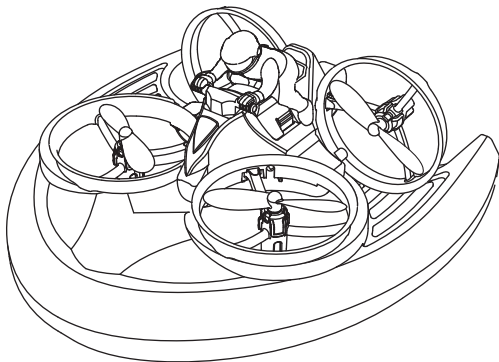


4D-V24

Suitable for ages over 14

Quadcopter operating instructions



Regular edition

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 \mp 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



Bottom of the hovercraft ×1



Lithium battery ×1

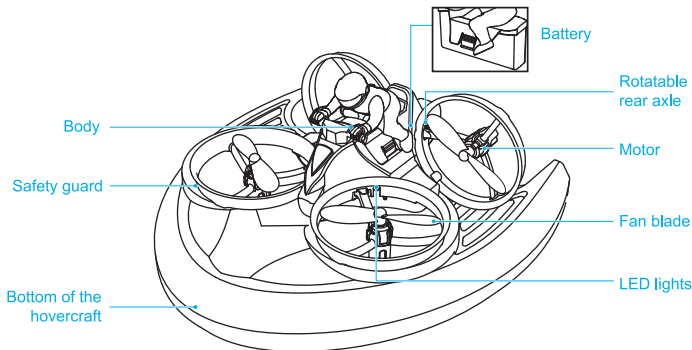


Screwdriver ×1

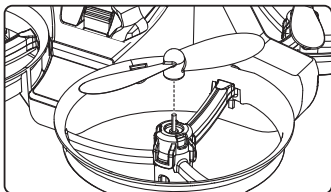
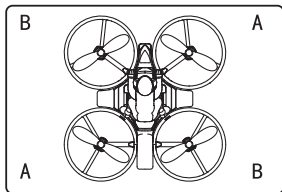


Operating Instructions ×1

2. Name of each part of aircraft:



3. Wind blade installation diagram:

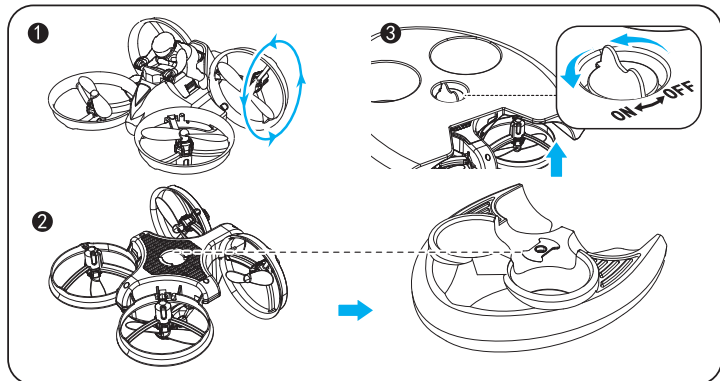
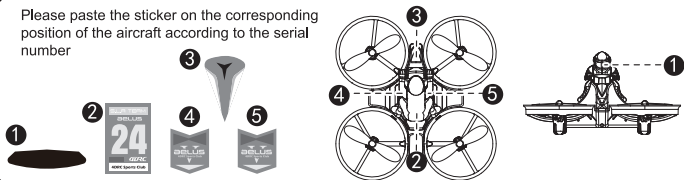


Remove the fan blade. (Replace fan blade A when it is broken, so does fan blade B, and it can not take off when the replacement is error)

⚠ Note: The 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. Sticker paste/hovercraft installation:

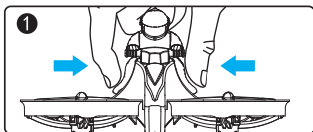
Please paste the sticker on the corresponding position of the aircraft according to the serial number



The rear propeller of the aircraft needs to be twisted vertically as indicated by the arrow (Figure. ①), and then fit the bottom card slot of the aircraft to the bottom buckle of the hovercraft (Figure. ②). At the same time, turn it over to the back of the hovercraft and turn around the buckle to complete the docking between the aircraft and the bottom of the hovercraft (Figure. ③)

Note: In land mode and water surface mode, the rear axis of the aircraft must be kept vertical. (Need to dry after the water surface mode operation is completed)

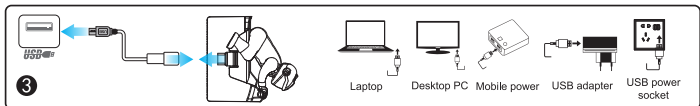
5. Lithium battery charging instructions:



5.1 Pressing both sides of the aircraft according to the indicated arrow



5.2 Remove the battery.

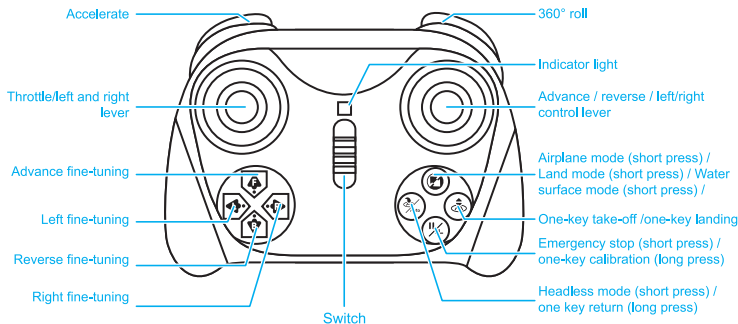



5.3 Charging: Insert the USB interface of the USB charging line into the USB port of the computer (or use the power adapter with output of 5V \equiv 2A), and connect the plug at the other end of the USB charging line to the battery socket. The USB red light of the aircraft will go out when charging.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



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:



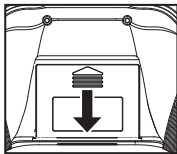
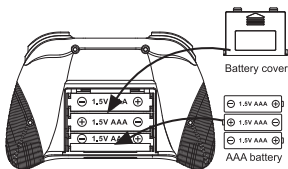
The default flight mode is turned on, the indicator light is red, short press the  key to enter the land mode, the indicator light turns blue, short press the  key again to enter the water surface mode, the indicator light turns purple (circular in turn).

1. When the aircraft is switched to land mode or water surface mode, (forward/backward fine-tuning keys, left/right fly fine-tuning keys, headless mode/one-key return key, emergency stop, one-key takeoff/landing key) these keys lose their original functions, which resume when the aircraft switches to flight mode.

2. Accelerator key: When the speed is switched in the flight mode, the default is the low-speed mode (3 gear switching). When the aircraft is switched to land mode or water surface mode, the speed switch is only (2 gear switching).

3. 360° roll key: When the aircraft is switched to water surface mode, the 360° roll key loses its original function.

7. Remote control battery installation:



Battery installation:

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).

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.
1. The positive terminal is marked with a '+' sign.
 2. The negative terminal is marked with a '-' sign.
 3. Do not insert the battery upside down.

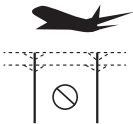
Warning

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.

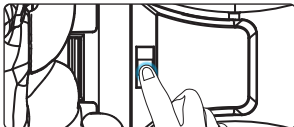
8. Environmental requirements before flight:




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.

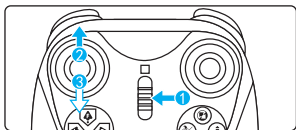
9. Pre-flight preparation instructions (using remote control):

9.1 Aircraft frequency matching: 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, and the front blue light and the rear red light 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 Turn on the power switch button of the remote control (step 1), the power indicator of the remote control is flashing red, push the throttle stick up to the top (step 2) and then push it to the bottom (step 3), the frequency is successfully matched, the drone light changes from flashing to being always on.



It must ensure that the power of the aircraft/remote control is sufficient or it cannot take off!

9.3 Horizontal calibration operation:

Long press the calibration key on the remote controller,  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:** The calibration must be completed only when the aircraft is placed on a horizontal plane.

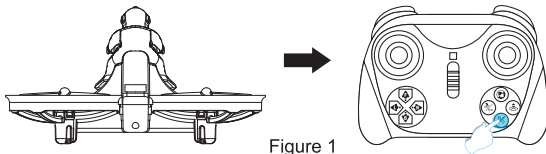





Figure 1

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  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.

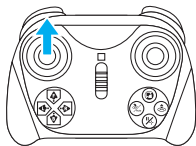


Figure 2



Figure 3

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.

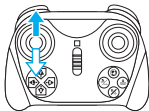


Figure 4



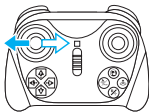
Please follow the steps in the above sequence before taking off: open (reference 9.1) → remote control starting frequency matching (reference 9.2) → horizontal calibration (reference 9.3) → start/stop (reference 9.4) → one-button take-off and landing (reference 9.5)

10. Remote control method:

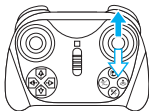


When the left joystick (throttle) is pushed up, the rotation rate of the main blade increases and the aircraft rises.

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

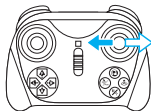


When the left joystick (rudder) is pushed to the left, the aircraft nose turns to the left. When the left joystick (rudder) is pushed to the right and the nose of the aircraft will turn to the right.



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.

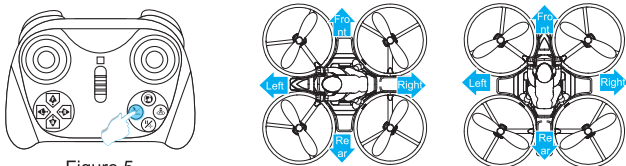



Figure 5

12.2 One-key return

The return function can be used to recall the aircraft when the flight distance of the aircraft is too long. The remote controller must be facing the tail of the aircraft when starting up and frequency matching. During the flight, long press the "Return" key  (Figure 6). The remote controller sends out a "beep" sound, the aircraft enters a key to return home and automatically flies back to us. When the right rocker is operated arbitrarily, the return function is released.

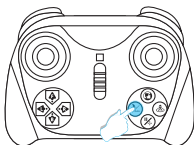


Figure 6

12.3 Speed switching

When the aircraft takes off, it is by default in the low-speed mode (3-gear 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



1. Fine tuning of aircraft moving forward/backward


When the aircraft leaves the ground and the aircraft deviates to the rear, press and hold ① forward fine-tuning key to fine-tune; when the aircraft deviates to the front, press and hold ② backward fine-tuning key to fine-tune.

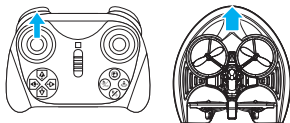


2. Fine tuning of aircraft deviates to the left/right

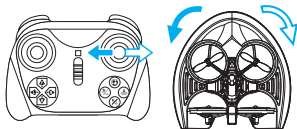
When the aircraft leaves the ground and the aircraft deviates to the right, press and hold ③ left fly fine-tuning key to adjust, and when the aircraft deviates to the left, press and hold ④ right fly fine-tuning key to adjust.

12.5 Land mode

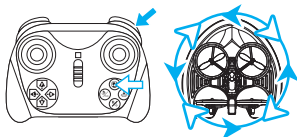
For land mode preparation steps, refer to 4. Hovercraft installation. After the aircraft is successfully matched in frequency, short press  to turn on land mode, and the indicator light of the remote controller in land mode is blue.



When the left joystick (throttle) is pushed up, the rotation speed of the main fan blade increases, and the aircraft moves forward.




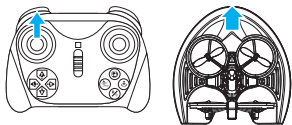
When the right joystick (rudder) is pushed to the left, the nose of the aircraft turns to the left. Push to the right to turn the nose of the aircraft to the right.



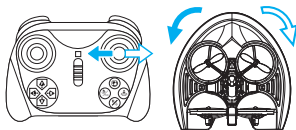
Short press the 360° roll button once, and the aircraft rotates to the left.
Short press the 360° roll button twice to stop the rotation.
Short press the 360° roll button three times, and the aircraft rotates to the right.
Short press the 360° roll button four times to stop the rotation.

12.6 Water surface mode

Preparation steps for water surface mode – please refer to 4. Hovercraft installation. After the aircraft is successfully matched for frequency, short press  to turn on the water surface mode.



When the left joystick (throttle) is pushed up, the rotation speed of the main fan blade increases, and the aircraft moves forward.



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

13. 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	Replace the blade
Fine tuning is done but still can't make the aircraft stable	1. Blade deformation 2. Defective motor	1. Replace the blade 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, 9.3 horizontal calibration operation.
Out of control	The throttle stick is not pulled to the lowest position, the already frequency matched aircraft will automatically rise	The throttle lever should be pulled to the lowest position when it is in lowest position
	Exceeds the effective control distance	The effective distance of the diameter is about 60M
	Uncontrolled, flying aimlessly	Whether the environment is in a harsh environment where the wind is too strong or the temperature is too low, you cannot fly under severe conditions.