PH2.0 6S

Readytosky
Serial charging adapter for 1S batteries



Read this entire manual carefully before first use, especially the safety rules in Chapter 2.1. Keep the manual for future reference.

User manual · www.rotorama.com

Contents

1. Product description

1.1 What it is for

1.2 Specifications and package contents

2. Use

2.1 Safety rules

2.2 What else you need

2.3 Charging procedure

2.4 Finishing charging and caring for the adapter

2.5 Troubleshooting

3. Information for the EU and Czech market

3.1 Importer and responsible person in the EU

3.2 Disposal of electrical equipment

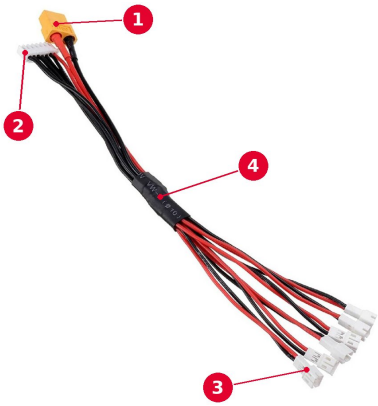
4. Warranty and rights arising from defective performance

1. Product description

1.1 What it is for

The Readytosky serial charging adapter lets you connect **six 1S batteries with a PH2.0 connector** in series and turn them into a single 6S pack with an **XT60** power connector and a **JST-XH 7P** balance connector. Typically these are small batteries for micro drones (tiny whoops) and small models.

With the adapter you can charge all six batteries at once using a standard LiPo balance charger in *Balance* mode for 6S. Through the balance connector, the charger monitors the voltage of each battery separately, as if they were the individual cells of a 6S pack.



Serial charging adapter PH2.0 6S

① **XT60** power connector – connects to the main output of the charger.

② **JST-XH 7P** balance connector – connects to the 6S balance port of the charger.

③ Six **PH2.0** connectors – for connecting six 1S batteries.

④ Wire harness junction under heat-shrink tubing.

1.2 Specifications and package contents

Product designation	Readytosky serial charging adapter – PH2.0 6S
Input connectors	6× PH2.0 (for 1S batteries)
Output connectors	XT60 + JST-XH 7P (balance)
Wiring	series – 6S
Package contents	1× adapter
Not included	batteries, charger

2. Use

2.1 Safety rules

- In a series connection the battery voltages add up. Once all six batteries are connected, the XT60 connector carries the voltage of the entire 6S pack – up to 25.2 V (6 × 4.20 V) with fully charged LiPo batteries and up to 26.1 V (6 × 4.35 V) with LiHV. **Never short-circuit the XT60 connector.**
- **Always charge in Balance mode only**, set to 6S. Modes without balancing (*Charge*, *Fast*) do not monitor the individual batteries and may overcharge them.
- Only combine batteries of **the same type** in one set (all LiPo or all LiHV), of the same capacity and, if possible, of the same age and condition. Never mix LiPo and LiHV.
- Do not charge swollen, mechanically damaged, overheated or deeply discharged batteries.
- The adapter is intended **for charging only** (and, if needed, for storage charging with the charger). Do not use it to power a model or to discharge batteries through a load.
- Never leave charging unattended. Charge on a non-flammable surface or in a fireproof bag, away from flammable materials, children and animals.
- PH2.0 connectors are keyed. Never force them in or insert them the wrong way round.

2.2 What else you need

- a LiPo balance charger that supports 6S charging and has an XT60 output and a JST-XH balance port for 6S,
- six 1S batteries with a PH2.0 connector (batteries with a different connector, e.g. BT2.0, do not fit the adapter directly),
- a non-flammable surface or a fireproof battery bag.

2.3 Charging procedure

① Check the adapter – the wire insulation and connectors must not be damaged.

② Connect the adapter to the charger: the XT60 connector to the main output, the JST-XH 7P connector to the 6S balance port. Do not connect the batteries yet.

③ Connect all **six** batteries to the PH2.0 connectors one by one. The set must be complete – with a battery missing, the charger will not start charging or will report an error.

④ On the charger, check that it has detected 6 cells and that the voltages of the individual batteries are balanced. Remove any battery with a significantly different voltage from the set and do not charge it together with the others.

⑤ Set the battery type (LiPo or LiHV), *Balance* mode, cell count **6S** and the charging current. Set the current according to the capacity of **one** battery and the recommendation of its manufacturer (usually no more than 1C, e.g. 0.3 A for a 300 mAh battery).

⑥ Start charging and check it regularly. Neither the batteries nor the connectors may get excessively warm.

The batteries are in series and the same current flows through all of them. The charging current is therefore based on the capacity of one battery, not on the total capacity of the set.

※ The adapter is a passive cable connection without electronics. The manufacturer does not specify the maximum charging current.

2.4 Finishing charging and caring for the adapter

- When charging is complete (the charger signals the end), first disconnect all six batteries and only then disconnect the adapter from the charger.
- A fully charged battery has 4.20 V (LiPo) or 4.35 V (LiHV); the entire 6S set therefore has 25.2 V or 26.1 V respectively.
- For longer-term storage, select *Storage* mode on the charger – the batteries are charged or discharged to 3.8 V per cell (22.8 V for the entire 6S set).
- Pull connectors out by the connector body, not by the wires.
- Keep the adapter dry and disconnected. Do not continue to use a damaged adapter (melted insulation, loose contact, cracked connector).

2.5 Troubleshooting

Problem	Cause and solution
The charger reports a cell count error or a broken balance lead	A battery is missing or not properly inserted. Check that all six batteries are connected and that the JST-XH 7P connector is fully inserted across its entire width.
The voltage of one cell is 0 V or very low	The battery is not connected, or it is deeply discharged or faulty. Do not charge such a battery.
Charging takes unusually long	The batteries differ significantly in state of charge or capacity and the charger spends a long time balancing. Charge batteries in the same condition together.
The connector or wires get warm	Charging current too high or poor contact. Stop charging, reduce the current and check the connectors.

3. Information for the EU and Czech market

3.1 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

3.2 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.

4. 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 3.1.
- 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.