# **INSTRUCTION MANUAL**

# SUPER FLYING MODEL MANUFACTURE

## Mo.8630K

# R.A.F. SE5a GP/EP 1:6.7 scale





Wing Span: 1200mm Wing Area: 53.3 dm<sup>2</sup> Length: 972mm

Total Weight: 1800g (with battery 2600mAh)

Radio: 4 ~ 6 channels

Motor: 4250-840KV brushless

Thrust: 2.4 KGS and up

Battery: Li-Po 4-cell 2600mAh and up

**ESC: 60A** 

Engine: .60 4-stroke Propeller for EP: 12 x 8" Propeller for GP: 11 x 6"

### Warning

An RC aircraft is not a toy! If misused, it can cause serious bodily harm and damage to property. Fly only in open areas, following all instructions included with your radio.

Before beginning the assembly, remove each part from its bag for inspection. Closely inspect the fuselage, wing panels, rudder and stabilizer for damage. If you find any damaged or missing parts, contact the place of purchase.



### Contents of Kit / Parts Layout

### Recommended radio and equipment(Not included in kit):

6 channels radio x1 piece

Receiver x1 piece

13g servo x 4pieces (metal gear with thrust 2.5KGS an up)

30cm extension x2pieces

Y-harness x1 piece

Propeller: 11x8~12x8

EP:

Motor 4250-840KV with 4cell or 4250-1120KV with 3cell

Battery:Li-Po 3-4cell 2200mAh and up

ESC:60A **GP:** 

#1018-86GP Power Pack(Option)

Engine:.60 (4C)

### Tools and suppliers needed (not included in kit):

1200mm x 400mm x 10mm flat surface planking, Triangle ruler, Straight aluminum ruler 1000mm Clips, Heavy object around 1 KG, Tissue, Double-side adhesive tape, Vernier scale, 10-12mm thickness planking, Sanding paper #150 & #200, Planer tool, 2mm hand driller, Iron, Phillips screws driver #0 & #1, Curved scissors, Hobby knife, Instant glue, UHU glue, Epoxy 5-10 minutes, Marker, white glue, Driller 1.5mm/2.6mm/4.2mm, Transparent tape, Masking tape, Brush, Painting, Z-bender pliers, Side-cut pliers, 1.5mm hex wrech, Solder iron, Pin, Rubber band, Sharp-nose pliers, Super glue, Cross wrench



Prepare C1~C9.



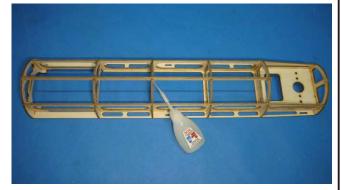
Join C5, C5, C6, C7, C2 to C1.



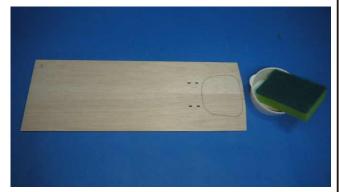
Join the other C1



Atach with instant glue.



Atach C4, C8 amd C9 with instant glue.



Prepare C10 and make it wet.





Atach C10 and secure with tape. Allow wood to dry so that it will keep its shape.



Sand it untl smooth like above picture.



Prepare C11, C12, C13.



Join C11, C12, and C13.



Put in ring - pull with instant glue.



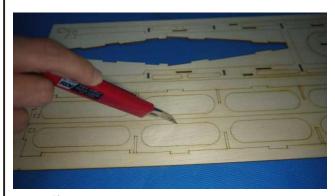
Prepare C14, C15



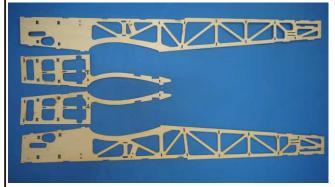
Attach C14 and C15 with instant glue. Then paint it.



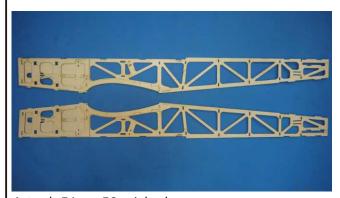
After covering attach window with instant glue.



Cut off extra piece.



Prepare F1, F2.

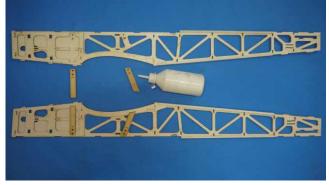


Attach F1 on F2 with glue.



Cut 3X5X262mm wood strips and attach on upside with instant glue. Cut 3X5X320mm wood strips and attach

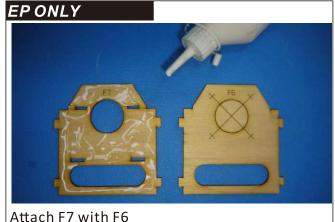
on underside with instant glue.

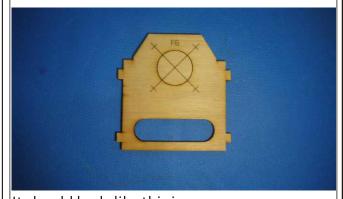


Attach F3, F4 with white glue.

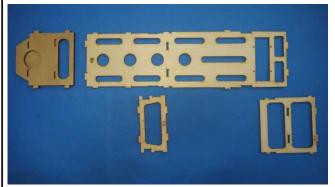


Attach F16 with instant glue.





It should look like this image.



Prepare F6. F8. F9. F10.



Attach with instant glue.



Attach C11 with F8, then attach with right side F2.

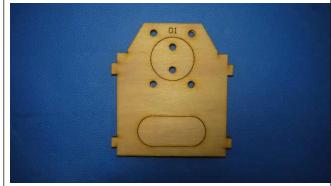


Attach left side F2

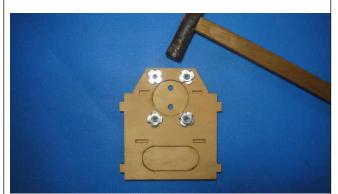
### **GP ONLY**



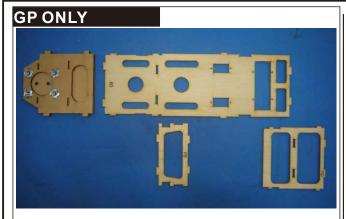
Attach 01 with 02



It should look like this image.



Take four clutch nails and use a hammer to place the clutch nails into these holes



Prepare 03, F9, F10



Join F11~F15.



Attach with instant glue.



Attach with instant glue.



Attach C11 with 03, then attach with right side F2.

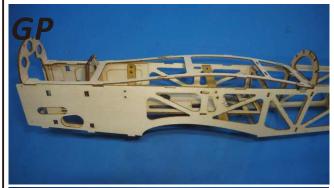




Cut offextra piece from F19.



Attach left side F2



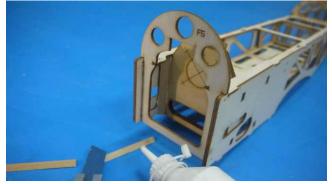


Join F19 to fuselage, it should look like image.





Attach with instant glue.



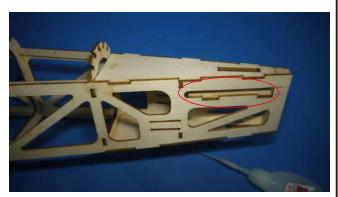
Cut 77mm triangle wood strips and attach on right side and left side with instant glue.



Attach F20 with instant glue.



Prepare F17, F18, F24.



At first attach F17, then attach F18 and F24.



According fuselage cut3X5mm wood strips and attach with instant glue.

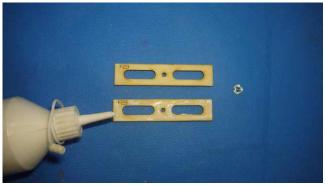


Attach F22 or 04 with white glue.





Cut triangle wood strips and attach inside of F21 with instant glue.



Attach two piece of F23 with white glue.

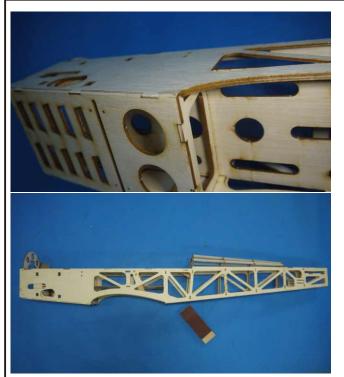


Take a clutch nail and use a hammer to place the clutch nail into the hole.





Attach into the fuselage with instant glue.



Sand it until smooth.



Prepare 4C engine and GP power pack(Option)



Install engine(Remove Exhaust Pipe)





Install exhaust pipe.

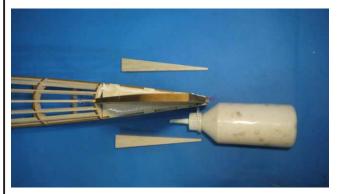




Install velcro.



Join V1 with fuselage but do not glue it.



Attach F27L and F27R.



Secure both side you attached.



Remove V1 then glue F27L and F27R.



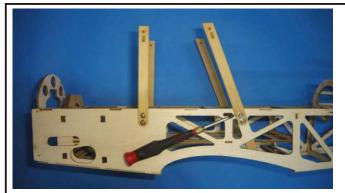


Cut off extra piece and sand it until smooth.

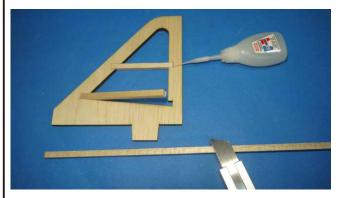




Sand F28 and F29 until smooth.



Use M3X25 screws, washers and nuts to secure F28 and F29.



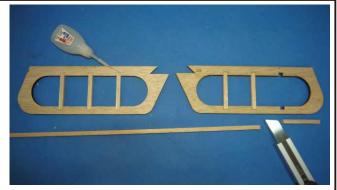
Cut **6x6mm** wood strips and attach on upside with instant glue.



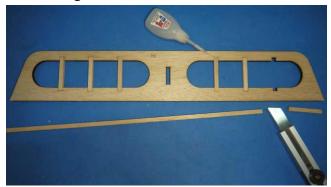
Cut **6X6mm** wood strips and attach with instant glue.



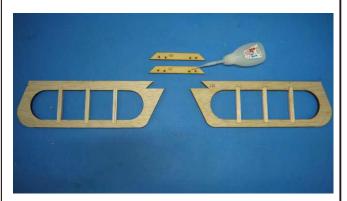
Attach F26 on F25 with instant glue.



Cut **6x6mm** wood strips and attach with instant glue.



Cut **6x6mm** wood strips and attach with instant glue.



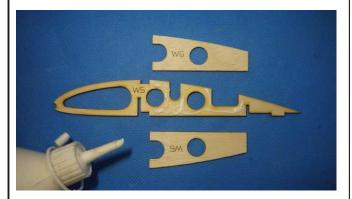
Attach H2 on H3 with instant glue.



Cut off extra piece and sand it until smooth.



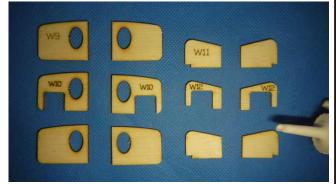
Cut the hinge holes and install the fiber hinges.



Attach 2 pieces of W6 on W5 both side with white glue.



Secure both side till it dry.





Prepare W9,W10,W11 and W12. Place each part then glue them.



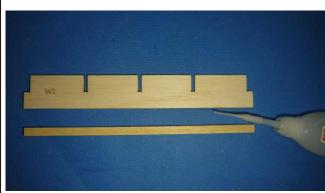


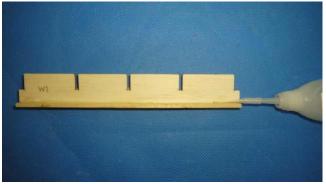
Prepare 2 pieces of W21 and 4 pieces of W22. Place 2 pieces of W22 and glue them on W21 both side.





Prepare 8 pieces of W33 and use white glue to secure every 2 pieces of W33.

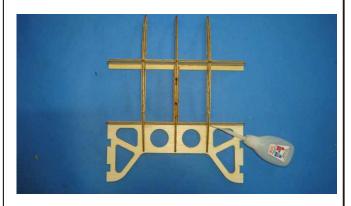




Take **3X6.5X188.6 mm** hard wood strips and attach with instant glue. The angle between W1 and hard wood is 90 degrees.

### Note:

The following steps, please refer to 1:1 Map.



Attach 3 piece of W6 and W4 with instant glue.



Attach the wood strip on upside with instant glue.



Attach 2 pieces of W2 on W1 underside with instant glue.

Then prepare 2 sets of W8 and W8A and the wood strip.

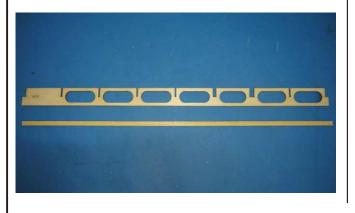




Attach W9,W13 and W11 with instant glue.



Sand it until smooth.





Cut **3X6.5X464 mm** hard wood strips and attach with instant glue.

The angle between W14 and hard wood is 90 degrees.



Please the wing ribs on W14 and secure with instant glue. (Please make sure every rib is vertical.)

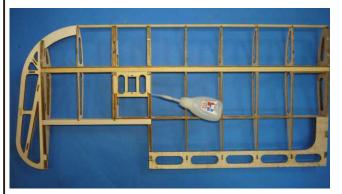




Prepare W15, W17, W18,W18A, W25,W26 one wood strip and one round wood stick. Attach with instant glue.



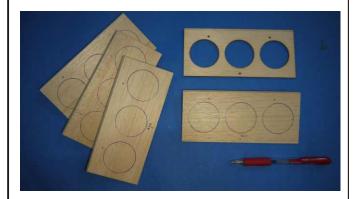
Secure with instant glue.



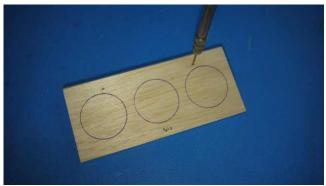
Prepare ?? then attach with instant glue.



Sand it until smooth.



Prepare W32 sheets and mark the circles and small points on it.



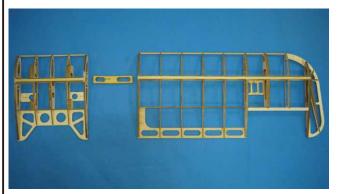




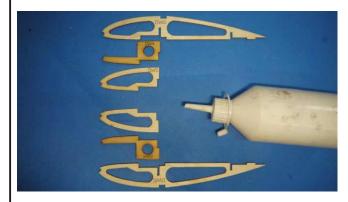
Drill three small points and cut off the circles.



Cut the hinge holes and install the fiber hinges.

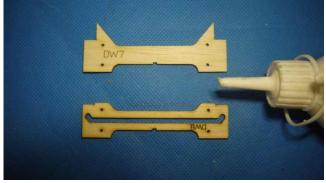


Prepare W33 to connect two side.



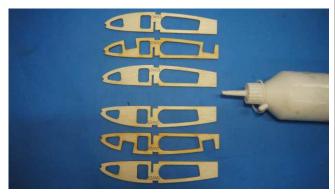


Prepare DW4,DW5 and DW6.
Place DW6 on the bottom and put DW4 in the middle, DW5 on the top then glue them.





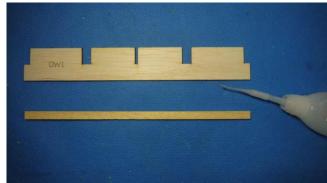
Prepare Dw7 and DW8.
Place DW7 on the bottom and glue DW8 on it.

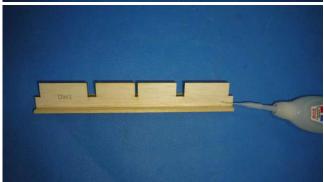




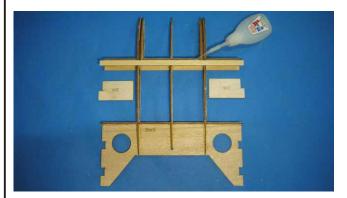
Prepare 2 pieces of DW12 and 4 pieces DW13.

Place DW12 in the middle and glue DW13 on both side.





Take **3X6.5X188.6 mm** hard wood strips and attach with instant glue. The angle between DW1 and hard wood is 90 degrees.



Attach the wood strip on upside with instant glue.
Prepare 2 pieces of W2.

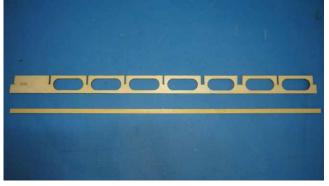


Attach 2 pieces of W2 on underside with instant glue.



Turn to front and prepare the round wood stick and 2 pieces of W18.
Attach with instant glue and sand it until smooth.

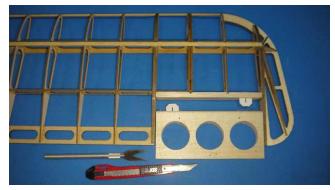




Take **3X6.5X464 mm** hard wood strips and attach with instant glue.
The angle between W14 and hard wood is 90 degrees.



Please the wing ribs on DW14 and secure with instant glue. (Please make sure every rib is vertical.)



Cut the hinge holes and install the fiber hinges.



Sand it until smooth.

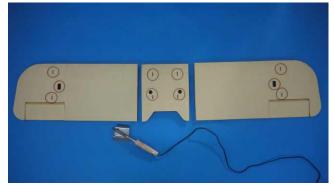


Prepare W33 to connect two side.

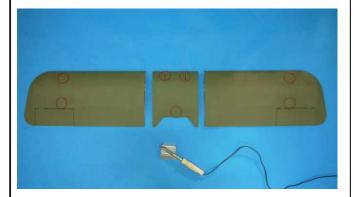
Note: The following steps, please refer to 1:1 Map.



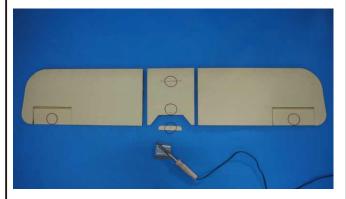
Secure with instant glue.



Remove the covering as the circle marked.



Remove the covering as the circle marked.



Remove the covering as the circle marked. (Small hole)



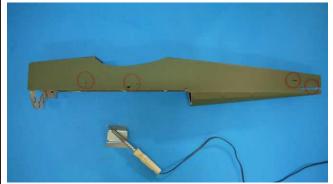
Remove the covering as the circle marked. (Small hole)



Remove the covering as the circle marked.



Remove the covering as the circle marked. (Tail part)



Remove the covering as the circle marked. (Small hole)



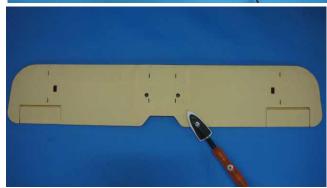
Remove the covering as the circle marked.





Attach with EPOXY.





Cover the gap nicely.

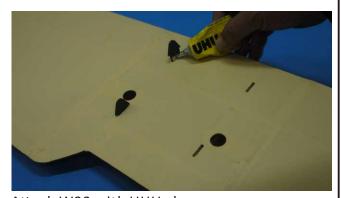




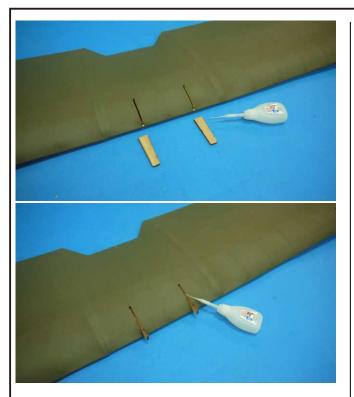
Prepare 4 strips of covering and cover the cap.



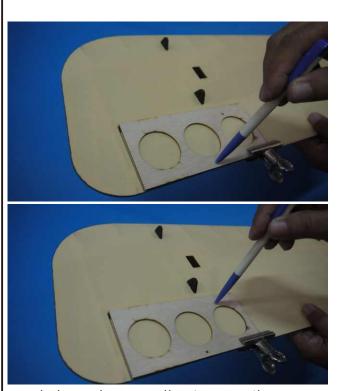
Attach DW9with UHU glue.



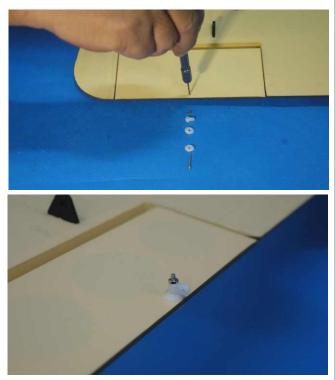
Attach W33 with UHU glue.



Place 2 pieces of DW10 and attach with instant glue.



Mark these three small points on aileron.



Secure the control horn set onto the aileron of top wing.





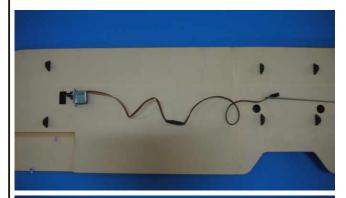
Secure the control horn set onto the aileron of top wing.



Prepare Z-bender, the servo, control horn set.



Put Z bend part to connect the servo arm.





Place the servo into the servo hole and pull out the servo line to the wire exit.



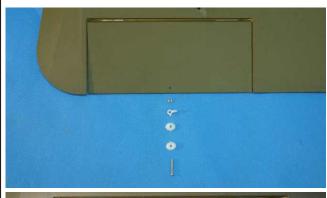


Prepare M3x25, washer and plastic nut.





Mark these three small points on aileron.





Secure the control horn set onto the aileron of second wing.





Attach with instant glue.



Prepare Phillips screws driver, UHU glue, instant glue, painting spray



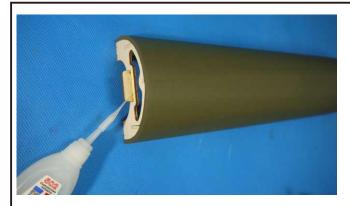


Attach C14 and C15 with instant  $\,$  glue. Then paint it.

After covering attach window with instant glue.



Attach the pilot with UHU and secure with screws.



Attach with instant glue.



Place the pilot pillow behind the pilot.



Try to find the gap on the fuselage and remove the coving carefully.



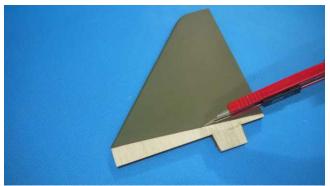
Try to fit the triangle reinforcement into the gap. Please note it must fit perfect. If not, use sand paper to trim the edges of the reinforcement. When satisfy the location, use pencil to mark the outline on the vertical and horizontal,



Use marker to mark the line onto vertical, horizontal and fuselage for where they contact with each other for two side.



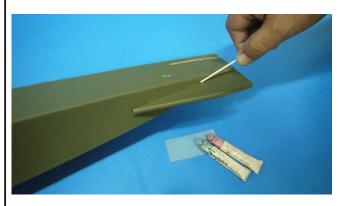
Use marker to mark the tail location.



Remove the covering.



Remove the covering.







Apply Epoxy to secure all these parts to the fuselage.





Drill 2mm hole on the servo arm. Install the adjustable rod stand on the servo arm and secure with M3x4mm hex screw and plastic nut. Don't screw too tight, it has to move freely. Thread clip onto the 2.0mm rod.





Prepare above part and assemble the rod for the elevator and rubber. Slide in shrinking tube on the conjunction. Use heat gun to make the tube shrinking for the reinforcement.





Prepare above part and assemble the rod for the elevator and rubber. Slide in shrinking tube on the conjunction. Use heat gun to make the tube shrinking for the reinforcement.



Use instant glue to make holes stronger.



Secure the servos onto servo tray and connect with the robs. Use sharp-nose plier tp remove the extra rob.



Cut off the extra part.



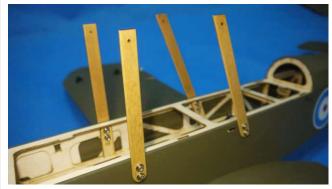
Spray the paining on it and try to secure the venting net with glue.



Install the propeller.



Prepare F28,F29, M2x10,M2 nut and washer





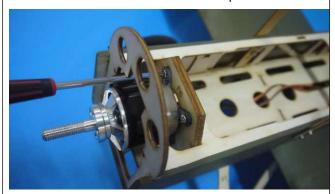
Install F28 and F29 on fuselage

### **EP ONLY**





Place the motor plate on the top of F6, use marker to mark the position for the screws. Drill the holes on the marked positions.

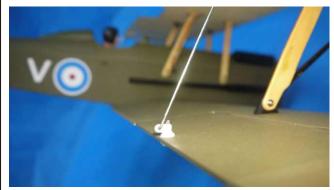


Secure the motor on the motor mount with the screws.

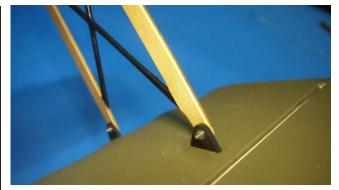








Connect two wing's aileron





Connect two wings by F28, F29 and W34, and secure with M2x10 screw.

### Note:

The following steps, please refer to 1:1 Map.



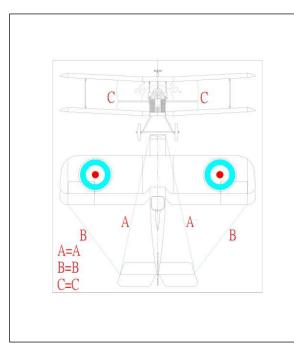


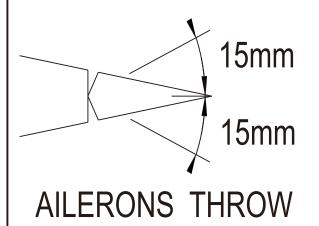


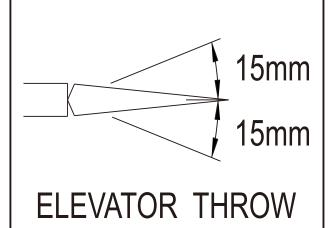


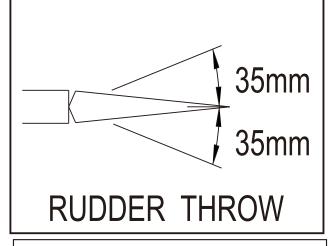
Attach with instant glue.

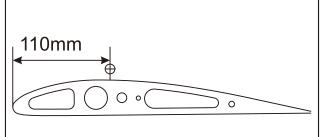




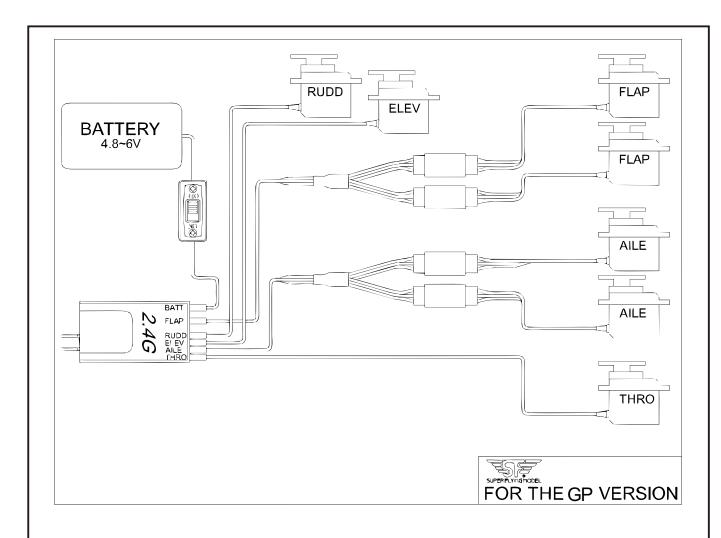


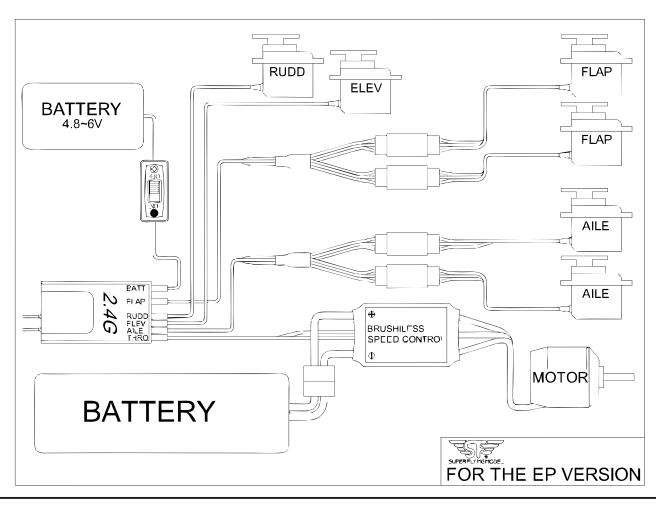






The C.G. Point is 110mm back from the leading edge against the fuselage.









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