



## Build the CAP 232 and EDGE 540



Web site: [www.hobby-loong.com](http://www.hobby-loong.com)

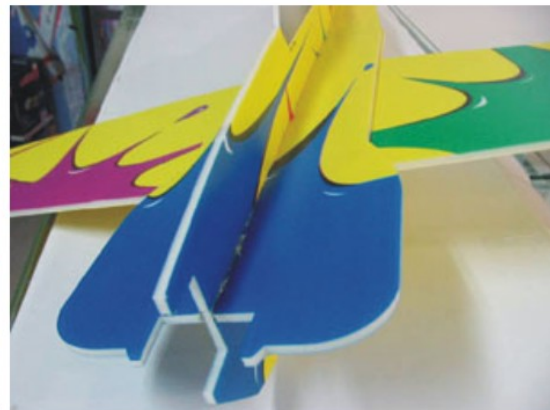
**I. Tools:** Hobby knife, cross screwdriver, foam glue, adhesive tape, double-sided glue tape.

**II. Cut the rudder, ailerons, and elevator halves free from the foam sheet with a sharp hobby knife, and trim the bur.**



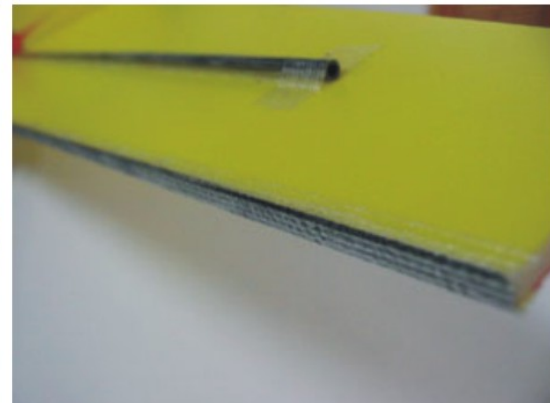
**III. Assemble the fuselage and the wings.**

- i. Lay some foam glue on the wing's axial cord and insert it to the vertical fuselage. Make sure the left wing and the right wing are quite symmetrical.
- ii. Glue the left and right horizontal fuselage halves to the vertical fuselage axial cord. Make sure they're perpendicular to the vertical fuselage.
- iii. Adjust the positions of all parts before the glue dry.



**IV. Strengthen the wings by using carbon fiber tubes.**

- i. Install the round carbon fiber tube through the small hole between the wing and the vertical fuselage. Make sure that it is perpendicular to the vertical fuselage and symmetrical on both wing halves.
- ii. Stick it to the wing by using adhesive tape. Make sure it can not glide.
- iii. Halve the flat carbon fiber tube and stick them to the wing leading edge. For EDGE540, it's unnecessary to halve the carbon fiber tube, but directly stick the whole to the wing leading edge.



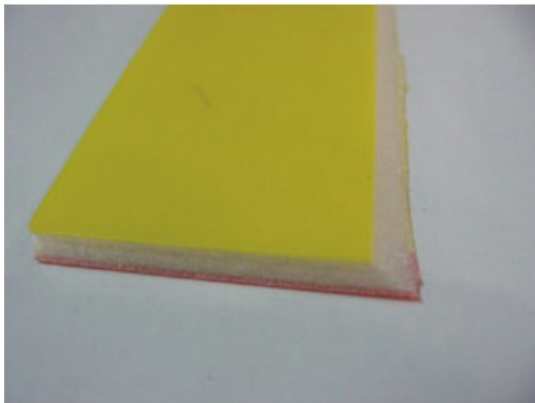
## V. Assemble the ailerons

- i. Slice at a  $45^\circ$  angle from the aileron bottom on its join area with the wing, so that the ailerons move freely up and down.
- ii. Stick the ailerons with the wing by using adhesive tape.

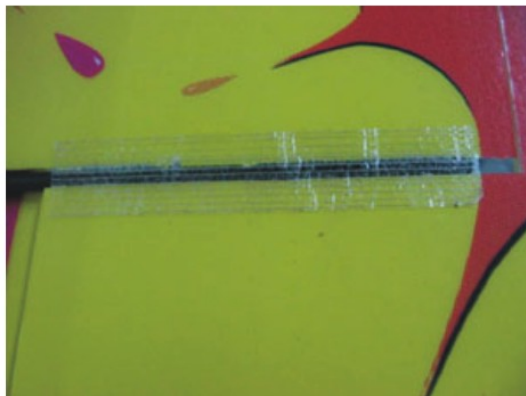


## VI. Assemble the Horizontal tail.

- i. Slice at a  $45^\circ$  angle at the bottom of the stabilizer trailing edge, and glue the stabilizer into the position on the bottom of the horizontal fuselage halves by using foam glue.
- ii. Glue one of the elevator halves to one end of the shorter carbon fiber tube by using foam glue. Please save a space for the other elevator halves and make sure it will be symmetrical on the bottom of the horizontal fuselage halves.



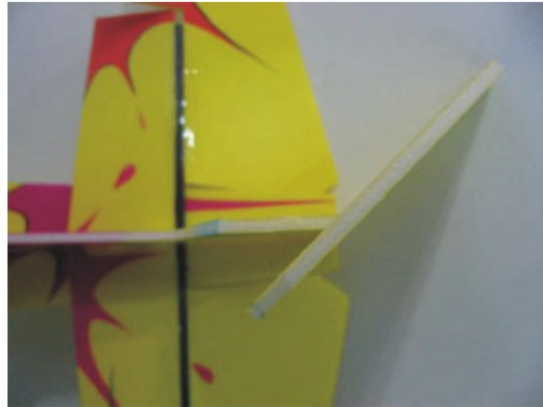
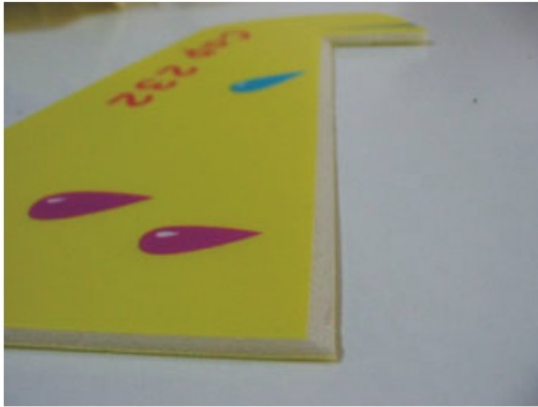
- iii. Install the carbon fiber tube through the small hole on the trailing edge of the stabilizer, and stick the other elevator halves to the other end of the short carbon fiber tube. Make sure the two elevator halves are quite symmetrical.
- iv. When the foam glue is dry, stick the stabilizer and the elevator halves together by using adhesive tape. Make sure that the elevators can move  $45^\circ$  up and down.





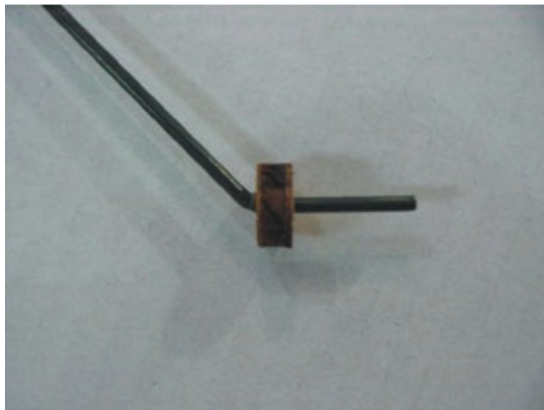
### VII. Assemble the Vertical tail.

- i. Slice the rudder at a 45° angle where it joins to the vertical fin..
- ii. Glue the rudder to the trailing edge of the vertical fin by using adhesive tape. Make sure that the rudders can move 45° left and right.



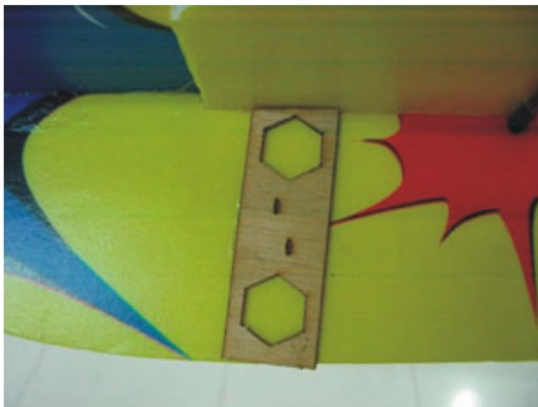
### VIII. Assemble the front landing gear

- i. Slide and glue the wheel wood collars onto the axles
  - ii. Slide the wheels onto the axle right after the wood collars, slide another wheel collar outside.
- Secure the wheel collar with a drop of glue. Make sure the wheel can roll freely.



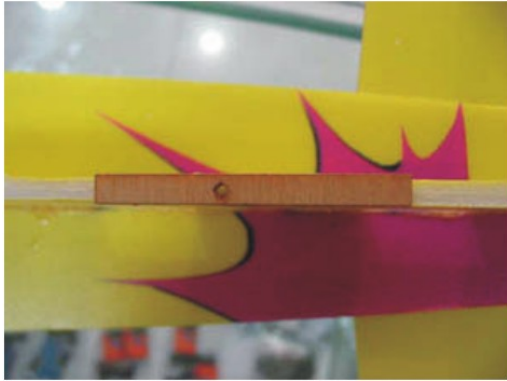
- iii. Install and glue two pieces of landing gear retaining plywood under both sides of wings symmetrically.

- iv. Fold the plywood using as the landing gear steel wire supports. Glue the elliptical plywood upon them as retainers. Perforate the wheel wires through the landing gear retaining plywood, sustaining the elliptical retainers. Use foam glue to secure the parts.



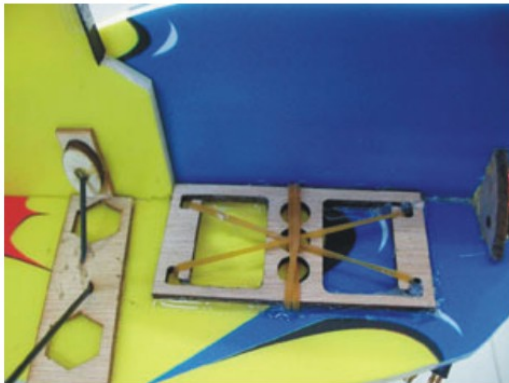
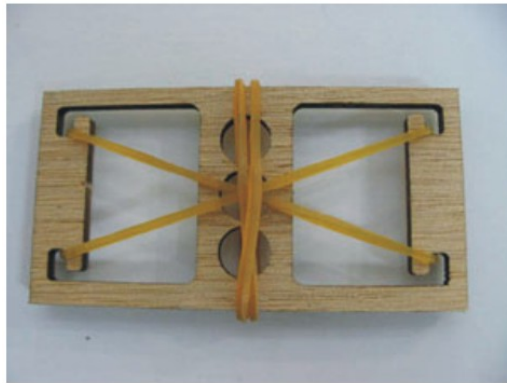
#### **IX. Assemble the rear landing gear**

- i. Glue the rear landing gear retaining plywood below the servo hole as shown in the picture.
- ii. Perforate the rear landing gear through the retaining plywood and secure it with the adhesive tape.



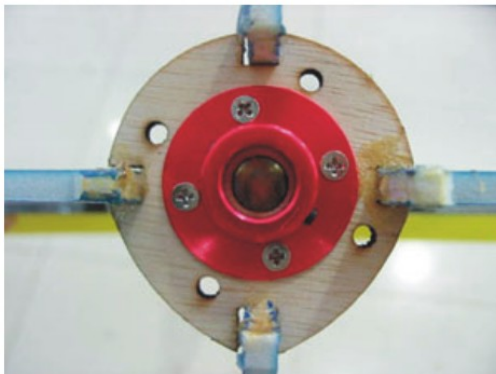
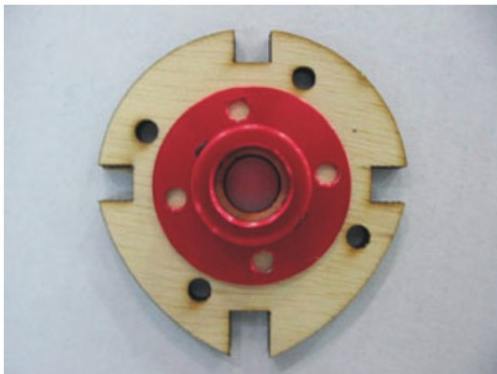
#### **X. Mount the battery holder**

- i. Twist the elastic around the battery holder as the picture shows.
- ii. Glue the battery holder to the position (please refer to the below demonstration.) by using strong glue. (Foam glue might not be strong enough)



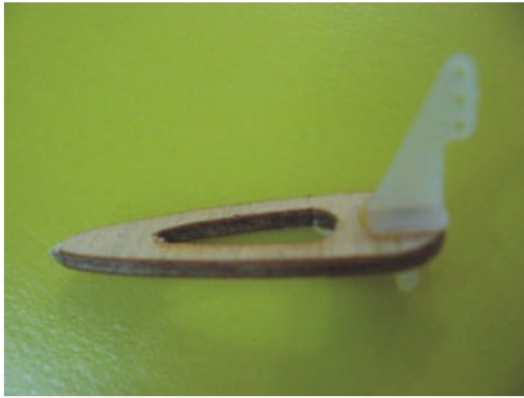
#### **XI. Setup the firewall and motor mount**

- i. Demount the motor mount from the motor and screw it to the plywood firewall. Make sure that the motor mount center is centered on the firewall center hole.
- ii. Lay some foam glue on the front of the fuselage. Then block the firewall assemble over the position as shown in the picture. Secure it with more foam glue and stress till the glue dry.

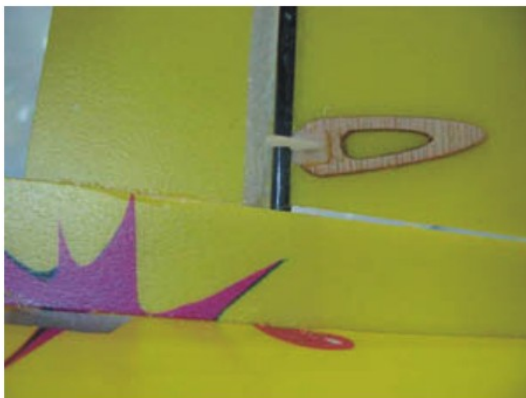
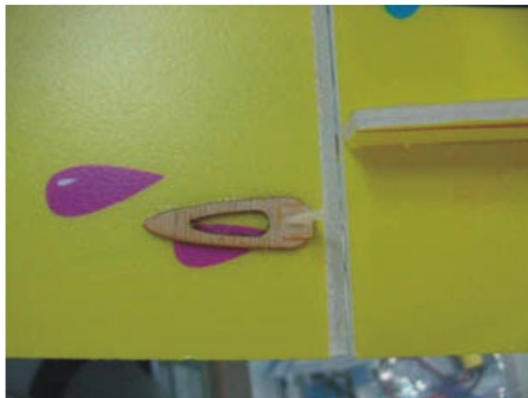


## XII. Mount the rod support sets

- i. Insert the rod supports to the retaining plywood. The pushrod hole should be outward.
- ii. Aileron rod support sets. Lay some foam glue on the bottom of the retaining plywood and stick them perpendicularly to the ailerons in the position as shown in the picture.



- iii. Mount the rudder rod support set the same way. Mind the position of the rudder servo.
- iv. Elevator rod support set. It should be mounted to the opposite side of the rudder rod support set. Take the position of the elevator servo into consideration.



## XIII. Mount the motor

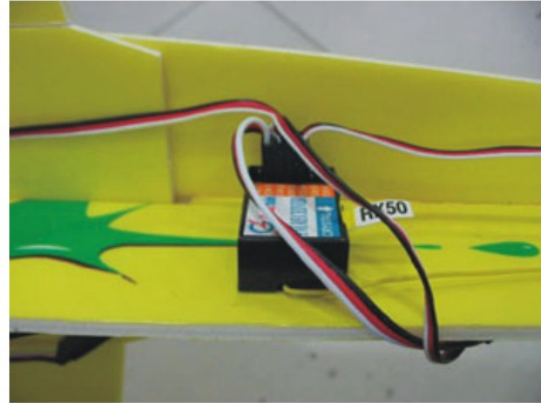
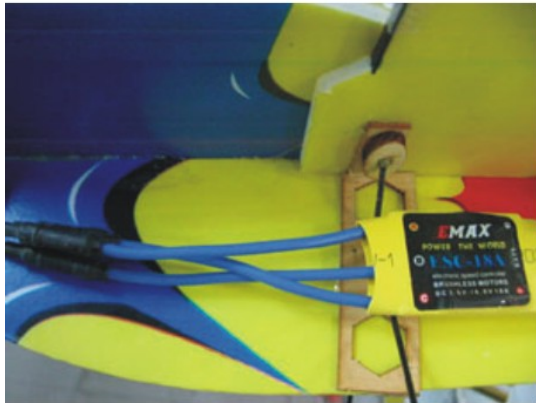
- i. Insert the shaft bearing set into the hole of the motor mount, secure the motor with screws.
- ii. Install the prop adapter and the motor onto the motor shaft.





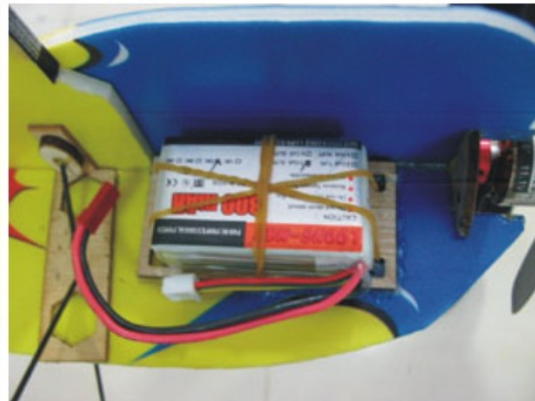
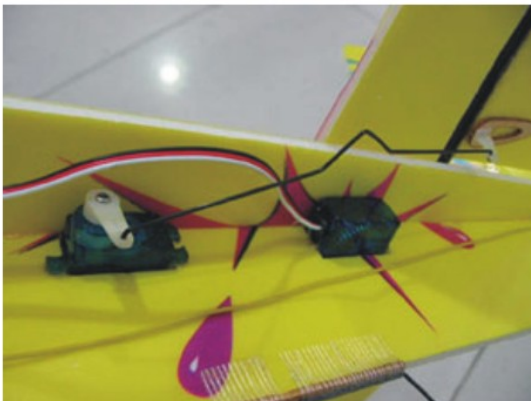
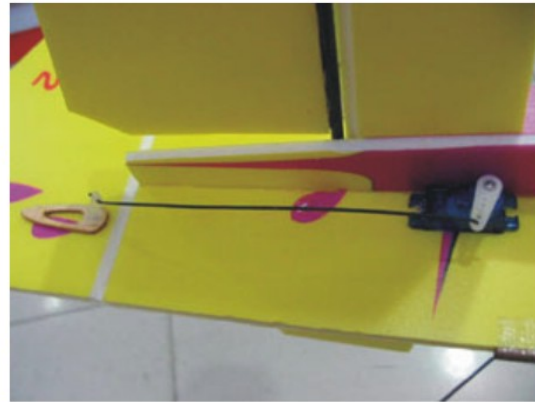
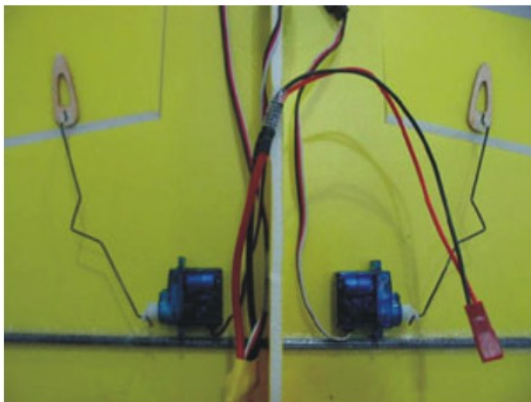
#### XIV. Setup the ESC and the receiver

- i. Connect the ESC to the motor, fix the ESC on the right position, and secure it with adhesive tape.
- ii. Plug the ESC signal wire to the CH3 of the receiver. Use the wire as a guide and mount the receiver to the bottom (opposite side to the battery holder) with double-sided foam glue tape.



#### XV. Mount the servos

- i. Aileron servos. Connect the two shorter pushrods to the aileron servo arms. Then stick the servos to the right position with double-sided foam tape. Adjust the length and curve of the pushrods evenly according to your experience. Make sure that the aileron motion can be perfectly conducted.
- ii. Mount the rudder and elevator servos the same way.
- iii. Connect the two aileron servos by using a Y extension; plug the extension connector into the CH1 of the receiver. Plug the signal wire of the rudder servo into the CH4, and the elevator servo to the CH2.
- iv. Adjust all the wires and extensions. Secure them to the fuselage with adhesive tape so as to reduce the air flow resistance.



# Complete!



# HAVE FUN!