INSTRUCTION MANUAL

5 Channel Coaxial Blades R/C Helicopters

X350 SERIES

5 CHANNEL

Patented Extreme-Flyers 5 Channel Anti-Wind System gives the Co-Axial X350 unmatched control and fast-forward flight ability for outdoor flight performance.
Patent No.: PCT/CN2010/002183

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warning

This is not a toy.
This product is intended for users 14 years of age and older.

EXTREME FLYERS

Introduction

Thank you for purchasing 5 Channel Coaxial Blades Series RC Helicopters made by Extreme-flyers. Before your operation, we'd like to introduce the relevant knowledge and general notes of the helicopter to you through this manual which can help you to operate this helicopter as what your mind wishes. Please read this instruction manual carefully before using and keep it in good condition for your future reference.
Extreme-flyers series products, radio control coaxial blades model helicopters, are the innovative 5 channel radio control electric helicopters developed by our company. Besides the features of 4 channel coaxial blades helicopter, it is equipped with an anti-wind linkage set which efficiently solves the problem of low anti-wind feature in coaxial blades helicopters. There are two modes: low speed and high speed. It can fly smoothly indoor and outdoor with wind speed of **10**km-**12**km/h. Now we have gained the international patent for this technology, the patent No.: PCT/CN**2010/002183.** Our helicopters are the best choice for beginners as well as the good pleasure for experienced hands.

Important Announcement

This radio control model is not a toy, but a kind of recreational sporting goods which utilize various high-tech products and technologies. Improper and unfamiliar use will result in serious injury. Please do read through this manual carefully before using to make sure to be conscious of your own personal safety and the safety of others when operating this radio control model.
Manufacturers, wholesalers and retailers have no liability for any damage or accident that caused by users' spare parts wastage and improper operations. This product is only intended for use by people above 14 years old.
Beginners should be guided by experienced pilots at their first flight to ensure that the flight must be safe. After the sale of this product we have no liability for any damage, injury and accident caused by any improper operation and use.

General Notes On Safety

⚠ CAUTION

Radio control helicopters fly powerfully at high speed, existing a certain of potential danger. In order to forestall the lose control of the helicopters and other unexpected accidents, Pilots must pay attention to the flying safety and are responsible for their actions and damage or injury occurring during operation.

⊘ FORBIDDEN

It is very important to choose an appropriate flying site. So please fly the helicopter at the place designated by local laws and regulations. Be sure there are no people, trees, buildings and high voltage cables around your flying place to avoid any lost and damages to yourself and others. Please do not fly the model in a rainy, thundery and other inclement weather to ensure the safety of yourself, others and your model.

⚠ CAUTION

Keep the model away from damp environment. Helicopters are composed of many precision electrical components. So it must be prevented far away from moisture and steam. Do not operate or expose the model to a cloudy and rainy day to prevent the helicopter to malfunction resulting in loss of use, or a crash by rainwater.

⊘ FORBIDDEN

Please do not improve or process the model helicopter yourself or use this model for other illegal purpose.

⚠ WARNING

Please do not fly or operate this model under tired or bad condition.

⚠ CAUTION

During the operation of the helicopter, please do not touch the rotating main rotor blades and do always fly the helicopter a safe distance from yourself and others, as well as surrounding objects to avoid inflicting serious bodily harm and damage to property.

⚠ CAUTION

Radio control helicopters are mainly made up of carbon fiber or polyethylene and electronic products. Plastic parts are very easy to be deformed due to the heat and strong sunshine.

Battery Charging

(only for the charger produced by Extreme-Flyers)

1、Connect the charger to the power supply (DC 15V/1A) , if the power indicator of the charger is red, it means the charger is properly connected.

2、Connect the second or the third Lithium ion battery to the charger interfaces separately. If the green indicator is flashing, the battery is charging.

3、When the green indicator stops flashing, the battery is fully charged.

General Notes On Battery Charging and Safety

1. Remove the battery from the model when you charge the battery.
2. A charging Lithium Polymer battery must be watched over .
3. A charging Lithium Polymer battery must be kept away from heat, inflammable and explosive substance and charge only in well-ventilated areas.
4. Do not try to charge the battery if it swells or distorts.
5. Do not touch the battery with your hands when the battery leaks. If you happen to touch the leaking substance, please wash it off immediately, or go and see the doctor in time.
6. Keep the battery far away from the children.
7. Remove the battery from the model and be sure that the battery comes back to the normal temperature before you charge it.

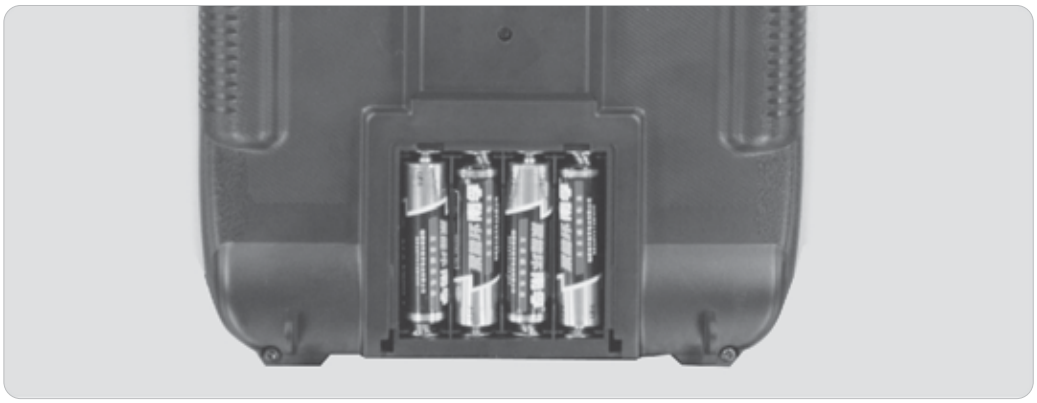
Maintenance of Lithium Polymer Battery

Be sure that the battery is fully charged before you keep it in a safe place. Lithium Polymer battery will discharge if it is not used for a long time. If the voltage of one cell is lower than 3V, damage will occur to the battery. We suggest that you check your battery periodically and avoid over-discharge of your battery, so that you can continuously keep your battery in the best state. We suggest that stored batteries should be charged 80% before you put it away in a safe place.

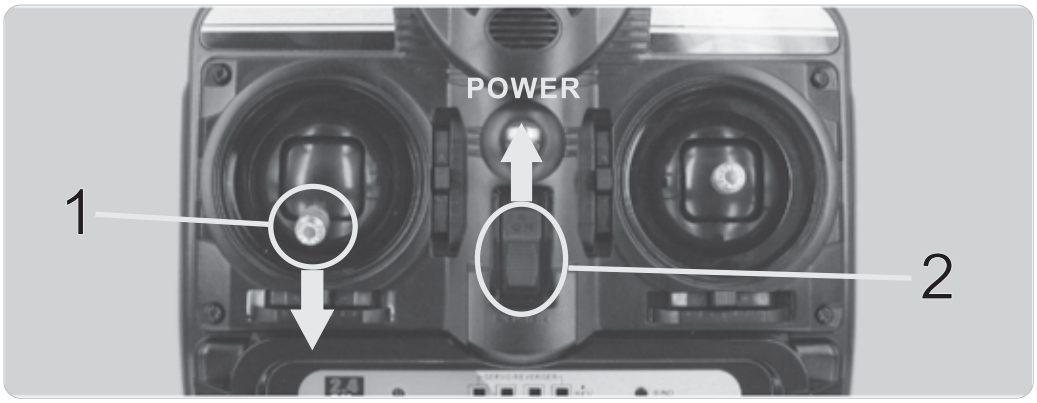
Take-off Steps of Helicopters

Mode 2 (Left Hand Throttle)

1、Install the batteries in the transmitter (4 cells AA 1.5V)

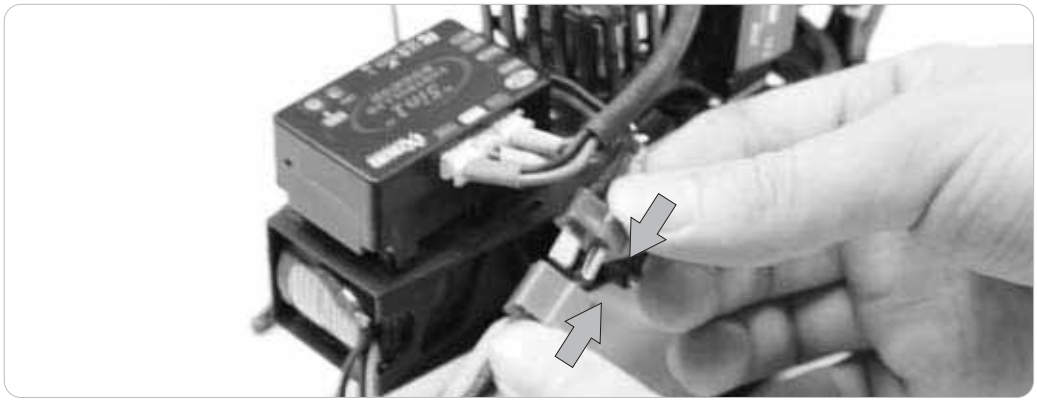


2、Put throttle stick in the lowest position, and turn on the power of the transmitter.

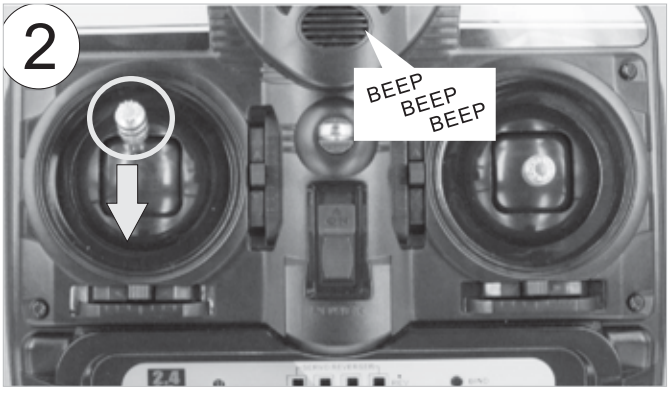


Mode 2
(Left Hand Throttle)

3、Turn on the receiver on the helicopter.



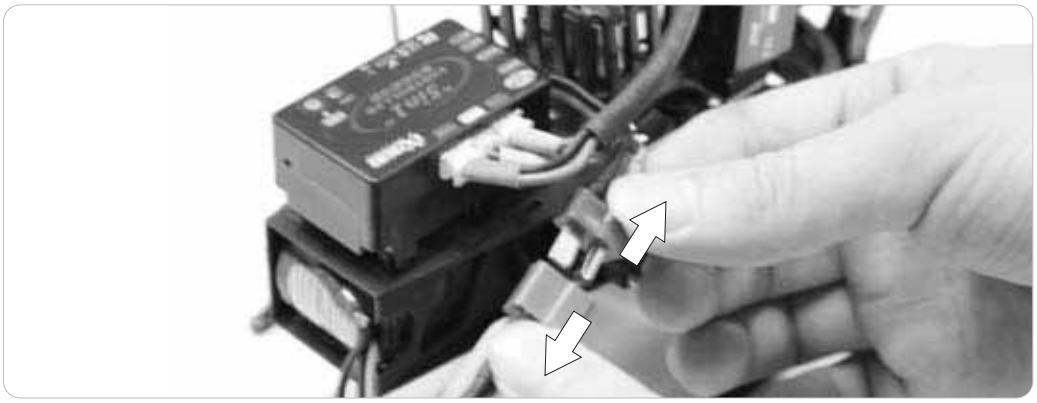
4、 For the sake of safety, please push the throttle stick to the highest position first, and then pull it back to the lowest position. When you hear three" beep, beep, beep", your helicopter is ready to fly.



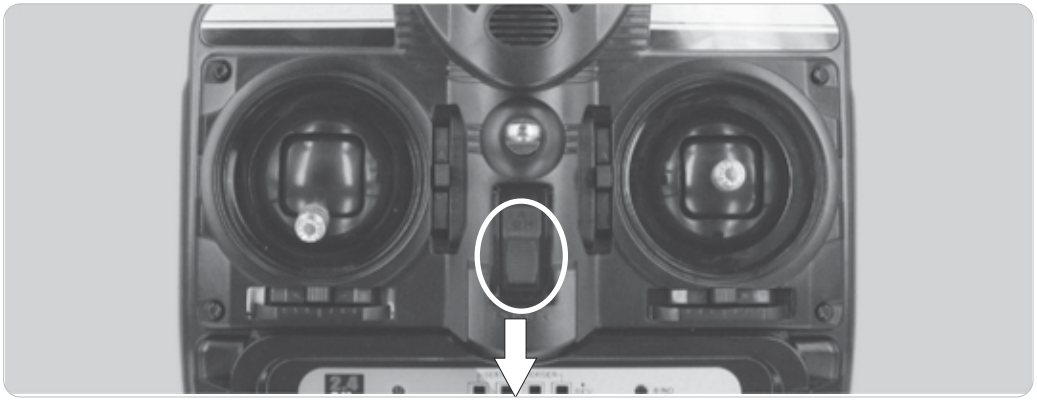
Landing Steps of Helicopters

Mode 2 (Left Hand Throttle)

1、 Remove the power pin from the receiver to avoid the damage when the battery discharges.



2、 And then turn off the power of the transmitter.

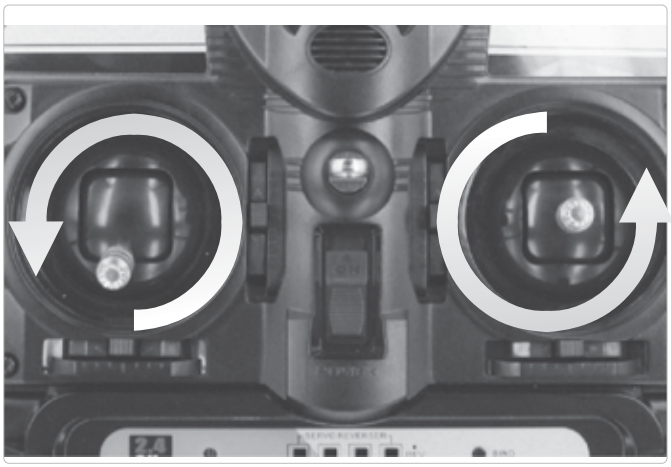


Mode 2
(Left Hand Throttle)

Adjustment of transmitter stick neutral point and pitch

Neutral point and pitch of the transmitter sticks were well calibrated in the factory. It is no need to be readjusted generally. But if the operation parts are changed to a new one, or the operation parts have been worn a lot after using for a long time and the stick operation gap begins to affect accuracy of the operation., you have to adjust the neutral point and pitch of the sticks yourself. Adjustment as follows:

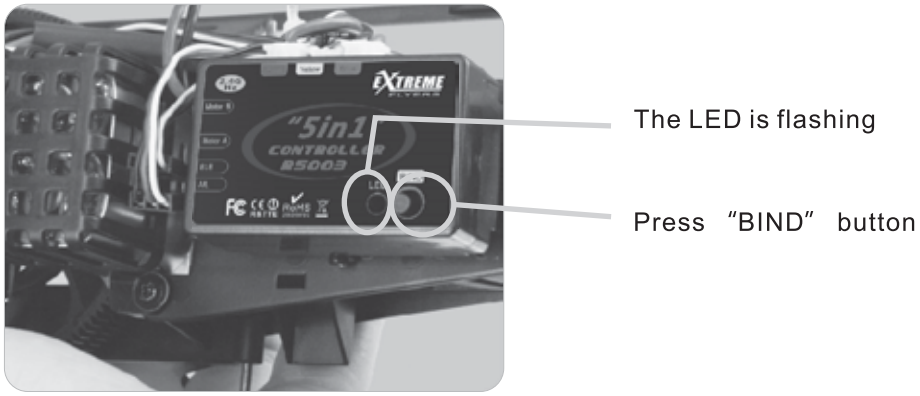
1.Turn off the power of the receiver;
2.Put the throttle stick to the lowest position;
3.Turn on the power of the transmitter;
4.As figure shows, press stick adjustment button at the back of the transmitter, you can hear “beep” from the transmitter. Now the power indicator of the transmitter begins flashing.



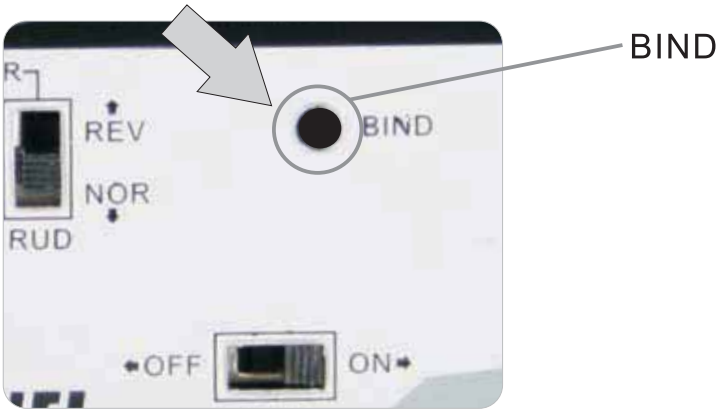
5. As figure shows, move the two sticks in a circle to the biggest pitch for a few times, and then put the throttle stick to the lowest position. Press the stick adjustment button again, you can hear “beep” from the transmitter, then other two ”beep, beep” follows. Now the power indicator is on. The adjustment is completed.

Bind 2.4GHz Radio Transmitter and Receiver

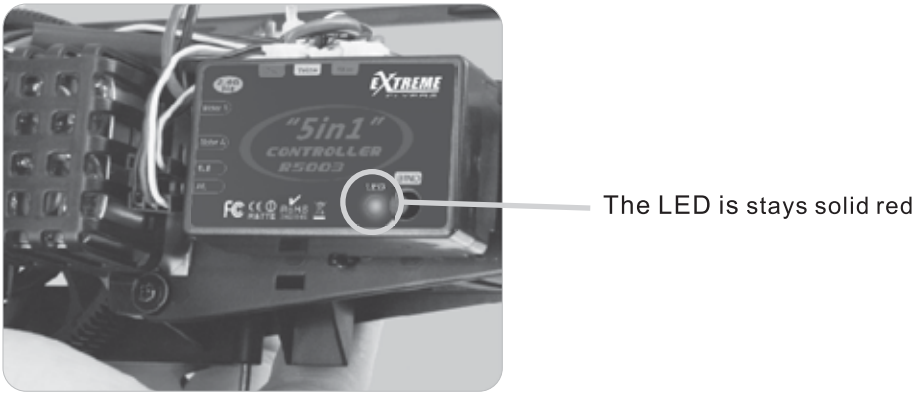
The binding process between the transmitter and receiver is set in our factory. It's no need to set up again. But if the radio equipment doesn't work properly, or you change another transmitter or receiver, you must bind it again by yourself.
First press "BIND" button on the receiver, now the LED is flashing.



Then place your helicopter on the horizontal ground or on the table (be sure your helicopter does not slant or shake). Press the "BIND" button on with astick the transmitter before LED stops flashing. You can hear one "beep" from the transmitter, In order to prevent the helicopter out of control, don't touch this botton until binding is necessary,



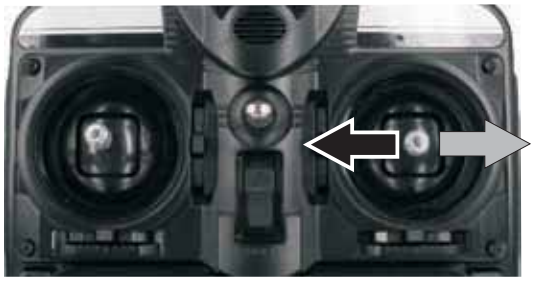
and at the same time, LED on the receiver is off and then it is on again and stays solid red. Now the set-up of the binding process is completed and you can operate your model. If you fail to set up the binding, you must repeat the above steps again.



Mode 1 (Right Hand Throttle)

When throttle stick is pushed upward, your helicopter goes up. And when throttle stick is pulled downward, your helicopter descends.

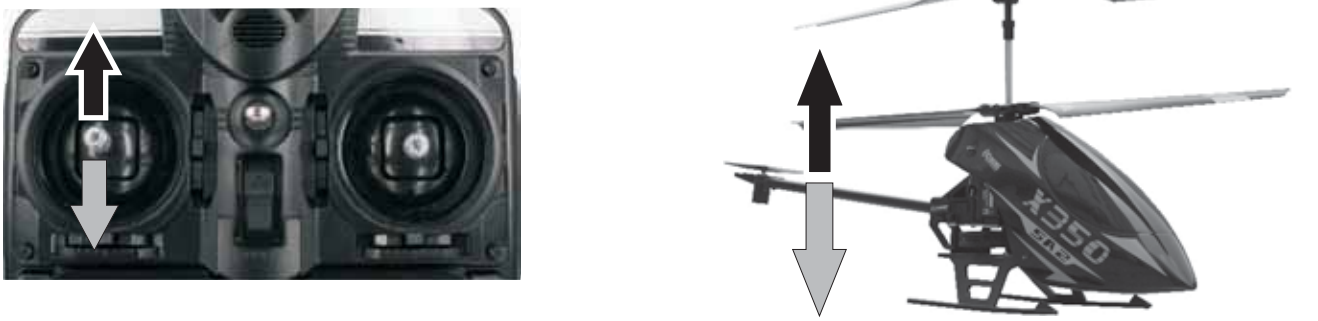
When elevator stick is pushed forward, your helicopter flies upward. And when elevator stick is pulled downward, your helicopter flies backward.



When aileron stick is moved to the left, your helicopter flies to the left. And when aileron stick is moved to the right, your helicopter flies to the right.

When aileron stick is moved to the left, your helicopter flies to the left. And when aileron stick is moved to the right, your helicopter flies to the right.

Mode 2 (Left Hand Throttle)



When throttle stick is pushed upward, your helicopter goes up. And when throttle stick is pulled downward, your helicopter descends.

When elevator stick is pushed forward, your helicopter flies upward. And when elevator stick is pulled downward, your helicopter flies backward.

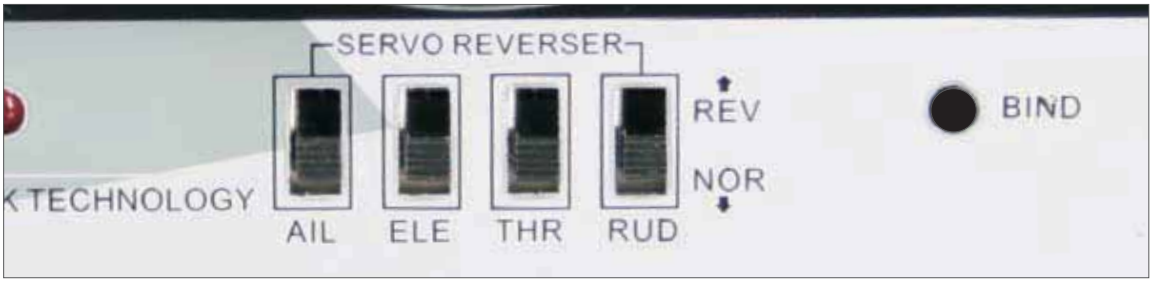
When aileron stick is moved to the left, your helicopter flies to the left. And when aileron stick is moved to the right, your helicopter flies to the right.

When aileron stick is moved to the left, your helicopter flies to the left. And when aileron stick is moved to the right, your helicopter flies to the right.

Channel Reversing Switches

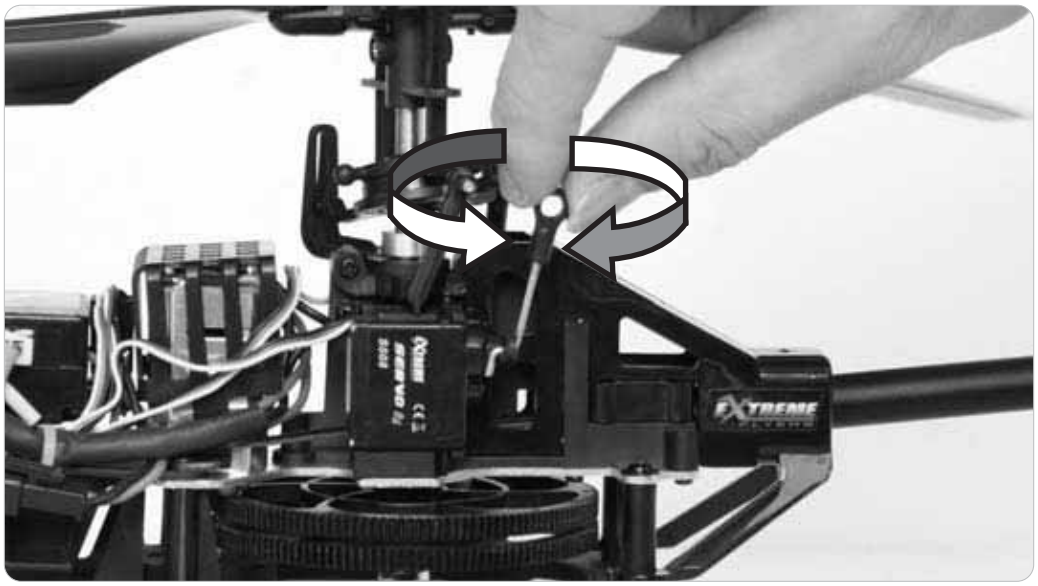
If your helicopter runs reverse in your test process, please use the reversing switches to correct it. Please do not always use THR switch, it is dangerous if it is used rashly and improperly.

CHANNEL 1 AIL NOR
CHANNEL 2 ELE NOR
CHANNEL 3 THR NOR
CHANNEL 4 RUD NOR

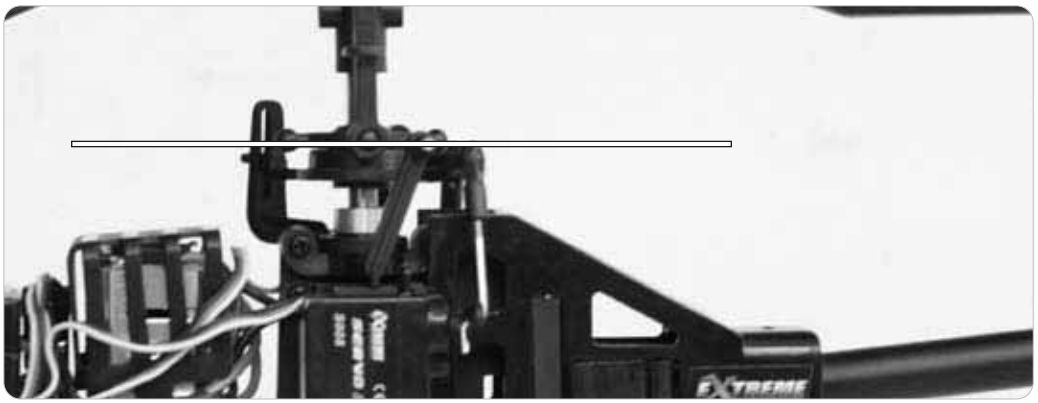


Adjustment of Servo Rods

The helicopter is debugged in the factory. In the windless weather conditions, only by moving throttle stick (no need to move other operation sticks), the helicopter can smoothly take off and up to 1 meter high, hovering there, and the helicopter does not yaw to any directions. If the helicopter yaws to the left, move the aileron servo rod anticlockwise and make it longer to the position that the helicopter does not yaw to the left anymore. On the contrary, if the helicopter yaws to the right, move the aileron servo rod clockwise and make it shorter to the position that the helicopter does not yaw to the right or left anymore. If the helicopter yaws forward, move the elevator servo rod clockwise and make it shorter to the position that the helicopter does not yaw forward. On the contrary, if the helicopter yaws backward, move the elevator servo rod anticlockwise and make it longer to the position that the helicopter does not yaw backward.



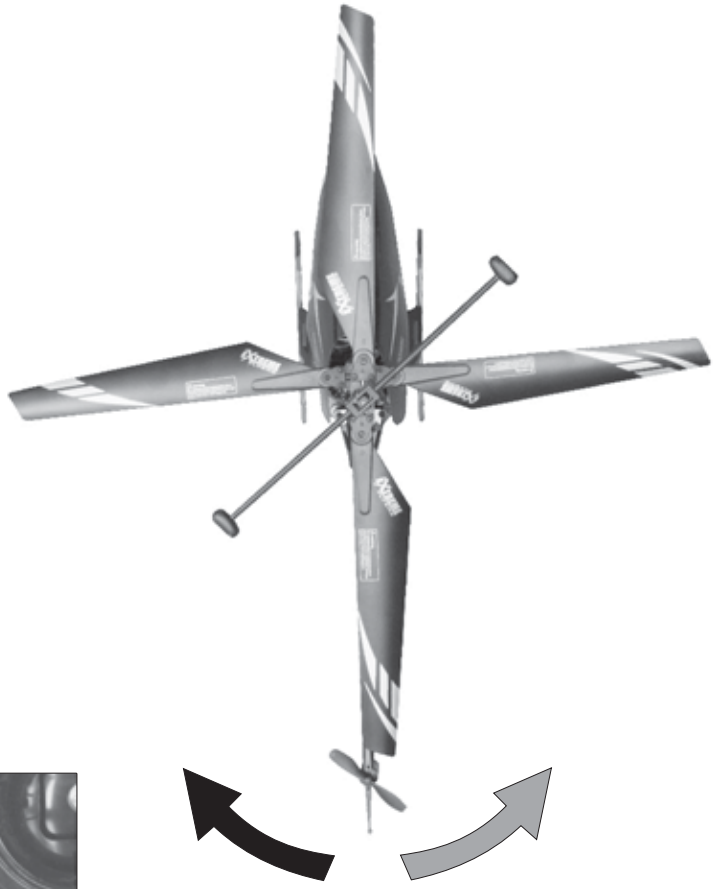
Adjust the swash plate until it is level!

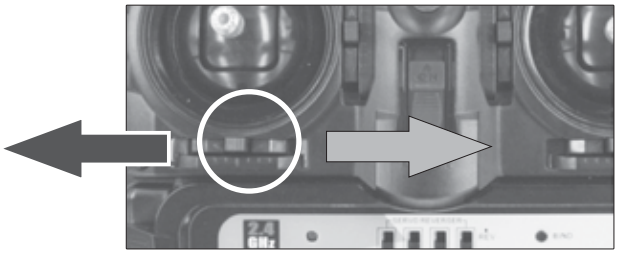


Tail Swinging Treatment

"5 in 1" receiver has the tail self-lock function. It is unnecessary to debug it again generally. Once the tail swings as the figure shows, please try to treat it by the following two methods:

1、Place the helicopter on the horizontal ground, reset the binding process to make it self-locked again.

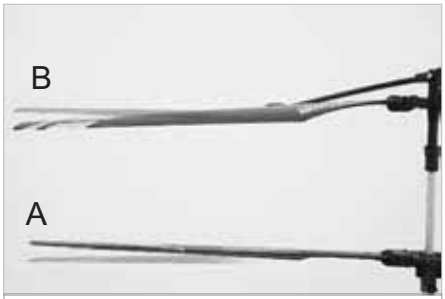




2、As shown in the figure, move the rudder trim on the transmitter to the left or right till the tail stops swinging.

Adjustment for blade out of its normal track

During the main blades rotation process, if the same level main blades rotate out of the same level track, it need some adjustment, otherwise the flight may be unstable.



1.Main blade out of its normal track.

2.Regulate the push rod length of main blade A.

3.Regulate the push rod length of main blade B.

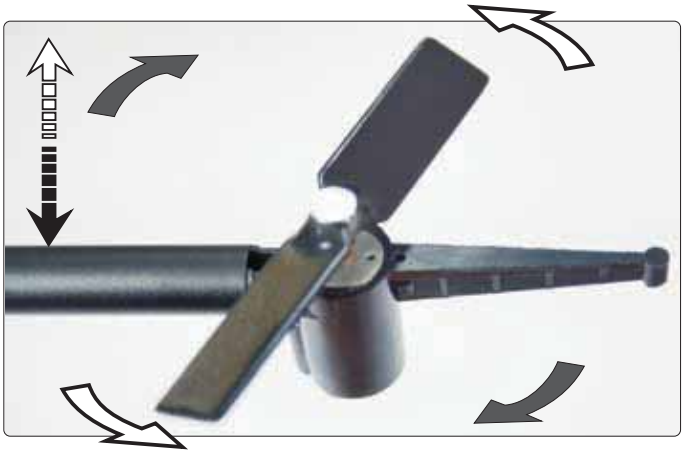
If both main blade A and B have the same problem of blade out of its normal track need regulate the relative push rod again and again, until the problem is solved, when regulation is finished, the flight effect will be better.

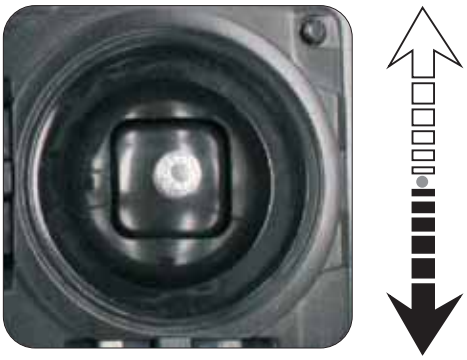
Turn on the Anti-wind Channel

As figure shows: When you fly the model indoor, TAIL switch is in the OFF position, the tail rotor blades do no work. When you fly at high speed or outdoor, please put TAIL switch in the ON position, turn on the anti-wind channel. Push the elevator stick forward or downward, now the tail rotor blades start working to meet the needs of fast speed and the anti-wind effect. When TAIL switch in the OFF position, the reaction speed of forward backward and turn left and right will slower than TAIL switch in the ON position. This is much more suitable for the beginners.

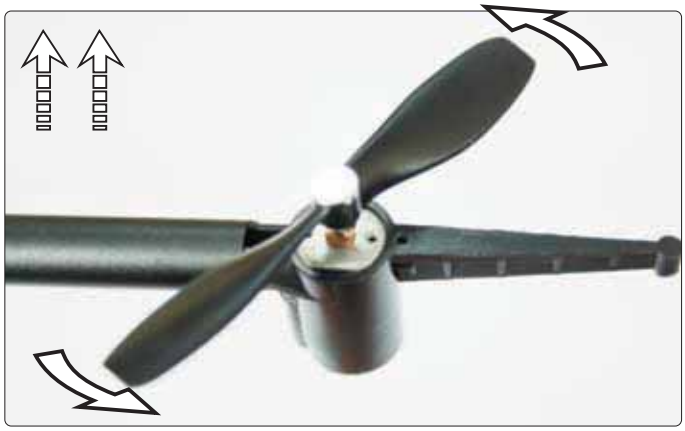
TAIL switch

According to the different anti-wind requirements you can choose anticlockwise rotation or clockwise rotation the tail rotor.





Elevator stick



Elevator stick

Other Protection Functions

1、Start-blocking protection function. When TAIL switch is in the OFF position and the anti-wind channel is closed the receiver circuit comes into self start-blocking protection mode. For the sake of safety, the circuit will stop working automatically if the rotor blades receive outside force. In this condition, if you want the model to work again, please move the transmitter throttle to the lowest position first, and pull out the battery pin and then put it in again. This mode is suitable for flying indoor. When TAIL switch is in the ON position and the anti-wind channel is open, the main rotor blades are not in the self start-blocking protection mode. This mode is suitable for flying outdoor, even the main rotor blades gently touch other substances, the helicopter will not lose power and get damaged on the ground.

2、Li-polymer battery discharge protection function. When battery voltage is lower than 9V, "5 in1" circuit will stop discharging automatically in order to avoid the battery damage by over discharging.

3、 Transmitter low voltage warning function. When the transmitter voltage is lower than 4V and the power indicator flashes with "beep, beep" warning alarm, please change the battery to avoid the out of control of the helicopter because of low voltage.

conformité pourraient annuler l'autorité de l'utilisateur pour le fonctionnement de l'équipement
Les changements ou modifications non expressément approuvés par la partie responsable de la

FCC rayonnées Déclaration exposition

Les antennes utilisées pour cet émetteur doit être installé pour condition une distance de séparation d'au moins 20cm de toutes les personnes et ne doit pas être installé à proximité ou utilisé en conjonction avec toute autre antenne ou transmetteur

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

FCC Radiation Exposure Statement:

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

CE 0678 ! RoHS

We are very excited about the new Extreme helicopters as we feel there is a huge GAP in the market especially on easy to fly, easy to learn helicopters. We are often confronted with learners that want to go from infra-red to outdoor helicopters and most of them are indoor short range co-axle helicopters and they do not achieve what the learners need or want. They want an outdoor full range helicopter that is as stable as the indoor ones. Our Extreme helicopters are exactly what is required; we have had great feedback from the helicopter learners and in fact from the helicopter pilots. This helicopter is the missing link between really simple flying helicopters and outdoor 3D flying.

Extreme -Flyers Hobby

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