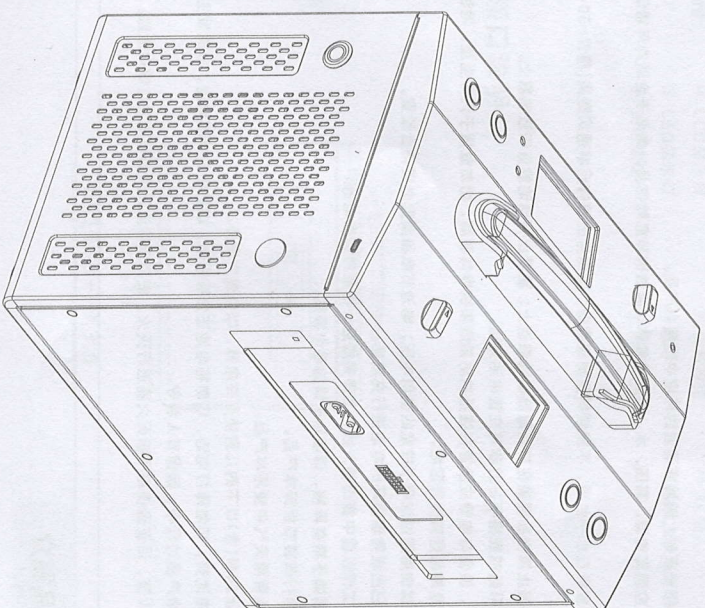


使用说明书/User Manual

U5T+

智能平衡充电器/Smart Charger



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Authorized by Beijing TT Aviation Technology Co., Ltd.
制造商：深圳市永新新能源技术有限公司
Manufacturer: Shenzhen EV-PEAK New Energy Technology Co., Ltd.

Thank you for purchasing U5T+ Balance Charger. This manual could help you install and operate easily. Please read the manual carefully before operating and keep it handy for further reference. Items herein mentioned is only supplementary to local safety regulations.

WARNING

Very important to understand the items as below. Failure to comply with the mentioned items, it would damage the charger or battery, injure your body or even cause a fire disaster.



WARNING

1. Do not put the charger in inappropriate conditions such as direct sunlight, rain, moisture and so on.
2. Keep it away from thermal source, high voltage, water, flammable gas, corrosives and so on, be sure to keep it at the range of recommended temperature 0°C-40°C/32°F-104°F.
3. Keep it horizontally stable to avoid any tilt or shake. And sufficient ventilation distance must be left around (>50cm recommended) to ensure good ventilation and heat dissipation during operation.
4. Forbidden to cover the radiator or battery with objects during operation; Prohibited to place battery on the radiator.
5. Prohibited to charge lithium batteries that do not match the cell numbers or models, or non-rechargeable lithium batteries.
6. Keep the charger and battery on an anti-flammable and anti-conductive surface, and do not put it on car seat, carpet and so on to avoid any losses or damages.
7. Do not try to connect to a power source that does not meet the rated input voltages; The cell number and type of batteries must meet the output.
8. Do not charge or discharge any battery that has been damaged physically.
9. Do not disconnect the input cable during operation, and disconnect battery timely once charging completed.
10. Please wipe off any object attached to the metal ports with dry cloth.
11. Do not disassemble or modify the charger by yourself.
12. Do not operate it during thunderstorm.
13. Keep children under age of 14 away from the charger.
14. Do not damage battery, short-circuit, or reverse battery polarity to avoid danger before connecting.
15. Never leave the charger unattended when it is working
16. Please use dry powder extinguisher in case in fire, and do not take liquid extinguisher to avoid electric shock.

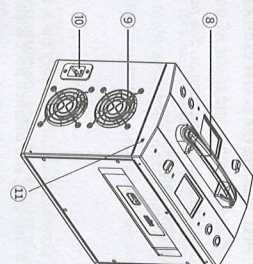
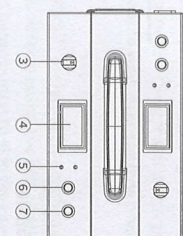
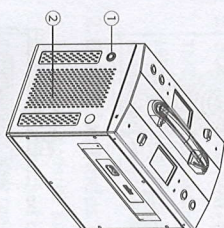
INSTRUCTION

This intelligent charger, with 2 charging channel, charging & maintenance mode, and 3-speed charging switch, automatically detect and run after connected with LiPo battery. The charger features multi-mechanism protection of over-current, over-charging, over-temperature and safety cut-off, and extra function of fast-balancing and status indication.

With the U5T+ smart balance charger and the charging butler USBT+ combined, 10 sets of LiPo battery can be connected simultaneously and charged alternately based on the remaining capacity of battery.

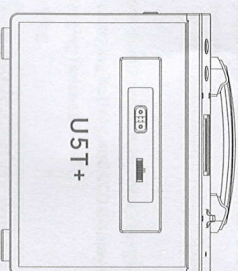
With dual LCD display equipped, the charger automatically indicates real time charging status, charging voltage, charging current, charging time, battery capacity and cell voltage.

PARTS DESCRIPTION



- | | | | |
|------------------|-----------------|---------------|--------------------------|
| ① Main Switch | ④ LCD Display | ⑦ Maintenance | ⑩ AC Input |
| ② Air In Port | ⑤ LED Indicator | ⑧ Handle | ⑪ Micro-USB Upgrade Port |
| ③ Current Switch | ⑥ Charge | ⑨ Cooling fan | |

Description of charging interface of this model

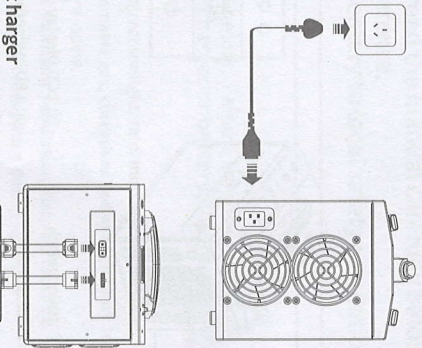


AS150U+MX3.0

CONNECTION INSTRUCTIONS

1. First, connect the power cable to the AC input port and the other end to the AC power supply (100-240V, 50/60Hz), turn on the power switch to start the charger.

2. Connect each Lipo battery pack to the charger via charging and balance port with compatible connectors as instructed.



Adapters may be required for connection to the charger

- Always confirm that connection polarity is correct before charging
- Always inspect batteries for physical damage before attempting to charge

OPERATING

The smart charger is dual-channel independent output, each channel operation interface is also independent, the following will take one channel as example for introducing the operation procedure.

1. Startup and Self-Test

The charger will automatically count down after getting all the connectors well connected, LCD screen and LED will turn on, and buzzer will alarm. The charger starts charging normally after the buzzer stops. If user needs maintenance or does not want to wait, user can long press the function button > 25 to start directly.

2. Operation Modes

1. **Charging mode:** It's an automatically preferred mode, after getting the battery well connected, charger will do self-check and countdown. After passing the self-check and countdown, charging will be started automatically. User can press the Charge button to skip the countdown.
2. **Storage mode:** It's a manual mode. When the battery is not used for a long time, it is recommended to maintain the battery every 15 days (specifically follow the battery manufacturer's instruction manual); or in normal use, if the battery life is significantly reduced or the battery cell voltage difference exceeds 50mV, maintenance is recommended; in storage mode, the charger charges and discharges with trickle current to get each cell voltage balanced to 3.84-3.86V.
3. **Continuous working mode:** After getting the USB+ butler connected, the charger automatically detects and switches to continuous working mode. In this mode, automatic mode will be closed, user needs to manually operate and define the continuous working mode once, and then the charger will coordinately and continuously work with the USB+ butler until pressing any

3. Setting Of Charging Modes

According to battery capacity and actual application, user shall select a appropriate current switch

4. Charging

- Long press charge button more than 2 seconds to enter charge mode.
1. Red light on, the charger is charging battery, and LCD display indicates real-time charging status.
 2. Green light on, indicates charging finished.
 3. Press any key can stop charging.



In the continuous working mode, charger will automatically perform a series of actions such as stop, detection, and channel switching. These actions are all executed by charger intelligently without human intervention. After user presses a key to stop, if the battery is not removed within 30 seconds, charging will automatically resume.

5. Storage

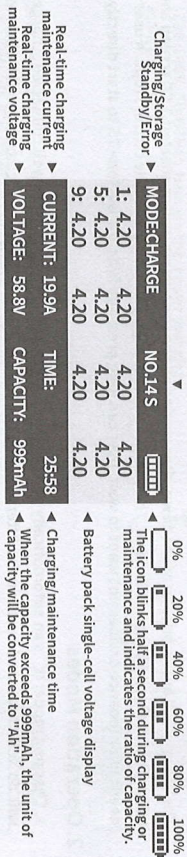
- Long press storage button more than 2 seconds to enter storage mode.
1. Red light on, the charger is maintaining battery, and LCD display indicates real time maintenance status.
 2. Green light on, maintenance finished.
 3. Press any key can stop maintaining.

In the continuous working mode, charger will automatically perform a series of actions such as stop, detection, and channel switching. These actions are all executed actions such as stop, detection, and channel switching. These actions are all executed stop, if the battery is not removed within 30 seconds, maintenance will automatically resume.

SCREEN

The interface displayed as below:

If charger works with butler, the display will show the charging channel; if charger works without butler, no channel info will be displayed.



ERROR!

When encountering improper use or charger failure, the charger will prompt error messages! As shown below:

Error

1: 0.000.000.000.00
5: 0.000.000.000.00
9: 0.000.000.000.00

REVERSE POLARITY

Error

1: 0.000.000.000.00
5: 0.000.000.000.00
9: 0.000.000.000.00

BATTERY HIGH VOLTAGE

REVERSE POLARITY

BATTERY HIGH VOLTAGE

MAX CURRENT

PROCESS INTERRUPTED

CELL LOW VOLTAGE

SAFETY TIMER

OUTPUT SHORT CIRCUIT

CELL HIGH VOLTAGE

MAX CAPACITY

INPUT VOLTAGE ERROR

CELL CONNECT ERROR

MAX EXT. TEMP

CHARGER FAILURE

CHARGER OVERHEATING

BATTERY LOW VOLTAGE

OVER POWER

STATUS INDICATOR

Status Indicator

	Flashing Green	Standby
	Solid Red	Working
	Solid Green	Completed
	Green and Red flashing alternately	Error

SPECIFICATIONS

Model No	U5T+
AC Input	100-120V~18A 60Hz / 180-240V~16A 50Hz
Output	Max. 60.9V =Max. 30.0A
Max. Output Power	Max. 1200W×2CH
Battery Type	LiPo/LiHV\$mart battery
Battery Cell Count	12S/14S
Channel Count	Dual channel
Balance Accuracy	<20mV
Input Protection	Overcurrent
Output Protection	Overvoltage, Undervoltage, Short circuit, Over temperature, Reverse polarity
Working Temperature	0°C-40°C/32°F~104°F
Cooling System	Forced air cooling
Upgrade Port	USB
Dimensions	325×190×280.5mm
Weight	≈9.2kg

Note: The product specifications mentioned in this manual are for reference only and are subject to change without prior notice.

SUPPORT AND WARRANTY

Thank you for purchasing our charger. We do our best to provide you with timely and satisfying support. Please contact us with any questions or concerns.

This product is warranted to be free from manufacturer defects for 1 year from original purchase date. Please keep your original proof of purchase for warranty purposes.

Disclaimer: What our manufacturing warranty does not cover:

1. Damage caused by incorrect connections.
2. Damage caused by incorrect operation.
3. Damage caused by in pact or drops.
4. Damage from disassembly or modification.
5. Internal damage from moisture, submersion, dust, dirt or other contaminants.
6. Sins of normal wear and tear, scratches dents and dings.



Note: Any expenses exceeding the original purchase price of the charger shall not be borne by TT Aviation. We reserve the right to modify the contents of this manual at any time with or without notice.

WARNING!

1. Do not attempt to operate this charger if you are impaired in any way.
2. Do not allow children to be near this charger when it is in operation.
3. Do not allow children to operate this charger.
4. Please turn the power off when the charger is not in use.
5. This charger is for indoor use only.



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