

## RunCam Spotter V2

# RunCam Spotter V2 FPV Camera and Transmitter Kit User Manual

Model: Spotter V2

## INTRODUCTION

The RunCam Spotter V2 Micro FPV AIO Camera is a compact, all-in-one camera and video transmitter designed for various RC applications, including RC cars, boats, drones, and planes. It features a 700TVL camera with a 170-degree field of view, an integrated microphone, and an On-Screen Display (OSD) for real-time data. The 5.8G video transmitter offers adjustable power output from 20mW to 200mW across 40 channels, ensuring compatibility with standard FPV goggles and monitors.

## PACKAGE CONTENTS

- 1x Spotter V2 Micro FPV AIO Camera (with Cloverleaf antenna)
- 1x XT-60 Power Cable
- 1x Double Sided Tape (one side Velcro)
- 1x Spare Whip Antenna
- 1x User Manual (this document)

## PRODUCT OVERVIEW

The Spotter V2 is designed for minimal impact on device performance due to its lightweight and compact form factor. It provides an expansive field of view for an immersive FPV experience.



Image: The RunCam Spotter V2 FPV Camera, demonstrating its compact size and lightweight design, weighing only 9g.

# 170° Wide-Angle Lens

Expansive field of view enhances detail, elevating the FPV experience.



Image: Illustration of the 170-degree wide-angle lens, providing an expansive field of view for enhanced detail in FPV applications.

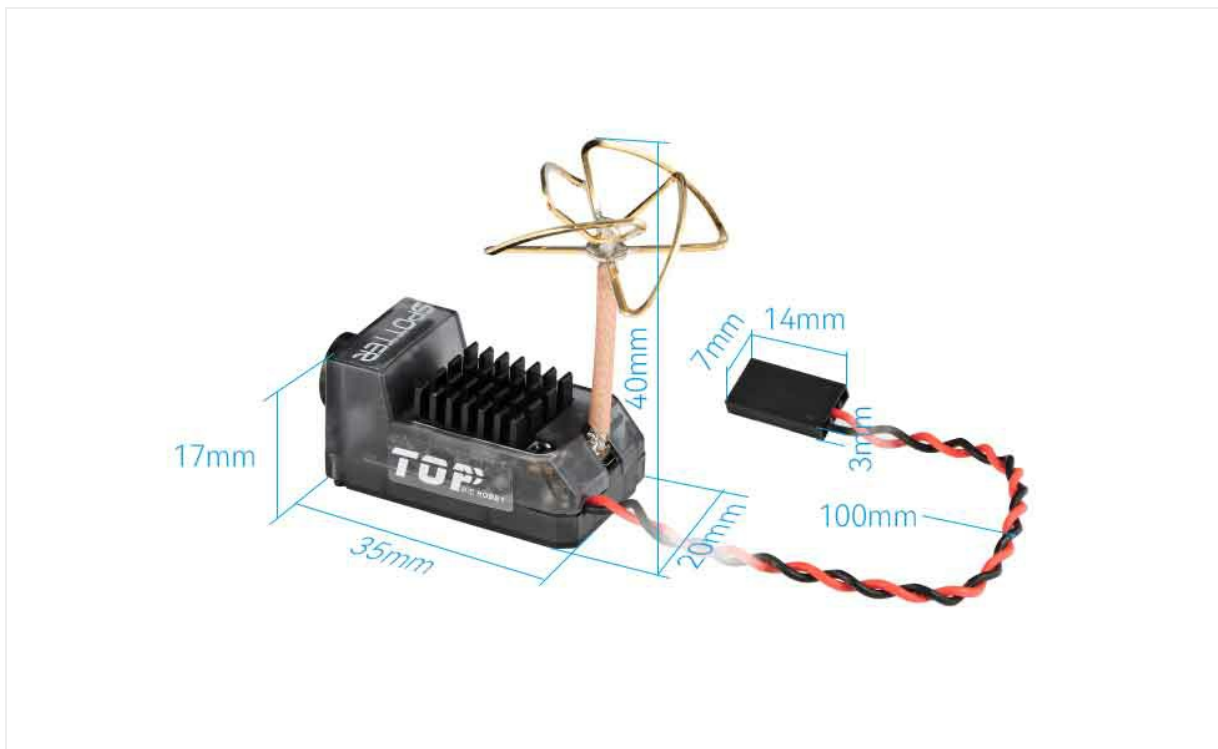


Image: Detailed dimensions of the Spotter V2 camera, measuring 35x20.5x17.8mm (excluding antenna).

## SETUP

1. **Power Connection:** Connect the provided XT-60 power cable to the camera and your power source (2S-4S LiPo battery, 7.4V-14.8V). Ensure correct polarity.
2. **Antenna Installation:** The camera comes with a pre-installed Cloverleaf antenna. A spare Whip Antenna is included for replacement if needed. Ensure the antenna is securely attached.
3. **Mounting:** Use the double-sided tape (one side Velcro) to securely mount the camera on your RC vehicle. Position the camera to achieve the desired field of view.
4. **Cooling:** Due to potential heat generation, especially in enclosed spaces, ensure adequate airflow around the camera's heatsink. Consider adding a small cooling fan if mounting inside an RC vehicle without natural ventilation.
5. **FPV Receiver Connection:** The Spotter V2 is compatible with all analog 5.8G FPV goggles and monitors. Refer to your FPV receiver's manual for pairing instructions.



Image: The Spotter V2 camera is broadly compatible with analog FPV goggles and monitors.

## OPERATING INSTRUCTIONS

1. **Power On:** Connect the camera to a compatible power source. The camera will power on automatically.
2. **Channel and Band Selection:** The camera features 5 bands and 40 channels. Use the button on the

camera to cycle through channels and bands. Refer to the detailed frequency table (usually provided in a separate quick start guide or on the product page) to match your FPV receiver.

3. **On-Screen Display (OSD):** The integrated OSD provides real-time flight data, such as battery voltage and channel information. This data is overlaid on the video feed.
4. **Integrated Microphone:** The built-in microphone captures audio, enhancing the immersive FPV experience.
5. **Video Transmission:** Once powered on and a channel is selected, the camera will transmit video. Ensure your FPV goggles or monitor are tuned to the same frequency.

## Tiny Design & Multi Modes

Easily portable, features adjustable power (20mW to 200mW), 5 Bands, 40 Channels, including a Racing channel.

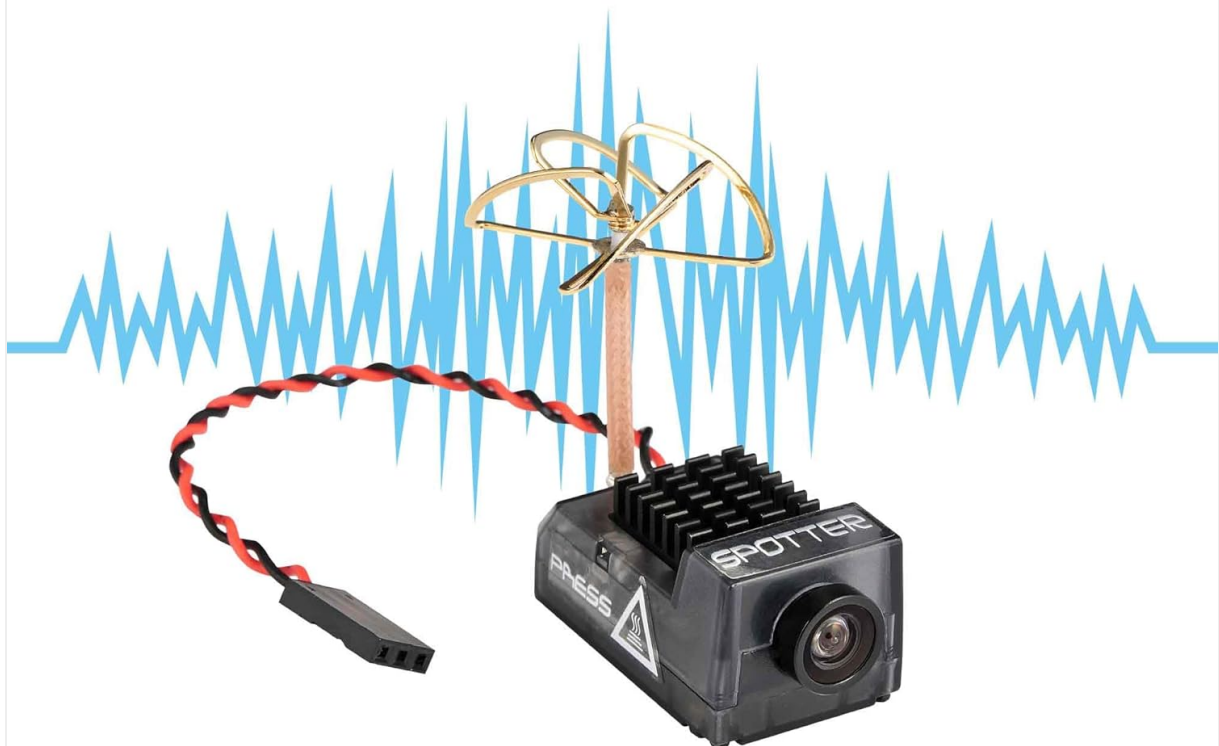


Image: The camera's button for frequency adjustment and its heatsink for thermal management.

## MAINTENANCE

- **Cleaning:** Keep the camera lens clean using a soft, dry cloth. Avoid abrasive materials or harsh chemicals.
- **Thermal Management:** Regularly inspect the heatsink for dust or debris. Ensure consistent airflow to prevent overheating, which can degrade video quality and shorten component lifespan.
- **Antenna Care:** Handle the antenna carefully. If the Cloverleaf antenna is damaged, it can be replaced with the spare Whip Antenna by soldering.
- **Storage:** Store the camera in a dry, cool environment away from direct sunlight and extreme temperatures.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Distorted or No Video Signal	<ul style="list-style-type: none"> <li>• Incorrect channel/band selection on receiver.</li> <li>• Overheating of the camera/transmitter.</li> <li>• Damaged antenna or poor connection.</li> <li>• Insufficient power supply.</li> </ul>	<ul style="list-style-type: none"> <li>• Verify receiver and transmitter are on the same frequency.</li> <li>• Ensure adequate cooling and airflow around the camera.</li> <li>• Check antenna for damage and secure connection. Replace if necessary.</li> <li>• Confirm power source provides sufficient voltage (7.4V-14.8V).</li> </ul>
Camera Gets Excessively Hot	<ul style="list-style-type: none"> <li>• Lack of airflow around the heatsink.</li> <li>• Operating in an enclosed space.</li> </ul>	<ul style="list-style-type: none"> <li>• Improve ventilation around the camera.</li> <li>• Consider installing a small cooling fan if operating in confined areas.</li> </ul>
No Audio	<ul style="list-style-type: none"> <li>• Receiver not configured for audio.</li> <li>• Microphone issue.</li> </ul>	<ul style="list-style-type: none"> <li>• Check your FPV receiver settings for audio input.</li> <li>• Contact support if the issue persists after checking receiver settings.</li> </ul>

## SPECIFICATIONS

Feature	Detail
Camera	700 TVL, 170-degree wide-angle lens
Resolution	1280*960
Video Output Resolution	720 pixels
Default Video Input	PAL
Video Transmission	5.8G, 40CH, 20mW~200mW adjustable
Maximum Transmission Distance	500 meters / 547 yards
Input Power	2S-4S (7.4V~14.8V)
Antenna	Cloverleaf and Whip antenna (interchangeable)
Frequency Adjustment	Button press
Features	Built-in OSD, Integrated Microphone
Minimum Illumination	0.5 LUX
Operating Current	80mA
Dimensions (L*W*H)	35*20.5*17.8mm (Antenna not included)
Total Weight	9g
Material	Plastic

Feature	Detail
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Skill Level	Beginner
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## WARRANTY

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The RunCam Spotter V2 FPV Camera and Transmitter Kit typically comes with a 1-year limited warranty. For specific warranty terms, conditions, and claim procedures, please refer to the official RunCam website or contact their customer support directly. Keep your proof of purchase for warranty validation.

## SUPPORT

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For further assistance, technical support, or inquiries regarding the RunCam Spotter V2, please visit the official RunCam website or contact their customer service department. Online resources, FAQs, and firmware updates may also be available on their website.

Official RunCam Store: [Visit the RunCam Store on Amazon](#)