

Genius CP

FLYBARLESS SERIES



DEVO 6
TRANSMITTER
6-channel
micro computer system

TOUCH SCREEN COLORFUL LCD



User Handbook

Specifications:

Main Rotor Dia. : 241mm

Tail Rotor Dia. : 45mm

Overall Length: 220mm

Gyro: three-axis and six-axis

All-up Weight: 41g (Battery included)

Transmitter: DEVO-6

Receiver: RX2625H

Battery: 3.7V 200mAh Li-Po

Main Brush Motor: 0820R

Tail Brush Motor: 0615R

Servo: wk-02-4

weight: 2.42g

speed: 0.12sec/60° (3.0~4.5V)

dimension: 16.5×6.8×15.7mm

Features:

1. The design of flybarless balance characterizes low power loss and great efficiency improvement.
2. three-axis and six-axis gyro, flybarless balance control system and amend the stable flight status automatically.
3. Mature low voltage driven system presents green, environmental friendly and safety concept.
4. Mini size helicopters for indoor. It offers 5-6 minutes flight time after fully charged.
5. Work with DEVO-6 radio, it gets easy operation, quick signal communication, precise and safe flight performance.

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01

Forewords



02

Matters needing attention

Dear customer:

Thank you for your purchase of Walkera radio control aircraft model products. In order to promptly and safely master the operations of Genius CP RC helicopter, please carefully read the user handbook, and then save it in a safe place for future consultation and reference.

Genius CP spread spectrum technology, it features vigorous power, stable flight, prompt response, and strong anti-jamming capacity.

2.1 Statement

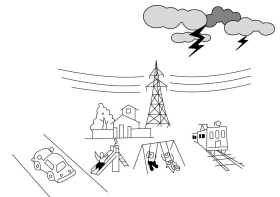
- (1) This product is not a toy. It is a piece of complicated equipment which harmoniously integrates together engineering materials, mechanics, electronics, aerodynamic and high frequency radio. Correct installation and adjustment are a must in order to avoid accidents taking place. The owner should operate in a safe manner. Improper operation may result in serious property damage or bodily injury, even death.
- (2) We accept no liability for damage and consequent damage arising from the use of products, as we have no control over the way they are installed, used and operated.
- (3) This product is suitable for RC-helicopter-experienced people aged not less than 14 years old.
- (4) The flight field should be legally approved by the local government. We accept no liability for any safety duties arising from operations, uses, or controls as soon as the products are sold.
- (5) We consign our distributors to offer technical support and service after sale. Please contact the local distributors for problem solutions caused by usage, operation, maintenance, etc.

2.2 Safety needing attention

RC helicopter is a high risk hobby, whose flight should be kept far away from other people. Misassembled or broken main frame, defective electronic equipment, and/ or strangeness to radio system will lead to unforeseen accidents such as bodily injury or property damage. The pilot **MUST** pay attention to the flight safety and UNDERSTAND his responsibility for accidents caused by his carelessness.

(1) Far away from obstacle and people

RC helicopter in flight is uncertain of flight speed and status, which potential risk exists in. when flying, please keep your RC helicopter far away from people, high buildings, high-tension line, etc, and avoid operating in rain, storms, thunder and lightening.



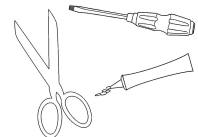
(2) Away from humidity environment

RC helicopter should be kept away from humidity and vapor because it is composed of complicated precise electronic elements and mechanic parts.



(3) Proper operation

Please use Walkera original spare parts to upgrade, modify or maintain your helicopter in order to assure its safety. Please operate your helicopter within the range of functions permitted. It is forbidden to use out of the safety laws or regulations.



(4) Avoid flying alone

At the beginning of studying radio-control flight skills, there exist some difficulties. Please avoid your flying alone, and should invite experienced pilots to guide you (it is one of the effective manners to practice via PC simulator and/ or skilled pilots' guidance).



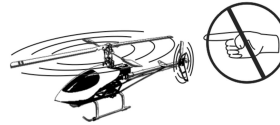
(5) Safety operation

Please fly your helicopter according to your body status and flight skills. Fatigue, listlessness and miss-operation will increase the possibilities of accidental hazard.



(6) Away from highly spinning parts

Please keep pilot, people and object away from the spinning blades of both main rotor and tail rotor.



(7) Away from heat source

RC helicopter is made from metal, fiber, plastic and electronic elements, etc. Please keep away from heat, sunshine in order to avoid distortion, even damage, caused by high temperature.



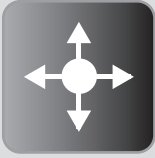
2.3 Attention before flight

- (1) Ensure the battery packs of both transmitter and receiver are fully charged (saturated).
- (2) Ensure both the throttle stick and the throttle trim of your transmitter stay at the lowest positions before operation.
- (3) Please strictly obey the order of turn-on and turn-off before operation. When starting your flight, please turn on your transmitter first, and connect the power cable of your helicopter last.
When finishing your flight, please disconnect the power cable of your helicopter first, and turn off your transmitter last.
- (4) An upset in the order of connection may cause your helicopter to lose control. Please cultivate a correct habit of turn-on and turn-off.
- (5) Ensure the directions and actions which servos execute transmitter commands are correct and smooth, respectively. Using a broken servo will result in unforeseen dangers.
- (6) Check there are no missing or loose screws and nuts, no unassembled or damaged parts. Carefully check the main blades have no defects, especially the position close to the main blade connector. Broken or unassembled parts will have an effect on the flight performance, and will cause unforeseen potential dangers.
- (7) Check all the connections between ball linkage and ball. Loose linkages and balls should be changed. Loose connection between linkage and ball will have an effect on the flight performance, even lose control.
- (8) Assure there are solid connections between the power cables of battery pack and motors. Continuous vibrations and drastic 3D actions in flight may loosen the battery tie-ins.



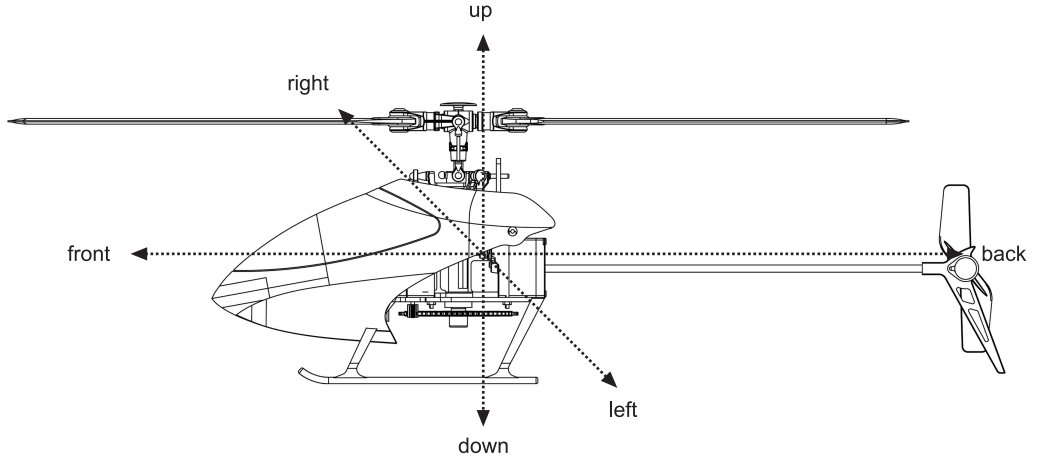
02

**Matters
needing
attention**



03

Definition of Helicopter Orientation



04

Standard equipments



▲ helicopter



▲ transmitter



▲ Li-polymer battery pack



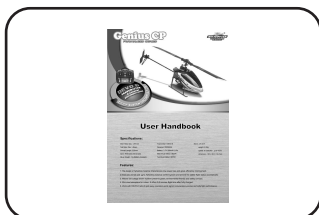
▲ Tool kit



▲ Wall adapter /Power supply

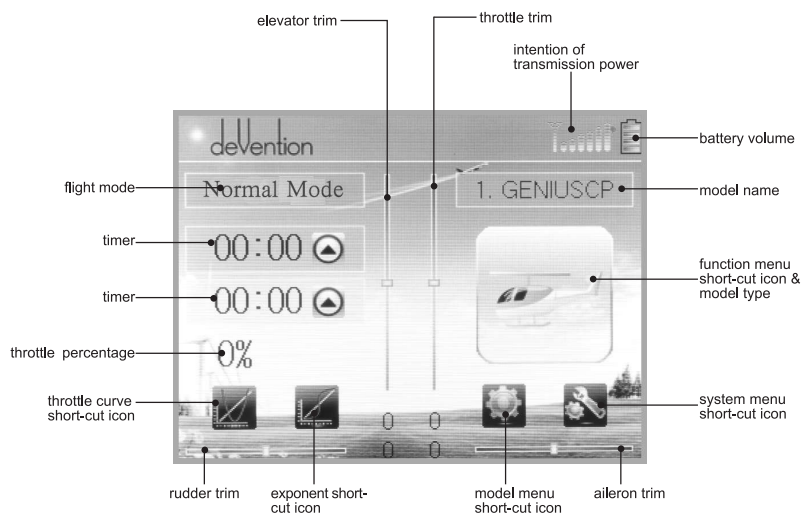


▲ Main rotor blades



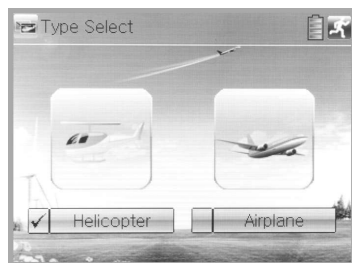
▲ User Handbook

5.1 Boost Screen

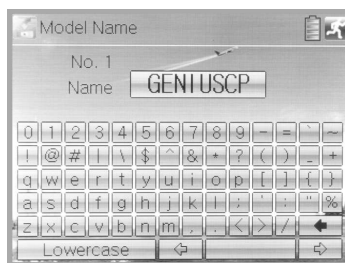


5.2 Model selection

Touch the shortcut icon to enter Mode Menu, and then click the icon to enter the interface of Model Select. Select the desired item, and then click the icon to exit.



5.2 Model selection



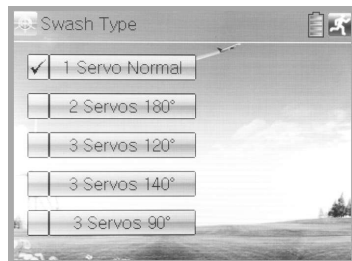
5.3 Model Name

5.3 Model Name

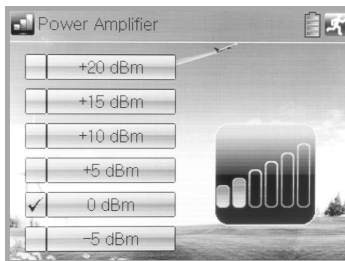
Touch the shortcut icon to enter Mode Menu, and then click the icon to enter the interface of Model Name. Then name the above selected item as "GENIUSCP". Touch the icon to exit.

5.4 Swash Type

Touch the shortcut icon to enter Mode Menu and then click the icon to enter the interface of Swash Type. Choose "1 Servo Normal", and then click the icon to exit.



5.4 Swash Type



5.5 Power Amplifier

5.5 Power Amplifier

Touch the shortcut icon to enter Mode Menu, and then click the icon to enter the interface of Power Amplifier. Select the item "0dBm". Click the icon to exit.



05

Setting of DEVO-6

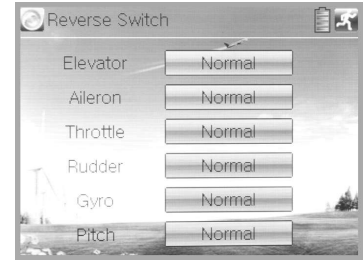


05

Setting of DEVO-6

5.6 Reverse Switch

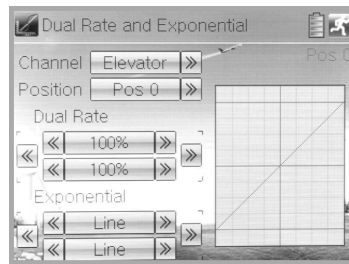
Touch the icon to enter Function Menu, and then click the icon to enter the interface of Reverse Switch to set as below, and then click the icon to exit.



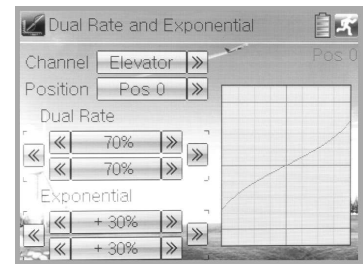
5.7 Dual Rate and Exponential

Touch the icon to enter Function Menu, and then touch the icon to enter the interface of Dual Rate and Exponential.

Below are the set values for each point, and then click to exit.



three-axis flight mode



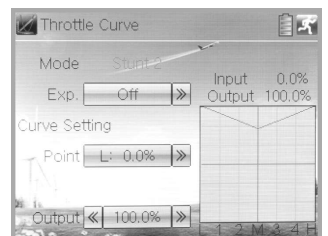
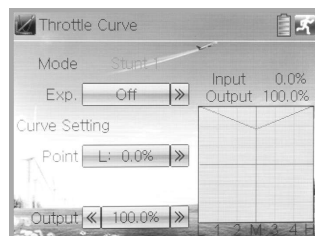
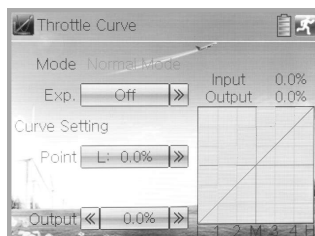
six-axis flight mode

5.8 Throttle curve



Touch the shortcut icon to enter Function Menu, and then click the icon to enter the interface of Throttle Curve while an enquiry dropdown is shown "All Servos Hold?" If click OK, all the servos will be locked at the current status; if click Cancel, all the servos will be unlocked at the current status.

Below are the set values for each point, and then click to exit.

point output	L	1	2	M	3	4	H
Normal Flight	0.0%	16.5%	33.5%	50.0%	66.5%	83.5%	100.0%
Stunt 1	100.0%	93.5%	86.5%	80.0%	86.5%	93.5%	100.0%
Stunt 2	100.0%	93.5%	86.5%	80.0%	86.5%	93.5%	100.0%

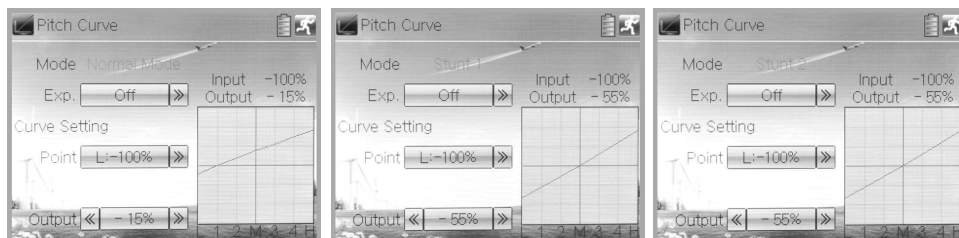


5.9 Pitch curve



Touch the icon  to enter Function Menu, and then click  to enter Pitch Curve. A dropdown pops up "All Servos Hold?". Click OK for all the servos will be locked at the current status; click Cancel for unlocked.

Below are the set values for each point, and then click  to exit.

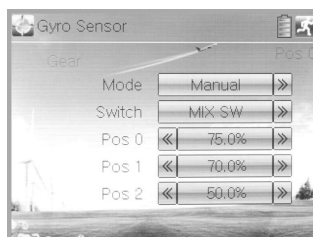
flight mode \ point output	L	1	2	M	3	4	H
Normal Flight	-15%	+0%	+12%	+25%	+36%	+49%	+60%
Stunt 1	-55%	-37%	-18%	+0%	+20%	+40%	+60%
Stunt 2	-55%	-37%	-18%	+0%	+20%	+40%	+60%



5.10 Gyro sensor

Touch the icon  to enter Function Menu, and then touch the icon  to enter the interface of Gyro Sensor.

Below are the set values for each point, and then click  to exit.



5.11 Save

Turn off the DEVO-6 power, and all the setting data will be automatically saved.



05

Setting of DEVO-6



05

Setting of DEVO-6

5.12 Fixed ID setting cancellation

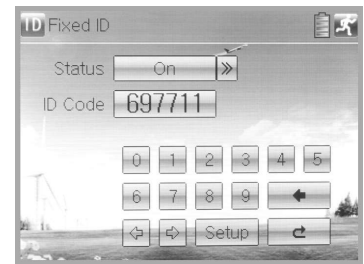
This setting will bind DEVO-6 with its receiver in a unique corresponding relationship. It will greatly speed up the time of automatic binding when DEVO-6 powered on.

(1) Setting for fixed ID(Take DEVO-6 manual for a reference)

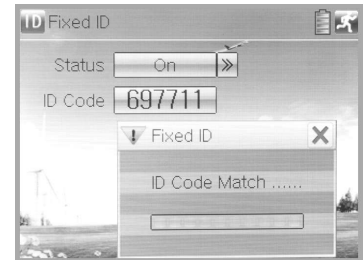
The setting for fixed ID should be under the status that automatic ID binding is successfully finished. Below is the setting method.

Touch the icon to enter Model Menu, and then enter Fixed ID by touching the icon in Model Menu.

Touch the navigation mark of the item ID Code Setting. It will expand into two statuses: Off and On(default setting is off). A series of random digits will be shown below after touching On. A mini soft keyboard is shown in the lower part after touching the random digits of ID Code.



The new ID digits can be modified by touching the mini soft keyboard. Touch Match after the new ID has been set. An INQUIRY interface of "Are you sure?" pop up. "ID Code Match" will be shown after touching OK.



(2) Fixed ID cancellation

(2.1) Receiver fixed ID cancellation

Insert the assorted PLUG BIND into ELEV channel in the receiver, and then power on the receiver. The red light of receiver will flash slowly. This means the fixed ID code has been cancelled. Pull out BIND PLUG.

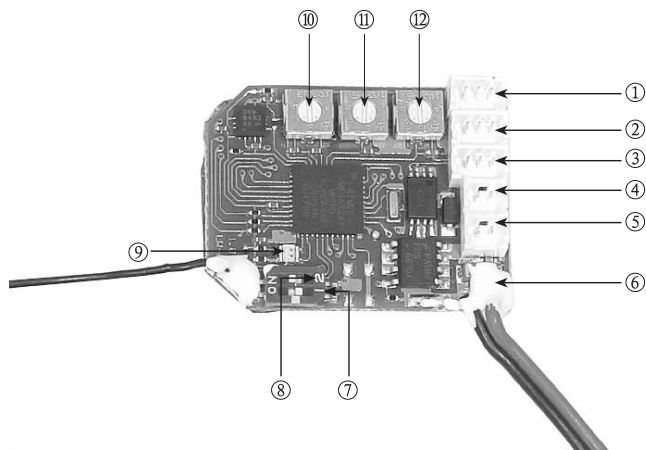
(2.2) Transmitter fixed ID cancellationx

DEVO-6 also needs to make relative cancellation after the fixed ID in receiver is cleared out.

In the main interface touch the icon to enter Model Menu and then touch to enter Fixed ID. Touch ID Code Setting to expand the navigation mark into two statuses On and Off. Touch Off. Then touch to exit.

6.1 Features of receiver RX 2625H

- (1) Receiver RX2625H adopts 2.4G spread spectrum technology with the functions of automatic scanning, code pairing and LED receiving indication.
- (2) The usage of high performance receiver dramatically reduces the possibility of missing signal and ensures the accuracy and reliability of signal receiving.
- (3) 6-channel signal output makes fine actions and powerful functions available.
- (4) Gyro sensitivity and servo extent offer fine and customized adjustments to relevantly meet the habits of your operation.



6.2 Function of receiver

S/N	Name for short	Full name	Function
1	ELEV	Elevator servo	Connects to the elevator servo and receives the control signal of elevator servo.
2	AILE	Aileron servo	Connects to the aileron servo and receives the control signal of aileron servo.
3	PIT	Pitch servo	Connects to the PIT servo and receives the control signal of PIT servo
4	TAIL MOTOR	Tail motor	Connects to the tail motor and receives the control signal of tail motor.
5	MAIN MOTOR	Main motor	Connects to the main motor and receives the control signal of main motor.
6	BATT.	Power cable	Connects to the battery(3.7V)
7	ADJ Mode Switch	Adjustment mode setting switch(switch 1)	The setting of helicopter's adjustment mode.
8	Flight Mode Switch	Flight mode switch (switch 2)	Set/choose helicopter flight mode.
9	LED	LED	Displays the status of receiving signal.
10	AILE-GS	Ailer gyro sensitivity adjust knob	Adjusts the aileron gyro sensitivity, changes the flight effect.
11	ELE-GS	Elevator gyro sensitivity adjust knob	Adjusts the elevator gyro sensitivity, changes the flight effect.
12	SERVO EXT.	Servo extent knob	Servo extent knob is used to set up the servo travel.



06

Instruction and attention of RX2625H



06

Instruction and attention of RX2625H

6.3 Flight mode setting

Note: When mounting the receiver, please make sure the receiver is placed flat and be vertical to the main axis of the helicopter.

- (1) Adjusting mode: turn the switch "1" to "1" after binding successful with the helicopter then it enter to the adjusting mode. The helicopter can be set on horizontal status through adjust the servos and the swashplate of the machine structure. Pls turn the switch "1" back to "0" to working mode due to this mode can't be used when the helicopter is flying.
- (2) The six-axis flying mode: turn the flying mode switch 2 to "ON". The red indicator on the receiver will keep lighting from quick flash. The balance function of ELVE/ AILE will be activated. At the same time turn the servo EXT switch and the ELEV/AILE gyro sensitivity switch to 50%, you can also adjust both of them according to the flying status and your own requirements. The more the servo EXT increased, the quicker the servos react; vice versa. When increase the ELEV/AILE gyro sensitivity, the helicopter will be more stable (the best status is no vibration), vice versa. Six-axis mode is suitable for beginners, not 3D pilots.
- (3) The three-axis flying mode: turn the flying mode switch 2 to "2". The green indicator of the receiver will keep lighting from quick flash, the ELEV/ AILE has balance function. At the same time turn the servo EXT tune and the ELEV/AILE gyro sensitivity to 50%, you can do some adjustment according to the flying status: the more the servo EXT tune increase, the more flexible the servo moves; vice versa. When increase the ELEV/AILE gyro sensitivity tune, the helicopter will be more stable (the best status is no vibration), vice versa. Three-axis flying mode is used for 3D mode.

6.4 Adjustment of receiver

- (1) Status of LED indicator of receiver: quick flash means the signal is being received; solid lighting means the signal has been received; slow flash means no signal has been received.
- (2) Servo extent knob: CW rotating toward (+) increases the servo travel and CCW rotating toward (-) decreases the travel.
- (3) Gyro turning knob: CW rotating toward (+) increases the gyro sensitivity and CCW rotating toward (-) decreases the gyro sensitivity.

6.5 Channel connection of receiver

S/N	Receiver terminal	Connection method	Wire direction
1	ELEV	Connects to the plug of elevator servo signal wire	The white wire is facing front
2	AILE	Connects to the plug of aileron servo signal wire	The white wire is facing front
3	PIT	Connects to the plug of pitch servo signal wire	The white wire is facing front
4	TAIL-MOTOR	Connects to the plug of tail motor signal wire	The black wire is facing front
5	MAIN-MOTOR	Connects to the plug of main motor signal wire	The black wire is facing front

6.6 Matters needing attention

- (1) All the signal wires should be connected in a correct way. Misconnection will result in failure to receive signal, even damage to receiver.
- (2) Use special adjustment pen to rotate the servo extent knob and gyro sensitivity in order to avoid damaging knobs.
- (3) Please strictly follow the sequence of "power on the transmitter first, then connect the battery". Turn on the transmitter, then connect the battery with receiver within 10 seconds, the red light on receiver begins flash. The red light will get a solid light 1-3 seconds, after the transmitter finishes pairing with receiver, the red light will flash again. If the red light get a solid light and a mechanical BEEP sound can be heard from the servo, it means the receiver have received the signal from the transmitter and their codes match successfully.

(4) The six-Axis flying mode: the helicopter's backward and forward flight, left and right flight can be adjust through ELEV/AILE trim button(do not adjust the tail gyro trim button), it is necessary to adjust the trim button back to middle setting before switch the flying mode back to three-axis gyro mode(It's better to binding again). It's forbidden to pressing all the trim button in three-axis gyro mode.

7.1 Specification and function of servo

7.1.1 Specification of servo

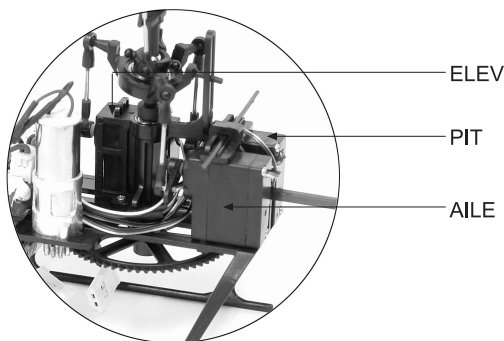
	Weight	Voltage	Speed	Dimension
WK-02-4	2.42g	3.0~4.5V	0.12sec/60°	16.5×6.8×15.7mm

7.1.2 Basic function of servo

Servo is a kind of electromechanical device that converts the signal from the receiver into mechanical movement, the function of which mainly aims at transforming the electronic signal into relevant mechanical movement, by means of which the control for its direction and speed can be achieved.

7.2 Connection and adjustment of servo

7.2.1 Connection of servo



S/N	Receiver terminal	Connection method	Wire direction
1	ELEV	Connects to the plug of elevator servo signal wire	The white wire is facing front
2	AILE	Connects to the plug of aileron servo signal wire	The white wire is facing front
3	PIT	Connects to the plug of pitch servo signal wire	The white wire is facing front

7.2.2 Adjustment of servo

Before departure from Factory, all the servos have been given correct adjustment and are locked at the initiation status. In general, we don't need make any adjustment.

7.2.3 Matters needing attention

- (1) All the plugs should be correctly connected. Otherwise wrong connection will make servos not function or lead to the direction which is different from the pre-set.
- (2) Before departure from Factory, all the servos have been given correct adjustment and are locked at the initiation status. Please ensure that the travels of servo bell cranks should be within the range of its fixed extent during replacement, installation, and adjustment of servo linkages.



07

Instruction and attention of servo

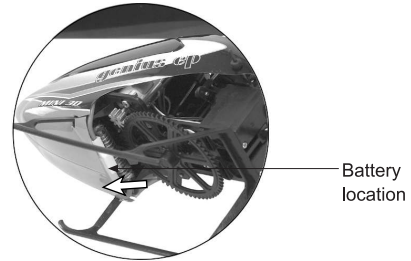


08

Steps of flight

8.1 Installation of battery

Install the battery into the battery compartment along the arrow direction.



Sketch map of battery installation

8.2 Turn on the power

8.2.1 Turn on the power



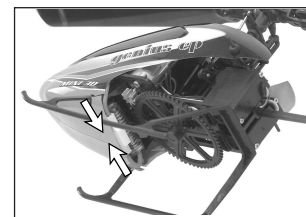
1. Take off the canopy, and install the battery in the battery compartment.



2. Turn on the power of transmitter.



3. Pull down the throttle stick and throttle trim of transmitter to the lowest position, and then move the elevator trim, aileron trim, and rudder trim at the neutral positions, respectively.



4. Connect the power cable of helicopter to receive signal from transmitter.

8.2.2 Matters needing attention

- (1) Please strictly follow the sequence of "power on the transmitter first, then connect the battery". Turn on the transmitter, then connect the battery with receiver within 10 seconds, the red light on receiver begins flash. The red light will get a solid light 1-3 seconds, after the transmitter finishes pairing with receiver, the red light will flash again. If the red light get a solid light and a mechanical BEEP sound can be heard from the servo, it means the receiver have received the signal from the transmitter and their codes match successfully.
- (2) If failed to connect the power cable of helicopter in 10 seconds after transmitter is turned on, please turn off the transmitter and repeat the step (1).

8.2.3 Troubleshoot of receiver LED keeping on flashing after power cable connected

Possible causes	Solutions
Failure to code pairing.	Re-turn on transmitter and re-connect the power cable of helicopter.
The throttle trim and throttle stick of transmitter are not at the lowest position.	Pull down the throttle trim and throttle stick to the lowest position and re-pair code.
The electricity of transmitter is short or used up.	Change new battery of transmitter, and pair code again.
The electricity of helicopter is short or used up.	Change new battery pack of helicopter, and pair code again.
No function in receiver or transmitter.	Change receiver or transmitter, and pair code again.



8.3 Adjustment before flight

Warning: Disconnect the power cable of main motor before adjustment for the sake of pilot's safety.

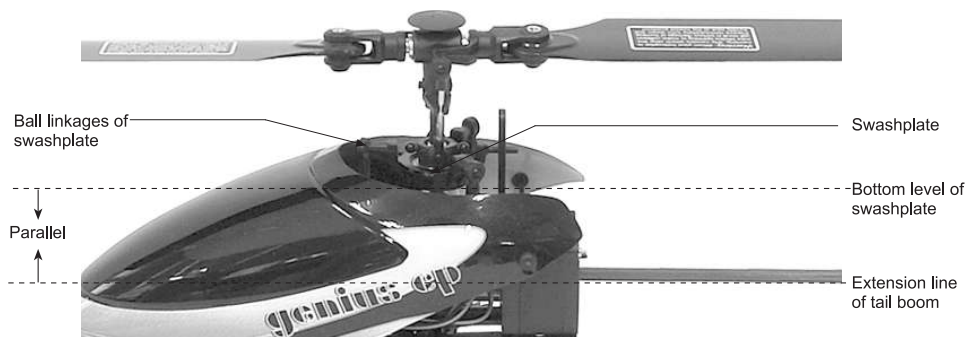
Matters needing attention: all the original equipments have been adjusted well before departure from factory. In general, it is unnecessary to make adjustment. Due to bump caused in long-distance transportation, some joint parts may be loose, even broken off. For the sake of safety, please strictly refer to the section 2.3 – "attention before flight" and check throughout your helicopter.

8.3.1 Adjustment of swashplate

Inspection of swashplate

Warning: Disconnect the power cable of main motor before adjustment for the sake of pilot's safety.

Put your helicopter in a spacious horizontal ground. Move the throttle stick and throttle trim of transmitter to the lowest position, and move the elevator trim, aileron trim and rudder trim at the neutral position, respectively. Turn on the transmitter first and then connect the power cable of helicopter. After the LED in the receiver stops flashing while mechanic beeps of servos initiation heard, the signal has been received. Then check whether the bottom level of swashplate is parallel to the longitudinal axis of the helicopter – the extension line of tail boom. Check also that the bottom level of swashplate is parallel to the lateral axis of the helicopter.



Adjustment of swashplate

Warning: Disconnect the power cable of main motor before adjustment for the sake of pilot's safety.

Servo bellcranks must be horizontal at mid throttle. Swashplate must be at center of travel at mid throttle.

If the bottom of swashplate is not in horizontal level, it can be adjusted via the following three steps:

- (1) Adjust the bellcrank of servo. Disconnect the power cable of helicopter first and then turn off transmitter. Unscrew the screw in the bellcrank of servo and take off the bellcrank. Re-turn on transmitter and re-connect the power cable of helicopter in sequence. After servos' initialization, re-mount the bellcrank of servo and Check that the swashplate is at center of travel, and then tighten the screw of bellcrank.
- (2) Adjust the ball linkage of servo. Make the swashplate parallel to the horizontal level via adjusting the length of servo ball linkage.



08

Steps of flight

8.4 Adjustment of main rotor blades

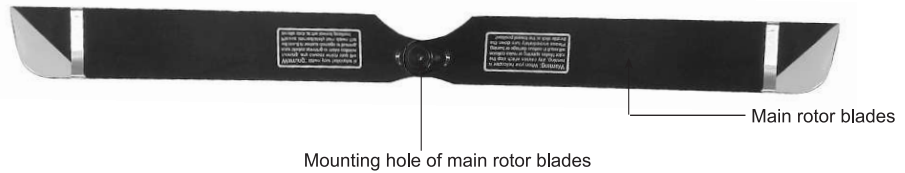
The purpose of adjustment is to make the weight and gravity center of main rotor blades equally distributing and ensure the main rotor blades are in same level during high speed spinning.

8.4.1 Color decal (tracking tape)

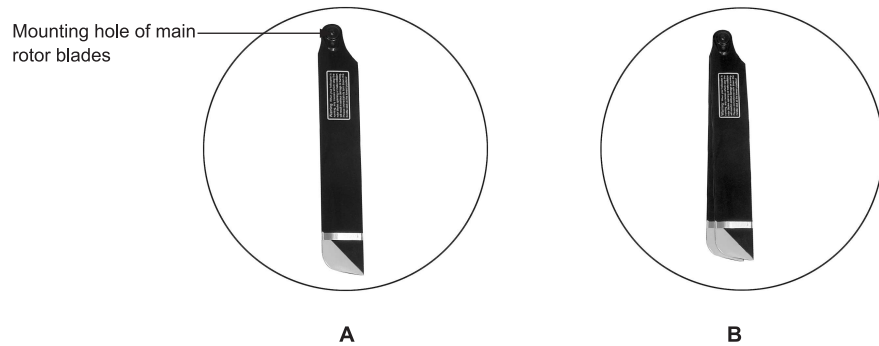
Two different colored blade tracking decals (red and blue) should be placed 6 mm away from each end of blade tip, whose purpose is to identify the position of each spinning blade in the following inspection of blade tracking.

8.4.2 Inspection and gravity center adjustment of main rotor blades

- (1) Transverse inspection and adjustment of gravity center. Use a bolt to insert the mounting hole of main rotor blades and screw the bolt cap, and then stretch the main rotor blades in line. Hang the couple of main rotor blades in the air using the bolt as a fulcrum. If the main rotor blades keep in a horizontal line, it means ok; if one end of the main rotor blades is higher than the other one, please move the high end stick to the high direction, and/ or move the low end stick to the high end until balanced.



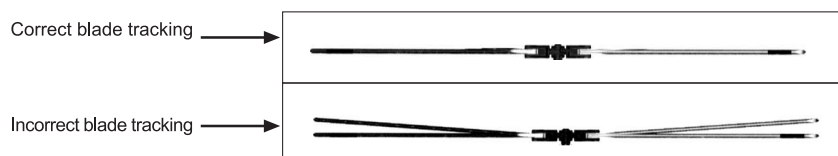
- (2) Longitudinal inspection of gravity center. Shown as below, take the mounting hole of main rotor blades as the fulcrum to vertically hang in the air. If the two main rotor blades are almost superposed, it means normal (shown as Fig. A); otherwise abnormal.



8.4.3 Tracking inspection

Note: for the sake of safety, please keep the main rotor blades of helicopter at least 3 meters away from the pilot when his inspecting the tracking problem.

Slowly push up the throttle stick of transmitter and ensure both the line of sight of pilot and the main rotor blades are in the same horizontal level. When the main rotor blades are spinning, please observe whether or not the two levels, respectively caused by the red and blue decals, are superposed in the same level. Superposition is correct; otherwise there exists tracking problem and adjustment is required.



8.4.4 Adjustment of blade tracking

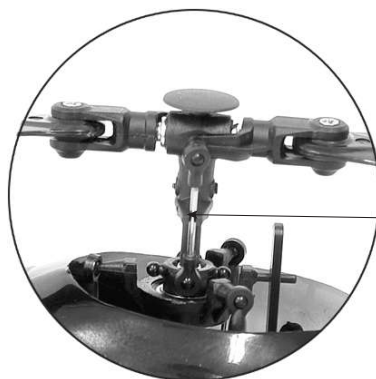
Below are the main causes for incorrect blade tracking:

- (1) The weights of two blades are unequal.
- (2) The gravity center distribution of two blades is unequal.
- (3) The lengths of ball linkages of two blades are set improperly.
- (4) When blades are too loose, blades shake due to gap, or main blade connectors distort.

When the main rotor blades appear to be unbalanced, you should adjust the ball linkage on the right side of the higher to be length or the ball linkage on the right side of the lower to be shorter.

If the main rotor blades happen to be normal at low speed; abnormal at high speed, or abnormal at low speed, normal at high speed, please check whether it is loose or distortion. If it is loose, please re-lock tightly. If it is distortion, please replace it immediately. You only by repeating precise adjustment to avoid of this appearance.

The lengths of ball linkages of main blades are required to adjust when there exist tracking blades. If the decal color of the high blade is red, please shorten the length of the ball linkage of red blade and/ or prolong the length of the ball linkage of blue blade. If the decal color of the high blade is blue, please shorten the length of ball linkage of blue blade and/ or prolong the length of ball linkage of red blade.



ball linkages of main blades



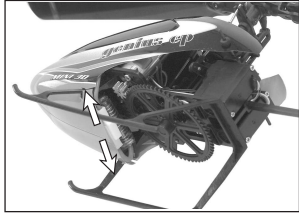
08

Steps of flight



09

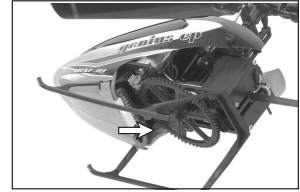
Flight over



Step 1: disconnect the power cable of helicopter.

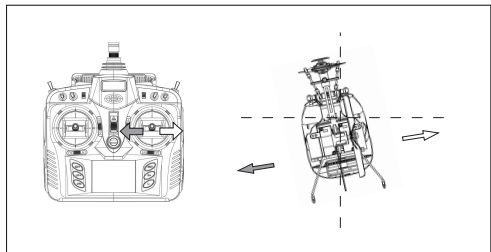


Step 2: turn off the transmitter.

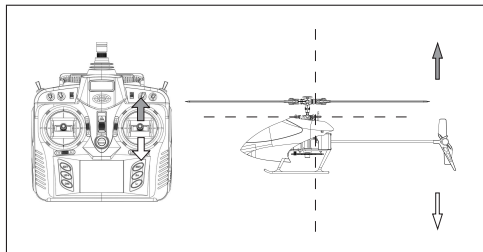


Step 3: take off the canopy and remove the battery pack.

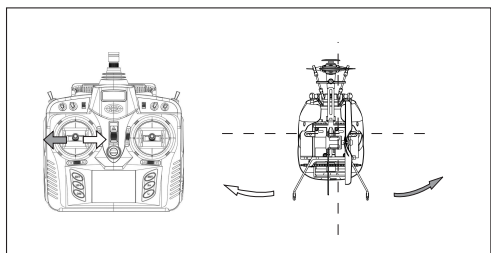
Mode 1 (throttle stick at right hand)



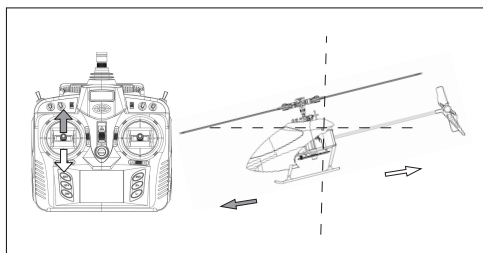
1. When moving the aileron stick left or right, the helicopter accordingly flies left or right.



2. When moving the throttle stick up or down, the helicopter accordingly flies up or down.

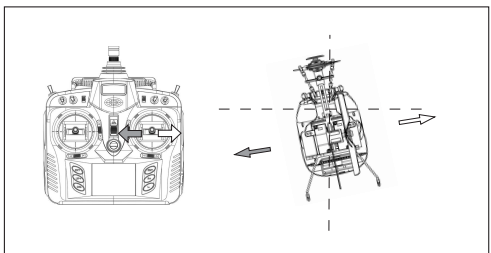


3. When moving the rudder stick left or right, the head of helicopter accordingly flies left or right.

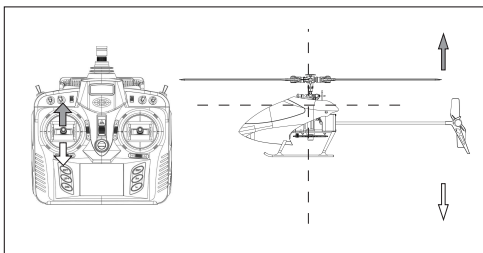


4. When moving the elevator stick up or down, the helicopter accordingly flies forward or backward.

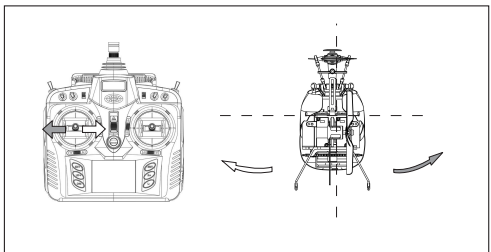
Mode 2 (throttle stick at left hand)



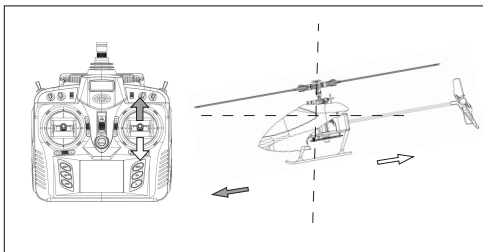
1. When moving the aileron stick left or right, the helicopter accordingly flies left or right.



2. When moving the throttle stick up or down, the helicopter accordingly flies up or down.



3. When moving the rudder stick left or right, the head of helicopter accordingly flies left or right.



4. When moving elevator stick up or down, the helicopter accordingly flies forward or backward.



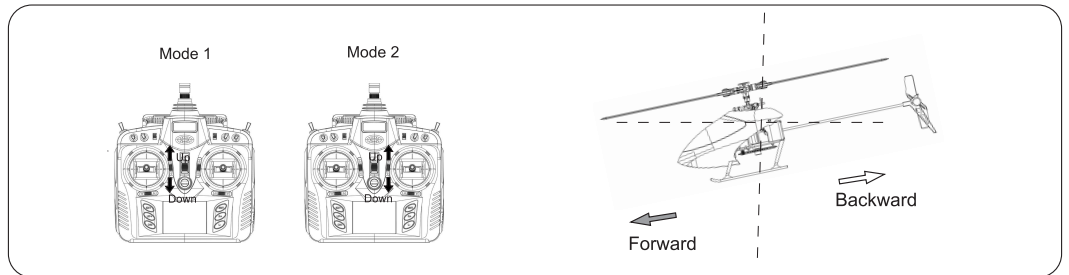
Appendix 1- flight control



Appendix 2 – trimming the flight actions

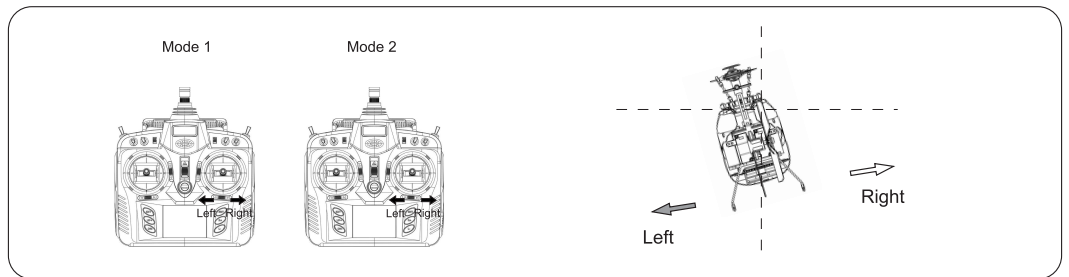
Six-axis flight mode:

1. Adjust the elevator trim



Move the elevator trim down if the helicopter flies up during takeoff; otherwise move it up.

2. Adjust the aileron trim



Move the aileron trim right if the helicopter flies left during takeoff; otherwise move it left.

1 flight practice for the beginner

1.1 Matters needing attention

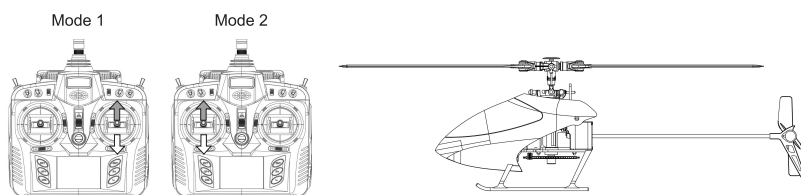
- (1) The beginners should be supervised and guided by skilled pilots when practicing.
- (2) For the sake of safety, people should keep at least 5 meters away from the helicopter during practicing.
- (3) Choose a spacious ground without people and obstacles as the flight practice field.
- (4) This is a 3D helicopter. We kindly suggest that the knowledge of flying 2D/ coaxial helicopter is preliminary before flight.

1.2 Steps

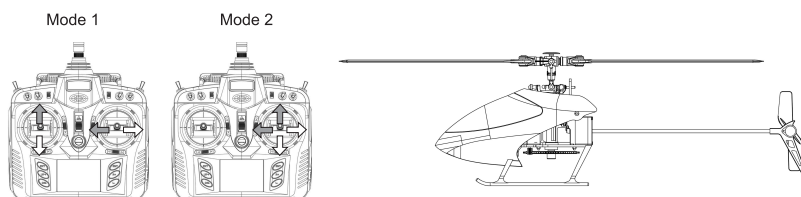
(1) Practice of throttle control - stationary flight

When helicopter taking off from the ground, slowly pull down the throttle stick and land it on gradually and stably. Repeatedly practice this step until controlling over the throttle stick with facility.

When hovering, tail rotor counteracts torque but also pushes helicopter to the left. Don't forget to counteract this effect using cyclic stick to the right and take off slightly inclined. It is important to hover vertically, stabilize helicopter at 1.5m height and then land it.

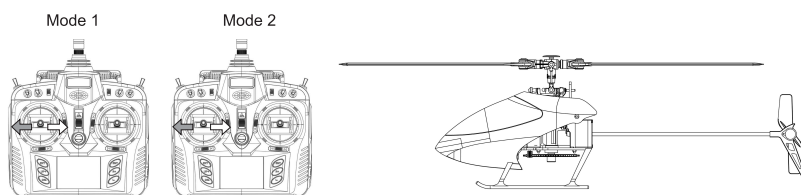


(2) Practice of aileron and elevator control



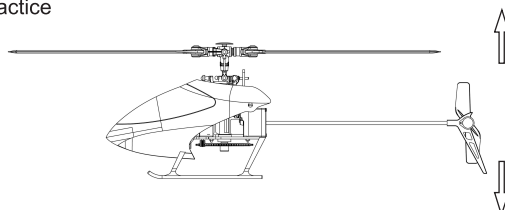
Slowly push up the throttle stick(at the same time, control over the elevator stick and aileron stick)to purposely fly your helicopter forward, backward, left and right; then reversely control over the aileron stick and elevator stick to fly your helicopter back to the takeoff point. Repeatedly practice this step until controlling with facility.

(3) Practice of rudder control



Slowly move the throttle stick, at the same time ,control over the rudder stick to change the head of your helicopter left and right, respectively; reversely control over the relative sticks to restore your helicopter. Repeatedly practice this step until controlling with facility.

(4) Frog-hopping practice



Repeatedly push up and pull down the throttle stick of transmitter to vertically take off and land your helicopter. It is called "frog-hopping practice" because the whole practice process is like a frog jumping



Appendix 3 – flight practice

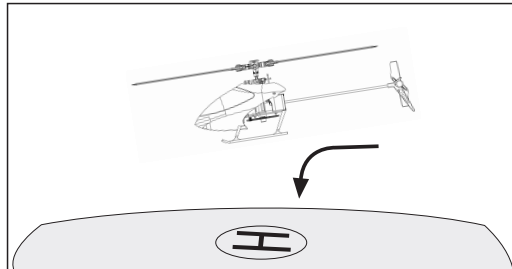


Appendix 3 – flight practice

2 Advanced practice

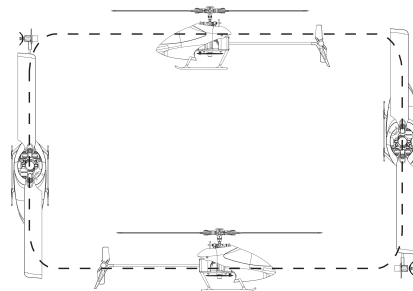
2.1 practice of takeoff and landing

Select a patch of fixing ground as the flight platform to purposely take off and land your helicopter in a set range. The process of takeoff and landing should be kept stable and vertical as best as possible.



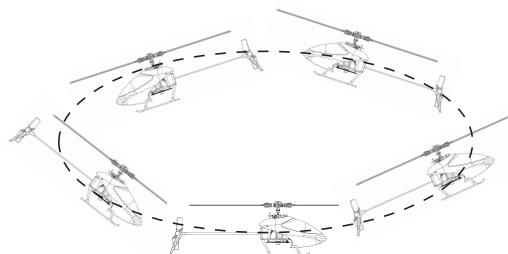
2.2 practice of square flight

Take the takeoff point as the center to draw a square whose side length is about 2 meters. Fly your helicopter along the 4 sides and keep the flight height parallel to the line of sight. Make 90° rotate at each corner of the quadrangle to adjust the flight direction. Train you the skill of straight flight and the adjustment of flight courses at right angle in flight.



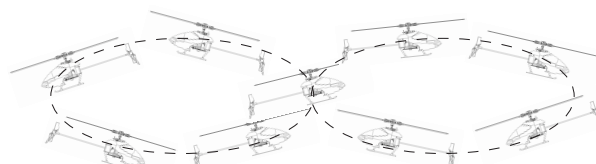
2.3 Practice of circular flight

After you master the operations with facility from step 2.1 to 2.2, please draw a proper size of circle in the ground. Then fly your helicopter along the circle track until you are skillful. This maneuver is more complex than first impressions may suggest because you have to use all orientations.



2.4 Figure eight practice

If you are skillful in the previous practices, you can try the figure eight flights shown as below.

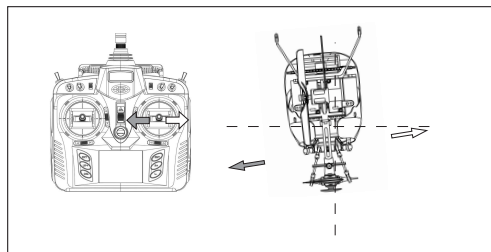


2.5 Aerobatic flight

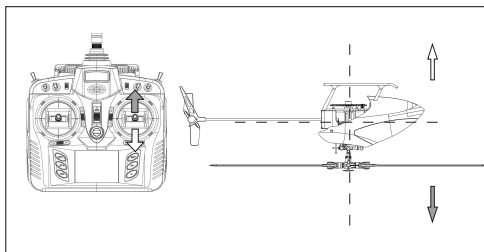
Your Genius CP can perform such breathtaking and exciting aerobatic flight as dive's and 3D inverted.

Inverted flight

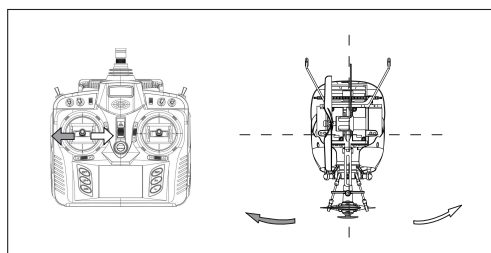
Mode 1 (throttle stick at right hand)



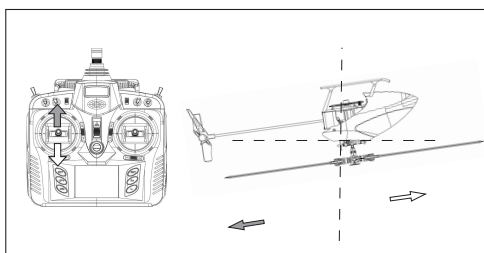
1. When moving the aileron stick left or right, simultaneously your helicopter flies left or right, respectively.



2. When moving the throttle stick up or down, simultaneously your helicopter flies up or down, respectively.

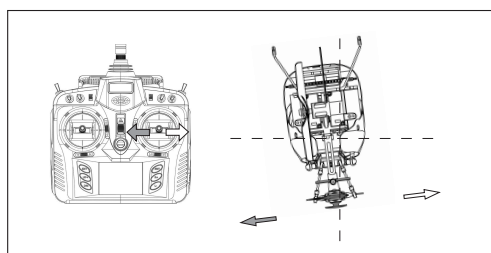


3. When moving the rudder stick left or right, your helicopter simultaneously flies right or left, respectively.

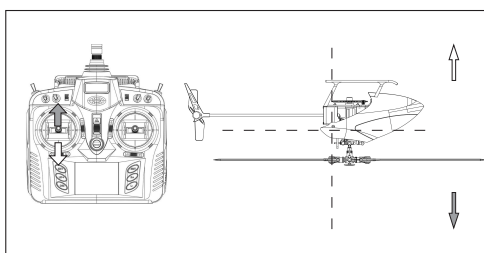


4. When moving the rudder stick up or down, your helicopter simultaneously flies backward or forward, respectively.

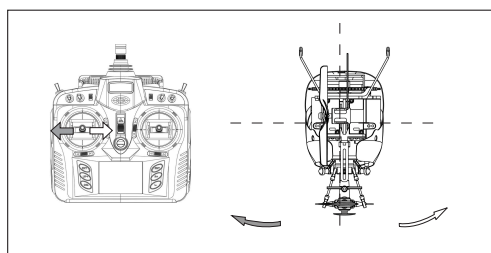
Mode 2 (throttle stick at left hand)



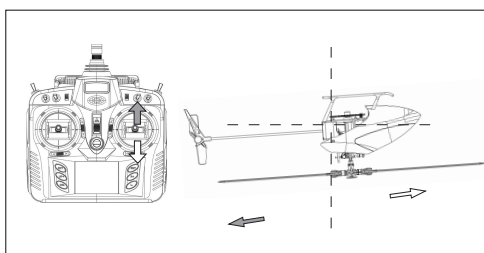
1. When moving the aileron stick left or right, your helicopter simultaneously flies left or right, respectively.



2. When moving the throttle stick up or down, your helicopter simultaneously flies down or up, respectively.



3. When moving the rudder stick left or right, the head of your helicopter simultaneously flies right or left, respectively.



4. When moving elevator stick up or down, your helicopter simultaneously flies backward or forward, respectively.



Appendix 3 – flight practice