Omni 72mm

Maple Wireless

Omnidirectional antenna 5.8 GHz · RHCP · SMA



Read the entire manual before first use. Never power up the video transmitter without an antenna connected.

www.rotorama.com

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1. Product description

1.1 What it is for

Maple Wireless Omni 72mm is an omnidirectional antenna for the 5.8 GHz band with **RHCP** circular polarisation. It is intended mainly for the video transmitter (VTX) of an FPV drone with an SMA connector. With an overall length of about 72 mm it suits freestyle drones and cinewhoops; its RHCP polarisation makes it suitable for analogue video.

An omnidirectional antenna radiates evenly in all directions around its axis, so the image stays stable even during quick attitude changes. Circular polarisation reduces interference from signal reflections. For the link to work, the antenna on the receiving side (FPV goggles or monitor) must have **the same RHCP polarisation**. The antenna is passive – it does not transmit by itself and contains no electronics and no battery.



Maple Wireless Omni 72mm – antenna head, cable and SMA connector

1.2 Technical data and package contents

Product designation	Maple Wireless 5.8G 2dBi Omni, RHCP, SMA-MALE, 72 mm
Manufacturer	Maple Wireless (www.maple-wireless.com)
Antenna type	omnidirectional (omni), passive
Frequency range	5650–5914 MHz
Gain	2 dBi
Polarisation	RHCP (right-hand circular)
Vertical beamwidth	80°
Connector	SMA male (coupling nut with internal thread, centre pin)
Length	72 mm
Package contents	1× antenna
Not included	video transmitter, connector adapters (e.g. to RP-SMA, MMCX or u.FL), antenna mount and mounting hardware

2. Use

2.1 Safety instructions

- **Never power up the video transmitter (VTX) without an antenna connected.** The transmitter can overheat within moments and be permanently damaged. Connect and disconnect the antenna only with the power off.
- Install the antenna with the drone battery disconnected and the propellers removed.
- Do not use the antenna if the head is cracked, the cable is kinked or the connector is damaged.
- The product contains small parts and is not a toy. Keep it out of the reach of children.
- Do not operate the drone or the antenna near high-voltage power lines.

2.2 Connecting the antenna

The antenna has an **SMA male** connector – a coupling nut with an internal thread and a centre pin. It mates with an **SMA female** counterpart (external thread, socket in the centre). It does not fit an RP-SMA connector without an adapter: the thread can be screwed on, but the centre contacts do not connect and the antenna will not work.



SMA male connector with centre pin

① Disconnect the drone battery and make sure the video transmitter is not powered.

② Check that the connector on the video transmitter (or on its pigtail) is SMA female.

③ Fit the antenna straight in line with the connector and screw the coupling nut on by hand.

④ Tighten the nut **finger-tight only**, without pliers or a wrench. Overtightening can damage the connector.

⑤ Secure the antenna in a mount or with a cable tie so that the cable and connector are not strained by vibration and impacts.

⑥ Only then connect the battery.

2.3 Placement on the drone and polarisation

- Both ends of the link must have the same polarisation: an RHCP antenna on the drone and an RHCP antenna on the FPV goggles or monitor. Combining RHCP and LHCP weakens the signal considerably.
- Position the head so that it protrudes from the frame and is not shadowed by carbon, the battery or electronics – carbon and metal parts attenuate the signal.
- Neither the head nor the cable may reach into the path of the propellers.
- Route the cable without sharp bends, do not pinch it between frame parts and do not bend it right at the connector.

2.4 Transmit power and regulations

The law of the country in which you transmit applies.

Permitted frequency bands and maximum transmit powers are governed by national regulations that differ from country to country. The information below describes the situation in the Czech Republic. If you operate a transmitter with this antenna in another country, you must comply with the regulations of the country in which you transmit.

- In the Czech Republic, operation in the **5725–5875 MHz** band is permitted without an individual licence at a power of no more than **25 mW e.i.r.p.** (general authorisation of the Czech Telecommunication Office No. VO-R/10/07.2021-8, Article 3).
- The **antenna gain** counts towards the e.i.r.p. value. With a gain of 2 dBi, the output power of the video transmitter must therefore be reduced accordingly.
- The frequency range of the antenna (5650–5914 MHz) extends beyond this band. Channels outside the 5725–5875 MHz band must not be used in the Czech Republic without authorisation.
- The operator is responsible for the channel and power settings of the transmitter.

2.5 Maintenance and troubleshooting

- After every crash, check the head, the cable and the connector. Replace a damaged antenna.
- Keep the connector clean and dry; remove dirt with a dry cloth or brush. Do not use solvents.
- Store the antenna in a dry place without bending stress on the cable.

Problem	Possible cause and solution
No image or a very weak image	The antenna is not tightened, the counterpart is not SMA female (e.g. RP-SMA) or the cable is damaged. Check the connection and replace the antenna if necessary.

Problem	Possible cause and solution
Weak image even at short range	Different polarisation of the antennas on the drone and on the goggles. Use RHCP on both ends.
Video dropouts in certain drone attitudes	The head is shadowed by the frame, the battery or another part. Reposition the antenna so that it protrudes from the frame.
The antenna cannot be screwed on	Different connector type or size, or a damaged thread. Do not use force.

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.