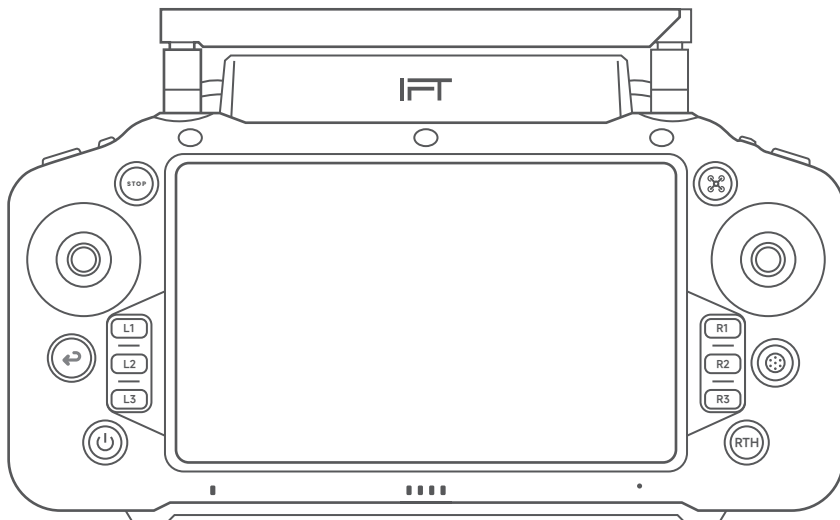




GS ONE

User Manual

FCC

FCC Regulations

This Smart controller complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Smart controller has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy. The exposure standard for wireless devices employs a unit of measurement known as Specific Absorption Rate, or SAR.

The SAR limit set by the FCC is 1.6 W/Kg. For Limbs & body-worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and positions the device a minimum of 0 mm from the Limbs & body. RF exposure compliance with any Limbs & body-worn accessory that contains metal was not tested and certified, and use of such Limbs & body-worn accessory should be avoided. Any accessory used with this device for Limbs & body-worn operation must keep the device a minimum of 0 mm away from the Limbs & body.

FCC Note

Any changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate this device.

1. Introduction

Safety Alert Definitions



WARNING: Ignoring this warning may lead to death or serious injury.



CAUTION: Ignoring this caution may result in minor or moderate injury.

IMPORTANT NOTES:

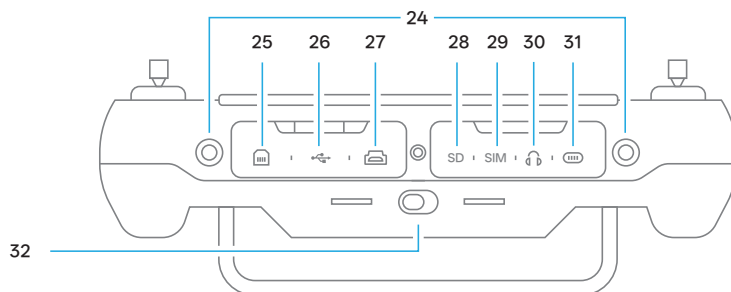
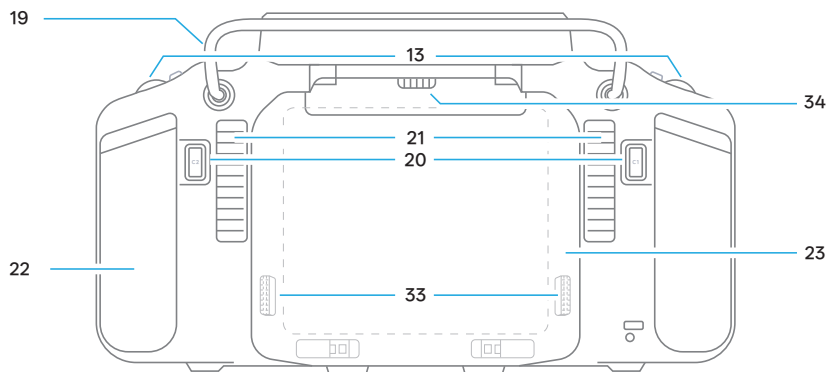
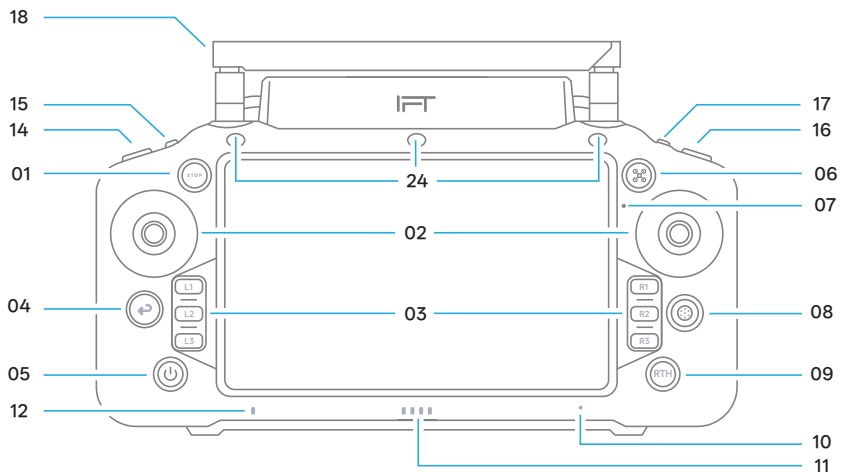
- The manufacturer is not responsible for damage or malfunction caused by unauthorized disassembly.
- If you observe any unusual behavior, stop using the GS ONE immediately and contact your dealer.

2. Specifications

Item		Specification
Dimensions		289.72× 178.34 × 105.77 mm
Weight		1.245 kg ± 6%
Display	Size	7 inches
	Resolution	1920 × 1080
Indicators		Haptic Feedback
		Power Indicator (Led)
		Signal connection indicator (LED)
Sensor		Temperature sensor
		Humidity sensor
		Light intensity sensor
		Pressure Sensor
		Magnetic Sensor
		Gyro
		Microphone
		GNSS receiver
Main Battery	Type	Lithium polymer
	Capacity	10,400 mAh
	Rated voltage	7.4 V
Sub Battery	Type	Lithium polymer
	Capacity	1000mAh
	Rated voltage	7.4 V
Working time	Typ.	5 hours
Charging time		3 hours (supports PD 2.0 fast charging up to 45W)
Video Transmission	Frequency	2.4/5.8 GHz band
	Distance	10 km

Item		Specification
Connectivity	Wi-Fi	5.8 GHz
	LTE	CAT7
	Bluetooth	5.2
Flight Control		Seamless integration with existing systems and protocols – PX4, Mavlink, ArduPilot.
OS		Android 14
Operation temperature range		Charge between 32°F~104°F (0°C~40°C)
Storage temperature range		Charge between 14°F~140°F (-10°C~60°C)
Temperature range when charging		Charge between 41°F~104°F (5°C~40°C)

3. Controller Overview

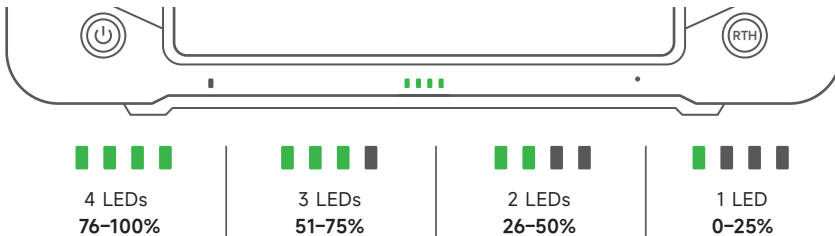


Name	Function	Remarks
1	Emergency Stop Button	Instantly stops drone motors in an emergency
2	Joystick	Controls drone movement.
3	Custom Button	User-defined function
4	Back Button	Return function
5	Power Button	Power on/off, battery check, restart
6	Hover Button	Makes drone hover
7	Buzzer	Emits warning sound
8	Five-Way Button	Directional control
9	RTH Button	Return-to-Home
10	Microphone	Sound recording
11	Battery-Level LED	Shows battery status
12	Connection Status LED	Shows connection status
13	Scroll Wheel	Gimbal control
14	Pause/Play Button	Video control
15	Flight Mode Switch	Switch flight modes
16	Photo Button	Camera control
17	3-Position Switch	User-defined function
18	Antenna	Signal transmission
19	Handle	Device holding
20	Custom Buttons (C1/C2)	User-defined function
21	Cooling Vents	Heat dissipation
22	Silicone Grip	Grip handle
23	Battery Compartment Cover	Battery installation
24	Mounting Hole	Attach accessories
25	JF-45 Port	Wired network connection
26	USB Type-A Slot	Connect USB devices
27	HDMI Port	Video output
28	microSD Card Slot	Install memory card
29	SIM Card Slot	Install SIM card
30	Headphone Jack	Connect headphones
31	USB Type-C	Device charging
32	Battery Slide-Lock	Lock/unlock battery
33	Battery Release Buttons	Remove battery
34	Speaker	Output sound

4. Indicators

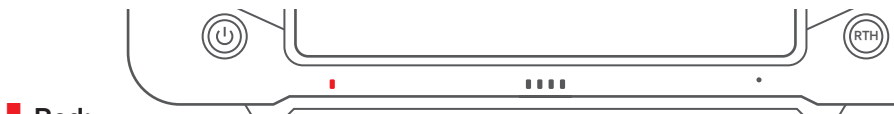
Battery Level LED:

When the GS-ONE is powered on, the battery level is indicated by four LEDs.



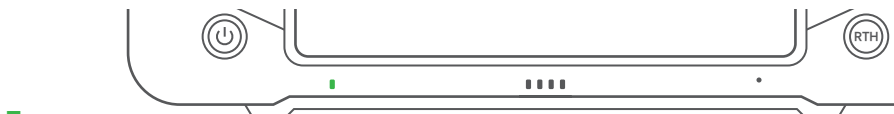
Connection Status LED:

Press and hold the power button for 2.5 seconds or longer to power on.



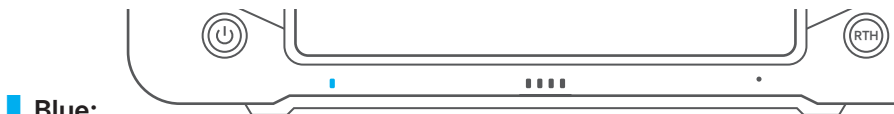
Red:

A flashing red left LED signals a battery fault or absence.



Green:

A flashing green left LED indicates the device has powered on successfully.

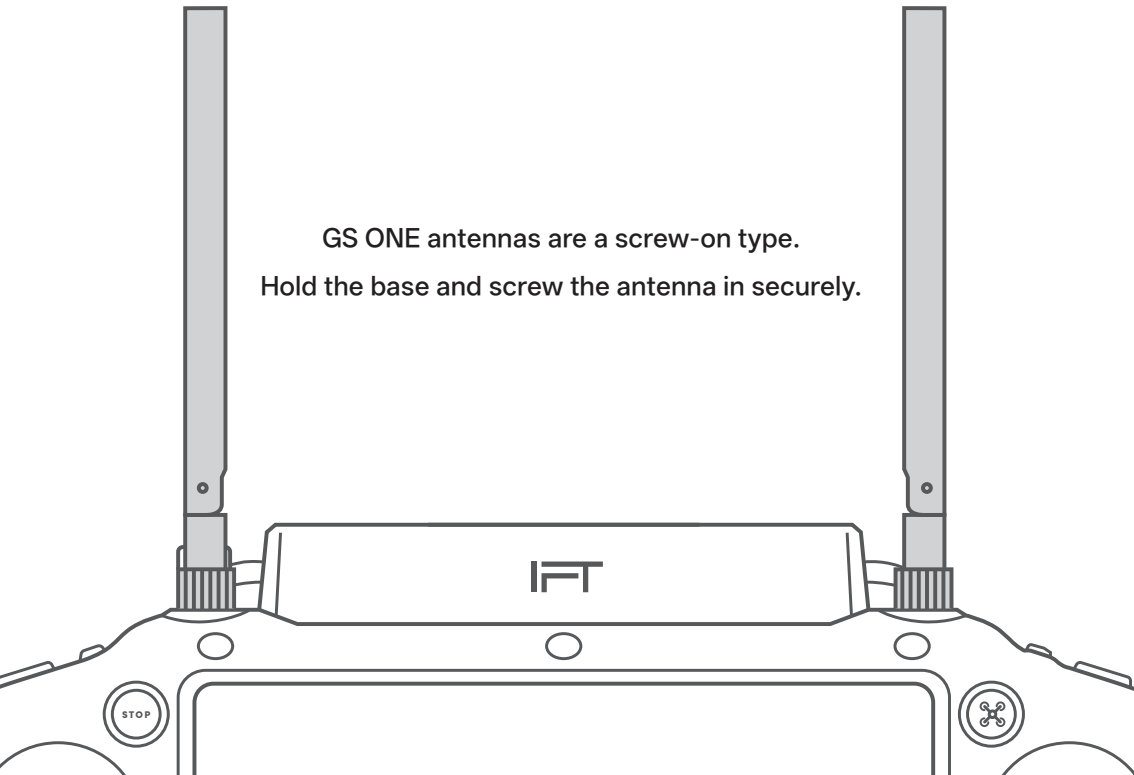


Blue:

Connected to drone

5. Antenna Installation

Screw antennas securely into place. Ensure proper installation before flight to prevent signal loss and automatic emergency procedures.

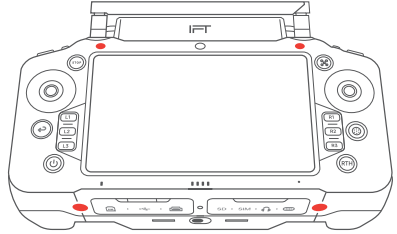


WARNING:

Always unfold and install the controller antenna before turning on the radio. Operating with the antenna folded or missing may cause weak signal, loss of control.

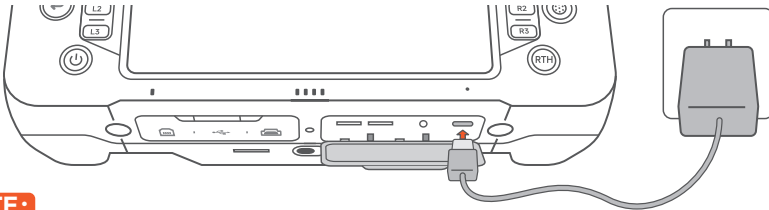
6. Strap Attachment

Attach the strap to the four anchor points and adjust to fit. Ensure the strap does not interfere with joysticks.



7. Charging

1. Connect the USB-C to USB-C cable to the supplied charger.
2. Open the waterproof cover and connect the cable to the USB-C port.
3. Plug the charger into an outlet.



NOTE:

- Charging stops automatically when full.
- Charging stops if battery temperature exceeds 104°F (40°C)

⚠ WARNING:

- Do not charge when wet.
- Avoid heat sources and direct sunlight.
- Charge between 41°F~104°F (5°C~40°C)

⚠ CAUTION:

- When storing the GS-ONE long-term, check the battery's power level every 1-3 months to ensure battery health and prevent over-discharge.
- Use the provided charger for best performance. If using a third-party charger, ensure it supports a minimum charging current of 2.25A

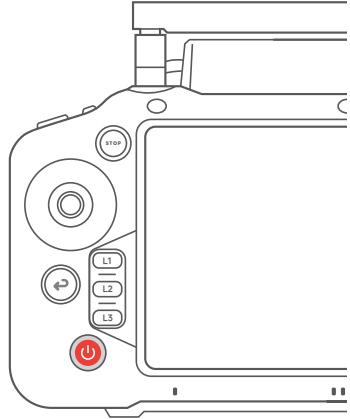
8. Power On/Off

Power On

Press and hold the power button for 3 seconds or more until the device powers on.

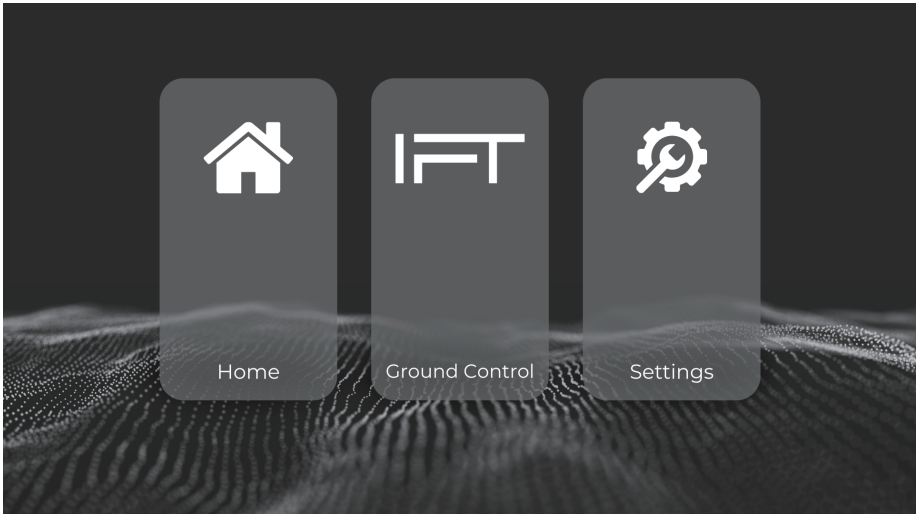
Power Off

Press and hold the power button for 1.5 seconds, then select OK on the pop-up screen to confirm shutdown.



9. Home Screen

The home screen contains three icons for accessing main functions.



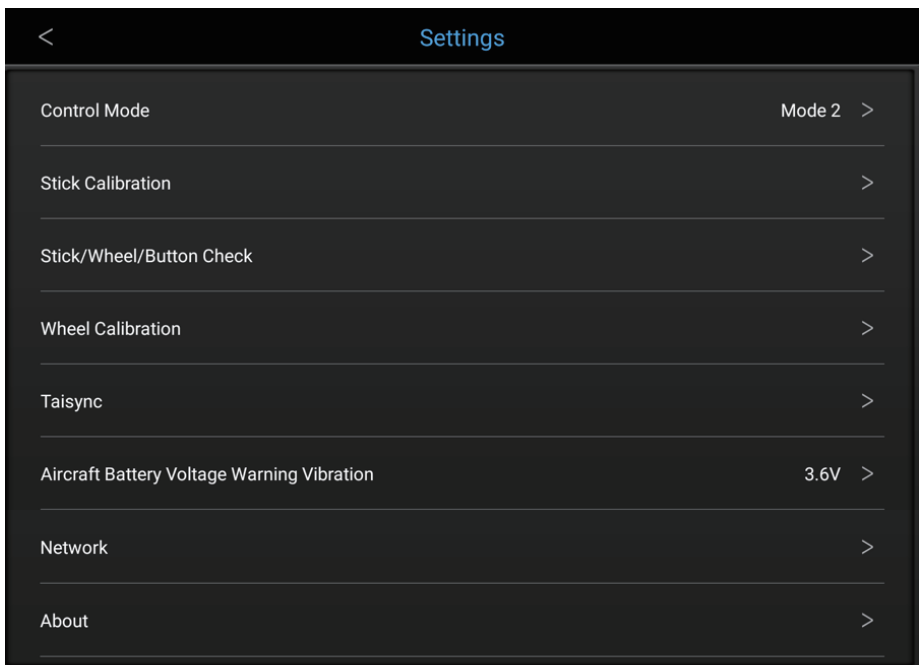
9.1 Home Menu

To access the Android home screen, tap the Home menu.

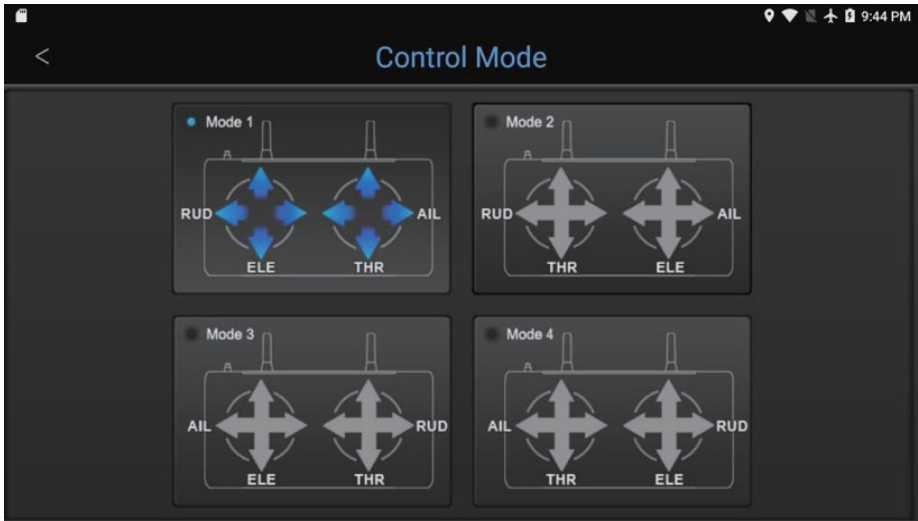
9.2 Ground Control Menu

For more detailed operating instructions, refer to the IGC user manual.

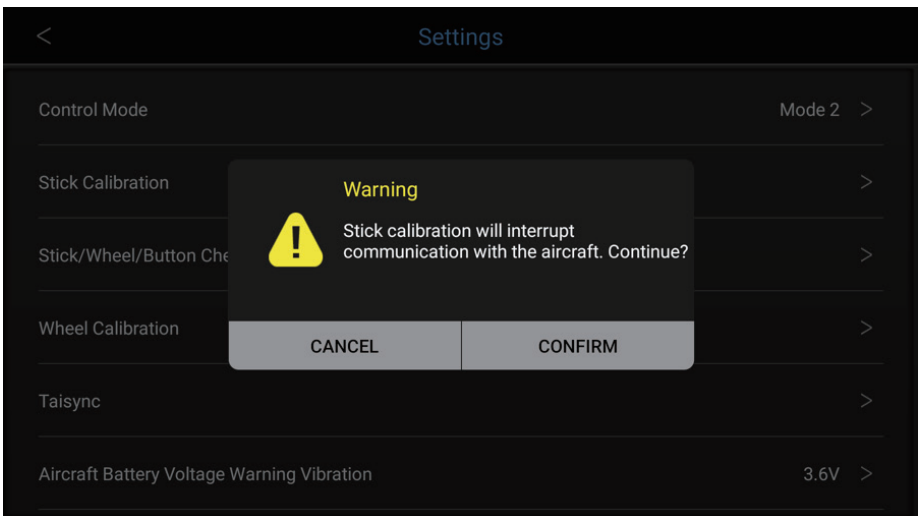
9.3 Settings Menu



9.3.1. Control Modes: Configure the transmitter mode



9.3.2. Stick Calibration: Calibrate sticks.

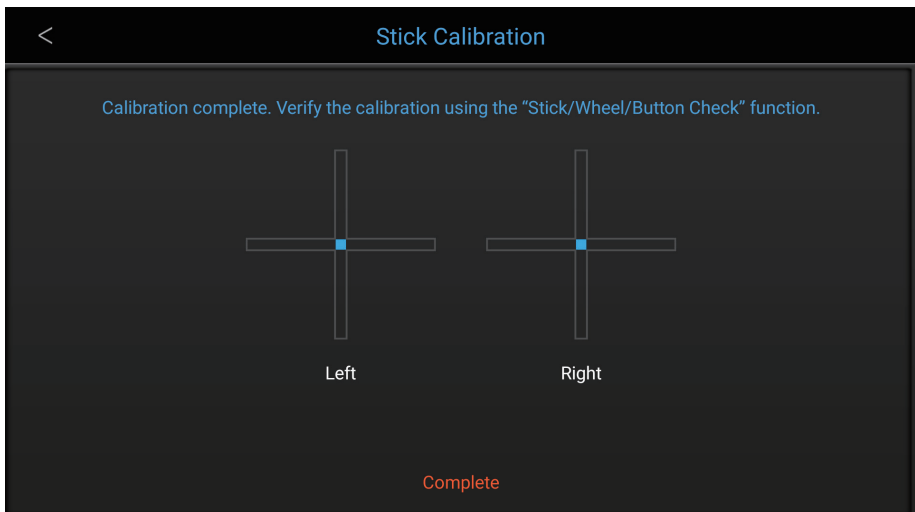


NOTE: When "Stick Calibration" is selected, the following warning will appear. Communication with the drone will be interrupted. Ensure it is safe before tapping "CONFIRM." Tap "CANCEL" to return to the settings menu.

Follow the on-screen instructions to complete stick calibration.



When finished, tap "<" in the top left corner to return to the settings menu.



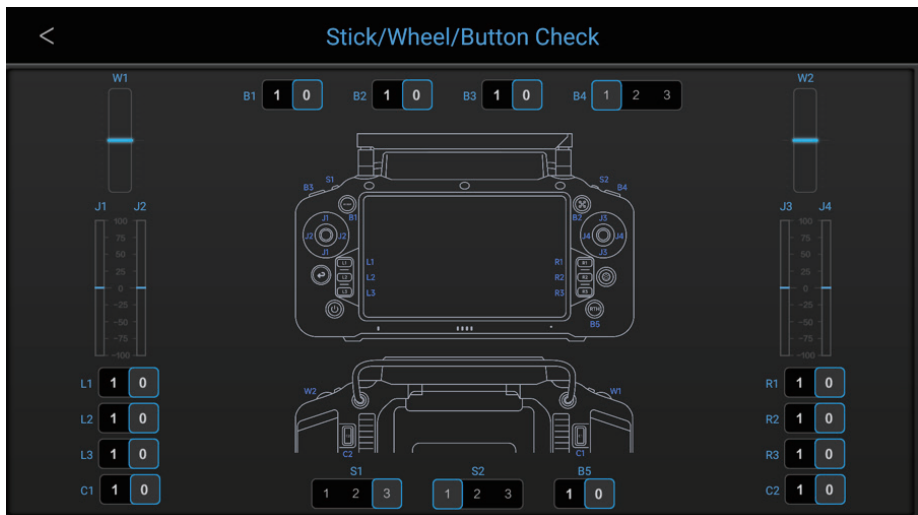
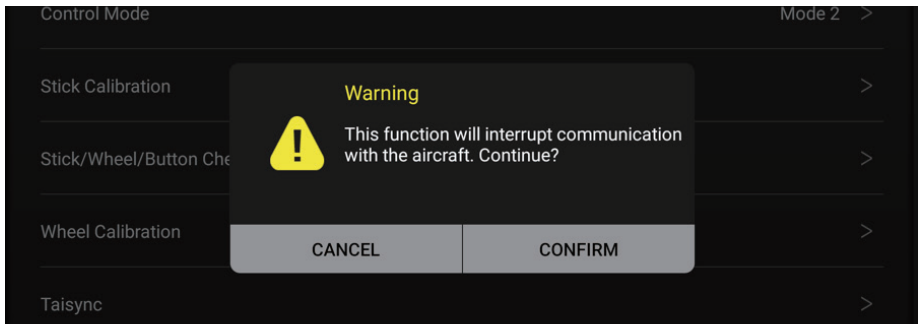
! CAUTION:

If the control stick is not calibrated, the drone may drift, fail to arm, or have limited control. Always calibrate the stick to ensure proper operation.

9.3.3. Stick/Wheel/Button Check: Check input functions.

The operation of each switch, button, and wheel can be verified on the screen as shown below. Use this screen to check functions after calibration or if you notice any irregularities.

NOTE: When Stick/Wheel/Button Check is selected, the following warning will appear. Communication with the drone will be interrupted. Ensure it is safe before tapping “CONFIRM.” Tap “CANCEL” to return to the settings menu.

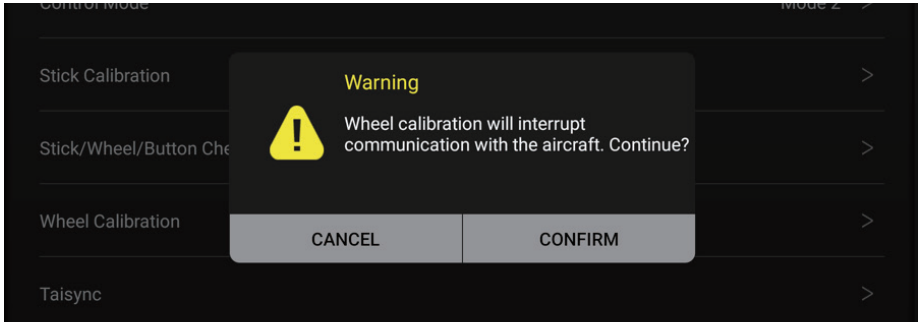


WARNING:

Do not use the Stick/Wheel/Button Check function during flight. This will interrupt communication with the drone and prevent command transmission.

9.3.4. Wheel Calibration: Calibrate scroll wheel

NOTE: When “Wheel” is selected, the following warning will appear. Communication with the drone will be interrupted. Ensure it is safe before tapping “CONFIRM.” Tap “CANCEL” to return to the settings menu.



Follow the on-screen instructions to complete stick calibration. When finished, tap “<” in the top left corner to return to the settings menu.



! CAUTION :

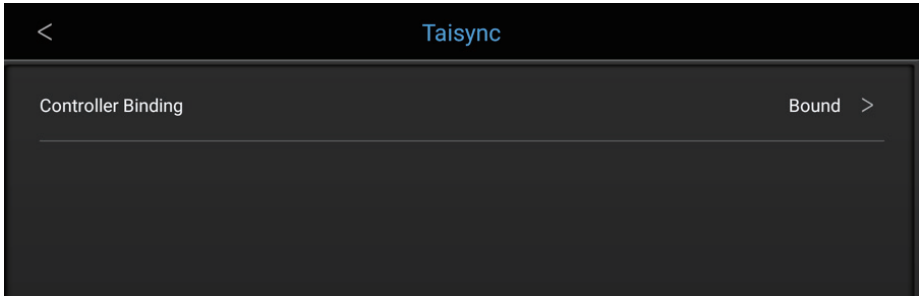
If the scroll wheel is not calibrated, the drone may drift, fail to arm, or have limited control. Always calibrate the stick to ensure proper operation.

9.3.5. Binding: Bind the controller to the drone.

Follow the procedure below to bind to a compatible drone.

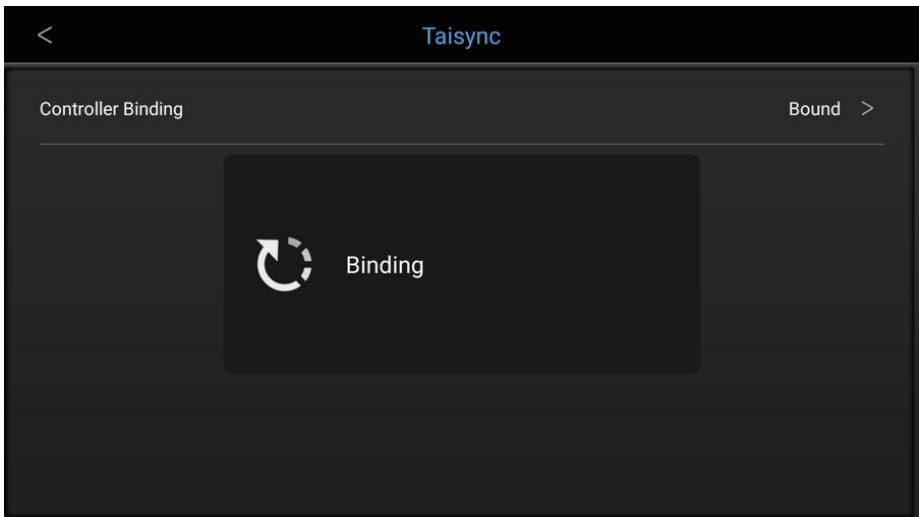
Step 1. Activate binding mode on the drone.

Step 2. Select the “Taisync” menu.



Step 3. Tap “Controller Binding.”

Step 4. Wait for the binding process to complete.



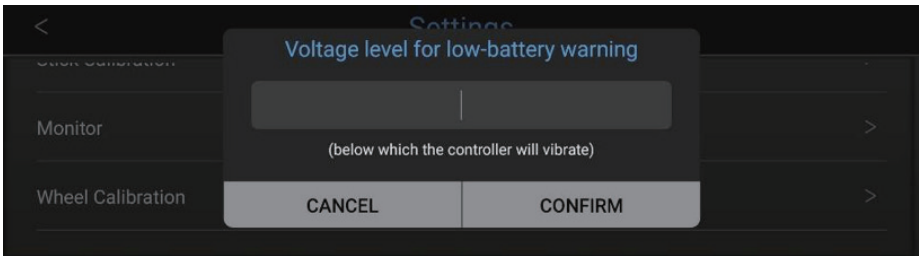
Step 5. When binding is successful, the Connection Status LED will turn blue.

9.3.6. Low Battery Vibration Warning

When the drone's battery voltage drops below the set value, the controller will vibrate to warn you.

NOTE: The default value of 3.6 V works for Lithium-Ion and Lithium-Polymer batteries, which are fully charged at 4.2 V per cell and empty at 3.0 V per cell. You can change this value if needed.

When the drone reaches the preset low battery level, GS-ONE will vibrate to indicate a low battery warning. This is not the emergency level.



9.3.7. Network: Configure Ethernet and Wi-Fi connections.

- **Wired Ethernet IP Address:**

This is the IP address assigned to the wired Ethernet connection.

- **Aircraft Connection IP Address:**

This is the IP address used to connect to the drone.

- **Video Source IP Address:**

This is the IP address of the camera on the drone. It is fixed and cannot be modified.

- **Video Stream Protocol:**

This specifies the protocol used for the video stream, which is currently RTSP.

9.3.8. About: System Software version and Serial Number

< About	
System Version	GS7_250801_T11
Launcher Version	V7.0.10
MCU Version	V7.1.5
Serial Number	M930128CQF031400108