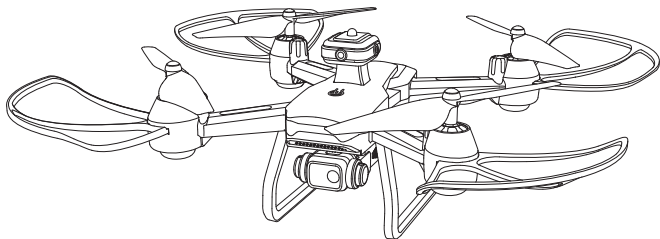**4DRC**
Just Four Dreams

4D-V29

Suitable for ages over 14

Quadcopter operating instructions

WIFI version

English

● In order to meet the requirements of the aeronautical radio station's electromagnetic environment (various of aero models and UAV are not allowed to fly within the range of 10 km on each side of center line and 20km on both ends of the airport runway and in the) and civil aviation routes and airlines. Using various models and drones in the no-fly zone issued by the relevant state departments is prohibited.

Warning

1. The packaging and instructions contain important information and should be kept.
2. With this aircraft, you are responsible for ensuring that no harm will be caused to the personal and property of others.
3. Commissioning and installing of aircraft must be strictly in accordance with the operating instructions, and attention shall be paid to the distance between the aircraft and the user or other people shall be 2 to 3m to prevent the aircraft from bumping into the head, face and body of people and causing injury in flying and landing, etc.
4. Our company and distributors are not responsible for any loss and damage, as well as injury to people caused by improper use or operation.
5. Children should be guided by adults when operating the aircraft. This product is prohibited to be operated by children under 14 years old.
6. Please follow the instructions or packaging instructions to install and use correctly, and some parts should be assembled by adults.
7. The product contains small parts, please place it out of the reach of children to prevent the risk of accidental eating or suffocation.
8. It is strictly forbidden to play on the road or in the place where water is accumulated to avoid accidents.
9. Please put away the packing materials in time to avoid harm to children.
10. Do not disassemble or modify the aircraft. Disassembly or modification may cause malfunction to the aircraft.
11. The charging cable needs to be inserted into the designated power supply 5V ⎓ 2A that is the same as the product label.
12. The use of other charging cables will cause damage to the battery and may cause unexpected dangers.
13. The charging cable is not a toy.
14. When charging the rechargeable battery, it must be under the supervision of an adult. When charging, it must be far away from flammable materials. During 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 lithium batteries.
17. The aircraft uses a rechargeable lithium battery, which needs to be pulled out for charging.
18. Do not short-circuit, decompose or throw the battery into fire; do not put the battery in a place with high temperature and heat (such as in fire or near electric heating device).
19. The aircraft should be used as far away from other electrical equipment and magnetic objects as possible, they may cause mutual interference.
20. Please keep a safe distance from the high-speed rotating propeller to avoid the risk of scalp or cut
21. The motor is a hot part; please do not touch it to avoid burns.
22. LED has laser radiation; please do not give direct light beam to others.
23. Do not use the model near your ears! 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 will cause serious damage to the battery and will lead to unexpected danger.
25. To meet the magnetic environment requirements of aeronautical radio stations. During the radio control order issued by the relevant state departments, the model remote control should be stopped within the city area as required.
26. Turn off the switch and unplug the battery when the battery of the aircraft is used up, and charge after 30 minutes of rest, otherwise the battery will be easily damaged.

1. List of accessories included:

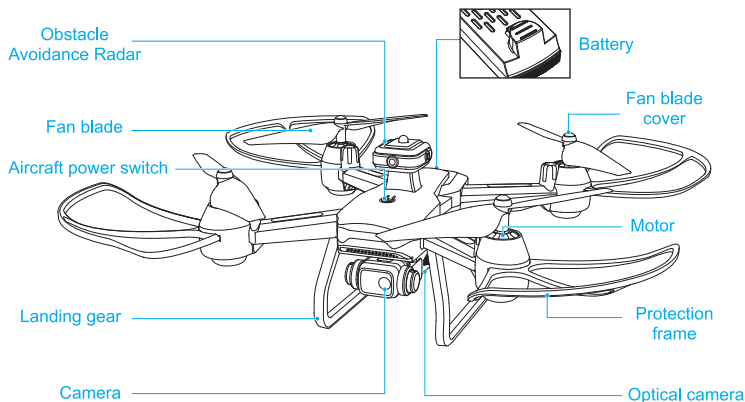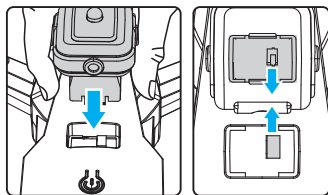Aircraft ×1　　USB charging cable ×1　　Fan blade ×2　　Protection frame ×4　　Lithium battery ×1　　Screw-driver ×1　　Operating Instructions ×1

2. Name of each part of aircraft:

Obstacle Avoidance Radar

Battery

Fan blade cover

Fan blade

Aircraft power switch

Motor

Landing gear

Protection frame

Camera

Optical camera

3. Radar installation diagram:

When installing according to the figure, the power socket at the bottom of the radar component should be accurately connected with the aircraft power interface. The radar is normally used after successful connection. If the installation position is wrong and the radar does not respond, please remove the radar components and readjust them.

⚠ Note: There are electronic components in the location where the radar componentsis installed on the aircraft, so it must not be used in water or in a humid environment.
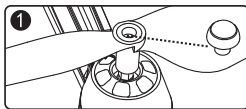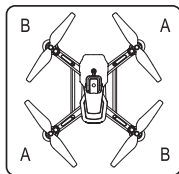
## 4. Installation figure of aircraft protection ring:
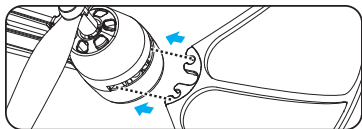
According to the figure, align the protection ring parts with the arm hole to make the connection, confirm the installation is in place before flying to avoid falling during the flight.

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

## 5. Wind blade installation diagram:

5.1 Remove the connecting part of the fan blade cap, unscrew the screw to remove the fan blade. Replace fan blade A when it is broken, so does fan blade B, and it can not take off when the replacement is error
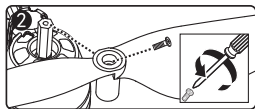
⚠ Note: The wind blade is printed with letter A and B, please install it correctly according to the diagram, otherwise it will not take off
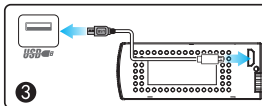
## 6. Lithium battery charging instructions:
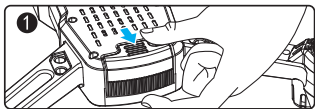
6.1 Buckle the battery lock of the aircraft.

6.2 Remove the battery.

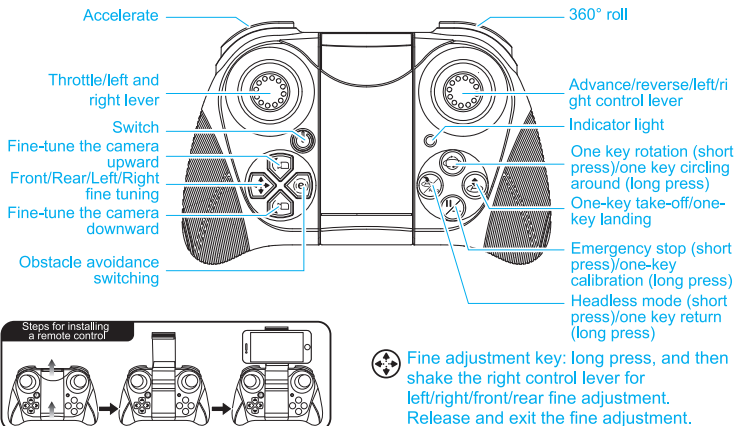Laptop   Desktop PC   Mobile power   USB adapter   USB power socket

6.3 Charging: Insert the USB interface of the USB charging cable into the USB port of the computer (or use the power adapter with an output of 5V⎓2A), and connect the other end of the USB charging cable to the battery socket. When charging, the red indicator on the module battery will be on, and when the battery is fully charged, the green indicator will be on.
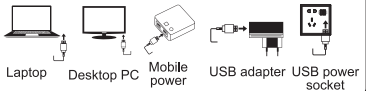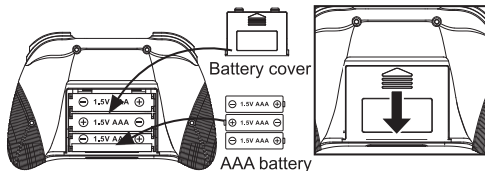
⚠ Warning: It must be charged with the aircraft charging cable provided by the factory, and other charging cables cannot be used. Be sure to remember to avoid accidents.

Accelerate

360° roll

Throttle/left and right lever

Advance/reverse/left/right control lever

Switch

Indicator light

Fine-tune the camera upward

One key rotation (short press)/one key circling around (long press)

Front/Rear/Left/Right fine tuning

One-key take-off/one-key landing

Fine-tune the camera downward

Emergency stop (short press)/one-key calibration (long press)

Obstacle avoidance switching

Headless mode (short press)/one key return (long press)

Steps for installing a remote control

Fine adjustment key: long press, and then shake the right control lever for left/right/front/rear fine adjustment. Release and exit the fine adjustment.

Battery cover

⊖ 1.5V AAA ⊕
⊕ 1.5V AAA ⊖
⊖ 1.5V AAA ⊕

AAA battery

Battery installation:
8.1 Remove the battery cover.
8.2 According to the polarity instructions on the battery compartment, remove the battery cover on the back and insert a 3X "AAA" battery (not included).

Instructions in charging:
● Do not put the charged battery in a place with high temperature and heat, such as an open flame or an electric heating device, otherwise damage or explosion may occur.
● Do not hit or beat the surface of hard objects with the battery.
● Do not disassemble the battery.
● Do not immerse the battery in water, and please store the battery in a dry place.
● Do not leave battery alone when charging.

Warning ⚠
When not flying, please do not install the battery in the aircraft to avoid battery damage.

Note
1. The positive and negative poles and the positive and negative poles of the battery box must be identified when inserting the battery, and error is not allowed.
2. Do not mix old and new batteries.
3. Do not mix different types of batteries.

## 9. Environmental requirements before flight:
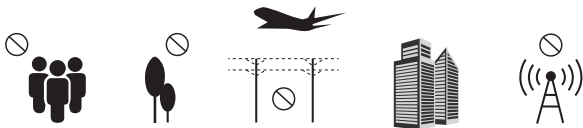
Please choose an outdoor and open environment with no rain and snow and low wind. Please stay away from crowds, trees, wires, tall buildings, airports, and signal transmission towers when flying. Do not fly in a too small indoor environment with lots of things.

Warning APP can only be viewed (photographed/recorded) when using the remote controller, and the remote controller cannot be used when using APP.

10. Preparation instructions before flight

10.1 Aircraft frequency mathcing: 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 matching state, with the front white/blue light and rear red light flashing.
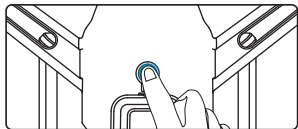
⚠ Note: Set the aircraft in a correct direction, and the nose shall face forward. It must be placed on the horizontal plane.

10.2 Turn on the remote control (default mode): long press the power switch button ⏻ (step 1), turn on the power and the indicator flashes; push the throttle lever up to the top (step 2) and then to the bottom (step 3), and thus the frequency matching is successful, the UAV lights change from flashing to being permanently on.
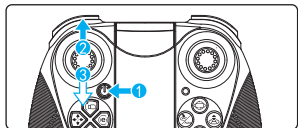
Warning The aircraft/remote controller must ensure sufficient power or it cannot take off!

10.3 Horizontal calibration operation:

Long press the calibration key on the remote controller, Ⅱⵗ and the LED lights on the aircraft will flash. When the LED lights on, calibration of the aircraft is completed, the remote controller emits "beep" (Figure 1).

⚠ Note: In calibration, the aircraft must be placed on a horizontal surface to complete the calibration.

Figure 1

10.4 Start/stop

Push the left control lever on the remote control upward (Figure 2). At this time, the aircraft can take off normally. After taking off, all the indicator lights of the aircraft will always be on. During the flight, whether you short press the Ⅱⵗ key, the aircraft will stop flying (Figure 3).

⚠ Note: This function operation is only suitable for the aircraft in an uncontrolled state. Under normal circumstances, it is recommended to use the one-key takeoff/one-key 🛬 landing key.
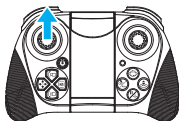

Figure 2   Figure 3

10.5 One-key take-off and landing

When unlocking is complete, gently press the "One Key Takeoff/Landing" key on the remote control 🛬 (Figure 4), the aircraft will automatically rise to a height of about 1 meter to maintain a stable flight; when you press this function key gently again, the aircraft will automatically land slowly.
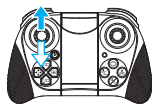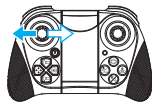

Figure 4

⚠ **Warning** Operate the aircraft with the remote control. Before taking off, please operate according to the above sequence: Turn on (refer to 10.1)→ frequency matching of the remote control starts (refer to 10.2)→horizontal alignment (refer to 10.3)→ start/stop (refer to 10.4)→ one-button taking off and landing (refer to 10.5)
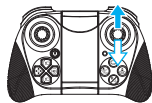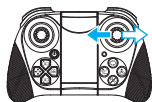
11. Remote control method:

When the left joystick (throttle) is pushed up, the rotation rate of the main blade increases and the aircraft rises.
When the left joystick (throttle) is pushed down, the rotation rate of the main blade slows down and the aircraft descends.

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

When the right joystick (rudder) is pushed up, the aircraft moves forward.
When the right joystick (rudder) is pushed down, the aircraft moves backward.

When the right joystick (rudder) is pushed to the right, the aircraft fuselage deviates to the right.
When the right joystick (rudder) is pushed to the left, the aircraft fuselage deviates to the left.

12. 360° roll

The aircraft can achieve 360-degree flight by the following joystick operation. In order to better perform the roll function, a height of about 1.5 meters shall be ensured between the aircraft and the ground. It is best to operate the aircraft to roll during the ascent stage, so that the aircraft can maintain the height more easily after rolling.
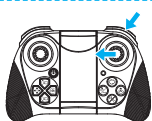
12.1 360° roll on the left
Short press the 360° roll button, then push the right joystick to the left, and the aircraft will flip 360° to the left accordingly.
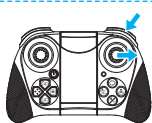
12.2 360° roll on the right
Short press the 360° roll button, then push the right joystick to the right, and the aircraft will flip 360° to the right accordingly.

12.3 Roll Forward 360°
Press the 360° tumble button for a short time, then push the right joystick upward, and the aircraft will turn forward 360°correspondingly.
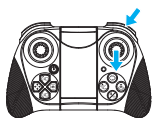
12.4 360° roll backward
Short press the 360° roll button, then push the right joystick down, and the aircraft will flip 360° backward accordingly.

13. Introduction of remote control function and operation:

13.1 Headless mode
The front of the aircraft when the code-matching is turned on is by default the front in headless mode; if it is necessary to adjust the direction, please turn on the code-matching again, and short press the remote controller "headless mode" function key ⚡ (Figure 5). When exiting, please tap gently press this function key again.

⚠ Special prompt: Please make sure the aircraft is aligned with the straight line and let the gyroscope automatically detect the straight line, and the headless mode of straight line flight can be realized.
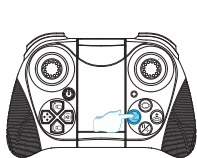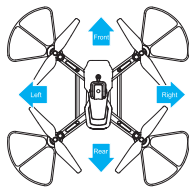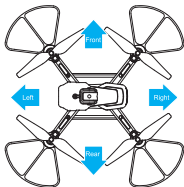

Figure 5

13.2 One key return

When the flying distance of the aircraft is too far, the aircraft can be recalled with the return function. When turning on the code-matching, the remote control must be directly facing the tail of the aircraft. During flight, press and hold the one-key home button 🛬 (Figure 6). When the remote control emits a "beep" sound, the aircraft will enter the one-key home function, and will automatically return to our side; when the joystick is operated in any form, the aircraft will be released from the home function.

Figure 6

13.3 Speed switching

When the aircraft takes off, it is by default in the low-speed mode (3-geared switching); gently press the remote control by a "beep" sound for low-speed gear, two "beep" sounds for medium-speed gear, and three "beep" sounds for high-speed gear (Figure 7).
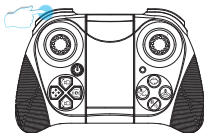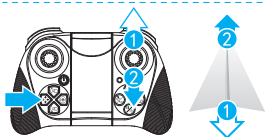

Figure 7

13.4 Normal mode (Optical flow assisted positioning)

The aircraft enters the normal mode: when flying above a good ground, optical flow will assist the aircraft. When hovering in a place, it will be normal to drift about 1 meter depending on the ground and altitude conditions.

13.5 Fine tuning function

1. Forward fine adjustment: When the aircraft leaves the ground and the aircraft deviates backward, press and hold the fine adjustment key, and push the ① direction control lever forward to adjust.

2. Backward fine adjustment: When the aircraft leaves the ground and deviates forward, press and hold the fine adjustment key, and push the ② direction control lever backward for adjustment.
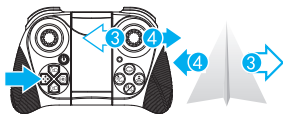
3. Left flight fine adjustment: When the aircraft leaves the ground and deviates to the right, press and hold the fine adjustment key, and push the ③ direction control lever to the left to adjust.

4. Right flight fine adjustment: When the aircraft leaves the ground and deviates to the left, press and hold the fine adjustment key, and push the ④ direction control lever to the right to adjust.

13.6 Obstacle avoidance mode

During flight, short press Obstacle Avoidance ⓔ to open the obstacle avoidance mode (Figure 8). If the aircraft is close to wall or other obstacles in front/back/left/right direction, it will automatically stop flying forward. To switch to the normal mode, gently press this key ⓔ to turn off the obstacle avoidance function.

⚠ Note: Under sunlight or strong light, under transparent and reflective objects such as glass, and under black objects, the obstacle avoidance effect will become weak, or even lose its effect.
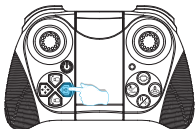
Figure 8
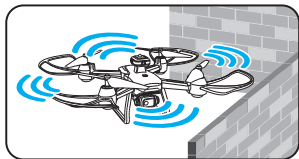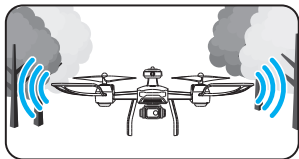
14. APP download and installation instructions:

14.1 Download and install the software
For Google mobile phone, after scanning the code, choose to open and download in the browser

Google system: Please scan this QR code to install

Download on the 4DRC PRO

Download on the App Store

IOS system: Please scan this QR code to install

14.2 Link description
① Turn on the power of aircraft, enter the (Settings) option (of mobile phone or IPAD), and open the wireless network; find the device name of "4DRC********" in the wireless network search list and connect; after connection, exit the setting option.
② Open the software icon "of 4DRC PRO" in mobile phone to enter the control interface. (Try to stay away from other signal source environments when flying)

Open 4DRC PRO" software → Select GO to enter the control interface → Select and click "More Features" → Enter the function menu

15. APP control interface function introduction:

- Emergency stop
- Flight status
- More features
- Return
- Takeoff / landing
- Calibration
- Lens adjustment
- Filter

- WIFI signal
- Aircraft battery power
- Settings
- Photo / Video
- Shutter
- Media library
- Music
- Zoom

- Gesture photo
- 3D stereo
- Orbit flight
- 360° roll

- Touch joystick
- Speed gear
- Gravity induction
- Lens inversion
- Lens switching
- Headless mode

3D Stereo Gesture photo Touch joystick Speed gear Gravity sensor

Orbit flight 360°rolling Headless mode Lens switch Invert camera

lens adjustment

- Japanese hand
- Picture quality switching

- On/Off

Japanese hand

16. Pre-flight preparation instructions (using APP):

16.1 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 matching state, with the front white/blue light and rear red light flashing.

⚠ Note: Set the aircraft in a correct direction, and the nose shall face forward. It must be placed on the horizontal plane.

11
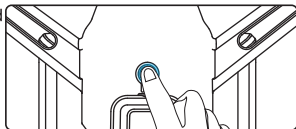
16.2 Turn on the WiFi function in the mobile device, select "4DRC********" (Figure 9) in the WiFi list, and turn on APP after it is connected successful. Click on more functions (Figure 10), turn on the touch rocker, and the aircraft lights will turn on normally, indicating successful frequency matching (Figure 11).

Figure 9   Figure 10   Figure 11

16.3 Horizontal calibration operation:
APP Application operation: click the "correction" icon in the app interface. The LED light on the aircraft flash and the calibration of the LED light on the aircraft is completed (Figure 12).

⚠ Note: In calibration, the aircraft must be placed on a horizontal surface to complete the calibration.
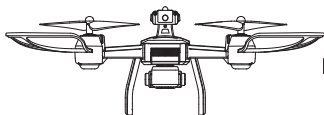
Figure 12

16.4 One-key take-off and landing
APP application operation: Click the "one-button take-off" icon (Figure 13) in the control interface of APP, it can also take off; during the flight, click this icon again, the aircraft will automatically land slowly.

Figure 13

APP operation: Before taking off of the aircraft, please follow the steps in the above sequence: turn on (see 16.1) → APP start the frequency matching (see 16.2) → level calibration (see 16.3) →one key take-off and landing (see 16.4)

17. APP Application Control Method:

When the left joystick (throttle) is pushed up, the rotation rate of the main blade increases and the aircraft rises.
When the left joystick (throttle) is pushed down, the rotation rate of the main blade slows down and the aircraft descends.

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

When the right joystick (rudder) is pushed up, the aircraft moves forward.
When the right joystick (rudder) is pushed down, the aircraft moves backward.

When the right joystick (rudder) is pushed to the right, the aircraft fuselage deviates to the right.
When the right joystick (rudder) is pushed to the left, the aircraft fuselage deviates to the left.

## 18. APP Application function operation introduction:

18.1 Headless mode
APP Application operation: the front of the aircraft when starting up for frequency matching is the front of headless mode by default; Whether you need to adjust the direction you need, please restart the frequency matching, enter the APP Application interface, expand the function menu and click the headless mode function (Figure 14). when exiting, please click this function icon again.

⚠ Special prompt: Please make sure the aircraft is aligned with the straight line and let the gyroscope automatically detect the straight line, and the headless mode of straight line flight can be realized.

Figure 14

13
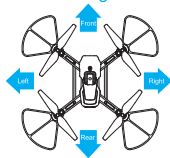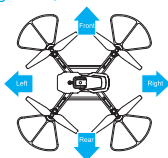
18.2 Speed switching

APP operation: Click the "More Functions" icon (Figure 15) in the APP control interface, and the flight speed can also be switched (Figure 16).

Figure 15

Figure 16

18.3 Lens adjustment

Press the fine adjustment button for the camera angle on the remote control, and the operator can adjust the lens angle as needed (Figure 17).

APP operation: Move the lens adjustment joystick in the control interface of APP (Figure 18). As shown in the following figure, pull the adjustment joystick all the way up to adjust the camera towards the top. Pull the adjustment joystick all the way down, and the camera will be adjusted towards the bottom. The controller adjusts the lens angle as needed.

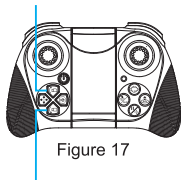Fine adjustment button with angle of the camera being upward

Figure 17

Figure 18

Fine adjustment button with angle of the camera being downward

18.4 Gesture recognition

When facing the camera's front lens, click the gesture photo button on the APP, and use any of the following gestures to trigger the aircraft's photo or camera function.

⚠ Special tip: Please aim directly at the lens and perform gesture recognition at a position about 2-3M away from the lens and in an environment with good light and background.

Yeah gesture photo

In about 3m front of the aircraft lens, make Yeah gesture with one hand in horizontal position; after the aircraft successfully recognizes the gesture, count down 3 seconds and take photos.

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Palm gesture video-recording

In about 3m front of the aircraft lens, put five fingers together and lift one hand to horizontal position; after the aircraft successfully recognizes the gesture, it will start recording. The recording will end when the gesture is re-recognized (the time difference between the two recognitions shall be greater than 3s).

18.5 MV interface

Click the "filter interface" icon (Figure 19) in the APP control interface, after entering the filter interface, you can choose to match your favorite filter effect, click the recording icon to start recording (Figure 20). After the recording is completed, the synthesized short video or picture will be saved to the media library (Figure 21).

⚠ Special tip: During the recording process, you can rotate the screen or switch the filter effect, and you can also turn the joystick on / off to control the direction and altitude of the aircraft.

| Figure 19 | Figure 20 | Figure 21 |

19. FAQ and solving guidelines:

Question	Reason	Solution
The aircraft indicator flashes without any response	The aircraft has insufficient power	Charge the battery
The blades of the aircraft rotate but cannot fly	1. Low battery 2.1 Blade deformation 2.2 Installation error of AB propeller	1. Charge the battery 2.1 Replace the blade 2.2 The fan blades are printed with letters A and B. For fan blade A or B, replace the one that is broken.
The aircraft vibrates badly	Blade deformation	Charge the battery
Fine tuning is done but still can't make the aircraft stable	1. Blade deformation 2. Defective motor	1. Charge the battery 2. Replace the motor
After the impact, start the aircraft again and it fly uncontrollably	The three-axis acceleration sensor loses its balance due to impact	After leaving the aircraft for 5-10 seconds, or by the horizontal calibration, it will be ok. For the steps, please refer to the manual, 10.3 horizontal calibration operation.