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MANTH

USER MANUAL

FILIPPO MATERAZZI DESIGN

Features

BIGGER, STRONGER, LIGHTER, that's the Manth! it was born from the experience of Vanth design and considering the previous success of Metis. It was designed for the World Air Games 2015 where Filippo flew it with success. It is a little bigger than Vanth for a better looking during flying performances but it is also reinforced to make it stronger and ready for hard maneuvers and lightened where necessary to have it lighter than Vanth! Final result is a very slow plane but also perfect for extreme fast and hard maneuvers thanks to enormous control surfaces and their innovative shape. High contrast color scheme let the plane very easy to see in flight even during fast rolls. It is perfect for indoor flight and outdoor too with calm wind. The kit is composed by 3 mm and 2 mm depron, carbon rods (pre-cutted!), new super lightweight carbon control horns and servo arms and all the necessary to complete the plane.

Product Specifications

Fuselage Length: 950mm (37.4in.) **Wingspan:** 932mm (36.7in.)
Flying Weight: 125-145g (with battery) **Motor :** AS2204 KV1700
ESC : 6-10Amp **Propeller:** 8040 **Servos:** 4-6g micro servo *4pcs
Radio ： 4/more channel **Battery:** 7.4v 2S 350mAh Li-po

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

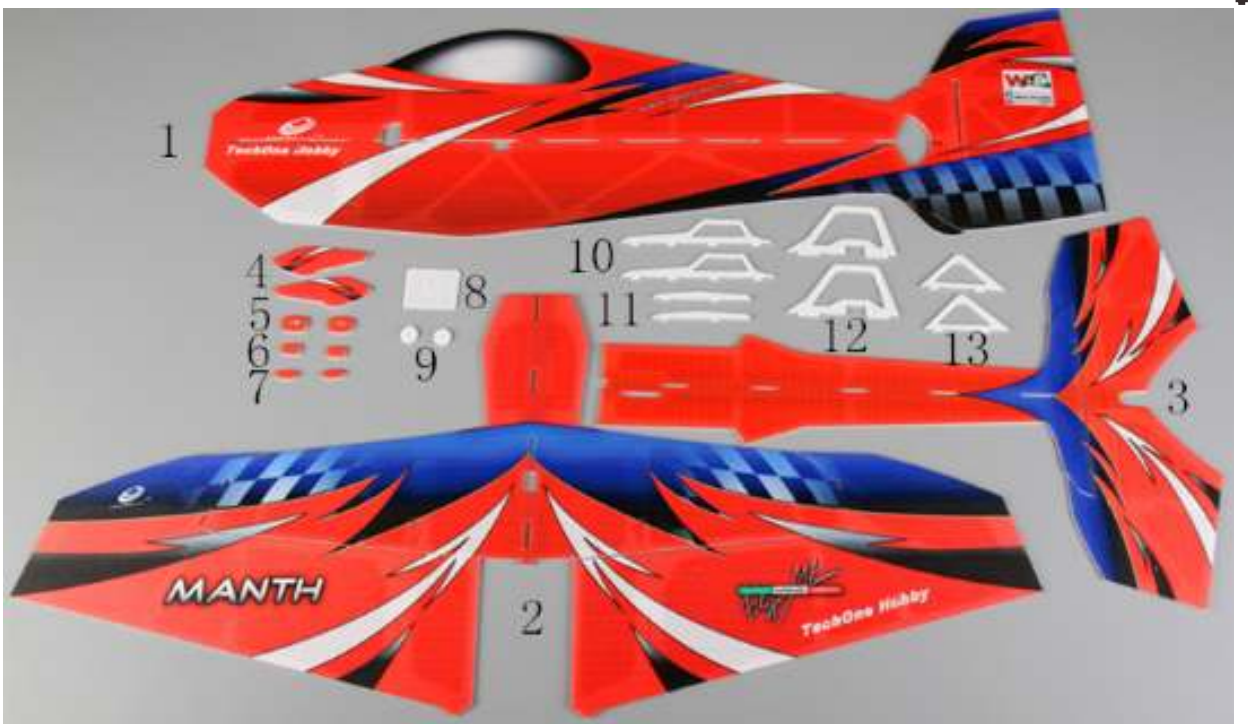
Cautions for flying
Large gyms, front lawns and parks make excellent flying areas. Make sure you have permission to fly and follow safety guidelines set by local authorities. The calmer the wind, the better!

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

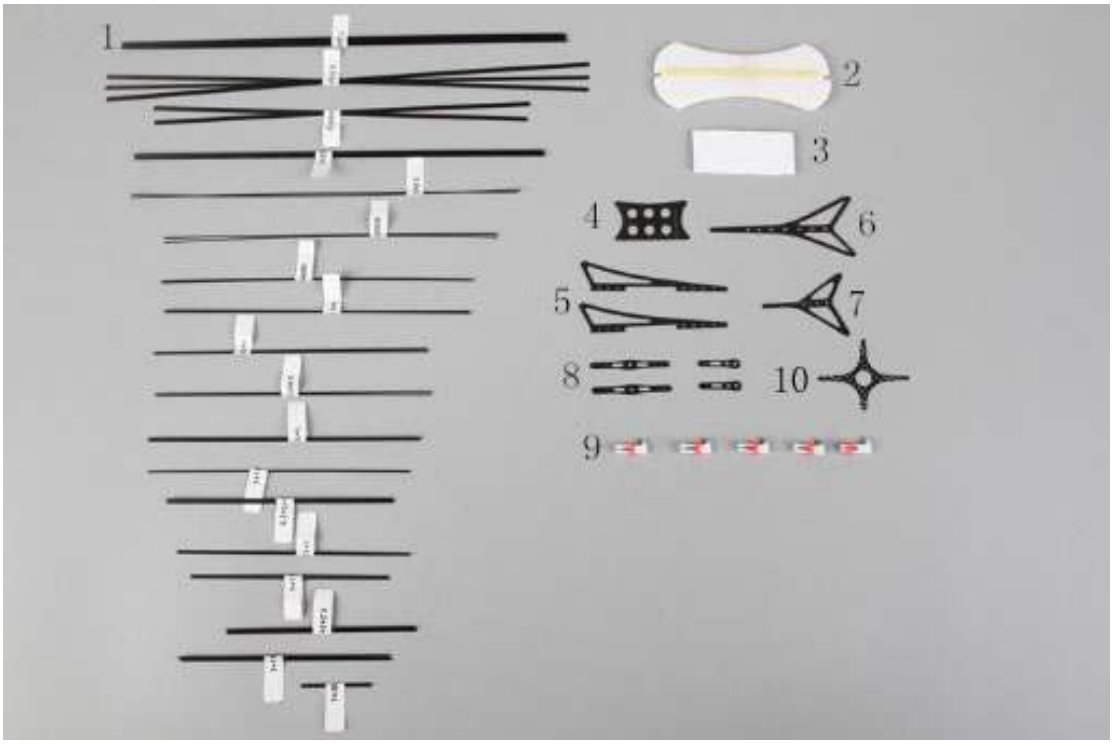
Recommended Flying Setup
Max servo travel of aileron: 45degrees up and 45degrees down（55mm）
Max servo travel of elevator:50 degrees up and 50 degrees down（65mm）
Max servo travel of rudder: 50degrees left and 50 degrees right （70mm）

CG Position: 190-200mm away from the leading edge of the wing.

Parts included in the packing

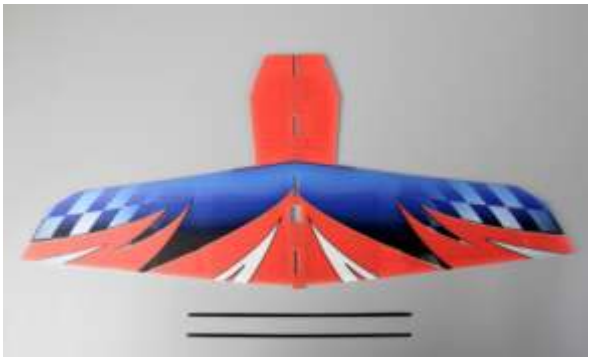


1. Fuselage	1pc	8. Reinforcement set	1pc
2. Wingspan	1pc	9. Landing gear fixed reinforcement	2pcs
3. Side of fuselage and Horizontal stabilizer	1pc	10.Aileron reinforcing wing fence	2pcs
4. Wheel cover	2pcs	11.Horizontal stabilizer reinforcing wing fence	2pcs
5. Landing gear reinforcement	2pcs	12.Main wing reinforcing wing fence	2pcs
6. Main wing reinforcement	2pcs	13.Aileron reinforcing wing fence	2pcs
7. Wheel cover reinforcement	2pcs		

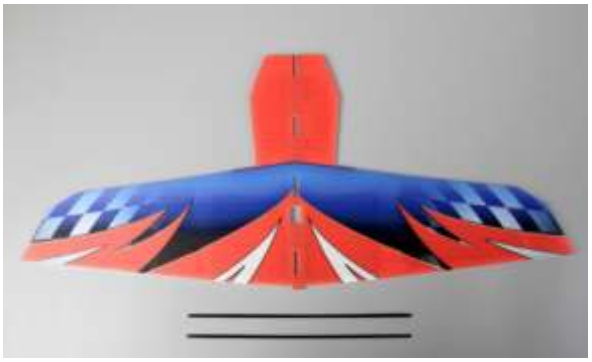


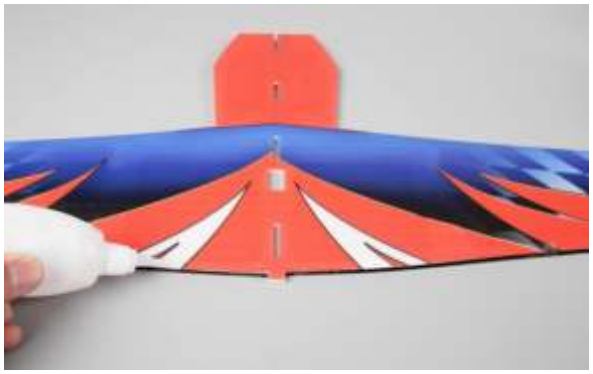
1.Reinforcing carbon rod and bracing carbon rod
2.Kevlar strings
3.Sticker magic tape
4.Horizontal stabilizer Reinforcing carbon fiber
5.Aileron servo horn
6.Vertical stabilizer servo horn
7.Horizontal stabilizer servo horn
8.Lengthening servo horn
9.Pushrod Plastic adjuster
10.Motor mount plate

The assembly steps



1.Glue the carbon fiber of wing leading edge

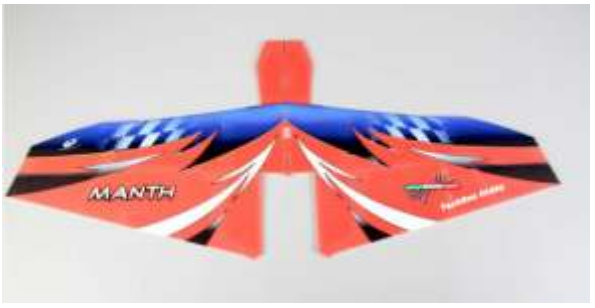




2.Glue the carbon fiber of wing trailing edge

3.Cut out the aileron cant by knife

4.Glue half of transparent adhesive tape on the aileron



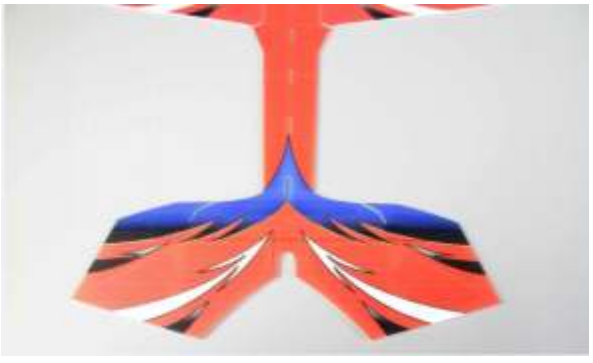
5.Aileron finished

6.Side of fuselage be glued with wingspan

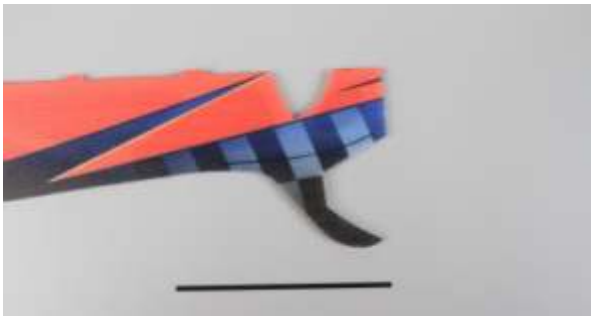
7.Cut out the angle by knife

8.Put the carbon fiber into the slot of Horizontal stabilizer, and fix with glue.

9.Glue the half of the transparent adhesive tape on the Horizontal stabilizer

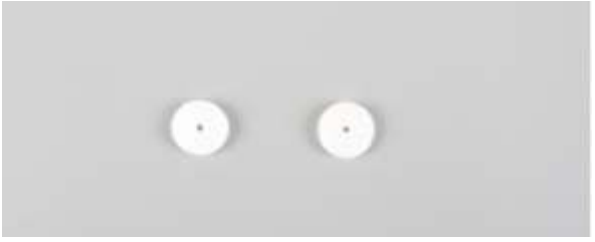


10.Glue Horizontal stabilizer with the side of fuselage

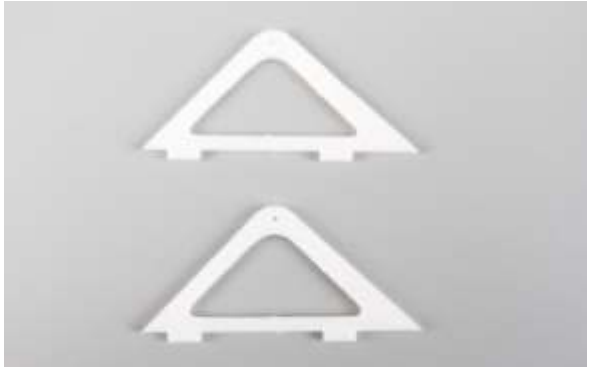


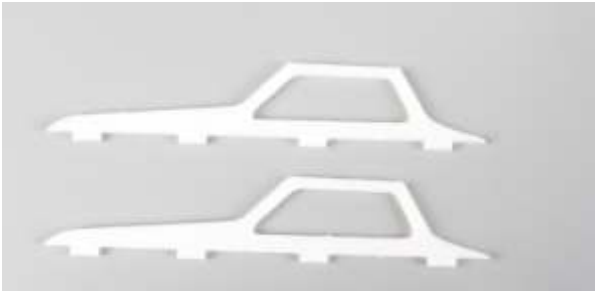
11.Insert the carbon fiber into the tail of skid, then fix with glue.

12.Keep the right angle to 90°, glue the lower fuselage to the bottom surface of wing.



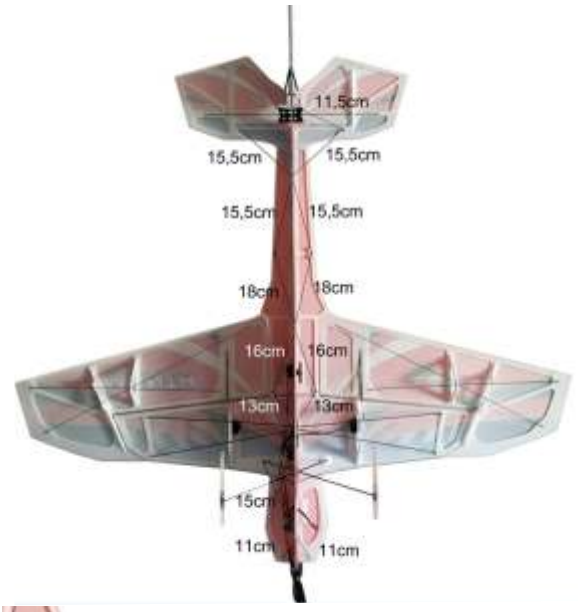
13.Glue the reinforcement parts as picture.

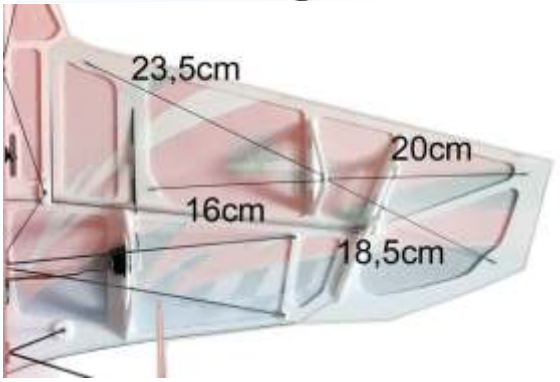


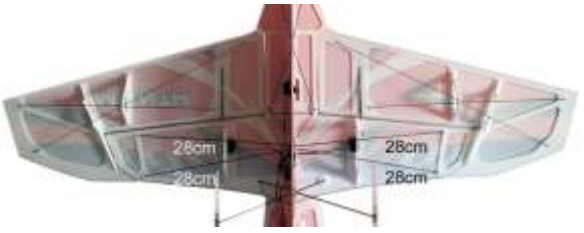


14.When glue the reinforcing wing fence, keep the angle to 90°

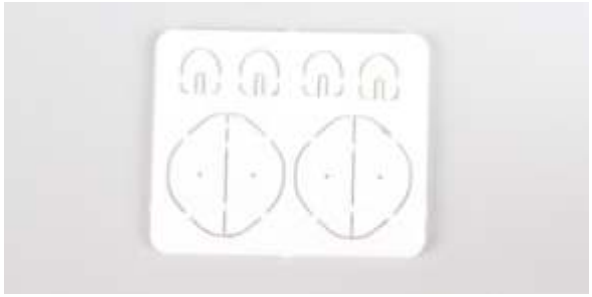
15.Reinforcing bracing parts as picture







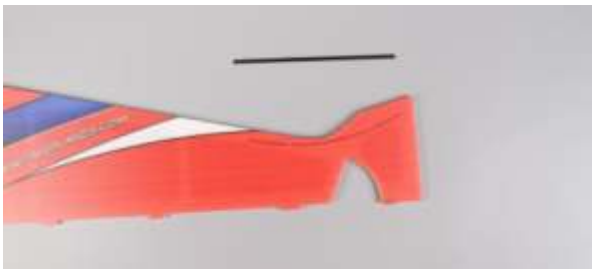
16.Carbon fiber bracing as picture

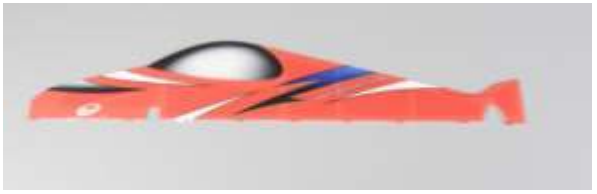


17.Reinforcing parts

18.Reinforce the position of the adhesive parts

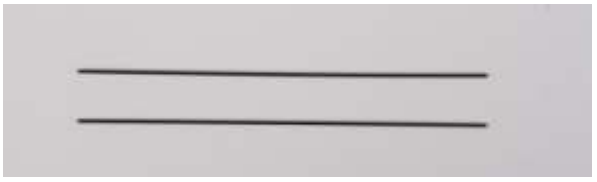
19.Landing gear wheel cover adhesion as picture

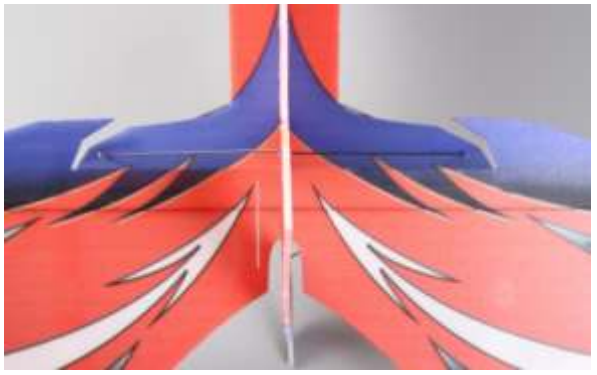




20.Insert reinforcing carbon fiber into the slot of upper fuselage, then fix with glue.

21.Use the right angle ruler on upper fuselage when bonding , keep the right angle 90°of upper fuselage , then fix with glue.





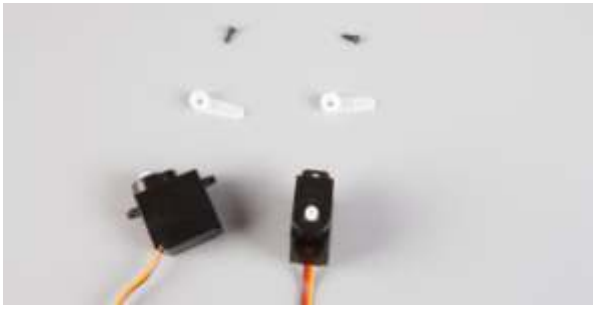
22.Insert the reinforcement carbon fiber into slot of horizontal stabilizer, then fix with glue.

23.Cut out the angle of vertical stabilizer by knife

24.Glue the half of the transparent adhesive tape on the vertical stabilizer

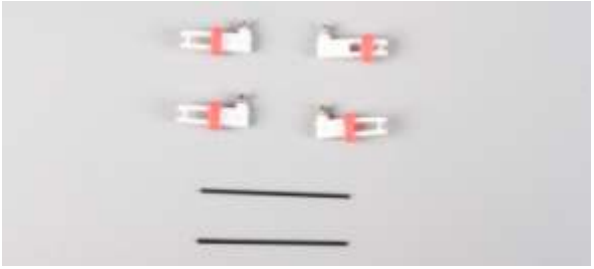
25.Kit plane assembly completed

26.Glue the Aileron servo



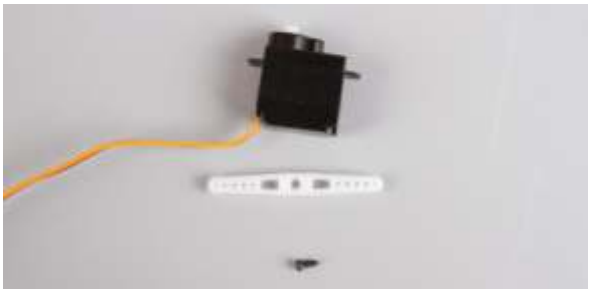
27.Attention to the left and right of servo arm when installing the servo.

28.Glue Aileron servo

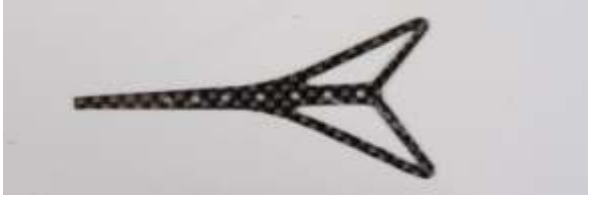


29.Adjuster and Carbon connecting rod

30.Connect aileron servo with aileron servo horn



31.The installation way of vertical stabilizer servo



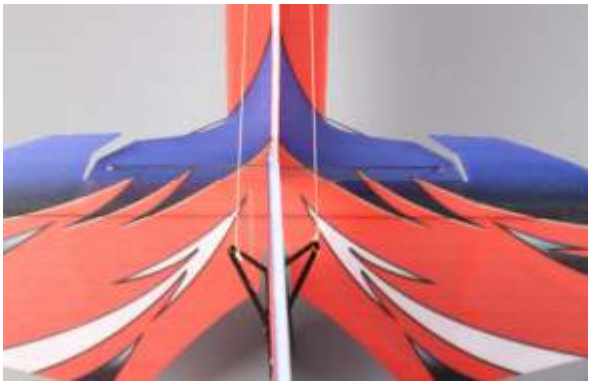
32.Vertical stabilizer servo horn

33.Screws

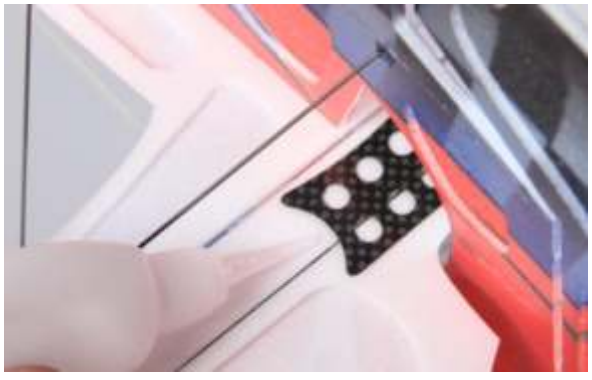
34.Twist screws on the outer edge of the servo arm on vertical tail

35.Twist screw on the outer edge of servo horn on vertical tail

36.Kevlar strings



37.Horizontal stabilizer reinforcement sheet



38.Glue the reinforcement sheet on the bottom of control surface of Horizontal stabilizer

39.Insert the servo horn into the slot of Horizontal stabilizer, then fix with glue

40.Glue the servo on Horizontal stabilizer, then tighten the servo arm with screwdriver

41.Screws

42.Twist the outer edage of Horizontal stabilizer with screws

43.Twist the outside of servo horn on Horizontal stabilizer with screws

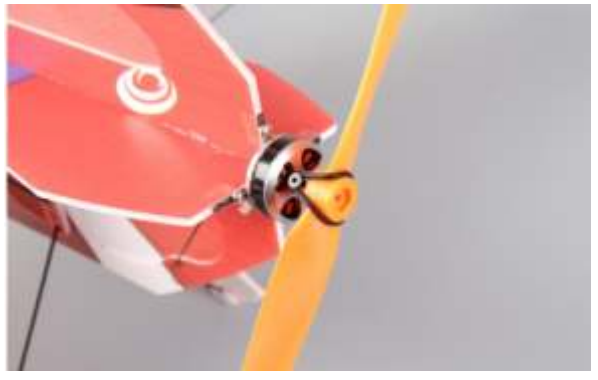
44.Kevlar connecting wires

45.Motor mounting plate

46.Glue the motor mounting plate

47.Motor 2204 KV1700

48.Fix the motor with screws by screwdriver



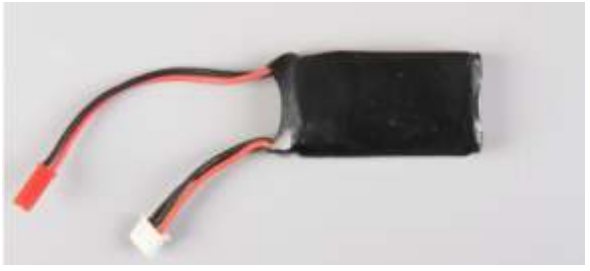
49.The installation of Propeller as picture

50.Receiver

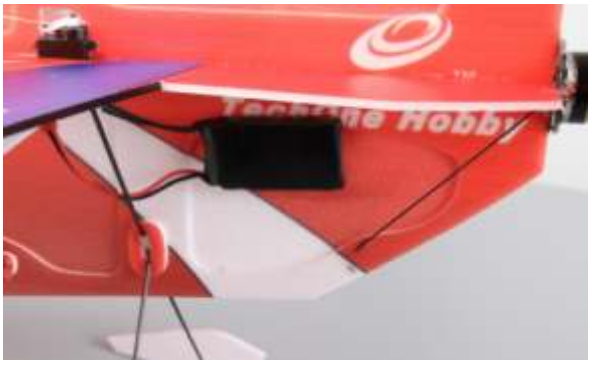
51.Connect all of the servo horn wires on receiver

52.Magic tape

53.Stick the receiver and ESC on fuselage by using magic tape



54.Li-po Battery



55.Stick the battery on the other side of fuselage

56.Assembly completed

NOTE

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