Johnny 3"

Readytosky – frame for 3" FPV drone
User manual



Before assembling the drone, read this manual and the manuals of all components used carefully.

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

Contents

1. Product description

1.1 What it is for

1.2 Specifications and package contents

2. Use

2.1 What you will need

2.2 Assembly procedure

2.3 Before the first flight

3. Safety, operation and maintenance

3.1 Safety

3.2 Operating the assembled drone

3.3 Maintenance

4. Information for the EU and Czech market

4.1 Importer and responsible person in the EU

4.2 Disposal

5. Warranty and rights arising from defective performance

5.1 Rights of the buyer under Czech law

1. Product description

1.1 What it is for

Readytosky Johnny 3" is a small and lightweight freestyle frame for building an FPV drone with 3-inch propellers. The arms are made of 3 mm thick carbon fibre composite, the other frame plates of 1.5 mm thick carbon fibre composite.

The frame is the structural base of the drone: the motors are mounted on the arms, a flight controller (FC) and electronic speed controller (ESC) stack with 20 × 20 mm mounting hole spacing goes into the centre section, and a Micro size camera (19 mm) goes into the front mount. Electronics, motors, propellers and battery are not included – the frame is intended for experienced hobbyists who build their drone themselves.



Readytosky Johnny 3" – assembled frame (without electronics)

1.2 Specifications and package contents

Product designation	Readytosky Johnny 3"
Type	frame for 3" FPV drone, freestyle
Wheelbase (diagonal motor-to-motor)	140 mm
Material	carbon fibre composite
Arm thickness	3 mm
Plate thickness	1.5 mm
Frame weight	30 g
Stack mounting holes	20 × 20 mm, M2 screws
Motor mounting holes	9/12 mm, M2 screws
Camera size	Micro (19 mm)
Package contents	1× frame
Not included	motors, flight controller (FC), ESC, VTX, camera, receiver, propellers, battery, charger, radio transmitter

2. Use

2.1 What you will need

When choosing components, make sure their dimensions match the frame:

- **4 motors** with 9/12 mm mounting hole spacing for M2 screws, suitable for 3" propellers,
- a flight controller (FC) and electronic speed controller (ESC) **stack** with 20 × 20 mm mounting hole spacing (M2), or a single FC/AIO board with the same spacing,
- a **Micro size camera** (19 mm wide), a video transmitter (VTX) with antenna and a receiver for your radio transmitter,
- **3" propellers** (2× clockwise, 2× counter-clockwise), a battery and a battery strap,
- tools: hex drivers, soldering iron, solder, cable ties, heat-shrink tubing, optionally medium-strength threadlocker.

2.2 Assembly procedure

The following procedure is general. Always wire the electronics according to the instructions of the manufacturer of the respective component.

① **Check the parts.** Before building, check that no frame part is cracked or delaminated. Lightly round off sharp carbon edges that cables could chafe against using fine sandpaper (wet, see Chapter 3).

② **Mounting the motors.** Screw the motors to the ends of the arms with M2 screws. The screw must be long enough to hold firmly, but **must not touch the motor windings** – a screw that is too long will damage the windings and cause a short circuit. Medium-strength threadlocker can be used on the screws.

③ **Routing the motor wires.** Route the wires along the arms and secure them (with heat-shrink tubing or cable ties) so that they cannot get into the propeller or chafe against a carbon edge.

④ **FC and ESC stack.** Mount the stack in the centre of the frame on the 20 × 20 mm (M2) mounting holes. Use silicone dampening grommets if supplied with the stack, and make sure no board or solder joint touches the carbon. Observe the flight direction arrow on the flight controller.

⑤ **Camera, VTX and receiver.** Mount the Micro size camera (19 mm) in the front mount. Place the video transmitter and receiver so that they are protected by the frame structure. Lead the VTX antenna out of the frame and secure it firmly so that it cannot get into the propellers. Never power up the VTX without an antenna connected.

⑥ **Closing the frame.** Fit and screw on the top plate. Tighten all screws with moderate force – M2 threads strip easily.

⑦ **Setup.** Configure the flight controller in the configuration software (e.g. Betaflight): board orientation, motor order and direction of rotation, receiver and failsafe. Follow the flight controller instructions.

⑧ **Propellers.** Fit the propellers only after completing the setup and checking the motor direction of rotation – always without propellers.

2.3 Before the first flight

- Check that all frame, motor and propeller screws are tight.
- Make sure no cable or antenna can get into the propellers.
- Check that there is no short circuit when the battery is connected (we recommend connecting for the first time through a fuse – a so-called smoke stopper).
- Insert a fully charged battery (LiPo 4.20 V/cell, LiHV 4.35 V/cell) and secure it firmly with the strap.
- Check that after Arm (motors on) the motors spin in the correct direction, and that Disarm (motors off) and failsafe work.

3. Safety, operation and maintenance

3.1 Safety

- **Carbon fibre composite is electrically conductive.** Solder joints, circuit boards and cables must not touch the carbon or chafe against it – risk of short circuit and battery fire.
- The edges of carbon parts can be sharp. Take care not to cut yourself when handling them.
- Sanding, drilling or cutting carbon produces dust that is harmful if inhaled and irritates the skin. Work it wet, in a well-ventilated area, and wear a respirator and protective gloves.
- An assembled drone with spinning propellers can cause serious injury. Always disconnect the battery when working on the drone and fit the propellers only just before flight.
- This product is not a toy. Keep it out of the reach of children.

3.2 Operating the assembled drone

Regulations (EU) 2019/947 and 2019/945 apply in all member states of the European Union, but national implementing rules differ from state to state – registration portals, minimum pilot age, geographical zones, mandatory insurance, permitted frequency bands and maximum transmit power. The law of the country in which you operate the drone always applies.

In the Czech Republic, an assembled drone with a camera is subject to operator registration with the Civil Aviation Authority (www.caa.gov.cz). Observe the operational limits of the open category, geographical zones and the rules for flying with FPV goggles (observer). Operate the video transmitter and receiver only in permitted frequency bands and at permitted power.

3.3 Maintenance

- After every crash, inspect the frame carefully. Replace a cracked, bent or delaminated arm or plate – a damaged part may fail in flight.
- Regularly check that the screws are tight; vibration can gradually loosen them.
- Check the cable insulation where cables run over carbon edges.
- Clean the frame with a dry or slightly damp cloth; do not use solvents.

4. Information for the EU and Czech market

4.1 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

4.2 Disposal

- The frame itself contains no electronic components or batteries and is not electrical equipment.
- Dispose of an unneeded or damaged frame according to your local municipal waste rules (carbon fibre composite does not belong in sorted plastic waste). Sort the packaging according to material.
- An assembled drone with electronics and a battery is electrical equipment – before disposing of the frame, remove the electronics and battery and hand them in at a collection point for electrical equipment and batteries. Take-back is free of charge for the end user.

5. Warranty and rights arising from defective performance

5.1 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 4.1.
- 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.