ROTORAMA

Singularity SMA 62mm

TrueRC · 5.8 GHz omnidirectional FPV antenna
User manual



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

www.rotorama.com

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1. Product description

1.1 What it is for

TrueRC Singularity SMA 62mm is an omnidirectional, circularly polarized 5.8 GHz antenna made by the Canadian manufacturer TrueRC. It screws onto the video transmitter (VTX) of a drone or onto the receiver of FPV goggles or a receiver module operating in the 5.6–6.0 GHz band and fitted with an SMA connector.

The radiating element sits in a small head 11.8 mm in diameter. The RG405 cable is stiff but flexible and holds its shape; the knurled nut is easy to tighten by hand. The 62 mm length suits freestyle and micro long-range drones and cinewhoops.



Radiating head, RG405 cable and SMA connector

1.2 Specifications and package contents

Parameter	Value
Manufacturer	TrueRC (Canada)
Product designation	Singularity 5.8 SMA, SMA 62mm version
Frequency band	5.6–6.0 GHz
Gain	1.9 dBic
Polarization	circular, RHCP (right-hand)
Cross-polar rejection	−15 to −30 dB
Radiation efficiency	99 %
SWR	≤ 1.5:1
Cable and connector	RG405, 62 mm long; SMA connector
Head dimensions	Ø 11.8 mm × 8.2 mm (height)
Weight	1.03–3.55 g depending on cable (manufacturer’s range for the series)
Package contents	1× antenna; **not included:** VTX, goggles, antenna mount, SMA / RP-SMA adapter

2. Use

2.1 Compatibility and polarization

- **Connector:** the antenna has an **SMA** connector. RP-SMA looks similar but has the centre contact reversed and cannot be connected directly. Check the connector type on the video transmitter or receiver first; use a suitable adapter for a different type.
- **Band:** the antenna is designed for the 5.6–6.0 GHz band. It does not work properly on transmitters and receivers for other bands (e.g. 1.2 GHz, 2.4 GHz).
- **Polarization:** the antenna is right-hand circularly polarized (RHCP). Both ends of the link – the video transmitter on the drone and the receiver in the goggles – must use antennas with the **same polarization**. Combining RHCP and LHCP weakens the signal considerably, because the antenna rejects the cross polarization (−15 to −30 dB).

2.2 Installation

① Disconnect the drone battery, or switch off the goggles or receiver.

② Check that the antenna connector and its mating connector are clean, the centre contact is not bent or damaged and there is no dirt in the thread.

③ Fit the antenna straight onto the connector and tighten it **by hand** using the knurled nut. Do not use pliers or a spanner and do not overtighten the nut – you could damage the video transmitter connector.

④ Secure the cable in the antenna mount on the frame. Keep the head out of reach of the propellers and, if possible, not shielded by the carbon frame, battery or metal parts. The cable can be shaped slightly; do not bend it sharply at the connector or head.

⑤ Switch on the power only with the antenna connected.

Never power on a video transmitter without an antenna connected. The transmitter may be damaged.

2.3 Operation and care

- The antenna has no power supply or electronics – output power and channel are set on the video transmitter. Permitted bands and maximum power (e.i.r.p.) are governed by the regulations of the country of operation; the antenna gain counts towards the radiated power.
- Before every flight, check that the connector nut is tight – vibration can loosen it. After a crash, inspect the head, cable and connector; a damaged antenna reduces range and image quality and may damage the video transmitter – do not use it.
- Keep the antenna dry and clean; clean the connector with a dry brush, no solvents. Protect it from crushing and sharp bending during transport.

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.