YAK55 EPP 3D Airplane

Instruction Manual

E17

注意事项
SAFETY PRECAUTIONS

● 这个产品不是玩具，而是一个复杂的具有难度的飞行器。您和您身边人的安全取决于您如何操作它，您需要了解相关知识，并谨慎操作。禁止没有成人陪伴的儿童独自操作该设备。不适合14岁以下人群使用。再次强调，这不是一个玩具。
● This product should not be considered a toy, but rather a complicated and sophisticated flying model. Your safety depends on how you use and fly it, If not correctly operated, could cause injury to you or your family members. Children must be accompanied by an adult at all times if operating this product. Not suitable for children under the age of 14. THIS IS NOT A TOY.

● 不要在机场，军事基地，居民区或其他任何受限制的地方飞行。
● Do not fly around some restricted location like airports, military bases, residential areas, etc.

● 您需要对发射机进行距离检查，以确保没有收到任何干扰。
● You will need to range check the transmitter to be sure you are not experiencing any interference.

● 始终保持先打开发射机后打开接收机，先关闭接收机后关闭发射机的步骤。
● Always turn on the receiver last after turning on the transmitter and shut off the receiver first before turning off the transmitter.

● 如果您是初学者，建议您在有经验玩家的协助下调试和飞行。
● If you are only a beginner to the radio control model flying, do not attempt to fly your model without any assistance or advice from advanced expert fliers.

● 请将相关物品放置在孩子们够不到的地方
● Keep relevant items out of reach of children.

● 这个设备的设计已经超过我们正常使用所需要刚性要求，但若您需要以超出我们推荐的动力飞行时，请合理控制动作幅度并适当增加机体强度。
● This product has been flight tested to meet or exceed our rigid performance and reliability standards in normal use,if you plan to perform any high-stress flying, you are solely responsible for taking any and all necessary steps to control movement range and reinforce the body strength.

● 您的设备中可能包括一些玻纤和碳纤雕刻的部件，这些纤维部件所带的粉尘可能会引起眼睛，皮肤的不适，请您在需要的时候带上护目镜或者防尘服。
● This product may include some fiberglass and carbon-fiber reinforced plastic parts,which may cause eye and skin discomfort,pls wear the goggles or dust-proof clothes when needed.

● 因航空运输安全管制，您收到的产品可能没有清单中出现过的胶水，请您理解无法发送胶水给您的原因。您可以在当地文具店很方便的购买到您所需要的胶水。
● Due to air traffic safety control, the products you receive may not have the glue that appears in the list. Please understand and purchase the glue you need at your local stationery store.

飞行前的建议
PRE-FLIGHT CHECKS

● 安装舵机前，请先将舵机通电让舵机中心点回中，以便能更好的调试舵面。
● Check/adjust servo centering, in order to adjust the control surface better.

● 初次启动电机，您需要确认电机旋转的方向以适配您的机型。
● Double-check the spinning direction of motor at first usage, and sure it’ s suitable for your model.

● 请将重心（CG）调整至说明书所述位置并尽量靠近。如果有需要，您可以增加机头或者机尾的重量，以确保机体有更好的飞行姿态。
● Set the center of gravity (CG) at the position that manual already marked out. If necessary, add weight to the nose or tail to ensure the best flight performance.

● 检查机身内部，确保所有设备正常连接；检查机身表面，包括但是不限于蒙皮，固定螺丝，舱盖，座舱罩等位置。
● Double-check the inside of the fuselage, make sure all the equipments are correctly connected; Check the heat-shrink covering material’ s surface, Make certain all screws, bolts, cabin and canopy remain secure.

● 在飞行前，请检查您电池情况，若有低电压，电池损坏等情况，请您停止操作并马上更换电池。
● Take great care when connecting/disconnecting the battery, pls replace the battery immediately once found low voltage or damage to battery.

● 机身内部设备连接的方式，会和您的收发设备有关，在一些功能更多的收发设备上，您可以通过设置简化机身内部设备的连接。详细请查看您的收发设备以确认是否满足您需要的功能。
● The way the internal devices of the fuselage are connected will be related to your transmitter-receiver device. For those transmitter-receiver devices with more functions, you can simplify the connection of the internal devices of the fuselage. Check your device for details to see if it meets the features you need.

● 动力设备和收发设备第一次配对时，可能需要设置油门最大行程，请您自行设置。
● When the power system and transmitter-receiver device are paired for the first time, you may need to set the maximum stroke of the throttle. Please set it yourself.

DANCING WINGS HOBBY
http://www.dwhobby.com/

MADE IN CHINA

飞行参数
Specification

翼展:800mm
机长:867mm
起飞重量≈450g

Wingspan: 800mm
Length: 867mm
Flying Weight≈450g

推荐配置
Suggested Equipment

推荐马达: MM2212 1100KV
推荐电调: 20A 3S
推荐舵机: 9g*4pcs
推荐桨叶: 9寸
推荐电池 3S 1500mAh
推荐4通道以上接收机

Suggested Motor: MM2212 1100KV
Suggested ESC: 20A 3S
Suggested Servos: 9g*4pcs
Suggested Propeller: 9 inch
Suggested Battery: 3S 1500mAh
Radio≥4CH

工具
Tools Needed

散件 KIT

配件图仅做参考用，您收到的实物可能因为修改/优化的原因导致与图片有略有不同。
Photos shown here just for reference, the product you received maybe slightly differ from the photos due to continuous improvement on products.

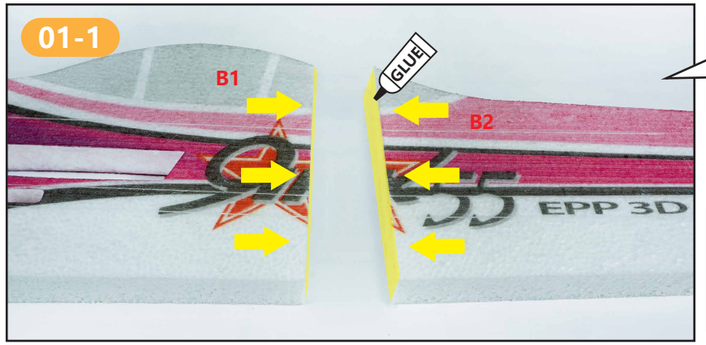
A：机翼　B1-B2：机身　C1：水平尾翼　C2：垂直尾翼
D1-D2：碳片　E1-E3：起落架　F：舵角　G：钢丝连杆
I：舵臂　J：快装接头　K：木件
L：马达座　M：魔术绑带

A: Wing　B1-B2: Fuselage　C1: Horizontal Tail
C2: Vertical Tail　D1-D2: Carbon sheet　E1-E3: Landing Gear　F: Servo Horn　G: Steel Wire Connecting Rod
I: Servo Arm　J: EZ-Connector
K: Wood Parts　L: Motor Mount　M: Magic Strap

01 机身组装Assemble the Fuselage

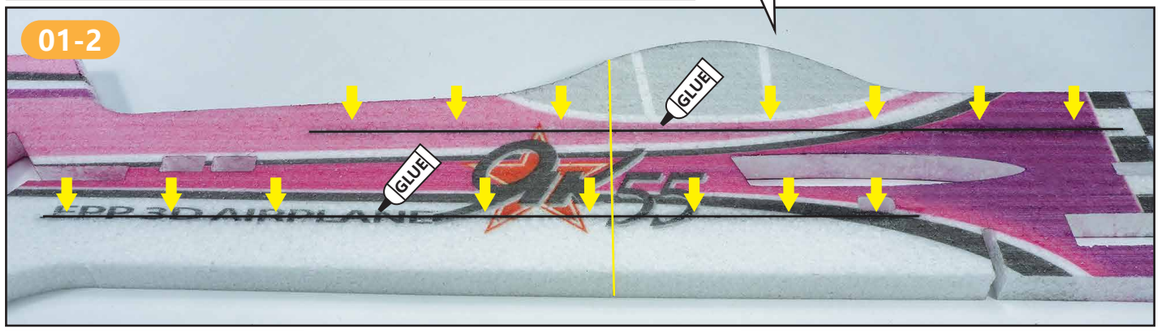
注意：各部件结合处用泡沫胶粘合。
Note: the joints of the parts are bonded with foam glue.

01-1



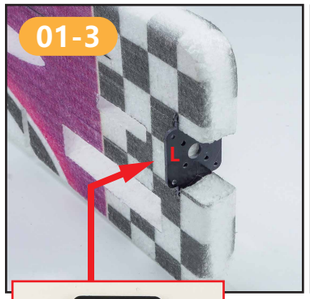
把B1，B2粘合在一起，保持机身整体平直。
Glue B1 and B2 together，keep the fuselage straight.

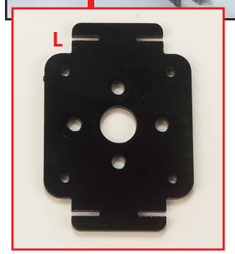
01-2



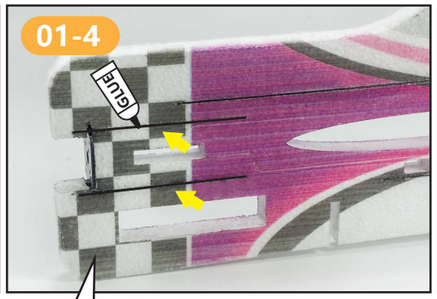
待上一步骤胶水干固后，在机身两面的预留槽内嵌入碳片，用泡沫胶粘固。
After the glue is dry of the previous step, insert a carbon sheet into the reserved groove of the both sides of the fuselage ,and glue it with foam glue.

01-3



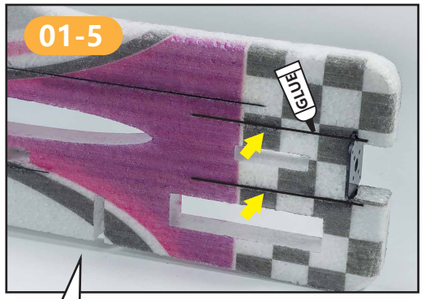


01-4



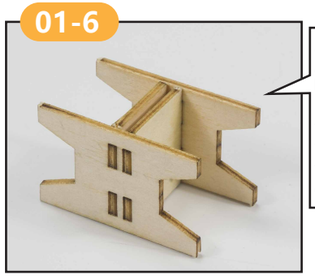
在机身头部粘贴马达座，并用碳片卡入卡扣，碳片整体嵌入机身，并用胶水粘合牢固。
Attach the motor mount to the head of the fuselage, and insert the buckle with the carbon sheet. The carbon sheet is integrated into the fuselage and glued firmly with glue.

01-5



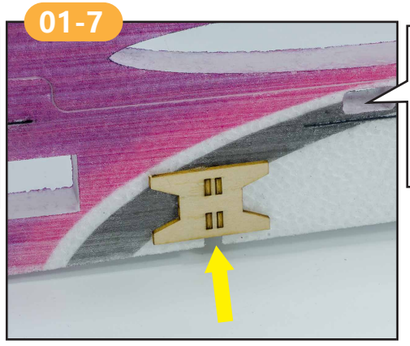
翻转到另一面，参考步骤01-4，嵌入碳片固定住马达座另一面，然后用胶水粘固。
Flip to the other side, refer to steps 01-4, insert the carbon sheet to fix the other side of the motor mount, and then glue it with glue .

01-6



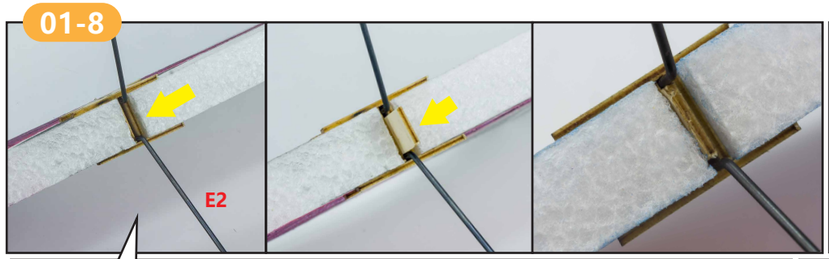
从K木件板上取下木件，用快干胶粘合成图中形状。（完成后可喷漆上色）
Remove the wood pieces from the K board and glue them into the shape of the figure with quick-drying glue.(paint after completion)

01-7



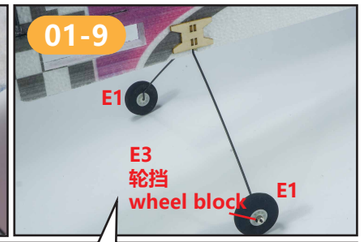
把木件嵌入机身底部的槽内，用胶水粘合。
Insert the wood piece into the groove at the bottom of the fuselage and glue it with glue.

01-8



在起落架木件中装入起落架钢丝，然后插入木片固定住，最后用胶水粘固。
Install the steel wire in the landing gear, then insert the wood chip to fix it, and finally glue it with glue.

01-9

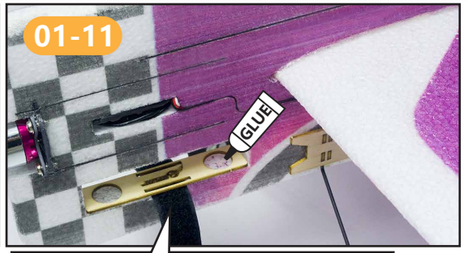


在起落架钢丝上装入机轮，用轮挡E3锁住轮子。
Install the wheel on the landing gear wire and lock the wheel with the wheel block E3.

01-10

从K木件板上取下木件，穿入魔术绑带。
Remove the wood pieces from the K board and insert the magic strap.

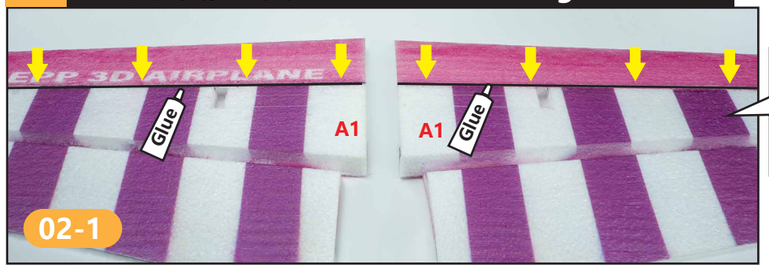
01-11



把木件粘贴到机身头部电池放置位置。
Paste the wood piece to the position of the battery in the head of the fuselage.

02 安装机翼，尾翼 Assemble the Wing and Tail

02-1

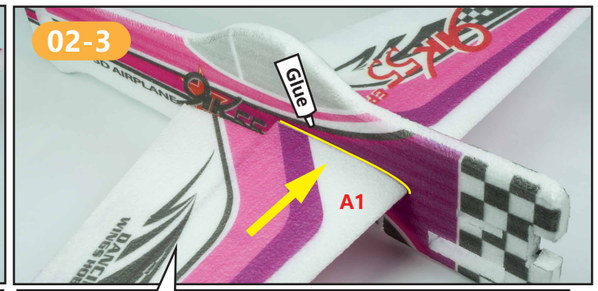


在机翼预留槽内嵌入碳片，并用胶水粘合牢固，两片机翼相同。
Insert a carbon sheet into the reserved groove of the wing and glue it firmly with glue. The two wings operate in the same way.

02-2

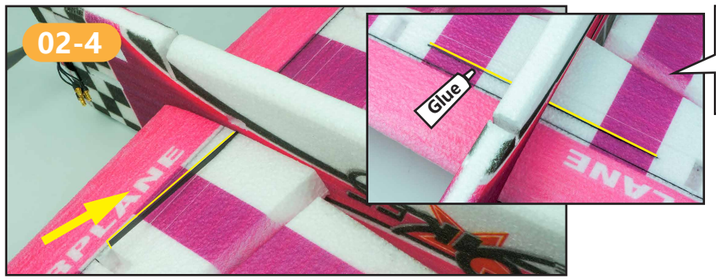
在机身机翼安装孔和机翼切面涂泡沫胶，然后把机翼插入机身。
Smear the foam glue along the installation hole of the fuselage and wing,insert the wing into the fuselage.

02-3

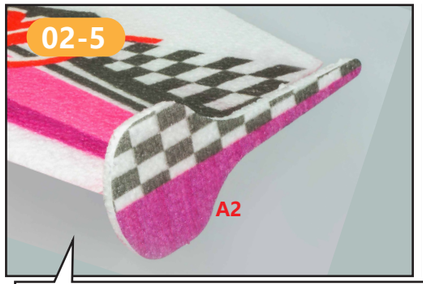


插入另一半机翼，粘合牢固，并调整机翼平直定型，保持与机身垂直。
Insert and glue the other wing,adjust the wing,make sure it's straight and vertical with fuselage.

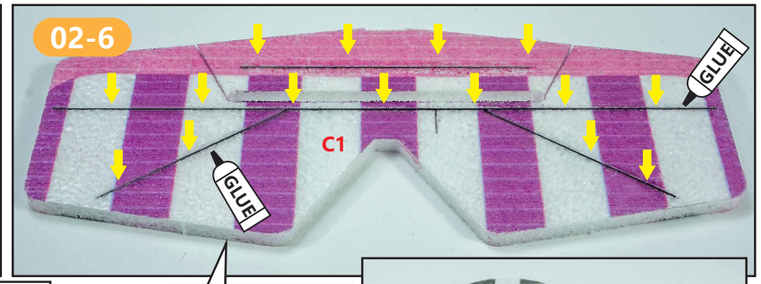
02-4



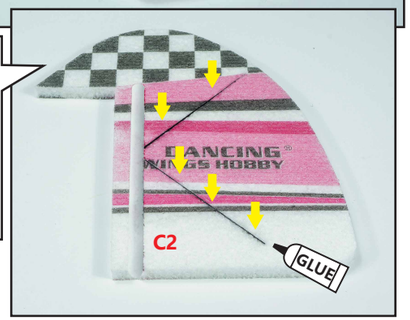
待上一步胶水干后，在机翼预留的切口内嵌入碳片，并用泡沫胶粘合固定。
After the glue is dry,insert and glue the carbon plate inside the reserved cut on the wing.

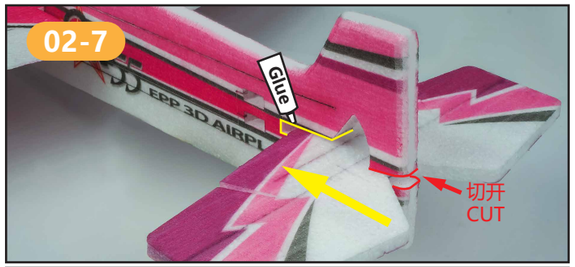


在机翼两侧粘贴A2，如下图。
Paste the A2 on both sides of the wing as picture shown.

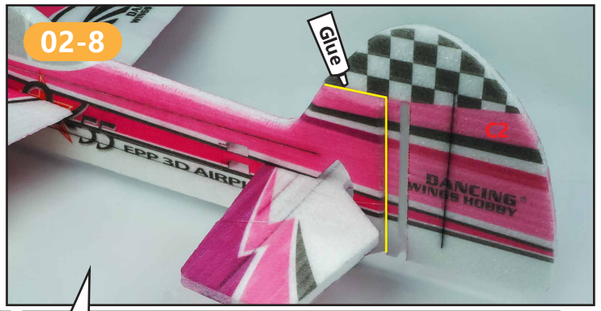


在尾翼有预留槽的一面嵌入碳片，用胶水粘固。
Insert a carbon sheet on one side of the tail with a reserved groove and glue it firmly with glue.





在机身尾部用刀切开一个开口，然后装入水平尾翼（C2），用泡沫胶粘合固定住，并调整水平尾翼与机身垂直，最后用胶水封住切口。
Cut a slit at the end of the fuselage by a knife,install the horizontal tail C2, glued firmly with foam glue,and adjust and keep it vertical with fuselage,finally seal the slit with glue.



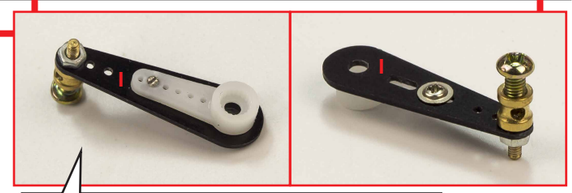
粘贴垂直尾翼，使转向舵可以自由摆动。
Paste the vertical tail so that the steering rudder can swing freely.

03 安装舵机 Install the Servos

在机身尾部舵机孔装入舵机，用胶水粘固。舵机线嵌入预留槽内，把线引导到机身中部。
Install and glue the servo into the servo hole at the rear of the fuselage. The servo line is embedded in the reserved groove to guide the line to the middle of the fuselage.

在机翼舵机孔内安装舵机，用胶水粘固。舵机线嵌入预留槽内，把线引导到机翼中部，线可以从小孔中穿过。
Install and glue the servo in the wing. The servo line is embedded in the reserved groove to guide the line to the middle of the wing, and the wire can pass through the small hole.

04 安装舵角，连杆 Install the Servo Horns and Linkage Rods

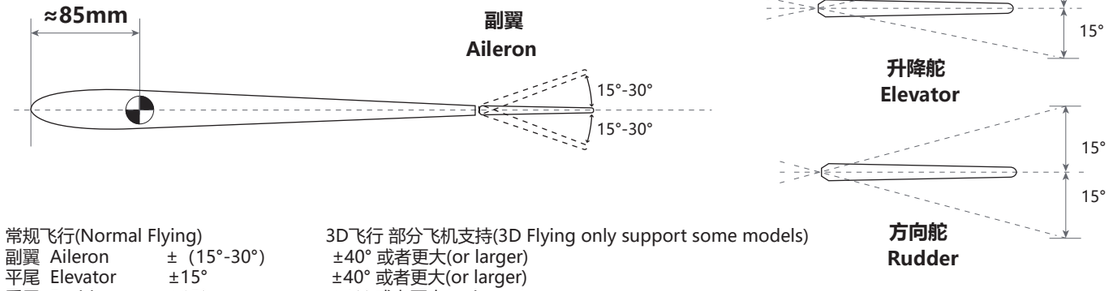


安装舵臂时，用玻纤片改装加长（如上图）。
When install the servo arm, use the fiberglass sheet to modify and lengthen. (as shown above)

在副翼，升降舵，转向舵上预留槽对应位置安装舵角，位置参考以上三张图，用胶水粘合。
Install the servo horns at the corresponding position of the reserved groove on the aileron, elevator and steering rudder,refer to the above three pictures for the position and glue it with glue.

在舵臂上安装快装接头，用Z型钢丝连杆连接舵臂与舵角，Z型一端穿入舵角，并用快装接头锁定连杆。
Install the EZ-connector on the servo arm,connect the servo arm with rudder angle with Z type steel wire connecting rod, insert one end of the Z type into the rudder angle, and lock the connecting rod with EZ-connector.

通常情况下，舵面角度的设置如下：
Usually, the control throws set as below:

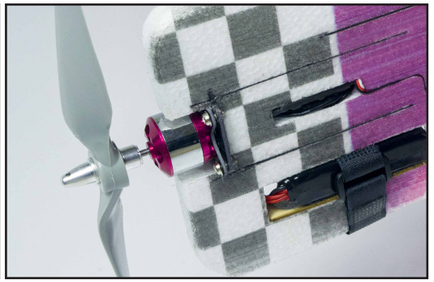


常规飞行(Normal Flying)		3D飞行 部分飞机支持(3D Flying only support some models)
副翼 Aileron	±（15°-30°）	±40° 或者更大(or larger)
平尾 Elevator	±15°	±40° 或者更大(or larger)
垂尾 Rudder	±15°	±40° 或者更大(or larger)
常用襟翼 Flap	（起飞 take-off）15°-20°	（降落 Landing）20°-40°

部分特殊机型会有V型尾翼，襟翼，前缘机翼或舵面很小等，可以以常规飞行的角度作为参考，在您不确认且没有有经验人员指导的情况下，我们建议您先以小角度试飞以确认您的设置是否正确。
Some special models will have V-tails, flaps, leading edge wings, etc., which can be used as a reference for conventional flight angles. If you do not confirm and there is no experienced person to guide you, we recommend that you first test at a small angle to confirm that your settings are correct.

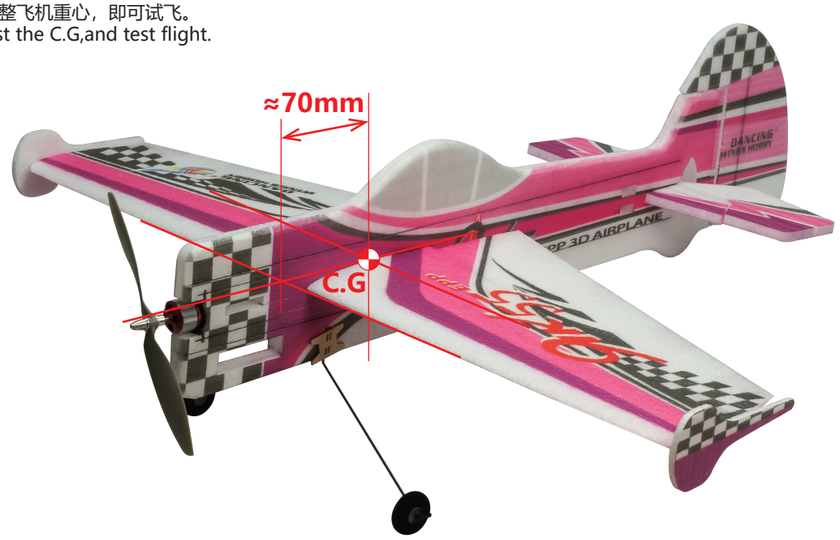
05 马达安装 桨叶 Install the Motor and Propeller



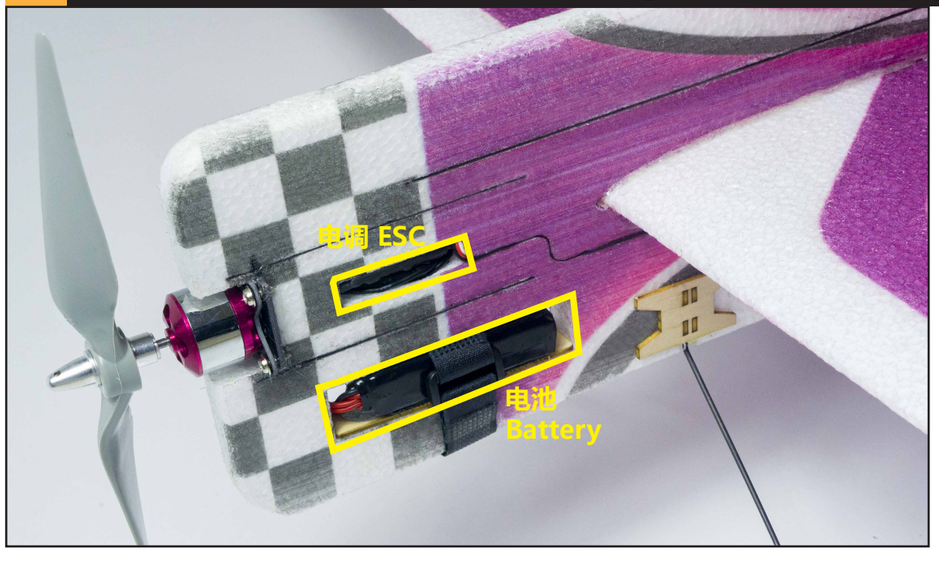


06 调整重心 Adjust the C.G.

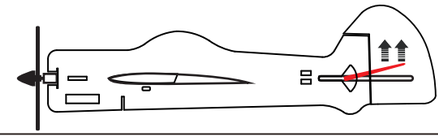
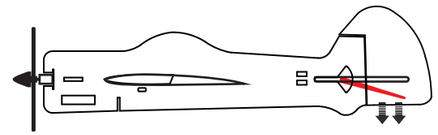
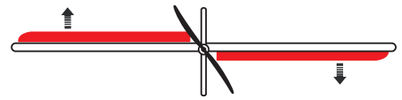
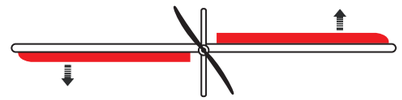
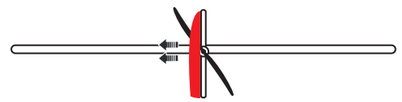
19.调整飞机重心，即可试飞。
Adjust the C.G,and test flight.



07 电子设备安装位置示意 Diagram for Installing the Electronics Equipment



地面控制方向测试 Control Directions Tests

	遥控器动作 Transmitter Command	飞机反应 Aircraft Reaction
升降舵 Elevator	升降杆下拉 Lifting rod down	
	升降杆上推 Lifting rod up	
副翼 Aileron	转向杆向右 Steering rod to the right	
	转向杆向左 Steering rod to the left	
方向舵 Rudder	方向杆向右 Direction rod to the right	
	方向杆向左 Direction rod to the left