



***HIGH PERFORMANCE***

**HF RECEIVING SYSTEMS & COMPONENTS**

**Hi-Z Antennas™**

**Part Number RSW421**

**Hi-Z 4 Input to One Output 75 OHM Receiving Antenna  
Switch For Remote Operation**



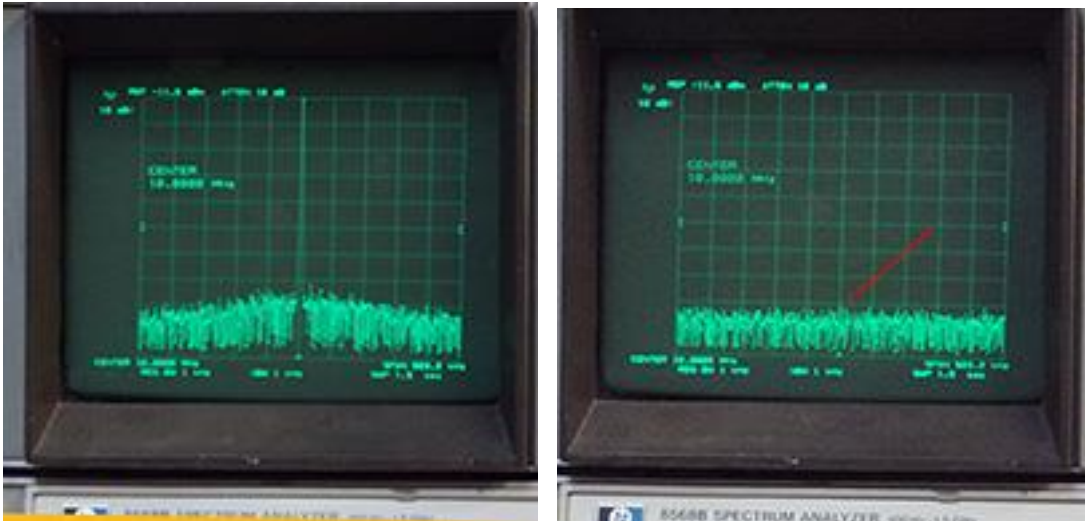
**Congratulations and Thank You for the purchase of our system components. We recommend that you read this manual and fully understand the requirements for the proper installation of your system.**

**No more listening to all your RX antennas at once with >70 dB on to off Isolation**

## Specifications

- 75 OHM impedance coaxial cable one of four switch
- Remotely Switch One of four receiving Antennas
- Remote operation can be operated by contact closure or activated by +13.8 VDC
- Power Requirements 13.8 VDC at 30 ma when using Contact closure switching.
- Switching current is 30 ma or less.
- Provides a ½ Watt 75 ohm termination for non-switched inputs
- Greater than 70 dB of on to off isolation from 50 KHz to 10 MHz
- SWR contribution less than 1.3: 1 from 50 KHz to 10 MHz
- Quality Type F 75 ohm connectors
- Physical size excluding connectors is 3 ¾ X 6 X2 inches

## Spectrum Analyzer Shots of ON and OFF



Left picture is Switch on for full scale Right picture is switch off  
Vertical scale is 10dB per division, Signal left is ~80 dB down Typical

- Perfect for Beverage antennas needing non-selected antennas terminated
- Also available in 50 Ohm versions P/N RSW422
- Power input protected with 18Volt MOV
- High Quality relays for a long life
- Perfect for switching with CAT5 or 6 computer cable



**Front Panel is used to accept the 4 cables to be switched**



**Rear panel is used for output , control, and power**

Remote switching can be accomplished two ways. One, the standard Hi-Z switching scheme is to supply the RSW421 with +13.8 VDC on the power terminals. Then ground in turn whichever number terminal desired. Secondly, you can Ground the +13.8VDC (DO NOT CONNECT POWER) and then apply +13.8VDC to whichever number terminal you would like to select.

Using the Standard Hi-Z switching scheme allows the use of any of the Hi-Z wireless controllers for selection or the CTRL421, CTRL422, CTRL821, CTRL822 controllers.



**CTRL421**



**HIZ-WIRELESS**

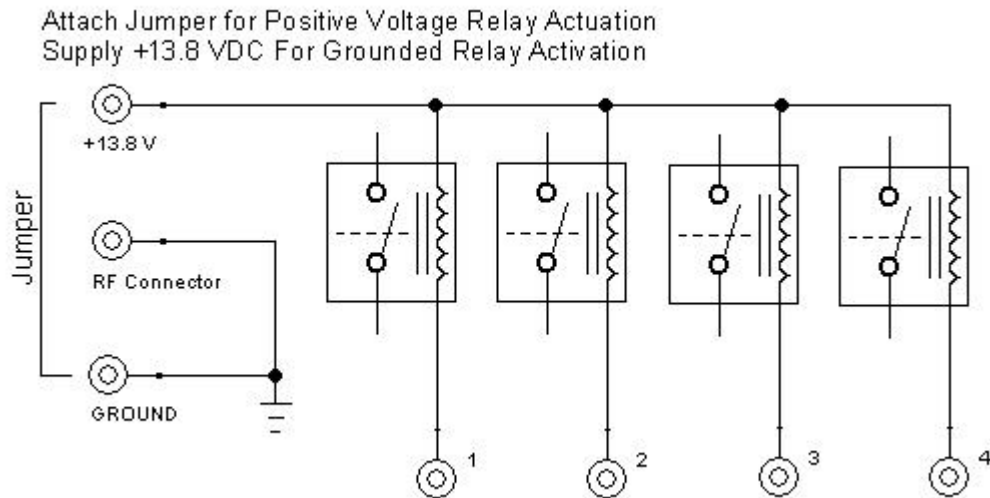
**CAT5 or 6 wire is perfect for use with the CTRL series controllers.**

**No wires but power wires are needed with the wireless unit.**

**These switches have only a 30 ma current requirement.**

The CTRL controllers can be used to drive the wireless inputs for end to end operation.

Typical schematic for the switching portion of the RSW421 RSW422, RSW821, and RSW822 four and eight input remote switches. Only 4 relays are shown here as 8 input switch circuits are exactly the same.



Hi-Z Antennas™  
8125 SW Larch Drive  
Culver, OR 97734  
USA