# **Receiver RP4S1**

Thank you for purchasing the world's smallest synthesized receiver! Please read the manual carefully before using the receiver.

## Why Synthesized Receiver?

- Synthesized receiver gets rid of the inconvenience of using the crystal. Receivers with crystal still use the technology of 1970's which have to switch the frequency by changing the crystal. Users have to bring dozens of crystal to flying field. In addition, every changing of the crystal may damage the electron devices. While it is only need to push the button, you can switch to any channel with synthesized receiver.
- 2. Every transmitter and receiver has production tolerance inevitably. But the production tolerance of the crystal affects it most. Even the most precise crystal has the tolerance of 1 2KHz, and sometimes it will be 4KHz. This is a big tolerance to a 10KHz narrow receiver. Synthesized receiver will correct the tolerance because it can automatically follow the frequency tolerance. It is what will make R/C receiver has the best performance.

With Corona's technology in manufacturing R/C products, RP4S14 4CH Single conversion receiver becomes the smallest in the world. Do not only focus on its small size. Its high - performance will surprise you.

# **RP4S1's Feature**

1. You can switch the frequency freely.

- 2. It can automatically follow the frequency tolerance which will make it compatible with all transmitters, including the high - rate transmitter.
- 3. The 'one button' function makes it convenient to change the frequency.
- 4. With such a small size, the receive range reaches as far as 1 mile<sup>+</sup>!
- 5. The dual ceramic IF filters ensure ultra narrow selectivity, and can reject the adjacent channel interference effectively.
- 6. DSP technology can filter the noise intelligently and eliminate glitch effectively.

You can put RS410II receiver in any place when you install it on whatever electric puddle - plane, 3D plane, glider or training plane. And don't worry the trouble which will be brought by changing CG.

Reliability, high performance and sale price, they are what CORONA can provide for you.

#### **Specifications**

Size 1.1"x0.6"x0.3"(28x15x7.6mm) Weight 0.17oz/4.7g(with shrink wrap) Sensitivity better than 2.0µV Selectivity ±8kHz at 65dB down Number of channels 1 - 4 Filtering Dual turned RF circuitry Filtering Dual 4 pole ceramic filter Filtering DSP filtering with mild algorithm Modulate FM/PPM Shift polarity Positive or Negative (auto - detect) Case Shrink wrap Operating Voltage 4.8V~6.0VDC

#### Operating Current 11mA.

#### **Frequency Set**

1.Turn the transmitter power on ,adjust the mode to PPM and make sure the transmitting frequency be in the frequency list

2.get the receiver close to the transmitter, then connect it to the battery

3.after the LED in receiver flashing two times, press the button for two second, then release the button ,then press the button again ,LED will begin to flash, when the LED stops flashing , it suggest that the receiver can work now.

4.after the receiver locked, if you don't change frequency, receiver will work when you connect it to the power. no need to relock.

5. If you change different transmit brands but not change frequency ,you just cut off receiver power and connect it to the battery again , then the receiver will works well.

Caution: when you locking your receiver ,please ensure your around 5 meters only own transmitter is working and put your receiver close enough to your transmitter.

## **Quick Range Checking**

Fully collapse the transmitter's antenna and move the transmitter sticks continuously. Ask someone to watch the servos to see whether the receiver has lost the signal. If the receiver does not lose the signal until you are at least 90m away from it, it passes the quick range check.

### **Rigorous Range Checking**

Your local environment can affect the range of the receiver, so quick range checking may not reflect the actual range correctly. If you suspect range problems, perform a rigorous range check.

- Place the receiver on a non metallic surface (for example, a wooden bench) which is at least 2 feet (60cm) off the ground.
- Fully extend the antenna of the receiver and fix it vertically. Don't let it touch the ground.
- 3. Connect one servo to channel 1.
- 4. Fully extend the antenna of the transmitter.
- 5. Turn on the transmitter and then turn on the receiver.
- 6. Walk away from the receiver while moving the transmitter sticks continuously. Ask someone watch the servo and note any loss of control.

#### Use method

I. Normal Working State:

Turn on transmitter and adjust it to PPM mode. When electrify the receiver, the LED will blink 2 times. Then if it receives correct signal, the LED will be lightening and work normally; if LED went out, it means the transmitter do not receive correct signal.

Note: 1 This receiver has the feature of memory, please electrify the receiver again if change another transmitter. 2 When change crystal of different frequency, please lock up new transmitting frequency.

II . Method of Searching RP4S1 Transmitting Frequency:

1, Pull out the aerial of transmitter, then turn on the transmitter and adjust it to PPM mode. Do not spread the aerial of receiver, and keep the transmitter be 1m far away from the receiver, also to make sure there is no working transmitter within 10m around.

2, Electrify the receiver, after the LED blink 2 times, if LED keeps be lightening, it proves that the frequency of receiver and transmitter is coherent. If LED went out, it means there are different frequencies of receiver and transmitter, or the transmitter does not receive correct signal. So it needs to set up working frequency of receiver.

3, Press the frequency enactment button of RP4S1, wait for 2 seconds and unlock it, then repeat the action within 1 second. If the LED blinks, it proves it is searching transmitting signal. Still wait for 2 to 3 seconds, if finishes setting up, the LED will be lightening; if not, please check up the transmitter.

Caution: The range depends on the power of the transmitter, so use a freshly charged transmitter battery. Range checking must be done in an open field to avoid environmental interference. Note that the range in the air will be longer than on the ground. Connection Diagram

