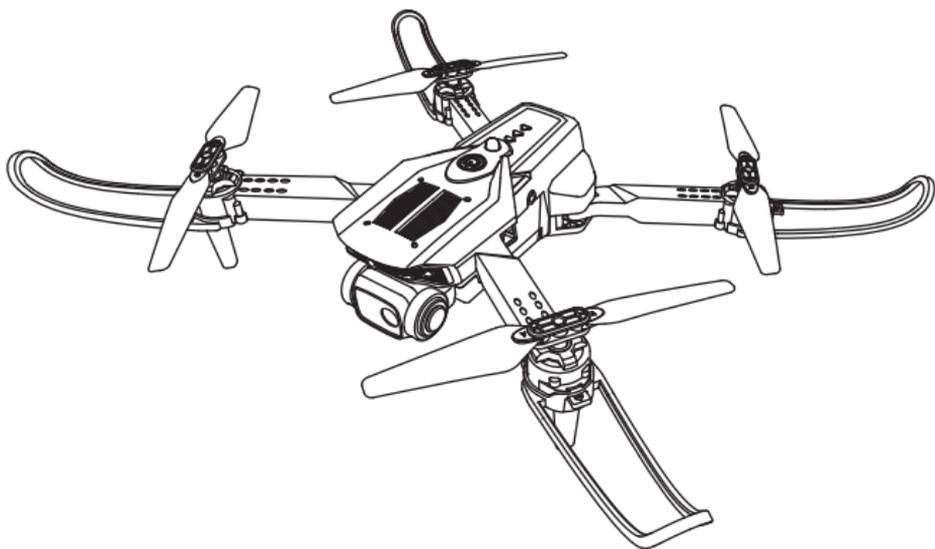


**4D-V32**

Suitable for age 14 +

# User Manual for Four Axis Aircraft



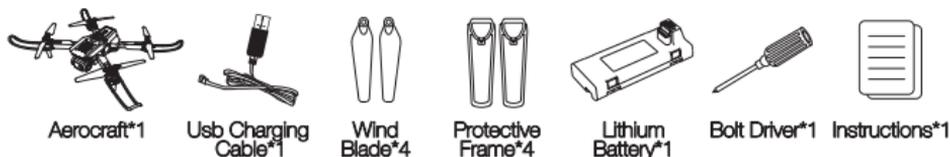
**WIFI VERSION**

- To ensure the electromagnetic environment requirements of aviation radio stations, it is prohibited to operate within a range of 10 kilometers on both sides of the airport runway centerline and 20 kilometers on both ends of the runway, as well as civil aviation routes and routes. Stop using various models and drones. Stop using all kinds of models and UAVs in the no fly zone issued by relevant national departments.

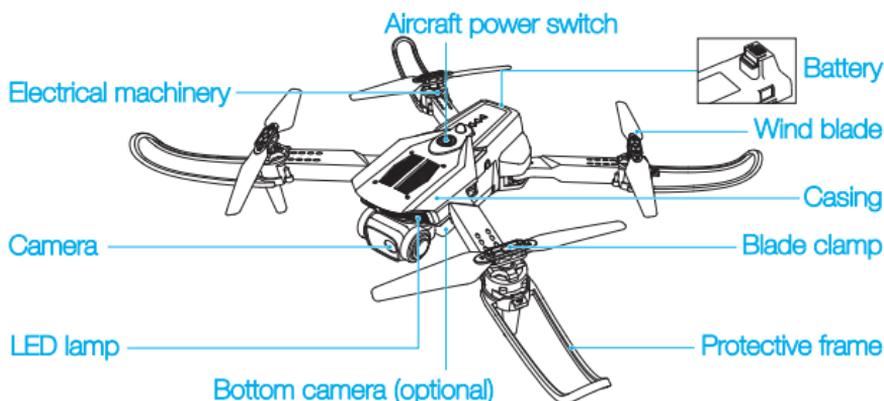
# WARNING

1. The packaging and instructions contain important information and should be retained.
2. It is your responsibility to ensure that this aircraft does not cause harm to the personal and property of others.
3. When debugging and installing the aircraft, it is necessary to strictly follow the operation manual, and pay attention to maintaining a distance of 2-3 meters from the user or others during the flight of the aircraft to avoid colliding with the head, face, and body of people during flight and landing, causing injury.
4. Our company and the seller shall not be responsible for any loss, damage, or bodily injury caused by improper use or operation.
5. Children should be guided by adults when operating aircraft. This product is prohibited for children under the age of 14 to operate.
6. Please follow the instructions or packaging instructions for proper installation and use. Some parts should be assembled by adults.
7. The product contains small parts, please place them out of reach of children to prevent accidental ingestion or indoor breathing hazards.
8. It is strictly prohibited to play on the road or in areas with accumulated water to avoid accidents.
9. Please pack the packaging materials in a timely manner to avoid harm to children.
10. Do not disassemble or modify the aircraft, as disassembly or modification may cause the aircraft to malfunction.
11. The charging cable needs to be inserted into the designated power supply 5V --- 2A that is the same as the product label.
12. Using other charging cables can cause battery damage and may cause unexpected hazards.
13. The charging cable is not a toy.
14. When charging a rechargeable battery, it must be supervised by an adult. When charging, it must be kept away from flammable materials. When charging, the guardian should not leave the monitoring range.
15. Please do not short-circuit or squeeze the battery to avoid explosion.
16. Do not mix different types of batteries.
17. If the aircraft uses rechargeable car batteries, they need to be unplugged and charged.
18. Do not short-circuit, disassemble, or throw the battery into fire; Do not place the battery in a high-temperature and heated area (such as in a fire or near an electric heating device).
19. Aircraft should be used as far away from other electrical equipment and magnetic objects as possible, as they may cause mutual interference.
20. Please maintain a safe distance from the high-speed rotating propeller to avoid the risk of twisting or cutting.
21. The motor is a heating component, please do not touch it to avoid burns
22. Light emitting diode laser radiation, do not directly shoot the beam.
23. Do not use the model close to the ear! Misuse may cause hearing damage.
24. The USB charging cable must use the data cable provided by our company to charge the battery, otherwise it may cause serious damage to the battery and may cause unexpected danger.
25. To ensure the magnetic environment requirements of aviation radio stations. During the period when relevant national departments issue radio control orders, the use of model remote controls within the district should be stopped as required.
26. When the battery of the aircraft runs out of power, be sure to turn off the switch and unplug the battery. After standing still for 30 minutes, charge it, otherwise it may cause damage to the battery.

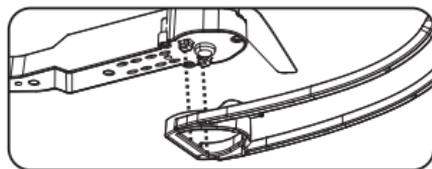
## 1. Includes a list of accessories



## 2. Names of various parts of the aircraft



## 3. Installation diagram of aircraft protection frame



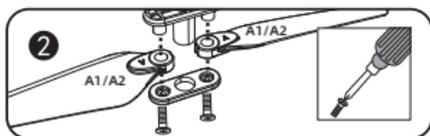
Insert the protective frame from the bottom of the boom and dock it with the two clips. Confirm that the installation is in place before flying to avoid falling during the flight.

⚠ Note: Please be sure to install the protective frame before flying!

## 4. Installation diagram of aircraft blades



4.1 Unscrew the screws to remove the fan blade.

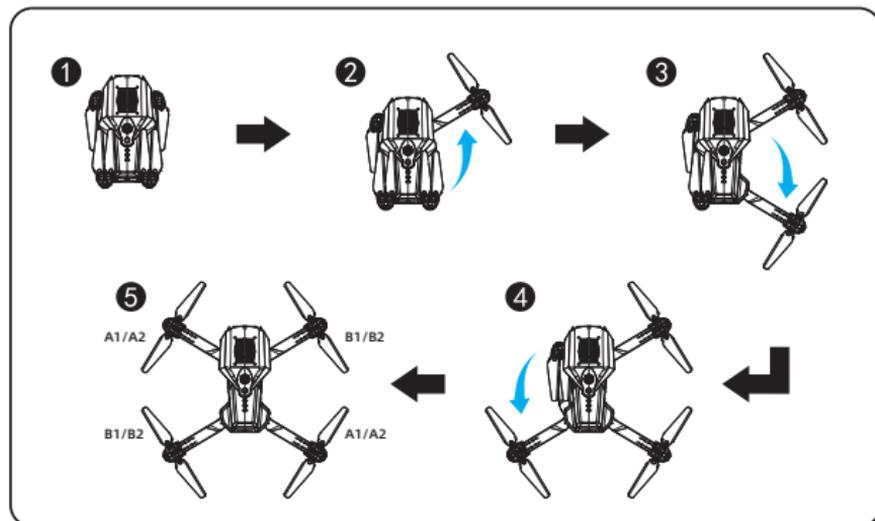


4.2 Unscrew the screws to open the two blades and connecting components, and remove the blades for replacement.

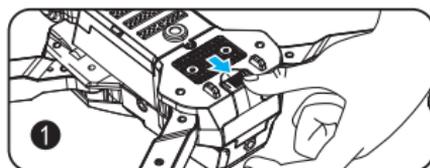
⚠ Note: The wind blade is printed with letters A1, A2, B1, B2, A1=A2, B1=B2. Please install it correctly according to the diagram, otherwise it cannot take off!

## 5. Deployment steps of the aircraft (stored at the factory)

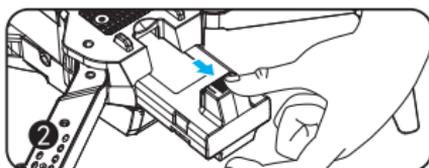
5.1 Follow the steps to deploy the aircraft:



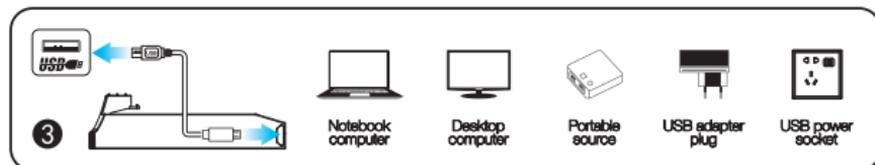
## 6. Instructions for charging and using lithium batteries



6.1 Secure the aircraft battery latch.



6.2 Remove the battery.

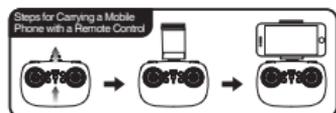
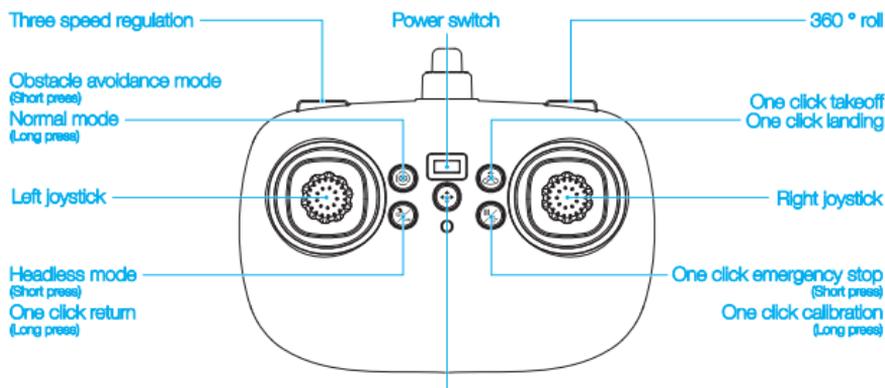


6.3 Charging: Insert the USB port of the USB charging cable into the computer USB port (or use a 5V  $\overline{\text{---}}$  2A power adapter with output), and connect the other end of the USB charging cable plug to the battery socket; When charging, the battery indicator light turns red. When the battery is fully charged, the indicator light turns off and the charging is complete.



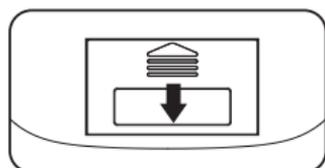
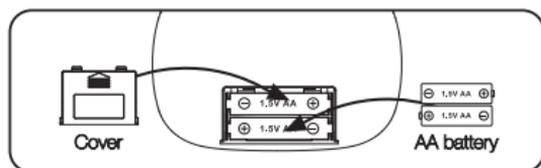
The aircraft charging cable provided by our factory must be used for charging, and other charging cables cannot be used for charging. Remember to avoid unexpected danger!

## 7. Names of various parts of the remote control



**Fine adjustment key** (After pressing and holding for three seconds to enter fine-tuning mode, gently push the right directional lever, and then push the adjustment in the opposite direction until the fine-tuning is completed. Short press the fine-tuning button to release the fine-tuning mode)

## 8. Remote control battery installation



### [Precautions during charging]

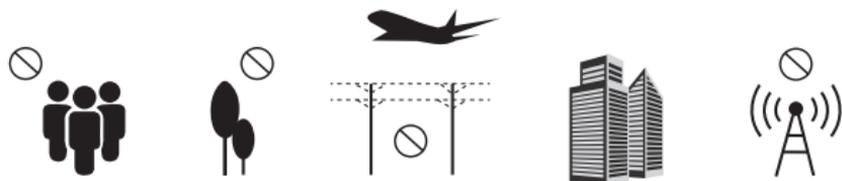
- Do not place charged batteries in high-temperature areas, such as open flames or electric heating devices, as damage or explosion may occur.
- Do not use batteries to strike or strike hard object surfaces.
- Do not disassemble the battery.
- Do not immerse the battery in water. Store the battery in a dry place.
- Do not leave while charging.



When not flying this aircraft, do not install the battery inside the aircraft to avoid battery damage!

- ⚠ **Note:**
1. When installing the battery, it is necessary to identify the positive and negative poles and the positive and negative poles of the battery box. Do not reverse the installation!
  2. Do not mix old and new batteries!
  3. Do not mix different types of batteries!

## 9. Flight environment requirements



Please choose an outdoor open environment with no wind, snow, and low wind. When flying, please stay away from people, trees, power lines, tall buildings, airports, and signal transmission towers. Don't fly indoors in a small and crowded environment.



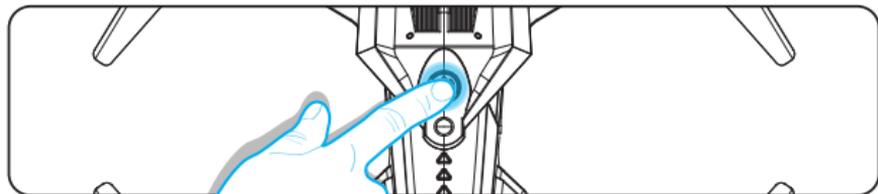
When using the remote control to operate, the app can only watch (take photos/videos). If you need to use the app to operate, the remote control cannot be used!

## 10. Pre flight preparation instructions (using remote control operation)

### 10.1 Opening:

Turn on the power supply of the aircraft and place it on a horizontal surface. At this time, the aircraft placed on the horizontal surface will automatically enter the frequency synchronization state, and the front white light and rear red light will flash.

**⚠ Note:** Place the aircraft in the right direction, with the nose facing straight ahead, and be sure to place it on a level ground!

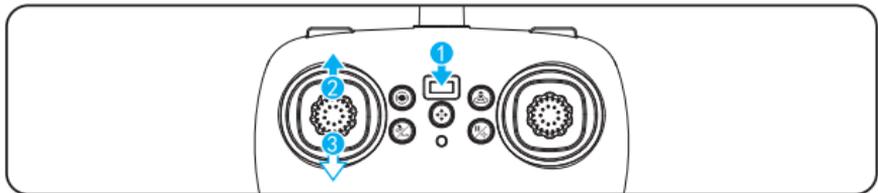


### 10.2 Remote control start frequency alignment:

Turn on the power switch button on the remote control (1) (step 1), and the power indicator light on the remote control will flash. Push the throttle lever up to the top (step 2) and then to the bottom (step 3), and the aircraft indicator light will change from flashing to constantly on.



The aircraft/remote control must be fully charged, otherwise it cannot take off!



### 10.3 Horizontal calibration:

Long press the calibration button on the remote control , and the LED lights on the aircraft will flash quickly. The calibration of the LED light on the aircraft is completed, and the remote control emits a "beep" sound (Figure 1).

 **Note:** The calibration must be completed by placing the aircraft on a horizontal plane!

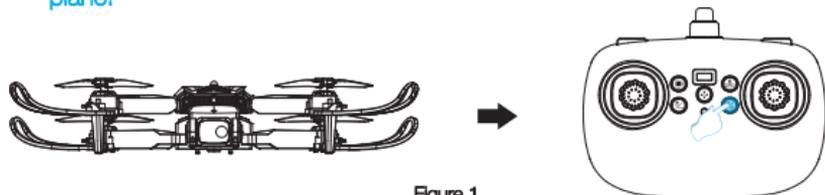


Figure 1

### 10.4 Start/Stop:

Push the left joystick on the remote control upwards (Figure 2), and the aircraft can take off normally. After takeoff, all indicator lights of the aircraft remain on. During flight, briefly press  key, the aircraft will stop flying (Figure 3).

 **Note:** This function operation is only suitable for aircraft in a state of loss of control. Under normal circumstances, it is recommended to use one click takeoff/one click landing  key.



Figure 2



Figure 3

### 10.5 One click takeoff/landing:

After unlocking is completed, lightly press the "One Key Takeoff/Landing" function key on the remote control  (Figure 4), and the aircraft will automatically rise to an altitude of about 1 meter, maintaining a stable flight at this altitude; When you lightly press this function key again, the aircraft will automatically and slowly land on the ground.

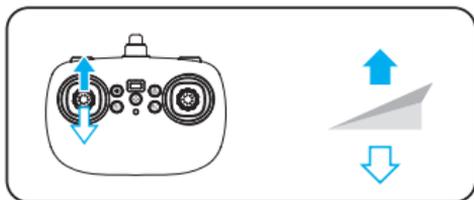


Before takeoff, please follow the steps in the above sequence to operate the aircraft using the remote control: Open → Remote control start frequency synchronization → Horizontal calibration start/stop → One click takeoff/landing.



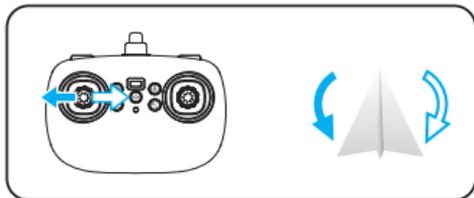
Figure 4

## 11. Remote control control method

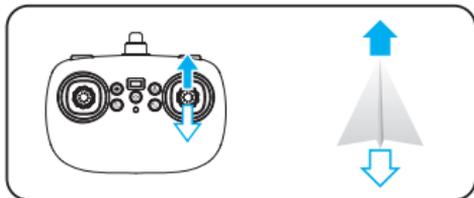


When the left joystick (throttle) is pushed up, the main fan speed increases and the aircraft rises.

When the left joystick (throttle) is pushed down, the main fan speed slows down and the aircraft descends.

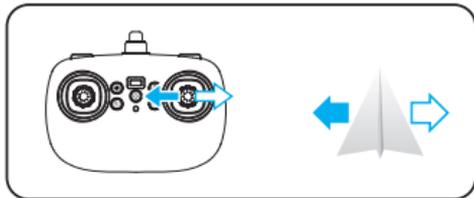


When the left joystick (rudder) is pushed to the left, the aircraft nose turns left. Push to the right and turn the aircraft nose to the right.



When the right joystick (rudder) is pushed upwards, the aircraft advances forward.

When the right joystick (rudder) is pushed down, the aircraft moves backwards.

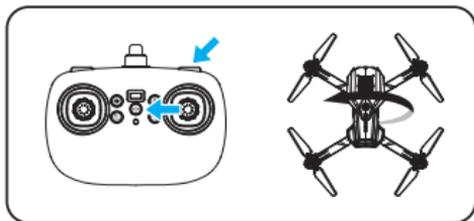


When the right joystick (directional rudder) is pushed to the right, the aircraft's fuselage leans to the right for flight.

When the right joystick (directional rudder) is pushed to the left, the aircraft's fuselage leans to the left for flight.

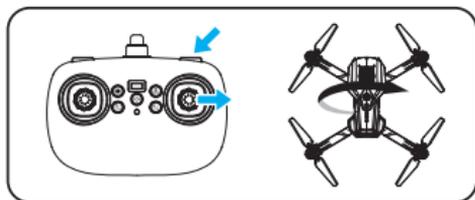
## 12. 360° rolling

This aircraft can fly 360° through the joystick operation below. In order to better perform the roll function and ensure that the aircraft maintains a height of about 1.5 meters from the ground, it is best to operate the aircraft to roll during the ascent process, which makes it easier to maintain the height after the aircraft rolls.



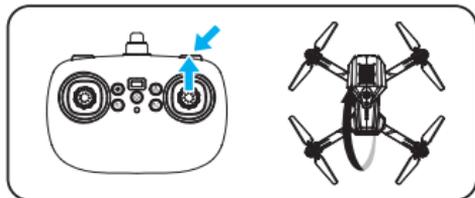
### 12.1 Left side 360° roll

Short press the 360° roll button, then push the right joystick to the left, and the aircraft will flip 360° to the left accordingly.



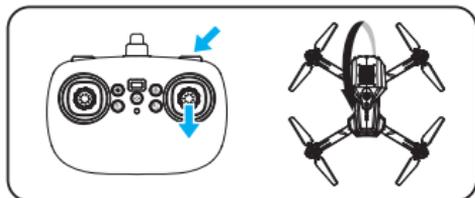
### 13.2 Right side 360 ° roll

Short press the 360 ° roll button, then push the right joystick to the right, and the aircraft will flip 360 ° to the right accordingly.



### 13.3 Rolling 360 ° Forward

Short press the 360 ° roll button, then push the right joystick upwards to flip the aircraft forward 360 ° accordingly.



### 13.4 Rollback 360 °

Short press the 360 ° roll button, then push the right joystick down to flip the aircraft back 360 ° accordingly.

## 13. Remote Control Function Introduction and Operation

### 13.1 Headless mode:

The front of the aircraft during power on frequency synchronization defaults to the front of headless mode; To adjust the direction you need, please turn on the frequency again and briefly press the "Headless Mode" function key on the remote control (Figure 5). When exiting, please lightly press this function key again.

**⚠ Special reminder:** Please make sure to align the aircraft with the straight line for navigation, so that the gyroscope can automatically detect the straight line in order to achieve the headless mode of straight flight.

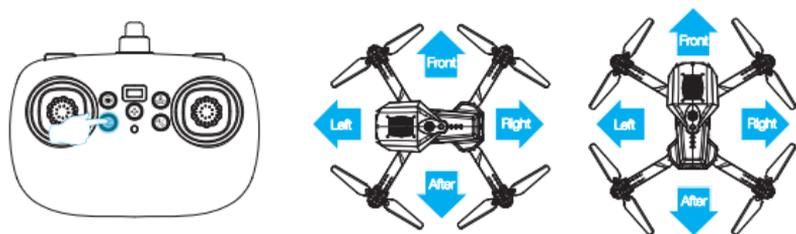


Figure 5

### 13.2 One click return:

When the flight distance of the aircraft is too far, the return function can be used to recall the aircraft. When turning on the frequency control, the remote control must be facing the tail of the aircraft. During flight, long press and hold the return button  (Figure 6). The remote control emits a "beep" sound, and the aircraft enters a one click return flight, automatically flying back to our side; When any joystick is activated, the return function is deactivated.

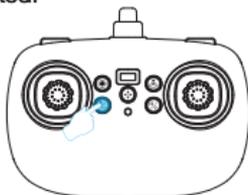


Figure 6

### 13.3 Speed switching:

When the aircraft takes off, it defaults to low speed mode (3 gear switching). Gently press the remote control to make one "beep" sound for low speed, two "beep" sounds for medium speed, and three "beep" sounds for high speed (Figure 7).

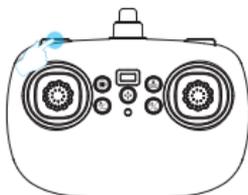


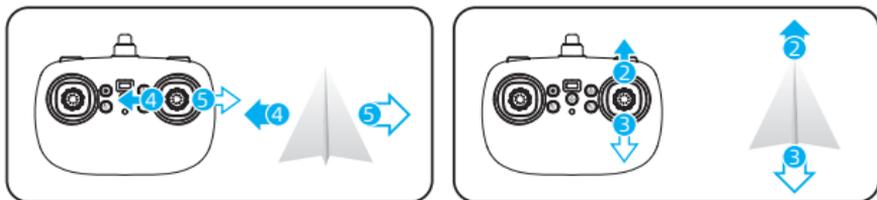
Figure 7

### 13.4 Fine tuning mode:

When the aircraft leaves the ground and its orientation shifts, press and hold the  fine adjustment button for three seconds to enter the fine adjustment mode:

- When the aircraft is offsetting towards the rear, gently push the right joystick ② forward and down until the fine adjustment is completed;
- When the aircraft is moving forward, push the right joystick ③ back slightly until the fine adjustment is completed;
- When the aircraft is offset to the right, gently push the right joystick ④ to the left until the fine adjustment is completed;
- When the aircraft is offset to the left, gently push the right joystick ⑤ to the right once until the fine adjustment is completed;

After the fine adjustment is completed, briefly press the fine adjustment button to release the fine adjustment mode.

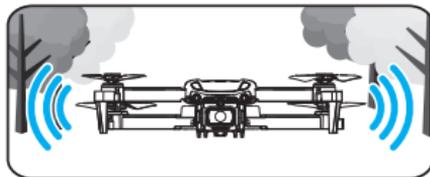
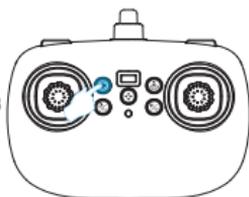


### 13.5 Obstacle avoidance mode:

During the flight, briefly press the obstacle avoidance (Ⓜ) button to open the obstacle avoidance mode (Figure 8). If the aircraft is close to walls or other obstacles in the front/back/left/right direction, it will automatically avoid to a safe area because the aircraft has activated the obstacle avoidance function. To switch to the normal fixed height mode, press and hold this key (Ⓜ) to turn off the obstacle avoidance function.

⚠️ **Note:** Under sunlight or strong light, transparent and reflective objects such as glass, as well as black objects, the obstacle avoidance effect may deteriorate or even lose.

Figure 8



## 14. APP Software Download and Installation Instructions

### 14.1 Download and Install Software:

After using your phone to scan the code, select the corresponding system download in your browser.



iOS app store >

Android Google >

Android China >

### 14.2 Link Description:

- ① Turn on the aircraft power, enter the "Settings" option (mobile phone or iPad), open the wireless network, find the device "4DRC \*\*\*\*\*" name in the wireless network search list, and connect. After successful connection, exit the settings option.
- ② Open the "4DRC FPV" software icon on your phone to enter the control interface. (Try to stay away from other signal source environments during flight).



Open the "4DRC FPV" software



Select START to enter the control interface

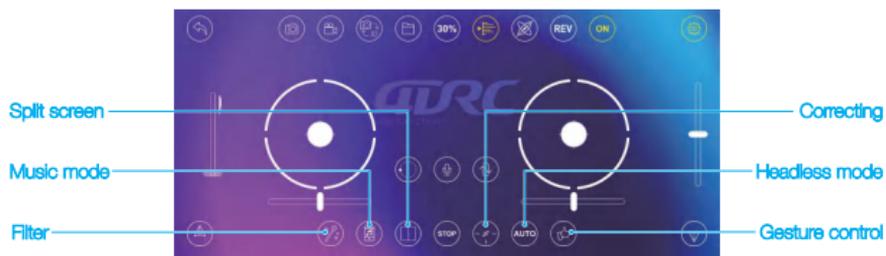
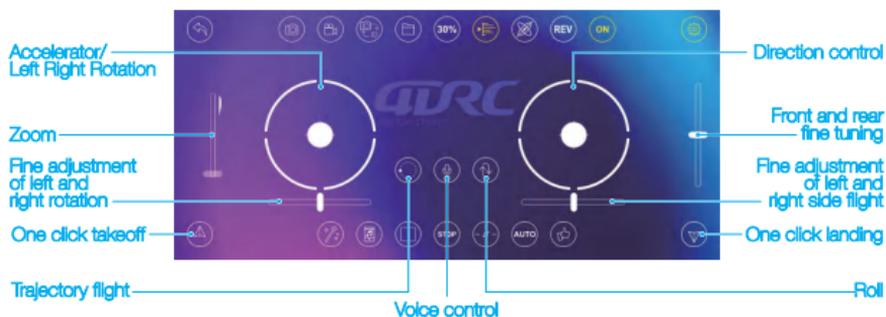
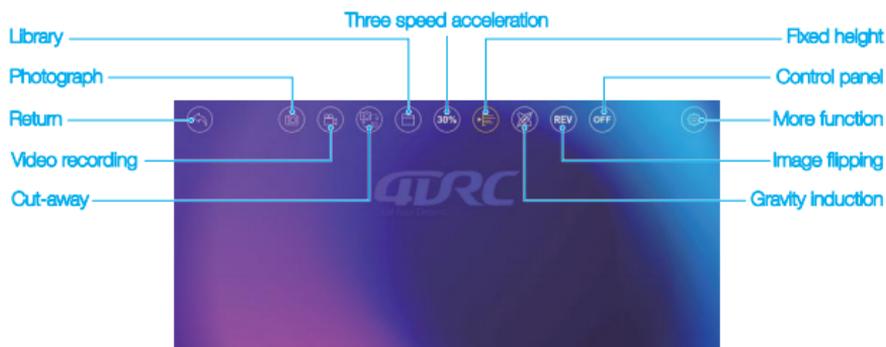


Select and click on "More Features"



Enter the function menu

## 15. Introduction to the functions of the APP control interface



## 16. Instructions for pre flight preparation (using APP operation)

### 16.1 Opening:

Turn on the power of the aircraft and place it on a horizontal surface. At this time, the aircraft placed on the horizontal surface will automatically enter the frequency synchronization state, with the front white light and rear red light flashing.

**⚠ Note:** Place the aircraft in the right direction, with the nose facing straight ahead, and be sure to place it on a level ground!



### 16.2 APP application startup frequency:

Turn on the WIFI function in the mobile device, select "4DRC \*\*\*\*\*" in the WIFI list (Figure 9), and open the APP after successful connection. Click START to enter (as shown in Figure 10), click OFF (as shown in Figure 11), open the touch joystick, and click on more functions (as shown in Figure 12). The aircraft will turn on normally, indicating successful frequency matching.



Figure 9



Figure 10



Figure 11



Figure 12

### 16.3 Horizontal calibration operation:

APP application operation: Click on the "Calibration" icon in the APP interface (Figure 13). The LED lights on the aircraft flash quickly, and the LED lights on the aircraft are constantly on. Calibration is complete.

**⚠ Note:** The calibration must be completed by placing the aircraft on a horizontal plane.

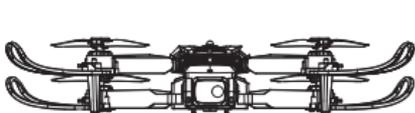


Figure 13



### 16.4 One click takeoff/landing:

APP application operation: Click on the "One Key Takeoff" icon (key 14) in the APP interface, and you can also achieve the One Key Takeoff function; During the flight, click the "one click landing" icon again (key 15), and the aircraft will automatically and slowly land on the ground.



Before taking off the aircraft, please follow the steps in the above order to operate the APP application: open → APP application startup frequency comparison → Horizontal calibration → One click takeoff/landing.



Figure 14



Figure 15

## 17. APP application manipulation methods



When the left joystick (throttle) is pushed up, the main fan speed increases and the aircraft rises.



When the left joystick (rudder) is pushed to the left, the aircraft nose turns left. Push to the right and turn the aircraft nose to the right.



When the right joystick (rudder) is pushed upwards, the aircraft advances forward.



When the right joystick (directional rudder) is pushed to the right, the aircraft's fuselage leans to the right for flight.

When the right joystick (directional rudder) is pushed to the left, the aircraft's fuselage leans to the left for flight.

## 18. APP application manipulation methods

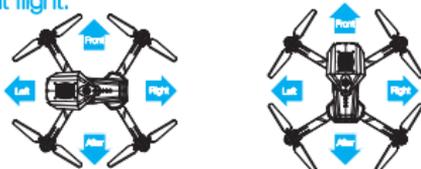
### 18.1 Headless mode:

APP application operation: When turning on frequency synchronization, the front of the aircraft defaults to the headless mode; To adjust the direction you need, please restart the frequency synchronization and enter the APP application interface. Expand the function menu and click on the headless mode function (Figure 16). When exiting, please click on the function icon again.

**⚠ Special reminder:** Please make sure to align the aircraft with the straight line for navigation, so that the gyroscope can automatically detect the straight line in order to achieve the headless mode of straight flight.



Figure 16



## 18.2 Speed switching:

APP application operation: Click on the "three speed acceleration" icon in the APP control interface (Figure 17), and you can also switch the flight speed of the aircraft.



Figure 16

## 18.3 Fine tuning function:



### [ Aircraft forward/backward fine tuning ]

When the aircraft leaves the ground and shifts towards the rear, click the fine adjustment joystick ① forward fine adjustment key to make adjustments. When the aircraft shifts towards the front, click the fine adjustment joystick ② backward fine adjustment key to make adjustments.



### [ Aircraft left/right rotation fine adjustment ]

When the aircraft leaves the ground and rotates to the right for offset, click on the fine tuning joystick ① to adjust it. When the aircraft rotates to the left for offset, click on the fine tuning joystick ② to rotate to the right for fine tuning.



### [ Left/right flight fine adjustment of the aircraft ]

When the aircraft leaves the ground and shifts to the right, click on the fine adjustment joystick ① and the left fly fine adjustment button to adjust. When the aircraft shifts to the left, click on the fine adjustment joystick ② and the right fly fine adjustment button to adjust.

## 18.4 gesture recognition:

When facing the front lens of the camera, click on the gesture camera button on the APP and make any of the following gestures to trigger the automatic photography or camera function of the aircraft.

⚠ Special tip: Please aim at the lens at a distance of 2-3M from the lens and in an environment with good light and background to perform gesture recognition.



Correct gestures



Incorrect gesture

#### [ Gesture photography ]

About 2m in front of the aircraft lens, lift the palm of one hand (palm facing forward) flat on the side of the body; After the aircraft recognizes the gesture, it starts a 3-second countdown and takes a photo (at this point, the arm can be lowered) (the time difference between two consecutive recognition should be greater than 3 seconds) (Some models do not support this function, and turning on the function will cause a delay in the image).



Incorrect gesture



Correct gestures

#### [ Gesture recording ]

About 2m in front of the aircraft lens, clench your fist with one hand (palm facing forward) and lift it flat on your side; After the aircraft recognizes the gesture, a 3-second countdown begins and the recording begins (at this point, the arm can be lowered). When recognizing the fist gesture in the recording, the recording ends. (During the recording, the palm is not detected).

### 18.5 MV interface:

Click on the "Filter Interface" icon in the APP control interface (Figure 18) to enter the filter interface. You can choose to match your favorite filter effect, click on the recording icon, and start recording (Figure 19). After recording, the synthesized short video or picture will be saved to the media library (Figure 20).

**⚠️ Special reminder:** During the recording process, the screen can be rotated or the filter effect can be switched. The joystick can also be turned on/off to control the direction and height of the aircraft.



Figure 18



Figure 19



Figure 20

## 19. Guidelines for Solving Common Problems

| Problem  | Reason   | Resolvent   |
|--|--|---|
| Aircraft indicator light flashing, no response during operation      | 1. The aircraft's battery is low   | 1. Charging the battery   |
| Aircraft blades rotate but cannot fly                                | 1. Low battery level<br>2. Blade deformation<br>3. AB blade installation error | 1. Charging the battery<br>2. Replace the fan blades<br>3. The fan blades are printed with letters A and B. The A fan blades are replaced with A, while the B fan blades are damaged and replaced with B. |
| The flight shook violently   | 1. Blade deformation   | 1. Replace the fan blades   |
| Fine tuned to the bottom, but still unable to stabilize the aircraft | 1. Blade deformation<br>2. The motor is not working properly                   | 1. Replace the fan blades<br>2. Replace the motor   |
| Starting the aircraft again after impact and flying uncontrollably   | 1. Three axis acceleration sensor loses balance due to impact                  | 1. After the aircraft has been left stationary for 5-10 seconds, or through horizontal calibration, it is sufficient. (Refer to 10.3 Horizontal Calibration Operation for steps)                          |