R8XM

(FHSS)

INSTRUCTION MANUAL

Compatible Transmitters: T8FB(BT)/T8S(BT)/T8FB(OTG)/T8S(OTG)/RC6GS V3/RC6GS V2/RC6GS/RC4GS V3/RC4GS V2/RC4GS
(must work with flight controller)

Thanks for purchasing RadioLink 8-channel receiver R8XM.

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 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

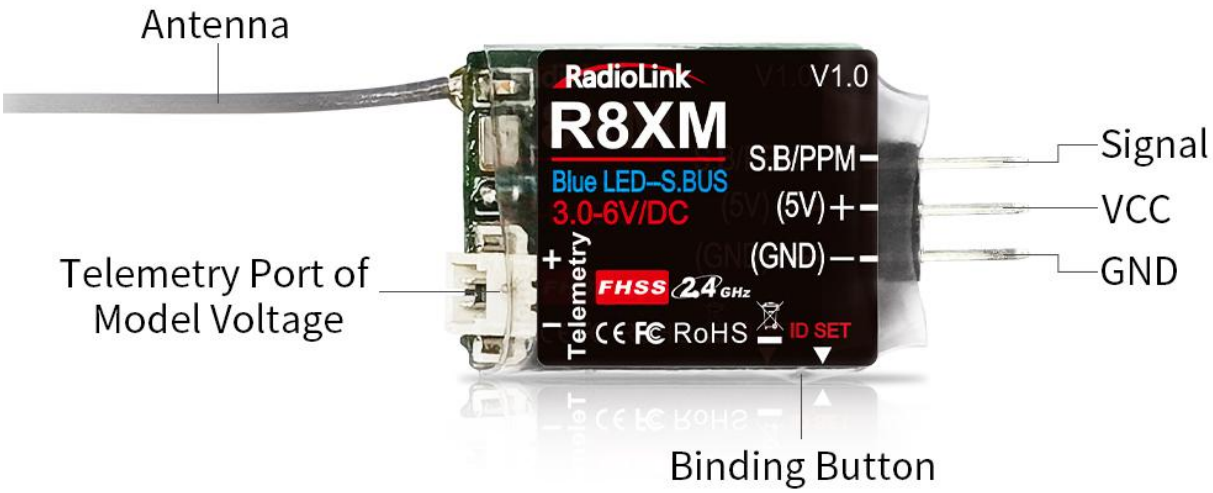
This product is not a toy and is **NOT** suitable for children under the age of 14. Adults should keep the product out of the reach of children and exercise caution when operating this product in the presence of children.

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.

Contents

R8XM Introduction

RadioLink R8XM is a 2.4G 8 channels receiver with 4000 meters control distance, supporting signal output of PPM and SBUS and is compatible with RadioLink transmitters T8FB(BT) / T8S(BT) / T8FB(OTG) / T8S(OTG) / RC6GS V3 / RC6GS V2 / RC6GS / RC4GS V3 / RC4GS V2 / RC4GS (must work with flight controller).



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 R8XM is purchased, binding needs to be done in order to work with transmitter. (Note: R8XM is not compatible with T8FB produced before December 2016)

Binding steps

1. Place the transmitter and R8XM receiver more than 50 cm apart.
2. Power on the transmitter and R8XM will bind to the closest transmitter automatically.
3. Press the ID SET on the receiver's side for more than 1s and the LED indicator will flash, meaning the binding process has begun.
4. When the LED indicator stops flashing, binding is complete.
5. Test the model servo to make sure it can be operated by the transmitter.

Note:

1. There is signal amplification in R8XM, and the telemetry range is the same as the control range of 4000 meters, so it is best to keep the transmitter and R8XM receiver more than 50 centimeters apart when binding. If the transmitter and R8XM receiver are too close, it is easy to cause signal blockage, and the binding cannot be successful. After the binding is successful, if transmitter and R8XM receiver are too close (for example, within 50 centimeters), the signal may be lost. Bring the transmitter and R8XM receiver farther apart, the signal loss will disappear automatically.

2. When the transmitter and receiver are powered on, the LED indicator of R8XM flashes slowly means there is no binding or the receiver loses signal during flight.

Working Modes

There are two signal working modes of R8XM.
Purple LED, SBUS signal, 8 channels totally.
Red LED, PPM signal, 8 channels totally

SBUS and PPM signal switch

Quick press the ID SET switch twice within 1 second, the signal is changed from SBUS to PPM (or from PPM to SBUS).
The red LED indicates the PPM and purple LED indicates SBUS.

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.

Real-time Built-In Telemetry

R8XM supports real-time transmission of RSSI, receiver voltage, and model voltage. The telemetry range is the same as the control range, 4000 meters.

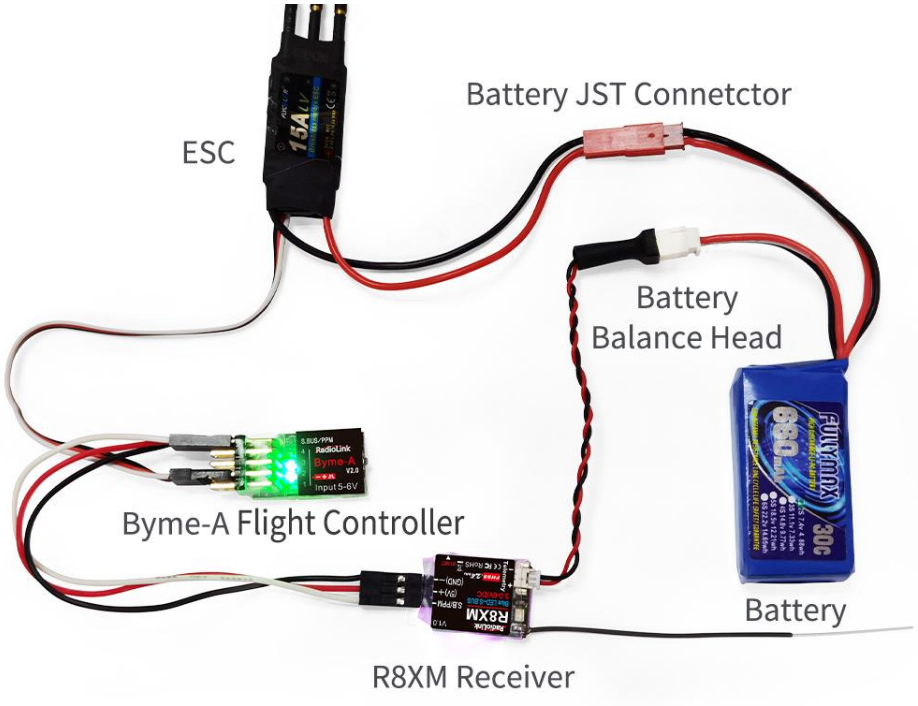
Telemetry of RSSI and Receiver Voltage

RSSI and receiver voltage will be displayed after the successful binding between the transmitter and the receiver.

Telemetry of Model Voltage

Connect the balance head of the battery to the telemetry port of R8XM, the model voltage will be

displayed. There is no need for an external power battery voltage telemetry module, and R8XM supports up to 6S (25.2V) battery voltage telemetry. Telemetry cable for 2S battery is standard packed by default. If you connect other batteries such as 3S，4S，5S, 6S battery, please change the telemetry cable by yourself.



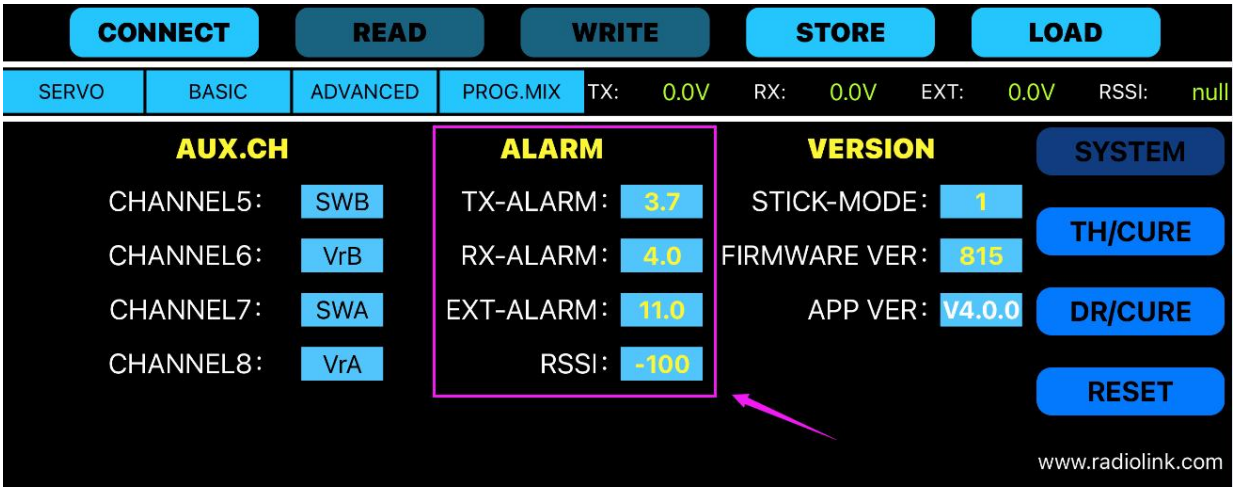
RSSI and Low Voltage Alarm Setting

When R8XM works with RadioLink T8FB/T8S (BT) transmitters, low voltage alarm can be set after connected to Parameter Setup APP on Android phone, iPhone or computer, so as to avoid the failure to return due to insufficient voltage during the flight. For download and detailed information of the APP, please refer to the detailed manual of T8FB or T8S.

Manual of T8FB: https://www.radiolink.com/t8fb_bt_manual

Manual of T8S: https://www.radiolink.com/t8s_manual

The following is the setting page on Parameter Setup APP of iPhone.



RSSI and Low Voltage Alarm Beeps

When the returned RSSI, receiver voltage, and model voltage are lower than the set alarm value, the transmitter will emit alarm tone:

① Low transmitter voltage alarm: keep DDDD beep quickly and continuously
② Low receiver voltage alarm: five DDDDD beeps as a unit continuous beeping prompt
③ Low model voltage alarm: three DDD beeps as a unit continuous beeping prompt
④ Low RSSI alarm: four DDDD beeps as a unit continuous beeping prompt

Output RSSI Value from Receiver to FPV Monitor

Output RSSI Value from Receiver to FPV Monitor, and real-time RSSI Telemetry is available when Racing/Driving/Sailing.

① * How to output RSSI value from receiver to FPV when the transmitter is T8S/T8FB and the flight controller is F4/F7?
https://www.radiolink.com/newsinfo/504912.html?templateId=148964

② * How to output RSSI value from receiver to FPV when the transmitter is T8FB/T8S and the flight controller is Mini Pix/TURBO PiX/PIXHAWK ?
https://www.radiolink.com/newsinfo/504919.html?templateId=148964

R8XM Specifications

Model: R8XM
Dimension: 22*17mm (0.87”x0.67”)
Weight: 3g (4g with cable)
Antenna Length: 90mm
Channel Quantity: 8 channels
Operating Voltage: 3-6V DC
Operating Current: 40mA±5mA@5V
Signals: SBUS/PPM
Output Frequency: 2.4GHz ISM band (2400MHz~2483.5MHz)
Spread Spectrum: FHSS, 67 channels pseudo-random frequency hopping
Adaptable Models: Racing drone/Rotary Wing/Fixed wing/Glider/Multicopter/Car/Boat/Robot (must work with flight controller)
Control Distance: 4000 meters (2.49Miles) in the air (Maximum range tested in unobstructed areas free of interference and may vary depending on local regulations).
Transmission: Telemetry of signal, RSSI, receiver voltage, model voltage ((The telemetry distance is the same as the control distance)
Model Voltage Telemetry: 2S-6S LiPo battery (7.4V-25.2V)
Compatible Transmitter: T8FB(BT)/T8S(BT)/T8FB(OTG)/T8S(OTG)/RC6GS V3/RC6GS V2/RC6GS/RC4GS V3/RC4GS V2/RC4GS (must work with flight controller)

Thank you again for choosing RadioLink product.