

# Receiver RD820II

Thank you for purchasing the RD820II receiver – a small and light receiver with high-performance using the latest in receiver technology.

## Sensitivity of DUAL Conversion Receiver

CORONA never stops improving the receiving range. RS620II has improved the range as far as 1.8Km\*

*\*This range is based on our test conditions. The actual result of a range check will be different depending on your local environment.*

Dual Conversion receiver can eliminate mirror frequency interference efficiently. Further remote control distance means more reliable control. Even the reliability can compare beauty with PCM receiver. We make control distance be further so that receiver can locate in stable RF Electromagnetic Field, it will make the reliability of Corona receiver approach to PCM receiver. Meanwhile, its response speed will not be influenced.

## Selectivity and Dual Ceramic IF filter

The RD820II uses dual tuned RF circuitry with dual ceramic IF filters. Compared to a single ceramic filter, it has a better steep flank which reduces group delay effectively and ensures that the receiver has ultra narrow selectivity to more effectively reject adjacent channel interference. This is especially important when flying indoor airplanes where many transmitters may be operating near each other.

## IP3&AGC

With improved circuit design, RD820II advances IP3 performance apparently, and it can even compare beauty with all famous brand receivers around the world. Now RD820II can operate under more 3 adjacent channel transmitters.

## DSP

We have also improved DSP algorithm, It can make more strictly filter about received signals and eliminate glitch efficiently.

RD820II receiver has the structure of level inserted pin by special design and assorted with super thin electronic parts. The thickness of RD820II receiver is only 7.2mm which make the installation more convenient.

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	1-6
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.

## Installing the RD820II Receiver

1. Plug in crystal.
2. Plug in all the servos/ESC. Pay attention to the polarity of the wire. Please consult the labels on the case for the channel number and polarity.  
**Caution: If the polarity of the plug is wrong, it will damage the servos/ESC.**
3. If not using an ESC with a built-in battery-eliminator circuit (BEC), plug a 4.8V battery/switch harness into any unused channel. If you are using all the channels for servos, use a Y harness to connect the battery and servo to one channel.
4. Wrap receiver in foam rubber to isolate it from vibration.
5. Secure the receiver in aircraft with a rubber band or hook-and-loop fastener.
6. Unwind the antenna fully. Do not coil or cut the antenna.

## Quick range checking

Fully collapse the transmitter, 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 (270feet) 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.

1. Place the receiver on a non-metallic surface (for example, a wooden bench) which is at least 2 feet (60cm) off the ground.
2. 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.

**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

