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.

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.

飞行参数
Specification

翼展: 1100mm (43.3inch)
机长: 1050mm (41.3inch)
起飞重量≈620g

Wingspan: 1100mm (43.3inch)
Length: 1050mm (41.3inch)
Flying Weight≈620g
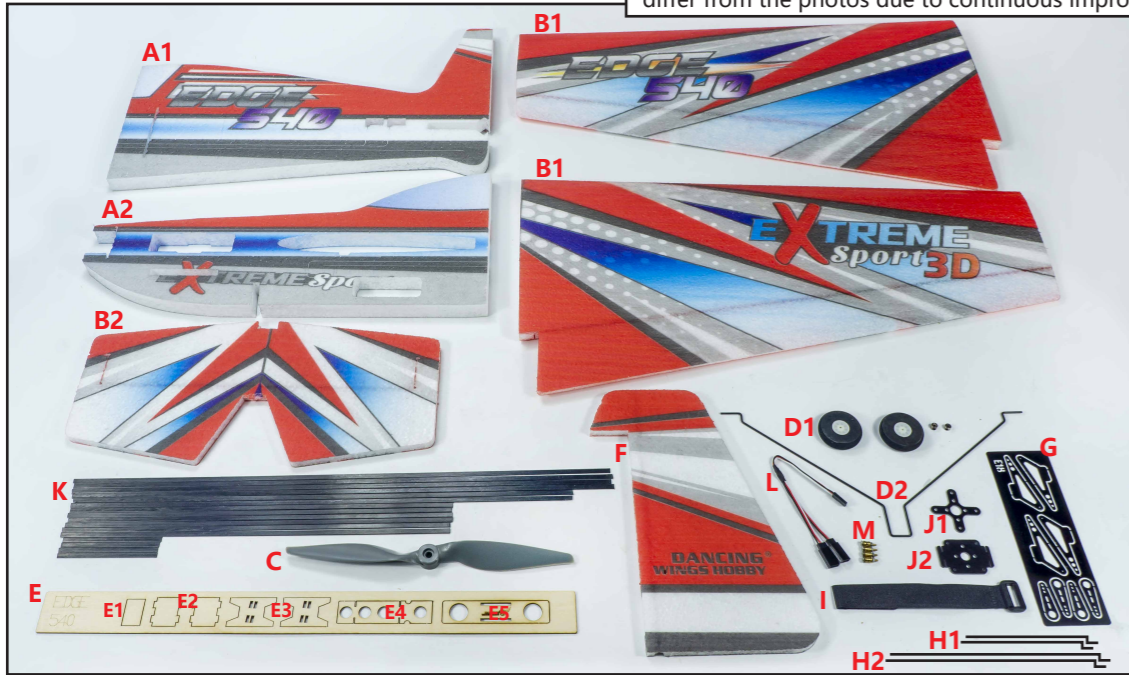
推荐配置
Suggested Equipment

推荐马达: MC2216 950KV
推荐电调: 30A
推荐舵机: 9g * 4pcs
推荐桨叶: 10-11inch plastic
推荐电池: 3S 1000-1300mAh
推荐通道≥4CH

Suggested Motor: MC2216 950Kv
Suggested ESC: 30A
Suggested Servos: 9g * 4pcs
Suggested Propeller: 10-11inch plastic
Suggested Battery: 3S 1000-1300mAh
Radio≥4CH

工具
Tools Needed

KIT

A1-2：机身 Fuselage
B1：机翼 Wing
B2：水平尾翼 Horizontal tail
C：桨叶 Propeller
D1-2：起落架 Landing gear
E：加强木件 Reinforcement wooden parts
F：垂直尾翼 Vertical Tail
G：舵角,摇臂 Servo horn,Servo arm
H1-2：连杆 Connecting rod
I：魔术绑带 Magic bandage
J1-2：马达座 Motor mount
K：碳片 Carbon sheet
L：Y线 Y-cable
M：快装接头 EZ-connector

机身拼装 Assemble the Fuselage

01-1 A1 A2 GLUE

01-2 J2 GLUE

01-3 碳片嵌入 Insert the carbon sheet GLUE

在预留槽埋入碳片，用涂泡沫胶粘固，长度按实际需要裁剪。并注意碳片需嵌入马达座卡槽。
Embed carbon sheet in the reserved slot, and stick it with foam adhesive. The length shall be cut according to the actual needs. Note that the carbon sheet should be embedded into the slot of the motor mount.

在机身另一面，嵌入3条碳片并粘固。
Insert 3 carbon sheets on the other side of the fuselage and stick them

注意 嵌入 Note Insert

01-4 木片嵌入 Insert the wood piece GLUE

翻转到机身另一面，在图示位置嵌入木片，用泡沫胶粘固。并把碳片嵌入木片卡槽内。
Turn over to the other side of the fuselage, insert wood chips in the position shown in the figure, and use foam glue to fix them. And insert the carbon sheet into the wood chip slot.

01-5 嵌入 Insert

01-6 碳片嵌入 Insert the carbon sheet 嵌入 Insert GLUE

机翼拼装 Assemble the Wing

02-1 碳片嵌入 Carbon sheet insertion GLUE GLUE

02-2 GLUE

在机翼预留槽埋入碳片，长度按实际需要裁剪。并在图示位置涂抹泡沫胶。左右机翼相同操作。
Embed carbon sheet in the reserved slot of the wing and cut the length according to the actual needs. Apply foam glue at the position shown in the figure. Same operation for left and right wings.

02-3 GLUE

在图示位置斜插入碳片，用泡沫胶粘固。同时调整机翼与机身垂直。
Obliquely insert the carbon sheet at the position shown in the figure and stick it with foam adhesive. Adjust the wing to be perpendicular to the fuselage at the same time.

02-4 GLUE

在G板上取下舵角安装到副翼预留槽内，并用泡沫胶粘固。
Remove the rudder horn from the G plate,install it into the reserved slot of aileron and fix with foam glue.

02-5 GLUE

在翼尖粘贴翼刀，如图所示方向，02-4，02-5均为左右相同粘合。
Paste the Side Force Generator (SFG) on the wing tip in the direction shown in the figure, 02-4 and 02-5 are the same adhesive on the left and right.

机翼拼装 Assemble the Wing

03-1 GLUE

03-2 GLUE

在水平尾翼，垂直尾翼图示位置嵌入碳片，长度按实际需要裁剪。用泡沫胶粘固。
Insert carbon sheet at the position of horizontal tail and vertical tail as shown in the figure, and cut the length according to the actual needs,fianlly fix with foam glue.

03-3 GLUE GLUE

尾翼用泡沫胶粘固。同时调整机翼与机身垂直。
Stick the tail wing with foam glue. Adjust the wing to be perpendicular to the fuselage at the same time.

03-4
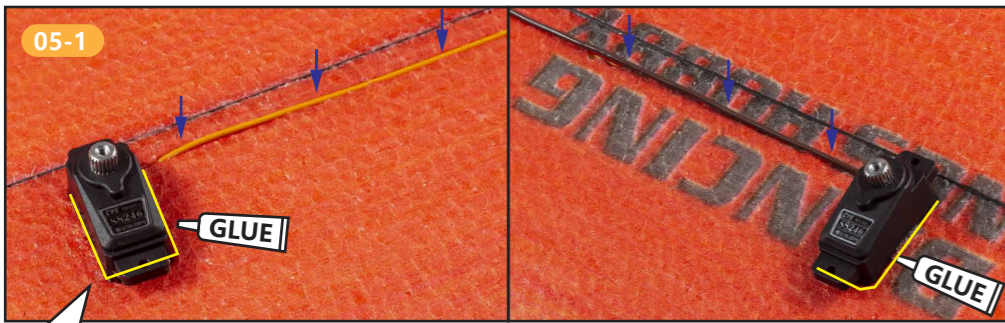
在G板上取下舵角安装到转向舵和升降舵预留槽内，并用泡沫胶粘固。
Remove the rudder horn from G plate,install it into the reserved slot of the rudder and elevator, finally fix with foam adhesive.

GLUE

GLUE

起落架安装 Install the Landing Gear

04-1

E2 E3
E2
E3
CA

04-2

GLUE

04-3

D2
E1

04-4
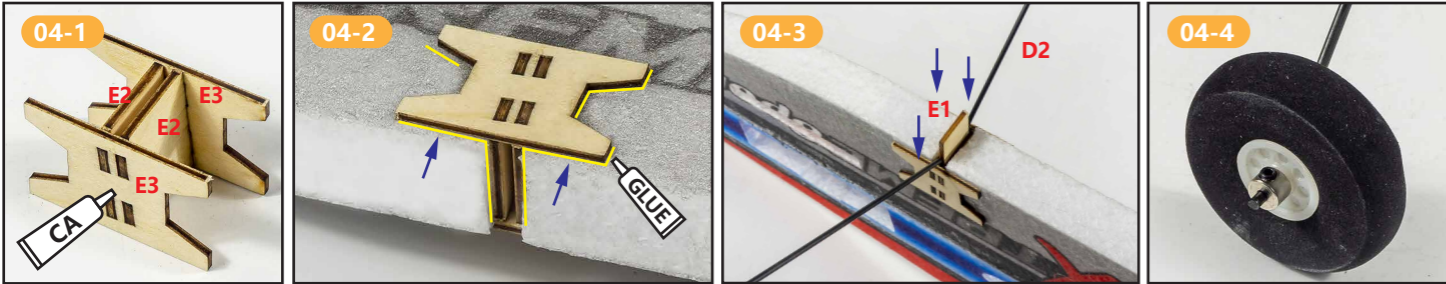
电子设备安装调试 Power System Installation and Adjustment

05-1

GLUE

GLUE

05-2

M2*6mm 自攻螺丝
Self-tapping screw

在机翼舵机槽内安装舵机，用泡沫胶粘固，舵机线埋入预留槽内，并粘固。
Install the servo into the servo slot of the wing and fix with foam glue;embed and fix the servo cable into the reserved slot.
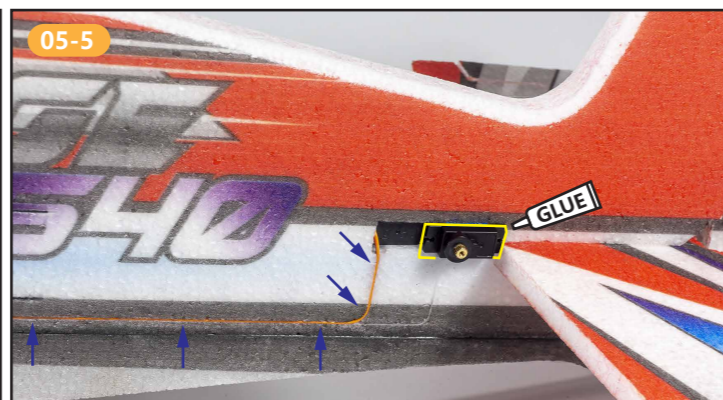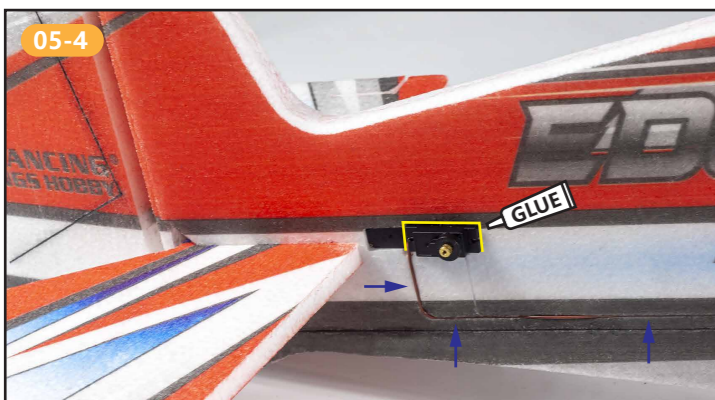
在G板上取下摇臂，如图安装。
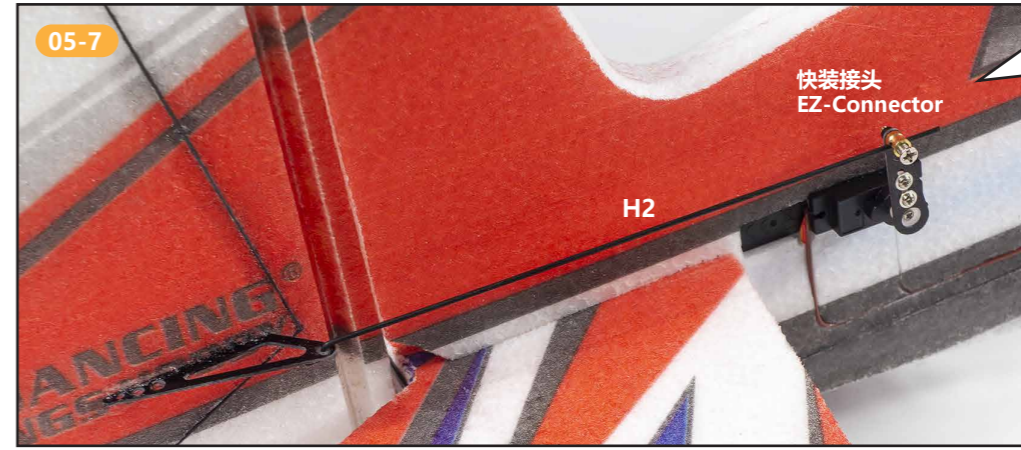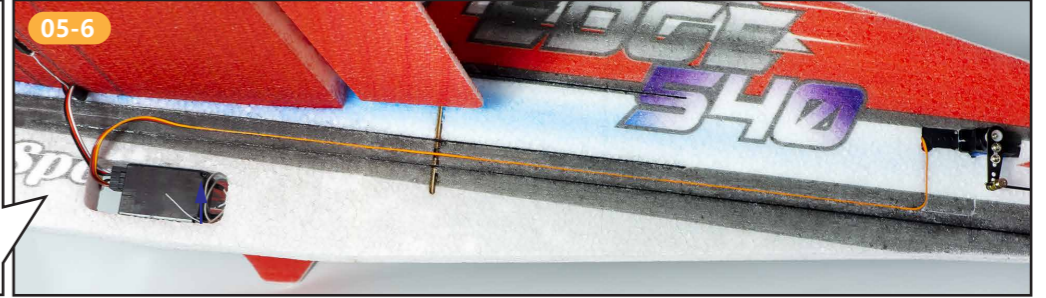Remove the rudder arm from the G plate and install it as shown in the figure.

把05-2装好的摇臂安装到舵机，并把舵角与摇臂用钢丝连杆连接起来。
Install the rudder arm that already built in 05-2 onto the servo, and connect the rudder horn and the rudder arm with steel wire connecting rod.

舵角上安装快装接头。
Install the EZ-Connector joint on the rudder horn.

钢丝连杆Z型一端穿入舵臂，另一端插入快装接头，调整舵机通电回中后，锁紧快装接头，左右相同安装
The Z-shaped end of the steel wire connecting rod is threaded into the rudder arm, and the other end is inserted into the EZ-Connector. After the servo is adjusted to power on and return to the center, lock the EZ-connector. Same installation on left and right.

05-3

H1
快装接头
EZ-Connector

05-4

GLUE

05-5

GLUE

05-6

在机身尾部舵机槽内安装舵机，如图安装，舵机线埋入预留槽内，并引导到机身头部。用泡沫胶粘固。
Install the servo into the servo slot at the rear of the fuselage as shown in the figure.
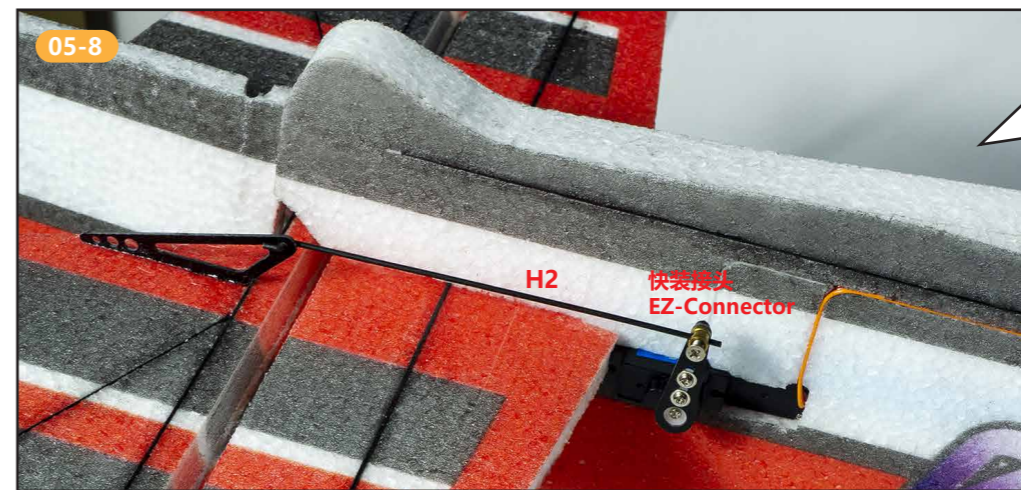The servo cable is buried in the reserved slot and guided to the fuselage head,finally stick with foam glue.

05-7

把05-2装好的摇臂安装到舵机，并把方向舵，升降舵上舵角与摇臂用钢丝连接起来。
Install the rudder arm that already built in 05-2 onto the servo, connect the servo horn of the rudder and elevator with the rudder arm by steel wire linkage rod.

舵角上安装快装接头。
Install the EZ-Connector on the rudder horn.

钢丝连杆Z型一端穿入舵臂，另一端插入快装接头，调整舵机通电回中后，锁紧快装接头。
The Z-shaped end of the steel wire connecting rod is threaded into the rudder arm, and the other end is inserted into the EZ-Connector. After the servo is adjusted to power on and back to the center, lock the EZ-Connector.

快装接头
EZ-Connector
H2

05-8

H2
快装接头
EZ-Connector

05-9

E5
GLUE

05-10

设备放置位置展示
Equipment Placement Display

电池 Battery

电调 ESC

接收机 Receiver

更多电子设备调试细节可参考以下链接查看（可直接扫二维码）

More details about power system adjustment, please refer to below link: (You can scan QR Code directly.)

http://www.dwhobby.com/art/connection

重心位置展示 Display for C.G

≈60-70mm

C.G

注意：设置重心时，可用电池配重，调整电池位置以达到合适的重心。然后用魔术胶带把电池固定机身。

Note:When you adjust CG, you can use battery as balance weight, adjust battery positon to find the suitable CG, then fasten the battery on the fuselage with magic tape.

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.

地面控制方向测试
Control Directions Tests

遥控器动作 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	