Introduction

Thank you for purchasing FrSky RX4R 4/24CH telemetry receiver. The RX4R features 4 PWM outputs with extremely high precision and low latency. The latency of PWM output is 9ms less than that of X series receivers in high speed mode. RX4R features redundancy function as well, so another receiver can be added as a back-up in case the first one fails. Last but not least, the RX4R and the whole RX-line has a 40% increase in range compared to the previous X series receivers. In order to fully enjoy the benefits of this system, please read the instruction manual carefully and set up the device as described below.

Overview

What’s New

- CH1~CH4 outputs high precision PWM signal (Precision: less than 0.5μs)
- Under the same conditions, the effective communication distance of RX6R is about 1.4 times than that of X series receivers.
- Installed with ACCESS protocol

Specifications

- Dimension: 18*17*7mm (L × W × H)
- Weight: 2.0g / 2.4g (with two antennas)
- Number of Channels: 24CH
- Operating Voltage Range: 3.5V~10V
- Operating Current: 100mA@5V
- Operating Range: 26km
- Compatibility: ACCESS/*ACCST firmware
- Servo frame rate: 7ms (HS—High Speed Mode) / 20ms (FS—Normal Speed Mode)

Feature

- Small and High sensitivity (40% increase of the range compared to previous X series receivers)
- Higher precision PWM
- Low latency PWM output
- Lower power consumption
- Redundancy function supported
- Smart Port enabled and telemetry data transmission supported
- Battery voltage detection supported
- 2 detachable IPEX 4 connector antennas
- PCB protection with the conformal coating craftwork

LED state

<table>
<thead>
<tr>
<th>Blue LED</th>
<th>Green LED</th>
<th>Red LED</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Register</td>
</tr>
<tr>
<td>Off</td>
<td>Flash</td>
<td>Flash</td>
<td>Register successfully</td>
</tr>
<tr>
<td>X</td>
<td>Flash</td>
<td>Off</td>
<td>Binding successfully</td>
</tr>
<tr>
<td>On</td>
<td>On</td>
<td>Off</td>
<td>Working under HS Mode</td>
</tr>
<tr>
<td>Off</td>
<td>On</td>
<td>Off</td>
<td>Working under FS Mode</td>
</tr>
<tr>
<td>X</td>
<td>Off</td>
<td>Flash</td>
<td>Failsafe</td>
</tr>
</tbody>
</table>

Note:
1. X meanings neglect.
2. The default output of RX4R is standard SBUS signal (1-16CH). Hold F/S button for about 5 seconds, CH16 will output RSSI. Repeat the steps above, the value of Channel 16 will output CH16.

Registration & Automatic binding (Smart Match™)

With the FrSky ACCESS protocol, the transmitter/transmitter module can bind receiver without using the “F/S” button.

Follow the step below to finish the Registration & binding procedure:
1. Put the transmitter/transmitter module into [Reg] status.
2. For Taranis X-Lite Pro as an example, turn on the transmitter, go to: MENU-MODEL SETUP-PAGE 2, choose Internal or External RF, and select [Reg].
3. Connect the battery to the receiver while holding the F/S button on the receiver. The RED LED and GREEN LED on the receiver will be on, indicating into the [Reg] status. Select [ENTER] on the transmitter. The RED LED and GREEN LED will flash, and the transmitter displays [Registration ok].
4. Turn off the receiver.
5. Move the cursor to select the receiver 1 [Bind].
6. Connect the battery to the receiver, the GREEN LED will flash, indicating into the [Bind] status. Select the RX, the GREEN will keep lit, and the transmitter displays [Bind successful].
7. The transmitter exit [Bind], GREEN LED will keep lit, RED LED will be off, indicating Working normally.

How to Switch FS mode/HS mode

a) The factory default setting is FS mode.
b) To go to the receiver [Options], select the 7ms PWM or not.

Note: The SBUS output is 7ms, no matter HS/FS mode.

Range Check

A pre-flight range check should be done before each flying session. Reflections from nearby metal fences, concrete buildings or trees can cause loss of signal both during range check and during the flight. Under Range Check Mode, the RF power would be decreased and Range distance to 1/30 ~1/10 that of Normal Model, about 30 meters.

1. Place the model at least 60cm (two feet) above non-metal contaminated ground (e.g. on a wooden bench). The receiver antenna should be in vertical position.
2. For Taranis X-Lite Pro as an example, turn on the transmitter and power on the receiver, go to: MODEL SETUP/Internal RF/Range.
3. For transmitter RF module, please refer to its manual.

Much more operation and instruction please refer to radio manual.
Failsafe

Failsafe is a useful feature which is for a preset channel output position whenever control signal is lost for a period. Follow the steps to set Failsafe for channels necessary:

1. For Taranis X-Lite Pro as an example, turn on the transmitter, go to: MODEL SETUP/Internal RF/Failsafe.
2. Failsafe can be set on receiver via short pressing F/S button while moving a certain channel position to a preset value after binding.

FrSky is continuously adding features and improvements to our products. To get the most from your product, please check the download section of the FrSky website www.frsky-rc.com for the latest update firmware and manuals.