	5A/10A/15A/20A/25A
Balance Current	1.5A/cell
Battery Type	LiPo/LiHV
Battery Cell Count	2-6S(also can charge 2S/3S radio battery)
Working Mode	Charge/Storage
Dimension	268X140X127 mm
Net Weight	3.1KG

Figure 2: Charger Components. This diagram labels the key parts of the UP600+ charger, including the handle, LCD display screen, current button, working mode setting button, start/stop button, two-color indicator, XT90 battery port, balance socket, cooling fan, power switch, and AC input.

- **Dual Channel Charging:** Two independent channels allow simultaneous charging of two batteries.
- **High Power Output:** 1200W total (2x600W) for fast charging.
- **Wide Voltage Compatibility:** Supports AC 110V or 220V input.
- **Versatile Battery Support:** Compatible with LiPo/LiHV batteries from 2S to 6S.
- **Multiple Charging Modes:** Includes Charge mode and Storage mode.
- **Clear LCD Display:** A 3.2-inch high-definition LCD displays real-time charging data such as voltage, current, battery capacity, working time, and battery type. The display automatically switches interface every 5 seconds to show detailed cell voltages.
- **One-Key Charging:** Simplified operation for quick start.
- **Independent Port for 2/3S Radio Batteries:** A dedicated port for charging smaller radio batteries.

UP600+ Dual Channels LiPo/LiHV Charger For UAV Drone

Max. Power: 2X600W Max. Current: 25.0A

LCD Display | LiPo/LiHV | Balance Charge | Storage Charge | 2-6S Battery



Clearly show the battery data of charging/discharging

3.2 inch high definition LCD display



Figure 3: LCD Display. This image highlights the 3.2-inch high-definition LCD display, clearly showing battery data during charging or discharging, including voltage, current, and battery percentage.

Switch the interface intelligently in every 5 seconds

real-time voltage | charging current | battery capacity | working time
battery type | battery capacity percentage | battery cell voltage



One-key charging, easy for user

Five charging current choice: 5A/10A/15A/20A/25A
Two working mode choice: Charge/Storage charging



Maintain the battery to extend the battery life

Under Storage mode, the battery can be charged/discharged the cell voltage to 3.80V, when the battery voltage is higher than 3.80V per cell, the charger will discharge the battery; on the opposite, when the battery voltage lower than 3.80V per cell, the charger will charge the battery.

Figure 4: Dynamic Display and One-Key Charging. This image illustrates how the charger's interface intelligently switches every 5 seconds to show real-time voltage, charging current, battery capacity, working time, battery type, and individual cell voltages. It also depicts the 'One-key charging' feature for user convenience.

SETUP INSTRUCTIONS

1. **Unpack the Charger:** Carefully remove all components from the packaging.
2. **Connect Power:**
 - Ensure the charger's power switch is in the OFF position.
 - Connect the provided AC power cord to the AC input port on the back of the charger.
 - Plug the other end of the power cord into a suitable AC outlet (110V or 220V, depending on your region).
3. **Power On:** Flip the power switch to the ON position. The LCD display should illuminate, indicating the charger is ready.

OPERATING INSTRUCTIONS

Connecting Batteries for Charging

1. **Connect Main Power Lead:** Connect the main power lead of your LiPo/LiHV battery to the XT90 battery port on one of the charging channels (Channel 1 or Channel 2).
2. **Connect Balance Lead:** Connect the balance lead of your battery to the corresponding balance socket using the provided XH adaptor board if necessary. Ensure the balance lead is inserted correctly to prevent damage.
3. **Repeat for Second Channel (Optional):** If charging two batteries simultaneously, repeat steps 1 and 2 for the second channel.

Widely apply to various field

Agriculture drone, Industrial drone, other UAV Drones,
like 6S 16000mAh, 22000mAh LiPo/LiHV battery,
2pcs 6S LiPo/LiHV batteries charged/discharged at the same time, good helper for big capacity battery.



Independent charging port for 2/3S Radio battery

1pc 2S or 3S Radio battery can be charged, one battery one time

Figure 5: Charging Setup. This image demonstrates the charger connected to two 6S 16000mAh LiPo batteries, illustrating its capability to charge multiple large batteries simultaneously. It also shows the independent charging port for 2/3S radio batteries.

Selecting Charging Mode and Current

1. **Select Channel:** Use the "Current Button" or "Mode Button" to navigate and select the desired charging channel (1 or 2) if not already selected.
2. **Choose Mode:** Press the "Working Mode Setting Button" to cycle through available modes: *Charge Mode* and *Storage Mode*.
 - **Charge Mode:** Charges the battery to its full voltage (e.g., 4.2V per cell for LiPo, 4.35V per cell for LiHV).
 - **Storage Mode:** Charges or discharges the battery to a safe storage voltage (typically 3.80V per cell for LiPo/LiHV) to extend battery lifespan.

3. **Set Charge Current:** Use the "Current Button" to adjust the charge current. Available options are 5A, 10A, 15A, 20A, and 25A. Select a current appropriate for your battery's capacity (e.g., 1C rate).

Starting and Stopping Charging

1. **Start Charging:** Once the mode and current are set, press the "Start/Stop Button" to begin the charging process. The LCD will display real-time charging data.
2. **Monitor Progress:** The display will show voltage, current, capacity charged, and individual cell voltages (switching every 5 seconds).
3. **Stop Charging:** To stop charging at any time, press the "Start/Stop Button" again. The charger will cease operation.
4. **Completion:** The charger will automatically stop when the battery reaches its full charge or storage voltage. Disconnect the battery once charging is complete.

Using the Independent 2/3S Radio Battery Port

The charger includes a dedicated port for 2S or 3S radio batteries. Only one 2S or 3S radio battery can be charged at a time using this port.

1. Connect your 2S or 3S radio battery to the designated "Radio Battery Connection Port".
2. The charger will automatically detect the battery type and begin charging. Monitor the process on the main display or a dedicated indicator if available.

MAINTENANCE

- **Cleaning:** Keep the charger clean and free from dust. Use a soft, dry cloth to wipe the exterior. Do not use solvents or abrasive cleaners.
- **Storage:** Store the charger in a cool, dry place away from direct sunlight and moisture when not in use.
- **Ventilation:** Ensure the cooling fans are not obstructed during operation to prevent overheating.
- **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.	No power supply; power cord loose; power switch off.	Check AC power connection; ensure power cord is securely plugged in; turn power switch ON.
Battery not charging.	Battery not connected correctly; incorrect mode selected; battery damaged.	Verify main and balance lead connections; ensure correct charging mode is selected; inspect battery for damage.
Display shows error message.	Battery voltage mismatch; connection error; internal fault.	Check battery cell count setting; re-connect battery; if error persists, contact support.
Charger gets hot during operation.	Normal operation for high power; obstructed ventilation.	Ensure adequate airflow around the charger; clear any obstructions from cooling fans. If overheating persists, reduce charge current.

SPECIFICATIONS

Feature	Detail
Input Voltage	AC 110V or 220V (100V-240V)
Charge Power	1200W (2x600W)
Discharge Power	80W (40W x 2)
Charge Current Range	5A / 10A / 15A / 20A / 25A
Battery Type	LiPo / LiHV
Battery Cell Count	2-6S (also charges 2S/3S radio batteries)
Working Modes	Storage Mode / Charge Mode
Balance Current	1.5A/cell
Dimensions	268 x 140 x 127 mm (12 x 5 x 6 inches approx.)
Net Weight	3.1 KG

WARRANTY AND SUPPORT

This product comes with a standard manufacturer's warranty. Please refer to the warranty card included in your package or contact your retailer for specific warranty terms and conditions.

For technical support, troubleshooting assistance, or inquiries regarding parts and service, please contact the retailer or manufacturer directly. Keep your purchase receipt as proof of purchase for warranty claims.