

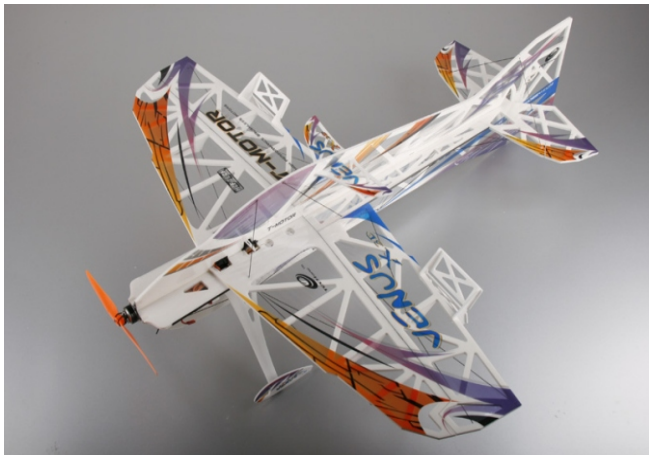


Before operating this unit, please read these instructions completely.

TECHone™

VENUS X 3D-HCF INSTRUCTIONS

Instruction Manual



Features:

Venus X 3D is originated from our successful product--Venus EPO, and it also uses HCF technology. It's suitable for both indoor and outdoor flying.

- 1.5mm depron foam is used on this plane which ensures its flying intensity in outdoor.
2. Carbon fiber materials are applied to make it stronger. And we use new X interchange way to reinforce the aileron, so plane's torsional strength is increased without too much adding weight.
3. To ensure the accurate product control, precise control horns and accessories for Venus EPO are also used on Venus X 3D.
4. A winglet on the fuselage is added to improve the flying performance.

Hollow-carved & filming technology

We've been trying our best to lighten the flying weight of our indoor 3d planes and also enhance their configuration intensity. Today, we applied a brand-new technology which is used on this kind of planes and achieves great effect.

1. Use laser cutting machine to make depron foam hollow-carved, also ensure entire plane's configuration rigidity by reasonable configuration design.
2. We adopt ultrathin polyester film, then print colorful color schemes on it, although this is a difficult task.
3. To ensure good adhesive effect between the joints of film and foam, we applied advanced filming technology. No additional adhesive left inside carved hollows.
4. In mass production, we use very skillful adhesive-transfer and heating solidify technology to make sure there's no distortion and unglued part in finished product.
5. HCF TECH not only increased product's anti-break performance, but also reduced any unnecessary configuration weight, which greatly improves our product's flying performance.

We hope our HCF TECH will be widely recognized by customers.

Product Specifications

Fuselage Length: 1060mm (41.7in.)
Wingspan: 920mm (36.2in.)
Flying Weight: 200-230g (with battery)

Motor : AS2206 KV1500
ESC : 10-12Amp
Propeller: HD 9050 or SF 9047
Servos: 6-8g micro servo *3pcs
Radio: 4/more channel
Battery: 7.4V 2S 250-450mAh Li-po 25C

3D FLYING power combo 2 (VENUS X 3D)

MOTOR: AS2206 KV 1500 outrunner brushless motor

SERVO: TS-08
0.07 sec/60° at 6.0V
0.10 sec/60° at 6.0V
1.8kg-cm at 6.0V
23.6X11.5X19.65mm
Weight: 8.5 g

ESC: 10Amp 2-4s Lipo BEC 1A/5V
BATTERY: 500mAh 7.4v Lipo 20C

Warning: This aircraft is a hobby grade product, only for people 14-year old or above.

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

Large gyms, 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

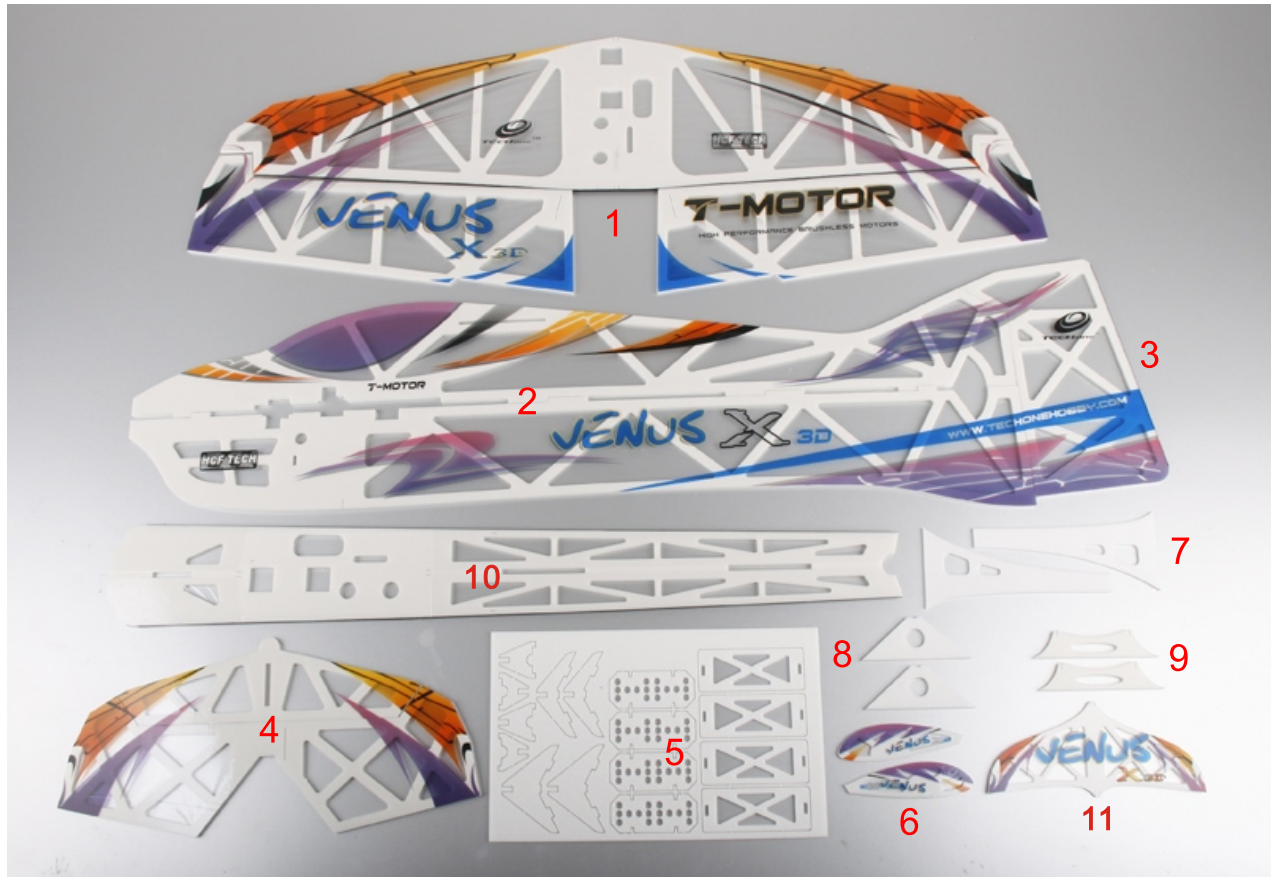
Max servo travel of aileron: 45degrees up and 45degrees down(55mm)
Max servo travel of elevator:50 degrees up and 50 degrees down(75mm)
Max servo travel of rudder: 50degrees left and 50 degrees right (98mm)

CG Position:

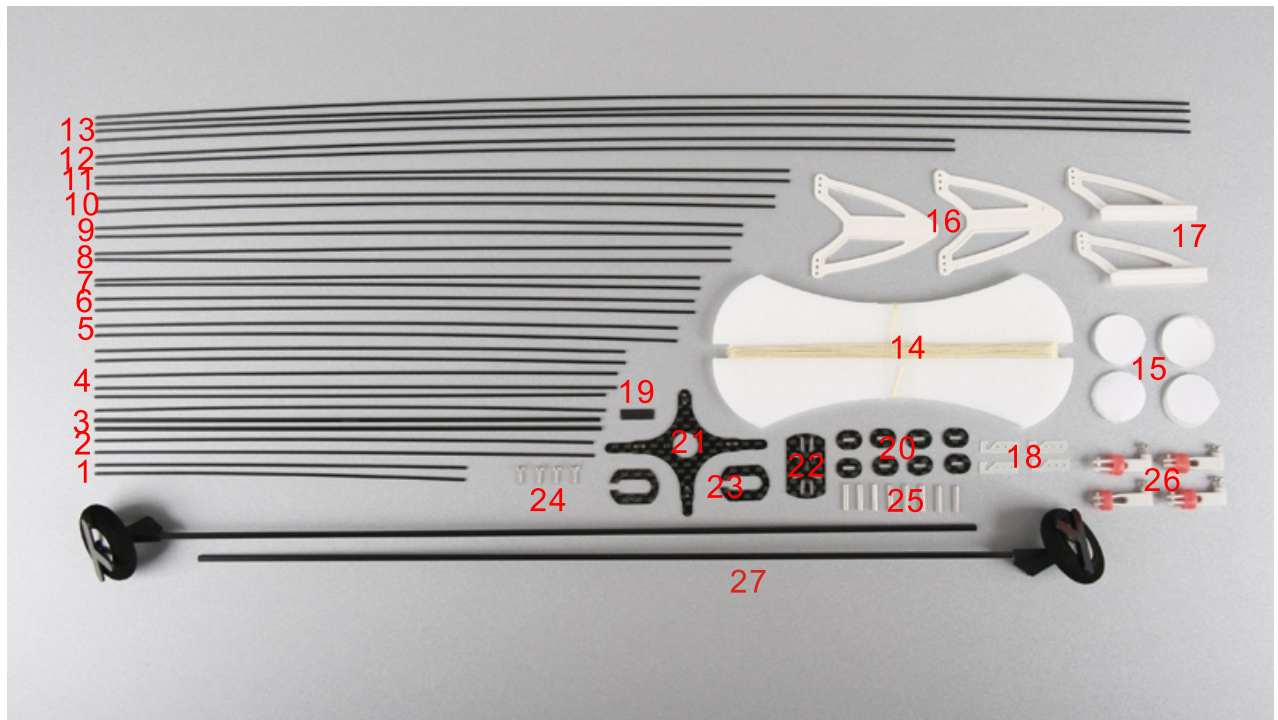
85-95 mm from the leading edge of the wing.



Parts included in the packing



- | | | |
|----|-----------------------|------|
| 1 | Wing | 1pc |
| 2 | Fuselage | 1pc |
| 3 | Rudder(vertical tail) | 1pc |
| 4 | Elevator (stabilizer) | 1pc |
| 5 | Damping board | 1pc |
| 6 | Wheel cover | 2pcs |
| 7 | Landing gear baffle | 2pcs |
| 8 | Aileron wing fence | 2pcs |
| 9 | Wing fence | 2pcs |
| 10 | Horizontal fuselage | 1pc |
| 11 | Winglet | 1pc |



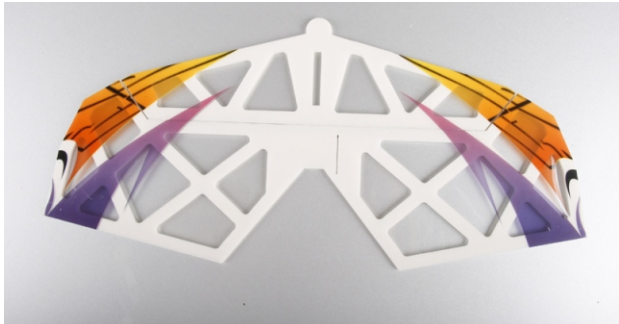
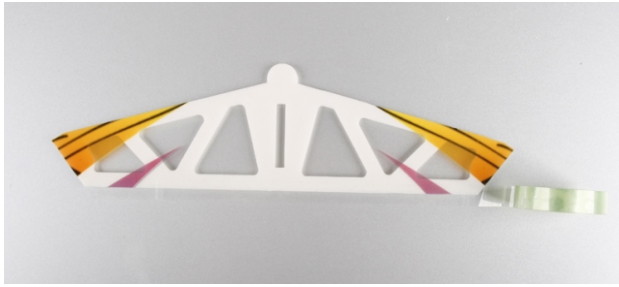
- 1 carbon fiber rods 1*118MM 2pcs
- 2 carbon fiber rods 1*158MM 2pcs
- 3 carbon fiber rods 1.3*160MM 2pcs(Alleron push rod)
- 4 carbon fiber rods 1*168MM 2pcs
- 5 carbon fiber rods 1*185MM 2pcs
- 6 carbon fiber rods 1*190MM 2pcs
- 7 carbon fiber rods 1*192MM 2pcs
- 8 carbon fiber rods 1*202MM 2pcs
- 9 carbon fiber rods 1*207MM 2pcs
- 10 carbon fiber rods 1*216MM 2pcs
- 11 carbon fiber rods 1*221MM 2pcs
- 12 carbon fiber rods 1*272MM 2pcs
- 13 carbon fiber rods 1*348MM 4pcs

- 14 Pull-pull thread 1pc
- 15 Nylon velcro 4pcs
- 16 Rudder & elevator control horn 2pcs
- 17 Aileron control horn 2pcs
- 18 Pull-pull thread adjustor 4pcs
- 19 Carbon fiber strip 3x10x0.5mm 1pc
- 20 Reinforcing doublers 8pcs
- 21 Motor mount 1pc
- 22 9-hole carbon fiber reinforcement 1pc
- 23 Landing gear reinforcement 2pcs
- 24 Self tapping screw 4pcs
- 25 Steel tube 8pcs
- 26 Aileron collet 4pcs
- 27 Landing gear set 2pcs

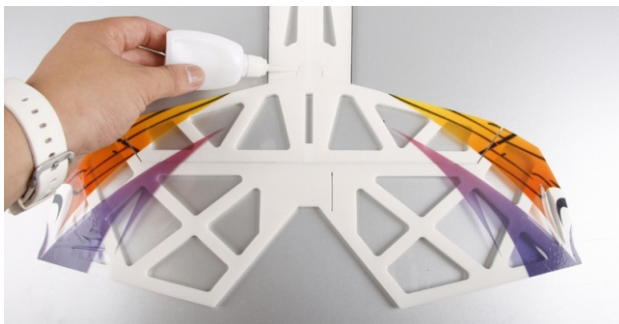
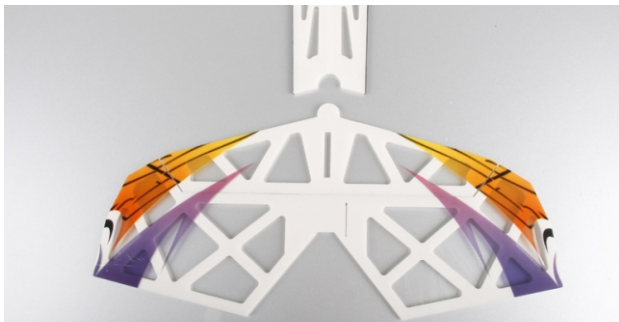
The items below are required for assembly



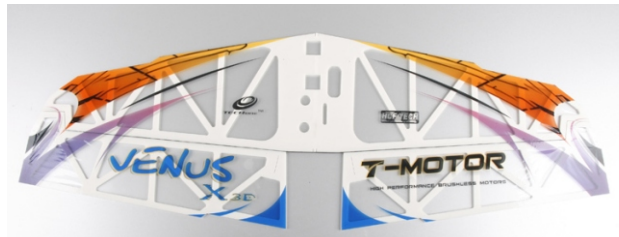
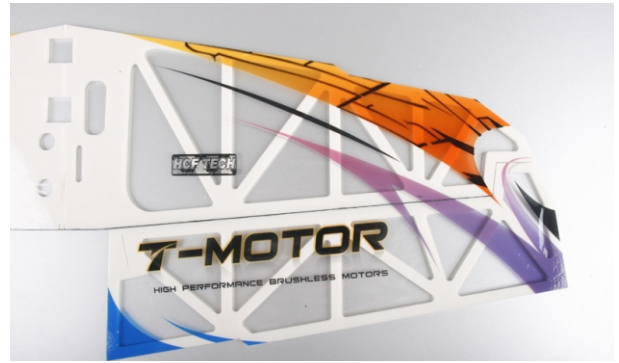
The assembly steps :



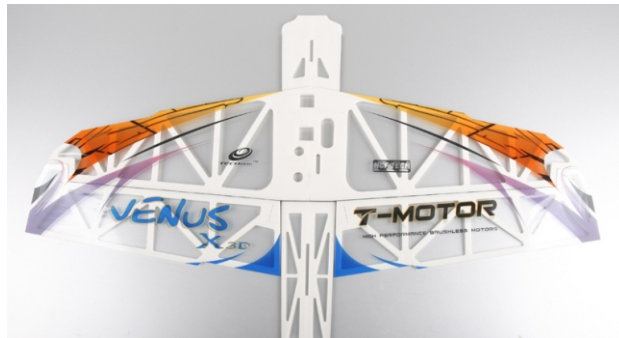
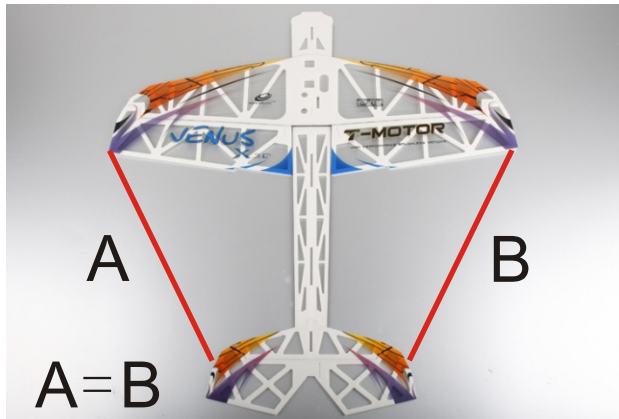
1. Attach elevator to stabilizer and fix with glue tape. Notice: make sure elevator can move up and down smoothly.



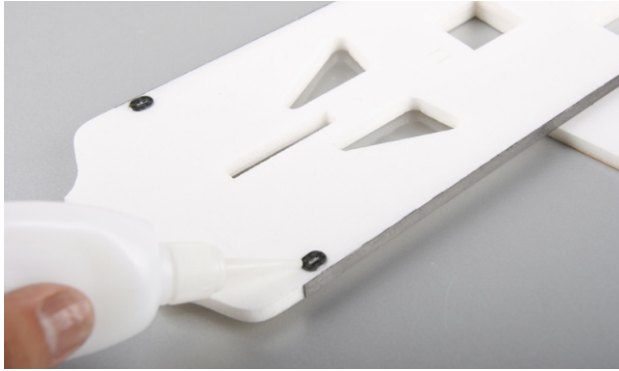
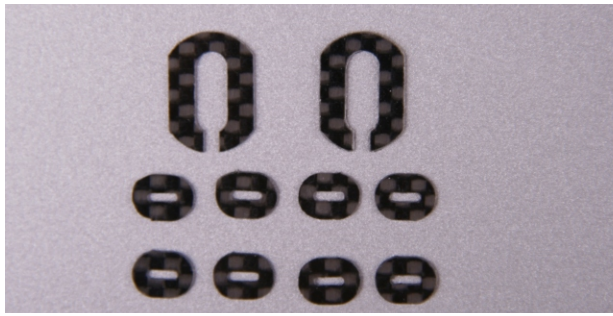
2. Attach stabilizer to horizontal fuselage and fix with glue. Make sure fuselage and stabilizer is on the same level.



3. Fix left and right ailerons, same as step 1.



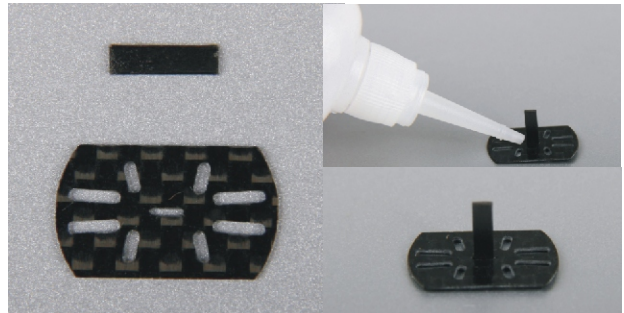
4. Place two wing pieces on the fuselage and make them centered, then fix with glue as picture shown.



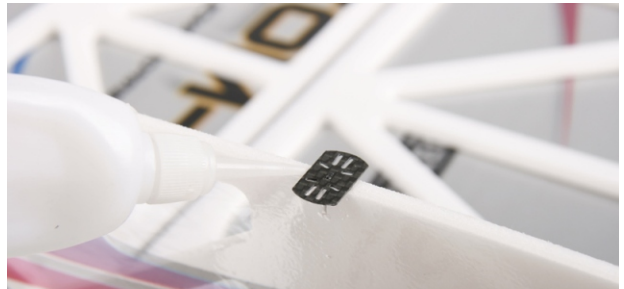
5. Glue 8pcs reinforcing doublers onto pre-reserved holes on back fuselage and wing, refer to above pictures.



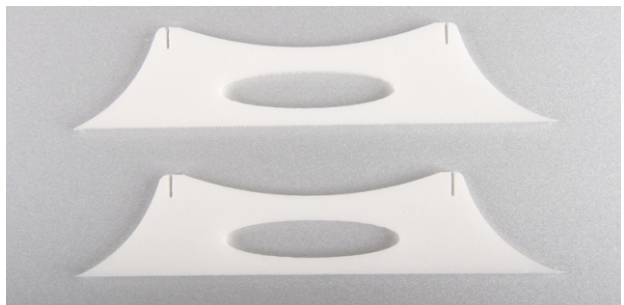
6. Insert vertical fuselage into the slot of horizontal fuselage, then use CA to fix. Notice: make sure both fuselages are perpendicular to each other.

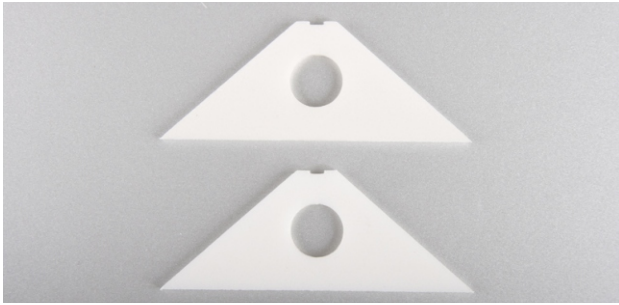


7. Glue 9-hole carbon fiber reinforcement and 1pc 3*10*1mm carbon fiber strip together.

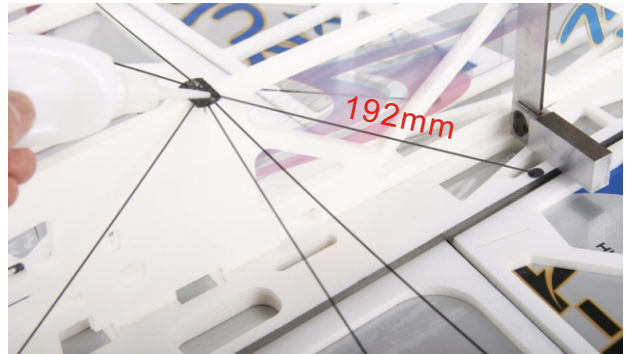


8. Insert above carbon strip into pre-reserved slot on bottom vertical fuselage (close to the nose), then fix with glue. Make sure the 9-hole reinforcement is perpendicular to vertical fuselage.

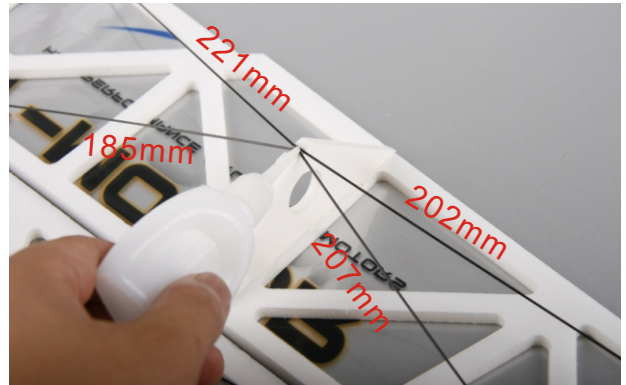




9. Install wing fences on corresponding places of bottom wing and fix with glue.



10. Install all sizes carbon fiber rods on corresponding places according to the order of above pictures.



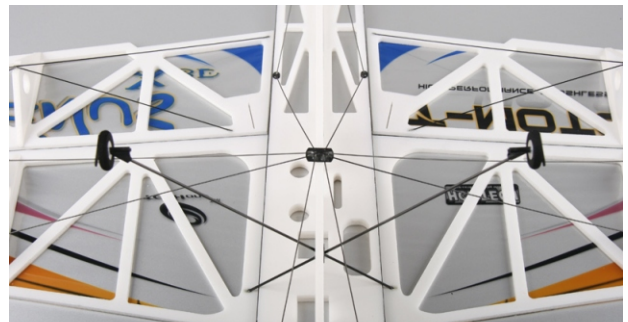
11. Install aileron carbon fiber rods, no distortion on ailerons.



12. Install other carbon rods, and make sure the vertical fuselage is perpendicular to wing.



13. Fix landing gear reinforcements to corresponding hole with glue.



14. Install landing gear sets.





15. Install wheel covers and landing gear baffle.



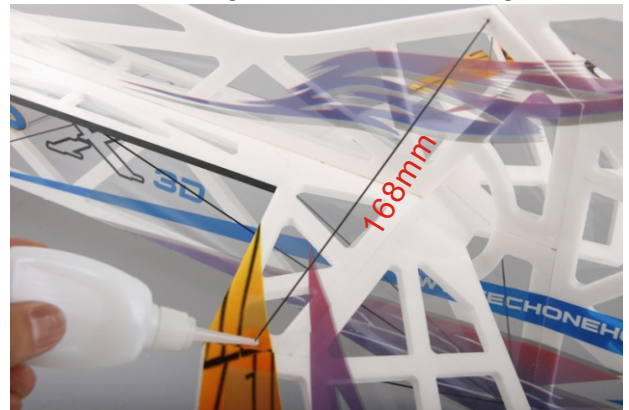
16. Insert upper vertical fuselage into the slot of horizontal fuselage, then use CA to fix. Notice: make sure both fuselages are perpendicular to each other.



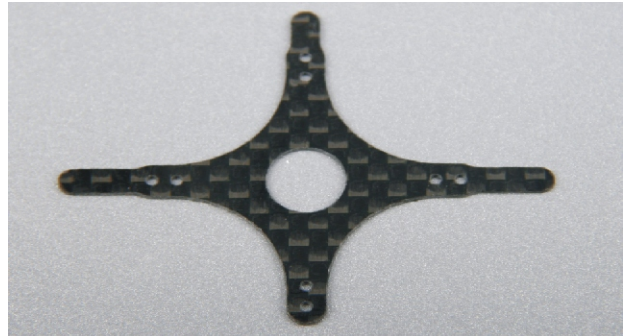
17. Install rudder on vertical fuselage.

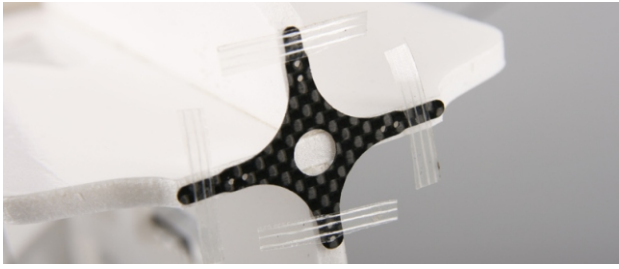


18. To avoid distortion on vertical fuselage, install 2pcs carbon fiber rods between upper horizontal fuselage and vertical fuselage.



19. Install 2pcs carbon fiber rods between upper stabilizer and rear vertical fuselage. Make sure stabilizer is perpendicular to vertical fuselage.





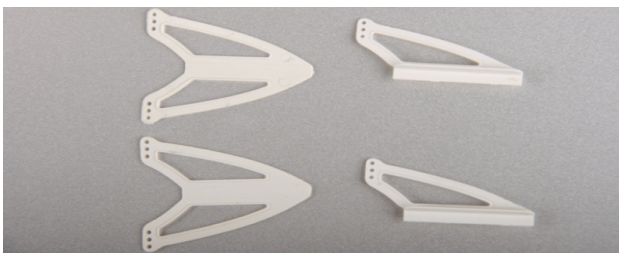
20. Install motor mount on nose, then use fiber tape to reinforce.



21. Install winglet.



22. Install 2pcs carbon fiber rods between upper horizontal fuselage and vertical fuselage. Refer to picture.



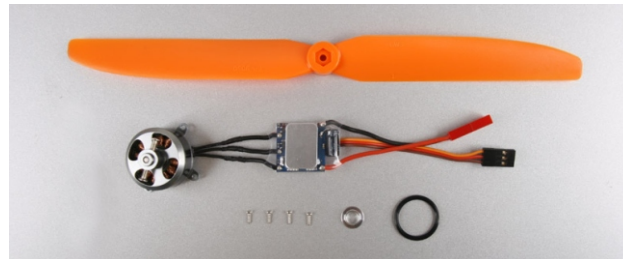
23. Install aileron control horns on back wings.



24. Install rudder control horns.



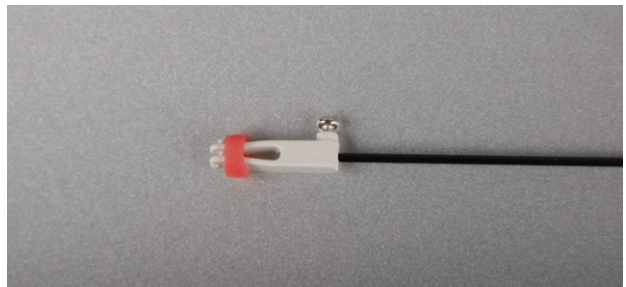
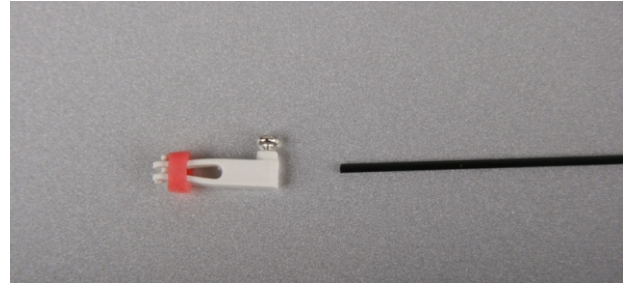
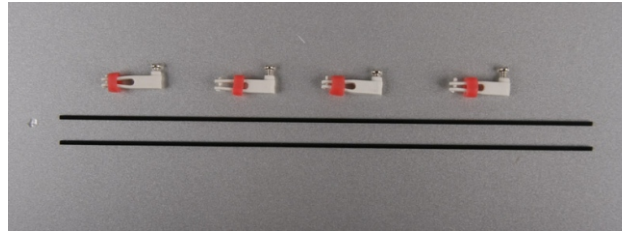
25. Install elevator control horns.



26. Install motor on motor mount with 4pcs self tapping screws.



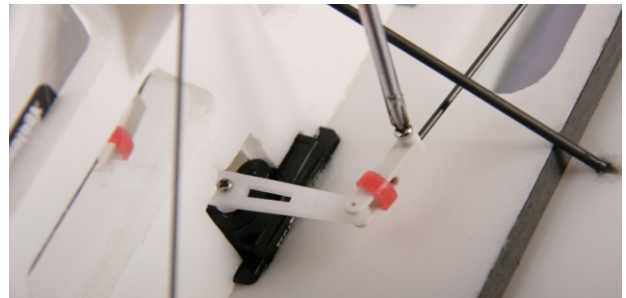
27. Fix propeller with o ring.



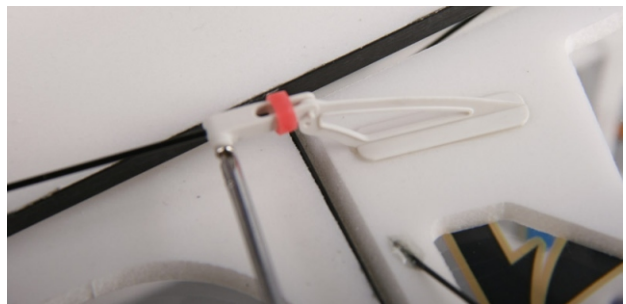
30. Insert carbon rod into the hole of collet, then fix with screwdriver.



28. Place aileron servo into pre-cut servo hole on fuselage and fix with glue.



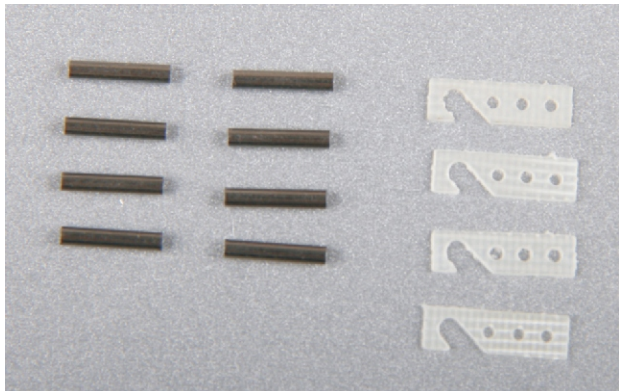
29. Use screwdriver to install aileron servo arm.



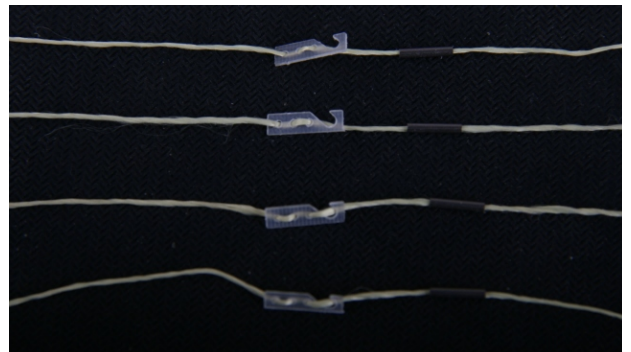
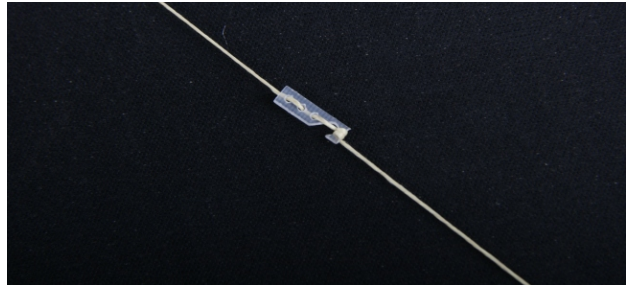
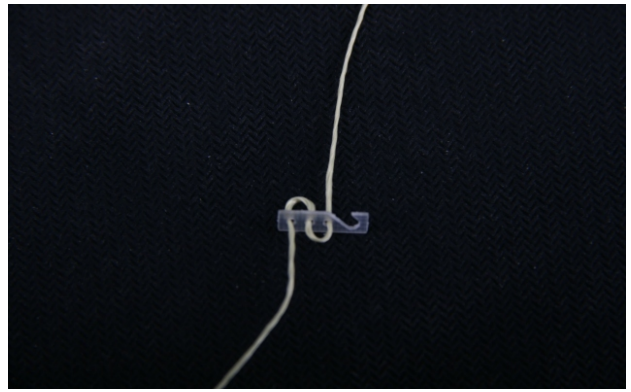
31. Install aileron push rods. Make sure the both aileron control surface is at the same angle.



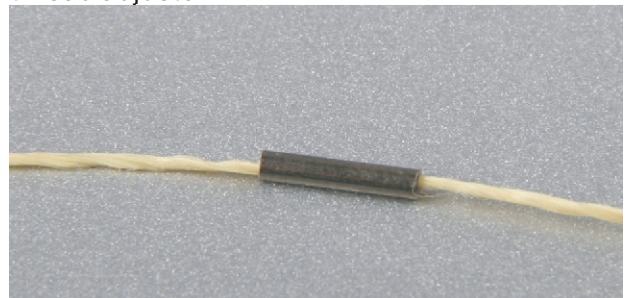
32. Install rudder servo arm extension.



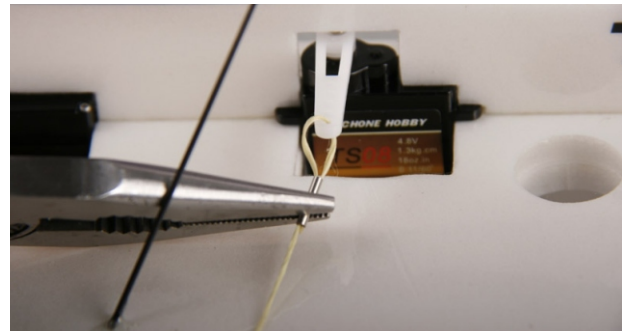
33. Drop some CA on the ends of thread to make them a little harder, so they can easily thread through small holes.



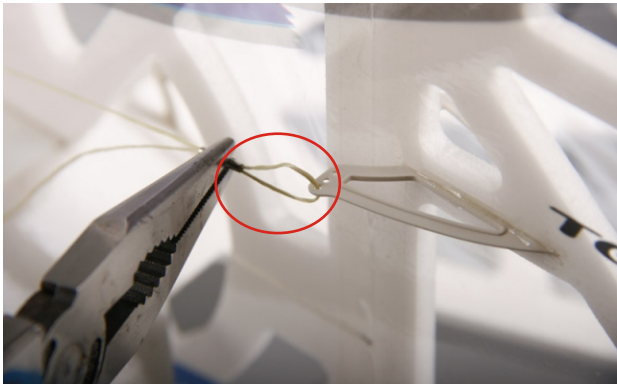
34. Across thread through 3 holes on pull-pull thread adjuster.



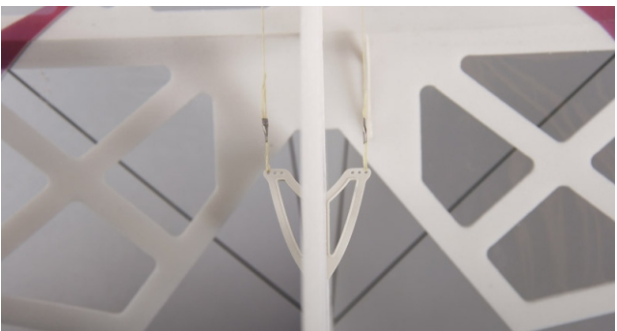
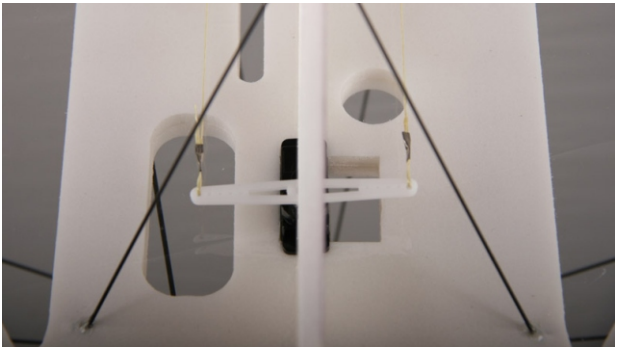
35. Then pass through steel tube.



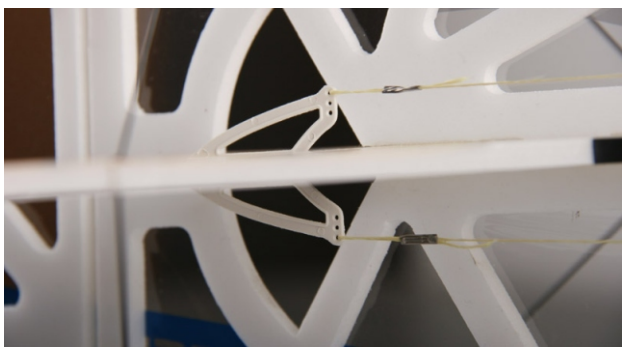
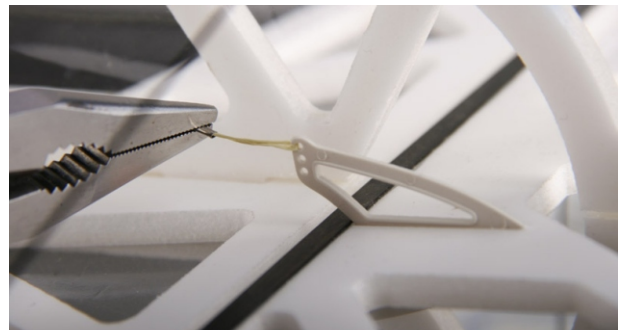
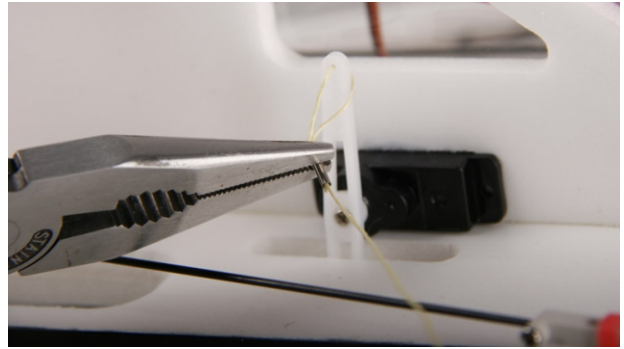
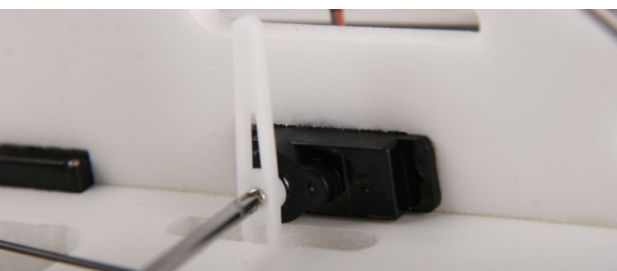
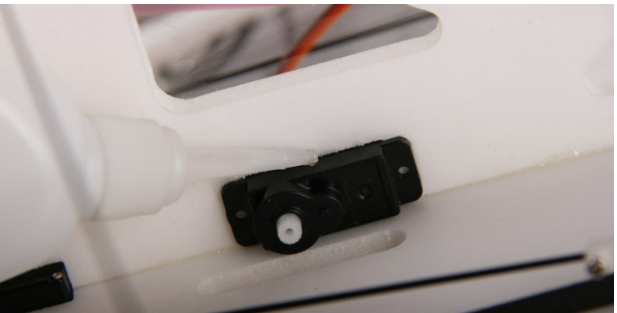
36. Then thread through the hole on rudder servo arm. Stave steel tube with plier and fix with CA.



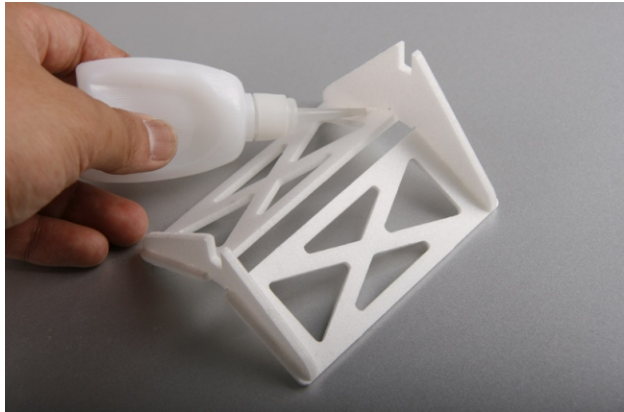
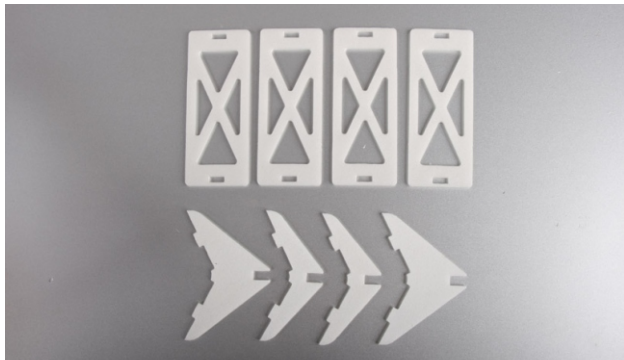
37. Pass another end of thread through rudder control horn, and stave steel tube with plier, then fix with CA. The same operation as last step.



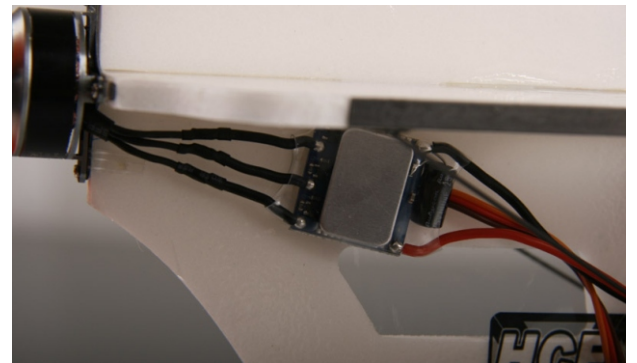
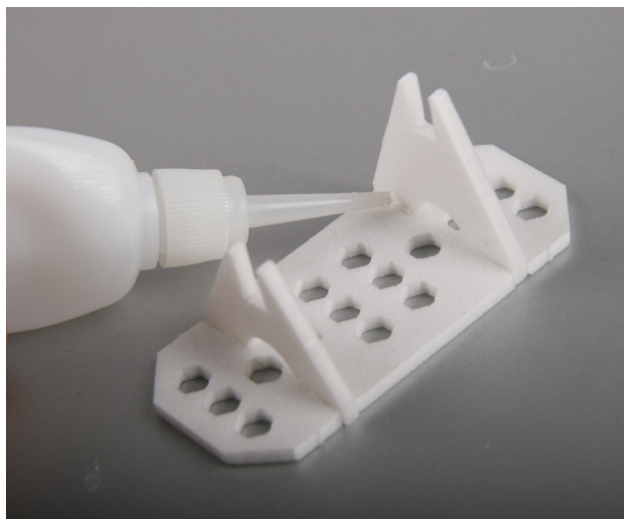
38. Install another elevator pull-pull thread. Same operation as last step. Notice: make sure the thread is taut.



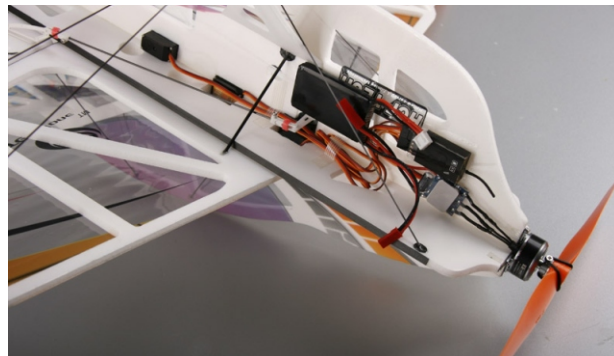
39. Install elevator pull-pull thread. Same operation as rudder pull-pull thread.



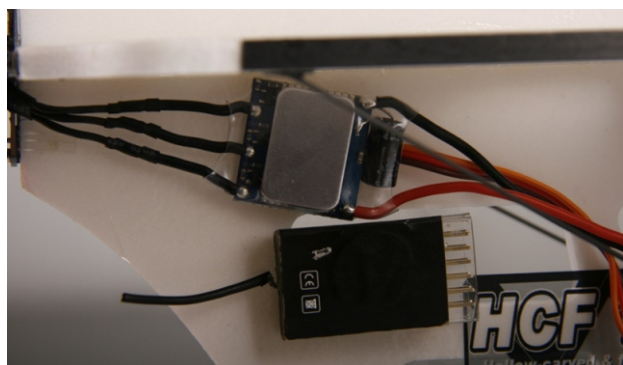
40. Two different damping boards for your better choice. Refer to above pictures.



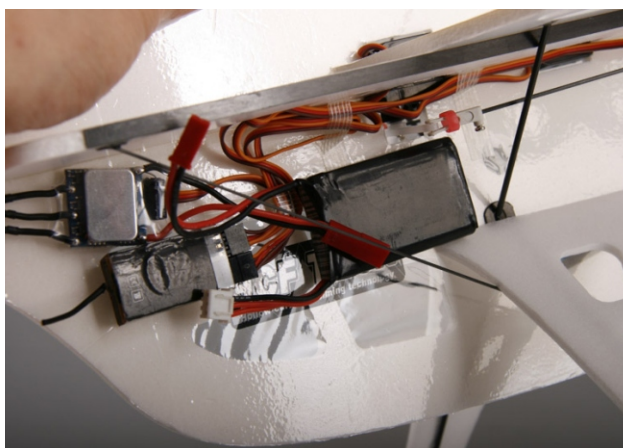
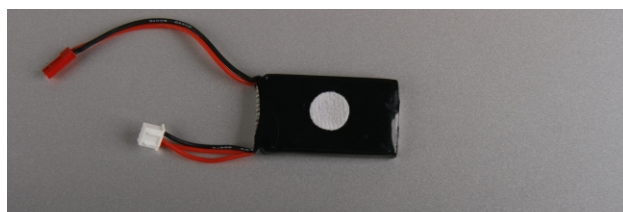
41. Fix ESC with nylon velcro on lower vertical fuselage.



44. Connect servo and ESC to receiver, then power on and do equipment test.



45. A perfect VENUS X 3D 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.



42. Fix receiver and battery with velcro.



43. Pass all servo wires through fuselage and place them close to receiver.

www.techonehobby.com
salestechone@gmail.com
techonesales4@gmail.com