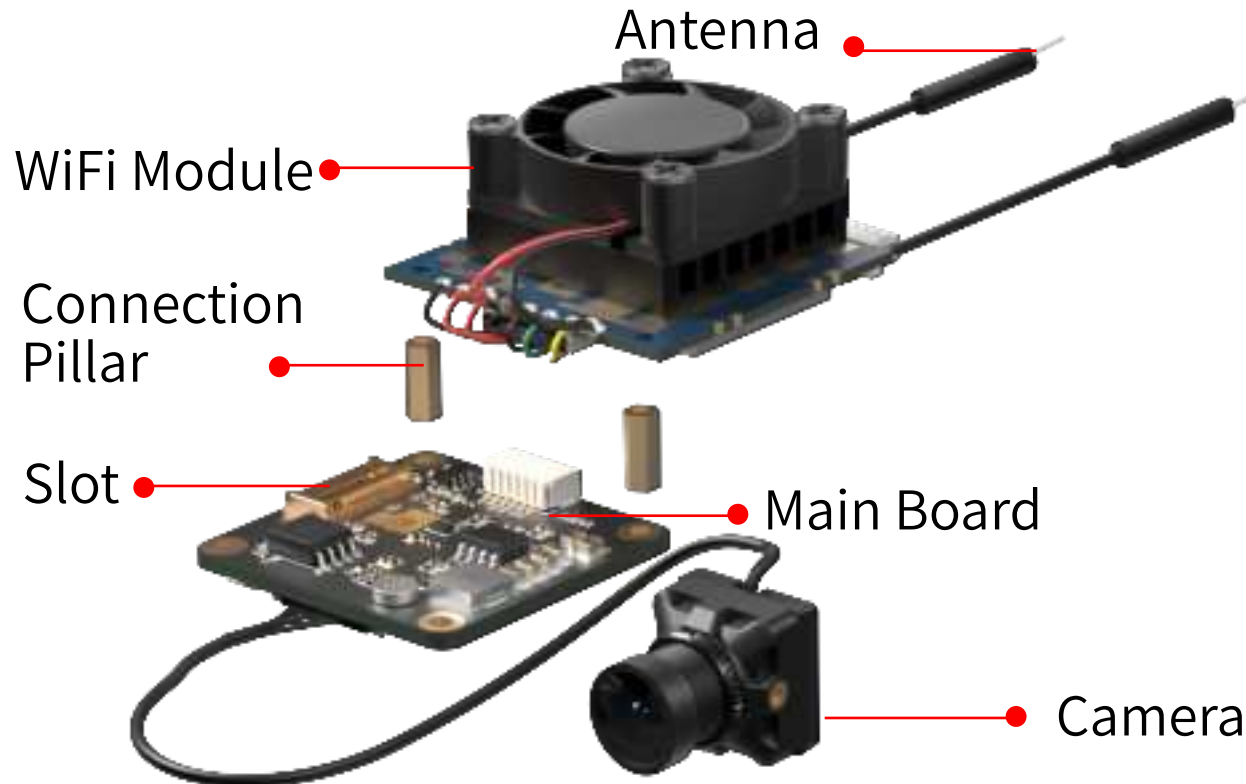


WiFiLink

Installation and Usage Guide

1 Component



2 Installation

Metal pillars must be used to connect the main board with the WiFi module to ensure effective heat transfer from the main board to the WiFi module.

•Installation Method 1 Direct Stacking



•Installation Method 2 Offset Stacking



3 Other Precautions

•Antenna Layout

•Antenna Installation:

Ensure the two tail antennas are sufficiently spread apart to avoid entanglement, which could reduce signal interference.

•Antenna Direction:

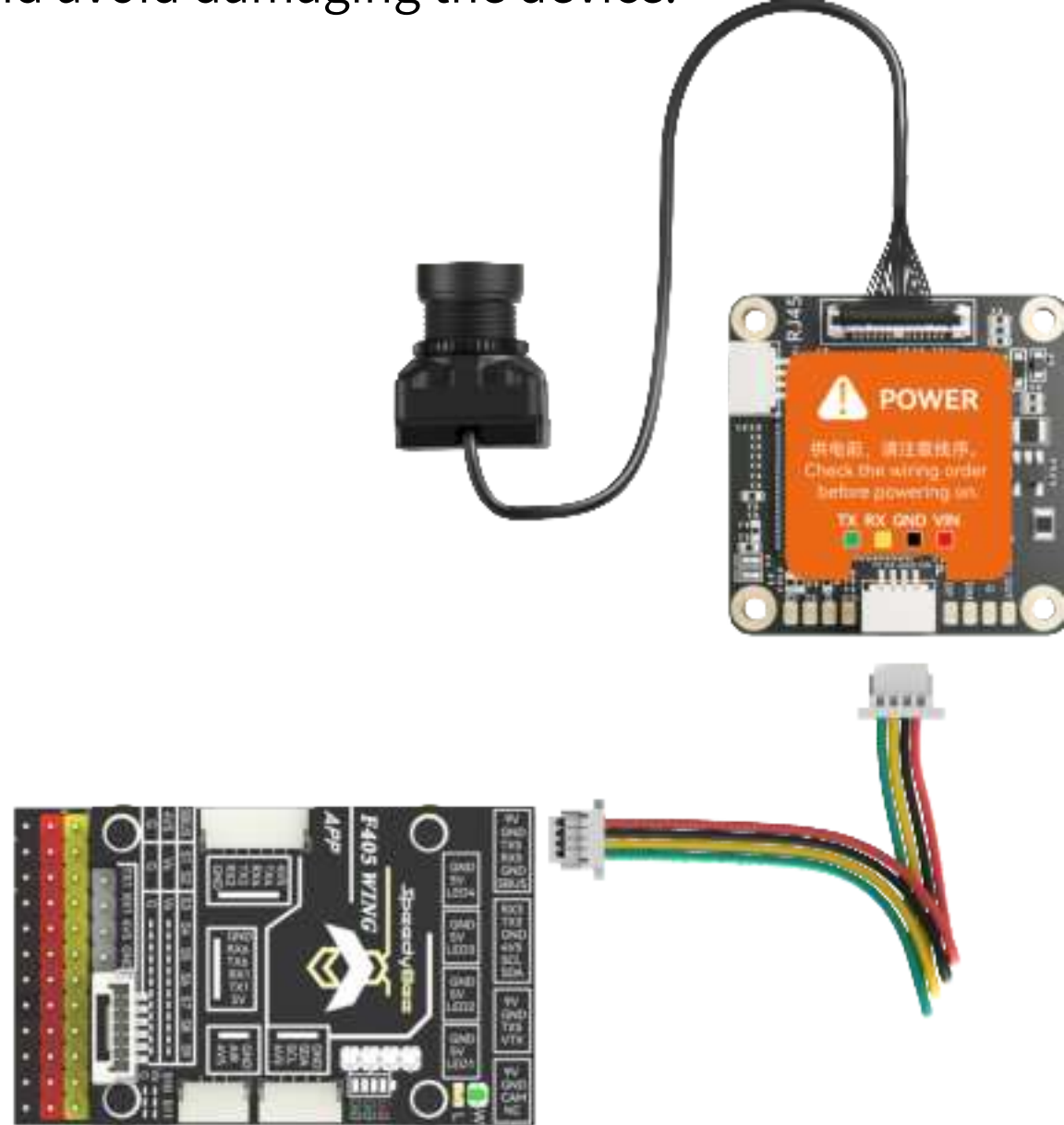
Adjust the antennas to point upwards whenever possible to avoid obstruction by the drone or battery, ensuring the best signal transmission.



Refer to the illustration for installation

•4PIN Power Cable Connection

The wiring sequence of the two ends of the 4PIN power cable is opposite. Confirm the direction before connecting to ensure correct insertion and avoid damaging the device.



WiFiLink consumes about 14W and operates within a voltage range of 9-30V. Direct power from 3S and 4S batteries is acceptable, but avoid using 6S batteries directly due to high inrush voltage; instead, please use a BEC for buffering.

4 Specifications

Model	WiFiLink
Sensor	IMX415
FOV	160°
Resolution	1080P@60FPS/1080P@90FPS/720P@120FPS
Power Supply	DC 9-30V (BEC power supply highly recommended. Non-direct power supply from Lipo battery)
Lens Module Specs	1919mm/M12 Lens/MIPI Cable Length 200mm
Hole Distance	25.5*25.5mm
PCB Size	30mm*30mm (Main Board) 32mm*32mm (WiFi Board)
Weight	30g
Antenna	IPEX1 (5G)
Power Amplifier	29dBm

WiFiLink FAQ

5 How to Use WiFiLink

WiFiLink requires no configuration. Simply follow the steps below to use it:

•Install the APP

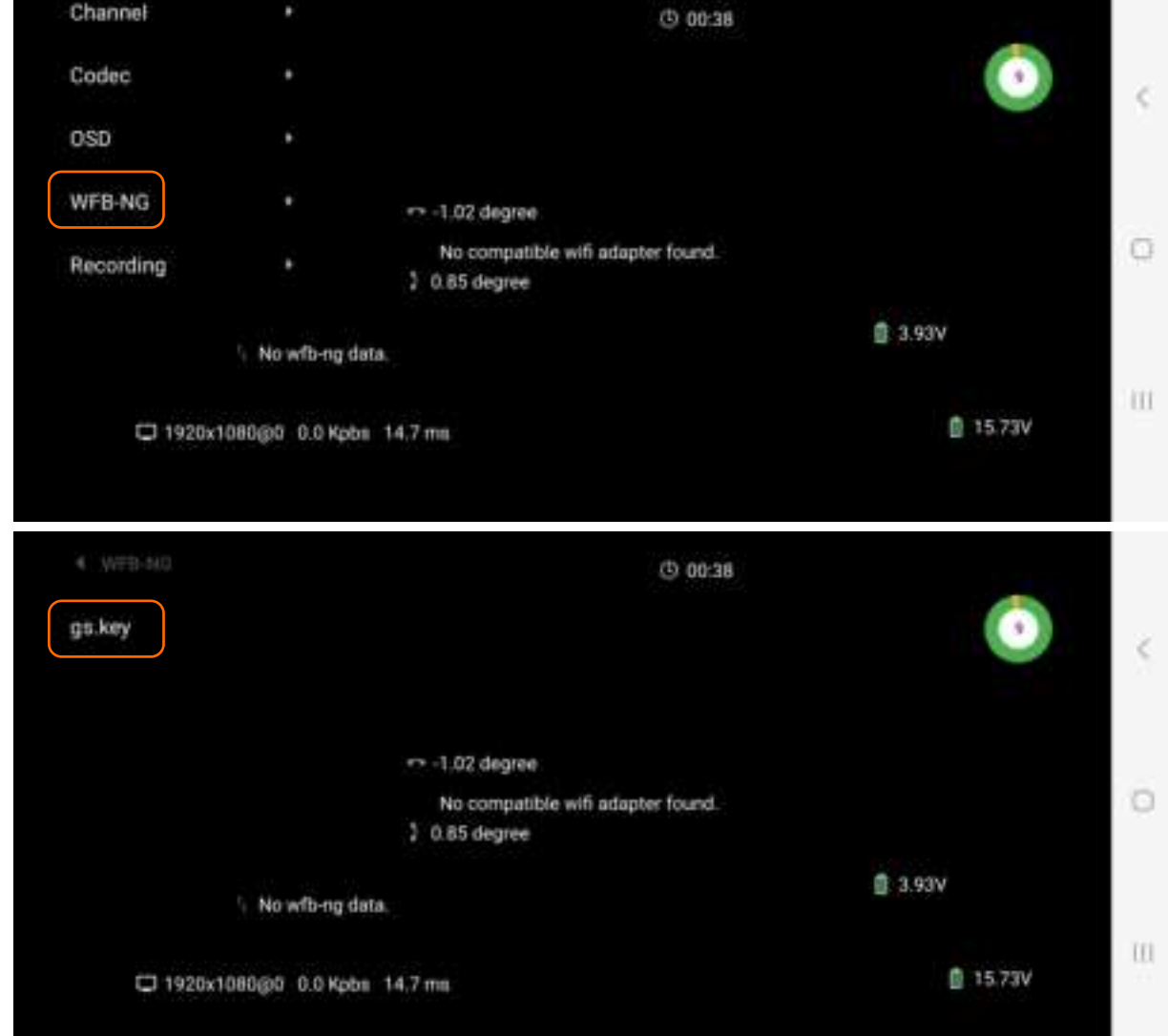
Install the FPVue APP or PixelPilot on an Android phone.

FPVue APP Download:
https://github.com/gehee/FPVue_android/releases

PixelPilot Download:
<https://github.com/OpenIPC/PixelPilot/releases>

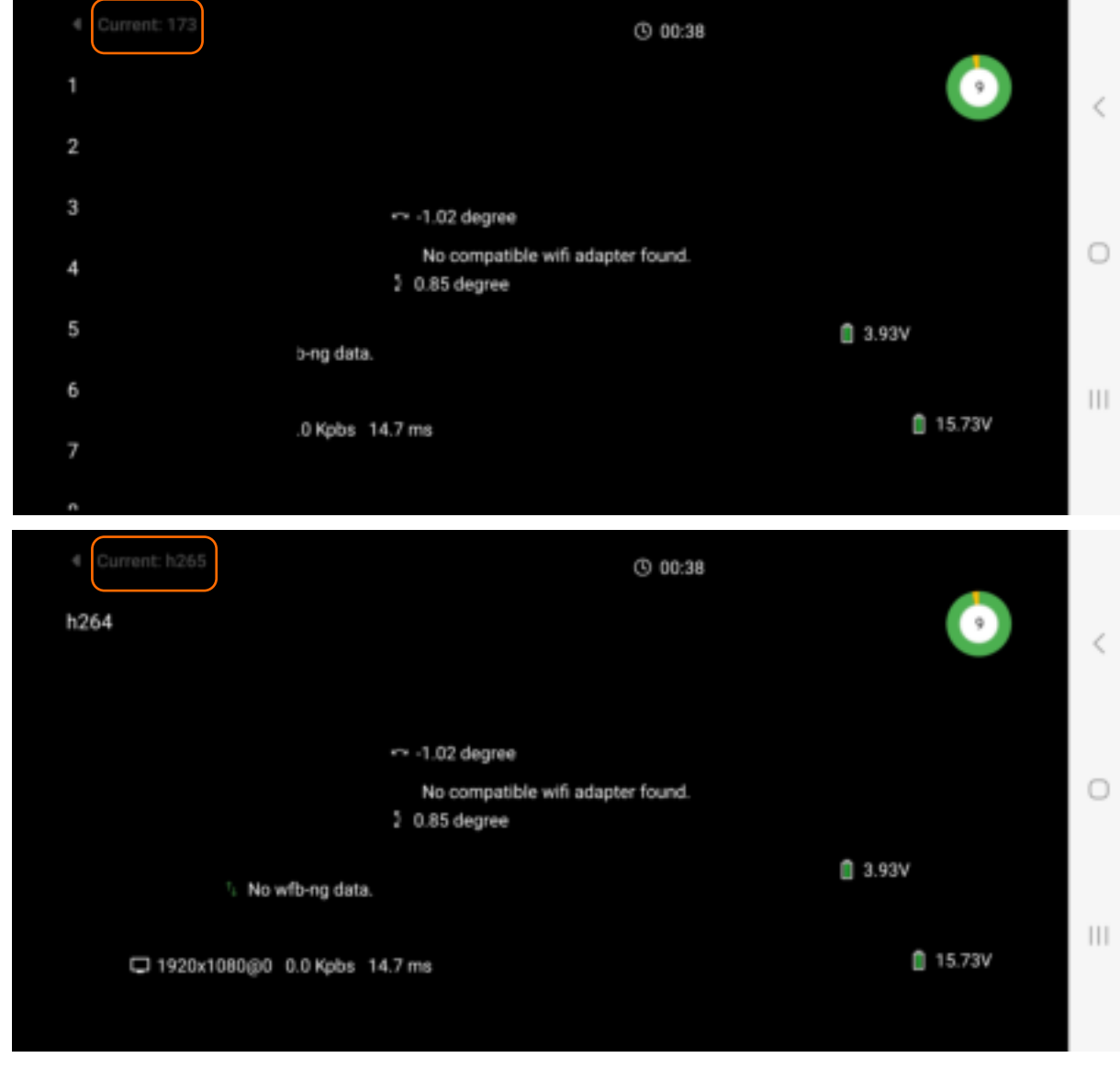
•Copy and Replace the Key

Copy the “gs.key key” file generated by WiFiLink into the phone’s storage.



•Set Parameters

Set the Channel to 173, and the Video Codec to H.265.



•Auxiliary Tool Links

OTG Cable Reference to:
<https://item.jd.com/10087520840342.html#crumb-wrap>
8812AU Wireless Network Adapter Reference to:
<https://item.taobao.com/item.htm?id=597898122636>

6 How to Flash WiFiLink

Card Flashing Steps:

•Prepare Files

Copy the “WiFiLink-part0.bin” and “WiFiLink-part1.bin” card flashing files to the root directory of an empty SD card.

•Upgrade Steps

Insert the SD card into the camera’s main board and power it on. The camera will automatically enter upgrade mode (about 15 seconds).

Once the upgrade is complete (about 1 minute), the green light will stay on and the SD card content will be cleared. After re-powering, a new configuration file (“gs.key” and “user”) will be generated on the SD card.

Card flashing file:
<https://www.runcam.com/download/runcamwifilink>

7 How to Obtain WiFiLink Keys and Configuration Files

Insert the empty SD card into the camera and power it on. The camera will automatically generate the required configuration files upon startup.

8 How to Set WiFiLink Parameters

It is recommended to use Notepad++ to edit the user file, which only supports modifying the parameters listed under Available Values, including:

Channel	Codec
ResolutionRatio	Bitrate
Mirror	Flip
Rotate	Contrast
Hue	Saturation
Luminance	...

9 How to Use the Ethernet Port

Default Settings:
IP Address: 192.168.1.10
Username: root
Password: 12345

10 How to Pair with Ground Station

WiFiLink is paired with the FPVue APP by default. If you need to pair it with another ground station, copy the WiFiLink’s “gs.key” key to the corresponding location on the ground station.

11 What Other Ground Stations Are Compatible

Computer and Radxa ZERO 3W Development Board

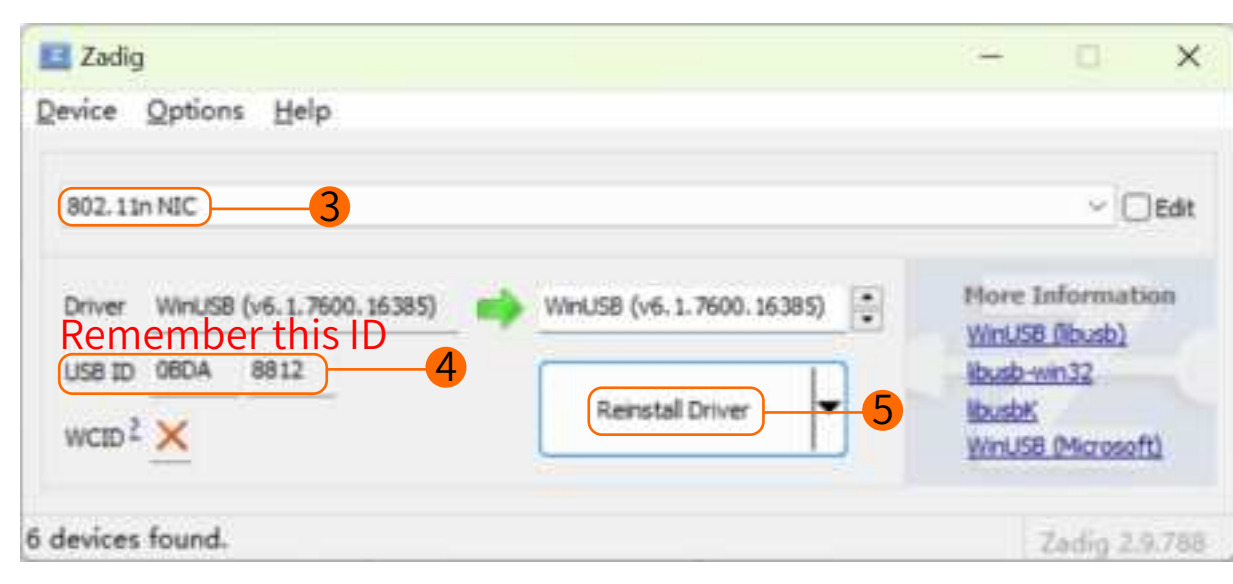
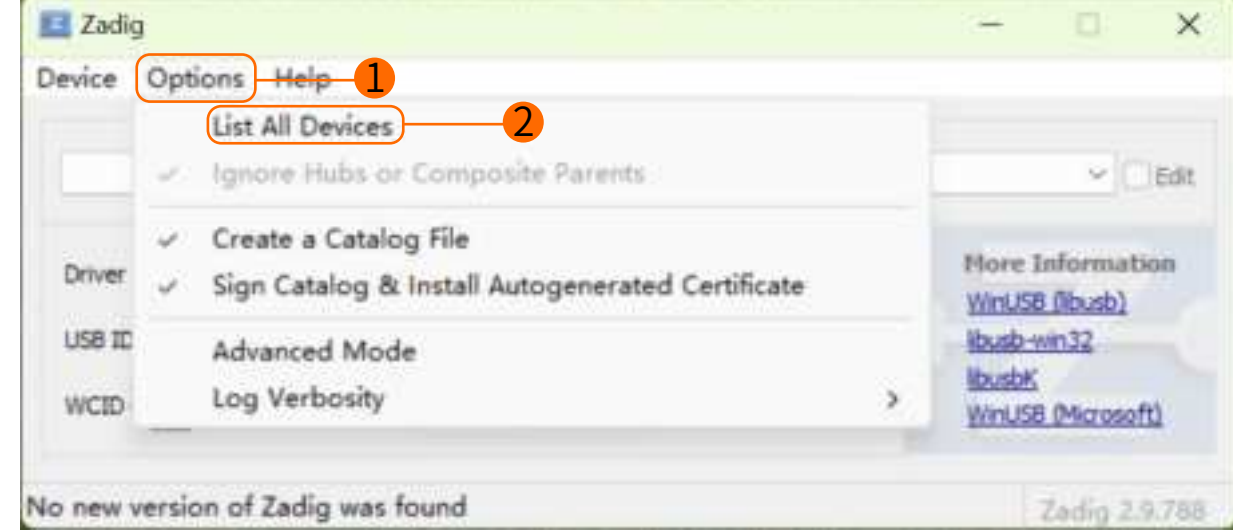
12 How to Use with a PC Ground Station

Download:
<https://github.com/OpenIPC/fpv4win/releases>

Follow the steps below:

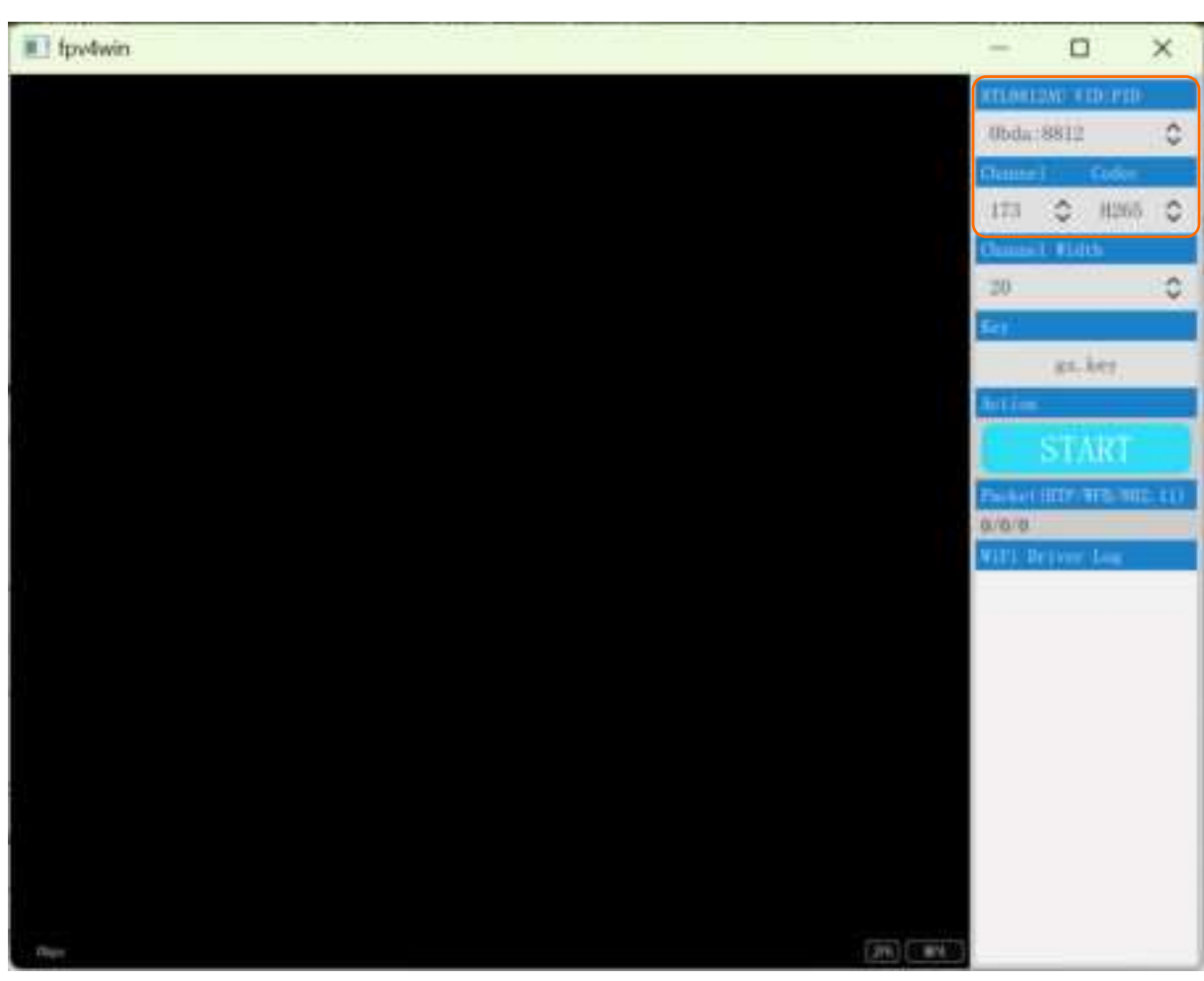
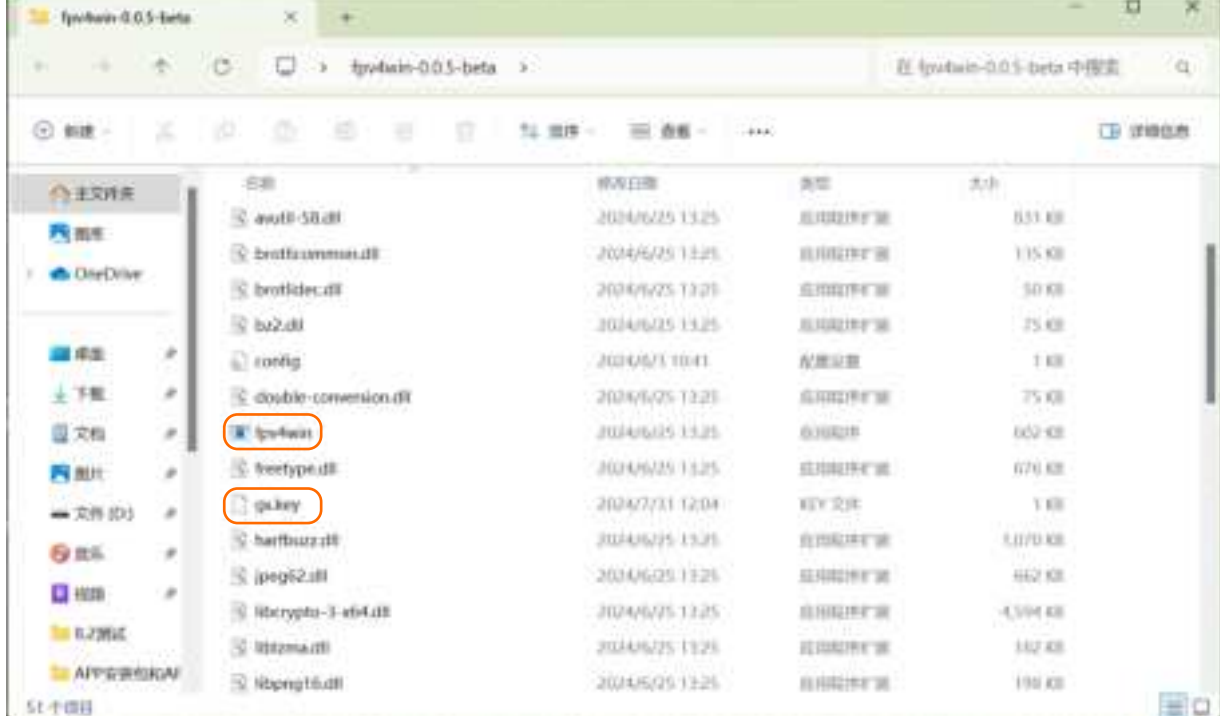
•Step 1

Insert the 8812AU wireless network adapter into the computer and reconfigure the driver using the Zadig program.



•Step 2

Replace the WiFiLink key file (gs.key) in the computer's program folder. Double-click to open the “fpv4win” program, select the correct network adapter, Channel, and Codec, then click START to begin use.



13 How to Use with Radxa ZERO 3W

Visit:
<https://support.runcam.com/hc/en-us>
Contact our technical support for detailed guidance.

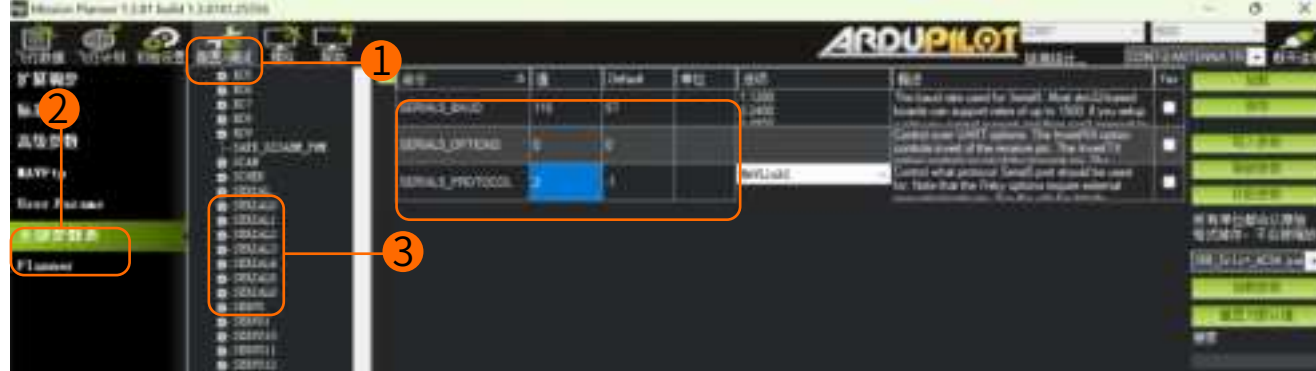
14 Troubleshooting: What to Do If There Is No Video

Check Power Supply: Ensure the power supply is normal and verify that the Channel, Codec, and Key are correctly matched.

15 Troubleshooting: No FC OSD Information on Screen

• Check Configuration

Ensure that the configuration settings are correct. The three parameters should be: 115 (corresponding to 115200), 0, 1, or 2 (corresponding to Mavlink1 or 2).



• Check Serial Port

Confirm that the flight controller serial port data is normal and available, and ensure that the serial port wiring is correct. Note that TX and RX must be cross-connected.