

# FLYLENS 85 Quick Start Guide V1.0

The document provides important information on pre-flight frequency operation, channel setup, and proper use of the drone.



#### WEBSITE:www.flywoo.net

It is recommended that users watch the instructional video first. If you have any questions or issues during the installation, use, or maintenance of the drone, please contact Flywoo's after-sales and technical support.

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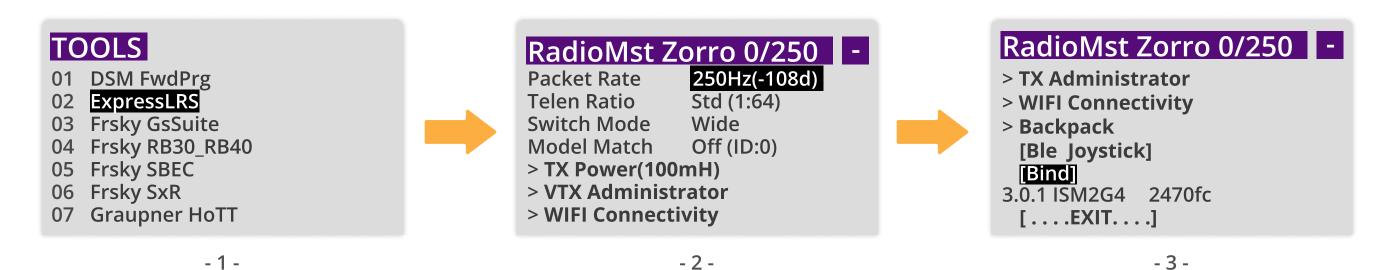
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## **ELRS BINDING**

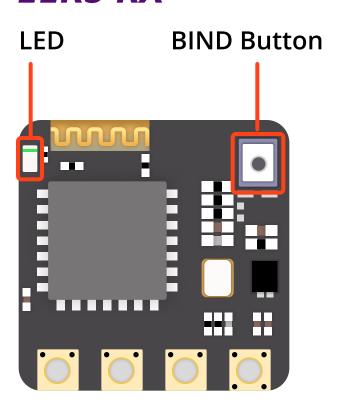
# Before Binding, It Is Recommended To Check If The Firmware Of The Module And Receiver Are Consistent. If They Are Not, Please Update The Firmware Using ELRS Configurator.

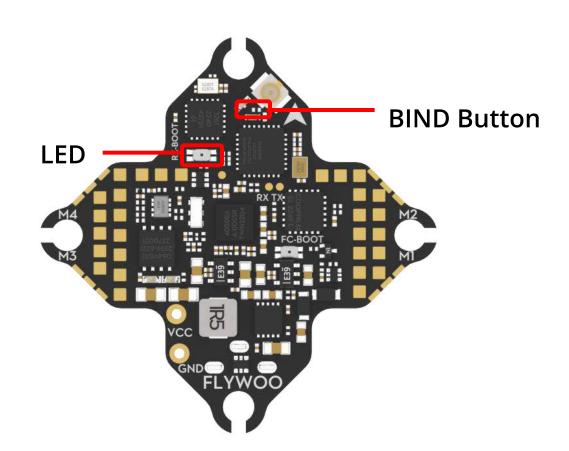
- 1. Power on and off the three times to put the receiver in binding mode. When the LED on the receiver flashes rapidly twice, it means the receiver has entered binding mode.
- 2.For the ZORRO remote controller, turn on the power and long press the SYS button to access the TOOLS interface. Scroll down with the scroll wheel and select ExpressLRS, then select Bind and press the Enter key.
- 3. When the LED on the receiver is constantly on, it means the binding is successful.

#### **Operational Demonstration**



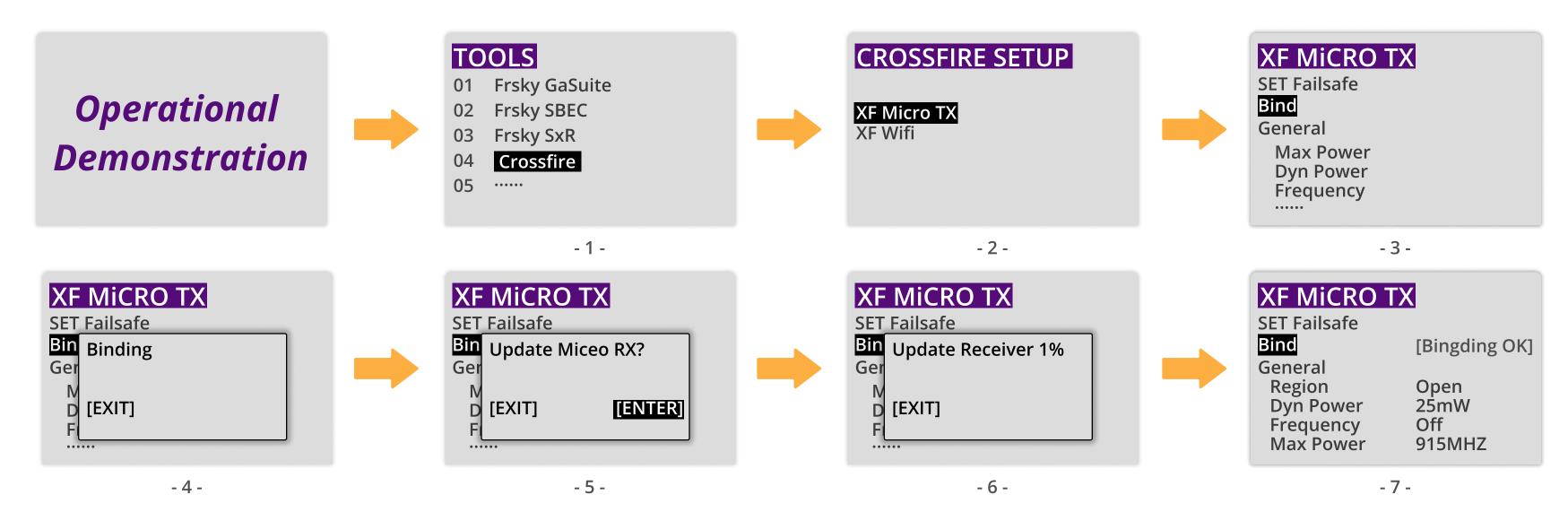
#### **ELRS RX**



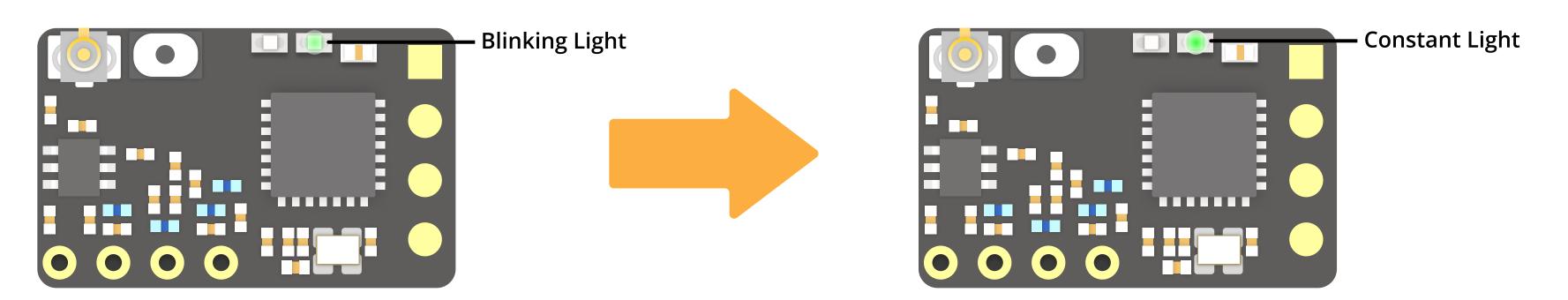


## BIND TBS NANO RX

- After Receiving The Drone, Turn On The Remote Controller And Power On The Drone.
- 1. The Green LED On The Receiver Will Start Flashing.
  Click The "Bind" Button On The Remote Controller To Complete The Bind.
- 2. After Updating, The Binding Process Will Be Automatic. Once The Binding Is Successful, The Screen Will Display "Binding Successful" And The Receiver Will Display A Stable Green Light.



#### Example Receiver Diagram

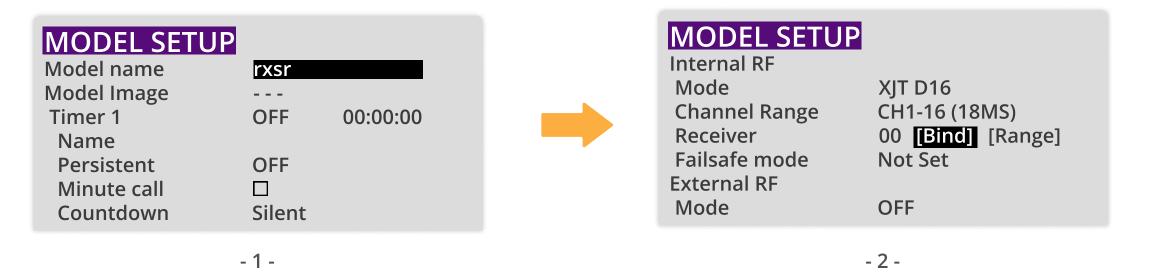


## BIND XM+

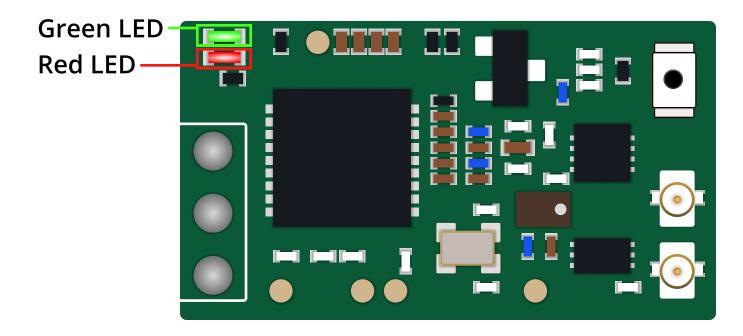
# The Remote Controller And Receiver Should Not Be Too Close To Each Other, Or The Signal May Be Lost. Please Perform Bind At A Distance Of At Least 0.5 Meters.

- 1.Press and hold the bind button "Bind" on the receiver, then connect the drone to the battery or connect the flight controller to the USB to make the receiver work. The red and green LED indicators on the receiver will light up, indicating that it has entered binding mode.
- 2.Taking X9D remote controller as an example, enter the BIND interface of the remote controller and click "Bind".
- 3.Turn off the power of the receiver, exit the BIND mode on the remote controller, and then turn on the power again. The red LED will go off and the green LED will remain on, indicating that the bind is successful.

#### **Operational Demonstration**



#### **Bind XM+**



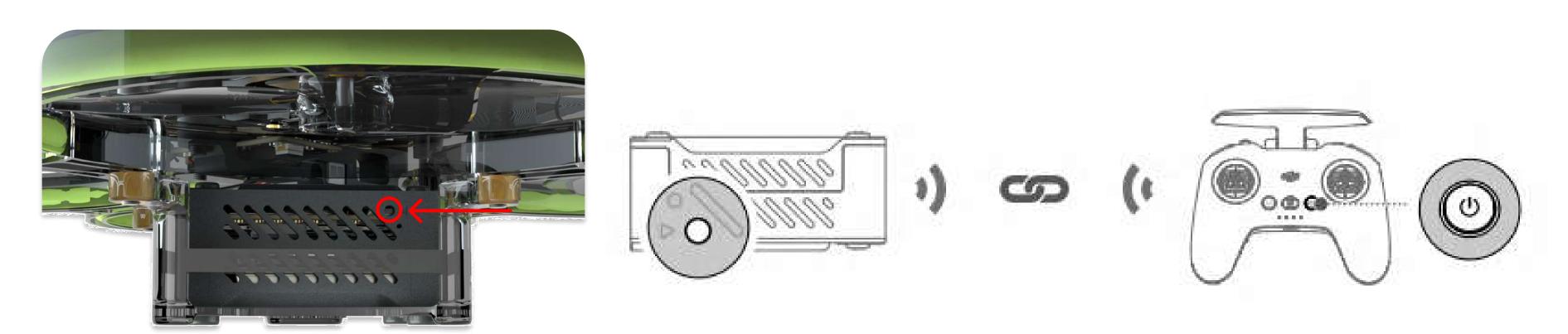
# BINDING DJI C2 REMOTE CONTROLLER

- Press The Bind Button On The Drone, And The Bind Indicator Light On

  The Drone Will Flash Red. Hold Down The Power Button On The Remote Controller.

  The Remote Controller Will Start Beeping And Flashing Continuously, And The Battery Level LED Will Flash In Sequence.
- Make Sure That The Distance Between The Drone And The Remote Controller Is Within 0.5 Meters.

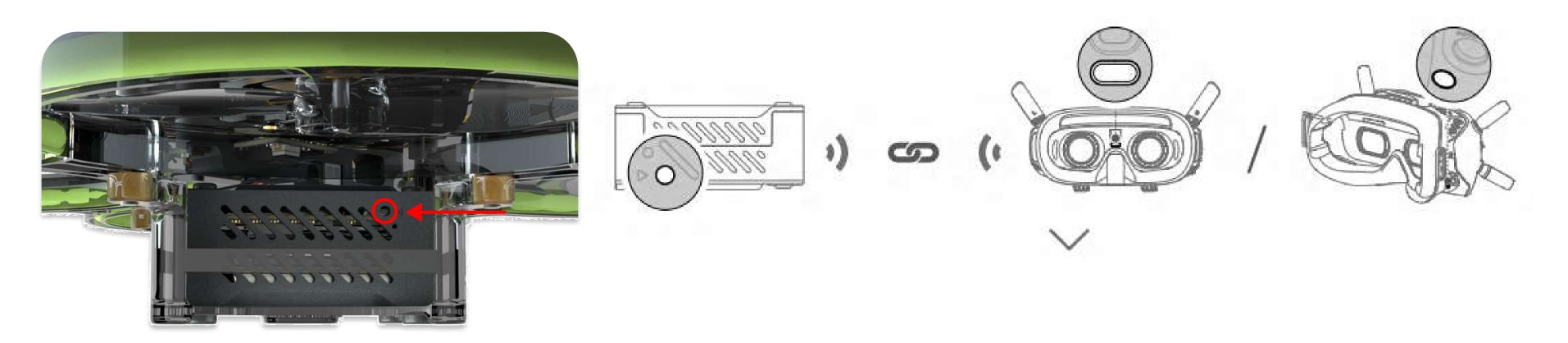
  After Successful Bind, The Bind Indicator Light On The Drone Will Turn Solid Green,
  Indicating That The Bind Is Successful. The Controller Will Stop Beeping.



# DJI 03 AIR UNIT BINDING

# Make Sure That All Devices Have Been Updated To The Latest Firmware The DJI Air Unit Must Be Connected To The Goggles First Before Connecting It To The Remote Controller.

- 1.Turn on the goggles and connect the drone to the battery. Press the bind buttons on both the drone and goggles. The O3 VTX module indicator light will flash red, and the goggles will start beeping continuously.
- 2.Make sure that the distance between the drone and goggles is within 0.5 meters. Once the connection is successful, the bind indicator light on the drone will turn solid green. The goggles will stop beeping, and the image will be displayed on the goggles.

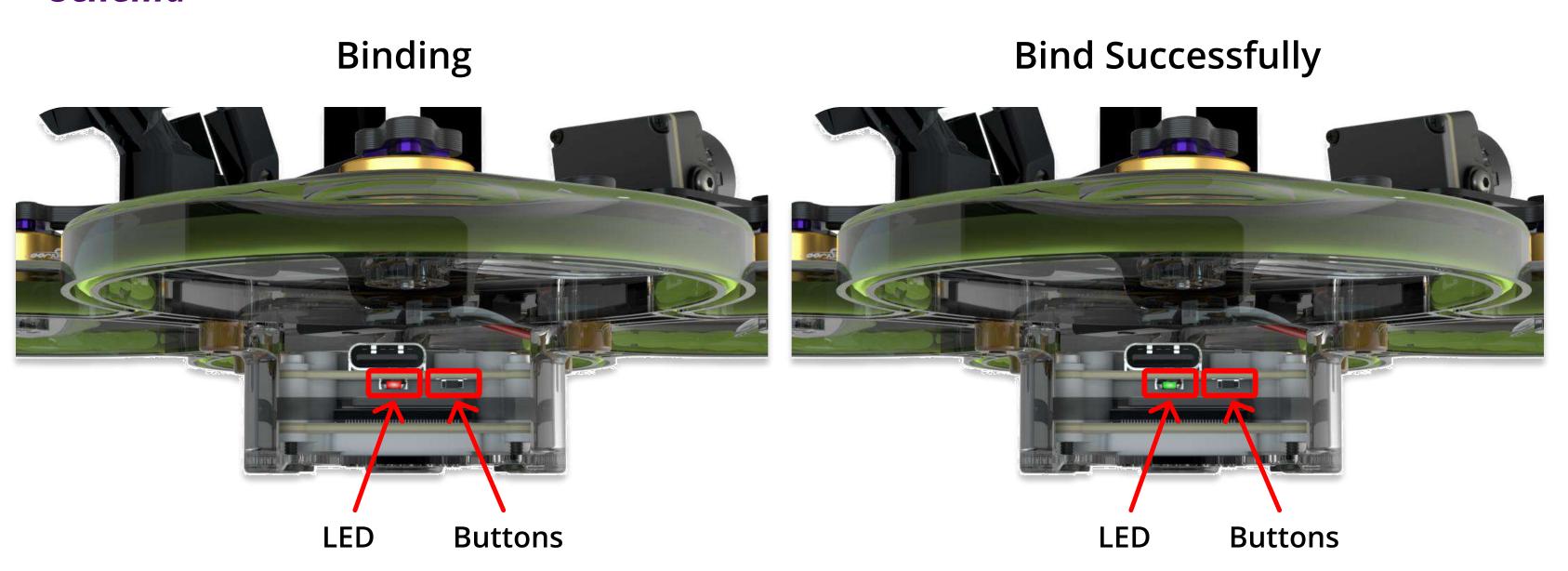


## **BIND VISTA**

#### The Drone Must Be Connected To The FPV Goggles First Before Connecting It To The Remote Controller.

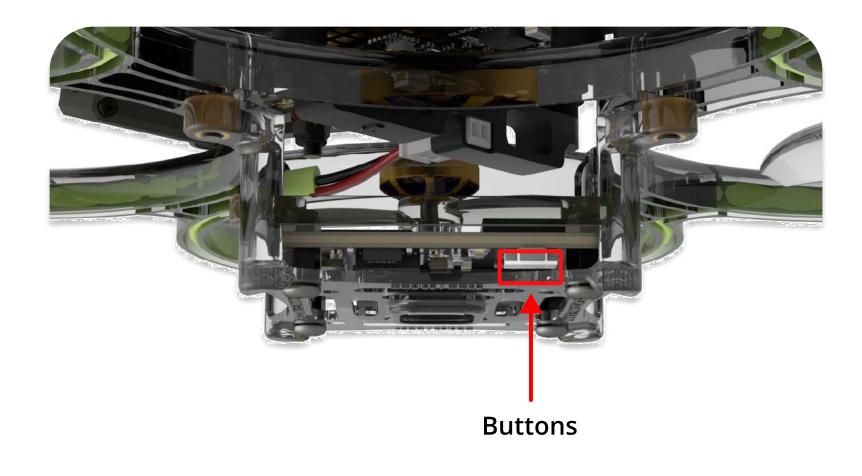
1.Turn on the FPV goggles, remote controller, and power on the quadcopter. Press the binding button on the FPV goggles, and a beep sound will indicate that the goggles are in binding mode.

2.Press the VISTA/LINK drone button (next to the LED indicator), and the indicator light will turn red, indicating that the VISTA/LINK is bound. After the binding is successful, the FPV goggles will beep, the green light will stay on, and the FPV goggles will display real-time images.



## **BIND WALKSNAIL**

- Connect The VTX And Goggles To Power.
- 2. Wait For The Goggles To Start Up, And The VTX Green Light Will Start Blinking, And A Status Icon Will Appear On The Goggles.
- Press The Bind Buttons On Both The VTX And Goggles (As Shown In The Picture). When Entering Pairing Mode, The VTX Indicator Light Will Turn Red, And The Goggles Will Beep With A "Drip...Drip...Drip..." Sound.
- 4. After Successful Bind, The VTX Indicator Light Will Turn Solid Red, And The Goggles' Beeping Sound Will Stop, And The Transmission Image Will Be Displayed On The Goggles.

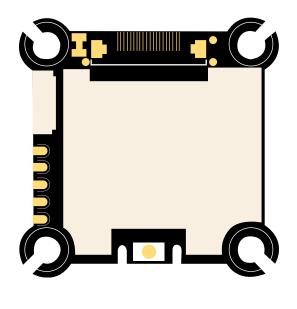




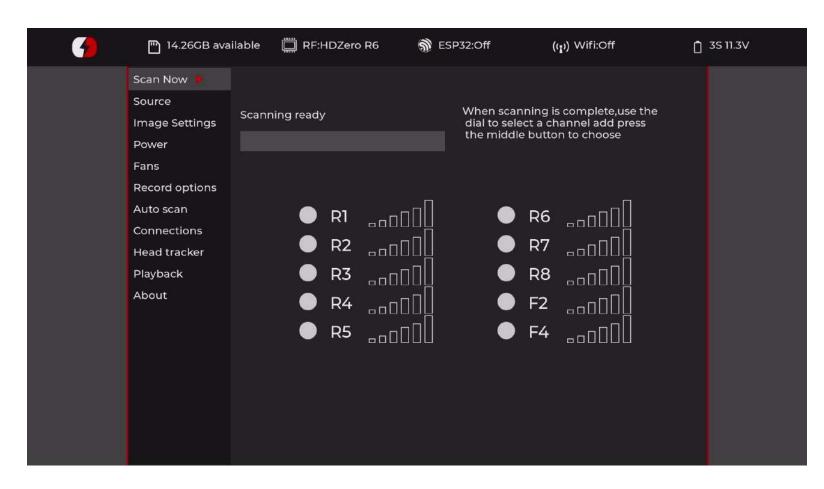
## **BIND HDZERO**

- Please Ensure That The Transmission And Goggles Have The Same Firmware Version Installed And That It Is Up To Date.
- Make Sure That After The Drone Is Powered On, The Blue Light Will Blink Three Times, Indicating That The Communication
  With The Flight Controller Is Normal. Then, Open The HDZero Receiver Or Goggles And Enter The "Scan Now" Option To Scan Channels And Obtain The HDZero Video Signal. Long Press "Enter" To Exit The Main Menu.
- 3 After Successful Bind, The Corresponding Channel On The Goggles Will Turn Green, And The More Green Bars There Are, The Stronger The Signal.

#### Flow Chart





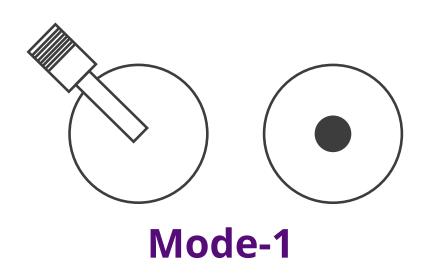


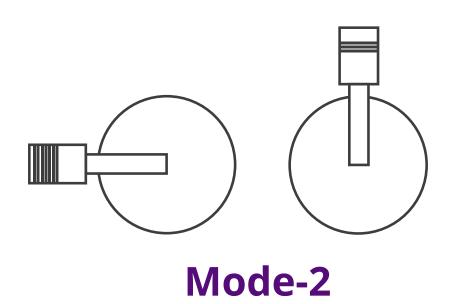
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# ADJUSTMENT OF VTX POWER AND CHANNELS (ANLOG)

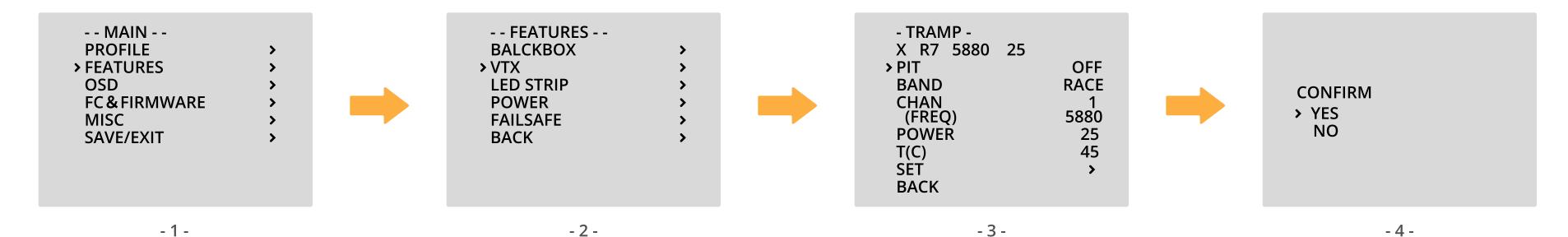
#### **Use The Remote Controller To Operate The OSD For Remote Debugging.**

1.





2.



#### Flow Chart

FR/CH	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Α	5865	5845	5825	5805	5785	5765	5745	5725
b	5733	5752	5771	5790	5809	5828	5847	5866
E	5705	5685	5665	5645	5855	5905	5925	5945
F	5740	5760	5780	5800	5820	5840	5860	5880
r	5658	5695	5732	5769	5806	5843	5880	5917

## **MODES & LED**

- The Switches On The Drone Have Been Mapped At The Factory, But They May Not Necessarily Match Your Transmitter.

  After Pairing The Drone With The Remote Controller, Open The BF Configurator And Enter The "Modes" Tab To Test Each Function Switch. When The Yellow Cursor Moves Within The Set Range, The Corresponding Function Will Be Activated.
- ARM Is Used To Unlock The Motors. To Set A Switch On The Remote Controller For ARM, Select "AUTO" To The Right Of "ARM,"

  Choose A Switch On The Remote Controller And Press It, And The Indicator Will Toggle. After That, Drag The Yellow Line Segment To The Yellow Indicator Point And Click "Save" In The Lower Right Corner To Set The Switch For Unlocking.



3 The LED Switch Is Implemented By An External BEC, And The Default Channel Is USER1. Choose A Switch On The Remote Controller To Set It Up.



# PROPELLER DIRECTION

### Propeller Installation Diagram



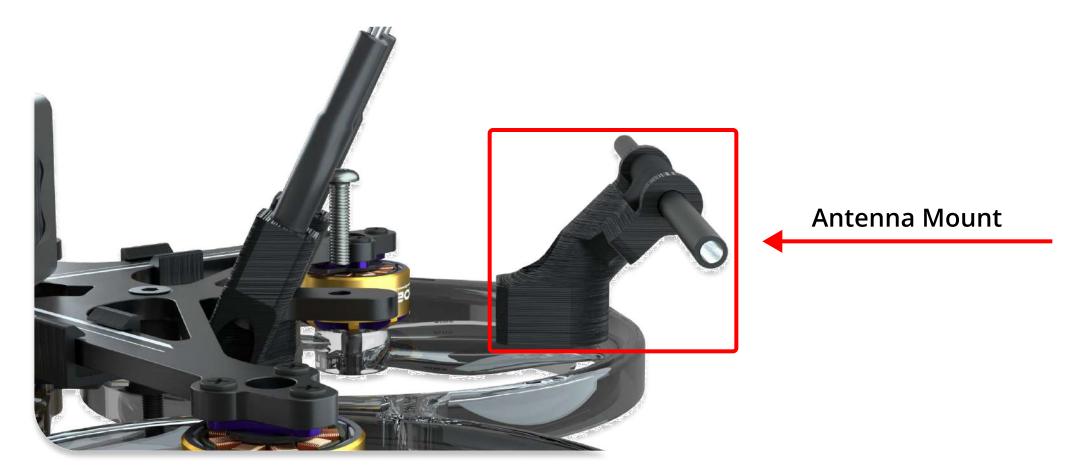
## PREFLIGHT CHECK

- 1. Please Inspect The Drone For Any Damaged Components Or Parts And Further Check Or Repair If Necessary.
- 2. Please Confirm That The Propeller Direction Is Correct, And The Screws Are Tightened.
- **3.** Please Check The Battery Voltage. When The Battery Is Fully Charged, It Should Be 4.2V For 1S, 8.4V For 2S, 16.8V For 4S, And 25.2V For 6S.
- **4.** Turn On The Remote Controller And Ensure That It Is Properly Connected To The Drone. Please Make Sure That The Unlock Switch Is In The "Locked" Position, And The Throttle Is At The Lowest Position.
- 5. Turn On The FPV Goggles Or Screen To Check For Interference.
- **6.** After Powering On The Drone, Please Test Unlocking The Drone At A Safe Distance (At Least 3 Meters) And Check If The Propellers Are Working Correctly.
- 7. Please Take Off In A Safe Area Without People Around And Enjoy Your Flight.
- 8. Do Not Leave The Drone Idle While Powered On, As This May Cause The VTX To Overheat And Damage It.

Please Send Your Feedback Through The Flywoo Official Website's Messaging System Or By Sending An Email To: Flywoofpv@Outlook.Com.

## **EXPANSION MODULE - GPS INSTALLATION**

Remove The Original Receiver Antenna Printing Seat, Unplug The Antenna, And Unscrew The Screws.

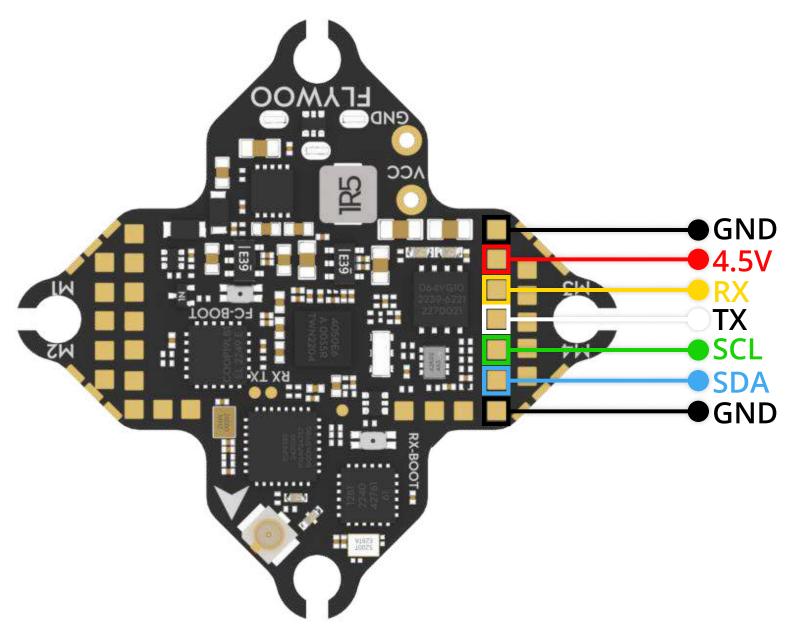


2 Remove The Original Receiver Antenna Printing Seat, Unplug The Antenna, And Unscrew The Screws.

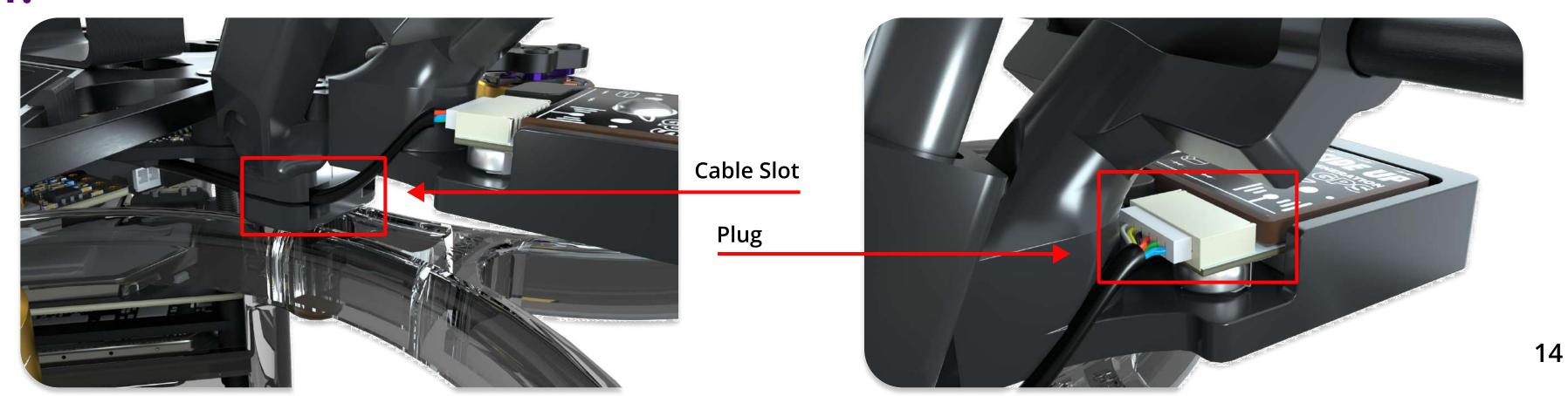


# **EXPANSION MODULE - GPS INSTALLATION**

3 Use The GPS Cable Provided To Solder It Onto The AIO According To The Color Sequence Shown In The Picture.



4. Fasten The Ribbon Cable Into The Cable Slot And Plug The Port Into The GPS.

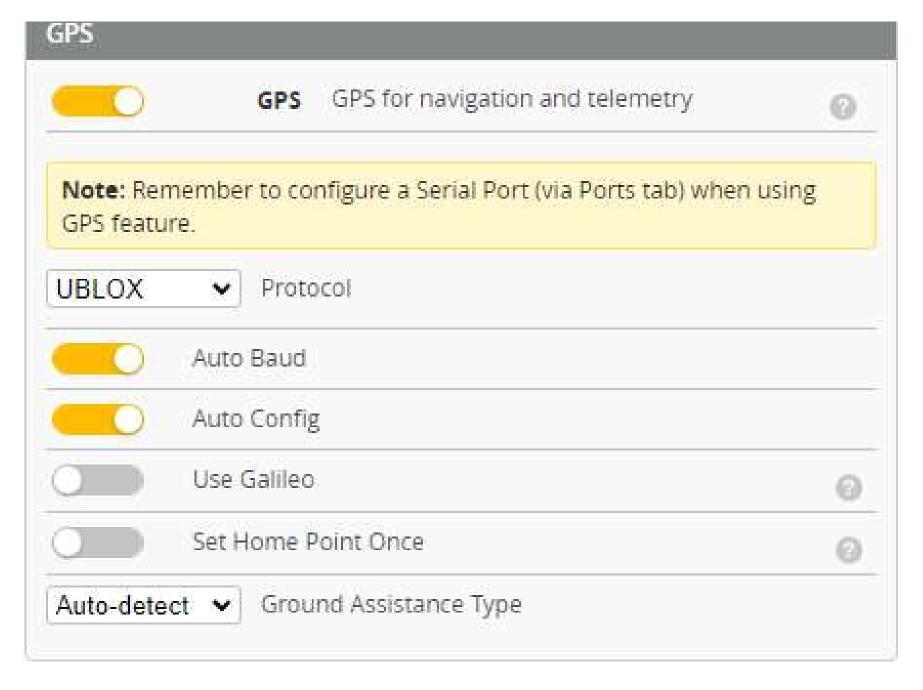


## GPS SETTINGS/COMPASS SETTINGS

Enter The BF Configurator And Modify The Sensor Input Of UART4 Port To GPS With A Baud Rate Of 115200.



Enter The Configuration Menu, Turn On The GPS Function, Set The Protocol To UBLOX, Enable Automatic Baud Rate,
 Once The GPS Icon Above Lights Up, You Can Enable Rescue Mode In The Failsafe Menu



If GPS Is Still Not Recognized After Completing This Step, Please Check The Following:

- Check If The GPS Module Is Powered On Properly.

  The Green Light Should Be On Constantly After Power On.
- Check If Tx And Rx Are Crossed Connected With The Flight Controller.

## **COMPASS CALIBRATION**

The GPS Of The Upgraded Kit Comes With A Compass. Although The Rescue Mode Of BF Flight Controller Does Not Require
The Compass, Having A Compass Can Make It Easier For Pilots To Identify The Flight Direction On The OSD Screen.

• Players Who Need It Can Turn On The Compass In The BF Configuration Menu. After Turning On The Slider, Click Save And Restart. If The Connection Is Normal, The Yellow Icon Above Will Light Up Normally."

8.00 kHz	Gyro update frequency		
2.00 kHz	➤ PID loop frequency		
	Accelerometer		
	Barometer (if supported)		
	Magnetometer (if supported)		

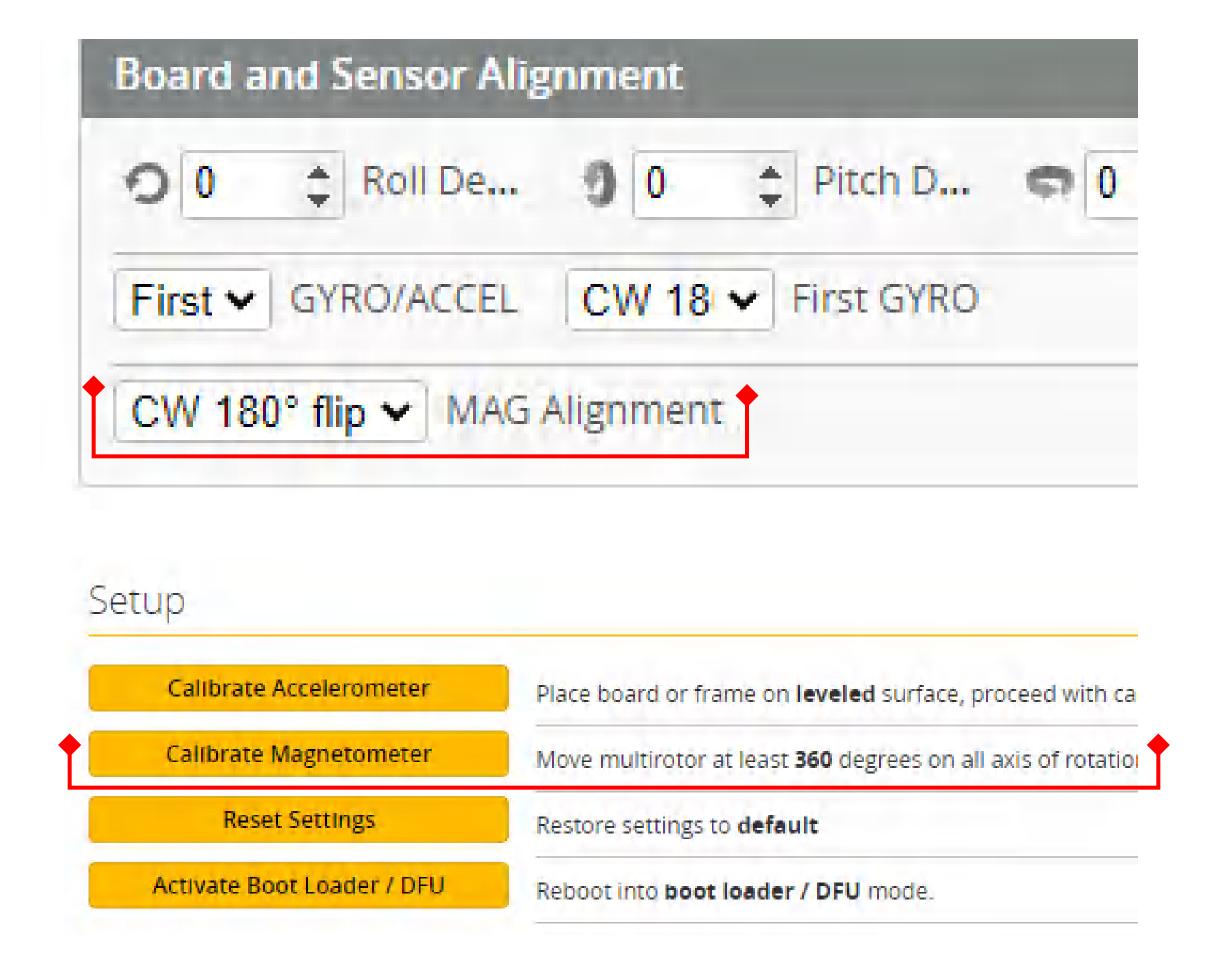
8.00 kHz	Gyro update frequency			
2.00 kHz	➤ PID loop frequency			
	Accelerometer			
	Barometer (if supported)			
	Magnetometer (if supported)			

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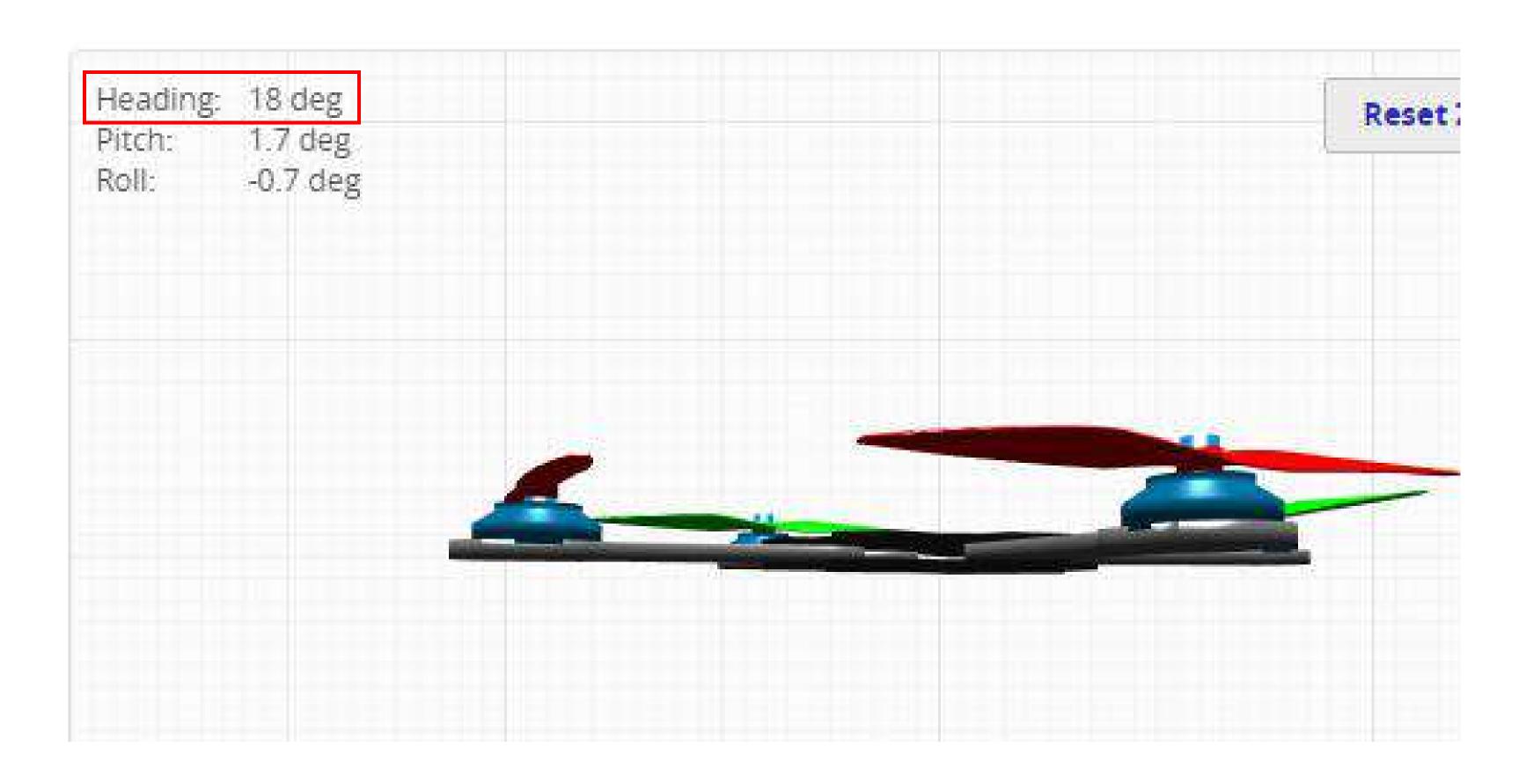
## **COMPASS CALIBRATION**

This Sentence Can Be Translated As: "After Setting The Compass Direction To CW 180°FLIP And Saving, You Will Need To Calibrate It. Perform The Following Steps In An Open Area Away From Strong Magnetic Interference. On The Settings Page, Click 'Calibrate Magnetometer' And Follow The Prompts. Within 30 Seconds, Rotate The Drone 360° In All Directions, Such As A Horizontal Rotation Of 360°, A Nose-Up Rotation Of 360°, And A Nose-Down Rotation Of 360°.



## **COMPASS CALIBRATION**

After Calibration, Restart The Flight Controller And Align The Drone's Nose With The True North Direction. At This Point,
Observe If The Heading Value Is Around 0°. If The Deviation Is Within 10°, It Is Generally Acceptable Considering The Presence
Of Various Errors And Interferences. If The Deviation Is Significant, It May Be Necessary To Recalibrate Or Check
If The Installation Direction And Configuration Parameters Are Correct.



## LED STRIP REPLACEMENT

- The LED Strip On The Frame Of The Whole Machine Can Be Replaced By Removing
   The Bottom Plate And Locating The LED Power Plug.
- 2. Pull Out The LED Power Plug And Remove The LED Strip. Then Insert The LED Strip Of Another Color In The Same Way And Plug It Into The Power Plug.

