



BT2.0 connector

BETAFPV · power connector for 1S drones (5 pairs)
User manual



Read this manual before soldering and before connecting a battery for the first time. Reversed polarity or a short circuit can damage electronics and cause a battery fire.

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1. Product description

1.1 What it is for

BT2.0 is a power connector designed by BETAFPV for small drones powered by a single-cell (1S) battery – typically Tiny Whoops. It replaces the previously used PH2.0 connector: instead of crimped pins it uses banana contacts with a larger cross-section, so it has lower internal resistance, less voltage sag under load and can carry a higher current.

The set is used to fit or replace the connector on a drone's power lead (pigtail), on a battery, a charger or your own adapter. The connector is soldered onto the wires; BT2.0 male and female connectors mate with each other. BT2.0 is not directly compatible with PH2.0 – an adapter is required to connect them.



*BT2.0 connectors on 1S batteries and power leads
(illustrative photo by the manufacturer)*

1.2 Technical data and package contents

Manufacturer	BETAFPV
Product designation	BT2.0 Connector – variant 5 × female + 5 × male (manufacturer code 00313640)
Type	two-pole power connector for 1S
Continuous current	9 A
Burst current	15 A
Male dimensions	6.0 × 4.2 × 10.5 mm
Female dimensions	6.0 × 4.2 × 8.3 mm
Male weight	0.34 g / pc
Female weight	0.24 g / pc
Package contents	5 × BT2.0 female connector 5 × BT2.0 male connector
Not included	wires, heat-shrink tubing, solder and soldering iron, battery, BT2.0–PH2.0 adapter

2. Use

2.1 Polarity

The positive (+) and negative (–) poles are marked on the plastic housing of the connector. The wires must be soldered exactly according to this marking. The pin layout, looking into the mating face of the connector, is shown in the picture:



Left male: BATT V– | BATT V+, right female: BATT V+ | BATT V– (view into the mating face)

Reversed polarity will destroy the electronics of the drone or charger. Always check the polarity with a multimeter before connecting a battery for the first time.

2.2 Soldering the connector

- ① Make sure the connector you are fitting is the counterpart of the connector on the device it will be connected to (male ↔ female).
 - ② When replacing the connector on a battery, always work on one wire at a time: cut it, strip it, solder it and insulate it; only then continue with the second wire. The battery wires must never touch each other or the soldering tip at the same time.
 - ③ Slide heat-shrink tubing onto the wires beforehand.
 - ④ Tin the ends of the wires and the solder terminals of the connector.
 - ⑤ Solder the wires according to the marked polarity. Solder quickly with a sufficiently hot tip – prolonged heating can deform the plastic housing and misalign the contacts.
 - ⑥ After cooling, pull the heat-shrink tubing over the joints and shrink it so that the terminals cannot touch each other.
 - ⑦ Check the polarity with a multimeter and verify that there is no short circuit between the poles.
- ※ Manufacturer's video showing the replacement: youtu.be/JRU9sDiKaDo.

2.3 Connecting and disconnecting

- Connect the connectors straight along their axis and push them fully home. A connector that is not fully inserted has a higher contact resistance and heats up.
- When disconnecting, hold the connector housing, not the wires – pulling on the wires damages the soldered joints.
- Do not load the connector above the stated continuous current. It is intended for 1S power.

2.4 Safety and care

- Solder on a non-flammable surface, in a well-ventilated area and with eye protection.
- Replace a connector with a deformed housing or loose or blackened contacts – increased resistance leads to heating and voltage sag.
- Keep the contacts clean and dry. Disconnect the battery after flying and store it disconnected.
- Keep small parts out of the reach of children – they may be swallowed.

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@rotorاما.cz
Phone	+420 252 252 098
Website	www.rotorاما.com

3.2 Disposal



- 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

4.1 Rights of the buyer under Czech law

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.