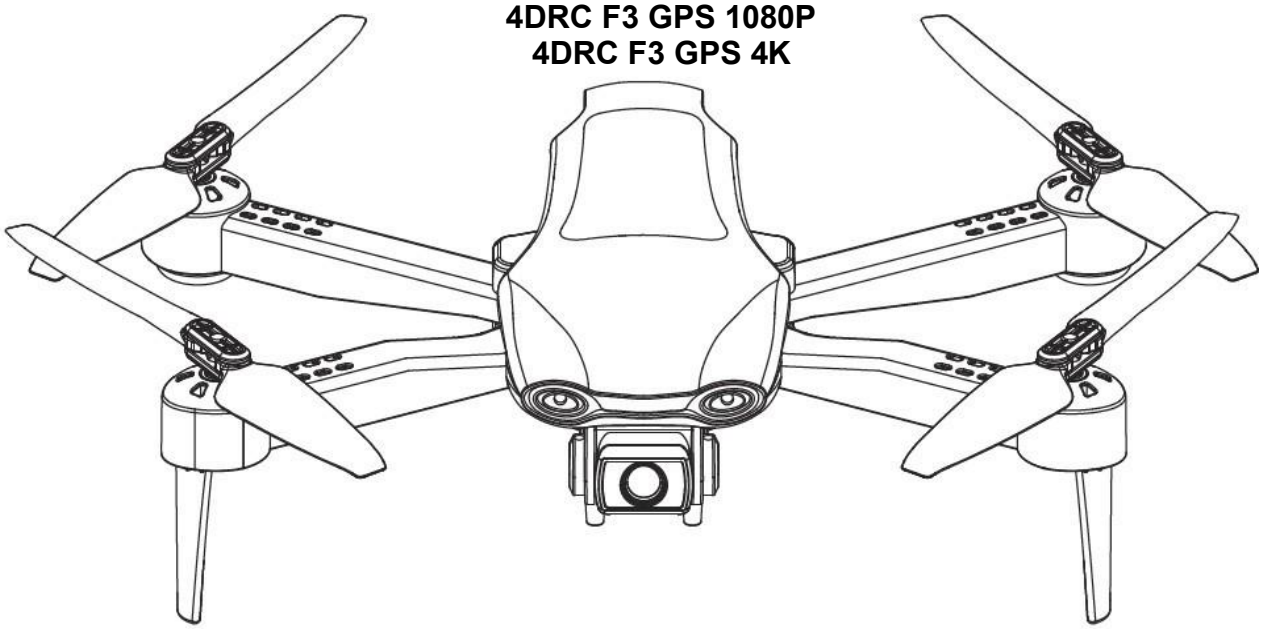
AERIUM 4DRC F3 drone instructions for use

For models:
4DRC F3 4K (without GPS) - the GPS features listed in the manual are not valid for this model
4DRC F3 GPS 1080P
4DRC F3 GPS 4K



For users over 14 years of age

Registration is compulsory for all drones with a camera, more at:
https://www.letejtezodpovedne.cz/

It is prohibited to use any model of drone within a 10 km radius on the sides of the airport and within 20 km of either end of the runway and on civil air routes to meet the electromagnetic environment requirements for aeronautical communications.
No model of drone is allowed in the no-fly zones

established by the relevant state authorities.

1.The packaging and instructions for use provide important information and should be kept for future reference.

2.You are responsible for ensuring that this drone does not cause any personal injury or property damage.

3.The commissioning and assembly of the drone must be strictly in accordance with the operating instructions. 4. Make sure that the drone is 2-3 m away from the operator and other persons when flying, so that the drone does not hit the head, face and body of a person during flight and landing and cause injury to him/her.

4. Neither our company nor the dealer shall be liable for any loss, damage or personal injury resulting from improper use or operation.

5. Children over 14 years of age may operate this drone under adult supervision and children under 14 years of age may not operate this product.

6.Please install and use this product correctly in accordance with the instruction manual,some parts must be assembled by adults.

7. This product contains small parts, please keep out of reach of children to prevent accidental ingestion or suffocation.
8. It is forbidden to operate it on the road or on waterlogged ground to avoid possible accidents.

9. Please clean up the packaging materials in time to avoid harm to children.

10.Do not disassemble or reassemble the drone to avoid any malfunctions.

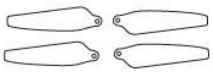
11.The USB charging cable must be plugged into the designated 5V = 2A power source as marked on the product.

12. Only the original USB charging cable may be used.

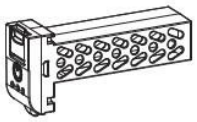
1. Accessories

Drone model

1xcharger screwdriver

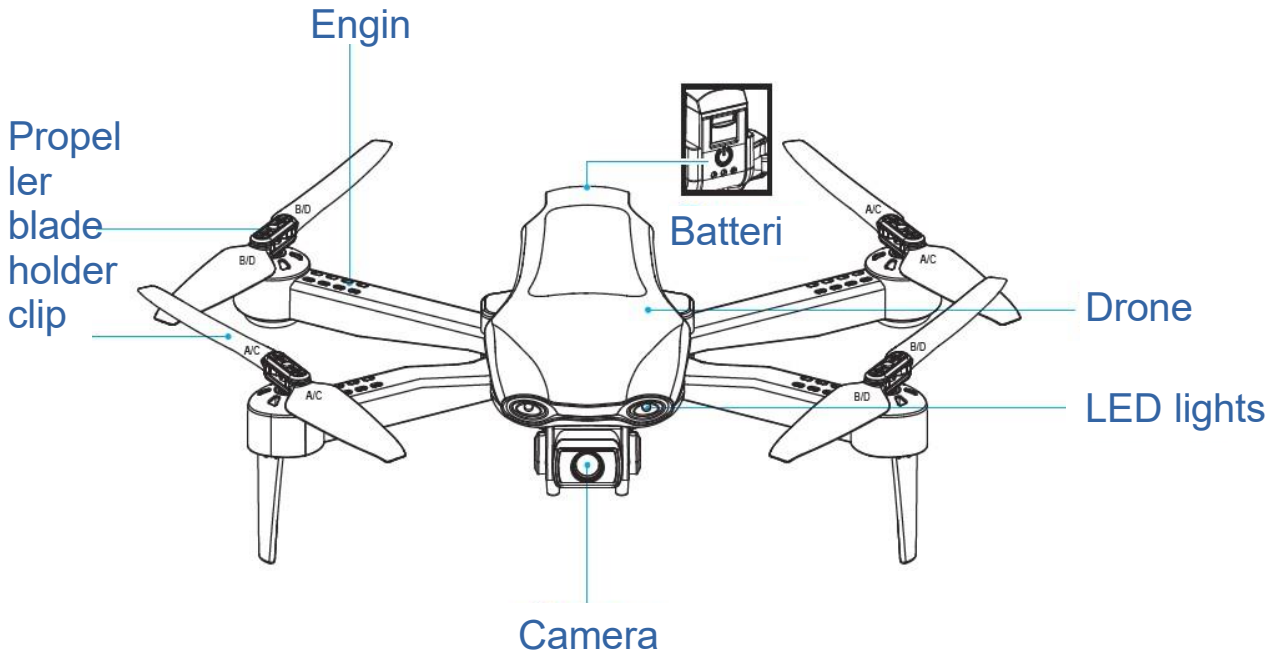


1xreplacement propeller blades instructions

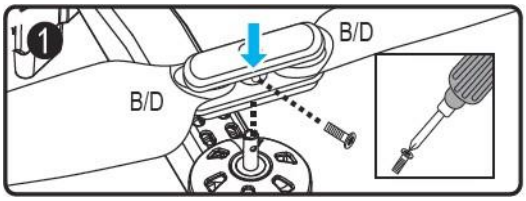


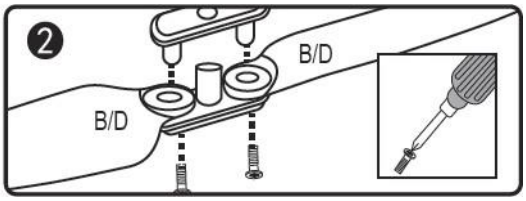
4xbatteries 3x (2x) according to

2. Drone component names:



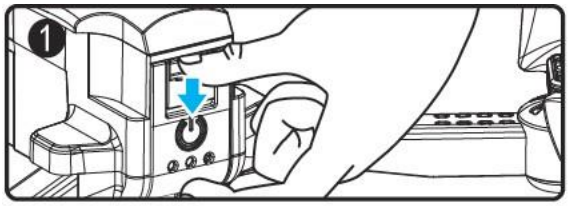
3. Propeller blade installation and replacement



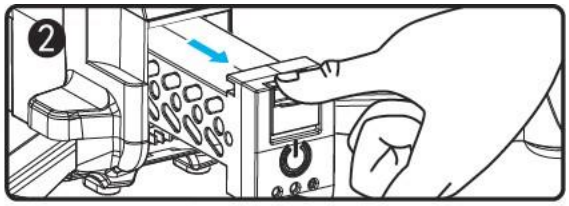


3.1 Unscrew the screw and remove the propeller blades. Note: The letters A, B, C and D are printed on the blade, A=C, B=D, place them according to the drawing, otherwise the drone will not be able to take off.

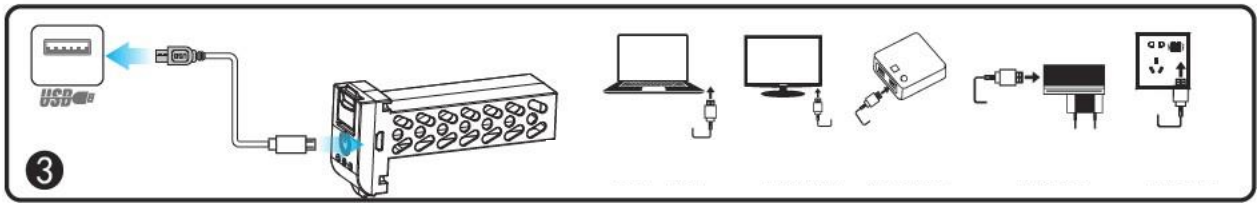
3.2 Unscrew the screw to separate the two blades from the connecting parts and replace them. (Replace damaged B/D blades with B/D blades and replace damaged A/C blades with A/C blades, any incorrect replacement will cause the drone to not take off.)



4.1 Press the drone battery lock

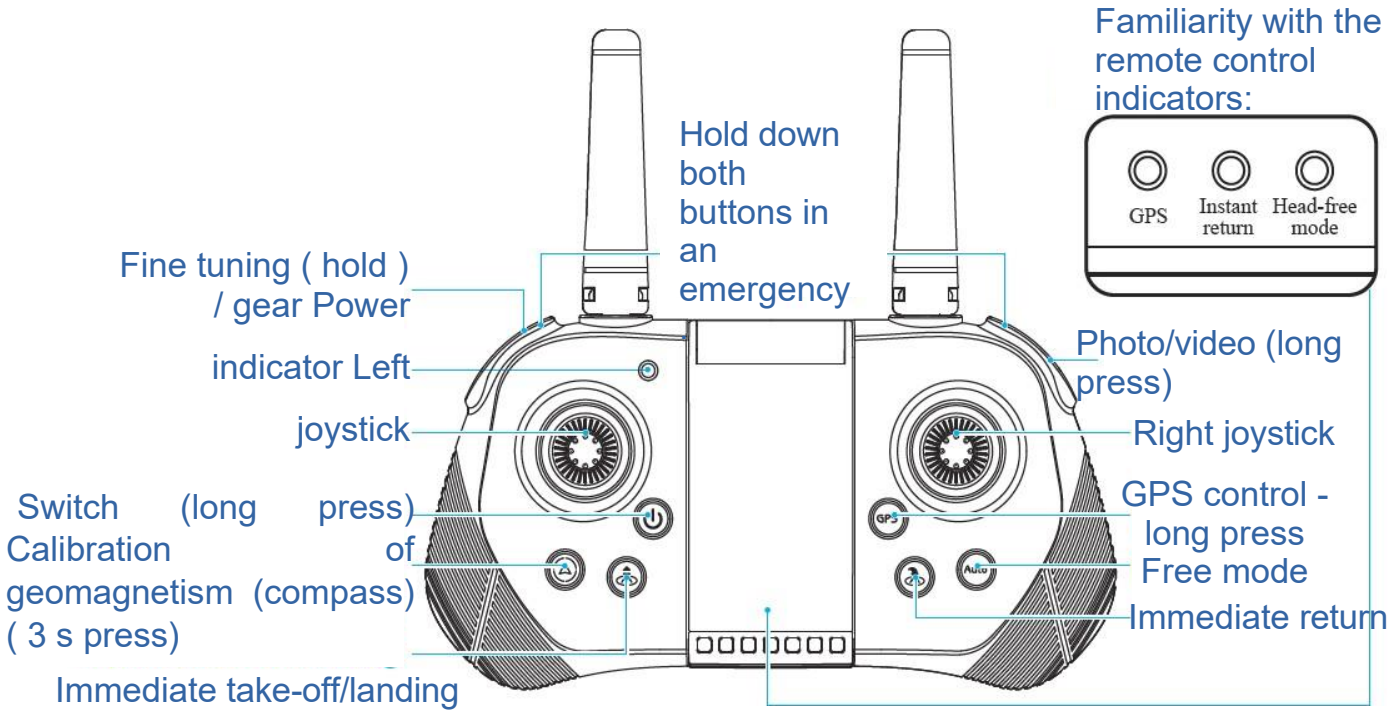


4.2 Remove the



4.3 Charging: insert the USB interface of the charging cable into the USB ports of the computer (or use the output: 5V = 2A power adapter) and connect the other side of the USB interface to the battery socket. When charging, the USB drone's red light will turn on and the green light will flash; when the battery is fully charged, the red light will turn off and the green light will turn on, indicating that charging is complete.

5. Names included with the remote control:

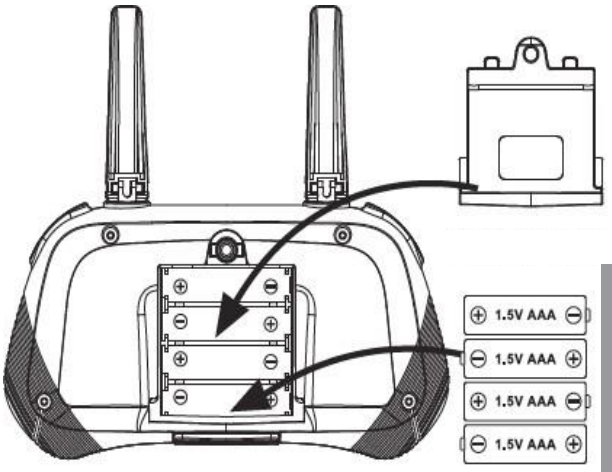


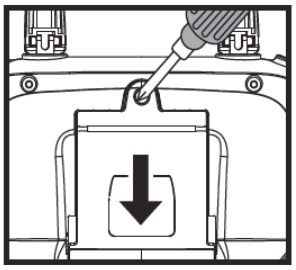
GPS Common/GPS button: after adjusting the frequency, long press this button for 3 seconds to select the common mode and GPS mode (default GPS mode, GPS light is on, if you select common mode, GPS light is off).

Auto Free mode button: Press the button again to exit the free mode, the light goes off.

Return button: press the button once to return and the return light will illuminate. Press the button again to cancel the return, the light goes off.

6. Installing the remote control battery:





Battery installation:
4.1 Press the battery cover button with a screwdriver to remove the battery cover.
4.2 Follow the polarity instructions on the battery holder to remove the battery. and install 4 "AAA" batteries (not included).

Notes:
1. When installing the batteries, pay attention to the anode and cathode of the batteries and their markings on the battery packaging.
2. Please do not mix new and old batteries.
3. Please do not mix different types of lithium batteries.

Safety precautions for charging:
To prevent damage or explosion, do not insert charged batteries into high temperature areas such as open flames or electric heating equipment.
- Do not throw batteries, prevent them from falling.
- Do not disassemble the batteries.
- Do not soak batteries in water. Store batteries in a dry place.
- Charge batteries under adult supervision.

Warning:
When the drone is not in use, disconnect the battery plug from the drone's power connector to avoid damaging the battery.

7. Instructions for downloading and installing the app:

7.1 Download and install the app
For Android, scan the QR code, open the website in your browser and download the software.

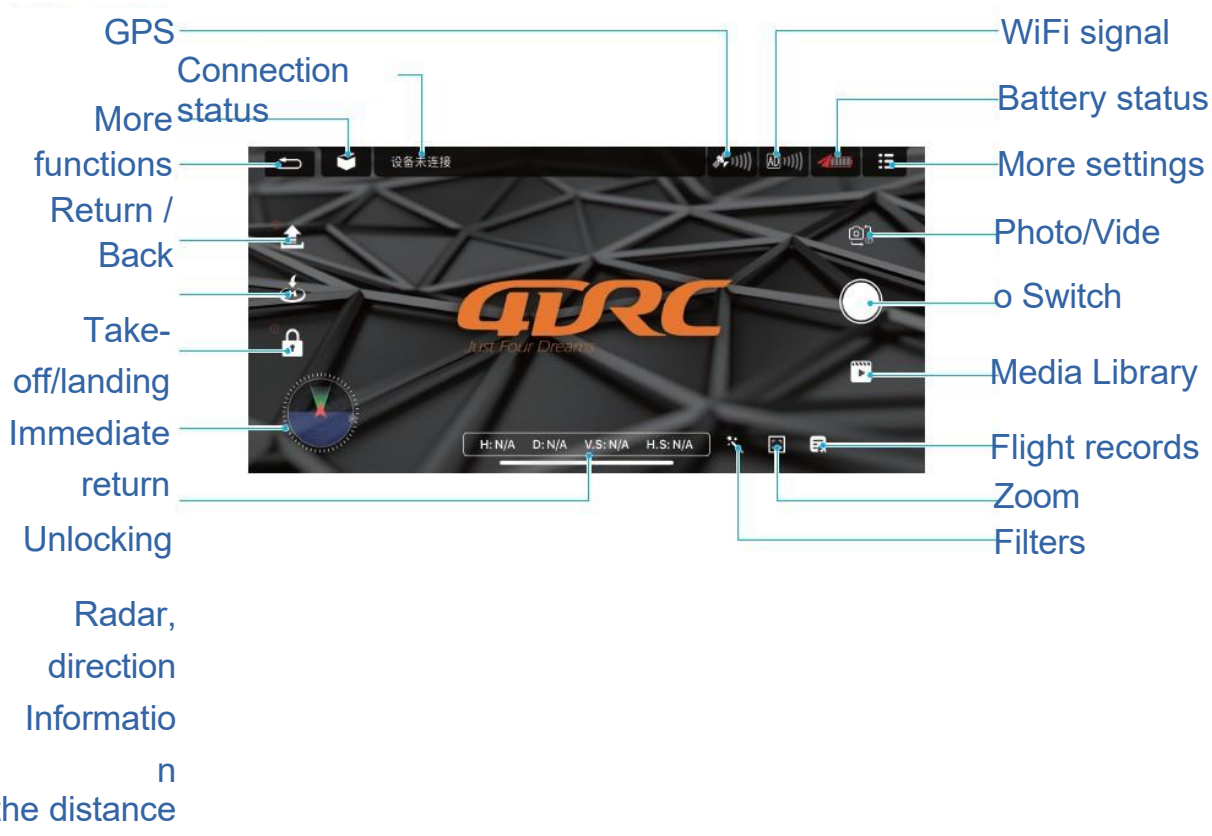
ANDROID APP ON Google play

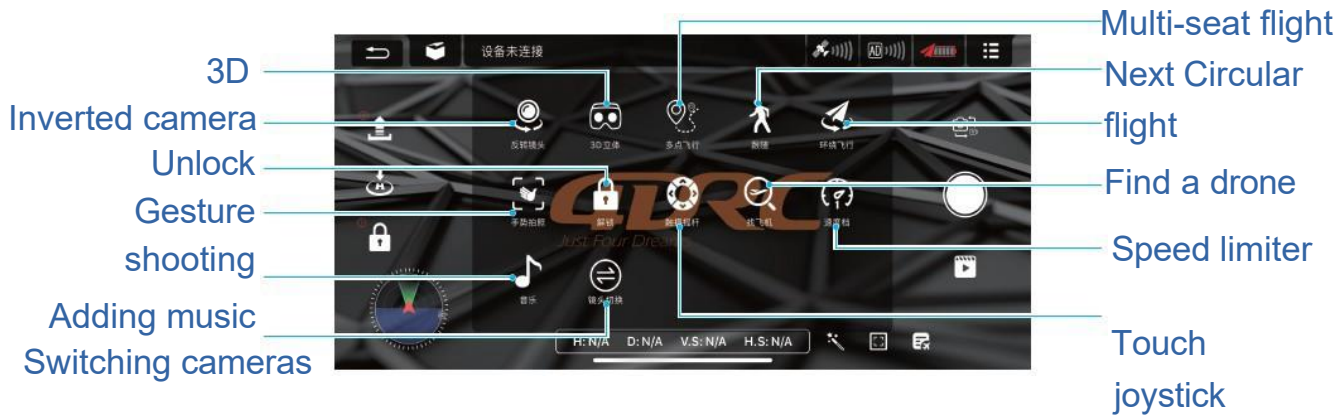
Download on the App Store

7.2 Linking instructions
- Turn on the power of the drone, enter "Settings" (mobile phone or IPAD), open the WiFi wireless network, find the device "4DRC-4K-GPS *****" in the wireless network search list and connect the device, exit Settings when connected.
- Open the "4DRC PRO" icon on your mobile phone and enter the control interface (stay away from other signal sources when controlling the drone).

Open the 4DRC **CLICK on the "GO"** **buttonClick on "MORE FUNCTION "** **Enter the "FUNCTION MENU"**

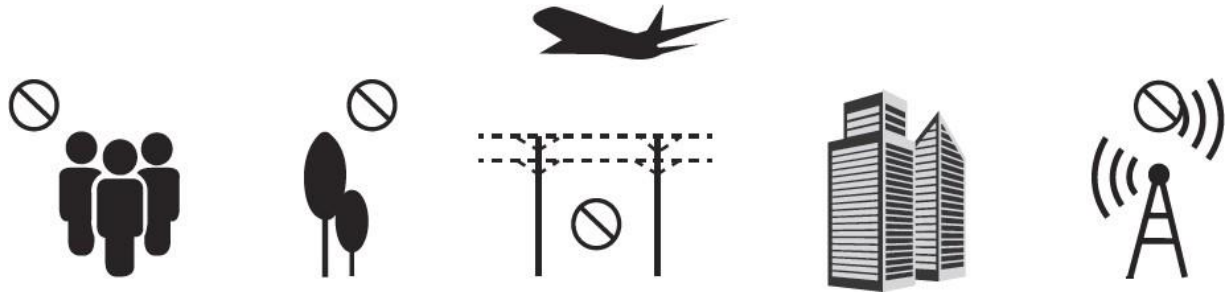
8. Introduction to the functions of the application control interface:





Note: Turn off Beginner mode with advanced flight operations, then adjust the flight distance and altitude to allow the drone to fly further!

9. Pre-flight environmental requirements:

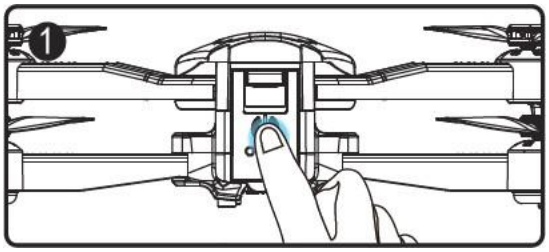


Operate the drone in an outdoor open area free of rain and snow and with wind strengths below level 3 and stay away from crowds, trees, power lines, tall buildings, airports and signal towers.
Do not use it in enclosed areas or in a place with a weak GPS signal.

10. Preparation for flight:

WARNING: Please make sure the drone/remote is fully charged, otherwise it cannot take off.

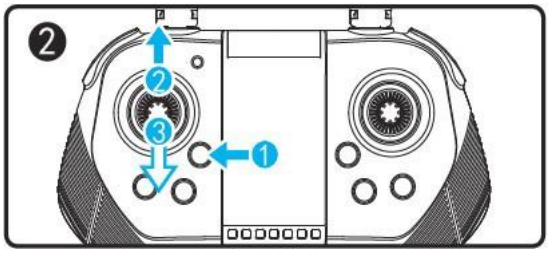
10.1 Turn on the power to the drone, place it on the launch pad - the horizontal spot for automatic frequency adjustment, the front white indicator light and the red indicator light on the rear arm blink (battery light is on).



Note: Adjust the direction of the drone so that the front of the drone is facing forward and the drone is positioned horizontally.

10.2 Open the WiFi function on your mobile phone and select "4DRC-4K- GPS*****" in the WiFi list, connect the device and then open the app.

10.3 Turn on the remote control (default mode), long press the "ON/OFF" button on the remote control (step 1), the power light will come on. Push the throttle stick up (step 2) and then down (step 3). When the pairing frequency is successfully paired, the UAV indicator light will turn on instead of blinking.



10.4 Horizontal calibration:

Press the left and right control stick on the remote control to the bottom left corner, the white and red lights on the drone will flash rapidly. When the white and red indicator lights on the drone light up, horizontal calibration is complete, the remote control will beep (Figure 1).

APP Operation:Click the "More Settings" icon in the APP interface for horizontal calibration according to the text prompt. When the calibration is complete, automatically proceed to the next operation (Figure 2).

Note: Calibration can only be completed when the drone is positioned horizontally.

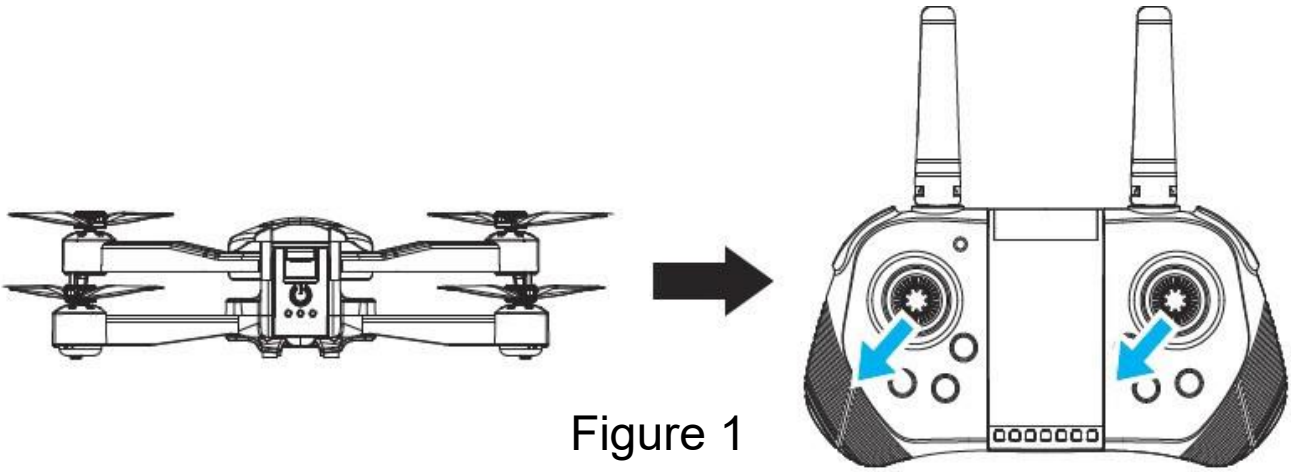


Figure 1

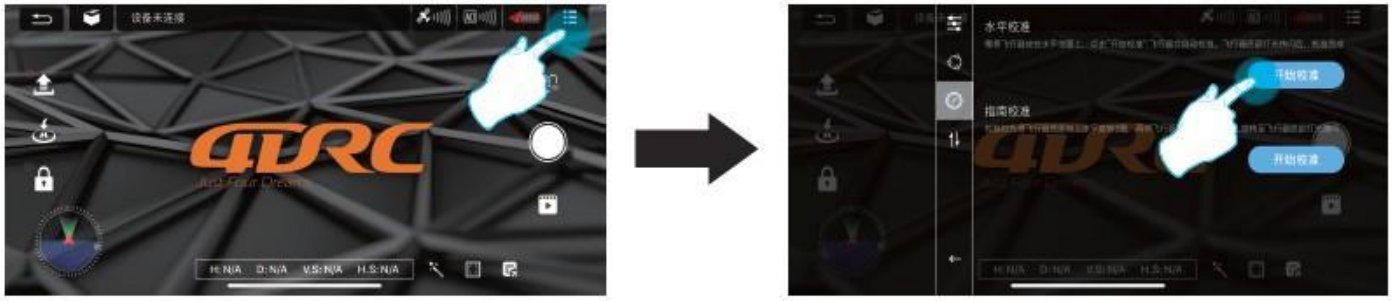


Figure 2

10.5 Geomagnetic calibration:

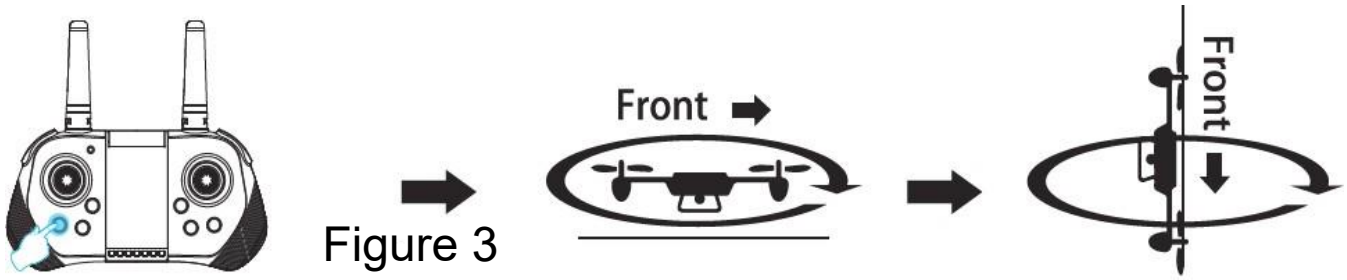


Figure 3

1.Long press the "geomagnetic" button
calibration" until the front white light and the red light on the rear arm flash rapidly.

2. Horizontal Clockwise Rotate - Take the drone horizontally and rotate it clockwise until the front white light and rear red light blink slowly, when the remote control beeps, the horizontal calibration is complete.

3. Rotate the drone clockwise with the tail up - take the drone upside down, rotate the drone clockwise until the front light and red light on the rear arm illuminate, when the remote beeps, the compass calibration is complete.

To operate the application: enter the "Other Settings" interface, complete the compass calibration according to the text prompt and the operating steps (Figure 4). Once the compass calibration is complete, automatically enter the flight operations interface.

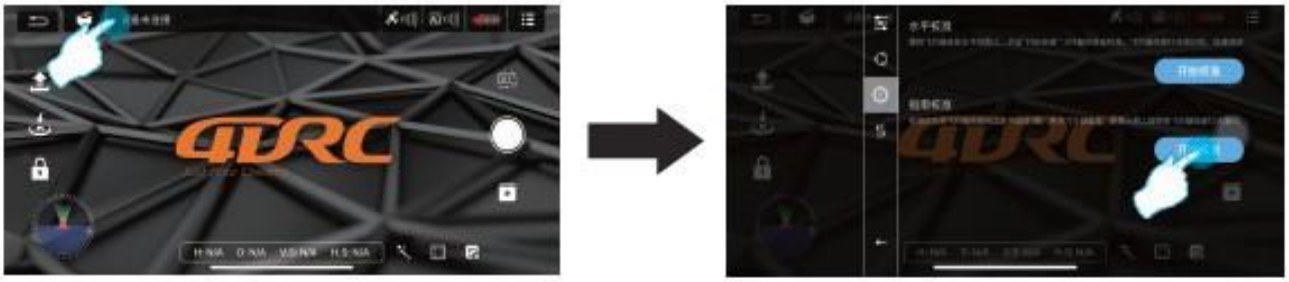


Figure 4

10.6 Satellite search status (default GPS mode)

When the remote control is in GPS mode, the GPS light is on, indicating that the GPS is entering the satellite search state. When the red rear aero light flashes, the satellite search is complete and the remote beeps, the drone can be used (Figure 5).
Note: *Once the signal from the satellite reaches at least level 10, the drone can take off.*

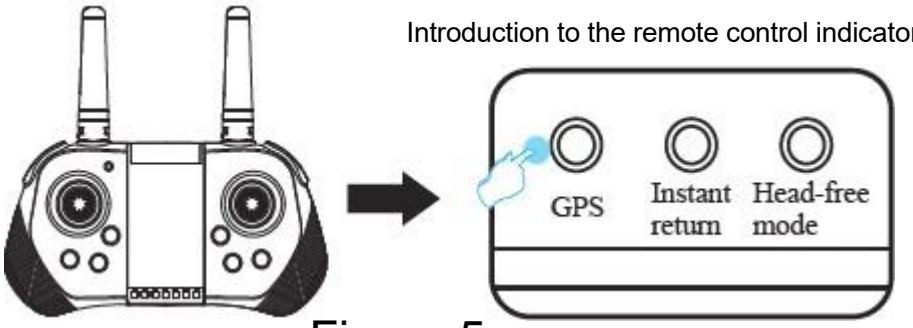


Figure 5

10.7 Start/Stop (GPS mode)

To unlock the drone, push the left and right control rods on the remote control outwards (the drone cannot be unlocked for operation unless the satellite search is completed) (Figure 6).In this condition, the aeroplane can take off and all the lights will illuminate after takeoff (Figure 7).
App operation: click the "One Key Unlock" icon (Figure 7) in the APP control interface. the key unlock function can also be achieved

Figure

6Figure 7

10.8 Immediate take-off/landing

After unlocking the drone, lightly press the "Instant Takeoff/Landing" button on the remote control (Fig. 8) until the drone automatically flies up to a height of about 1 m, maintain a stable flight at this height; press this button again, the drone will automatically land slowly on the ground.

App operation: click the icon again during the flight and the aeroplane will automatically land slowly on the ground (Figure 9).

Figure 8

Figure 9

10.9 Normal mode (optical flight positioning)

The drone is in normal mode: When the drone is flying over good ground, the optical sensor helps the drone hover in place. Depending on ground conditions and flight altitude, a yaw of approximately 1 m is normal.

10.10 Start/Stop (normal mode for indoor operation)

Figure 10Figure 11Figure 12Figure 13

1. Long press the button "GPS" button on the remote control, the GPS indicator light will go off, enter normal mode (Figure 10).

2. Press the left and right joysticks on the remote control outwards to unlock the drone(Figure 11).

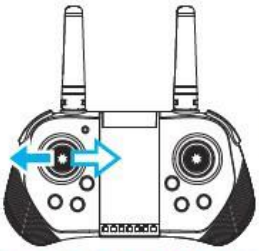
3. Push the left control lever upwards (Figure 12).

Or press the "Instant take-off" button (Figure 13).

Note: Before taking off, perform the following actions with the drone. Frequency tuning (see 10.1) → WIFI connection(see 10.2) → remote control start frequency (see 10.3) → horizontal calibration (see 10.4) → geomagnetic calibration (see 10.5) → satellite search status (default GPS mode) → (see 10. 6) → Start/Stop (GPS mode) (see 10.7) → Start/Stop (normal mode) (see 10.8) → Normal mode (optical positioning) (see 10.9) → Start/Stop (normal mode for indoor operation) (see 10.10)

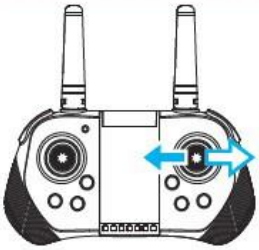
11. Operational methods:


Press the left joystick (throttle stick) upwards, the speed of the main blades increases and the drone climbs. Press the left joystick (throttle stick) downwards, the speed of the main blades decreases, the drone descends.

Press the left joystick (rudder) to the left, the drone head will turn to the left. Press the left joystick (rudder) to the right, the drone head will turn to the right.


Press the right joystick (rudder) upwards and the drone will fly forward. Press the right joystick (rudder) downwards and the drone will fly backwards.

Press the right joystick (rudder) to the right, the drone's fuselage will fly to the right. Press the right joystick (rudder) to the left, the drone's fuselage will fly to the left.

Please note: If the drone is lower than 100 cm from the ground, the flight becomes unstable due to the swirling of the blades, called ground effect. The lower the height of the drone, the greater the ground effect.

12. Operation of the application and introduction of the remote control functions:

12.1 Free mode

The front of the drone during frequency matching is the main part in free mode; if you want to adjust the default direction, restart the frequency matching drone and press the "free mode" button (Figure 14) on the remote control briefly and press this button again lightly when finished.
Special tips: set the drone and align it in a straight line so that the gyroscope can automatically detect the straight line and achieve straight flight in free flight mode.

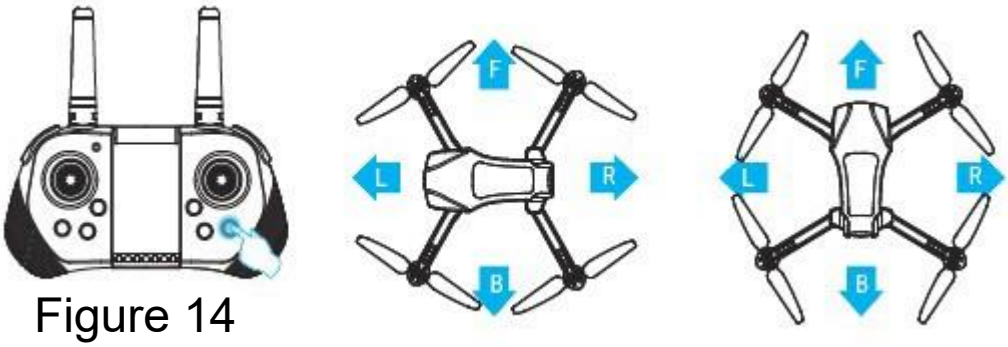


Figure 14

12.2 Immediate return

Press the "Immediate Return" button, the drone will return above the geomagnetic calibration position (Figure 15) (if the flight altitude is lower than the safety altitude, the aeroplane will climb to the safety altitude) and slowly land on the ground. If there are any obstacles, press the "Immediate Return" button again to disable the function and manually operate the rudder to avoid obstacles, then press the throttle stick down to land the drone.
To operate the app: tap the "Instant Return" icon (Figure 16) in the APP control interface to make the drone fly back; tap this icon again during the return to cancel the return.

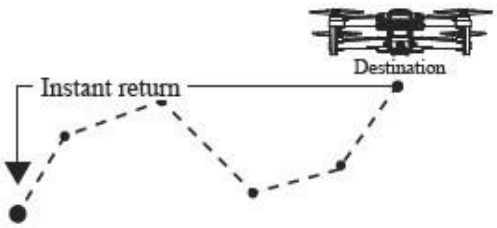


Figure 15Figure 16

Return out of control
When the remote control signal is interrupted for approximately 4 seconds, the drone will automatically fly back to the location with the appropriate signal.
Return when the battery is low
If the battery is low, the drone will be forced to return to a position about 20 m above the take-off point. The return cannot be cancelled during the return with low batteries.

12.3 Speed switching:

When the drone takes off, it flies in low speed mode by default (3 gears), press the remote control lightly, "di" for low gear, "di di" for medium gear and "di di di" for high gear (Figure 17).
APP operation: click on the "More settings" icon (Figure 18) in the APP control interface to switch the drone flight speed (Figure 19).

Figure 17Figure 18Figure 19

12.4 Flight mode with waypoint

① In GPS mode, click the "More Settings" icon (Figure 20) in the APP control interface to enter the multi-site flight (Figure 21), then the interface will switch from the image transmission page to the map page.
On the map page, click to set a route range consisting of a single waypoint or continuous waypoints (Figure 22).
If there are too many waypoints during setup, you can click the Delete icon to remove all waypoints (Figure 23).
② After setting the waypoints, click the Send icon (Figure 24), the drone will automatically fly to all waypoints from the starting point to complete the preset flight path. You can control the direction of the drone during flight using the joystick.

Figure 20Figure 21Figure 22

Figure 23Figure 24

12.5 Flight mode in the circle

In GPS mode, click on the "More Settings" icon (Figure 25) in the APP control interface and enter the circle flight (Figure 26), the drone will automatically create a radius (Figure 27) that can be adjusted in the APP (Figure 28). At this point, press the right rudder left or right to make the drone fly left or right (Figure 29) to achieve a circle flight, and the flight speed is adjustable. Push the right rudder back and forth to adjust the radius for circular flight. Press the circle flight button again to stop the circle flight (Figure 30).

Figure

25Figure

26Figure 27

Figure

28Figure

29Figure 30

12.6 GPS tracking mode

While in GPS mode, click the "More Settings" icon (Figure 31) in the APP control interface to enter the following mode (Figure 32). The drone will automatically fly with the movement of the mobile device based on the distance from the drone's current position to the control device (mobile phone or IPAD). While in tracking mode, lightly press the GPS following button to cancel the tracking mode.

Figure 31

Figure 32

12.7 Gesture recognition

In GPS mode, you can enable the timer or auto-resume drone recording by looking at the front camera lens using the following gestures.
Special tip: To perform gesture recognition operations, stay about 3 m away from the lens and face the lens in a well-lit location.

Yeah gesture photography
About 3 m in front of the drone's lens, raise one hand horizontally and make the Yeah gesture; if the drone successfully detects this gesture, it will take a picture after 3 s.

Palm gesture for Auto REC
About 3 m in front of the drone's camera lens, raise one hand horizontally with 5 fingers open; when the drone's camera successfully detects this gesture, it will start recording video immediately. Perform this gesture again, it will stop recording this video (the time difference between the two detections must be greater than 3 s).

12.8 MV interface

Click the "Filter interface" icon (Figure 33) in the APP control interface to select your favorite filter effects and click the Record icon to record the MV (Figure 34). When finished, the composited short video or images will be saved to the media library (Figure 35).

Figure 33Figure 34Figure 35

13. Solving common problems:

The drone light is blinking, but the drone is not working. Problem:
1. Unsuccessful satellite search for a drone using GPS
2. Low drone battery
Solution:
1. Place the drone in an open area and locate the satellite again.
2. Charge the battery

A drone cannot take off with its blades turned.
Problem:
1. Low battery level
2. Deformed blades
Solution:
1. Charge the battery
2. Replace the blades

Poor drone stability Problem:
Deformed blades
Solution:
Replace the blades

The drone cannot fly smoothly even when fine tuning is set to minimum. Problem:
1. Damaged blades
2. Engine damage, impurities in the engine
Solution:
1. Replace the blades
2. Replace the motor

The drone is out of control after impact. Problem:
The three-axis acceleration sensor loses its balance due to the impact.
Solution:
Position the drone for 5-10s or correct it with a correction gyro.