

# R4FGM (FHSS)



### **User Manual**

4-channel Receiver with Integrated Gyro

Radiolink Electronic Ltd

www.radiolink.com



Thanks for purchasing RadioLink 4-channel receiver R4FGM.

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 <a href="https://www.facebook.com/radiolinkofficial/to">https://www.facebook.com/radiolinkofficial/to</a> search related key words. Also you can send your questions to <a href="mailto:after\_service@radioLink.com.cn">after\_service@radioLink.com.cn</a> 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 <a href="http://www.radiolink.com">http://www.radiolink.com</a> 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 18. 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



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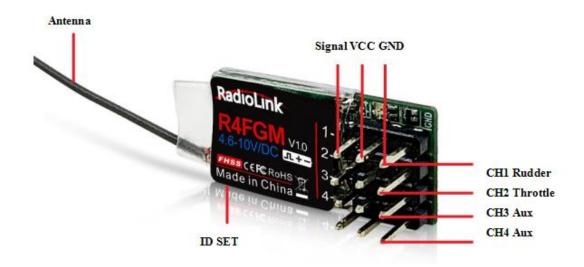


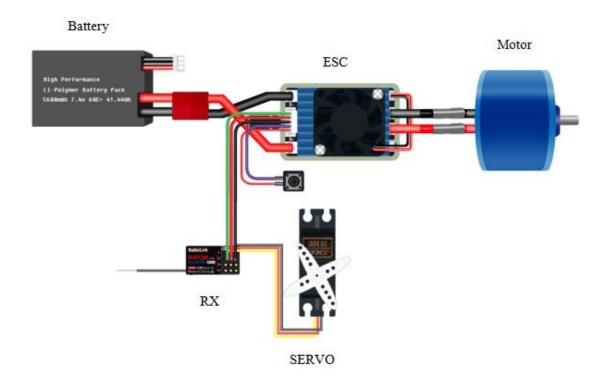
#### **R4FGM** introduction

#### 1. R4FGM Basic introduction

#### 1.1 Compatible transmitters

Radiolink R4FGM 2.4G 4-channel receiver with integrated gyro for professional car drifting and high voltage servo supported is compatible with RadioLink 6 Channels radio RC6GS V2, RC6GS, 4 Channels radio RC4GS V2, RC4GS.







#### 1.2 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 R4FGM is purchased, binding needs to be done in order to work with transmitter.

- 1. Put the receiver and the transmitter together within 30-50cm.
- 2. Power up the transmitter and R4FGM receiver.
- 3. Press the ID SET on the receiver's side for more than 1 second and the indicator will flash, meaning the binding process has begun.
- 4. When the indicator stops flashing and turns always on, binding is complete.
- 5. Test the model servo to make sure it can be operated by the transmitter.

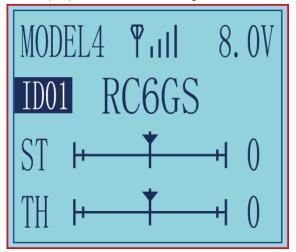
#### Note:

 When R4FGM is powered on, the indicator FLASHING means no signal or binding WITHOUT success. Please bind the receiver to the transmitter.

#### 2. Telemetry of Signal and RSSI

Power on the transmitter and the receiver and complete the binding, signal will be displayed on the homepage of transmitter. Short press EXIT twice and enter the interface with returned information including RSSI value.

Warning can be set with a certain low RSSI value after testing by changing distance: Press EXIT and ENTER simultaneously to enter MENU=>press Inc (+) to highlight "19. ALARM =>Press ENTER to (dis)activate the warning and set the RSSI warning value.



#### 3. Working Modes

R4FGM has two working models: factory setting by default is standard mode with PWM signal output without Gyro; The second mode is Gyro mode.



#### 3.1 Standard mode (factory setting by default)

When the green indicator is on, Ch1 to Ch4 output standard PWM signal.

#### 3.2 Gyro mode

The R4FGM integrated gyro for professional car drifting and Mosquito car(MINIZ).

Short press ID SET three times with interval less than 1 second, the RED indicator flashes three times. Red LED on/off indicates the gyro function is on/off.

Stabilizing the direction, keeping car from slipping and ensuring safer turning to preventing drifting from fast speed.

#### 4. Gyro Introduction

#### 4.1 Gyro Function

The R4FGM integrated gyro for professional car drifting can be enabled and disabled. When it's enabled, the turning stability can be maximized during competition. When there is false position, gyro function keeps the car straight forward and turn precisely.

#### 4.2 Gyro Setup

#### A. Gyro Enabled

Factory setting is gyro function OFF by default. When power on R4FGM, the gyro will self-check. There are two indicators on R4FGM while always-on GREEN LED meaning working mode WITHOUT gyro.

Short press ID SET three times with interval less than 1 second, the RED indicator flashes three times, always-on GREEN+RED LED is working mode WITH gyro.

#### **B.** Gyro Phase

As model aircraft, car gyro also has phase. Only the phase is correctly set that the gyro can always revise directions.

When the gyro forward is enabled, try to turn the model car to see if the gyro is correcting the wheels. Normally, the wheels should turn right to correct when the car is turned left, while the wheels should turn left to correct when the car is turned right. If the gyro phase is reversed, short press ID SET twice with interval less than 1 second. The Red indicator flashes twice means the gyro phase setting is complete.

#### 4.3 Transmitter Sensitivity Adjustment

Gyro sensitivity setting is CH3 by default (factory setting) and can be adjusted by the VR rotary switch. Percentage is displayed when sensitivity is adjusted while the bigger percentage means higher sensitivity. If the VR rotary switch/CH3 is set with other function, menu setting on transmitter can be used to adjust gyro sensitivity.



#### 5 Specifications

1) Frequency: 2.4GHz ISM band(2400MHz~2483.5MHz)

2) Dimension: 25\*13mm

3) Weight: 3g

4) Channel Qty:: 4 channels5) Signal Output: PWM

6) Model Application: Car/Boat

7) Encode: FHSS 67-channel pseudo random frequency hopping

8) Voltage Range: 4.6-10V

9) Operating Current: 30mA (Depending on power supply)

10) Telemetry: Signal/RSSI

11) Control Distance: 400 meters on the ground

12) Compatible transmitter: RC6GS/RC6GS V2/RC4GS/RC4GS V2/T8FB/T8S

#### **6 Note of Antenna Installation**

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

- Keep antennas as straight as possible, or the effective control range will reduce.
- 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.
- Antennas should be kept away from metal conductor and carbon fiber at least half inch away and no over bending.
- Keep antennas away from motor, ESC or other possible interference sources.
- Sponge or foam material is advised to use to prevent vibration when installing receiver.
- Receiver contains some electronic components of high-precision. Be careful to avoid strong vibration and high temperature.
- 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.