



ToolkitRC C3

User manual

Compact AC balance charger for LiPo / LiHV 2-3S



Read the entire manual before use. The charger is powered from the 100-240 V mains - protect it from moisture. Never leave charging batteries unattended.

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1. Safety

Thank you for purchasing the **ToolkitRC C3** balance charger (hereinafter C3). Please read this manual carefully before use and keep it. Always pass it on together with the product.

1.1 Before you start

- The C3 is intended exclusively for charging **LiPo and LiHV batteries with 2 or 3 cells (2S, 3S)** via the balance connector. Any other use is not permitted.
- The product may only be used by persons **aged 14 and over**. Keep it out of the reach of children.
- Do not modify the product in any way and do not use it if the housing, the power cable or a connector is damaged.

1.2 Mains voltage

There is dangerous mains voltage inside the charger. Never open the housing - the charger contains no user-serviceable parts.

- The C3 allows an input voltage of **AC 100-240 V**. Only connect it to a properly installed AC outlet with this voltage, using the supplied power cable.
- Do not kink or pinch the power cable and do not route it over sharp edges or hot surfaces. When disconnecting, pull the plug, not the cable.
- When not using the product, and always before cleaning, **unplug the input power**.
- Do not touch the plug or the connectors with wet hands.

1.3 Operating environment

- Do not use this product in **hot, humid, flammable or explosive environments**. Protect it from rain and from dripping and splashing water.
- Place it on a firm, level and non-flammable surface. Do not cover the heat dissipation vents and do not expose the charger to direct sunlight or heat sources.

1.4 Charging batteries

- **Never leave the charger or charging batteries unattended.**
- Always select the **correct battery type** before charging (chapter 4.1). An incorrect choice may damage the battery and/or become a fire hazard.
- Only charge LiPo and LiHV 2-3S batteries, never batteries that are not rechargeable.
- Charge LiPo and LiHV batteries on a non-flammable surface or in a fireproof bag, away from flammable materials.
- Do not charge a swollen, punctured or otherwise damaged battery.

2. Product description

The C3 is a compact balance charger powered directly from the mains; despite the small size, the C3 has a maximum output of **25 W**. Featuring a single-button operation and LED status indicators, the C3 is a capable, bring-anywhere charger.

- Charge and balance management of LiPo and LiHV 2–3S batteries.
- One-touch storage mode charging to 3.85 V/cell.
- Voltage input AC 100–240 V.
- Charging current 2.2 A at 2S, 1.5 A at 3S.
- Charging accuracy < 0.01 V, balance current 200 mA.
- Balancer plug and play – just connect the battery and charging starts automatically.
- Built-in voltage, current, temperature and short circuit protection.

2.1 C3 layout



Front and top of the charger

- ① **MODE** key – battery type selection
- ② **LIPO**, **LIHV** and **LI-STO** LEDs – selected type and charging status
- ③ Balance port for **2S** batteries (3-pin)
- ④ Balance port for **3S** batteries (4-pin)
- ⑤ Heat dissipation vents – do not cover them



Back of the charger

© AC input for the detachable power cable

2.2 Package contents

Item	Qty
C3 charger	1×
AC input cable	1×
User manual	1×

A battery is not included.

2.3 Manufacturer

Manufacturer	ToolkitRC Technology (Shenzhen) Co., Ltd
Address	3F, B1 Building, Shanghe Industrial Park, Nanchang Road, Hangcheng Street, Bao'an District, Shenzhen, China
E-mail	sales@toolkitrc.com
Web	www.toolkitrc.com

To stay up to date with news and information about the product, visit www.toolkitrc.com/c3.

3. Quick start

- ① Connect the power cable to the AC input ⑥ and plug it into a suitable AC 100–240 V power outlet.
- ② After booting up, the LED of the selected battery type lights up, for example LIHV:



*Charger switched on,
LIHV type selected*

- ③ Short press the **MODE** key ① to select the battery type (chapter 4.1).
- ④ Connect the battery balance connector to port ③ (2S) or ④ (3S). When the battery voltage matches the selected type, the C3 will automatically start charging.

4. Charging

4.1 Battery type setting

Select the battery type by repeatedly short pressing the **MODE** key ①. The selected type is shown by LED ②. Different battery chemistries have different cutoff voltages. Please refer to the following table as reference, and verify with your battery manual:

LED	Per cell	2S pack	3S pack
LIPO	4.20 V	8.40 V	12.60 V
LIHV	4.35 V	8.70 V	13.05 V
LI-TO	3.85 V	7.70 V	11.55 V

Important: Ensure the correct battery type has been selected prior to charging. An incorrect choice may damage the battery and/or become a fire hazard. Do not use this product to charge non-compatible battery chemistries.

4.2 Connecting the battery and charging

- ① Connect the charger to the mains and select the battery type with the **MODE** key.

- ② Insert the battery balance connector fully into the port matching the cell count: **2S** into the 3-pin port ③, **3S** into the 4-pin port ④. Make sure the connector is oriented correctly. Always connect only one battery.
- ③ The charger recognizes the battery and, if it is normal, starts charging. The LED turns **red**.
- ④ After full charge, the LED turns **green**. Disconnect the battery and unplug the charger from the mains.

LED	Meaning
green	standby / battery full
red	charging

4.3 Battery types

- **LiPo** – often referred to as a lithium polymer battery. Nominal voltage 3.70 V/cell, 4.20 V/cell when fully charged.
- **LiHV** – often referred to as a high-voltage lithium battery. Nominal voltage 3.85 V/cell, 4.35 V/cell when fully charged. Only charge a battery as LiHV if its manufacturer explicitly designates it as LiHV.
- **Li-Sto** (storage) – often called storage charging: the battery voltage is set to 3.85 V/cell. Use it if you are not going to use the battery for a longer period.

5. Maintenance, transport and storage

- Before cleaning, disconnect the charger from the mains and from the battery. Clean the housing with a dry cloth. Do not use water, solvents or cleaning sprays.
- Regularly check that the heat dissipation vents are not clogged with dust.
- Check the power cable and the balance ports. Do not continue to use a damaged cable – replace it.
- Carry and store the charger disconnected, in a dry and clean place, ideally in its original packaging. Protect it from drops and impacts.
- Do not open the housing. Have any repair carried out by the seller (chapter 9).

6. Troubleshooting

Symptom	Cause and solution
No LED lights up	The charger is not powered from the mains. Check that the power cable is inserted in the AC input ⑥ and in the outlet and that the outlet is live.
Charging does not start after connecting the battery	Check that the battery is connected to the port with the correct number of pins (2S to ③, 3S to ④) and that the connector is fully inserted. Make sure the correct battery type is selected.
Charging does not start even with a correctly connected battery	The battery may be damaged or deeply discharged. Do not continue to use such a battery and have it checked.
The charger gets warm during operation	The charger warms up while charging – this is normal. Ensure free air flow around the heat dissipation vents ⑤.

If the problem persists, unplug the charger from the mains and contact the seller (chapter 8.1).

7. Specification

Parameter	Value
Input	AC 100-240 V, max. 25 W
Output	max. 13.1 V DC, max. 2.2 A
Battery type	LiPo, LiHV 2-3S; storage charging
Charging current	2.2 A (2S), 1.5 A (3S)
Balance current	max. 200 mA at 4.20 V
Charging accuracy	< 0.01 V at 4.20 V
Cutoff voltage	LiPo 4.20 V/cell, LiHV 4.35 V/cell, storage 3.85 V/cell
Protection	voltage, current, temperature, short circuit
Display	LED - green: standby / full, red: charging
Dimensions	91 × 58 × 30 mm
Weight	100 g
Package dimensions	95 × 64 × 58 mm
Package weight	160 g

8. Information for the EU and Czech Market

❖ The information in Chapters 8 and 9 describes the situation under the law of the Czech Republic, where the product is sold. The law of the country in which the product is operated always prevails – if you use it in another country, follow the regulations of that country.

8.1 Importer and responsible person in the EU

The product is placed on the European Union market by the importer stated below, who is at the same time the responsible person within the meaning of Article 16 of Regulation (EU) 2023/988 of the European Parliament and of the Council on general product safety (GPSR).

Importer / responsible person in the EU	Rotorama, s.r.o.
Company ID (IČO)	051 57 692
VAT ID (DIČ)	CZ05157692
Registered office	Okrajová 1351, 674 01 Třebíč, Czech Republic
E-mail	info@rotorاما.cz
Phone	+420 252 252 098
Website	www.rotorاما.cz

8.2 Product conformity



- The product bears the **CE** marking and complies with the requirements of the applicable European Union harmonisation legislation.
- A copy of the **EU Declaration of Conformity** is available from the importer at the address stated above or at the e-mail address info@rotorاما.cz.
- **Product identification:** the type designation (C3) is given on the front panel of the charger.

8.3 Disposal of electrical equipment



- The crossed-out wheeled bin symbol on the product, its packaging or in the documentation means that at the end of its service life the product **must not be disposed of together with mixed municipal waste**.
- Hand it over at a take-back point for electrical equipment – at a collection yard, at a take-back point of a collective system, or at the retailer when purchasing a new equivalent product. Take-back is free of charge for the end user.
- The obligations under Act No. 542/2020 Coll., on end-of-life products, are fulfilled by the importer through a collective take-back system.
- Proper disposal helps prevent negative impacts on the environment and human health and contributes to the reuse of secondary raw materials.

Through its contractual partner **ASEKOL a.s.**, the company ensures the take-back of waste electrical equipment from households and the separate collection of waste electrical equipment, batteries and accumulators in accordance with the applicable legislation. The customer is entitled to hand over old electrical equipment or a battery or accumulator at any collection point of the above contractual partner. The addresses of these take-back points are listed at www.asekol.cz, www.ecobat.cz and also <https://visoh2.mzp.cz/RegistrMistZO/RegistrMistZOPublic/MapaMistZpetOdberu>.

9. Warranty and rights arising from defective performance

The rights and obligations of the contracting parties are governed by Czech law, in particular by Act No. 89/2012 Coll., the Civil Code, and Act No. 634/1992 Coll., on consumer protection.

- The seller is liable to the buyer for the product being free of defects on receipt. If the buyer is a consumer, a defect may be notified **within two years of receipt** of the product (Section 2165 of the Civil Code).
- If a defect appears within **one year** of receipt, the product is deemed to have been defective already at the time of receipt (Section 2161(5) of the Civil Code).
- When purchasing online, a consumer has the right to **withdraw from the contract within 14 days** of receiving the goods without giving a reason (Section 1829 of the Civil Code).
- Claims should be made with the retailer from whom you purchased the product. The importer's contact details are given in Chapter 8.1.
- The competent body for out-of-court settlement of consumer disputes is the **Czech Trade Inspection Authority**, Štěpánská 796/44, 110 00 Prague 1, www.coi.cz.