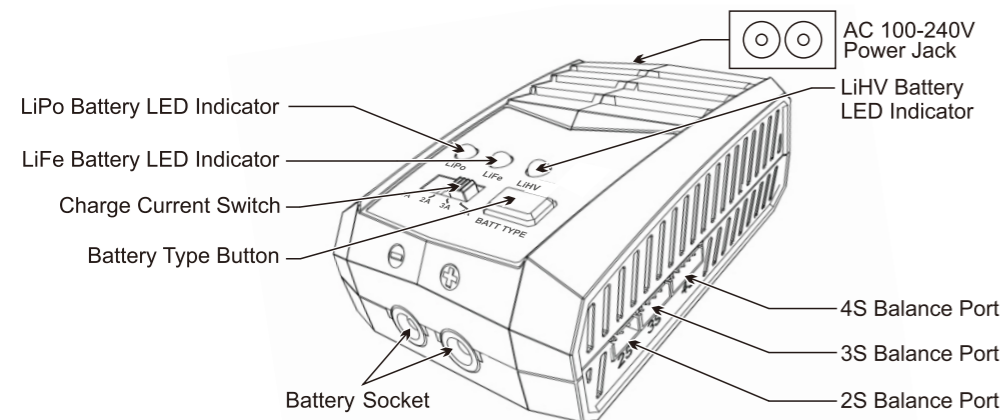


**INTRODUCTION**

Thank you for purchasing the EcoPower Electron 44 AC balance charger. These operating instructions are designed to ensure that you quickly become familiar with the charger and its functions. It is therefore important that you read through the Operating Instructions, Warning and Safety Notes before you attempt to use your new charger for the first time.

The Electron 44 is an economic, high quality 100-240V AC balance charger that integrates the latest technology for charging 2-4S LiPo, LiFe and LiHV batteries. The Electron 44 has a compact 50W AC power supply that can reach a 4 amp charge rate. There are four charge current settings 1A, 2A, 3A and 4A that can be selected. The charge amperage should be set according to the batteries mAh capacity (**OPERATION #4** explains this further).

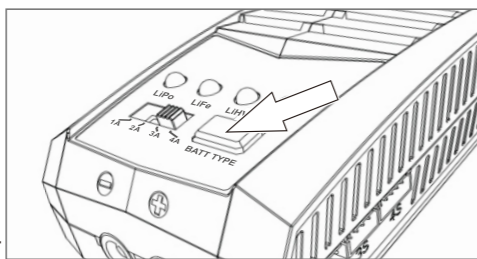


**OPERATION**

The Electron 44 comes with a built in 50W AC power supply. You can connect the AC power cord to a 100-240V AC socket.

Please refer to the following steps to charge the battery:

- 1) Insert the AC power cord into the charger.
- 2) Insert the AC cord into a 100-240V wall socket. All LEDs will light up for 1 second and the battery type LED will flash green and red which indicates the charger is ready.
- 3) Select the battery type (LiPo, LiFe and LiHV) that you are charging by pressing the "Batt Type" button.

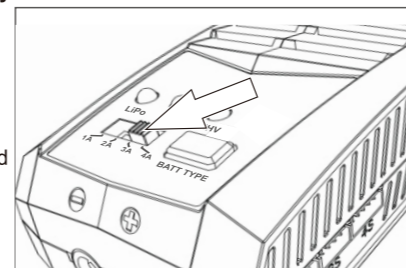


Select Battery Type

**4) Select the proper charge current (1A, 2A, 3A or 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).

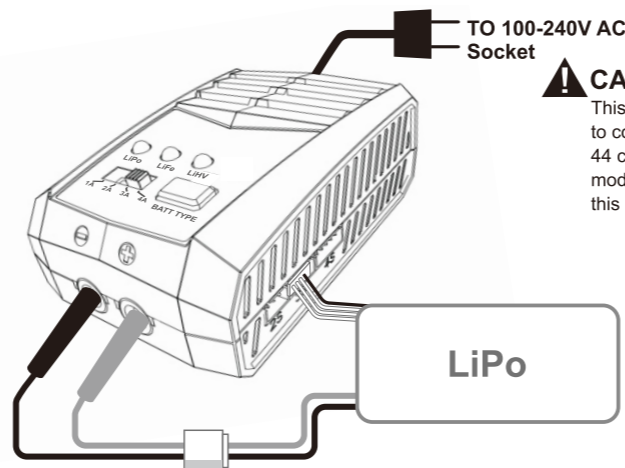
**Example:** A battery with a capacity of 3200mAh for a 1C charge rate is 3.2 amps or 3A (capacity divided by 1000 = 1C).  
A battery with a capacity of 4000mAh for a 1C charge rate is 4A. 4000mAh ÷ 1000 = 4 amps.



Select Charge Current

**5) Charging LiPo/LiFe/LiHV Batteries**

Always connect the charge lead first to the charger before connecting the lead to the battery to ensure the battery won't short circuit. **Double check that the correct battery type has been selected** and connect the charge lead to the charger then make the connection from the battery to the charge lead. Connect the batteries XH balance plug to the charger's balance input. The charger will start charging. The LED lights will indicate the charge status (see below).



Connection Diagram

**CAUTION:**  
This diagram shows the correct way to connect your battery to the Electron 44 charger while charging in balance mode. Failure to connect as shown in this diagram will damage this charger.

**LED STATUS**

LED green and red blinking	The charger is ready to charge.
LED 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 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.

**TROUBLESHOOTING**

If there is an error, all four status LEDs will be blinking. The amount of blinks in a sequence will indicate the issue.

LED Blinking Times	Problem	Solution
1 Blink	Connection break or wrong connection	Check the connection between the charger and the battery.
2 Blink	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 Blink	Dead cell or imbalance between cells is too high	Safely dispose of damaged battery
4 Blink	Over current protection	Decrease charge rate to safe level for the battery pack, or dispose of shorted battery

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

**SPECIFICATION**

AC Input	100-240V
Battery Type	LiPo/LiFe/LiHV/NiMH
Cell Count	LiPo/LiFe/LiHV: 2-4S NiMH: 6-8S
Charge Current	1A/2A/3A/4A ± 10%
Cell Terminate Voltage	LiPo: 4.2V ± 0.02V / LiFe: 3.6V ± 0.02V LiHV: 4.35V ± 0.02V
Circuit Power	50W
Current Drain for Balancing	300mA
Dimension	69.4x110.7x40.5mm
Weight	220g

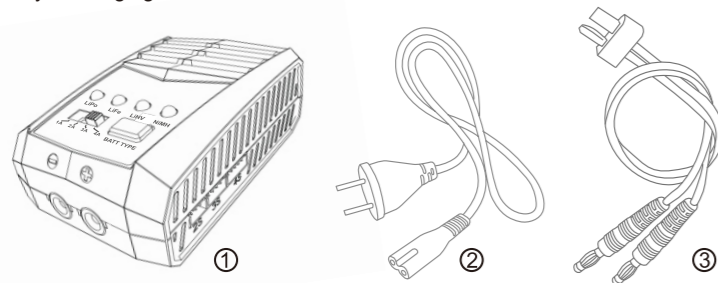
**IMPORTANT WARNING**

First generation of the 44AC allowed NiMH batteries to be charged, this feature has since been removed.

**First generation 44AC Charger:**  
**ALWAYS make sure you are charging NiMH battery in the NiMH mode. Charging LITHIUM BATTERIES under NiMH mode can lead to fire, personal injury or property damage. Never attempt to charge in a DIFFERENT charge mode from what the battery chemistry is.**

## CHARGER CONTENTS

- ① EcoPower Electron 44 AC Charger
- ② AC Power Cord
- ③ T-Style Charging Cable



## WARNING AND SAFETY NOTES

**These warnings and safety notes are particularly important. Please follow the instructions for maximum safety; otherwise the charger and the battery can be damaged or at worst it can cause fire or injury to the user.**

⚠ Never leave the charger unattended when it is connected to its power supply. If any malfunction is found, TERMINATE THE PROCESS AT ONCE and refer to the operating manual. Always use a LiPo safe bag or a non flammable non conductive containment box while in use.

⚠ Keep the charger well away from dust, damp, rain, heat, direct sunlight and vibration. Never drop it.

⚠ This charger and the battery should be placed on a heat-resistant, nonflammable and nonconductive surface. Keep all flammable volatile materials away from the operating area.

⚠ Make sure you know the specifications of the battery to be charged to ensure it meets the requirements of this charger. If the program is set incorrectly, the battery and charger may be damaged. It can cause fire or explosion due to overcharging.

⚠ To avoid short-circuiting between the charge lead, always connect the charge cable to the charger first, then connect the battery. Reverse the sequence when disconnecting.

⚠ It is highly recommended to keep an operable Class A fire extinguisher in the vicinity of use.

## NEVER ATTEMPT TO CHARGE THE FOLLOWING TYPES OF BATTERIES

- A non-rechargeable battery
- A battery that is still installed in the model
- Battery that consists of different types of cell chemistry
- A battery that is dead, wet, damaged, swollen or fully charged
- A battery with an integral charge circuit or protection circuit
- A battery with pinched or shorted cables.
- Never attempt to connect more than one battery to this charger

## COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

European Compliance Information  
Declaration of Conformity



Product(s):  
Item Numer(s):

Battery balance charger  
ECP-1006

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European EMC Directive 2004/108/EC.

EN60335-2-29  
EN60335-1: 2012 +A11: 2014  
En55014-1: 2006+  
A1: 2009+A2: 2011  
EN55014-2: 1997+  
A1: 2001+A2: 2008  
EN61000-3-2: 2014  
EN61000-3-3: 2013  
FCCPart 15B



### Instructions for disposal of WEEE by users in the European Union



This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collections point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

All rights including translation reserved. Reproduction of this manual by any method, including photocopy, microfilming, or the capture in electronic data processing system require the prior written approval by EcoPower. Reprinting in any way is prohibited. These operating instructions represent the technical status at the time of printing. EcoPower reserves the right to make changes to technology and equipments.



## WARRANTY AND SERVICE

Thank you for purchasing the EcoPower Electron 44 AC Battery Charger. We will do our best to provide you with comprehensive after sale service and protect your rights and interests. EcoPower guarantees this item to be free of defects in materials and workmanship for 90 days after the original purchase date. The warranty only applies to material or operational defects that are present at the time of purchase; EcoPower reserves the right to repair or replace the item. Warranty will not cover items that have been modified, disassembled, or otherwise misused according to the item's instructions. Proof of purchase is required to submit a warranty claim. EcoPower is not responsible for bodily injury and/or property damage that may occur from the us of, or caused by this item.

Below is considered incorrect use:

- Failure to follow instructions.
- Improper use of the product (abusive use, out of spec. etc.).
- Failure to adapt settings for proper function(improper connections,wrong gearing installation, setup, etc.).
- Overload, overheating(desoldering, melting, etc.).
- Running in inadequate conditions(damage or rust from rain, humidity, etc.).
- Improper maintenance (presence of dirt, etc.)
- Disassembly, modification by the user (modifying, original connectors, wires, components, etc.).
- Mechanical damage due to external causes.

Product specifications and information mentioned in this manual are for reference only, subject to updates without notice.