

# **2.4Ghz** **HELICOPTER**

Multiple copters can be flown at the same time without interference.

AGES  
14+

# 2.4Ghz HELICOPTER

Multiple copters can be flown at the same  
time without interference.



**4** channel  
HELICOPTER

# Product manual

For security, please carefully read the manual before operating. If you have not any experience of operating R/C helicopter, please believe that helicopter is your best choice.

## Catalogue

Product introduction.....	1
Announcements of operating R/C helicopte .....	1
Product configuration.....	2
Safety guidelines of using lithium battery .....	2
The functional introductions to remote control .....	3
The code introduction to remote control and R/C helicopter .....	3
The battery installment of remote control.....	4
Flight operating steps.....	4
The charging instructions of lithium battery .....	5
Announcements .....	6
To consumers .....	6
The operation schematic diagram of R/C helicopter( left-hand mode) .....	7
Flight sites .....	8
Flight training .....	8
Practice .....	9

## Product introduction

This is the newest coaxial indoor helicopter (2.4GHz & 4-channels), which has the distinguished operating functions and progressive balance operating system, operate simply, fly stably, making it the best choice for the beginners. The helicopter is small in size and light in scale, operators can play it in a small scope and enjoy the flying fun and interest.

product specifications	
Batteries:	3.7V 650mAh Li-PO
plane weight:	125g
rotor diameter:	280mm
plane length:	350mm
flying distance:	20-30m

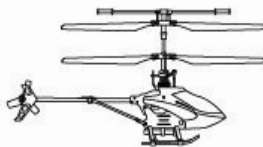
## The announcements of operating R/C helicopter

- 1.Ensure safe and correct handling, not suitable for children under the age of 14.
- 2.If you have not enough handling experience, we advise you to learn with an experienced player, factory and dealer do not bear any responsibility for product using.
- 3.Debugging and flying should carry out in strict accordance with the manual, the human body and pets should keep away from moving parts.
- 4.Ensure the helicopter to fly indoor or windless outdoor, and make the moving parts far away from others and objects.
- 5.Please firstly pull up the battery plugs in helicopter when stopping.
- 6.Please keep away from other electrical equipments, magnetic objects, wireless equipments, in order to avoid mutual interference and influence.
- 7.Ensure the batteries install correctly. When the indicative light of remote control is glistening red, it shows the electric quantity is insufficient, please stop operating, turn off the power switch, and pull up the battery plug and renewal the batteries.
- 8.The batteries we equip are polymer lithium batteries, please strictly follow the operating rules of lithium batteries, or may occur accidents, such as burning, explosion, etc.
- 9.Please use the charging system we provide to charge, the charging time is about 50 minutes.
- 10.Prohibit the wetting hands touch the batteries, charger to avoid the accidents.

## Product configuration



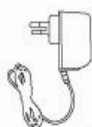
Remote control X 1



Helicopter X 1



manual X 1



Charger X1



screw driver X1

## Safety guidelines of using lithium battery



### FIRE ALARM:

In the case of misuse, the batteries' charging may cause fire, body hurt and property loss. Players must be aware of the risks of using this product. Manufacturers, retailers and dealers do not bear any responsibility once accidents occur, so please carefully read the safety guidelines and charging instructions before operating.



### WARNING:

Please make the batteries far away from the children and pets, the players under 18 should use it under the supervision of adult, and the ones under the age of 14 should not be manipulated.

### Lithium batteries' using:

The product's guarantee is only aim at raw material and manufacturing shop, do not guarantee this product. We will do not compensate the amount beyond the product retail product.

Please turn off the helicopter's power, connect the charger's plug into the helicopter's socket, and then insert the charger into the power socket. When charging, the charger indicative light will become light. And the charging is over when the indicative light dies out.

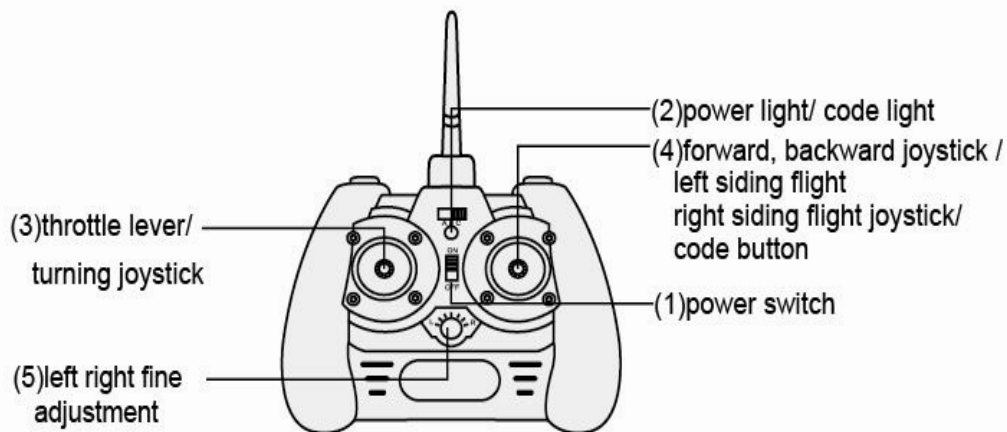
-Please use the charger we provide to charge for the product.

- 1.Prohibit charge in a long time unserviced, so as not to occur accident.
- 2.Please use the charger we provide to charge.
- 3.Prohibit resolve and unpick the batteries.
- 4.Prohibit use the batteries in high temperature sources and tinders.
- 5.Do not cover the batteries and charger when charging, please ventilate and make sure the environment is safety and fireproofing.
- 6.If the batteries gives out odour, emit heat, discolor, deformate and any unusual, please send the batteries to safety places immediately (do not throw about the bad batteries) , so as to bring batteries' burning and exploding.
- 7.Prohibit store and transport together with batteries and metal objects.

8. Prohibit throw the batteries into fire or heat up.
9. Prohibit directly connect the battery's anode and cathode with metal.
10. Prohibit overturn the anode and cathode.
11. Once the batteries' electrolyte come into your eyes, please do not rub, but wash your eyes with clean water and send to hospital.
12. Please lay up the batteries in the place of cool and dry when the batteries are stored.

## The functional introductions to remote control

Remark: joystick functions can divide into accelerator& side flight and accelerator& turning.



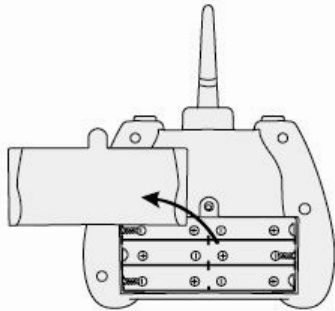
## The code introduction to remote control and R/C helicopter

We have coded the remote control and helicopter, the concrete operations steps as follows:

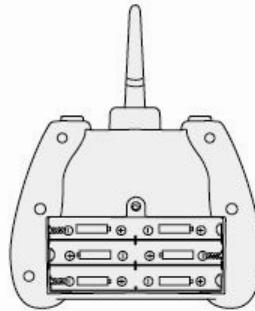
1. Put the batteries into the remote control and stir the switch to "OFF".
2. Vertically press the (4) joystick in remote control (forward, backward joystick / left siding flight , right siding flight joystick/ code button); Simultaneously stir the (1) power switch in remote control to "ON" when hearing "DI" "DI", to loosen the code button. Now the power light in remote control will glitter.
3. Correctly connect the helicopter batteries into the power lead-wire, and then keep the helicopter balanced. Now the helicopter will issue "DI".
4. Coding finishes.
5. Put the (3) (throttle lever/ turning joystick) joystick of remote control to least significant end, other joystick keep nature state. Then you can play the R/C helicopter.

## The battery installment of remote control

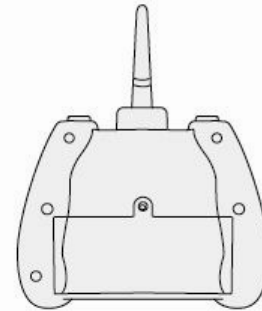
1. Take out the batteries in cell box from remote control's back.( as picture 1)
2. Fix the 6\*AA batteries into cell box in according to the correct direction.( as picture 2)
3. Regain the battery cover to the original place.( as picture 3)



( picture 1)



( picture 2)



( picture 3)

## Flight operating steps

1. Take down the battery cover of remote control, and correctly install 6\*AA batteries (refer to battery install of remote control). Stir (1) power switch to "ON", the light of remote control (2) power light/ charging light/code light will turn red.
2. Correctly connect lithium batteries (anode and cathode should be connected correspondingly, red power wire connects anode and black one connects cathode)in a state of balancing.
3. Please fine adjust the helicopter before freely operating it.
4. When the flight is over, please make the helicopter drop stably, firstly pull up the polymer lithium batteries of remote control, and then stir remote control (1) [power switch/ code switch] to "OFF".

### WARNING

\*Stir the power switch of remote control to "ON", when the throttle lever should place the least significant end, and other joysticks keep nature state.

\*Do not largely push the accelerator when the flight starts.

\*When you push the accelerator to the maximum, but the helicopter drop obviously, it means that the polymer lithium batteries are insufficient in electric quantity, now it needs to charge.

**Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.**

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

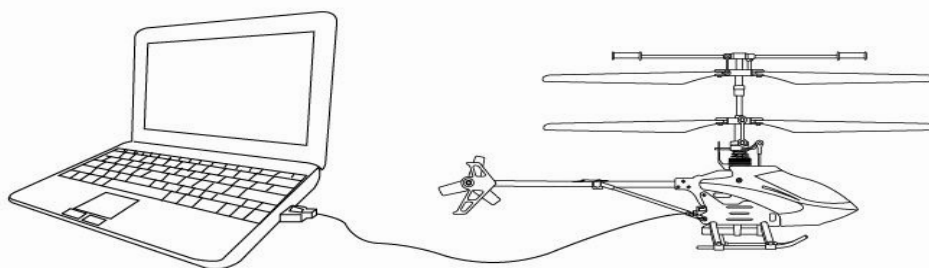
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

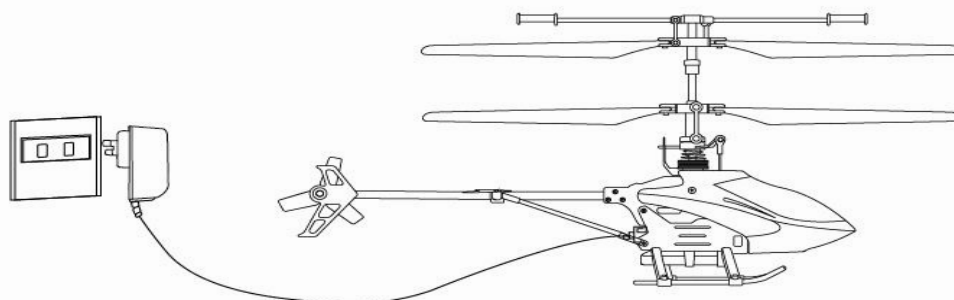
### The charging instructions of lithium battery

#### Charging with USB

1. Turn on the computer power, correctly insert the USB charger into computer's USB socket.
2. Connect the polymer lithium batteries and USB charger, the USB charger's light will light all the time.
3. When the USB charger's light dies out, charging finishes.



### To charge the fuselage battery



Charging time is about 100 minutes

#### Attention:

1. Make sure the adapter fits the local electricity supply.
2. The battery is overcharged if it overheats. Please stop charging immediately for it could cause damage to the battery.
3. Do not leave the battery aside when charging.



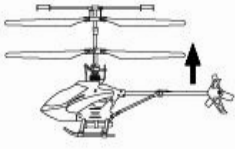
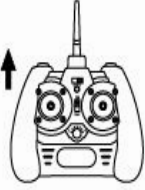

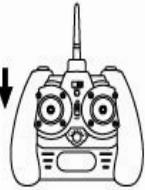
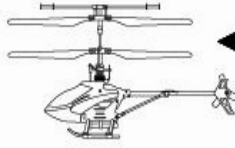



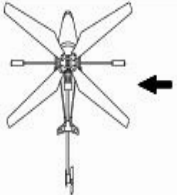
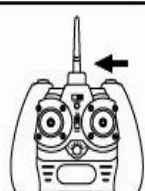
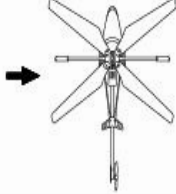
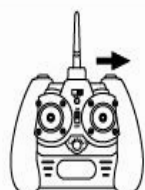



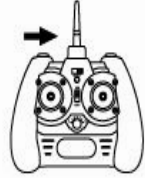
## Announcements

1. Helicopter uses 1\*3.7V 180mAh lithium batteries, and remoter control uses 6\*1.5V“AA” alkalinity batteries.
2. Please mind the polarity when installing or changing batteries.
3. Non-rechargeable batteries can not be charged.
4. Do not mix the new&old batteries or different type batteries.
5. Please take out the spent batteries.
6. Terminals can not be short circuit.
7. Please charge the batteries correctly.
8. Please charge under the supervision of adult.
9. Take out the batteries correctly.
10. Periodically check wires, plugs, hulls and other parts, to confirm they are favorable.
11. Please stop playing it when the electric quantity is insufficient.
12. Please take out the lithium batteries immediately when the flight is over.
13. Please loosen the accelerator when the helicopter runs down some objects (check if the parts are damaged, if they are damaged, you can buy something new at dealers).
14. If you do not play it in a long time, please ensure the lithium batteries have half of electric quantity, and take out the batteries of remote control.

## To consumers

1. Do not bring furniture's damage and glass's damage when you play it indoor.
2. Do not play it on the road, you should play in the spacious and safety place.
3. Please stop operating when you hearing thunder.
4. Do not play it in water logging or sand , in case the electric circuit breakdowns.
5. Do not fold the antenna, because the cracked antenna may hurt others.
6. Do not pull the wires in helicopter, which may make the helicopter lose its function.
7. Do not touch the moving propeller with your hands, let alone your hairs, clothes, etc.
8. Do not operate the helicopter toward the human.
9. Do not leave about the helicopter.
10. Keep the helicopter far away from the fire source and the places of high temperature.
11. The product uses the complex electronic circuit and lots of components, please do not take apart the circuit board.
12. When the electric quantity is insufficient, the helicopter's speed will slow down obviously or out of control, please regain the new batteries or charge.
13. You can make the batteries durable as the following methods:
  - \*Please take out the batteries if you do not play in a long time.
  - \*Do not mix the new and old batteries when you regain the batteries.

## The operation schematic diagram of R/C helicopter( left-hand mode)

Ascend		<p>Push the accelerator upward, the turning speed of rotor becomes faster and the helicopter ascend.</p>	
Descend		<p>Push the accelerator downward, the turning speed of rotor becomes slower and the helicopter downward.</p>	
Forward		<p>Push the joystick upward and the helicopter moves forward.</p>	
Backward		<p>Push the joystick downward and the helicopter moves backward.</p>	
Left siding flight		<p>Push the joystick toward the left and the helicopter siding fly toward the left.</p>	
Right siding flight		<p>Push the joystick toward the right and the helicopter siding fly toward the right.</p>	
Left -turning		<p>Push the joystick toward the left and the helicopter head turn to left.</p>	
Right -turning		<p>Push the joystick toward the right and the helicopter head turn to right.</p>	

## Flight sites

You should choose a suitable flight sites, for example, a big room without any barrier. If you play it outdoor, you must do it in windless and ensure no trees, wires and other barriers.

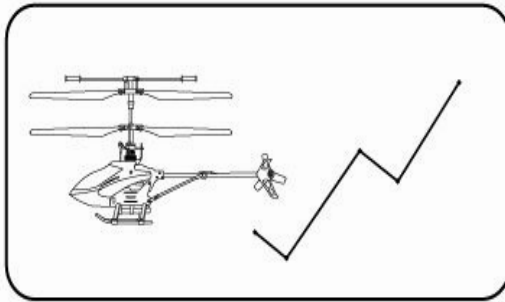
## Flight training

Operation procedure

1. Put the helicopter in the center of the room. The tail should face yourself and the suitable place 2 meters away from you. Open the remote control, switch on, reconfirm the servo system is normal.
2. Now you are ready to learn how to play. The following instructions will help you.
3. For the first flight, do not worry if you can control your helicopter adeptly. You will be confident by practices. You can do further flight when you are skillful.
4. Gradually push the throttle lever forward till it takes off. Please mind the helicopter's state, do an adjustment if necessary. Do not fly to high, 1 meters away from the floor. And please landfall when any instability, vibration occur.
5. Take off. The helicopter can take off after a bit adjustment. Push the throttle lever upward to make the rotor turning speed increases, but the speed should become slow after taking off. Keep a 1 meter's distance, observe the helicopter's trend, and adjust some parts to the best flight state.
6. Beginners should concentrate themselves at 2 points: height control and direction control. Firstly, you should learn to control the throttle lever. And the pushing speed should become slow after taking off. Control the direction joystick well and make the tail face yourself.
7. Do not make the flight height below 0.3meters, or it will affects the normal flight and control.
8. Flight skills: The movement should be soft. Once accident occurs, please quickly make the throttle lever to the end. The beginners should practice more to control the fight height is between 0.5meters and 1 meters away from the floor.
9. You can increase the flight height to the eye height when you have many operation experiences.

# Practice

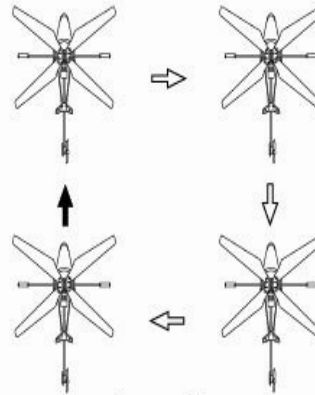
Frog's jumping (descend immediately after taking off)



- extend the time of frog's jumping
- hovering toward tail
- practice left-turning and right-turning, forward and backward
- left siding flight, right siding flight
- 360 degree spin
- left siding hovering
- right siding hovering
- hovering toward head
- Square circling

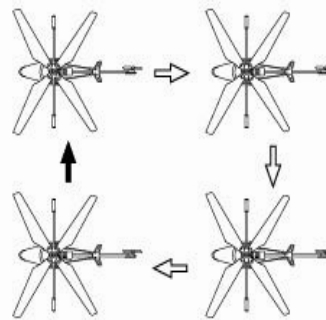
- (1). Make the tail toward yourself, operate it leftward, rightward, forward and backward, but not swerve.
- (2). Stand beside the helicopter and repeat the square combination training.
- (3). Make the head toward yourself and repeat the square combination training.

- left circling
- right circling
- Number "8" flight



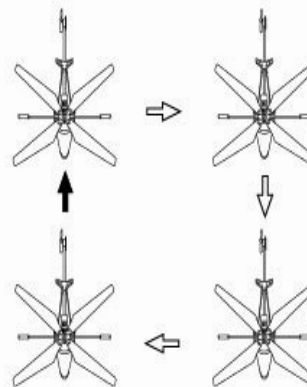
handlers

(1) Square circling



handlers

(2) Square circling



handlers

(3) Square circling