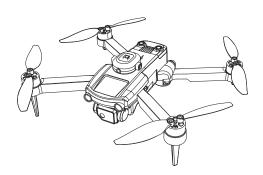
# FOLDING DRONE WITH OBSTACLEAVOIDANCE FUNCTION OPERATING MANUAL



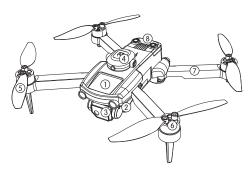
<sup>\*</sup>Please read this manual carefully before operation and keep it properly <u>for</u> future reference.



operating Tutorials

## KNOW YOUR DRONE

With 2.4G frequency band for long remote control distance, Drone allows multiple flights at the same time without any interence. User can control it to fly, hover and take photos/videos with APP and WIFI connection on smart phone.



- ① Upper Casing
- 2 Lower Casing

③ Camera

4 Obstacle Avoidance head

⑤ Propeller

6 Motor

(7) Arm

8 Battery

## PRE-FLIGHT PREPARATION

#### 1. FLIGHT ENVIRONMENT







Indoor:Spacious soaces away from barriers,crowds or pets are preferred.







Outdoor: Sunny, windless and breezy weathers are preferred.







Please keep the dorne in sight during the flight and keep ti away from barriers, high–tension cables, trees and people.



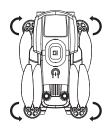




Do not fly in extreme environment, such as hotness, coldness, strong wind or heavy rain.

# 2. OPEN THE WINGS OPENING STEPS:

- (1) Open the front arm ( close to camera )
- ② Open the back arm, Fold the back armf firstly and then the ront arm when folding.





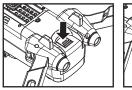
#### 4. ASSEMBLING PROPELLERS

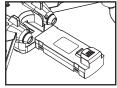




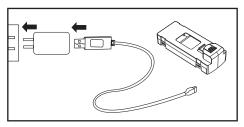
Align the blade with the blade hole ( the identification of the arm should be consistent with that of the blade) and tighten the screws clockwise. ( Adapters are purchased separately. The replacement of damaged blades should also be identified according to AB blades.)

#### 5. BATTERY CHARGING FOR DRONE





Remove the lithium battery from the bottom of the drone.



Connect USB charging cable with the charging interface of the lithium battery.(Adapters are purchased separately)

#### Notes:

Before using the drone, the battery needs to be fully charged, LED lights on when charging and red light turn off when full charging completes. Charging time is about 60 minutes.

# **A BATTERY LINSTRUCTIONS**

- There is a certain risk when using lithium battery. It may cause fire, body injury or property loss. Users must be aware of the risks and take full responsibility of using battery improperly.
- If battery leakage occurs, please avoid contacing you eyes or skin with electrolyte. Once it happens, please wash your eyes with clean water and seek medical care immediately.
- Please remove the plug immediately if you sense any peculiar smell, noise or smog.

## **Battery Charging**

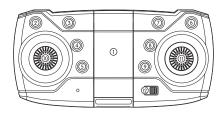
- Please use the charger from original factory the ensure you safe usage.
- Do not charge dilatant or outworn battery.
- Do not over charge battery. Please unplug the charger once fully charged,
- Do not charge the battery next to inflammables, such as carpet, timber floor or wood furniture or in the surface of electro conductive objects.
- Do not charge battery which not cool down yet.
- The charging temperature should be between  $0^{\circ}$ C to  $40^{\circ}$ C.

## **Battery Recycling**

 Do not dispose the battery ad daily rubbish, Please familiarize yourself with the local garbage disposal mathod and dispose it according to the special requirement.

#### KNOW YOUR REMOTE CONTROL

#### Parts of temote control

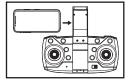


- Phone support
- (2) Speed switch
- (3) One–key Calibration
- A Short press for headless mode Press and hold for one-key back
- One-key take-off
- 6 One-key Flips & Rolls

- 7 Fine-tuning key
- (8) Obstacle Avoidance
- 9 One-key landing
- Left joystick
- 11 Right joystick
- 12 ON/OFF

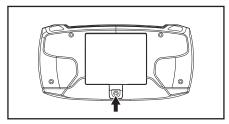
#### MOBILE OHINE INSTALLATION

- Open the mobile phone bracket on the remote control.
- 2. Install the mobile phone on the mobile phone bracket.

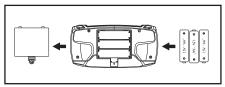


## **BATTERY INSTALLATION**

#### 1. Open the remote control battery cover



#### 2. Remote control battery installation



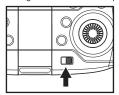
As shown in the figure, to identify the positive and negative terminals and install the battery correctly. (Batteries need to be purchased separately)

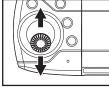
#### Notes:

- When installing a battery, it is necessary to identify the positive and negative poles of the battery, and do not install the battery upside down.
- 2. Please do not mix old and new batteries together.
- 3. Please do not mix different types of batteries together.

#### FREQUENCY ALIGNMENT

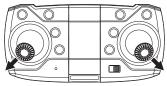
- Turn on the drone and place it on a level surface , the indicator light of transmitter and the LED of drone flashing.
- Push the throttle joystick to the hightest point the push back to the lowest point, and whenyou hear two beeps, the indicator light of transmitter and the LED of drone become normally on, the signal connection as completed.





## TRANSMITTER CALIBRATION

If the aircraft cannot rise vertically after taking off, in can be corrected by pulling the left and right joysticks into an outer eight at the same time with a shound of Di and the indicator light flash quickly to long—retm on, the calibration is completed, When executing the correction command, the aircraft must be place in a smooth state parallel to the horizontal line, otherwise the correction effect will be affected (The drone needs to be calibrated before take—off)



#### START YOUR FLIGHT

#### 1. One-key Ascend/One-key landing

Press the button of One key take off, the aircraft wind blade rotates, and automatically fly to a height of about 1.5 meters. And press the button of One key landing, it will automatically land to the ground.

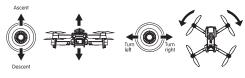




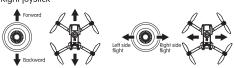
#### 2. Basic Flight

Use the left joystick to control the flight altitude and turn left / right, and the right joystick to control the forward, backward, left and right sidde flight directions.

#### Left joystick



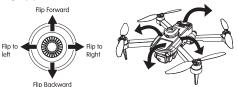
#### Right joystick



#### FLIPS & ROLLS

When the drone is reaching more the 3 metershigh, click "360° flips and rolls" and move the right joystick to acertain direction, the drone will rotate in that direction

#### Right joystick



## **HEADLESS MODE**

Adjustment, the drone defaults to the normal mode with the indicator light steady on. When press the headless mode button on the remote control, the remote control emits a sound of Di to indicate that enter the headless mode. If the needs to face the drone to open the headless mode.) And then press the button again with a long sound of Di to exit headless mode. It does not need to identify the nose direction of the drone, but only controls the aircraft according to the direction of the remote control.

### SPEED SWITCH

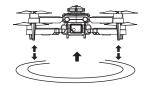
Press the speed switch button of the remote control to change the speed of the aircraft. When it is switched to the low gear, the remote control delivers one sound of Di. When switching to the medium speed, the remote control emits two sounds of Di. When it switch to high gear, the remote control beeps three times. Each time the remote control is turned off and the aircraft is restarted, the aircraft gear will automatically return to low gear.

#### **HOVER**

When you release the left joystick (throttle) after the ascent/descent action, the dronewill hover at a certain height.

#### Left joystick





## **OBSTACLE ABOIDANCE MODE**

Press the button to start the obstacle avoidance mode, and hover when encountering obstacles with avoid obstacles on three sides, and then press again to close the obstacle avoidance mode.

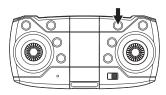




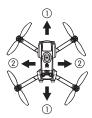
It is recommended to turn on the obstacle avoidance function in an indoor flight environment with a length and width of 6x6 meters or more. When the UAV turns on the obstacle avoidance mode, the speed will slow down and the fast gear cannot be turned on. Therefore, it is recommended to fly indoors when the opstacle avoidance mode is turned on.

### FINE-TUNING FUNCTION

When the aircraft spins in the air or tilts in different directions, you can use fine-tuning to correct the action. Press the fine-tuning button and hear a beep, then movethe joystick in the opposite direction to adjust and calibrate until the aircraft does not deviate. If there is no operation for 5–6 seconds after entering the fine-tuning, the fine-tuning function will automatically exit.



- Forward/Backward
  Fine—tuning
- ② Left/Right Side Fly Fine-tuning



#### Notes:

When the drone is within 30 cm from the ground, it will be affected by the blade vortex made by itself and become unstable. This is "ground effect". The lower the drone is, the greater the effect will be.

## **FAQ**

| PROBLEMS            | CAYSES  | SOLUTIONS  |
|---------------------|---|--|
| Control failure     | Not connect with the quadcopter battery.              | Connect the quadcopter battery in right way.   |
|                     | Too strong wind force.                                | Do not fly in windy days.<br>The performance and the<br>control of the quadcopter<br>will beaffected by the<br>strong winds. |
| Fail to ascend      | The rotation speed of mian blades is too slow.        | Please full charge the quadcopter.   |
|                     | The battery of the quadrocopter is not fully charged. | Please full charge the quadcopter.   |
| Landing<br>too soom | The throttle stick is pulled down too fast.           | Pull down the throttle<br>stick slowly to perform<br>a smooth landing.   |
| Out of control      | Beyond the effective controlling distance.            | Ensure operation within<br>the controllable distance:<br>remote control of 100<br>meters and WIFI control<br>of 40–50 meters |

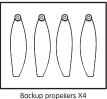
### **ACCESSORIES**

Notes: Please check the number of accessories carefully ( as shown above ), Please provide proof of purchase and contact the store for replacement if any missing parts.

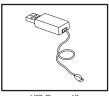




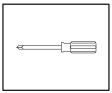
DRONE X1 (Battery Included)



Remote Control X1



buckup propellers A4



USB Charger X1



Screwdriver X1

User Manual X1

### OPTIONAL ACCESSORIES LIST

If any of the above accessories are damaged during operation, you can contact the seller to purchsae.





Propellers

Launch board

Motor







Receiving board

Upper Casing

Lower Casing





Battery

Obstade Avoidance Head