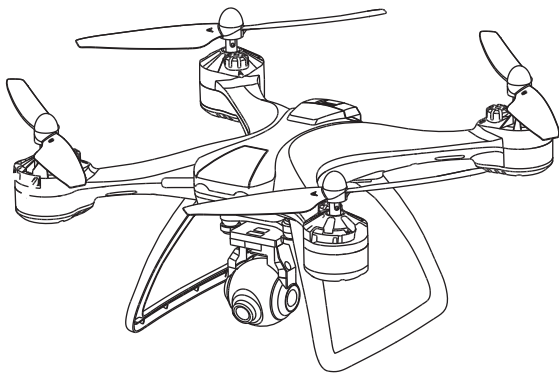# 4D-F5

Suitable for ages over 14

Quadcopter operating instructions

GPS

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

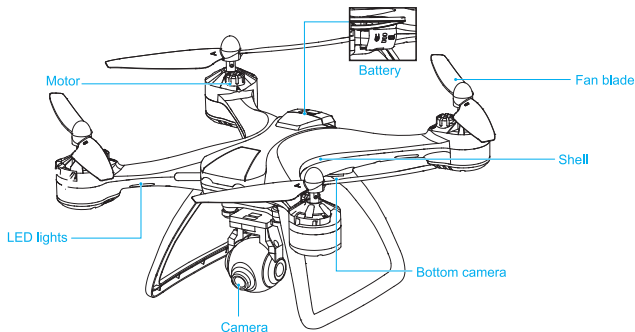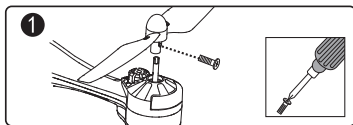USB charging cable ×1

Fan blade ×2

Lithium battery ×1

Screwdriver ×1

Operating Instructions ×1

2. Name of each part of aircraft:

Battery

Motor

Fan blade

Shell

LED lights

Bottom camera

Camera

3. Wind blade installation diagram:

1

Unscrew the screw to remove the fan blade.
(Replace the fan blade(A or B) which is broken.
The error replacement will cause the failure of taking off.)

⚠ Note: the fan blades are printed with AB letters, please install them correctly according to the figure, otherwise they cannot take off.

4. Lithium battery charging instructions:

4.1 Buckle the battery lock of the aircraft.

4.2 Remove the battery.

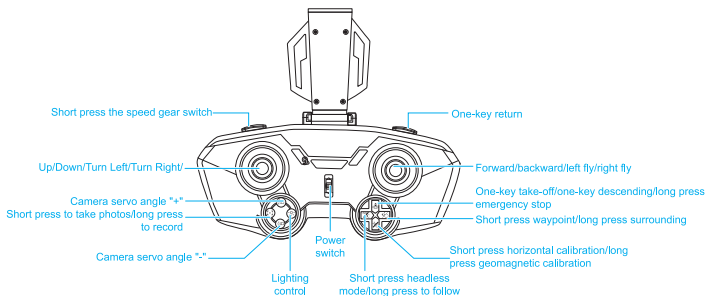Laptop   Desktop PC   Mobile power   USB adapter   USB power socket
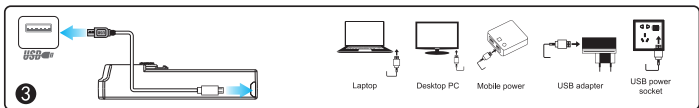
4.3 Charging: Insert the USB port of the USB charging cable into the USB port of computer (or use the power adapter with an output: 5V ⎓ 2A), and connect the other end of the USB charging cable to the battery socket. When charging, there are 3 green LED lights flash cyclically on the battery box. When the battery is fully charged, the 3 green LED lights are always on, which means the charging is complete.

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.

5. Name of each part of the remote control:

Short press the speed gear switch

Up/Down/Turn Left/Turn Right/-

Camera servo angle "+"
Short press to take photos/long press to record

Camera servo angle "-"

Lighting control

Power switch

Short press headless mode/long press to follow

One-key return

Forward/backward/left fly/right fly

One-key take-off/one-key descending/long press emergency stop

Short press waypoint/long press surrounding

Short press horizontal calibration/long press geomagnetic calibration

Battery cover

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

AAA battery

Battery installation:
6.1 Unscrew the screw and remove the battery cover.
6.2 According to the polarity instructions on the battery compartment, remove the battery cover on the back and insert a 4X "AAA" battery (not included).

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.

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 the aircraft, pull the battery out of the aircraft to avoid battery damage.

7. APP download and installation instructions:

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

Download on the 4DRC MAX

Please scan this QR code to install
(scan the code to download for Android/iOS systems directly)

7.2 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*6K*GPS*****" in the wireless network search list and connect; after connection, exit the setting option.
② Open the software icon "of 4DRC MAX " in mobile phone to enter the control interface. (Try to stay away from other signal source environments when flying)

AOpen "4DRC MAX " software

Select Go to enter the control interface

Select and click "Personalized Settings"
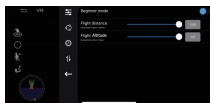
Enter the function setting menu

8. APP control interface function introduction:

- Satellite signal
- Flight status
- VR mode
- Return
- One key return (display only)
- Orbit (display only)
- One key follow (display only)
- Waypoint flight
- Map
- Flight distance
- WIFI signal
- Aircraft battery power
- Personalization
- Gesture photo
- Photo / Video
- Shutter
- Media library
- Lens switching
- Flight record
- Zoom
- Filter

05
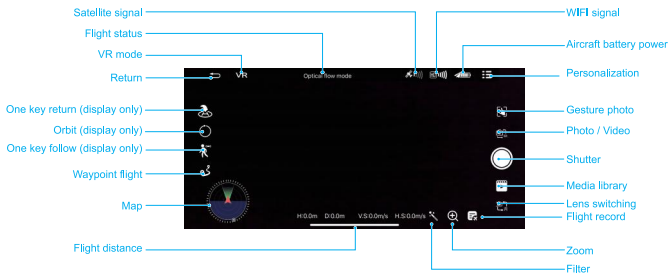
⚠ Note: The lens can be switched in indoor mode, and in GPS mode, the lens switch function will be turned off.

Novice mode

Flight distance
Default 80m, (80m~1000m)

Flight altitude
Default 50m, (50m~120m)

On/Off

Return

Surrounding radius setting

Horizontal calibration/guide calibration settings

Image transmission quality setting
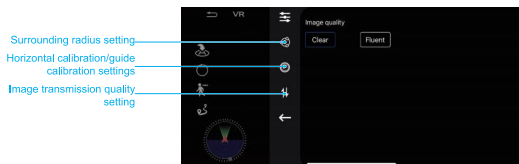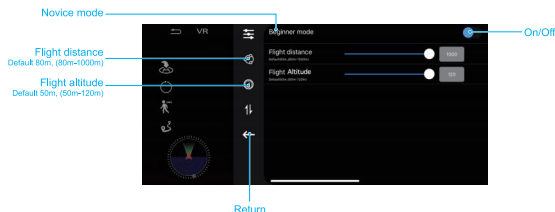
⚠ Note: After being proficient in flight operation, it is necessary to close the novice mode and set the flight distance and altitude before the aircraft can fly further!

9. Environmental requirements before flight:
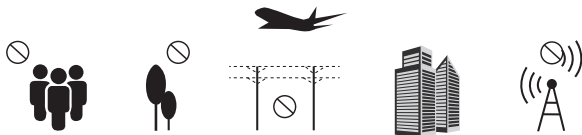
Please fly in an outdoor open environment without rain and snow, and with a wind power of less than 3. When flying, please stay away from people, trees, wires, tall buildings, airports and signal transmission towers.

10.1 Long press the aircraft for 2 seconds, the 4 LED lights under the aircraft motor base will flash, and place theaircraft on a horizontal surface, it will automatically enter the frequency matching state, and the blue light on the front arm and the red light on the rear arm will flash.
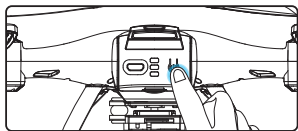
10.2 Turn on the remote control (step 1), turn the power switch of the remote control and the indicator light flashes; first push the throttle up to the top (step 2) and then to the bottom (step 3), the frequency matchingis complete, and the drone light stops flashing and is always on.
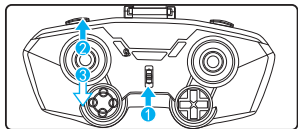
10.3 Turn on the WiFi function in the mobile device, select "4DRC*6K*GPS****" in the WiFi list, and open the APP after it connected successfully.
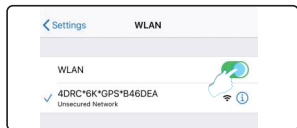
Warning — The aircraft/remote controller must ensure sufficient power or it cannot take off!

10.4 horizontal calibration operation:

Short press the horizontal calibration button on the remote control , the blue and red lights on the aircraft will flash quickly. When the blue and red lights on the aircraft are always on and the calibration is complete (Figure 1).

APP operation: click on the "personalization" icon in the APP interface, and then follow the instructions to operate. The horizontal calibration can also be done (Figure 2).

⚠ Note: In calibration, the aircraft must be placed on a horizontal surface to complete the calibration.
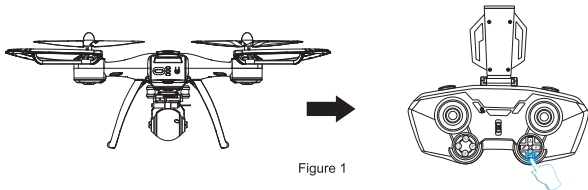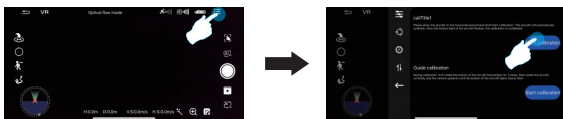
Figure 1

Figure 2
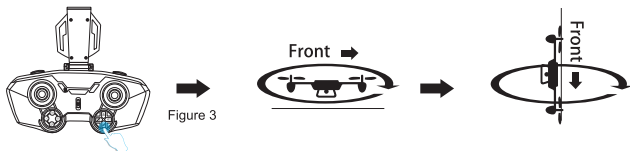
10.5 Geomagnetic calibration operation

Figure 3

Front ➡

Front

1. Long press ⚡ the geomagnetic calibration button until the remote control emits two beeps, the blue light on the front and the red light on the rear of the aircraft flash quickly.

2. Clockwise horizontal rotation-pick up the aircraft horizontally and rotate it clockwise until the left tail light is always on and the right tail light flashes quickly, and the horizontal calibration is completed.

3. The tail of the aircraft is upwards and turns clockwise-pick up the aircraft, the nose of the aircraft is vertically down, and rotate clockwise until the right tail light of the aircraft flashes slowly. The guide calibration is completed.

APP application operation: In entering the interface of "Setting more", according to the text prompt and operation steps, you can also guide the calibration (Figure 4).

Figure 4

08
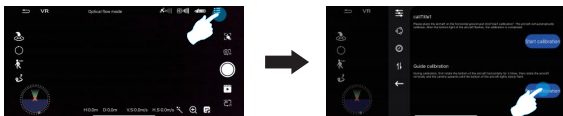
10.6 Star search status

After the aircraft is calibrated, the red light on the right side of the tail flashes slowly, which means that the GPS is in the search state. When the red tail light of the aircraft is always on, it means the satellite search is successful. The aircraft is now ready (Figure 5).

⚠ Note: You need to wait at least a few minutes for the first search, and you can take off when the tail light of the aircraft is always on!
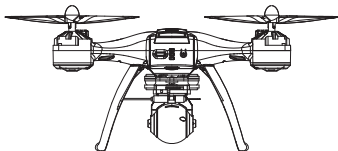

Figure 5

10.7 Start/stop

Press the left and right joysticks at the same time to unlock it, and then push the left joystick of the remote control upwards (Figure 6). At this time, the aircraft can take off normally, and all the indicator lights of the aircraft are always on after takeoff. Press and hold the ⬡ button during the flight, the remote controller will emit two beeps, and the aircraft will stop flying (Figure 7).

⚠ Note: This function operation is only suitable for the aircraft when it is out of control. Under normal circumstances, it is recommended to fly after unlocking. All aircraft with emergency stop function can be executed when the aircraft is below 2M, and the self-landing mode is executed when the aircraft is above 2M.
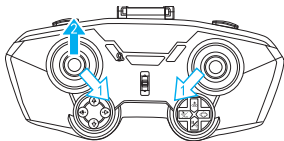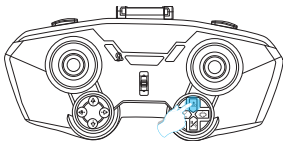

Figure 6

Figure 7

10.8 One-key take-off and landing

When the frequency matching is completed, press the left and right joysticks in a V style at the same time to unlock, and lightly press the "one-key take-off/landing" function of the remote control ⚲ (Figure 8), the aircraft will automatically rise to a height of about 1m, and fly smoothly in this height; when you press this function key again, the aircraft will automatically slowly land on the ground.
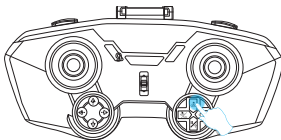

Figure 8

10.9 Normal mode (Optical flow assisted positioning)

The aircraft enters the normal mode: when the aircraft flies on a good ground, the optical flow will assist the aircraft, and hovering in a place shall be according to the ground and altitude conditions. It is normal to drift about 1 meter. In this mode, the height of the aircraft is limited to 10m.

⚠️ **Warning** Note: After turning on, the aircraft will automatically search for satellites. GPS mode can only be executed after satellite searching is complete. When the aircraft cannot find GPS signals indoors or in the basement, the tail light on the right side of the aircraft flashes slowly, and the aircraft can only be in the normal mode (optical flow fixed point) at this time.

⚠️ **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)→ link to WIFI (refer to 10.3)→horizontal alignment (refer to 10.4) → geomagnetic calibration (refer to 10.5) →Star search status (in GPS mode by default) (reference 10.6) →Start/stop (GPS mode) (reference 10.7) → One Key Takeoff/Landing (reference 10.8)

11. Control method:
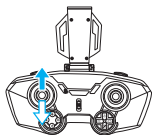
When the left joystick (throttle) is pushed up, the rotation rate of the main blade increases and the aircraft rises.
When the left joystick (throttle) is pushed down, the rotation rate of the main blade slows down and the aircraft descends.
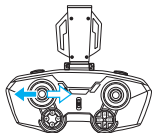
When the left joystick (rudder) is pushed to the left, the aircraft nose turns to the left. When the left joystick (rudder) is pushed to the right and the nose of the aircraft will turn to the right.
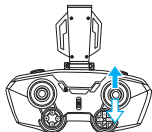
When the right joystick (rudder) is pushed up, the aircraft flies forward.
When the right joystick (rudder) is pushed down, the aircraft flies backward.
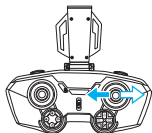
When the right joystick (rudder) is pushed to the right, the aircraft fuselage deviates to the right. When the right joystick (rudder) is pushed to the left, the aircraft fuselage deviates to the left.

Warning

When the aircraft is in 1m from the ground, the aircraft will become unstable due to the influence of its own blade vortex, which is called "ground effect response". The lower the height of the aircraft, the greater the effect of the ground effect response.

11

12.1 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 9). When exiting, please tap gently press this function key again.

⚠ Special tips: Please make sure to align the aircraft in a straight line and let the gyroscope automatically detect the straight line to realize the headless mode of straight flight (this function can only be performed in the normal mode).
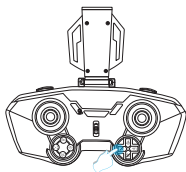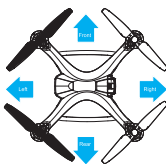

Figure 9
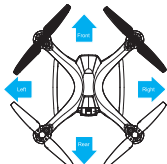
12.2 One key return

In GPS mode, press one-key return 🔄, the aircraft will return to the sky above the geomagnetic calibration position (Figure 10). (The aircraft will automatically rise to a safe altitude when flying below a safe altitude) and then slowly land. If there are obstacles during the descending, press the one-key return button again to turn off the return and control the direction stick manually to avoid it, and pull down the throttle to land.
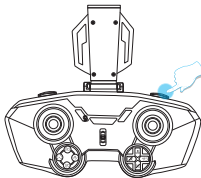

Figure 10

⚠ Warning: Runaway return: When the signal of the remote controller is interrupted for about 4s, the aircraft will automatically return to the place where there is a signal and stop. Low battery return: when the aircraft is in low battery electricity, it will forcefully return to a place that is 20m above the take-off point. The return flight cannot be cancelled during the low battery return.

12

12.3 Speed switching

When the aircraft ⊞₁₂₃ takes off, it is by default in low speed mode (gear switching). Press the remote control twice and it emits"di di" for medium speed, and press it again and emits"di di di"for high speed. (Figure 11)
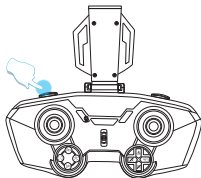

Figure 11

12.4 Waypoint flight mode

① In GPS mode, click "More Functions" icon (Figure 12) in the APP control interface to enter waypoint flight (Figure 13). At this time, the interface changes from the image transmission page to the map page. On the map page, click to set the track range of a single waypoint or continuous waypoints (Figure 14). During the setting process, if the track waypoints are too dense, you can click the delete icon to delete all waypoints (Figure 15).

②After setting the waypoints, click the send icon (Figure 16), and then short press the "one-key waypoint flight" button ✕⟋ (Figure 17) on the remote control. The aircraft will fly to all the waypoints from the initial point to complete the pre-set flight trajectory. During the flight, use the right joystick of the remote control to release the waypoint flying.

Figure 12

Figure 13

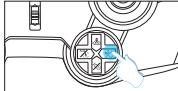Figure 14

Figure 15

Figure 16

Figure 17

12.5 Orbital flight mode

In GPS mode, long press the "One-key Surrounding" button ✕⟋ (Figure 18) on the remote control during flight,the remote controller emits two beeps, the aircraft will fly to the set radius with this position as the center, and the aircraft nose will turn around the center point to perform a 360° orbital flight. When the aircraft is flying in a circle, you can change the circle direction and radius by manipulating the right joystick of the remote control. Long press the one-key surroundingbutton ✕⟋ on the remote control again to cancel thesurrounding command.
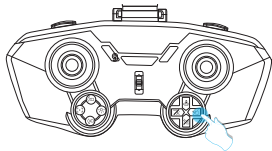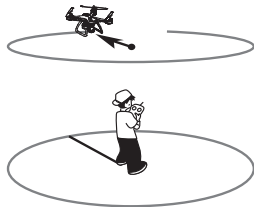
Figure 18

12.6 GPS follow mode

In GPS mode, long press the "One-key follow" button on the remote control (Figure 19) to enter the follow APP interface and the icon will light up (Figure 20), and the aircraft will adjust the distance from the current position to the controller to about 5m, and move by tracking the change of the device's position. During the following, manipulate the right joystick of the remote control to cancel the following.
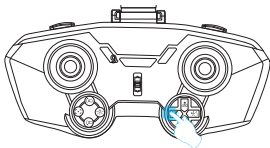

Figure 19

Figure 20

12.7 Lens adjustment

Press the camera servo angle adjustment button (, the remote control will make a "di", and the camera will adjust the angle upward; press the camera servo angle adjustment button (, the remote control will make a "di", and the camera will adjust its angle downward ; (The adjustable angle is less than 70°), the operator adjusts the lens angle according to the needs (Figure 21).
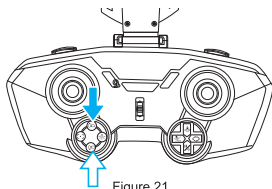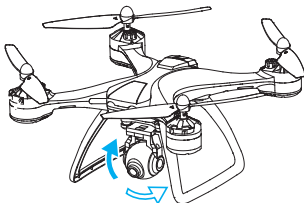

Figure 21

12.8 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 2m 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.

Palm gesture video-recording

In about 2m 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).

12.9 MV interface

Click the "filter interface" icon (Figure 22) 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 23). After the recording is completed, the synthesized short video or picture will be saved to the media library (Figure 24).

⚠ 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.
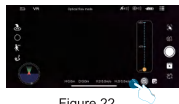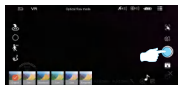

| Figure 22 | Figure 23 | Figure 24 |

13. FAQ and solving guidelines:

Question	Reason	Solution
The aircraft indicator flashes without any response	1. Geomagnetic anomaly 2. The aircraft has insufficient power	1. Move the aircraft to an open place and search for stars again 2. 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	Replace the blade
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, 10.4 horizontal calibration operation.