D-Pole u.FL

TrueRC — 5–6 GHz dipole antenna
linear polarization, u.FL connector



Read this manual before use and keep it for future reference.

Rotorama, s.r.o. · www.rotorama.com

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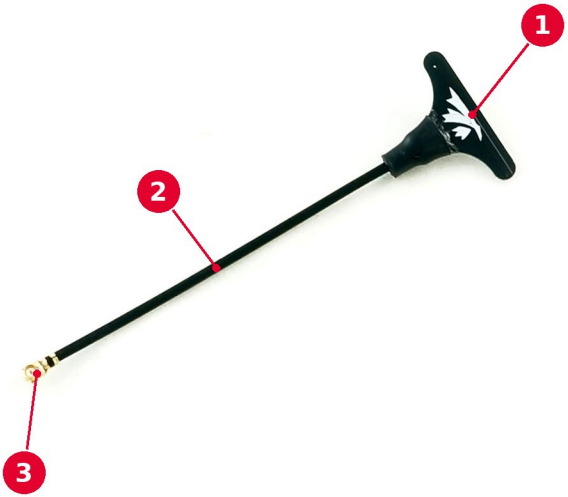
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1. Product description

1.1 Intended use

TrueRC D-Pole u.FL is a lightweight, linearly polarized dipole antenna for the 5–6 GHz band made by the Canadian manufacturer TrueRC. It is intended mainly for small FPV drones and tinywhoops, where every gram counts. It covers the entire 5–6 GHz band, which makes it suitable for both analog and digital video transmission.

The antenna connects via its u.FL connector directly to a video transmitter (VTX) or other device operating in the 5–6 GHz band that has a u.FL antenna connector – no extra pigtail is needed. The radiating element is made on a printed circuit board, which makes the antenna very durable. The antenna is passive – it does not transmit on its own and needs no power supply.



① antenna head (radiating element on a PCB) · ② coaxial cable · ③ u.FL connector

1.2 Specifications and package contents

Product designation	TrueRC D-POLE-U.FL 5G (D-Pole u.FL)
Manufacturer	TrueRC (Canada), truerc.com
EAN	0608597251708
Antenna type	dipole, omnidirectional, linear polarization
Frequency band	5–6 GHz
Gain	2.5 dBic (manufacturer's data)
Dimensions	80 mm × 25 mm
Cable	flexible RG178 coaxial cable
Connector	u.FL
Package contents	1× antenna
Not included	video transmitter, receiver, extension cables and adapters, mounts, glue and tape

※ The manufacturer does not state the weight or the length of the cable alone.

2. Use

Never power up the video transmitter (VTX) without an antenna connected. The transmitter may be permanently damaged.

2.1 Connecting the u.FL connector

① Before connecting, disconnect power from the video transmitter (unplug the battery).

② Place the u.FL connector at the end of the antenna cable perpendicularly over its mating socket on the transmitter board and align it exactly on centre.

③ Press the connector down evenly until it audibly and noticeably clicks into place. Do not use excessive force and do not press the connector at an angle.

④ Check that the connector sits straight and is seated all the way around.

⑤ To disconnect, pull straight up on the body of the connector, ideally using a suitable tool. Never pull on the cable – the u.FL connector and its mating socket on the board are fragile.

2.2 Placement and mounting

- Place the antenna head so that it cannot get into the propellers – not even in a crash or after the cable has been bent.
- The head should protrude outside the frame. Carbon and metal parts, the battery and wiring close to the head shield the signal and reduce range.
- Keep the head as far as possible from the motors, electronic speed controllers (ESC) and other sources of interference.
- Route the cable without sharp bends and secure it so that pulling forces and vibration do not act directly on the u.FL connector (e.g. with tape, a cable tie or a drop of glue on the cable a short distance from the connector).
- Secure the head to the frame or to an antenna mount so that it cannot move freely in flight.

2.3 Polarization

This antenna has linear polarization. The best results are achieved when the antenna on the receiving side (FPV goggles, video receiver) is also linearly polarized and both antennas are oriented in a similar way. With a circularly polarized antenna (RHCP/LHCP) on the other end of the link it works, but part of the signal is lost. Linear polarization is also more sensitive to the orientation of the drone relative to the receiving antenna.

2.4 Radio regulations

The antenna does not transmit on its own, but it affects the radiated power of the whole setup: the effective isotropic radiated power (e.i.r.p.) is determined by the video transmitter output power and the antenna gain. The user is responsible for setting the output power and choosing the channel.

- The law of the country in which you operate the equipment is decisive. Permitted frequency bands and maximum transmit powers differ from country to country.
- In the Czech Republic, general authorisation of the Czech Telecommunication Office (ČTÚ) No. VO-R/10 permits operation in the 5725–5875 MHz band at a maximum of 25 mW e.i.r.p. Check the current wording at www.ctu.cz.
- Operation outside these bands and limits may require an individual authorisation, e.g. an amateur radio licence.

2.5 Care and inspection

- Before every flight, check that the u.FL connector is properly clicked in and that the cable is not cut, pinched or broken at the connector or at the antenna head.
- Do not use a damaged antenna – it degrades video transmission and may damage the transmitter.
- Do not paint the antenna head with metallic paints or cover it with metal foils.
- Clean the antenna with a soft dry cloth; do not use solvents.
- This product is not a toy. Keep it out of the reach of children – small parts 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@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.