

Before operating this unit, please read these instructions completely.

Su31 3D-EPP

Instruction Manual

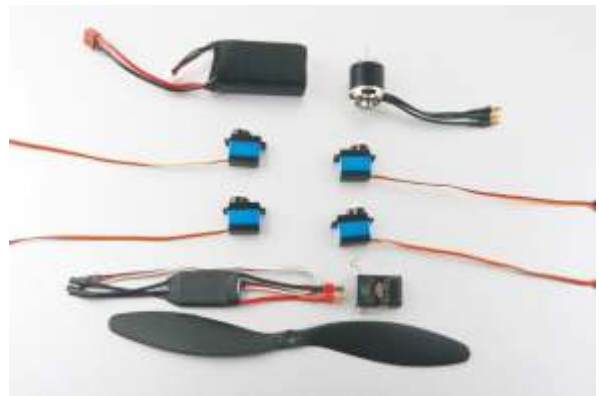


Easy to install

Features:

1. SU31 3D-EPP is a super model for 3D aerobatic flying. It's made of "almost unbreakable" EPP material and by the modern technology in CNC machines.
2. The flying time of SU31 3D-EPP is 8-15 minutes, it depends on the flying figures. The model is able to "torque roll" and then after giving more "gas" to rise vertically up, looping in "knife" flight and all aerobatic figures.
3. Easy to landing.
4. Easy to assemble, most of the parts are pre-assembled in our factory.

Product Specifications



Fuselage length: 1070mm (42.1in.)
Wingspan: 1000mm (39.4in.)
Flying Weight: 650--710g (with battery)
Motor: AT2216 KV 1250
ESC: 30 Amp
Propeller: 10x4.7sf
Servo: 8-12g micro servo*4pcs
Radio: 4/more channel
Battery: 11.1V 1100-1500mAh Li-po 25C

Do not fly under the conditions as below

Wind strong enough to make the trees rustle
A street with many trees or street lamps
Close to high voltage electrical wires
High Population density areas

Cautions for flying

Front lawns and parks make excellent flying areas. Make sure you have permission to fly and follow safety guidelines set by local authorities. The calmer the wind, the better!

Note for Storage

Please disconnect the lipo packs when finished flying
Do not press or crush the airplane when storing
The best way to store is to hang the airplane to keep the control surface rigid

Recommended Flying Setup

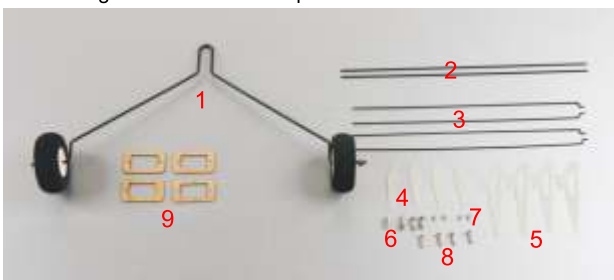
Max servo travel of aileron: 45degrees up and 45degrees down (55mm)
Max servo travel of elevator: 50 degrees up and 50 degrees down (75mm)
Max servo travel of rudder: 50degrees left and 50 degrees right (90mm)
CG Position:
105-115mm from the leading edge of the wing.



parts included in the packing

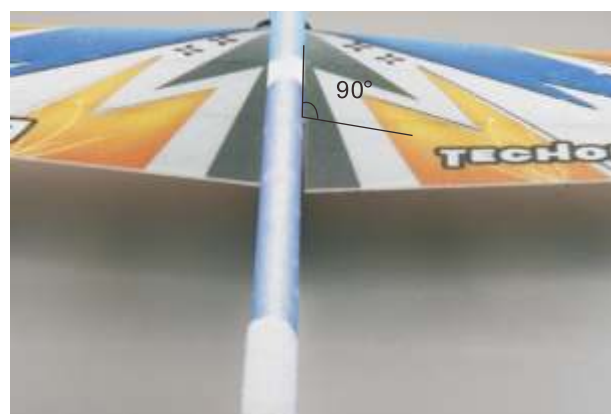
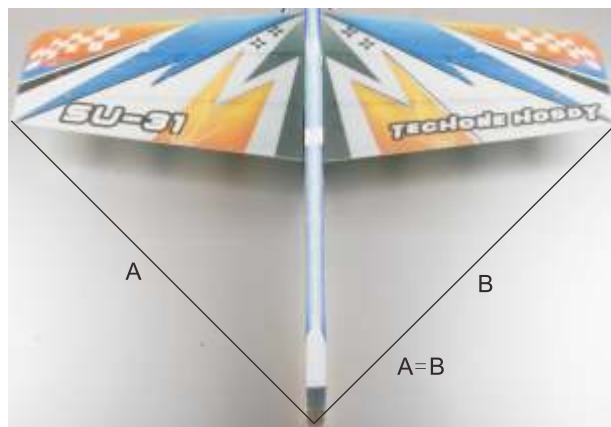


- | | |
|-------------------------|-----|
| 1 Wing (right and left) | 1pc |
| 2 Rudder(vertical tail) | 1pc |
| 3 Elevator (stabilizer) | 1pc |
| 4 Fuselage | 1pc |



- | | |
|--------------------------------------|------|
| 1 Landing gear system | 1pc |
| 2 Stab. Brace carbon rods 1. 3*220mm | 2pcs |
| 3 Z bend 1.2*200mm | 4pcs |
| 4 Extension servo arm | 4pcs |
| 5 Aileron & Elevator & Rudder horn | 4pcs |
| 6 Pushrod connector | 4pcs |
| 7 Screw 1.5*5mm | 4pcs |
| 8 Screw 3*10mm | 4pcs |
| 9 Plywood servo mount | 4pcs |

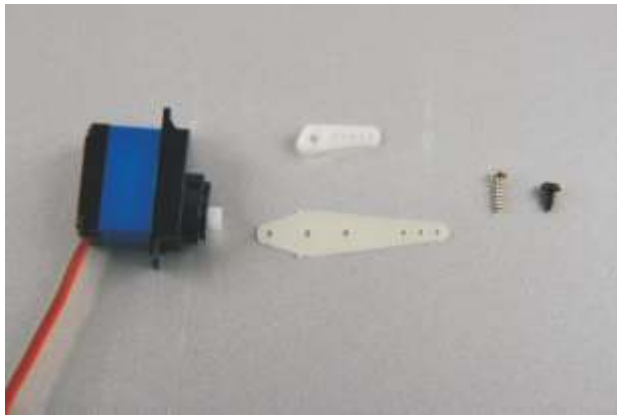
The items below are required for assembly



Insert the wing into the slot of fuselage and use glue to fix. Make sure A=B (refer to above picture)



Drop some glue on the joints of fuselage and wing to fix (both upside and downside).



Install the servo mount as picture shown.



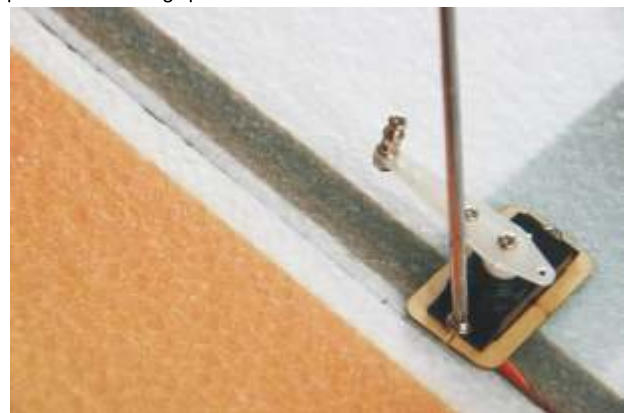
Fix the servo extension arm onto the servo arm with screw .



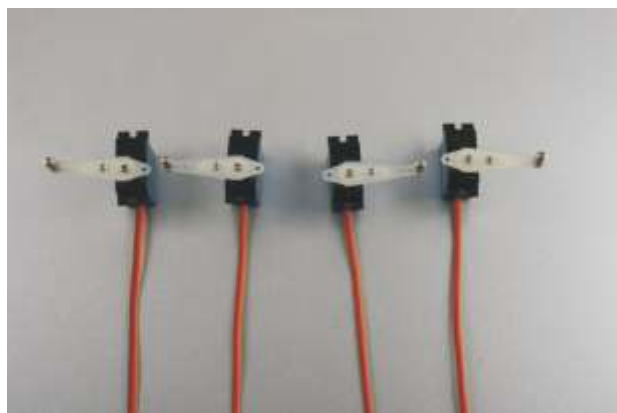
Put the servo into the pre-cut servo hole, then use glue to fix the servo mount onto the wing. Make sure the servo arm point to the wingtip.



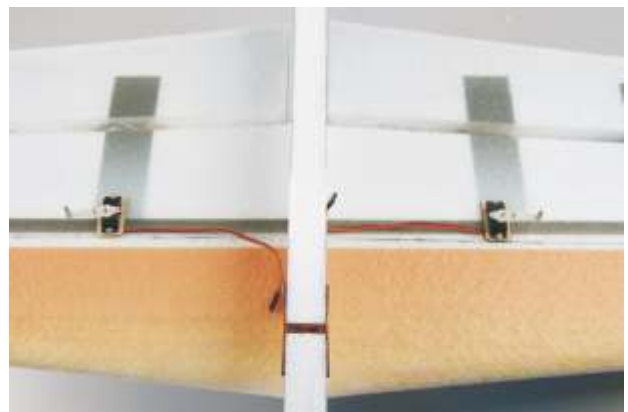
Install the pushrod connector onto the extension arm .



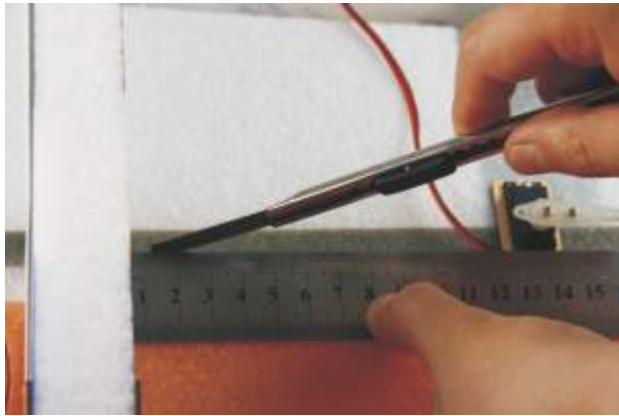
And fix the servos onto the plywood servo mount with included screws.



8. Fix the servo arm by using the servo package which included.



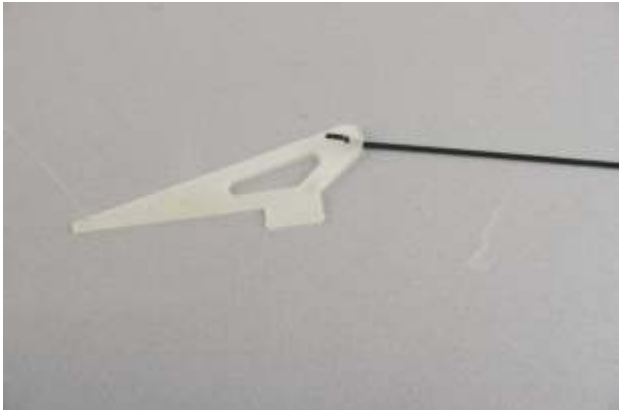
Use the same method to install the aileron servos



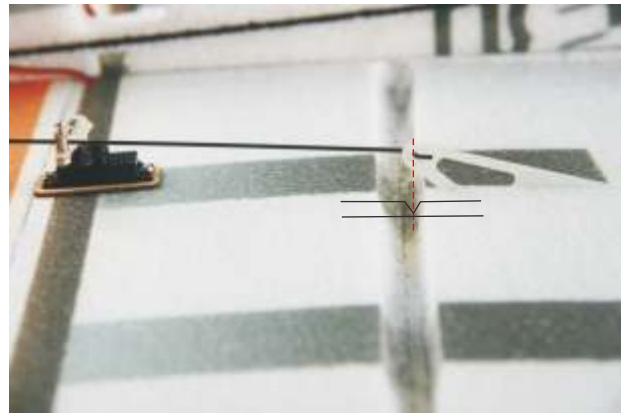
Use knife to cut slots on wing, then embed aileron servo leads as picture shown.



Pls use a hobby knife to cut a slot which is vertical to the servo arm , so that can install the servo control horn easily .



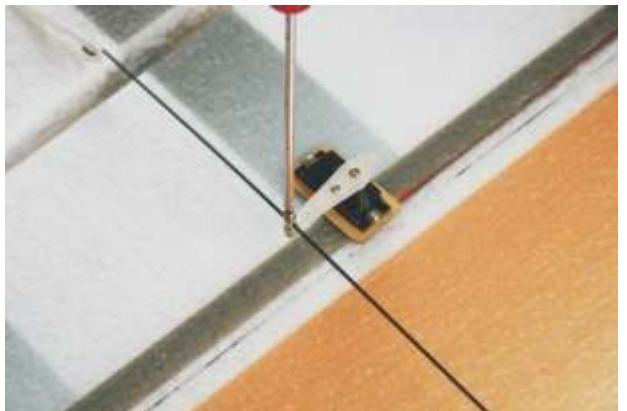
Connect the aileron horns to one side of the Z bend.



Through the other side of the Z bend to the hole of pushrod connector , and then insert the aileron horn into the pre-cut slot.



Glue the control horn by using the CA .



Use the screwdriver to tighten the pushrod connector with screws.



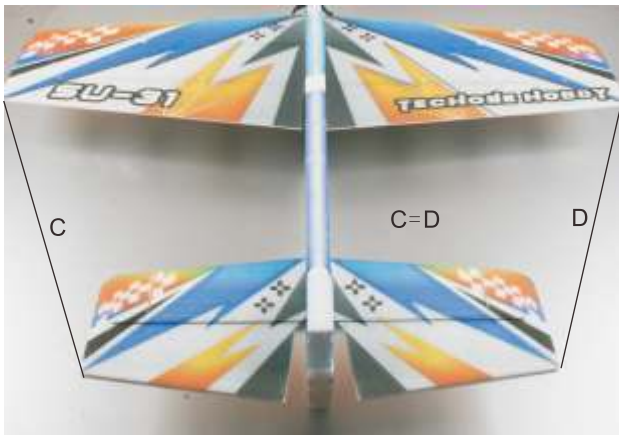
Use the same method to install the aileron pushrod.



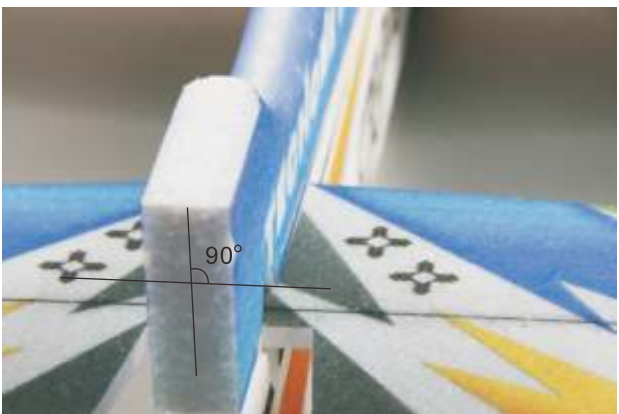
Use the pinchers to cut off the superfluous steel wire.



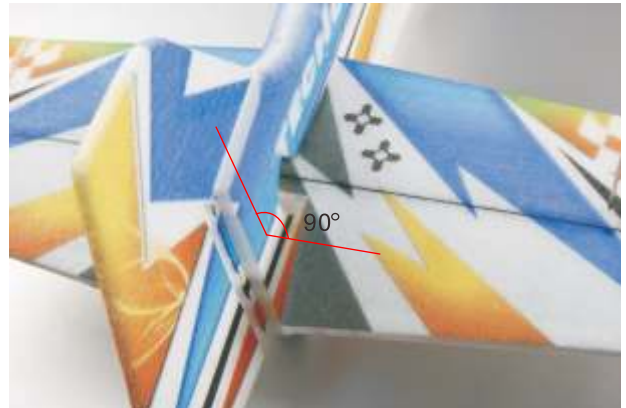
Drop some glue on the joints of elevator and fuselage to fix.



Glue the break point of the fuselage.



Insert elevator into the slot of fuselage. Make sure $C=D$ (refer to the picture).



Use CA to fix the rudder.



Connect the horizontal stabilizer to the bottom of the fuselage by using 2pcs 1.3*220mm stab brace carbon rods, and then reinforce the rods by using CA , pls make sure the horizontal stab is vertical the fuselage when you connect.



Insert the elevator servo into the servo hole , Glue the servo . And fix the servos onto the plywood servo mount with included screws.



Use a hobby knife to cut a small slot on the elevator so that can install the control horn easily.



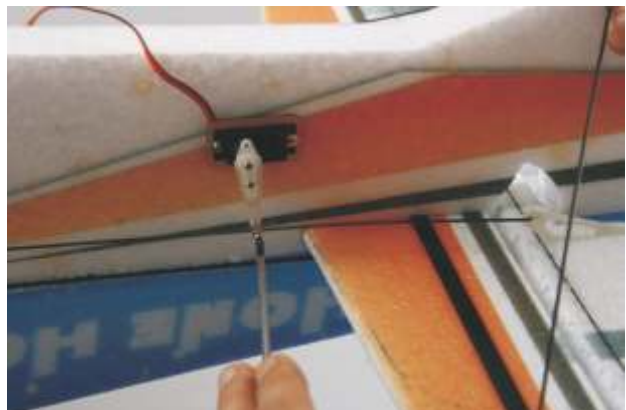
Connect the elevator and rudder horn onto the Z bend.



Through the other side of the Z bend to the hole of pushrod connector , and then insert the rudder and elevator horn into the pre-cut slot.



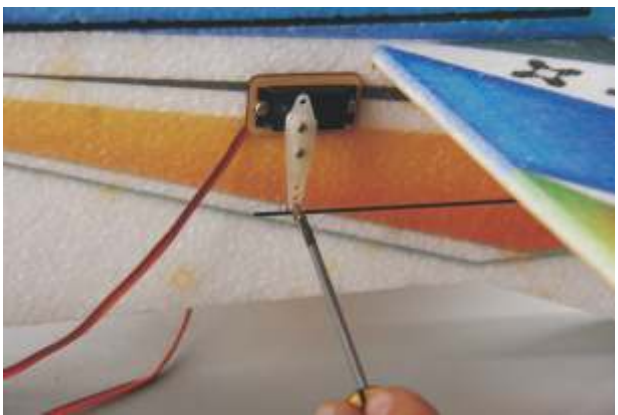
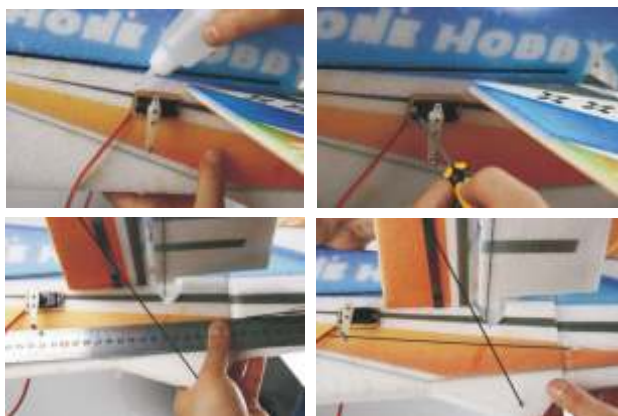
Glue the control horn



Use screw to tighten the pushrod connector with the screws.



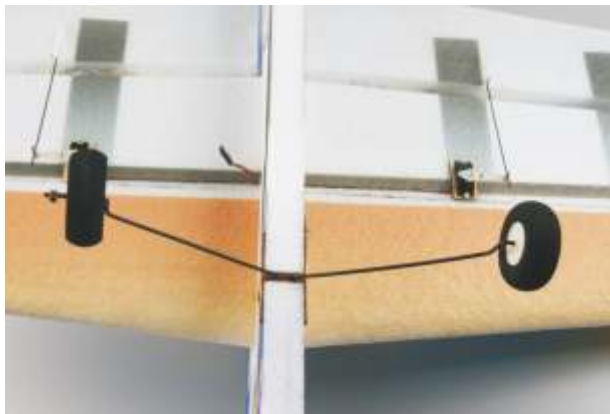
Use the pinchers to cut off the superfluous steel wire.



Use the same method of installing the elevator pushrod to install the rudder pushrod.



Embed the rudder and elevator servo leads into the pre-cut slots on two sides of fuselage.
Pls use the servo extension wire if the servo wire is not long enough.



Insert the landing gear port into the slot of plywood mounting brace onto the bottom of the fuselage.



Use included screws to fix the motor onto the motor mount.



Connect motor and ESC, then adjust to correct motor running direction before flying.
Put ESC into the slot of downside fuselage.



Insert battery into the battery hole.



Link the servo leads and ESC to receiver, then test.



After test, put the receiver into the receiver slot. (see picture)



fix the propeller



A perfect SU31 3D-EPP is done after your careful assembly. While assembly, the flying weight is really critical to the flight performance and will be affected by adding weight, so you should reduce any unnecessary weight while assembly. Then you'll get the best flying performance.