

XFLY-MODEL

TWIN 70MM B-1B LANCER

Overall Length: 1920mm/75.6in

Wingspan: 1776mm/69.9in extended, 1140mm/44.9in retracted

操作手册

Instruction Manual

<http://www.xfly-model.com/>

Warnings

Please read through the whole user manual carefully and follow the instructions strictly for product installation and operation. Improper operation may lead to product damage or property loss or even severe personal injury. Xfly-model and its distributors will not assume responsibility if damage or loss is caused by violating the instructions listed.

Caution

This product is Not a toy! Flying experience is required by users. Beginners should only operate the product under the supervision of professionals.

This product is not intended for use by children under 14 years!

Safety Precautions

This product is radio-controlled and subject to interference from other signal sources which may result in momentary loss of control or even crash. So please always keep a safe distance in all directions around your model in order to avoid unexpected collision or injury.

- NEVER operate your model with low transmitter batteries.
- Always operate your model in an open area with the sun behind you away from cars, traffic or people.
- Do not operate your model in bad weather such as wet weather, thunderstorm, strong wind or heavy snow.
- Always follow the instructions and pay attention to the warnings for this product and other associated devices you use (charger, rechargeable battery pack, etc.)
- Always keep all chemicals, small parts and electronic components out of reach of children.
- Do not expose the electronic components to moist environment in case of damage.
- This model kit contains small parts, plastic bags, and materials that can be harmful to children if swallowed.
- ALWAYS ensure the transmitter is turned ON with the throttle at its lowest setting before connecting model battery.

Lithium-Polymer (Li-Po) Battery Use

Caution: Always follow the manufacturer's instructions for safe use and disposal of batteries. Improper use of Li-Po batteries may cause a fire, property damage, or severe injury.

- Do not use the battery that is swollen, or overcharged, or has been damaged. Keep in mind to discharge the battery to storage voltage (3.8-3.85V per cell) if they are not in use for a long time and as soon as possible after use for safe storage. Always store the battery at room temperature in a cool dry area to extend the lifespan of the battery. Do not store the battery in a car or expose it to direct sunlight. For maximum safety Xfly-Model recommends storing Li-Po batteries in a proper battery bunker, or sealed (not airtight) fire resistant container.
- Only use a Li-Po compatible charger to charge & discharge Li-Po batteries - NEVER try to use any other charger in case of personal injury and property damage.
- Do not discharge the Li-Po to below 3V per cell or irreversible damage can occur to the battery.
- NEVER leave charging battery unattended.
- Do not charge damaged battery - instead dispose of Li-Po batteries by fully discharging then taking to an appropriate disposal agent.

Warning for Battery Charging

As stated previously ONLY use a Li-Po compatible charger to charge the battery. Be sure to read and understand the charger instruction manual carefully before charger use. Make sure battery is on a heat-resistant surface when being charged. It is highly recommended to place the Li-Po battery inside a fire-resistant charging bag readily available at hobby shops or online stores.

\ Product Overview /

The B-1B Lancer, nicknamed "The Bone," is a supersonic, variable-sweep wing, heavy bomber used by the United States Air Force for long-range and multi-mission purposes. The XFly Model B-1B Lancer twin 70mm EDF jet is a scale replica of this aircraft, designed with meticulous attention to detail, such as the swept wing mechanism, full-flying stabs, retractable landing gears, and LED navigation and landing lights.

The power system of the XFly B-1B is highly efficient, featuring twin upgraded 70mm EDF Pro with 3060-KV2000 motors and twin 80A ESCs, providing ample thrust for the aircraft to perform loops, rolls, inverted flights, and other maneuvers. The swept wing, optimized for high-speed and low-speed flights, and the full-flying stabs deliver an authentic and unique flying experience.

To simplify the wiring and setup, the B-1B features an onboard mixing circuit board that controls all the servos, landing gears, swept wing, and lighting package. A built-in gyro enhances flight stability and can also assist with the operation of landing gears, flaps, navigation and landing lights, and the swept wing mechanism, allowing pilots to fly with minimal manual operation. Experienced pilots can switch off the gyro and enjoy the sense of realism brought by manual handling.

The XFly B-1B Lancer features scale CNC-made landing gears for outstanding durability and realism. The aircraft is easy to assemble without the need for glue, and the wings and rear fuselage can be removed for convenient transportation.

In summary, the XFly B-1B Lancer is a highly detailed bomber with impressive performance, making it the ideal choice for those seeking both scale realism and fantastic flight capabilities.

Features

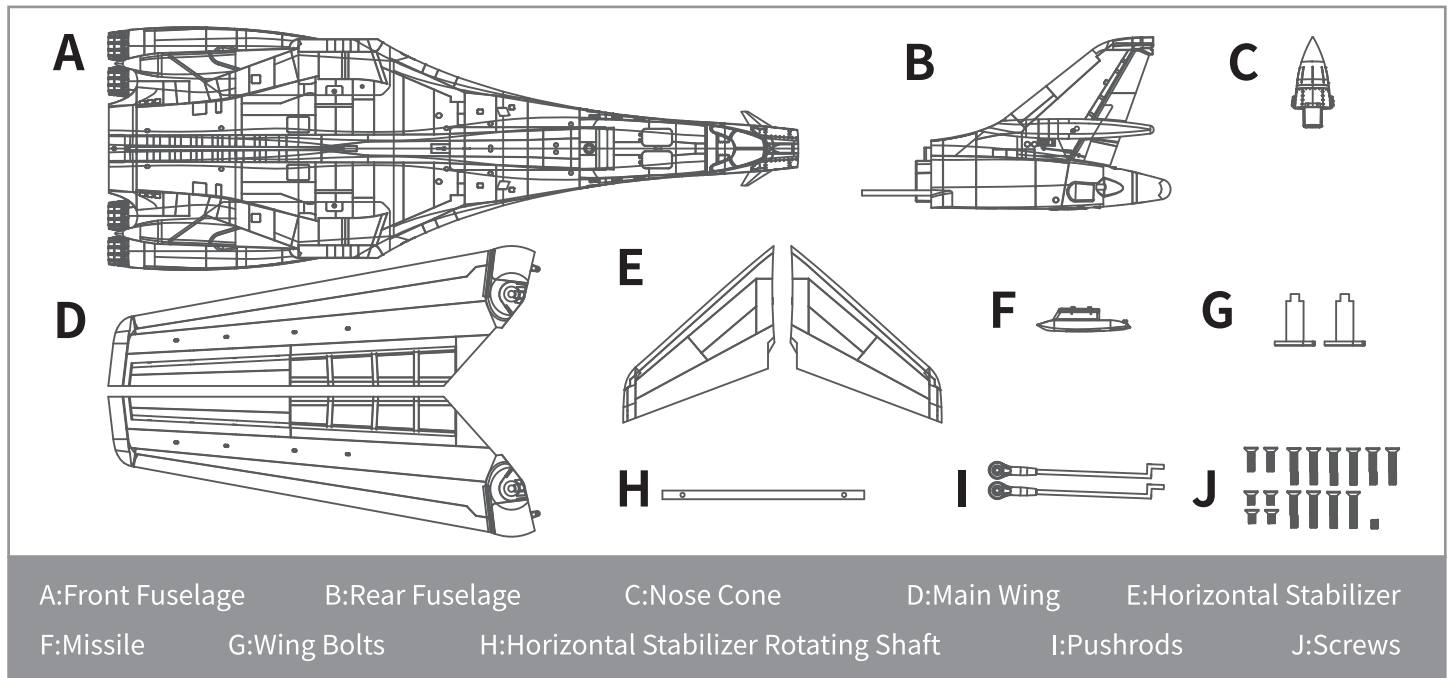
- Upgraded 70mm EDF power system and twin 80A ESCs providing ample thrust .
- Swept wing design for high-speed and low-speed flights.
- Full-flying stabs, navigation and landing lights.
- Multi-function control board simplifying the wiring and setup.
- Built-in gyro for flight stability and operation assistance.
- Scale CNC-made landing gears for outstanding durability and realism.
- Easy to assemble and convenient for transportation.

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Product Packing List

Please check the below parts carefully before assembly. If anything appears missing or damaged, please contact your distributor in the first instance, or send us an email (support@xfly-model.com) and advise the item name or part number of the missing or damaged part(s). (Please refer to the spare parts list on Page 13 of this manual for full parts listing). Please note that different versions can sometimes include slightly different items inside the package.



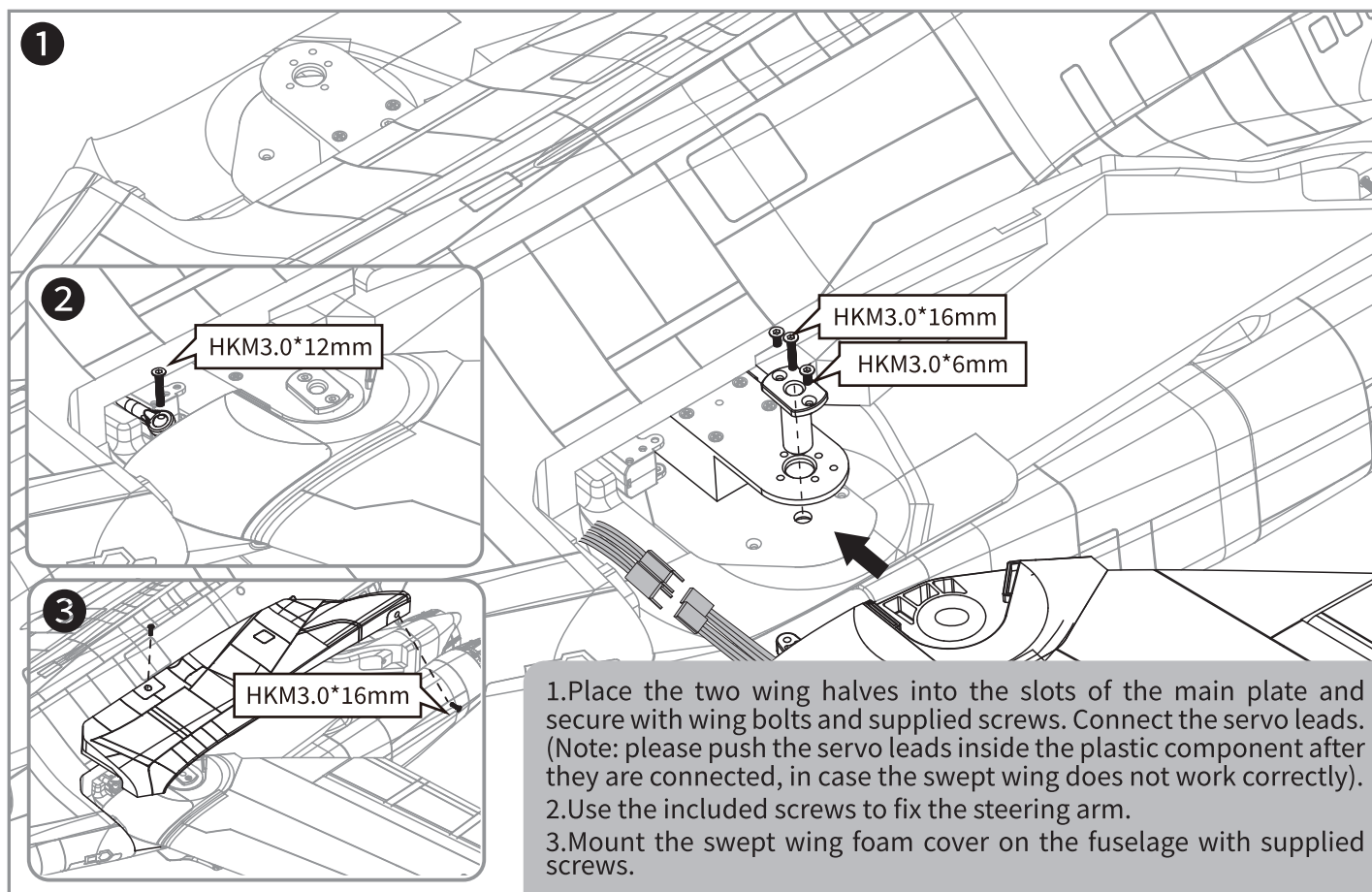
Specifications

Material:	Lightweight yet strong EPO, ABS engineering plastics
Wingspan:	1776mm/69.9in extended, 1140mm/44.9in retracted
Overall Length:	1920mm/75.6in
Wing Load:	130g/dm ²
Wing Area:	37dm ²
Flying Weight:	5000g
Propeller/EDF:	Twin 70mm 12-blade EDF
Motor:	3060-KV2000*2
ESC:	80A*2
Servos:	9g servos*5, 13g servos*3, 25g servo*1

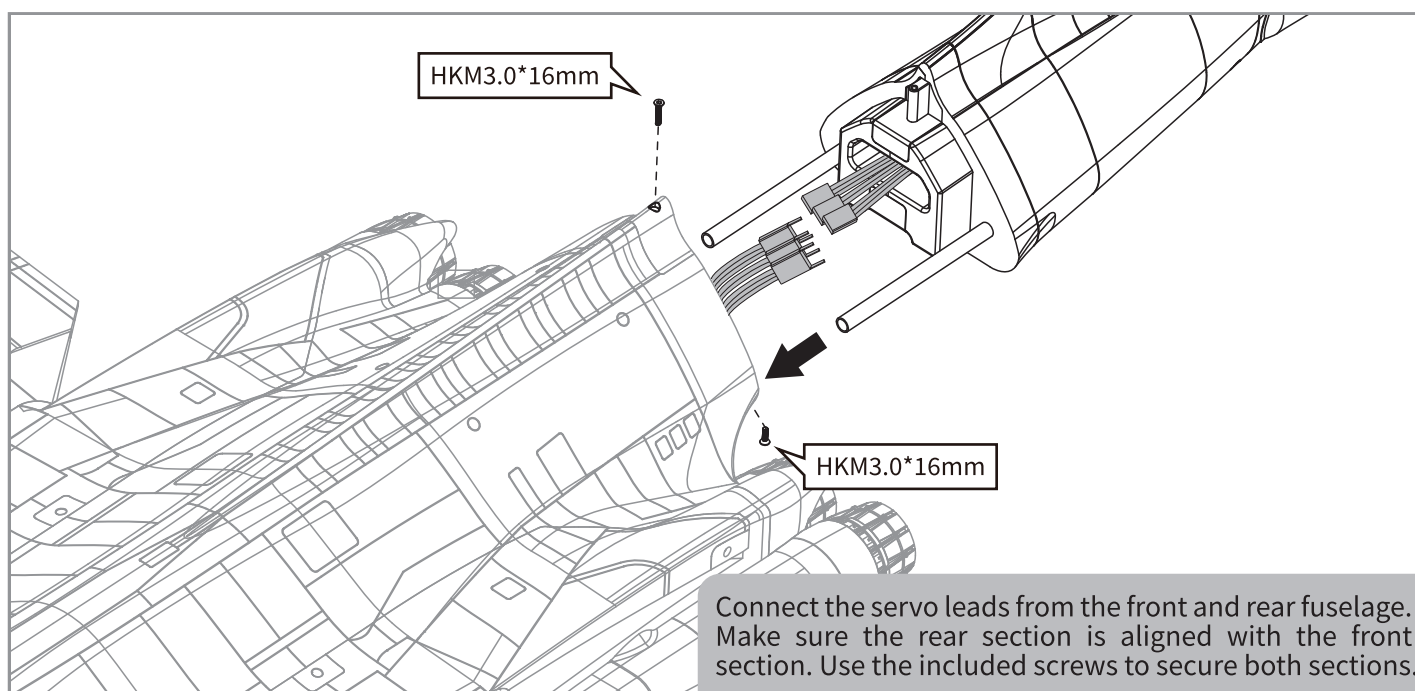
Flying Duration:	5-8 mins
Landing Gear:	CNC-made retractable landing gears
LED lights:	Navigation & landing lights *8
Other Electronics:	Multi-function Control Board
Channels:	7CH: aileron, elevator, throttle, rudder, landing gear, flap, swept wing
Skill Level:	Intermediate/Advanced
Recommended Battery:	22.2V 5000-7000mAh
Build&Test Time:	~20 mins

Assembly Instructions

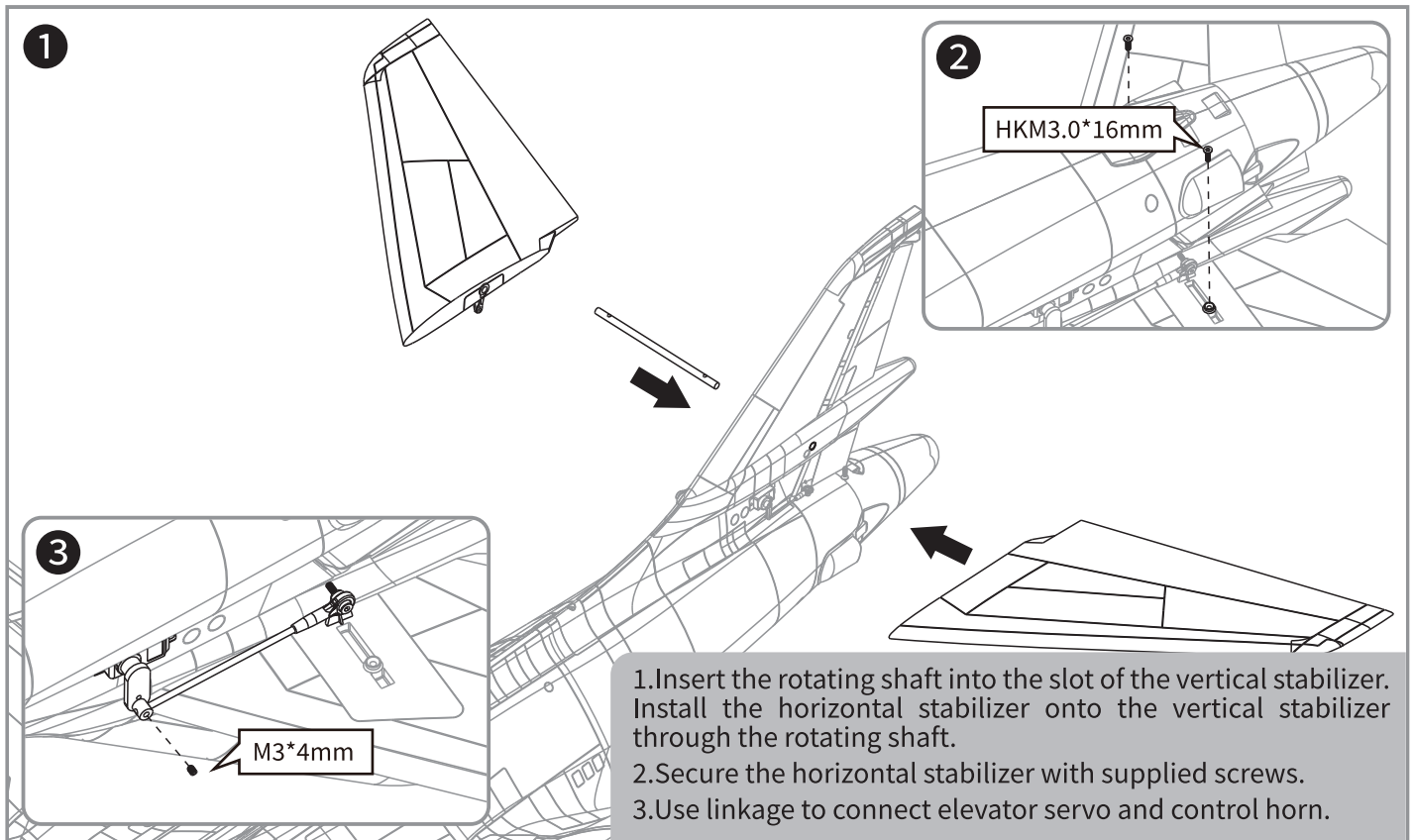
Main Wing Installation



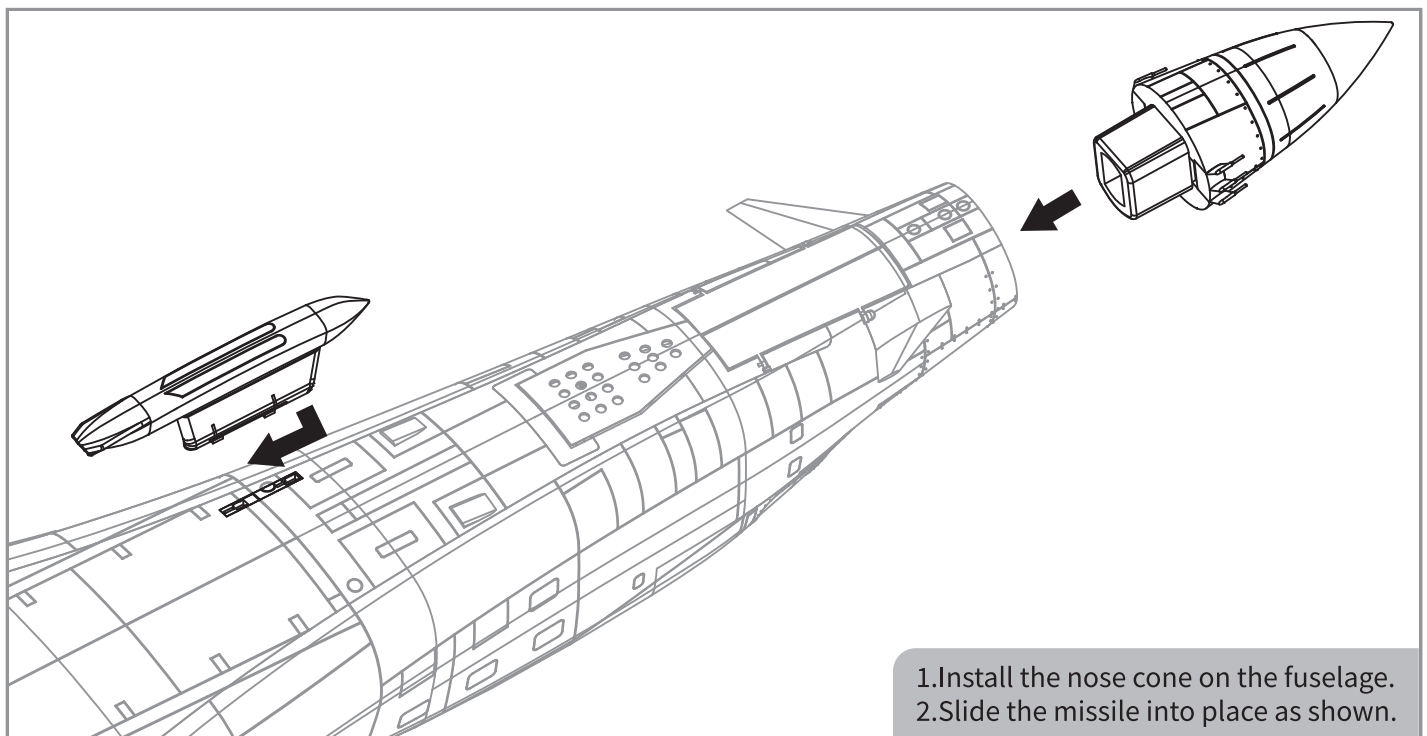
Fuselage Installation



Horizontal Stabilizer Installation

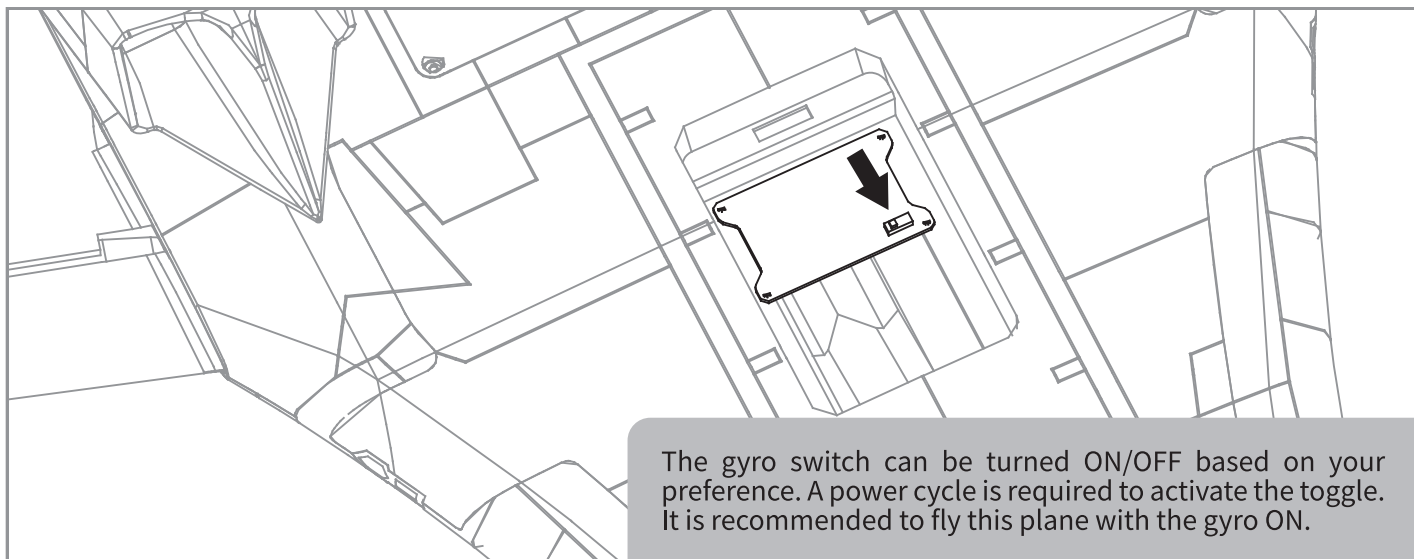


Nose Cone and Missile Installation

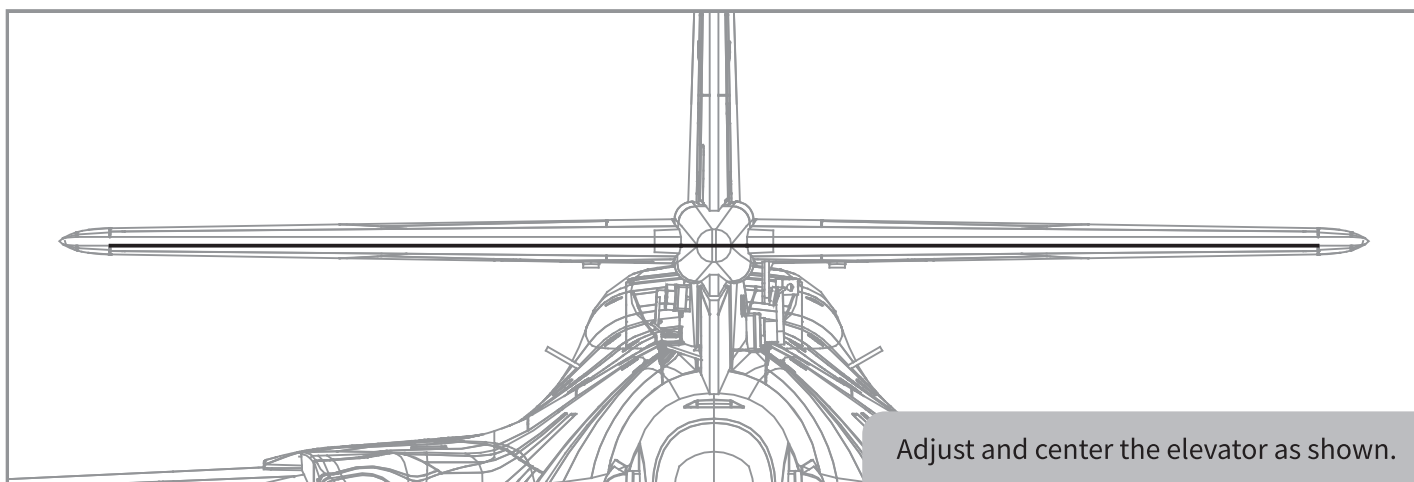


Assembly Instructions

Gyro Switch



Elevator Centering

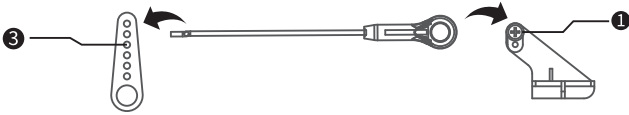


Control Horns Installation

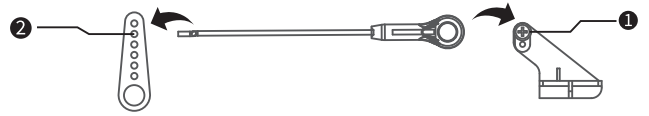
Make sure all servos are in their central position and adjust the linkages to the indicated positions.

The following pictures show the default factory settings for the control horns and linkages recommended for use for initial flight.

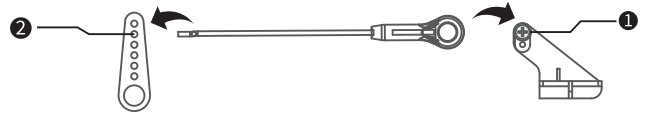
Hole reference for flap servo linkage



Hole reference for aileron flap servo linkage



Hole reference for rudder servo linkage



Flap Linkage Placement

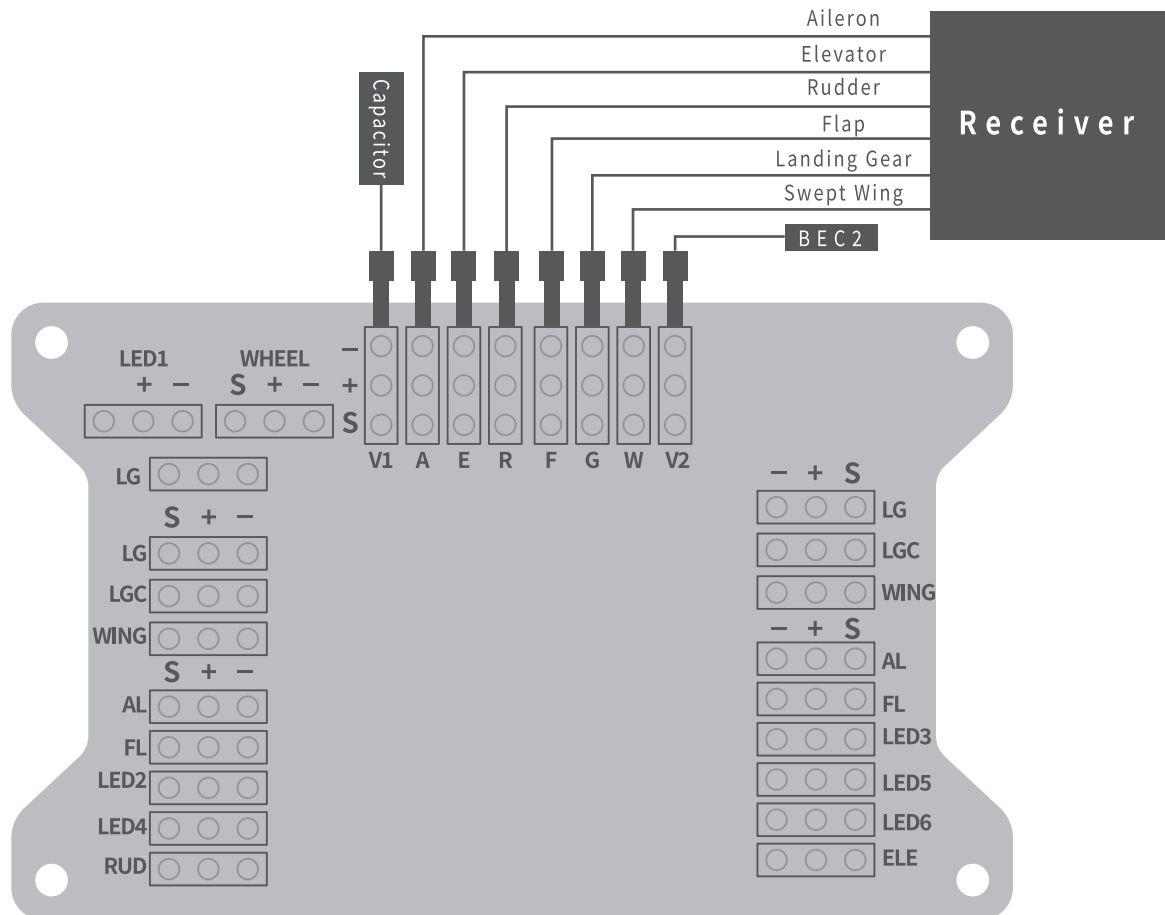
For ease in obtaining correct flap linkage placement, it is recommended to install flap linkages when the wings have been cycled into the wing swept mode. This will ensure that the flap surfaces will be set in the correct position for the automatic flap retraction function to operate correctly, preventing misalignment of the flap surfaces when they travel into the fuselages wing slot. After linkages have been installed, adjust flap settings within transmitter setting, to achieve proper flap travel amounts as described in the manual (verify the flaps adjust/move when the flap switch is in the retracted position and the wings are commanded to swept)

Control Board Wiring Diagram

Note: When the airplane is powered on, if its landing gear status does not correspond to the transmitter retract/gear switch (for example, the landing gear is retracted, but the retract/gear switch is "OFF"), the front steering wheel will not respond to pilot's operation. Please make sure the retract/gear switch on your transmitter and the airplane gear status is corresponding to each other.

The B-1B is equipped with an automatic flap retraction system that is activated when the wings are commanded to move into sweep mode. While in this mode flaps are deactivated and unable to be used in any of the switch positions. When the wing are extended, the flaps function as normally as commanded by the user programmed settings.

Nose down pitch when the flaps are deployed or the wings are swept can be trimmed by the transmitter, or adjusted by preset flight mode in the transmitter, which will not interfere with the onboard gyro.



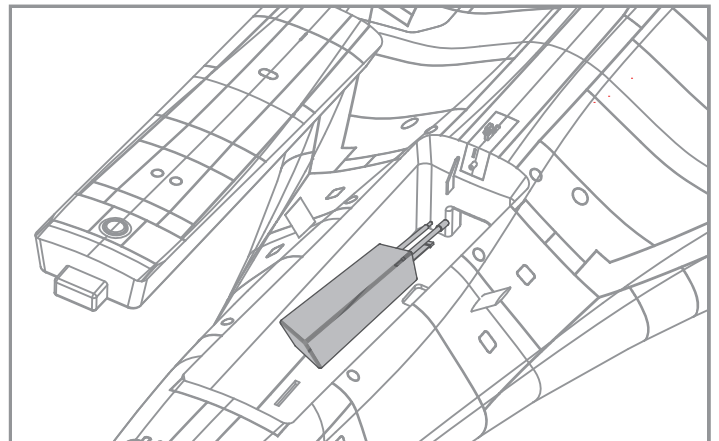
Battery Installation

1. Before connecting the battery to the plane, power on the transmitter and ensure throttle lever in the lowest position.

2. Remove the battery hatch.

3. Insert battery into the battery compartment with the power cable towards the rear of the plane and use straps to secure the battery.

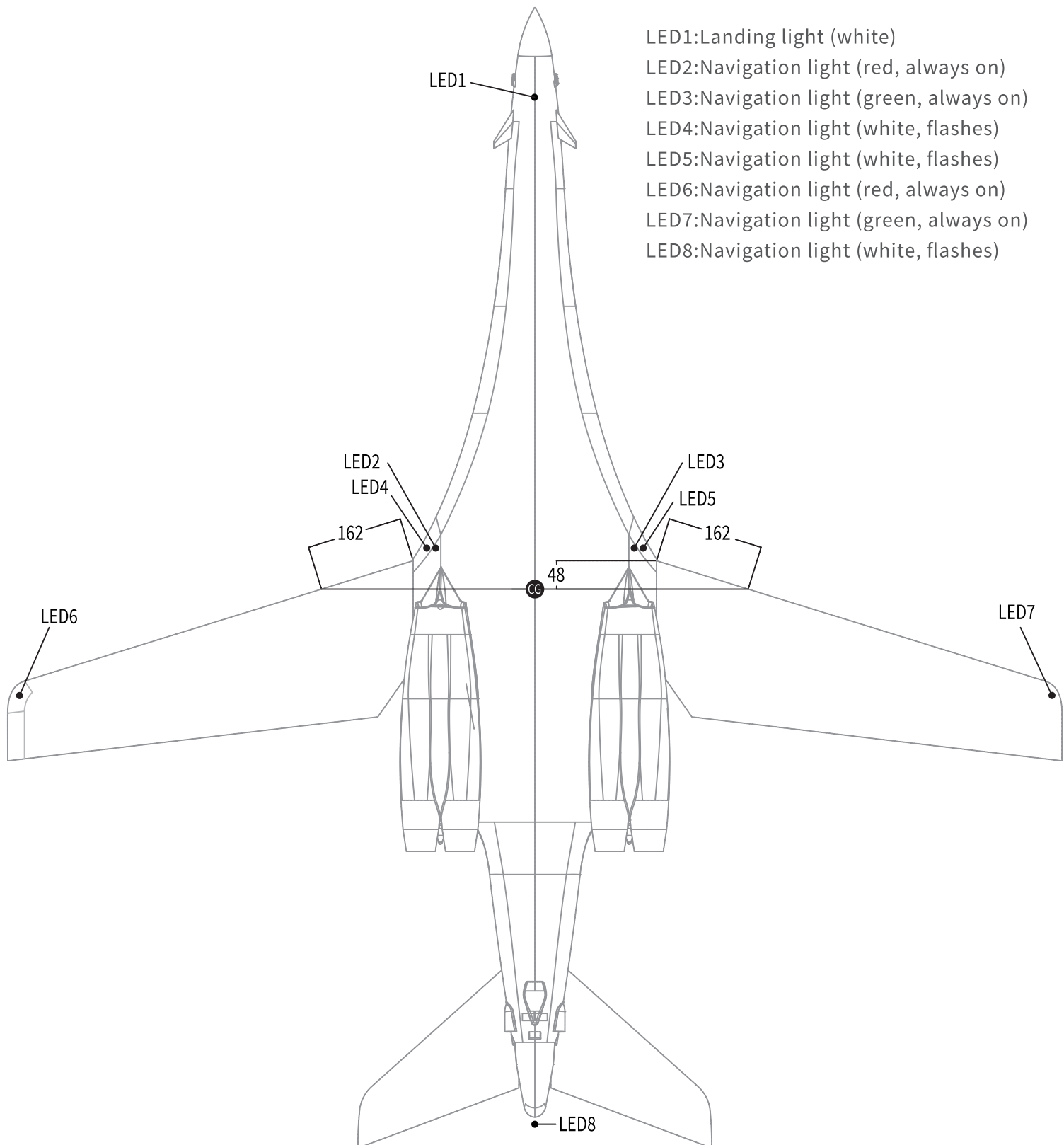
4. If necessary reposition battery to adjust the center of gravity (CG) by moving the battery forward or backward.



CG Setting

Correct center of gravity is very essential for a successful flight. Please refer to the below diagram to adjust the CG of the plane.

—Adjust the CG position by moving the battery forwards or backwards. If necessary add ballast weight to achieve the correct CG position before flight.



Control Surface Testing

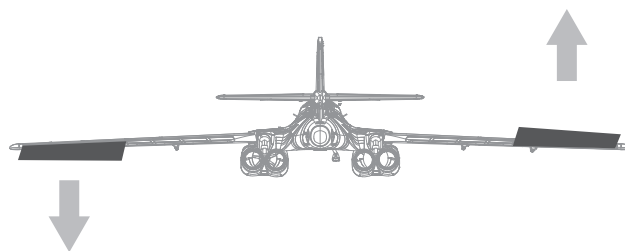
Before each flight turn on the transmitter BEFORE connecting a fully charged battery and perform a full pre-flight functional check-pay attention to all control surfaces for correct direction of operation. Xfly-Model Strongly recommends you also perform a full range test prior to each flight!

ALWAYS CHECK CONTROL SURFACE DIRECTION FROM BEHIND THE MODEL LOOKING FORWARD TO ENSURE CORRECT OPERATION

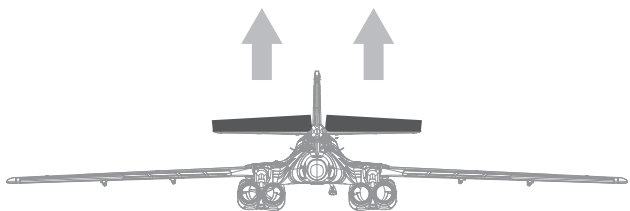
Aileron control lever moving leftward



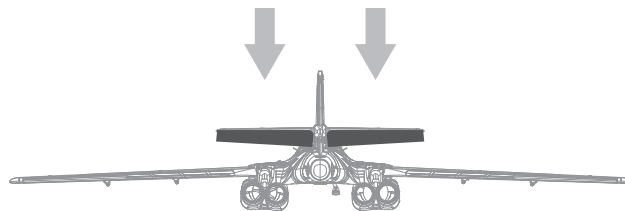
Aileron control lever moving rightward



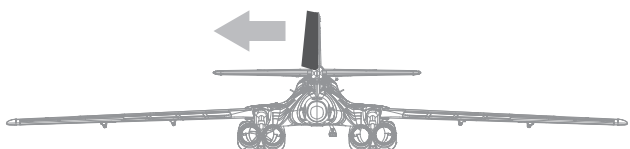
Elevator control lever moving downward



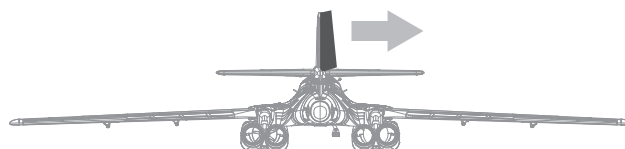
Elevator control lever moving upward



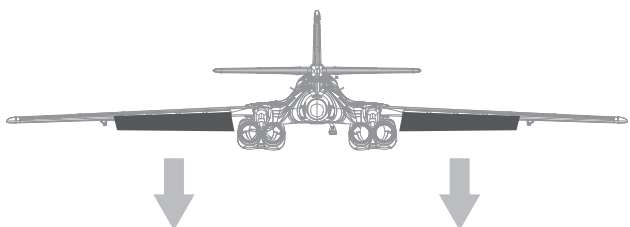
Rudder control lever moving leftward



Rudder control lever moving rightward



Flaps deployed

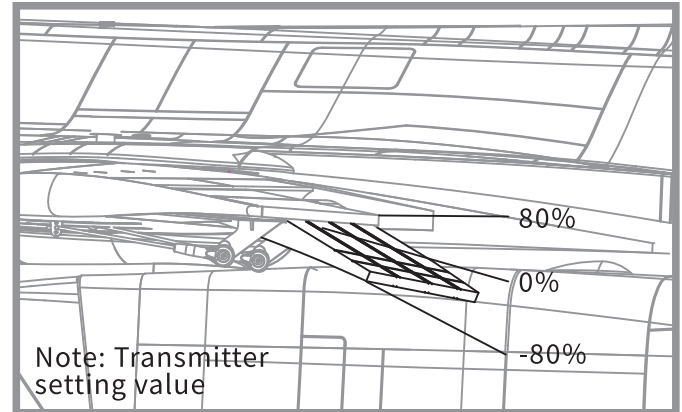
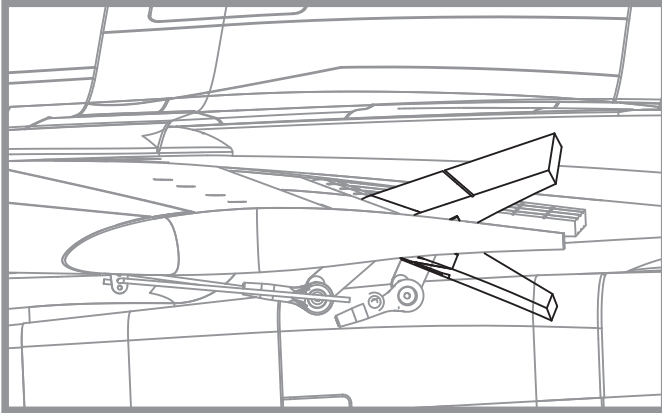


Dual Rate Setting

Based on Xfly-Model's testing experience, the following dual rates are recommended for optimum performance with the gyro ON/OFF.

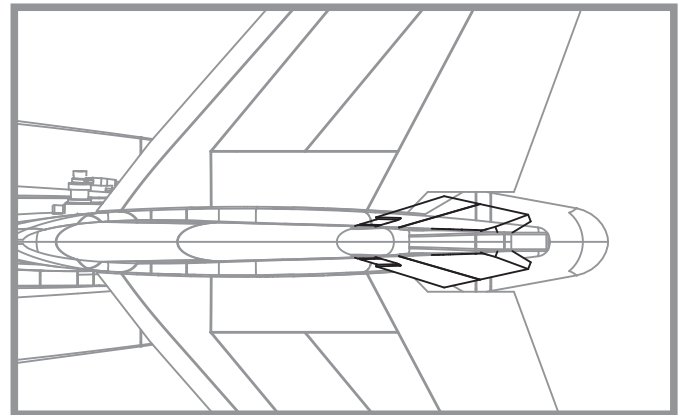
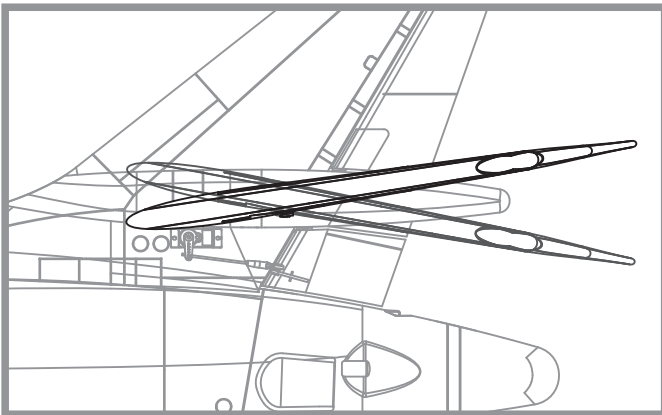
Aileron

Flap



Elevator

Rudder



	Aileron	Elevator	Rudder	Flaps
High rate	135%	80%	100%	45%
Low rate	100%	65%	100%	45%

\ Trouble Shooting /

Problem	Possible Cause	Solution
Aircraft not responding to the throttle but responding to other controls	-ESC not calibrated -throttle deactivated on radio -motor wire disconnected	-Calibrate ESC according to manual -activate throttle on radio -check motor wires and connect/repair as required
Excessive propeller noise or Excessive vibration	-Propeller/EDF loose or damaged -Propeller/EDF out of balance -Propeller/EDF fan incorrectly installed or mounting loose	-Tighten and/or Replace damaged parts -balance propeller/EDF unit -Remove and install the propeller correctly -ensure mounting tight and parts correctly fitted
Reduced flight times or aircraft underpowered	-Low battery charge -ESC overheating -Defective battery	-Recharge battery -Ensure adequate cooling to ESC -Replace battery with new one
Control surface not moving, or responds slowly to control inputs	-Control surface, control horn, linkage or servo damaged -Wire damaged or connector loose	-Replace or repair damaged parts and adjust controls -Check all wires and ensure connections are secure -Repair/replace damaged wires or connectors
Control surface reversed	Channels reversed on the transmitter	-Check transmitter settings and adjust as required
Motor losing power in flight	-ESC not calibrated correctly -ESC LVC low voltage cutoff activated -Defective motor, ESC, or battery	-Recalibrate ESC -Check the battery, transmitter, receiver, ESC, motor and replace it if defective -Get the aircraft land immediately and recharge the battery
Slow LED flash on the receiver	Receiver power loss	-Check the connection between ESC and receiver -Check if servo is damaged -Check if the linkages are in place

\ Spare Parts List /

XF112-01	XFly B-1B Front Fuselage	XF112-27	XFly B-1B Horizontal Stabilizer Rotating Shaft
XF112-02	XFly B-1B Rear Fuselage	XF112-28	XFly B-1B LED Light Set
XF112-03	XFly B-1B Main Wing Set	XF112-29	XFly B-1B Control Board w/Gyro Built In
XF112-04	XFly B-1B Horizontal Stabilizer	XFRE010	XFly B-1B Front Electronic Retract
XF112-05	XFly B-1B Swept Wing Foam Cover	XFRE007	XFly B-1B Main Electronic Retract (L/R)
XF112-06	XFly B-1B Bomb	XFRE008	XFly B-1B Swept Wing Retract (L)
XF112-07	XFly B-1B Battery Hatch	XFRE009	XFly B-1B Swept Wing Retract (R)
XF112-08	XFly B-1B Nose Cone	XFKV2000	XFly 3060-KV2000 Motor
XF112-09	XFly B-1B Equipment Hatch	XF-DF003V2	XFly 70mm Ducted Fan V2 (12-blade) w/o Motor
XF112-10	XFly B-1B Windshield	XF-DFS007	XFly 70mm Ducted Fan (12-blade) w/ 3060-KV2000 Motor(6S Pro version)
XF112-11	XFly B-1B Wheel Set	XFESC80A-1	XFly Twin 80A ESC
XF112-12	XFly B-1B Pushrod Set	XFSER13P-300	XFly B-1B(Aileron) 13g Digital MG Servo Positive w/300mm Lead
XF112-13	XFly B-1B Screw Set	XFSER13P-600	XFly B-1B(Steering) 13g Digital MG Servo Positive w/600mm Lead
XF112-14	XFly B-1B Control Horn Set	XFSER25P-300	XFly B-1B(Elevator) 25g Digital MG Servo Positive w/300mm Lead
XF112-15	XFly B-1B Nose Gear Doors	XFSER9P-400	XFly B-1B(Rudder) 9g Digital MG Servo Positive w/400mm Lead
XF112-16	XFly B-1B Main Gear Doors	XFSER9PAD-400	XFly B-1B(Flap) 9g Digital MG Servo Positive w/400mm Lead
XF112-17	XFly B-1B Front Landing Gear	XFSER9PP-550	XFly B-1B(Left LG Door) 9g Digital Servo Positive w/550mm Lead
XF112-18	XFly B-1B Main Landing Gear (L)	XFSER9PR-550	XFly B-1B(Right LG Door) 9g Digital Servo Reverse w/550mm Lead
XF112-19	XFly B-1B Main Landing Gear (R)		
XF112-20	XFly B-1B Front Landing Gear w/Retract		
XF112-21	XFly B-1B Main Landing Gear w/Retract (L)		
XF112-22	XFly B-1B Main Landing Gear w/Retract (R)		
XF112-23	XFly B-1B Swept Wing Main Plate		
XF112-24	XFly B-1B Swept Wing Main Plate w/Retracts		
XF112-25	XFly B-1B Decal Sheet (Standard)		
XF112-26	XFly B-1B Decal Sheet (Optional)		

ESC User Manual

Please read the safety information contained in this manual carefully before using this product. XFly Model have no control over the use, installation, application, or maintenance of these products, thus no liability shall be assumed nor accepted for any damages, losses or costs resulting from the use of this item.

IMPORTANT WARNINGS

- XFly is not responsible for your use of this product, or any damage or injuries you may cause or sustain as a result of its usage.
- Always place safety as priority when you use the product.
- An electric motor that is connected in combination with a battery and/or ESC may start unexpectedly and cause serious damage and so should always be used with care and respect.
- We recommend you always remove the propeller when working on a model with the power source connected.
- Follow and observe all local laws and by-laws relating to model flying when flying RC planes.
- Never fly over others or near crowds.

KEY FEATURES

1. Utilizes powerful next generation MOSFET with a low thermal signature, high peak current threshold and reliability.
2. Features high performance 32bit microprocessor as standard. Stronger computing ability and faster processing rates.
3. Super smooth start up and throttle throughout the power range.
4. Higher driving efficiency and more energy-saving.
5. Adjustable SBEC output voltage, 5V/6V. (40A/50A/60A/80A/100A have SBEC adjustable)
6. Multiple protection protocols: start-up, over-heat, low-voltage cutoff, signal loss, phase loss etc.
7. Supports wide range of high RPM type motors commonly found in today's market.
8. Fully programmable via optional mobile app or LCD programming card.

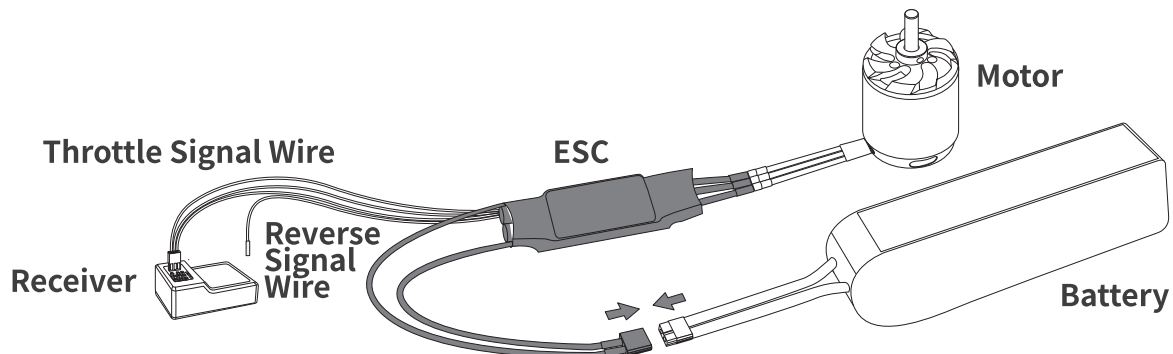
SPECIFICATION

Type	PN#Model	Cont./Burst Current(A)	Battery cell NiXX\Lipo	Weight (g)	BEC Output	Size(mm) L*W*H	User Program
20A SBEC	3020211	20A/30A	5-12NC\2-4Lipo	25	5.5V/4A	60*25*10	Yes
30A SBEC	3030211	30A/40A	5-12NC\2-4Lipo	25	5.5V/4A	60*25*10	Yes
40A SBEC	3040211	40A/55A	5-12NC\2-4Lipo	37	5V/6V 4A	68*25*10	Yes
50A SBEC	3050211	50A/65A	5-12NC\2-4Lipo	37	5V/6V 4A	68*25*10	Yes
60A SBEC	3060211	60A/80A	5-18NC\2-6Lipo	50	5V/6V 8A	70*34*10	Yes
80A SBEC	3080211	80A/100A	5-18NC\2-6Lipo	75	5V/6V 8A	90*37*10	Yes
100A SBEC	3100211	100A/120A	5-18NC\2-6Lipo	80	5V/6V 8A	90*37*10	Yes

Wires Connection:

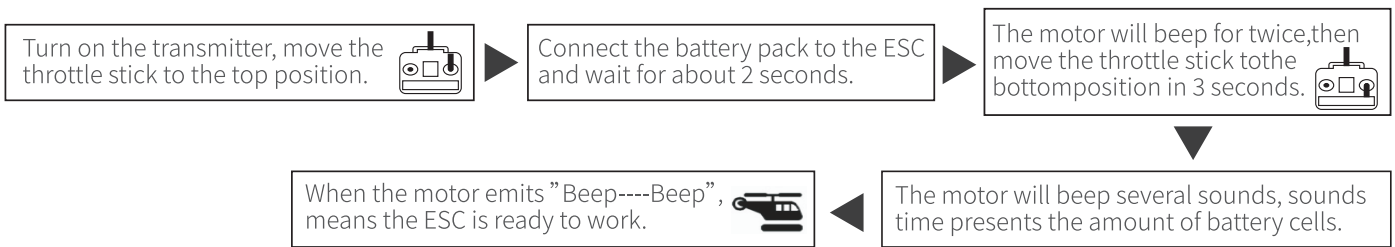
The speed controller can be connected to the motor by soldering directly or with high quality connectors. Always use new connectors, which should be soldered carefully to the cables and insulated with heat shrink tube. The maximum length of the battery pack wires shall be within 6 inches.

- Solder controller to the motor wires.
- Solder appropriate connectors to the battery wires.
- Insulate all solder connectors with heat shrink tubes.
- Plug the "JR" connector into the receiver throttle channel.
- Controller Red and Black wires connects to battery pack Red and Black wires respectively.

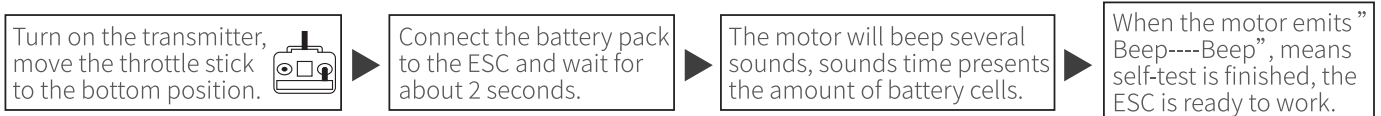


THROTTLE CALIBRATION

(Important: Please make the throttle calibration for the first time using ESC!!!)



NORMAL STARTUP PROCEDURE



PROGRAMMING ITEMS (The option written in bold font is the default setting)

1. SMR Function: **OFF**/ON

This function supports switching the motor rotation to decelerate when the airplane landing to the ground.

The factory default is OFF, the 1Pin signal wire is completely invalid at this time.

If you need to turn it on, using Phone App or transmitter to program it "ON", plug the 3Pin signal wire into the throttle channel, and plug the 1Pin signal wire into any 2-stage switch channel of the receiver, then turn on the transmitter 2-stage switch. The SMR function is turned on now, you can change the forward and reverse directions of the motor by flipping the 2-stage switch of the transmitter.

Warning: This function can only be effective when the throttle is below 50%, and it is only allowed to be used when the airplane is landing on the ground, otherwise it may cause the ESC to burn!

2. Brake Type: **OFF**/Soft/Mid/Hard

3. Timing: **Auto**/Low/Mid/High(5°/15°/25°)

4. Motor Rotation: **CW**/CCW

5. SR function: ON/**OFF**

The synchronous rectification function makes ESC with higher driving efficiency and more energy-saving.

6. Battery cells: **Auto**/2S/3S/4S/5S/6S

7. Low Voltage Cutoff Threshold: OFF/NIMH50%/NIMH60%/**3.0V**/3.2V/3.4V/3.6V

For example: using 3 lithium batteries and setting 3.0V as the low voltage cutoff value, then the low voltage protection threshold is: $3 \times 3.0 = 9.0V$

8. Low Voltage Cutoff Type: **Reduce Power**/Cut Off Power

Reduced power: When the voltage drops to the set low-voltage protection threshold, the ESC will reduce power to 70%.

Cut Off power: When the voltage drops to the set low-voltage protection threshold, the ESC will cut off the power immediately.

9. 40A, 50A, 60A, 80A, 100A ESCs have adjustable SBEC 5V/6V, the default set is **5.0V**.

10. Acceleration: **Normal**/Soft

ENTERING THE PROGRAMMING MODE

1. Turn on the transmitter, move the throttle stick to the top position.
2. Connect the battery pack to ESC.
3. Wait for 2 seconds, the motor will emit special tone like "beep-beep beep"
4. Wait for another 3 seconds, the motor will emit special tone like "123", which means program mode entered.

PROGRAMMABLE ITEMS

After entering program mode, you will hear 11 tones in a loop with the following sequence.

Tones

- 1). "beep"
- 2). "beep.beep"
- 3). "beep.beep.beep"
- 4). "beep.beep.beep.beep"
- 5). "beep- -"
- 6). "beep- -.beep"
- 7). "beep- -.beep.beep"
- 8). "beep- -.beep.beep.beep"
- 9). "beep- -.beep.beep.beep.beep"
- 10). "beep- -beep- -"
- 11). "beep- -beep- -.beep"

Programmable items

SMR Function	(1 short tone)
Brake Type	(2 short tone)
Motor Timing	(3 short tone)
Motor Rotation	(4 short tone)
SR Function	(1 long tone)
Battery cells	(1 long 1short)
Low Voltage Cutoff Threshold	(1 long 2 short)
Low Voltage Cutoff Type	(1 long 3 short)
BEC Voltage	(1 long 4 short)
Acceleration	(2 long tone)
Restore Factory Setup Defaults	(2 long 1 short)

Note: 1 long "beep- -" = 5 short "beep"

SET ITEM VALUE

Moving the throttle stick to the bottom position within 2 seconds after one kind of following tones, this item will be selected. After the programmable item selected, then you will hear several tones in loop as follows on each programmable item, set the value matching to a tone by moving throttle stick to top position when you hear the tone, then the motor will emit special tone like "123", means this value is set and saved.

For example: If you want to set the motor rotation, when you hear four short tones of "Beep", moving the throttle stick to the bottom position within 2 seconds, means you enter the motor rotation menu. One short tone of "Beep" is forward direction(CW), two short tones of "Beep" is reverse direction(CCW). If you want to set to reverse direction(CCW), moving the throttle stick to the top position when you hear the two short tones of "Beep", then you will hear a special confirmation tone like "123", which means the "CCW" is set and saved.

Keeping the throttle stick at top, you will go back to programming mode and you can select other items; or moving the stick to bottom within 2 seconds will exit program mode directly).

PROGRAMMING TONE REFERENCE TABLE

Items \ Tones	"beep"	"beep.beep"	"beep.beep .beep"	"beep.beep .beep.beep"	"beep- -"	"beep- - beep"	"beep- - beep.beep"
	1short tone	2short tone	3short tone	4short tone	1long	1long 1short	1long 2short
SMR Function	*OFF	ON					
Brake Type	*OFF	Soft Brake	Mid Brake	Hard Brake			
Motor Timing	*Auto	Low	Mid	High			
Motor Rotation	*CW	CCW					
SR Function	ON	*OFF					
Battery Cells	*Auto	2S	3S	4S	5S	6S	
Low voltage Cutoff Threshold	OFF	NIMH50%	NIMH60%	*3.0V	3.2V	3.4V	3.6V
Low Voltage Cutoff Type	*Reduce Power	Cut off Power					
BEC Voltage	*5V	6V					
Acceleration	*Normal	Soft					
Restore Factory Default Sets	Restore						

! Note: " * " value means default settings.

PROTECTION FUNCTION

1. Start-up protection: If the motor fails to start normally within 2 seconds after pushing the throttle to start, the ESC will cut off the output power, and you need to make the throttle calibration again, then ESC can be restarted. Possible reasons: disconnection or poor connection between ESC and motor, the propeller or motor is blocked by other objects, the gearbox is damaged, etc.)
2. Over-heat protection: When the temperature of the ESC is over about 110°C, the ESC will automatically reduce the output power for protection, but will not fully shut down the power, reduce it to 70% of the full power at most to ensure the motor has enough power to avoid crashes.
3. Throttle signal loss protection: The ESC will reduce the output power if throttle signal is lost for 1 second, will cut off output to the motor if the throttle signal is lost over 2 seconds. If the throttle signal recovers during power down, the ESC will immediately resume throttle control. In this way, the ESC will not protect when the signal loss less than 2 seconds, only when the signal lost is over 2 seconds or longer time. And the ESC will reduce the output power gradually instead of cutting off it immediately, so the player has certain amount of time to save the plane, taking into account safety and practicality.
4. Over load protection: The ESC will cut off power or restart automatically when the load increased a lot suddenly, possible reason is the motor blocked.

TROUBLE SHOOTING

Trouble	Possible Reason	Action
After powering up, ESC emits the sound of battery cells, but motor can't run.	ESC doesn't set throttle range.	Set throttle range again.
After powering up, motor doesn't run and doesn't emit any sound.	<ol style="list-style-type: none"> 1.Bad connection between ESC and battery. 2.Bad soldering cause bad contact. 3.Low voltage of the battery. 4.Quality problem of ESC. 	<ol style="list-style-type: none"> 1.Clean the connectors or replace them, check the connection polarity. 2.Solder the wires again. 3.Check battery pack, use full-charged battery. 4.Change ESC.
Motor does n' t work and no audible tone emitted after connecting the battery. Servos are not working either.	<ol style="list-style-type: none"> 1. Poor/loose Connection between battery Pack and ESC. 2. No power 3. Poor soldered connections 4. Wrong battery cable polarity 5. ESC throttle cable connected to receiver in the reverse polarity 	Check all the connections make sure you are doing it right.
Motor does not work but servos do	<ol style="list-style-type: none"> 1. Poor / loose connection between ESC and motor 2. Burnt motor coils 3. The battery pack voltage exceeds the acceptable range. 4. Throttle stick is not at the lowest position 5. The ESC throttle calibration has not set up 	<ol style="list-style-type: none"> 1. Check all the connections make sure you are doing it right. 2. Change a new motor. 3. Solder the wires again. 4. Check the battery pack, use full-charged battery. 5. Set throttle range again.
When the ESC is powered on, the motor does not work and an alarm sound (continuously beeping) will sound.	The throttle stick is not in the bottom position after power on.	Move the throttle stick to the bottom position.
Motor runs in reverse rotation	Wrong cables polarity between the ESC and the motor.	Swap any two of the three cable connections between the ESC and the Motor or access the Motor Rotation function via the ESC programming mode and change the pre-set parameters.
Motor stops running in flight.	Lost throttle signal	Check proper operation of the radio equipment. Check the placement of the ESC and the Receiver and check the route of the receiver' s aerial and ESC

警告

组装、调整及飞行前请务必认真阅读产品说明书以熟知产品的特性。请严格按照说明书提示进行飞机的组装、调整及飞行。如操作不当会造成产品本身损坏及其它财产损失，甚至造成严重的人身伤害。迅飞模型及其销售商，对于违反说明书的要求操作而造成的损失、将不负任何法律责任！

声明

模型不是玩具，具有一定的危险性，操作者需要具备一定的飞行经验，初学者请在专业人士指导下操作。飞机的使用年限必须是14岁以上的儿童或者成人！

操作使用安全须知

本产品飞行由无线电遥控器控制，在飞行过程中可能会受到外界强信号源干扰而导致失控，甚至坠机。因此，在飞行过程中务必始终与飞机保持一定的安全距离，避免意外碰撞、受伤。

- 请勿在发射器电池低电量的情况下操纵模型飞机。
- 请勿在在公共场合、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。
- 请勿在雷雨、大风、大雪或者其它恶劣气象环境下飞行。
- 请严格遵照产品指导说明及安全警告操作本产品及其相关配置（例如充电器、电池等）。
- 请勿将相关化工类产品、零部件、电子部件等置于儿童可触及的范围。
- 请勿将电子件暴露于潮湿的环境中，以免造成损坏。
- 请勿将本产品任意处置于口中，以免造成人身伤亡。
- 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。

锂聚合物电池使用安全须知

使用锂聚合物电池时，须严格遵守制造商说明、要求并了解相关风险，使用不当会导致锂聚合物电池起火，从而造成严重的财产损失甚至人身伤害。

- 禁止使用变形、胀气的锂聚合物电池。
- 禁止使用过充、放电的锂聚合物电池，避免发生危险。长时间不使用须将锂聚合物电池放电至存储电压（3.8~3.85V/节）。锂聚合物电池须储存在室内干燥区域（4.5~48.5℃），禁止将锂聚合物电池置于阳光下暴晒或车内，高温可能会导致锂聚合物电池起火，造成财产损失和人身伤害。
- 请使用专用充电器对锂聚合物电池进行充放电，禁止使用其它，如：镍氢电池充电器。充放电时，禁止将锂电池放置于高温物体表面，建议使用锂电池防爆袋。不正确的充放电操作会对锂聚合物电池造成损伤，甚至会引起火灾，造成财产损失和人身伤害。
- 禁止将锂聚合物电池单节电压放至低于 3V，禁止给已损坏的锂聚合物电池充电。
- 锂聚合物电池充放电须在有人看管的情况下进行，避免发生意外造成不必要的损失。
- 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。

飞机电池充电须知：

请确保使用合格的电池充电器给锂电池充电。在使用充电器前，请认真阅读充电器说明书。充电过程中，请确保把电池置于耐热的表面。建议把锂电池置于防火充电袋内充电，防火充电袋可在相关模型实体店或网上买到。

产品简介

B-1B枪骑兵是美国空军在冷战末期开始使用的超音速可变后掠翼重型长程战略轰炸机，XFLY迅飞模型推出全比例缩放的双70MM涵道B-1B轰炸机，具备可变后掠翼、全动平尾控制、全像真设计的收放起落架等像真特点，让您身临其境感受B-1B带来的震撼。

迅飞B-1B采用升级版双70MM涵道系统和双80A电调，充沛的动力可以让你轻松完成筋斗、横滚等轰炸机无法完成的特技动作。集成于控制板的飞控参与起落架、襟翼、航灯着陆灯、可变翼等机构工作，大大减少操控者的工作量；飞行过程可以让飞控全程参与姿态控制，无论机翼处于什么状态，操控者无需担心姿态波动，放心体验轰炸机飞行的气势；且飞控具备可屏蔽功能，高级别的玩家可以体验手动操作带来的真实感。

前后起落架均采用全金属CNC加工，完美展现真机起落架收放的美感；起落架着陆灯、机翼翼尖航灯、边条翼航灯、尾部航灯完全按照真机排布工作，力求像真；整机采用无胶水设计，可以快速完成拆装，方便运输和存放。

特征

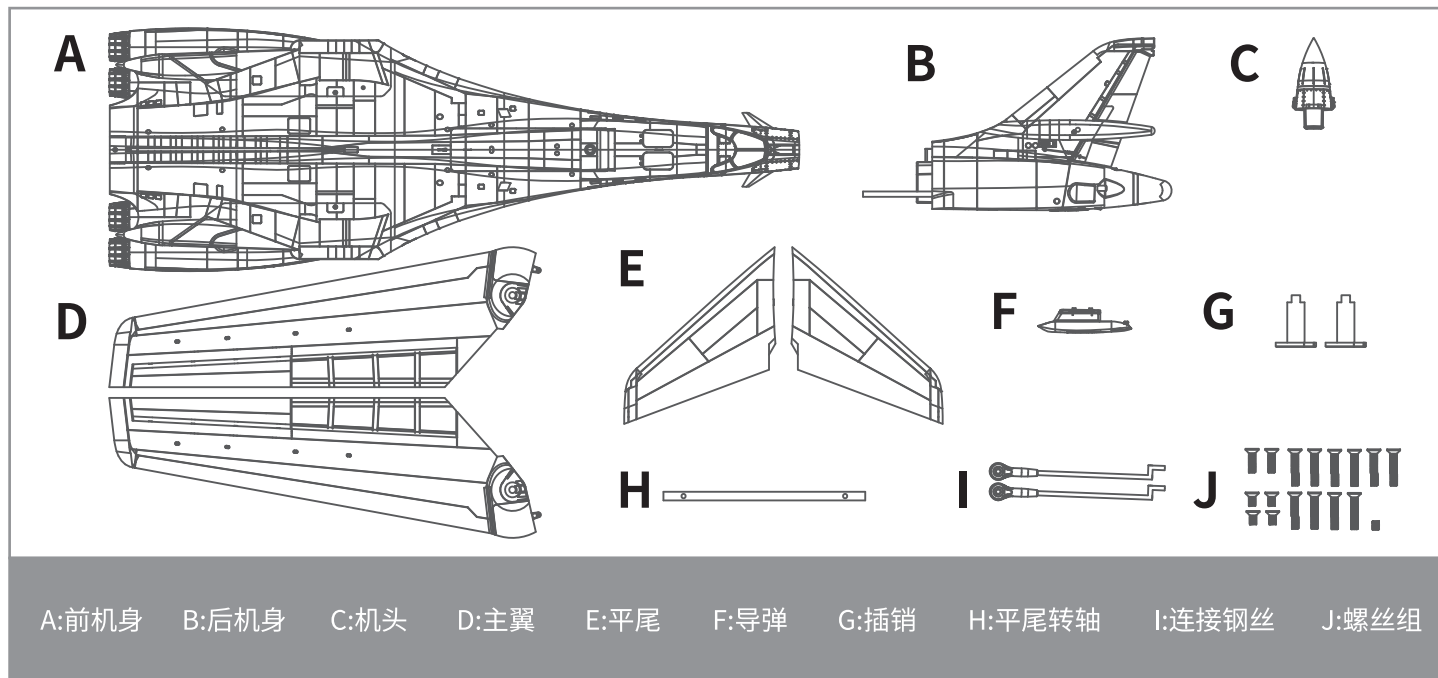
- 可变后掠翼设计、全动平尾控制
- 全像真设计、全金属加工的收放起落架
- 升级版双 70MM 涵道系统和双 80A 电调提供充沛动力
- 飞控参与飞行姿态控制以及起落架、襟翼、航灯着陆灯、可变翼等机构工作
- 航灯着陆灯完全按照真机排布工作
- 无胶水设计，可快速完成拆装

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\ 产 品 包 装 清 单 /

在组装产品之前,请仔细检查以下配件,如有缺失或者损坏,请及时联系商家或者邮件至厂家(support@x-fly-model.com),告知缺失或损坏的配件名称及编码(请在本说明书尾页查看相应的配件编码)。请注意,不同配置,包装盒内部物品不同。

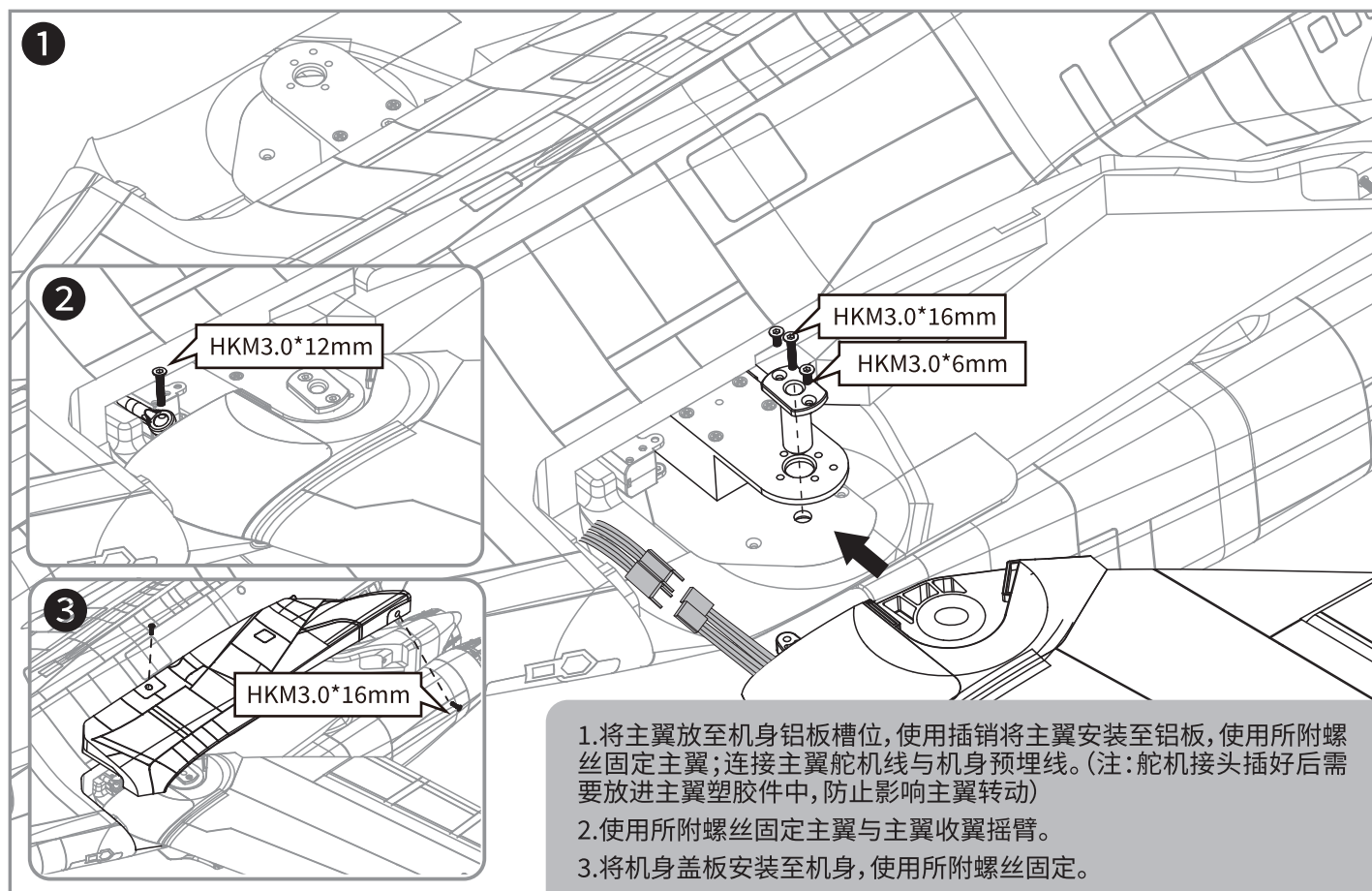


\ 产 品 参 数 /

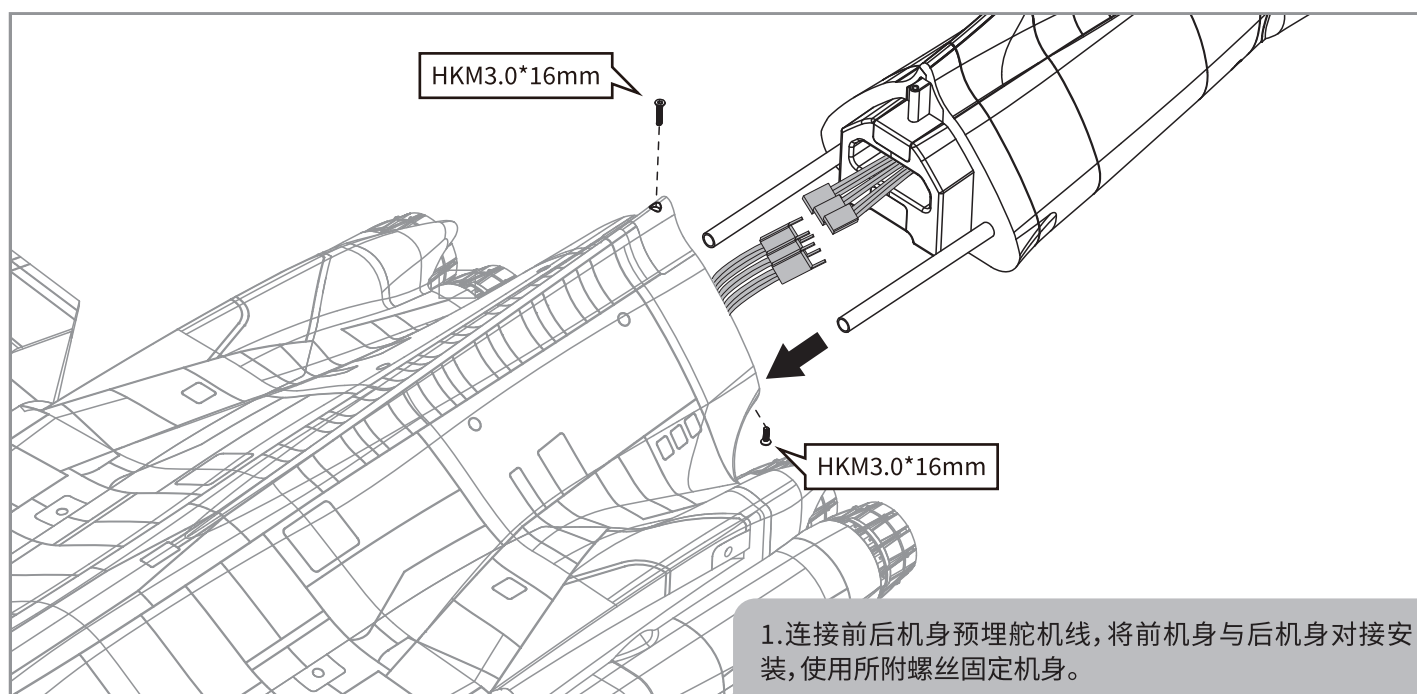
材料:	高密度 EPO, ABS 工程塑料
翼展:	1776mm/69.9in, 1140mm/44.9in
机身长度:	1920mm/75.6in
翼载荷:	130g/dm ²
机翼面积:	37dm ²
起飞重量:	5000g
桨叶类型:	双 70mm 12 叶涵道
电机:	3060-KV2000*2
电调:	80A*2

舵机:	9g 舵机 *5, 13g 舵机 *3, 25g 舵机 *1
持续飞行时间:	5-8 分钟
起落架系统:	CNC 加工的电动收放起落架
LED 灯系统:	航灯和着陆灯 *8
其他电子设备:	飞控板
通道介绍:	7 通: 副翼, 升降舵, 油门, 方向舵, 收放起落架, 襟翼, 变翼
模型难度:	中级 / 高级经验水平
推荐锂电池:	22.2V 5000-7000mAh
组装调试时长:	~20 分钟

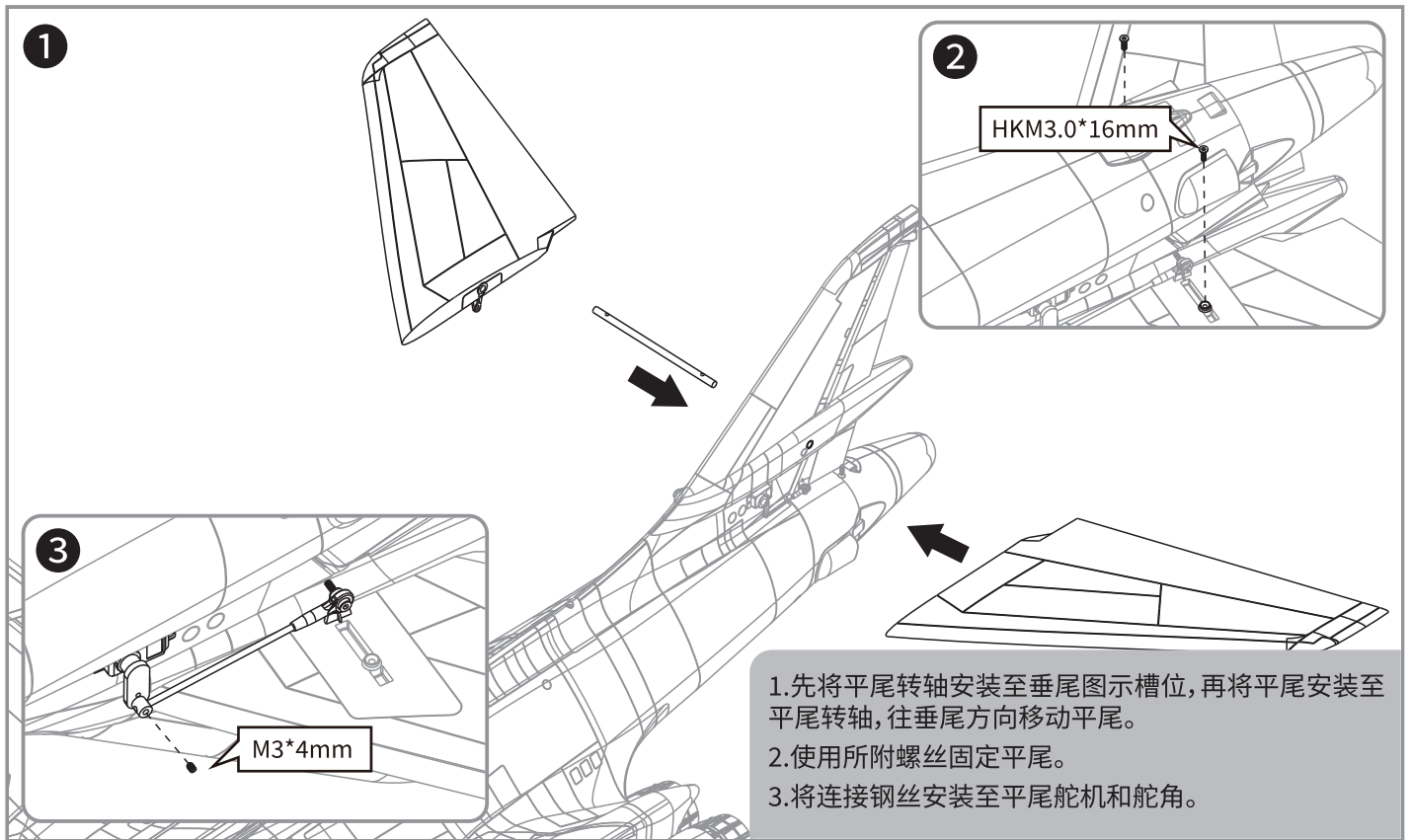
主翼安装



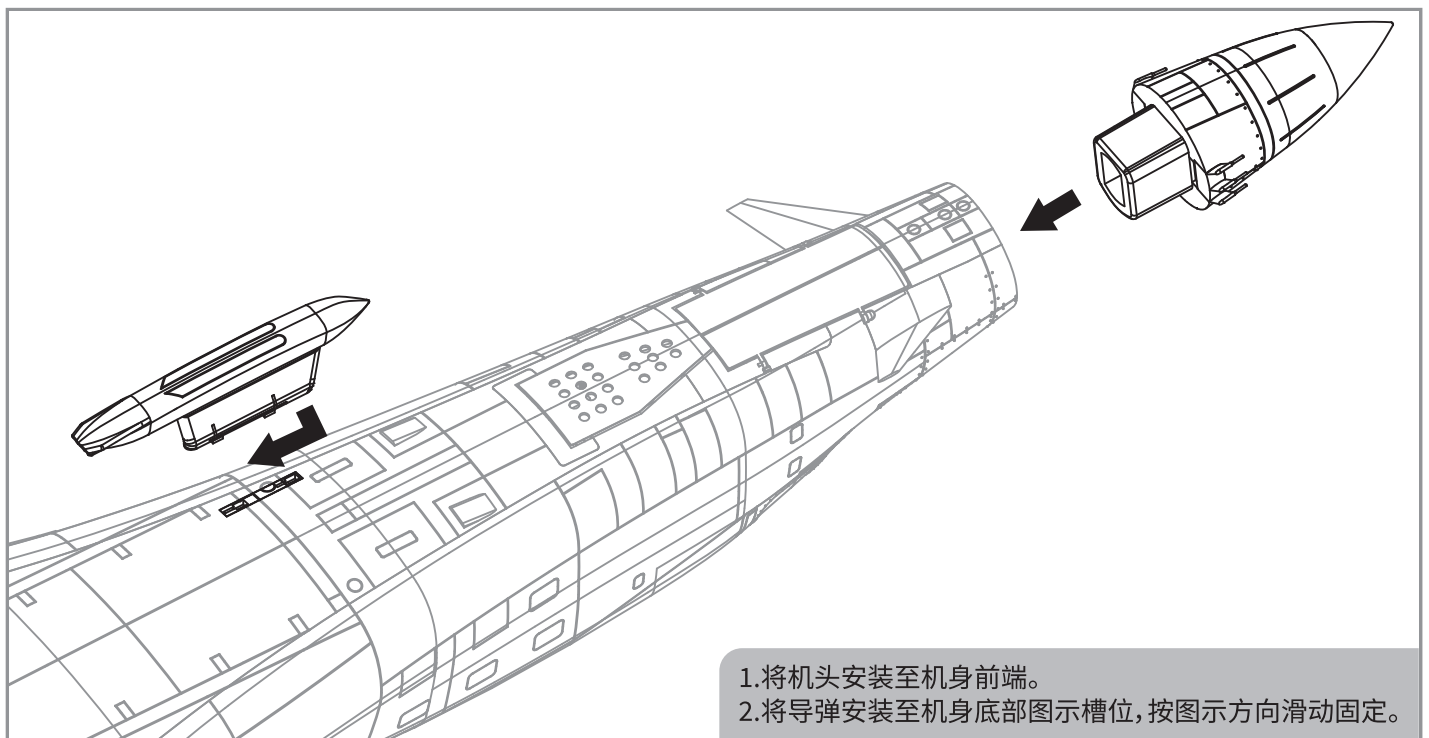
机身安装



平尾安装



机头和导弹安装

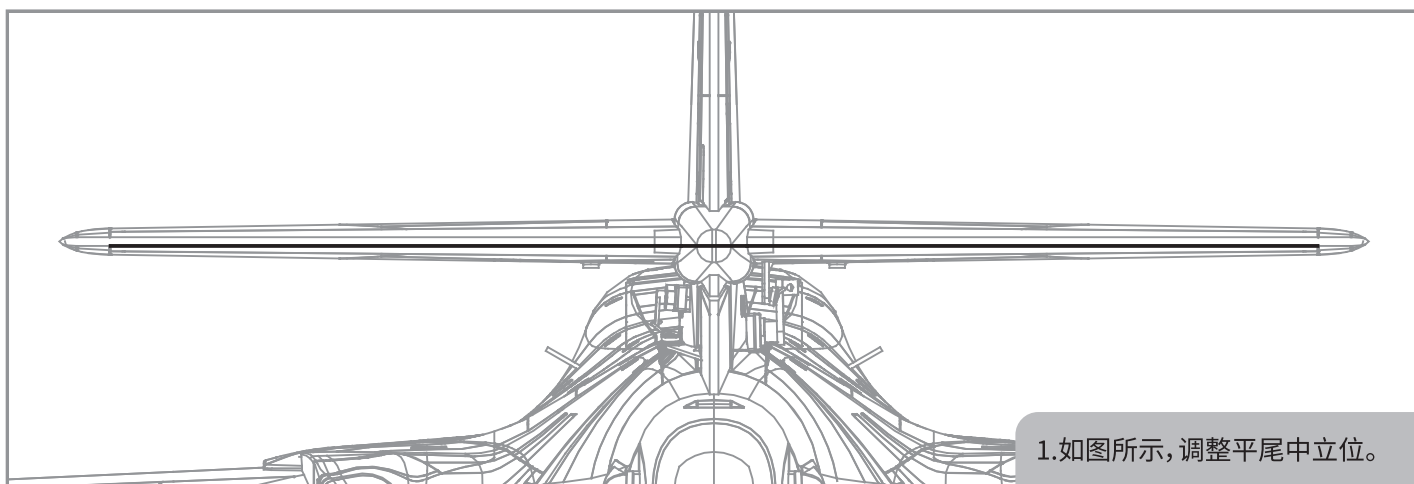


产品组装说明

飞控开关说明



平尾中立位



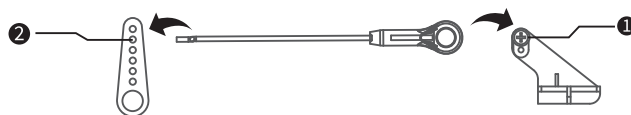
舵角摇臂安装

保证舵机为回中状态, 将连接杆调整到合适位置。

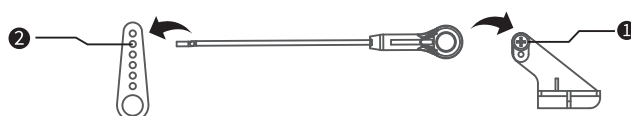
图示是舵角和舵面摇臂的出厂设置。

首飞建议用出厂设置的舵角飞行。

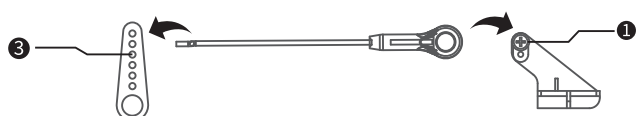
副翼舵机钢丝安装孔位参考



垂尾舵机钢丝安装孔位参考



襟翼舵机钢丝安装孔位参考

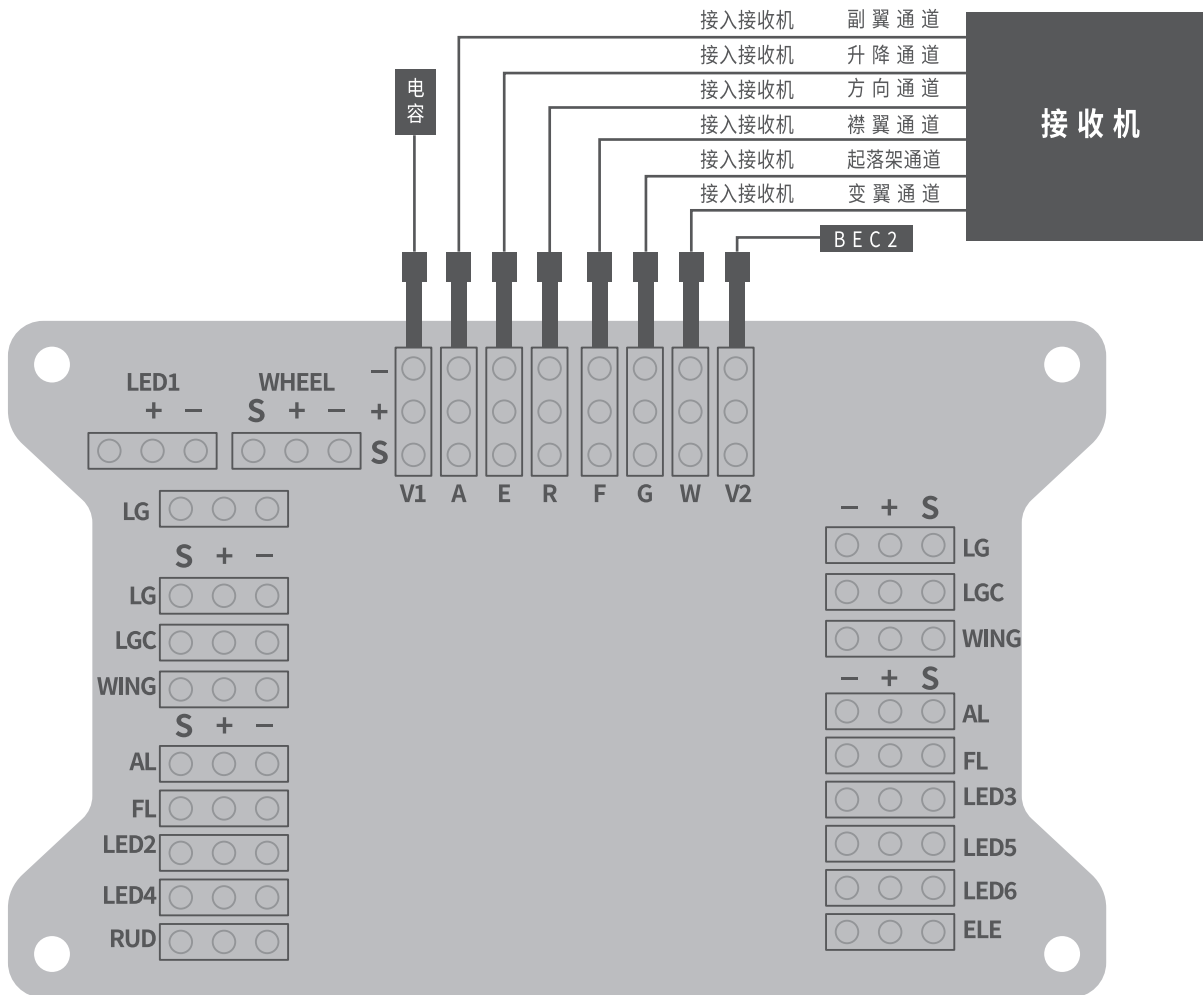


飞控板连接示意图

注意：上电时，当遥控器收放起落架通道开关与飞机起落架状态不对应时，操作前轮转向时会没有反应，请确认此通道开关与实际状态对应。

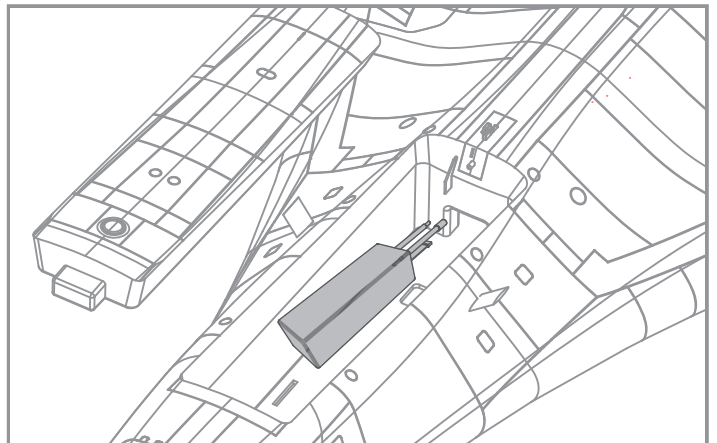
在机翼后掠状态下，操控遥控器襟翼通道，襟翼舵面不会工作；在机翼展开状态，同时襟翼舵面下放时，此时操控机翼变翼操作，襟翼会自动收回。

襟翼下放或者机翼后掠起的俯仰低头可以通过遥控器微调来修正，也可通过预设遥控器飞行模式来调整，不会影响飞控工作。



电池安装

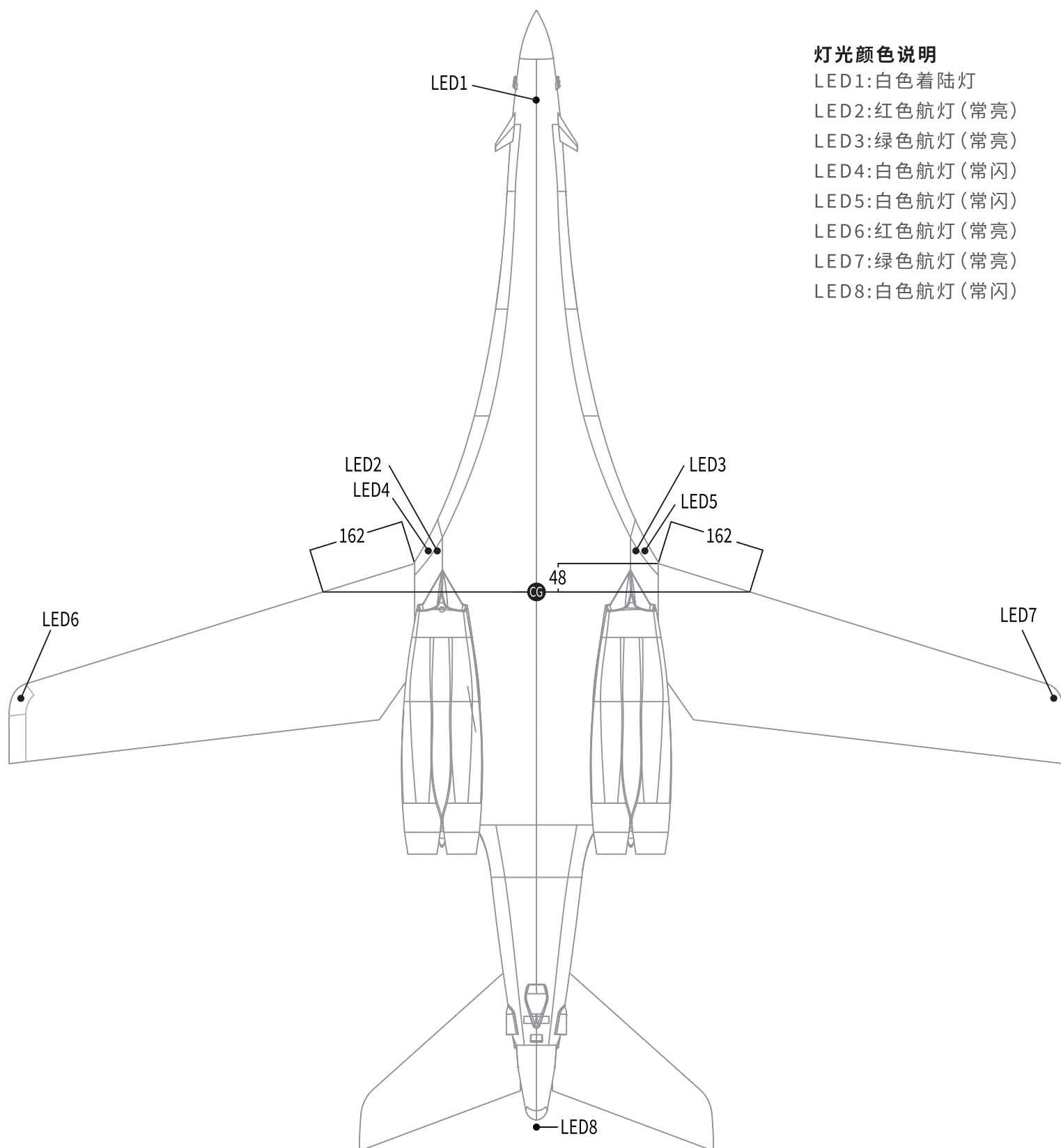
1. 飞机通电前，首先请打开发射机电源，确认油门杆处于低位。
2. 移开电池仓罩，取下电池板上的魔术带。
3. 将电池置于电池仓内，有电源的线的一端朝向飞机尾部，使用魔术带固定电池。
4. 由于不同的电池厂家生产的电池重量有差异，需要调整电池的位置来平衡飞机的重心位置。



重心调整

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、后移动来调整飞机的重心;如果通过移动电池无法调整到正确的重心位置,您还可以适当的使用一些其他材料来配重,使得飞机的重心处于正确的位置。



灯光颜色说明

- LED1:白色着陆灯
- LED2:红色航灯(常亮)
- LED3:绿色航灯(常亮)
- LED4:白色航灯(常闪)
- LED5:白色航灯(常闪)
- LED6:红色航灯(常亮)
- LED7:绿色航灯(常亮)
- LED8:白色航灯(常闪)

\ 舵 面 测 试 /

当您按照前面的步骤组装好飞机、调整好舵角摇臂后,在飞机起飞前,我们需要一块满电的电池连接到电调。用遥控器测试每个舵面的工作情况,检查是否正常!

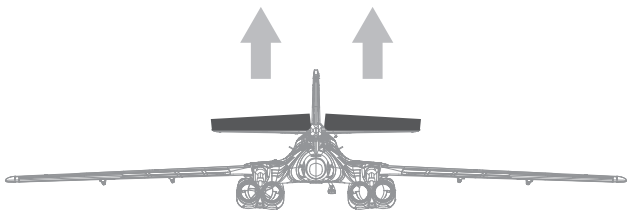
副翼摇杆向左运动



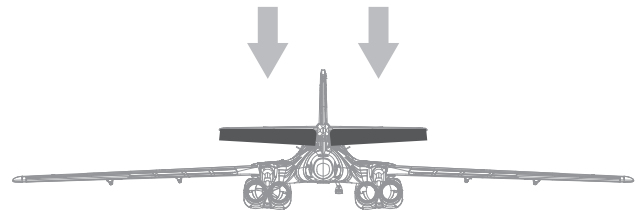
副翼摇杆向右运动



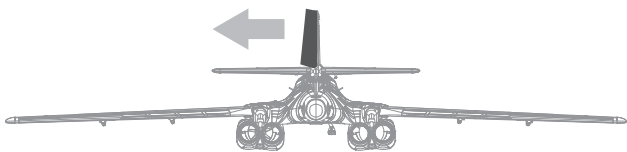
升降摇杆向下运动



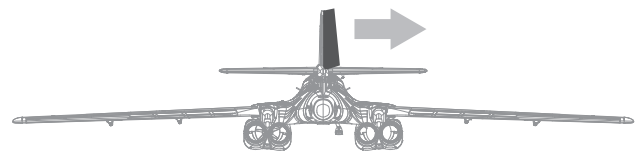
升降摇杆向上运动



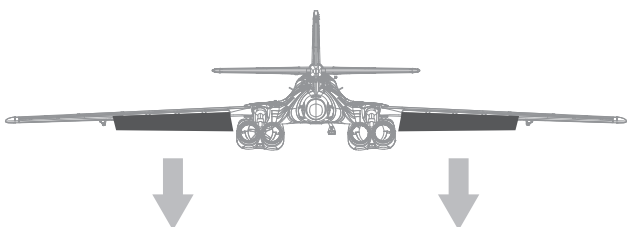
方向摇杆向左运动



方向摇杆向右运动



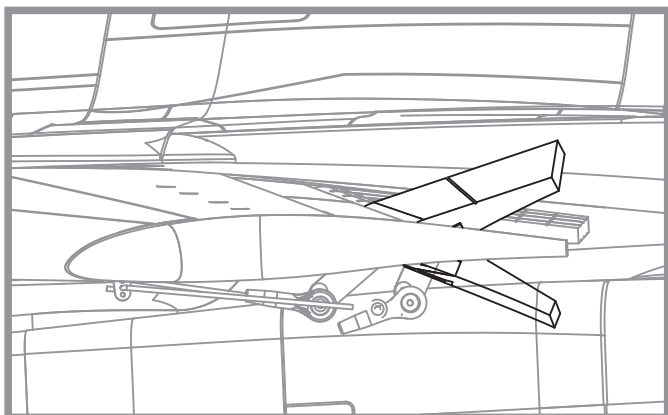
襟翼放下



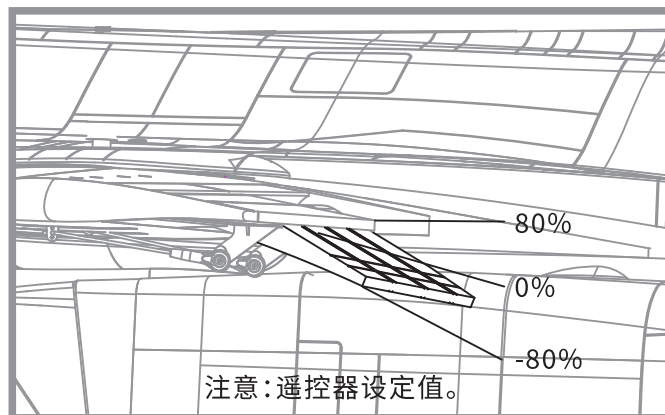
推荐舵面行程

根据我们的测试经验,推荐遥控器舵量如下。

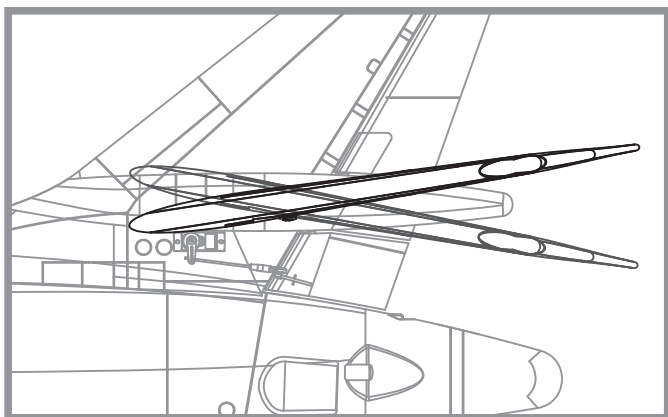
副翼



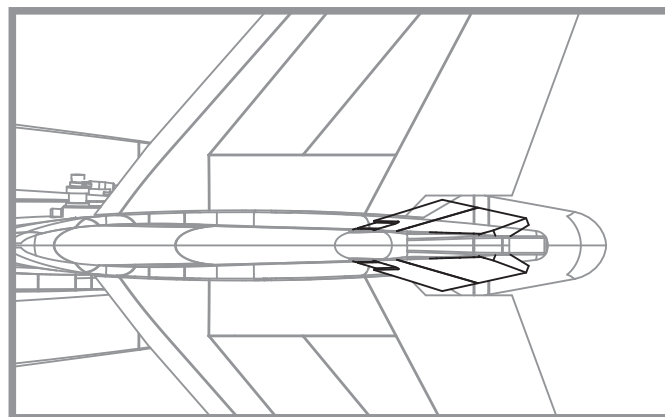
襟翼



升降舵



方向舵



	副翼	升降舵	方向舵	襟翼下放
大舵量	135%	80%	100%	45%
小舵量	100%	65%	100%	45%

故障检修

问题	问题原因	解决方式
油门推杆无响应,但舵机有响应	—电调未连接电机 —油门通道反向	—降低油门推杆和油门微调设定 —反过来重新装油门通道
桨的噪音过大或者震动过大	—桨罩、桨、电机、电机架坏了 —桨或者桨罩的小部件松动了 —桨装反了	—更换损坏的配件 —把桨、桨夹和桨罩的小部件拧紧 —反过来重新装桨
飞行时间变短,飞机无力	—电池电量低 —桨装反了 —电池坏了	—重新给电池充电 —依照电池说明书更换新的电池
飞舵面不动,或者动作响应较慢	—舵面、舵角、连接杆、舵机坏了 —连接线坏了或者接头松了	—更换或者维修坏了的配件 —检查所有连接线,确保所有接头无松动现象
舵面反向	—遥控器发射机通道反向	—检查通道控制(舵面)方向,调试飞机舵面和遥控器的舵面控制杆
电机无力	—电机或电池坏了 —电调用了不合适的低压保护装置	—检查电池、发射机、接收机、电调、电机是否有损坏(如有,请及时更换) —立刻操控飞机降落,重新给电池充电
接收器的LED灯慢闪	—接收器低电量	—检查电调和接收器之间的连接 —检查舵机是否受损 —检查连接杆是否安装到位

配件列表

XF112-01	前机身	XF112-24	变翼系统
XF112-02	后机身	XF112-25	标配贴纸
XF112-03	主翼	XF112-26	选配贴纸
XF112-04	平尾	XF112-27	平尾转轴
XF112-05	变翼维护盖	XF112-28	LED灯组
XF112-06	炸弹	XF112-29	飞控板
XF112-07	电池舱盖	XFRE010	前电子收放
XF112-08	机头	XFRE007	主电子收放(左/右)
XF112-09	设备仓盖	XFRE008	变翼收放(左)
XF112-10	挡风板	XFRE009	变翼收放(右)
XF112-11	轮胎组	XFKV2000	3060-KV2000电机
XF112-12	连接杆	XF-DF003V2	70MM空涵道V2(12叶)
XF112-13	螺丝组	XF-DFS007	70MM涵道带电机(6S Pro版本)
XF112-14	舵面摇臂组	XFESC80A-1	2*80A电调
XF112-15	前起落架舱门盖板	XFSER13P-300	113g金属数码正向舵机(300mm线长)
XF112-16	主起落架舱门盖板	XFSER13P-600	13g金属数码正向舵机(600mm线长)
XF112-17	前起落架组	XFSER25P-300	25g金属数码正向舵机(300mm线长)
XF112-18	主起落架组(左)	XFSER9P-400	9g金属数码正向舵机(400mm线长)
XF112-19	主起落架组(右)	XFSER9PAD-400	9g金属数码正向舵机(400mm线长)
XF112-20	前起落架系统		防堵死
XF112-21	主起落架系统(左)	XFSER9PP-550	9g塑胶数码正向舵机(550mm线长)
XF112-22	主起落架系统(右)	XFSER9PR-550	9g塑胶数码反向舵机(550mm线长)
XF112-23	变翼组		

无刷电子调速器说明书

感谢您购买使用本产品。我们强烈建议您在使用之前阅读本使用手册。

东莞市迅飞航空科技有限公司有权不经通知变更其产品,包括其外观和性能参数及使用要求;对其产品是否适合特定用途不作任何保证、申明或承诺。不承担因第三方产品相关修改所引起的任何责任,也不承担因应用该产品而产生的任何责任,包括直接损失或间接损失的赔偿责任。

安全须知

检验无线电接收装置上的正确设置,第一次测试电调和马达时不要在马达上安装螺旋桨或传动小齿轮。只有当您确认了无线电接收装置上的设置正确后方能安装螺旋桨或传动小齿轮。

- 不要使用裂开或被刺破的蓄电池组电池。
- 不要使用会变得过热的电池组。
- 不要使用短路电池或马达接线端。
- 电缆绝缘要用正确的绝缘材料。
- 使用正确的电缆连接器。
- 电池或伺服系统的数量不要超过电调的规定。
- 错误的电池极性会损坏电调。

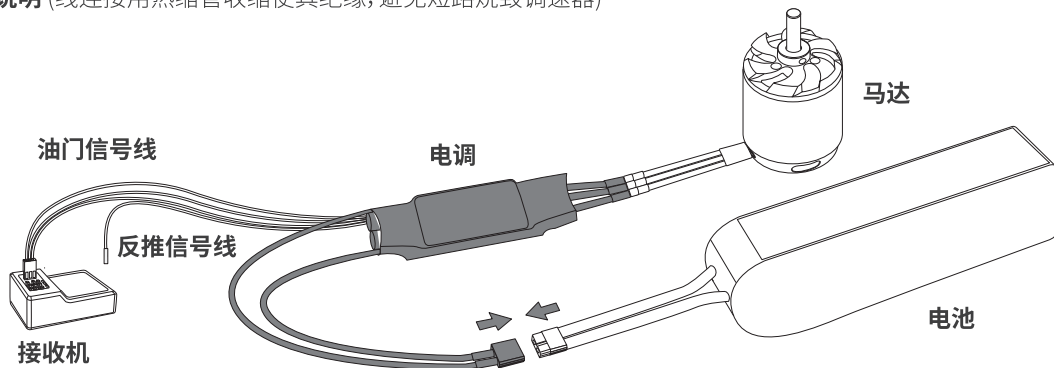
主要特性

1. 功率输出元器件(MOSFET)选用新一代的制作工艺,发热低,瞬间承受电流大,可靠性高。
2. 高性能32位处理器,运算能力更强,运行速度更快。
3. 超流畅的启动与精准的油门线性。
4. 效率高,电调更节能,续航时间更长。
5. SBEC 5V/6V两档可调,持续8A电流供应,给舵机提供更强劲的动力(40A/50A/60A/80A/100A具有SBEC可调)。
6. 多重保护:启动保护,过温保护,低压保护,缺相保护,信号丢失保护。
7. 自动识别马达进角,支持高RPM马达,可兼容市面上绝大多数马达。
8. 支持手机App或LCD编程,操作更简单方便(需单独购买ZTW蓝牙模块或LCD编程卡)。

产品规格

型号	PN#Model	持续/瞬时电流(A)	输入电压	重量(g)	BEC输出	尺寸(mm) 长*宽*高	是否支持编程
20A SBEC	3020211	20A/30A	5-12NC/2-4Lipo	25	5.5V/4A	60*25*10	是
30A SBEC	3030211	30A/40A	5-12NC/2-4Lipo	25	5.5V/4A	60*25*10	是
40A SBEC	3040211	40A/55A	5-12NC/2-4Lipo	37	5V/6V 4A	68*25*10	是
50A SBEC	3050211	50A/65A	5-12NC/2-4Lipo	37	5V/6V 4A	68*25*10	是
60A SBEC	3060211	60A/80A	5-18NC/2-6Lipo	50	5V/6V 8A	70*34*10	是
80A SBEC	3080211	80A/100A	5-18NC/2-6Lipo	75	5V/6V 8A	90*37*10	是
100A SBEC	3100211	100A/120A	5-18NC/2-6Lipo	80	5V/6V 8A	90*37*10	是

调速器接线说明 (线连接用热缩管收缩使其绝缘,避免短路烧毁调速器)

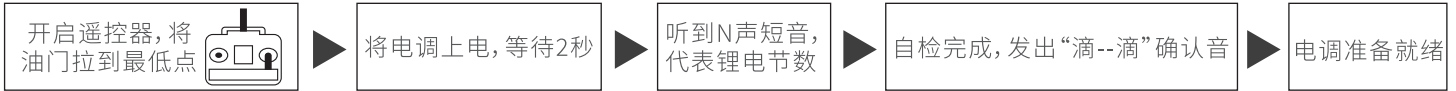


首次使用电调并设置油门行程

温馨提示:在首次使用本电调或更换其他遥控器使用时,请务必先重新设定油门行程。



电调的正常启动程序



编程项简要说明(加粗字体为出厂默认值)

- SMR功能: **关闭**/打开
通过切换电机正反向,快速停止。出厂默认是关闭,此时1Pin信号线完全无效。如需打开,通过App设置或遥控器编程打开SMR功能,将3Pin信号线接入油门通道,将1Pin信号线接入接收机任意的2段开关通道,打开遥控器2段开关,此时SMR功能开启,拨动遥控器2段开关即可调整电机正反向。
▲ 警告:此功能只能在50%油门以下才有效,且只允许在飞机降落至地面使用,否则有可能引起电调烧毁!
- 刹车力度: **关闭**/软/中度/最大
- 进角: **自动**/低/中/高 (分别为5度/15度/25度)
- 马达方向: **正向**/反向
正向:电机默认旋转方向
反向:将电机旋转方向更改
- SR功能:打开/**关闭**
效率更高,更节能,续航时间更长
- 锂电节数: **自动**/2S/3S/4S/5S/6S
- 低压保护点: **3.0V**/3.2V/3.4V/3.6V
例如:使用3节锂电,设定为3.0V为低电压保正值,则低压保护阈值为: $3 * 3.0 = 9.0V$
- 保护方式: **降低功率**/立即关断
降低功率:当达到预设的低压保护阈值时,电调减少输出功率至70%
立即关断:当达到预设的低压保护阈值时,电调立即关断输出功率
- BEC: **5V**/6V
40A、50A、60A、80A、100A电调BEC电压输出可设置5V/6V
- 加速度: **普通**/柔和

电子调速器编程设置模式

首先将遥控器油门拉杆推至最高位置,打开遥控器电源,将电池组连接到调速器,2秒后电机“滴-滴滴”声响,停3秒,发出123特殊声音,表示进入编程模式。设置音按以下顺序滚动播放:

- | | | |
|------------------|--------|----------|
| 1). “滴” | SMR功能 | (1短音) |
| 2). “滴.滴” | 刹车力度 | (2短音) |
| 3). “滴.滴.滴” | 进角 | (3短音) |
| 4). “滴.滴.滴.滴” | 马达转向 | (4短音) |
| 5). “滴——” | SR功能 | (1长音) |
| 6). “滴——滴” | 电池节数 | (1长1短音) |
| 7). “滴——滴.滴” | 低压保护值 | (1长2短音) |
| 8). “滴——滴.滴.滴” | 电压保护类型 | (1长3短音) |
| 9). “滴——滴.滴.滴.滴” | BEC输出 | (1长4短音) |
| 10). “滴——滴.——” | 加速度 | (2长音) |
| 11). “滴——滴.——滴” | 恢复出厂默认 | (2长音1短音) |

注:一声长滴相当于五声短滴。

在听到某个提示音后,2S内将油门摇杆打到最低,则进入该设定项,马达会循环鸣叫,在鸣叫某个提示音后将油门摇杆打到最高点,则选择该提示音所对应的设定值,接着会听到123特殊确认音,表示设置成功。

例如:设置马达转向,听到“滴滴滴滴”四短音,表示进入马达转向菜单,在2S内将遥控器油门打到最低,听到“滴”一短音代表正向(CW),“滴滴”两短音代表反向(CCW),如想设置为反向(CCW),则在听到“滴滴”两短音时将油门拉杆打到最高,会听到123特殊确认音,表示设置成功,2秒内将油门拉杆打到最低位置。(如果听到确定音之后,超过2秒油门仍在最高位,则重新进入编程模式)重复以上操作,设置您所需要的各种功能。

退出设定:参数设置成功后,立即将油门拉杆打到最低位置,即表示退出设定。

编程参数表

提示音 设定项	“嘀”	“嘀.嘀”	“嘀.嘀.嘀”	“嘀.嘀.嘀.嘀”	“嘀—”	“嘀—嘀”	“嘀—嘀.嘀”
	1短音	2短音	3短音	4短音	1长音	1长1短音	1长2短音
SMR功能	关闭	打开					
刹车力度	关闭	软刹车	中度刹车	最大刹车			
进角	自动	低	中	高			
马达转向	正向(CW)	反向(CCW)					
SR功能	打开	关闭					
电池节数	自动	2S	3S	4S	5S	6S	
低压保护值	关闭	NIMH 50%	NIMH 60%	3.0V	3.2V	3.4V	3.6V
电压保护类型	降低功率	立即关断					
BEC输出	5V	6V					
加速度	普通	柔和					
恢复出厂默认	复位						

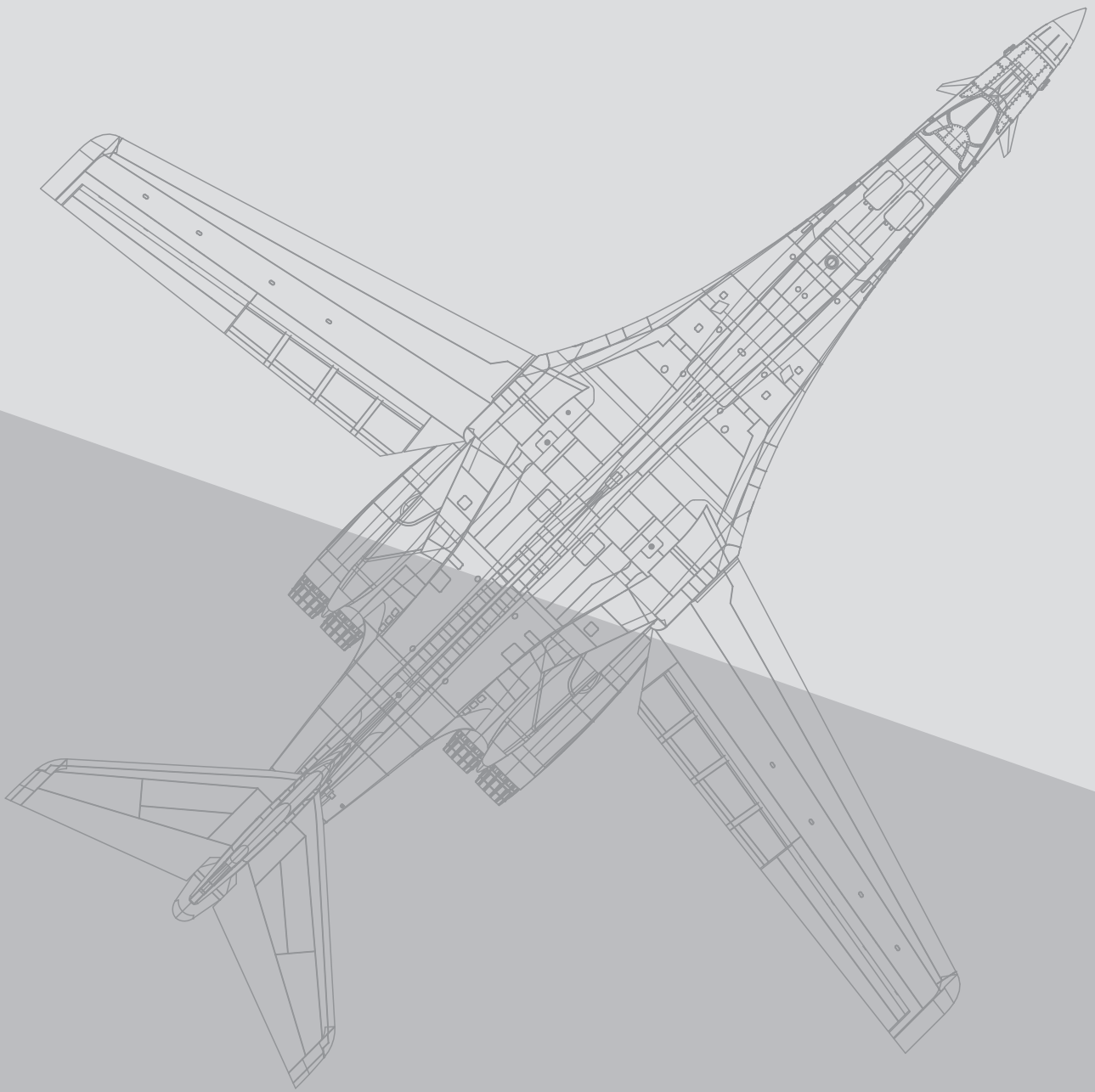
❶ 注:灰颜色为出厂默认选项参数。

保护功能

1. 启动保护:当推油门启动后,如在两秒内未能正常启动电机,电调将会关闭电机,油门需要重新设置,才可以重新启动。可能原因:电调与电机接线断开或接触不良、螺旋桨被其他物体阻挡、减速齿卡死等。
2. 温度保护:当电子调速器工作温度超过 110 度时,电调将自动降低输出功率进行保护,但不会将输出功率全部关闭,最多降到全功率的 70%,以保证电机留有一定动力,避免摔机。
3. 油门信号丢失保护:当电调检测到油门信号丢失1秒后,将自动减少对马达的输出功率,然后油门信号丢失超过2秒,电调将自动关断马达。如果在降功率过程中油门信号恢复,电调可以立即恢复油门控制。这样在瞬间信号丢失情况下(2秒以下),电调并不会进行油门保护;只有当遥控信号确实长时间丢失,才进行保护,但电调不是立即关闭输出,而是有一个逐步降低输出功率的过程,给玩家留有一定的救机时间,兼顾安全性和实用性。
4. 过负荷保护:当负载突然变得很大时,电调会切断动力,或自动重启,出现负载急剧增加的原因通常是马达堵转。

常见问题解答

出现的问题	可能的原因	解决方法
接通电调后有自动检测电池节数声音,但马达不能启动	电调没有油门行程设置	对电调进行油门行程设置
马达不工作,连接电池后马达未发出音乐声,伺服系统也未运行	电池组与电调之间接触不良 没接通电源 焊接不牢固(接头易断) 电池电缆极性错误 电调信号线与接收机连接极位相反 电调有问题	清理连接器终端或替换连接器 用刚充满电的电池组替换 再次焊接电缆连接 检查并确认电缆极性 检查连接在电调上的信号线以确保处于正确极性 更换电调
马达不工作,连接电池后马达未发出音乐声,但伺服系统在运行接通电调后马达不工作,发出警报音(两声滴滴响后有短暂停顿)	电调与马达之间接触不良 马达线圈被烧 焊接不牢固(接头易断) 电池组电压超出正常范围	检查连接器终端或替换连接器 替换马达 再次焊接电缆连接 更换为刚充满电的电池组 检查电池组电压
接通电调后马达不工作,发出警报音(持续地滴滴响)	通电后油门拉杆不在最小位置	将油门拉杆移至最小位置
接通电调后马达不工作,电调发出两声长响之后,有两声更长点的滴滴响	被颠倒的油门通道导致电调进入程序设计模式	进入发射器上的伺服系统 倒转菜单并倒转油门通道
马达反向运行	电调与马达之间错误的电缆连接	交换电调与马达之间三条电缆连接中的任意两条或者通过电调程序设计模式进入马达旋转功能并改变预设参数。
飞行过程中,马达停止运行	丢失了油门信号	检查无线电接收装置是否操作得当。 检查电调和接收机信号线路及发送频道和电调信号线之间确保有足够的隔离来防止干扰 在电调的信号线上安装一个磁环



XFLY-MODEL



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