

# POWERTECH PLUS



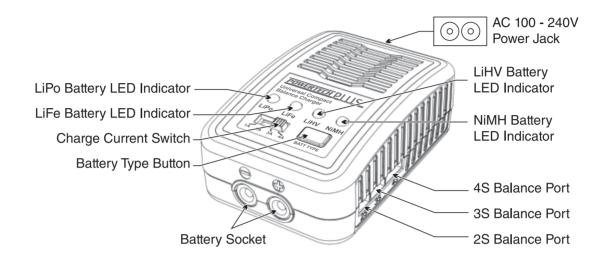
4A Universal Li-Po/LiFe/LiHV Balance Charger MB-3629 User Manual





#### INTRODUCTION

Thank you for your choice of the Powertech Plus MB-3629, 100-240V AC balance charger. This unit is simple to use but its operation does require some knowledge on the part of the user. Please read this entire operating manual completely and attentively before using this product, as it covers a wide range of information on operating and safety. This charger is an economic, high quality 100-240V AC balance charger, designed for charging LiPo, LiFe and LiHV batteries from 2-4 cells in balance mode. It can charge 6-8S NiMH batteries also. The circuit power is 50W and max charge current can reach to 4A. There are four kinds of charge current 1A/2A/3A/4A that can be selected. You could select the proper charge current according to battery capacity.

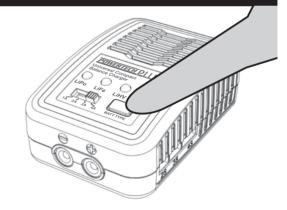


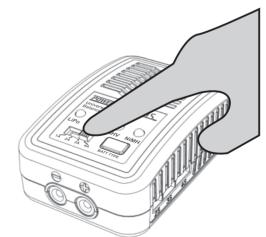
## **OPERATION**

The charger comes with a built in power supply. You can connect the AC power cord to the AC socket (100-240V AC) directly.

Please refer to following steps to charge the battery:

- 1. Insert the AC power cord into the charger.
- 2. Insert the AC cord into a wall socket (100-240V). All LEDS will light for 1 second and the battery type LED will flash green and red which indicates the charger is ready to charge.
- 3. Select the battery type LiPo/LiFe/LiHV/NiMH by press "BATT TYPE" button.
- 4. Select the proper charging current 1A/2A/3A/4A by the slide switch. The charge current varies from 1A(1000mA) to 4A(4000mA). The recommended charge rate is 1C (battery capacity = charge current). 1C means: capacity value = charge current. Example: LiPo cell of 2200mAh Capacity; 1C=2200mA (=2.2A) charge current. You can choose 2A current to charge the battery. LiPo cell of 2800mAh Capacity; 1C=2800mA (=2.8A) charge current. You can choose 3A current to charge the battery.



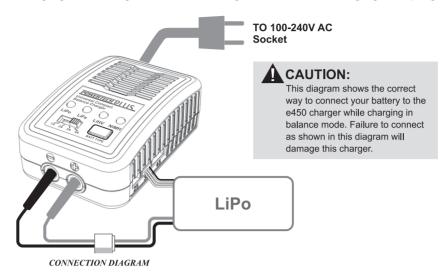




#### 5. ChargingLiPo/LiFe/LiHV Battery.

Connect the battery main charge lead to battery socket which is in the front side of the charger and battery balance wire to balance port which is in the right side of the charger.

The charger starts charging. The charge status LED will glow to indicate charging is in progress.



### Explanation of LED Status:

LED green and red blinking	The charger is ready to charge.	
LED glows constant red	Battery capacity is less than 25% charged.	
LED blinking red	Battery capacity is between 25% to 50% charged.	
LED blinking yellow	Battery capacity is between 50% to 75% charged.	
LED blinking green	Battery capacity is between 75% to 99% charged.	
LED glows constant green	Battery is fully charged.	

When the battery is fully charged, the charge status LED will glow constant green. Unplug the battery from the charger and the charge status LED will flash green which indicates the charger is ready to charge another battery.

# 4. Charging NH Battery.

Connect the battery main charge lead to battery socket which is in the front side of the charger. Press and hold "BATT TYPE" button for 2 seconds to start charging. The charge status LED will glow to indicate charging is in progress. Always make sure you are charging NiMH battery under NiMH mode. Charging Lithium Battery under NiMH mode can lead fire, personal injury or property damage.

#### **WARNING:**

When the battery is fully charged, the charge status LED will glow constant green. Unplug the battery from the charger and the charge status LED will flash green which indicates the charger is ready to charge another battery.

## **TROUBLESHOOTING**

If there is an error, all four status LED of the charge will blinking.

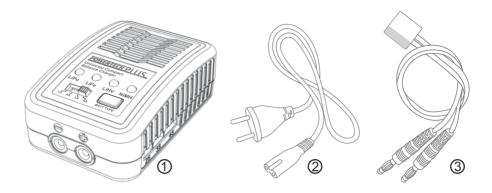
LED Blinking	Problem	Solution
1. * * * *	Connection break or wrong connection	Check the connection between the charger and the battery
2. * * * *	Polarity (+ and –) connections of battery are incorrect	Make sure the charge lead is connected properly to the charger and ensure it is wired correctly
3. * * * *	Dead cell or imbalance between cells is too high	Safely dispose of damaged battery
4. ***	Over current protection	Decrease charge rate to safe level for the battery pack, or dispose of shorted battery

Once the error condition has been resolved, press "BATT TYPE" button to reset the charger. If the error can not be solved, please disconnect the power cord from the wall socket and unplug the battery from the charger.



# THE SET CONTAINS

- 1. 4A Universal Li-Po/LiFe/LiHV Balance Charger
- 2. AC Power Cord
- 3. Battery Charging Cable



# RECOMMENDED ACCESSORIES



Tamiya Charging Cable



EC3 Charging Cable



Crocodile Clip Charging Cable



JST / BEC Charging Cable



Dean Charging Cable





#### **WARNING & SAFETY NOTES**

- This charger is not intended for use by persons (include children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid a hazard
- This charger is suitable for charging rechargeable LiPo/LiFe batteries. Do not attempt to recharge non-rechargeable batteries. Charging other types of batteries may cause fire or explosion
- Never leave the charger unattended when it is connected to its power supply
- The allowable AC input voltage is 100-240V AC. Never connect it to any other voltage
- · Protect charger from dust, dirt and damp
- Never place the charger and batteries connected to it on any form of flammable surface. Never operate the charger in the vicinity of inflammable material or gas
- During charging, the battery must be placed in a well ventilated area . Never place the charger on a carpet or similar surface
- •Take great care to maintain correct battery polarity, and avoid shot-circuit. Read the battery manufacturer's instructions and adhere to them strictly
- The charger must only be plugged into an earthed socket-outlet (for portable class 1 battery chargers for outdoor use)
- The connection to the supply mains is to be in accordance with the national wiring rules when battery chargers for installation in caravans and similar vehicles

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

## **SPECIFICATIONS**

AC Input: 100-240V

Battery Type: LiPo/LiFe/LiHV/NiMH

Lithium Battery Cell Count: 2-4S NiMH Battery Cell count: 6-8S

Charge Current: 1A/2A/3A/4A

Charge Power: 50W
Current Drain for Balancing: 300mA
Weight: 225g

Dimensions:  $72(W) \times 111(D) \times 40(H)$ mm























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