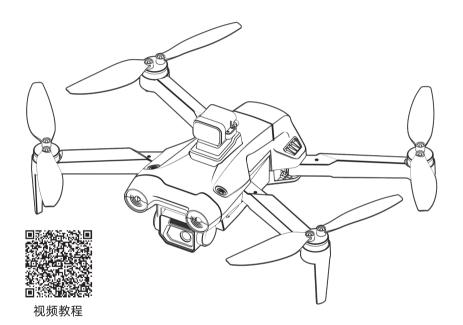
GP5避障航拍无人机

使用说明书



安全防范:

- 1.为保证航空无线电台(站)电磁环境的要求:禁止在以机场跑道中心点为圆心、半径5000M的区域内使用各类模型遥控器。在国家有关部门发布无线电管制命令的期间、区域区,应按要求停止使用模型遥控器。选择温暖晴朗无风的天气飞行,切勿在过热、过冷、强风、暴雨等恶劣天气条件下飞行;选择室内或户外空旷地方,并与人、宠物、空架电线及其他障碍物保持安全距离,确认无其他使用相同频率;不能让飞机离开视线;
- 2.飞行器发动后,请不要接触飞行器的高速旋转部分与高速旋转的螺旋桨保持距离,以免发生绞伤危险。(包括齿轮、旋翼等)。
- 3.飞行器使用中和使用后, 电池及电机将会产生高温, 请勿触摸, 以免发生烫伤的危险。
- 4.请勿直视发光二极管的光束,以免影响眼睛。

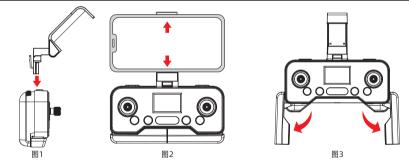
温馨提示:建议初学者在空旷无人的地方低空练习飞行3天左右,

熟悉飞行后再向高空飞行

遥控器功能键及名称说明:

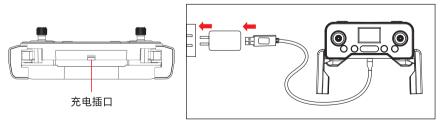


遥控器手把/手机架使用说明:



手机架:将手机架装入遥控器(图1),向上拉伸可放置手机(图2)。 遥控器手把:将遥控器底部手把从中间位置向下拉,旋转至到位。

遥控器充电使用说明:



将充电线充电插头插入遥控器充电插口,然后将USB充电器插头连接电脑或手机充电器充电,充电时绿色充电指示灯亮起,充满电后指示灯熄灭。(充电时间40分钟左右)

注意:如果充电时充电指示灯没有变化时,这表明电池为满电,不需要再充电。

预飞行准备

飞行环境







室内: 宽敞的空间远离障碍, 人群或宠物 是首选。







请在飞行期间将无人机保持在视线范围内, 并远离障碍物, 高压电缆, 树木和人员。







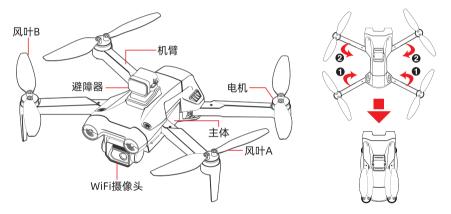
户外: 晴朗, 风和晴朗天气是首选。







不要在极端的环境中飞行,如炎热,寒冷, 强风或暴雨。



叶片更换事官

- 1.将要更换的风叶必须对应机上相对的位置更换。风叶A需安装在A的位置上,风叶B需安装 在B的位置上,如更换风叶错误将无法操控。
- 2.飞行时风叶A往顺时针方向转动,风叶B往逆时针方向转动。

1.重要说明

本产品不是玩具。错误的使用会造成的损害。

请在使用此产品前请按照说明书使用。不要自己拆卸此产品。否则,造成任何损伤制造商不负责。

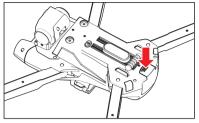
2.安全说明

警告:要在安全的区域内或远离他人飞行。不要在密集人群上方操控飞行器,遥控飞行器飞行时由于 飞行员操作过程中操作错误或无线干扰,很容易发生事故、故障,容易对人群造成损害或伤害。

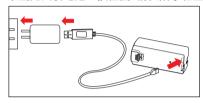
禁止:特别室内和室外飞行时,请远离障碍物此产品适合室内和室外飞行(风级不超过4级),请选 择一个,没有障碍物、人群和宠物。路人的地方,例如,加热源、热源、电线或电子电源不会 受到碰撞着陆,纠缠,导致的火灾、触电和造成的生命和财产损失的地方。

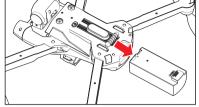
警告:请一位飞行经验丰富的飞行员帮助产品主要适合14岁以上,在开始学习时有一定的难度, 建议 请一位飞行经验丰富的飞行员指导。

无人机锂电池充电使用说明:



取出无人机电池:按住图1箭头所示位置,向后拉取出电池。





电池充电步骤:

USB安卓头插入电池,将USB充电器插头连接电脑或手机充电器充电,充电时电池指示灯长高,充满电后指示灯熄灭。

(充电时间360分钟左右)

注意:如果电池插到充电器上,电池上指示灯没有长亮,不需要再充电。

飞行前环境要求:

请选择空旷的室内或无雨雪、风力小于4级的室外环境飞行,飞行时请远离人群、树木、电线、高大建筑物、机场和信号发射塔等。

无人机飞行教程:

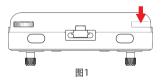
室内模式教程:

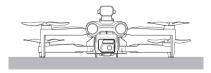
1.无人机对频

将无人机电池按照正确方向装入无人机电池槽,将无人机放在水平地面上并打开电源,再打开遥控器电源,此时遥控器"Di"一声表示对频成功。

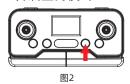
2.陀螺仪校准操作

将无人机放在水平位置,按遥控器上"陀螺仪校准"按键(图示1),无人机灯光快闪变长亮,同时遥控器发出"Di"一声,表示校准成功。





3.开启室内模式



长按GPS开关按键3秒 (图示2) , 遥控器 "滴滴"二声, 遥控器上室内模式指示灯亮表示开启室内模式。

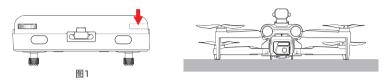
室外模式教程:

1.无人机对频

将无人机电池按照正确方向装入无人机电池槽,将无人机放在水平地面上并打开电源,再打开 遥控器电源,此时遥控器"Di"一声表示对频成功。

2. 陀螺仪校准操作

将无人机放在水平位置,按遥控器上"陀螺仪校准"按键(图示1),无人机灯光快闪变长亮,同时遥控器发出"Di"一声,表示校准成功。



3.校准地磁操作

地磁容易受到其他电子设备干扰,将导致数据异常影响飞行,首次使用,必须进行地磁校准, 根据下面的步骤校准地磁:

短按遥控器(图示2)按键后,遥控器发出"Di"一声,无人机指示灯变为快闪,此时就可以 校准。

把无人机拿在手上,按(图示3)水平方向顺时针缓慢转动3圈,遥控器发出"Di"一声,表示水平校准成功。此时可以进行(图示4)垂直方向,机头向下顺时针缓慢转动3圈,遥控器发出"DiDi"二声表示校准成功。



4.搜索GPS信号:

地磁校准完成后,把飞行器放在水平面上,飞行器将自动搜星,飞行器指示灯由后灯慢闪变成长亮,遥控器上室外模式指示灯长亮,表示搜星成功,此时短按遥控器"解锁按键"(图示5)可以飞行。

特别提示:

- 1.请确保起飞环境为室外空旷场合,起飞前卫星信号大于9颗星。
- 3.每个地区经纬度不同,新客户必须校准一次,比如广东和北京相差28度,所以不校准表现为前进后退不是直线飞行,校准是为了气压计测量高度的准确。

图5

基础飞行:

基础飞行步骤:

- 1.遥控器与无人机对码,无人机完成初始化。
- 2.地磁校准。(同一地点不用再次校准)
- 3.手机Wi-Fi链接手机,打开手机APP。
- 4.飞行器校准完成后,等待收星,一般60-80秒(9颗星以上)才可解锁飞行。

操控方法:





当左操纵杆(油门)向上推,主风叶转速增大, 飞行器升高。

当左操纵杆(油门)向下推, 主风叶转速减慢, 飞行器下降。





当左操纵杆(方向舵)向左推,飞行器机头向 左转,向右推,飞行器机头向右转。





当右操纵杆(方向舵)向上推,飞行器向前进。 当右操纵杆(方向舵)向下推,飞行器向后退。





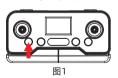
当右操纵杆(方向舵)向右推,飞行器向右侧 飞行。

当右操纵杆(方向舵)向左推*,*飞行器向左侧 飞行。

警 当无人机在离地面30cm的位置,无人机会受到自身桨叶涡流的影响而变得不稳定, 告 这就叫"地效反应",当无人机高度越低时,地效反应的影响越大。

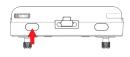
遥控功能操作介绍:

1.无人机解锁



当无人机在室外搜星成功,无人机启动需要解锁,短按遥控器 "解锁"按键(图示1),此时四个螺旋桨同时均速转动,表示解 锁成功,当解锁完成,无人机就可以正常操作飞行。

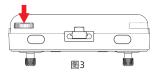
2.速度档位调节

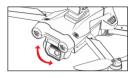


无人机起飞速度档位默认慢档,当无人机在空中飞行时候,可通过快慢速度档位调节速度(图示2),短按一下速度按键,遥控器"滴滴"两声表示进入二档,再短按一下速度按键,遥控器"滴"一声则返回低速档。

图2

3.摄像头角度调节





无人机飞行过程中可通过摄像 头调节旋钮(图示3)调节摄像 头的角度。旋钮左转摄像头角 度升高,旋钮右转摄像头角度 降低。

4.一键返航

室外开启GPS功能并搜星校准起飞后,飞行较远或者无人机低电状态,按一键返航按键,无人机会返航回初始起飞的位置。

返航:

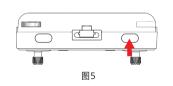
飞行器有三种不同的返航方式,分别为: 一键返航、失控返航 、低电量返航。

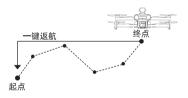
返航点:

起飞或飞行过程中, GPS首次收到9颗星以上时, 将记录为飞行器当前位置为返航点。

一键返航:

当GPS信号良好(卫星颗数大于9),可通过按遥控器的"一键返航"按键,启动飞行器返航, 其返航过程与失控返航一致,区别在于飞行器返航降落时,用户可通过摇杆控制飞行器以躲避 障碍物,再按遥控器的"一键返航"按键可退出返航,用户可重新获得控制权。





失控返航:

当GPS信号良好(卫星颗数大于9),指南针工作正常,且飞行器成功记录返航点后,如遥控信号持续中断超过6秒,飞控系统将接管飞行器控制权,控制飞行器飞回到记录的返航点。如果在飞行过程中,遥控信号恢复,返航过程扔将继续,但用户可通过遥控器返航键取消返航,夺回飞行器控制权。

<u>介</u> 返航注意事项:

- 1.自动返航过程中,飞行器无法躲避障碍物。
- 2.当GPS信号欠佳或GPS不工作时,无法返航。
- 3.如果飞行器没有收到卫星,同时遥控器信号又持续中断超过6秒,飞行器将不能返航,为慢慢 下降,直到着陆上锁。

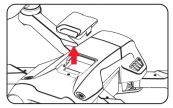
低电返航:

飞行器低电压指示灯会慢闪,此时飞行器会自动返回起飞30米附近(低电后飞行器返回起飞点 附近,飞行器的高度和距离会被限制在30米内)

飞行器电压低于安全值将自动降落至返航点。

<u>八</u> 温馨提示:飞行器处于低电返航状态,遥控器无法取消返航。

避障设备安装及使用注意事项:



1.取出避障设备安装位置盖板



2.如图所示先插上避障设备插头,然后再将 避障设备装入无人机。

X-·

避障模式 (购买避障版本才有避障功能) 避障功能注意事项:

- 1.请在开机前安装好避障头;
- 2.避障距离1米左右,感应到有障碍物时遥控器会滴滴响;
- 3.使用避障功能时请在室内或没有阳光的室外飞行 (太阳光对避障功能有干扰)

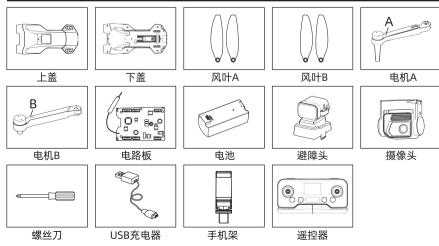


请确保正确安装,安装错误将导致不能正常飞行

常见问题解决指引:

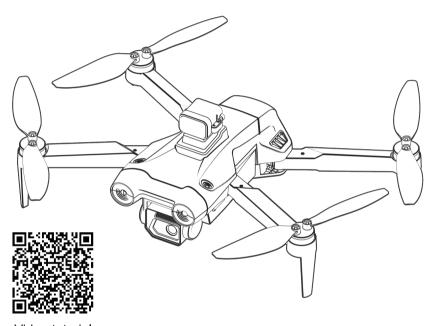
问题	解决方法
飞行器通电后,指示灯一直 持续快速闪烁	飞行器处于陀螺仪检测状态,请将飞行器放在静止的平面上 或地面上
飞行器起飞后,不能悬停, 向一边倾斜比较大	将飞行器放在平面或水平地面上,重新进行陀螺仪校准
飞行器震动很厉害	风叶变形,需要更换风叶
飞行器无法解锁,指示灯快闪	飞行器电池电压太低,请将电池充满电
大风飞行器飞行不稳	待4-5级阵风再飞行
无法悬停,不停绕圈	地磁校正不成功,重新校正地磁

配件清单





GPS FOUR-AXIS AERIAL PHOTOGRAPHY DRONE OPERATING INSTRUCTIONS



Video tutorial

Safety precautions:

- 1 in order to ensure the electromagnetic environment requirements of aviation radio station (station), it is prohibited to use various model remote controllers in the area with the center point of airport runway as the center point and the radius of 5000M. During the period when the relevant departments of the state issue radio control orders and regional areas, the use of model remote controllers shall be stopped as required. Please fly in warm, clear, windless weather. Do not fly in severe weather conditions such as overheating, overheating, strong wind, rainstorm, etc. Please choose indoor or outdoor open area, and keep a safe distance from people, pets, empty overhead wires and other obstacles. Make sure that no other uses the same frequency. Do not let the aircraft out of sight.
- 2 after the aircraft is started, please do not contact the high-speed rotating part of the aircraft and keep a distance from the high-speed rotating propeller to avoid the risk of strangulation. (Including gears, rotors, etc.)
- 4. During and after the use of the aircraft, the battery and motor will generate high temperature. Please do not touch it to avoid the risk of scalding.
- 4 do not look directly at the light beam of the LED to avoid affecting the eyes.

Warm Tip: It is suggested that beginners practice flying at low altitude in an open and unmanned place for about 3 days, and then fly to high altitude after being familiar with flying

Pre-flight preparation

flight environment







indoor: Spacious space away from obstacles, crowds or pets are preferred.







Please keep the UAV in line of sight and away from obstacles, high-voltage cables, trees and personnel during the flight.







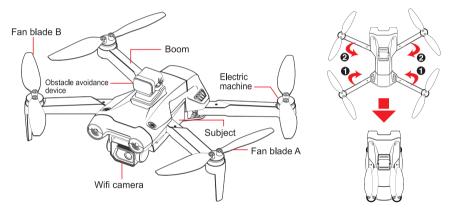
Outdoor: Sunny, windy and sunny weather are preferred.







Do not fly in extreme environments, such as heat, cold, strong wind or heavy rain.



Blade replacement:

- The fan blade to be replaced must be replaced corresponding to the relative position on the machine.
 Fan blade A needs to be installed at position A, and fan blade B needs to be installed at position B.
 If fan blade is replaced incorrectly, it can not be controlled.
- 2. When flying, the fan blade A rotates clockwise, and the fan blade B rotates counterclockwise.

1. Important note

This product is not a toy, wrong use will cause damage.

Please follow the instructions before using this product. Do not disassemble the product yourself. Otherwise, the manufacturer is not responsible for any damage.

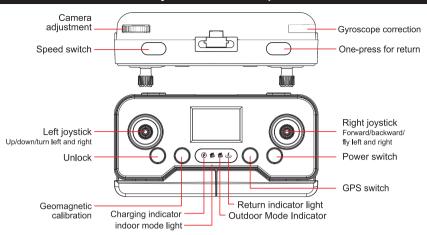
2. Safety instructions

Warning: It is necessary to fly in a safe area or away from others, and do not control the aircraft above a dense crowd. Due to the pilot's operation error or wireless interference in the operation process, accidents and failures are easy to occur, and damage or injury to the crowd is easy to occur.

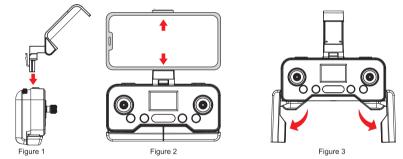
Prohibition: Especially for indoor and outdoor flight, please keep away from obstacles This product is suitable for both indoor and outdoor flight (wind strength not more than 4). Please choose a place that is free from obstacles, crowds and pets, passers-by, such as, heating source, heat source, electric wires or electronic power source will not collide with the drone, landing, entanglement, or cause fire, electrocution and damage to life and property.

Warning: As this product is mainly suitable for people over 14 years old, it may be difficult to learn at first, we recommend you to ask an experienced pilot for guidance.

Remote control function key and name Description:



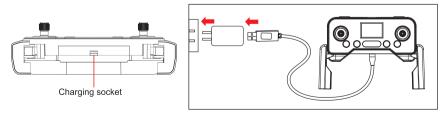
Instructions for remote control handlebars/mobile phone frames:



Mobile phone frame: Put the mobile phone frame into the remote control (Figure 1), and stretch it up to place the phone (Figure 2).

Remote control handlebar: pull down the bottom handle of the remote control from the middle position and rotate to the place.

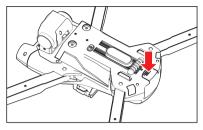
Remote control charging instructions:

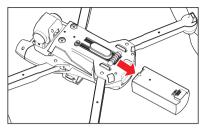


Insert the charging plug into the remote control charging socket, and then connect the USB charger plug to the computer or mobile phone charger. When charging, the green charging indicator lights up, and the indicator light is extinguished after full charging. (The charging time is about 40 minutes)

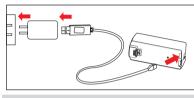
Note: If the charging indicator light does not change during charging, this indicates that the battery is fully charged and does not need to be recharged.

Instructions for charging drone lithium battery:





Take out the drone battery: press and hold the position shown by the arrow (Figure 1), and pull it back to take out the battery.



Battery charging steps:

The USB Android head plugs into the battery and connects the USB charger plug to the computer or mobile phone charger. When charging, the battery indicator light is long and turn off after full charging.

(The charging time is about 360 minutes)

Note: If the battery is inserted on the charger, the light on the battery is not long, and no need to charge.

Pre-flight environmental requirements:

Please choose an open indoor or outdoor environment without rain and snow and wind force less than Level 4 to fly. Please stay away from people, trees, electric wires, tall buildings, airports and signal transmission towers when flying.

Drone Flight Tutorial:

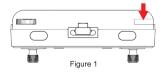
Indoor mode tutorial:

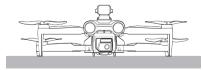
1.Drones to frequency

Put the battery of the drone into the battery slot of the drone in the correct direction, place the drone on a level ground and turn on the power, and then turn on the power of the remote control. At this time, the remote control will sound "Di" to indicate that the frequency binding is successful.

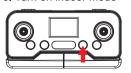
2. Gyroscope calibration operation

Put the drone in a horizontal position, press the "Gyroscope Calibration" button on the remote control (Figure 1), the light of the drone will flash quickly and become long, and the remote control will emit a sound of "Di", indicating that the calibration is successful.





3. Turn on indoor mode



Press and hold the GPS switch button for 3 seconds (picture 2), the remote control will beep twice, and the indoor mode indicator light on the remote control will be on, indicating that the indoor mode is turned on.

Figure 2

Outdoor mode tutorial:

1.Drones to frequency

Put the battery of the drone into the battery slot of the drone in the correct direction, place the drone on a level ground and turn on the power, and then turn on the power of the remote control. At this time, the remote control will sound "Di" to indicate that the frequency binding is successful.

Gyroscope calibration operation.

Put the drone in a horizontal position, press the "Gyroscope Calibration" button on the remote control (Figure 1), the light of the drone will flash quickly and become long, and the remote control will emit a sound of "Di", indicating that the calibration is successful.

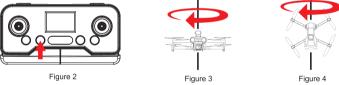


Calibrate geomagnetic operation

The geomagnetism is easily interfered by other electronic devices, which will cause abnormal data and affect the flight. For the first use, geomagnetic calibration must be performed. Calibrate the geomagnetic field according to the following steps:

After short pressing the button of the remote control (Figure 2), the remote control will emit a "Di" sound, and the indicator light of the drone will flash quickly, and the calibration can be performed at this time.

Hold the drone in your hand, press (Figure 3) and rotate slowly clockwise for 3 circles in the horizontal direction, and the remote controller will make a sound of "Di", indicating that the horizontal calibration is successful. At this point, the vertical direction can be carried out (as shown in Figure 4), and the nose of the machine can be rotated slowly clockwise for 3 circles, and the remote control will emit two beeps of "DiDi", indicating that the calibration is successful.



4. Search for GPS signals:

After the geomagnetic calibration is completed, put the aircraft on a horizontal surface, the aircraft will automatically search for satellites, the indicator light of the aircraft will change from the slow flashing of the rear light to a steady light, and the outdoor mode indicator light on the remote control will be on, indicating that the satellite search is successful. At this time, short press The remote control "unlock button" (Figure 5) can fly.

Special Note:

Figure 5 1. Please ensure that the take-off environment is an open outdoor environment, and the satellite signal before take-off is greater than 9 stars.

2. The latitude and longitude of each region are different. New customers must calibrate once. For example, the difference between Guangdong and Beijing is 28 degrees. Therefore, non-calibration means forward and backward flight instead of straight flight. Calibration is for the accuracy of the barometer to measure altitude.

Basic flight:

Basic flight steps:

- 1. The remote control and the drone are coded, and the drone is initialized.
- 2. Geomagnetic calibration. (No need to calibrate again at the same place)
- 3. Connect the mobile phone Wi-Fi to the mobile phone and open the mobile APP.
- 4. After the aircraft is calibrated, wait for the satellites to be received, usually 60-80 seconds (above 9 stars) to unlock the flight.

Manipulation method





When the left lever (accelerator) is pushed upwards, the speed of the main wind blade increases and the aircraft goes up

goes up.
When the left lever (accelerator) is pushed downward,
the speed of the main wind blade slows down and the
aircraft descends





When the left lever (rudder) is pushed to the left, the aircraft head turns to the left, when pushed to the right, and the head turns to the right.





When the right lever (rudder) is pushed up, the aircraft goes forward.

When the right lever (rudder) is pushed down, the aircraft goes backward.





When the right lever (rudder) is pushed to the right, the aircraft flies to the right.

When the right lever (rudder) is pushed to the left, the aircraft flies to the left.

Warning: When the Drone is 30 cm away from the ground, the Drone will become unstable due to the influence of its own blade eddy current, which is called "ground effect reaction". When the height of the Drone is lower, the effect of ground effect reaction is the largest.

Operation description of remote control function:

Drone unlock



Figure 1

When the drone has successfully positioned itself outdoors, the drone needs to be unlocked to start, press and hold the remote control. Press the "unlock" button (Figure 1). At this time, the four propellers rotate at the same speed, indicating that the unlocking is successful. When the unlocking is completed, the UAV can operate and fly normally.

2. Speed gear adjustment

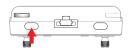
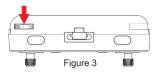
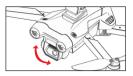


Figure 2

The take-off speed gear of the drone defaults to the slow gear. When the drone is flying in the air, the speed can be adjusted through the fast and slow speed gear (Figure 2). Short press the speed button and the remote controller will beep twice to indicate entering Second gear, short press the speed button again, the remote control will return to the low gear with a beep.

3. Camera angle adjustment





During the flight of the drone, the camera angle can be adjusted through the camera adjustment knob (Figure 3). Turn the knob to the left to increase the camera angle, and turn the knob to the right to decrease the camera angle.

5.One-press for return

After the GPS function is turned on outdoors and the satellite is searched for calibration and takeoff, if the drone is flying far away or the drone is in a low battery state, press the one-key return button, and the drone will return to the initial take-off position.

Return:

The aircraft has a home return function. If the home point is successfully recorded before takeoff, the remote controller and the aircraft lose the communication signal or the home key is pressed, the aircraft will automatically return to the home point and land to prevent accidents.

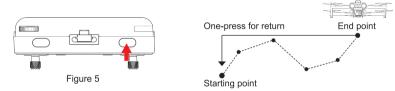
The aircraft has three different ways to return to home, namely: one-key return, uncontrolled return, and low battery return.

Home point:

During takeoff or flight, when GPS receives more than 9 stars for the first time, it will record the aircraft's current position as the home point.

One-press for return

When the GPS signal is good (the number of satellites is greater than 9), you can start the aircraft to return to home by pressing the "one-key return" button on the remote control. The return process is the same as the out of control return. The difference is that when the aircraft returns to home and lands, the user can control it with the joystick The aircraft can avoid obstacles, and then press the "one-key return" button on the remote control to exit and return, and the user can regain control.



Out of control and returning:

When the GPS signal is good (the number of satellites is greater than 9), the compass is working normally, and the aircraft successfully records the home point, if the remote control signal continues to be interrupted for more than 6 seconds, the flight control system will take over the control of the aircraft and control the aircraft to fly back to the recorded return home point. If the remote control signal is restored during the flight, the return home process will continue, but the user can cancel the return home via the remote control return home button and regain control of the aircraft.

Note for returning home:

- 1. During the automatic return, the aircraft cannot avoid obstacles.
- 2. When the GPS signal is poor or the GPS is not working, it cannot return home.
- If the aircraft does not receive the satellite and the remote control signal continues to be interrupted for more than 6 seconds, the aircraft will not be able to return home and will descend slowly until the landing is locked.

Low power return:

The low-voltage indicator of the aircraft will flash slowly, and the aircraft will automatically return to the vicinity of takeoff 30 meters (after low power, the aircraft will return to the vicinity of the take-off point, and the aircraft's altitude and distance will be limited to within 30 meters)

If the aircraft voltage is lower than the safe value, it will automatically land to the home point.

Reminder: The aircraft is in the low power return state, and the remote controller cannot cancel the return.

Precautions for installation and use of obstacle avoidance equipment:



1. Take out the cover plate where the obstacle avoidance equipment is installed

2. Plug in the plug first as shown in the picture, and then install the obstacle avoidance device.

Obstacle avoidance mode

(purchase the obstacle avoidance version to have the obstacle avoidance function)

Precautions for obstacle avoidance function:

- 1. Please install the obstacle avoidance head before starting the machine;
- 2. The obstacle avoidance distance is about 1 meter, and the remote control will beep when it senses an obstacle:
- 3. When using the obstacle avoidance function, please fly indoors or outdoors without sunlight (sunlight interferes with the obstacle avoidance function)





Please make sure to install it correctly, wrong installation will lead to abnormal flight

Resolution guide for common problems

Problems	Solution
After the aircraft is powered on, the indicator light keeps flashing rapidly	The aircraft is in the gyroscope detection state, please place the aircraft on a stationary surface or on the ground
After taking off, the aircraft can't hover, it leans a lot to one side	Place the aircraft on a flat or level ground and re-calibrate the gyroscope
The aircraft vibrates very badly	The blades are deformed and need to be replaced
The aircraft cannot be unlocked and the indicator light flashes quickly	The aircraft battery voltage is too low, please fully charge the battery
Unsteady flight of gale aircraft	Wait for 4-5 gusts to fly
Unable to hover, keep going in circles	The geomagnetism calibration is unsuccessful, re-calibrate the geomagnetism

Accessories











Upper cover

















Battery

Obstacle avoidor



Camera

Motor B







Screwdriver

USB charging cable

Phone stand

Remote control