ROTORAMA

CORE 5.8 Side Feed

TrueRC · 5.8 GHz RHCP antenna
MMCX, 85 mm side-exit cable



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

www.rotorama.com

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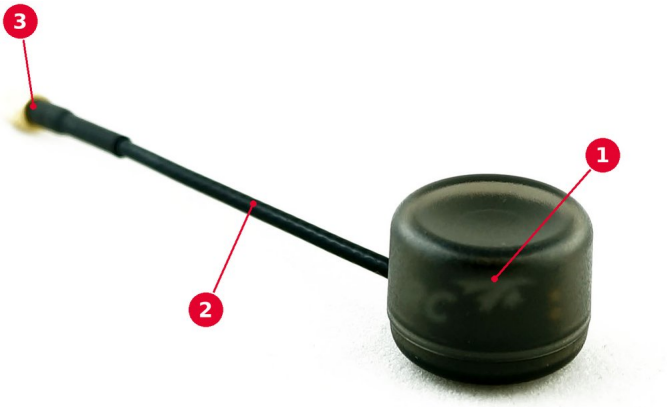
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1. Product description

1.1 Purpose

TrueRC CORE 5.8 Side Feed is an omnidirectional, circularly polarised antenna for the 5.8 GHz band, which is used for analogue and digital video transmission on FPV models. It connects to the video transmitter (VTX) in the model or to a video receiver (FPV goggles, monitor) with an **MMCX** connector.

Unlike the standard CORE antenna, this version has the coaxial cable **exiting from the side** of the housing. The manufacturer recommends it primarily for burying inside the wing or fuselage of an FPV aircraft, where the antenna lies flat and does not protrude. The radiating element is protected by a durable polycarbonate housing.



① housing with radiating element ② side-exit coaxial cable ③ MMCX connector

1.2 Specifications and package contents

Parameter	Value
Product designation	TrueRC CORE 5.8 Side Feed, MMCX side feed 85 mm
Manufacturer	TrueRC Canada, 410 Av. Murdoch, Rouyn-Noranda, QC J9X 1G8, Canada; contact@truerc.com
Antenna type	omnidirectional
Frequency band	5.5–6.1 GHz
Gain	1.9 dBic
Polarisation	right-hand circular (RHCP)
Cross-polar rejection	−10 to −20 dB (3.2 %)
Radiation efficiency	98 %
SWR	≤ 1.2 : 1
Housing dimensions	diameter 16.9 mm, height 13.1 mm
Cable	TrueRC RG178 coax, side exit, length 85 mm
Connector	MMCX (straight)

Package contents: 1× TrueRC CORE 5.8 Side Feed antenna with cable and MMCX connector.

Not included: video transmitter or receiver, adapters to other connector types (SMA, U.FL), mounting material.

2. Use

2.1 Compatibility

- The antenna is intended for 5.8 GHz devices with an **MMCX** antenna connector. Connect it to any other connector type only via a suitable adapter (pigtail).
- The antenna is **passive** – it has no power supply or electronics of its own and does not transmit anything by itself. It always works together with a video transmitter or receiver.
- Use antennas with the **same polarisation** on both the transmitting and the receiving side (RHCP with RHCP). Combining RHCP and LHCP significantly reduces range and degrades image quality.

2.2 Connecting and disconnecting

① Before connecting or disconnecting the antenna, **disconnect the power** of the video transmitter (the model's battery).

② Push the MMCX connector straight onto its counterpart until it clicks into place. Do not push at an angle and do not use tools.

③ When disconnecting, pull the connector body, **never the cable**.

④ Before switching on, check that the connector is firmly seated and the cable is not pinched.

Never switch on a video transmitter without an antenna connected. The transmitted power has nowhere to radiate and the transmitter may be permanently damaged.

2.3 Placement and installation in the model

- Place the antenna housing as far as possible from carbon parts, metal, the battery and high-current wiring. Carbon and metal block the signal.
- When buried in a wing or fuselage, the antenna must only be covered by material that lets the signal through (EPP/EPO foam, plastic, balsa). Do not cover it with carbon, metal foil or conductive paint.
- Route the cable without sharp bends, especially where it exits the housing and where it enters the connector. Secure it against vibration and pulling (tape, a cable tie without overtightening).
- Do not modify the cable or the connector (do not shorten or re-solder them). Improper modification degrades signal transmission.
- Do not glue the housing with cyanoacrylate (super glue), which may damage the polycarbonate. Use double-sided tape or a flexible adhesive suitable for plastics and foams.

2.4 Transmitting power and legal regulations

The antenna gain counts towards the radiated power (e.i.r.p.). Therefore set the video transmitter power so that the radiated power, including the antenna gain, does not exceed the limit applicable in the country of operation. In the Czech Republic, the limit for the 5725–5875 MHz band under the CTU general authorisation VO-R/10 is **25 mW e.i.r.p.**

National regulations on frequencies and power differ from country to country. The information above describes the situation in the Czech Republic. If you operate the model in another country, **the regulations of the country in which you operate it are decisive**. The user is responsible for the transmitter settings.

3. Maintenance and troubleshooting

3.1 Maintenance and storage

- After a crash, check the housing (cracks), the cable (kinks, torn insulation) and the connector (bent centre pin). Replace a damaged antenna.
- Wipe off dirt with a dry or slightly damp cloth. Do not use solvents.
- Store the antenna in a dry place, without kinking the cable and out of the reach of children.

3.2 Troubleshooting

Problem	Possible cause and solution
Short range, noise in the image	Different antenna polarisation on transmitter and receiver – use RHCP on both sides. The antenna is covered by carbon or metal – change its position.
Image drops out when the model banks	The housing is shielded by the fuselage, battery or wiring – relocate the antenna.
No image at all	The MMCX connector is not seated or the cable is damaged – check the connection and the cable.

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 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.

5. 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 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.