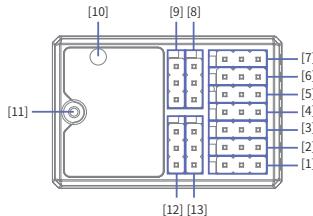


产品介绍 Introduction

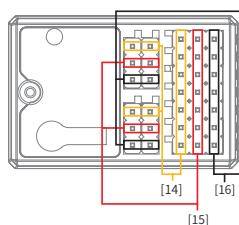
FS-FMS-R11D-BS 采用 2A-BS 协议，是一款带 LED 灯组控制的 11 通道接收机。它具有外置单天线，支持双向传输，采用通电自动对码技术，可输出 PWM 信号和车灯控制信号，搭配车灯驱动板使用，可适配多种车型使用。

The FS-FMS-R11D-BS adopts the 2A-BS protocol and is an 11-channel receiver with LED light group control functionality. It features an external single antenna, supports two-way transmission, and uses power-on automatic binding technology. It can output PWM signals and LED light control signals, and can be used with an LED light unit. It is compatible with a variety of RC cars.

接收机概览 Overview



- [1] CH1 通道接口
- [2] CH2 通道接口
- [3] CH3 通道接口
- [4] CH4 通道接口
- [5] 车灯扩展接口
- [6] CH6 通道接口
- [7] CH7 通道接口
- [8] CH10 通道接口
- [9] CH11 通道接口
- [10] LED 指示灯
- [11] 天线
- [12] CH9 通道接口
- [13] CH8 通道接口
- [14] S (通道 / 车灯扩展接口信号端)
- [15] "+" (通道 / 车灯扩展接口正极)
- [16] "-" (通道 / 车灯扩展接口负极)



- [1] CH1
- [2] CH2
- [3] CH3
- [4] CH4
- [5] LED Light Expansion Interface
- [6] CH6
- [7] CH7
- [8] CH10
- [9] CH11
- [10] LED
- [11] Antenna
- [12] CH9
- [13] CH8
- [14] S (Signal Pin of LED Light Expansion/CH Interface)
- [15] "+" (Anode of LED Light Expansion/CH Interface)
- [16] "-" (Cathode of LED Light Expansion/CH Interface)

注：车灯扩展接口用于连接 DB01 车灯驱动板。

Note: The LED Light Expansion Connector is used to connect the DB01 LED light unit.

产品规格 Specifications

- 产品型号: FS-FMS-R11D-BS
- 适配发射机: FS-FMS-MG11-BS
- 适配模型: 车
- 通道个数: 11
- 车灯组数: 6 (车灯扩展接口连接 DB01 车灯驱动板)
- 无线频率: 2.4GHz ISM
- 发射功率: <20dBm
- 天线类型: 外置单天线 (同轴)
- 遥控距离: >150 米 (空旷无干扰地面距离)
- 无线协议: 2A-BS
- 通道分辨率: 4096 级
- 数据输出: PWM
- 工作电压: 3.5 ~ 8.4V/DC
- 固件更新: 不支持
- 温度范围: -10°C ~ +60°C
- 湿度范围: 20% ~ 95%
- 防水等级: PPX4
- 外形尺寸: 35.0*23.3*13.3mm
- 机身重量: 8g
- 认证: CE, FCC ID: 2A2UNR11P01

- Product Model: FS-FMS-R11D-BS
- Compatible Transmitters: FS-FMS-MG11-BS
- Compatible RC Models: Cars
- Number of Channels: 11
- Number of LED Lights: 6 (The LED Light expansion connector connects to the DB01 LED light unit.)
- RF: 2.4GHz ISM
- Maximum Power: <20dBm (e.i.r.p.) (EU)
- Antenna: Single External Antenna (coaxial)
- Distance: More than 150m (Ground Distance without Interference)
- RF Protocol: 2A-BS
- Resolution: 4096
- Data Output: PWM
- Operating Voltage: 3.5 ~ 8.4V/DC
- Firmware Update: Not Supported
- Temperature Range: -10°C ~ +60°C
- Humidity Range: 20% ~ 95%
- Waterproof: PPX4
- Dimensions: 35.0mm*23.3mm*13.3mm
- Weight: 8g
- Certifications: CE, FCC ID: 2A2UNR11P01

对码 Binding

本款接收机支持双向对码，通电自动进入对码状态：

- 接收机上电即进入等待连接状态，等待与已对码的发射机建立通信；
- 若 2 秒未与已对码的发射机建立通信，则自动进入对码状态，此状态持续 10 秒；
- 若与发射机对码成功，即进入正常通信状态；否则退出对码状态，回到等待连接状态。

注：对码时，接收机 LED 灯快闪；等待连接时，接收机 LED 灯慢闪；正常通信时，接收机 LED 灯常亮。

对码 Binding

对码步骤如下：

1. 将发射机进入对码状态；
2. 接收机通电等待 2 秒没有连接后自动进入对码状态，此时接收机 LED 灯快闪；
3. 对码成功后，接收机 LED 灯常亮；
4. 检查发射机、接收机是否正常工作。如需重新对码，请重复以上步骤。

注：对码时请先将发射机进入对码状态，再将接收机进入对码状态，若 10 秒内对码没有完成，接收机 LED 灯进入慢闪状态。

This receiver is compatible with two-way binding, and is to automatically enter the binding mode upon power-on.

- The receiver will enter the waiting-for-connection status upon power-on, waiting for the connection to the bound transmitter.
- If the receiver does not connect the bound transmitter within 2 seconds, it will automatically enter the binding state. This state lasts for 10 seconds.
- If the binding with the transmitter is successful, it will enter the normal communication status, otherwise, it will exit the binding state and return to the waiting-for-connection status.

Note: In case of binding, the receiver LED flashes quickly. In case of waiting-for-connection, the receiver LED flashes slowly. In case of normal communication, the receiver LED is solid on.

The binding steps are as below.

1. Put the transmitter into binding mode.
2. Turn on the receiver, and it will wait 2 seconds for connection. If without connection, the receiver will enter the binding mode automatically. At this time, the receiver LED will be flashing fast.
3. After the binding is successful, the receiver LED is solid on.
4. Verify that the transmitter and receiver are working properly. If you need to re-bind, repeat the above steps.

Note: Set the transmitter to its binding state first, and then set the receiver to its binding status. If the binding is not finished within 10 seconds, the receiver LED will enter a slow flashing status.

车灯控制 LED Lights Control

本接收机支持 6 组车灯：左转灯、右转灯、日行灯、前大灯、刹车灯和倒车灯（此 6 组车灯通过 DB01 车灯驱动板与本接收机建立连接）。

车灯状态由 FS-FMS-MG11-BS 发射机的相应控件控制：

日行灯 / 前大灯：亮灭状态由 CH5 旋钮控制；

刹车灯 / 倒车灯：亮灭状态由扳机控制；

左转灯 / 右转灯：默认转向灯功能为开启状态，旋转手轮即可触发左右转向灯。在正常通信情况下，可顺时针旋转手轮至最大位置，然后同时短按 CH4 按键，以关闭转向灯功能。继续短按 CH4 按键，可开启或关闭转向灯功能。转向灯功能开启后，左转灯和右转灯的亮灭状态由手轮控制。关机时，系统会保存当前的设置。再次开机时，转向灯状态将与上次关机时保持一致。

具体如下所述：

| 车灯 | 车灯状态 | 控制状态 | 控件 | 触发条件 | 备注 |
|-----|------|------|--------|------------|---|
| 左转灯 | 慢闪 | 左转 | 手轮 | 逆时针打手轮 | / |
| 右转灯 | 慢闪 | 右转 | 手轮 | 顺时针打手轮 | |
| 日行灯 | 常灭 | / | CH5 旋钮 | CH5 旋钮位于左侧 |  |
| | 常亮 | | | CH5 旋钮位于中间 | |
| | 常亮 | | | CH5 旋钮位于右侧 | |
| 前大灯 | 常灭 | / | CH5 旋钮 | 触发条件同日行灯 |  |
| | 常灭 | | | | |
| | 常亮 | | | | |
| 刹车灯 | 常亮 | 刹车 | 扳机 | 前推扳机 | 当电调运行模式设置为正转 / 反转模式时（无刹车），前推扳机刹车灯不亮。 |
| 倒车灯 | 常亮 | 倒车 | 扳机 | 前推扳机 | / |

注：

1. 接收机开机后，所有车灯长亮 1 秒后灭；
2. 方向通道（CH1）和油门通道（CH2）具有自动识别中位的功能，当调过微调后，需重新给接收机上电以完成中位自动识别；
3. 方向通道设置反向后对左、右转向灯控制无影响。通道 5 设置反向后对日行灯和前大灯控制无影响。

This receiver features six sets of LED lights: Turn signal left light, turn signal right light, daytime running light, headlight, brake light and reverse light. And these six sets of LED lights are connected to this receiver through the DB01 LED light unit.

The status of all the LED lights is controlled by the corresponding controls of the FS-FMS-MG11-BS transmitter.

The daytime running light and headlight are controlled by the CH5 knob.

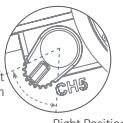
The brake and reverse lights are controlled by the throttle trigger.

The turn signal function (left and right) is enabled by default. Rotating the steering wheel will activate the corresponding left or right turn signal. Under normal communication conditions, the turn signal function can be disabled by rotating the steering wheel fully clockwise while shortly pressing the CH4 button. Pressing the CH4 button again toggles the function between

车灯控制 LED Lights Control

enabled and disabled states. When the turn signal function is enabled, the on/off state of the left and right turn signals is controlled by the steering wheel. The current setting is saved automatically upon power-off. When powered on again, the turn signal state will be restored to its pre-shutdown status.

Details are as follows:

| LED Lights | LED Light Status | Control State | Control | Trigger Condition | Notes |
|-------------------------|------------------|---------------|----------------|---|--|
| Turn Signal Left Light | Slow Flashing | Turn Left | Steering Wheel | Turn the steering wheel counterclockwise. | / |
| Turn Signal Right Light | Slow Flashing | Turn Right | | Turn the steering wheel clockwise. | |
| Daytime Running Light | OFF | / | CH5 Knob | Toggle the CH5 Knob is to the far left. |  |
| | Solid ON | | | Toggle the CH5 Knob to the middle position. | |
| | Solid ON | | | Toggle the CH5 Knob to the far right. | |
| Headlight | OFF | / | CH5 Knob | Same as the DRL above | |
| | OFF | | | | |
| | Solid ON | | | | |
| Brake Light | Solid ON | Brake | Trigger | Push the throttle trigger forward. | When the running mode of ESC is set to Forward/Reverse mode (no brake), the Brake Light will not on when pushing the throttle trigger forward. |
| Reverse Light | Solid ON | Back up | Trigger | Push the throttle trigger forward. | / |

Notes:

- After the receiver is turned on, all the LED lights will be on for one second and then go out.
- The steering channel (CH1) and throttle channel (CH2) are capable of automatic neutral identifying, after the trim is adjusted, the receiver should be powered again to recognize the neutral positions of these two channels automatically.
- If you have set the steering channel in reverse, the trigger condition for turn signal left light and turn signal right light will not be affected. And if you have set the CH5 in reverse, the trigger condition for daytime running lights and headlights will not be affected.

失控保护 Failsafe

失控保护功能用于当接收机无法正常收到发射机的信号不受控制时，保护模型和操作人员的安全。

- 默认未设置。失控后，无论是否设置 CH2 始终无输出，接收机其他通道保持最后输出。若其他通道已在发射机端设置，则按照设置值输出。
- 左、右车灯同步慢闪提示。

The failsafe function is used when radio signal connection is lost between the transmitter and receiver. The receiver performs channel output according to the set failsafe value to protect the safety of the model and personnel.

- It is not set by default. After out-of-control, no matter whether the CH2 is set or not, there will be always no output, and the other channels will maintain the last output. If the other channels have been set at the transmitter side, it will output according to the set value.
- The turn signal left and right lights will flash slowly and simultaneously.

注意事项:

- 使用前必须确保本产品与模型安装正确，否则可能导致模型发生严重损坏。
- 为了一切正常，请养成先开发射机再接收机通电以及先接收机断电再关闭发射机的习惯。
- 确保接收机安装在远离电机或电子噪声过多的区域。
- 接收机天线需远离导电材料，例如金属棒和碳物质。为了避免影响正常工作，请确保接收机天线和导电材料之间至少有1厘米以上的距离。
- 准备过程中，请勿连接接收机电源，避免造成不必要的损失。

Attention:

- Make sure the product is installed and calibrated correctly, failure to do so may result in serious injury.
- Normally, you must power on the transmitter and then receiver, and power off the receiver and then the transmitter.
- Make sure the receiver is mounted away from motors, electronic speed controllers or any device that emits excessive electrical noise.
- Keep the receiver's antenna at least 1cm away from conductive materials such as carbon or metal.
- Do not power on the receiver during the setup process to prevent loss of control.

认证相关 Certifications

FCC Compliance Statement

This device 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.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

EU DoC Declaration

Hereby, [ShenZhen FLYSKY Technology Co., Ltd.] declares that the Radio Equipment [FS-FMS-R11D-BS] is in compliance with RED 2014/53/EU.

The full text of the EU DoC is available at the following internet address: www.flyskytech.com/info_detail/10.html

RF Exposure Compliance

This equipment complies with FCC/ISED RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Environmentally friendly disposal

Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.



FCC ID: 2A2UNR11P01



微信公众号



Bilibili



Website



Facebook

Manufacturer: ShenZhen FLYSKY Technology Co., Ltd.

Address: 16F, Huafeng Building, No. 6006 Shennan Road, Futian District, Shenzhen, Guangdong, China

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Figures and illustrations in this manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.