

UP1200+

Generic UP1200+ 8-Channel LiPo/LiHV UAV Drone Battery Charger Instruction Manual

Model: UP1200+

1. INTRODUCTION

Thank you for choosing the Generic UP1200+ 8-Channel LiPo/LiHV Battery Charger. This advanced charger is designed for UAV and drone batteries, offering high power output, multiple charging modes, and intelligent balancing capabilities. Please read this manual thoroughly before operating the device to ensure safe and efficient use.

2. SAFETY INSTRUCTIONS

- Always operate the charger in a well-ventilated area, away from flammable materials.
- Ensure the input voltage (AC 110V or 220V) matches your local power supply.
- Never leave the charger unattended during operation.
- Only charge LiPo/LiHV batteries with this device. Charging other battery types may cause damage or fire.
- Verify battery cell count (2-6S) and capacity before charging.
- Do not short-circuit the charging ports.
- Keep the charger away from water, moisture, and extreme temperatures.
- In case of malfunction, disconnect power immediately and contact support.

3. PRODUCT OVERVIEW

The UP1200+ is an 8-channel intelligent charger featuring a 3.2-inch HD color display for clear status monitoring. It supports LiPo/LiHV batteries from 2S to 6S and offers various charging modes.



Figure 3.1: Front view of the UP1200+ charger, showing the display, control buttons, and four charging ports.



Figure 3.2: Overview of the UP1200+ charger, highlighting its 8 channels, 1200W max power, 25A max current, and 3.2-inch HD color display.

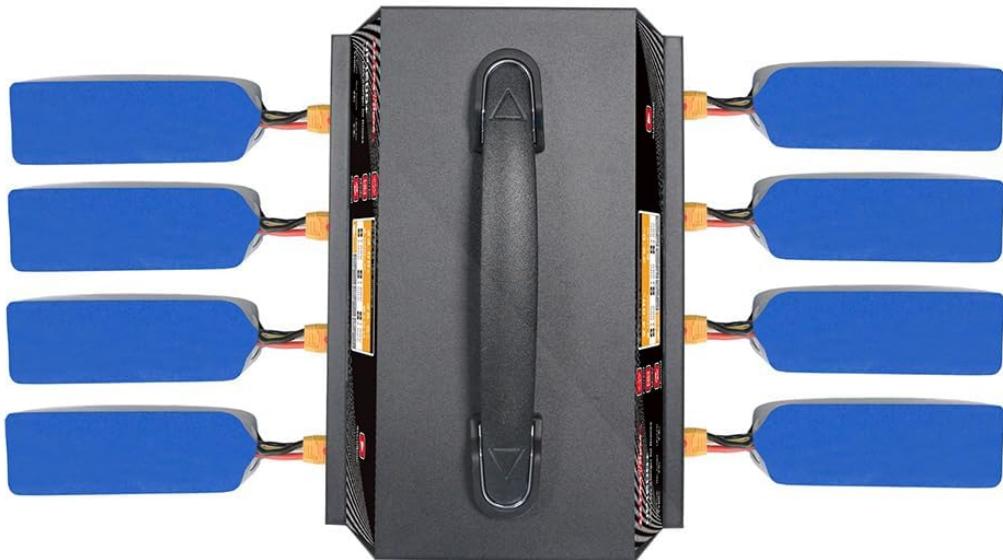
Key Features:

- **8 Independent Channels:** Capable of charging up to 8 batteries simultaneously.

- **Charging Nanny Function:** Automatically proceeds to the next batch of batteries once the current batch is fully charged.
- **High Power Output:** Total charge power of 1200W (2x600W) and max current of 25A.
- **Versatile Battery Support:** Compatible with LiPo/LiHV batteries from 2S to 6S.
- **Multiple Working Modes:** Charge, Fast Charge, and Storage modes.
- **PFC Protection System:** Ensures stable and safe power delivery.
- **Automatic Balance Charging:** Balances cell voltage at 1.5A/cell to extend battery life.

8 Channels, With Charging Nanny Function

UP1200+ can connect 8 batteries in one time, and it will automatically turn to the next batch packs (2pcs battery packs) once fully charged in last batch. Max. power per channel is 600W, and Max. current could reach 25A.



Two working modes, user-friendly

Balance Charging Mode: After choosing a CORRECT battery type, charger will charge two pieces of batteries simultaneously, and stop charging automatically when full charged.

Storage mode: Charger will charge/discharge your batteries to storage voltage simultaneously. With intelligent management system, charger will skip to next batch automatically if last batch is malfunction or broken.

Figure 3.3: The UP1200+ charger connected to 8 batteries, demonstrating its multi-channel capability and the 'Charging Nanny' feature for sequential charging.

4. SETUP

- 1. Unpack the Charger:** Carefully remove the UP1200+ charger and all accessories from its packaging.
- 2. Placement:** Place the charger on a stable, non-flammable surface in a well-ventilated area. Ensure adequate space around the charger for airflow.
- 3. Power Connection:** Connect the appropriate AC power cord (110V or 220V, depending on your region) to the charger's AC input port and then to a suitable wall outlet.
- 4. Initial Power On:** Flip the power switch to the 'ON' position. The display should illuminate, indicating the charger is ready.

5. OPERATING INSTRUCTIONS

5.1 Connecting Batteries

Connect your LiPo/LiHV batteries to the charging ports. Each port supports both the main discharge lead and the balance lead. Ensure correct polarity and secure connections.

5.2 Navigating the Display

The 3.2-inch HD color display provides real-time information on charging status, battery voltage, current, and capacity. Use the control buttons (Mode, Start/Stop, Channel) to navigate menus and adjust settings.

Clearly show the battery status via a 3.2" HD LCD display

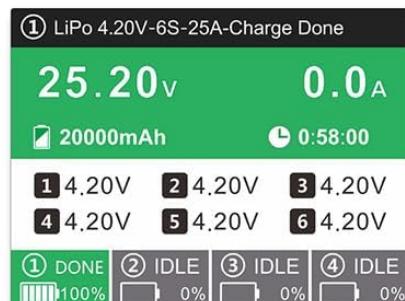
"One-button charging" function, easy to use

Choosing correct charging current: 5A/10A/15A/20A/25A, and press the "Start/Stop"button



Charging

Fully Charged



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

Figure 5.1: The charger's display showing a battery in the process of charging (left) and a fully charged battery (right), indicating voltage, current, capacity, and individual cell voltages.

5.3 Selecting Charging Parameters

- Select Channel:** Use the 'Channel' button to select the desired charging port.
- Select Battery Type:** Ensure 'LiPo' or 'LiHV' is selected based on your battery.
- Choose Working Mode:** Press the 'Mode' button to cycle through 'Charge', 'Fast Charge', and 'Storage' modes.
- Set Charge Current:** Adjust the charge current (5A/10A/15A/20A/25A) according to your battery's specifications. It is recommended not to exceed 1C for standard charging.
- Start Charging:** Once all parameters are set, press the 'Start/Stop' button to begin the charging process. The display will show real-time charging data.

5.4 Balance Charging

The UP1200+ automatically performs balance charging with a balance current of 1.5A per cell. This ensures that all cells within the battery pack maintain equal voltage, which is crucial for battery health and longevity.



Balance your battery cell voltage automatically

The Max. balance current of UP1200+ is 1.5A/cell. It will monitor the battery voltage of each cell and balance the battery cell voltage to keep a balancing charging, so as to extend the life of battery.



Figure 5.2: The UP1200+ charger is widely used for charging batteries for various applications, including agricultural drones and industrial UAVs.

6. MAINTENANCE

- Cleaning:** Regularly clean the charger's exterior with a soft, dry cloth. Do not use solvents or abrasive cleaners.
- Ventilation:** Ensure the cooling fans and vents are free from dust and obstructions to prevent overheating.
- Storage:** When not in use, store the charger in a cool, dry place, away from direct sunlight and extreme temperatures.
- Cable Inspection:** Periodically inspect all cables and connectors for signs of wear or damage. Replace any

damaged components immediately.

7. TROUBLESHOOTING

7.1 Charger Not Powering On

- Check if the power cord is securely connected to both the charger and the wall outlet.
- Verify that the wall outlet is functional.
- Ensure the power switch on the charger is in the 'ON' position.

7.2 Charging Not Starting

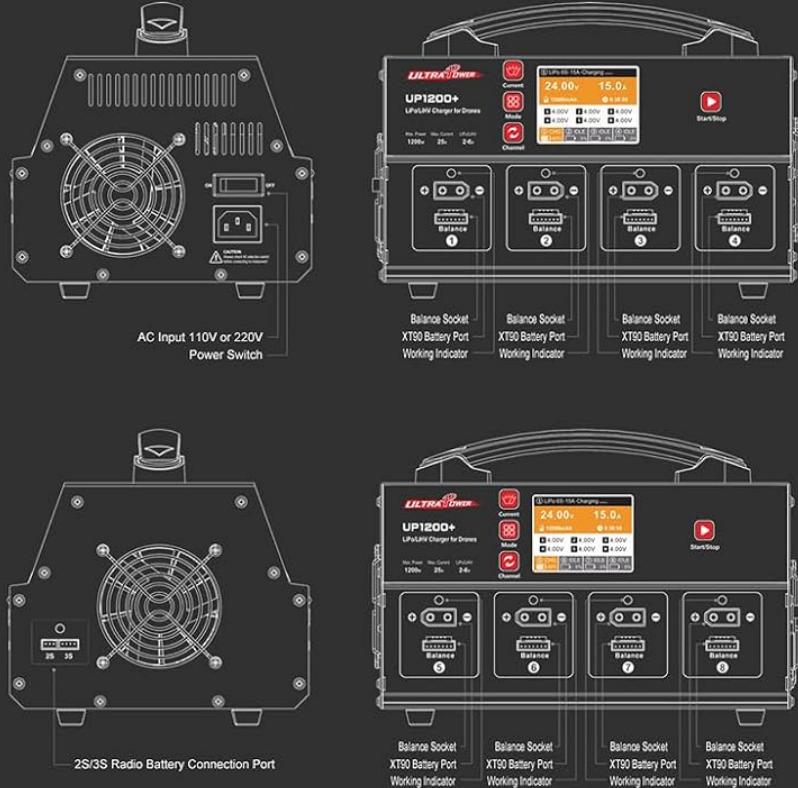
- Confirm that the battery is correctly connected to both the main and balance ports.
- Check if the correct battery type (LiPo/LiHV) and cell count (2-6S) are selected.
- Ensure the charge current is set appropriately.
- Press the 'Start/Stop' button to initiate charging.

7.3 Display Error Messages

- Refer to the on-screen message for specific error codes. Common errors include 'Connection Error' (check battery connections) or 'Voltage Error' (battery voltage outside safe range).
- If an error persists, disconnect the battery and power cycle the charger.

8. SPECIFICATIONS

Specifications



Input Voltage:	AC 110V or 220V
Charge Power:	1200W(600WX2)
Discharge Power:	80W(40WX2)
Battery Type:	LiPo/LiHV
Charge Current:	5A/10A/15A/20A/25A
Balance Current:	Max.1.5A/cell
Battery Cells Count:	2-6S (also can charge 2S/3S radio battery)
Number of ports:	8 (4 ports per side)
Charging Mode:	Balance Charging Mode/Storage mode
Working Temperature:	0-40°C
Storage Temperature:	-20-60°C
Dimensions:	270x190x175mm
Weight:	4.71kg

Figure 8.1: Detailed specifications and physical layout of the UP1200+ charger, including input/output ports and cooling fan.

Parameter	Value
Input Voltage	AC 110V or 220V
Charge Power	1200W (2x600W)
Discharge Power	280W (35Wx8)

Charge Current Range	5A/10A/15A/20A/25A
Battery Type	LiPo/LiHV
Battery Cell Count	2 – 6S
Working Mode	Charge/Fast Charge/Storage
Balance Current	1.5A/cell
Net Weight	4.61KG
Dimensions	270 x 190 x 160 mm (12 x 5 x 6 inches)
Operating Temperature	0-40°C
Storage Temperature	-20-60°C

9. WARRANTY AND SUPPORT

This product comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact your retailer. For technical support, troubleshooting assistance, or spare parts, please contact the manufacturer or your authorized dealer.