



Suitable for ages over 14

# Quadcopter operating instructions



**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

- The packaging and instructions contain important information and should be kept.
   With this aircraft, you are responsible for ensuring that no harm will be caused to the
- 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
  - operating instructions, and attention snain or part to the distance determined in the 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.

    Our company and distributors are not responsible for any less and damage, as well as
  - Our company and distributors are not responsible for any loss and damage, as well as injury to people caused by improper use or operation.
  - Children should be guided by adults when operating the aircraft. This product is prohibited to be operated by children under 14 years old.
  - Please follow the instructions or packaging instructions to install and use correctly, and some parts should be assembled by adults.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
  - It is strictly forbidden to play on the road or in the place where water is accumulated avoid accidents.
  - 9. Please put away the packing materials in time to avoid harm to children.
  - 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. Only use the charging cable configured by the factory.
  - 13. The charging cable is not a toy.

personal and property of others.

- 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 quardian 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.
- 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).
- 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.
- 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. As for the USB charging cable, the data cable provided by our company must be used
- to charge the battery, otherwise it will cause damage to the battery.

  25. To meet the magnetic environment requirements of aeronautical radio stations. During
- 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.

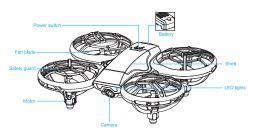
# 1. List of accessories included:



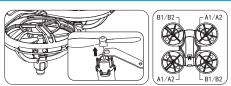
Aircraft ×1 USB charging Fan blade ×4 Lithium battery ×1 cable ×1

Fan blade Screwdriver ×1 Instructions ×1
replacement
tool ×1

# 2. Name of each part of aircraft:



# 3. Fan installation steps:

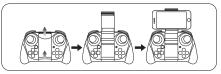


Take off the fan blade with attached tools. (If A1/A2 blade is broken, replace A1/A2. If B1/B2 blade is broken, replace B1/B2. If replace the wrong parts, the aircraft will not take off.)

⚠ Note: The fan blade is printed with letters of A1, A2, B1, and B2, in which, A1 = A2, B1 = B2, please install it correctly according to the diagram, otherwise it cannot take off

# 4. Steps for installing a remote control:

Load the mobile phone on the remote control according to the order indicated in the figure.



# 5. Lithium battery charging instructions:



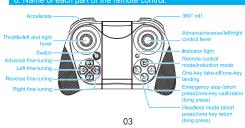


5.1 Buckle the battery lock of the aircraft.

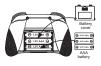


- 5.3 Charging: Insert the USB interface of the USB charging line into the USB port of the computer (or use the power adapter with output of 5V == 2A), and connect the plug at the other end of the USB charging line to the battery socket. The USB red light of the aircraft will go out when charging. The red light will always be on when the battery is full and the charging is completed.
- . 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.

# 6. Name of each part of the remote control:



### 7. Remote control battery installation:





Battery installation:

7.1 Remove the battery cover.

7.2 According to the polarity instructions on the battery compartment, remove the battery cover on the back and insert a 3X "AAA" battery (not included).

Note
 Note
 Note
 The positive and negative potes and the positive and negative poles of the battery box must be identified when inserting the battery, and error is not allowed.
 Do not mix old and new batteries.
 So not mix different traves of butteries.

#### 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 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 A
When the aircraft is not in Tying, disconnect
the battery plug from the power connector
of the aircraft drouit board to prevent the
battery from being damaged.

# 8. Environmental requirements before flight:











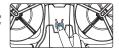
Please fly in an outdoor open environment without rain and snow, and with a wind power of least than 3. When flying, please stay away from people, trees, wires, tall buildings, airports and signal transmission towers.



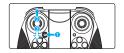
APP can only be viewed (photographed/recorded) when using the remote controller, and the remote controller cannot be used when using APP.

# 9. Pre-flight preparation instructions (using remote control):

9.1 Turn on the power of the aircraft and place it on a horizontal plane. The aircraft on the plane will be in the frequency matching state and the front blue lamp and the red lamp on the body will flash.



Note: Set the aircraft in a correct direction, and the nose shall face forward. It must be placed on the horizontal plane. 9.2 Press and hold the power switch button of the remote control () (step 1), and the power indicator of the remote control will be on; push the throttle lever up to top (step 2) and then to the end (step 3), ocde-matching will succeed, and the aircraft light will change from flashing to be always on.





The aircraft/remote controller must ensure sufficient power or it cannot take off!

#### 9.3 Horizontal calibration operation:

Long press the calibration key on the remote controller,  $\frac{1}{1}$  and the LED lights on the aircraft will flash. When the LED lights on, calibration of the aircraft is completed, the remote controller emits "been" (Figure 1).

Note: The calibration must be completed only when the aircraft is placed on a horizontal plane.



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# 9.4 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  $\frac{11}{2}$  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.





. .9.

### 9.5 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



Operate the aircraft with the remote control. Before taking off, please operate according to the above sequence: Turn on (refer to 9.1)— frequency matching of the remote control starts (refer to 9.2)—horizontal alignment (refer to 9.3)—start/stop (refer to 9.4)— one-button taking off and landing (refer to 9.5).

# 10. 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

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.

### 11. 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.





# 11.1 360° 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.





### 11,2 360° 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.





# 11.3 Roll Forward 360°

Short press the 360 tumble button, then push the right joystick upward, and the aircraft will turn forward 360° correspondingly.





# 11.4 360° roll backward

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

### 12. Introduction of remote control function and operation:

#### 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 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

#### 12,2 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 entils 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

# 12.3 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

#### 12.4 Fine tuning function



- Fine tuning of aircraft moving forward/backward
  - When the aircraft leaves the ground and the aircraft deviates to the rear, press and hold① forward fine-tuning key to fine-tune; when the aircraft deviates to the front, press and hold②backward fine-tuning key to fine-tune.



 Fine tuning of aircraft deviates to the left/right When the aircraft leaves the ground and the aircraft deviates to the right, press and hold ⑤ left fly fine-tuning key to adjust, and when the aircraft deviates to the left, press and hold ⑥ right fly fine-tuning key to adjust.

#### 12.5 Induction mode

During the flight, press the remote control/induction switch button on the remote control to enter the induction mode. Now the aircraft can be operated by referring to Figure B—Figure 10, (When using interactive induction function, your palm shall be 10 cm away from the aircraft tody. The distance shall not be too long or tool short, otherwise the induction function will be influenced. If the aircraft flies too high and cannot be detected, it will automatically descend to a certain height after 5 to 15 seconds.)









Figure 10

Figure 8

Figure 9

### 12.6 Inductive roll

Put your both hands on the left and right inductive head to induce the aircraft. After two seconds (both heads shall be induced), the aircraft will automatically roll 360° (figure 11)



Figure 11

# 12.7 Stop flight

Take the aircraft and turn it upside down to stop flight (figure 12)

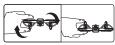


Figure 12

### 12.8 Throw flight mode

Turn on the power and place the aircraft on a horizontal plane. If no frequency matching by remote control within 3 seconds, hold the aircraft to stretch forward, wait until the blue lamp and red lamp slowly flash, throw upward the aircraft or swing hand downward, the aircraft will automatically take off. (figure 13)



Figure 13

# 13. APP download and installation instructions:

#### 13.1 Download and install the software

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







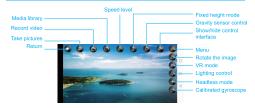


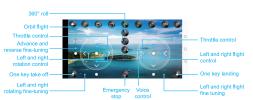
### 13,2 Link description

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



# 14. APP control interface function introduction:







APP setting: When the control switch is turned on, click the APP main page setting button to adjust the parameters.

Special prompt: The interface setting (right-handed mode) will turn the control interface operation lever horizontally, which is convenient for the crowd who operate with left or right hand.

#### 15. Pre-flight preparation instructions (using APP):

15.1 Turn on the power of the aircraft and place it on a horizontal plane. The aircraft on the plane will be in the frequency matching state and the front blue lamp and the red lamp on the body will flash.



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

15.2 Turn on the WiFi function in the mobile device, select "4DRC\_4K\_\*\*\*\*\*\*\*\*\*\* (Figure 14) in the WiFi list, and turn on APP after it is connected successful, Click OFF (Figure 15), turn on the touch rocker, click, X and the aircraft lights will turn on normally, indicating successful frequency matching (Figure 16).



Figure 14 Figure 15 Figure 16

# 15.3 Horizontal calibration operation:

APP Application operation: click the "correction" icon in the app interface. The LED lights on the aircraft flash and the calibration of the LED lights on the aircraft is completed (Figure 17).

Note: The calibration must be completed only when the aircraft is placed on a horizontal plane,



Figure 17

#### 15.4 One-key take-off and landing

APP application operation: Click the "one-key take-off" () ioon (Figure 18) in APP control inferface, the one-key take-off unction can also be achieved; during the flight, press "one-key landling" (), the aircraft will automatically land slowly.



Figure 18



Operate the aircraft with APP application. Before taking off, please operate by the above procedure: Turn on (refer to 15.1)—frequency matching with APP (refer to 15.2)—horizontal alignment (refer to 15.3)—one-button taking off and landing (refer to 15.4)

#### 16, 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.

# 17. APP Application function operation introduction:

#### 17.1 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 19), when exiting, please click this function icon again. AS Special prompt: Please make sure the aircraft is aligned with the straight line and tet the gyroscope automatically detect the straight line, and the headless mode of straight line flight can be realized.





Figure 19

# 17.2 Speed switching

APP Application operation: click the "30%" icon in the app control interface (Figure 20) to switch the flight speed of the aircraft.



Figure 20

### 17,3 Orbit flight

Track flight: When the control switch is turned on, click the track flight button to open the sketchpad. Use your finger to draw a flight path on the drawing board, and the aircraft will fly along the path (Figure 21).



Figure 21

### 17.4 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.

 $\triangle$  Special Tip: Please face the lens with the front being at a position about 2-3M away and in a better light and background environment to perform the gesture recognition.



#### OK (right hand) gesture photographing

Stand at 3m in front of the lens of the aircraft, raise right hand and make OK gesture.

After the aircraft recognizes the gesture, it will take photo after counting down 3 seconds.



#### V gesture recording

Stand at 3m in front of the lens of the aircraft, raise one hand and make V gesture. After the aircraft recognizes the gesture, it will record. When it recognizes another gesture, the recording will stop (the time interval shall be longer than 3 seconds)

### 17.5 Fine tuning function











 Fine tuning of aircraft deviates to the lett/right.
 When the aircraft gets off the ground and deviates right, press<sup>®</sup> left fine tuning<sup>®</sup> button to adjust. If the aircraft deviates left, press and hold <sup>®</sup> right fine tuning<sup>®</sup> button to adjust.

"backward fine tuning" button to adjust.

# 18, FAQ and solving guidelines:

Question	Reason	Solution
The aircraft indicator flashes without any response	The aircraft has insufficient power	Battery charging
The blades of the aircraft rotate but cannot fly	Low battery     Blade deformation	Charge the battery     Replace the blade
The aircraft vibrates badly	Blade deformation	Replace the blade
Fine tuning is done but still can't make the aircraft stable	Blade deformation     Defective motor	Replace the blade     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	Leave the aircraft stationary for 5-10 seconds, or correct it by correcting the level