

# R8SM

(FHSS)



## INSTRUCTION MANUAL

Thanks for purchasing RadioLink 8-channel receiver R8SM.

To fully enjoy the benefits of this product and ensure safety, please read the introduction carefully and set up the device as instructed steps.

If any problems found during the operation process, please kindly refer to the manual first. Then you could contact our distributors to find solution or follow our Facebook homepage <https://www.facebook.com/radiolinkofficial> to search related key words. Also you can send your questions to [after\\_service@radiolink.com.cn](mailto:after_service@radiolink.com.cn) or [after\\_service1@radiolink.com.cn](mailto:after_service1@radiolink.com.cn) and we will answer your question at the earliest.

Due to unforeseen changes in production procedures, the information contained in this manual is subject to change without notice.

For more information please check our website <http://www.radiolink.com> and follow our Facebook and YouTube homepage.



## SAFETY PRECAUTIONS

- Never operate your model during adverse weather conditions. Poor visibility can cause disorientation and loss of control of your model.
- Never use this product in a crowd and illegal area.
- Always ensure the trim levers at 0 and battery properly charged before connecting the receiver.
- Always check all servos and their connections prior to each run.
- Always be sure about turning off the receiver before the transmitter.

## WARNING

This product is not a toy and is **NOT** suitable for children under the age of 14. Adults should keep the product out of the reach of children and exercise caution when operating this product in the presence of children.

Water or moisture may enter the transmitter inside through gaps in the antenna or joystick and cause model instability, even out of control. If running in the wet weather (such as game) is inevitable, always use plastic bags or waterproof cloth to cover the transmitter.

## 1. R8SM Introduction

RadioLink R8SM is a 2.4G 8 channels receiver with weight of 1.5g(0.05oz) and dimension of 18x13mm(0.71"x0.51"), supporting signal output of PPM and SBUS and is compatible with RadioLink transmitter T8FB/T8S.



## 2. Binding

Each receiver has an individual ID code and must bind with transmitter before using. When the binding is done, the ID code will be stored in the transmitter and there's no need to rebind. Therefore, when a new R8SM is purchased, binding needs to be done in order to work with transmitter.

### Binding steps

1. Put the transmitter and the receiver close to each other (about 50 centimeters) and power both on.
2. Switch on the transmitter and the RED led on R8SM will start flashing slowly.
3. There is a black binding button(ID SET) on the side of receiver. Press the button for more than 1 second and release, the RED led will flash quickly, meaning binding process is ongoing.
4. When the RED led stops flashing and is always on, binding is complete. If not succeed, repeat the above steps.

## 3. Working Modes

### *Two signal working modes*

Blue/purple LED, S-BUS signal, 8 channels totally.

Red LED, PPM signal, 8 channels totally

### *S-BUS and PPM signal change*

Quick press the ID SET switch twice within 1 second, the signal is changed from S-BUS to PPM.

The red LED indicates the PPM and blue/purple indicates S-BUS.

#### **4. R8SM Specifications**

- 1) Frequency: 2.4GHz ISM band(2400MHz~2483.5MHz)
- 2) Dimension: 18x13mm(0.71"x0.51")
- 3) Weight: 1.5g(0.05oz)
- 4) Channel Qty: : 8 channels
- 5) Signal Output: PPM/SBUS
- 6) Model Application: Car/Boat/Fixed Wing/Glider/Multirotor
- 7) Encode: FHSS 67-channel pseudo random frequency hopping
- 8) Antenna Length: 200mm
- 9) Voltage Range: 4.8-6V
- 10) Channel Resolution: 4096
- 11) Operating Current: 30mA ( Depending on power supply)
- 12) Control Distance: 2000 meters(6562ft) in the air

#### **5. Note of Antenna Installation**

In order to maximize the signal transmission, it's greatly advised that

1. Keep antennas as straight as possible, or the effective control range will reduce.
2. Big models may contain metal parts that influence signal emission. In this case. antennas should be positioned at both sides of the model to ensure the best signal status in all circumstances.
3. Antennas should be kept away from metal conductor and carbon fiber at least half inch away and no over bending.
4. Keep antennas away from motor, ESC or other possible interference sources.
5. Sponge or foam material is advised to use to prevent vibration when installing receiver.
6. Receiver contains some electronic components of high-precision. Be careful to avoid strong vibration and high temperature.
7. Special vibration-proof material for R/C like foam or rubber cloth is used to pack to protect receiver. Keeping the receiver in a well sealed plastic bag can avoid humidity and dust, which would possibly make the receiver out of control.

When all the above steps are complete, please turn off the transmitter and repower on to test if the receiver is correctly bind with it.

**Thank you again for choosing RadioLink product.**