| | | |
|---|---|---|
| 3 | Video Recording Button | Press the button to start recording video and press it again to end recording video. |
| 4 | Key C1 | Customize the key function in the flight application. For more information, see “6.5 “Settings” Interface” in Chapter 6. |
| 5 | Air Outlet | For heat dissipation of the remote controller. When using it, please pay attention to whether there are foreign objects blocking the air outlet. |
| 6 | HDMI Interface | Outputs the live view of the remote controller to a supported display device. |
| 7 | USB-C Interface | Used for remote controller charging or device debugging. |
| 8 | USB-A Interface | Connects to an expandable 4G/5G module or external USB device for data transmission. |
| 9 | Power Button | When the remote controller is off, press this button for 1 second to display the remaining battery level of the RC and press this button for 3 seconds to turn it on.<br>When the remote controller is on, press this button quickly to switch between Screen On and Screen Off and press and hold it for 6 seconds to force shut the RC down. |
| 10 | Key C2 | Customize the key function in the flight application. For more information, see “6.5 “Settings” Interface” in Chapter 6. |
| 11 | Shooting Button | Press the button to take a photo. |
| 12 | Right Dial Wheel | Turn the dial wheel to adjust the zoom factor of the camera. |
| 13 | Right Stick | Controls the state of motion of the aircraft. The default stick mode is Mode 2. In this mode, you can use the stick to control the translation of the aircraft in four directions: front/back/left/right. You can set the stick mode in the flight application. For more information, see “6.5 “Settings” Interface” in Chapter 6. |

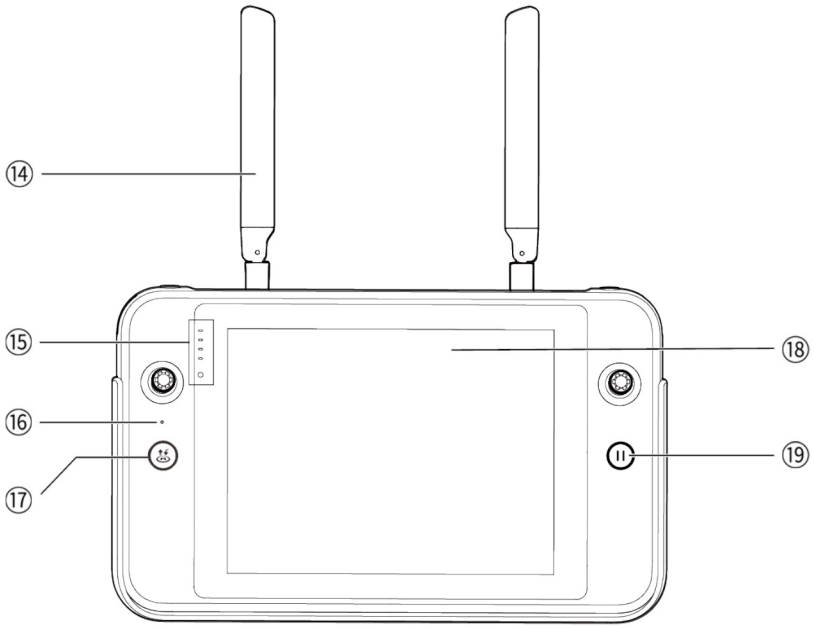



**Fig 4-2 Remote Controller Front View**

**Table 4-2 Remote Controller Front View Details**

| No. | Name | Description |
|---|---|---|
| 14 | Antenna | Transmits the control signals of the remote controller to the aircraft and receives the image transmission information from the aircraft. |
| 15 | Battery Level Indicator | Displays the remaining battery level of the remote controller. |
| 16 | Audio Input | Receives information from an external audio source near the remote controller. |
| 17 | Take-off/Return-to-Home Button | When the aircraft is turned on but not taking off, press and hold the button for 2 seconds, and the aircraft will take off and hover at an altitude of 1.2 meters above the ground.<br>When the aircraft is flying, press and hold the button for 2 seconds, and the aircraft will automatically begin the return-to-home process. For details, please refer to "4.11.2 Take-off/Return-to-Home Button and Pause Button" in this chapter. |
| 18 | Display | Displays real-time image transmission views. with 2048×1536 resolution. Touch operation is supported. |
| 19 | Pause Button | When the aircraft is in autonomous flight mode, short press this button to control the aircraft to suspend autonomous flight and hover in place and press the button again to resume flight; press and hold this button for 2 seconds to control the aircraft to exit the mission flight. |

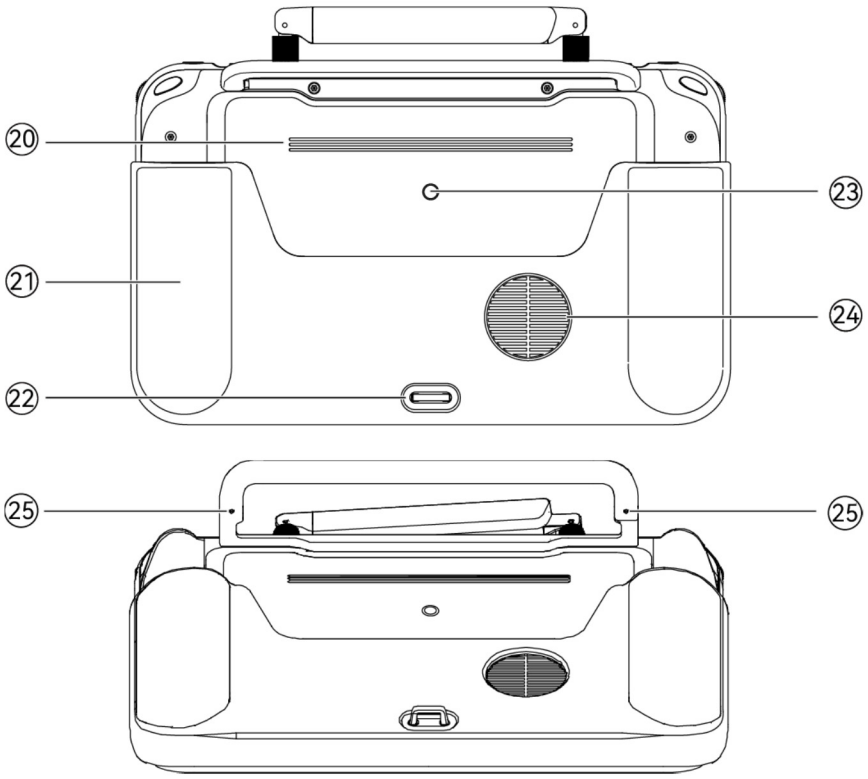



**Fig 4-3 Remote Controller Rear View**

**Table 4-3 Remote Controller Rear View Details**

| No. | Name | Description |
|---|---|---|
| 20 | Speaker | Plays sound to indicate the status of the device. |
| 21 | Protective Cover | Used to prevent external damage such as collision and abrasion to the remote controller. |
| 22 | Lower Hook | Used to connect and fix the remote controller strap. |
| 23 | Standard 1/4 interface | Used for attaching tripods. |
| 24 | Air Inlet | Used for heat dissipation of the remote controller. Please pay attention to whether there are foreign objects blocking the air inlet when using it. |
| 25 | Stick Storage Slot | Used to store left and right sticks. |

### 4.1.2 Communication Frequency Bands

The image transmission frequency bands of the remote controller comply with regulatory requirements worldwide. Please refer to the table below for the relevant used frequency bands.

**Tip**

- In actual use, after the aircraft and the remote controller is turned on and matched in frequency, the flight application in the remote controller will automatically determine and select the radio communication frequency band that complies with local regulations for the specific country or region based on the GNSS information received by the aircraft.
- Users can select legal image transmission frequency bands. For details, please refer to "6.5 "Settings" Interface" in chapter 6.
- Before flight, please ensure that the aircraft receives a strong GNSS signal after being powered on. This allows the flight application to receive the proper communication frequency band.
- When the aircraft does not obtain GNSS positioning information after being turned on (for example, the aircraft enters visual positioning mode or attitude mode right after being turned on), the radio communication frequency band between the RC and the aircraft adopts 2.4G frequency band by default; when the aircraft enters the visual positioning mode or attitude mode from GNSS mode, its communication frequency band remains the same.

**Table 4-4 Global Frequency Bands Used (Image Transmission)**

| Operating Frequency | Details | Countries & Regions |
|---|---|---|
| 900M | 902-928MHz | ■ USA (FCC)<br>■ Canada (ISED) |
| 2.4G | 2400-2476MHz | ■ Chinese Mainland (SRRC) |
| 2.4G | 2400-2483.5MHz | ■ USA (FCC)<br>■ Canada (ISED)<br>■ EU (CE)<br>■ UK (UKCA) |
| 5.8G | 5725-5829MHz | ■ Chinese Mainland (SRRC) |
| 5.8G | 5725-5850MHz | ■ USA (FCC)<br>■ Canada (ISED)<br>■ EU (CE)<br>■ UK (UKCA) |

**Table 4-5 Global Frequency Bands Used (Wi-Fi)**

| Operating Frequency | Details | Countries & Regions |
|---|---|---|
| 2.4G<br>(2400-2476MHz) | 802.11b/g/n | ■ Chinese Mainland (SRRC) |
| 2.4G<br>(2400-2483.5MHz) | 802.11b/g/n | ■ USA (FCC)<br>■ Canada (ISED)<br>■ EU (CE)<br>■ UK (UKCA) |

| | | |
|---|---|---|
| 5.8G<br>(5725-5829MHz) | 802.11a/n/ac | ■ Chinese Mainland (SRRC) |
| 5.8G<br>(5725-5850MHz) | 802.11a/n/ac | ■ USA (FCC)<br>■ Canada (ISED)<br>■ EU (CE)<br>■ UK (UKCA) |

**Note**

- Some countries and regions have strict restrictions on the use of radio communication frequency bands. It is crucial to use them legally, and any modification of communication modules is strictly prohibited.
- If flying in any countries not listed in the above table, please consult the local communication management authorities to ensure that the aircraft communication frequency bands comply with local regulatory requirements.
- The aircraft will automatically match the legal frequency band based on GNSS positioning, so users can use it with confidence.

## 4.2 Installing the Remote Controller Lanyard

**Tip**

- The remote controller lanyard is an optional accessory. You can choose whether to install it as required.
- When holding the remote controller for a long time during flight operations, we recommend that you install the remote controller lanyard to effectively reduce the pressure on your hands.

### ■ Steps

1. Clip the two metal clips on the lanyard to the narrow positions on both sides of the metal handle at the back of the controller.
2. Open the metal button of the lanyard, bypass the lower hook at the bottom of the back of the controller, and then fasten the metal button.
3. Wear the lanyard around your neck, as shown in the figure below, and adjust it to a suitable length.

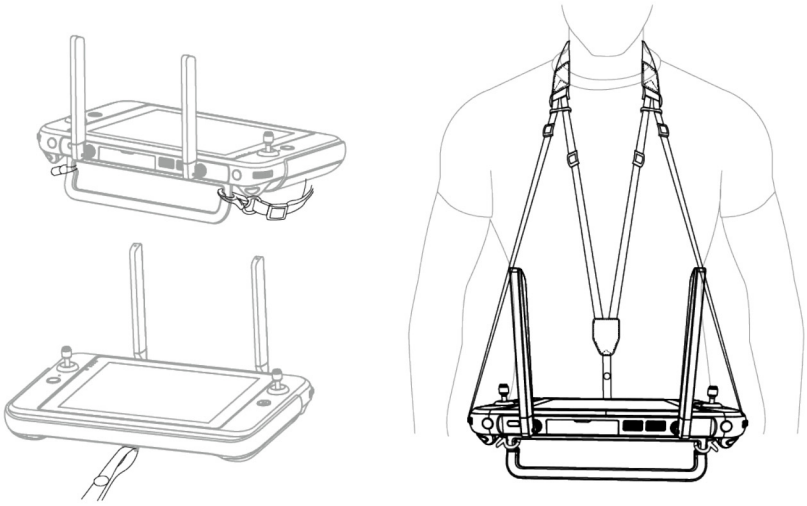


**Fig 4-4 Install the Remote Controller Lanyard (As Required)**

## 4.3 Installing/Storing Sticks

The remote controller features removable sticks, which effectively reduce storage space and enable easy carrying and transportation.

### ■ Installing sticks

There are stick storage slots above the mental handle at the back of the controller. Rotate counterclockwise to remove the two sticks and then rotate them clockwise to install them separately on the remote controller.

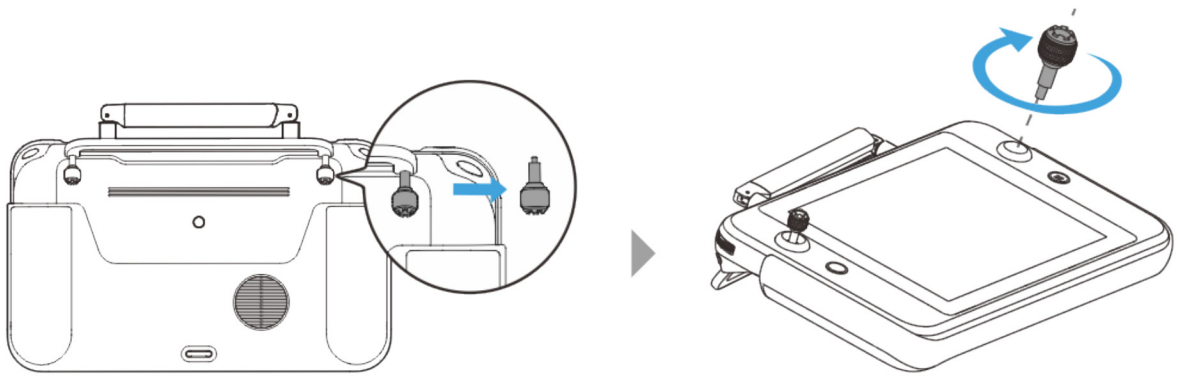


**Fig 4-5 Installing sticks**

### ■ Storing Sticks

Simply follow the reverse steps of the above operation.

| Tip |
| --- |
| ● When the sticks are not in use (such as during transportation and temporary aircraft standby), we recommend that you remove and store them on the metal handle. This can prevent you from accidentally touching the sticks, causing damage to the sticks or |

unintended startup of the aircraft.

## 4.4 Turning the Remote Controller On/Off

### ■ Turning the Remote Controller On

Press and hold the power button at the top of the remote controller for 3 seconds until the controller emits a "beep" sound to turn it on.

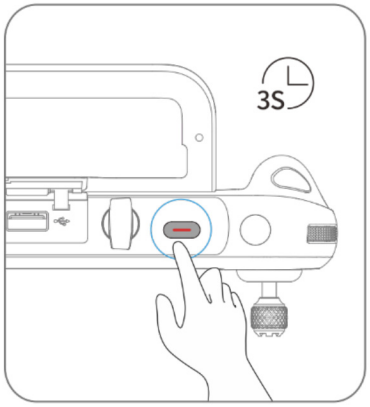



**Fig 4-6 Turning the Remote Controller On**

**Tip**

- When using a brand-new remote controller for the first time, please follow the on-screen instructions to complete the relevant setup.

### ■ Turning the Remote Controller Off

When the remote controller is on, press and hold the power button at the top of the remote controller until the "Off" or "Restart" icon appears at the top of the controller's screen. Tapping the "Off" icon will turn off the remote controller. Tapping the "Restart" icon will restart the remote controller.

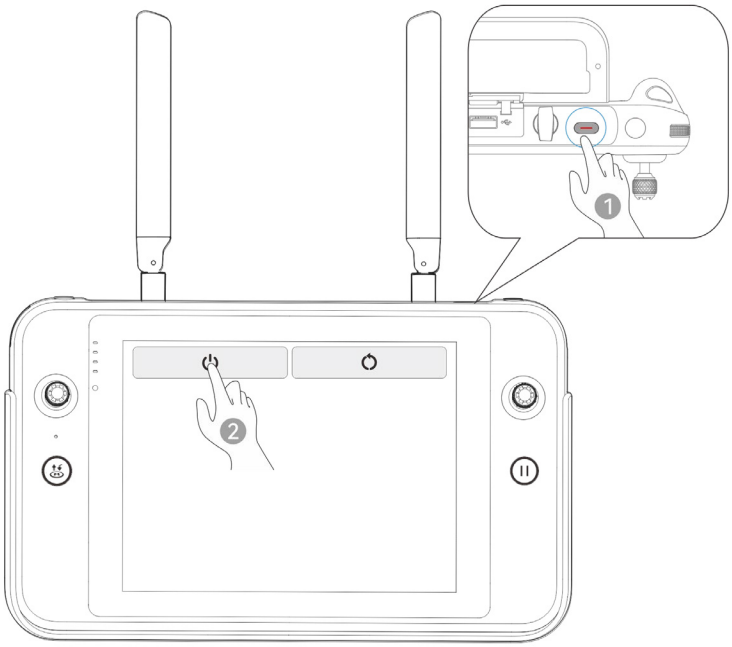



**Fig 4-7 Turning the Remote Controller Off**

| Tip |
| --- |
| ● When the remote controller is on, you can press and hold the power button at the top of the remote controller for 6 seconds to forcibly turn it off. |

## 4.5 Checking the Battery Level of the Remote Controller

When the remote controller is off, short press the power button of the remote controller for 1 second, and the battery level indicator will display the battery level of the remote controller.

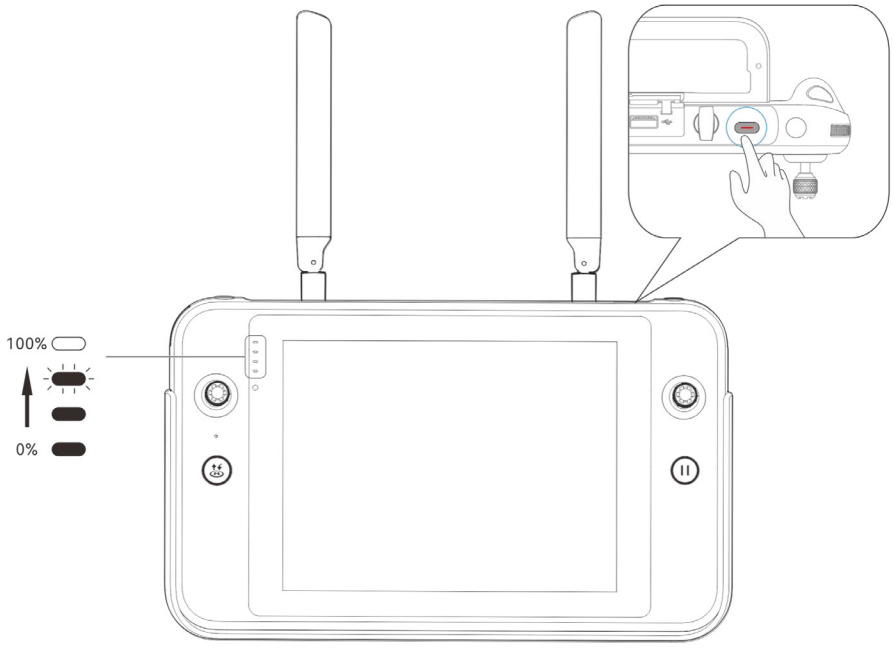



**Fig 4-8 Checking the Battery Level of the Remote Controller**

**Table 4-6 Battery Remaining**

| Power Display | Definition | Power Display | Definition |
|---|---|---|---|
|  | 1 light always on: 0%-25% power |  | 2 lights always on: 25%-50% power |
|  | 3 lights always on: 50%-75% power |  | 4 lights always on: 75%-100% power |

**Tip**

When the remote controller is on, you can check the current battery level of the remote controller in the following ways:

- Check it on the top status notification bar of the flight application.
- Check it on the system status notification bar of the remote controller. In this case, you need to enable “Battery Percentage” in the “Battery” of the system settings in advance.
- Go to the system settings of the remote controller and check the current battery level of the controller in “Battery”.

## 4.6 Charging the Remote Controller

Connect the output end of the official remote controller charger to the USB-C interface of the remote controller by using a USB-C to USB-A (USB-C to USB-C) data cable and connect the plug of the charger to an AC power supply (100-240 V~ 50/60 Hz).

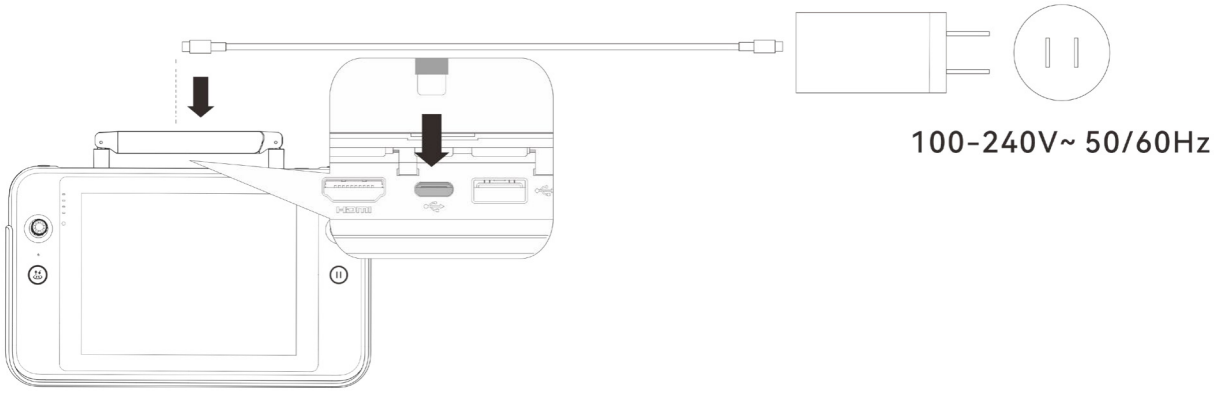



**Fig 4-9 Use the remote controller charger to charge the remote controller**

**Warning**

- Please use the official charger provided by Autel Robotics to charge the remote controller. Using third-party chargers may damage the battery of the remote controller.

- After charging is complete, please disconnect the remote controller from the charger promptly.

**Note**

- It is recommended to fully charge the remote controller battery before the aircraft takes off.
- Generally, it takes about 120 minutes to fully charge the aircraft battery, but the charging time is related to the remaining battery level.

**Tips**

- If the remote controller is not used for a long time, please charge it every 3 months to prevent long-term low power from affecting battery life or damaging the battery.

## 4.7 Adjusting the Antenna Position of the Remote Controller

During flight, please extend the antenna of the remote controller and adjust it to an appropriate position. The strength of the signal received by the antenna varies depending on its position.
When the angle between the antenna and the back of the remote controller is 180° or 270°, and the plane of the antenna faces the aircraft, the signal quality between the remote controller and the aircraft can reach its best state.

**Important**

- When you operate the aircraft, make sure that the aircraft is in the place for the best communications.
- Do not use other communication devices of the same frequency band at the same time to prevent interference with the signals of the remote controller.
- During flight, if there is a poor image transmission signal between the aircraft and the remote controller, the remote controller will provide a prompt. Please adjust the antenna orientation according to the prompt to ensure that the aircraft is in the optimal data transmission range.
- Please make sure that the antenna of the remote controller is securely fastened. If the antenna becomes loose, please rotate the antenna clockwise until it is firmly fastened.

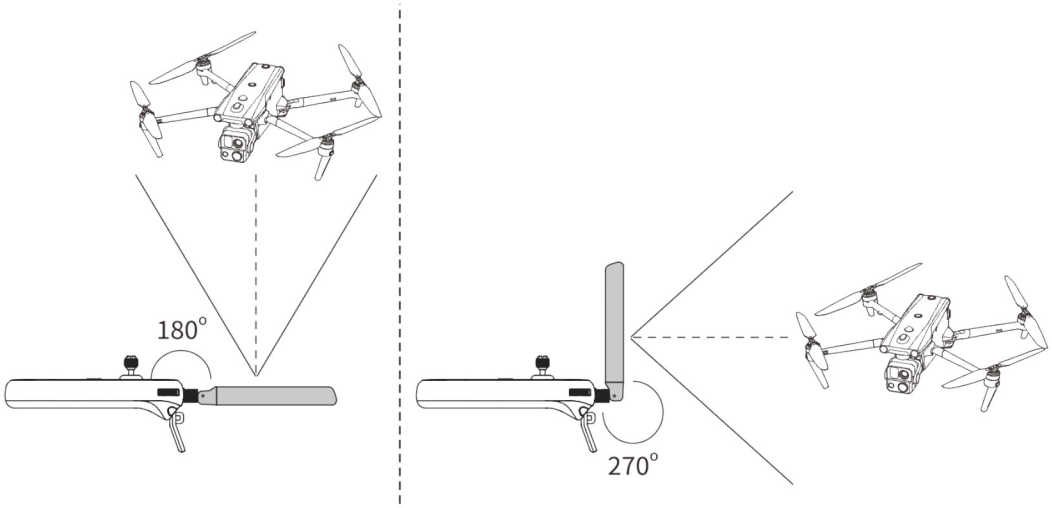



**Fig 4-10 Extend the antenna**

## 4.8 Remote Controller System Interfaces

### 4.8.1 Remote Controller Main Interface

After the remote controller is turned on, it enters the main interface of the flight application by default.

In the main interface of the flight application, slide down from the top of the touch screen or slide up from the bottom of the touch screen to display the system status notification bar and navigation keys, and tap the "Home" button or the "Back" button to enter the "Remote Controller Main Interface". Swipe left and right on the "Remote Controller Main Interface" to switch between different screens, and enter other applications as needed.

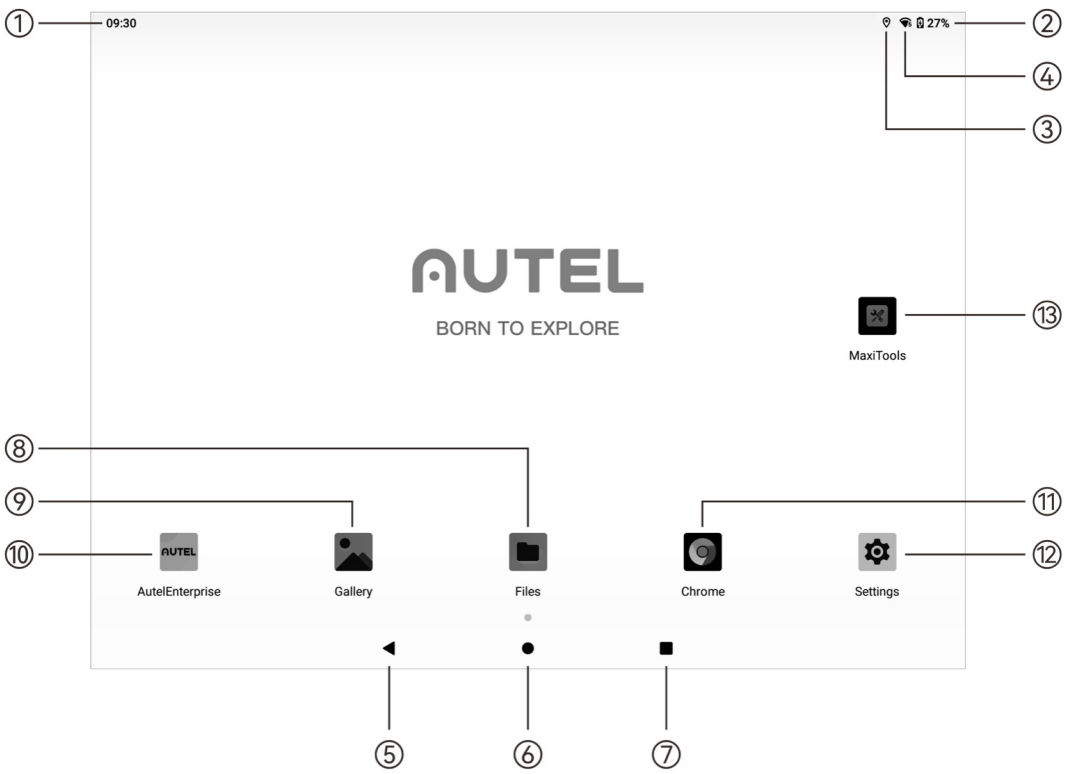



**Fig 4-11 Remote Controller Main Interface**

**Table 4-7 Remote Controller Main Interface Details**

| No. | Name | Description |
|---|---|---|
| 1 | Time | Indicates the current system time. |
| 2 | Battery Status | Indicates the current battery status of the remote controller. |
| 3 | Location Info | Indicates that location information is currently enabled. If not enabled, the icon is not displayed.<br>You can tap "Settings" to enter the "Location Information" interface to quickly turn on or off location information. |
| 4 | Wi-Fi Status | Indicates that Wi-Fi is currently connected. If not connected, the icon is not displayed.<br>You can quickly turn on or off the connection to Wi-Fi by sliding down from anywhere on the "Remote Controller Interface" to enter the "Pull-Down Shortcut Menu". |
| 5 | Back Button | Tap the button to return to the previous page. |
| 6 | Home Button | Tap the button to jump to the "Remote Controller Main Interface". |
| 7 | “Recent apps” Button | Tap the button to view all background programs currently running and take screenshots.<br>Press and hold the application to be closed and slide up to |

| | | |
|---|---|---|
| | | close the application.<br>Select the interface where you want to take a screenshot, and tap the "Screenshot" button to print, transfer via Bluetooth, or edit the screenshot. |
| 8 | Files | The app is installed in the system by default. Tap it to manage the files saved in the current system. |
| 9 | Gallery | The app is installed in the system by default. Tap it to view the images saved by the current system. |
| 10 | Autel Enterprise | Flight software. The flight application starts by default when the remote controller is turned on. For more information, see "Chapter 6 Flight Application". |
| 11 | Chrome | Google Chrome. The app is installed in the system by default. When the remote controller is connected to the Internet, you can use it to browse web pages and access Internet resources. |
| 12 | Settings | The system settings app of the remote controller. Tap it to enter the settings function, and you can set the network, Bluetooth, applications and notifications, battery, display, sound, storage, location information, security, language, gestures, date and time, device Name, etc. |
| 13 | Maxitools | It supports the log function and can restore factory settings. |

**Tip**

- The remote controller supports the installation of third-party Android apps, but you need to obtain the installation packages on your own.
- The remote controller has a screen aspect ratio of 4:3, and some third-party app interfaces may encounter compatibility issues.

**Table 4-8 List of Pre-installed Apps on the Remote Controller**

| No. | Pre-installed App | Device Compatibility | Software Version | Operating System Version |
|---|---|---|---|---|
| 1 | Files | √ | 11 | Android 11 |
| 2 | Gallery | √ | 1.1.40030 | Android 11 |
| 3 | Autel Enterprise | √ | V2.1.119 | Android 11 |
| 4 | Chrome | √ | 68.0.3440.70 | Android 11 |
| 5 | Settings | √ | 11 | Android 11 |

| | | | | |
|---|---|---|---|---|
| 6 | Maxitools | √ | 2.45 | Android 11 |
| 7 | Google Pinyin Input | √ | 4.5.2.193126728-arm64-v8a | Android 11 |
| 8 | Android Keyboard (AOSP) | √ | 11 | Android 11 |

**Tip**

- Please be aware that the factory version of the flight application may vary depending on subsequent function upgrades.

### 4.8.2 Pull-Down Shortcut Menu

Slide down from anywhere on the "Remote Controller Interface", or slide down from the top of the screen in any app to display the system status notification bar, and then slide down again to bring up the “Pull-Down Shortcut Menu”.
In the "Pull-Down Shortcut Menu", you can quickly set Wi-Fi, Bluetooth, screenshot, screen recording, airplane mode, screen brightness, and remote controller sound.

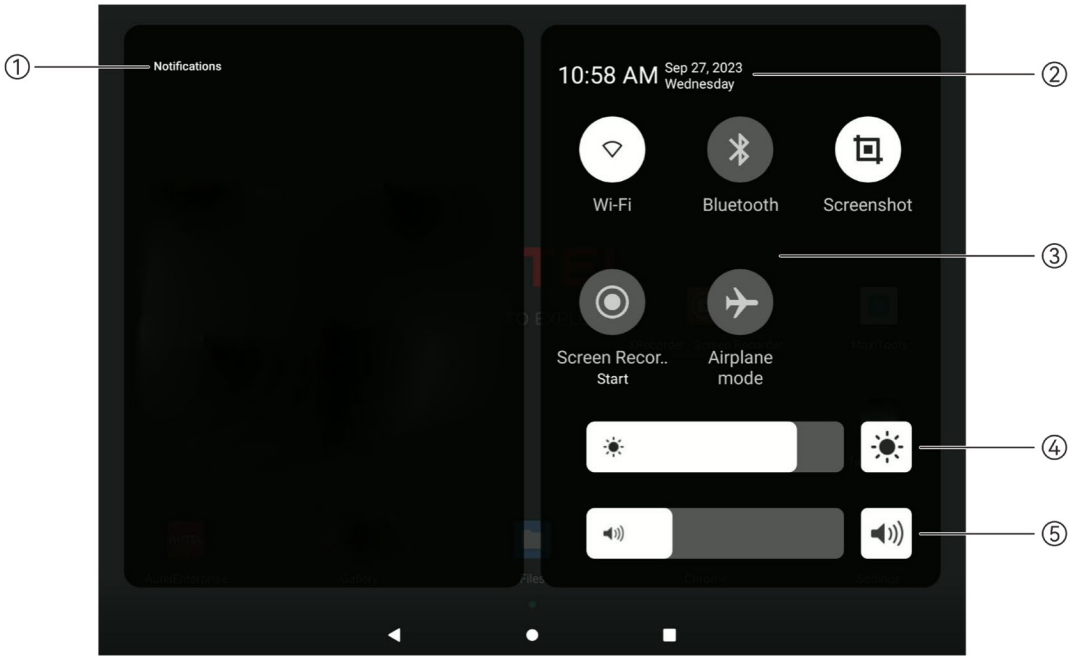



**Fig 4-12 Pull-Down Shortcut Menu**

**Table 4-9 Pull-Down Shortcut Menu Details**

| No. | name | Description |
|---|---|---|
| 1 | Notification Center | Displays system or app notifications. |
| 2 | Time and Date | Displays the current system time, date, and week of the |

| | | |
|---|---|---|
| | | remote controller. |
| 3 | Wi-Fi | Tap the “” icon to enable or disable the Wi-Fi function. Press and hold it to enter WLAN settings and select the wireless network to be connected. |
| | Bluetooth | Tap the “” icon to enable or disable the Bluetooth function. Press and hold it to enter the Bluetooth settings and select the Bluetooth to be connected. |
| | Screenshot | Tap the “” icon to use the screenshot function, which will capture the current screen (hide the Pull-Down Shortcut Menu to take a screenshot). |
| | Screen Recor.. Start | After tapping on the “” icon, a dialog box will pop up, where you can choose whether to enable the functions of recording audio and displaying the touch screen position, and then tap the "Start" button, wait for 3 seconds, and start screen recording. Tap the icon again or tap “Screen Recorder” to turn off screen recording. |
| | Airplane mode | Tap the “” icon to turn on or off the airplane mode, that is, to turn on or turn off the Wi-Fi and Bluetooth functions at the same time. |
| 4 | Screen Brightness Adjustment | Drag the slider to adjust the screen brightness. |
| 5 | Volume Adjustment | Drag the slider to adjust the media volume. |

## 4.9 Frequency Matching Between the Aircraft and the Remote Controller

Only after the remote controller and the aircraft are matched in frequency can users operate the aircraft using the remote controller.
The remote controller and the aircraft support two modes of matching: Single Link and A-Mesh Link. They differ in following aspects:

- Single Link: 1 RC matches with 1 aircraft in frequency.
- A-Mesh Link: It supports frequency matching between up to 2 RCs and 2 aircrafts, which comprise a team.

**Note**

- The aircraft included in the aircraft kit has already been matched in frequency with the remote controller provided in the kit at the factory by using the Single Link. No matching

is required after the aircraft is powered on. Normally, after completing the aircraft activation process, users can directly use the remote controller to operate the aircraft.

- If the aircraft and the remote controller become unmatched due to other reasons, please follow the above steps to match the aircraft with the remote controller in frequency again.

### ■ One RC Matches with One Aircraft when the RC is On

1. Turn on the RC and the aircraft.
2. After entering the main interface of the flight application, tap "" and then "" to enter the Single Link. At this time, the aircraft battery indicator enters the sync flashing status.
3. Double press the power button of the aircraft, and then the arm lights of the aircraft will turn green and flash quickly, waiting for the RC to complete auto matching.
4. After the aircraft is matched with the RC, the battery indicator and rear arm lights will stop flashing and the image transmission picture of the gimbal camera appears in the RC.

### ■ One RC Matches with One Aircraft when the RC is off (Force Match)

When the RC is off, users can force match the RC with the aircraft. The procedures are as follows:

1. Press and hold the power button and the take-off/return-to-home button of the remote controller at the same time until the battery level indicators of the remote controller blink quickly, which indicates that the remote controller has entered the forced frequency pairing state.
2. Make sure that the aircraft is turned on. Double-click the power button of the aircraft, and the front and rear arm lights of the aircraft will turn green and blink quickly.
3. When the rear arm lights of the aircraft and the battery level indicator of the remote controller stop blinking, it indicates that the frequency matching is successfully done.

### ■ A-Mesh Link

1. Choose one of those RCs and turn it on, and enter the main interface of its flight application, tap "" and then "" to enter "Multi-aircraft frequency" interface, tap "Add device" button to enter A-Mesh Link mode. At this time the RC battery indicator blinks quickly.
2. Select one of those aircrafts and turn it on, press its power button quickly and press and hold the button until the arm lights of the aircraft blink quickly (among which the rear arm lights turn yellow and blink quickly), which indicates that the aircraft enters the A-Mesh Link mode, waiting for the RC to complete auto frequency matching.
3. After the RC and the aircraft are matched in frequency successfully, the RC's battery level indicators blink quickly but the rear arm lights of the aircraft stop flashing, in "My team" interface RCs and aircrafts in the team are displayed.
4. Users then can repeat the step 2 to add 1 more aircraft into the team; they can also choose another RC, enter the main interface of the flight application on the RC, tap "" and then "" to enter "Multi-Aircraft frequency" interface, tap "Join the team" button to enter A-Mesh Link mode and add the RC into the team.
5. After A-Mesh Link is completed, in the "My team" interface of the RC used in the step 1, tap "Finish" button to complete the building of the team.

**Tip**

- The firmware of the smart battery should be V0.4.29.1 or later so that the multi-aircraft matching can be supported. Otherwise the matching cannot be triggered. When you use a smart battery with a version lower than that one, please connect the RC through Single Link, reboot the RC and the aircraft and upgrade them by following instructions in the interface. After the upgrade, please try the multi-aircraft matching again.

**Note**

- In A-Mesh Link, the RC, which leads matching in the team, is the pilot role that has all control permissions over other aircrafts in the team while the RC, which joins the team later, is the observer role that can only use pinpoint sharing operation and view screens of different lens of aircrafts' gimbal cameras.
- In A-Mesh Link, the first aircraft that joins the team is the relay machine by default.
- After a team is built, in "My team" interface, the RC that has pilot role can dissolve the team or add device. The RC that has observer role can exit from the team.

**Important**

- When matching, please keep the remote controller and the aircraft close together, at most 1 meter apart.
- In frequency matching, please turn off Wi-Fi and Bluetooth of devices nearby which share same frequency bands. In this way, matching interference can be avoided.
- When matching multiple aircrafts, please assign marks to devices and match them with RCs one by one so as to distinguish the devices easily.

## 4.10 Selecting Stick Mode

### 4.10.1 Stick Modes

When using the remote controller to operate the aircraft, you need to know the current stick mode of the remote controller and fly with caution.
Three stick modes are available, that is, Mode 1, Mode 2 (default), and Mode 3. Users can set stick mode based on their own needs or preference. For details about how to set the stick mode, please refer to "6.5 "Settings" Interface" in chapter 6.

## ■ Mode 1

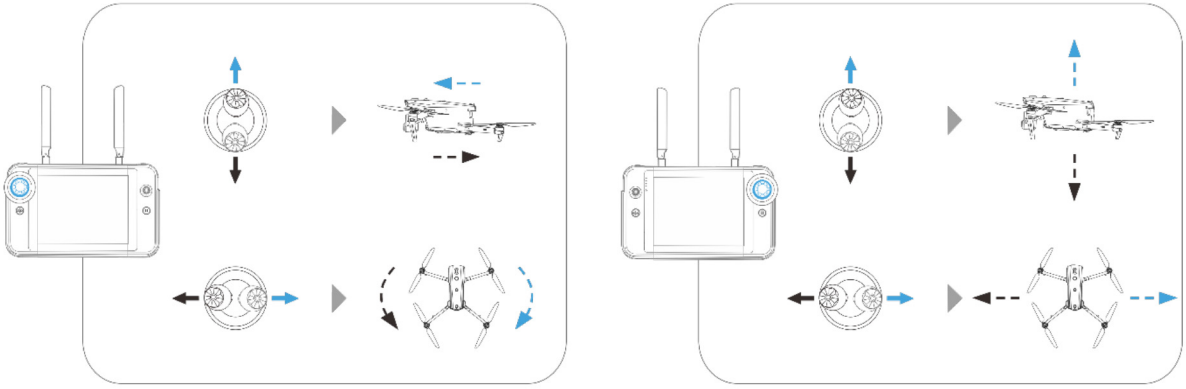


**Fig 4-13 Mode 1**

**Table 4-10 Mode 1 Details**

| Stick | Move Up/Down | Move Left/Right |
|---|---|---|
| Left Stick | Controls the forward and backward movement of the aircraft | Controls the heading of the aircraft |
| Right Stick | Controls the ascent and descent of the aircraft | Controls the left or right movement of the aircraft |

## ■ Mode 2

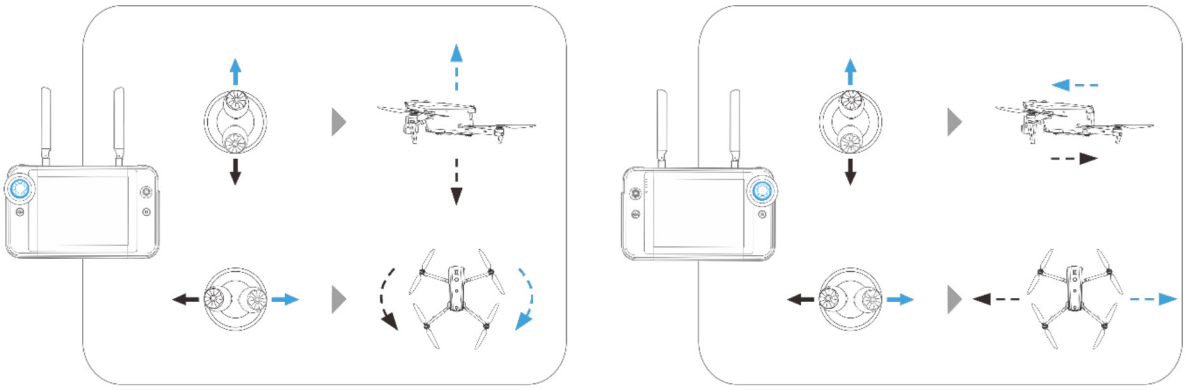


**Fig 4-14 Mode 2**

**Table 4-11 Mode 2 Details**

| Stick | Move Up/Down | Move Left/Right |
|---|---|---|
| Left Stick | Controls the ascent and descent of the aircraft | Controls the heading of the aircraft |
| Right Stick | Controls the forward and backward movement of the aircraft | Controls the left or right movement of the aircraft |

### ■ Mode 3

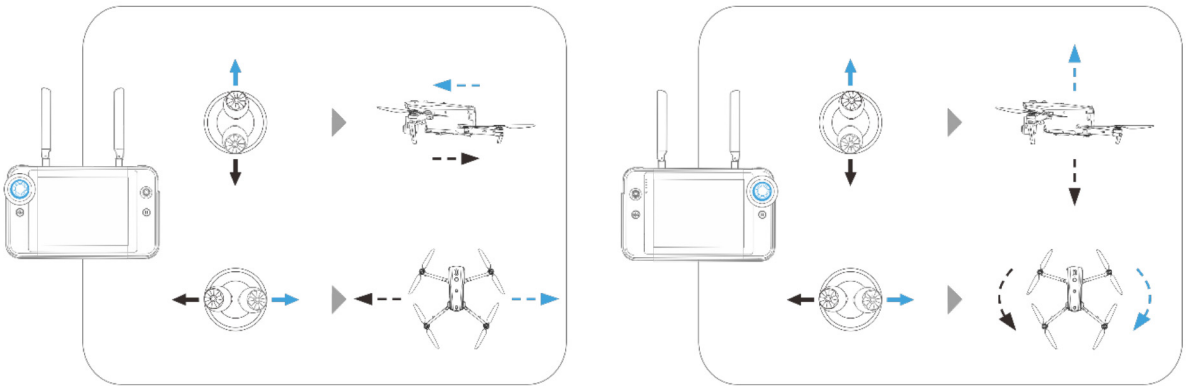


**Fig 4-15 Mode 3**

**Table 4-12 Mode 3 Details**

| Stick | Move Up/Down | Move Left/Right |
|---|---|---|
| Left Stick | Controls the forward and backward movement of the aircraft | Controls the left or right movement of the aircraft |
| Right Stick | Controls the ascent and descent of the aircraft | Controls the heading of the aircraft |

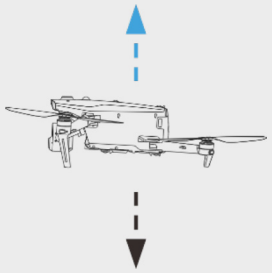
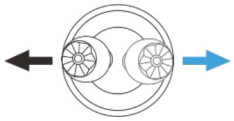
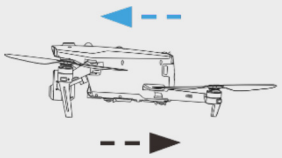
**⚠ Warning**

- Do not hand over the remote controller to people who have not learned how to use the remote controller.
- If you are operating the aircraft for the first time, please keep the force gentle when moving the sticks until you are familiar with the operation.
- The flight speed of the aircraft is proportional to the degree of the stick movement. When there are people or obstacles near the aircraft, please do not move the stick excessively.

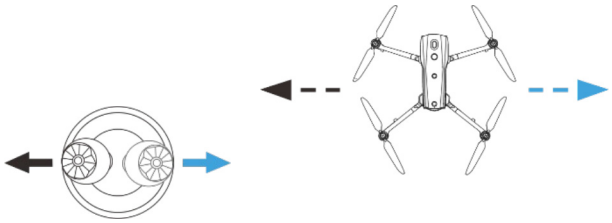
## 4.10.2 Setting Stick Mode

The default stick mode of the remote controller is "Mode 2". The detailed setting instructions are as follows. You can also refer to following steps to set other stick mode of the RC.

**Table 4-13 Default Control Mode (Mode 2)**

| Mode 2 | Aircraft Flight Status | Control Method |
|---|---|---|
| Left Command Stick Move Up or Down  |  | 1. The up-and-down direction of the left stick is the throttle stick, which is used to control the vertical lift of the aircraft.<br>2. Push the stick up, and the aircraft will rise vertically; pull the stick down, and the aircraft will descend vertically.<br>3. When the stick is returned to the center, the altitude of the aircraft remains unchanged.<br>4. When the aircraft takes off, please push the stick up to above the center, and the aircraft can lift off the ground. |
| Left Command Stick Move Left or Right  |  | 1. The left-and-right direction of the left stick is the yaw stick, which is used to control the heading of the aircraft.<br>2. Push the stick to the left, and the aircraft will rotate counterclockwise; push the stick to the right, and the aircraft will rotate clockwise.<br>3. When the stick is returned to the center, the rotational angular velocity of the aircraft is zero, and the aircraft does not rotate at this time.<br>4. The larger the degree of the stick movement, the greater the rotational angular velocity of the aircraft. |
| Right Stick Move Up or Down  |  | 1. The up-and-down direction of the right stick is the pitch stick, which is used to control the flight of the aircraft in the forward and backward directions.<br>2. Push the stick up, and the aircraft will tilt forward and fly towards the front of the nose; pull the stick down, and the aircraft will tilt backward and fly towards the tail of the aircraft.<br>3. When the stick is returned to the center, the aircraft remains horizontal in the forward and backward directions.<br>4. The larger the degree of the stick movement, the faster the flight speed of the aircraft, and the larger the tilt angle of the aircraft. |

Right Stick Move Left or Right



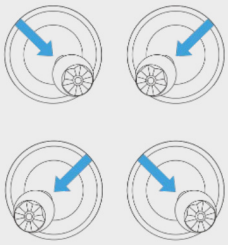
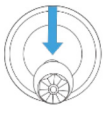
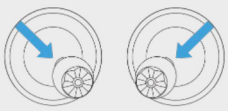
1. The left-and-right direction of the right stick is the roll stick, which is used to control the flight of the aircraft in the left and right directions.
2. Push the stick to the left, and the aircraft will tilt to the left and fly to the left of the nose; pull the stick to the right, and the aircraft will tilt to the right and fly to the right of the nose.
3. When the stick is returned to the center, the aircraft remains horizontal in the left and -right directions.
4. The larger the degree of the stick movement, the faster the flight speed of the aircraft, and the larger the tilt angle of the aircraft.

**Note**

- When controlling the aircraft for landing, pull the throttle stick down to its lowest position. In this case, the aircraft will descend to an altitude of 1.2 meter above the ground, and then it will perform an assisted landing and automatically descend slowly.

### 4.10.3 Starting/Stopping the Aircraft Motor

**Table 4-14 Start/Stop the Aircraft Motor**

| Process | Stick Operation | Description |
|---|---|---|
| Start the aircraft motor when the aircraft is powered on |  | Power on the aircraft, and the aircraft will automatically perform a self-check (for about 30 seconds). Then simultaneously pull the left and right sticks inward or outward for 2 seconds, as shown in the figure, to start the aircraft power motor. |
| Stop the aircraft motor when the aircraft is landing |  | When the aircraft is in landing state, pull the throttle stick down to its lowest position, as shown in the figure, and wait for the aircraft to land until the power motor stops. |
| |  | When the aircraft is in touch down state, simultaneously move the left and right |

sticks inward or outward, as shown in the figure, until the power motor stops.

**⚠ Warning**

- When the aircraft is taking off and landing, keep it away from people, vehicles, and other moving objects.
- In flight, the aircraft will initiate a forced landing in case of sensor anomalies or critically low battery level.

## 4.11 Remote Controller Keys

### 4.11.1 Custom Keys C1 and C2

You can customize the functions of the C1 and C2 custom keys according to your preferences. For detailed setting instructions, see "6.5 'Settings" Interface" in Chapter 6.

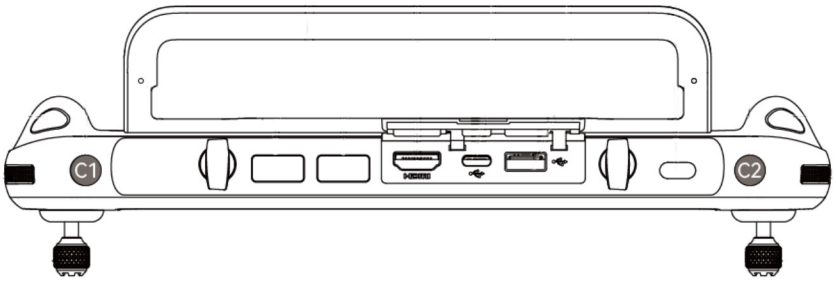



**Fig 4-16 Custom Keys C1 and C2**

**Table 4-15 C1 and C2 Customizable Settings**

| No. | Function | Description |
|---|---|---|
| 1 | Visual Obstacle Avoidance On/Off | Press to trigger: turn on/off the visual obstacle avoidance sensing system.<br>When this function is enabled, the aircraft will automatically hover when it detects obstacles in the field of view. |
| 2 | Gimbal Pitch Recenter/45°/Down | Press to trigger: switch the gimbal angle.<br>➢ Gimbal Pitch Recenter: The heading angle of the gimbal returns from the current position to be consistent with the heading of the aircraft nose, and the gimbal pitch angle returns to 0° direction from the current angle;<br>➢ Gimbal Pitch 45°: The heading angle of the gimbal returns from the current position to be consistent with the heading of the aircraft nose, and the gimbal pitch angle returns to 45° direction from the current angle; |

| | | |
|---|---|---|
| | | ➢ Gimbal Pitch Down: The heading angle of the gimbal returns from the current position to be consistent with the heading of the aircraft nose, and the gimbal pitch angle rotates to 90° direction from the current angle. |
| 3 | Map/Image Transmission | Press to trigger: switch between the map full screen display and camera full screen display. |
| 4 | Speed Mode | Press to trigger: switch the flight mode of the aircraft. For more information, see "3.9.2 Flight Modes" in Chapter 3. |

**⚠ Warning**

- When the speed mode of the aircraft is switched to "Ludicrous", the visual obstacle avoidance system cannot be turned on.

### 4.11.2 Take-off/Return-to-Home Button and Pause Button

**⚠ Warning**

- The auto-return function will only be enabled when the aircraft is in GNSS mode.
- If the obstacle avoidance system is disabled during a return flight, the aircraft will not be able to automatically avoid obstacles.
- Before using the auto-return function, you need to set the home point in advance in the flight application. For more information, see "6.5 'Settings" Interface" in Chapter 6. If the home point is not set, the aircraft will take the take-off point as the home point by default.

To manually activate the auto-return function, press and hold the take-off/return-to-home button "" on the remote controller for 2 seconds until the remote controller emits a "beep" sound. Upon receiving the command, the aircraft will automatically return and land at the preset home point.

When the aircraft is in the auto-return state, the remote controller will be disabled. You can short press the pause button "" until the remote controller emits a "beep" sound to pause the auto-return, or press and hold the pause button "" for 2 seconds until the remote controller emits a "beep" sound to exit the auto-return. After pausing or exiting the auto-return, you can reactivate the remote controller for controlling the aircraft.

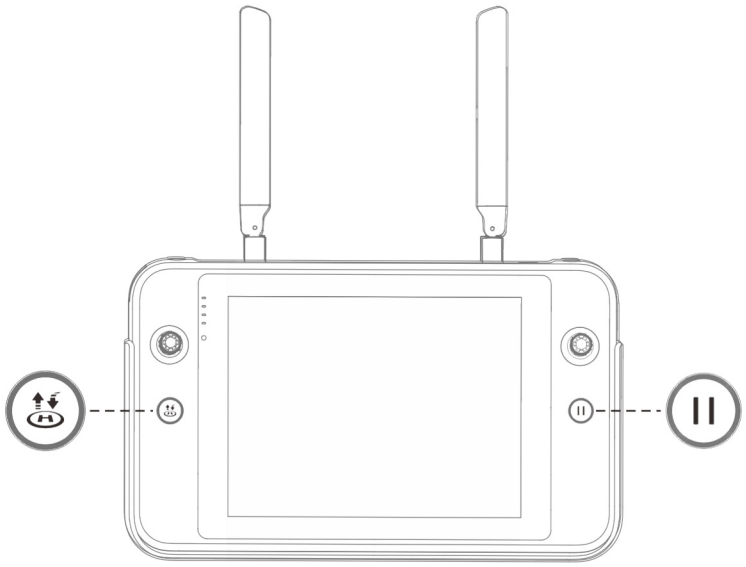


**Fig 4-17 Take-off/Return-to-Home Button and Pause Button**

| Tip |
| --- |
| ● When the aircraft pauses an auto-return, it will hover in place. To resume the auto-return, press the pause button "⏸" again until the remote controller emits a "beep" sound. |

| ⚠ Warning |
| --- |
| ● If the auto-return home point is not suitable for the aircraft to land (such as uneven ground and crowds), please exit the auto-return before the aircraft reaches the home point, and then manually resume control to land. |

## 4.12 Turning On/Off the Remote Controller Prompt Sound

In some scenarios, the remote controller will send a prompt sound, such as the screen lock sound, power-on sound and aircraft alert notification sound.

| Tip |
| --- |
| ● You can access the system settings app from the main interface of the remote controller, and then drag the volume slider in "Sound" to adjust the media volume and notification volume separately. |

## 4.13 Calibrating the Remote Controller Compass

If the flight application prompts "Compass calibration required for remote controller.", please calibrate the compass of the RC as follows:

1. Make sure the aircraft is powered on.
2. In the main interface of the flight application, tap "⊞" >"⚙">"🤖"->"Compass calibration of remote controller", and enter the calibration interface.
3. Tap "Start calibrating" button, hold the RC, and perform an 8-figure notion as shown in the picture on the interface until the RC emits calibration result sound. Then check the calibration result.

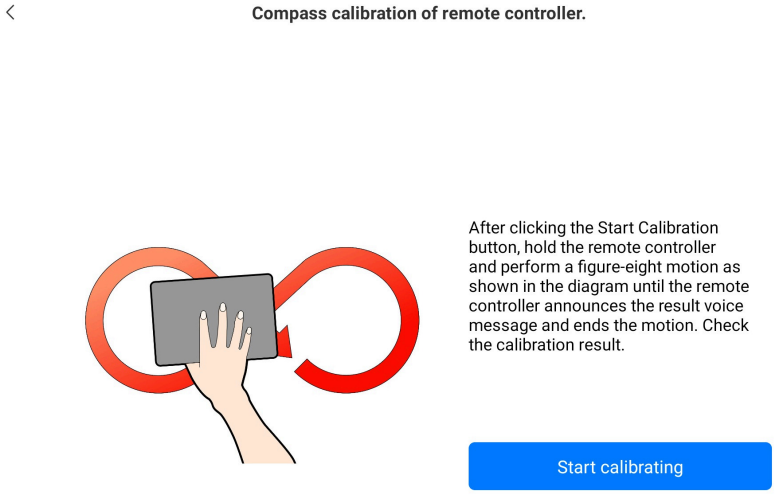



**Fig 4-18 Calibrate the RC compass**

## 4.14 Calibrating the Remote Controller

If the remote controller is abnormal, it is recommended to calibrate it, as shown below.

**Table 4-16 Calibrating the Remote Controller**

| Step | Operation | Diagram |
|---|---|---|
| 1 | Turn on the remote controller.<br>After entering the main interface of the flight application, tap "⊞" -> "⚙", -> "🤖" -> C Calibration" -> "Start calibrating". Follow the on-screen instructions to calibrate the remote controller. |  |

| | | |
|---|---|---|
| 2 | Calibration of the dials and command sticks: According to the instructions on the calibration interface, move the left and right dial wheels and the left and right sticks according to the directions shown in the figure and hold for 1 second. At this time, a beep will be heard, and the calibration direction icon will be changed from gray to dark blue, indicating that the orientation calibration was successful.<br>There is no order in which directions are calibrated, until all directions are calibrated, the remote controller calibration is done. |  |

## 4.15 HDMI Screen Output

The remote controller is equipped with an HDMI interface. The interface allows you to output the real-time screen of the remote controller to supported digital devices such as display screens.