

# FOLDING GPS DRONE USER MANUAL



## Main features:

- Ultra long-distance remote control distance. Let you experience the fun of flying more.
  - Low-power automatic return: the aircraft will fly back to the take-off point automatically when flying to low-power.
  - Fixed height: the aircraft can be fixed at the height you need.
  - GPS: Global Satellite Positioning System, which allows your aircraft to be suspended in midair without moving, making it easier to control.
  - One-click return: With GPS positioning, you can fly your aircraft back to the take-off point. (According to the strength of the GPS signal, the landing point will be a bit off)
  - The four-axis structure makes the aircraft more flexible and fast, has strong wind resistance, and can fly indoors or outdoors.
  - Built-in six-axis gyroscope stabilizer can ensure accurate positioning in the air.
  - The structure adopts modular battery design, and easy to change.
  - Added optical flow positioning function for precise indoor positioning.
- The materials, specifications or items in the package of this manual are for reference only. The company will not be responsible for any changes in this print and cannot actively notify consumers of any updates or changes.

## Important Notices And Safety Guidelines

You are welcome to purchase our products. In order to make it easier and more convenient for you to use this aircraft, please read this manual carefully before operating, and please keep this manual in a safe place as a reference for future adjustments and maintenance.

### Important Statement

- This product is not a toy, but a precision device that integrates mechanical, electronic, aerodynamics, high-frequency emission and other professional knowledge into one. It requires correct assembly and debugging to avoid accidents. The product owner must use a safe method to operate the control; improper operation may cause serious personal injury or property damage.
- This product is suitable for people who have experience in operating model aircraft and are not less than 14 years old.
- If you have any questions about use, operation, maintenance, etc., please contact your local dealer or our company. Our company and the seller are not responsible for any loss and damage caused by improper use or operation and human injury.
- The product contains small parts. Keep it out of the reach of children to avoid the danger of accidental eating or suffocation.

### Safety Precautions

The remote control model aircraft is the most dangerous commodity, and it must be far away from the crowd when flying. Improper assembly or damage to the airframe, poor electronic control, and unfamiliar operation may lead to unpredictable accidents such as aircraft damage or personal injury. The operator must pay attention to flight safety, and must understand the responsibility for accidents caused by his negligence.

- Stay away from obstacles and people

The remote control aircraft has an uncertain flight speed and state during flight, and is potentially dangerous. When flying, you must stay away from crowds, high-rise buildings, high-voltage power lines, etc., and avoid flying in bad weather such as wind and rain. The commissioning and installation of the aircraft must be operated strictly in accordance with the operating instructions. Pay attention to maintaining a distance of 1-2 meters from the user or other people during flight to avoid collision with the head, face and body of the aircraft during flight and landing, causing injury.

- Keep away from humid environment

The interior of the aircraft is composed of many precision electronic components and mechanical parts. Therefore, it is necessary to prevent the aircraft from getting wet or moisture entering the aircraft body, so as to avoid accidents caused by mechanical and electronic components failure. During maintenance, please wipe the surface stain with a clean cloth.

- Avoid manipulation alone

The remote control aircraft control technique has some difficulties in the early stage of learning. To avoid flying alone, you need the guidance of experienced people.

- Proper use of this product

Please use our original parts for modification or maintenance to ensure the safety of flight. Please operate and use the product within the scope permitted by the product function, and shall not be used for any illegal purpose other than safety regulations.

- Safe operation
  - 1. Please operate the remote control aircraft according to your state and flying skills. Fatigue, mental retardation, or improper operation will increase the risk of accidents.
  - 2. Do not use near your ears! Misuse can cause hearing damage.
  - Keep away from high-speed rotating parts
- When the rotor of the aircraft rotates at high speed, please keep the pilot, surrounding people and objects away from the rotating parts to avoid danger and damage.
- Keep away from heat sources
- The remote control aircraft is composed of metal, fiber, plastic, electronic components and other materials. Therefore, it should be kept away from heat sources as much as possible to prevent sunlight, deformation and even damage due to high temperature.
- Environmental requirements
- Discard this product at will, which may have an impact on the environment. Please recycle properly in accordance with local laws and regulations.

## Product Description

### Product Configuration

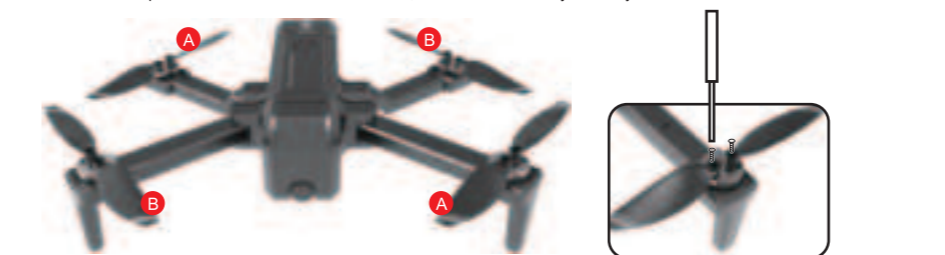
Packing List					
	Aircraft	x1		screwdriver	x1
	remote control	x1		Spare propeller	x2
	USB charging cable	x1		User manual	x1

## Aircraft Component Description And Installation



### 1. Propeller Replacement

If the propeller is damaged during use, please replace the propeller as shown in the figure below to ensure that all propellers are installed in the correct position. If the installation is incorrect, the aircraft will not fly normally.



### 2. Aircraft Battery Installation

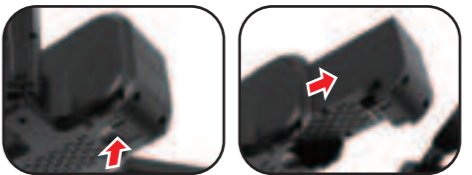
Push the battery into the drone battery holder as shown in the figure on the right. After the installation is complete, the battery buckle will pop up. Please check to ensure that the battery is in place.



**Kind reminder: If the battery is not installed properly, it is likely to cause the drone to lose power and cause a fall accident.**

### 3. Aircraft Battery Removal

Press the battery latch as shown on the right, and remove the battery backwards. Keep fingers and machine clean and dry before operation, otherwise the battery may not be slipped out.



### 4. Aircraft Battery Charging



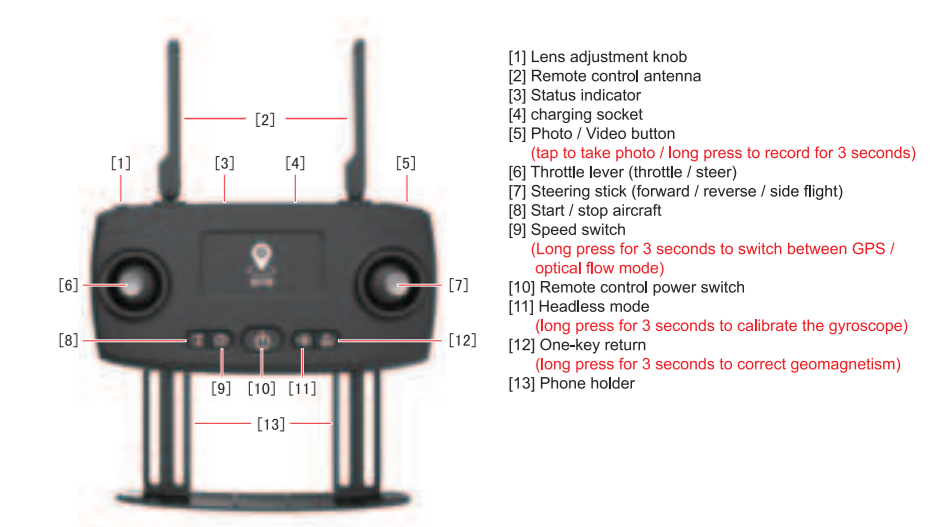
**Tips:**  
 • Insert the plug in the correct way.  
 • It is recommended to use 5V 1-2A adapter for charging.

Plug the USB charging cable provided by the factory into the USB socket or power adapter of the computer (need to be purchased separately), and then connect the charging socket of the battery. The red indicator light of the battery is always on. When the indicator is off, it means it is fully charged. Charging time is about 240 minutes.

Once the battery is in a low-battery state, the aircraft's LED lights will flash. Please charge the battery in time to avoid unnecessary losses. Please allow the battery to cool down for a while before recharging. This will extend the battery life.

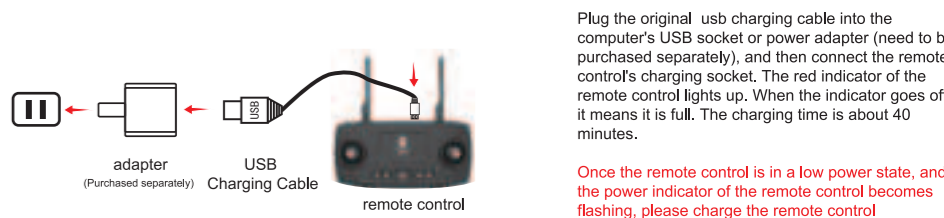
- When charging the rechargeable battery, do not use it for children alone. It must be carried out under the supervision of an adult. It must be kept away from flammable materials during charging. The guardian should not leave the aircraft outside the surveillance range during charging.
- Do not short circuit or squeeze the battery to avoid explosion.
- The power supply terminals should not be taken out of the model, and the terminals should not be short-circuited; do not short-circuit, disassemble or throw the battery into fire; do not place the battery in high temperature and heat places (such as in a fire or near a heating device).
- The model can only use the recommended charger. Regularly check the charger's wires, plugs, shells and other parts for damage. If you find any damage, stop using it until the repair is complete.
- The charger is not a toy, the charger can only be used indoors.
- The battery must be charged and stored after the flight. If not in use, it is recommended to charge the battery at least once every 3 months to avoid over-discharging the battery and permanently damaging the battery.

## Remote Control Part Names



- [1] Lens adjustment knob
- [2] Remote control antenna
- [3] Status indicator
- [4] charging socket
- [5] Photo / Video button  
(tap to take photo / long press to record for 3 seconds)
- [6] Throttle lever (throttle / steer)
- [7] Steering stick (forward / reverse / side flight)
- [8] Start / stop aircraft
- [9] Speed switch  
(Long press for 3 seconds to switch between GPS / optical flow mode)
- [10] Remote control power switch
- [11] Headless mode  
(long press for 3 seconds to calibrate the gyroscope)
- [12] One-key return  
(long press for 3 seconds to correct geomagnetism)
- [13] Phone holder

## Remote Control Charging



Plug the original usb charging cable into the computer's USB socket or power adapter (need to be purchased separately), and then connect the remote control's charging socket. The red indicator of the remote control lights up. When the indicator goes off, it means it is full. The charging time is about 40 minutes.

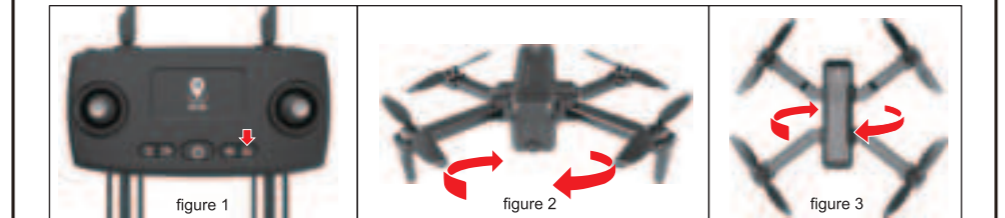
Once the remote control is in a low power state, and the power indicator of the remote control becomes flashing, please charge the remote control immediately to avoid unnecessary losses.

## Preparation Before Flight

1. Make sure the aircraft and remote control are fully charged.
2. Please choose to fly indoors or outdoor environment without rain or snow and wind less than level 4, avoiding people, animals and obstacles.
3. Load the original battery into the aircraft and turn on the power switch (Figure 1). The aircraft indicator light will flash. At this time, place it in a flat position and wait for the code.
4. Turn on the power of the remote control (Picture 2), the indicator light of the remote control flashes, wait for the remote control to beep and the indicator light becomes long, then the indicator light of the aircraft also becomes long, and the code matching is completed.
5. After completing the code matching, please open the mobile phone to scan the corresponding QR code to download and install the APP, and then connect to WIFI to open the APP.  
(For detailed introduction and operation, please refer to the APP user manual.)



## 2. Correction of geomagnetism (no need to repeat correction for flight at the same location):



- A. After the aircraft has finished calibrating the gyroscope, press and hold the one-key return key for 3 seconds (as shown in Figure 1), the remote controller will make a beep, the green light of the aircraft is off, and the red light is on.
- B. Pick up the aircraft at a level of about 1 meter above the ground and rotate it one clockwise. When you hear a "drop" from the remote control, the green light of the aircraft lights up and the red light goes out. At this time, the horizontal correction is completed.
- C. Then stand the aircraft upright, with the camera facing down, and rotate it one clockwise. When you hear a "drop" from the remote control, the green light of the aircraft flashes and the red light comes on, and the vertical correction is completed.
- D. Put the aircraft back on the flat ground, and search for stars at this time. When all the indicator lights of the aircraft become long and the remote control "drops", it means that the search for stars is completed. You can unlock and take off at this time.

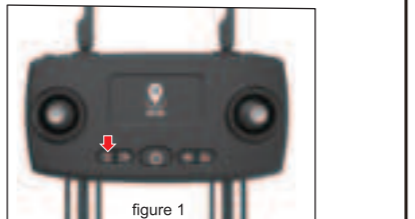
**Tips: Please make sure that the take-off environment is open, and the satellite signal before take-off is greater than 7 stars (the number of satellites is displayed on the mobile APP). The GPS mode will not take off until the GPS automatically searches for protection before completing the GPS search.**

- Do not correct in areas with strong magnetic fields, such as magnetic deposits, parking lots, construction areas with underground steel bars, etc. Do not correct near large pieces of metal.
- Do not carry ferromagnetic materials with you during calibration.
- Place the aircraft in an open area when searching for satellites. Do not surround the building with high-rise buildings or vehicles, high-voltage power lines or other obstructions. Otherwise, the aircraft may not be able to complete GPS satellite positioning.

## 3. Unlock and lock the aircraft:

**Unlock:** Lightly press the start / stop aircraft key (as shown in Figure 1) to complete unlocking, and the motor can be flown after starting.

**Lock:** Lightly press the start / stop aircraft key(as shown in Figure 1) to complete the lock and the motor stops working.



## Mode 2 Optical Flow Mode Operation Introduction (For Spacious Indoor Venues):

This mode is suitable for spacious indoor venues. When using this mode, the GPS function must be turned off before taking off. After the aircraft and the remote control are coded and the gyroscope is calibrated, press and hold the speed switch button for 3 seconds at this time. The remote control will beep and switch to Mode 2 optical flow mode to unlock takeoff.

(Note: Mode2 optical flow mode does not have a series of GPS functions such as low-power return, one-click return, etc. Please pay attention to the flight distance and altitude when using)

## Aircraft Control Method:

Lift	When the left joystick is pushed up or down, the aircraft will rise or fall.	
Turn	When the left joystick is pushed left or right, the aircraft turns left or right.	
advance and retreat	When the right control stick is pushed up or down, the aircraft moves forward or backward.	
Fly sideways	When the right control stick is pushed left or right, the aircraft flies left or right.	

## Headless Mode:

When the remote controller and the aircraft are coded, adjust the direction pointed by the aircraft nose to the front directly in the "headless mode" state. Press the "Headless Mode" key, the remote controller emits a "Drip ~ Drop ~ Drop ..." sound, and the aircraft's indicator light flashes. At this time, the aircraft enters the "Headless Mode", and the user does not need to identify the direction of the aircraft nose. The aircraft needs to be controlled according to the direction of operation of the remote control's steering stick.

## One Touch Return (This Function Is Only Available In Mode 1 Gps Mode):

When the GPS signal is good (the number of satellites is greater than 7), press the "one-key return" button on the remote control, and the remote control emits a "didid" ~ "didi" ... sound. Fly back to takeoff point and land automatically. (The landing position may be deviated)

The user cannot control the aircraft during one-click return, and the aircraft cannot avoid obstacles automatically.

However, you can exit the return home by pressing the "One Click Home" key again, and the user can regain control of the aircraft.

## Runaway Return (This Function Is Only Available In Mode 1 Gps Mode):

When the GPS signal is good (the number of GPS satellites is greater than 7), if the remote control signal is interrupted, the flight control system will take over the control of the aircraft and control the aircraft to fly back to the takeoff point and land.

## Low Battery Return (This Function Is Only Available In Mode 1 Gps Mode):

When the battery power of the aircraft is low, the aircraft's indicator light starts blinking, and the aircraft will automatically return to the vicinity of the take-off point 15 meters.

The user can continue to control the aircraft, but the altitude and distance of the aircraft will be limited to a radius of 15 meters at the takeoff point.

When the aircraft battery is critically low, the aircraft will be forced to land at the takeoff point.

**Reminder: The aircraft is in the low-power return mode, and the remote control cannot cancel the return mode.**

## Control Of Ptz Camera:

**Tips: The camera needs to be used with the real-time transmission APP. See the ZC GPS user manual for download process and function introduction.**

By turning the lens adjustment knob, the shooting angle of the gimbal camera can be adjusted to 90° to experience a better aerial photography process.

When flicking in direction A, the camera adjusts in direction A; when in direction B, the camera adjusts in direction B.

(This function can only be used when the aircraft unlocks the take-off blades)



## Photo / Video:

When the connection between the WIFI camera of the aircraft and the APP of the mobile phone is complete, lightly press the camera / video button on the remote control, the remote control will "drop" to take a photo, and the photo is stored in the mobile phone.

Press and hold the camera / video button on the remote control for 3 seconds, the remote control will "drop ~ drip" twice, the camera starts to record video, press and hold this button again to complete the recording, and the video is stored in the phone.



## Common Troubleshooting:

Serial number	Problem	Solution
1	The aircraft cannot be controlled indoors	Without turning off the GPS function, the aircraft enables the protection program
2	The aircraft cannot take off in GPS mode	Re-calibrate the geomagnetism and search for stars after restarting
3	When in optical flow mode, the aircraft is always dangling and cannot hover, floating around	The ground is too smooth, and the environment is too dark, which will prevent the optical flow lens from positioning. Please fly to a place with good light and no reflection on the ground.
4	After taking off in GPS mode, the aircraft has always been unable to hover, and floats around	The GPS positioning is not good, and the interference is too great. Please fly to an open, unobstructed, and high-voltage line.
5	The aircraft vibrated a lot	The blade is deformed or damaged, it needs to be replaced



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