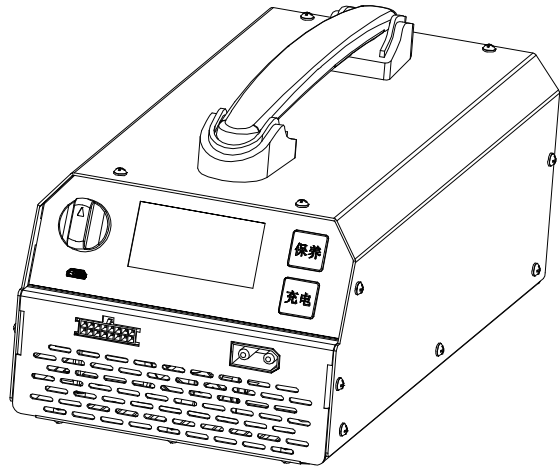


Product Manual

Mode: U1+

Support LiPo/LiHV Battery



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PROLOGUE

Thank you for purchasing our EV-PEAK Intelligent Lithium Battery Fast Charger. This manual indicates how to use the product properly. Please read and keep the instructions carefully for further reference before operation, and keep it properly.
The provisions mentioned here are merely complementary to the local safety regulations.

WARNING



Please read carefully and understand the safety tips below. Failure to comply with the mentioned items, it would damage to the charger or battery, endangering your body and even causing a fire disaster.

- Do not use the product in an inappropriate environment, such as sun exposure, rain, wet and other environments.
- Keep the product away from heat sources, high pressure, water, combustible gases, and corrosive objects, be sure to keep it at the recommended temperature range of the product (0-40 degrees Celsius).
- Keep it be placed horizontally to avoid tilt or shaking. Keep an adequate ventilation distance (> 50cm) around during use.
- It is prohibited to cover or place items on the product radiator and battery during operation.
- Never charge non-rechargeable lithium batteries not mentioned in the instructions.
- Keep the product and battery are on the anti-flammable, anti-conductor surface, and do not place them on the car cushion, carpet or similar objects to avoid losses or disasters.
- It is forbidden to use the voltage inconsistent with the operation manual, and the number of relevant model batteries and batteries required in the operation manual.
- Never charge and discharge batteries that have already been physically damaged.
- Do not unplug the input wire during use. Pull out as soon as the charging is complete.
- Wipe it with a dry towel if there is any attachment to the metal base.
- Do not modify or dismantle the product by yourself.
- Do not use the product in thunderstorm weather.
- Keep children under 14 years stay away from the product.
- Do not hit the battery before connecting the battery. Do not short circuit the positive and negative electrodes of the battery to avoid accidents.
- Keep an eye during use this product.
- In case of fire alarm, please use a dry powder fire extinguisher to put out the fire. Do not use liquid to put out the fire, which may lead to electric shock.

PRODUCT DESCRIPTION

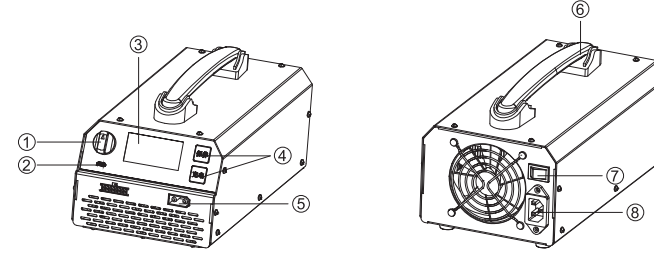
This product can charge one lithium battery with a maximum charge power of 800W, and it has two working modes: charging mode and storage mode. Charging current can be adjusted in 10A/20A/25A. This charger has a variety of protection modes, including over-current protection, overcharge protection, over-temperature protection, disconnection protection, and additional fast balance function, along with display indications.

When the U1+ charger working with butler UB4-Pro, it can extend to charge up to 4 batteries alternately according to the capacity difference of the battery.

This charger is equipped with a LCD display, which can automatically display the real-time charging status, battery voltage, charging current, charging time, battery capacity and cell voltage of the battery pack.

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COMPONENT ILLUSTRATION

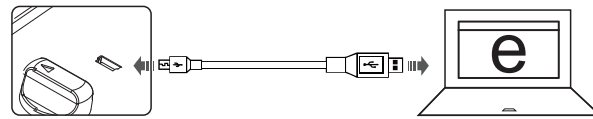


- | | | |
|------------------------------|-------------------|-----------------|
| ① 10A/20A/25A Current Switch | ④ Working Mode | ⑦ Power On-off |
| ② USB Upgrade Port | ⑤ XT90i Connector | ⑧ AC Input Port |
| ③ LCD Display | ⑥ Handle | |

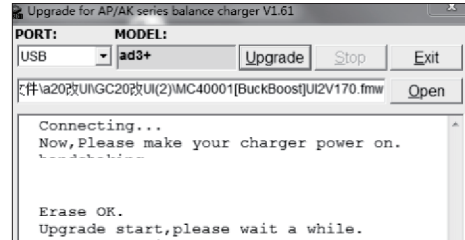
FIRMWARE UPGRADING

If the battery firmware needs to be upgraded, please visit our official website and follow these steps to update.

- Visit the official website of EV-PEAK, www.ev-peak.com (<http://www.ev-peak.com/firmware>)
- Connect the charger to your computer through the Micro USB update port.



- Run the firmware and click the "Upgrade" button to upgrade.



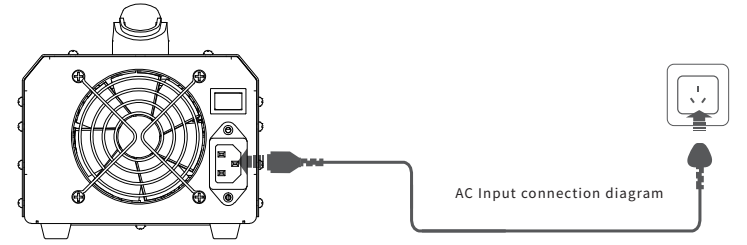
- After the upgrade is completed, the device will be restarted.
- If the upgrade fails, restart and try the above steps.

Follow the upgrade software prompts for the detailed steps.

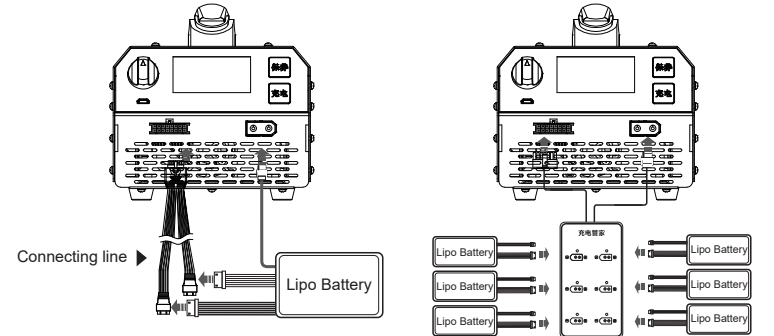
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CONNECTION INSTRUCTIONS

- First, connect the power cord to the AC input port and the other end to the AC power socket(100-240V, 50/60Hz), turn on the power switch and LED display will light on.



- Connect the LiPo-14S battery or the butler



Adapter cable connection diagram

Butler connection diagram

- Always inspect whether each port of the battery pack is damaged, broken or other obvious defects before connecting.
- Always make sure that the connection polarity is correct before charging.
- Always connect the adapter to the charger first and then connect the battery to avoid a short circuit. When disconnecting, always disconnect the battery first, and then disconnect the charger.

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OPERATION INSTRUCTIONS

1. Start-up and self-inspection

After checking all connections are correct, press the ON/OFF switch button to power on the charger. The LCD display will light on, and buzzer alarming. When the buzzer is over, the charger completes the normal start and self-test.

2. Operation modes

This product has two modes: Charging & Storage. Users can choose the corresponding mode according to the user's needs. When the butler is connected, the host will automatically recognize and switch to the continuous working mode. All operations only need to be performed once, and the host will work continuously with the butler.

Charging mode: In this mode, the charger can realize the rapid and balanced charging.

Storage mode: When the battery is unused for a long time, the battery storage is recommended every 15 days; when the battery life decreases significantly or the difference of the unit cell exceeds 50mV, battery storage is suggested. In the storage mode, the charger will charge or discharge the battery with a small current, the voltage each cell is maintained at 3.84-3.86V.

Continuous working mode: After the butler is connected, the charger will automatically identify and convert to the continuous working mode.

3. Set up the working current

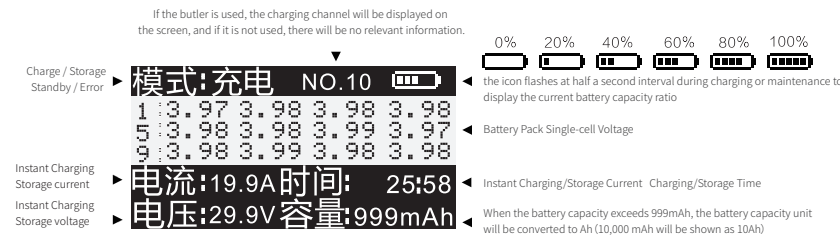
Adjust the current switch to the corresponding gear according to the battery capacity and the actual use requirements.



4

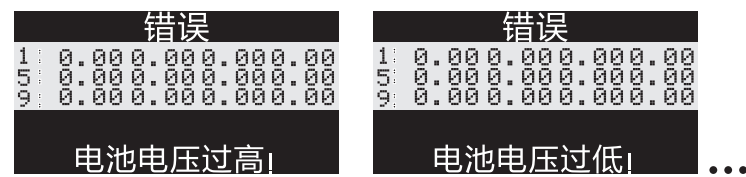
SCREEN DESCRIPTION

The LCD screen displays as follows:



Error Reminder

When using the product incorrectly, the charger reports an error, as shown in the figure below:



Output Line Disconnected	Charger High Temperature	Short Circuit
Battery High Voltage	Discharge Short Circuit	Overheating Protection
Battery Low Voltage	Safety Timer	AC Input Low Voltage
Cell Wrong Number	Cell Connect Error	AC Input Error
Cell High Difference Voltage	Battery Low Temperature	Power Turned Off
Cell High Voltage	Battery High Temperature	
Cell Low Voltage	Connection Error	
Max Capacity	Connection Overtime	
Power Supply Failure: Fan Fault		

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SPECIFICATIONS

model	U1+	U1S
Input	100V-240V-8.0A 50/60Hz	
Output	Max. 60.9V=Max. 25.0A	Max. 60.9V=Max. 20.0A
Maximum output power	1200W	750W
Battery type	LiPo/LiHV	
Battery cell count	6S-14S	6S-12S
Channel number	Single channel	
balance accuracy	<20mV	
Input protection	over-current	
Output protection	over-voltage, under-voltage, short circuit, over temperature, reverse polarity	
Working temperature	5-45℃	
Cooling system	Forced air cooling	
Upgrade Port	USB	
Dimensions	287*145*139mm	
Weight	4.0KG	≈5.9KG

Tip: The product parameters mentioned in this product manual are for reference only and can be modified without prior notice.

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SUPPORT AND WARRANTY

Thank you for purchasing the charger of EV-PEAK. We will do our best to provide you with perfect and timely after-sales service. Please contact us with any questions or questions.

- The deadline for warranty after product failure is subject to delivery to our after-sales service centre.
- All warranties are free of charge if the product itself is faulty within one year from the date of purchase.
- If the customer is unable to provide a valid proof of purchase, the internal production date of the product will prevail.
- Exceeds one year from the date of purchase, cost will be charged as appropriate and the user will have to bear the transportation costs back and forth.
- Be sure to leave your contact information so that warranty centre can be timely contact you.

Disclaimer: The following situation is not within the category of warranty.

- Damage caused by incorrect connections.
- Damage caused by incorrect operation.
- Damage caused by human beings or accidental impact, force majeure factors.
- Damage caused from disassembly or private modification.
- Internal damage from moisture, submersion, dust, dirt or other contaminants.
- Signs of wear and tear, scratches dents and dings.

Note: Please use the charger correctly. Any expense exceeding the original purchase price of the charger shall not be borne by EV-PEAK. We reserve the right to modify the contents of this manual at any time with or without notice.

WARNING

- Do not attempt to operate this charger if you are impaired in any way.
- Do not allow children to be near to this charger when it is in operation.
- This charger is not a toy. Do not allow children to operate this charger.
- Turn the power off to avoid electric shock if there are cracks on the charger surface.
- This product is limited for indoor use only.



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