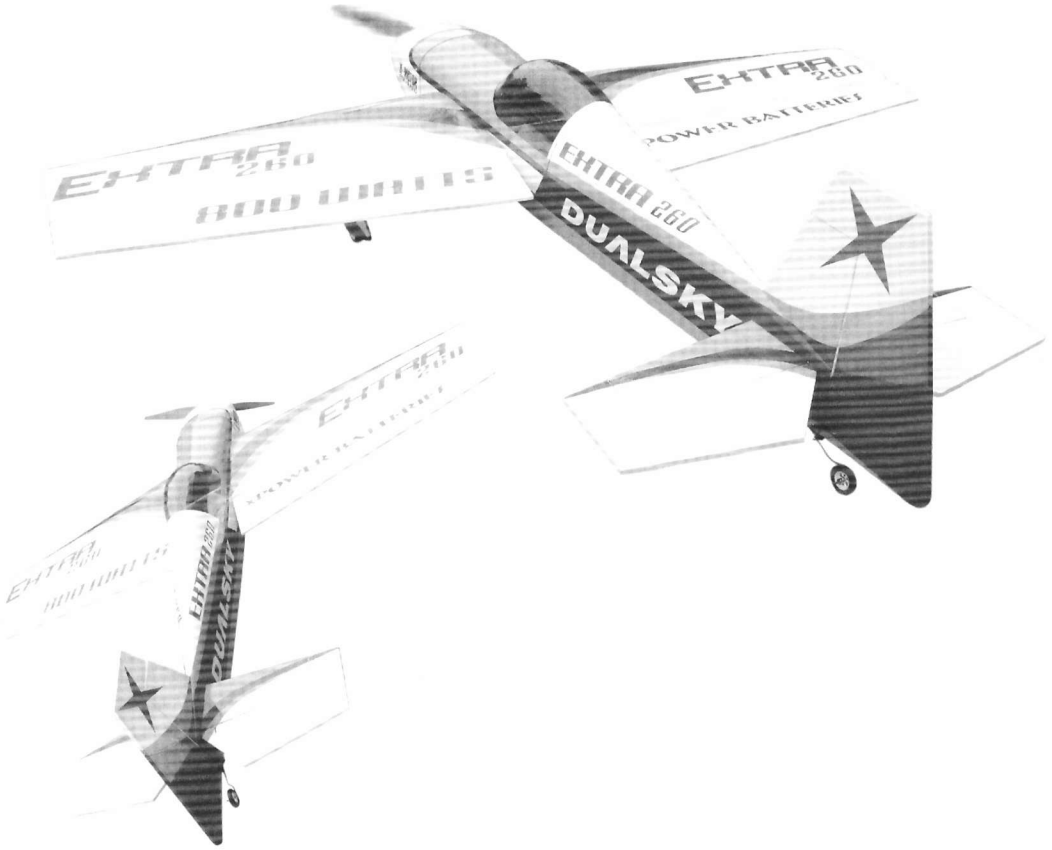
Electric powered

EXTRA260-40EP

ALMOST-READY-TO-FLY



Assembly Manual

Congratulations on your purchasing of this excellent almost-ready-to-fly R/C model! This ARF adopts the latest 3D design features and emphasizes high performance, light weight and fun. The plane is designed by professional engineers and built by skilled craftsmen. Many of the parts are already pre-installed for you!

Cautions: This R/C model is not a toy!

1. The RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly it only in open area, following all instructions including your Radio and Engine.
2. As this product is designed for high performance, incorrect installation would affect the flying performance. Please ask for instructions from an experienced modeler if you couldn't assemble it by yourself.
3. Because the package contains some small parts, please keep the children away while assembling them.
4. For safety reasons, please consider every possible accident when operating this model airplane and follow your club/country rules.
5. This model is designed for **450-700watt class** Power System, please use this recommended electric motor.
6. Always keep this manual, which will be helpful during assembly.

Features:

- Light weight construction
- High structural stre ngth
- Super quality
- Easy installation
- Complete accessories
- High performance hardware including:Carbon fibre wing tube
  Carbon fibre control horn
- PVC canopy assembly
- Latest structure
- Two pieces of wings
- Excellent aerobatics and 3D performance

EXTRA260-40EP Specifications

Wing Span: 54 in (1370mm)
Length: 51.8 in (1315mm)
Wing Area: 45.5sq dm
Weight: 65-70 oz (2000g)

Recommended

- JR systems
- JR 9X or JR 9XII
- JR PCM 10X
- Futaba systems
- Futaba 9CHPS
- 12ZAP
- 14MZA

Additional Required Equipment Radio Equipment

- 4-channel radio system(minimum)
- 4 mini/standard servos

Recommended Power System:

Brushless ----------DUALSKY XM4250CA-7
Speed Contr. --------- DUALSKY XC6048BA
Battery----------DUALSKY XPOWER XP33004GT 25C
Propeller----------APC 15x6E 3D

Other Items Needed (not included in the kit)

- 6" servo Extension for Mini Servos
- 24" servo Extension*1
- 2" Spinner
- Long servo Arm(single)*3
- Long rudder servo Arm(dual)*1

Additional Required tools and adhesives Tools

- Adjustable wrench (small)
- 4-40 Tap
- Canopy scissors
- Drill (drill press preferred)
- Drill bit: 1mm-6mm set
- Drum sander
- Cut off wheel
- Flat blade screwdriver w/short handle
- Hex wrench
- Hobby knife
- Masking tape
- Philips screwdriver (small)
- Razor saw
- Scissors
- Square
- Syringes
- Tap handle
- Toothpicks
- Velcro straps

Adhesives

- 5-minute epoxy
- 30-minute epoxy
- Medium CA Glue
- Thread lock

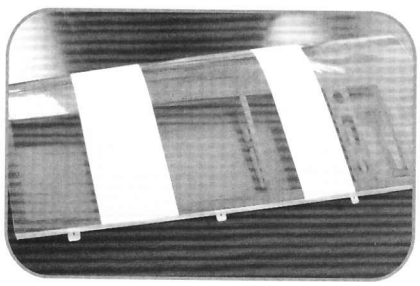
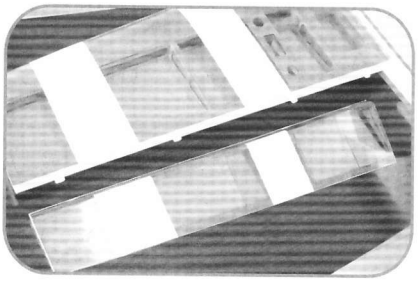
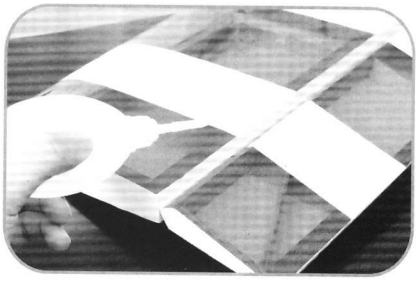
Other Required Items

- Epoxy brushes
- Felt-tipped pen or pencil
- Measuring device (e.g. ruler, tape measure)
- Mixing sticks for epoxy
- Paper towels
- Petroleum jelly
- Rubbing alcohol
- Sanding bar
- Sandpaper (coarse)
- Covering iron
- Dental floss or string

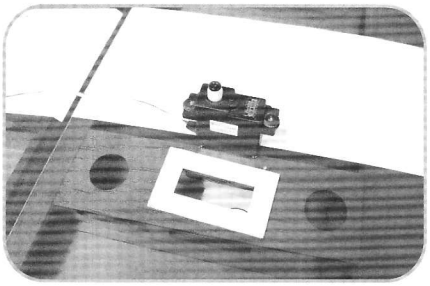
Before starting Assembly

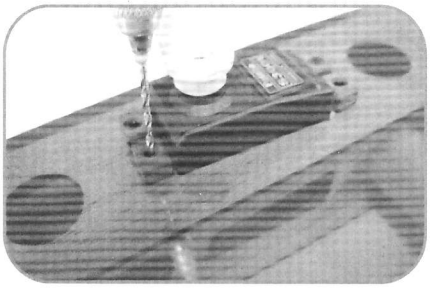
Before beginning the assembly of these models, thoroughly inspect the fuselage, wing panels, rudder, and stabilizer. If you find any part damaged or missing, please contact the local dealer.
If you find any wrinkles in the covering, use a heat gun or covering iron to smooth them.

I. Wing Assembly

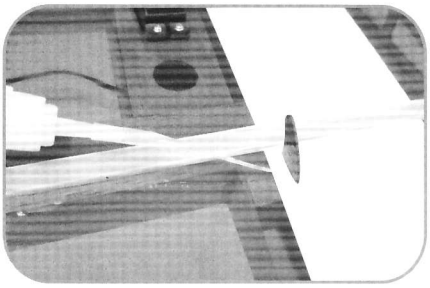




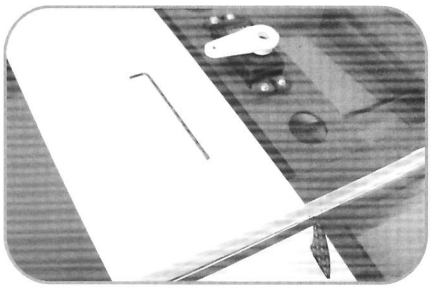
- Glue the hinges into the aileron. make sure all hinges are centered between the wing and aileron.
- Insert the hinges into the hinge slots in the wing. Move the control surface up and down to ensure its flexibility, and adjust the gap between the wings and the ailerons. Secure the hinges with CA glue.

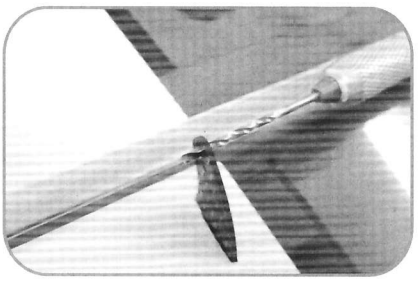


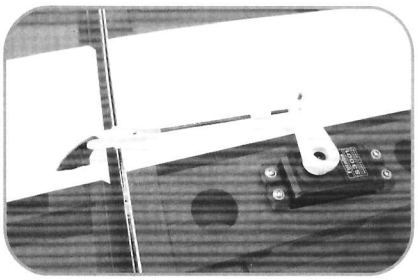


- Install the servo arm onto the servo.
- If using mini servos, please use STD-MINI Servo Adapters.
- Use a hobby knife to remove the covering over the servo opening.
- Use the string to pull the servo lead through the wing. Then install the servo.
- Adjust the center section of the servo.





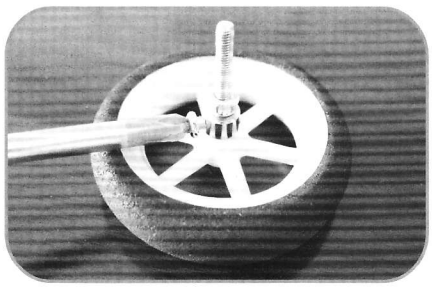


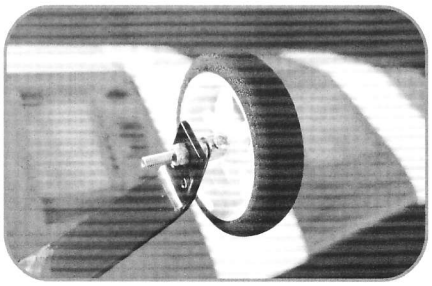


- Remove the covering over the mounting hole for the control horn with hobby knife.
- Insert the control horn into slot and fix it with glue.
- Measure the linkage length and cut it to an appropriate length.
- Install the control rod and linkage stopper, tighten the screws of servo.

* **Repeat the above steps for the remaining aileron.**

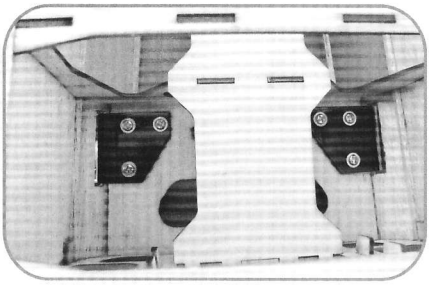
II. Main landing Gear Installation





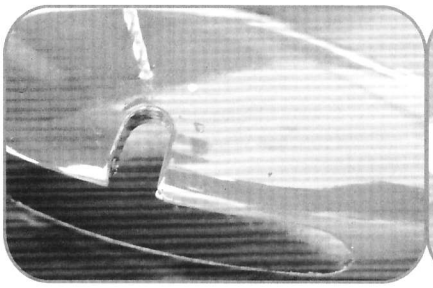
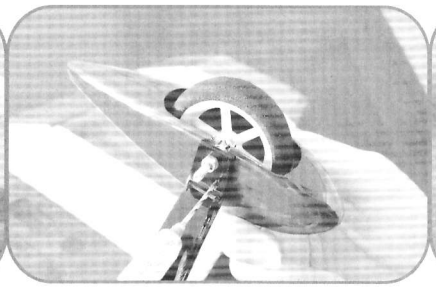
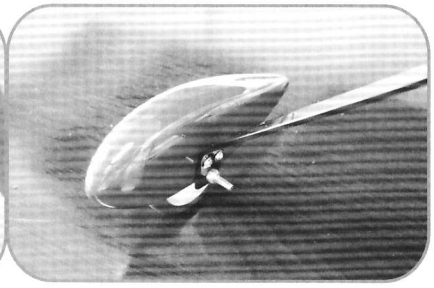
- Insert the wheel axle through the center hole of the wheel.
- Install the wheel collar and locknut, ensure that the wheel rolls freely.

- Insert the axle through the hole in the landing gear,and attach the axle for the main landing gear firmly with the same locknut.



- Install the main landing gear on the bottom of the fuselage. Place a thread lock on the threads of the landing gear mounting bolts, using "thread lock" on the screws to keep them from vibrating during flight.
- Insert them through the landing gear and rotate them into the blind nuts firmly,which have been installed in the landing gear plate.

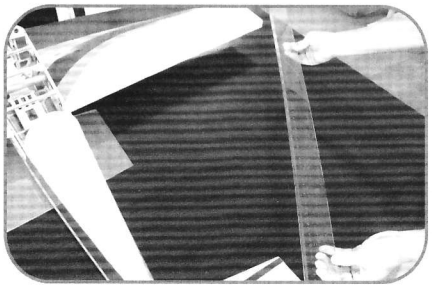
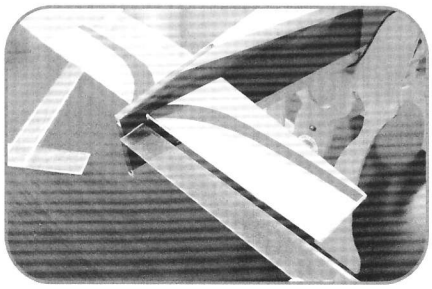
Note: Use thread lock when attaching all nuts to bolts during assembly.

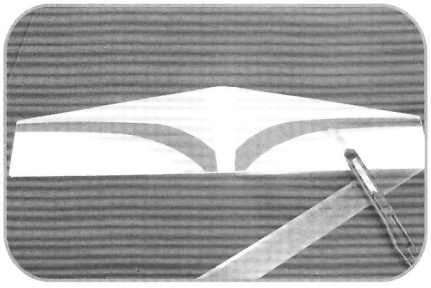
- Put the wheel pant onto landing gear, parallel the wheel pant to fuselage.
- Measure the location of screws and drill two holes which diameter should be 1mm.
- Use two screws to fix the wheel pant.
- Rotate the two nuts and adjust the wheel to see if it is centered in the wheel pant without rubbing.

III.Tail surfaces Installation

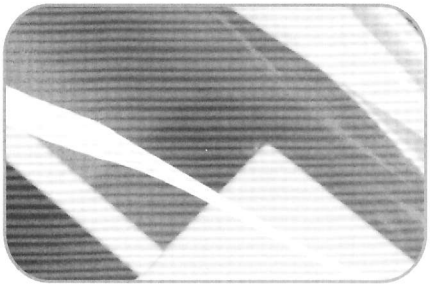
- **Horizontal tail**

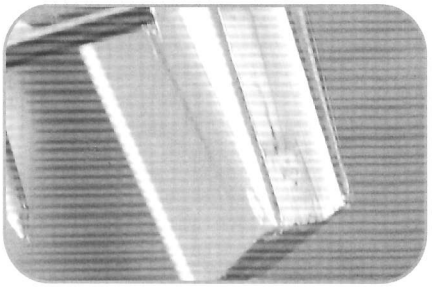



- Measure and mark the horizontal stabilizer where it passes through the fuselage. Use a Hobby knife to trim off the covering from the stabilizer center section as per your mark.

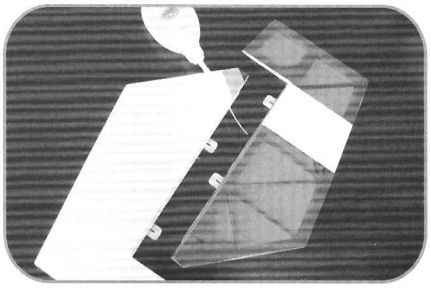


NOTE: Be very careful not to cut or score the balsa underneath as this might cause structural failure in flight.





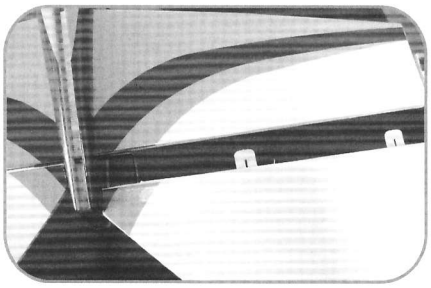
- Put the elevator connector into the slot before installing horizontal stabilizer.



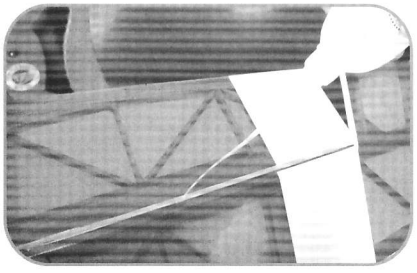
- Insert the horizontal stabilizer into the fuselage slot. Adjust it to be symmetric and equidistant from the left to right, perpendicular to the fuselage and parallel to the wings.

- Apply epoxy glue to secure the stabilizer .

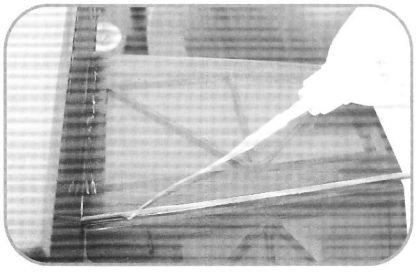
- Slide the hinges into the factory pre-cut hinge slots in the elevator and then apply thin CA to secure stabilizer.



- Insert the elevators connector for the elevator halves.Each hinge must be inserted to their respective hinge slot in the stabilizer.Secure the elevator connector prior to gluing the hinges.

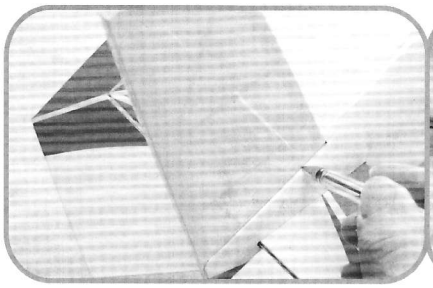
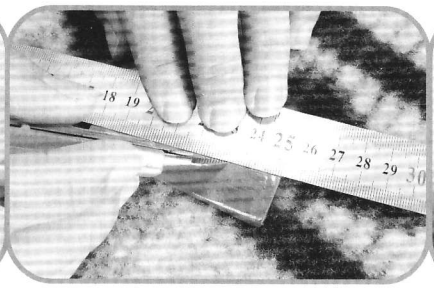
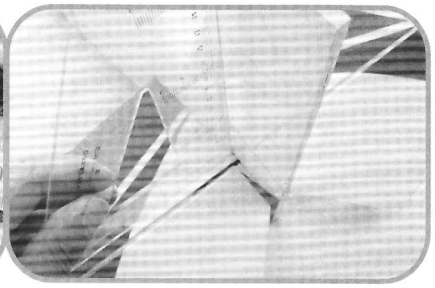


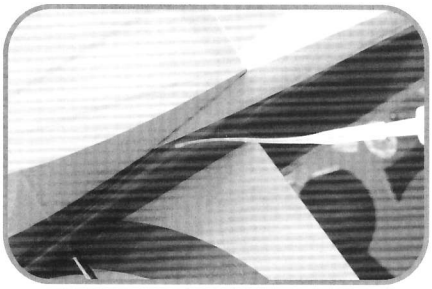
- Adjust the gap between the two elevators and the horizontal stabilizer. Move the elevators up and down to obtain sufficient deflection.



- Once you are satisfied with the deflection, secure the control surface with CA glue.

• Vertical Tail

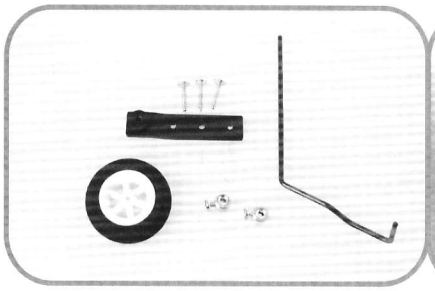
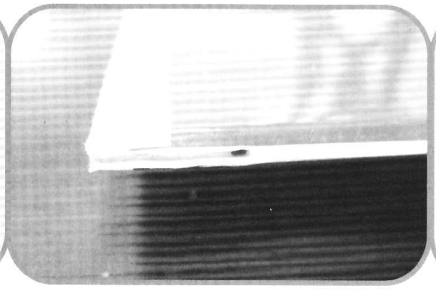
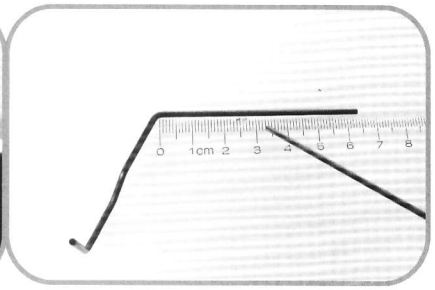


- Insert the vertical fin into the mount on the fuselage and mark where the vertical fin mates with the fuselage.

- Cut and remove the covering on the gluing surface making sure not to score or cut the balsa underneath the covering.

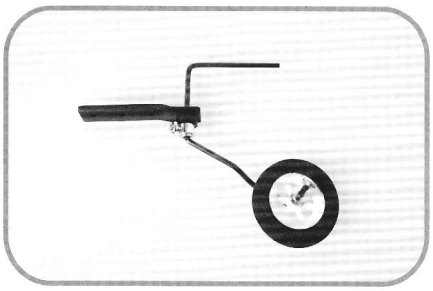
- Insert the vertical fin into the fuselage and adjust its height and angle. Make sure the trailing edge of the vertical fin is in line with the aft end of the fuselage. Ensure the vertical fin and horizontal stabilizer are at 90 degrees. Verify this by using a square placed on the horizontal stabilizer and aligning the square with the vertical stabilizer.

- Secure it with glue.

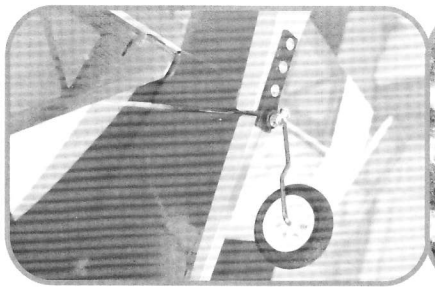
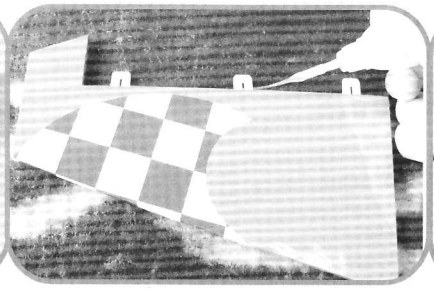
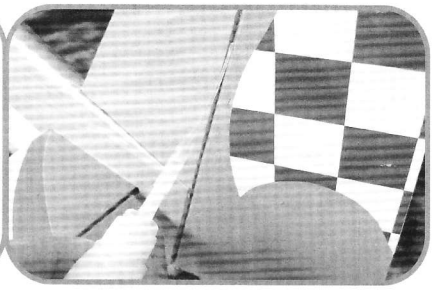
- Measure the location of hole that you need to drill on the rudder. The location is for bending tail landing gear.

- Drill a hole that fit for the tail landing gear. And make a slot which both the width and the depth are 2mm on the rudder.



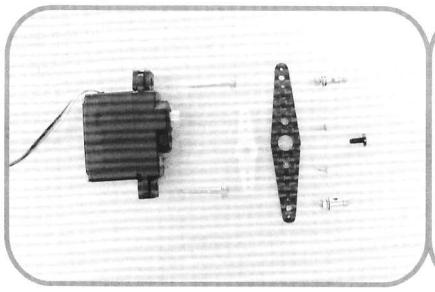
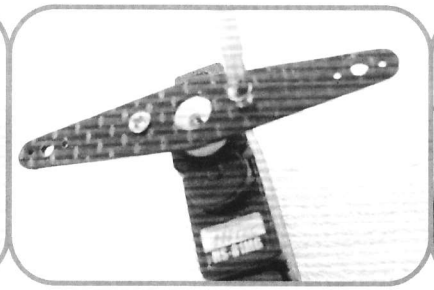
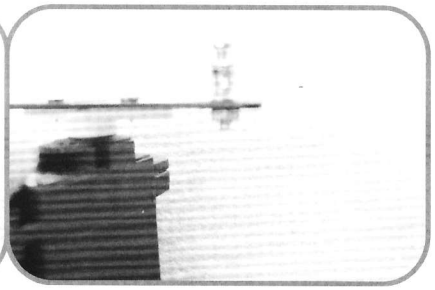
- Let the wire through the tail langing gear mount and wheel collar.

- Measure and bend the wire to 90 degrees.

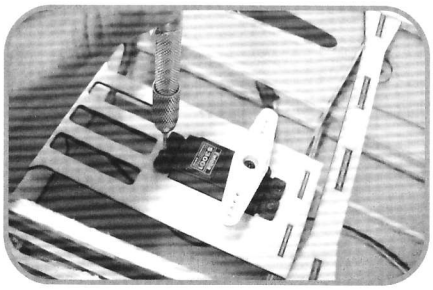




- Install the tail wheel .
- Glue the hinge into the rudder.
- Insert the hinge into the hinge slots.At the same time, Insert the wire into the hole.
- Secure it with glue.

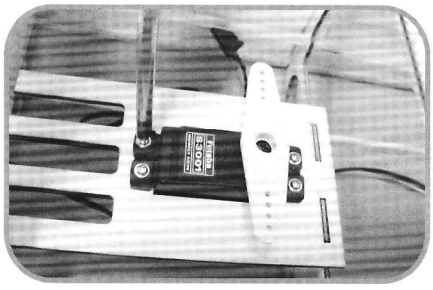
• Elevator&Rudder Servos Installation

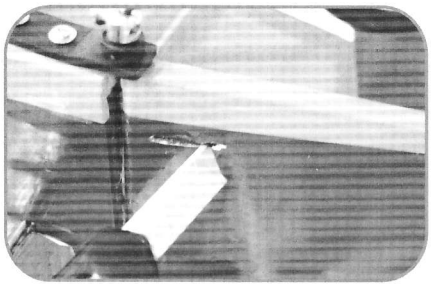
- If you use mini serv, install the long servo arm(dual, high performance, made of carbon fiber) onto the servo of rudder.



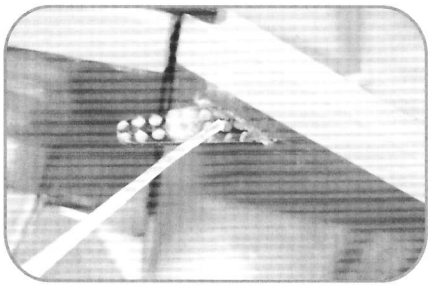
- Install the linkage stopper firmly, we advise you to use some thread lock.
- Place the rudder servo into servo plate,and fix it with the screws.



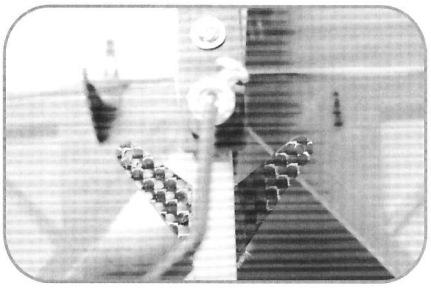
- Insert the control horn(dual) into the slot and fix it with glue.



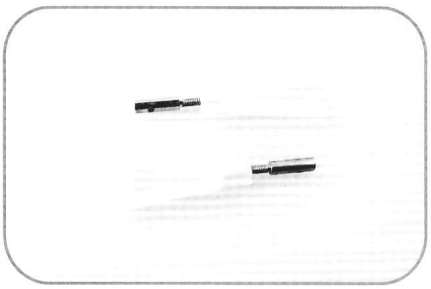
- Cut the cable into two equal pieces,which need to be passed through the crimp and control horn, then back through the crimp twice and complete the job by a crimping tool.



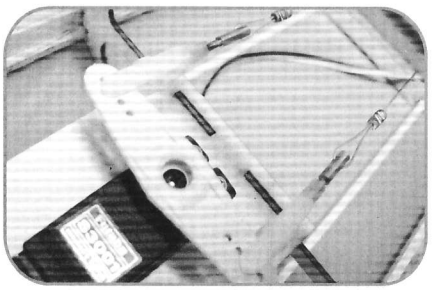
- Pass the cable into the fuselage through the slot.You can use a wire to lead the cable.



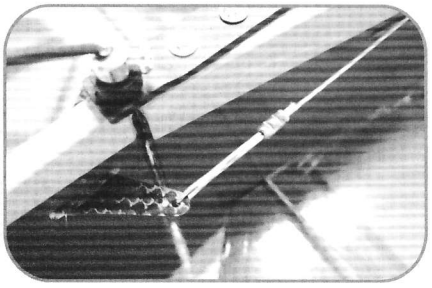
- Pass the cable through the linkage stopper.
- Tighten the bolt to fix it.



- Install the long servo arm(single,high performance,made of carbon fiber) onto the servo of rudder.
- Install the linkage stopper firmly with the thread lock.
- Connect elevator servo with a 24" servo extension,either tie the servo leads together, using a commercially available connector, or use unwaxed dental floss to secure the extensions to prevent them from coming loose during flight.

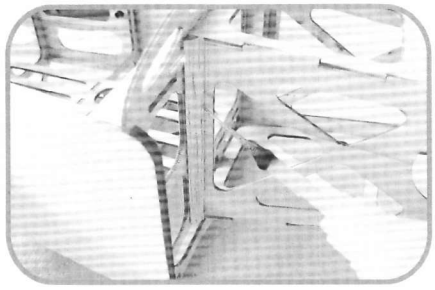


- Place the servo into the servo hatch. And Install the servo firmly with the screws.

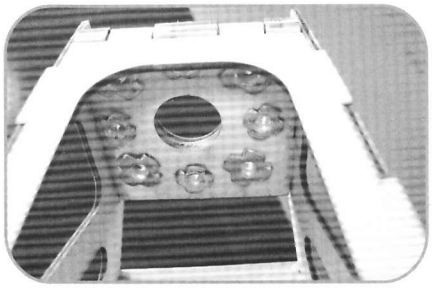


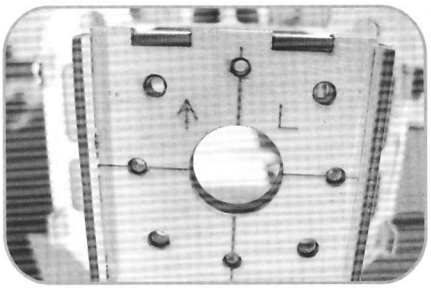
- Install a control horn.
- Measure the linkage rod length and cut it to an appropriate length.
- Install the linkage stopper, and fix them firmly.

IV. Motor Installation



- Insert the tabs on the motor box into the slots of the firewall, and push down so that they lock into place.
- Fix the mount by using glue.
- Glue both of the girders on the left and right side seperately.

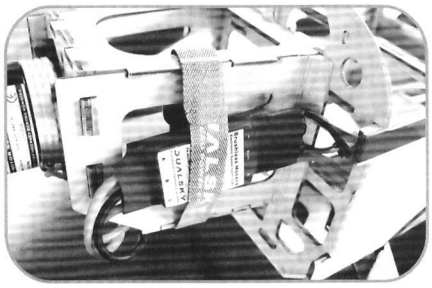




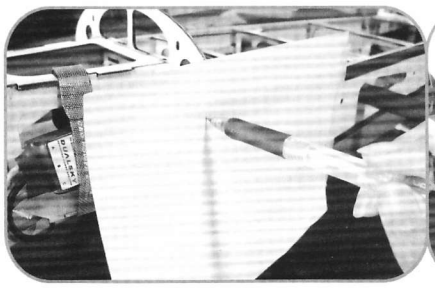
- The firewall can fit two type of popular motors that is easy to get.
- User can mount the motor directly onto firewall, if motor is a bit short, use bolt come with the box to adjust the length.

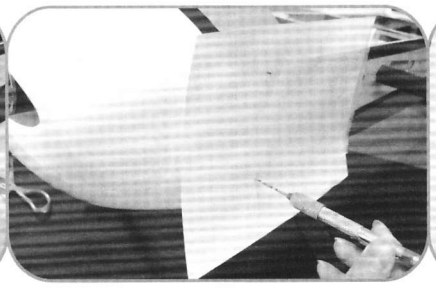
- Use the supplied bolts and washers to mount the motor to the mounting plate. put a drop of thread lock on the mounting bolts.

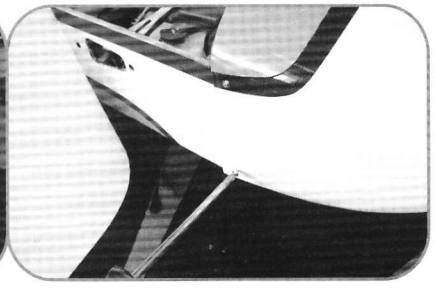
CAUTION: Tighten firmly, but don't be over tight, being careful not to crush the plate.



- Mount the ESC with nylon cable ties.
- Plug the bullet connectors into their mating connectors on the motor.
- Secure the wires with a nylon cable tie to prevent them from touching the rotating case of the motor.



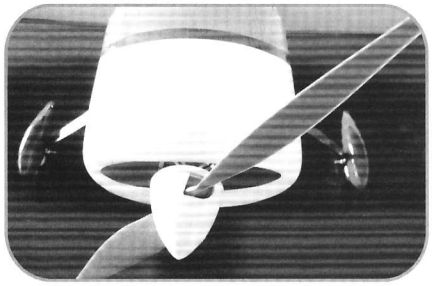




- Apply a piece of masking tape on the line where you have to make the holes for the screws to fix the cowling, then mark the position.
- Slide the cowling in place on the fuselage and ensure its proper position. The rear of the cowling should be flush with the rear of the firewall.

- Make sure the prop shaft is centered in the cowling opening.
- Use a small drill bit to drill four small holes and use the self-tapping screws to secure the cowling.

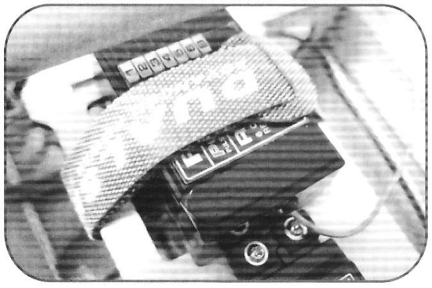
- Read the manual for the motor. Choose suitable propeller on the motor according to the suggestions from the motor manufacturer.
- Install the propeller and 2inch spinner.



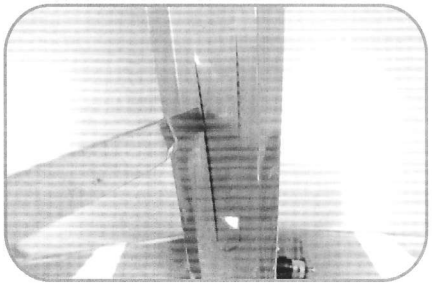
Note: Do not use the damaged or cracked propeller and spinner, which can be broken at high speed and can cause serious damage to body and property!

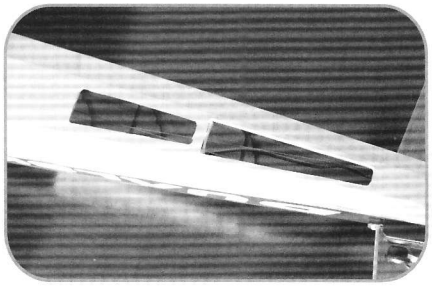
V. Wing & Hatch Assembly

Note: When opening the canopy hatch, please make sure not to squeeze it, there are four strong magnets.

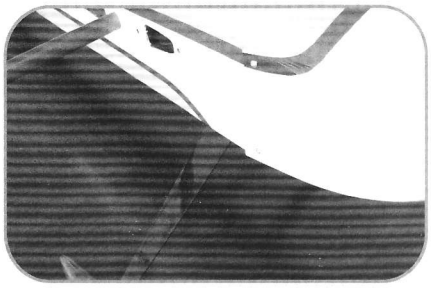


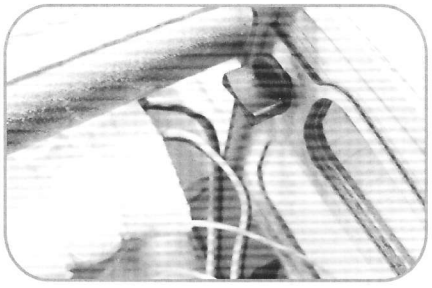
- Bind the battery in place with Velcro.
- Connect servos and ESC to receive,but do not connect the battery to ESC.
- Then bind the receiver with Velcro.





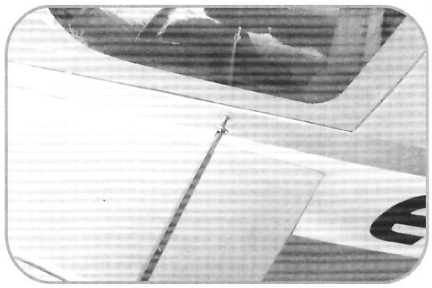
- Remove the covering from the bottom of the fuselage as it is shown in order to allow cool air to escape from the fuselage.



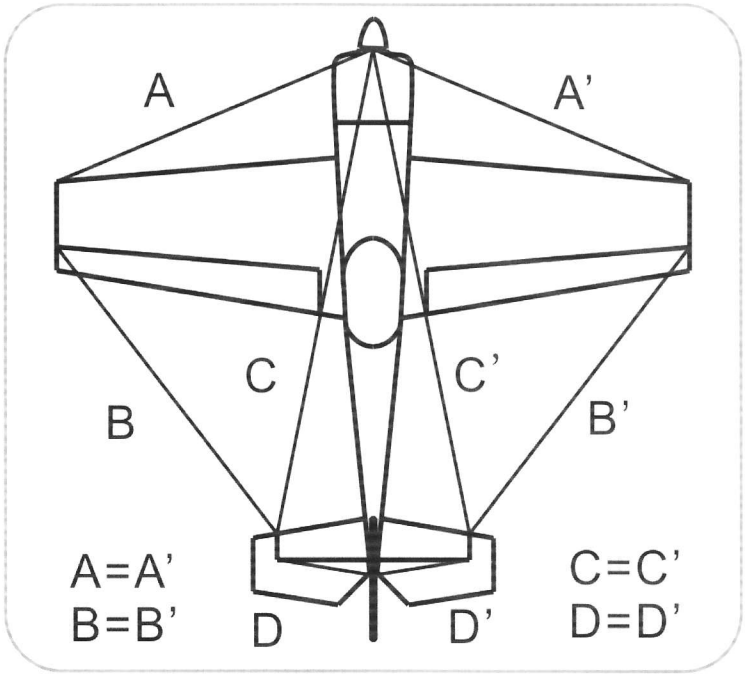


- Use the wing tube to attach the wing halves to the fuselage.
- Install the nylon retaining screws from the inside of the fuselage.

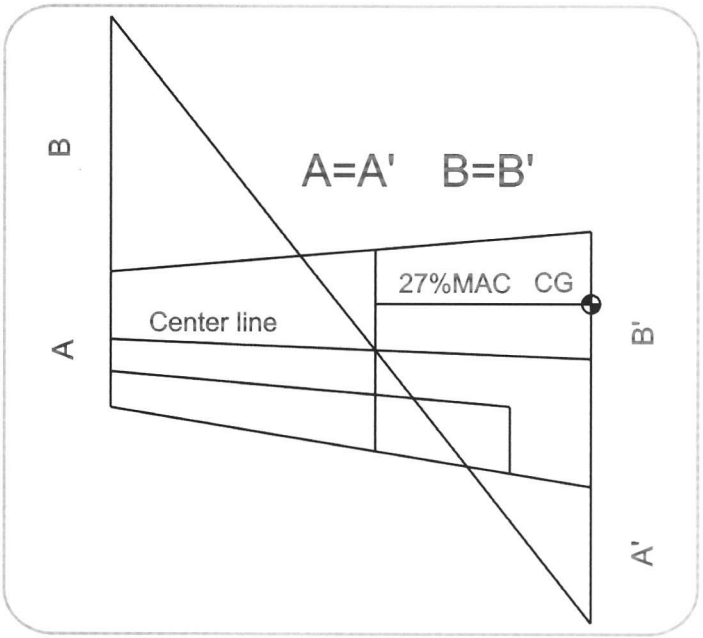
Note: Tighten the screws only by hand and not to be over tight.



- Check the CG, if the CG at the right location, now you can connect the power and place the hatch.
- The magnets there can't lock the hatch in place completely, you need to secure it by using the screws.



Adjust the aircraft and make sure both of the sides are symmetric, like the diagram .So that the plane is ready for flight.



Measure the CG from the leading edge of wing root rib, Adjust the battery pack location. For CG proper position should be at 25-30%MAC. This recommendation balance point is for your first flights. The CG can be moved around later to fit your personal taste.

MAC:	25%	27%	30%
CG Location:	96mm 2-3/4inch	103mm 3inch	115mm 3-3/8inch

1. Check every angle and adjust them to correct position.
2. Check all parts and make sure the installation is firm and reliable.
3. Add some weight in either of wingtip to balance the left and right wings.

Power on to trim your plane.

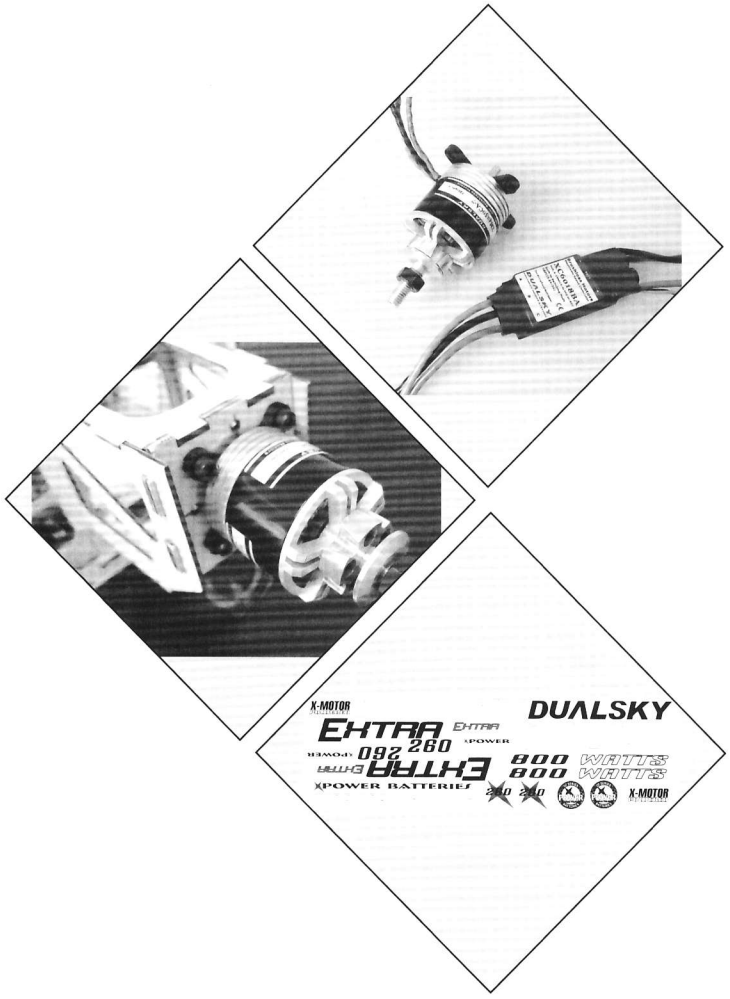
1. Range check the radio (test whether the motor is running or not).
2. Ensure that the servos and control surfaces move smoothly and are in the correct direction.
3. Adjust the servo throw. The chart below is the recommended throws for the first flight. You can adjust the servo arms and control horn length later to fit your flying style.

Control Throws :

	Surface	Throws	Exp
Common flying	Aileron	20 degrees	25%
	Elevator	20 degrees	25%
	Rudder	30 degrees	30%
3D flying	Aileron	40 degrees	45%
	Elevator	40 degrees	45%
	Rudder	45 degrees	45%

Trail run the motor to check its stability at high speed and low speed to ensure there are no problems with vibration on the model. Run the motor at high speed about 30min,check the ESC/Batteries and motor and make sure the temperature is below the prescription of manufacturer.Once everything is right... ...

Good luck & Have fun!



* Do forget to stick the decal on the plane, it will make your model beautiful and focus people' s eyes!