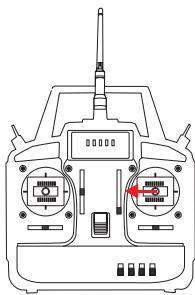
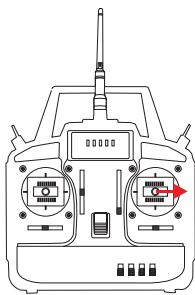


制式2（左手油门）  
Model 2 (left throttle)

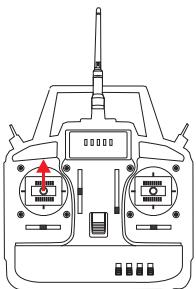
当副翼操作杆移向左边时，倾斜盘也应该向左边倾斜。直升机飞向左边。

When the aileron stick is moved to the left, the swashplate also tilt to the left, and the helicopter moves to the left.



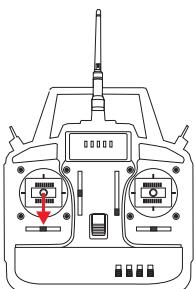
当副翼操作杆移向右边时，倾斜盘也应该向右边倾斜。直升机飞向右边。

When the aileron stick is moved to the right, the swashplate also tilt to the right, and the helicopter moves to the right.



当油门杆向上推时，电机动力和主翼的速度增加，直升机上升。

When the throttle stick is pushed upward, the speed of the motor and main rotor increases, as a result, the helicopter lifts up.



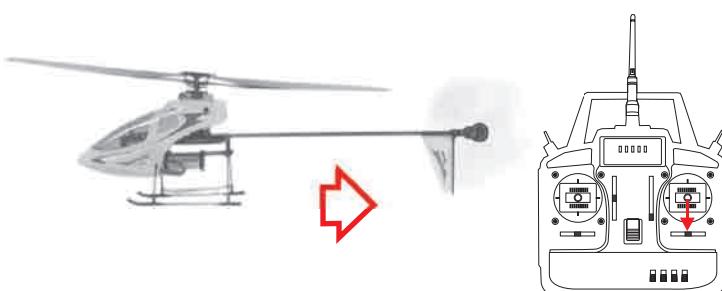
当油门杆向下推时，电机的动力和主翼的速度增加，直升机下降。

When the throttle stick is pushed downward, the speed of the motor and main rotor increases, as a result, the helicopter descends.



当升降杆推向前方时，直升机的前端会向下倾，结果直升机向前飞，速度减低。

When the elevator stick is pushed forward, the nose of helicopter will tilt downward, as a result, the helicopter moves forward and its speed decreases.



当升降杆推向后方时，直升机的前端会向上倾，直升机向后飞，速度增加。

When the elevator stick is pushed backward, the nose of the helicopter will tilt upward, then the helicopter moves backward and its speed increases.

制式 2 中方向舵的操作方式和制式 1 是相同的

**The rudder stick operation for Model 2 is the same as Model 1**

### 飞行前的调节 ADJUSTMENTS BEFORE FLYING

每个控制器的操纵杆，副翼，方向舵的中位在出厂前已设置好，如需要请根据您的遥控产品作自行调整。

The meso-position of each operating stick, aileron and rudder had already set in the factory, you can adjust it according to your needs. If need adjustment ,you can adjust according to your remote products.



**声明 Caution**

如果你是一个初学者，请根据配套手册和相关图案进行基本联接和调整，确保遥控准确无误。

If you are a novice ,please connect and adjust each part according to the corresponding manual and pictures to ensure the proper operation.

## 各部位名称/操纵方法

## NAME AND OPERATION OF EACH PART

发射机 EK2-0406G  
TRANSMITTER EK2-0406G

规格型号：  
 1. 通道数：六通道  
 2. 教练开关：有  
 3. 教练线插口：有  
 4. 3D开关：有  
 5. 使用电源：1.5V\*8 AA 电池  
 6. 射频功率：≤3dBm  
 7. 跳频方式：FSK  
 8. 静态电流：≤50mA  
 9. 伺服器倒置开关：有  
 10. 电压显示方式：LED  
 11. 低电压警告：无  
 12. 尺寸：189\*218\*97mm  
 13. 重量：575g  
 14. 外壳颜色：黑色  
 15. 天线长度：14.5cm  
 16. 使用范围：直升机，飞机  
 17. 认证证书：CE,FCC,RoHS



## Specification

1.channel:6channel  
 2.trainer switch: yes  
 3.servo port: yes  
 4.IDEL switch: yes  
 5.Power resource:1.5V\*8 AA Battery  
 6.RF power:≤3mW  
 7.Modulation type:FSK  
 8.Static current:≤50mA  
 9.Servo reverser: yes  
 10.Voltage display type: LED  
 11.Low voltage warning: NO  
 12.Size:189\*218\*97mm  
 13.Weight: 575g  
 14.Color:black  
 15.Antenna length: 14.5cm  
 16.Use range: helicopter,airplane  
 17.Certificate:CE,FCC,RoHS



陀螺仪锁定开关：这个为锁尾陀螺仪专用。打上为非锁定，打下为锁定。  
 伺服器倒置开关：出厂前倒置开关已调好，没有必要时须再调動。右手开关：下上上左手开关：下上上  
 倒飞开关：开关往后打是正常飞行。注意在起飞前得先确认倒飞开关是打回。  
 天线：使用时天线要拉直，以免影响飞行距离。  
 螺距行程直线微调：在中速飞行3D时调整它的螺距，也就是调整中立点的pitch值。Hovering pitch knob: adjust the pitch when flying the 3D at the moderate speed, which is to adjust the midpoints' pitch.



电池盒：注意正负级别，切勿装反。The battery box, note its positive and negative. Never assemble it in the reverse direction.

电源开关：往上按打开电源开关。Power switch: push it upward

教练开关  
Trainer switch

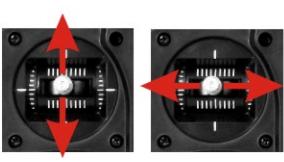
教练线插口  
Trainer jack



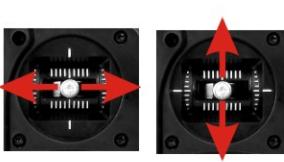
螺距行程曲线微调：在正常飞行时调整它螺距值。



油门微调：注意在飞行时或在调机子时，油门微调一定打到最底。



升降操纵杆：向上打为方向操纵杆：往左方向前进，向下打为后退。左，往右方向向右，右，往左方向向左，往右方向向右，往左方向向左，往右方向向右。



副翼操纵杆：向左副翼向左倾斜，向右副翼向右倾斜。



LED 指示灯：灯全亮时说明电池电量最多，只亮最后一个红灯时说明电量快用尽，需马上跟换。

LED indicating light: when all the lights are on, it indicates that the quantity of electric charge is fullest; when only one red light is on, it means that the battery almost used up and it needs change immediately.

Pitch Trim Knob: adjust pitch when the plane flies in the normal condition.

## 2.4G 遥控系统采用智能化展频传输与数字跳频编码技术

2.4G Remote control system adopts Advanced Spread Spectrum Technology and digital FSK (frequency shift key) Coding Technology.

各部位名称/操纵方法  
NAME AND OPERATION OF EACH PART

发射机 EK2-0406H  
TRANSMITTER EK2-0406G

规格型号：  
1.通道数：六通道  
2.教练开关：有  
3.教练线插口：有  
4.3D开关：有  
5.使用电源：1.5V\*8 " AA " 电池  
6.射频功率：≤3dBm  
7.跳频方式：FSK  
8.静态电流：≤50mA  
9.伺服器倒置开关：有  
10.电压显示方式：LED  
11.低电压警告：无  
12.尺寸：189\*218\*97mm  
13.重量：575g  
14.外壳颜色：黑色  
15.天线长度：14.5cm  
16.使用范围：直升机，飞机  
17.认证证书：CE,FCC,RoHS



Specification

1.channel:6channel  
2.trainer switch: yes  
3.trainer port: yes  
4.IDEL switch: yes  
5.Power resource:1.5V\*8 AA Battery  
6.RF power:≤3mW  
7.Modulation type:FSK  
8.Static current:≤50mA  
9.Servo reverser: yes  
10.Voltage display type: LED  
11.Low voltage warning: NO  
12.Size:189\*218\*97mm  
13.Weight: 575g  
14.Color:black  
15.Antenna length: 14.5cm  
16.Use range: helicopter,airplane  
17.Certificate:CE,FCC,RoHS



伺服器倒置开关:出厂前倒置开关已调好,没有必要时无须再调动。右手开关:下下上左手开关:下上下上  
The servo reverser switch: the switch has been adjusted in the factory, it does not need to be adjusted any more if there is no necessary.



倒飞开关:开关往后打是正常飞行,注意在起飞前得先确认倒飞开关是打回。  
IDEL switch: push the switch backward is normal flight. Note: make sure the switch had returned before flight.



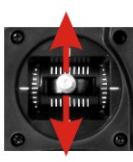
教练开关  
Trainer switch



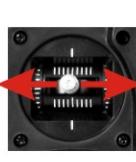
天线: 使用时天线要拉直,以免影响飞行距离。



油门微调: 注意在飞行时或在调机子时,油门微调一定打到最底。



升降操纵杆:向上打为方向操纵杆:往左方向



副翼操纵杆:向左副翼前进,向下打为后退,向左,往右方向向右。向左倾斜,向右副翼



电源开关:往上按打开电源开关。  
Power switch: push it upward



教练线插口  
Trainer jack



LED 指示灯: 灯全亮时说明电池电量最多,只亮最后一个红灯时说明电量快用尽,需马上跟换。  
LED indicating light: when all the lights are on, it indicates that the quantity of electric charge is fullest; when only one red light is on, it indicates that the battery almost used up and it needs change immediately.

2. 4G遥控系统采用智能化展频传输与数字跳频编码技术

2.4G Remote control system adopts Advanced Spread Spectrum Technology and digital FSK (frequency shift key) Coding Technology.

## 各部位名称/操纵方法 NAME AND OPERATION OF EACH PART

发射机 EK2-0404G  
TRANSMITTER EK2-0404G

规格型号：  
 1.通道数：四通道  
 2.教练开关：有  
 3.教练线接口：有  
 4.使用电源：1.5V\*8 AA 电池  
 5.射频功率：≤3dBm  
 6.跳频方式：FSK  
 7.静态电流：≤50mA  
 8.伺服器倒置开关：有  
 9.电压显示方式：LED  
 10.低电压警告：无  
 11.尺寸：189\*205\*55mm  
 12.重量：560g  
 13.外壳颜色：黑色  
 14.天线长度：14.5cm  
 15.使用范围：直升机  
 16.认证证书：CE,FCC,RoHS

Specification  
 1.channel:4channel  
 2.trainer switch: yes  
 3.trainer port: yes  
 4.Power resource:1.5V\*8  
 AA Battery  
 5.'RF'power:≤3dBm  
 6.Modulation type:FSK  
 7.Static current:≤50mA  
 8.Servo reverser: yes  
 9.Voltage display type: LED  
 10.Low voltage warning: NO  
 11.Size:189\*205\*55mm  
 12.Weight: 560g  
 13.Color:black  
 14.Antenna length: 14.5cm  
 15.Use range: helicopter  
 16.Certificate:CE,FCC,RoHS



伺服器倒置开关:出厂前  
倒置开关已调好,没有  
必要时无须再调动。  
右手是开关:上下上上  
左手是开关:上下上上  
开关已调好,没有必  
要时无须再调动。  
右手是开关:上下上上  
左手是开关:上下上上  
开关已调好,没有必  
要时无须再调动。



LED 指示灯: 灯全亮时说  
明电池电量最多,只亮最  
后一个红灯时说明电量快  
用尽,需马上更换。  
LED indicating light: when all  
the lights are on, it indicates  
the battery is almost full; when only  
one red light is on, it indicates  
that the battery almost used up  
and it needs change immediately.



天线: 使用时天线要  
拉直,以免影响飞行  
距离。

Please extend the  
transmitter antenna  
straight so as not to  
influence the range ability.



电池盒: 注意正负  
级别,切勿装反。  
The battery box: note its  
positive and negative  
polarity. Never assemble it in the  
reverse direction.



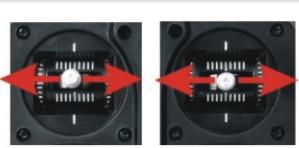
油门微调: 注意在飞行  
时或在调机子时,油门  
微调一定要打与最底。  
Throttle trim: Note that the  
throttle trim must be pushed  
down to the lowest when  
flying or adjusting the plane.



电源开关: 往上按  
打开电源开关。  
Power switch: push it  
upward



升降操纵杆:向上打为  
方向操纵杆;往左方向  
前进,向下打为后退,往  
右方向向右。



副翼操纵杆:向左副翼  
向左倾斜。向右副翼  
向右倾斜。



油门操纵杆:向下打于  
最底油门为零,向上  
打为加速。



教练线接口  
Trainer jack



教练开关  
Trainer switch

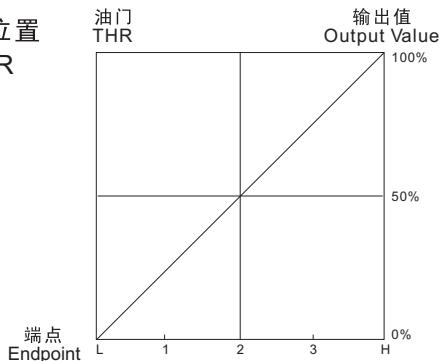
Elevator steering rod: up. Rudder steering rod: turn  
means forward and down left and the direction rod  
means backward.

Aileron steering rod: turn  
left, turn right and the  
aileron leans to the  
right.

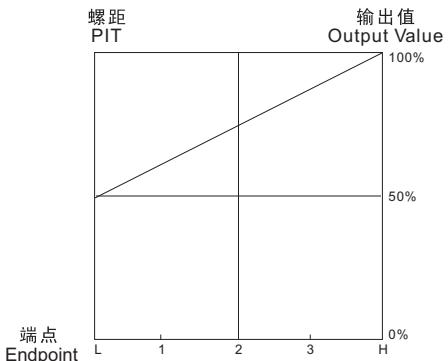
Throttle steering rod:  
when the rod is down, the  
throttle is 0, and pushing it  
up means speed-up.

油门/螺距曲线图  
Throttle/pitch curve diagram

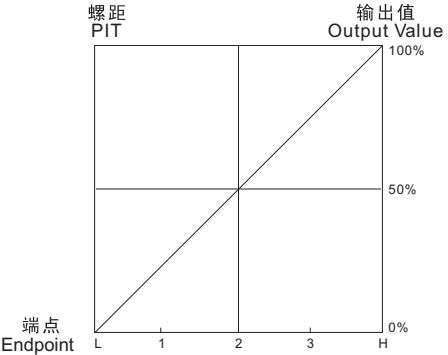
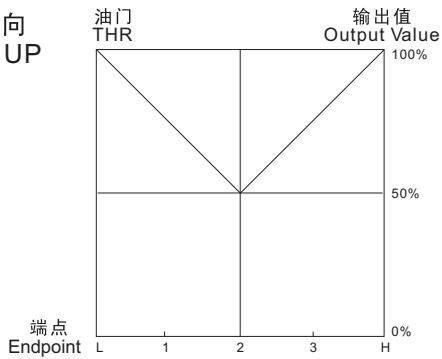
正常位置  
NOR



螺距  
PIT



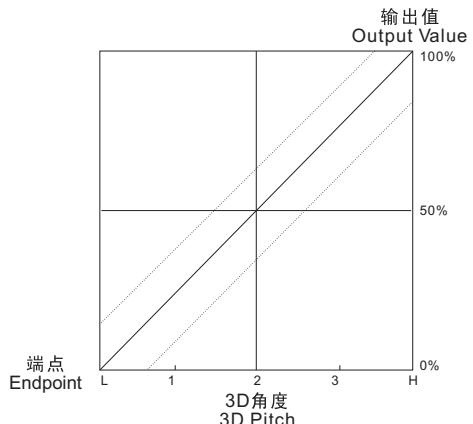
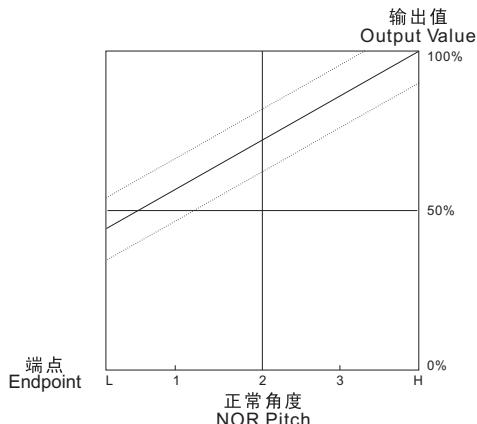
反方向  
IDEF UP



螺距行程直线微调  
Hovering Pitch knob

旋扭是在悬停状态下通过转变曲线的中心点（上或下）来调整主旋翼的旋转速度。

The hovering pitch knob function is to shift the center point of curve either upward or downward to adjust rotor RPM at the hover position.



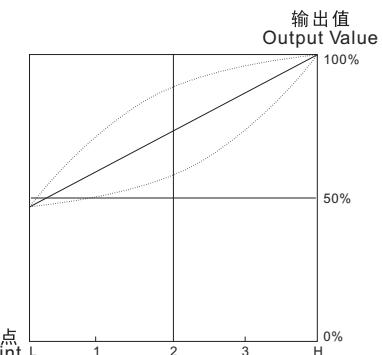
螺距行程曲线微调  
PITCH TRIM KNOB

螺距微调旋扭是对PITCH变换通道的一种调整。首先旋钮打到“0”位置（最小），然后主要是通过上下转变来调整主旋翼的速度。

The pitch trim knob is a trimmer for the pitch channel .This knob should be set to “0”at first ,then adjust the rotor RPM by shifting it upward or downward.

不同的工厂有不同的设置，如果角设置是在正确的情况下，那儿只需要一点小小的调整就可以了。

As the setting of each manufacturer is different ,only small trim adjustment will be required if the pitch curve had set properly.



## 调整程序 Adjustments

在做任何调节之前，请把发射机前面所有的开关调到最小（正常）位置。

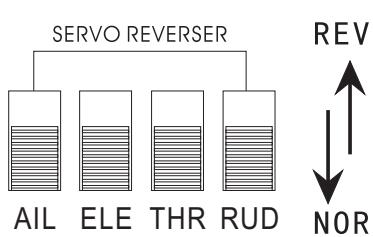
Before any adjustment, please set all the switches in the front of the transmitter to the lowest(normal) position.

打开发射机和接收机电源开关，做下列的调节：

Turn on the power switch of the transmitter and the receiver , then make the following adjustments:

1. 检查每个伺服系统的设置位置，如果伺服器的操作方向错误，请转换它的伺服倒置开关。（不需改变连接，操作方向也会相应改变）

Check the direction of each servo, If a servo operates in the wrong direction, switch its SERVO REVERSR switch (the direction of operation can be changed without changing the linkage.)



通道显示	Channel display
AIL : 副翼 (通道1)	AIL : Aileron(channel 1)
ELE: 升降舵 (通道2)	ELE: Elevator(channel 2)
THR: 油门 (通道3)	THR: Throttle(channel 3)
RUD: 方向舵 (通道4)	RUD: Rudder servo(channel 4)

方向操作显示	Rudder operating display
REV: 反方向	REV: Reverse
NOR: 正	NOR: Normal

2. 同时检查机身控制面的中位位置（副翼，升降舵，方向舵等）如果中位改变，请重新设置和调试，伺服器的摆臂和舵角成90度垂直。

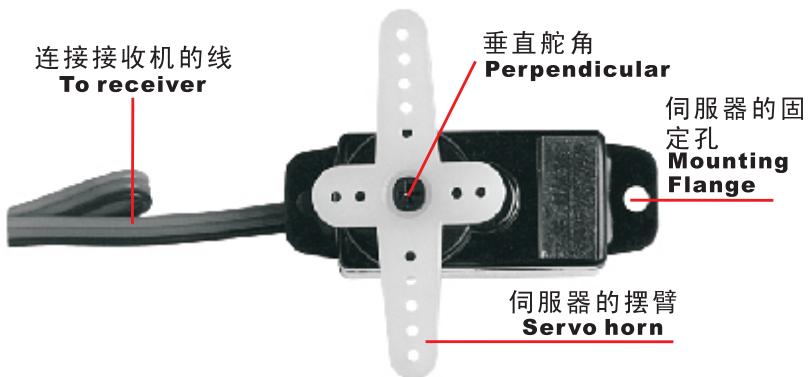
3. 检测机身各个方向的操作是否正常，如果机身上操纵方向不对，请调整发射机上面的舵机反向开关设置（针对6CH发射机）

2.Check the aileron, elevator and rudder neutral adjustment, if the neutral position changed,please reset and readjust it ,make the servo horn to be perpendicular to the servo.

3.Check to see whether the operation of each direction is normal, if not ,please adjust the SERVE REVERSErswitch (For 6CH transmitter ).

4. 最后检测舵机各个方向的行程曲线大小，如行程偏小，请把摆臂拉杆连接往外调，如行程偏大，请把摆臂往内调。

5. 所有的连接都连好后，重新检查操作方向，设置，等等。



4. At last, check the range curve of each servo direction, turn the servo horn rod outward if the range is too small and turn it inward while the range is too large.

5. After finishing all the connections, recheck the operating direction and setting etc.

## ! 电池更换方法 Battery Replacement

将电池的“+”“-”极正确地插入，极性错误时会造成发射机不能使用。

不使用时，请取出电池，万一有液体漏出时，请立即更换电池（作报废处理）

Always be sure that the batteries are loaded in the correct polarity order. If the batteries are loaded incorrectly, the transmitter will be unworkable.

Please take the battery out during the suspended period, please clean it with dry cloth if there is some liquid leaking out from the battery.

### 〈电池警告表示〉 Battery Alarm Display

当发射机电池量指示灯(LED)的绿色灯消失只剩红色或红灯闪烁时，请立即更换电池或对电池进行充电。

When the green lamp of the battery voltage indicator(LED) goes off or the Red LED flashes, please exchange the batteries or charge them immediately.

## 术语表 GLOSSARY

### (副翼) AILERON (Ail)

控制机翼左右两边的操纵杆，它用来控制飞机的转向。

Control surface at the left and right sides the main wing of an aircraft. It usually controls turning of the aircraft.

### (通道) CHANNEL

控制系统的通道表示，也可以叫作伺服器操作的数字表现。

Represents the number of control systems. It can also represent the number of servos that are operated.

### (向下) DOWN

升降舵向下的意思，升降舵向下指示的通道表示。

Means down elevator .it is the direction in which the trailing edge of the elevator is pointing down.

### (升降舵) ELEVATOR (ELE)

控制飞机向下或向上的水平稳定器，用来控制升降。

Control surface that moves up and down the horizontal stabilizer of an aircraft. It usually controls up and down.

### (调制方式) MODULATION METHOD

无线电控制的两种调制方式：AM（调幅）和FM（调频）。飞机的无线电装置通常使用FM。另一种方式是脉冲编码调制数字信号叫“PCM”。

Two modulation methods are used/with radio control : AM (amplitude Modulation) and FM(Frequency Modulation). Radio sets for aircraft mainly use FM. Another Method that encoding and transmitting the modulated signals is called “PCM”

### (空档) NEVTRAL

空档，不运转时发射杆回到中心位置时的状态。

Means the neutral position. It is the state in which a transmitter stick returns to the center when not operated.

### (正常) NORMAL (NOR)

舵机的回转运行，是正常面。其反面是反向。

For the servo reversing function, it is the normal side.the opposite side is the reverse side.

**(平衡器) PROPORTIONAL**

现在的无线电控制操作是平衡杆运动，无线电控制机器就叫平衡器。

Because today's radio control sets control servos in proportion to stick operation, radio control equipment is called proportional.

**(方向舵) RUDDER (RUD)**

操纵尾部控制飞机的方向。

Tail control surface that controls the direction of the aircraft.

**(相反) REVERSE (REV)**

舵机的回转运行，这里用来表示反面，其反面是正常面。

With the servo reversing function ,this is used to mean the reverse side. The opposite side is the normal side.

**(连杆) ROD**

连接舵机和机身控制的结构。

A bar that connects the servos and the fuselage control surfaces.

**(伺服器设置) SERVO MOUNT**

机身的伺服器设置

Fuselage base for installing a servo to the fuselage.

**(操纵杆) STICK**

发射器操作杆。

Rod for operating the transmitter.

**(油门) THROTTLE (THR)**

控制空气气流吸入量和马达- (发动机) 的运转速度。当加大油门时，会吸进大量的气流，速度加快。当减小油门时，则速度降低。

Part that controls the air mixture at the engine intake. When opened(throttle high side ),a large air mixture is sucked in and the engine speed increases. When closed (throttle low side ),the engine speed decreases.

**(教练开关) TRAINER**

教学航空器安全飞行的装置，航行器正确飞行的指导装置。

A device that fine adjusts the neutral point of each servo for safe flying. It is a mechanism that corrects bad tendencies of the aircraft.

**(向上) UP**

升降舵上升，描述升降舵一直升高到最高点。

Means up elevator. Direction in which the trailing edge of the elevator is pointing up.

**The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.**

**NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.**

**If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- Consult the dealer or an experienced radio/TV technician for help.**



公司名称: 深圳市天外飞模型贸易有限公司  
公司地址: 深圳市罗湖区笋岗东路3002号万通大厦

电话: 86-0755-82124391; 86-0755-82124392

传真: 86-0755-82124390

Company name: Shenzhen TWF Hobby Co., Ltd.

Address: Wantong Building, NO.3002, Sungang Rd  
East, Luohu, Shenzhen

Tel: 86-0755-82124391; 86-0755-82124392

Fax: 86-0755-82124390 http:WWW.TWF-SZ.COM

E-mail: TWF@TWF-SZ.COM

销售中心: 深圳市罗湖区梨园路艺展中心B座418

Distribution center: NO.418, B building, Light Industrial Products City, Liyuan Rd, Luohu, Shenzhen