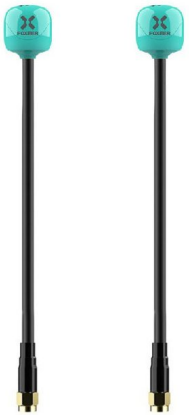
Lollipop 4 Plus

5.8 GHz FPV antenna · length 15 cm
RHCP / LHCP · SMA / RP-SMA · 2 pcs



Never power on the video transmitter without an antenna connected.

User manual · www.rotorama.com

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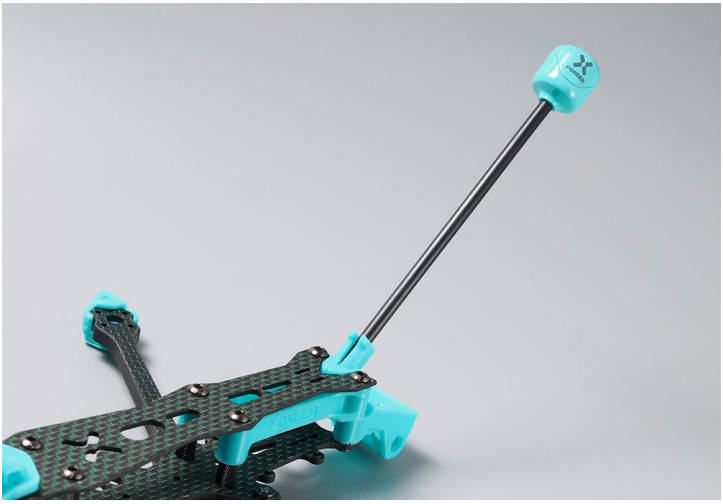
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1. Product description

1.1 What it is for

Foxeer Lollipop 4 Plus (Lollipop 4+) is an omnidirectional, circularly polarised antenna for FPV video transmission in the 5.8 GHz band. The radiating element is a gold-plated printed circuit protected by a durable plastic cover. The antenna has a gain of 2.6 dBi and a uniform radiation pattern. The package contains two antennas.

The antenna screws onto the connector of the video transmitter (VTX) on the drone, or onto a video receiver or FPV goggles. The long 15 cm version is particularly suitable for long-range quadcopters, where the antenna head needs to be raised above the drone frame. RHCP polarisation is mainly used with analogue video transmission and the HDZero system, LHCP polarisation mainly with the DJI O4 and Walksnail Avatar digital systems.



Lollipop 4 Plus antenna fitted in a holder on a drone frame (manufacturer's illustrative photo)

1.2 Specifications and package contents

Manufacturer	Foxeer
Product designation	Lollipop 4 Plus (on the antenna cover: FOXEER, LOLLIPOP 4+)
Antenna type	omnidirectional, circular polarisation
Band	5.8 GHz
Gain	2.6 dBi
Polarisation	RHCP or LHCP — depending on the selected variant
Connector	SMA or RP-SMA — depending on the selected variant
Variants offered	LHCP RP-SMA · RHCP SMA · LHCP SMA
Length	15 cm
Radiator cover width	17 mm
Weight	13 g (1 pc)
Construction	gold-plated printed-circuit radiator, plastic cover
Connectors	resistance verified by a 48-hour salt spray test
Package contents	2× antenna (both in the selected variant)
Not included	video transmitter, video receiver or goggles, frame antenna holder, connector adapters, mounting hardware

2. Use

2.1 Choosing the right variant

For the antenna to work, two things must match: **polarisation** and **connector type**.

- **Polarisation** — the antenna on the drone and the antenna on the goggles or video receiver must have the **same polarisation** (RHCP with RHCP, LHCP with LHCP). Combining RHCP with LHCP significantly reduces signal strength and range. Check which polarisation your goggles' antennas use.
- **Connector** — the antenna connector must fit the connector of the video transmitter. An **SMA** male plug has a **pin** in the centre and fits an SMA jack (socket in the centre). An **RP-SMA** male plug has a **socket** in the centre and fits an RP-SMA jack (pin in the centre).
- SMA and RP-SMA connectors have the same thread, so they can also be screwed onto the wrong counterpart — but the centre contact will not connect and the antenna will not work. Never force the connector.



RP-SMA connector (left, socket in the centre) and SMA (right, pin in the centre)

2.2 Mounting on the drone

① Disconnect the drone battery. The video transmitter must be switched off during mounting.

② Check that the polarisation and connector of the antenna match your system (chapter 2.1).

③ Fit the antenna connector straight onto the video transmitter connector and tighten the nut **by hand**. Do not use pliers or excessive force — the connector on the transmitter board could be damaged.

④ Secure the antenna cable in a holder on the frame or with a cable tie so that the antenna does not pull on the transmitter connector in flight or in a crash.

⑤ Position the antenna head as high above the frame as possible, out of reach of the propellers, ideally vertical and away from carbon parts, metal components

and other antennas (e.g. the RC receiver).

⑥ Before the first flight, check that the propellers cannot touch the antenna cable or head in any position.

2.3 Use on goggles and video receivers

The antenna can also be used on the receiving side — on FPV goggles or a video receiver with a matching connector. The same rules apply: the same polarisation as on the drone, the correct connector type and hand tightening only. Protect a long antenna on goggles against bending and leverage on the connector, e.g. when putting the goggles down.

2.4 Safety, transmit power and care

Never power on the video transmitter without an antenna connected. It may be permanently damaged.

- The antenna itself does not transmit anything and needs no power. However, the antenna gain (2.6 dBi) adds to the power of the video transmitter — the resulting radiated power (e.i.r.p.) is therefore higher than the power set in the transmitter.
- In the Czech Republic, a maximum of 25 mW e.i.r.p. is permitted for general use in the 5725–5875 MHz band (general authorisation of the Czech Telecommunication Office, ČTÚ). The user is responsible for the transmitter power setting. **The law of the country in which you operate the product always prevails** — outside the Czech Republic, follow the limits and regulations of that country.
- After a crash, check the radiator cover, cable and connector. A cracked cover, a broken or pinched cable or a bent connector degrade reception; replace a damaged antenna.
- Clean the antenna cover with a dry or slightly damp cloth, without solvents. Keep the connector clean and dry.
- Store the antennas so that the cable is not bent at a sharp angle and the connectors are not damaged.

2.5 Troubleshooting

Problem	Possible cause and solution
No image or very weak image	Wrong connector type (SMA × RP-SMA) — the centre contact did not connect. Use an antenna with the correct connector or a suitable adapter.
Much shorter range than usual	Different polarisation of the antennas on the drone and on the goggles (RHCP × LHCP). Use the same polarisation on both sides.
Image drops out during some manoeuvres	The antenna head is shielded by the frame, battery or carbon. Route it higher and away from conductive parts.
Image worse after a crash	Damaged antenna cover, cable or connector. Inspect the antenna and replace it if necessary.

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.