Osprey 40mm u.FL

FlyFishRC · 5.8 GHz circularly polarized antenna
RHCP and LHCP versions · u.FL (IPEX) connector



Read this manual before installation. Never power on the video transmitter without an antenna connected.

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1. Product description

1.1 What it is for

The FlyFishRC Osprey 40mm u.FL is a small, lightweight 5.8 GHz antenna with circular polarization. It serves as the transmitting antenna of an analog or digital video transmitter (VTX) on an FPV drone, typically on smaller craft – whoops, 2–3 inch drones and racing drones. The antenna head sits in a transparent casing made of impact-resistant polycarbonate, which is hermetically sealed and protects the radiating element inside.

The antenna is available in two polarization versions: **RHCP** (right-hand, transparent black head) and **LHCP** (left-hand, cyan head). It connects to the video transmitter with a miniature **u.FL (IPEX)** connector at the end of a short coaxial cable.



Osprey 40mm u.FL antennas (LHCP version shown)

1.2 Specifications and package contents

Manufacturer	FlyFishRC
Product designation	Osprey 5.8Ghz 40mm ipex/UFL RHCP Stubby Antenna (A000504) Osprey 5.8Ghz 40mm ipex/UFL LHCP Stubby Antenna (A000505)
Frequency	5.8 GHz (band 5.6–6.0 GHz)
Gain	2.82 dBi
VSWR	≤ 1.2:1
Radiation efficiency	99 %
Polarization	RHCP (transparent black) or LHCP (cyan)
Connector	u.FL (IPEX)
Head dimensions	diameter 14.1 mm × height 14 mm
Length	40 mm
Cable	coaxial, RG141 (as stated by the manufacturer)
Casing	polycarbonate, hermetically sealed
Weight	2.1 g
Package contents	1× Osprey 40mm u.FL antenna in the selected polarization

Not included in the package: video transmitter, antenna mount and fastening material (cable ties, heat-shrink tubing).



Antenna dimensions (manufacturer's data)

2. Use

2.1 Choosing the polarization

Circularly polarized antennas work well together only if they have **the same sense of polarization**. An RHCP antenna on the drone belongs with an RHCP antenna on the goggles or receiver, LHCP with LHCP. Combining RHCP with LHCP weakens the signal considerably and shortens the range.

- Before purchase and installation, check which polarization the antennas of your goggles or video receiver use.
- For digital video systems, follow the recommendation of the manufacturer of the system.
- When flying in a group, agree on a common polarization – pilots using opposite polarization interfere with each other less.

2.2 Connecting to the video transmitter

Never power on the video transmitter without an antenna connected. The transmitter may be damaged within a short time.

① Disconnect the drone battery.

② Check that the video transmitter has a u.FL (IPEX) connector and operates in the 5.8 GHz band.

③ Place the antenna connector perpendicularly onto the mating connector on the transmitter board and press it straight down until it clicks into place. Do not press at an angle and do not use excessive force.

④ To disconnect, lift the connector straight up – ideally with a suitable tool inserted under its edge. Never pull on the cable.

⑤ The u.FL connector is designed for a limited number of mating cycles. Do not disconnect the antenna unnecessarily, and after connecting, secure the connector against loosening, for example with a drop of glue or heat-shrink tubing over the cable.

2.3 Mounting on the drone

- Place the antenna head as high as possible and as far as possible from the carbon frame, the battery and other metal parts that shield the signal.
- Route the cable so that the antenna cannot get into the spinning propellers. Check this again after a crash.
- Secure the cable to the frame, in an antenna mount or with heat-shrink tubing so that it does not strain the connector and does not vibrate.
- Do not bend the cable at a sharp angle and do not pinch it between frame parts.

▶ Frequency and transmit power

The frequency (channel) and transmit power are set on the video transmitter, not on the antenna. The antenna gain adds to the transmitter output power. The user is responsible for observing the permitted frequencies and radiated power limits. The regulations of the country in which you operate the product are decisive.

2.4 Care and inspection

- Before every flight, check that the connector is firmly seated and that neither the cable nor the head is damaged.
- A cracked casing, a broken or nicked cable and a loose connector degrade the video link – replace a damaged antenna.
- Clean the casing with a dry or slightly damp cloth; do not use solvents.
- Store the antenna in a dry place, out of the reach of children and so that the cable is not kinked.

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



- 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.