CORE 5.8 Side Feed

TrueRC – 5.8 GHz omnidirectional antenna
LHCP · u.FL connector · 205 mm cable



Read this manual before use. Never power on a video transmitter without an antenna connected.

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1. Product description

1.1 What it is for

The **TrueRC CORE 5.8 Side Feed** is an omnidirectional, circularly polarized antenna for the 5.8 GHz band, designed for a video transmitter (VTX) or the receiver of an analogue or digital FPV link. It is a special version of the CORE 5.8 antenna with the coaxial cable exiting from the **side** of the housing. This allows the antenna to be mounted flat, typically on the wing or inside the fuselage of an FPV airplane.

The radiating element is protected by a durable polycarbonate housing that survives ordinary crashes. This variant has **left-hand circular polarization (LHCP)**, a 205 mm TrueRC RG178 cable and a u.FL connector for direct connection to a video transmitter or receiver with a u.FL socket.



TrueRC CORE 5.8 Side Feed – radiating element in a polycarbonate housing with side cable exit

1.2 Specifications and package contents

Product designation	TrueRC CORE 5.8 Side Feed, LHCP, U.FL side feed 205 mm
Manufacturer	TrueRC Canada
Antenna type	omnidirectional, circular polarization
Polarization	LHCP (left-hand)
Frequency band	5.5–6.1 GHz
Gain	1.9 dBic
Cross-polar rejection	−10 to −20 dB (3.2 %)
Radiation efficiency	98 %
SWR	≤ 1.2:1
Radiator dimensions	diameter 16.9 mm × height 13.1 mm
Cable	TrueRC RG178 coax, side exit, length 205 mm
Connector	u.FL
Package contents	1× antenna
Not included	video transmitter or receiver, adapters and pigtails for other connectors, mounting material

※ The manufacturer does not state the weight of this variant. The antenna is passive – it contains no electronics, no battery and no power supply of its own, and it does not transmit anything by itself.

2. Use

2.1 Polarization and compatibility

The antenna of the transmitter and the antenna of the receiver (FPV goggles, monitor or ground station) must have the **same polarization**. This antenna is LHCP, so only combine it with LHCP antennas. According to the manufacturer, with matching polarization most of the signal passes from one antenna to the other; with an RHCP-to-LHCP combination only about 3 % of the signal is left – you will still have video, but with heavy interference.

- The antenna is designed for the 5.8 GHz band (5.5–6.1 GHz). Do not use it with transmitters or receivers for other bands (e.g. 1.2 GHz or 2.4 GHz).
- The u.FL connector plugs directly into the u.FL socket on the video transmitter or receiver. Devices with an SMA or MMCX connector require a different antenna variant.
- The antenna does not transmit by itself. Frequencies and maximum transmit power are determined by the video transmitter – observe the regulations of the country in which you operate the model.

2.2 Connecting the u.FL connector

① Disconnect the model's power (battery). Never connect or disconnect the antenna while the model is powered.

② Hold the connector perpendicular above the u.FL socket on the video transmitter and press until it audibly and noticeably clicks in.

③ Secure the cable near the connector (with tape, heat-shrink tubing or a drop of glue on the cable, not into the connector) so that vibration or a pull in a crash cannot rip it off.

④ To disconnect, lever the connector straight up with a suitable tool. Never pull on the cable.

Never power on the video transmitter without an antenna connected – it may be damaged.

※ The u.FL connector has a limited number of mating cycles. The antenna manufacturer states that the connector maker (Hirose) rates it at 30 cycles, but in practice the connectors last longer. As long as the connector reliably “snaps in”, there is nothing to worry about.

2.3 Mounting on the model

- Place the radiating element away from carbon parts, metal parts and wiring. Carbon and metal shield the signal.
- The side cable exit allows the element to be mounted flat on the wing or inside the fuselage of an airplane. Any cover over the element must not be made of carbon or metal.

- Route the cable away from propellers and moving parts and secure it along its entire length. Do not bend it sharply or crush it – especially right next to the element and the connector.
- Fix the element so that it cannot move in flight, and keep it in as clear a line of sight towards the pilot as possible.

2.4 Care and troubleshooting

- After a crash, check the element housing, the cable and the connector. A cracked housing, a cut or pinched cable or a loose connector will degrade video quality.
- Clean the antenna with a dry cloth; do not use solvents.

Problem	Cause and solution
Very short range, noisy video	Mismatched antenna polarization – use an LHCP antenna on the receiver. Check that the u.FL connector is clicked in and that the transmitter and receiver are on the same channel.
Video drops when banking or turning	The element is shielded by carbon, metal or the battery – move it to a place with a clear view.
Video drops with vibration	Loose u.FL connector – reconnect it and secure the cable against pulling.

※ The manufacturer states that cable length does not affect the performance of a properly designed antenna and that the cable can be shortened or the connector replaced. This is a modification of the product that requires experience with soldering RF connectors; defects caused by such a modification are not product defects.

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.