Singularity 5.8 Stubby RP-SMA LHCP

Circularly polarized 5.8 GHz antenna for FPV goggles
TrueRC Canada · RP-SMA · LHCP



Read this manual before installation. The antennas on the goggles and on the drone must have the same polarization (LHCP).

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1. Product description

1.1 Intended use

The **TrueRC Singularity 5.8 Stubby RP-SMA LHCP** is a passive, omnidirectional, circularly polarized antenna for the 5.8 GHz band made by the Canadian manufacturer TrueRC. It is a direct-fit replacement for the antennas of FPV goggles with RP-SMA connectors. The manufacturer lists it as compatible with **DJI FPV Goggles V1 and V2**, **Walksnail Avatar HD / Fat Shark Dominator** and **Walksnail Avatar HD X**. Installation requires no modifications to the goggles.

Compared with the stock goggle antennas, it has a much lower profile (*stubby* design). The manufacturer states over 50% more range than the stock antennas thanks to circular polarization. The radiating element is enclosed in a hardened polycarbonate case, injection-molded and ultrasonically welded, designed for high crash resistance. The antenna requires no power supply and no configuration.



TrueRC Singularity 5.8 Stubby antenna (photo: TrueRC)

1.2 Specifications and package contents

Product designation	TrueRC Singularity 5.8 Stubby RP-SMA, LHCP polarization
Manufacturer	TrueRC Canada, 410 Av. Murdoch, Rouyn-Noranda, QC J9X 1G8, Canada · contact@truerc.com · www.truerc.com
Type	passive omnidirectional antenna, circular polarization
Frequency band	5.6–6.0 GHz
Gain	1.9 dBic
Polarization	LHCP (left-hand circular)
Cross-polar rejection	−15 to −30 dB
Radiation efficiency	99%
SWR	≤ 1.5:1

Connector	RP-SMA
Dimensions	diameter 12.7 mm × height 20 mm
Weight	3.7 g
Case	hardened polycarbonate
Colour	black
Package contents	1× antenna
Not included	FPV goggles, video transmitter (VTX), drone antenna, SMA / RP-SMA adapter

Specifications as stated by the manufacturer TrueRC.

2. Use

2.1 Before you start

- **Check the connector.** The antenna has an **RP-SMA** connector and fits only devices with an RP-SMA connector. SMA and RP-SMA connectors look similar but are not compatible with each other – the centre contact does not connect and the antenna will not work. Never force them together.
- **Check the polarization.** The antennas at both ends of the link must have the same polarization. This antenna is **LHCP**, so the video transmitter (VTX) antenna on the drone must also be LHCP. According to the manufacturer, an LHCP/RHCP combination passes only about 3% of the signal – the image will be much worse.
- On goggles with several antenna connectors, we recommend fitting all antennas with the same polarization as the antenna on the drone.

2.2 Installation on the goggles

① Switch the goggles off.

② Unscrew the original antenna by hand, turning it anticlockwise.

③ Place the Singularity antenna straight onto the RP-SMA connector and tighten it **by hand**, turning clockwise. Do not use tools – excessive force can damage the connector of the antenna and of the goggles.

④ Repeat for the other antennas of the goggles.

⑤ Switch the goggles on and check the image quality.

※ Never power up the video transmitter (VTX) on the drone without an antenna connected – it may be damaged.

2.3 Operation and care

- Before every flight, check that the antennas are tight. A loose connector degrades reception.

- The case is welded – do not disassemble the antenna. A cracked case or a bent or loose connector means the antenna must be replaced.
- During transport, protect the goggles and antennas from impacts and pressure, e.g. in a case or backpack.
- Clean the antenna with a soft, dry cloth; do not use solvents. Store it in a dry place.
- The operator of the video transmitter is responsible for complying with the permitted frequencies and transmit power. The law of the country in which you operate the equipment always applies.

2.4 Troubleshooting

Problem	Possible cause and solution
Weak or noisy image, short range	Different antenna polarization on the drone and the goggles – use LHCP on both sides. Check that the antenna is properly tightened.
Image only at a very short distance	The antenna is not connected properly, an incompatible connector is used (SMA instead of RP-SMA), or the wrong channel is selected. Check the connection and the channel setting.
The antenna cannot be screwed on	The device has an SMA connector, or the thread is damaged. Do not use force.
Cracked case, loose connector	Mechanical damage, e.g. after an impact. Replace the antenna.

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.