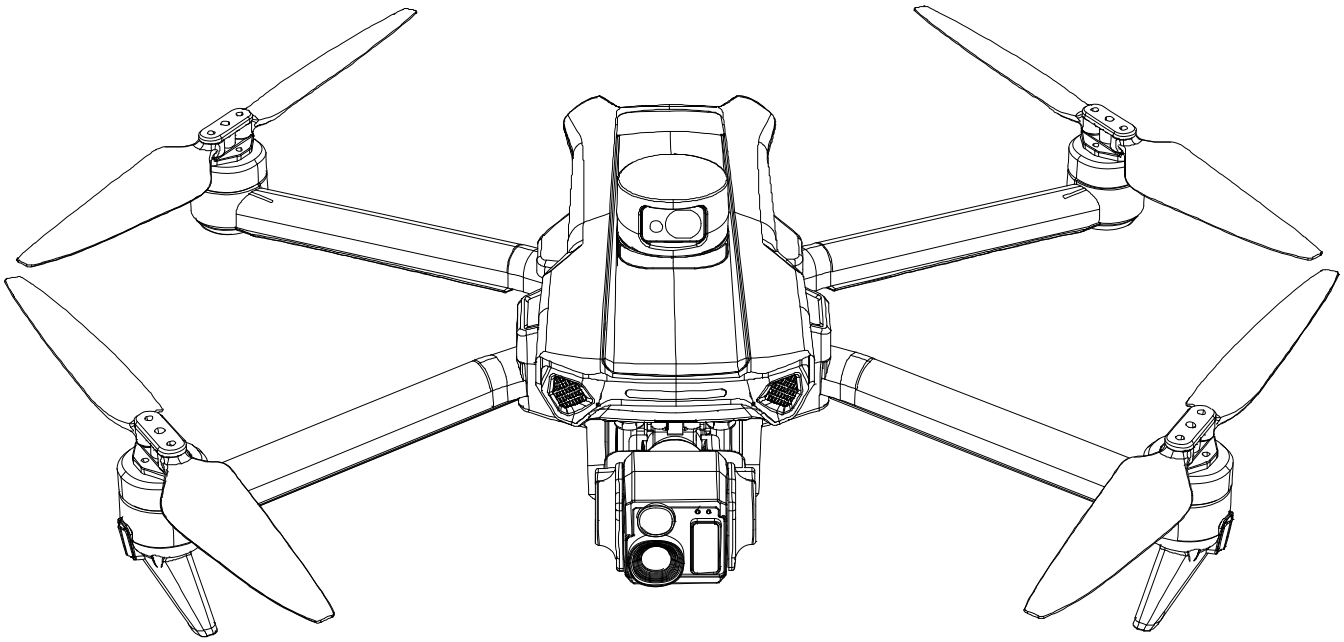
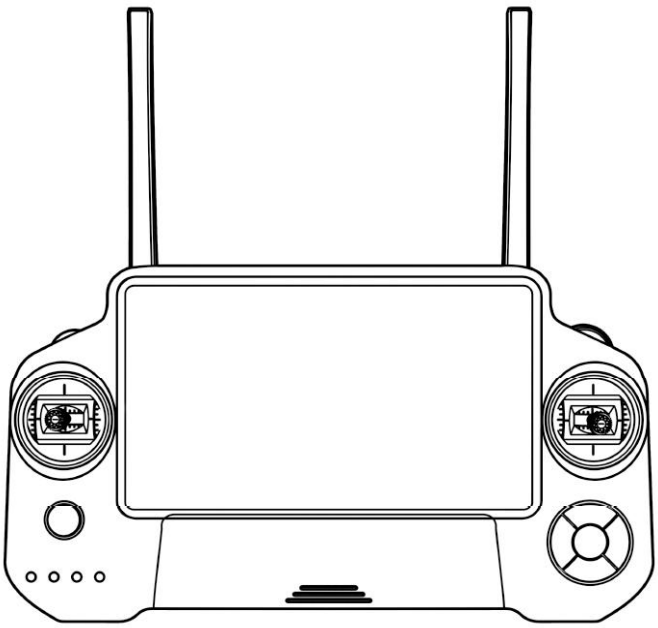
14+AGES

Control Screen Version

GPS 4-AXIS AEROCRAFT INSTRUCTION MANUAL





Before using, please read the instruction manual in its entirety
(note that for some sections of learning, please read in detail).
Keep this instruction manual for future reference.

⚠ Prohibition Notice

To ensure the requirements of the electromagnetic environment of the aeronautical radio station, it is prohibited to use all kinds of model remote controllers and drones within a range of 10 kilometers on each side of the centerline of the airport runway, as well as within 20 kilometers at each end of the runway and civil aviation air routes. During the period when the relevant national authorities issue radio control orders, the use of model remote controllers and drones should be stopped as required.

Disclaimer and Safety Information

To make it more convenient and secure for you to use this product, please carefully read all the contents of this manual before using the product and keep this manual for future reference.

Disclaimer

1. To protect the legitimate rights and interests of users, please carefully read the instructions, disclaimers, and safety notices provided with this product before use.
2. This product is not suitable for individuals under the age of 14. Individuals aged 14 and under must use it under the supervision and guidance of an adult with or without drone flying experience.
3. By starting to use this product, you are deemed to have read, understood, acknowledged, and accepted all the terms and content of the instructions, disclaimers, and safety notices of this product.
4. During the use of this product, please strictly comply with and implement the requirements including but not limited to those in the instructions and safety notices. For any personal injury, accidents, property damage, legal disputes, and any other adverse events causing conflicts of interests due to violation of safety notice instructions or unforeseeable factors during use, users are responsible for related liabilities and losses, and the company will not assume any responsibility.
5. The company will not be liable for any actions directly or indirectly resulting from the use of this product that violate legal regulations.

Safety Instructions

1. This product is not suitable for individuals under the age of 14 and others who do not have full capacity for civil conduct.
2. This product features high-speed rotating propellers and powerful flight power, which poses certain risks during operation. Please do not approach or touch the product while it is running.
3. When using this product, please stay away from dangerous environments such as airports, railways, highways, high-rise buildings, and power lines.
4. When using this product, please stay away from environments with high electromagnetic interference such as mobile phone base stations and high-power transmission equipment.
5. When using this product, please stay away from all manned aircraft.
6. Do not use this product in harsh environments such as rain, thunderstorms, sandstorms, fog, snow, strong winds, low temperatures, etc.
7. This product is not waterproof. Do not operate this product near water bodies.
8. When operating this product, always maintain a safe distance of about 10 meters between the drone and people or animals.
9. Always keep the drone within the operator's line of sight during flight.
10. Do not hover or fly the product over crowds, and do not use it to scare others.
11. Do not operate this product near children's play areas.
12. Do not use this product to chase or interfere with the normal operation of vehicles.
13. In non-emergency situations, do not turn off the motors while the product is flying.
14. Do not use this product under the influence of alcohol, fatigue, medication, physical discomfort, etc.
15. Before each use, inspect the product for components' firmness, cracks and wear on the body and propellers, battery level, effectiveness of indicators, etc. If any abnormalities are found, stop using it immediately and replace the corresponding parts.
16. An unmanned aircraft with abnormal operation may cause accidents. Do not start the propellers or fly in a forced manner.
17. Do not attempt to stop any moving parts of the product during operation.
18. Do not modify the product or use it for purposes other than its original design.
19. Do not operate this product in no-fly zones specified by laws and regulations.

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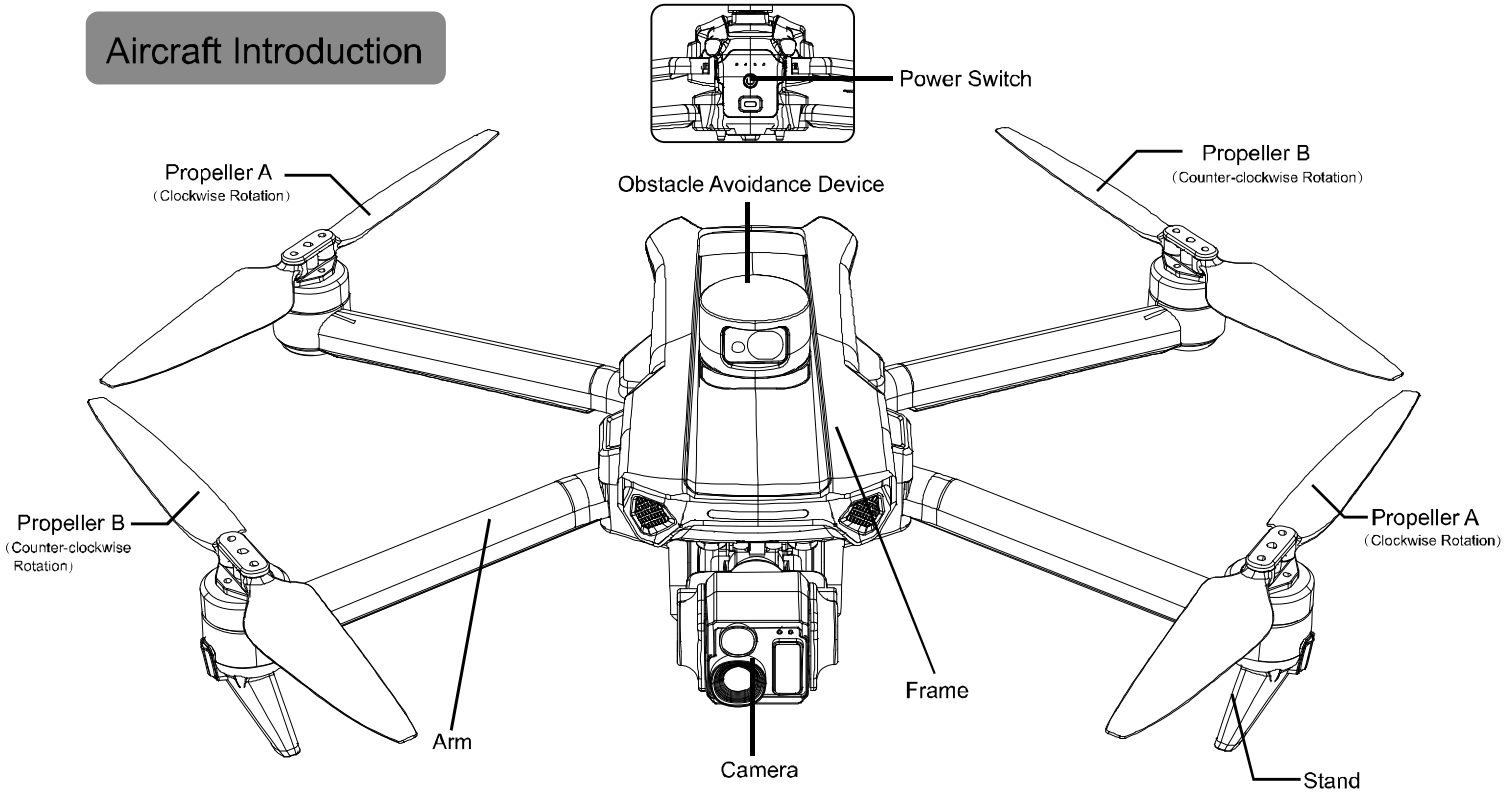
Product Introduction

Aircraft Introduction

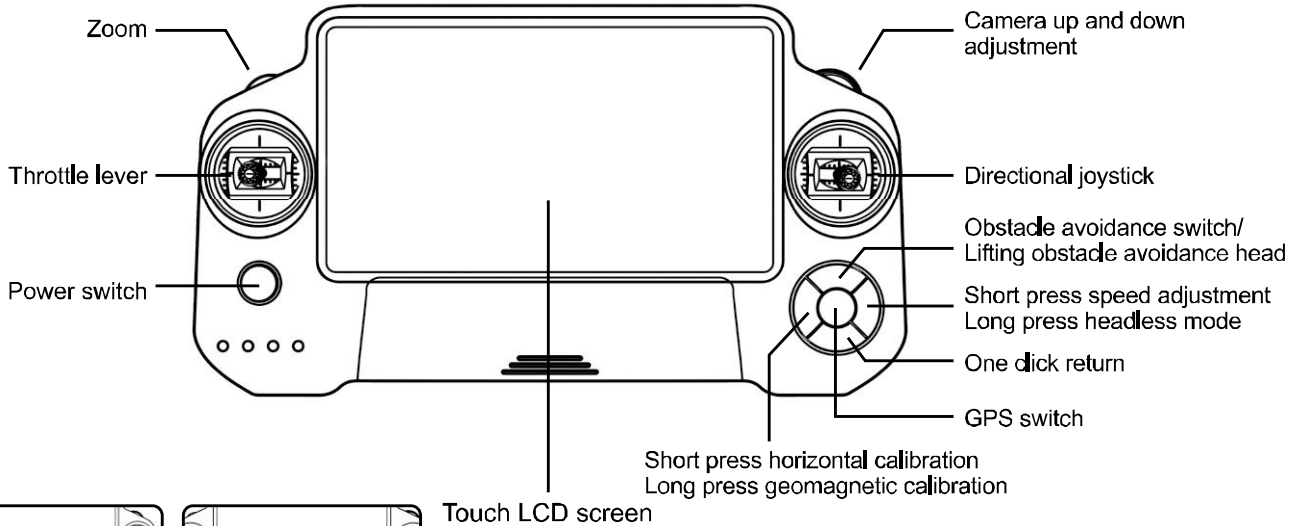


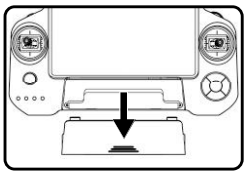
Note

When replacing the blades, ensure that each axis is installed with blade A/B consistently.

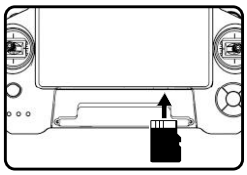
Note: Images are for reference only, please refer to the actual product.

Remote Control Introduction





1. Remove the remote control panel



2. Insert the memory card

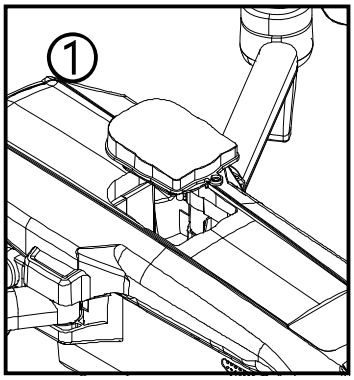
Low Battery Reminder: When the remote control's power drops below 7V, it will emit a "beep" low battery reminder sound, at which point the user needs to charge it promptly.

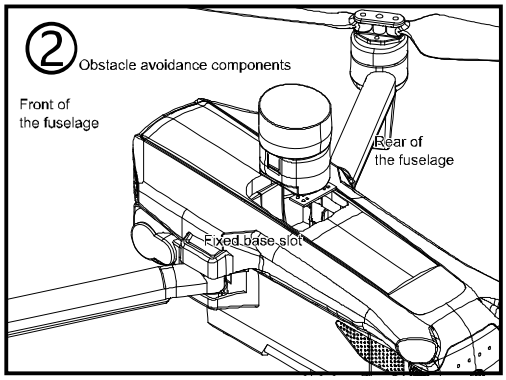
Installation Guide for External Obstacle Avoidance Components

Note: The built-in obstacle avoidance device will only be installed if this configuration is purchased. There are two types of obstacle avoidance heads: "external obstacle avoidance head" and "built-in lifting obstacle avoidance head"

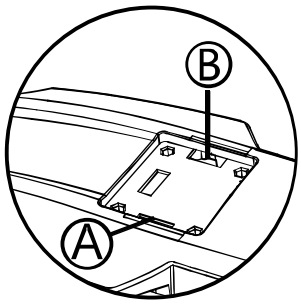
Obstacle avoidance function

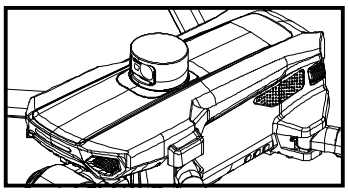
Obstacle avoidance technology, as a guarantee to increase the safety of drone flights, has been advancing rapidly with technological discoveries. During the flight process, drones collect information about the surrounding environment through their sensors, measure distances, and then make corresponding action commands to achieve the function of "obstacle avoidance."





Assembly diagram





Assembly completion diagram

Installation of obstacle avoidance components

1. Insert the signal plug wire (4PIN) of the obstacle avoidance head component into the left side Ⓐ seat of the body, making sure it is not inserted in the wrong direction;
2. Insert the steering plug wire (5PIN) of the obstacle avoidance head component into the right side Ⓑ seat of the base slot, making sure it is not inserted in the wrong direction;
3. Insert the component into the buckle inside the main body of the machine;
4. The obstacle avoidance device needs to work with the direction rod to operate the obstacle avoidance.

Obstacle avoidance operation method:

External obstacle avoidance: Press and hold the obstacle avoidance switch to activate the obstacle avoidance mode. When the obstacle avoidance mode is activated, the obstacle avoidance head will rotate according to the direction of the steering rod Release the steering lever, and the obstacle avoidance will automatically return to the correct position.

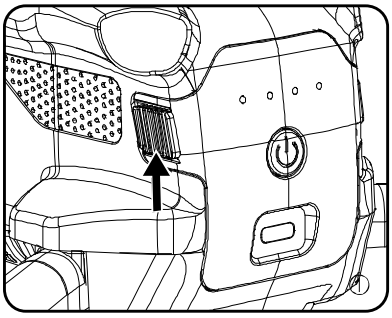
Built in lifting obstacle avoidance: Long press the obstacle avoidance switch, and the obstacle avoidance head will automatically rise. When the obstacle avoidance head rises, the obstacle avoidance mode will be turned on.Press and hold the obstacle avoidance switch again to turn off the obstacle avoidance mode

⚠ Note:

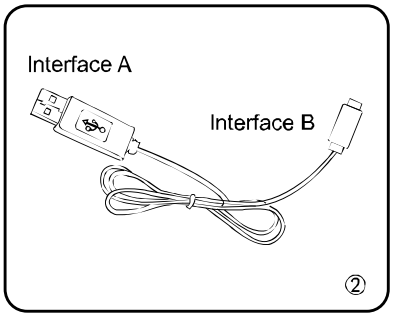
1. The obstacle avoidance system must be installed before powering on the aircraft, otherwise the obstacle avoidance function will be ineffective.
2. The obstacle avoidance function does not work when the aircraft is circling.
3. The obstacle avoidance function does not work when the aircraft is low on battery.
4. The obstacle avoidance function does not work when the aircraft is returning.

Charging and Battery Installation

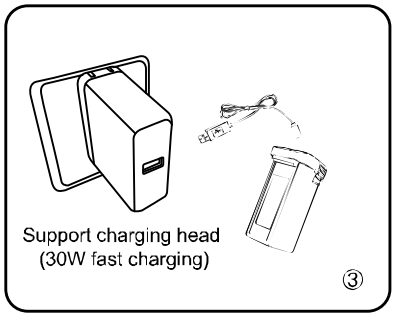
Aircraft Charging Instructions



1. Hold the handle and pull out the battery. (Refer to Figure 1)



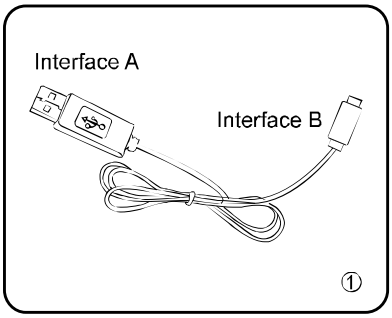
2. Connect the dedicated charging cable for charging. (Refer to Figure 2)



3. Insert the power adapter. (Refer to Figure 3)

As shown in the picture above, after disconnecting, connect the interface A to the charging head, plug in the smart battery and the light will light up once. When the smart battery is plugged in, the light will flash to indicate charging. After full charging, 4 lights will stay on. The charging time is about 180 minutes (using fast charging).

Remote Control Charging Instructions



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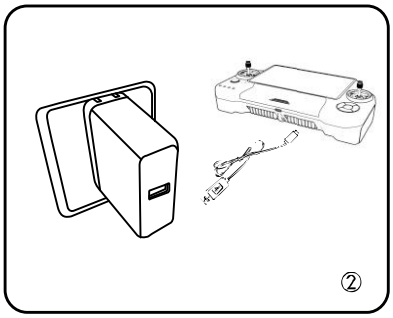


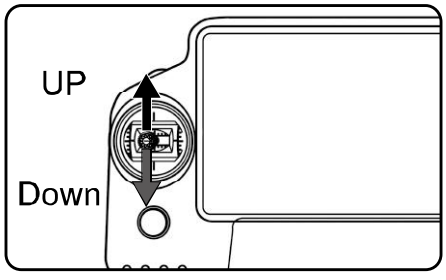
2. Insert the power adapter. (Refer to Figure 2)

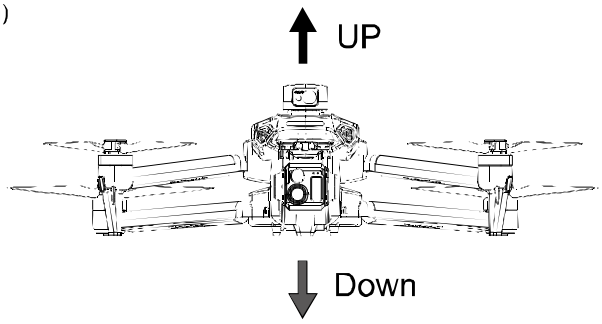
As shown in the picture above, after disconnecting, interface A is connected to the computer USB or mobile phone charger. At this time, the indicator light of the remote control lights up and flashes. If the light stays on, it means the remote control is fully charged; the charging time is about 240-300 minutes.

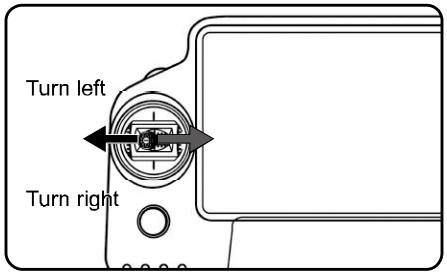
Function Introduction

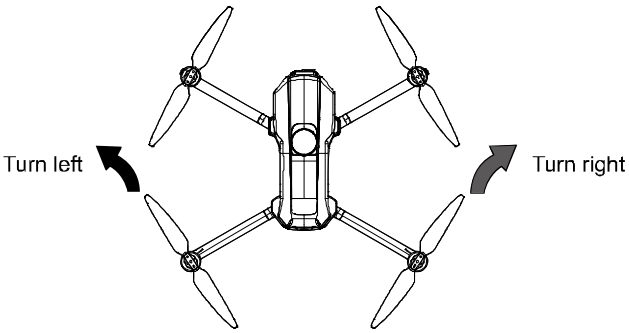
Joystick Introduction

1. Left (Throttle) Joystick
(The left joystick controls the flight's altitude and left-right direction)



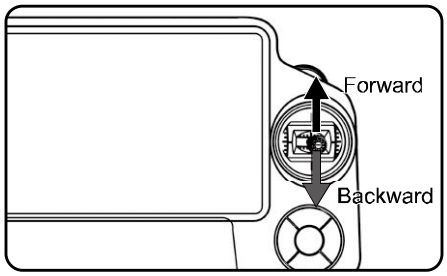


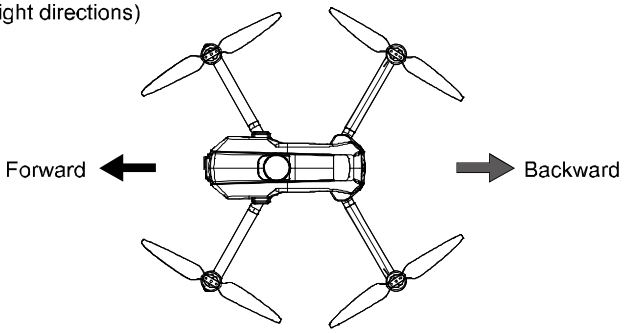


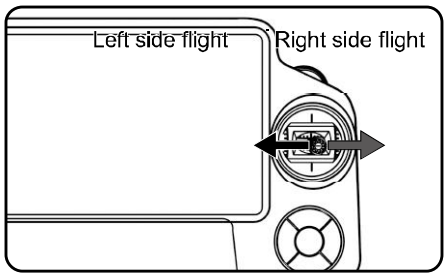


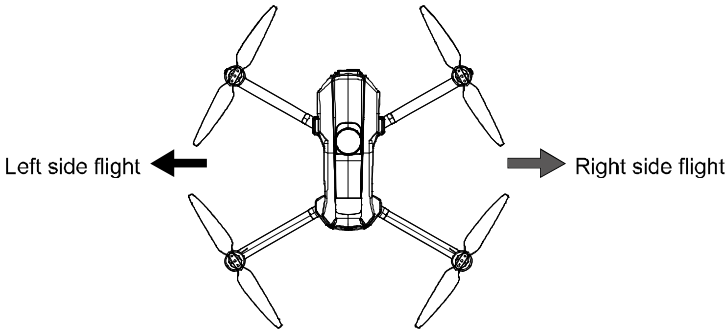
2. Right (direction) joystick

(The right joystick controls forward, backward, and left/right side flight directions)









GPS Fix Introduction

1. After the aircraft is successfully linked, it will take 1-3 minutes in an open and unobstructed environment. The two lights on the front of the aircraft are always on, and the lights on the back are on. The two lights flash slowly. When the last two lights turn solid, it means the GPS positioning is successful. At this time, press the two joysticks diagonally outward. Toggle the word "eight" to unlock the motor, the aircraft's blades will rotate slowly, and you can take off by pushing the throttle upward.
2. If the lights on the front and rear of the aircraft flash back and forth, it means that the current location is receiving signal interference and needs to be replaced. venue, or is not connected, you need to restart the aircraft and the remote controller to link again.
3. Press the GPS button, the remote controller will "beep" twice, entering indoor mode, and the two rear lights of the aircraft will flash slowly.

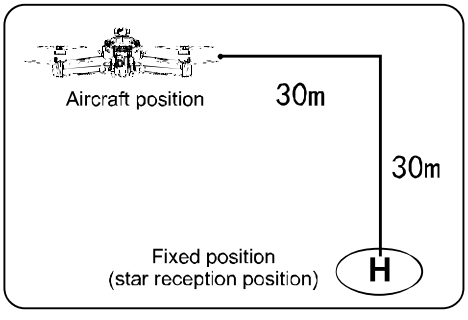
One-key Return

Three situations of one-click return:

1.Active Return: When one-click return is initiated, the remote controller will continuously emit "beep" sounds, and the aircraft will start returning to the takeoff point for landing. Approximately 10 seconds after the completion of one-key return, the remote controller will automatically stop the alarm sound.

2.Automatic Return: When the aircraft detects low first-level battery power, the rear red light of the aircraft will flash slowly. If the aircraft is flying below 30 meters from the ground, it will automatically ascend to a height of 30 meters from the ground and then return to the takeoff point within a radius of 20 meters and automatically descend to a height of approximately 20 meters from the ground.

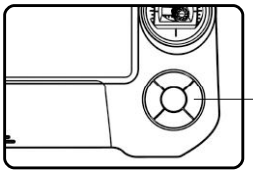
3.Forced Return: When the second-level low battery power is detected and the aircraft is below 30 meters from the ground, the aircraft will forcefully ascend to a height of 30 meters from the ground, then return to the airspace above the takeoff point and automatically land on the ground, stopping flight. (Note: During the forced return process, the remote controller cannot control the aircraft.)



Speed

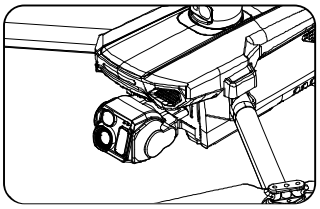
Short press the high and low speed switch button on the remote control to control the flight speed.

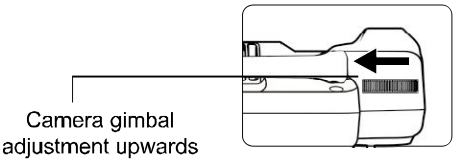
(One beep is the first gear, two beeps are the second gear, and three beeps are the third gear. The default setting is the slow gear when the computer is turned on)



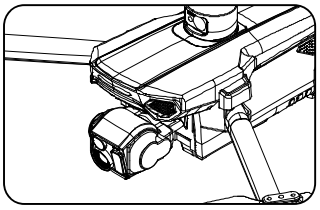
Camera gimbal adjustment

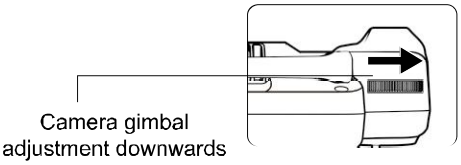
1. During flight, slide the camera gimbal control wheel on the remote control to the left to adjust the camera angle upwards.





2. During flight, slide the camera gimbal control wheel on the remote control to the right to adjust the camera angle downwards.

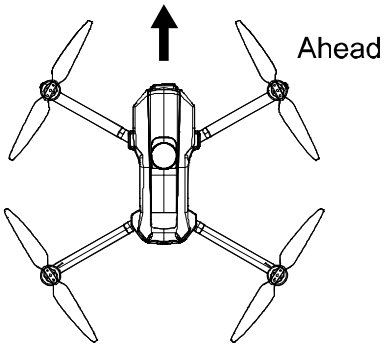




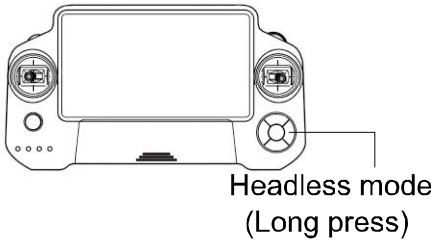
Note: After turning on the frequency, the camera will automatically calibrate. Remember not to manually adjust the camera!

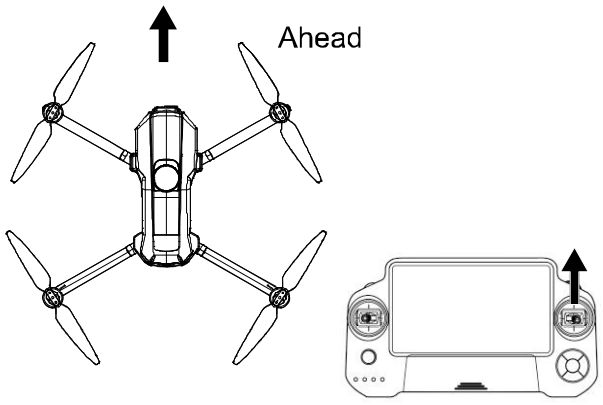
无头模式

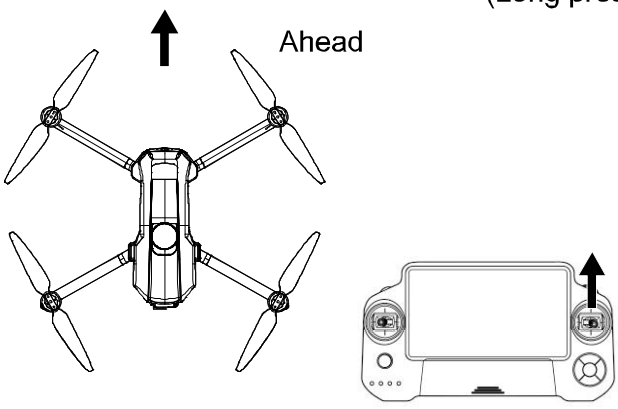
1. When you press and hold the headless mode button on the remote control, the antenna end of the remote control is in front of the heading, and the remote control emits a "beep" sound at the same time, indicating that the headless mode is turned on.

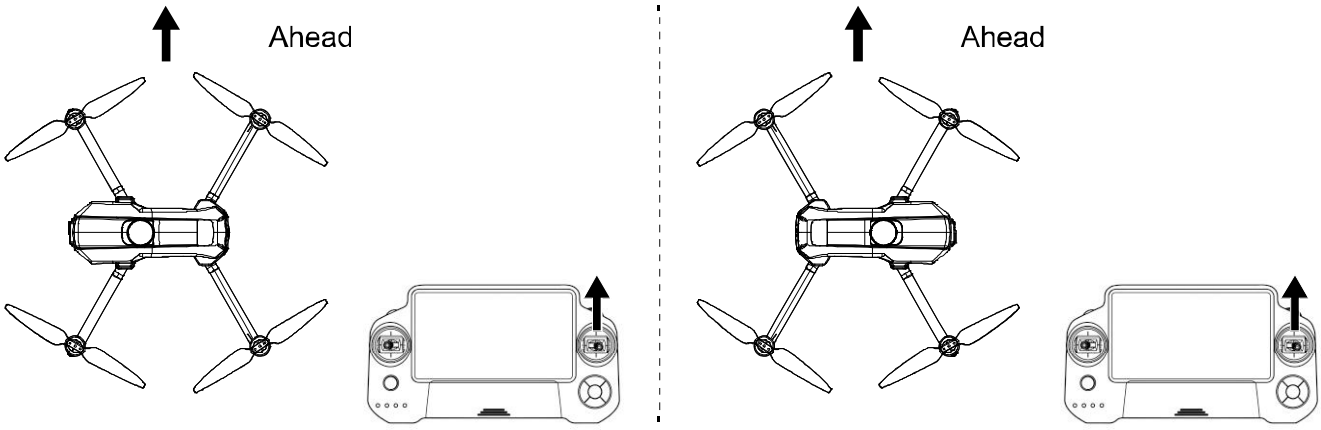


2. To exit the headless mode, press and hold the headless mode button again. The remote control will make a "beep" sound to exit the headless mode.



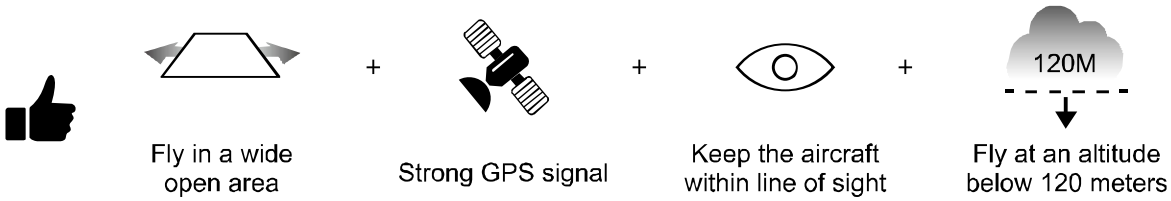






Safety Flight Guidelines

It is recommended to fly under the following conditions:

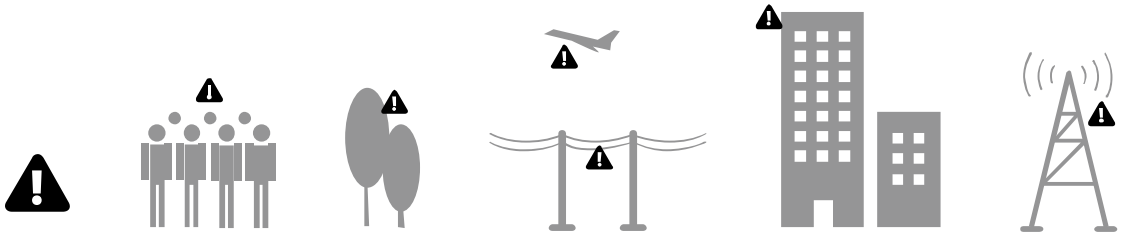


Fly in a wide open area

Strong GPS signal

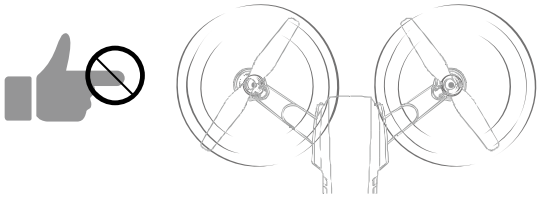
Keep the aircraft within line of sight

Fly at an altitude below 120 meters



It is recommended to avoid flying over or near crowds, trees, high-voltage power lines, buildings, airports or water bodies, as well as high-intensity power sources or base stations, as it may affect the compass on the aircraft.

Do not operate this product in adverse weather conditions such as rain, snow, fog, and wind speeds exceeding 10m/s or 22mph.



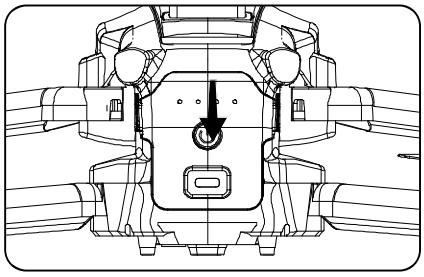
Stay away from rotating propellers and motors.

Prohibited to fly in areas where flying is not allowed.

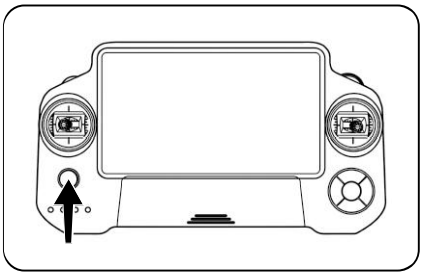
Understanding the safety guidelines is crucial for safe flight. Please read the safety guidelines carefully before flying.

Pre-flight Preparation

Frequency Pairing

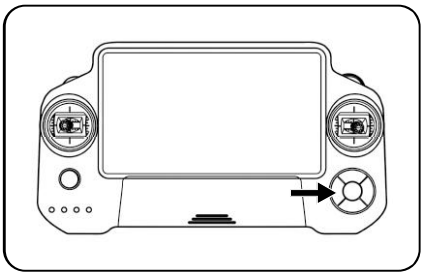


Long press the power button, all lights on the battery When it lights up, turn on the power of the aircraft.

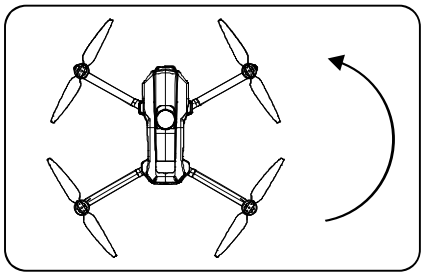


Short-press and then long-press the power switch of the remote controller until you hear two beeps. At this time, the power indicator light of the remote controller is always on, the front light of the aircraft is always on, and the rear light flashes slowly to indicate that the linking is completed. After successful linking, open the APP interface and the connection is successful.

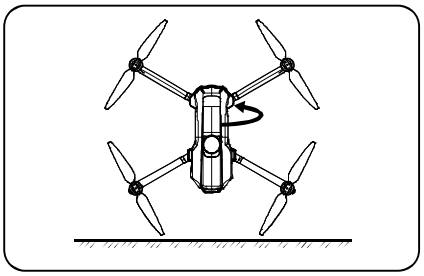
Calibrate the Magnetometer



Press and hold one button to correct the geomagnetic field. The remote control will make a beep sound and the front and rear lights will flash quickly.

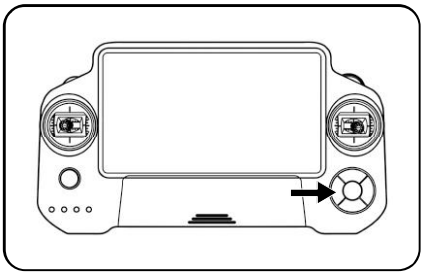


Hold the aircraft horizontally and rotate it counterclockwise until the remote control beeps, the front light flashes quickly and the rear light stays on.



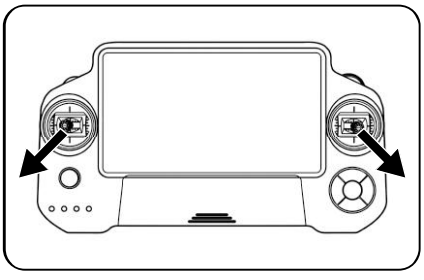
Rotate the body camera downwards and counterclockwise until the remote control beeps, the front light of the body is on and the rear light flashes slowly, indicating that the geomagnetic correction is successful.

Calibrate the Gyroscope



Press the one-key gyroscope calibration button briefly, the remote controller beeps once, the front and rear lights change from quick flashing to the front light staying on and the rear light flashing slowly, indicating successful gyroscope calibration.

Unlock

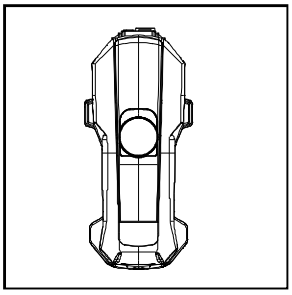


When the aircraft completes star collection, the LED light at the rear of the aircraft changes from slow flashing to bright, and the two joysticks are moved diagonally outward at the same time to unlock.

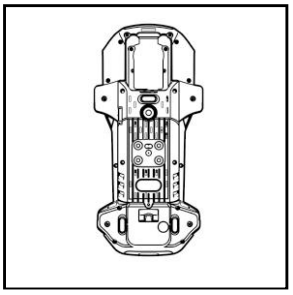
Special Reminder:

This product can be equipped with an airdrop configuration. The weight of the airdrop cannot exceed 300 grams, and it must be flown with a load in an open field and within the sight of no one. Our factory has nothing to do with any damage caused by overloading without permission!

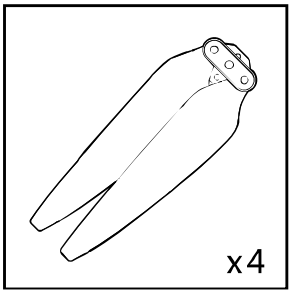
Components Diagram



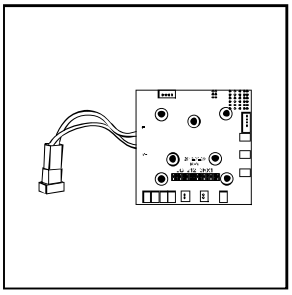
01. Nose cone



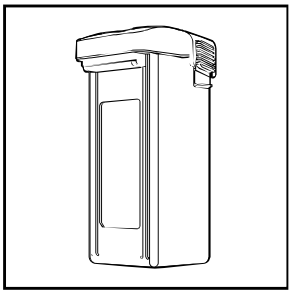
02. Bottom cover



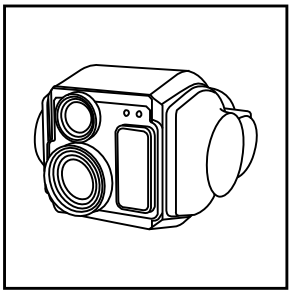
03. Propeller



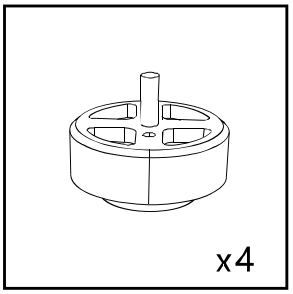
04. Receiver board



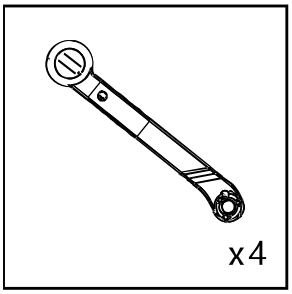
05. Lithium battery



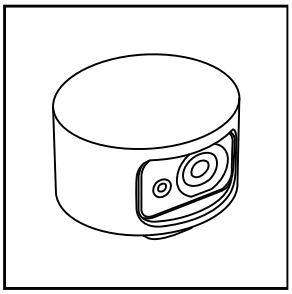
06. Camera



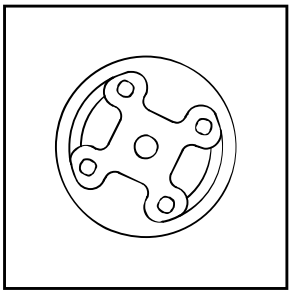
07. Brushless motor



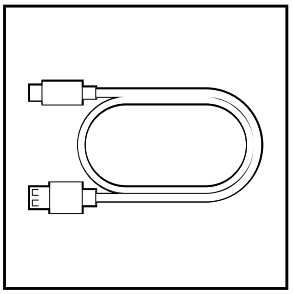
08. Shaft



09. Obstacle avoidance sensor



10. Motor cover



11. USB charging cable

DRONE

APP User Manual

User Guide

- Beginner's Guide
- Instruction
- Control Interface

1. Introduction to the Control Interface
2. Explanation of Control Interface Functions
3. Gesture Recognition Function

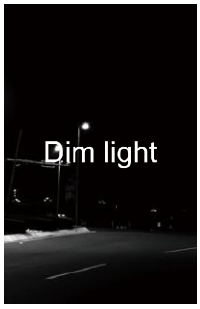
Connect the remote control

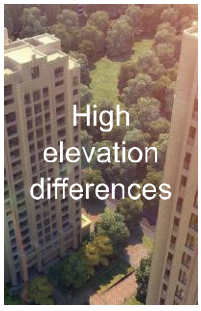
Turn on the remote control, switch on the aircraft power, wait for 1-2 minutes, the remote control LED light flashes slowly;At this time, waiting for the aircraft to synchronize frequencies, once synchronized, the remote control LED stays on.

Friendly Reminder

Only one mobile APP is allowed to connect to an aircraft at the same time!

Note: When the aircraft is in the following environments, the downward optical flow positioning hover effect is poor, which will cause the aircraft to have difficulty flying smoothly, resulting in body shaking.





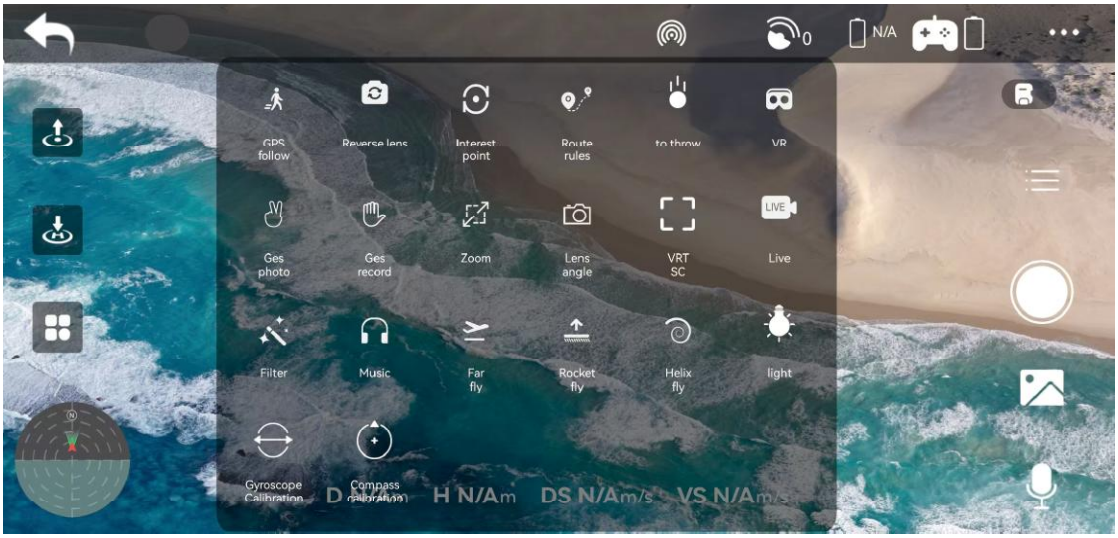
Beginner's Guide

Guidance Instructions

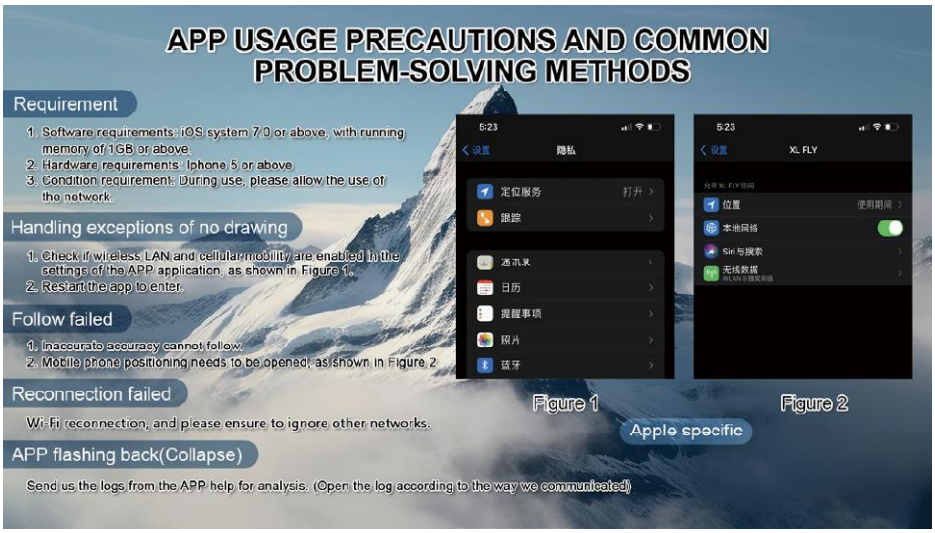
Click on the right  Enter the guidance instructions interface

Instruction Guide

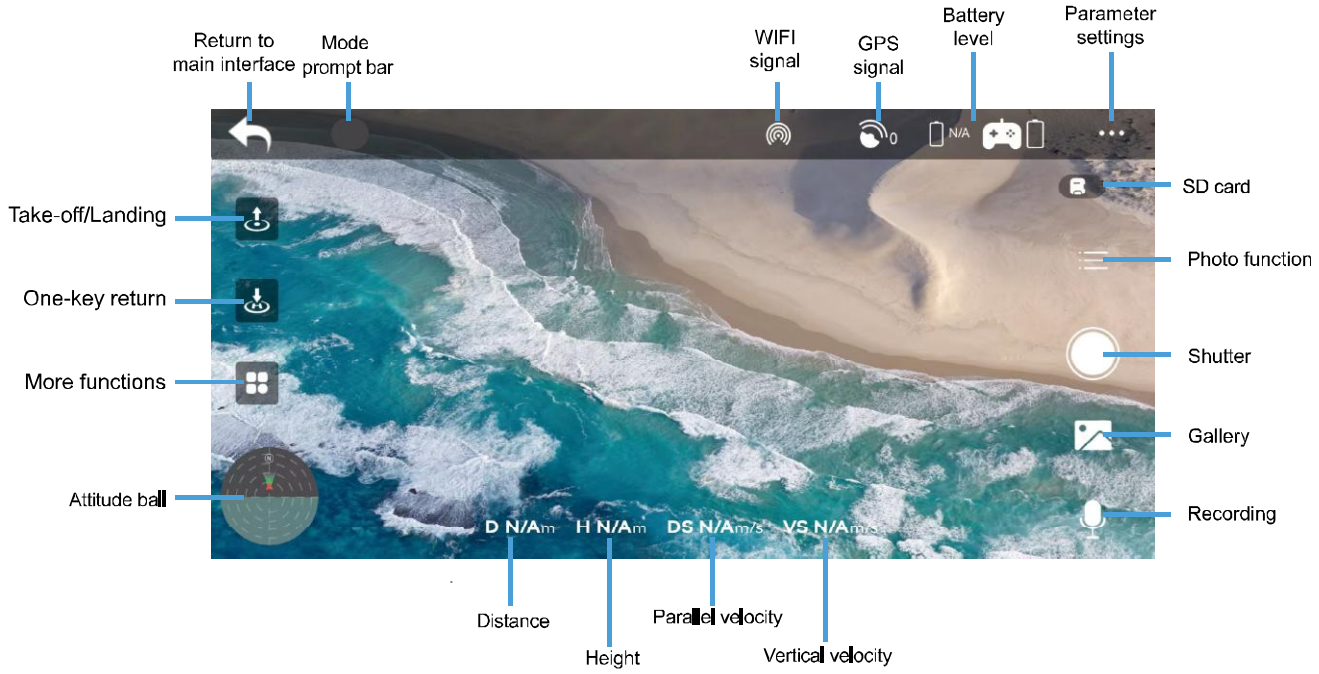
Guide Summary 2



App Usage Notes



1.1 Control Interface Overview



1.2.1 Control Interface Function Description

Return to main interface: Return to the main interface of the APP.

Mode prompt bar: Prompt the current flight status (in which mode of flight)

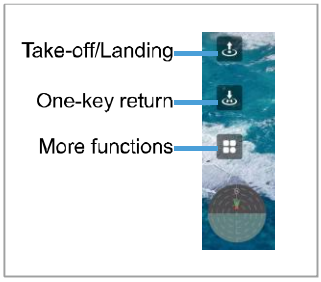
WIFI Signal: Indicates the signal of WIFI connection.

GPS Signal: Indicates the current flight mode and the number of satellites: Flashing indicates the current optical flow fixed point mode, without return, follow, orbit, and point-to-fly functions.Constantly on indicates the current GPS mode. Indicates the height, distance, and corresponding latitude and longitude of the current aircraft from the return point.

Battery Level: The battery status of the aircraft.
(1) 2-4 bars indicate normal battery level, in GPS mode, return, follow, orbit, and point-to-fly functions can be operated normally.
(2) 1 bar indicates the aircraft is in low battery status, the aircraft will execute automatic return function; there are no follow, orbit, and point-to-fly functions in low battery status.

Parameter Settings: Open or close the parameter settings dialog.

1.2.2 Operation Interface Function Description



Take-off/Landing: Click after unlocking to achieve one-click takeoff or one-click landing.

One-key return: In GPS mode, click to achieve One-key return.

More Functions: Click to open more functions.

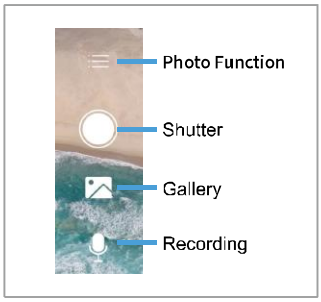


Photo Function: Click the button to select the photo function, video recording function, time-lapse shooting, or panoramic shooting.

Shutter: Click the button to start or stop taking photos or recording videos.

Gallery: Click the button to view the captured content.

1.2.3 Operation Interface Function Description

GPS Follow: In GPS mode, click this button and the aircraft will follow the phone in flight.

Reverse lens: When turned on, reverse the camera.

Interest point: In GPS mode, set any point on the map and the aircraft will orbit around the position obtained on the map.

Route rules: In GPS mode, the aircraft will fly according to the selected route on the map.

To throw: After pressing, you can unlock the lock of the drone and drop the items you need to drop.

VR : After opening, enter or exit the VR function.

Ges photo: Click the button, face the front camera lens, make a palm gesture to trigger the automatic photography function of the aircraft. Gesture recording: Click the button, face the front camera lens, make an OK gesture to trigger the automatic recording function of the aircraft.

Zoom: When turned on, you can adjust the zoom factor of the lens view by adjusting the slider on the right. After enlarging the view, slide your finger on the screen to move the visible range of the view.

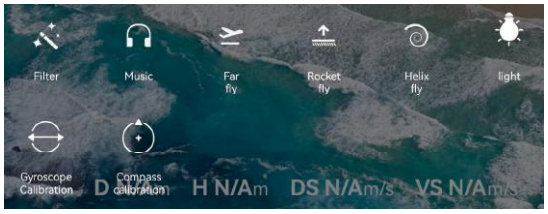
Lens angle: The angle of the lens servo can be adjusted.

VRT SC: After opening, it can switch to vertical screen aerial photography mode.

Live: After opening, you can activate the live streaming function.

In case of an emergency, immediately interrupt the flight with the remote control!

1.2.4 Operation Interface Function Description



Filter: After opening, you can adjust your favorite filter according to your needs.

Music: After opening, add music. When recording a video, you can also add background music.

Far fly: After opening, the aircraft will move diagonally back about 25 meters away from the target, paying attention to the space behind to avoid injury!

Rocket fly: After opening, the aircraft will automatically ascend by about 15 meters. Pay attention to obstacles above to avoid injury!

Helix fly: After opening, the aircraft will automatically spiral upwards (with a maximum radius of about 15 meters), pay attention to the surrounding environment to avoid injury!

Light: After entering the lighting settings, there are various adjustable lighting effects that can be adjusted according to personal preferences for the drone lighting.

Gyroscope calibration: Horizontal calibration.

Compass calibration: Geomagnetic calibration.

In case of an emergency, immediately interrupt the flight with the remote control!

1.2.4 Operation Interface Function Description

Joystick:

The left joystick controls the aircraft to go up, down, turn left, and turn right;
The right joystick controls the aircraft to go forward, backward, left, and right.

Share

Click on the left side of the screen in the control page After clicking the button, enter the album interface. When clicking to view photos or videos, users can do so through the upper right corner

Share photos or videos to major social media platforms.

1.3 Gesture Recognition

Facing the front lens of the camera, the following gestures can be triggered to trigger the automatic camera orcamera function of the aircraft:

Take Photos by Gestures About 2m in front of the camera of the aircraft, hold the ges-ture with one hand flat. After the aircraft successfully recognized the gesture,the countdown of 3 sec-onds began to take photos;

Shoot Videos by Gestures About 2 meters in front of the aircraft lens, After the aircraft has successfully recognized the gesture,the video will start. When the gesture isrecognized again, end the recording (the time difference between two recogni- tion should bemore than 3 seconds);

* Special Instructions

To ensure that the lens gets a higher recognition rate :

1.Please aim the lens face to face;

2.Please fly in a good light environment;

3.Please conduct gesture recognition operation at a distance of about 2m from the lens.

In the following cases,it will result in a low lens recognition rate :

1.Weak light or backlight;

2.The WiFi signal is weak or the signal is disturbed.

Tips:

1. Noise

The noise measurement results of the rotary wing unmanned aerial vehicle of this product at hovering and typical flight speeds, normalized to takeoff A-weighted sound pressure level at a distance of 1 meter. The frequency range for noise testing is 20Hz to 20000Hz. During testing under flight conditions The speed of the unmanned aerial vehicle is 3m/s.

2. Lighting

The lighting purpose of this product is to distinguish the direction of the front and rear arm lights.

The front arm light is (green) straight ahead.

The rear arm light is (blue) directly behind in GPS mode and (red) directly behind in indoor mode.

Lamp language interpretation: None.

The lighting of our products is only used for decoration and beautification, as well as for identifying the direction of unmanned aerial vehicles.

FCC Warning

This device 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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment 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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.