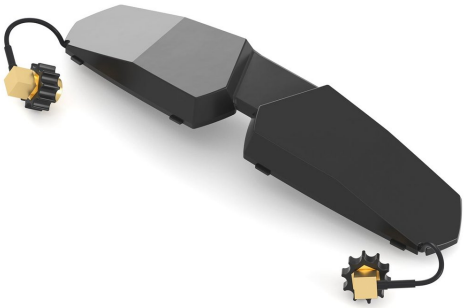
Patch Antenna V2

Directional antenna for Walksnail Goggles X
User manual



Read this entire manual before installation and keep it for future reference.

www.rotorama.com

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1. Product description

1.1 Purpose

Walksnail Patch Antenna V2 is a pair of directional (patch) antennas for 5.8 GHz video reception, integrated into a shaped mask for the **Walksnail Avatar HD Goggles X**. The mask is fitted in place of the removable front cover of the goggles, so the goggles keep their shape after installation and the antenna does not get in the way. The complete set weighs only 32 g.

Each of the two antennas has its own cable terminated with a right-angle **RP-SMA** connector with a rubber handwheel for hand tightening. The connectors attach to the antenna connectors of the goggles in place of the supplied omnidirectional antennas. A directional antenna concentrates reception in the area in front of the pilot and therefore improves range and signal penetration in the direction you are looking.



Walksnail Patch Antenna V2 – front view (manufacturer's illustrative photo)

1.2 Specifications and package contents

Parameter	Value
Product designation	Walksnail Patch Antenna V2 for Avatar HD Goggles X (WNPJ-00026)
Compatibility	Walksnail Avatar HD Goggles X
Frequency band	5600–6000 MHz
Polarization	LHCP (left-hand circular)
Gain	6.7 dBi
Beam width	127°
VSWR	< 1.4
Efficiency	97%
Connector	RP-SMA, right-angle, with rubber handwheel
Weight	9.6 g (single antenna), 32 g (complete set)
Dimensions (W × L × H)	146 × 35 × 10 mm
Package contents	1× mask with a pair of antennas
Not included	Walksnail Avatar HD Goggles X, omnidirectional antennas, tools

2. Use

2.1 Choosing the antenna connectors

The Avatar HD Goggles X have four RP-SMA antenna connectors. Three of them are receive-only, one both receives and transmits (the return link to the video transmitter on the drone). Seen from the display side, this connector is at the **top left**.

- We recommend connecting both antennas of the mask to the **top pair of connectors**, i.e. including the receive-and-transmit connector. The higher-gain directional antenna then helps both directions of the link.
- Keep the omnidirectional antennas on the remaining two connectors; they provide reception when the drone is not in front of you.

2.2 Installing on the goggles

① Switch off the goggles and disconnect the power cable.

② Remove the front cover of the goggles. Proceed carefully and without excessive force.

③ Unscrew the omnidirectional antennas from the connectors you will use for the mask and keep them.

④ Fit the antenna mask in place of the front cover.

⑤ Screw the right-angle RP-SMA connectors of the mask onto the free antenna connectors of the goggles and tighten them **by hand only** using the rubber handwheel. Do not use a wrench or pliers.

⑥ Check that the cables are not sharply bent or under tension and that all four connectors of the goggles have an antenna attached.

⑦ Switch on the goggles and before flying check that the image from the drone is clear and stable.

Do not switch on the goggles if any of the antenna connectors has no antenna attached. Operating without an antenna degrades reception and on the transmitting connector it may damage the transmitter circuitry.

2.3 Operation and pointing

A directional antenna receives best in the area its front face points to. Because the mask is fixed to the goggles, the antenna always points where you are looking.

- For the best signal, turn your head towards the drone. The beam width of the antenna is 127°.
- When the drone flies behind or beside you, the directional antenna receives a weaker signal and reception relies mainly on the omnidirectional antennas on the remaining connectors.
- The antenna has **LHCP** polarization. For good reception the video transmitter antenna on the drone must have the same polarization (LHCP). Combining LHCP and RHCP significantly reduces range.
- Before every flight check that the connectors are tight and the cables are in good condition.

2.4 Care and storage

- Do not disconnect or carry the mask by pulling on the cables. Do not bend the cables sharply near the connectors.
- Protect the connectors from dust, moisture and mechanical damage.
- Clean the mask with a dry or slightly damp cloth; do not use solvents.
- Keep the original front cover and the omnidirectional antennas so that you can return the goggles to their original state.

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.