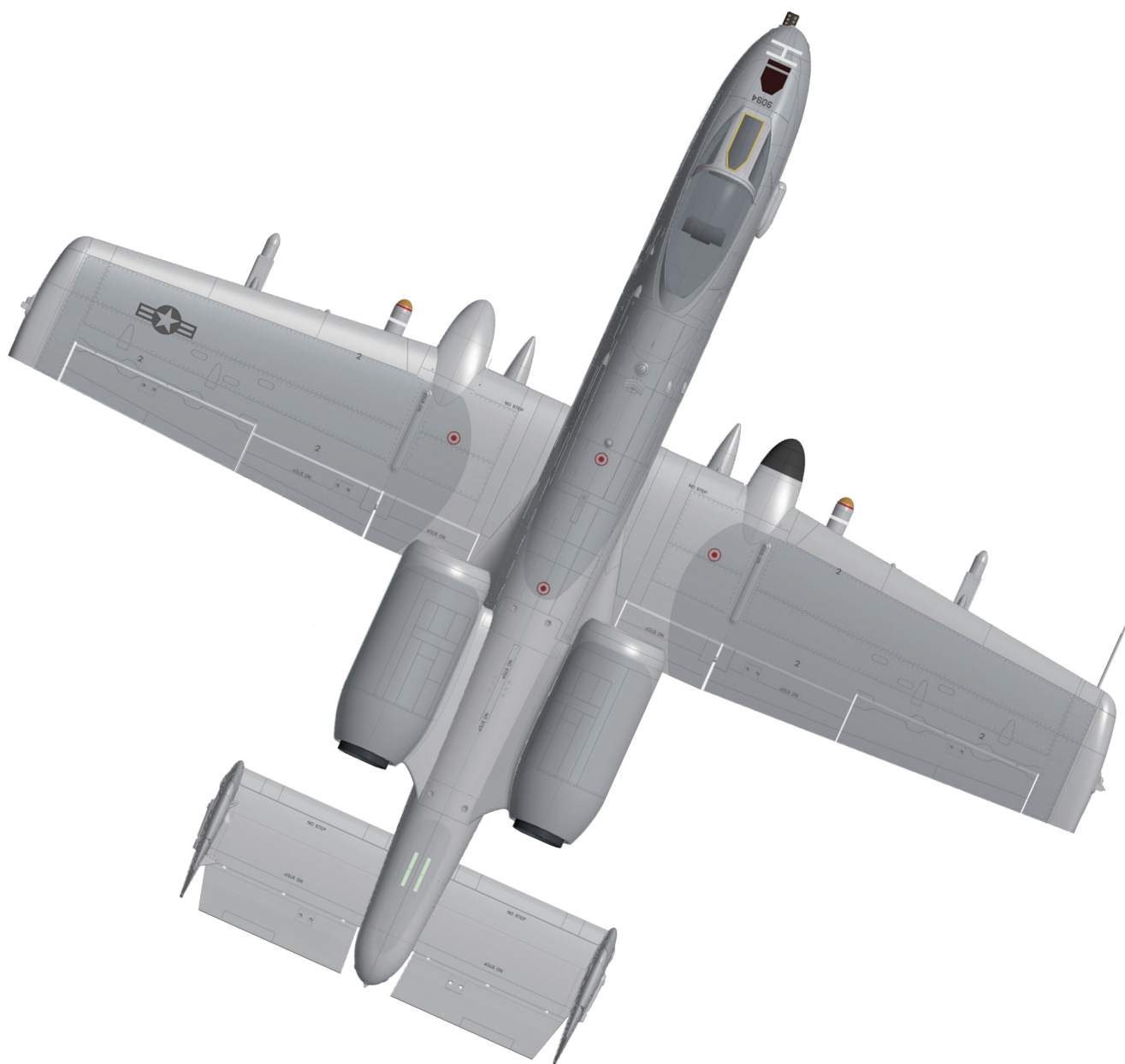


TWIN 64mm EDF JET

A-10 Thunderbolt II V3 USER MANUAL

Wingspan:1270mm Length:1143mm Empty Weight:2212g (W/O Battery W/O Missile)



EN	1~12
中	13~24

1	Introduction	13	前言
2	Product Basic Information	14	产品规格参数
2	Package list	14	包装列表
3	PNP Assembly Instructions	15	PNP组装步骤介绍
3	Install Vertical Tail	15	垂尾组装
3	Install Horizontal Tail	15	平尾组装
4	Install Engine compartment	16	发动机安装
5	Install Main Wing	17	主翼组装
7	Install Missiles	19	导弹组装
8	Pushrod Instructions	20	舵面控制钢丝尺寸及安装孔位
9	Battery Instructions	21	电池介绍
9	Center of gravity	21	重心示意图
10	Control Direction Test	22	模型舵面测试
11	Dual Rates	23	舵量范围
12	Servo Direction	24	舵机介绍
12	Motor Specification	24	电机介绍

Note:

- 1.This is not a toy! Operator should have a certain experience, beginners should operate under the guidance of professional players.
- 2.Before install, please read through the instructions carefully and operate strictly under instructions.
- 3.Cause of wrong operation, Freewing and its vendors will not be held responsible for any losses.
- 4.Model planes' players must be on the age of 14 years old.
- 5.This plane used the EPO material with surface spray paint, don't use chemical to clean, otherwise it will damage.
- 6.You should be careful to avoid flying in areas such as public places, high-voltage-intensive areas, near the highway, near the airport or any other place where laws and regulation clearly prohibit.
- 7.You cannot fly in bad weather conditions such as thunderstorms, snows....
- 8.Model plane's battery, don't allowed to put in everywhere. Storage must ensure that there is no inflammable and explosive materials in the round of 2M range.
- 9.Damaged or scrap battery should be properly recycled, it can't discard to avoid spontaneous combustion and fire.
- 10.In flying field, the waste after flying should be properly handled, it can't be abandoned or burned.
- 11.In any case, you must ensure that the throttle is in the low position and transmitter switch on, then it can connect the lipo-battery in aircraft.
- 12.Do not try to take planes by hand when flying or slow landing process. You must wait for landing stop, then carry it.

⚠ NOTE: This is not a toy. Not for children under 14 years. Young people under the age of 14 should only be permitted to operate this model under the instruction and supervision of an adult. Please keep these instructions for further reference after completing model assembly.

Thank you for purchasing our Freewing twin 64mm EDF model jet---A-10 Thunderbolt II V3. Before assembling this jet, please carefully read the instruction manual and assembly video, and assemble, set up, and debug it in the correct way. During this process, if you encounter special problems that cannot be solved on your own, please contact the dealer immediately or directly contact us for assistance.

The Freewing twin 64mm A-10 "Thunderbolt II" V3 model jet is a new upgraded product. Based on the latest thrust level, battery specifications, and user demand changes of the 64 series model jet, a systematic redesign has been carried out, achieving comprehensive innovation from structural planning to mold development. It will form a size differentiated product together with the 80mm A-10 80 model jet, meeting the needs of different model enthusiasts. The new 64mm A-10 Thunderbolt II V3 has a flight envelope almost identical to the Freewing 80 A-10 V2, provides an excellent flying experience!

Features

QUICK II screw-less portable install structure of main wing

-The revolutionary QUICK II & QuickLink screw-less quick release structure enables quick disassembly and assembly in the field, making transportation and storage more convenient

Quick release tail wing

-Connect the circuit by the tail wing control board and ribbon wire, and tighten the tail wing with screws

Quick release engine compartment

-Optimize the line connection between the power system and ESC, simplify the installation process, and avoid bumping the foam.

Aviation lighting system

-Complete set of aviation lights/strobe lights/landing lights/formation lights system, looks more realistic.

Shock absorbing landing gear and cabin door

-Metal shock-absorbing landing gear, matched with landing gear door, details comparable to real jet

Expand and reinforce the battery compartment

-Reinforced structure of plastic parts to avoid cabin door wear caused by long-term use. Larger battery compartment space can accommodate larger capacity batteries, effectively improving battery life.

Heat dissipation of battery compartment

-The airflow entering the nose cone passes through the hollow wooden battery tray to dissipate heat from the battery, achieving the unity of functionality and aesthetics

Modular Components

-The laser locator (AAS-35) is fixed to the edge strip of the fuselage with screws and can be disassembled at any time for easy storage and transportation. The antenna/airspeed tube adopts a press type installation, with zero damage during transportation

Strengthen the control surface structure

-The concealed/external hinges made of plastic molding, as well as the control surface arm fixed with screws and glue, combined with a high-precision ball joint linkage transmission mechanism, together constitute a control surface system that combines aesthetics, precision, reliability, and durability.

Personalized color scheme

-It adopts the "Terrifying Termites" livery of the 47th Fighter Squadron and provides complete exclusive character patterns and aircraft number stickers.

Fully armed mounting

-It is a realistic replica of the weapon model, with a slide rail structure that enables fast and non-destructive release.

Appearance improvement

-It covers the engraved lines and rivets on the surface, simulates pilot figures and cockpit, and micro detail elements, enhancing the overall simulation of the model.

The finely engraved lines on the surface, imitation rivets, simulated pilot figures and cockpit, as well as various detailed elements scattered throughout the surface, jointly construct a highly realistic A-10 model.

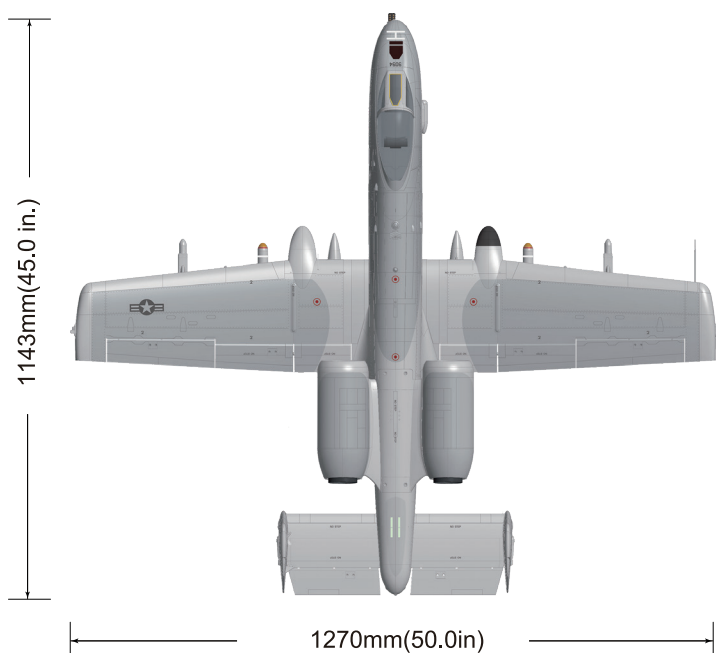
Freewing Guard Gyro

-Freewing Guard six axis gyro further enhances flight quality and brings a better experience.

(Only partially included in the configuration)

Center of Gravity

-There is a relief style CG marking line on the lower surface of the main wing, which can intuitively locate the center of gravity position and achieve quick calibration without the need to consult technical data.



Standard Version

Wingload: 113 g/dm²

Servo: 9g Digital plastic servo (1pcs)
9g Hybrid digital servo (9pcs)

Motor: 2840-2200KV O/R Motor

Ducted fan: 64mm 12-blade fan

ESC: 50A Brushless ESC×2(7A UBEC)

Weight: 2212g(w/o Battery W/O Missile)

Other Notes

Landing gear: Electric landing gear

Li-Po Battery: 6S 4000-5000mAh

Cabin doors: Nose gear electric cabin door

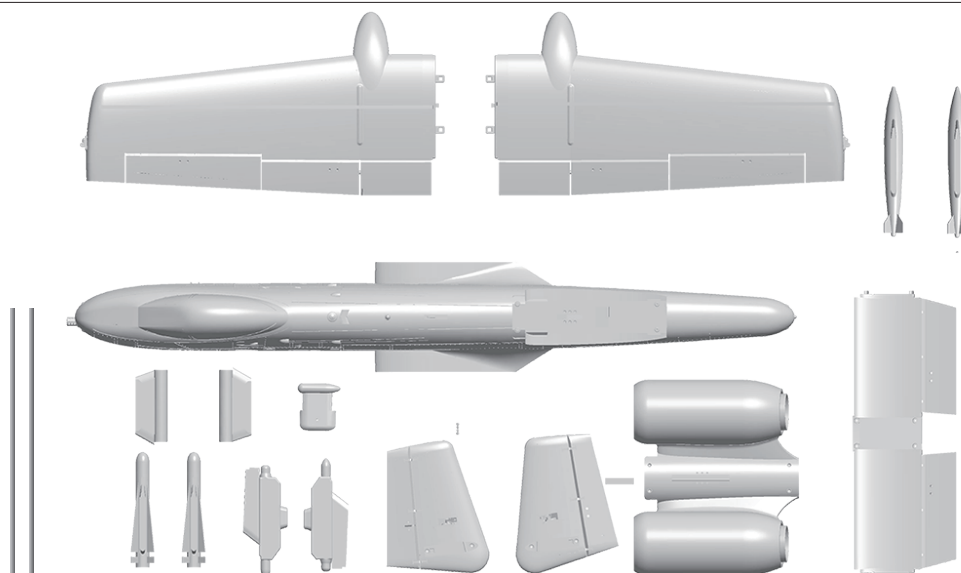
Other: LED navigation lights

simulated formation lights



Note: The parameters in here are derived from test result using our accessories.
If use other accessories, the test result will be different. Any problem since of using other accessories, we are not able to provide technical support.

Package List



Different equipment include different spareparts. Please refer to the following contents to check your sparepart list.

No.	Name	PNP	ARF Plus
1	Fuselage	Pre-installed all electronic parts	Pre-installed servo
2	Main wing	Pre-installed all electronic parts	Pre-installed servo
3	Vertical tail	Pre-installed all electronic parts	Pre-installed servo
4	Horizontal tail	Pre-installed all electronic parts	Pre-installed servo
5	Engine compartment	Pre-installed all electronic parts	✓

No.	Name	PNP	ARF Plus
6	Carbon tube	✓	✓
7	Missile	✓	✓
8	Annex bag	✓	✓
9	Manual	✓	✓

Traction steelwire use instruction

Through investigation, excessive servo extension line will increase the risk of poor contact joints, and lead to the servo outages caused flight accidents. Because of A-10 large and flat trough interior space, we don't use the servo extension wire in this jet. As the below photo shown, package includes a traction steel wire, we can use it to pull the main wing/elevator/rudder servo cables to the battery compartment.

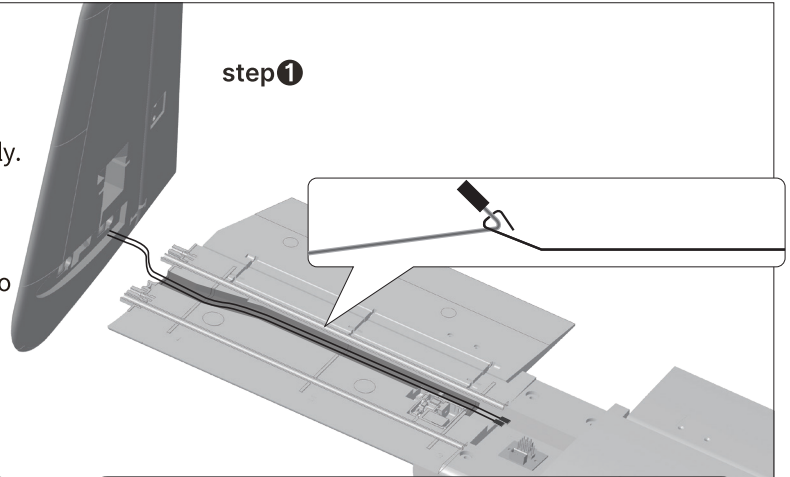
Install the Vertical tail

As the photo show:

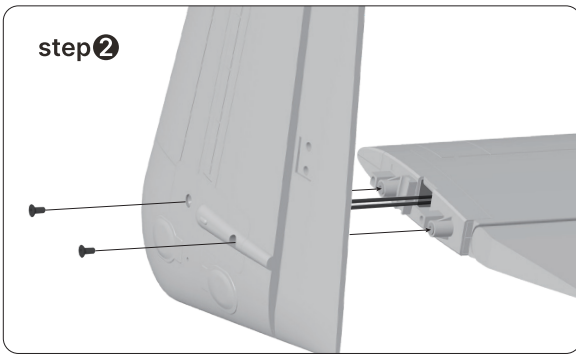
1. Pull the vertical tail servo wire and the formation light wire into the horizontal tail wire slot separately.
2. Install the vertical tail on the horizontal tail and fix the left/right vertical tails with 4 screws.
3. Insert the servo cable and formation light cable into the horizontal tail control board.

Screw (KM 3*7mm 4PCS)

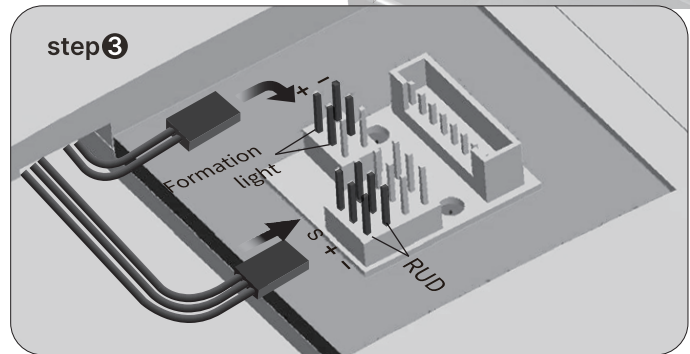
step ①



step ②



step ③

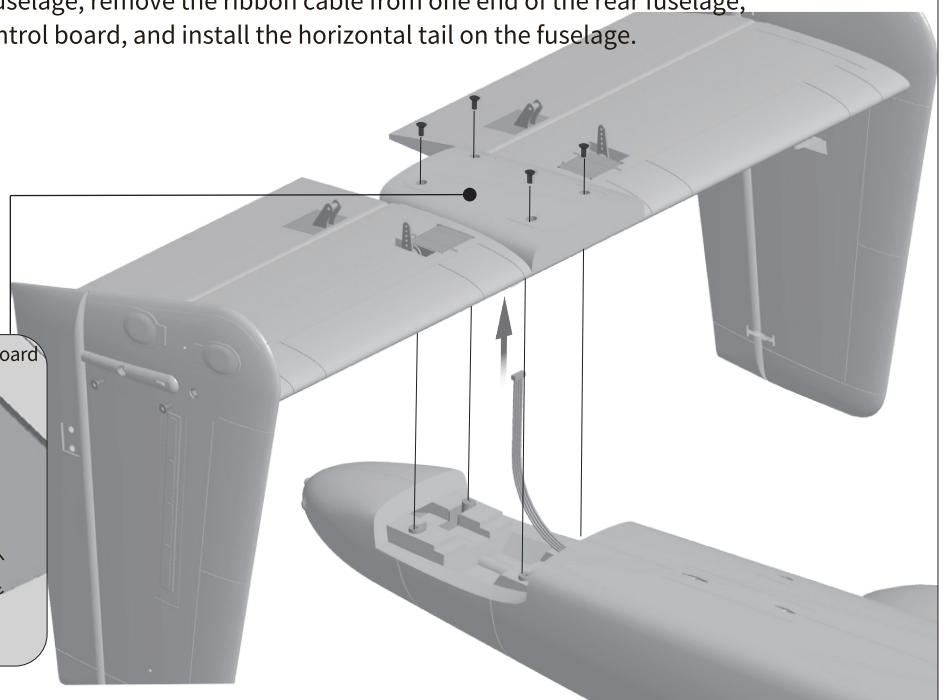
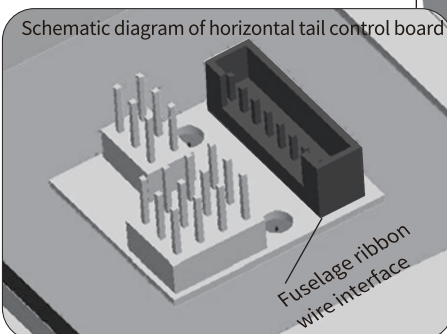


Install the Horizontal tail

1. Align the horizontal tail with the fuselage, remove the ribbon cable from one end of the rear fuselage, connect it to the horizontal tail control board, and install the horizontal tail on the fuselage.
2. Then fix it with 4 screws.

Screw (KM 3*7mm 4PCS)

Schematic diagram of horizontal tail control board



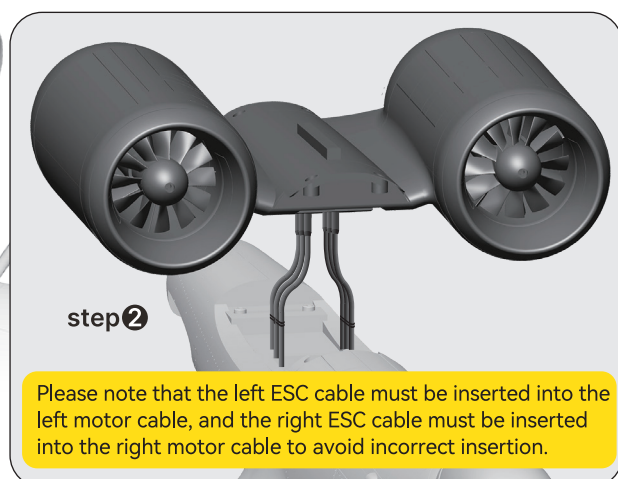
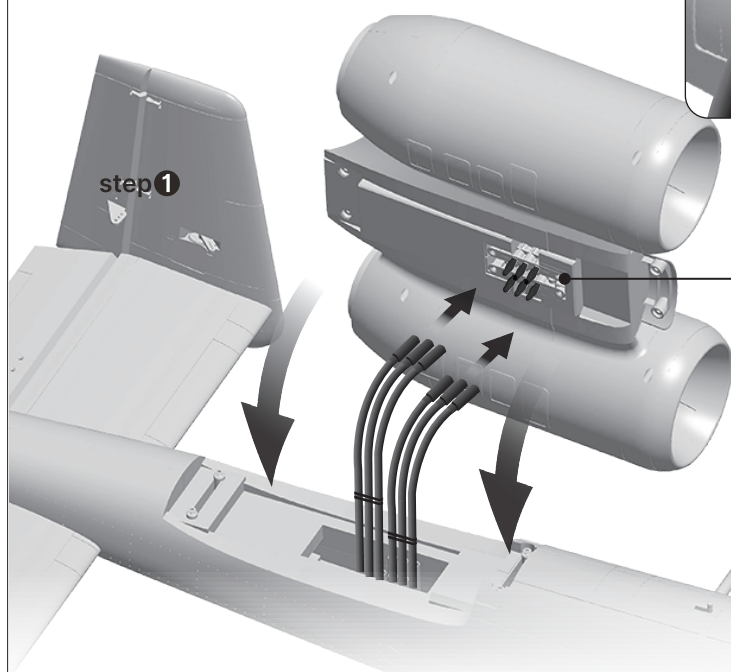
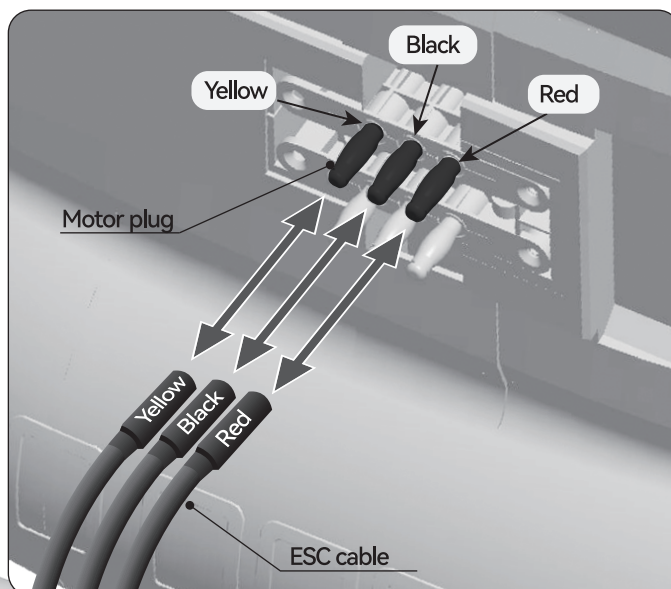
Install Engine compartment

As the photo show:

1. Align the ESC cable with the motor plug in the engine compartment correctly;
2. Insert the ESC cable into the motor plug of the same color.

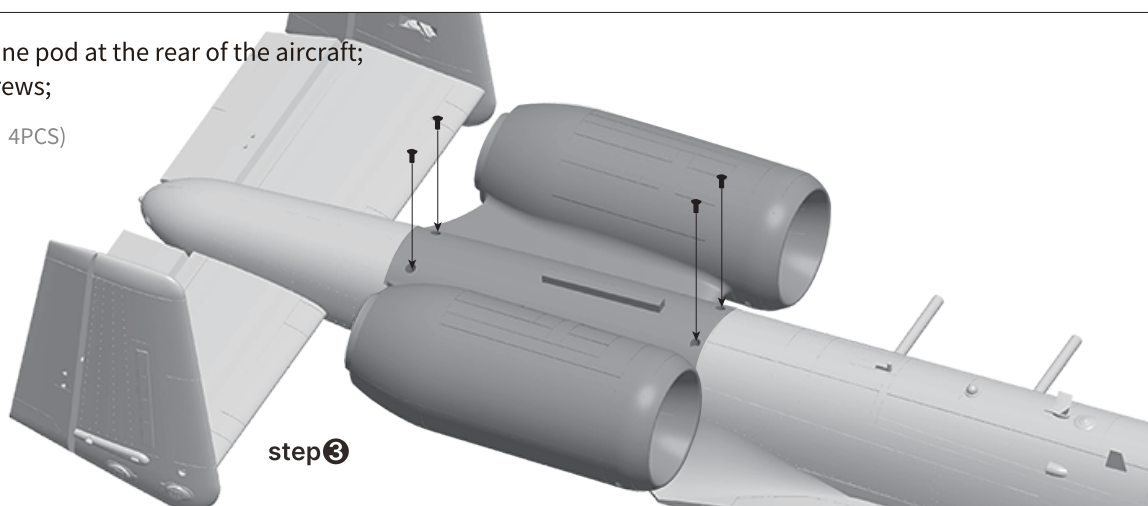
⚠ Note:

Please note that the ESC cable of the same color heat shrink tubing is inserted into the motor plug of the same color heat shrink tubing.



3. Install the engine pod at the rear of the aircraft;
4. Fix it with 4 screws;

Screw (KM 3*7mm 4PCS)



Install Main Wing

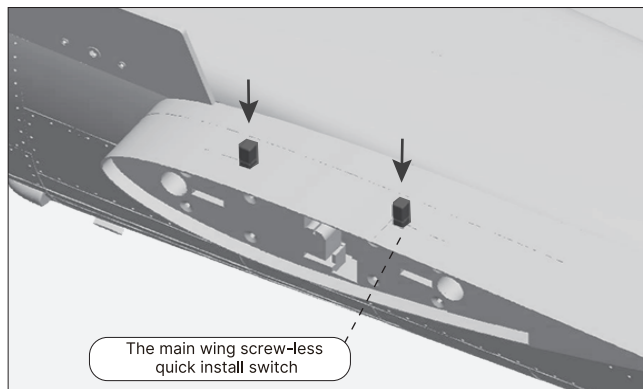
As the photo show: Press the fuselage screw-less quick install switch to unlock it ①;

- Two different status diagrams of the main wing screw-less quick install switch: (The working mode is to press the button to the bottom and release it. The button pops up to the highest position, which is the unlocked status. Once the button is pressed to the bottom again and released, but the button does not pop up, which is the locked status)

Unlock status

As shown in the following photo:

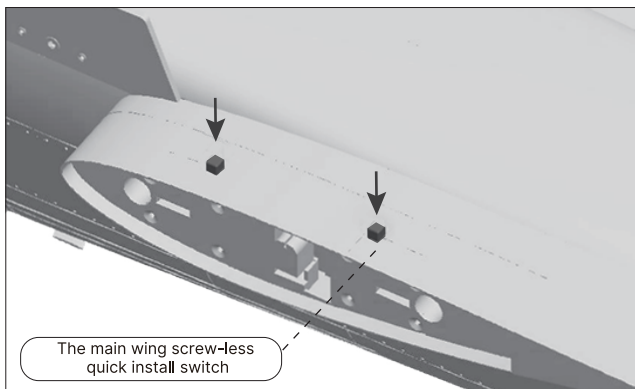
Press the main wing screw-less quick install switch to the bottom and release it. The button pops up to the highest position, indicating that the main wing has been unlocked and can be easily removed and installed.



Lock status

As shown in the following photo:

After installed the main wing, press again the main wing screw-less quick install switch to the bottom and release it. If the button does not pop up, it is the locked status. At this point, pull the main wing outward and can not remove it.



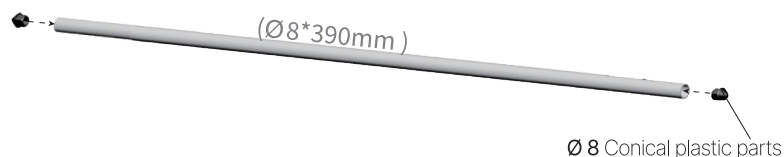
Install Main Wing

As the photo show:

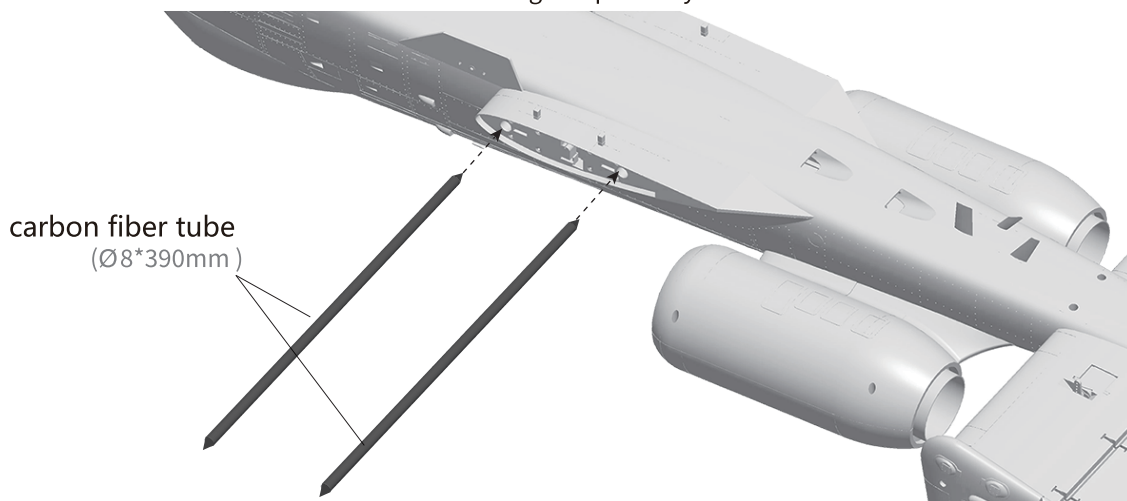
- Use glue to fix the 【 Conical plastic part 】 on two carbon tubes respectively;

Carbon tube (Ø8*390mm)

Conical plastic parts (Ø8mm)



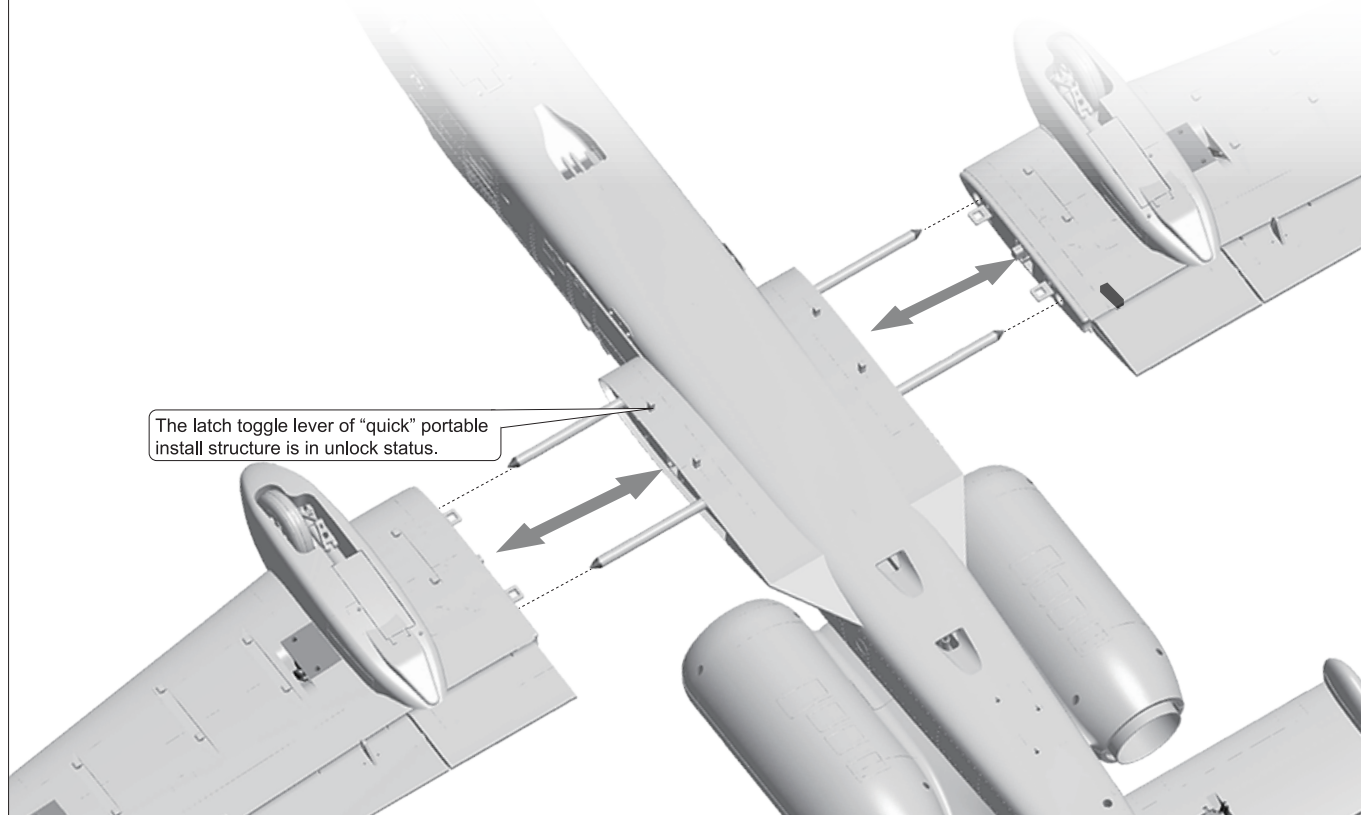
- Insert carbon fiber tube A and carbon fiber tube B into the fuselage respectively



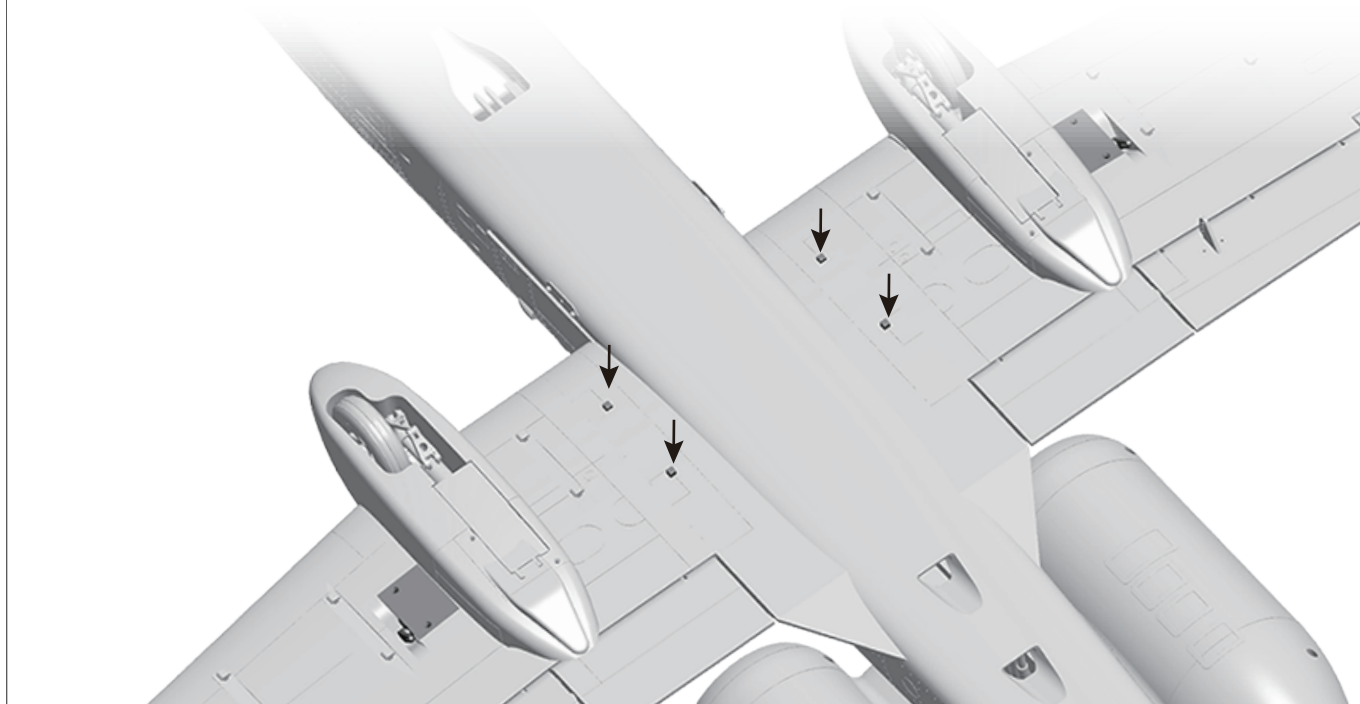
Install Main Wing

As the photo show:

3. Install the left and right main wings on the fuselage.



4. Press 4pcs fuselage screw-less quick install switch, put it in the locked status.



Pushrod Instructions

Flap pushrod length

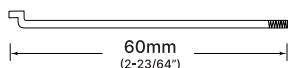


Pushrod diameter Ø 1.2mm

Flap pushrod mounting hole

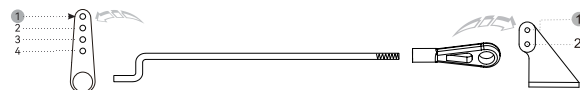


Aileron pushrod length

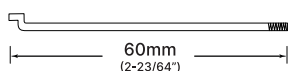


Pushrod diameter Ø 1.2mm

Aileron pushrod mounting hole

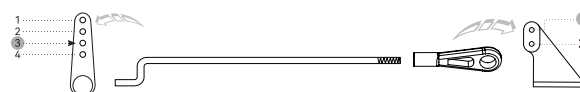


Elevator pushrod length

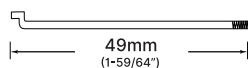


Pushrod diameter Ø 1.2mm

Elevator pushrod mounting hole

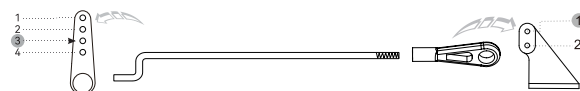


Rudder pushrod length



Pushrod diameter Ø 1.2mm

Rudder pushrod mounting hole



Nose gear steering pushrod length

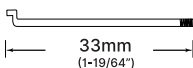


Pushrod diameter Ø 1.5mm

Nose gear steering pushrod mounting hole



Nose Cabin door pushrod length

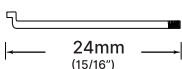


Pushrod diameter Ø 1.2mm

Nose Cabin door pushrod mounting hole



Nose follow Cabin door pushrod length

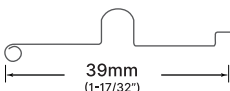


Pushrod diameter Ø 1.2mm

Nose follow Cabin door pushrod mounting hole

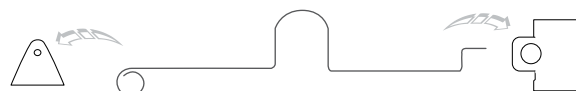


Rear follow Cabin door pushrod length

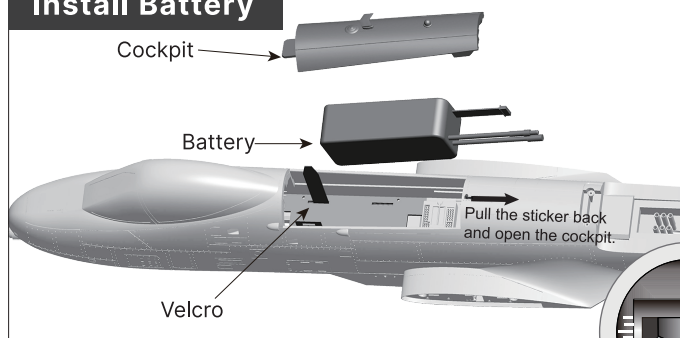


Pushrod diameter Ø 0.6mm

Rear follow Cabin door pushrod mounting hole

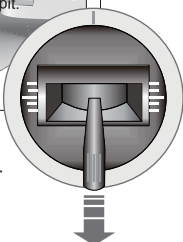


Install Battery



Battery cabin size: L=230 W=63 H=68(mm)

Before connecting the battery and receiver, please switch on the transmitter power and make sure the throttle stick is in the lowest position. Bind your receiver to your transmitter according to your transmitter's instruction manual.

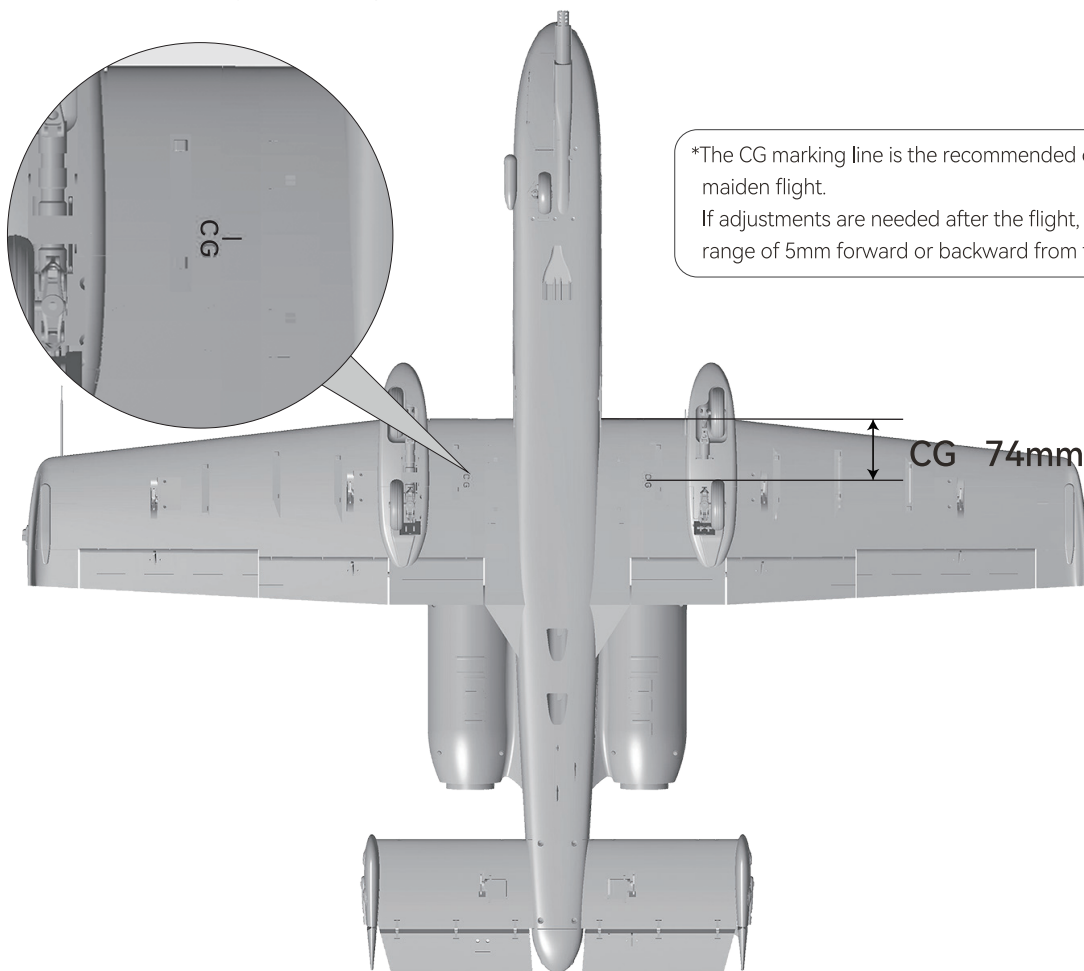


We recommend the following LiPo battery:
6S 22.2V 4000mAh~6S 22.2V 5000mAh (1pcs)
Discharge rate of C ≥40C

Center of Gravity

Correct Center of Gravity ("CG") is critical for enabling safe aircraft stability and responsive control. Please refer to the following CG diagram to adjust your aircraft's Center of Gravity.

- Depending on the capacity and weight of your chosen flight batteries, move the battery forward or backward to adjust the Center of Gravity.
- If you cannot obtain the recommended CG by moving the battery to a suitable location, you can also install a counterweight to achieve correct CG. However, with the recommended battery size, a counterweight is not required. We recommend flying without unnecessary counterweight.



*The CG marking line is the recommended center of gravity position for your maiden flight.

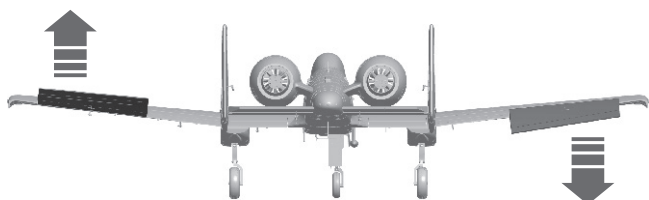
If adjustments are needed after the flight, fine-tuning can be done within a range of 5mm forward or backward from the CG marking line.

After installed this A-10 model plane, please connect to the receiver and power on, then adjust it.

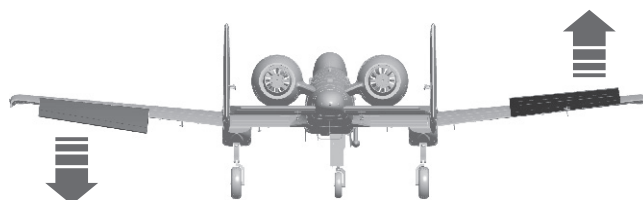
1. When all channels of radio are fine tuned to zero and the control stick is centered: check whether each control surface on the aircraft is in the center position. If it is found that the control surface is not in the center position, please adjust the control rod to center it;
2. Please refer to the diagram below and use the radio to test each control surface to ensure that its movement direction matches the diagram. If the opposite movement occurs, first check whether the relevant channel in the radio has enabled the reverse function; If the problem persists, please contact us for assistance in resolving it.

Aileron

Stick Left

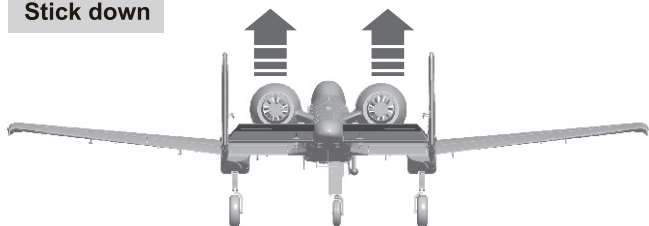


Stick Right

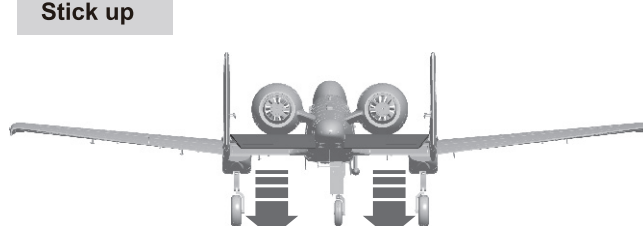


Elevator

Stick down



Stick up



Rudder

Stick Left

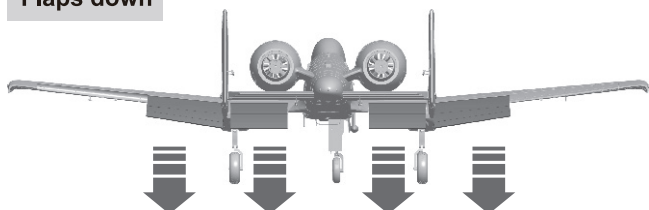


Stick Right



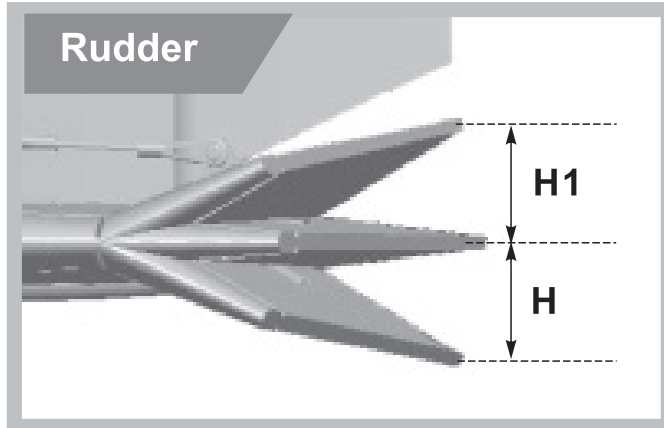
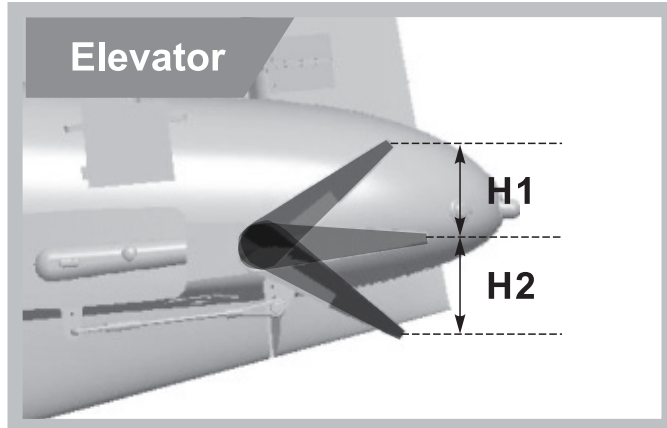
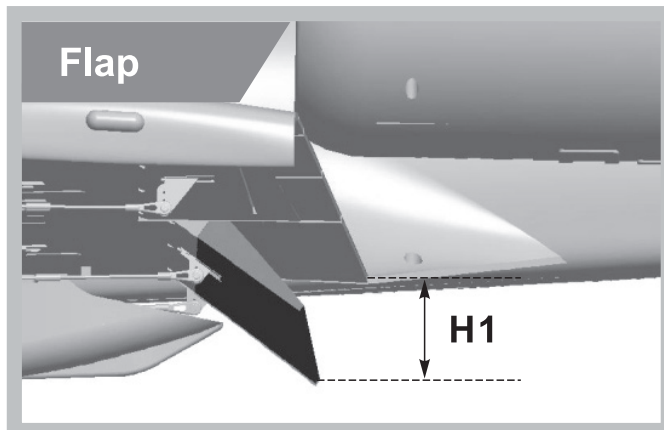
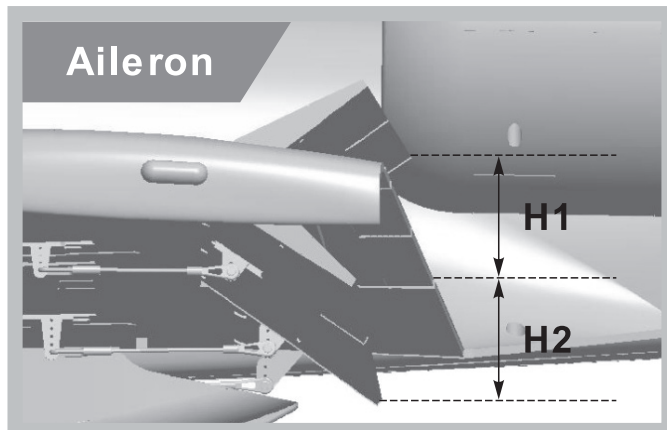
Flaps

Flaps down



Dual Rates

According to our testing experience, use the following parameters to set Aileron/Elevator Rate. Program your preferred Exponential % in your radio transmitter. We recommend using High Rate for the first flight, and switching to Low Rate if you desire a lower sensitivity. On successive flights, adjust the Rates and Expo to suit your preference.



	Aileron (Measured closest to the fuselage)	Elevator (Measured closest to the fuselage)	Rudder (Measured from the bottom)	Flaps Measured closest to the fuselage
Low Rate	H1/H2 21mm/21mm D/R Rate: 100%	H1/H2 11mm/11mm D/R Rate: 80%	H1/H2 13mm/13mm D/R Rate: 80%	H1 10mm
High Rate	H1/H2 24mm/24mm D/R Rate: 120%	H1/H2 15mm/15mm D/R Rate: 100%	H1/H2 16mm/16mm D/R Rate: 100%	H1 15mm

⚠ Flight Attention:

1. Please refer to the right photo and adjust the elevator to the correct center position

The distance between the elevator rear end and the vertical tail marking : 4mm

2. Flap-elevator mix parameter

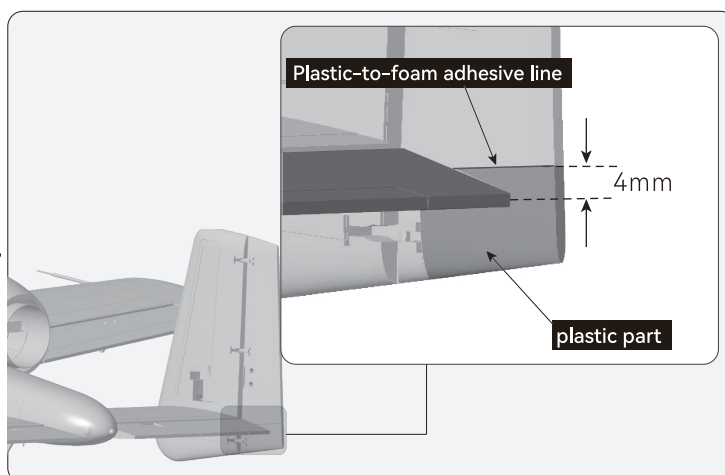
When deploy the flap, the jet will change the flight direction, it will fly up the sky. In order to operate better, we advise you set the "Flap-elevator mix" in radio. In this case, when you deploy the flap, the jet don't change its flight.

The detail is as below:

With low rate flaps deployed, mix 0.8mm of DOWN elevator.

With high rate flaps deployed, mix 1.0mm of DOWN elevator.

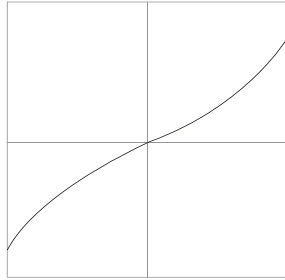
At last, according to your operating, you can increase or reduce its rate



3. Please note that the elevators on both sides should be adjusted to the same height position for flight stability

Remote Control EXP Setting Suggestion

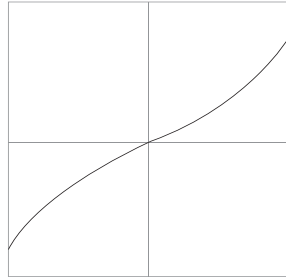
1. Aileron EXP curve is shown as below :



Futaba brand Remote Control : EXP A -30
EXP B -30

Spektrum brand Remote Control : EXPO 30% 30%

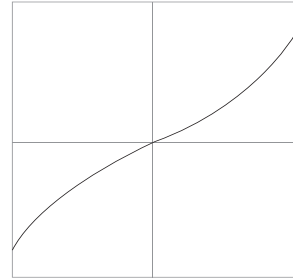
2. Elevator EXP curve is shown as below :



Futaba brand Remote Control : EXP A -40
EXP B -40

Spektrum brand Remote Control : EXPO 40% 40%

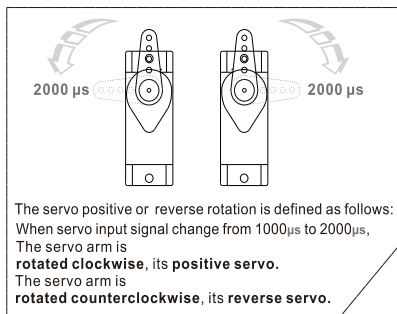
3. Rudder EXP curve is shown as below :



Futaba brand Remote Control : EXP A -30
EXP B -30

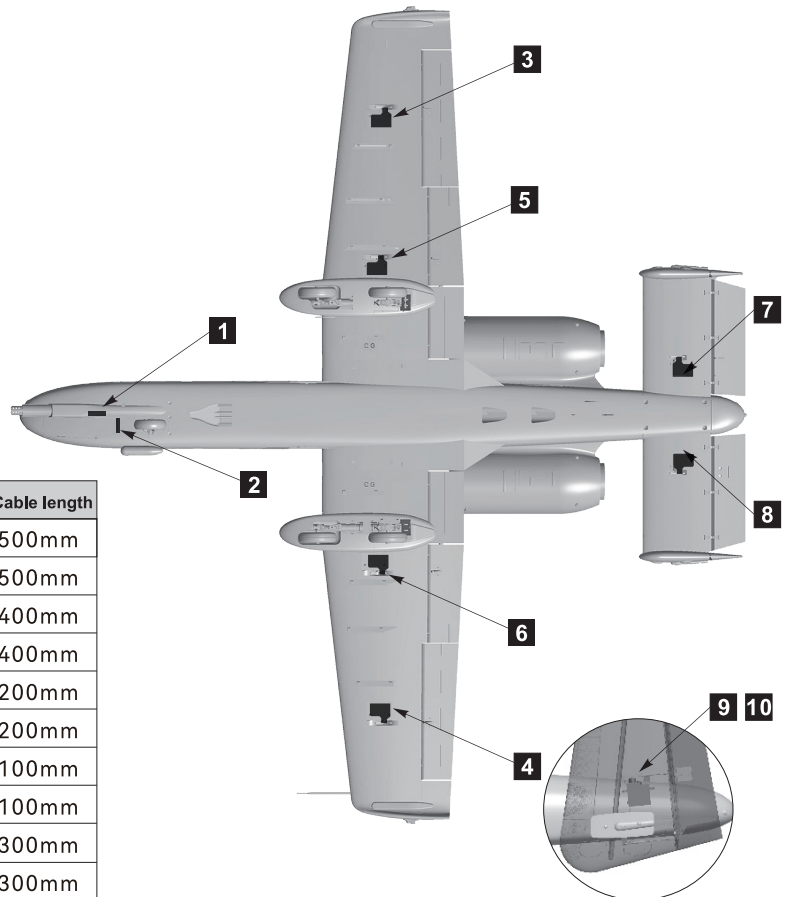
Spektrum brand Remote Control : EXPO 30% 30%

Servo Direction

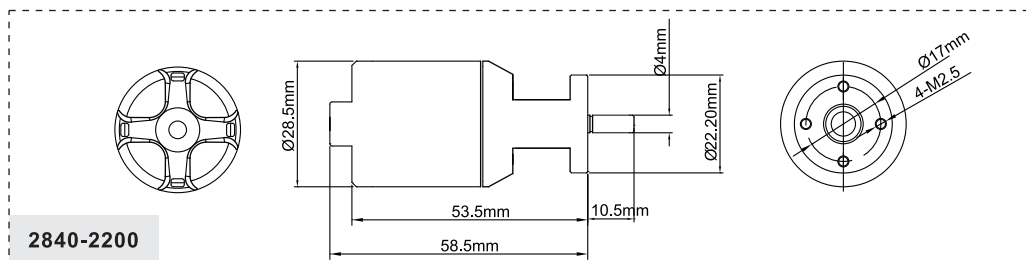


If you need to purchase another brand's servo, please refer to the following list to choose a suitable servo.

Position	Servo regulation	No.	Pos. / Rev.	Cable length
Nose gear steering servo	9g Digital-Hybrid	1	Positive	500mm
Nose cabin door	9g plastic servo	2	Positive	500mm
Aileron(L)	9g Digital-Hybrid	3	Positive	400mm
Aileron(R)	9g Digital-Hybrid	4	Positive	400mm
Flap(L)	9g Digital-Hybrid	5	Positive	200mm
Flap(R)	9g Digital-Hybrid	6	Reverse	200mm
Elevator(L)	9g Digital-Hybrid	7	Positive	100mm
Elevator(R)	9g Digital-Hybrid	8	Reverse	100mm
Rudder(L)	9g Digital-Hybrid	9	Positive	300mm
Rudder(R)	9g Digital-Hybrid	10	Positive	300mm



Motor Specification



2840-2200KV brushless motor use 6S 22.2V lipo battery and 50A ESC.

⚠ Note: If you need other motor to use, please refer to the dimension shown on the left to select your motor, to make sure that the motor you purchased can install successfully.

Model	KV Value	Volute (V)	Current (A)	Pull (g)	RPM	Weight (g)	No Load Current	Propeller	ESC
2840-2200KV	2200RPM/V	22.2	50	1400	48800	151	2.7A	64mm Ducted Fan	50A

欢迎您购买飞翼双64系列A-10 Thunderbolt II“雷电II”V3模型飞机。在您组装这架飞机前，请认真阅读说明书和组装视频，按照正确的方式进行组装、设定与调试。在此过程中，如遇特殊问题且无法自行解决的，请立即联系经销商，或直接联系我们，寻求帮助。

飞翼双64系列A-10 Thunderbolt II“雷电II”V3模型飞机是一款全新升级产品，基于64系列航模最新涵道推力水平、电池规格及用户需求变化，经过系统性重新设计，从结构规划到模具开发均实现全面革新。它将与飞翼80系列的A-10模型飞机一起，形成尺寸差异化的产品矩阵，满足不同航模爱好者的需求。新的64系列A-10 Thunderbolt II“雷电II”V3，其飞行包线与飞翼80系列A-10 V2模型飞机几乎相同，拥有绝佳的飞行体验！

产品特性

快拆式主翼

-主翼更换为Quick II免螺丝快速分离结构

快拆尾翼

-通过转板板与排线，快速完成电路连接，并使用螺丝紧固尾翼

快拆发动机舱

-优化动力组与电调之间的线路连接，简化安装过程，避免碰伤泡沫。

丰富的仿真航灯系统

-航灯/频闪灯/着陆灯/编队灯全套航灯系统，真实度倍增

减震起落架及舱门

-金属仿真减震起落架，配合起落架舱门，细节媲美真机

扩容加固电池舱

-塑料内衬强化结构，避免长期使用带来的舱门磨损问题。兼容大容量电池，续航与耐久双提升

电池舱散热

-巧妙的电池舱散热孔设计，在确保高效散热的同时完美融入机身仿真细节，实现功能性与美观性的统一

模块化细节组件

-激光定位器(AAS-35)与机身边条使用螺丝固定，可随时拆卸，便于储运。

强化舵面控制结构

-采用塑胶成型制作的隐藏式/外置铰链，以及通过螺丝与胶水双重固定工艺的舵面摇臂，结合高精度球头连杆传动机构，共同构成了兼具美观性、精准度、可靠性和耐久性的舵面控制系统。

个性化涂装

-采用第47战斗机中队“可怕的白蚁”涂装，并提供完整的专属角色图案及飞机编号贴纸。

全武装挂载

-真实复刻的武器套件模型，滑轨结构实现快速、无损拆装

外观提升

-覆盖表面的刻线和铆钉，仿真飞行员人偶及座舱、微型细节元素，提升了模型飞行的整体仿真度。

机身表面精细刻线、仿制铆钉、仿真飞行员人偶及座舱，以及遍布表面的各种细节元素，共同构建高度逼真的A-10模型

扩容加固电池舱飞翼卫士陀螺仪

-FreewingGuard六轴陀螺仪，进一步提升飞行品质，带来更好体验。（仅部份配置包含）

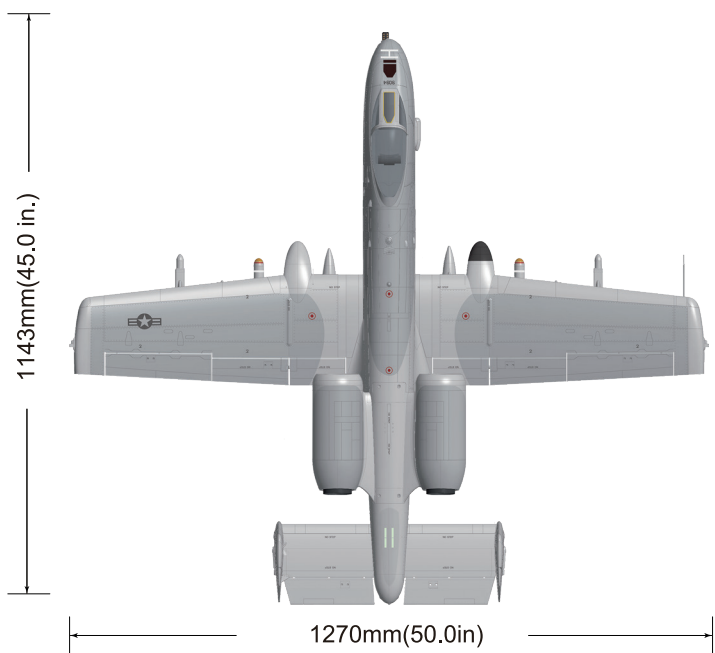
CG标记

-主翼下表面设有浮雕式CG标识线，可直观定位重心位置，实现快速调校，无需额外查阅技术资料。

重要提示

- 1.模型飞机不是玩具,操作者需要具备一定的经验,没有经验的初学者,必须在有丰富经验的专业人士指引下,逐步学习!
- 2.在组装之前,必须认真阅读产品说明书,严格按照说明书指示操作。
- 3.飞翼模型及其销售商,对于违反说明书的要求操作而造成的损失、将不承担任何法律责任!
- 4.模型飞机的使用年龄必须是14岁以上的儿童或者成人。
- 5.此模型产品使用EPO材料制成,表面喷涂油漆,不可随意使用化学制剂擦拭,否则会损坏模型产品。
- 6.不可以公共场合、高压线密集区、高速公路附近、机场附近或者其它法律法规明确禁止飞行的场合飞行。
- 7.不可以雷雨、大风、大雪或者其它恶劣气象环境下飞行。
- 8.模型飞机的电池产品,不可以随意乱扔,乱放。存放时,必须保证周边2M范围内,无易燃、易爆物体。
- 9.损坏或者报废处理的模型飞机电池,应妥善回收处理,不准随意抛弃,避免自燃而引发火灾。
- 10.在场飞行时,应做到妥善处理飞行后所产生的垃圾,不可随意抛弃、焚毁模型及其配件。
- 11.在任何情况下,都必须保证油门杆处于起始位、发射机处于打开状态时,才能连接模型飞机内部的动力电池。
- 12.无论是模型飞机是在正常飞行过程中,或者是在缓慢降落过程中,都不要尝试用手去回收模型。必须等模型降落停稳以后,再进行回收!

 **注意:** 模型产品是具有一定危险性的产品,请禁止14岁以下的儿童玩耍,14岁以上的儿童,请在有飞行经验的成人指导下使用,无飞行经验的购买者,应当在具有一定电动涵道飞机飞行经验的成人指导下使用! 组装模型前,请仔细阅读说明书,按照说明书的要求进行安装.进行调试和飞行时,请根据说明书指示的参数进行调整。



标准版 6S

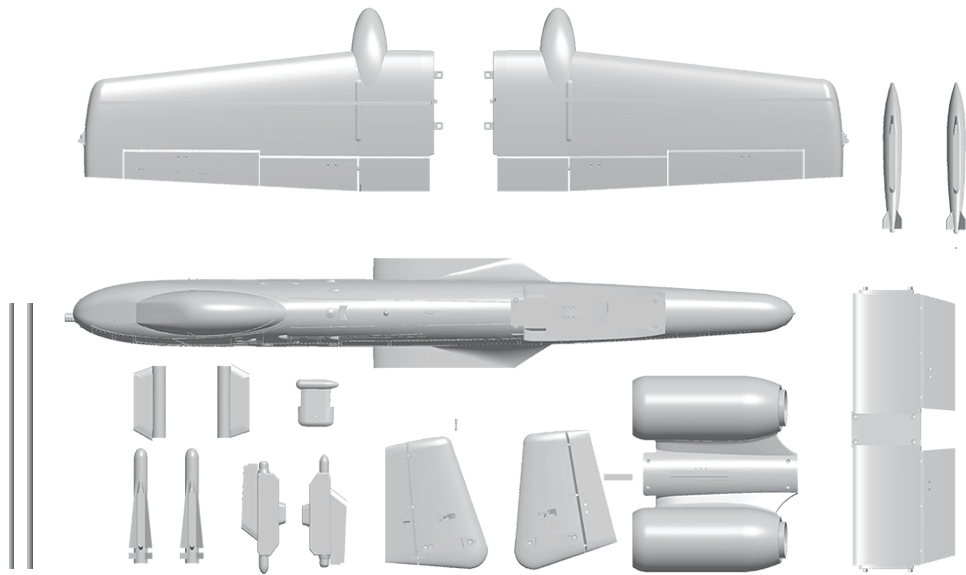
翼载荷: 113g/dm²
翼面积: 24.6dm²
舵机: 9g塑料齿舵机×1
9g混合齿舵机×9
电机: 2840-2200KV外转电机
涵道风扇: 64mm 12叶涵道组
电调: 双50A无刷电调 UBEC 7A
起飞重量: 2212g(不含电池、无导弹)

其他说明

起落架: 电动收放起落架
电池范围: 6S 4000-5000mAh
舱门: 前起落架舱门
其他: 仿真LED灯, 编队灯

⚠ 注意: 此处各项参数, 均使用本公司配件测试得出, 如果使用副厂配件, 会有所差异。
使用副厂配件时所产生的问题, 我们将无法给予技术支持!

产品包装清单



打开产品包装, 核对包装清单。(不同配置的版本, 包含内容不同!)

序号	配件名称	PNP	ARF Plus	序号	配件名称	PNP	ARF Plus
1	机身	预装所有电子设备	预装舵机	6	碳纤维管	✓	✓
2	主翼	预装所有电子设备	预装舵机	7	导弹	✓	✓
3	垂尾	预装所有电子设备	预装舵机	8	附件包	✓	✓
4	平尾	预装所有电子设备	预装舵机	9	说明书	✓	✓
5	发动机舱	预装所有电子设备	✓				

牵引钢丝使用说明

通过调查，过多的舵机延长线会加大连接处接触不良的风险，严重时，导致飞行过程，舵机断电而造成飞行事故。由于A-10内部线槽空间大且平直，故此模型的机体内，未使用舵机延长线。如下图所示，包装盒内包含一根牵引钢丝，PNP配置下，我们可以利用这根牵引钢丝，顺利的将主翼、平尾、垂尾舵机线布置到电池舱内。

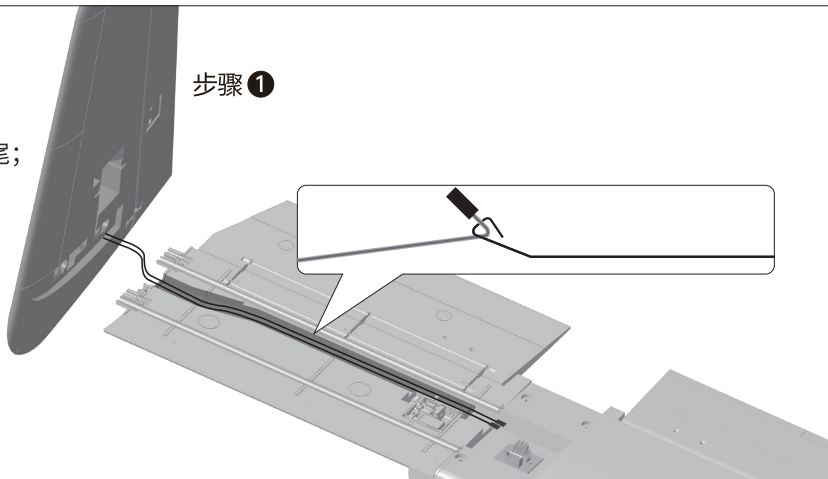
垂尾组装

如图所示:

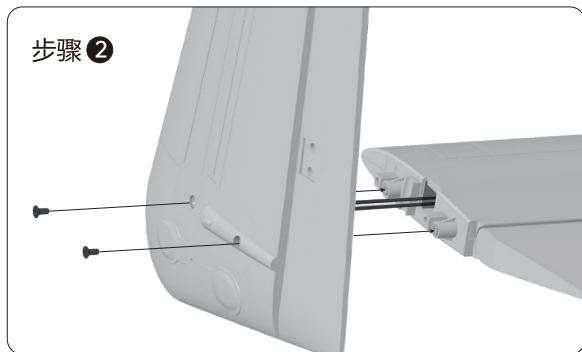
- 1.分别将垂尾舵机线与编队灯线拉入平尾线槽；
- 2.把垂尾安装在平尾，用4颗螺丝固定左、右垂尾；
- 3.把舵机线与编队灯线插在平尾转接板上。

螺丝 (KM 3*7mm 4PCS)

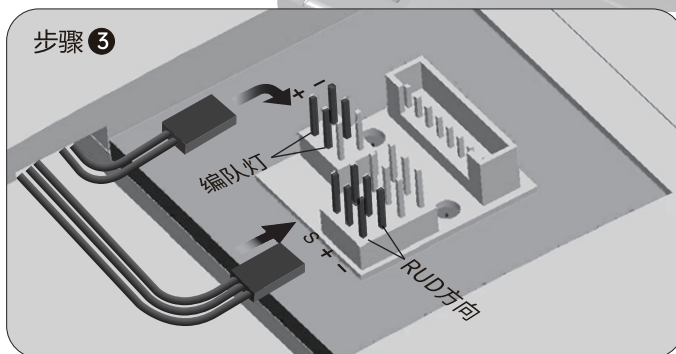
步骤①



步骤②



步骤③

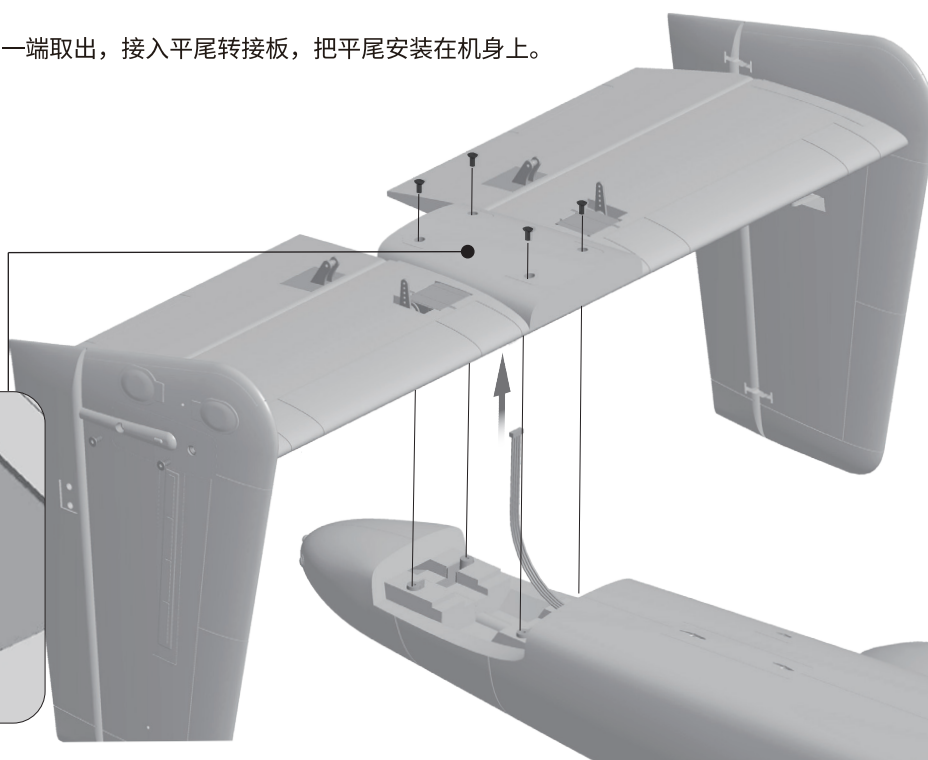
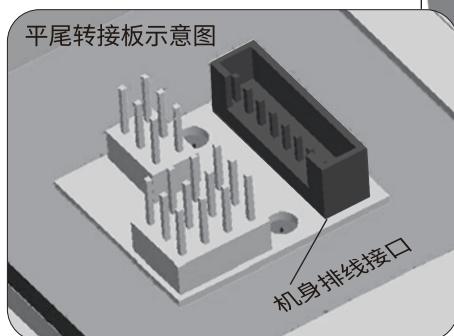


平尾组装

- 1.将平尾对准机身，将排线从后段机身一端取出，接入平尾转接板，把平尾安装在机身上。
- 2.然后用4颗螺丝固定。

螺丝 (KM 3*7mm 4PCS)

平尾转接板示意图



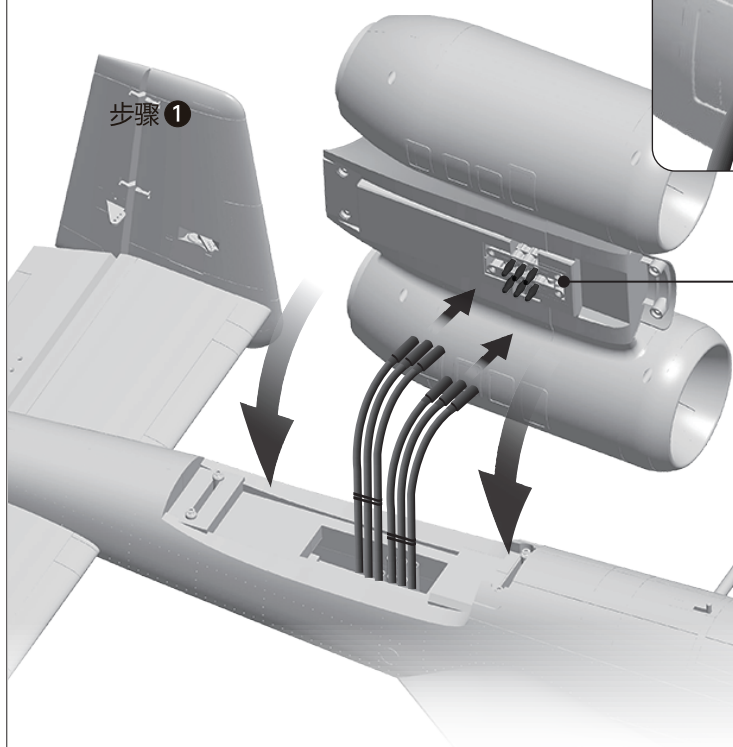
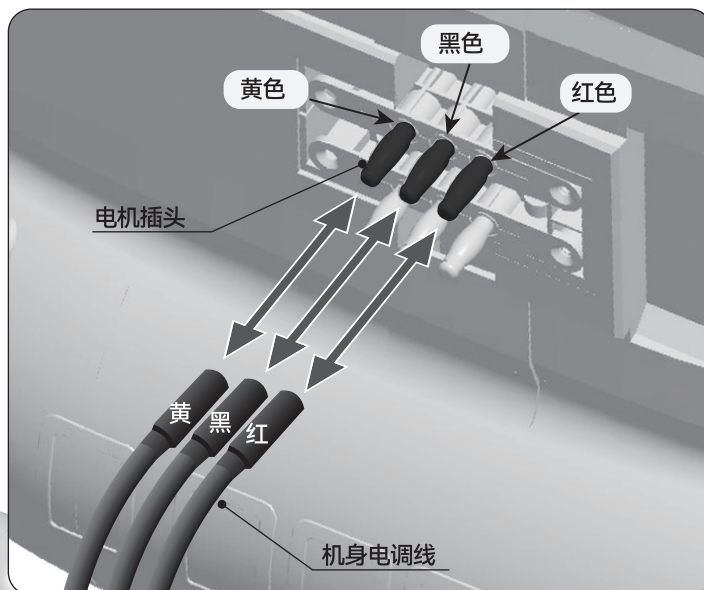
发动机舱组装

如图所示:

- 1.将电调线与发动机舱电机插头正确对齐;
- 2.电调线对应插入相同颜色的电机插头中。

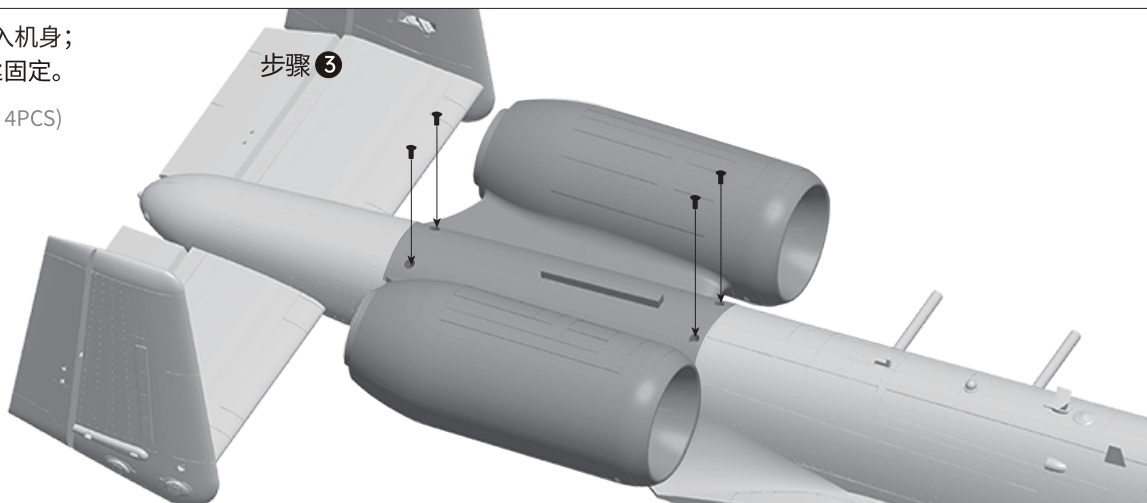
⚠ 注意:

黄色热缩套管电调线插入黄色热缩套管的电机插头,
黑色热缩套管电调线插入黑色热缩套管的电机插头,
红色热缩套管电调线插入红色热缩套管的电机插头;



- 3.将发动机舱装入机身;
- 4.然后用4颗螺丝固定。

螺丝 (KM 3*7mm 4PCS)



主翼组装

如图所示：按下机身上4个快速拆装开关按钮，使其处于解锁状态①；

① 主翼快速拆装式开关按钮二种不同状态图示：(此按钮的工作模式是，将按钮压到底后松开，按钮弹起来到最高位置，此时是解锁状态，再一次将按钮压到底后松开，按钮未弹起来，此时是锁止状态，这样重复的工作)

解锁状态

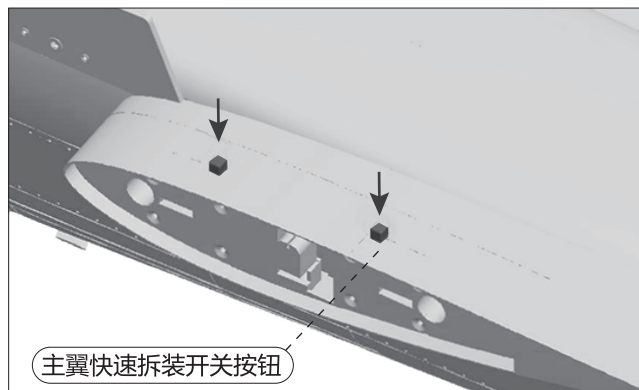
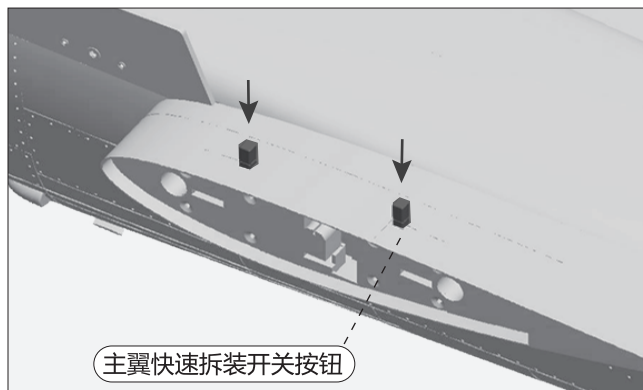
如下图所示：

将主翼快速拆装开关按钮按压到最后后松开，按钮弹起到最高位置，表示主翼已解锁，可以轻松拆下和安装主翼。

锁止状态

如下图所示：

装上主翼后，再次按压主翼快速拆装开关按钮到最后后松开，按钮没有弹起来，表示主翼已锁紧，此时向外拉动主翼，不能拆下主翼。



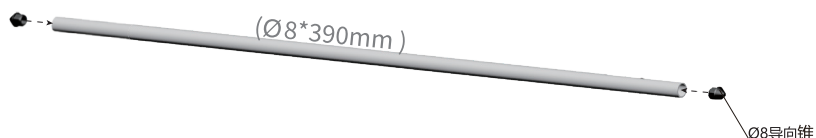
主翼组装

如图所示：

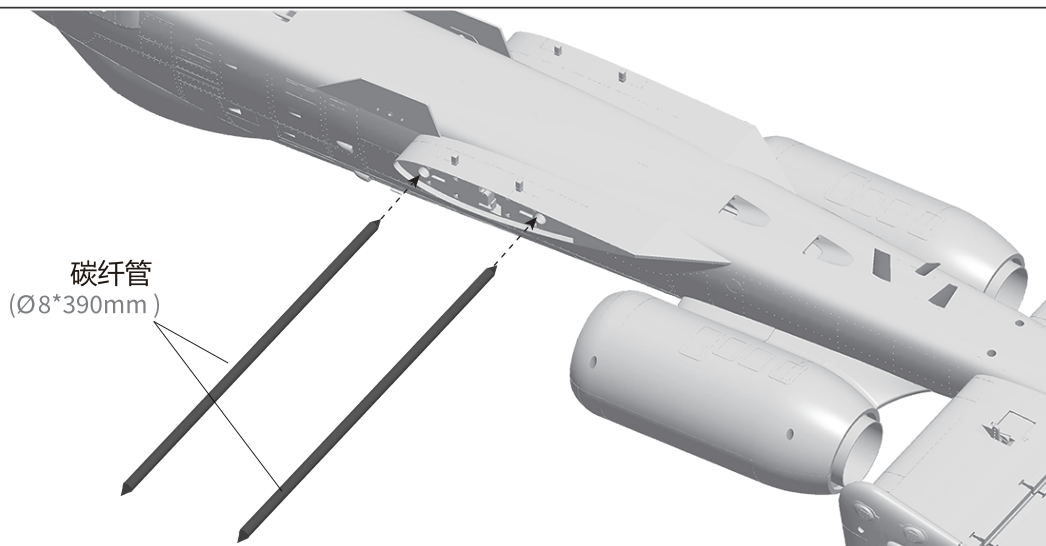
1. 使用胶水把【导向锥】固定在碳纤管二端；

碳纤管 (Ø8x390mm)

导向锥 (Ø8mm)



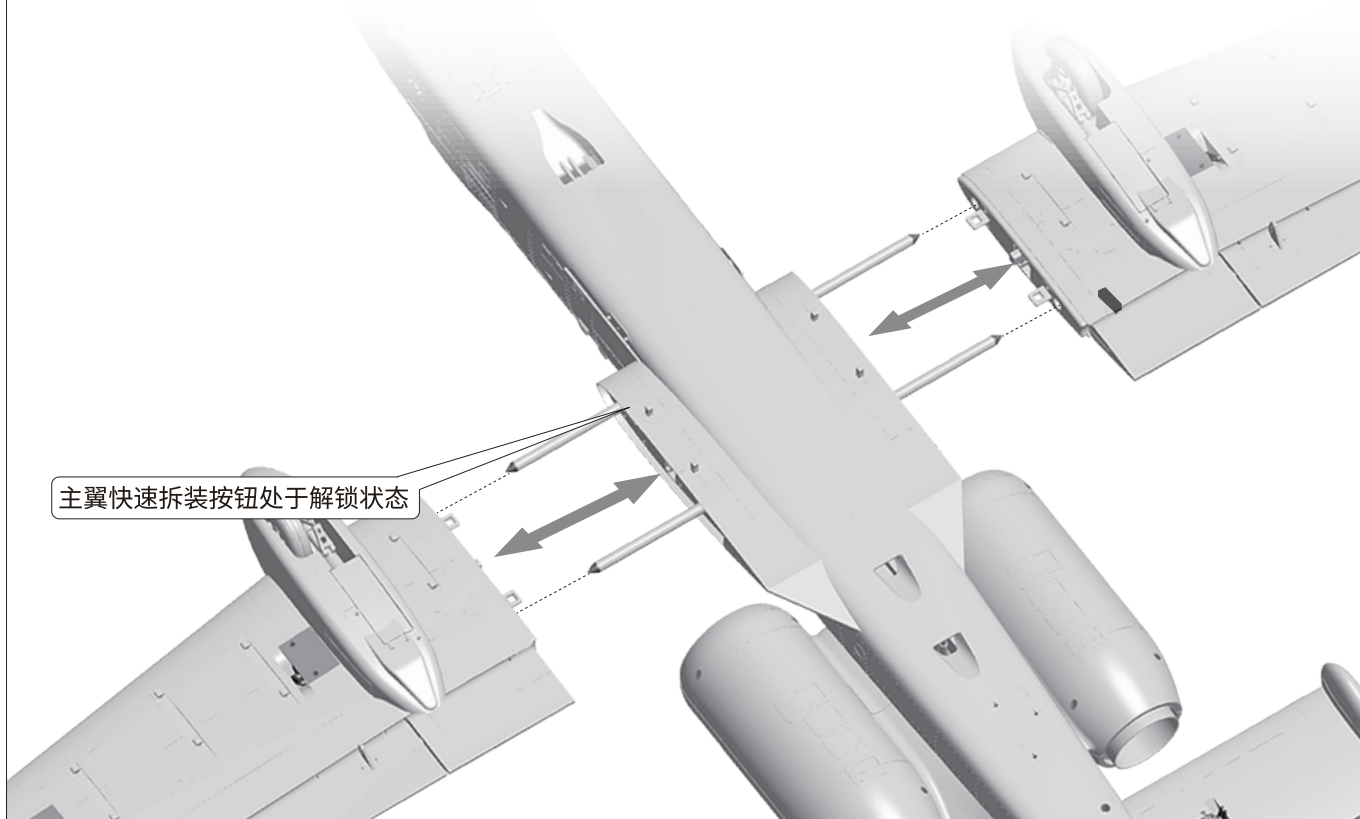
2. 分别把碳纤管，穿入机身



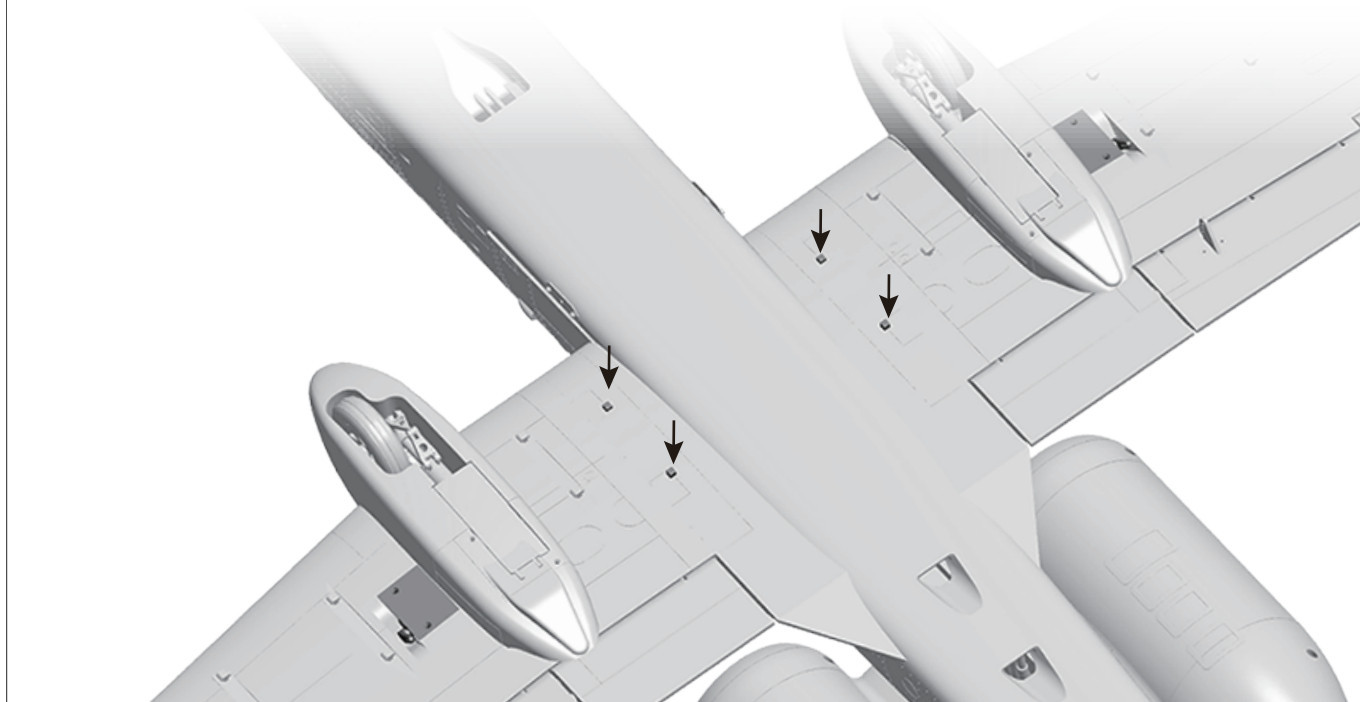
主翼组装

如图所示:

3. 将主翼对准碳管，然后把左、右主翼安装在机身上；

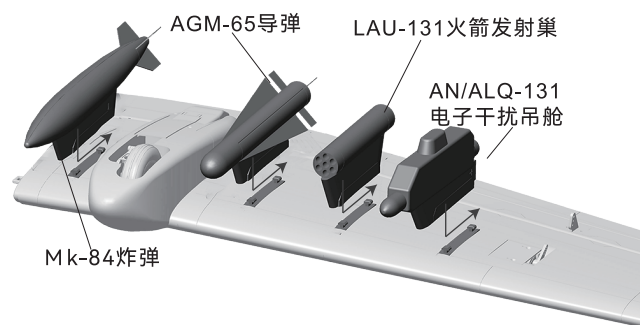
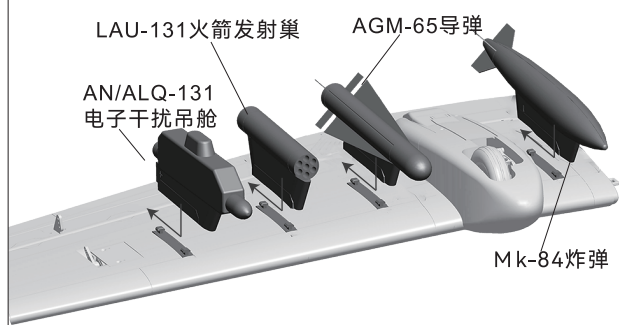


4. 按下4个机身快速拆装开关按钮，使其处于锁止状态；

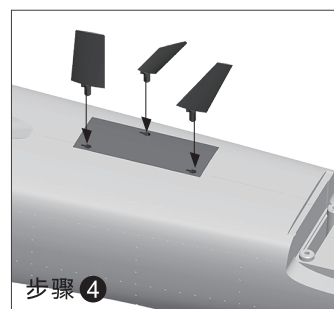
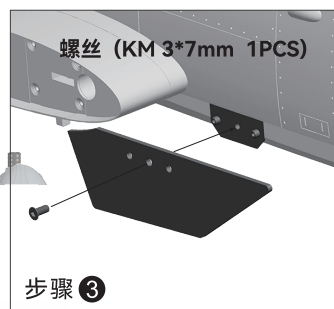


导弹组装

请参考以下图示组装挂架及导弹



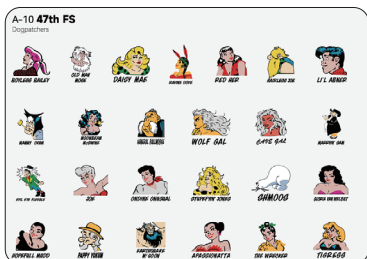
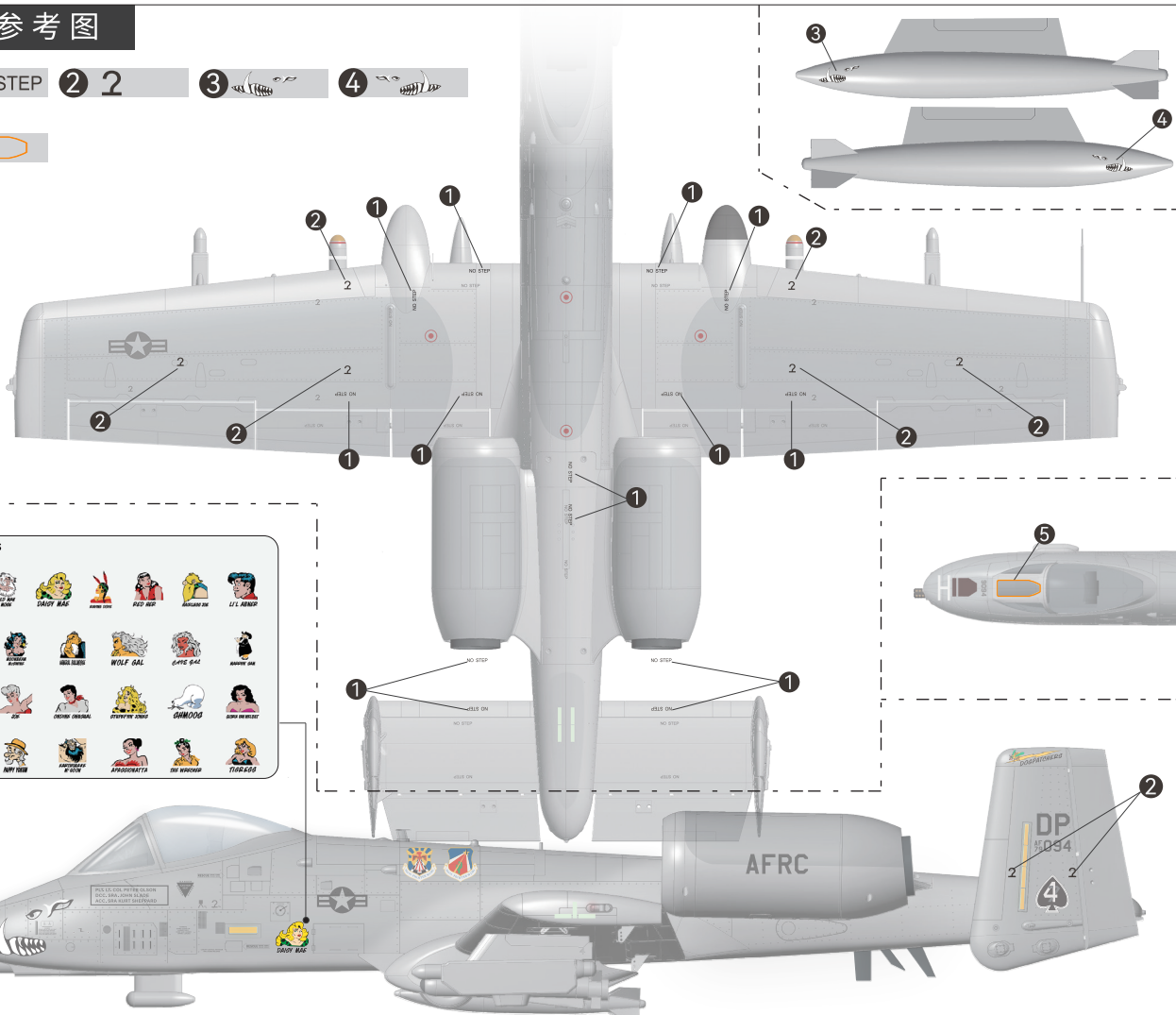
仿真小配件组装



贴花参考图

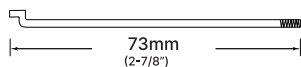
1 NO STEP 2 2 3 4

5



舵面控制钢丝尺寸及安装孔位

襟翼控制钢丝尺寸

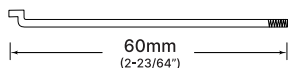


钢丝直径 $\varnothing$ 1.2mm

襟翼控制钢丝安装孔位



副翼控制钢丝尺寸

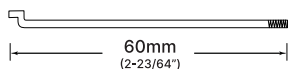


钢丝直径 $\varnothing$ 1.2mm

副翼控制钢丝安装孔位



升降舵控制钢丝尺寸

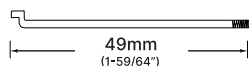


钢丝直径 $\varnothing$ 1.2mm

升降舵控制钢丝安装孔位

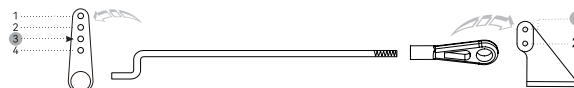


方向舵控制钢丝尺寸

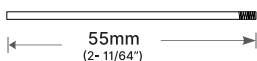


钢丝直径 $\varnothing$ 1.2mm

方向舵控制钢丝安装孔位



前轮转向控制钢丝尺寸

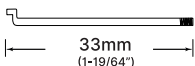


钢丝直径 $\varnothing$ 1.5mm

前轮转向控制钢丝安装孔位



前起落架舱门控制钢丝尺寸

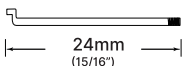


钢丝直径 $\varnothing$ 1.2mm

前起落架舱门控制钢丝安装孔位



前起落架随动舱门控制钢丝尺寸

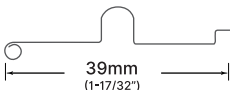


钢丝直径 $\varnothing$ 1.2mm

前起落架随动舱门控制钢丝安装孔位

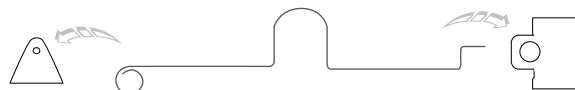


后起落架随动舱门控制钢丝尺寸

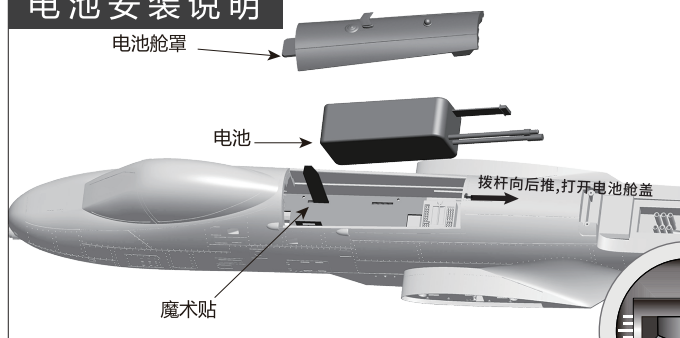


钢丝直径 $\varnothing$ 0.6mm

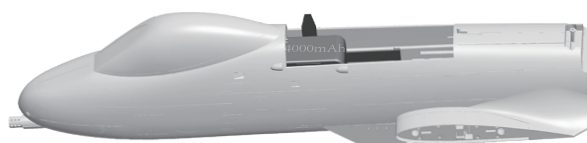
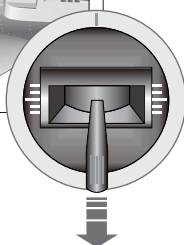
后起落架随动舱门控制钢丝安装孔位



电池安装说明



将电池与电调连接前, 请先请打开发射机电源, 确认油门杆处于低位。
安装电池后, 启动油门前, 请保证没有任何物体在螺旋桨转动直径以内, 以免造成事故和人身伤害!



电池舱尺寸:

L=230 W=63 H=68(mm)

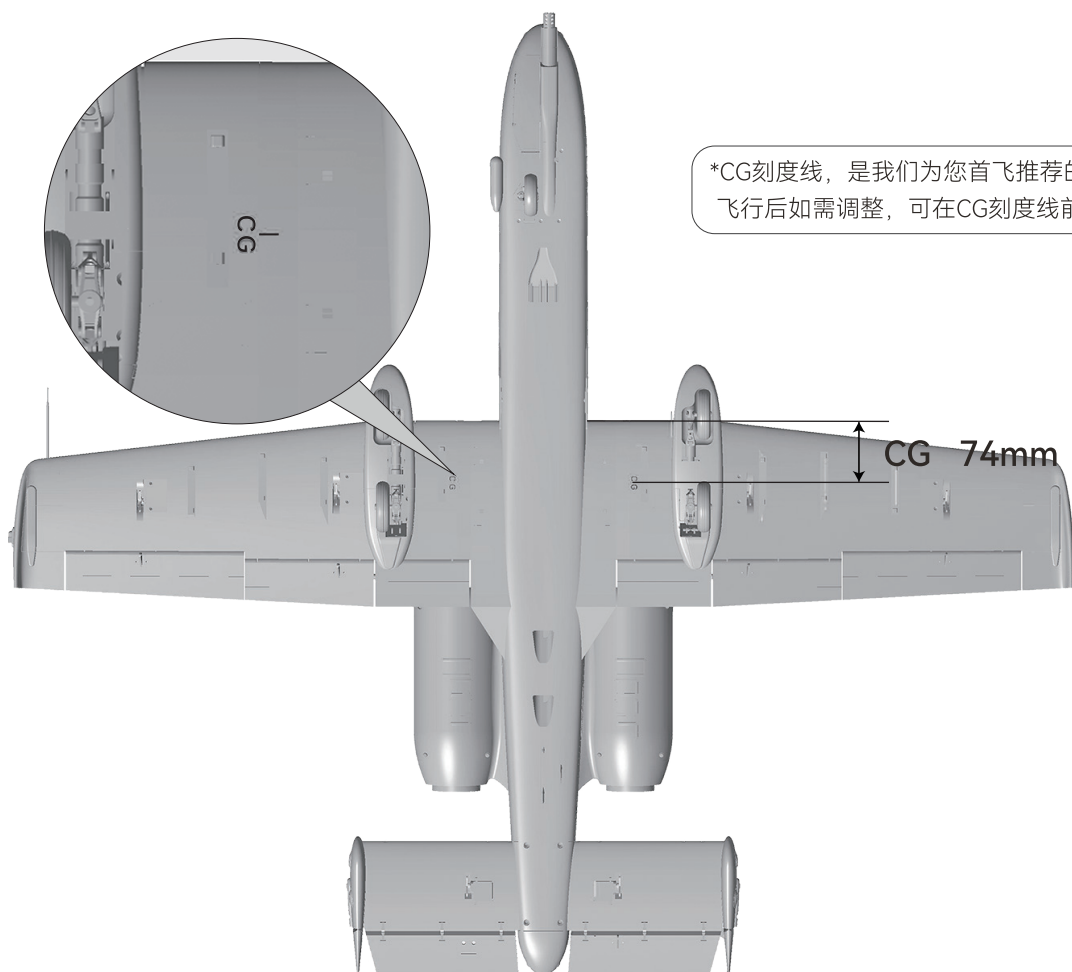
我们建议使用的电池容量和放电倍率如下:
6S 22.2V 4000mAh~6S 22.2V 5000mAh (1pcs)
放电倍率 $\geq 40C$

重心示意图

正确的重心, 直接关系到飞行的成功与否, 请参考下面的重心标示图, 来调整飞机的重心。

- 您可以将电池向前, 或者向后移动, 来调整飞机的重心;
- 如果通过电池的移动无法调整到正确的重心位置, 您还可以适当的使用一些其它材料来配重, 使飞机的重心处于正确的位置!

如图所示, 在主翼下表面表面已经雕刻了重心位置标记. 请根据此标示线来确认重心。
如果标记模糊不清, 那么请根据图示尺寸测量。



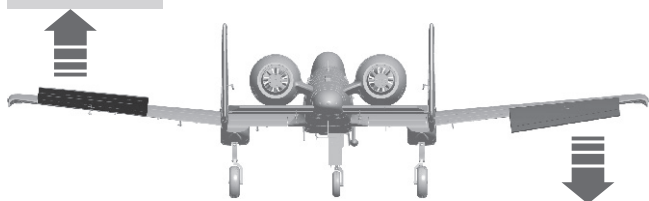
*CG刻度线, 是我们为您推荐的首飞推荐的重心位置;
飞行后如需调整, 可在CG刻度线前、后5mm范围内微调。

当您组装好飞机后，请连接接收机并通电，对飞机进行调试。

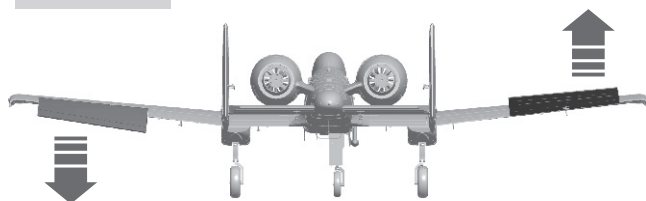
- 1.在遥控器所有通道微调归零、操纵杆居中的情况下:检查飞机上每一个舵面是否处于居中位置，如发现舵面未处于居中位置，请通过调整操纵钢丝使其居中；
- 2.请参考下面示意图，通过遥控器来测试飞机的每个舵面，确保其运动方向与下列示意图相符。如果出现相反的运动动作，首先请查看遥控器中，相关通道是否开启了反向功能；若问题持续存在，请联系我们协助解决。

副翼

副翼摇杆
向左运动

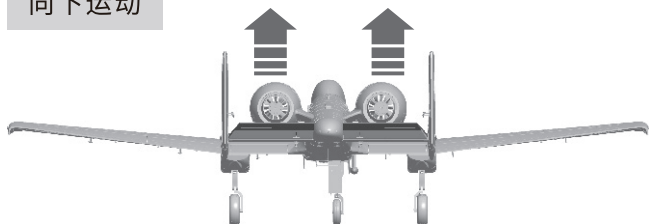


副翼摇杆
向右运动

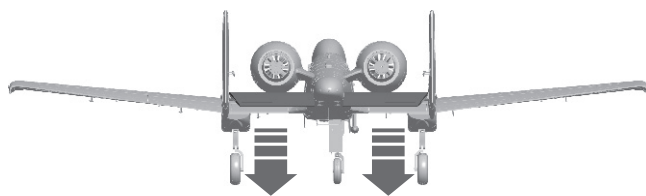


升降舵

升降摇杆
向下运动



升降摇杆
向上运动

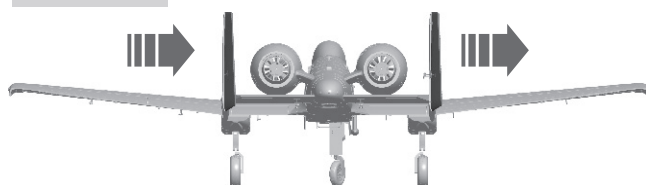


方向舵

方向摇杆
向左运动

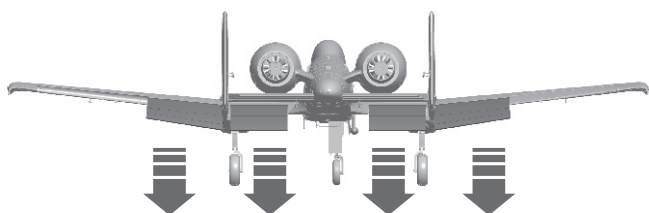


方向摇杆
向右运动



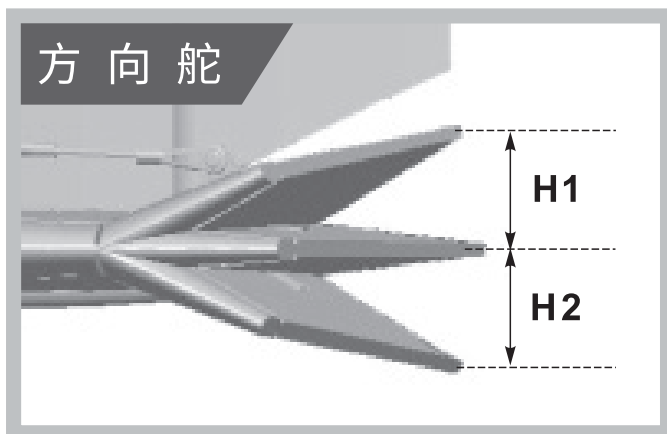
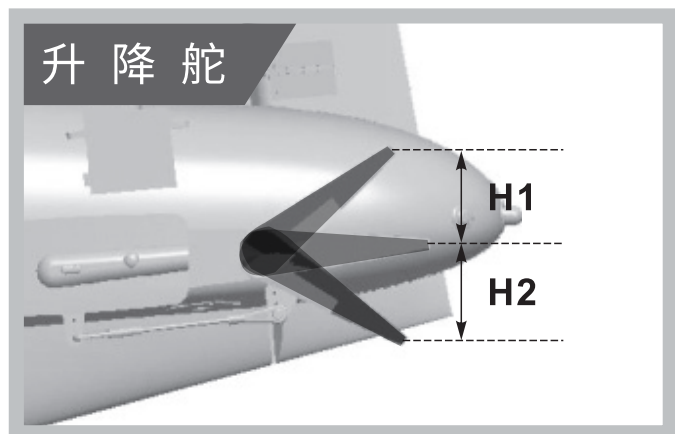
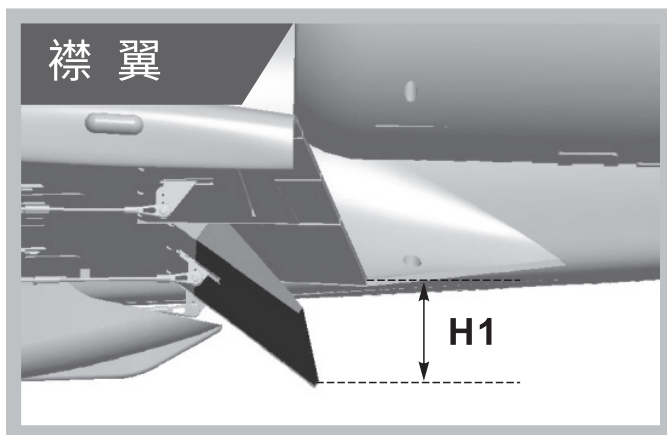
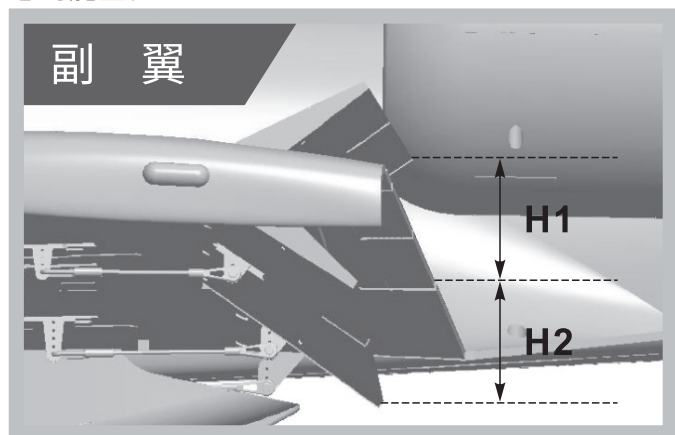
襟翼

襟翼放下



大、小舵参数

根据我们的测试经验，我们认为，按以下参数来设置大小舵量，将有助于飞行，舵量越大，模型飞机的动作响应更快，动作幅度可以更大。我们建议初次飞行使用大舵量起飞，然后根据个人情况调整到适合您的舵量。



	副翼 (内侧)	升降舵 (内侧)	方向舵 (下端)	襟翼 (内侧)
小舵量	H1/H2 21mm/21mm 舵量比率: 100%	H1/H2 11mm/11mm 舵量比率: 80%	H1/H2 13mm/13mm 舵量比率: 80%	H1 10mm
大舵量	H1/H2 24mm/24mm 舵量比率: 120%	H1/H2 15mm/15mm 舵量比率: 100%	H1/H2 16mm/16mm 舵量比率: 100%	H1 15mm

⚠ 飞行注意事项

1. 请参考右图，将平尾调整到正确的居中位置。

平尾后端距离垂尾刻线：4mm

2. 襟翼-升降混控参数

放下襟翼时，飞机会改变飞行方向，向上飞行，为了更好地操纵飞机，我们建议在遥控器预设“襟翼-升降舵混控”，这样可以使得飞机在打开襟翼的情况下，飞机不会改变原有地飞行姿态，

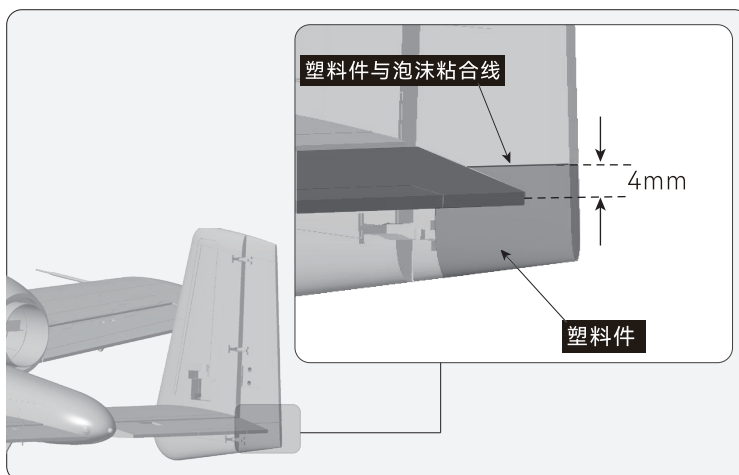
具体设定范围值如下

使用小舵量襟翼时，需要0.8mm降舵补偿

使用大舵量襟翼时，需要1.0mm降舵补偿

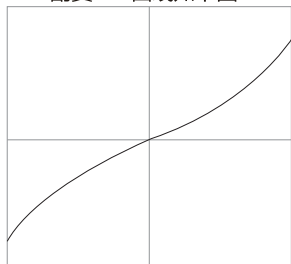
最后，您可以根据自己的实际操控情况，略微增加或者减少预设舵量

3. 注意两侧升降舵要调整到相同高度位置，否则影响飞行稳定性



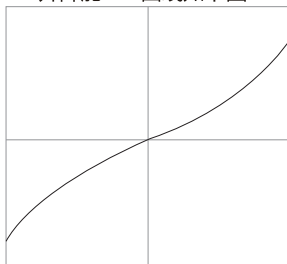
遥控器EXP设置建议

1.副翼EXP曲线如下图:



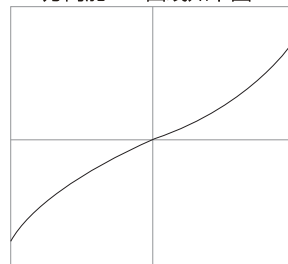
Futaba系列遥控器: EXP A -30
EXP B -30
Spektrum系列遥控器: EXPO 30% 30%

2.升降舵EXP曲线如下图:



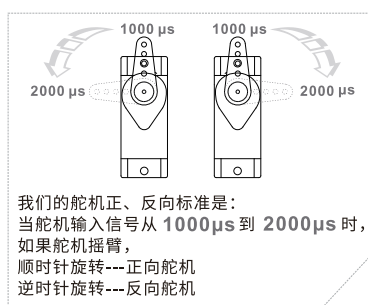
Futaba系列遥控器: EXP A -40
EXP B -40
Spektrum系列遥控器: EXPO 40% 40%

3.方向舵EXP曲线如下图:



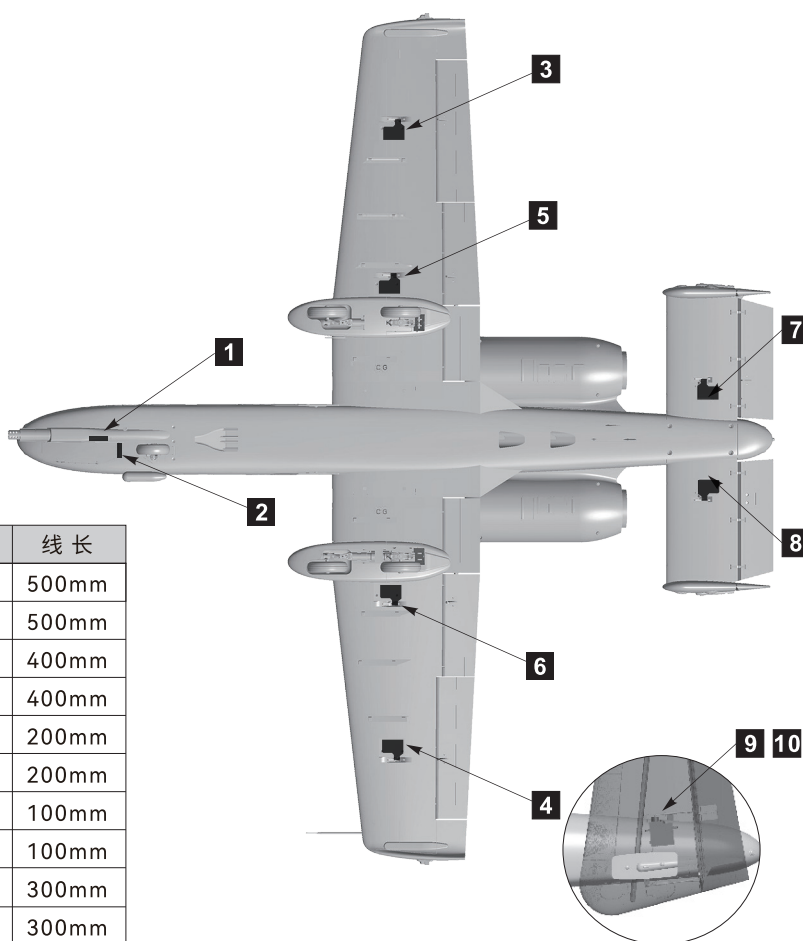
Futaba系列遥控器: EXP A -30
EXP B -30
Spektrum系列遥控器: EXPO 30% 30%

舵机使用介绍

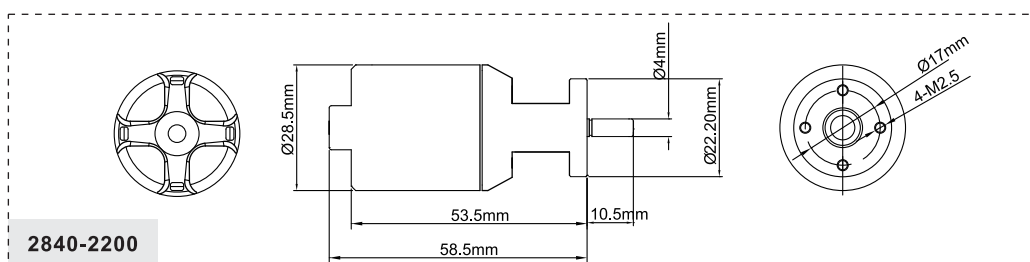


如果您需要选购其它品牌的舵机进行安装,
请参考下面的表格选择的舵机

舵机位置	舵机规格	序号	方向性	线长
前轮转向	9g混合	1	正向	500mm
前起落架舱门	9g塑料	2	正向	500mm
副翼(左)	9g混合	3	正向	400mm
副翼(右)	9g混合	4	正向	400mm
襟翼(左)	9g混合	5	正向	200mm
襟翼(右)	9g混合	6	反向	200mm
平尾(左)	9g混合	7	正向	100mm
平尾(右)	9g混合	8	反向	100mm
垂尾(左)	9g混合	9	正向	300mm
垂尾(右)	9g混合	10	正向	300mm



电机参数



2840-2200 KV无刷马达, 使用
6S 22.2V的电池和50A电调。

⚠ 注意: 如果需要购买副厂马达
使用, 请参考左图所示的尺寸图,
来选择马达, 确保您所购买的马达
能够顺利安装。

型号	电机 (KV)	使用电压 (V)	电流 (A)	推力 (g)	转速	涵道重量 (g)	无负载电流	扇叶	电调
2840-2200KV	2200RPM/V	22.2	50	1400	48800	151	2.7A	64mm Ducted Fan	50A



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