

**SKYARTEC**

# NASA701

**RADIO CONTROL INSTRUCTION MANUAL**

DIGITAL PROPORTIONAL RADIO CONTROL SYSTEM



Radio control communication tool by personal computer

# Catalogue

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## 1.0 前言 Preface

### 1, 重要声明 Important statement

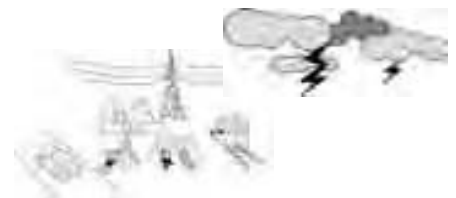
- (1) 本产品适用于有操作模型机经验、年龄不小于14周岁的人群  
This product is suitable for crowd who has rc experience and age not less than 14 years.
- (2) 使用场所必须是当地合法的遥控飞机飞行场地  
Playing place must be lawful for rc planes flying
- (3) 产品一经售出，我们将不負責任何由操作和使用、控制等方面产生的安全责任  
Once product sold, we will not be responsible for any safety responsibilities about operating, using, controlling and so on.
- (4) 如遇使用、操作、维修等问题，我们委托经销商提供技术支持和售后服务，请与当地经销商联系  
If you have problem with useage, operation, maintence and so on, please contact with local distributor for technical support and after service.

### 2, 安全注意事项 Safety announcements

- (1) 远离障碍物及人群 Keep away barrier and people

遥控模型飞行时具有不确定的飞行速度和状态，存在潜在的危險性。飞行时必须远离人群、高层建筑、高压电线等，同时避免在风雨、雷电等恶劣天气下使用，以确保飞行员、周围人群和财产的安全。

When rc models flying, it has uncertain flight speed and status, which has potential dangerous. When playing, make use far away people, high-rise buildings, high-tension busbar, and avoid using under wing and rain, thunder and so on such severe weather, in order to insure pilot、crowd around and property safety.



- (2) 远离潮湿环境 Keep away wet environment

本设备内部是由许多精密的电子元件和机械零件组成，所以必须防止潮湿或水气入机体，以免机械、电子元件故障而引发意外！

This product is formed by many precise electronic components and machine elements, so it must prevent wet or steam entening into the body, in order to aviod accident causing by machinery and electronic components breakdown.



- (3) 正当使用本产品 Rightful using this product

请勿自行改装或者维修；请在产品功能允许的范围内进行操作和使用，且不得用于安全法令之外的其他非法用途。

Please do not refit or repair by oneself. Please operate and use within function allowable and not be used for illegal purposes which out of safety decree.



- (4) 安全操作 Safety operation

请根据自身的状态和飞行技能，操作遥控模型。疲劳、精神不佳或操作不当，将会增加意外风险的概率。

Please operate the rc mode according to your own state and flight skills. Fatigue, poor spirit or improper operation will increase the accident risk probability.



- (5) 远离热源 Keep away from heat

本设备内部是由许多精密的电子元件和机械零件组成，因此要尽量远离热源，防止日晒，避免因高温引起的变形，甚至损坏。

This product is formed by many precise electronic components and machine elements, so it needs to keep away from heat, prevent from exposing to sun, avoid transformation and damage caused by high temperature.



3, 飞行前注意事项 Notice before flight

- (1) 确保遥控器与接收器的电池电量处于饱和状态。  
Make sure transmitter and receiver power enough.
- (2) 开机前确认遥控器的油门摇杆、油门微调处于最低位置。  
Make sure throttle rocker,trim are at the lowest position before boot.
- (3) 开机时必须遵守电源开、关机的顺序。开机时应先开启遥控器电源，再接通飞机电源；关机时应先断开飞机电源，再关闭遥控器。不正确的开关顺序可能会造成模型失控的现象，影响自身与他人的安全。请养成正确的开、关习惯。  
It must to abide the order of turning on and turning off. When boot, it should turn on the transmitter first, then connector battery to the plane; when shutdown, it should disconnect the battery off the plane, then turn off the transmitter. Incorrect orders of turning on or off will cause the plane out of controlling and affect oneself and others's safety. So please do keep a good habit of turning on and turning off.
- (4) 确认伺服器执行遥控指令的方向是否正确、顺畅。使用有故障的伺服器，将导致不可预测的危险。  
Make sure if all servos move normal. Using fauty servo will cause uncertain danger.

2.0 特性 Features

- NASA701特性: NASA701 features:
- 采用2.4GHZ遥控技术，让飞行距离更遥远，遥控性能更稳定  
Adopt 2.4GHZ remote control technology, making more distant and stable remote control performance.
- (1) USB连机程序升级，保持永远是最新程序。  
USB connected programe upgrade, keeping always the newest programe.
  - (2) 可储存12架模型的设定资料。  
12 Models setting documents can be stored.
  - (3) 具备由遥控器调整陀螺感度，方便悬停和花式飞行。  
Gyro sensitivity can be adjusted by radio control, which is convenient for hovering and fancy flying.
  - (4) 超大LCD，显示大字体，设定更直接，更方便  
Huge LCD, display big font, more direct and convenient for setting.
  - (5) 外形设计符合人体工程学，握持方便，舒服  
Shape design is ergonomic, convenient and comfortable to hold.
  - (6) 摇杆可调整长度及松紧度  
The length and tightness of the rocker can be adjusted

- 2, 接收器 Receiver
- (1) 采用2.4Ghz接收灵敏度高，抗干扰能力强。  
Adopt 2.4GHZ receiver with high receiveing sensitivity and anti-interference capability.
  - (2) 有效保证接收信号的稳定  
Effectively guarantee stale receipt signal.
  - (3) 以单片机为中央处理器，具有超强的解析力  
Singlechip is the CPU, which has super resolving power.
  - (4) 在遥控器不关电源时，更换接收器电池后，接收器有频率、ID记忆功能。  
When transmitter power on, after changing the receiver battery, the receiver has frequency, ID memory function.

3.0规格 Specification

遥控器规格 transmitter specification	
编码器-----	7通道微电脑系统7
encoder-----	channel microcomputer system
频率-----	2.4Ghz
frequency-----	2.4Ghz
输出功率-----	≤100mW
output power-----	≤100mW
消耗电流 -----	≤230mA (100mW时)
consume current-----	≤230mA(100Mw hour)
使用电池 -----	5#电池8*1.5v或NIMH 8*1.2V 1600-2000mAh
use battery-----	5#battery 8*1.5v或NIMH 8*1.2V 1600-2000mAh
输出脉冲-----	1000-2000uS (中立点为1500)
output pulse-----	1000-2000uS (neutral point is 1500)



接收器规格	Receiver specification
类型	-----2.4GHz 7通道
type	-----2.4GHz 7ch
灵敏度	----- -105dBm
sensitivity	----- -105dBm
频率间隔	----- ≥4M
Frequency space	----- ≥4M

# Two 遥控器简介 Introduction of the radio control

## 1.0 发射机介绍 NASA 701 Introduction of transmitter NASA 701



## 2.0 Backboard identification 发射机背面介绍



We can' t provide the 8AA dry battery for the radio control. and it doesn' t include in the scope of our products .  
遥控器所动力所需的8节干电池,不包含在产品范围内。

### 3.0 接线图 Wiring diagram

#### SKY706接收机接线图

接收机线位的区分:

- "-" 地线 (或称负线) 接舵机上的黑线;
  - "+" 正极, 接舵机上的红线;
  - "S" 信号线, 接舵机上的白线 (或其它颜色的线)。
- The identification of the receiver wire:  
"- " negative pole, connect to black wire  
"+ " positive pole, connect to red wire  
"S" signal wire, connect to white (or other color) wire

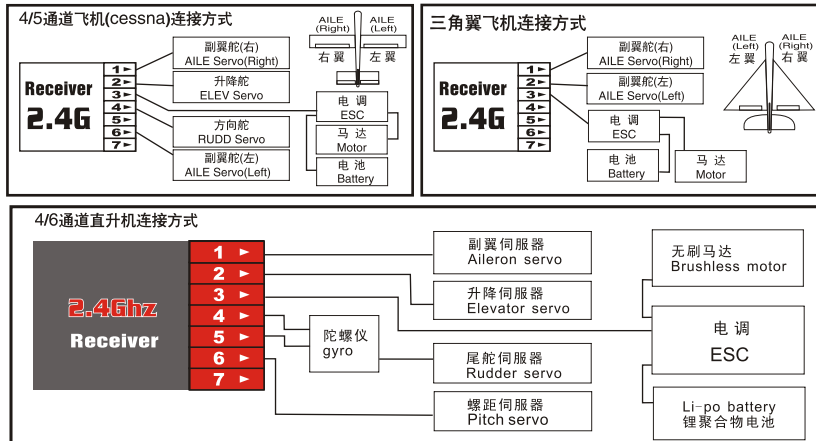


通道名称

Channel name

- |               |                     |
|---------------|---------------------|
| 1 通道: 副翼舵机    | 1CH: Aileron servo  |
| 2 通道: 升降舵机    | 2CH: Elevator servo |
| 3 通道: 电调 (油门) | 3CH: Throttle ESC   |
| 4 通道: 尾翼舵机    | 4CH: Rudder servo   |
| 5 通道: 陀螺仪     | 5CH: Gain           |
| 6 通道: 螺距舵机    | 6CH: Pitch servo    |
| 7 通道: 起落架舵    | 7CH: Gear           |

接收器接线示意图



#### Ap302接收机接线图



The identification of the receiver wire:  
"- " negative pole, connect to black wire  
"+ " positive pole, connect to red wire  
"S" signal wire, connect to white (or other color) wire )

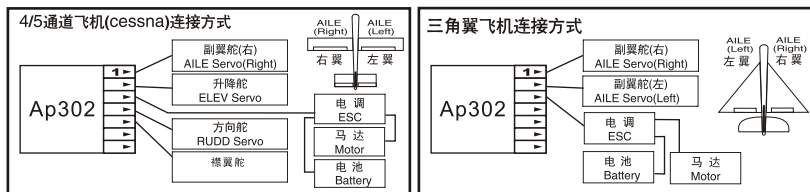
接收机线位的区分:

- " " 地线 (或称负线) 接舵机上的黑线;
- " " 正极, 接舵机上的红线;
- " " 信号线, 接舵机上的白线 (或其它颜色的线)。

Channel name

通道名称

- |                     |               |
|---------------------|---------------|
| 1CH: Aileron servo  | 1 通道: 副翼舵机    |
| 2CH: Elevator servo | 2 通道: 升降舵机    |
| 3CH: Throttle ESC   | 3 通道: 电调 (油门) |
| 4CH: Rudder servo   | 4 通道: 尾翼舵机    |
| 5CH: FLAP           | 5 通道: 襟翼      |
| 6CH: GEAR           | 6 通道: 起落架     |
| 7CH: AUX            | 7 通道: 预留      |



#### SKY-X302V接线示意图



The identification of the receiver wire:  
"- " negative pole, connect to black wire  
"+ " positive pole, connect to red wire  
"S" signal wire, connect to white (or other color) wire

Channel name

通道名称

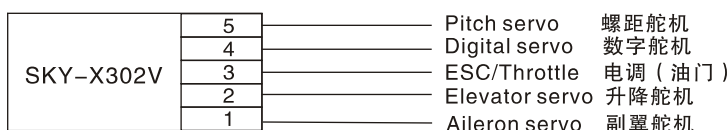
- |                     |               |
|---------------------|---------------|
| 1CH: Aileron servo  | 1 通道: 副翼舵机    |
| 2CH: Elevator servo | 2 通道: 升降舵机    |
| 3CH: ESC/Throttle   | 3 通道: 电调 (油门) |
| 4CH: Digital servo  | 4 通道: 尾数字舵机   |
| 5CH: Pitch servo    | 5 通道: 螺距舵机    |

3D飞行模式时把敏捷度调至最大。  
感度顺时针调大 sensitivity clockwise bigger  
敏捷度顺时针调大 dexterity clockwise bigger

接收机线位的区分:

- "-" 地线 (或称负线) 接舵机上的黑线;
- "+" 正极, 接舵机上的红线;
- "S" 信号线, 接舵机上的白线 (或其它颜色的线)。

SKY706 receiver wiring diagram 接收器接线示意图



## 4.0 面板功能键 Panel function keys

NASA701面板上有四个按键，详细功能如下：

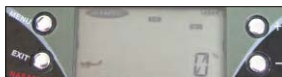
There are four buttons on NASA701 panle, detail function as following: picture 2

**[MENU]**: 确认键，按下可进入系统或功能模式  
Confirmation button, press it can enter into system or function mode

**[EXIT]**: 复位键，按EXIT键保存并退出菜单模式  
Reset button, press EXIT to save and exit menu mode

**[+]**: 增加键，增加设定值  
Increase button, increase set value

**[-]**: 减少键，减少设定值  
Reduce button, reduce set value



## 5.0 遥控摇杆调整 Transmitter rocker adjust

### 5.1 摇杆松紧度调节 Rocker tightness adjust

控制摇杆的调节分两部分：长度调节和松紧度调节。

摇杆长度调节

调长摇杆长度：逆时针旋出手柄头，直到所需要长度，  
在逆时针旋紧手柄套筒即可。

缩短摇杆长度：顺时针旋动手柄套筒，直到所需要长度，  
再顺时针旋紧手柄头即可



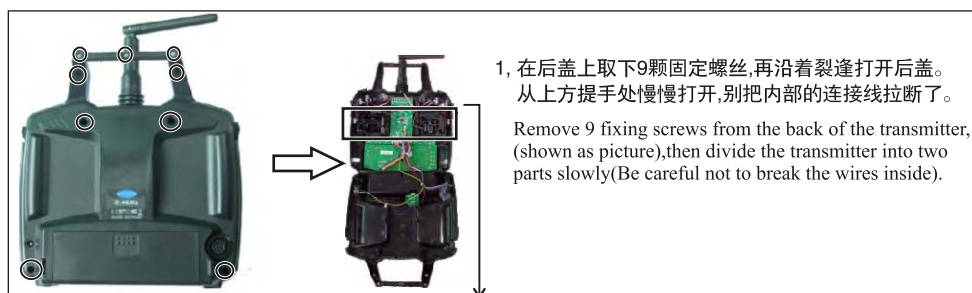
Adjust rocker length long: anticlockwise screw off the handle head, until to the needed length, then anticlockwise screw the handle socket on tightly.

Shorten rocker length: clockwise screw off the handle socket, until to the needed length, then clockwise screw the handle head on tightly.

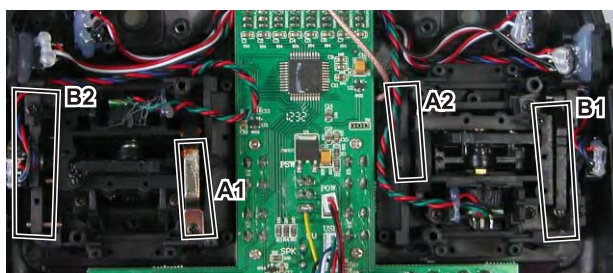
### 5.2 摇杆松紧度调整 Rocker tightness adjust

用螺丝起子直接调整A1处，调整到合适的松紧度。

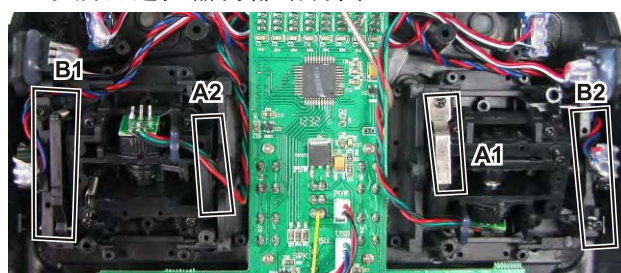
Adjust to A1 place by screw driver, until to the appropriate tightness.



右手油门遥控器内部结构图



左手油门遥控器内部结构图



## 6.0 颈带使用 Neckband usage

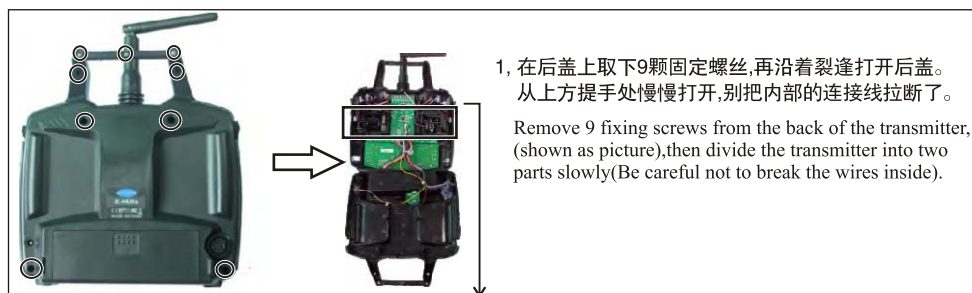
可以将遥控器颈带的挂钩扣在挂扣上，遥控器颈带挂扣位于遥控器中心位，可使遥控器获得最佳的平衡位置  
Put the neckband hook to the hook clasp, the neckband hook is in the centra of the transmitter, which can make the transmitter to the best balance position.

Hook clasp  
挂扣

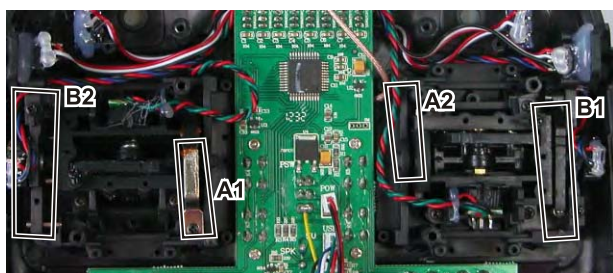




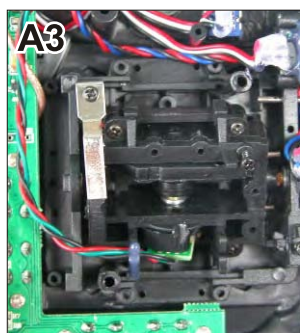
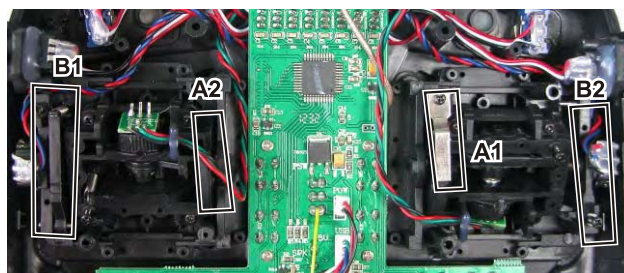
## 7.0 左右手油门切换: Left and right throttle switch



右手油门遥控器内部结构图

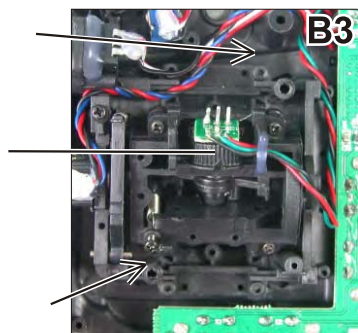


左手油门遥控器内部结构图



2, 取出A1处的螺丝和金属片,装入A2处,装好后如图A3。

Take out the screw at the A1 position and the sheet metal,then install them into the A2 position.at last,it's shown as the figure A3.

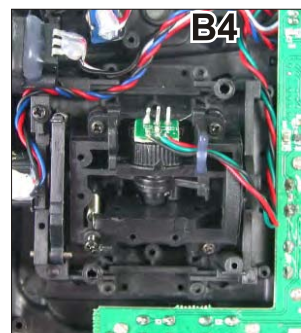


3, 取出B1处的伸缩弹簧和塑胶片,按照B3图所指示装入B2处,装好后如图B4。

备注: 在B1处取伸缩弹簧和塑胶片时,要注意观察看清楚它们是怎么固定连接的,便于装向B2处时不出错。

Take out the throttle arresting spring and plastic at the B1 position, according to the figure B3,then install the them to the corresponding position B2.As shown in the figure B4.

**Remark:**When you take out the throttle attesting spring and plastic, should look carefully how to connect them.so that you can mount them correctly.



## 模式更改, 左右手更改 Mode change, Left and right hand change



设定MODE 按"MENU"键开机  
Set MODE press"MENU"to boot



选择"STCK MOD" "1" 为右手油门  
Choose"STCK MOD" "1" to right hand throttle



选择"2" 为左手油门  
Choose"2" to left hand throttle