EasyPower E24

Flywoo · 2S LiHV battery charger
4 channels · USB-C PD3.0 power input · user manual



Before first use, read this manual carefully, in particular the safety instructions in chapter 1. Keep the manual for future reference. The product may only be used by persons aged 14 and over.

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1. Safety instructions

Charging lithium batteries involves a risk of fire. Failure to follow the instructions below may result in destruction of the battery or the charger, fire, personal injury or damage to property.

1.1 General rules

- The product may only be used by persons aged 14 and over who have read this manual.
- **Never leave the charger or the batteries being charged unattended.**
- Use the charger exclusively for charging and storing the batteries listed in chapter 2.4.
- Do not disassemble or modify the charger. Do not use a damaged charger, cable or power supply.
- Do not insert anything other than the balance connector of a supported battery into the charger's connectors. Do not short-circuit the contacts.
- Use the power supply and the USB-C cable in accordance with their manufacturer's instructions.

1.2 LiHV batteries

- Do not charge batteries that are swollen, mechanically damaged, have damaged cable or connector insulation, or have been deeply discharged.
- Do not charge a battery that is still warm after a flight. Let it cool down to room temperature first.
- Charge batteries in a fireproof bag or box for lithium batteries.
- If a battery starts to heat up, swell, smoke or smell during charging, immediately disconnect the charger's power supply, disconnect the battery (if it is safe to do so) and move it to a non-flammable place away from people.
- Do not use water to extinguish a burning lithium battery. Avoid inhaling the smoke and call the fire brigade if necessary (emergency number 112).
- Transport and store batteries charged to storage voltage, not fully charged.

1.3 Operating environment

- Place the charger on a flat, dry and non-flammable surface (e.g. a ceramic tile or a metal sheet) at a sufficient distance from flammable materials.
- Do not cover the ventilation openings in the charger housing and ensure free air circulation.
- Protect the charger from water, moisture, dust, direct sunlight and heat sources.
- Charge out of the reach of children and pets.

2. Product description

The Flywoo EasyPower E24 is a compact charger for 2S **LiHV** batteries. It charges up to four batteries at the same time via their balance connector and, in addition to charging, it can bring batteries to storage voltage (*Storage* mode). It is powered from an external power supply via a USB-C connector using the Power Delivery 3.0 protocol.

2.1 Package contents

- 1× Flywoo EasyPower E24 charger

※ The USB-C PD power supply and the USB-C cable are not included.

2.2 Parts description



Flywoo EasyPower E24 – top view

① **XH2.54 3-pin charging connector** (balance connector) – one for each of the four channels; the channels are numbered 1–4 on the top side.

② **Channel indicator** – one for each channel, indicates the charging status of the respective battery (chapter 4.3).

③ **Mode button** – switches the mode when held for 2 s.

④ **Mode indicator** – red = charge mode, blue = Storage mode.

USB-C (PD) power connector – on the shorter side of the charger, below the Mode button (not visible in the picture).

2.3 Technical data

Parameter	Value
Model	EasyPower E24
Manufacturer	FLYWOO TECHNOLOGY (HK) LIMITED, Hong Kong · support@flywoo.net
Input connector	USB-C
Input voltage	9–20 V
Charging protocol	PD3.0 only
Minimum power supply rating	65 W
Number of channels	4
Max. charging current	1.5 A per channel
Battery type	2S LiHV
End-of-charge voltage	4.35 V/cell (8.7 V for 2S)
Storage voltage (Storage)	3.85 V/cell (7.7 V for 2S)
Battery connectors	XH2.54, 3-pin (balance connector)
Protection	over-voltage, over-current, overheating
Dimensions	88 × 54 × 26.5 mm
Weight	70 g

2.4 Supported batteries

The charger is designed **exclusively for two-cell (2S) LiHV batteries** with an end-of-charge voltage of 4.35 V per cell, i.e. 8.7 V for the whole battery. The battery is connected to the charger via a 3-pin XH2.54 balance connector.

Do not charge Li-Po batteries with an end-of-charge voltage of 4.20 V/cell, single-cell (1S) or multi-cell (3S and more) batteries, Li-Ion, NiMH or any other types. There is a risk of overcharging, battery damage and fire.

3. Power supply

3.1 Power supply requirements

- The charger supports **only the USB Power Delivery 3.0 (PD3.0) protocol**. Other fast-charging protocols are not supported.
- The power supply must provide **at least 65 W**. With a weaker power supply, the charger will not work properly.
- The input voltage of the charger is 9–20 V; it is supplied by the power supply after negotiation via the PD protocol.
- Use a good-quality USB-C to USB-C cable rated for the required power.

3.2 Connecting the power supply

① Place the charger in a suitable location according to chapter 1.3.

② Connect the USB-C cable to the charger's power connector and to the power supply.

③ Plug the power supply into the mains socket. The mode indicator shows the currently selected mode (red = charging, blue = Storage).

4. Modes and indication

4.1 Charge mode and Storage mode

Mode	Mode indicator	Function
Charge	red	charges the battery to 4.35 V/cell (8.7 V)
Storage	blue	brings the battery to the storage voltage of 3.85 V/cell (7.7 V)

In Storage mode, the charger charges a battery with a voltage below 3.85 V/cell up to this value and discharges a battery with a higher voltage down to it. The selected mode applies to all four channels.

4.2 Switching the mode

To switch the mode, **hold the Mode button for 2 seconds**. The colour of the mode indicator changes according to the table in chapter 4.1.

4.3 LED indication

The indicator of each channel shows the status of the battery connected to that channel:

Channel indicator	Meaning
red	charging in progress (charge mode, 4.35 V)
blue	bringing to storage voltage in progress (Storage mode, 3.85 V)
green flashing	charging or bringing to storage voltage is almost complete
green solid	complete – the battery can be disconnected

5. Charging and storing batteries

5.1 Charging procedure

① Check that the battery is a 2S LiHV type, is not damaged or swollen and is at room temperature.

② Connect the charger's power supply (chapter 3.2) and check that the mode indicator is **red**. If it is blue, switch the mode with the Mode button (chapter 4.2).

③ Insert the battery's balance connector into the connector of any channel. Make sure the connector is oriented correctly; do not force it in.

④ The charger detects the battery and starts charging automatically; the channel indicator lights red.

⑤ As soon as the channel indicator lights solid green, the battery is charged (8.7 V). Disconnect it.

Up to four batteries can be charged at the same time, each in its own channel.

5.2 Bringing batteries to storage voltage

If you are not going to use the batteries for a longer period (roughly more than a few days), bring them to storage voltage:

① Hold the Mode button for 2 s to switch the charger to Storage mode – the mode indicator lights **blue**.

② Connect the batteries via their balance connector. The channel indicator lights blue.

③ As soon as the channel indicator lights solid green, the battery is at the storage voltage of 3.85 V/cell (7.7 V). Disconnect it.

5.3 Finishing work

- Disconnect all batteries – hold the connector, do not pull on the cables.
- Unplug the power supply from the mains socket and disconnect the USB-C cable from the charger.
- Let the charger cool down and store it according to chapter 6.

6. Maintenance and storage

- Clean the charger only with a dry soft cloth, always after disconnecting the power supply. Do not use water, solvents or cleaning agents.
- Keep the connectors clean and dry; check that they are not mechanically damaged or deformed.
- Keep the ventilation openings clear and free of dust.
- Store the charger in a dry place, out of the reach of children, protected from mechanical damage, dust and moisture.
- Store batteries at storage voltage in a fireproof container, separately from the charger and flammable materials.

7. Troubleshooting

Problem	Possible cause and solution
The charger does not respond after connecting the power supply, the mode indicator is off	The power supply does not support PD3.0 or its rating is lower than 65 W – use a suitable power supply. Check the USB-C cable and replace it with a cable rated for higher power if necessary.
The charger behaves unstably or charging is interrupted	The power supply does not provide sufficient power – use a power supply rated at least 65 W. Check that the ventilation openings are not covered.
The channel indicator does not light up after connecting a battery	Check that the balance connector is fully inserted and correctly oriented and that neither the connector nor the battery cables are damaged. Try another channel.
The battery is being charged in the wrong mode	Check the colour of the mode indicator and switch the mode by holding the Mode button for 2 s.
The battery heats up or swells during charging	Immediately disconnect the power supply and proceed according to chapter 1.2. Do not use the battery any more.

8. Information for the EU and Czech Market

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@rotorama.cz
Phone	+420 252 252 098
Website	www.rotorama.cz

8.2 Product conformity

CE

- 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@rotorama.cz.
- **Product identification:** the type designation (EasyPower E24) is given on the top side 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.