

## CADDXFPV Avatar Pro Kit

# CADDXFPV Walksnail Avatar Pro Kit Instruction Manual

Model: Avatar Pro Kit

## 1. INTRODUCTION

The CADDXFPV Walksnail Avatar Pro Kit is an advanced digital FPV (First Person View) transmission system designed for FPV drones. It features a high-resolution camera with excellent night vision capabilities, integrated Gyroflow support for stable footage, and a robust digital transmission system for reliable long-range flights. This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your Avatar Pro Kit.

## 2. WHAT'S IN THE BOX

Carefully unpack your CADDXFPV Walksnail Avatar Pro Kit and verify that all components are present:

- Avatar Pro Air Unit
- Booster Antenna (2x)
- Coaxial Cable
- Type-C USB Cable
- Screws (various sizes for mounting)
- Gasket
- User Manual (this document)

# ALL ACCESSORIES

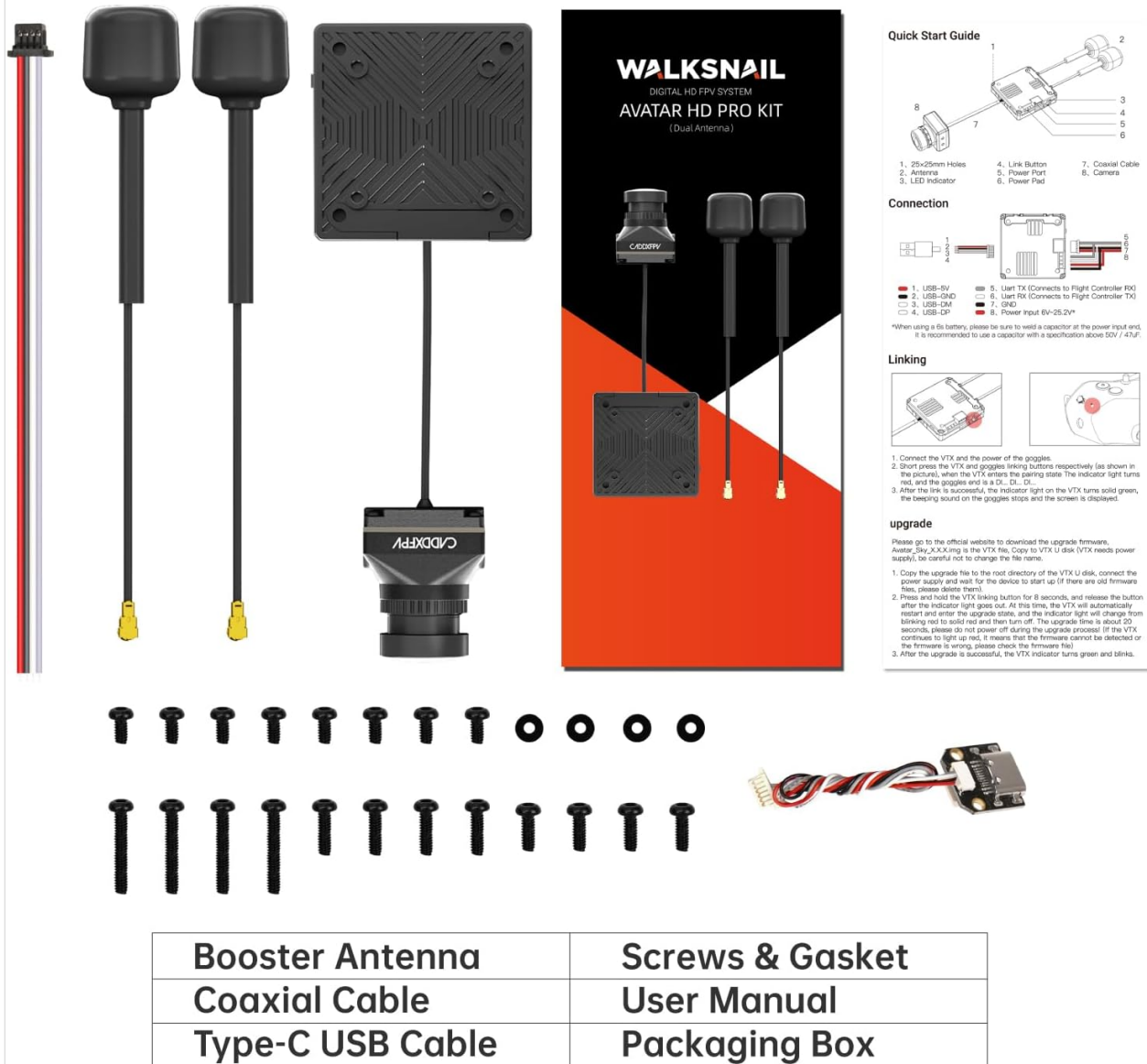


Figure 2.1: All accessories included in the Walksnail Avatar Pro Kit packaging.

## 3. PRODUCT FEATURES

The CADDXFPV Walksnail Avatar Pro Kit offers a range of features designed to enhance your FPV experience:

- **Crisp 1080P/60FPS with Night Vision:** Powered by a large 1/1.8-inch Starvis II sensor and advanced H.265 encoding, capture every detail in stunning clarity, day or night. Perfect for city skyline flights or forest trails after sunset.
- **Stable 4KM Digital HD Transmission:** Dual high-gain antennas and enhanced TVS protection deliver rock-solid signal penetration with up to 4KM range and just 22ms latency—fly fast and far without video dropouts, even in dense trees or urban areas.
- **Built-in Gyroflow with 32GB Storage:** Integrated gyro supports Gyroflow stabilization for buttery-smooth footage. Record hours of HD video directly to the built-in 32GB card—no need for external storage or Wi-Fi.
- **Compact, Lightweight, and Versatile:** Weighs just 33g to reduce drone load. Smart layout fits both 20×20mm and 25.5×25.5mm mounting patterns, with dual power connection options for easy installation on most FPV drone and RC Cars frames.

- **Seamless Compatibility with Goggles X & L:** Fully works with Walksnail Avatar HD Goggles X and L for an immersive, lag-free FPV experience—see every turn, dive, and gap with total confidence.

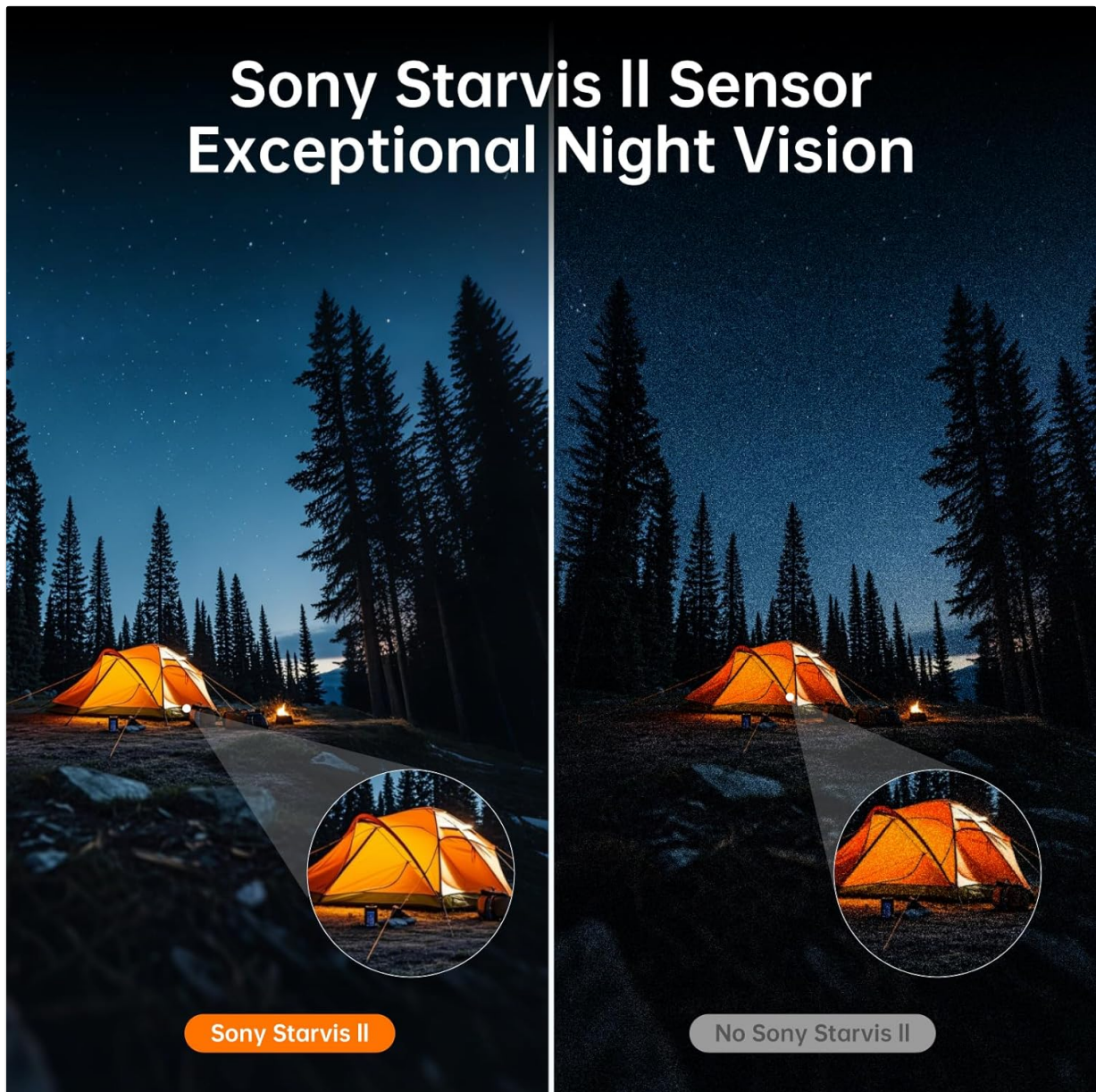


Figure 3.1: Exceptional Night Vision with Sony Starvis II Sensor.

160°  
**160° FOV**  
ULTRA WIDE



  
**1080P/60FPS**  
ULTRA CLEAR



Figure 3.2: 160° FOV Ultra Wide and 1080P/60FPS Ultra Clear Video.

## Smooth & Stable Recording



Figure 3.3: Smooth & Stable Recording with Built-in Gyroflow and 32GB Storage.



Figure 3.4: Stable Digital Transmission Up To 4KM Range.

## 4. SETUP INSTRUCTIONS

This section guides you through the installation of the CADDXFPV Walksnail Avatar Pro Kit onto your FPV drone. Ensure your drone is powered off and disconnected from any power sources before beginning installation.

### 4.1 Mounting the Air Unit

The Avatar Pro Air Unit supports both 20x20mm and 25.5x25.5mm mounting patterns. Choose the appropriate screws and gaskets for your drone frame.

1. Identify the mounting location on your drone frame.
2. Secure the Avatar Pro Air Unit using the provided screws and gaskets. Ensure a snug fit without overtightening.

# Dual Mounting Options

20×20mm & 25×25mm Holes

Compatible With FPV Drones & RC Vehicles

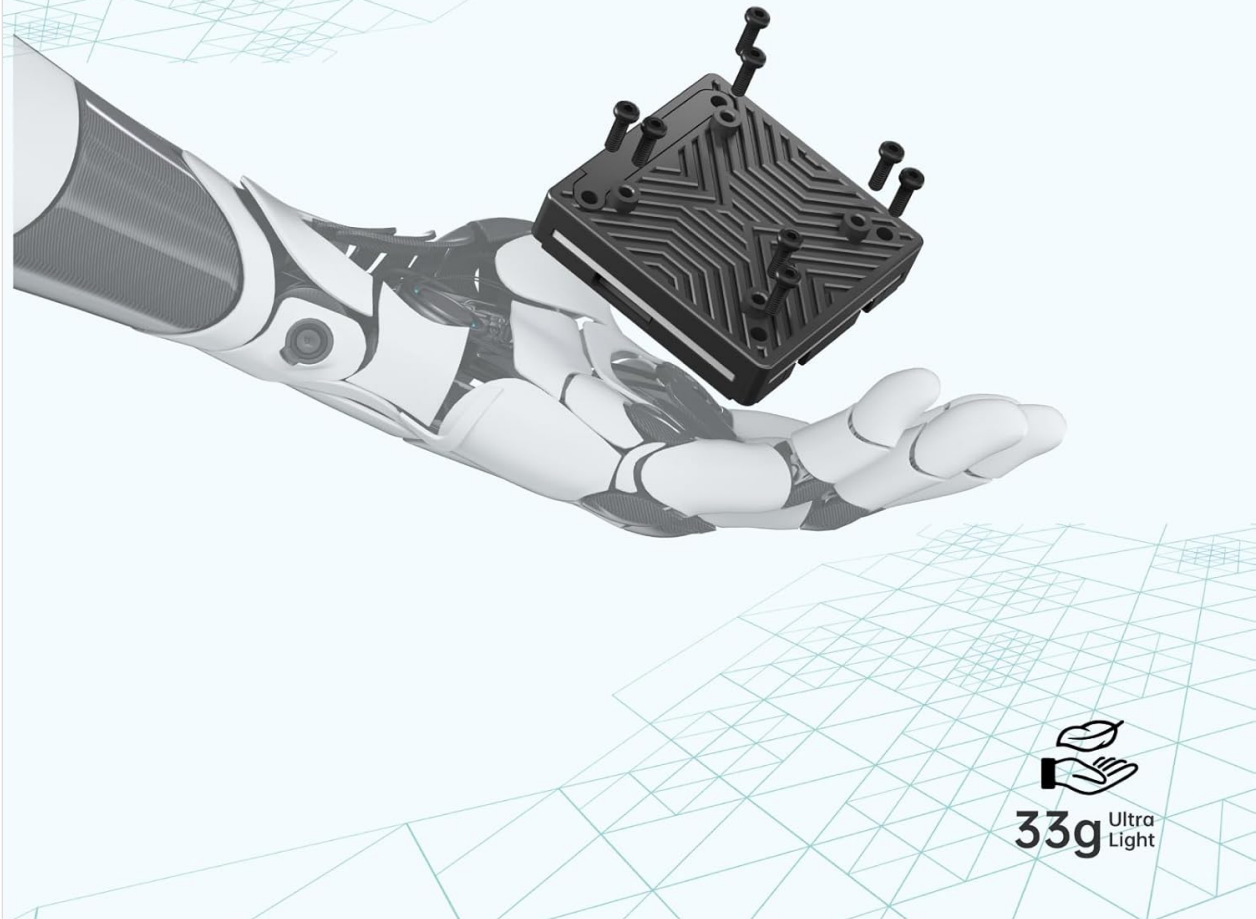


Figure 4.1: Dual Mounting Options for the Avatar Pro Air Unit.

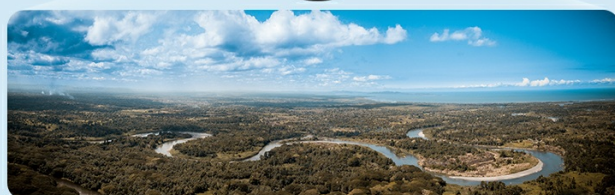
## 4.2 Power Connection

The Avatar Pro Kit offers two power connection modes. Refer to the diagram below for proper wiring. When using a 6S battery, it is recommended to use a capacitor with a specification above 50V / 47uF at the power input end.

**1080P**  
Ultra-Clear



**160°**  
Ultra-Wide FOV



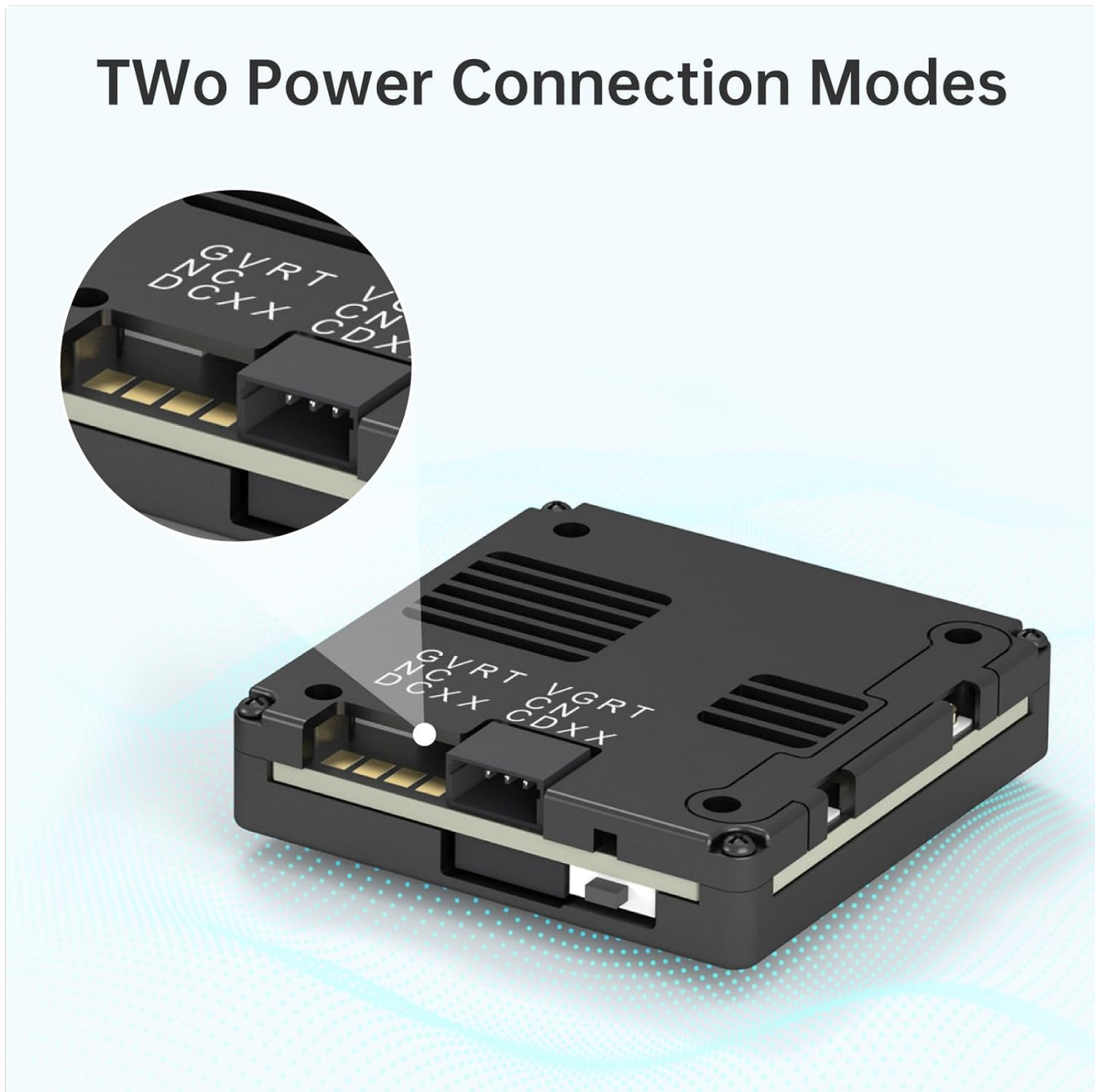


Figure 4.3: Two Power Connection Modes.

### 4.3 Antenna Installation

Connect the dual high-gain antennas to the Avatar Pro Air Unit. Ensure they are securely fastened and positioned for optimal signal reception.

### 4.4 Camera Installation

Connect the camera to the Air Unit via the coaxial cable. Ensure the camera is mounted in a forward-facing direction on your drone.

### Video: CADDXFPV Walksnail Avatar Pro Kit FPV Drone Air Unit Pro

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Video 4.1: An overview of the CADDXFPV Walksnail Avatar Pro Kit, demonstrating its components and general assembly for FPV drone integration.

### Video: Pavo Femto Quadcopter Installation (General Air Unit Installation)

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Video 4.2: This video demonstrates the installation process of an Air Unit on a Pavo Femto Quadcopter. While specific to a different drone model, the general principles of mounting, wiring, and connecting the camera and antennas are applicable to the Avatar Pro Kit installation.

### Video: Pavo20 Pro HD Camera Installation (General Camera Installation)

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Video 4.3: This video illustrates the installation of an HD camera on a Pavo20 Pro. The techniques for securing the camera and managing its cable are relevant for installing the Avatar Pro Kit camera.

## 5. OPERATING INSTRUCTIONS

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Once the Avatar Pro Kit is installed, follow these steps to begin operation:

1. **Power On:** Connect your drone's battery. The Avatar Pro Air Unit will power on automatically.
2. **Goggle Pairing:** Power on your Walksnail Avatar HD Goggles (X or L). Follow the goggle's instructions to pair with the Avatar Pro Air Unit. Typically, this involves pressing a bind button on both devices.
3. **Video Feed:** Once paired, you should see the live FPV video feed from the Avatar Pro camera in your goggles.
4. **Recording:** The Avatar Pro Kit supports onboard recording to its 32GB internal storage. Refer to the specific instructions for your flight controller or goggle system to initiate and manage recordings.
5. **Night Vision:** The 1/1.8-inch Starvis II sensor automatically enhances low-light performance, providing clear visuals even in challenging lighting conditions.

### Video: How to use the Walksnail Avatar System

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Video 5.1: A demonstration of how to use the Walksnail Avatar System, including powering on, pairing with goggles, and accessing the FPV feed.

### Video: First-Person View Immersion with Walksnail FPV System

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Video 5.2: Experience the immersive first-person view provided by the Walksnail FPV System, showcasing its real-time video capabilities during flight.

### Video: Walksnail Avatar Pro Kit - Excellent Night Vision

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Video 5.3: This video highlights the excellent night vision capabilities of the Walksnail Avatar Pro Kit, demonstrating clear video quality in low-light environments.

## 6. MAINTENANCE

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Proper maintenance ensures the longevity and optimal performance of your Avatar Pro Kit:

- **Cleaning:** Regularly clean the camera lens with a soft, lint-free cloth. Avoid abrasive materials that could scratch the lens.

- **Firmware Updates:** Check the CADDXFPV official website periodically for firmware updates. Keeping your firmware up-to-date ensures access to the latest features and performance improvements.
- **Cable Inspection:** Inspect all cables (coaxial, power, antenna) for any signs of wear, cuts, or damage before each flight. Replace damaged cables immediately.
- **Storage:** Store the Avatar Pro Kit in a dry, cool environment away from direct sunlight and extreme temperatures when not in use.

## 7. TROUBLESHOOTING

If you encounter issues with your Avatar Pro Kit, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No video feed in goggles	Incorrect pairing, loose cable connections, power issue.	Ensure goggles and Air Unit are paired correctly. Check all cable connections (power, coaxial). Verify the Air Unit is receiving power.
Poor video quality/signal breakup	Interference, damaged antennas, range too far.	Ensure antennas are securely connected and undamaged. Fly within the recommended 4KM range. Avoid areas with high electromagnetic interference.
Recording issues	Full storage, corrupted storage, incorrect settings.	Check available storage on the 32GB internal memory. Format the internal storage if necessary. Verify recording settings in your goggle or flight controller OSD.
Air Unit overheating	Insufficient airflow, prolonged ground operation.	Ensure adequate airflow around the Air Unit. Avoid powering the unit for extended periods without active flight cooling.

## 8. SPECIFICATIONS

Feature	Detail
Brand	CADDXFPV
Model Name	Avatar Pro Kit
Special Features	First Person View (FPV), Gyroscopic Stabilization, High Sensitivity Sensor, Integrated Camera, Night Vision Camera
Video Capture Resolution	1080p, 720p
Connectivity Technology	Radio Frequency
Maximum Range	4 Kilometers
Material	Plastic
Optical Sensor Technology	CMOS (1/1.8-inch Starvis II)

Feature	Detail
Video Capture Format	MP4 (H.265 encoding)
Latency	22ms
FOV	160°
Internal Storage	32GB
Mounting Patterns	20×20mm, 25.5×25.5mm
Item Weight	2.08 ounces (approx. 59g)
Product Dimensions	6.1"L x 2.6"W x 0.98"H

## 9. WARRANTY & SUPPORT

CADDXFPV is committed to customer satisfaction. If you are not satisfied with the product or encounter any issues, please contact us before considering a return or taking any other action. We promise to provide you with a 100% satisfactory solution.

### 9.1 Contact Information

You can contact CADDXFPV via:

- Amazon Message
- Site Support Mail
- CADDXFPV Official Channels

For additional support and resources, visit the official CADDXFPV store:[CADDXFPV Store](#)