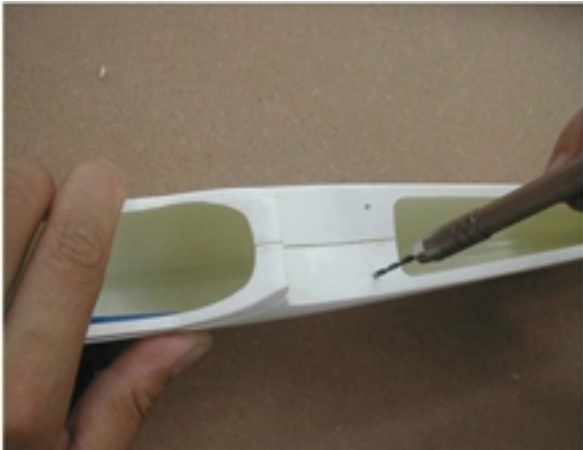


Step 1: Intall the fuselage



- 1a. Make a hole with diameter (4mm)
- 1b. Paste the provided Main Wing Mount (shown on the above photo) on the fuselage by using Glue.

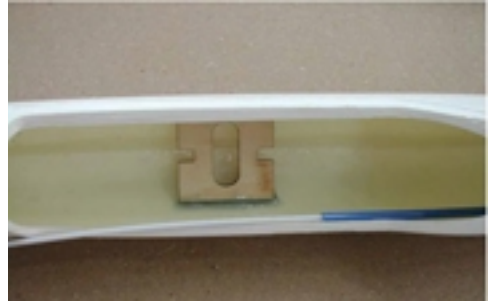


2. Install the Tail Wing Mount (shown on the above photo) by using glue.



- 3a. Install the metal clevis on the end of white push rod.
- 3b. Put the white push rod across though a hole at end of fuselage (shown on photo)

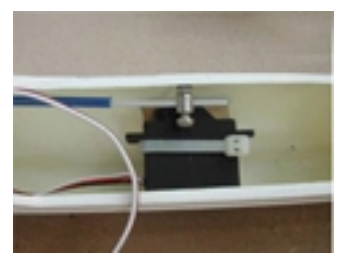
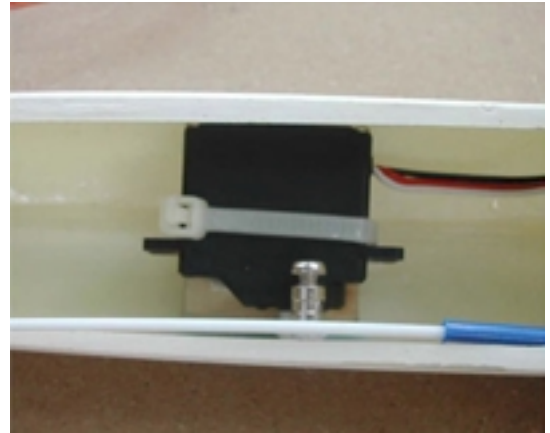




4. Install Servo of elevator:

4a. install the wooden servo mount in the fuselage by glue as photo on the right top side. The location of the servo mount is depended on the size of battery & receiver. It is better if the mount near front of fuselage.

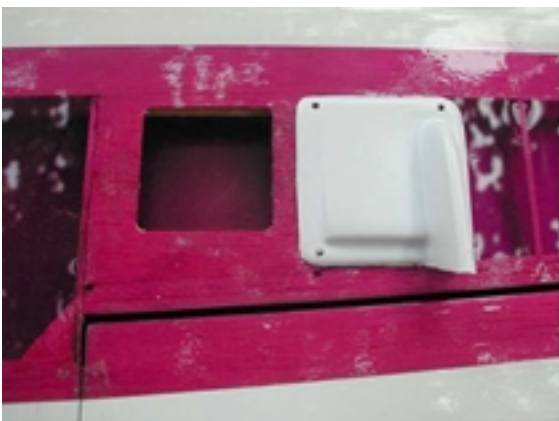
4b. install the 9-19 grams servo on the servo mount by using rubber band.



5a. Install a servo born on the bottom of the tail wing elevator by using glue and screws (3mm).

5b. Connect the metal clevises fo push rod to the servo born.

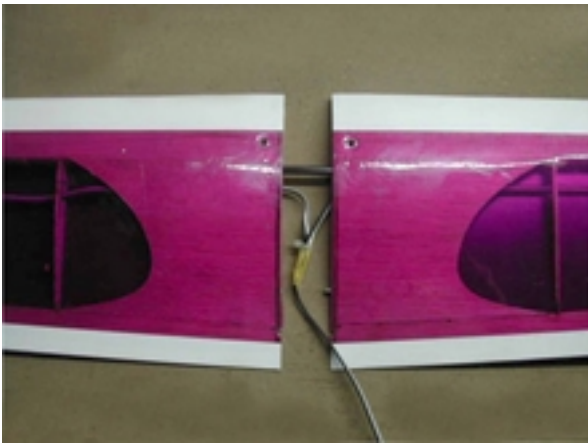
Step 2: Install Main Wing:



1. Tailor the white servo covers and paste two 9g servos on the bottom of servo cover by using double-side paste.



- 2a. Put two extension wires for two servos across the 2 sides of main wing.
- 2b. Fix the servo covers on the main wing by using 2×10 screws.
- 2c. Connect servos and servo horns by using push wires.



3. Two sides of main wing are constructed by using carbon rod. The middle of main wing is covered by a transparent plastic band.



***remark:** A hole must be made in order to release the heat energy provided by motor.

Guideling for Flying:

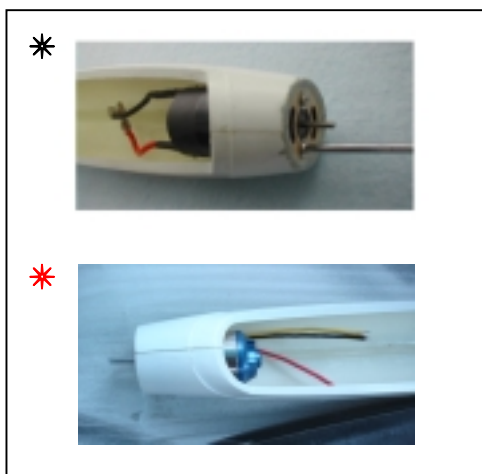
The C.G. of airplane is located at 53-60mm (2.1-2.4"). The C.G. is depended on the flying behaviour.

-Install the motor (*for Ptero-X only)



Paste the wooden motor mount on the front of fuselage as the Photo by using mixing glue. The motor can install it by using 2 pcs of screws after the motor mount is fixed.

*If the weight of upgraded motor is higher, a little front parts of fuselage could be cut in order to tuning the C.G.



*Brushed motor version
*Brushless motor version

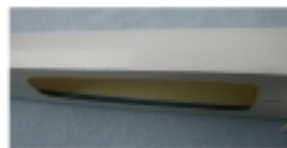
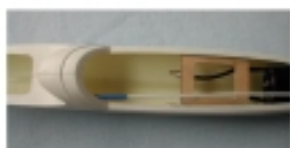
-Install the servo mount



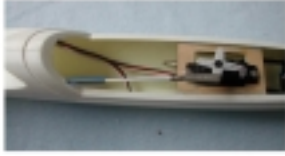
After installed the motor, the servo mount can be installed in the fuselage as the provided by using glue.

*Keep enough space for installing the battery

-Connect the servo rod into servo.



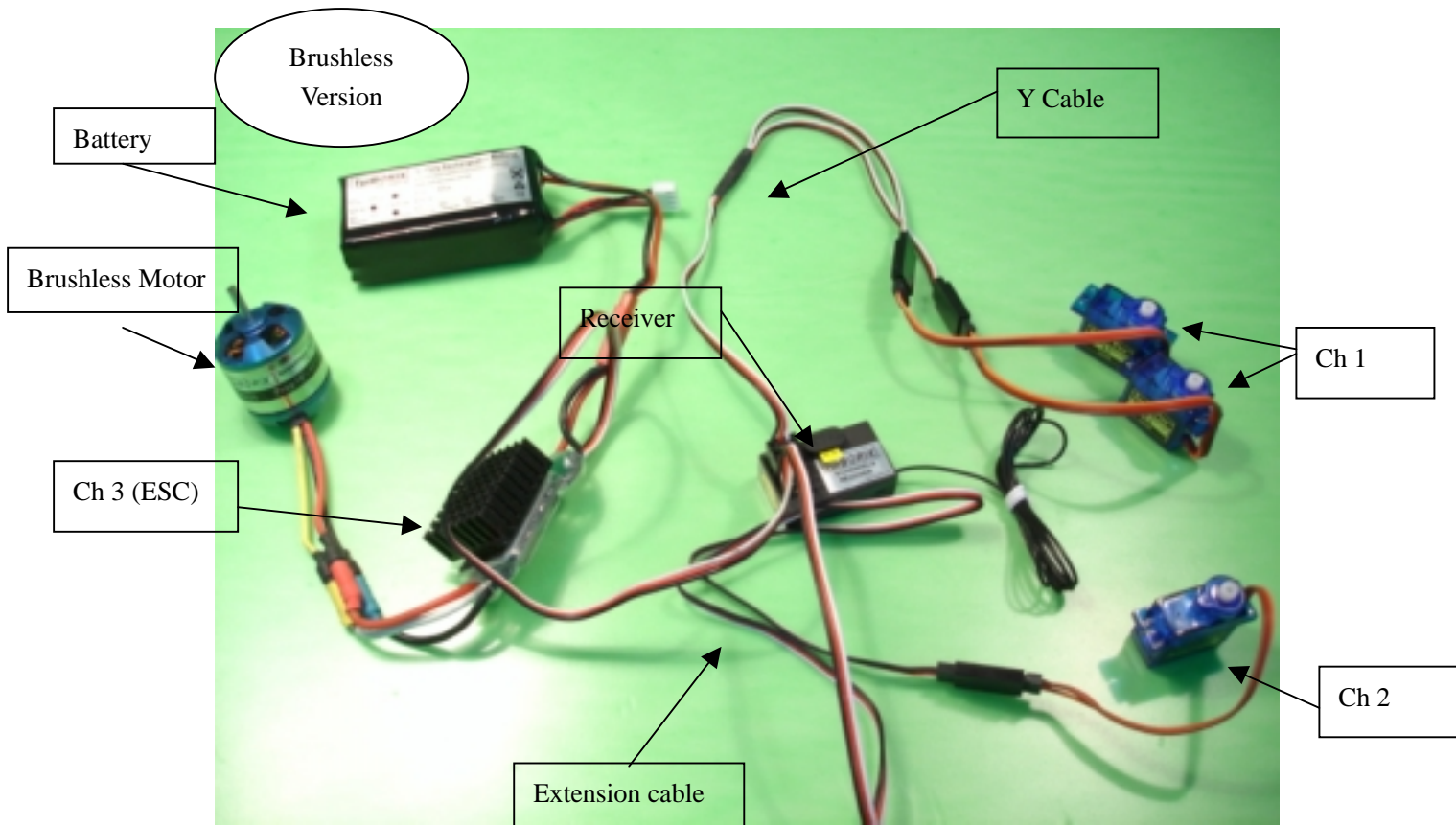
Paste the blue parts of push rod inside the fuselage by using Glue. Install the servo on the servo mount. Connect the rod into the servo arm by using clevis.



*Remarks: Position of the servo could be adjusted in order to match the expected C.G. and the space inside of fuselage.

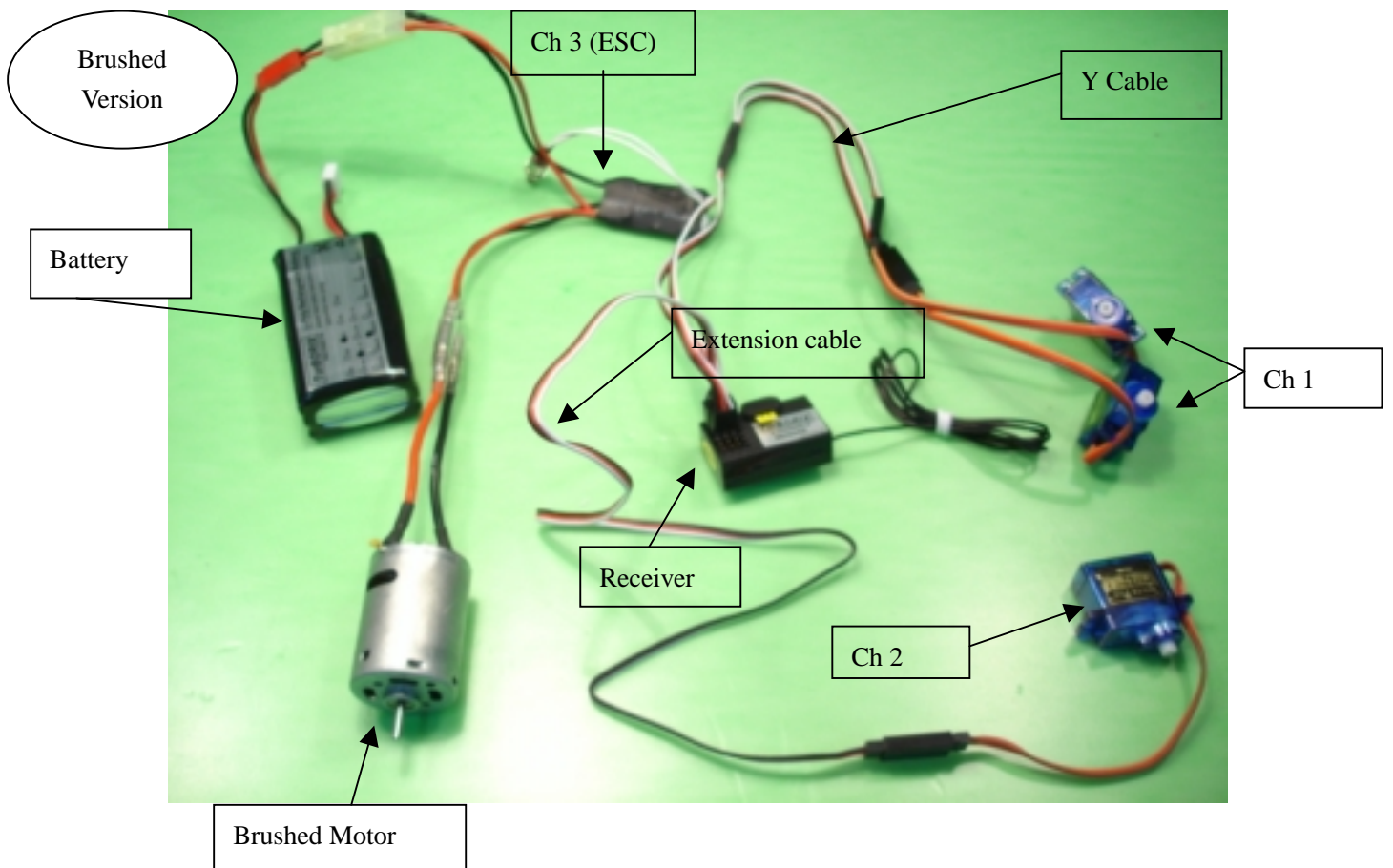
-Create a hole in order to release the heat power. (for Petro-X only)

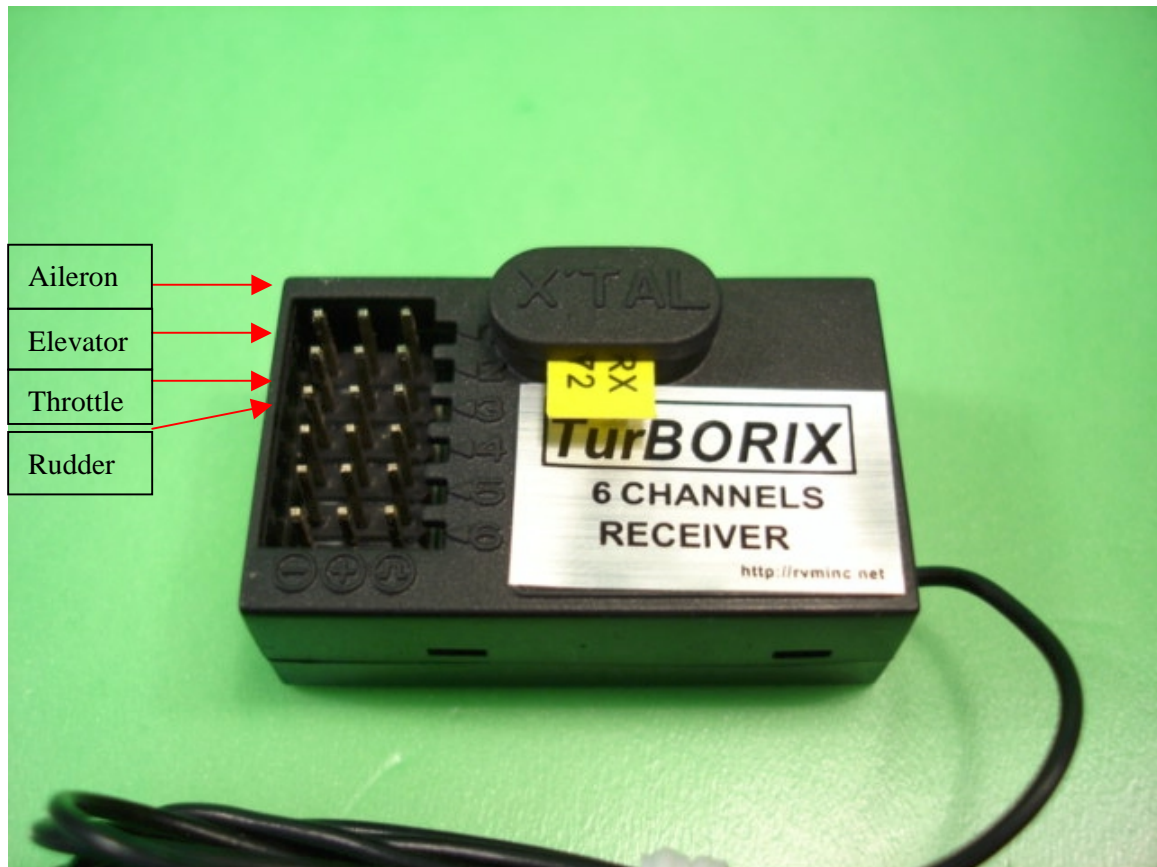




Remark:

- Ch1 is connected to 2 Servo and Y Cable
- Ch2 is connected to 1 Servo and Extension Wire
- Ch3 is connected to Speed Controller
- Ch4 is connected to 1 Servo and Extension Wire





Channel 1: Aileron Action

Control the right-and-left lean of the aircraft. To level the slantwise aircraft, you must make the control rod act in reverse direction. Otherwise, it will make the aircraft overturn.

Channel 2: Elevator Action

Control the aircraft to descend or ascend. Pulling the control rod down will drive up the head, and the aeroplane will ascend. Boosting it up will make the head downhill, and the aeroplane will descend.

Channel 3: Throttle Operation

Control the power. Pulling the control rod down will minish down the power group, and boosting the control rod up will increase the power group.

Channel 4: Rudder Action

Control the swerve of the aircraft. Turning the control rod to left will make the head of the aircraft turn left, and turning it to right will make the head turn right.

Channel 5: Landing Gear/Gyro Action

This channel is for switch variable. It is a switch to control landing gear when used for airplane state, but it will be a switch for gyroscope when used for helicopter.

Channel 6: Screw-pitch/Flaperon Action

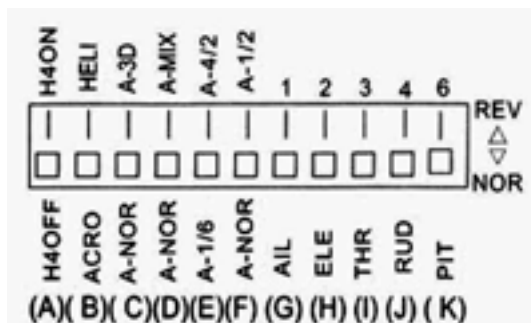
The angle adjusting of the flaperon is for the airplane state, and the adjusting of the main screw-pitch is for helicopter state.

A - Function Introduction (6 channels)

This item has functions of both airplane and helicopter, and emphasizes more on airplane.

The main functions are as follows:

- (1) At airplane state, channel 1, 2, 4, 6 is a switch for dual rate (D/R) variable: from $\pm 100\%$ to $\pm 125\%$.
- (2) At airplane state, channel 1 & 6 mixture function: Flaperon.
- (3) At airplane state, channel 4 & 2 mixture function: V-tail.
- (4) At airplane state, channel 1 & 2 mixture function: Triangle wing (ELEVON).
- (5) At airplane state, channel 3 mixture function is to channel 4 & channel 6.
- (6) At airplane state, channel 3 mixture function is only to channel 6.
- (7) Channel 1, 2, 3, 4, 6 reverse switch.
- (8) Normal mode can be used in car model and boat model.
- (9) Sound-and-light hint notification for low power: when the battery voltage is below 8.8V, the power indicator light 1S/1S glitters and buzzes. And when it is below 8.3V, the power indicator light 0.5S/1S glitters and buzzes at the same time.



Switch Function Instruction

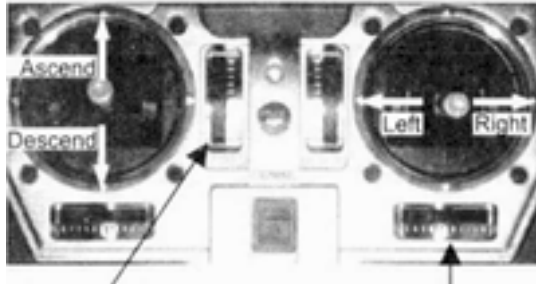
- (A) At helicopter state, pulling A down to put off mixture function of channel 3 to channel 4, when pulling it up it will comeback the function. But the mixture function to channel 6 is stable, which is irrelevant with this switch.**
- (B) Pulling B down is airplane state and pulling it up is helicopter state.
- (C) At airplane state, pulling 1, 2, 4, 6 down the dual rate is $\pm 100\%$; when pulling them up , the dual rate will be $\pm 125\%$.
- (D) At airplane state, pulling D down make switches have no mixture function, but pulling it up will cause them have the function.
- (E) At airplane state, when D is pulled up, pulling E down cause channel 1 & 6 mixture function (Flaperon); pulling E up will cause channel 2 & 4 mixture function (V-TAIL).
- (F) At airplane state, when D is pulled up, pulling F up it works as the mixture function of channel 1 & 2 (Triangle wing ELEVON), and D function doesn't work at that moment.
- (G) Channel 1 is reverse switch for aileron. Pulling G down is to make it in normal mode, and pulling it up is to make it act in reverse.
- (H) Channel 2 is reverse switch for elevator. Pulling H down is to make it in normal mode, and pulling it up is to make it act in reverse.
- (I) Channel 3 is reverse switch for power. Pulling I down is to make it in normal mode, and pulling it up is to make it act in reverse.
- ((J) Channel 4 is reverse switch for rudder, pulling J down is to make it in normal mode, and pulling it up is to make it act in reverse.**
- (K) Channel 6 is reverse switch for screw-pitch/flaperon. Pulling K down is to make it in normal mode, and pulling it up is to make it act in reverse.**

Operation of Transmitter

Functions of Control Rods

MODEL 1

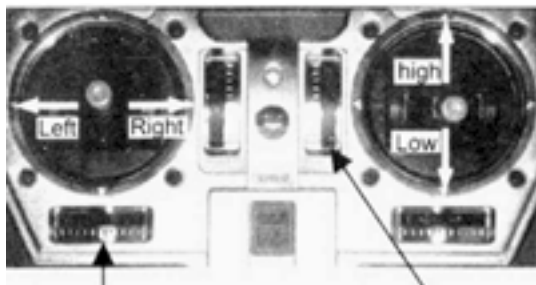
(Channel 2:Elevator) (Channel 1:Aileron)



(Elevator TRIM)

(Aileron TRIM)

(Channel 4:Elevator) (Channel 3:Power)

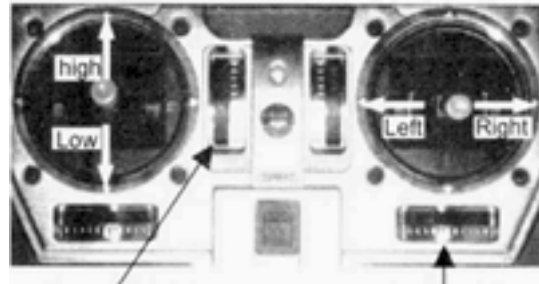


(Rudder TRIM)

(Power TRIM)

MODEL 2

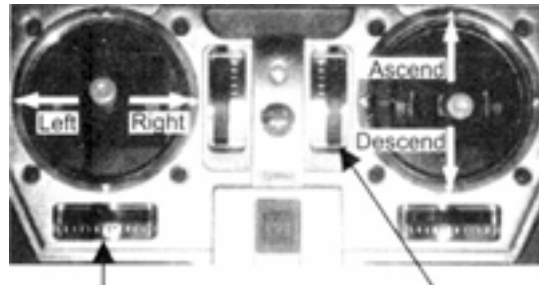
(Channel 3:Throttle) (Channel 1: Aileron)



(Power TRIM)

(Aileron TRIM)

(Channel 4:Rudder) (Channel 2:Elevator)



(Rudder TRIM)

(Elevator TRIM)

OPERATION AND ADJUSTMENT

About Lithium Polymer Battery

Using Lithium Polymer battery to fly your lovely helicopter is your best choice. The Li-Po battery will improve flight performance and flight time, at similar or even less weight than Ni-Mh battery. Anyhow, with 3-cell 11.1V 1400mAh Li-Po battery, your helicopter will do the best aerobatic performance. But one thing that Li-Po batteries are significantly more volatile than the alkaline, Ni-Cd or Ni-Mh batteries used in RC applications. So you should be careful when you use Li-Po battery.

Note: When charging Li-Po batteries (3-Cell, 11.1V), charging current should never exceed 0.5A and charging voltage should never exceed 12.6V, and when you charge your Li-Po battery, please notice the description in the paster which was stuck in the front of the Li-Po charger, when it display red it is charging; and when it appear green it has been charged completely



Enjoy you fly!!

