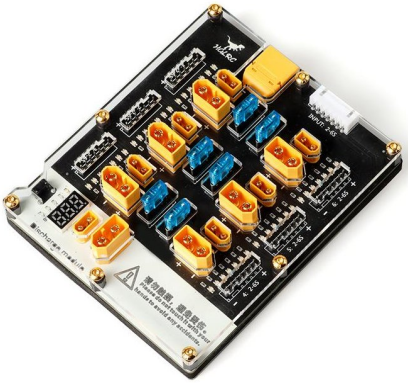
ROTORAMA

Thor 6 Pro

HGLRC – parallel charging board for 2–6S LiPo
with integrated discharge module



Read the entire manual, especially the safety instructions, before first use. Never leave LiPo batteries charging unattended.

www.rotorama.com

Contents

1. Safety instructions

2. Product description

2.1 Intended use

2.2 Package contents

2.3 Parts overview

2.4 Specifications

3. Preparation for use

4. Parallel charging

5. Discharge module

6. Maintenance and storage

7. Troubleshooting

8. Information for the EU and Czech Market

9. Warranty and rights arising from defective performance

1. Safety instructions

1.1 Before you start

The HGLRC Thor 6 Pro board is used to charge several LiPo batteries at the same time from a single charger. Charging LiPo batteries involves a risk of fire. Read this entire manual before first use and keep it for future reference.

- Use the board only with a LiPo charger that has a balance charging function.
- **Never leave charging unattended**. Charge on a non-flammable surface, away from flammable materials, children and animals.
- When charging or discharging, place the batteries in a fireproof bag (LiPo bag) or a non-flammable container.
- Do not use the board if it is mechanically damaged, wet or contaminated with conductive debris (metal shavings, screws, carbon dust).
- This product is not a toy. Keep it out of the reach of children.

1.2 LiPo batteries

- Do not charge or discharge batteries that are swollen, mechanically damaged, overheated or have damaged cable insulation or connectors.
- When charging in parallel, the batteries must have **the same number of cells and the same capacity**, and their voltages may differ only minimally (see Chapter 4.1).
- A fully charged LiPo cell has a voltage of **4.20 V**. For storage, leave the battery charged to **3.8 V/cell**.
- If a battery swells, heats up, smokes or smells during charging, stop charging on the charger immediately and – if it is safe to do so – disconnect the battery and move it to a non-flammable place.

1.3 Handling and operating environment

- Please make sure the input voltage is within the specified range (2–6S) and the positive and negative poles are correct. Otherwise, the manufacturer's warranty will be voided.
- Pay attention to **electrostatic protection** during transportation and installation.
- The discharge module heats up during discharging. As the label on the board warns, **do not touch it with your hands** to avoid any accidents.
- Use the board in a dry environment on a stable, flat surface and do not cover it.

2. Product description

2.1 Intended use

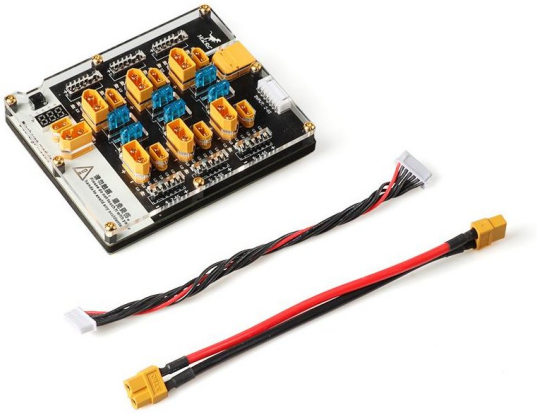
The HGLRC Thor 6 Pro is a parallel charging board to which up to **six 2–6S LiPo batteries** with an XT60 or XT30 connector can be connected and charged at the same time with one charger. To the charger, the batteries connected in parallel appear as a single battery whose capacity is the sum of the capacities of the connected batteries.

Each charging port is protected by its own 15 A automotive fuse, and every balancing pin by a self-resetting thermal fuse with LED short-circuit indication. The board also includes a **discharge module** that discharges a battery to the storage voltage of 3.8 V/cell.

The manufacturer lists the board as suitable for chargers such as the IMAX B6, ISDT Q6 Nano, HOTA D6 Pro and P6.

2.2 Package contents

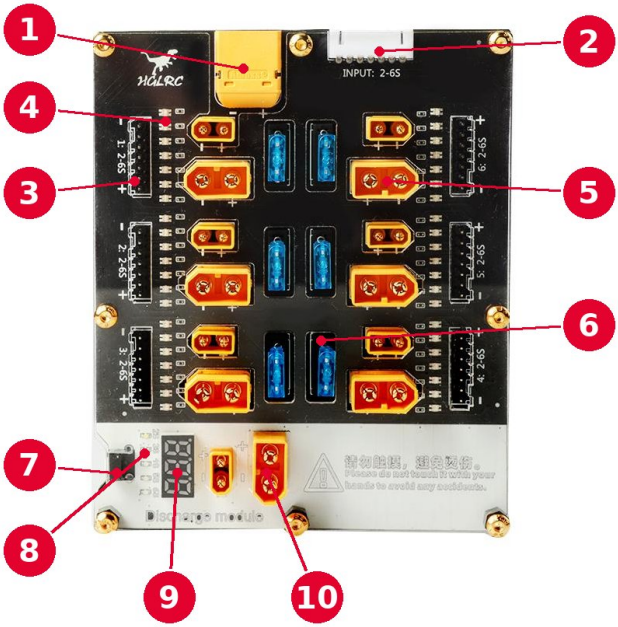
- 1× HGLRC Thor 6 Pro board
- 1× balance cable (200 mm)
- 1× XT60 cable (200 mm)



Package contents

※ Charger and batteries are not included.

2.3 Parts overview



Top view

① XT60 input connector – connection to the charger output
② Balance input connector *INPUT: 2–6S* – connection to the charger balance port
③ Balance connector of the charging port (ports 1–6, each 2–6S)
④ LED short-circuit indication on the balance connector
⑤ XT60 and XT30 connectors of the charging port
⑥ 15 A automotive fuse (one for each port)
⑦ Voltage switch button (cell count selection) of the discharge module
⑧ LED indicator of the selected cell count (2S–6S)
⑨ Voltage display of the discharge module
⑩ XT30 and XT60 battery interface of the discharge module

2.4 Specifications

▶ Battery charger board

Max input current	40 A
Max balance current	2 A
Cell count support	2–6S
Battery interface	6× XT30/XT60
Charge connector protection	each XT30/XT60 port has its own 15 A automotive fuse
Balancing connector protection	self-resetting thermal fuses between every balancing pin, LED short-circuit indication
Size	100 × 121 × 26 mm
Weight	180.6 g

▶ LiPo discharger

Input voltage	2–6S
Cut-off voltage of discharging	3.8 V/cell
Battery type	LiPo
Battery interface	XT30/XT60

3. Preparation for use

3.1 What else you need

- a LiPo balance charger with a 2–6S output,
- LiPo batteries with an XT60 or XT30 connector and a balance connector,
- a non-flammable surface and a fireproof battery bag,
- we recommend a cell voltage checker to check the batteries before connecting them.

3.2 Connecting the board to the charger

① Place the board on a flat, non-flammable surface. Keep the charger idle – do not start charging.

② Use the XT60 cable from the package to connect the XT60 input connector ① of the board to the charger output. Make sure the polarity is correct.

③ Use the balance cable from the package to connect the balance input connector *INPUT: 2–6S* ② to the balance port of the charger.

The input voltage must be within the specified range (2–6S) and the polarity must be correct. Otherwise, the board may be damaged and the manufacturer's warranty will be voided.

4. Parallel charging

4.1 Conditions for parallel charging

- All batteries charged at the same time must have **the same number of cells and the same capacity**.
- Check the battery voltages before connecting. The voltage difference between the batteries should not be too large – the manufacturer recommends that the difference per cell **does not exceed 0.1 V**. Otherwise, the fuse may be burned.
- Connect only one battery to each port – using either the XT60 or the XT30 connector ⑤ – and plug its balance lead into the balance connector of the same port ③.
- The maximum input current of the board is 40 A; each port is protected by a 15 A fuse.

4.2 Procedure

① Connect the board to the charger as described in Chapter 3.2.

② Connect a battery to a port: **connect the main (power) connector first** – XT60 or XT30 ⑤ – **and then the balance connector** ③.

③ Connect further batteries in the same way, each to its own port.

④ Check that no LED short-circuit indicator ④ is lit at the balance connectors.

⑤ On the charger, select the LiPo balance charge program, the cell count of the connected batteries and a charge current based on the total capacity of the connected batteries and the recommendations of their manufacturer. The charge current must not exceed the maximum input current of the board of 40 A.

⑥ Start charging and monitor it continuously.

⑦ When charging is complete, disconnect the batteries in reverse order – first the balance connector, then the main connector.

When charging in parallel, the batteries are connected to each other as soon as they are plugged into the board – even before the charger starts charging. Therefore always observe the conditions in Chapter 4.1.

4.3 Protection and indication

- **Charge connectors:** each XT30/XT60 port has its own 15 A automotive fuse ⑥. In the event of an overload or equalisation of a large voltage difference, the fuse blows and disconnects the port.
- **Balance connectors:** there are self-resetting thermal fuses between every balancing pin. A short circuit is indicated by the LED ④ at the pin concerned lighting up.

5. Discharge module

5.1 Purpose

The discharge module in the lower part of the board discharges a 2–6S LiPo battery to **3.8 V/cell**, i.e. to a voltage suitable for storage. The battery is connected to the XT30 or XT60 interface of the discharge module ⑩.

5.2 Cut-off voltages and indicator colours

Battery	Cut-off voltage of discharging	LED colour ⑧
2S	7.6 V	white
3S	11.4 V	blue
4S	15.2 V	green
5S	19.0 V	yellow
6S	22.8 V	red

5.3 Discharging procedure

① Connect the battery to the XT30 or XT60 interface of the discharge module ⑩. Make sure the polarity is correct.

② The display ⑨ shows the battery voltage in real time and the white 2S indicator flashes – 2S is selected by default when the power is turned on.

③ Press the button ⑦ to set the cell count of the connected battery. Each press moves the selection one step (2S → 3S → ...). The selected cell count is shown by the flashing LED ⑧ of the corresponding colour.

④ The battery is being discharged. The module heats up during discharging – do not touch it and do not leave discharging unattended.

Always select the cell count that actually matches the connected battery. If a lower cell count is selected, the battery would be discharged below a safe voltage and could be permanently damaged.

5.4 End of discharging and sleep mode

- When the battery voltage drops to the set cut-off voltage, the indicator light of the corresponding cell count changes from flashing to a **constant light** after 10 seconds. The discharge module enters a low-power sleep state.
- If the battery voltage is already lower than the set cut-off voltage when connected, the display turns off after 10 seconds, and the corresponding indicator flashes for 10 seconds and then goes out. The discharge module enters a low-power sleep state.
- Disconnect the battery when discharging is complete.

6. Maintenance and storage

6.1 Replacing a fuse

Always replace a blown fuse ⑥ with a new automotive fuse **of the same type, size and rating of 15 A**. Replace the fuse only when the board is disconnected from the charger and all batteries are disconnected. Never bridge a fuse or replace it with a fuse of a higher rating.

If a fuse blows repeatedly, stop using the board and find the cause – typically a large voltage difference between the batteries, or a faulty battery or cable.

6.2 Cleaning and storage

- Clean the board with a dry soft brush or cloth. Do not use water or solvents.
- Regularly check the connectors and cables for looseness, burn marks or damage.
- Store the board in a dry place, out of direct sunlight, disconnected from the charger and batteries.
- Store LiPo batteries charged to 3.8 V/cell (2S 7.6 V; 3S 11.4 V; 4S 15.2 V; 5S 19.0 V; 6S 22.8 V).

7. Troubleshooting

Problem	Possible cause and solution
A battery connected to a port is not charging	Blown 15 A fuse ⑥ of that port – replace it (Chapter 6.1). Check that the main connector is plugged in.
The fuse blew immediately after connecting a battery	Large voltage difference between the batteries. Equalise the voltages before connecting – the recommended difference is max. 0.1 V per cell.
The LED ④ at a balance connector is lit	Short circuit in the balance circuit – disconnect the battery immediately and check the balance cable and the battery connector. The self-resetting thermal fuse recovers by itself once the short circuit is removed.
The charger reports a balance error or a wrong cell count	Check the balance cable connection to the *INPUT: 2–6S* input ② and to the charger, the set cell count, and whether all batteries have the same number of cells.
The discharge module display is off	The module is in sleep mode or the battery voltage is lower than the cut-off voltage. Disconnect the battery and connect it again; check its voltage.
The discharge module is hot	This is normal during discharging. Do not touch it and ensure free air circulation.

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.com

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:** type designation **HGLRC Thor 6 Pro** (6 Port Battery Charger Board Lipo Discharger Pro), manufacturer code C.PJ.05.00006. Manufacturer: HGLRC.

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.