

## **HIGH PERFORMANCE**

# **HF RECEIVING SYSTEMS & COMPONENTS**

# Hi-Z Antennas™ Part Number RSW2X422 Hi-Z DUAL 4 Input to One Output 50 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.

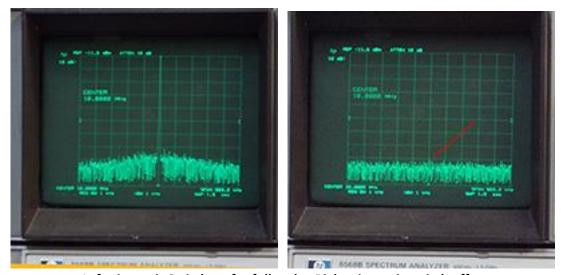
These Dual switches have > 70 dB isolation between the two channels

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

## **Specifications**

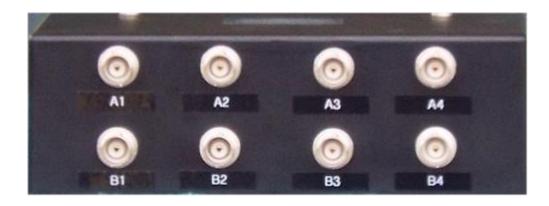
- 50 OHM impedance coaxial cable Dual channel one of four switches
- Remotely Switch two channels of One of four receiving Antennas
- Remote operation can be operated by contact closure or activated by +13.8 VDC
- Power Requirements 13.8 VDC at 60 ma when using Contact closure switching.
- Switching current is 30 ma or less.
- Provides a ½ Watt 50 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 BNC 50 ohm connectors
- Physical size excluding connectors is 4 1/2 X 8 X 2 1/2 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 75 Ohm versions P/N RSW2X421
- 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 2 sets of 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 two RSW422s with +13.8 VDC on the power terminals. Then ground in turn whichever number terminals desired. Secondly, you can Ground the +13.8VDC (DO NOT CONNECT POWER) and then apply +13.8VDC to whichever number terminals 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 two of the CTRL421 controllers.





CTRL421 (needs two)

**HIZ-WIRELESS** 

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

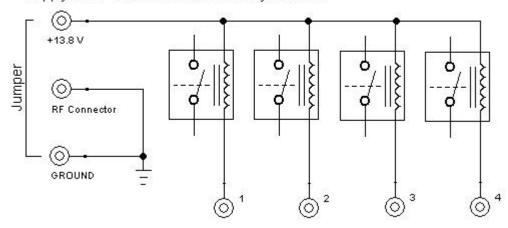
No wires but power wires are needed with the wireless unit.

These switches have only a 30 ma current requirement.

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

Typical schematic for ½ the switching portion of the RSW2X421 RSW2X422 Dual four input remote switches. Only 4 relays are shown here as the second 4 input switch circuits are exactly the same.

Attach Jumper for Positive Voltage Relay Actuation Supply +13.8 VDC For Grounded Relay Activation





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