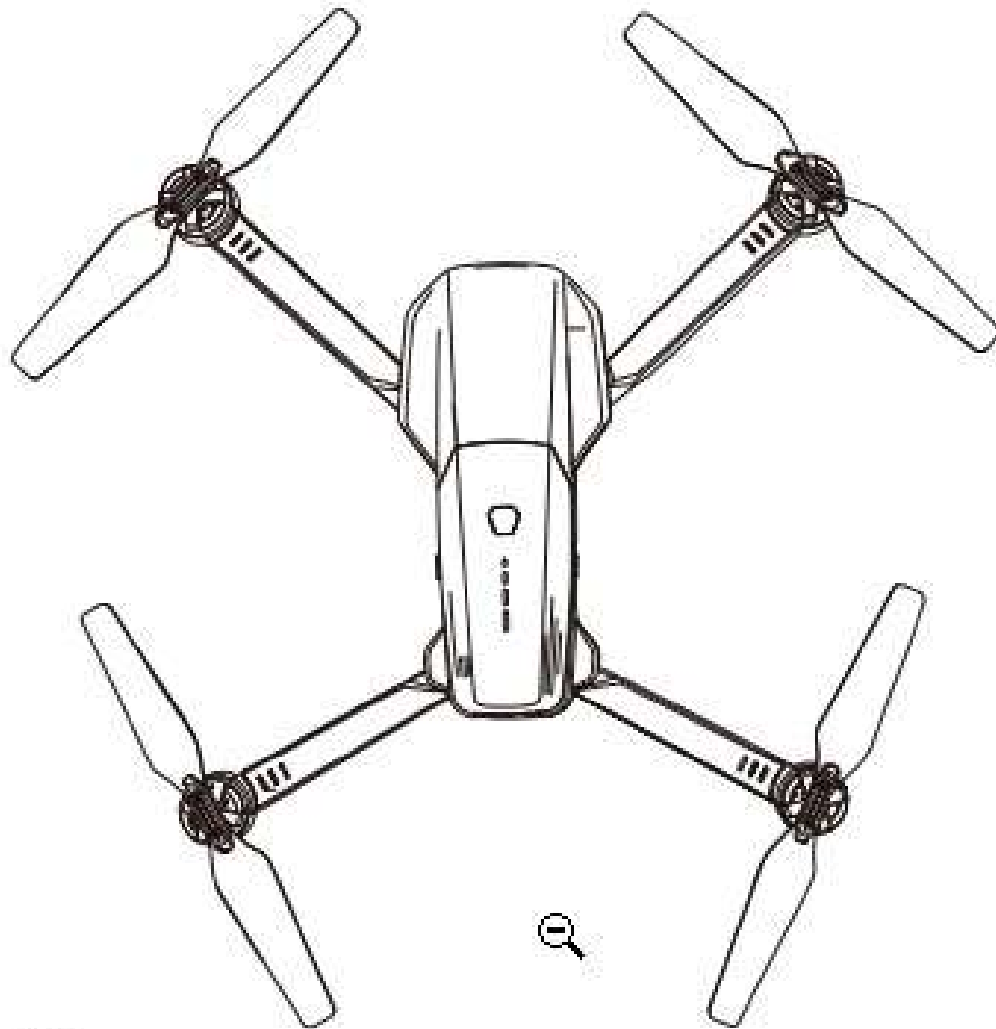


# GPS DRONE USER MANUAL



## WARNING:

- When taking off make sure that the operator is 3 meters away from the drone, and keep far away from any crowds and property.
- The players must operate the drone as required by the instructions. Pay attention to the flight safety and understand the accident liability caused by your own negligence!
- When outdoor before taking off please confirm that the GPS calibration is completed and the GPS signal number is more than 10N/S.
- This drone provides two flight modes: indoor mode and GPS mode, before flying, please select the appropriate mode according to the environment.

Please read this manual carefully before operation and keep it properly for future reference.

Thank you for purchasing our GPS Drone. Please read all instructions and warnings carefully before operating. Please also keep this instruction manual for future reference and maintenance.

## IMPORTANT

1. This product is not a toy. It is a precision device; integrating machinery and electronics with air mechanics and high frequency transmission. It requires correct assembly and debugging to avoid any accident. The user should operate and control this product in a safe manner. In case of incorrect operation, it may cause serious injury or damage property. It can also be lost due to incorrect operation.
2. This product is suitable for those who are experiencing operating UAV and age no less than 14 years.
3. In the event of a problem during using, operating, or maintenance, please contact the local sales agent or retailer or keep in touch with the responsible staff of our company.
4. Small parts are included with this product. Please place it beyond the reach of the children to avoid a CHOKING HAZARD or parts being mistakenly swallowed.

## INTRODUCTION SAFETY PRECAUTIONS

This R/C flying model can be dangerous when in use, please make sure you keep it far away from any person or spectators when flying. In-correct installation, poor conditions, or users not familiar with operation may cause damage to the aircraft or injure people or may cause an unexpected accident. Please pay close attention to flying safety and learn to recognize more dangerous conditions which may cause an accident due to your own negligence.

- Keep it far away from any structures or crowds

This R/C aircraft may vary slightly in speed or sensitivity while flying and can cause potential danger. Therefore, please keep it far away from crowds, buildings, trees, structures, high voltage wire, etc. Please also avoid flying in adverse weather conditions such as rain, electrical storms, and high winds to ensure safety of the user, any spectators, and surrounding property.

- Keep it away from any moist environment

The inside of the aircraft is composed of many precision electronic and mechanical parts. Therefore, please try to avoid any moisture or water content from entering the main body of the aircraft as it may cause a breakdown of the mechanical and electronic parts and thus cause an accident.

- Only operate with included parts for intended use

Please use the original parts for any re-equipping or maintenance to ensure flying safety. Please operate and use only under the scope of the product function permitted. Using unapproved parts will void warranty. DO NOT use for any illegal purpose or use beyond the scope of which your local laws and regulations have stipulated.

- Avoid controlling it independently

New users may have certain difficulties during the early stages of learning to operate this aircraft. Please try to avoid operating the aircraft alone. When available, always operate this aircraft under the guidance of a more experienced user.

- Do not operate under the influence of drugs or alcohol

Please operate this R/C aircraft according to your own state and flying skills. Any fatigue, bad mental state, or incorrect operation may increase the probability of accidental risk.

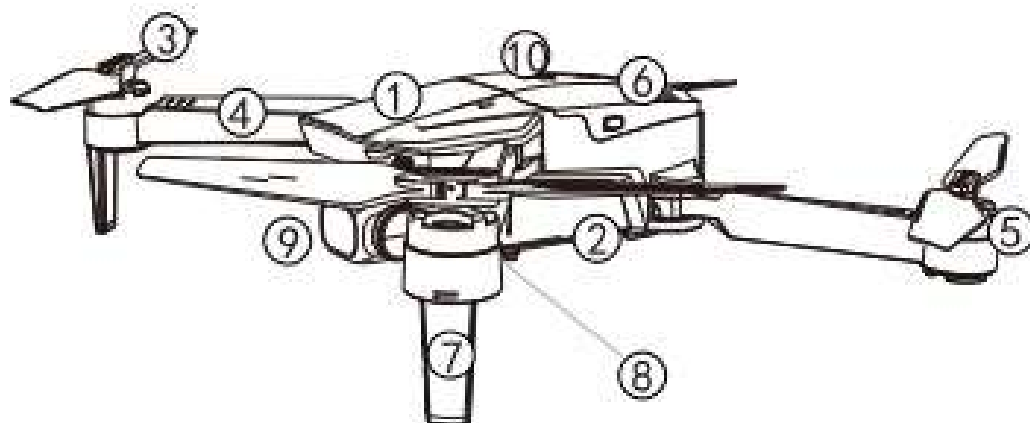
- Please keep a safe distance from aircraft when using top speed

When the drone is flying, please keep the drone far from the operator and any surrounding persons or objects so as not to cause danger or damage.

- Store it in a cool, dry place

The R/C aircraft is composed of material such as metal, fiber, plastic, electronics, etc. Therefore, please keep it away from any heat source and avoid prolonged exposure to direct sunlight. Excessive heat exposure can cause distortion and damage.

## KNOW YOUR Drone



- 1. Drone top cover
- 2. Drone bottom cover
- 3. Propeller
- 4. Arms
- 5. Motor

- 6. Lithium battery
- 7. Legs
- 8. Bottom camera
- 9. Main HD camera
- 10. Switch  
(Depress 3 seconds take on/off)

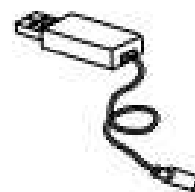
## ACCESSORIES



Drone x1  
(Included battery)



Remote Control x1  
(not included battery)



USB Charging line x1



User Manual x1



WIFI Instruction x1



2 each of L, R



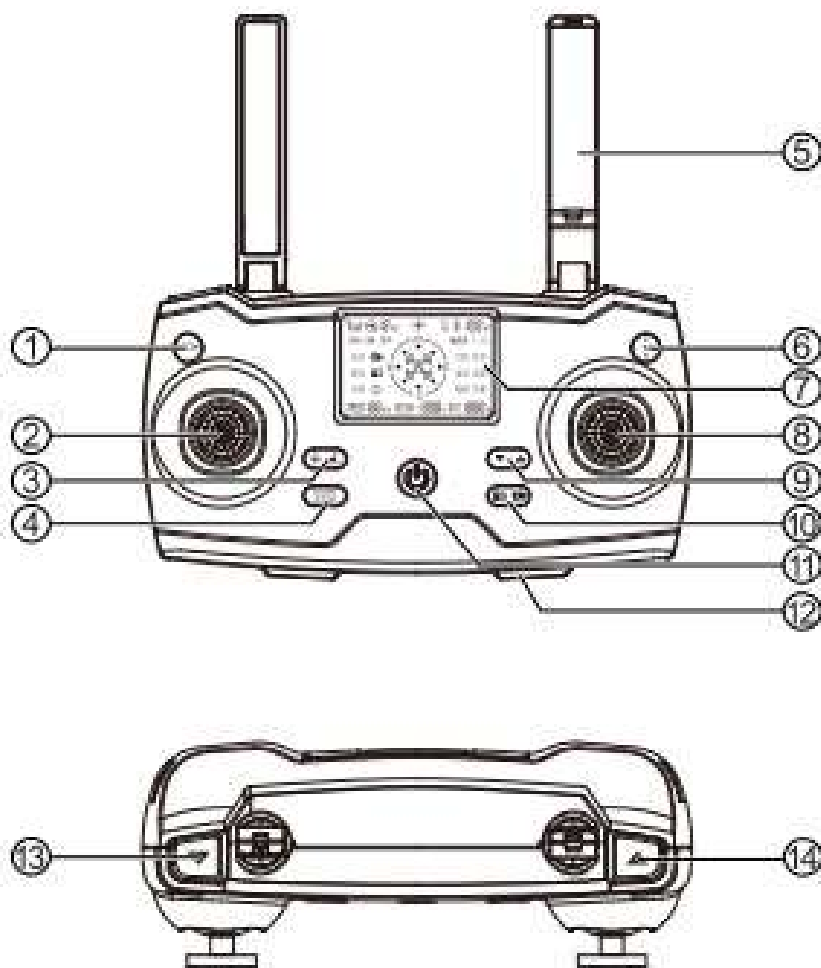
Screw Driver x1



Note: Please check the number of accessories carefully (as shown above). Please provide proof of purchase and contact the store for replacement if any missing parts.

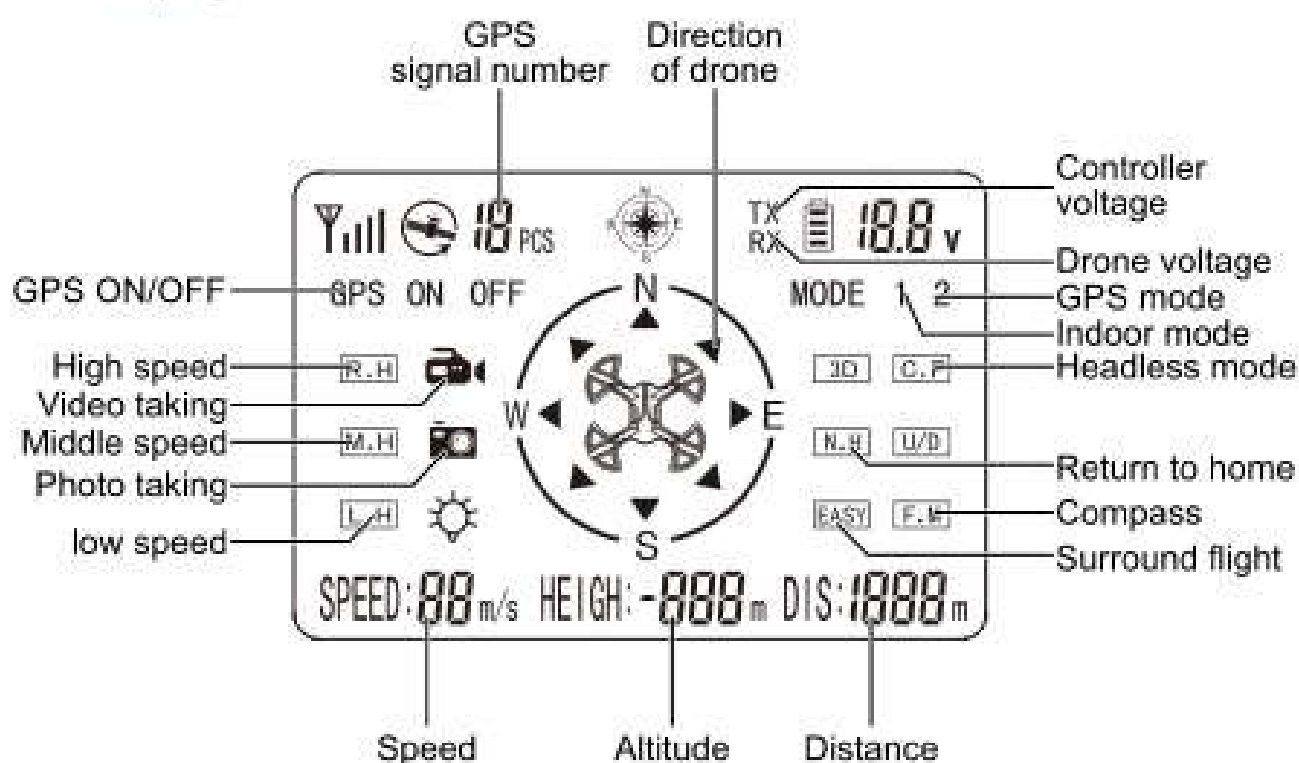
# KNOW YOUR REMOTE CONTROL

## Structures of remote control



1. Surround flight/  
GPS on/off  
(depress 3 seconds)
2. Left joystick/3 Speeds  
mode (Press down)
3. Headless mode  
(depress 3 seconds)/  
Return To Home
4. Start (unlock)
5. Antenna
6. Compass
7. LCD display
8. Right joystick
9. One key ascend/  
descend  
(depress 3 seconds)
10. Photo/Video  
(depress 3 seconds)
11. Power switch  
(depress 3 seconds)
12. Holder for phone
13. Camera upward
14. Camera downward

## LCD Display



## LITHIUM BATTERY INSTRUCTION

### Remote control battery installation

Open the battery cover and insert the 3 AA batteries correctly according to the electrode instructions.  
(Batteries not included)



Note1:

When the remote control is in low power, there is a DIDI DI sound. You need to change the battery. Meanwhile, the LCD screen TX indicates the voltage is less than 3.5V. (Depending on the environment, the value will vary)

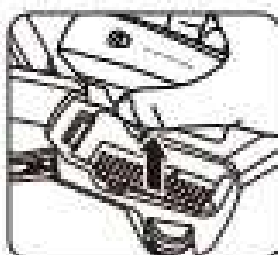
Note2:

1. Make sure the battery is loaded correctly according to the polarity indications on the battery compartment.
2. Please do not mix old and new batteries together.
3. Please do not mix different types of batteries together.

### Battery charging for drone



1. Depress the clip at the bottom of the battery box.



2. Take out battery.



3. Connect lithium battery and USB charging interface by USB charger.



Note:

1. When the drone is in low power, there is a long DIDI sound, and the LCD screen RX indicates the voltage is less than 7.3V. (Depending on the environment, the value will vary).
2. When charging, the battery lights flash in turn, four lights all on indicate that the battery is full. After charging, please remove the battery from the USB. The charging time is about 2.5 h.
3. Please take out the battery after flying.

## BATTERY INSTRUCTIONS

- There is a certain risk when using a lithium battery. It may cause fire, body injury or property loss. Users must be aware of the risks and take full responsibility for using batteries improperly.

- If battery leakage occurs, please avoid contacting your eyes and skin with electrolyte. Once it happens, please wash your eyes with clean water and seek medical care immediately.
- Please remove the plug immediately if you sense any peculiar smell, noise or smog.

### Battery charging

- Please use the charger from the original factory to ensure your safe usage.
- Do not charge dilapidated or outworn battery.
- Do not overcharge the battery. Please unplug the charger once fully charged.
- Do not charge the battery next to inflammables, such as carpet, timber floor or wood furniture or on the surface of electro-conductive objects.
- Please always keep an eye on the battery when charging.
- Do not charge the battery which has not cooled down yet.
- The charging temperature should be between 0°C to 40°C.
- Rechargeable batteries are to be removed from the product before being charged.
- Exhausted batteries are to be removed from the product.
- Supply terminals are not to be short-circuited.
- The battery chargers used with the toy are to be regularly examined for damage to the cord, plug, enclosure and other parts, and in the event of such damage they must not be used until the damage has been repaired.
- Non-rechargeable batteries for remote control are not recharged.

### Battery recycling

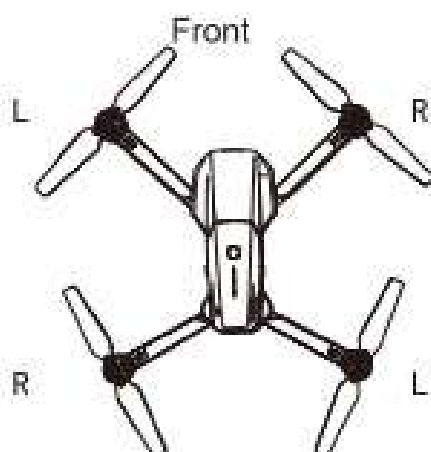
Do not dispose the battery as daily rubbish. Please familiarize yourself with the local garbage disposal method and dispose it according to the special requirement.

## PRE-FLIGHT PREPARATION

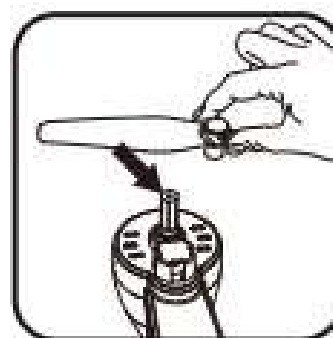
### 1. Unfold the drone

Unfold the front two arms first (Near the camera) then extend the back two arms. When making folding, fold the back arms first, then the front.

### 2. Propellers installation



L corresponds to L  
R corresponds to R



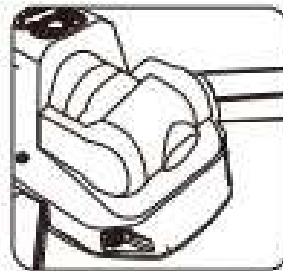
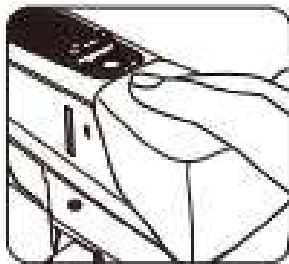
Press down the propeller  
with the crankshaft and screw it



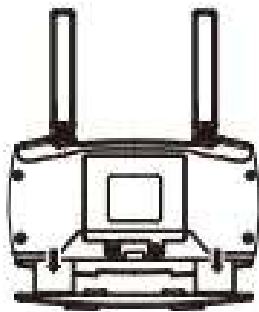
Note: When installing or dismantling the propeller, please do not exert force on the propeller to avoid distortion.

### 3. Open the cover of gimbal (for drone with gimbal)

Press the clip of the gimbal cover and remove it.



### 4. The method to assemble clip on phone



Pull out the holder for phone at the bottom of controller.

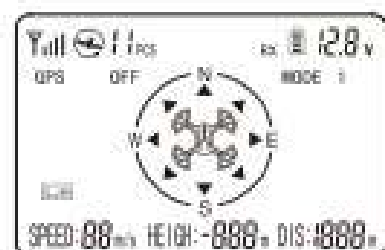
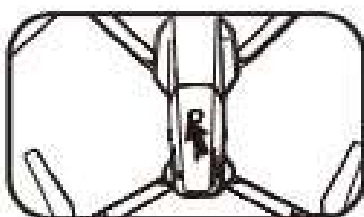


Clip the phone.

### 5. Install APP software and APP operation refer to WIFI INSTRUCTION

### 6. Pairing controller and drone

- Place the drone on a level surface, depress the switch for 3 seconds and switch on it, the LED lights flash.
- Then switch on the controller, the front lights on the drone turn to solid, the pairing between controller and drone is successful automatically.
- The drone defaults to the GPS mode. In this mode, the LCD screen shows "GPS On".
- If indoor mode is selected, after pairing between controller and drone, the drone's front lights will turn solid and the back will keep flashing.



## 7. Compass (magnetometer) calibration

After Pairing, you need to do compass calibration by two steps, press the compass key, the drone lights begin to flash quickly.

- Keep the drone level and pick it up about 1M height, then rotate 3 circles, there is a DI sound and back lights on drone will turn to solid.



- From the bottom, hold the drone face-up about 1M height and rotate it 3 circles, there is a DI sound and front lights also turn to solid, compass calibration is okay.



## 8. Gyro calibration

Gyro calibration could be applied to ensure drone fly vertically. Push the two joysticks to the right corner at the same time. When there are sounds of DI on controller and the lights on the drone quickly flash, then gyro calibration was successful. Drone must be placed on a level surface and remain stationary while calibrating.



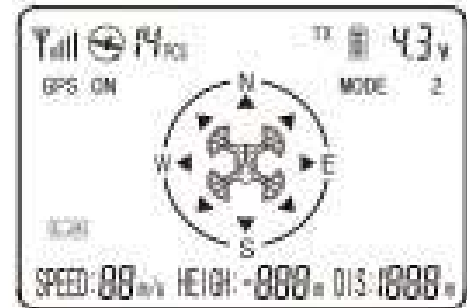


## 9. GPS calibration ( Satellite searching)

After Compass calibration, set the drone back down to level surface, back lights start flashing, the drone is finalizing its GPS calibration. Once the controller makes a long DI sound and all lights have switched to solid (the GPS signal number is more than 10N/S.), after waiting for 2 minutes, the drone is ready to fly, LCD screen displays "GPS ON" and "MODE 2".

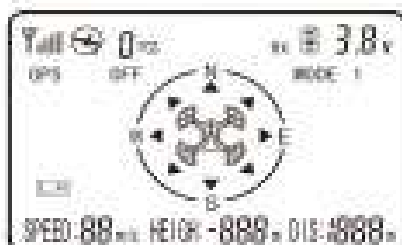
### Note:

1. In GPS mode, the drone can not be started in a weak GPS signal environment or the GPS calibration is not finished.
2. After succeeding GPS calibration, wait for 2 minutes to take off, the RETURN TO HOME will be more accurate.

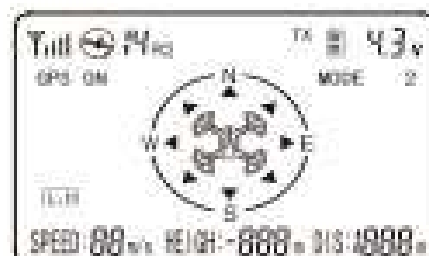


## MODE SWITCHING

- The drone provides two flight modes: indoor mode (LCD screen shows GPS off and mode 1) and GPS mode (LCD screen shows GPS on and mode 2). Before take off, the corresponding flight mode can be selected according to the flight environment.
- The drone defaults to the GPS mode. In this mode, the drone can be operated only after the satellite searching (GPS calibration) is completed.
- Under indoor and weak GPS signal environment, press the key indoor mode to control the drone.
- In the indoor mode, the drone's front lights will turn to solid and the back will keep flashing. The drone will not provide the GPS functions.
- Flight mode can only be selected before take-off. After taking off, it cannot be switched.



Indoor mode



GPS mode

## FLY SAFE



Fly in open areas

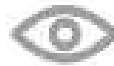


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Strong GPS

+

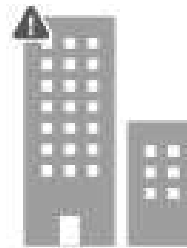
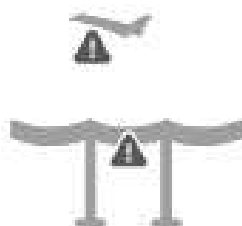
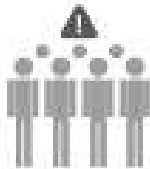


Maintain line  
of sight

+



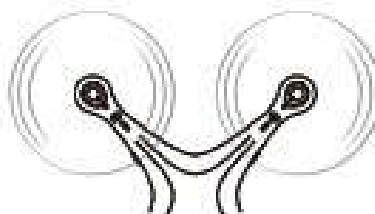
Fly below 150M



Avoid flying over or near obstacles, crowds, high over voltage power lines, trees, airport or bodies of water. Do not fly near strong electromagnetic sources, such as power lines and base stations, as it may affect the onboard compass.



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



No Fly Zone

Stay away from the rotating propellers and motors.

# START YOUR FLIGHT



Note:

1. Only can choose remote controller or mobile phone APP to operate the drone!
2. The drone is NOT equipped with obstacle-avoidance, so to fly at GPS mode, please choose an open and wide space for the flight!

## 1. Take off and landing

**Take off:** After compass calibration and GPS calibration, press the key "start" to unlock the drone and push forward the left joystick to realize drone take-off, or just press one key ascend to fly.

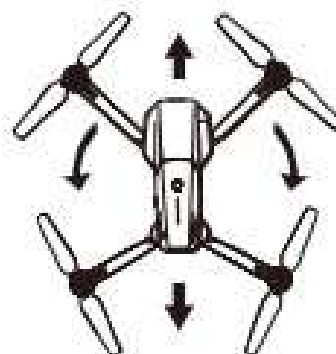
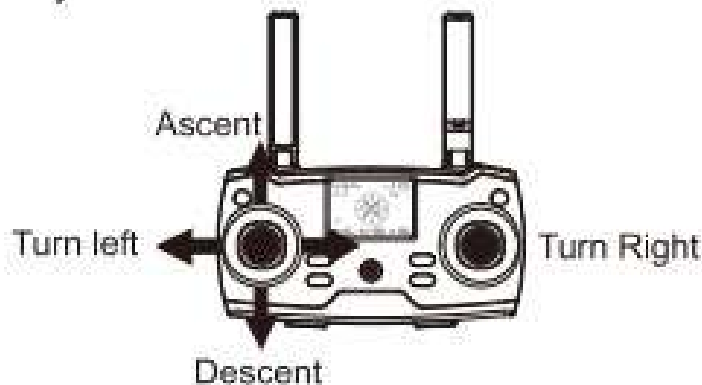
**Landing:** Pull down left joystick to realize drone descending or depress 3 seconds one key descend to land the drone.



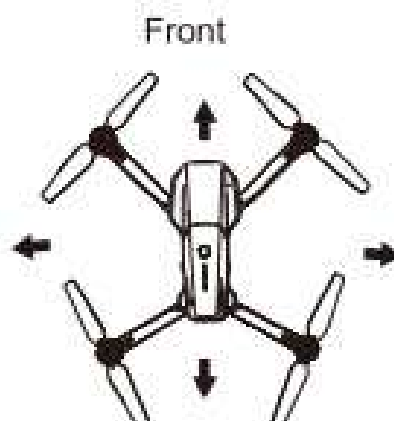
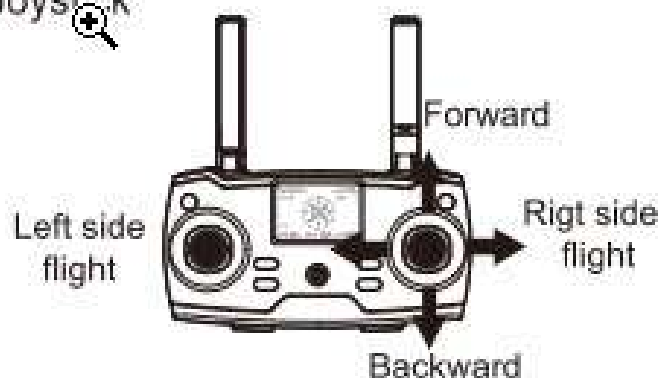
## 2. Basic flight

The left joystick controls the flying altitude and direction change and the right joystick is to control the directions flight.

### Left Joystick



### Right Joystick



### 3. Set 3 speeds mode

Press down 3 speed mode button (Left joystick), you can hear corresponding sounds, the drone is set 3 speed mode.



### 4. Headless mode

Depress 3 seconds the "Headless mode" key, the controller makes sounds DIDI and back lights on drone start to flash, drone is now in headless mode, this will lock the drone flying direction, that means no matter which direction the drone will fly, it always remembers the first set direction. Pressing "headless mode" for 3 seconds again, exit this mode.



### 5. Return to home (RTH)

The Return to home (RTH) function brings the drone back to the last recorded home point. There are 3 types of RTH at GPS mode: Smart RTH / Low-battery RTH / Failsafe RTH

#### Smart RTH

Press the key Return to home, there is a DI sound on the controller and the lights on the drone start to flash, the drone will return to the TAKE OFF point. Press this key again, exit this mode.



#### Low-battery RTH

- Low-battery RTH is triggered when the drone battery level is low. The drone will fly back to where you are about 20 m away. You can still control your drone. Pull the joystick down to land the drone in a safe area.
- When the drone is under Low Voltage, the controller will make a long "DIDI" sound, and all the Indicator lights on the drone will flash. LCD screen RX indicates the voltage is less than 3.6V. (Depending on the environment, the value will vary)

### Failsafe RTH

Drone will enter failsafe RTH mode if the signal of the controller is lost, drone fly back to the record point. Rebind the controller to the drone if drone flies into your view. Pull the joystick down to land the drone in a safe area.

### 6. GPS surround flight

- At GPS mode press surround flight key (pic.1), the drone looks for its direction automatically.
- Push the right joystick left front, the drone flies surround counterclockwise. (pic.2)
- Push the right joystick right front, the drone flies surround clockwise. (pic.3)



Pic.1



Pic.2



Pic.3

### 7. Follow me

Follow me function refer to WIFI INSTRUCTION.

### 8. Way point flight

Way point flight function refer to WIFI INSTRUCTION.

### 9. Photo/video taking

- Press "Photo" key on controller to take photo.
- Depress 3 seconds "Video" key on controller to start video taking and depress again to finish.
- Players can view photos and videos on APP.



## PROBLEM & SOLUTION

No.	Problems	Solution
1	Fail to charge for drone.	Must use the original battery and usb line.
2	Remote controller is not work/light is not on.	Battery has run out of power,change new battery.
3	Fail to do frequency match/ sometimes unable to do frequency match.	Battery of drone or remote controller has run out of power,need to charge drone battery or change remote controller battery.
4	After frequency match all the lights on drone still flash.	Drone battery has run out of power, take it out and charge the battery.
5	Mobile phone can't get WIFI name.	Connect APP after redownloading.
6	1. Get the WIFI name but cannot display image. 2. Slow connection to phone.	1. Replace your phone to download APP and connect it. 2. The plug wire connecting the WIFI board is loose,needs to take it out and reinserted it to connect.
7	Cell phone cannot display images or images display but cannot operated by mobile phones.	The plug wire connecting the WIFI board is loose. needs to take it out and reinserted it to connect.
8	Image display is stuck or mobile phone control is stuck.	Severe wave interference surroundings,move to open and wide area.
9	After taking off, drone deviating from course and unstable.	1. Take-off after 1-2 minutes when the GPS satellite search is completed. 2. It needs to be calibrated step by step when geomagnetic calibration has not been done. 3.The gyroscope needs to be calibrated before taking off.
10	GPS signal is weak or controller's GPS signal alarm.	Complex surrounding environment,move to open and wide area.
11	Drone is too far away from the take off place.	1. After received the GPS signal, wait for 2 minutes then fly. 2. Reference compass calibration in manual and recalibration. 3. Operate the drone in an open place.
12	Drone can only fly in the range of 20 meters.	Drone is in low battery,need to recharge or replace the battery.
13	After unlocking, push throttle or press one key ascend, the drone is not normally work.	Reference Gyro calibration in manual and recalibration.
14	The drone does not respond to press the start key.	Need to choose indoor / outdoor mode correctly