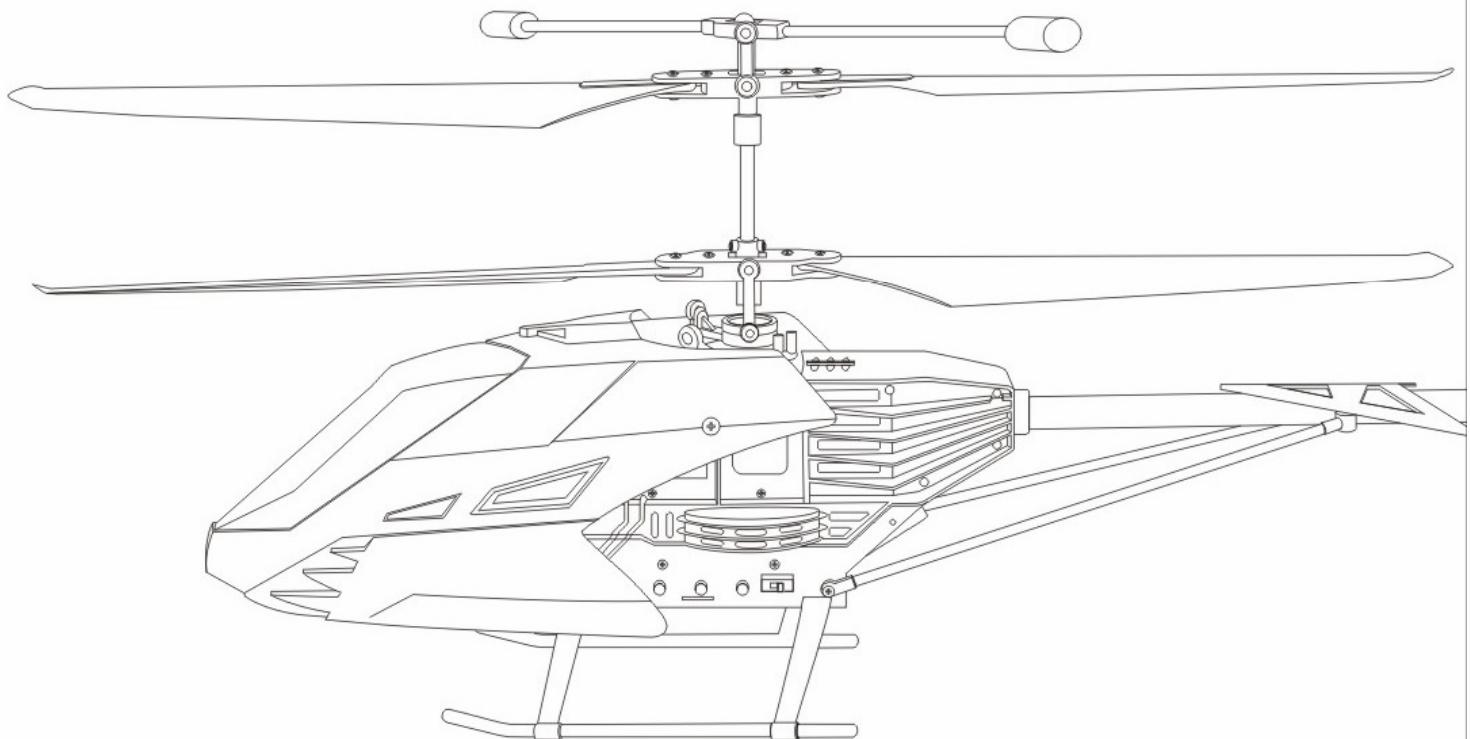


2.4GHz

R/C HELICOPTER USING INSTRUCTION



Please read this instruction carefully. And please keep this instruction as you may need it in the future.

Dear Customer:

You can master the operation quickly and safely, please read the User Manual carefully and keep it well for later lookup.

This product adopted high simulated shape design, and brand new 2.4G frequency-hopping spread spectrum technology so as to get strong power, smooth flying, fast response and anti-interference.

1-1 Important Notice

- (1) This is not a toy, actually it is a fine machine that integrated mechanical, electronics, aerodynamics, high-frequency transmitter. So it is essential to carry correct assembly and trial operation so as to avoid any accident possible occurring. The product user shall take care to operate the device safely otherwise it might cause serious personal injury or property damage. In this case of not proper operation which lead to any damage or harm our company is not liable for because it's impossible for us to know how you assembly, use and operate. For the procedure.
- (2) The product is suitable for people whose' age is over 14.
- (3) The flight space shall be legal space that for remote control airplane flying.
- (4) Our company is not liable for any damage or harm or loss arisen from improper use, operation.
- (5) For any issue related to use, operation, maintenance, we provide technical support and after-sales service. Please contact your local dealer.

1-2 Caution

Remote-controlled model aircraft is of a high-risk product, so it is a must to play it in the location where it is far from crowd. Any improper assembling or body damage, electronic control equipment error, improper operation and alike may cause the aircraft damage or personal injury by accidents. So it's essential to take care of safety and make a clear understanding the liabilities risk arisen from your own negligence.

(1) Far Away from Obstructions and Crowd

There is uncertain flight speed and status in operation. So it is a must to be far away from any obstruction and crowd, high-rise buildings, high-voltage wire so as to avoid potential risk. Don't fly in wind, rain, lightning.



(2) Far Away from the Moist

Aircraft interior is made of many sophisticated electronic components and mechanical component parts, it is necessary to prevent the aircraft moisture or water dropped into the body otherwise it may lead to mechanical, electronic component failure and cause accident!



(3) Legal Use and Proper Operation

To update, modify or repair, please use the original parts of the product so as to ensure the safety of the aircraft. Please use the product within the allowance and under the law. Any illegal purpose is not allowed.



(4) Avoid Alone Play

Remote control aircraft handling skills are somewhat hard for newbie. So you need to first learn how to operate and do everything properly under the on-site instruction of a teacher. (You may first to use computer simulation software to practice to get first learning and experiences of operation).



(5) Operation Safety

Try to play according to the specific status of the aircraft and operator's own skills. Don't play it when you are tired, in mental poor condition or when it is on improper condition, otherwise it may lead to risks.



(6) Far Away from Any High-speed Rotary Object

When the helicopter main rotor and tail rotor rotates at high speed, keep it away from crowd and any object that is rotating to avoid danger and damage.



(7) Far Away from Heat

Remote control aircraft is made of metal, fibers, plastics, electronic components and other materials. So it's necessary to be far away from heat source, to prevent the sun so as to avoid high deformation caused by temperature, otherwise it may cause damage

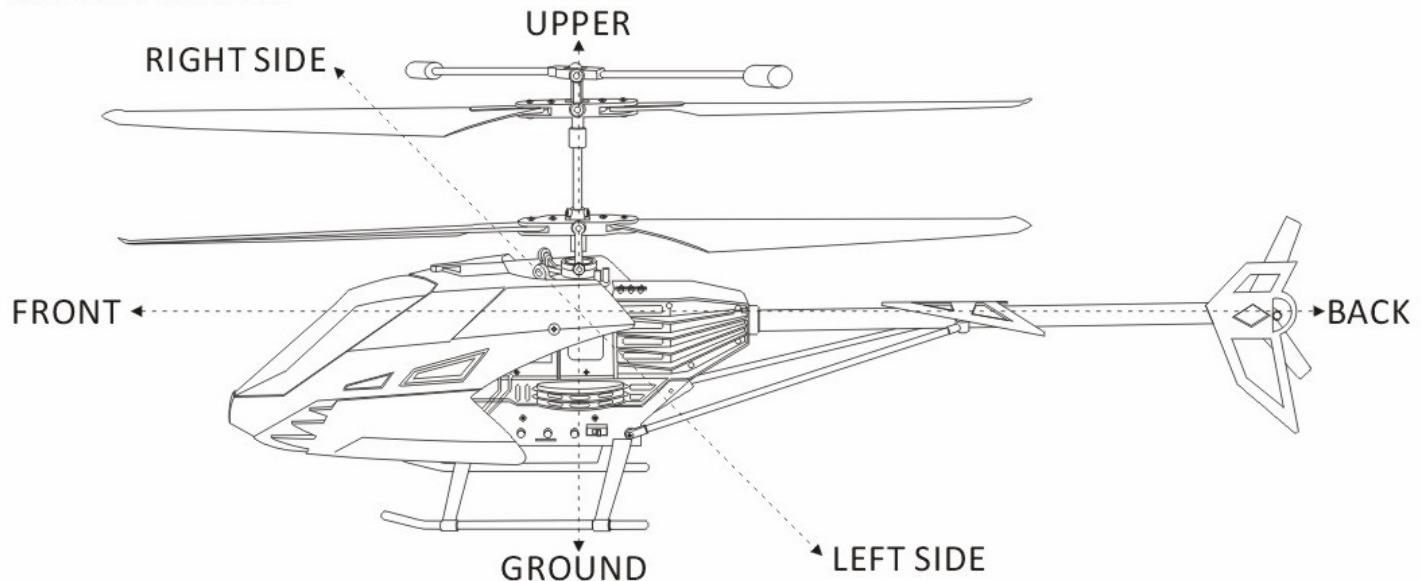


1-3 Pre-flight

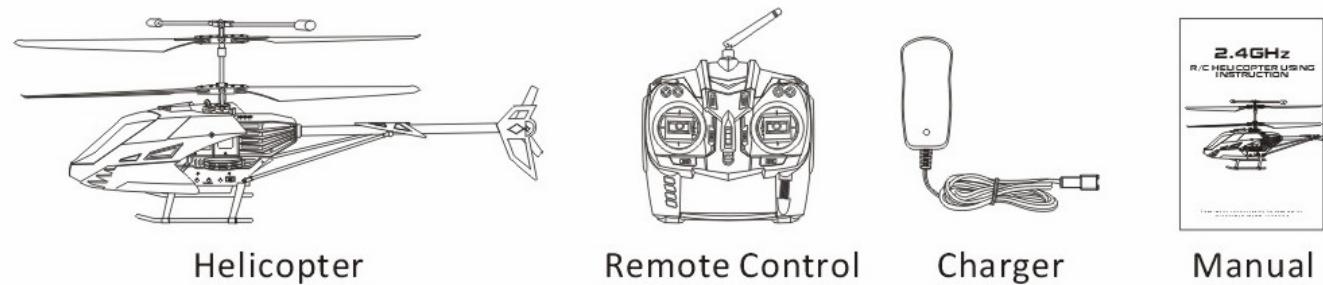
- (1) Make sure battery power of both remote control and receiver is saturated.
- (2) Make sure remote control throttle joystick and throttle trim at the low position.
- (3) Make sure power-on in good order. First to power on remote control, then aircraft. To shutdown, first cut off aircraft power and then remote control's. Care incorrect switch shutdown sequence may cause the aircraft out of control and lead to damage to person or property.
- (4) Make sure server in correct direction and is smoothly. You shall understand server error may cause unpredictable danger and failure.
- (5) Make sure there is no missed or loose screw and nut, no improper assembly or damaged parts. Careful to check the main rotor to ensure no any damage, especially the parts close to the blades. You shall understand any damaged part or improper assembly may cause potential unpredictable risks.
- (6) Check all ball sets and ball head to ensure loose ball set and head were replaced, you shall understand flight speed will be affected and danger is hidden as well.
- (7) Make sure connection between battery and motor reliable. You shall understand shock in flight may cause power connector loose, and aircraft out of control.

1-4 Aircraft Direction Definition

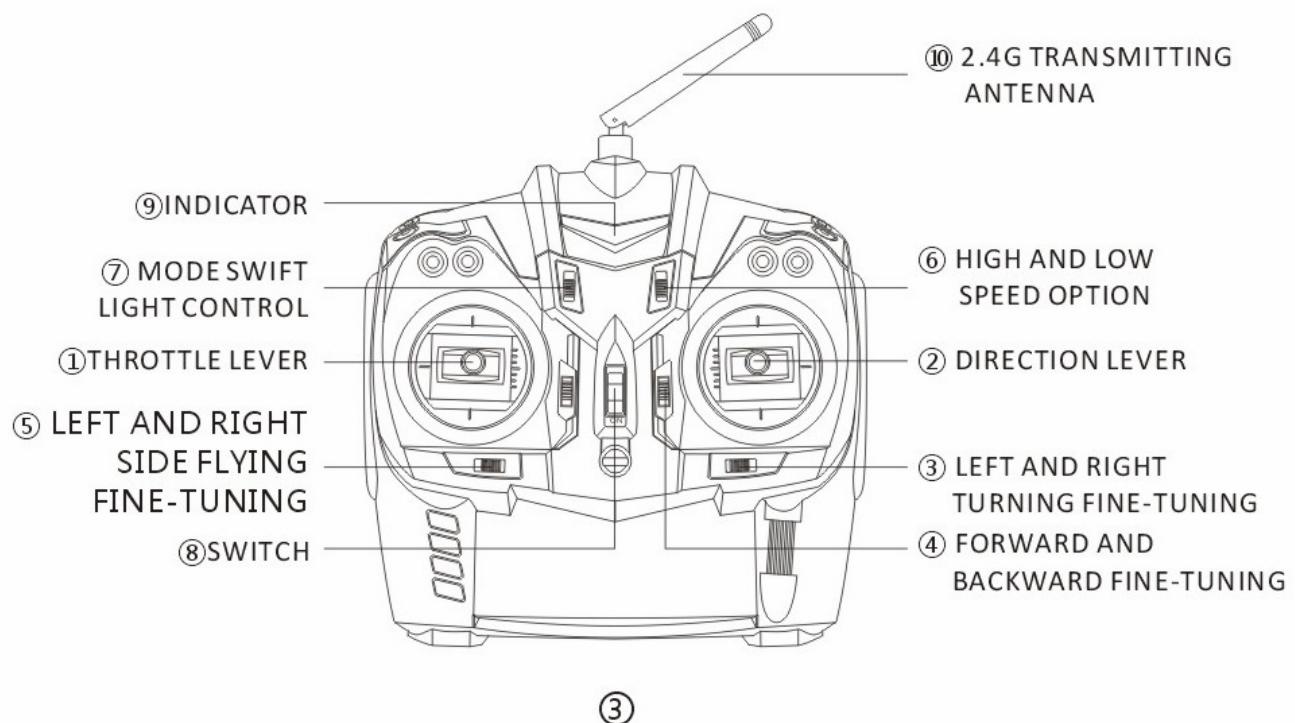
In order to prevent the description unclear or confused, we make particularly a definition of the direction. When a pilot holds the aircraft the rear part toward pilot's chest, the left hand side is considered to be the left side of the aircraft, the other side is the right. The front is the aircraft head and the back is the rear. The upper is toward the sky and lower is toward the ground. All theses directions defined here are used in the User Manual.



1-5 Standard Configuration

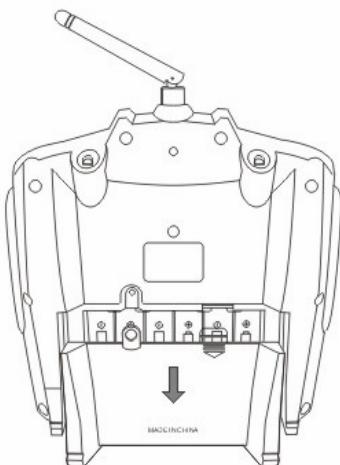


2-1 Name and Function of Remote Control Keys

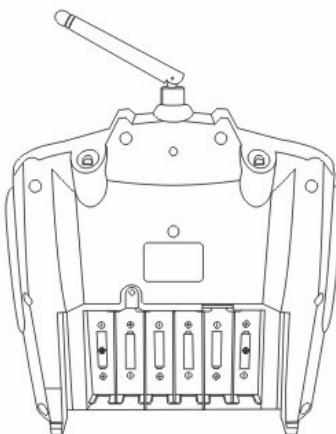


Name of Function Keys	Functions
1.THROTTLE LEVER	<p>Mode 1. Move forward and backward toggle joystick to control aircraft up and down and left and right to fly along the left side and right side.</p> <p>Mode 2. Push forward or draw back toggle joystick to control aircraft up and down and left and right to turn left and right.</p>
2.DIRECTION LEVER	<p>Mode 1. Push forward or draw back toggle joystick to control aircraft forward and backward, and left and right to turn left and right.</p> <p>Mode 2. Move forward and backward toggle joystick to control aircraft up and down and left and right to fly along the left side and right side.</p>
3.LEFT AND RIGHT TURNING FINE-TUNING	Adjust aircraft to turn left and right.
4.FORWARD AND BACKWARD FINE-TUNING	Adjust aircraft forward and backward.
5.LEFT AND RIGHT SIDE FLYING FINE-TUNING	Adjust aircraft to fly along the left side and right side.
6.HIGH AND LOW SPEED OPTION	Switch to control flight speed, forward, backward, and side flying.
7.MODE SWIFT LIGHT CONTROL	Quick Press. To turn on and off aircraft lamp. Long-tine press to switch between mode 1 and mode 2.
8.SWITCH	Control remote control power switch. Push-up is for power on and push-down for off.
9.INDICATOR	Remote control power indicator
10.2.4G TRANSMITTING ANTENNA	Transmitting remote control signals

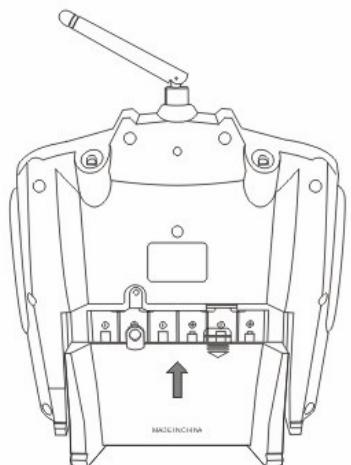
2-2 REMOTE CONTROL BATTERY INSTALLATION



1. Open the battery cover on the remote control



2. Install 1.5VX6AA battery. Make sure correct positive direction and negative direction. (Not included)



3. Re-install the battery cover

2-3 Precautions:

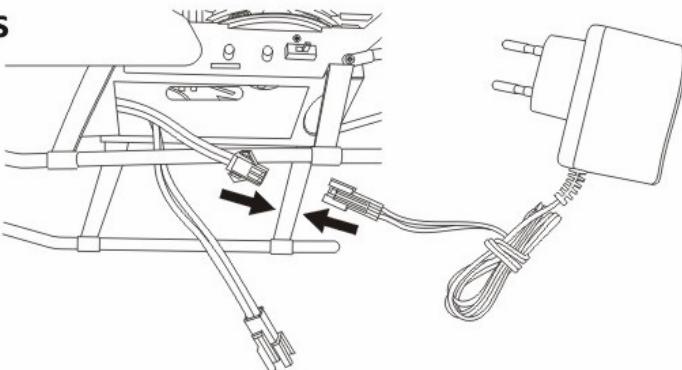
Ensure battery for remote control is fully charged and the polarity is correct, and cover is stable to avoid power inadequate or sudden danger arisen from power failure.

2-4 Remote Control Coding and Attention

- (1) Turn remote control throttle stick and throttle trim to the lowest position. Open remote control power switch, then power indicator starts blinking fast (in signal coding status, don't hit any rocker and micro Tone during the time.)
- (2) Power on aircraft. LED light on receiver flashes quickly for 1-3 seconds then turn to long-time lighting, server automatically reset. Accompanied a sound mechanically sending from tilt plate movement. Draw the right joystick left and right (Don't draw it forward and backward to avoid aircraft suddenly high-speed rotation which may lead to accident.) Remote control power indicator stops flashing and is restores to power electricity indicate status. This means the success of coding and trial flight available. Under normal circumstances, it takes less than 10 seconds for the coding.
- (3) Fully-automated sweep check coding. It's possible there is error in the coding process arisen from ID not matching. In the case turn off aircraft power and remote control power. Carry the coding once again in 10 seconds.
- (4) Don't code by many people at the same time.
- (5) After the success of the coding, it's available that a couple of person play in the same time and venue.

3-1 Aircraft Battery Charging Steps

1. Insert charger for a trial and indicator turn to green light.
2. Connect aircraft battery socket with charger socket.
3. During charging indicator light is red and then become green after completion.



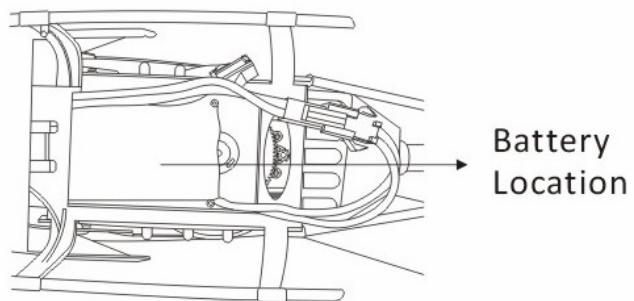
3-2 Precautions

- (1) When charging, place charger in a dry, well-ventilated place, away from heat and inflammable and explosive materials.
- (3) When charging, battery must be removed from aircraft. It is a must the charging is under the care of someone to prevent the occurrence of accident.

- (4) Don't charge the battery that is still hot because it just removed from the device, otherwise it will cause the battery drum inflation, or even lead to a fire.
- (5) Make sure the direction is correct prior to charging.
- (6) Avoid battery dropping or external impact during charging, otherwise it will cause the battery internal short circuit, and danger.
- (7) In order to ensure your safety, please be sure to use charger default(Power adapter + GA005 balance charger) and battery. If battery aged, replace it in time.
- (8) After the battery is fully charged, remove battery from charger, otherwise it will automatically discharged. When charger detected battery voltage is lower than the rated voltage, the charger will recharge the battery until saturated. Long-term charging and discharging repeatedly will shorten the lifetime of battery.

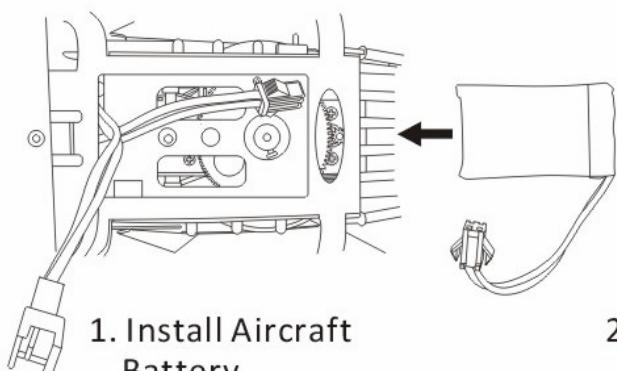
4-1 Battery Installation

Open battery compartment, press the arrow to install battery into battery compartment.

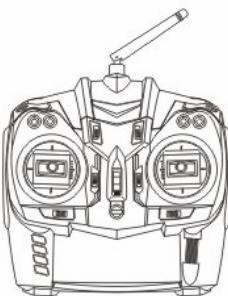


Battery Installation Diagram

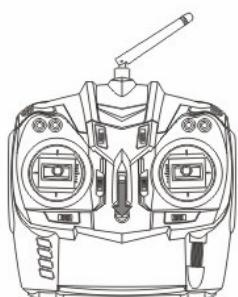
4-2 Turn on Power



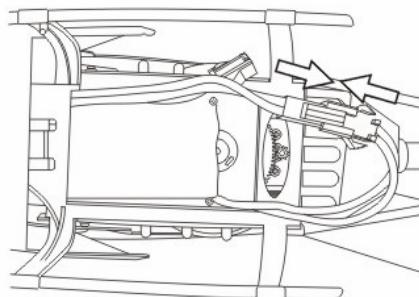
1. Install Aircraft Battery



2. Regulate throttle stick and throttle tuning to the lowest position and elevator, aileron rudder steering trim to the middle position.



3. Turn on remote control power.



4. Power on aircraft power and start receiving transmitted signal

4-3 Precautions

- (1) Take care of the order when booting, first remote control, then aircraft. Power on aircraft within 10 seconds after remote control is powered on. Receiver red light indicator starts flashing and then become stable for long-time and mechanical sound send from server reset. Coding succeeded.
- (2) In case failure of power-on within 10 seconds, please cut off aircraft power remote control power. Then repeat steps (1).

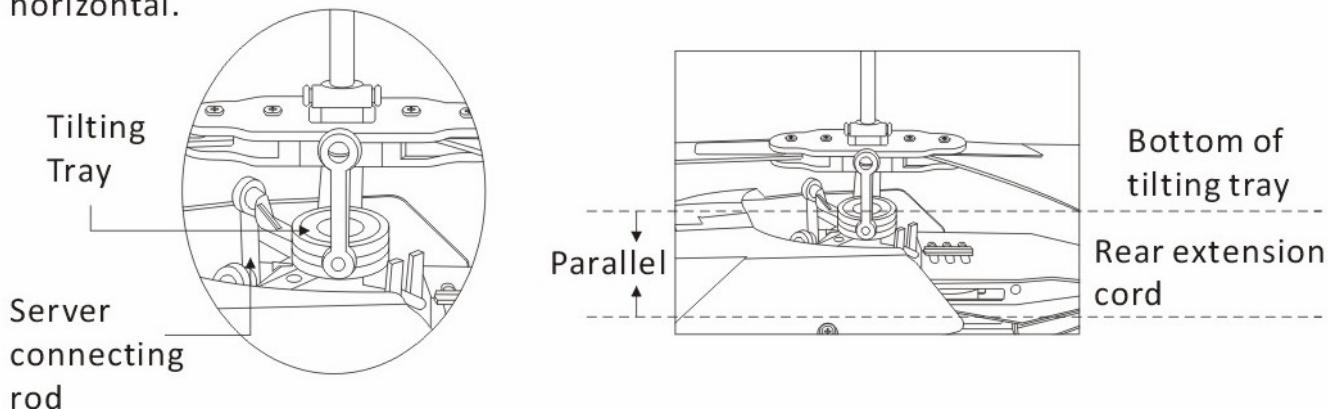
4-4 After power-on, Receiver Red Light Flashing.

Possible Causes	Solution
Coding failed.	re-open remote control, and then power on aircraft to re-code.
Remote control throttle trim and throttle stick did not set to the lowest position.	Regulate throttle trim, throttle lever to the lowest position and carry re-code once again.
Remote control power is too low or exhausted.	Replace remote control battery, then re-code.
Aircraft battery is too low or exhausted.	Replace aircraft battery, then re-code.
Receiver or remote control function failed.	Replace receiver or remote control, and then re-code.

4-5 Tilting Tray Adjustment

Tilting Tray Check

Place aircraft on a broad level ground. Regulate throttle stick and throttle trim to the lowest position, turn lift, aileron and direction of fine-tuning to the middle position. Open remote control power switch, power on aircraft. When receiver signal light stops blinking, and accompanied is a reset sound sending from servers, it indicates that signal has been received. Now check and ensure the bottom of the tilting tray is horizontal.

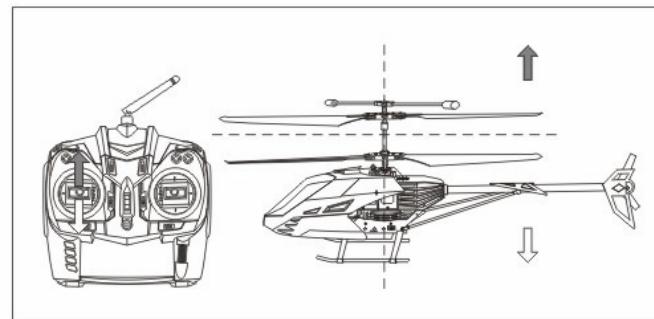
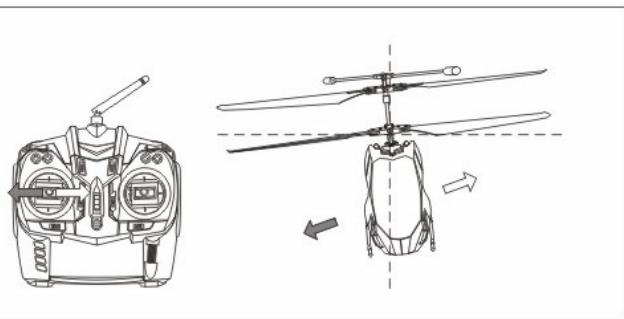


Tilting tray adjustment

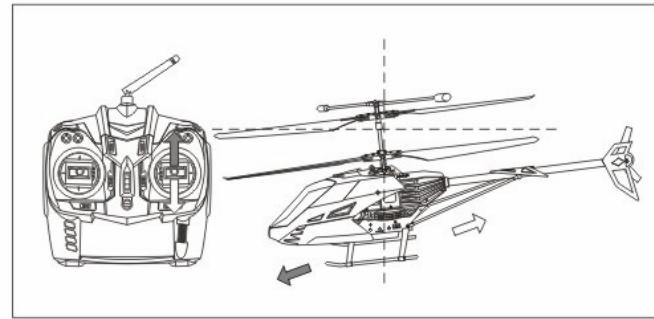
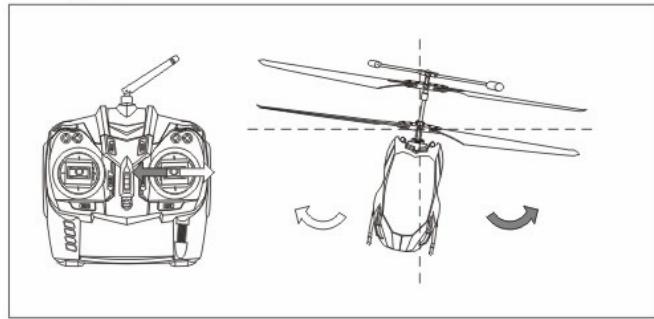
If tilting tray is not in horizontal position it can be adjusted as follows: Lift the server and aileron to the middle position, power on remote control and aircraft. When receiver indicator stops flashing and sound sending from server reset to show signal receiving works well, check and ensure tilting tray bottom horizontal.

4-6 Flight Control

Mode 1



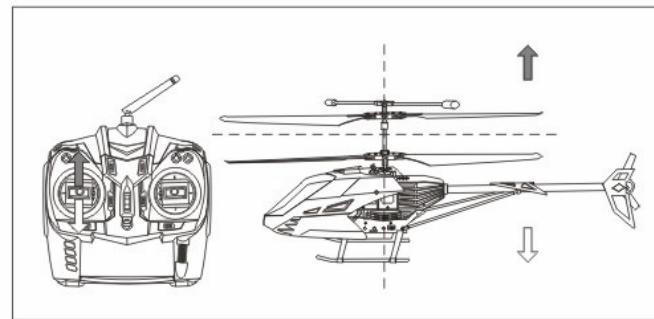
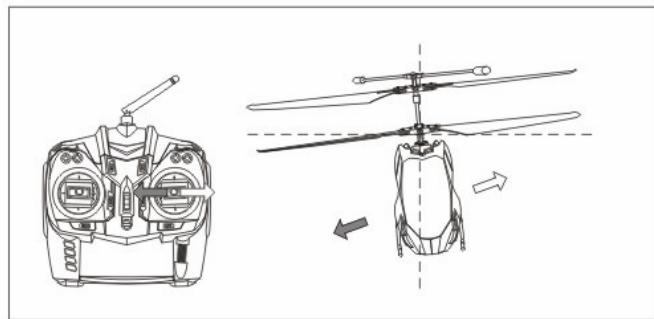
1. When aileron joystick pushed left and right, aircraft flies along the left and right.



3. When direction lever to left and right, aircraft flight to left and right.

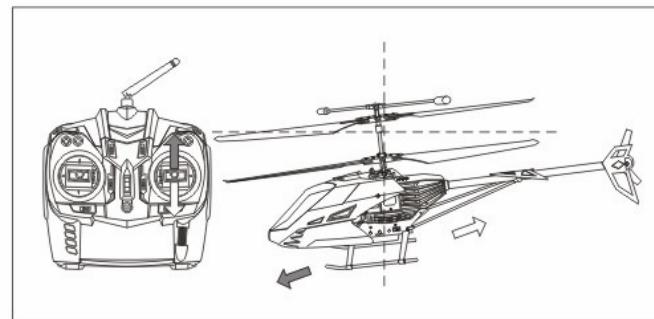
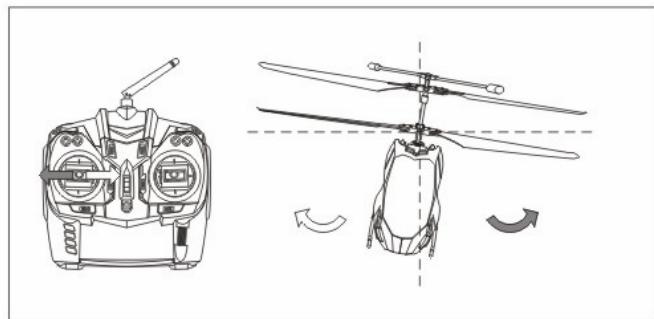
2. When throttle lever to left and right, aircraft up and down.

Mode 2



1. When aileron joystick moved left and right, aircraft flight to left and right.

2. When throttle lever up and down, aircraft flight up and down.

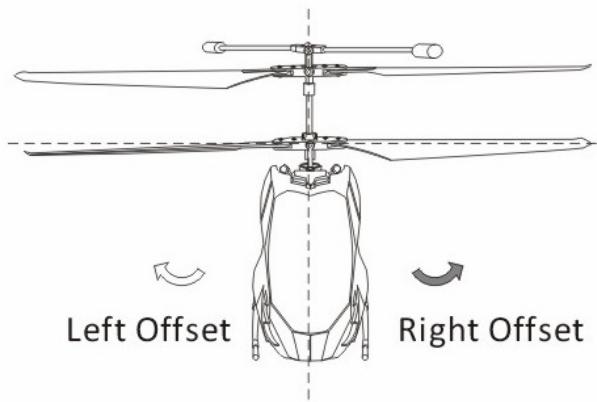
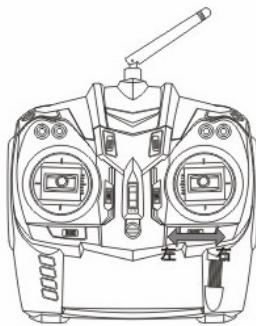


3. When direction lever to left and right, aircraft flight to left and right.

4. When lifting joystick up and down, aircraft flight up and down.

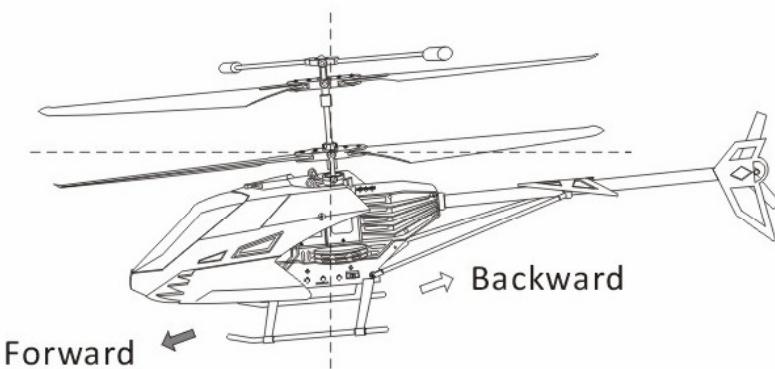
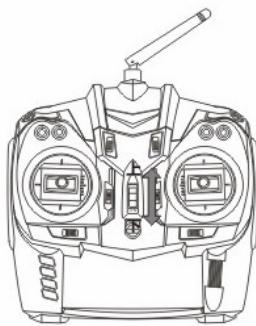
4-7 Fine-tuning

1. Turned Left and Right



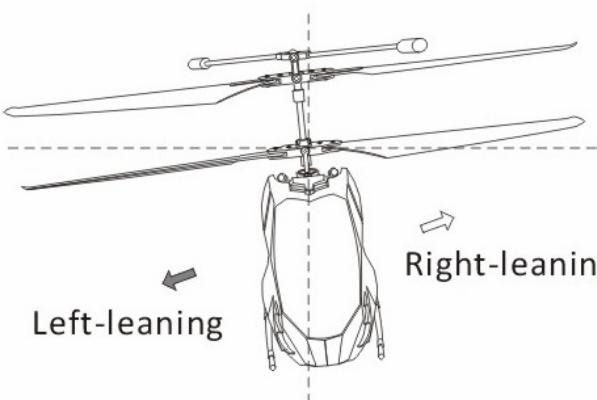
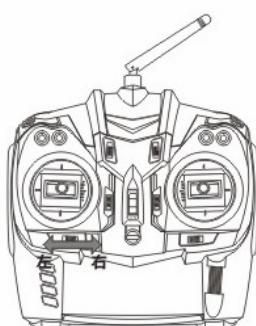
When taking off, turn aircraft head a little left, carry fine-tuning to the right and vice versa.

2. Forward and Backward Fine-tune



When taking off, fuselage forward offset, carry fine-tune downward and vice versa.

3. Side Fling Fine-tuning

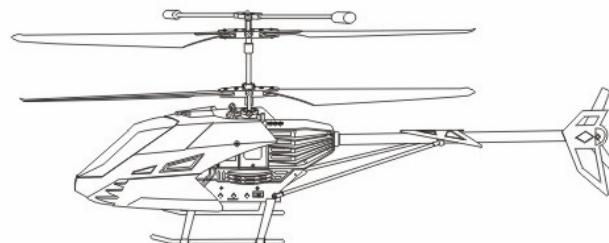
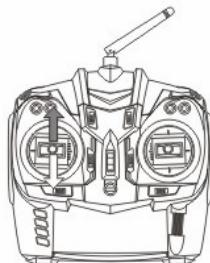


When taking off, fuselage left and offset, carry fine-tuning to the right and vice versa.

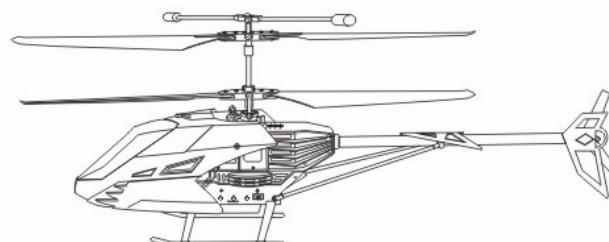
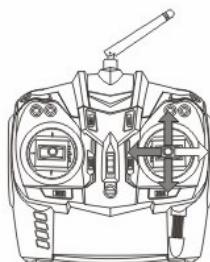
4-8 Flight Exercises

(1) Throttle Control Exercises

When aircraft take off, slowly reduce the throttle to land smoothly aircraft onto the ground. Repeat it until the throttle control is handy.

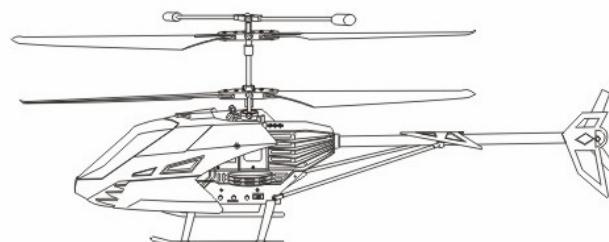
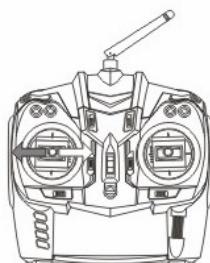


(2) Aileron and Lift Operation Exercises



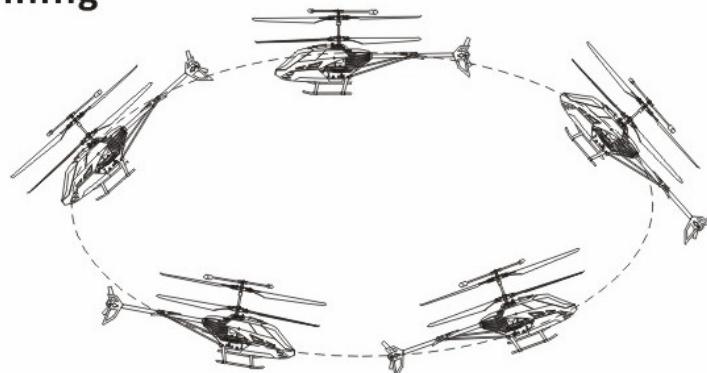
Slowly push the throttle lever to have aircraft forward, backward, left and right. Repeat it until the control is handy. Then reverse operation of vertical aileron and lift to stop the aircraft back to the take-off point. Repeat it until manipulate handy.

(3) Rudder Operation Exercises



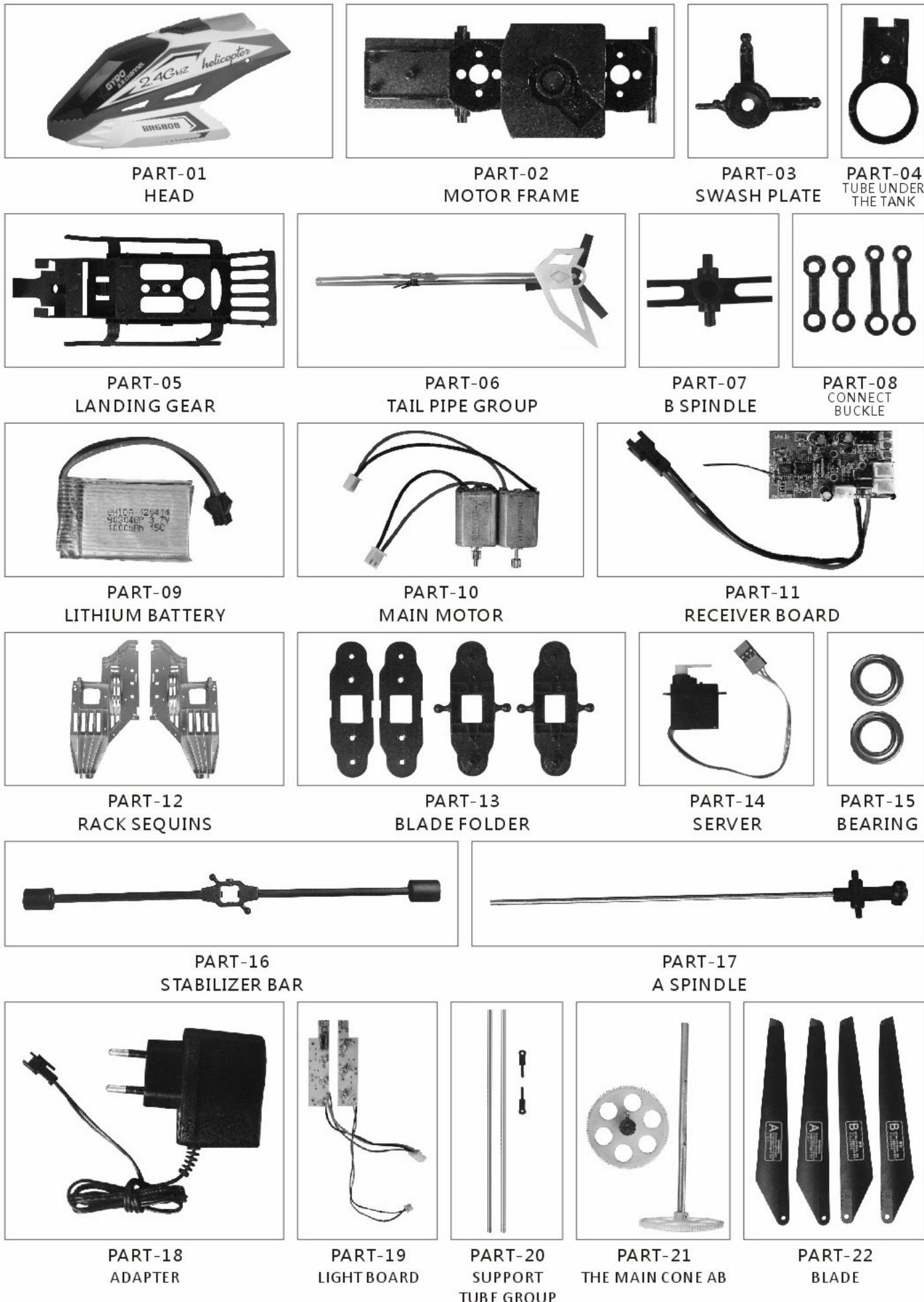
Slowly push the throttle lever to turn head to left, right, and rudder to fly back to the take-off point. Repeat it until manipulate handy.

(4) Circle Flight Training



When completed operation in above (1) - (3), make handy sizes of the circles on the ground, and then control aircraft to fly along the circle tracks until manipulate handy.

5. Accessories List



Caution: The user is cautioned that changes or modifications 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.