

INSTRUCTION MANUAL

e455

Multi Chemistry Charger

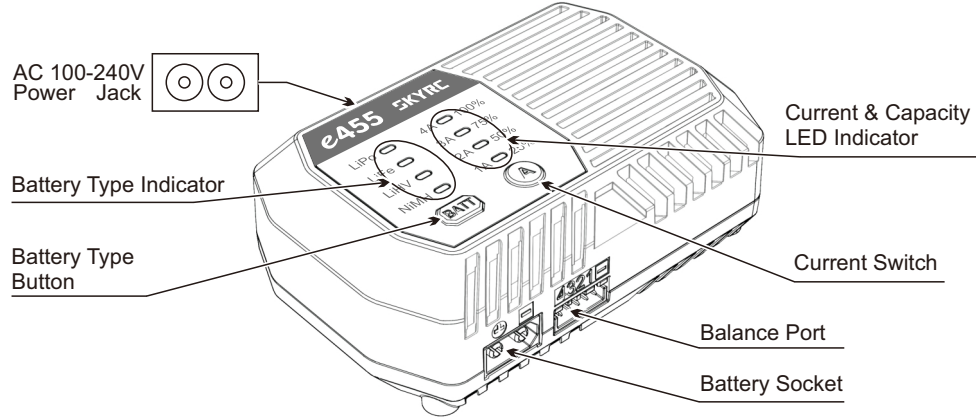
SK-100170

SKYRC

INTRODUCTION

Thank you for your choice of the SKYRC e455, 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.

SKYRC e455 Charger is an economical, 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.

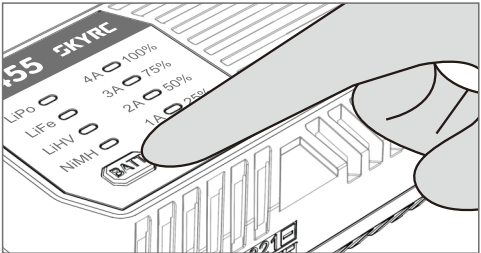


OPERATION

SKYRC e455 comes with the 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). The battery type LED and the charge current LED(default 2A) will glow constant white.
- 3) Connect battery balance wire to balance port which is in front side of the charger, select the battery type LiPo/LiFe/LiHV by pressing the "BATT" button.

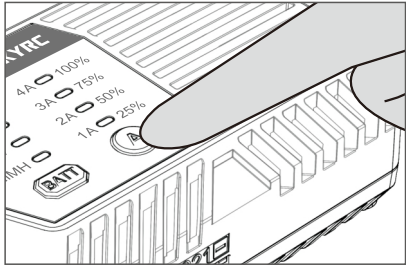


Select Battery Type

4) Select the proper charging current 1A/2A/3A/4A by pressing the "A" button.

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.

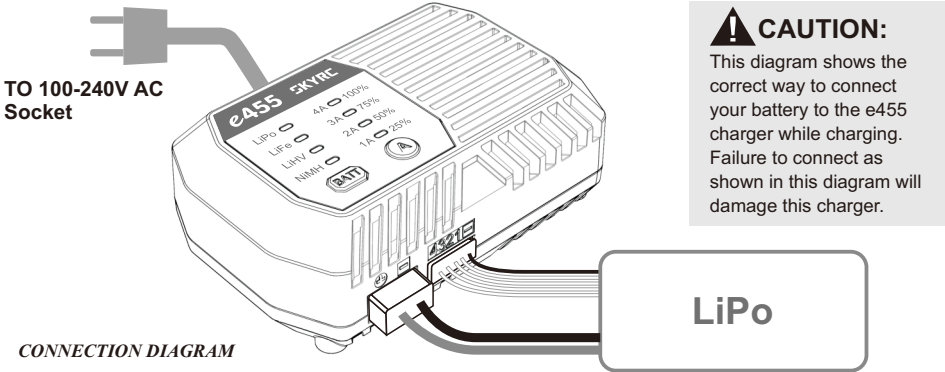
Example: LiPo cell of 2200mAh Capacity; 1C=2200mA (=2.2A) charge current. You can choose 2A current to charge the battery.
LiPo cell of 2800mAh Capacity; 1C=2800mA (=2.8A) charge current. You can choose 3A current to charge the battery.



Select Charging Current

5) **Charging LiPo/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. Press and hold "A" button for 2 seconds to start charging. The charge status LED will glow to indicate charging is in progress.



CONNECTION DIAGRAM

EXPLANATION OF LED STATUS

25% 50% 75% 100%	Capacity<25%	25% capacity indictor LED flashing
25% 50% 75% 100%	25%≤Capacity<50%	50% capacity indictor LED flashing
25% 50% 75% 100%	50%≤Capacity<75%	75% capacity indictor LED flashing
25% 50% 75% 100%	75%≤Capacity<100%	100% capacity indictor LED flashing

Remark:
The capacity indicator LED flash times shows the charge current you set.

1A	Flashes white ONCE and stop 1 second in cycle.
2A	Flashes white TWICE and stop 1 second in cycle.
3A	Flashes white THREE TIMES and stop 1 second in cycle.
4A	Flashes white FOUR TIMES and stop 1 second in cycle.

When the battery is fully charged, the charge status LED will glow constant WHITE. Unplug the battery from the charger, the charger will be ready to charge another battery.
During the charging process, if you want to stop charging, press the "A" button once.

6) **Charging NiMH Battery**

Connect the battery main charge lead to battery socket which is in the front side of the charger.
Select the battery type NiMH by pressing the "BATT" button.
Select the proper charging current 1A/2A/3A/4A by pressing the "A" button.
Press and hold "A" button for 2 seconds to start charging. The charge status LED will glow to indicate charging is in progress.
During the charging process, the capacity indicator LEDs will light up in sequence.
When the battery is fully charged, the capacity indicator LEDs will glow constant white.

WARNING:
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.

TROUBLESHOOTING

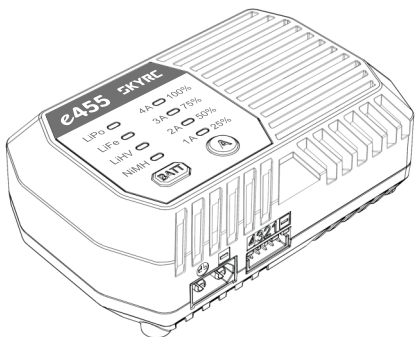
LED Blinking Times	Problem
All LEDs flash white ONCE and stop 2 seconds in cycle	Voltage of one cell in the battery pack is too high
All LEDs flash white TWICE and stop 2 seconds in cycle	Connection error in Balance port
All LEDs flash white THREE TIMES and stop 2 seconds in cycle	Connection error in Main port

SPECIFICATION

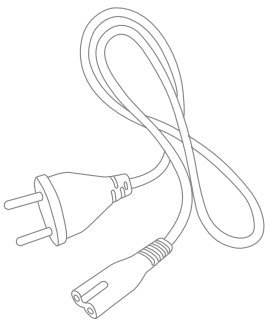
AC Input	100-240V
Battery Type	LiPo/LiFe/LiHV/NiMH
Cell Count	LiPo/LiFe/LiHV: 2-4S NiMH: 6-8S
Charge Current	1A/2A/3A/4A ± 10%
Cell Terminate Voltage	LiPo: 4.2V ± 0.02V / LiFe: 3.6V ± 0.02V LiHV: 4.35V ± 0.02V / NiMH: -△V
Circuit Power	50W
Current Drain for Balancing	300mA
Dimension	110x70x40mm
Weight	191g

THE SET CONTAINS

- ① SkyRC e455 Charger
- ② AC Power Cord
- ③ Instruction Manual



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WARNING AND 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 donot 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/LiHV/NiMH 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.

CONFORMITY DECLARATION

This appliance can be used by children aged from 14 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

⚠ Never leave the charger unattended when it is connected to its power socket. If any malfunction is found, TERMINATE THE PROCESS AT ONCE.

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

⚠ Never charge batteries on wood, cloth, carpet or on any other flammable material.

⚠ During charging, the charger must be placed in a well ventilated area.

♻ This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustain able reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

The e455 satisfy all relevant and mandatory CE directives and FCC Part 15 Subpart B: 2016.

For EC directives:

The product has been tested to meet the following technical standards:

	Test Standards	Title	Result
CE-LVD	EN60335-2-29	Household and similar electrical appliances –. Safety –. Part 2-29: Particular requirements for battery chargers.	Conform
	EN 60335-1: 2012 +A11: 2014	Household and similar electrical appliances - Safety - Part 1: General requirements	Conform
CE-EMC	EN55014-1: 2006+ A1: 2009+A2: 2011	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission	Conform
	EN55014-2: 1997+ A1: 2001+A2: 2008	Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus – Part 2: Immunity Product Family Standard	Conform
	EN61000-3-2: 2014	Electromagnetic compatibility (EMC) – Part 3-2: – Limits for harmonic current emissions (equipment input current up to and incelding 16 A per phase)	Conform
	EN61000-3-3: 2013	Electromagnetic compatibility (EMC) - Part 3-3: Limitation of voltage supply systems for equipment with rated current ≤ 16 A.	Conform
FCC-SDOC	FCC Part 15B	Title 47 Telecommunication PART 15 - RADIO FREQUENCY DEVICES Subpart B - Unintentional Radiators	Conform

♻ This symbol means that you must dispose of electrical from the general household waste when it reaches the end of its useful life. Take your charger to your local waste collection point or recycling centre. This applies to all countries of the European Union, and to other European countries with a separate waste collection system.

LIABILITY EXCLUSION

This charger is designed and approved exclusively for use with the types of battery stated in these Instruction Manual. SKYRC accepts no liability of any kind if the charger is used for any purpose other than that stated. We are unable to ensure that you follow the instructions supplied with the charger, and we have no control over the methods you employ for using, operating and maintaining the device. For this reason we are obliged to deny all liability for loss, damage or costs which are incurred due to the incompetent or incorrect use and operation of our products, or which are connected with such operation in any way. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of those SKYRC products which were immediately and directly involved in the event in which the damage occurred.

WARRANTY AND SERVICE

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we will repair or replace free of service charge for products deemed defective due to those causes.

You will be required to produce proof of purchase (invoice or receipt). This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification or as a result of failure to observe the procedures outlined in this manual.

Note:

1. The warranty service is valid in China only.
2. If you need warranty service overseas, please contact your dealer in the first instance, who is responsible for processing guarantee claims overseas. Due to high shipping cost, complicated custom clearance procedures to send back to China. Please understand SkyRC can't provide warranty service to overseas end user directly.
3. If you have any questions which are not mentioned in the manual, please feel free to send email to info@skycrc.com

The manual is subject to change without notice; please refer to our website for the latest version!



Manufactured by
SKYRC TECHNOLOGY CO., LTD.
www.skycrc.com