Strigiformes 11dBi

Maple Wireless

5.8 GHz circularly polarized directional antenna



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

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1. Safety instructions

The antenna is a passive receiving element with no power supply of its own. Nevertheless, observe the following rules to avoid damaging the antenna or the device you connect it to.

- Whenever possible, connect and disconnect the antenna with the goggles or monitor switched off.
- Tighten the SMA connector **by hand only**. Do not use a wrench or pliers – overtightening damages the thread or the receiver connector.
- A directional antenna is larger and heavier than a typical omnidirectional antenna and acts as a lever on the goggle connector. Protect it from impacts and do not rest the goggles on the antenna when putting them down.
- When wearing goggles with the antenna fitted, pay attention to your surroundings so that the antenna does not injure anyone or catch on objects.
- This product is not a toy. Keep small parts (the adapter) out of the reach of children.
- Do not use the antenna if it is mechanically damaged (cracked board, loose or deformed connector).

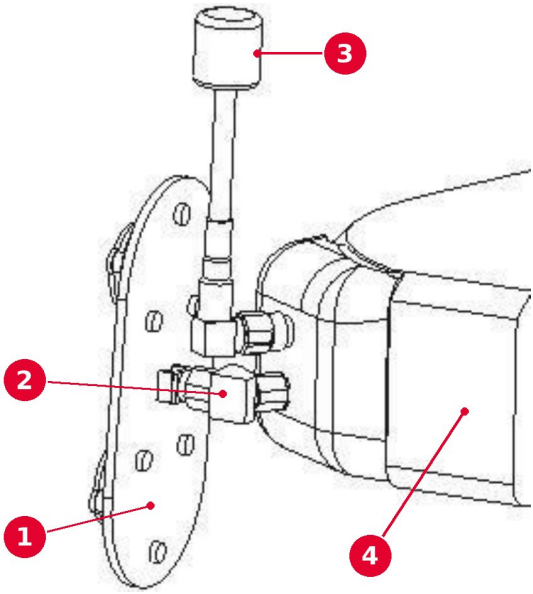
2. Product description

2.1 What the antenna is for

The Maple Wireless Strigiformes 11dBi is a high-gain, circularly polarized directional (patch) antenna for **receiving** analog FPV video in the 5.8 GHz band. It connects via an SMA connector directly to FPV goggles or to a monitor with a built-in receiver.

This product is suitable for **long-distance cruise flight**. Thanks to its narrower beam it concentrates reception in the direction it is pointed – the aircraft must therefore fly within the area the antenna is pointing at.

2.2 Overview



Example setup on FPV goggles (based on the manufacturer's drawing)

① Strigiformes 11dBi directional antenna (RHCP)

② 45° adapter (SMA)

③ Omnidirectional antenna – **not included**

④ FPV goggles – **not included**

2.3 Package contents

- 1× Strigiformes 11dBi directional antenna
- 1× 45° adapter

The FPV goggles, monitor, video receiver and omnidirectional antenna shown in the drawings are **not** included.

2.4 Product specifications

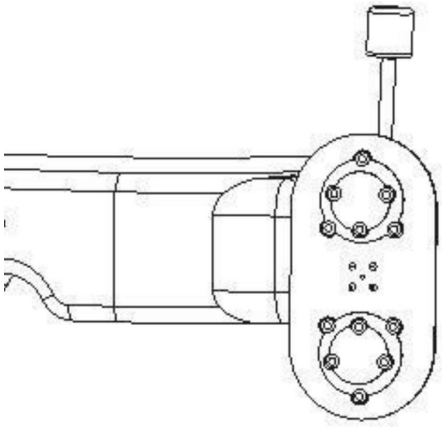
Parameter	Value
Product	Maple Wireless Strigiformes 11dBi
Manufacturer model no.	MDJ-11080-5.6R
Frequency range	5500–5800 MHz
Use	receiving (RX)
Gain	11 dBi
Polarization	right-hand circular (RHCP)
Half power beam (−3 dB)	75° H-plane, 40° E-plane
Connector	SMA (male)
Net weight	19 g
Antenna size	82 × 42 × 24 mm
Manufacturer	Quanzhou Maple Leaf Electronic Technology Co., www.maple-wireless.cn

3. Antenna installation

3.1 Connecting to FPV goggles

Screw the antenna onto the antenna input of the goggle receiver either directly or via the supplied **45° adapter**, which allows the antenna to be turned to a suitable position. Tighten the connector by hand only.

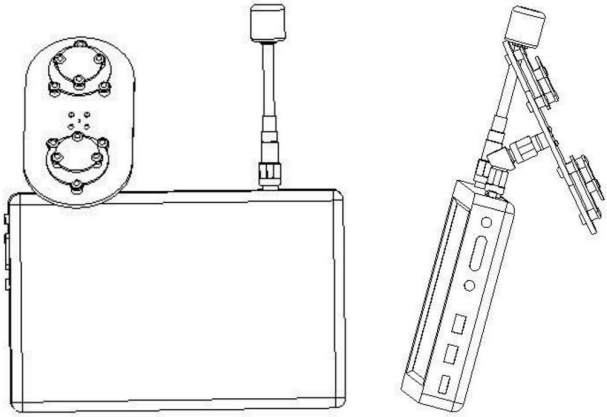
- If the goggles have two antenna inputs (diversity), the directional antenna can be combined with an omnidirectional antenna on the second input – see the drawing in Chapter 2.2. The omnidirectional antenna provides reception even where the directional antenna is not pointing.
- For best reception, the video transmitter (VTX) on the aircraft must also use a **right-hand circularly polarized (RHCP)** antenna. With a left-hand polarized (LHCP) antenna, reception is significantly worse.



Antenna on FPV goggles – front view

3.2 Connecting to a monitor

On a monitor with a built-in video receiver, the antenna is connected in the same way – directly or via the 45° adapter to the monitor's antenna input. Turn it so that the antenna board points towards the area where you will be flying.



Antenna on a monitor – front view (left) and side view (right)

3.3 Adjusting the antenna tilt

When installing the antenna, adjust its pitch angle appropriately according to your flying habits, so that the receiving antenna is **perpendicular to the ground** when the aircraft is in normal flight. This gives the best reception.

4. Use

4.1 Channel selection and the law of the country of use

The antenna operates in the **5500–5800 MHz** range. The manufacturer recommends using the **5650–5700 MHz** working frequencies, which have less interference.

※ The transmission frequency and power are determined by the video transmitter on the aircraft, not by this antenna. The user is responsible for their settings and must follow the regulations of the country in which they fly.

The law of the country in which the product is operated always prevails; permitted frequency bands and transmit powers differ from country to country. For example, in the Czech Republic the general authorization of the Czech Telecommunication Office VO-R/10 permits video transmitters in the **5725–5875 MHz** band with a maximum of **25 mW e.i.r.p.** Frequencies below 5725 MHz – including the 5650–5700 MHz section recommended by the manufacturer – are not covered by this general authorization. In the Czech Republic, therefore, use channels in the 5725–5800 MHz section, which lies within the antenna's range, unless you hold a further authorization.

4.2 Pointing the antenna in flight

The antenna is directional – the aircraft must be within the receiving signal range of the antenna.

① When the aircraft is in line of sight, the antenna should be pointed approximately at the aircraft.

② When the aircraft is out of line of sight, adjust the antenna pointing according to the strength of the received signal so that the image is stable. Adjust it **slowly and in small steps**, not with fast or large movements.

When flying with goggles, you point the antenna by turning your head. Keep this in mind especially when flying directly above or behind you, where the directional antenna does not point.

5. Maintenance and troubleshooting

5.1 Care and storage

- Before each flying session, check that the antenna is firmly tightened and the connector is not damaged.
- Clean the antenna with a dry, soft cloth. Do not use solvents.
- Protect it from moisture, drops and bending of the board. Store it in a dry place, preferably disconnected from the goggles.
- Keep the connector thread clean; dirt impairs contact and may damage the mating connector.

5.2 Troubleshooting

Problem	Possible cause and solution
Image is noisy or drops out even at short range	The antenna is not pointing at the aircraft – turn it. Check that it is firmly tightened. Make sure the VTX on the aircraft has an RHCP antenna, not LHCP.
Image drops out when the aircraft is above or behind you	The aircraft is outside the beam of the directional antenna. Use an omnidirectional antenna on the second goggle input, or turn the antenna.
Weak reception on all channels	Check that the VTX channel lies within the antenna range of 5500–5800 MHz, and check the condition of the connector and adapter.
Interference on one channel	There is interference on the channel (another pilot, Wi-Fi). Choose another channel permitted in the country of use.

6. Information for the EU and Czech Market

6.1 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

6.2 Product identification

- **Product designation:** Maple Wireless Strigiformes 11dBi, manufacturer model no. MDJ-11080-5.6R.
- **Manufacturer:** Quanzhou Maple Leaf Electronic Technology Co., China, www.maple-wireless.cn, e-mail g.yunfeng@gmail.com.
- Details of the importer and the responsible person in the EU are given in Chapter 6.1.

6.3 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.

7. Warranty and rights arising from defective performance

7.1 Rights of the buyer under Czech law

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 6.1.
- 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.