

Digital proportional radio control system **RED 13**

7. Transmitter specifications 发射机参数

Transmitter specifications:

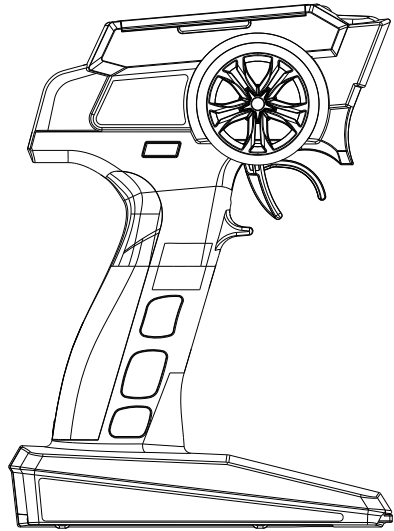
Channels: 2
Model type: car/boat
RF range: 2.405-2.475GHz
Bandwidth: 500KHz
Band: 142
RF power: less than 18 dBm
2.4G system: AFHDS 2A and AFHDS
Code type: GFSK
Sensitivity: 1024
Low voltage warning: less than 4.2V
DSC port: Micro-USB PPM
ST range: 70 L: 35 R: 35
TH range: 45 F: 35 B: 15
Charger port: no
ANT length: 26mm
Weight: 323g
Power: 6V DC 1.5AA*4
Display mode: LED indicator
Size: 150*80*196mm
Color: black

机种参数

通道个数: 2
适合机种: 车/船
频率范围: 2.405-2.475GHz
波段宽度: 500KHz
波段个数: 142个
发射机功率: 不高于18dBm
2.4G模式: 第二代增强版自动跳频数字系统(含第一代系统)
编码方式: GFSK
通道分辨率: 1024级
低电压报警: 低于4.2V时
数据输出: Micro-USB PPM
方向盘转动角度: 45度(前35度, 后15度)
充电接口: 无
天线长度: 26毫米
机身重量: 323克
输入电源: 6V DC 1.5AA*4
显示方式: LED指示灯
外形尺寸: 150*80*196毫米
外观颜色: 黑色



MODELS: RED 13



8. Receiver specifications 接收机参数



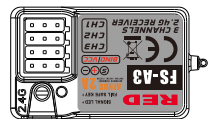
MODEL: FS-A3

SPECIFICATIONS :

Channels: 3
Model type: car/boat
RF range: 2.405-2.475GHz
Bandwidth: 500KHz
Band sum: 142
RF.receiver sensitivity: -105dBm
2.4G system: AFHDS 2A
Code type: GFSK
Sensitivity: 1024
Power: 4.0-6.5V DC
ANT length: 26mm
Weight: 5g
Size: 35*22*12mm
Color: black
Certificate: CE FCC

机种参数:

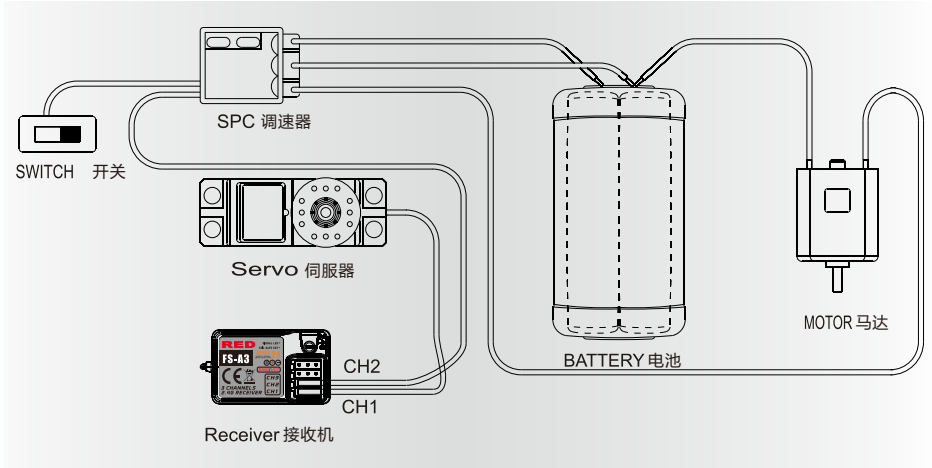
通道个数: 3
适合机种: 车/船
频率范围: 2.405-2.475GHz
波段宽度: 500KHz
波段个数: 142个
接收灵敏度: -105dBm
2.4G模式: 第二代增强版自动跳频数字系统
编码方式: GFSK
通道分辨率: 1024级
输入电源: 4.0-6.5V DC
天线长度: 26毫米
机身重量: 5克
外形尺寸: 35*22*12毫米
外观颜色: 黑色
认证: CE FCC



9. Receiver and servo connections 接收机与伺服器连接

9.01. Installation when a motor controller is used

带马达模型的安装连接



Remark: Place the receiver antenna upright and perpendicular to the horizontal plane
Keep the receiver antenna away from any metal objects to ensure max sensitivity. (See pic1)



注：在安装接收机时请将接收机天线与水平面垂直放置！且天线尽可能不要靠近金属物！因为这样接收灵敏度最高。（如图1）

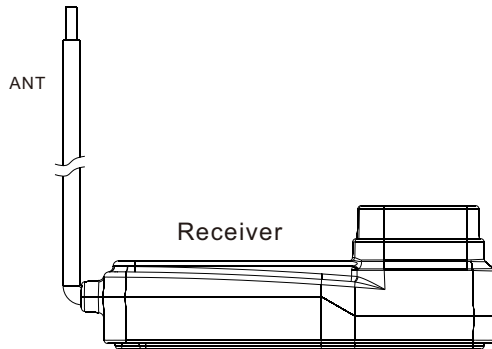
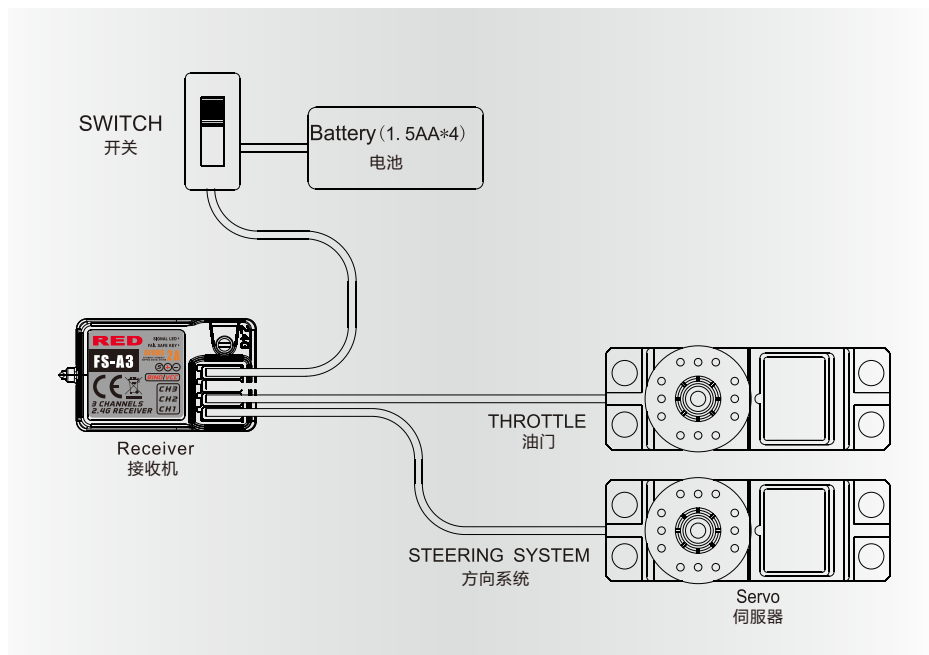


Figure1 (图1)

Digital proportional radio control system **RED 13**

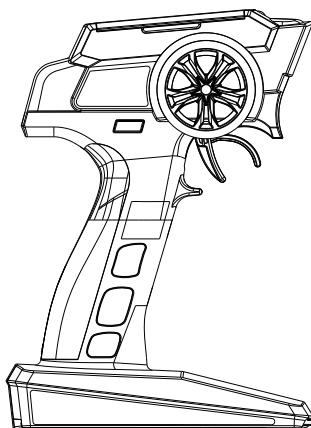
9. 02. Installation for gas powered models 发动机模型的安装



9. 03. Suggestions for RX fail safe setting. 接收机防失控设置建议

接收机防失控设置建议

- ① 设定在扣机的中间，适合电车使用。
- ② 设定在刹车位置，适合油车使用。
- ① It is set in the middle of the trigger, which fits the electric vehicle.
- ② It is set in brake, which fits the gas vehicle.



10. 2.4GHz Operation notes 2.4G操作注意事项

10.01. Matching(code)/Binding 对码

All receivers are already paired with their respective transmitter during production. If you wish to bind it with another transmitter, please follow the instructions below.

Remark: FS - brand system are not compatible with other brands

Steps:

1. Ensure you are using AFHDS2A system
2. Correctly install the battery inside 2.4G transmitter w/o powering it on.
3. Insert the binding plug into the BIND channel slot on the receiver. (Figure.1).
4. Using a correct receiver battery pack, plug it in to VCC channel slot on the receiver. At this time, the LED on receiver should flash, indicating receiver has entered bind status.
5. Press and hold the binding button on transmitter, and then switch on the transmitter.
6. Observe the LED light on the receiver. If LED stops flashing, and stays lit permanently, the binding procedure is completed. (This process takes approximately 5S.)
7. Release hold the binding button on the transmitter, and unplug the bind cable.
8. Install the servos to test.
9. If the system does not work properly, repeat the procedure.
(The above binding instruction is only suitable for any FLYSKY 2.4G products)

我们的产品出厂前已经过配对，您无需做配对动作便可使用。但如果您要将接收机跟另外的发射机进行配对使用，或者您要更换新的接收机或者发射机，请您按如下的步骤进行：

注：我们的接收发射系统。不跟其它品牌兼容！

1. 确保发射机为AFHDS2A系统
2. 将2.4G发射机装好电池，并关闭发射机。
3. 将配对线插入接收机的BIND通道接口（如图1）
4. 将接收机电池插入接收机的VCC通道接口，此时可看到接收机的LED在闪烁，此表示接收机进入配对状态。
5. 将发射机上的配对键（BIND）按住，然后打开发射机电源开关。（注：不要松开按键）。
6. 观察接收机上的LED，如果发现LED不再闪烁表示配对成功。（注：此过程大约时间为5S左右）。
7. 松开发射机上的配对按键，拔掉接收机上的配对线。
8. 将伺服器装上并通电测试
9. 如果测试NG，则重复以上动作

注：以上配对方法，仅适合于FLYSKY的2.4G产品。

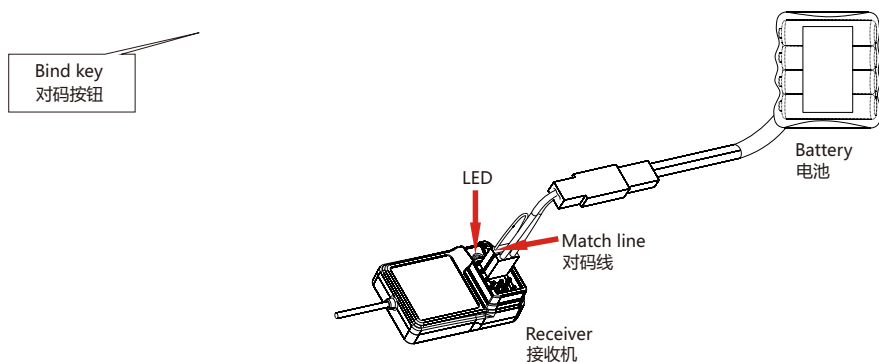


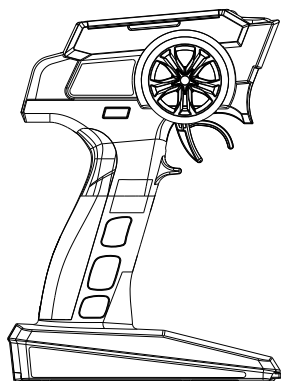
Figure1(图1)

Digital proportional radio control system **RED 13**

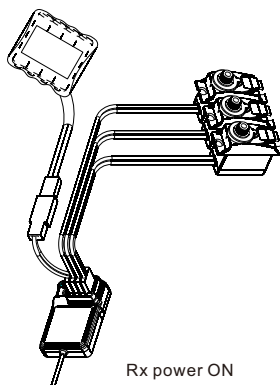
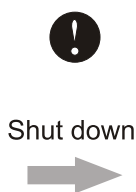
10.02 Power on 开机

- A. Connect every part.
- B. Switch on the power supply of the transmitter.
- C. Connect the power supply of the receiver.
- D. Receive LED light solid.
- E. Finish and use.

1. 将各部件链接好；
2. 打开发射机电源开关；
3. 连通接收机电源；
4. 接收机LED恒亮；
5. 使用。



Tx power ON

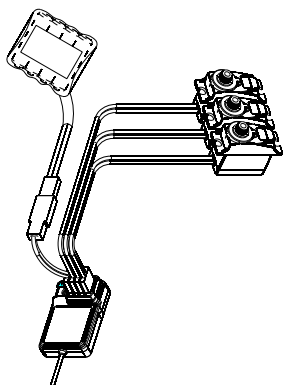


Rx power ON

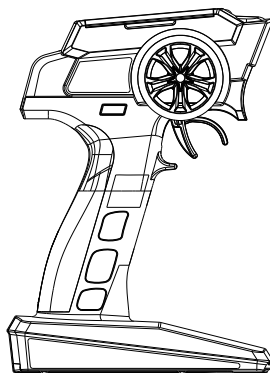
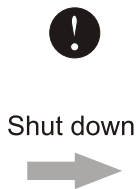
10.3 Shut down 关机

- A. Connect every part.
- B. Cut off the transmitter power supply.

1. 关闭接收机的电源；
2. 关闭发射机的电源。



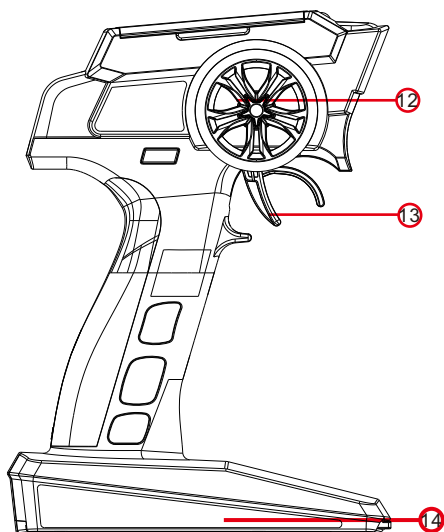
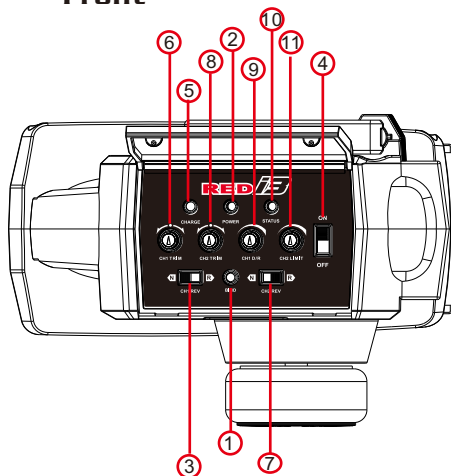
Rx power off



Tx power off

11. each part of the transmitter 发射机部件

Front



① 对码键 BIND Key

② 电源指示灯 POWER LED

③ Ch1倒置开关 CH1 REV

④ 电源开关 POWER ON/OFF

⑤ 充电指示灯 LED

⑥ Ch1 中位微调 CH1 TRIM

⑦ Ch2 倒置开关 CH2 REV

⑧ Ch2 中位微调 CH2 TRIM

⑨ Ch1通道比例微调 CH1 D/R

⑩ 工作指示灯 POWER CHECK

⑪ Ch2比例微调 CH2,M,P

⑫ 方向调轮 STEERING WHEEL

⑬ 油门扳机 THROTTLE TRIGGER

⑭ 电池盒 BAT BOX

油门比例微调 TH,M,P

On some model, the travel of the throttle is not equal to the travel of the brakes. This function sets the position of the middle point between the throttle and the brakes. Throttle proportion can be set from 5:5 to 7:3 when mechanical angle of the radio is not modified.

一些模型的油门的行程同刹车的行程是不对等的，此功能设置油门和刹车的中位位置。在没修改遥控器机械角度的情况下，修改扣机油门前进和倒退的比例。设定的范围是5:5至7:3。

13. Fail safefunction

接收机操作说明

13.01 Failsafe Instruction

失控保护功能说明

FAIL SAFE FUNCTION

1.Function

Failsafe aims to prevent out-of-control driving of RC car or RC boat. If the Receiver is not able to receive any signal, from the control to throttle, the parameter of throttle on receiver will turn back to its original setting.

2. Setting

- Turn on the Transmitter switch;
- Turn on the Receiver switch. the LED will be lighting;
- Adjust Transmitter's Throttle, make the car/boat to stop or flameout, then keep still.
- Press the "Setting" button on Receiver (as the pic below). the LED will be flashing, then stop after 3 seconds around, which means setting finished.

3. Testing

- Turn on the Transmitter switch;
- Turn on the Receiver switch;
- Turn off the transmitter switch;
- Servo of throttle will turn back to its original setting automatically;
- Setting is successful if above procedures finished completely.

1.功能说明

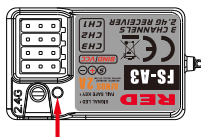
失控保护功能是对模型车或船进行失控保护，避免因失控造成损失。主要是对油门通道进行控制，当接收机接收不到控制信号时，接收机的油门通道将自运行到当初设定的值，以免误动作。

2.设定方法

- 将发射机接通电源进入工作状态。
- 将接收机接通电源进入工作状态，此时信号灯恒亮。
- 控制发射机的油门通道，使油门控制伺服器或调速器进入刹车或熄火状态，然后保持不动。
- 此时将接收机的设定键（如图按下），此时接收机LED信号灯会闪烁，并在3秒左右停止。
- 设定完成

3.测试

- 将发射机打开进入工作状态。
- 将接收机接通电源进入工作状态。
- 将发射机关闭电源。
- 此时可看到油门通道的伺服器便会自动进入设定状态的位置
- 以上动作如果可以完成表示设定OK



FCC Statement

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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.