Singularity 5.8 Stubby SMA

TrueRC · 5.8 GHz circularly polarized antenna
User manual



Read this manual before first use. Before connecting, check the connector type (SMA) and the polarization (RHCP) – both must match your device.

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1. Product description

1.1 What it is for

TrueRC Singularity 5.8 Stubby SMA is a short (stubby) omnidirectional circularly polarized antenna for the 5.8 GHz band. It is intended primarily as a receiving antenna for FPV goggles and video receivers. The manufacturer lists compatibility with the **HDZero VRX4** video receiver and **HDZero / Divimath** goggles; the antenna can also be used on analog FPV goggles and other devices with an SMA connector.

The antenna uses the proven Singularity radiator housed in a thicker polycarbonate case. The case is injection-molded and ultrasonically welded so that, according to the manufacturer, it survives even hard crashes without compromising antenna performance.



SMA connector

1.2 Specifications and package contents

Manufacturer	TrueRC (Canada)
Product designation	Singularity 5.8 Stubby SMA
Frequency band	5.6–6.0 GHz
Gain	1.9 dBic
Polarization	circular, RHCP (right-hand)
Cross-polar rejection	−15 to −30 dB (1.9 %)
Radiation efficiency	99 %
SWR	≤ 1.5:1
Connector	SMA
Dimensions	diameter 12.7 mm × height 20 mm
Weight	3.7 g
Colour	red
Package contents	1× antenna
Not included	goggles, video receiver and transmitter, connector adapters

2. Use

2.1 Before connecting the antenna

- **Connector type.** The antenna has an **SMA** connector. It fits devices with an SMA socket. Do not connect it to devices with an **RP-SMA** connector – the connectors do not match and forcing them may damage the centre contact of the antenna and the device.
- **Polarization.** The antenna is **RHCP**. Both ends of the link – the video transmitter on the drone and the goggles – must use antennas with the same polarization. The manufacturer states that with an RHCP-to-LHCP combination only about 3 % of the signal gets through: you will still have video, but much worse.
- **Frequencies.** The antenna is designed for the 5.6–6.0 GHz band. Use channels within this range. Permitted frequencies and transmit powers differ from country to country – the law of the country in which you operate the equipment always applies.

2.2 Mounting and removal

① Switch off the goggles or video receiver.

② Place the antenna squarely on the device connector and screw it on by hand clockwise until it seats.

③ Tighten it only lightly by hand. Do not use pliers or a wrench – excessive force may damage the connector of the antenna and of the device.

④ Check that the antenna sits firmly and does not wobble. Only then switch the device on.

⑤ To remove it, switch the device off and unscrew the antenna by hand anticlockwise.

2.3 Tips for good reception

- The antenna is omnidirectional. On goggles with diversity reception it can be combined with a directional antenna of the same polarization to improve reception in the direction of flight.
- There should be no obstacles between the antenna and the drone. The signal is attenuated by the human body, buildings, trees and metal objects.
- If you use the antenna on a video transmitter (VTX), never power the transmitter without an antenna connected – it may be damaged.

3. Care and troubleshooting

3.1 Care, storage and safety

- Keep the connector clean and dry. Do not clean the antenna with solvents.
- The case is welded – do not open it, you would damage the antenna irreparably.
- When transporting the goggles, unscrew the antenna or protect the connector from bending.
- The antenna is a small part – keep it out of the reach of small children.

3.2 Troubleshooting

Problem	Cause and solution
Weak video, short range	Check that the antennas on the drone and on the goggles have the same polarization (RHCP). Make sure the antenna is tightened and that the device has an SMA connector, not RP-SMA.
Video only at very short distance	The manufacturer states that such range corresponds to a link without an antenna or on the wrong channel. Check the antenna connection and the channel selection.
Antenna cannot be screwed on	The connector types do not match (SMA / RP-SMA) or the thread is damaged. Do not force it.
Antenna wobbles	Tighten it by hand. If there is still play, check the connector on the device.

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



- 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.