

### Important

- Please read this manual carefully before using this product, and operate strictly in accordance with the manual
- Please do not try to disassemble, modify or repair the aircraft by yourself, please contact authorized agent if necessary
- Users can enter the "Help" in the upper right corner of the APP main interface to download the electronic document of this manual.
- This instruction is updated without prior notice

This content may change later.

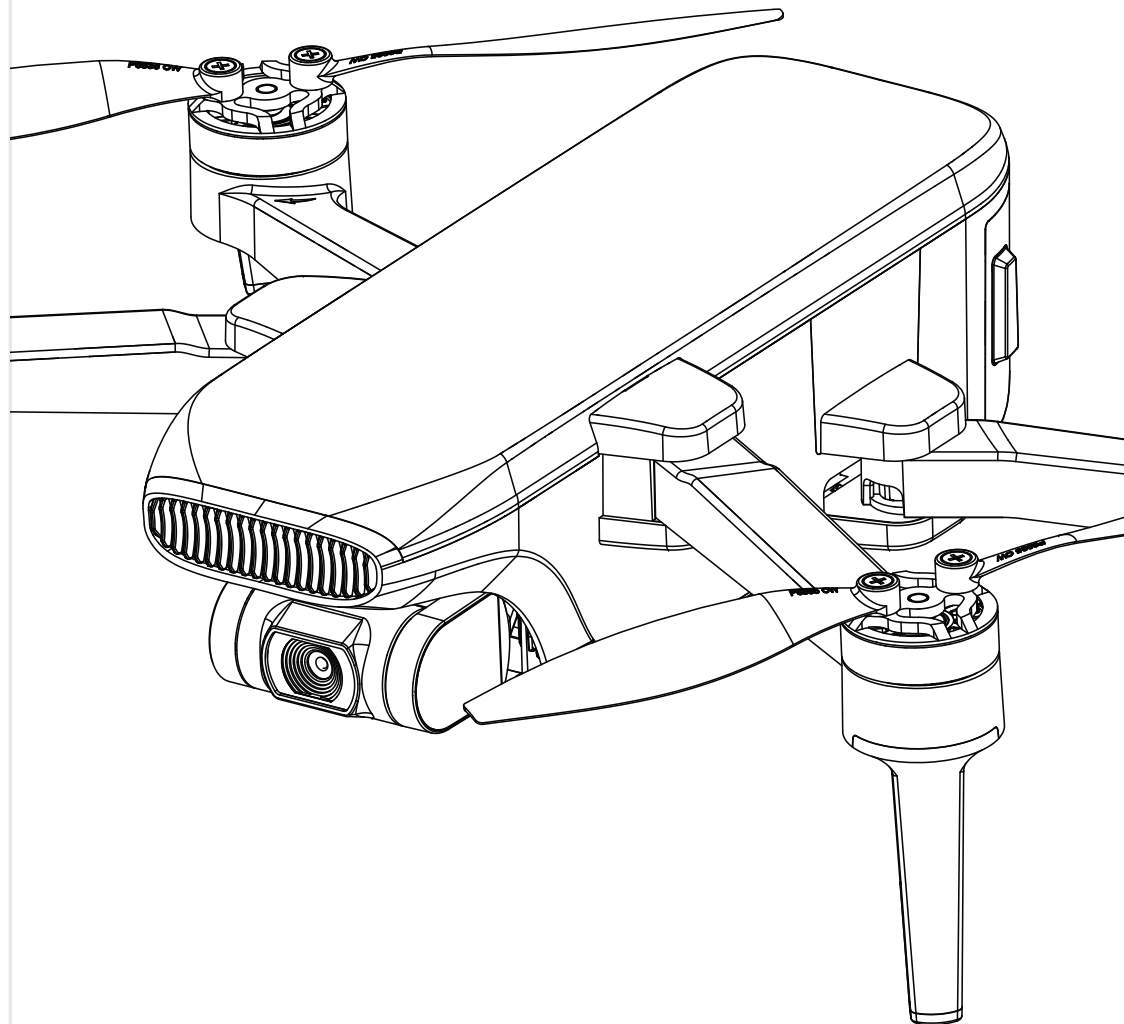
Please download the latest instructions from the official website  
<http://www.cfly-cn.com>

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# FAITH 2

## User Manual V3.0



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# Product Overview

This section introduces FAITH 2 and lists the components of the aircraft and remote controller

## Introduction

Faith 2 is equipped with a vision positioning and GPS positioning system, which allows it to fly and hover stably indoors and outdoors, and has functions such as one-key RTH, orbit mode, track, and waypoint flight, etc. Faith 2 is equipped with a 3-axis mechanical stabilization gimbal to capture high-resolution pictures and videos. It can adjust the camera angle during flight to capture unique photos and videos from different angles for better aerial photography experience.

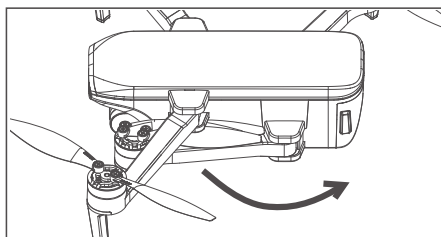
Faith 2 can be used with remote controller and APP to realize various operations and settings of the aircraft and camera. The App on the phone can display real time high-definition FPV (First-person view) and information like flight parameters at the same time.

The maximum speed of the aircraft is 20m/s, the maximum transmission distance approach 5km, the maximum flight time approach 35mins.

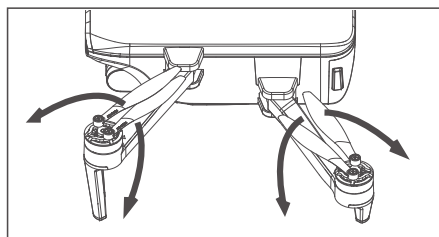
## Preparing The Aircraft

### ● Unfold the aircraft

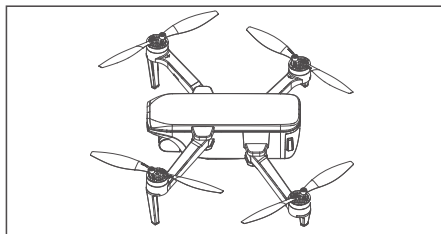
The aircraft is folded inside the package. Follow the steps below to unfold the aircraft.



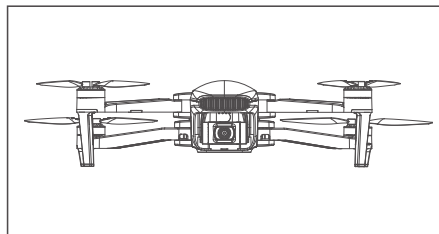
Step 1: Expand the arm outward



Step 2: Separate the propeller blades ;

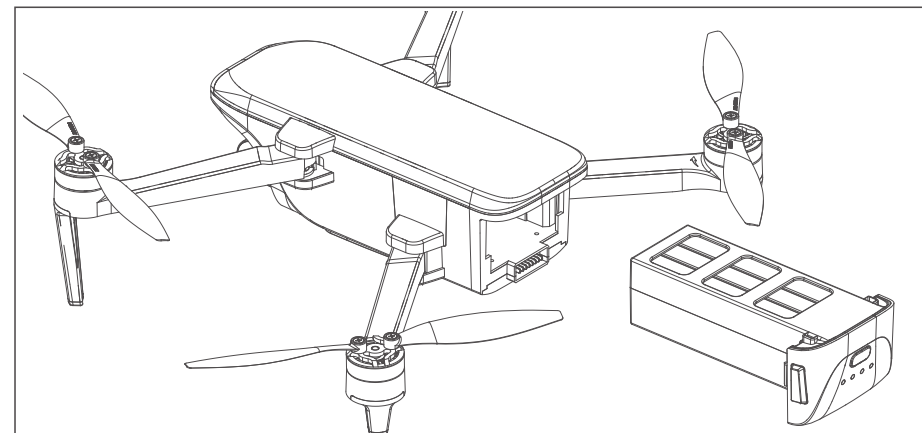


Step 3: Unfold the other arms and repeat step 1~ / with each arm.



Complete

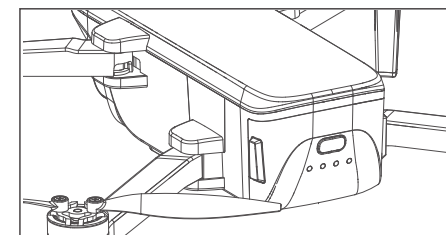
### ● Battery Installation



1. Insert the battery into the battery compartment from the bottom

#### Note

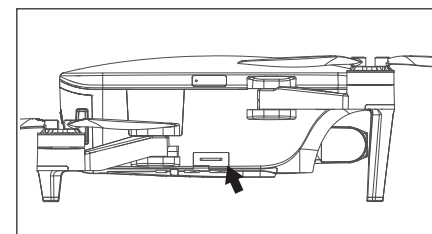
- If the battery is not installed properly, the aircraft may crash due to power-cut during flight.
- Please use both hands to install the battery. Installing the battery with one hand may result in poor battery installation.



2. Make sure that the latch on the battery is locked and the battery is in place

### ● TF Card Installation

The TF card slot is located on the left side of the aircraft body



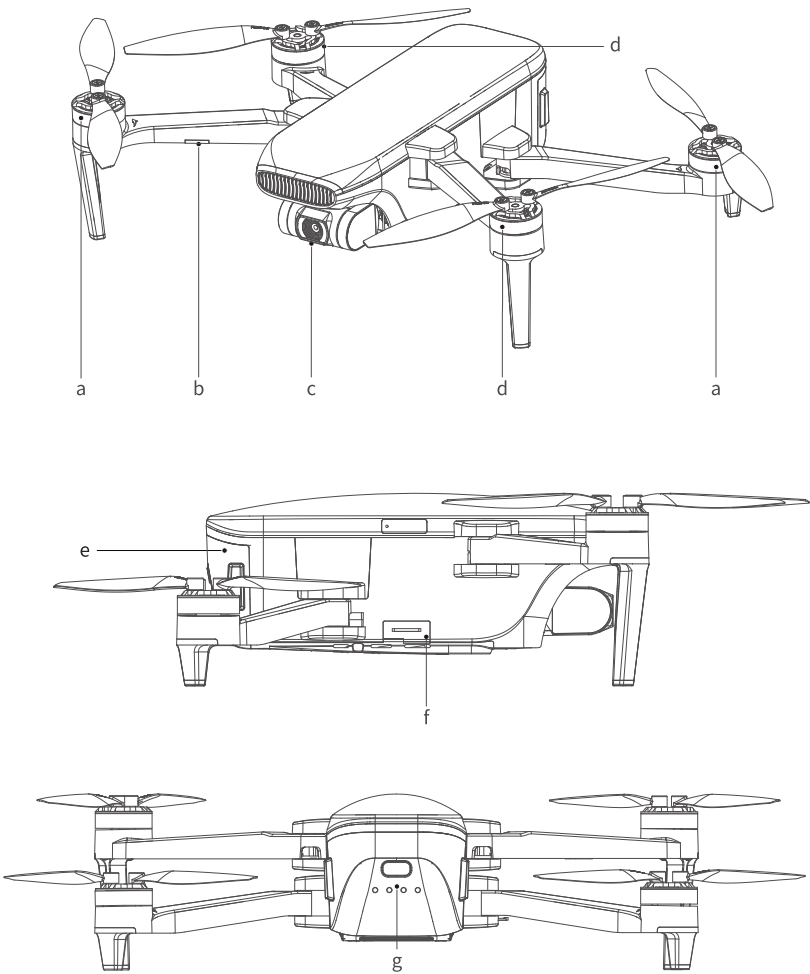
Before installing the TF card, open the TF card slot cover as shown on the right picture, then insert the TF card into the slot, and confirm that the TF card is in the right place, then close the TF card slot cover.

#### Note

- Please use micro SD card with transmission speed of Class 10 and above or UHS-1 rating
- Do not install or remove the TF card while the aircraft is powered on. Otherwise, errors will occur for the data stored.

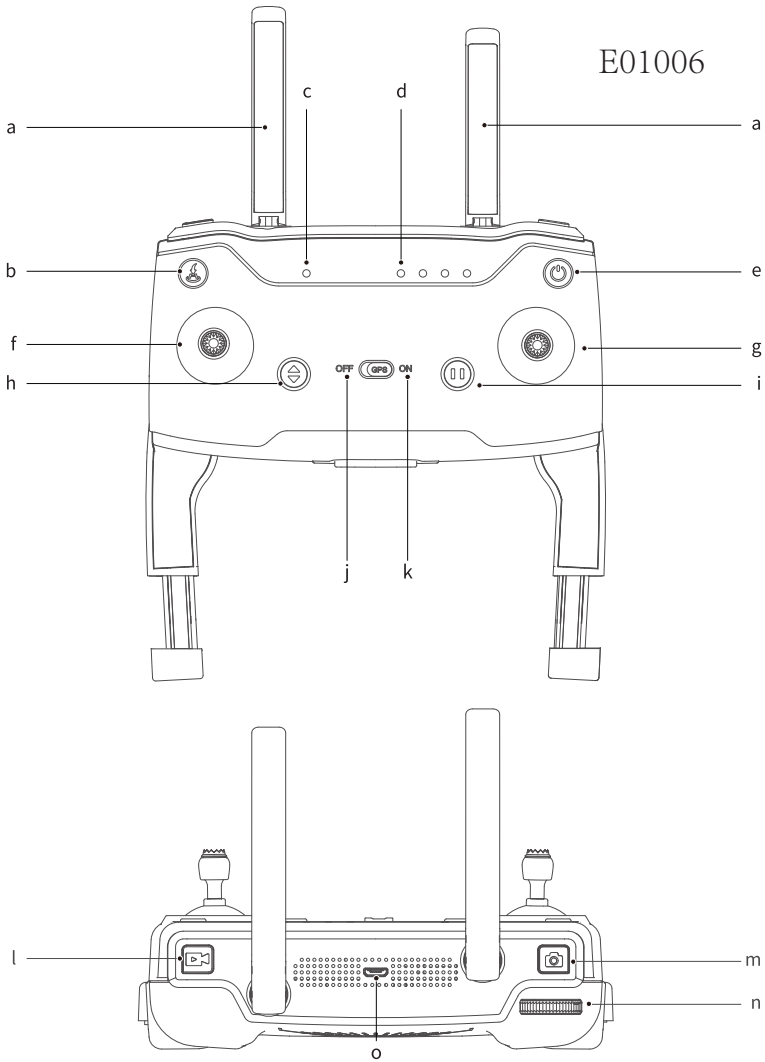
Aircraft Diagram

DF808



|                                     |                                              |                  |
|-------------------------------------|----------------------------------------------|------------------|
| a. CCW Motor/Propeller              | b. Head /Optical Flow Status Indicator Light | c. Gimbal/Camera |
| d. CW Motor/Propeller               | e. Aircraft Battery                          | f. TF Slot       |
| g.Power switch and status indicator | ---                                          | ---              |

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|                   |                               |                         |                            |
|-------------------|-------------------------------|-------------------------|----------------------------|
| a. Antenna        | b. RTH                        | c. Mode Indicator Light | d. Power Indicator Light   |
| e. Power          | f. Left Joystick              | g. Right Joystick       | h. One Key Takeoff/Landing |
| i. Pause          | j. optical flow position mode | k.GPS position mode     | l. Recording video         |
| m. Taking picture | n. Gimbal Adjustment          | o. USB Port             | ---                        |

## Flight Modes

### Position Mode

When the aircraft is in GPS mode, it can achieve accurate hover of the aircraft. When the GPS signal is weak, the aircraft will automatically enter altitude mode or vision positioning mode.

### Altitude Mode

In Altitude Mode, when the visual positioning conditions are satisfied, the aircraft will automatically enter the visual positioning mode, in the visual positioning mode, the aircraft can hover stably with the vision positioning system.

When the visual positioning condition is not satisfied, the aircraft will hold the current altitude by barometer. Accurate hover can not be achieved, as the aircraft has possibility to drift horizontally and it requires user with skilled flight control.

## Return To Home (RTH)

Aircraft has Return-to-home (RTH) function, and there are 3 types of RTH: one-key RTH, low battery RTH and lose control RTH. When the GPS signal is good and the aircraft successfully records the return point, if the user turns on one-key RTH, or the aircraft triggers low battery RTH, or the communication signal between the remote controller and the aircraft is lost, the aircraft will automatically return to the return point and land. Before the aircraft takes off, when the aircraft status indicator turns green and the GPS mode is displayed on the APP, the current position of the aircraft will be recorded as the return point.

### One-key RTH

When the GPS signal is good (the aircraft status indicator is solid green), the aircraft can return to the return point via the "⌂" button on the remote control, and the return process is the same as lose control RTH. The difference is that when the aircraft returns and begins to land, the user can control the aircraft through the joystick to avoid obstacles and change the landing position. After pressing and holding the " " button for more than 2 seconds to exit the return, the user can regain control of the aircraft.

### Low Battery RTH

During the flight, when the red light of the aircraft status indicator flashes slowly, the aircraft triggers low battery RTH. During the landing, the user can control the aircraft by joystick to avoid obstacles and change the landing position.

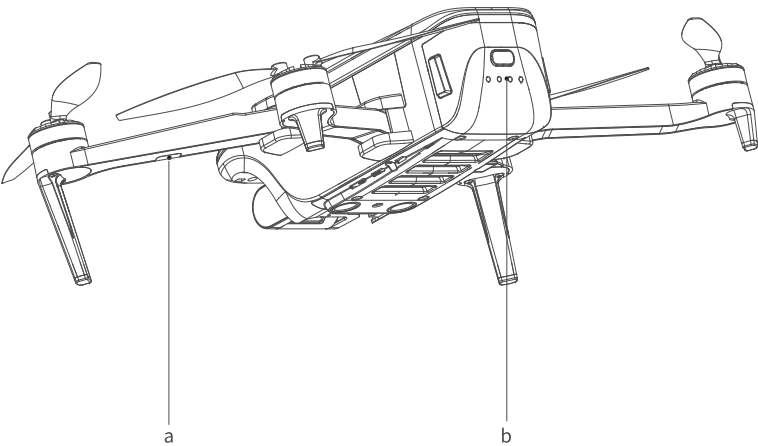
### Lose Control RTH

When the GPS signal is good (the aircraft status indicator is solid green), the compass is working normally, and the aircraft successfully records the return point, if the remote control signal continues to be lost for more than 2 seconds, the flight control system will take over the control of the aircraft and control the aircraft to fly back to the last recorded return point. If the signal of the remote controller is restored later during the flight, the return process will continue, but the user can cancel the return and regain the control of the aircraft through the Pause button "⏸".

### Attentions:

- The aircraft cannot avoid obstacles when it is flying back during the RTH process.
- The aircraft cannot return to the Return Point if the GPS signal is weak or unavailable.
- During RTH process, when the aircraft is flying above 30 meters, the aircraft will immediately perform the RTH function; when flying below 30 meters, the aircraft will rise to 30 meters automatically and then perform the RTH function.
- If the aircraft does not receive the satellite signal or the signal of the remote controller continues to be lost for more than 2 seconds, the aircraft will not be able to return, and will slowly descend until it lands.

## Aircraft LEDs And Status Indicator



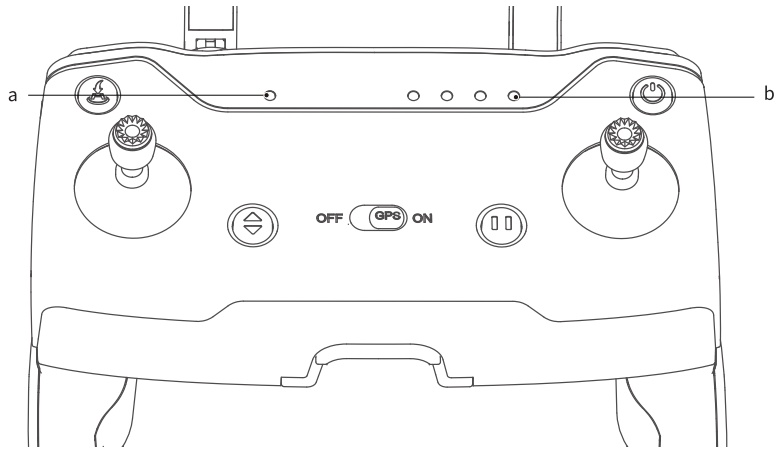
### a. Vision Positioning Status Indicator – LED

|                     |                            |
|---------------------|----------------------------|
| Flashing red light. | Vision positioning failure |
| Solid red light     | In vision positioning      |

### b. Flight Status Indicator – LED

|                                          |                                                  |
|------------------------------------------|--------------------------------------------------|
| Solid blue light on start-up             | Self-inspection                                  |
| Solid green light                        | RC and aircraft is paired,GPS is located         |
| Flashing green light                     | RC and aircraft is paired,GPS is not located     |
| Red and blue light flashing alternately  | Horizontal calibration process                   |
| Red and green light flashing alternately | Vertical calibration process                     |
| Flashing blue light                      | RC and aircraft is not paired,GPS is not located |
| Solid blue light                         | RC and aircraft is not paired,GPS is located     |
| Solid red light                          | Serious error                                    |
| Flashing red light                       | Low battery alarm                                |
| Red light flashes doubly                 | Alarm for severe low battery.                    |
| Green light flashes doubly               | Beginner mode (GPS not positioned)               |
| Blue and green light flashes alternately | Compass data error                               |

Remote Controller Status Indicator



a. Flight Mode Indicator -- LED

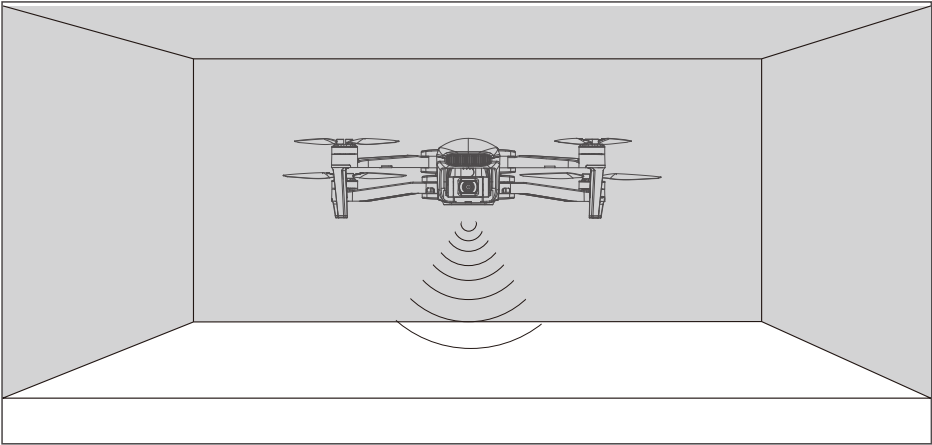
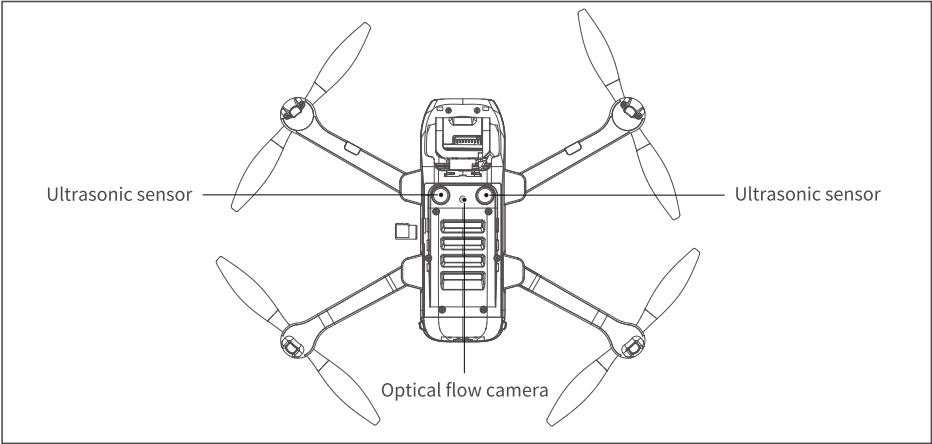
|                   |               |
|-------------------|---------------|
| Solid green light | GPS mode      |
| Solid red light   | Attitude Mode |

b. Power Indicator -- LED

|                                   |                                                                                                                        |          |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------|----------|
| Flashing green light during       | charging                                                                                                               | N/A      |
| Solid green light during charging | Charging complete                                                                                                      | N/A      |
| Solid green light                 | The remote controller is working normally                                                                              | N/A      |
| Green light flashes slowly        | Low battery alarm; please charge                                                                                       | B-B-B... |
| Green light flashes doubly        | The remote controller is idle for more than 9 minutes after power-on; the prompt disappears automatically once operate | B-B-B... |

Vision Position System

Consisted by ultrasonic sensor and camera, The vision system is composed by vision sensor and ultrasonic sensor, The position information of drone can be obtained by vision sensor, and the current height can be judged by the ultrasonic sensor, so that the precise positioning and safe flight of drone can be ensured.



Vision Positioning System

The Vision Positioning System is typically used in indoor environment when GPS is weak or unavailable. It works best when the drone altitude is less than 3 meters.

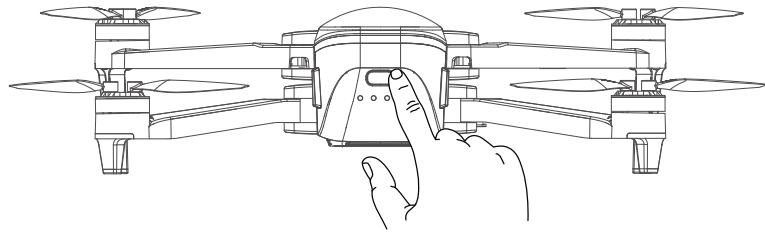
Note

The precision of the vision system is easily affected by the light strength and features of the surface textures. It would happen if the ultrasonic sensor could not work normally to detect the altitude when it is flying over objects that is made by sound-absorbing materials. Once the vision sensor and ultrasonic sensor are both not available, drone will switch to altitude mode automatically. Be cautious to operate the drone in the following situation.

- Fly fast at an altitude below 0.5m.
- Fly over monochrome surfaces (like pure black, pure red, pure red and pure green).
- Fly over strong light reflective surfaces or surfaces prone to reflection.
- Fly over water or transparent object surfaces.
- Fly over moving object surfaces (such as crowds, swaying juggles and glass).

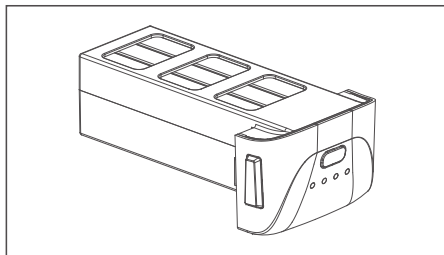
- Fly over an area where light changes dramatically and rapidly.
- Fly over surfaces extremely dark ( $\text{lux} < 10$ ) or extremely bright ( $\text{lux} > 10,000$ ).
- Fly over material surfaces that absorb ultrasonic waves (like thick carpet).
- Fly over surfaces without clear textures.
- Fly over surfaces with highly repeating textures (small grid brick in the same color).
- Fly over surfaces that are tilting over 30 degrees (could not receive the echo of the ultrasonic wave).
- Flying speed should be controlled not to be too fast. When the drone is 1 meter against the ground, the flying speed should not be over 2m/s; When the drone is 2 meter against ground, the flying speed should not be over 5m/s.
- Keep sensors clean at all the time.
- The vision system is only effective when the drone is within the altitude of 3 meters.
- Make sure that the light is bright enough and the surfaces is with clear textures so that the vision system can acquire the movement information through recognizing the ground textures.
- The vision system may not function properly when the drone is flying over water, low light ground and surfaces without clear patterns or textures.
- Do not use other ultrasonic device with a frequency of 40KHz when the vision system is in operation.
- Since the visual positioning will emit ultrasonic waves that human ears cannot perceive, the ultrasonic waves may cause the animals to be uneasy, please stay away from the animals when using.

## Drone Power Switch

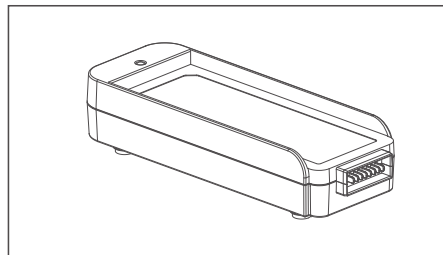


Press and hold the power switch of the drone for about 1.5 seconds, the drone will power on. At this time, the drone will sound a tone, and the front and rear lights will be on; press and hold again the power switch for about 1.5 seconds, the drone will power off, and the front and rear lights will be off.

## Drone Battery

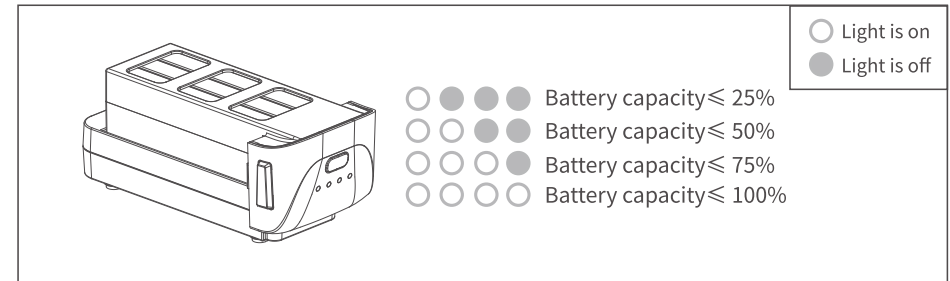


Drone battery



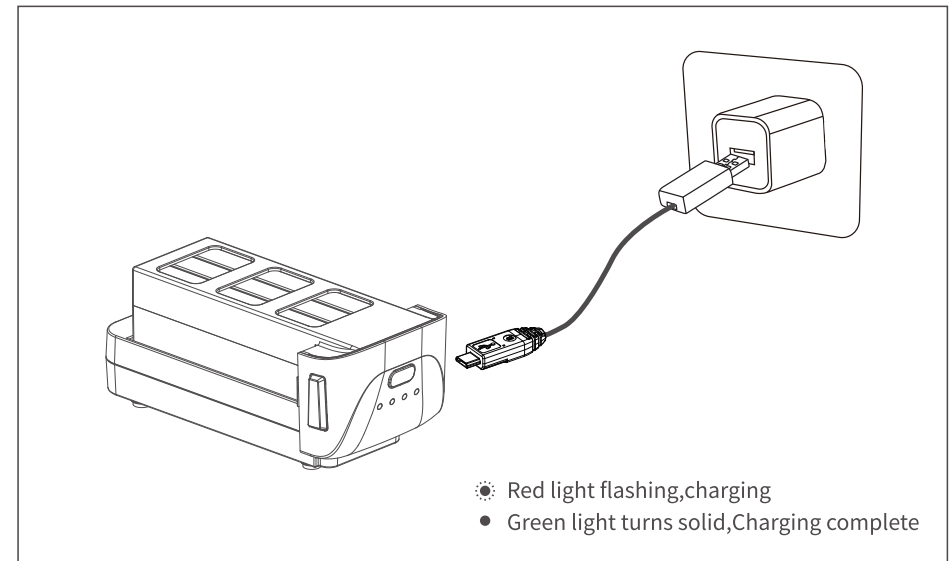
Balance charger

The drone battery capacity is 3100mAh, and its rated voltage is 11.4V. This battery uses high-energy battery cells.



## Check Battery Life

Press the battery power switch to display the current remaining capacity



## Charge

Be sure to fully charge the drone battery each time before flight. The drone battery must be charged using the officially supplied dedicated charger. With 5V 2A adaptor, the charging time is about 270 minutes.

Please charge the battery as the following steps:

Step 1: Connect the USB power adapter and the battery balanced charger with a USB cable.

Step 2: Connect the USB power adapter with a household power outlet.

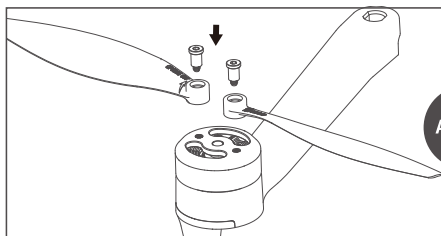
Step 3: Insert the flight battery into the balanced charger and make sure the connection is secure.

## Note

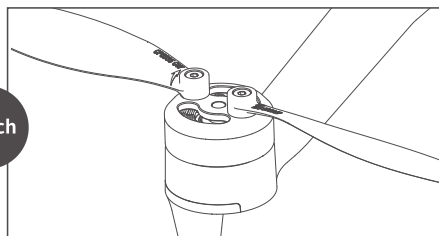
- Adult supervision is needed when the drone is charging. Batteries are only to be charged under adult supervision.
- Do not short circuit and squeeze the battery to avoid explosion.
- The battery should not be short-circuited, decomposed or put into the fire; and the battery should not be placed in high temperature and heated places (such as in the fire or near the electric heating device)
- The model can only use the recommended charger. Regular checks should be made to check whether the charger's wires, plugs, housing and other components are damaged. When damaged, the charger should be stopped using until repaired.
- Charger is not a toy; charger can only be used indoors.
- After the flight, the battery needs to be charged before storing. If not using it, it is recommended to charge the battery at least once a month to avoid permanent battery damage due to excessive discharge.
- Only 5V USB power adapters that meet local laws and regulations can be used.

## Attach And Detach The Propellers

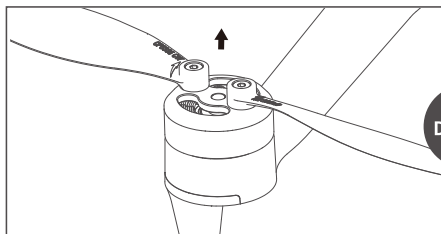
The propellers are pre-installed in the package. If the propeller is damaged during using, please replace the propellers according to the following steps:



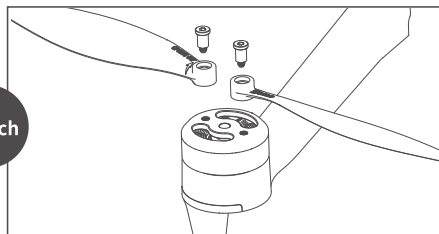
1. Use the screwdriver in the package to rotate clockwise Twist in 2 screws



2. Attach complete.



1. Use the screwdriver in the package to press the screw counterclockwise Twist 2 screws out



2. Detach complete

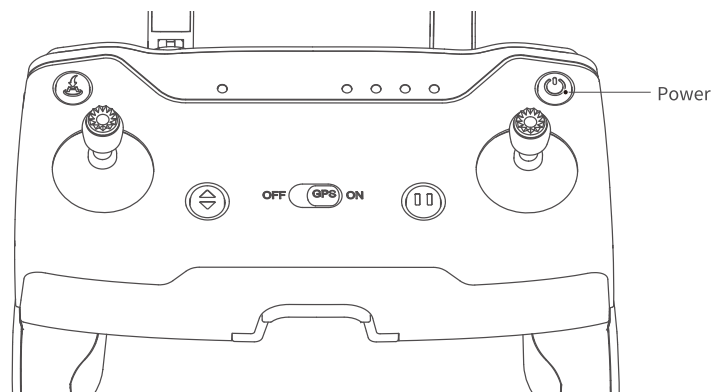
## Note

- If the propeller with the A-mark is to be disassembled, choose the propeller with the A-mark for installation. If the propeller marked with B-mark is removed, Just choose the propeller with B-mark to install
- Make sure that the propeller A and propeller B are installed in the correct positions. The drone will fail to fly normally if the propellers are installed improperly.
- As the propellers are thin, be careful when installing them to prevent accidental scratches.
- Please use the official dedicated propellers for replacement.
- Propellers are consumables. Please purchase the official dedicated propellers if necessary.

## Remote Controller

This section describes the features of the remote controller and includes instructions for controlling the aircraft and the camera.

## Power On And Power Off

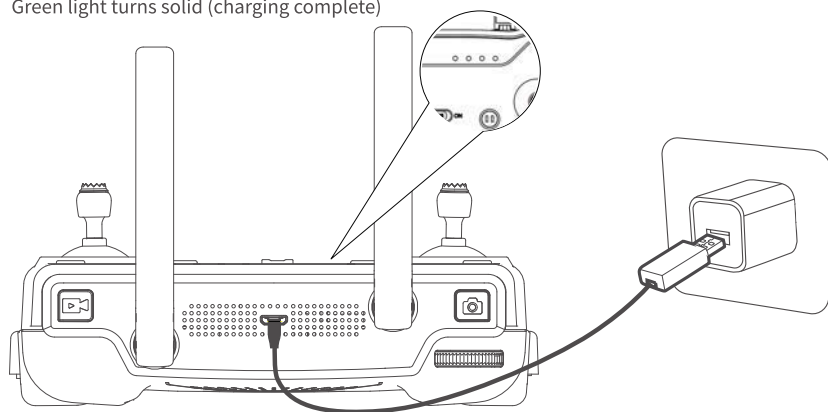


Power on and power off the controller by pressing the power button for more than 1.5 seconds.

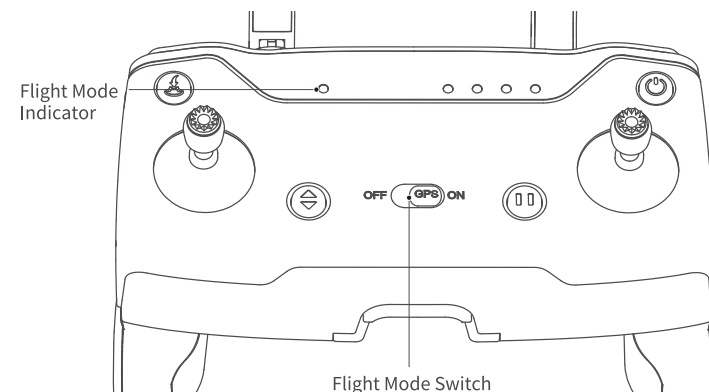
### Battery Life Check And Battery Charge

After turning on the remote controller, observe the status of the power indicator. When the power indicator light is four green lights, it means that the battery is fully charged. When the power indicator light is single green flashing, it means that the battery life is insufficient.

- Green light flashing (charging)
- Green light turns solid (charging complete)



## Function And Status Of Remote Controller



### Flight Mode Switch Button

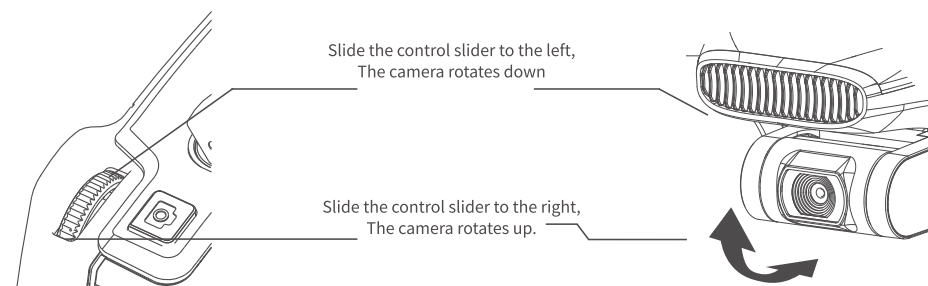
Dial the "ON/OFF" button to switch the flight mode of the drone. The flight mode indicator light indicates the current mode.

#### Indicator Light

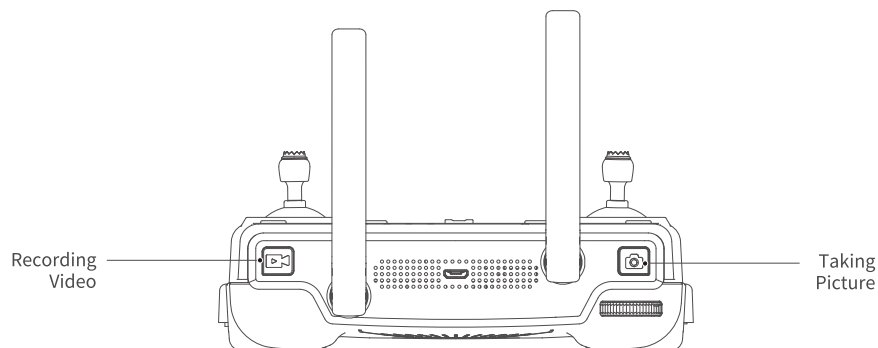
|                          |               |
|--------------------------|---------------|
| <b>Solid Green Light</b> | GPS mode      |
| <b>Solid Red Light</b>   | Attitude Mode |

### Gimbal Adjustment

The shooting angle of the camera can be adjusted for better aerial photography experience. As shown in the figure below, dial the pulley in the upper left corner of the remote control to control the camera pitch angle.



## Photo / Video



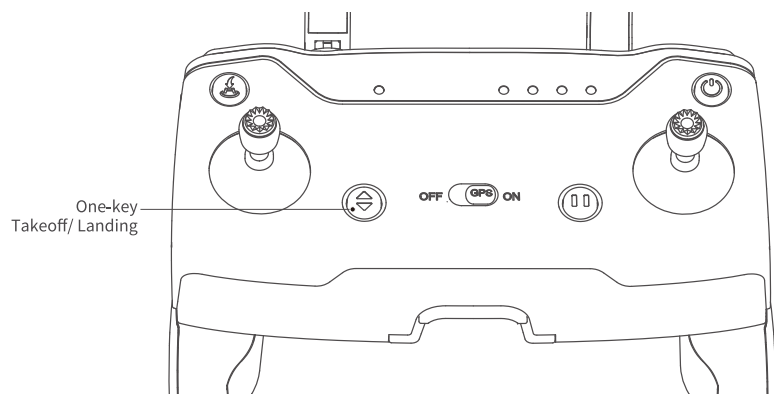
press "■", with "Beep" sound on RC, which means photo is taken successfully.

press "■", with "B-B-" sound on RC, which means video start to record successfully, press "■", again, with "B-B-" sound on RC, which means video stop to record successfully.

## Note

- When the drone is not inserted with TF card or the TF card malfunction, the photos and videos will be stored on the mobile device, the quality of video files is relatively poor.
- Please stop recording before turn off, otherwise it will cause file damage.
- Pictures can not be taken when it's recording.

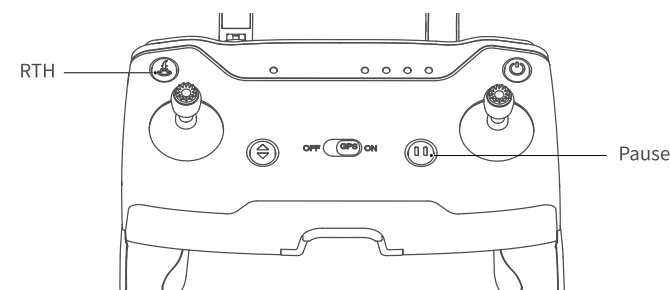
## One-Key Takeoff / Landing



Long press the "⬆" button for 2 to 3 seconds. When the remote controller beeps steadily, the drone will automatically take off and ascend to the altitude of 1.2 meters and hover.

Long press the "⬆" button for 2 to 3 seconds. When the remote controller beeps steadily, the drone will land vertically.

## RTH Button / Pause Button



Long press "⬆" button, with "B-B-" sound on RC, to start the RTH, The drone will fly back to the latest recorded return point. The joysticks can not be used during the process of ascent and return. During its landing, user can toggle the joystick to control the drone and decide the landing site. During its return, press the "⬆" button again to exit RTH mode, Then the user will regain control of the drone.

Short press the pause button, the aircraft will interrupt the current mode (such as track, lose control return, waypoint, quick shots, or orbit mode), and change to position mode.

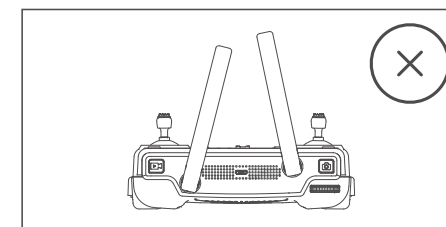
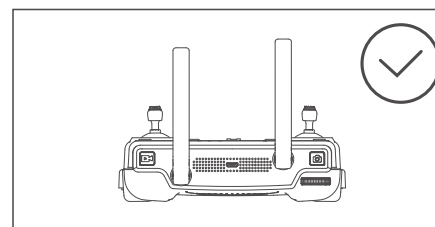
## Attention:

- To ensure the return to home point as precise as possible, please fly the drone in open area (no tall buildings in 50 meters of radius, flat in 10 meters of radius) with the GPS working well. Then the return to home function will be able to activate.
- With the GPS positioning mode turned on, it will automatically enter auto return to home mode if the remote controller loses control.
- Once the RTH mode is enabled, if the drone flies below 30 meters of altitude, the drone will automatically ascend to 30 meters before returning to home point. If the drone flies over 30 meters of altitude, the drone will return to home point at the current altitude. Please do not use other functions during the process of return. Please ensure there are no obstacles in way of return in case of any potential accidents.

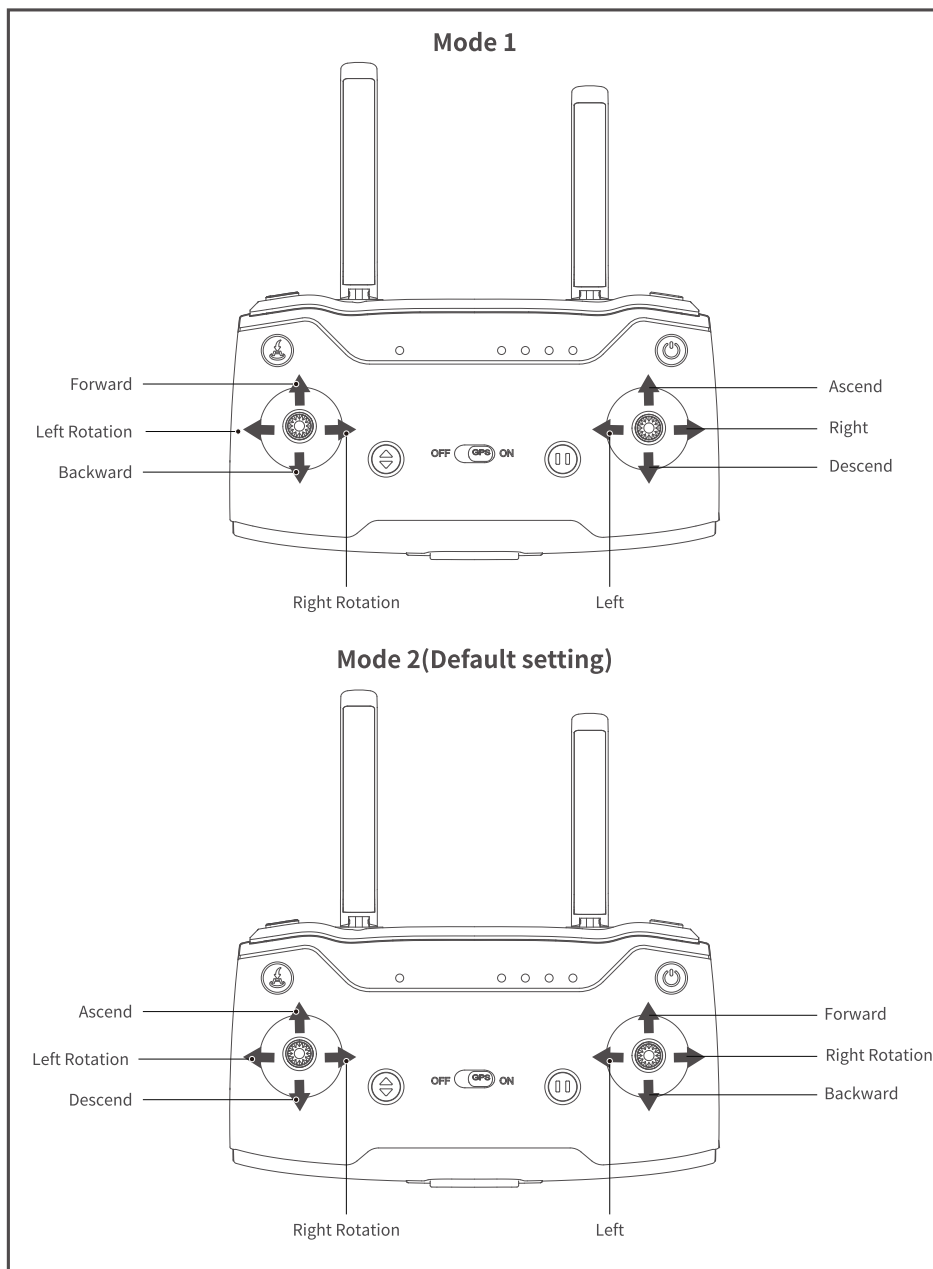
## Optimal Transmission Zone

Ensure that the drone is flying within the optimal transmission zone. To maintain optimal transmission performance, adjust the remote controller and antennas and keep the space between controller and drone clear during the flight.

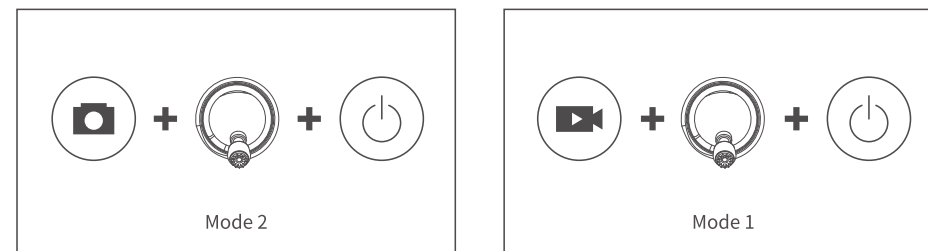
- Please keep the drone flying within the range in front of the remote controller without any obstacles between the remote controller and the drone.
- It is necessary to avoid the tip of the antenna facing the drone as much as possible, when the drone is in a poor communication area.



## Throttle Control Stick Mode



## Mode 2/ Mode 1 Switch



### ● Switch to Mode 2 (Default setting)

Before turning on, pull the left joystick to the lowest position, press the buttons "📷" and "🔌" at the same time, and keep still, wait for the remote control to make a beep and the two green lights are on to complete successfully. Switch to "mode 2",user can use it after restarting the remote controller.

### ● Switch to Mode 1

Before turning on, pull the right joystick to the lowest position, press the buttons "📺" and "🔌" at the same time, and keep still, wait for the remote control to make a beep and the two green lights are on to complete successfully. Switch to "mode 1",user can use it after restarting the remote controller.

## Download APP

Be sure to connect the APP before flying the drone. User can control the flight, operate the gimbal / camera and set flight parameters of the drone via the APP.

### Scan the QR code to download app

● Please make sure that the mobile software environment is Android 5.0 or above and IOS 9.0 or above, otherwise the APP may not be installed successfully or may work with errors.



## Photos And Videos Saving



**4K**  
**3840 x 2160**

- If a SD card is not installed, the video and photos will be saved to the mobile app. In this case, the video quality is relatively poor (not recommended).
- If a SD card is installed in the drone, the videos and photos will be saved to the SD card. In this case, the video quality is much better (recommended).
- The videos and photos on the SD card can be transferred to the mobile APP.
- The FPV transmission quality and distance varies by different mobile phones and different environmental situations.
- Please fly the drone in an open and undisturbed environment as possible for a better FPV transmission experience.
- The actual test indicates that the maximum FPV transmission distance approach 5000 meters in an interference-free environment.

## Flight

This section describes safe flight practices and flight restriction.

## Flight Environment Requirements

- Do not fly the drone in bad weather such as high winds, snow, rain, foggy weather, etc.
- Choose a wide, open place with no tall buildings surrounded as a flight site. Buildings that use a lot of steel bars may affect the compass work and block GPS signals resulting in poor positioning or even inability to locate the drone.
- When flying, please keep drone in sight, away from obstacles, crowds, water, etc.
- Do not fly in areas that have high-voltage lines, communication base stations or transmission towers, etc. to avoid signal interference of the remote controller.
- When flying above 5000m altitude, the performance of the drone battery and power system will be degraded due to environmental factors, thus the flight performance will be affected. Please fly with caution.
- GPS is not available for flight in Arctic Circle and Antarctic Circle.

## Flight Restrictions and Flight Limits of Special Area

According to the air traffic control regulations and the drone management regulations of ICAO and different nations' air traffic control, drones must fly in the prescribed airspace.

## Pre-Flight Inspection

- Make sure the remote controller, drone battery, and mobile device are fully charged;
- Make sure the propellers intact and installed correctly;
- Make sure that front and rear arms and the blades are fully unfolded;
- Make sure that the camera lens is clean;
- Make sure the TF card installed correctly;
- Ensure that the battery is firmly installed;
- Always use original components or accessories certified by the Manufacturer. The use of non-original accessories may pose a hazard to the use of the drone."

## Test Flight

### Beginner's Mode

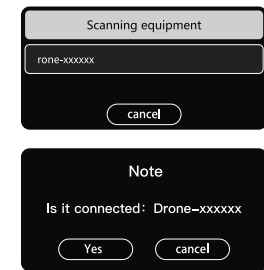
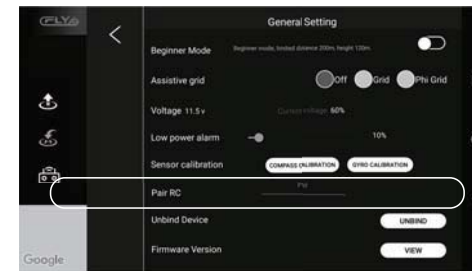
For beginners, please turn on the beginner's mode. Once the mode is activated, the drone will locate its own position by GPS before ready to takeoff. If the drone can not be controlled after takeoff, the RTH can be used to allow the drone to return automatically.

### Re-pair Remote Controller and Drone

The drone is pre-paired with the remote controller in the package, users can use it once turn it on. However, if the remote controller is replaced or for other reasons that causes a failure in matching the drone and the remote controller, please complete the binding as the following steps :

(1) Turn on the aircraft and the remote control.

(2) Open your phone and go to the Settings - WLAN menu to see the list of current Wi-Fi signal. User can see the remote's Wi-Fi signal: Ground-xxxxxx (xxxxxx is a serial number consisting of letters and Numbers). Please record the serial number of the remote control for standby.



(3) Select the Wi-Fi Signal of the remote control and connect it.

(4) Enter the App Interface and click"...". in the upper right corner. Go to the general settings menu as shown and then click "Pair";

(5) The Wi-Fi name scanned will be displayed in the dialog, Please select the Wi-Fi of the aircraft, such as Drone-xxxxxx and then click "OK"

(6) Enter the mobile phone "Settings" Wlan mean again and check the serial number of the remote control. If the serial number has been changed, the binding has been completed. at this point, the rear arm indicator light of the aircraft turns to green flashing or keeps on.

### Drone Self-Diagnostic Tests

Power on the aircraft, Make sure that the aircraft is placed horizontally for more than 30 seconds to self-diagnostic.

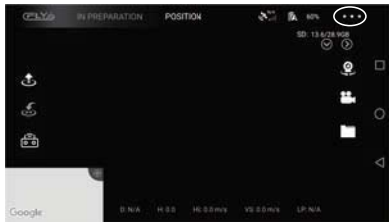
When the drone and Remote controller are connected successfully, the status indicator turns solid blue which means that the drone enters the self-diagnostic tests procedure. At this time, please ensure that the drone is statically placed on the horizontal ground.

### Compass Calibration

The drone has a built-in compass that ensures that the drone maintains an accurate heading during intelligent flight. The compass status must be checked before each flight. If encounter the following situations, please recalibrate the drone compass:

- Before the flight to a new flight site.
- When the drone status indicator shows that the compass has errors.
- When the APP and the drone remind to calibrate the compass.
- When the drone experiences severe shifting during hovering or flying.

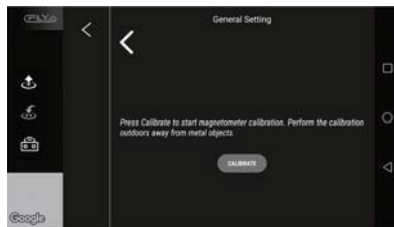
## Compass Calibration via APP



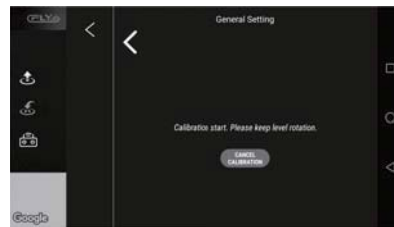
Tap the "..." button in the upper right corner of the APP



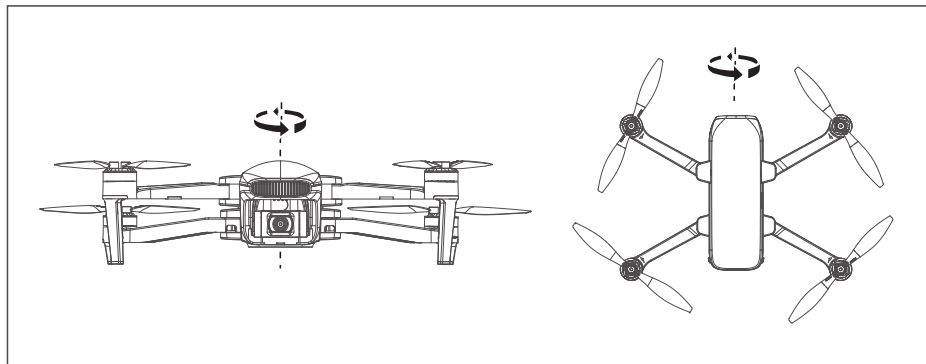
Enter the "General Settings" menu



Calibration Interface 1



Calibration Interface 2



Vertical Calibration / Horizontal Calibration

### (1)Enter calibration mode:

After the dronet is connected to the APP, tap the "..." button in the upper right corner of the APP control interface to enter the "General Settings" menu,Then tap the "Calibration" button.

When the APP pops up a prompt, check the current environment and keep away from metal objects as prompted. Then tap the "Calibration" button

In this case, when the status indicator on the rear arm of the drone flashes blue and red alternately, the compass calibration mode starts.

### (2)Compass Calibration

● When the APP prompts to rotate the drone horizontally, place the drone horizontally in the hand, then turn the drone horizontally until the status indicator on the rear arm of the drone changes to an alternatively flashing red and green light, which means that the horizontal calibration is successful

● Vertical Calibration:when the APP prompts to place the drone's head to be up and rotates, place the drone in the hand and ensure that the drone body is perpendicular to the ground; then rotates the drone horizontally. When the status indicator on the rear arm of the drone turns green (solid or flashing), the compass is successfully calibrated,At this time, the APP will prompt "Calibration Successful", then tap "Finish" to end the calibration process,If the status indicator turns to solid red light for about 6 seconds, the compass calibration fails. Please go to another location and recalibrate.

#### Note

- After changing the flight site, make sure to calibrate the compass before the first flight.
- If the aircraft indicator flashes blue and green alternately during flight, which means that the compass is abnormal and need to calibrate.
- Stay away from the environment with magnetic interference when calibrating, otherwise the calibration may fail.
- Do not calibrate in areas with strong magnetic fields, such as magnetic mines, parking lots, and building areas with underground reinforcement.
- Do not calibrate with carrying ferromagnetic materials such as keys, mobile phones, etc.
- Do not calibrate when large pieces of metal are nearby.

## Basic Flight Operation Steps

- (1) Place the drone in a wide open area that its front is user's front.
- (2) Turn on the drone and remote controller.
- (3) Connect the remote controller with the drone and then proceed drone self-diagnostic tests.
- (4) Connect the APP with mobile device and enter into the FPV interface.
- (5) Unlock the drone after the app indicate: ready go.
- (6) Pull up the throttle stick then the drone takes off, and control the drone flight by left/right stick.
- (7) 下 Pull down the throttle stick to land the drone.
- (8) Pull down the throttle stick to the bottom position and keep for 3 seconds to lock the drone.
- (9) Pull out the battery from the drone and then turn off the remote controller

#### Video Suggestion and Tips :

- (1) Make sure components of the drone are normal before flight.
- (2) Choose sunny, windy weather for recording.
- (3) Perform test flights to establish flight routes and to preview scenes.
- (4) Push the control stick gently to keep the drone movement smooth and stable.
- (5) Choose appropriate gimbal shooting angle.
- (6) Try to record the videos under Positioning Mode.

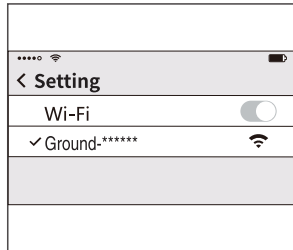
## Remote Controller to Control Flight

### Power on

Put the drone on the flat surface, turn on the Remote controller and drone successively, wait for drone on flat ground for about 30 seconds for self-diagnostic tests.

When the aircraft indicator light turns from flashing or solid blue to flashing or solid green, which means the Remote controller and drone are connected.

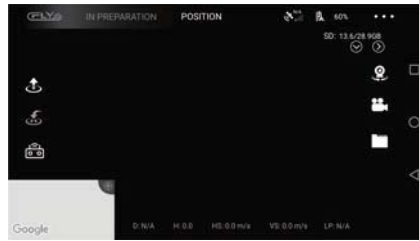
### Connect APP



WLAN setting



Done



Introduction of Main Interface

Click WLAN setting, and click "Ground-XXXXXX", exit Settings Options after Wi-Fi Connection Successfully. Open the APP, enter the home page as shown, When the bound interface pops up, please tap "Check" then tap "Start Flying" to enter the flight operation interface, watch real-time images or perform necessary operations.

#### Note

- Please maintain the current wifi connection and not switch to the mobile network.
- Use APP to monitor the image and the current state of the aircraft.

### GPS Signal Status

When the status indicator of the drone is solid green, it indicates that the GPS positioning is normal, and the drone can take off safely.

When the green light flashes on the drone status indicator, it indicates that the GPS signal is weak or no signal, and altitude mode can be selected for operation (this mode is difficult to operate, it is not recommended for beginners).

#### 【Note】

- Set the aircraft up and get ready to takeoff after the aircraft indicator light turns solid green (indicating good GPS signal)
- Please choose an open and spacious field. Tall steel structures and metal materials will interfere the compass and GPS.

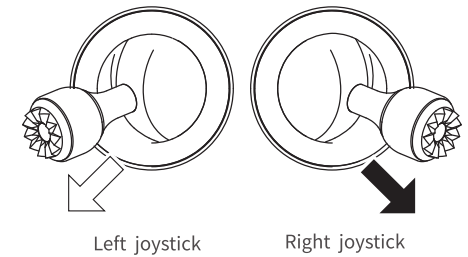
### Operate the Drone Takeoff

#### ● Method 1: Takeoff manually

Toggle the left and right joysticks outward as to get the propellers started to rotate.

#### ● Method 2: One-key takeoff

Long press the " " button for 2 to 3 seconds. When the remote controller beeps steadily, the drone will automatically take off and ascend to the altitude of 1.2 meters and hover.

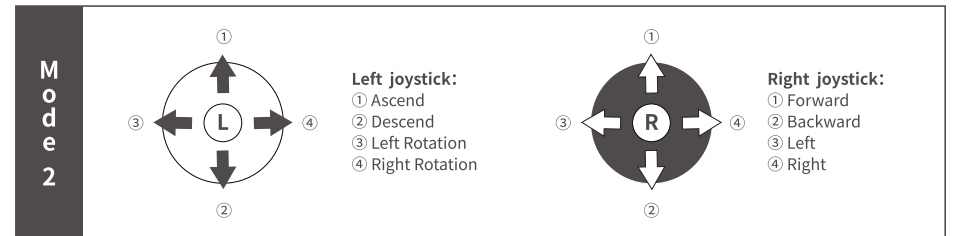
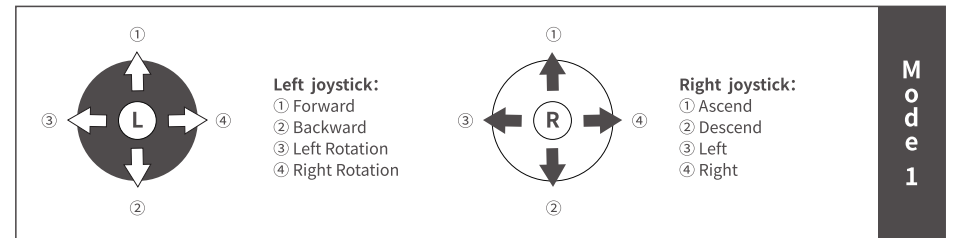


Left joystick

Right joystick

### Flight Control by Remote Controller

After takeoff, control the flight of the drone as shown.



### Landing

Please be aware to avoid the crowd and obstacles, and ensure that the drone is hovering over the landing site before landing. Choose an open and flat space as landing site.

#### Method 1 : Land manually

Slowly toggle the throttle joystick to control the drone to land. When the drone lands on the ground, continue to toggle the joystick towards the lowest position until the propellers stop rotating.

#### Method 2 : One-key landing

Long press the " " button for 2 to 3 seconds. When the remote controller beeps steadily, the drone will land vertically.

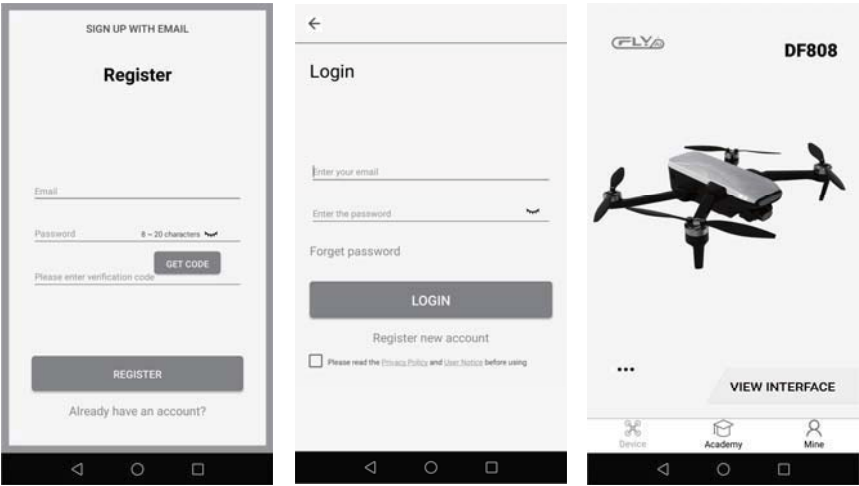
### Power off

After completing the flight, turn off the drone first and then the remote controller. Please do not touch the motor after the aircraft just landed!

# CFLY 2 APP

This section introduces the main functions of the CFLY 2 APP .

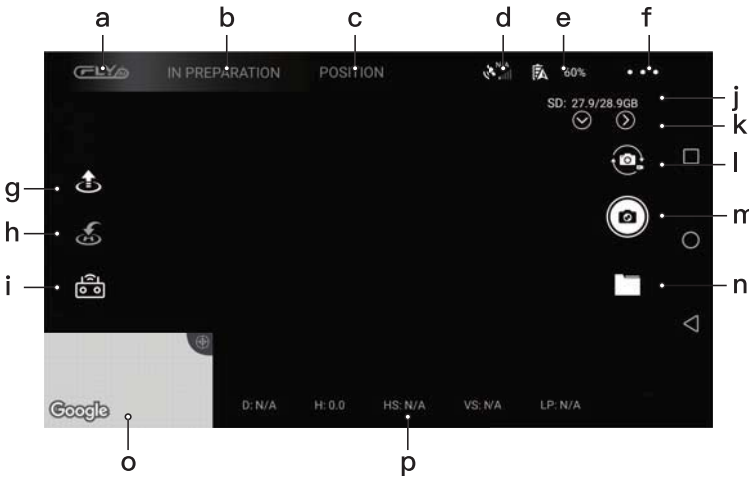
## Register、Log in



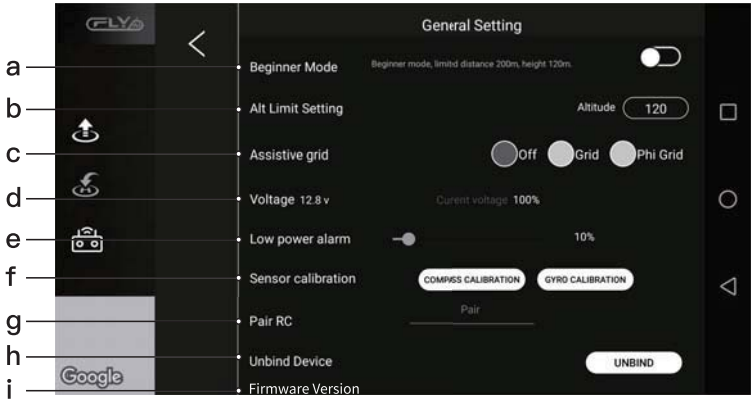
Register an account      Account login      Main interface

## Register、Log in

|   |                     |                                                                                           |
|---|---------------------|-------------------------------------------------------------------------------------------|
| a | Register an account | For the first visit,user need to register an account with mobile phone or email           |
| b | Account login       | After registration,enter the account and password to log in                               |
| c | Main interface      | After logging in, user can check the binding status of the aircraft on the main interface |



| Main interface |                             |                                                                                                                                                                                                                                                                                                             |
|----------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a              | Back to homepage            | Back to homepage                                                                                                                                                                                                                                                                                            |
| b              | Aircraft status prompt      | Display the current status of the aircraft.                                                                                                                                                                                                                                                                 |
| c              | Flight status               | The current flight mode is displayed. Click here to pop up the flight mode list and select the appropriate flight mode. For related flight mode functions, refer to the related description in the following text.                                                                                          |
| d              | GPS signal                  | Show the number of GPS currently connected to the aircraft                                                                                                                                                                                                                                                  |
| e              | Battery life                | Display the current battery life of the aircraft.                                                                                                                                                                                                                                                           |
| f              | General Setting             | Click to enter the general settings menu.                                                                                                                                                                                                                                                                   |
| g              | One key takeoff             | Before the aircraft takes off, the take-off icon "  " is displayed. After clicking, the aircraft will automatically take off and hover at a height of 1.2 meters.                                                          |
|                | One key landing             | After the aircraft takes off, the landing icon "  " is displayed, and the aircraft automatically descends to the ground after clicking. will automatically take off and hover at a height of 1.2 meters.                   |
| h              | RTH                         | This icon is displayed when the aircraft is in the "automatic return" state.                                                                                                                                                                                                                                |
| i              | Quick shots                 | Start the rocket,drone,helix,boomerang mode.                                                                                                                                                                                                                                                                |
| j              | TF card status              | N/A is displayed when the aircraft is not installed with a TF card, and the current storage status is displayed after the TF card is installed.                                                                                                                                                             |
| k              | Menu display/hide           | Show or hide the "Photo and Video" menu.                                                                                                                                                                                                                                                                    |
| l              | Photo/Video switch          | This function is to switch between photo and video mode.                                                                                                                                                                                                                                                    |
| m              | Recording video mode        | Start/stop recording.                                                                                                                                                                                                                                                                                       |
| m              | Taking picture mode         | click to take picture.                                                                                                                                                                                                                                                                                      |
| n              | Album                       | Tap to enter the album to view the photos or videos taken.                                                                                                                                                                                                                                                  |
| o              | Map                         | Tap to enlarge the interface and display the map near the current location.                                                                                                                                                                                                                                 |
| p              | Aircraft flight status data | The distance between the current position of the aircraft and the take-off point.<br>The altitude of the aircraft's current position and take-off point.<br>The current horizontal flight speed of the aircraft.<br>The current vertical flight speed of the aircraft.<br>Mobile device positioning status. |
|                |                             |                                                                                                                                                                                                                                                                                                             |
|                |                             |                                                                                                                                                                                                                                                                                                             |



General Setting interface

| General Setting interface |                            |                                                                                                                                                             |
|---------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a                         | Beginner mode switch       | Before the aircraft takes off, user can turn on or off the beginner mode, and set the limit of flying distance and altitude.                                |
| b                         | Alt limit setting          | Before the aircraft takes off, set the limit flight altitude. The default is 120m, the height range can be set 30m~500m.                                    |
| c                         | Auxiliary grid lines       | During aerial photography, auxiliary lines can be used for picture composition.                                                                             |
| d                         | Voltage                    | Display current aircraft battery voltage                                                                                                                    |
| e                         | Low voltage alarm setting  | The power level during low battery alarm can be set, the default is 10%, and the setting range is 10%~80%.                                                  |
| f                         | Compass calibration        | To calibrate the compass vertically or horizontally, refer to the relevant instructions for its functions.                                                  |
| g                         | Pair the remote controller | To pair the remote control, refer to related instructions for its functions.                                                                                |
| h                         | Unbind APP                 | Unbind the current APP and the aircraft, and then other users can bind.                                                                                     |
| i                         | Firmware version           | Click to view the application version, flight control firmware version, relay firmware version, remote control firmware version and image firmware version. |

## Flight Mode Description

The following flight modes can be displayed in the flight mode bar of the APP control interface.

### GPS mode

The default flight mode is GPS mode when drone turn on. When the drone is positioned (the drone status indicator is solid green), drone will be unlocked.

In this mode, the drone will be positioned automatically by GPS, so it has better flight stability and safety.

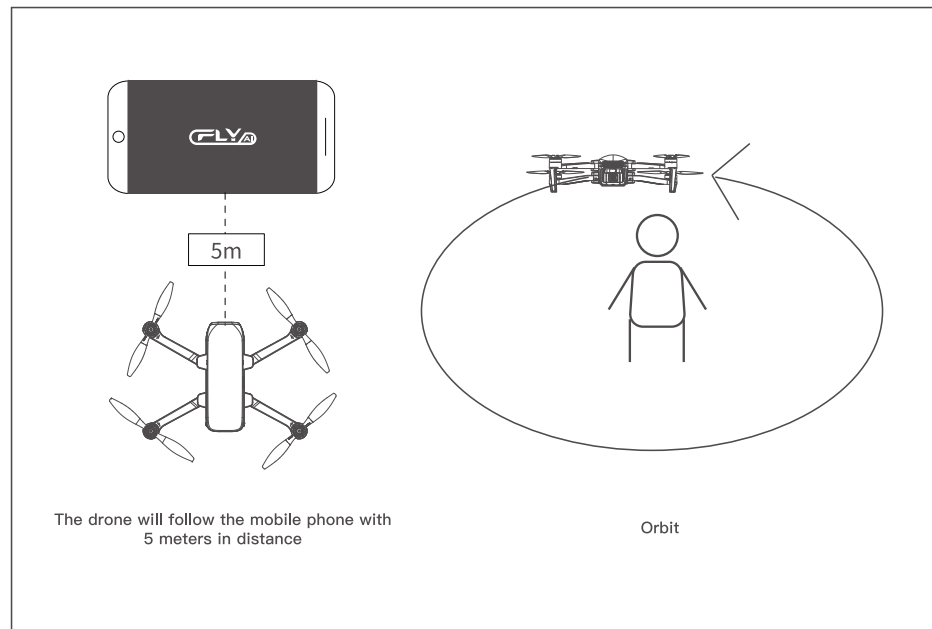
### Altitude Mode

In this mode, the drone only has vision positioning mode without GPS positioning, and the motion of the drone is more flexible. It needs skilled operation to control the flight of the drone. In the flight process, if the vision positioning condition is not satisfied (the front light flashing red), the vision positioning function fails, and the motion of the drone relies on manual control.

After fully mastering the operation of Position Mode, user can select the Altitude Mode.

### Orbit Mode

In Positioning Mode, when the Orbit Mode is activated, the drone will rotate around its current position. At this time, controlling the drone to move forward or backward can adjust the orbiting radius, push the throttle stick to change the flying height of the aircraft



## Track Mode (with the GPS successfully positioned)

In Position Mode, when Track Mode is activated, the drone will automatically follow user's mobile device.

### (1) Please pay attention to the GPS signal status in Track Mode:

Track Mode can be used when the GPS signal is full on the APP;

Track Mode is not advised to be used when the GPS signal on the APP is not full. If user need to use it, be sure to pay close attention to the drone condition and the surrounding environment!

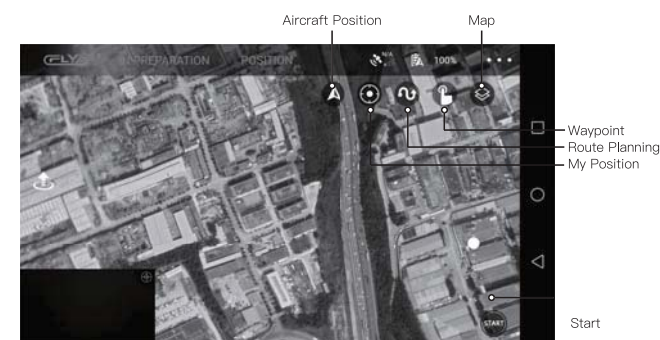
Track Mode must not be used when the GPS signal on the APP is poor!

### (2) How to track:

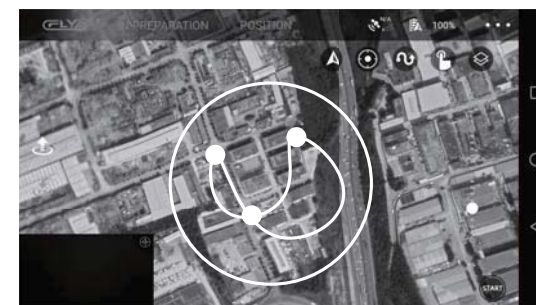
Warning: In order to ensure accurate return position, please choose a wide and open area (no large buildings within 50 meters and no barriers within 10 meters) and ensure the GPS signal is good so that the RTH function can work normally.

Ensure that the mobile phone is positioned successfully and accurately.

## Waypoint Flying



Waypoint Flying 1



Waypoint Flying 2



# Appendix

This section introduces the system composition,packing list, specifications, and safety precautions of the aircraft.

## Specification of Faith 2

| Aircraft                      |                                                                          |
|-------------------------------|--------------------------------------------------------------------------|
| Size(Unfold)                  | 182 X 255 X 74 mm (L*W*H)                                                |
| Size(Fold)                    | 170 X 108 X 74 mm (L*W*H)                                                |
| Wheelbase                     | 280 mm                                                                   |
| Weight                        | 515g                                                                     |
| Max Ascent Speed              | 5m/s(sport mode) 、2m/s(Normal mode) 、2m/s(Calm mode)                     |
| Max Descent Speed             | 2m/s(sport mode) 、1.5m/s(Normal mode) 、1.5m/s(Calm mode)                 |
| Max Speed                     | 20m/s(sport mode) 、10m/s(Normal mode) 、5m/s(Calm mode)                   |
| Max Service Ceiling Above Sea | 5000m                                                                    |
| Max Flight Time               | 35min                                                                    |
| Operating Temperature Range   | 0°C~40°C                                                                 |
| Satellite Positioning Systems | GPS/GLONASS                                                              |
| Hover Accuracy Range          | vertical: +/- 0.5 m± 0.2 m (ultrasonic system,optical flow system works) |
|                               | horizonal: +/- 1.5m± 0.3 m (ultrasonic system,optical flow system works) |
| Operating Frequency           | 5.8GHz/2.4GHz                                                            |
| Maximum flight height         | 120m,maximum 500m (need to change setting on app)                        |

| Optical flow system   |                                                             |
|-----------------------|-------------------------------------------------------------|
| Optical flow system   | yes                                                         |
| Operating Environment | Surface with clear pattern and adequate lighting (lux > 15) |
| Velocity Range        | ≤1.5 m/s at 6.6 ft (2 m) above ground                       |
| Altitude Range        | 0.5~5m                                                      |

| Ultrasonic altitude system |                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------|
| Ultrasonic altitude system | yes                                                                               |
| Operating Environment      | except for surface of water or ground of absorbing material(such as thick carpet) |
| Velocity Range             | ≤3m/s                                                                             |
| Altitude Range             | 0.2~4.5m                                                                          |

| 3-axis gimbal      |                                                 |
|--------------------|-------------------------------------------------|
| Stabilization      | 3-axis (pitch:±30°~120°,roll:± 35°,course:±30°) |
| Controllable Range | pitch: -90°~0°                                  |

| Camera                      |                                                                   |
|-----------------------------|-------------------------------------------------------------------|
| Sensor                      | Ambarella A12,SONY CMOS                                           |
| Image Size                  | 5120×3840(20MP)                                                   |
| Video Recording Resolution  | 3840×2160                                                         |
| Maximum Video Bit           | 60 Mbps                                                           |
| Supported File Systems      | FAT32(<=32GB) /exFAT(>32GB)                                       |
| Photo                       | JPEG /JPEG+DNG                                                    |
| Video                       | MP4                                                               |
| Supported SD Cards          | Micro SD™ Max capacity:128GB. UHS-I Speed Grade 3 rating required |
| Operating Temperature Range | 0°C~40°C                                                          |

| Battery                    |                         |
|----------------------------|-------------------------|
| Capacity                   | 3100mAh                 |
| Voltage                    | 11.4V                   |
| Battery Type               | LiPo 3S                 |
| Energy                     | 35.34Wh                 |
| Net Weight                 | 196 g                   |
| Charging Temperature Range | 0°C~40°C                |
| Max charging power         | 35 W                    |
| charge time                | <5h(with 5V 2A adapter) |

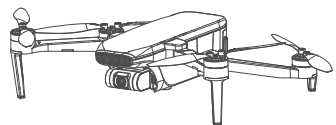
| APP                        |                                |
|----------------------------|--------------------------------|
| Mobile App                 | C-Fly 2/Enjoy Fly 2            |
| Live View Quality          | 720p                           |
| FPV transmission distance  | 5000m                          |
| Aerial photography mode    | drone,rocket,circle,helix      |
| Required Operating Systems | Andrio 6.0 above, IOS 9.0above |

| Charger |                   |
|---------|-------------------|
| Input   | 5 V 2A(recommend) |
| Output  | 4.35V 0.7A*3      |

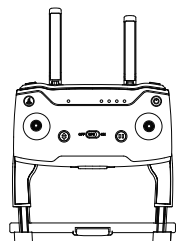
| WI-FI                     |                               |
|---------------------------|-------------------------------|
| Operating Frequency       | 5G                            |
| Max Transmission Distance | horizonal:200m, vertical:120m |
| Max Speed                 | 6m/s                          |
| Max Ascent Speed          | 2m/s                          |
| Max Descent Speed         | 1.5m/s                        |

| Remote Controller            |                                                       |
|------------------------------|-------------------------------------------------------|
| Operating Frequency          | For CE : 5.8 GHz / 2.4GHz; For FCC : 5.1 GHz / 2.4GHz |
| Max Transmission Distance    | 5000m                                                 |
| Operating Temperature Range  | 0°C~40°C                                              |
| Transmitter Power (EIRP)     | FCC: ≤26 dBm CE: ≤14 dBm SRRC : ≤20dBm                |
| Operating Current/Voltage    | 500ma @ 3.7V                                          |
| Supported Mobile Device Size | Thickness Supported: 6.5-8.5mm                        |
| Battery capacity(built-in)   | 3.7v 2600 mAh                                         |
| Battery type                 | LiPo 18650                                            |
| Battery power                | 9.62 Wh                                               |
| Charge                       | USB                                                   |
| Maximum charge power         | 5W                                                    |
| charge time                  | < 3h(with 5V 2A adapter)                              |

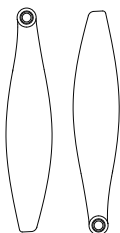
## Packing list



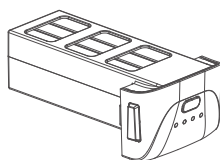
Aircraft



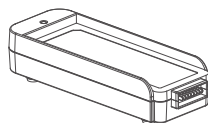
Remote controller



Propellers



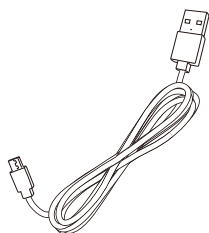
Aircraft Battery



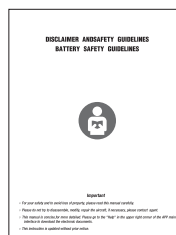
Balance Charger



Screwdriver



USB wire



Operation Manual

### Note

Before using this product, please check whether the product package contains all the following items. If something is missing, please contact our company or authorized dealers.

## Important Statement

- This product is not a toy, but a precision device that integrates professional knowledge such as mechanics, electronics, aerodynamics, and high-frequency emission. Accidents can be avoided by correct assembly and debugging. The owner of the product must use a safe way to operate and 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 at least 14 years old.
- If user encounter problems with use, operation, maintenance, etc., please contact local dealer or relevant personnel of our company. Our company and the seller are No responsibility for any loss and damage caused by improper work and personal injury.
- This product contains small parts, please keep it out of the reach of children to avoid the risk of ingestion or suffocation.

## After-Sales Warranty Information

Please browse the official website for the latest after-sales warranty information.

## Safety Precautions

The remote control model aircraft is the most dangerous commodity, so user must stay away from the crowd when flying. Improper assembly or damage to the body, poor electronic control, And unfamiliar operations may cause unpredictable accidents such as damage to the aircraft or personal injury. Please be careful when flying To be safe, user must understand the responsibility for accidents caused by your own negligence.

### Stay away from obstacles and crowd

The remote control aircraft has an uncertain flight speed and state during flight, and it is potentially dangerous. Stay away from crowds and high-rise buildings when flying At the same time, avoid flying in bad weather such as wind, rain, thunder and lightning. Debugging and installing the aircraft must strictly follow the operating instructions When flying upwards, pay attention to keeping the aircraft at a distance of 1-2 meters from the user or other people. Avoid the aircraft from crashing into the head, face, and body of people when flying or landing, which may cause injury.

### Keep away from humid environment

The inside of the aircraft is composed of many sophisticated electronic components and mechanical parts. Therefore, it is necessary to prevent the aircraft from getting wet or water vapor into the aircraft body. Avoid accidents caused by mechanical and electronic component failure. Please wipe the surface stains with a clean cloth during maintenance.

### Avoid controlling alone

The control skills of remote control aircraft are difficult to learn in the early stage. It is necessary to avoid flying alone as much as possible, and the guidance of experienced persons is required.

## Use this product properly

Please use original parts for modification or repair to ensure flight safety. Please operate and use within the scope allowed by the product function, And must not be used for illegal purposes other than security laws.

## Safe operation

(1) Please operate the remote control aircraft according to your own status and flying skills. Fatigue, poor spirits or improper operation will increase the risk of accidents Probability.

(2) Do not use it near ears! Misuse may cause hearing damage.

## Keep away from high-speed rotating parts

When the aircraft rotor is rotating 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

The remote control aircraft is composed of metal, fiber, plastic, electronic components and other materials. Therefore, it is necessary to keep away from heat sources, prevent sunlight, and avoid deformation or even damage due to high temperature.

## Environmental requirements

Discard the product at will, which may affect the environment, please recycle it properly according to local laws and regulations.

## FCC STATEMENT :

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.

**Warning:** 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: (RC Drone)

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

RF warning statement: (Remote Control)

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