Freewing 64mm EDF JET

F9F Panther User Manual

Wingspan:690mm
Length:740mm
Empty Weight:480G[w/o Battery]

MADE IN CHINA

Catalog

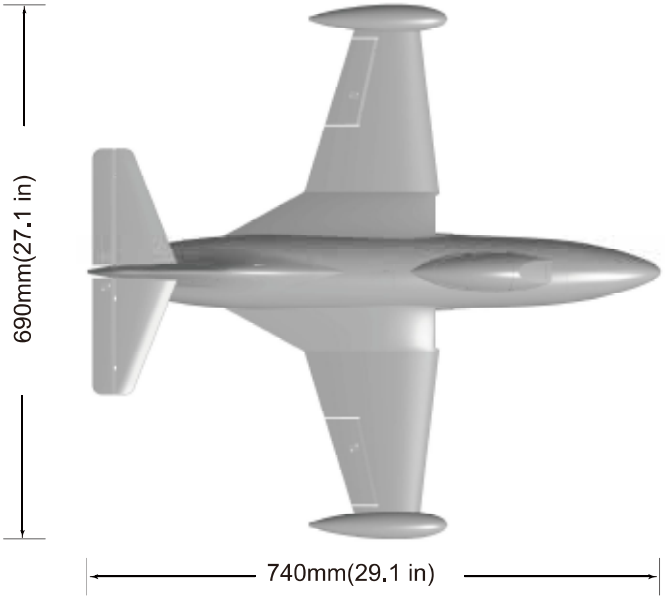
EN

Note:

1.This is not a toy! Operater 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.

Product Basic information

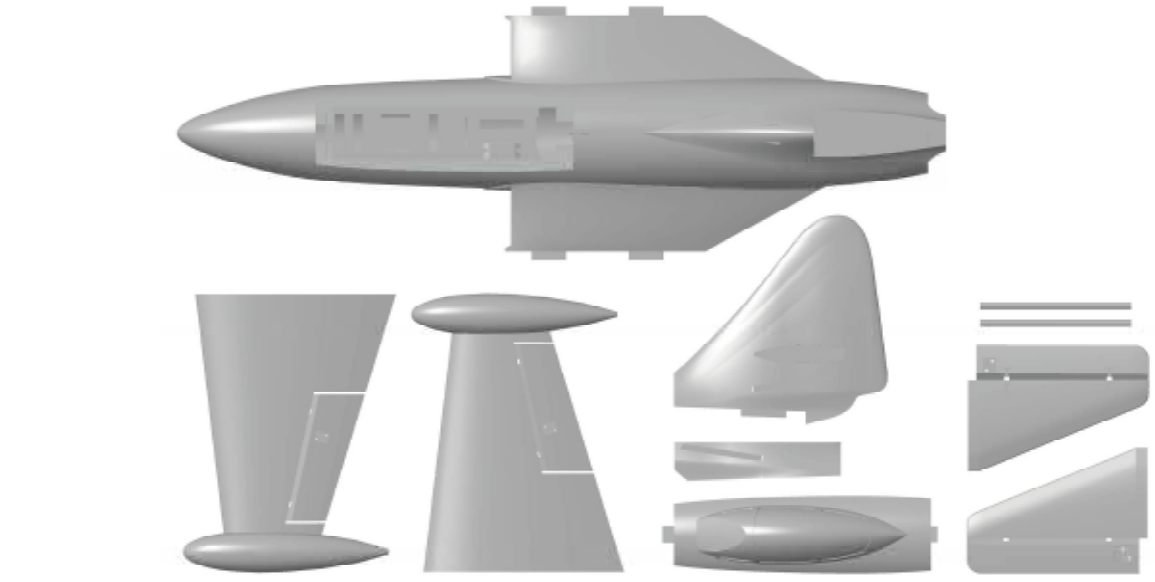


Standard Version

Wingload: 87.8 g/dm^2
Wing Area: 8 dm^2
Motor: 2840-2850KV O/R Motor
Servo: 9g Digital plastic servo ×3
ESC: 40A (V2 with Thrust Reverse Fuction)
Ducted fan: 64mm 12-blade fan
Weight: 480g(w/o Battery)
Li-Po Battery: 4S 1600-2200mAh
Landing gear: No

⚠ 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



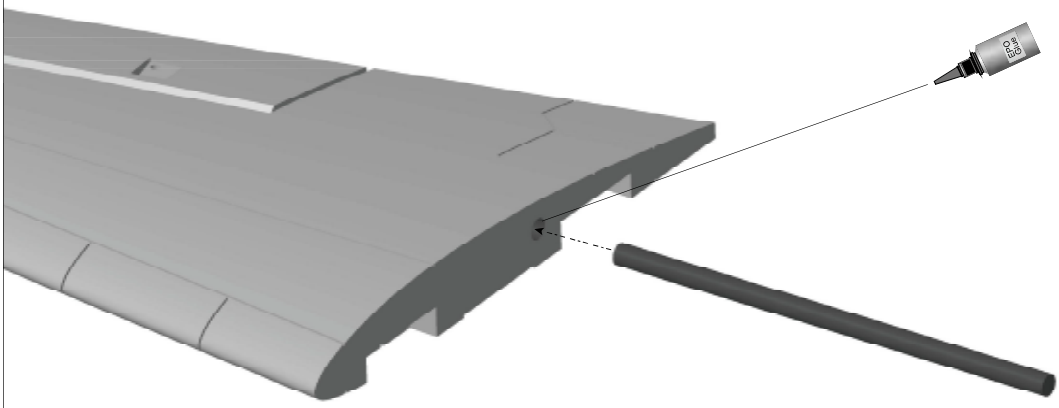
Different equipment include different spareparts. Please refer to the following contents to check your sparepart list.

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	Horizontal tail		
4	Vertical tail		

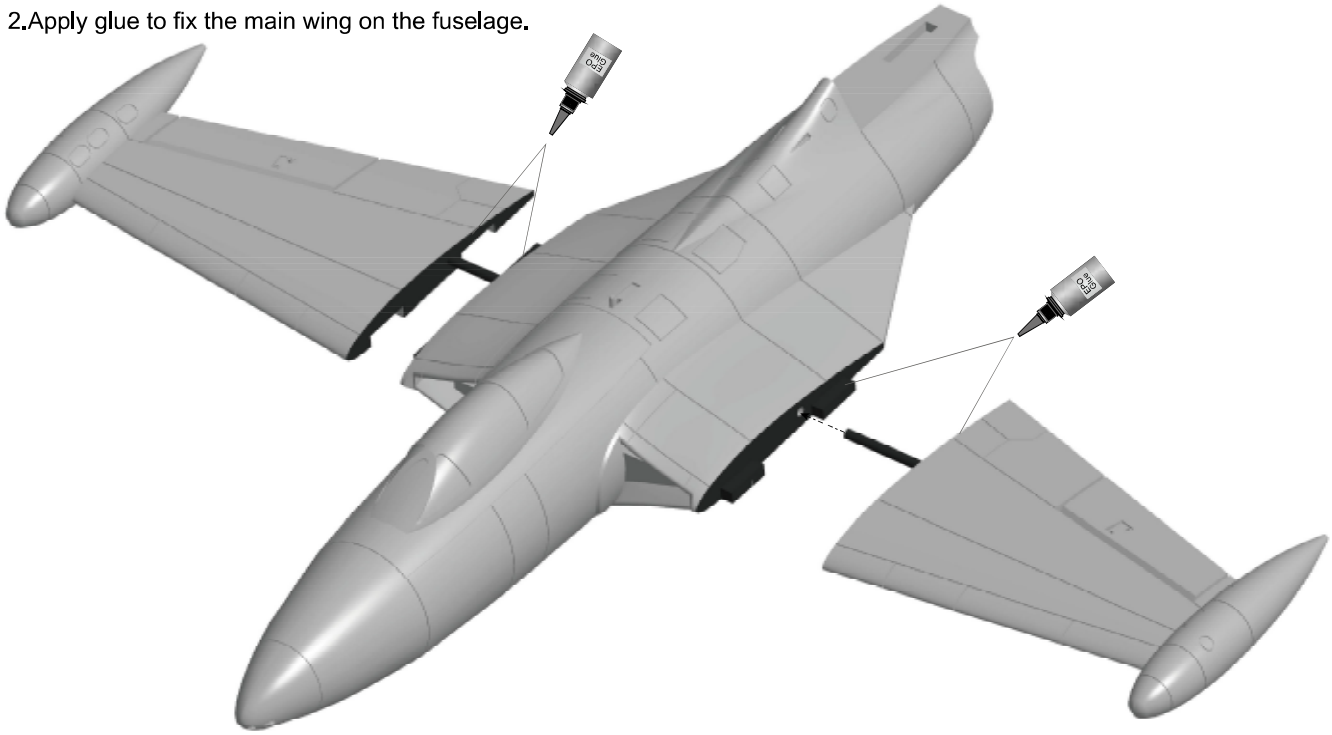
No.	Name	PNP	ARF Plus
5	Pushrod	√	√
6	Glue	√	√
7	Manual	√	√

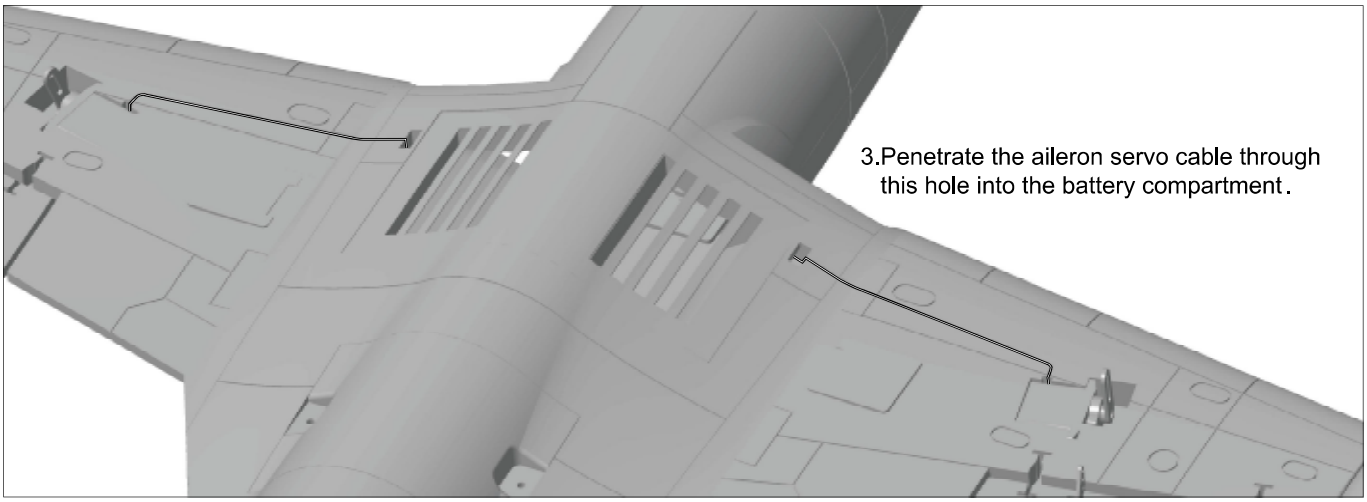
Install Main Wing

As the photo show:
1.Apply gule to fix the carbon tube on the left/right wing.



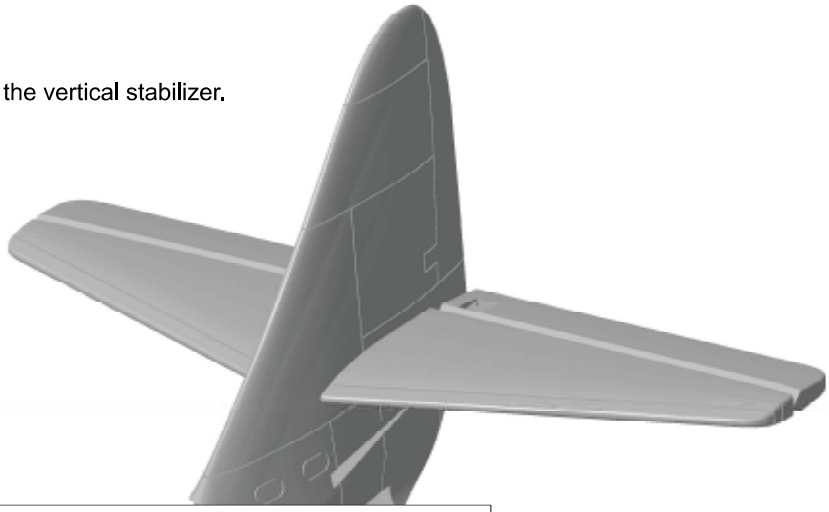
2.Apply glue to fix the main wing on the fuselage.

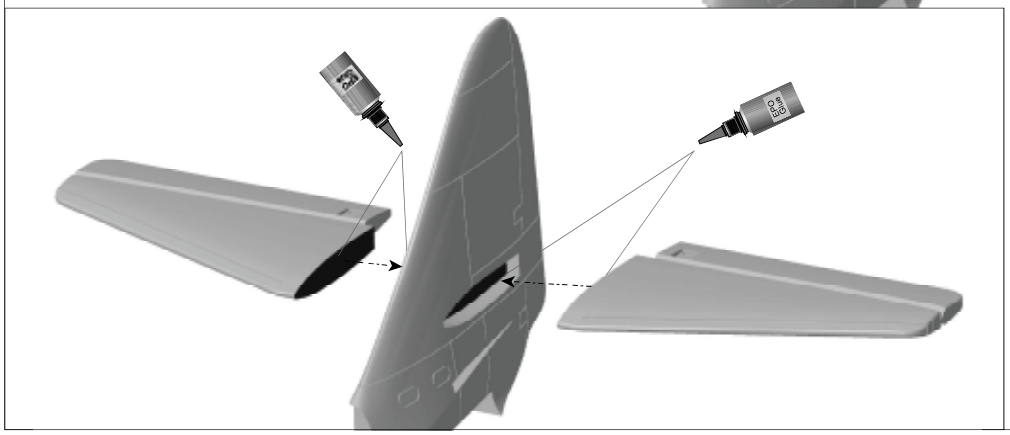




Install Horizontal Stabilizer

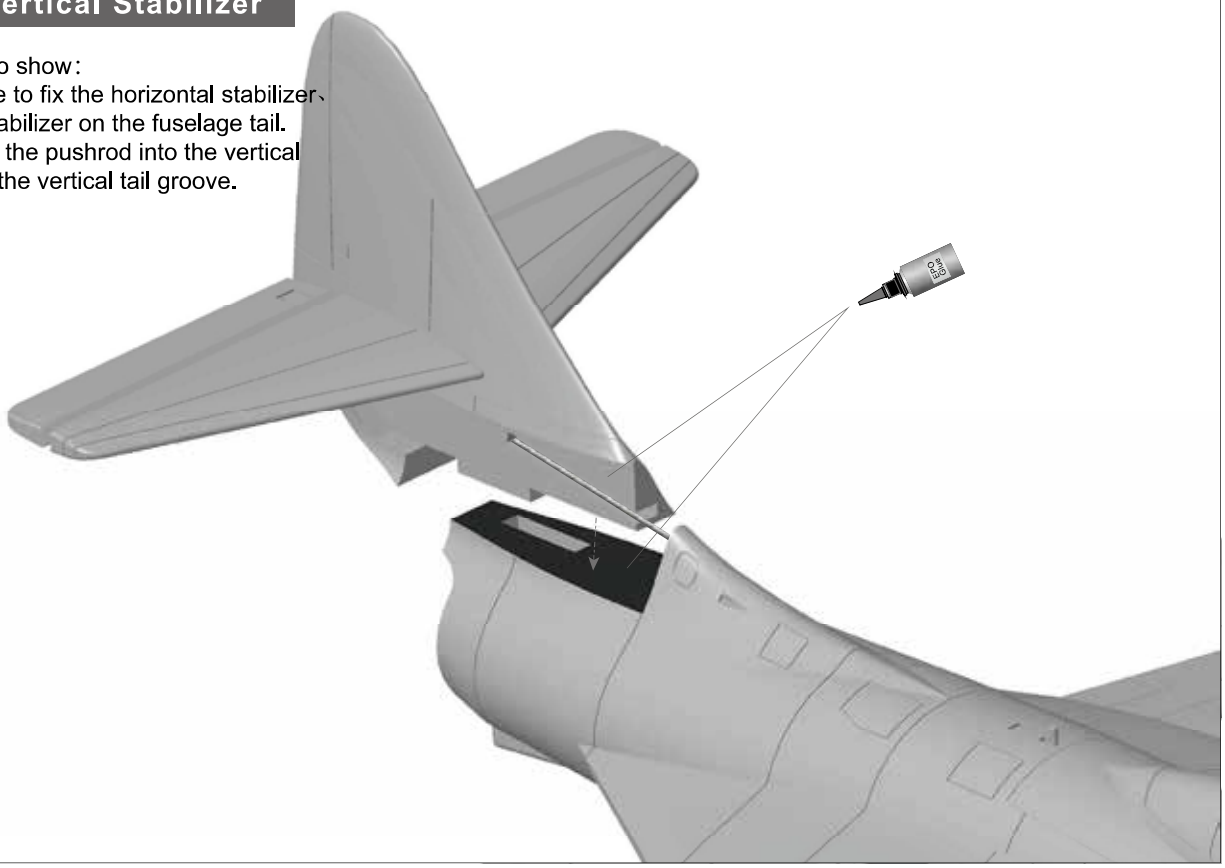
As the photo show:
1.Apply glue to fix the horizontal stabilizer on the vertical stabilizer.



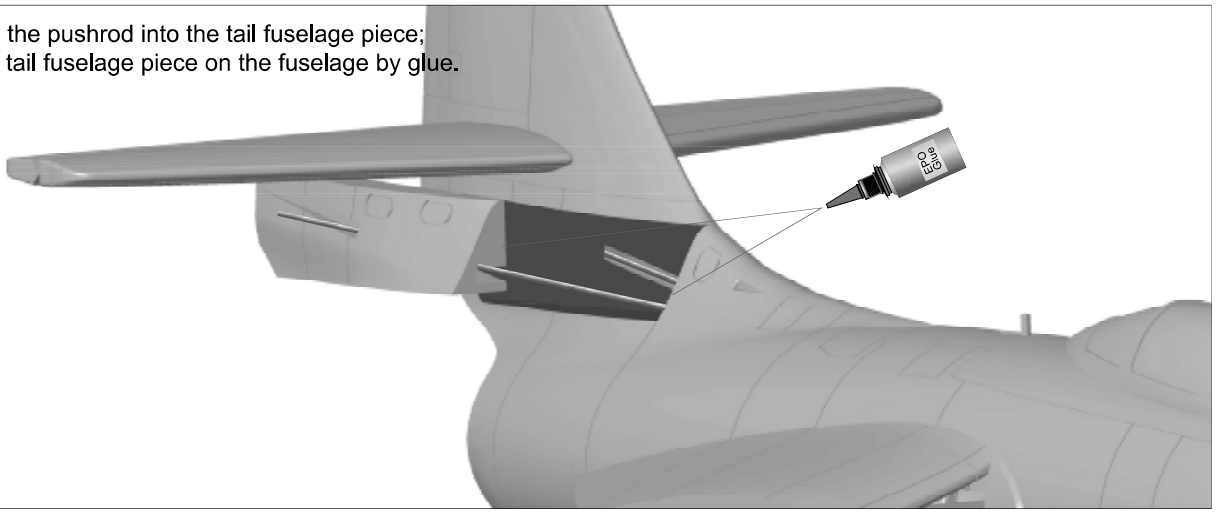


Install Vertical Stabilizer

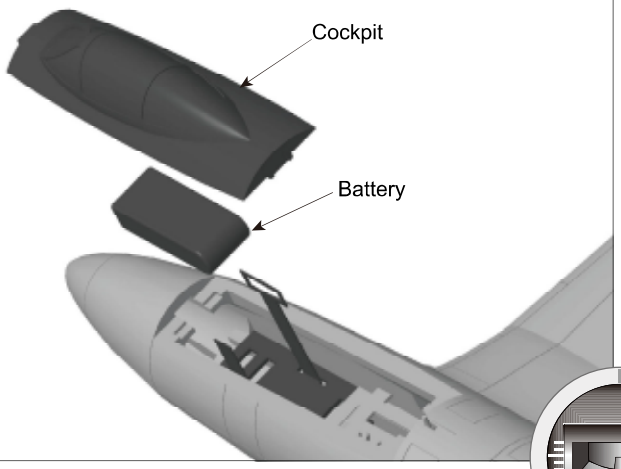
As the photo show:
1.Apply glue to fix the horizontal stabilizer、vertical stabilizer on the fuselage tail.
2.Penetrate the pushrod into the vertical tail along the vertical tail groove.



3.Penetrate the pushrod into the tail fuselage piece;
4.Install the tail fuselage piece on the fuselage by glue.

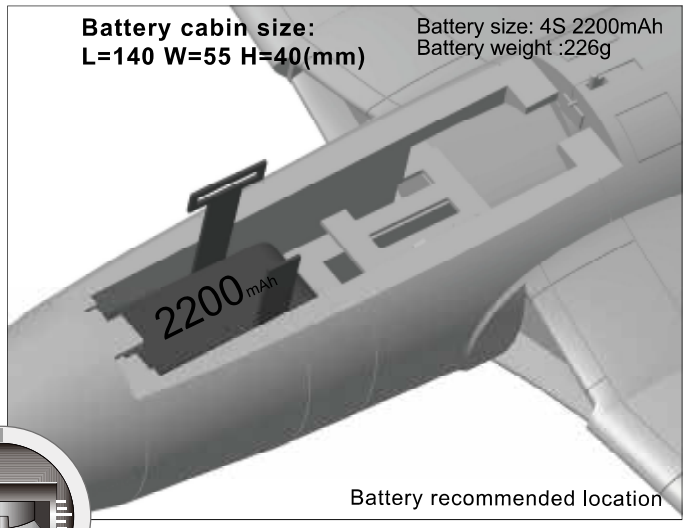


Install Battery



Battery cabin size:
L=140 W=55 H=40(mm)

Battery size: 4S 2200mAh
Battery weight :226g

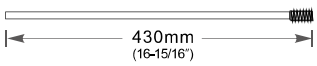


Before connecting the battery and receiver, please switch on the transmitter power and make sure the throttle stick is in the lowest position. Bind your receiver to your transmitter according to your transmitter's instruction manual.

We recommend the following LiPo battery:
4S 14.8V 1600mAh~4S 14.8V 2200mAh
Discharge rate of C ⩾ **35C**

Pushrod instructions

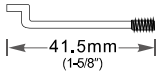
Elevator pushrod length



Pushrod diameter Ø1mm

Elevator pushrod length

Main wing pushrod length

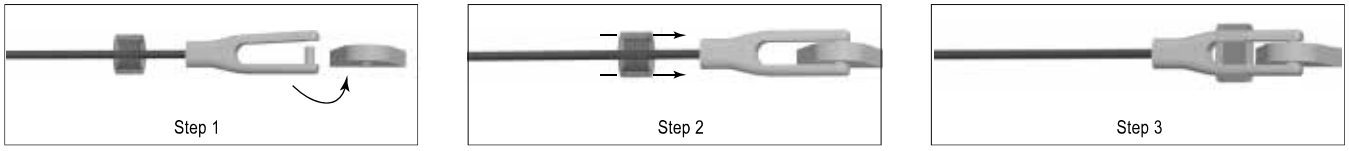


Pushrod diameter Ø1.2mm

Main wing pushrod length

Important additional notes

The Y-type clevis used in this product is equipped with a transparent silicone ring for secondary reinforcement, which can effectively prevent the clevis from accidentally loosening.
As shown in the following figure, when you buckle the clevis into the control surface horn, use the silicone ring to cover the clevis.



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 choosen 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.

Control Direction Test

After installed the plane, before flying, we need a fully charged battery and connect to the ESC, then use radio to test and check that every control surface work properly.

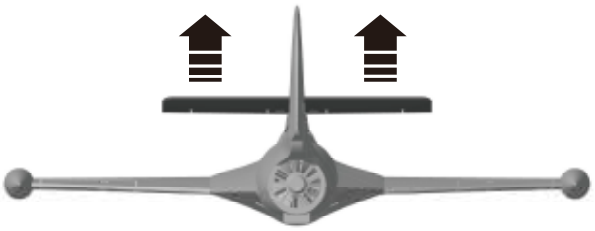
Aileron

Stick Left

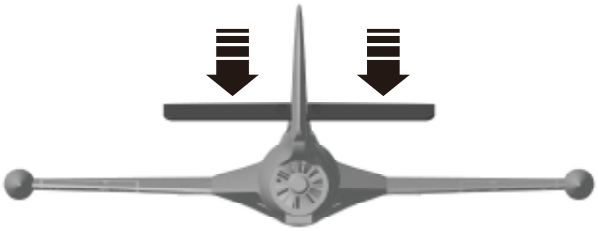
Stick Right

Elevator

Stick down

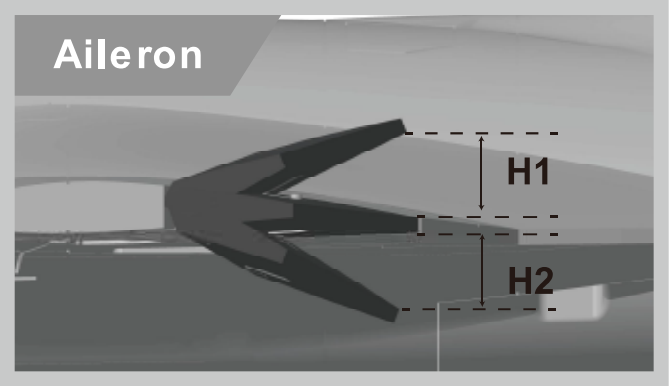


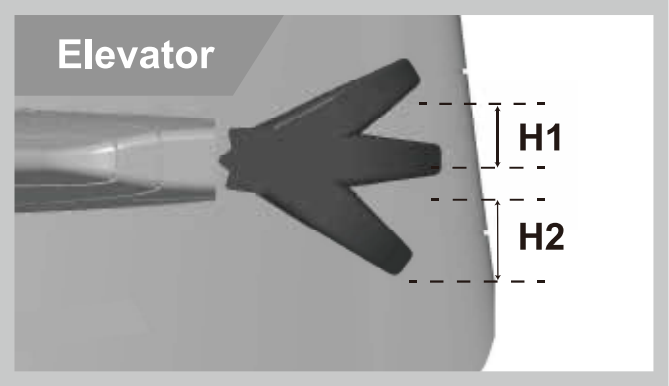
Stick up



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.

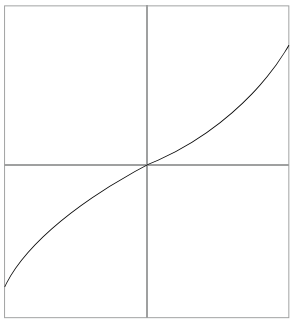




	Aileron (Measured closest to the fuselage)	**Elevator** (Measured closest to the fuselage)
Low Rate	H1/H2 7mm/7mm D/R Rate: 30%	H1/H2 7mm/7mm D/R Rate: 60%
High Rate	H1/H2 12mm/12mm D/R Rate: 50%	H1/H2 10mm/10mm D/R Rate: 80%

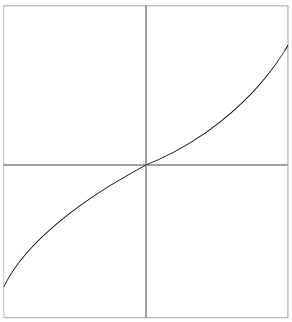
Remote Control EXP Setting Suggestion

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%

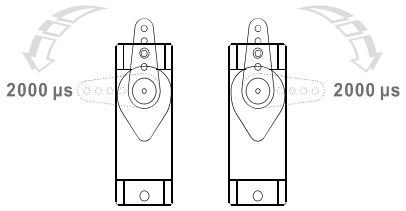
2.Elevator EXP curve is shown as below :



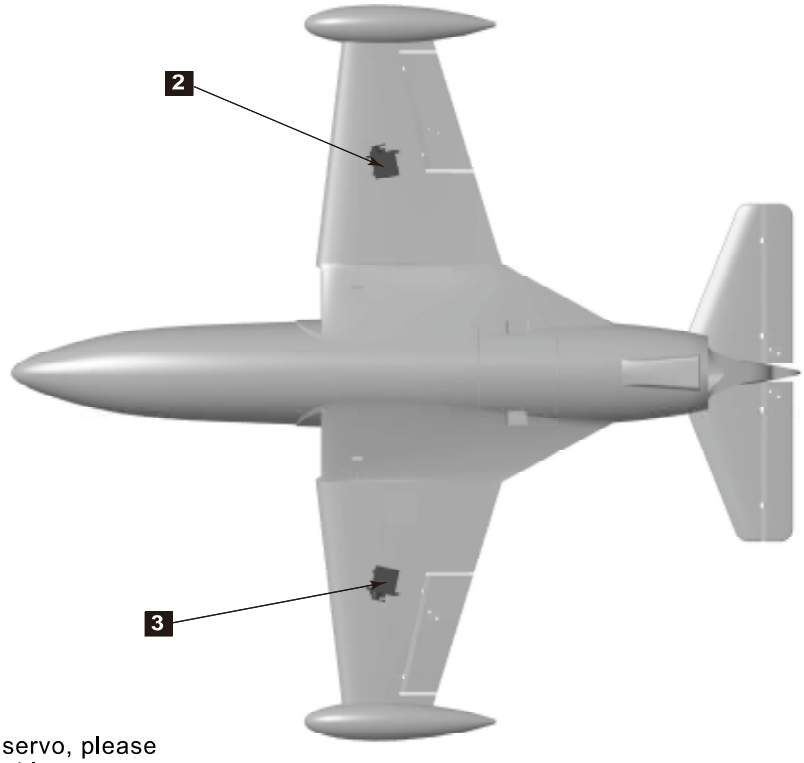
Futaba brand Remote Control : EXP A -30
EXP B -30
Spektrum brand Remote Control : EXPO 30% 30%

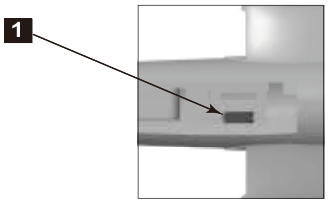
Pre-Installed Component Overview

Servo Direction



The servo positive or reverse rotation is defined as follows:
When servo input signal change from 1000μs to 2000μs,
The servo arm is
rotated clockwise, its **positive servo.**
The servo arm is
rotated counterclockwise, its **reverse servo.**

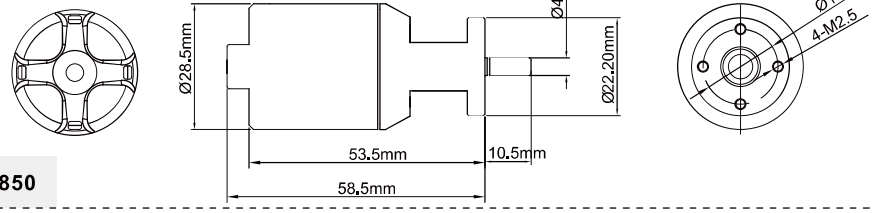




If you need to purchase another brand's servo, please refer to the following list to choose a suitable servo.

Position	Servo regulation	No.	Pos. / Rev.	Cable length
Fuselage	9g plastic servo	1	Positive	100mm
Main wing(L)	9g plastic servo	2	Positive	300mm
Main wing(R)	9g plastic servo	3	Positive	300mm

Motor Specification



2840-2850

2840-2850KV brushless motor use 4S 14.8V lipo battery and 40A 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	Volate (V)	Current (A)	Pull (g)	RPM	Weight (g)	No Load Current	Propeller	ESC
2840-2850KV	2850RPM/V	14.8	40	1350	42180	145	2.7A	64mm Ducted Fan	40A

Landing Gear Assemble

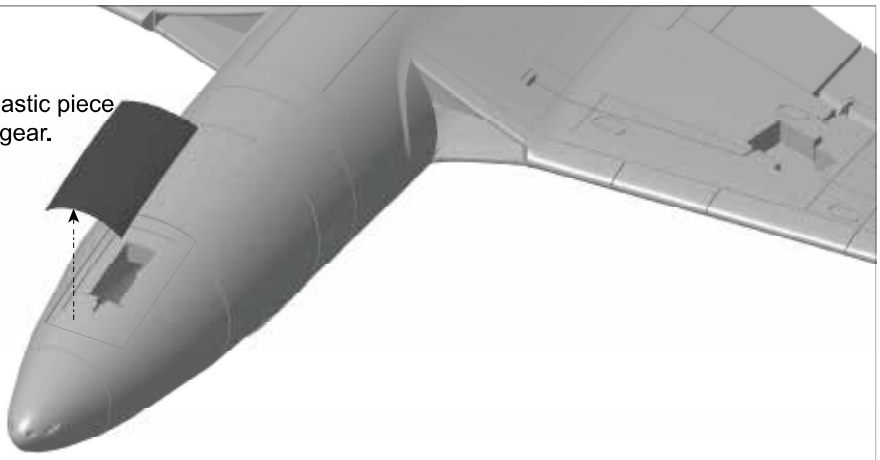
Landing gear is the optional part, please consult with the local distributor to purchase, and refer to the following instructions to install.

Please refer to the following photo for assembly and installation of the landing gear.

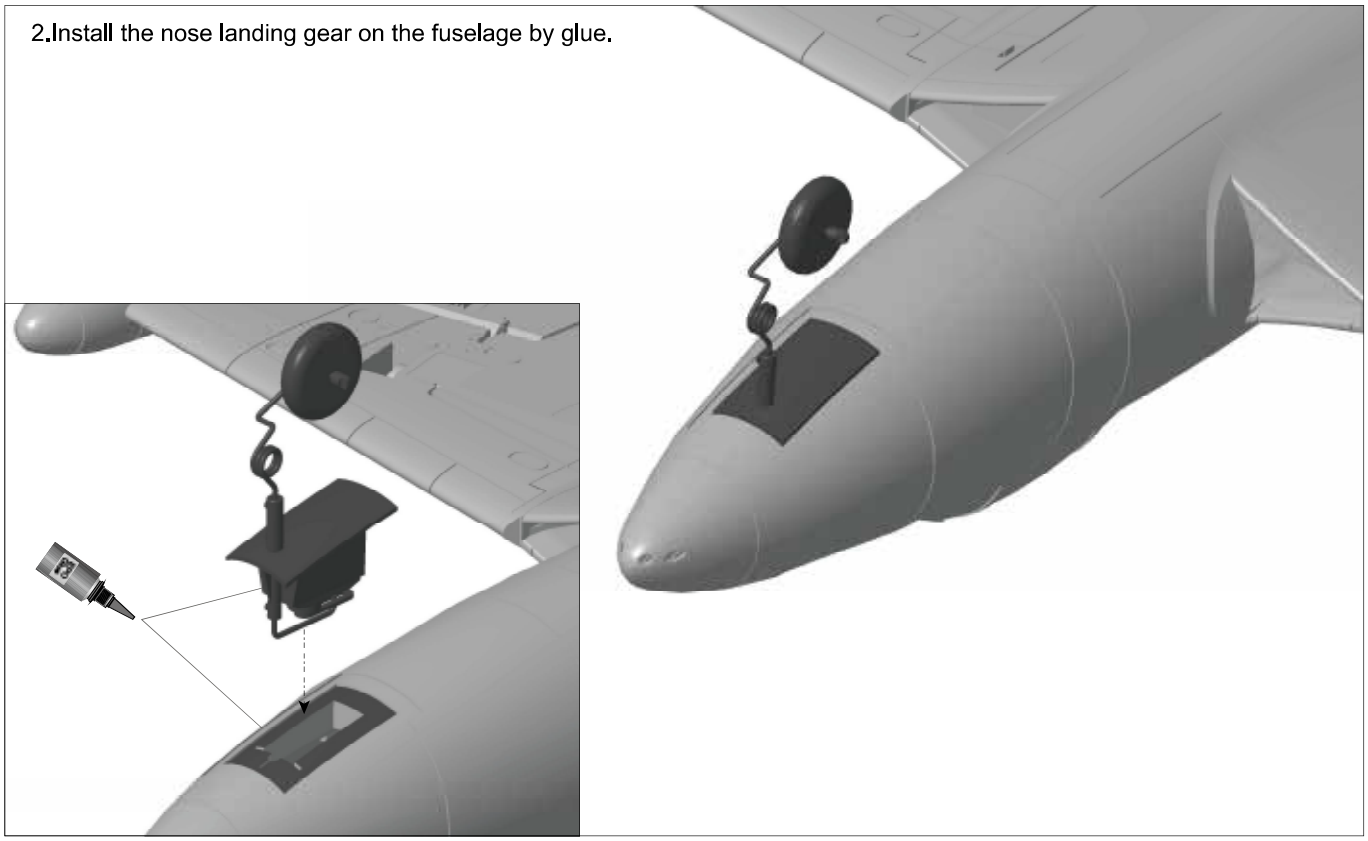
Install Nose Landing Gear

As the photo show:

1.Turn over the fuselage and remove the plastic piece on the install position of the front landing gear.



2.Install the nose landing gear on the fuselage by glue.



Landing Gear Assemble

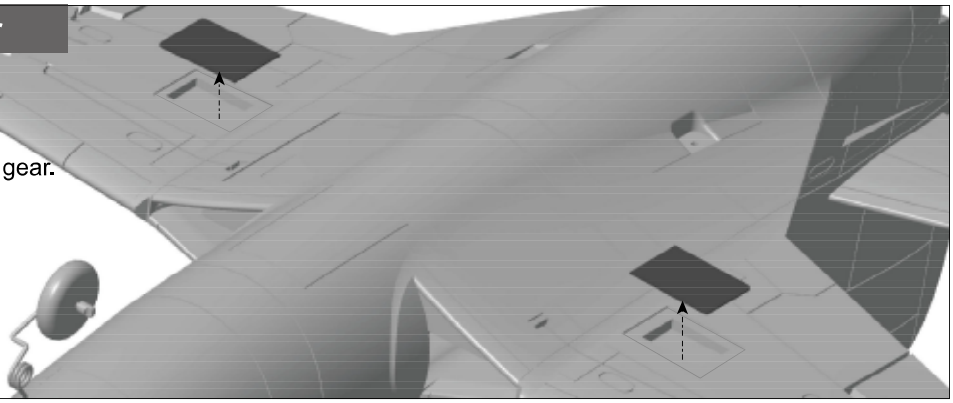
Landing gear is the optional part, please consult with the local distributor to purchase, and refer to the following instructions to install.

Please refer to the following photo for assembly and installation of the landing gear.

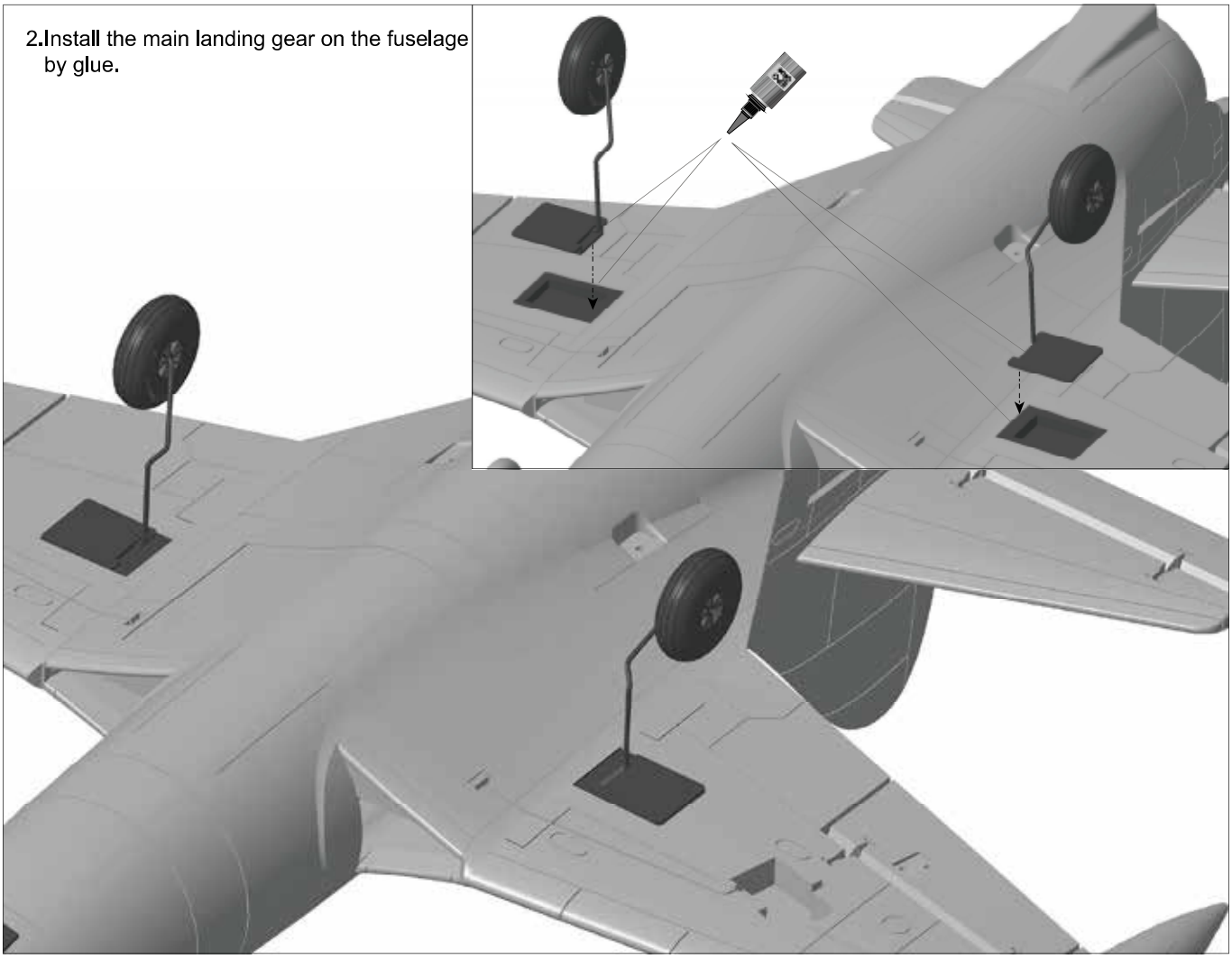
Install Rear Landing Gear

As the photo show:

1.Turn over the fuselage and remove the plastic piece on the install position of the main landing gear.



2.Install the main landing gear on the fuselage by glue.



Dongguan Freewing Electronic Technology Ltd
HK Freewing Model International Limited

Add.:FeiYi Building,face to Labor Bureau, Fumin Middle Road, Dalang Town,
Dongguan City，Guangdong Province, China
Web: http://www.sz-freewing.com www.freewingmodel.com
Email:freewing@sz-freewing.com
Tel: 86-769-82669669 Fax:86-769-82033233

东莞市飞翼电子科技有限公司
香港飞翼模型国际有限公司
地址：广东省东莞市大朗镇富民中路402-408号飞翼楼二楼
Web: http://www.sz-freewing.com www.freewingmodel.com
Email:freewing@sz-freewing.com
Tel: 86-769-82669669 Fax:86-769-82033233