# Avatar HD Pro Camera

Walksnail — digital FPV camera with 14 cm cable
User manual




**Read this entire manual before installation and first use, and keep it for future reference.**

*Rotorama, s.r.o. · www.rotorama.com*

# Contents

**1. Product description**

1.1 Intended use

1.2 Specifications and package contents

**2. Use**

2.1 Safety instructions

2.2 Mounting in the frame

2.3 Connecting to the video transmitter

2.4 Stabilising footage in Gyroflow

2.5 Care and troubleshooting

**3. Information for the EU and Czech Market**

3.1 Importer and responsible person in the EU

3.2 Disposal of electrical equipment

**4. Warranty and rights arising from defective performance**

# 1. Product description

## 1.1 Intended use

The **Walksnail Avatar HD Pro Camera** is a camera for the Walksnail Avatar digital video transmission system. It is mounted at the front of an FPV drone and connected by a coaxial cable to a Walksnail Avatar video transmitter (VTX), which transmits the image to the goggles and can also record it. The camera is intended as a replacement or upgrade camera for Avatar V1 and V2 video transmitters.

The camera uses a 1/1.8" **Sony Starvis II** sensor which, according to the manufacturer, delivers a clear image even in poor lighting conditions and at night. It supports 16:9 and 4:3 aspect ratios, a 160° field of view and the storage of gyro data, which allows recorded footage to be stabilised afterwards in Gyroflow.




*Camera parts*

① Lens

② Holes for the camera mount screws (on the side plates)

③ 140 mm coaxial cable for connection to the video transmitter

## 1.2 Specifications and package contents

| | |
|---|---|
| Product designation | Walksnail Avatar HD Pro Camera, manufacturer code WN08-0014B |
| Brand | Walksnail (CaddxFPV) |
| Image sensor | 1/1.8" Sony Starvis II |
| Resolution / frame rate | 1080P/60 fps; 720P/60 fps; 1080P/120 fps (compatibility mode) |
| Aspect ratio | 16:9 / 4:3 |
| Field of view (FOV) | 160° |
| Aperture | F1.6 |
| Shutter | rolling shutter |
| Gyroflow | supported |
| Dimensions | 19 × 19 × 24 mm |
| Weight | 9.5 g |
| Coaxial cable | 140 mm |
| Compatibility | Walksnail Avatar V1 and V2 video transmitters |

**▶ Package contents**

- 1× Walksnail Avatar HD Pro Camera with 14 cm coaxial cable
- 1× screw set

**▶ Not included in the package**

Walksnail Avatar video transmitter (VTX), Walksnail Avatar goggles, drone frame or camera mount. The camera itself neither transmits nor records video — it cannot be used without a Walksnail Avatar video transmitter.

# 2. Use

## 2.1 Safety instructions

- Install and connect the camera only with the **power disconnected** — the drone battery must be unplugged. Never connect or disconnect the coaxial cable connector while the video transmitter is powered.
- Always **fit the antenna** before powering the video transmitter, otherwise the transmitter may be damaged.
- The video transmitter heats up during operation. During bench tests without airflow, do not leave it switched on for long periods and do not touch hot parts.
- Keep small parts (screws) out of the reach of children. This product is not a toy.
- In the EU, a drone equipped with a camera is subject to **mandatory operator registration** under Regulation (EU) 2019/947, regardless of its weight. The regulations of the country in which you fly always take precedence.
- When filming, respect the privacy of others and data protection rules.

## 2.2 Mounting in the frame

The camera measures 19 × 19 × 24 mm. It is fixed in the camera mount of the drone frame with the screws from the set, which are screwed into the holes ② in the side plates of the camera.

① Disconnect the drone battery.

② Insert the camera into the mount with the lens facing forward and set the required tilt angle.

③ Tighten the screws evenly on both sides and with care — excessive force can damage the holes in the camera body.

④ Route the coaxial cable away from the propellers, without sharp bends and without tension. Secure it, for example with a cable tie, but do not pinch it.

⑤ The cable must not rest on sharp edges of the frame (especially carbon frames) — it could chafe through.



*Side view of the camera*

## 2.3 Connecting to the video transmitter

① Make sure the video transmitter is not powered.

② Push the free end of the coaxial cable into the camera connector on the video transmitter — straight and without levering — until the connector is fully seated. The location of the connector is described in the manual of your Walksnail Avatar video transmitter.

③ Fit the antenna of the video transmitter and only then connect the power.

④ Switch on the goggles. Once the goggles are linked with the video transmitter, the camera image is displayed.

Resolution, frame rate and aspect ratio are set in the menu of the Walksnail Avatar goggles. Before first use, we recommend updating the firmware of both the video transmitter and the goggles to the latest version from the manufacturer's website (www.walksnail.com → Download Center).

## 2.4 Stabilising footage in Gyroflow

The camera supports the storage of gyro data. Footage recorded by the video transmitter can be stabilised afterwards with this data in the free **Gyroflow** software (gyroflow.xyz). The manufacturer provides the Gyroflow lens profile for download in the Download Center at www.walksnail.com (file *Walksnail Camera Lens Gyroflow File*).

**If you use Gyroflow, provide vibration damping for the camera mount. Without it, stabilisation will not work properly.**

## 2.5 Care and troubleshooting

- Clean the lens with a dry, soft lens cloth. Do not touch it with your fingers.
- Do not rotate the lens — this would change the focus.
- The manufacturer does not specify any water or dust resistance. Protect the camera from moisture, rain and condensation.
- After every crash, check the lens, the camera body and the coaxial cable.

| Problem | Possible cause and solution |
|---|---|
| Goggles are linked with the transmitter but show no image | Check that the coaxial cable connector is properly seated on the video transmitter and inspect the cable itself (kinks, chafing). Update the firmware of the video transmitter and the goggles. |
| Image is blurred or hazy | Clean the lens. Check whether the lens has rotated or come loose after an impact. |
| Stabilisation in Gyroflow does not work properly | Improve vibration damping of the camera mount and use the manufacturer's lens profile. |

# 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.