



C6

ToolkitRC – 50 W balance charger
User manual



Read the entire manual carefully before first use, especially the safety instructions. Keep this manual.

Importer: Rotorama, s.r.o. · www.rotorama.cz

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1. Introduction

Thank you for purchasing the **ToolkitRC C6** balance charger. Please read this manual carefully before use and keep it for future reference.

1.1 Intended use

The C6 is a mains-powered balance charger for hobby batteries. It is intended exclusively for charging and balancing **LiPo, LiHV and LiFe batteries with 1-6 cells (1-6S)** and for charging **NiMH batteries with 5-12 cells**. Any other use is contrary to the intended purpose.

1.2 Further information

To ensure you have the best experience with this product, please stay up to date with news, information and firmware updates for your charger; this information can be found at www.toolkitrc.com/C6.

Manufacturer	ToolkitRC Technology (Shenzhen) Co. Ltd
Manufacturer website	www.toolkitrc.com
EU importer	Rotorama, s.r.o. – see Chapter 8.1

2. Safety instructions

2.1 Manufacturer's instructions

- ① The C6 allows an input voltage of **AC 100-240 V**. Ensure the charger is connected to a suitable AC power outlet.
- ② Do not use this product in hot, humid, flammable or explosive environments.
- ③ Do not use this charger without supervision. **Never leave charging batteries unattended.**
- ④ When not using this product, unplug the input power.

2.2 Safe battery charging

- Before each charge, make sure the **correct battery type** is selected. An incorrect choice may damage the battery and cause a fire.
- **Do not charge non-rechargeable (primary) batteries** or batteries of chemistries other than those the charger is intended for – risk of explosion or fire.
- Do not charge damaged, swollen or hot batteries – let them cool down after use. Select the charging current according to the battery manufacturer's recommendation.
- Charge on a solid, non-flammable surface away from flammable materials, ideally in a fireproof bag. **Do not cover the heat dissipation vents** of the charger.
- If the battery becomes excessively hot, swells, smells or emits smoke during charging, immediately disconnect the charger from the mains and move the battery to a safe place.
- Check the power cable regularly. Do not use a damaged cable or a damaged charger, and do not disassemble the charger.

3. Product description

3.1 Features

The C6 is a compact balance charger; despite the small size, the C6 has a maximum output of **50 W**. Featuring an intuitive user interface and an LED display, the C6 is a capable, bring-anywhere charger.

- Charge and balance management of LiPo, LiHV and LiFe 1-6S batteries; charging of NiMH 5-12S batteries.
- Voltage input AC 100-240 V.
- Selectable charging current 1.0 / 2.0 / 3.0 / 5.0 A.
- Charging accuracy < 0.01 V.
- Balance current max. 400 mA.
- LED capacity indication: 25 %, 50 %, 75 %, 100 %.

3.2 C6 layout



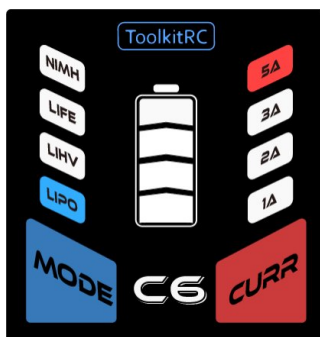
Front



Back

No.	Description
①	MODE key - battery type selection
②	Capacity indication (LED)
③	CURR key - charging current selection
④	Balance port
⑤	XT60 output port
⑥	Heat dissipation vents
⑦	AC input

3.3 Control panel

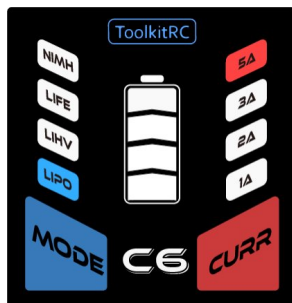


C6 control panel

- **Left column** - selected battery type: NiMH, LiFe, LiHV, LiPo.
- **Centre** - battery capacity indication (4 segments: 25 %, 50 %, 75 %, 100 %).
- **Right column** - selected charging current: 1 A, 2 A, 3 A, 5 A.

4. Quick start

- ① Connect the C6 to a suitable AC 100–240 V power outlet.
- ② After the unit boots up, the initial LED status is shown (see the figure in Chapter 3.3).



*Initial LED status after
power-on*

- ③ Short press the **MODE** key to select the battery type.
- ④ Short press the **CURR** key to select the current.
- ⑤ Connect the battery – the power lead to the XT60 output and, for lithium-based (LiXX) batteries, also the balance lead to the balance port. When using a LiXX battery, charging will start automatically once the self-checking process has been completed.
- ⑥ When all 4 bars of the LED status indication stay illuminated, charging is complete and the battery may be removed.

❖ **For NiMH batteries, press and hold the MODE key for 2 seconds to start charging. The 4 status LEDs will flash when charging and stay illuminated when charged.**

5. Charging settings

5.1 Battery type and charging current setting

Press the **MODE** key to select the battery type and the **CURR** key to select the charging current. The charging process will start after the battery is connected and the battery status is verified. The capacity indicator will blink when charging is in progress.

5.2 Cut-off voltages

Different battery chemistries have different cut-off voltages. Please refer to the following table as reference, and verify with your battery manual:

Battery type	Fully charged cell voltage
LiPo	4.20 V
LiHV	4.35 V
LiFe	3.60 V

Important:

- ① Ensure the correct battery type has been selected prior to charging. An incorrect choice may damage the battery and/or become a fire hazard. Please use caution.
- ② Do not use this product to charge non-compatible battery chemistries.

5.3 Nomenclature

- **LiPo** – often referred to as a lithium polymer battery; nominal voltage 3.70 V and 4.20 V when fully charged (per cell).
- **LiHV** – often referred to as a high-voltage lithium battery; nominal voltage 3.85 V and 4.35 V when fully charged (per cell).
- **LiFe** – often referred to as an iron-lithium battery; nominal voltage 3.30 V and 3.60 V when fully charged (per cell).

6. Specification

Area	Parameter	Value
Charge	Input	AC 100–240 V, max. 55 W
	Battery	LiPo, LiHV, LiFe 1–6S NiMH 5–12S
	Charging power	max. 50 W, 5.0 A
	Balance current	max. 400 mA @ 4.20 V
	Charging accuracy	< 0.01 V @ 4.20 V
Display	LED	25 %, 50 %, 75 %, 100 %
Product	Size	106 × 64 × 35 mm
	Weight	185 g
Individual packing	Size	115 × 70 × 58 mm
	Weight	240 g

7. Care and storage

- Disconnect the charger from the mains and from the battery before cleaning.
- Clean the charger only with a dry, soft cloth. Do not use water, solvents or cleaning agents.
- Keep the heat dissipation vents clean and unobstructed.
- Store the charger in a dry place, out of the reach of children, protected from dust, moisture and direct sunlight.
- The charger contains no user-serviceable parts. Have repairs carried out by a service centre – contact your dealer.

8. Information for the EU and Czech Market

The information in this chapter and in Chapter 9 describes the situation under the law of the Czech Republic. If you use the product in another country, the law of the country in which it is operated is decisive.

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 (C6) is given on the product and on its packaging.

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.