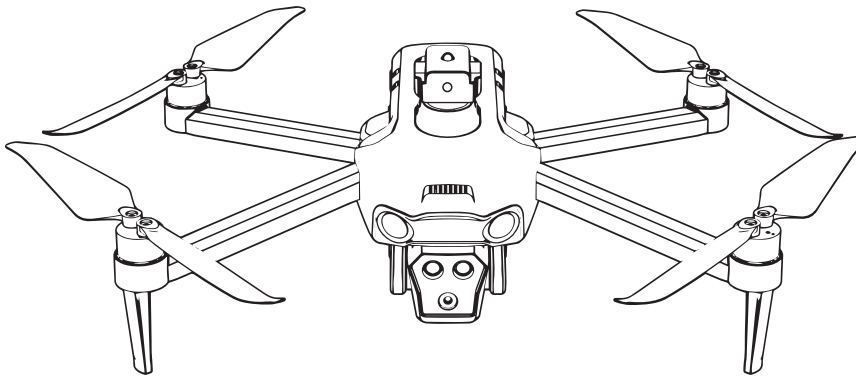
Suitable for over 14 years old

(GPS)

Folding Aerial Camera



— Portable • Foldable —

According to the regulations of the Civil Aviation Administration,unmanned aerial vehicles with a maximum take-off weight of more than 250g need to be real-named.

When you buy a new aircraft, You can log in "Civil Aviation Drone of China Civil Aviation Apply for an account on the "Real Name Registration System" (https://uas.caac.gov.cn/) and fill in the relevant information Relevant information, complete the real-name registration.

Each drone has a unique serial number, you can check the serial number on the drone body Serial number (SN:XM******), on the body of the drone, fill in the drone serial number in the real-name registration system of the drone "no UAV serial number" in the UAV real name registration system, and other options according to the instructions to select the corresponding options.

If the purchaser does not register in accordance with the relevant laws and regulations, any damage caused by illegal flight Losses, penalties and injuries caused to others, our company and agents are not responsible for any.

- In order to ensure the electromagnetic environment of aviation radio stations, it is forbidden to use all kinds of models and UAVs in 10 kilometers away both sides of the central line of airport runway, 20 kilometers at both ends of the runway, and civil aviation routes and routes. In the no-fly zones issued by the relevant state departments, the use of various models and UAVs is prohibited.
- The use of drones in urban areas and crowded places is strictly prohibited.
- After receiving the drone, the battery must be fully charged before use.

Table of content

Preface

You are welcome to purchase this product. In order to make it easier and convenient for you to use this aircraft, please read this instruction in detail before you operate it. At the same time, please keep this instruction properly as a reference for future adjustment and maintenance.

Important statements

1. This product is not a toy, but a precise equipment which integrates mechanical, electronic, aerodynamics, high-frequency emission and other professional knowledge. It needs correct assembly and debugging to avoid accidents. The holder of the product must operate and control in a safe way; improper operation may cause serious personal injury or property loss.
2. This product is suitable for people who have experience in operating model aircraft and are not less than 14 years old.
3. In case of use, operation and maintenance. Please contact the local distributor or the relevant personnel of our company.

Safety precautions

The remote control model aircraft must stay away from the crowd when flying. The unpredictable accidents such as inappropriate assembly or body damage, poor electronic control, and unfamiliar operation may result in aircraft damage or personal injury. Operators should pay attention to flight safety and be aware of other responsibilities arising from their own negligence.

1. Keep away from obstacles and crowds
   The flight speed and state of the remote control aircraft are uncertain, and there are potential dangers. When flying, it must be far away from the crowd, high-rise buildings, high-voltage wires and so on. At the same time, it should avoid flying in bad weather such as wind, rain, thunder and lightning to ensure the safety of pilots/surrounding people and property.

2. Keep away from damp environment
   The interior of an aircraft is composed of many precise electronic components and mechanical parts. Therefore, it is necessary to prevent dampness or moisture from entering the body of the aircraft in order to avoid accidents caused by mechanical and electronic components failure.

3. Proper use of this product, please use original parts for modification or maintenance to ensure flight safety. Please operate and use the product within the allowable scope of its functions and shall not be used for illegal purposes other than safety decrees.

4. Avoid manipulation alone
   The control skills of remote control aircraft have some difficulties in the early learning stage. To avoid flying alone as far as possible, it needs the guidance of experienced people.

5. Safe operation
   Please operate the remote control aircraft according to your state and flight skills. Fatigue, mental distress or improper operation will increase the probability of accidental risk.

6. Keep away from high-speed rotating parts
   When the rotors of aircraft rotate at high speed, the pilots, people and objects around them should be kept away from the rotating parts so as to avoid danger and damage.

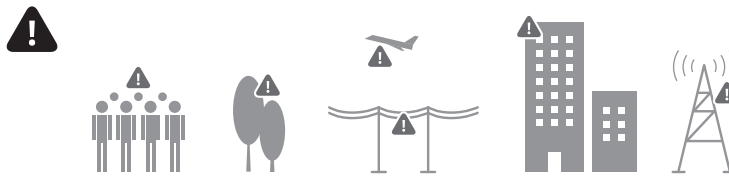
7. Keep away from heat sources
   The remote control aircraft is composed of metal, fibre, plastic, electronic components and other materials. Therefore, it is necessary to keep away from heat sources, prevent sunshine, and avoid deformation or even damage caused by high temperature.

Warning

1.Packaging and instructions contain important information and should be retained.
2.It is your responsibility to ensure that no harm is done to the person or property of others.
3.The debugging and installation of the aircraft should be strictly controlled according to the operating instructions. Attention should be paid to keeping a distance of 1-2 meters between the aircraft and the user or other persons during flight and landing, so as to avoid the impact of the aircraft on the head, face and body of the human being and cause injury.
4.Our company and distributors are not liable for any loss or damage caused by improper use or operation and human injury.
5.Children should be guided by adults when operating aircraft. This product is prohibited for children under 14 years of age.
6.Please follow the instructions or packing instructions to install and use correctly. Some parts should be assembled by adults.
7.Products contain small parts, please place them in places that children can not touch to prevent the risk of eating or asphyxiation.
8.It is strictly forbidden to play on the road or in the water-logged area in order to avoid accidents.
9.Please collect the packaging materials in time so as not to cause harm to children.
10.Do not disassemble or modify aircraft. Disassembly or modification may cause aircraft failure.
11.Charger battery pack batteries need to be inserted into the specified power supply with the same product logo.
12.The remote control uses 3.7V built-in lithium batteries, which need not be replaced.
13.Only the charger installed in the original factory can be used.
14.Charger is not a toy.
15.When charging rechargeable batteries, they must be under the supervision of adults. When charging, they must be far away from inflammables. When charging, the guardian should not leave the aircraft model out of the scope of surveillance.
16.Do not short circuit or squeeze the battery to avoid explosion.
17.Do not mix different types of lithium batteries.
18.Never short-circuit, decompose or put batteries into the fire. Never place batteries in high temperature or heated places (such as in fire or near electric heating devices).
19.Aircraft should be used as far away as possible from other electrical equipment and magnetic objects, which may cause mutual interference.
20.Keep a safe distance from the high-speed rotating propeller so as to avoid the risk of strangulation and cuts.
21.The motor is a heating part. Do not touch it to avoid scalding.
22.Light-emitting diode laser radiation, do not direct beam.
23.Do not use the model close to the ear! Misuse may lead to hearing damage.
24.USB: 5V = 3A.
25.In order to ensure the requirements of the magnetic environment of Aeronautical Radio stations. During the period of issuing radio control orders within the relevant ministries of the state, the use of model remote controllers should be stopped within the region as required.

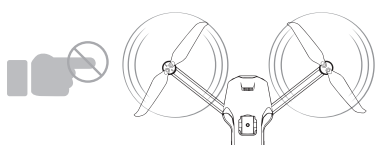
Safety Flight Guidelines

Flying in a wide area + Strong GPS signal + Keep the aircraft in sight + Flight altitude below 120 meters



Avoid flying over or near people, trees, high-voltage power lines, buildings, airports or waters, and high-intensity power lines or base stations, which may affect the compass on the aircraft.

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

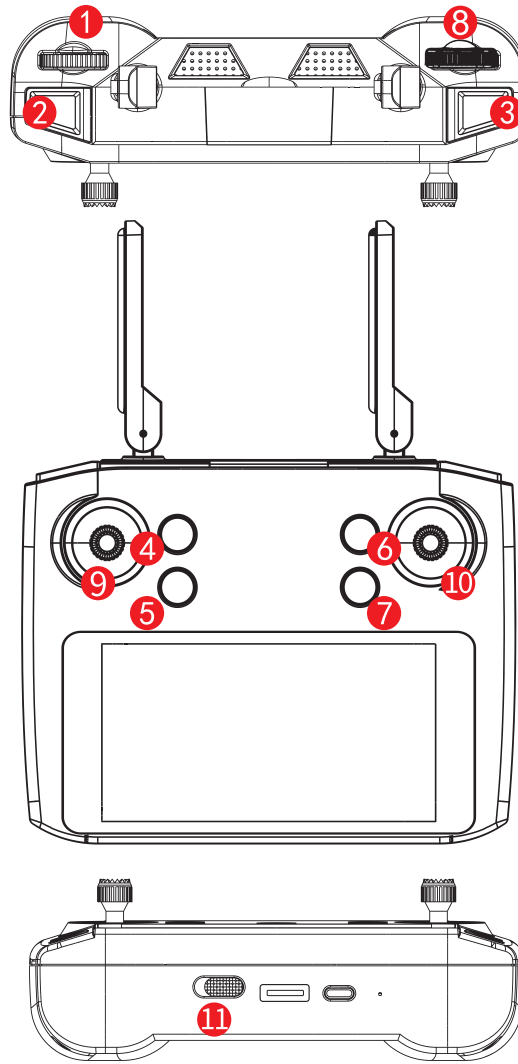


Propellers and motors away from rotation

No-fly Zone

Understanding safety guidelines is important for safe flight.
Before flying, please read the safety instructions carefully.

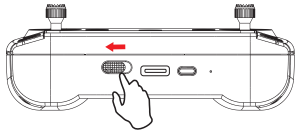
Remote Controller Function



1.Camera adjustment
2.Short press to reture
/long press to drop
3.Short press to take photo
/long press to record video
4.Speed adjustment
5.One key lift
6.Short press headless mode
/long press to switch off GPS
7.Short press geomagnetic
/long press calibration
8.Obstacle avoidance switch
9.Throttle lever
10.Direction Joystick
11.Switch

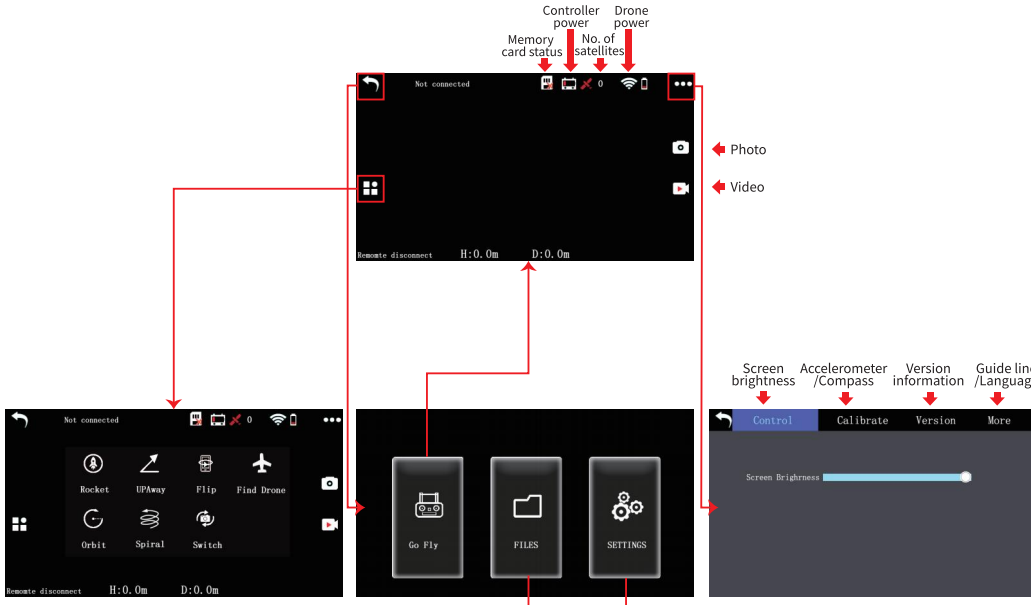
Operating interface functions

LANGUAGE SELECTION INTERFACE

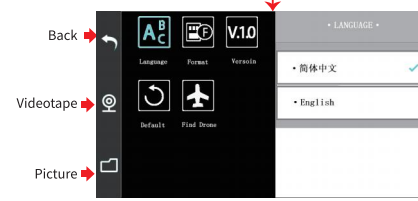


Turn the power switch to the left and wait briefly before entering the language selection interface.

Default to the drone shooting view interface after powering on.



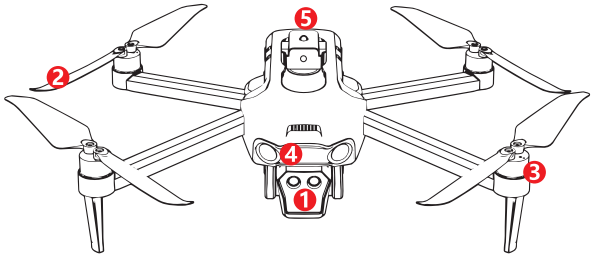
In the file management interface, which is divided into picture space and video space, users can touch to select or modify files according to the operation requirements.



In the system setting interface, users can touch the settings according to their operation needs.

Note: This version does not support the Find Aircraft feature!

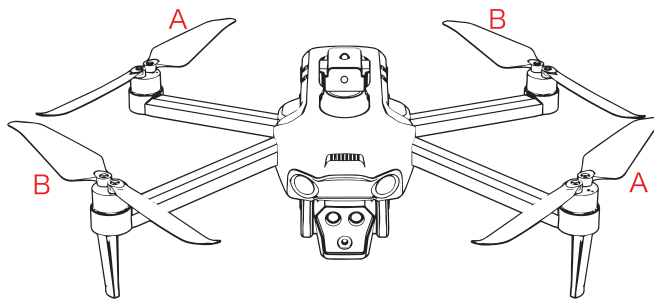
Aircraft assembly

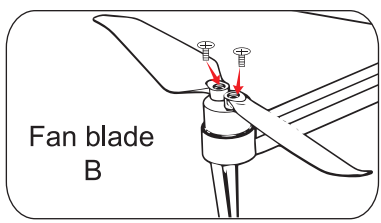


1. High Definition Camera
2. Propeller
3. Motor
4. LED lamp
5. Smart Lithium Batteries

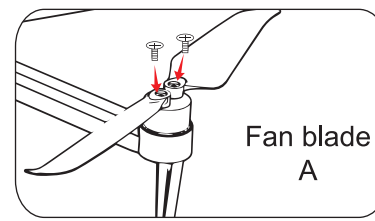
1. Propeller Installation

Please ensure that all propellers are installed in the correct position as shown in the figure below.



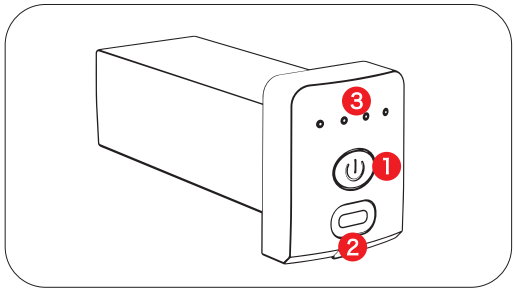


Lock blades into two screws.



Lock blades into two screws.

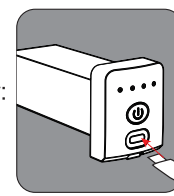
2. Lithium Battery for Aircraft



1. Battery Switches
2. USD charging interface
3. Battery power indicator

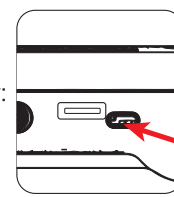
Charging of Batteries and Remote Controllers for Aircraft

Mobile adapter:
5V ⎓ 2A
(not included)



Charging time:
about 5-6 hours
(depending on the charging power supply)

Mobile adapter:
5V ⎓ 3A
(not included)



Charging time:
about 3-4 hours
(depending on the charging power supply)

Aircraft battery charging status: The green light is on when charging, and the green light is off when it is fully charged.
Remote control battery charging status: red light when charging, green light when full.

Note: The remote control should be turned off when charging

Matters needing attention:

1. Make sure the battery is fully charged before each flight.
2. Keep the battery of the aircraft while charging, and the remote control is closed.
3. The battery will automatically stop charging when it is full of electricity. It is recommended that the battery be disconnected from the charger when it is full.
4. Do not use batteries for more than 5 days. Store the batteries in 40%-65% capacity, which can prolong the service life of batteries.
5. If the aircraft enters the low-power alarm (the aircraft lights flicker quickly), it should land as soon as possible and stop flying, replace new batteries or charge batteries.
6. If the remote controller enters the low-power alarm (the remote controller will always issue a "beep" prompt sound), it should stop using as soon as possible and charge the remote controller.

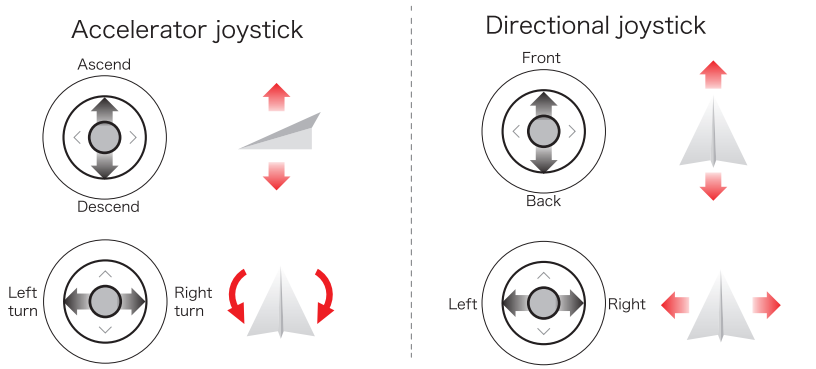
Tips:

1. Mobile power supply or vehicle power supply can be used for charging.
2. The charging time of the aircraft lithium battery is about 5-6hours.
3. The charging time of the remote control's lithium battery is about 3-4 hours.

Cautions for charging:

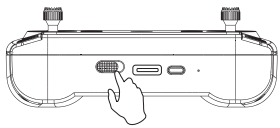
※ Do not place live batteries in hot places, such as open fires or electric heating devices, or they will be damaged or exploded.
※ Do not hit or knock hard surfaces with batteries.
※ Never break down batteries.
※ Do not immerse the battery in water. The battery should be stored in a dry place.
※ Do not leave when charging.

Operating Method of Remote Controller

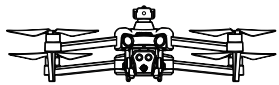


Flight Operational Guidance

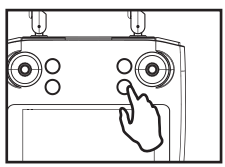
Because of the large size of this aircraft, we only recommend that customers use this product outdoors to avoid unnecessary loss or damage.



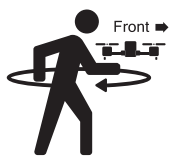
Step 1: Toggle the power switch for power-on to frequency.



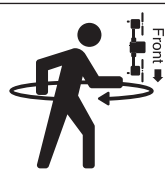
Step 2: Turn on the power of the aircraft
(The remote control beeps twice to indicate sccessful frequency matching.)
Place the craft on a level surface. The drone's front and rear lights blink, then change to constant front lights and blinking rear lights.



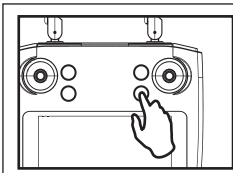
Step 3: Geomagnetic Calibration
Short press the remote control calibration button to enter the geomagnetic calibration mode, the drone's front and rear lights flash rapidly.



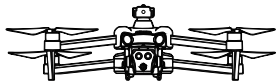
Step 4:Compass Calibration - Part 1
- Pick it up horizontally from the tail end of the craft and accompany it with a complete turn of your body (360°).
- The headlights blink and the rear lights are always on. (Remote control beep)



Step 5:Compass Calibration - Part 1
- Pick up the craft from the bottom, with the front of the craft facing downwards, and make a complete circle with your body (360°).
- Front and rear lights flashing. (Remote control beep)



Step 6: Gyro Calibration
- Long press the remote control calibration button to enter gyro calibration mode, the drone light flashes quickly.
- Drone lights are always on to indicate calibration is complete.



Step 7: Restore factory settings/ gyroscope calibration

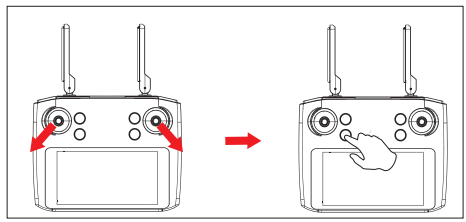
— Push the accelerator joystick of the remote control to the upper left corner and thedirectional joystick to the lower right corner.

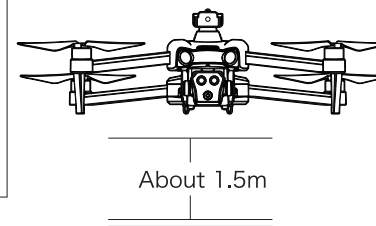
Drone lights flash fast

— The constant illumination of UAV lights indicates that the calibration is completed.

Product Function Analysis

1. One-click take-off/landing

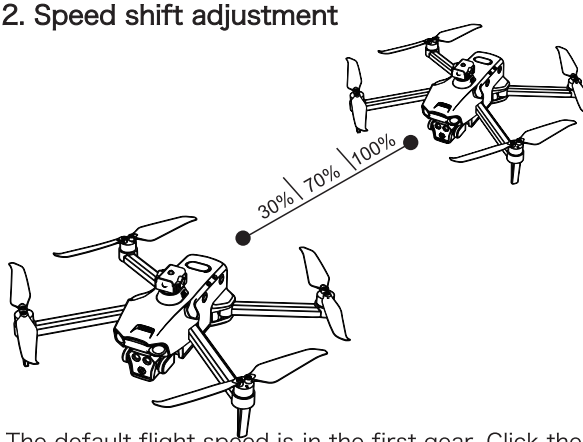




Rotating propellers are dangerous. Do not use aircraft near crowds.

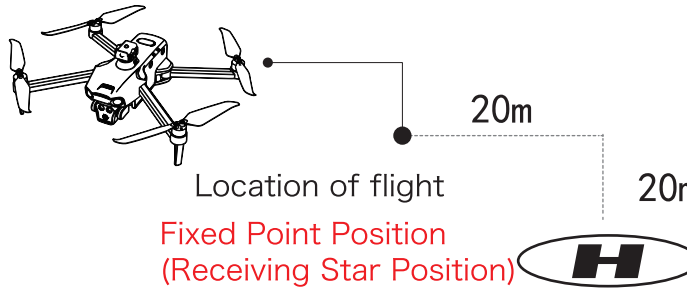
Press the remote control lightly, the propeller starts to rotate, and automatically takes off and hovers about 1.5 meters away from the height (please make sure the engine is headed forward). If you press the remote control again, the aircraft will land automatically. Please note that when the aircraft is running, do not touch the propeller or motor in operation, in order to avoid unnecessary damage.

2. Speed shift adjustment



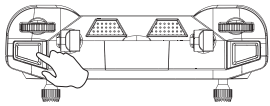
The default flight speed is in the first gear. Click the speed switch button to increase the flight speed by.

3.GPS course reversal



The GPS return function enables the aircraft to return to the take-off point. This function can only be implemented in GPS mode.
There are three types of return flight (RTH) modes for aircraft: GPS return/ low-power return/no-signal return.

①. GPS return:



By pressing the button on the remote control, the remote control will begin to beep. The aircraft will automatically return to the starting point: after the flying point is vertical, it will slowly descend to the starting-flying point. Press the button again to stop the return voyage, pull down the throttle] The lever will drop the aircraft to a safe area.

②. Low power return:

When the battery power is insufficient, it will trigger low-power return. When low-voltage return is activated, the aircraft will fly back to the air about 30 meters away from the operator, at which time, the operator can still operate and control the aircraft. At this point, pull down the throttle lever to land the aircraft in a safe place. When the power is exhausted, the aircraft will automatically return to the set starting point.

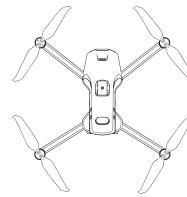
(Note: Do not push the steering rod forward when entering low-power return flight. If forward push will invalidate return flight, the aircraft will be at risk of loss.)

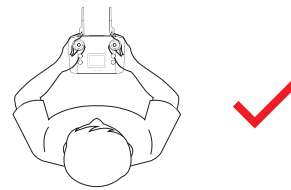
③. No-signal return

If the aircraft and the remote control lose connection, the aircraft will automatically enter the return mode. The aircraft will return automatically to the distance that the remote controller can connect. At this point, the operator can regain control of the aircraft.

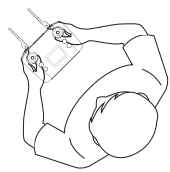
4. Headless mode

Since the operator's operation position is very important to the realization of "headless mode" in frequency alignment, after entering "headless mode", please do not change the operator's operation direction, so as not to cause direction disorder, resulting in unnecessary loss and damage.





The orientation of flight operator to frequency time operator



Do not change the direction of operation

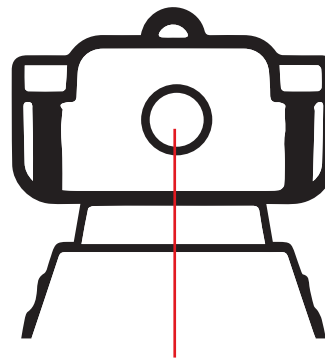
Do not change the direction of operation

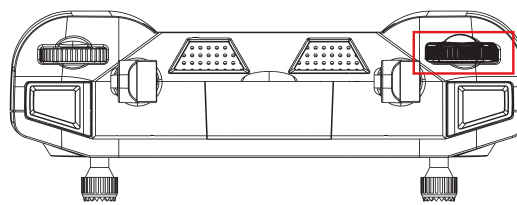
1.Turn the aircraft nose forward, press on the remote control headless mode button to enter headless mode after takeoff, and click again to exit headless mode.

Detailed introduction of obstacle avoidance function and working principle

A. Working principle of obstacle avoider

The port sends out pulse signals, and when it encounters an obstacle within the scanning range, it folds back the pulse signals, and when the port receives the folded back pulse signals, it sends a stop-forward command to the UAV through a series of arithmetic calculations to determine the distance between the UAV and the obstacle, so as to achieve the effect of obstacle avoidance!





Obstacle avoidance switch: when the upper right gear toggles to the left with a 'di' sound, it is closed; when it toggles to the right with two 'di' sounds, it is open.

B. Use and effect of obstacle avoidance function

1. When the drone is flying, as shown in Figure 1, the effective scanning range of the obstacle avoider is 1 meter in front of the drone. The scanning path is approximately between the two arms in the flight direction. Scan around 90"

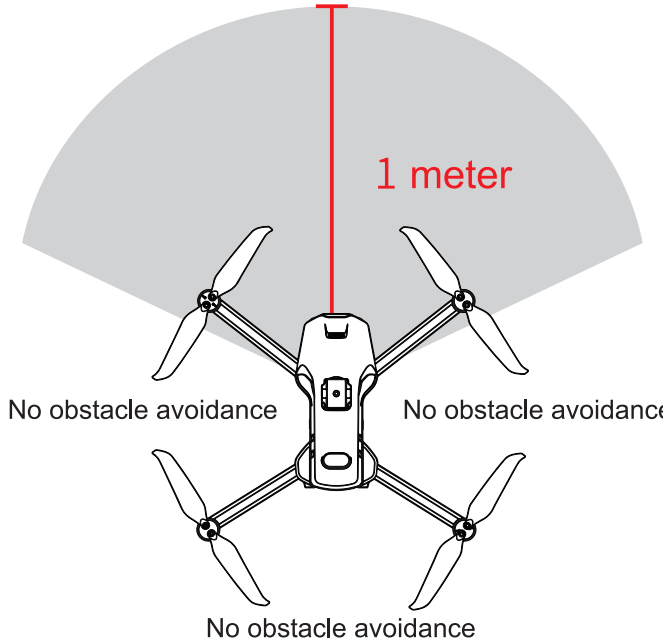


Figure 1

2.When the drone flies on the left side, as shown in Figure 2, the effective scanning range of the obstacle obstructor is 1 meter in the flying direction of the drone on the left side, and the scanning path is about 90 between the two arms on the left side. The same is true for the scanning range of the rear fly or the right fly shock absorber.

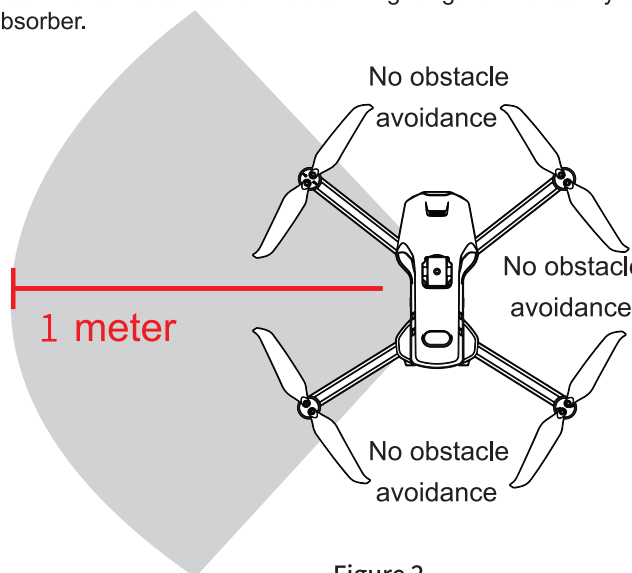
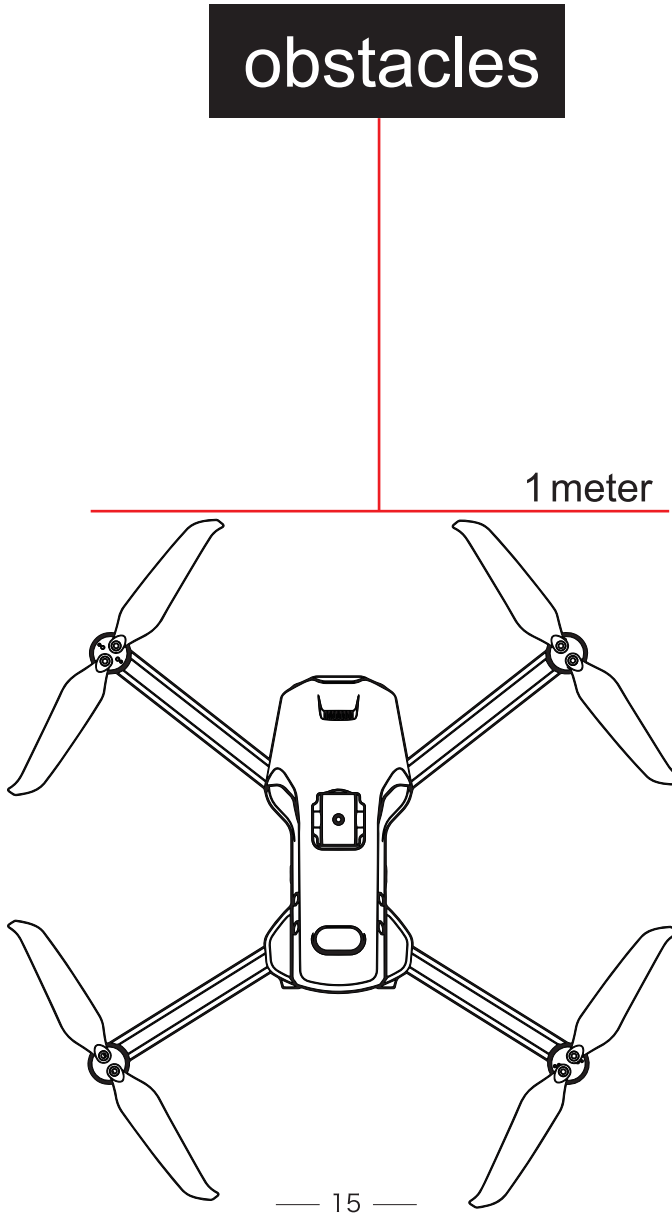
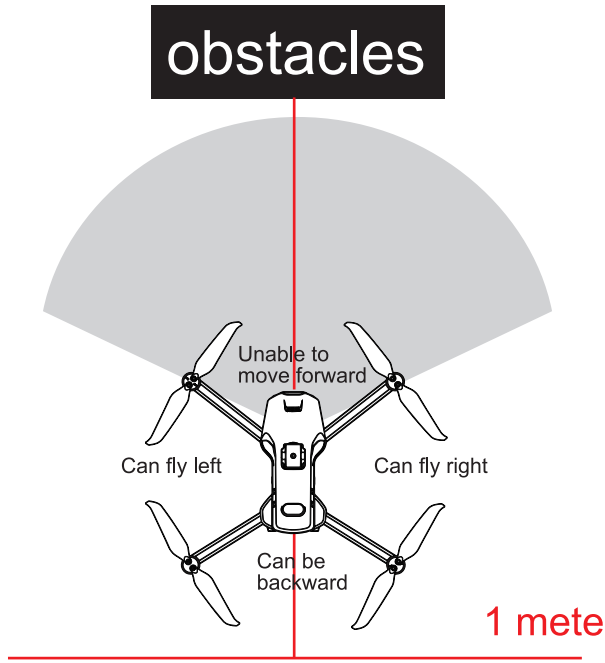


Figure 2

3. The position where the UAV stops flying is determined by the flight speed, when the UAV is flying at full speed in low gear. After the drone scans the obstacle at 1 meter, it starts to calculate and issues a stop flight command. The position of the drone to stop flying is determined by the flight speed (the faster the flight speed, the closer the distance between the drone and the obstacle, and the opposite flight (The slower the speed, the farther the distance between the drone and the obstacle)



4. When the drone encounters obstacles and hovering within 1 meter of the flight direction, the drone cannot continue to fly in that direction, and can continue to fly after avoiding obstacles or to other obstacles within 1 meter. In the direction of flight.

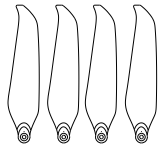


5. When the UAV takes off, there are obstacles within 1 meter in the forward direction. The UAV cannot fly in this direction, but it can raise to avoid the obstacles and continue flying or fly in another direction with no obstacles within 1 meter.

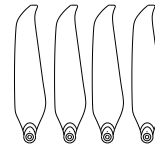
6. When the drone performs the return flight, the obstacle avoidance function will be automatically turned off until the drone cancels the return flight.

7. The obstacle avoidance function is turned on by default in the normal gear, and other gears are automatically turned off

Accessories List

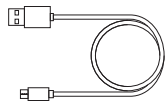


Fan blade A x4

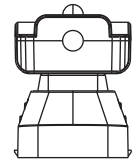


Fan blade B x4

Screw x8



USB Charging x1



Barrier Avoidance Device x1

Instruction x1

Screwdriver x1

Maintenance

1. Commonly used clean soft cloth to clean this product.
2. Avoid exposure to sunlight or heat.
3. Do not immerse the product in water, otherwise it will damage the electronic parts.
4. Check plugs and other accessories regularly. If any damage is found, please stop using them immediately until they are completely repaired.

* All the information in this manual has been carefully proofread in order to be accurate. If there are any printing errors or omissions, we reserve the right of final interpretation.

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.

FCC Radiation Exposure statement

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