

# **USER MANUAL**

## **Single Channel Wireless Relay Module**

### **Quicksilver P/N wr-sin**

**Information Derived from My Tests of the Module**

**Gene Hinkle, K5PA**

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***NOTICE: All drawings, materials, manufacturers, part numbers, assumptions were derived from manufacturers' equipment manuals and web pages. However, there is NO IMPLIED WARRANTY that the information present is free from error and the user of this information should validate it's accuracy and usage in their intended applications.***

## Wireless Relay Module for Push-to-Talk (PTT) Application

by Gene Hinkle, K5PA



**Manufacturer:** Quicksilver Radio

**Model:** Wireless Remote Relay

**Part Number:** wr-sin

**URL:** <http://www.qsradio.com/shop-now.html#!/Wireless-Relay-Single/p/51010730/category=13310077>

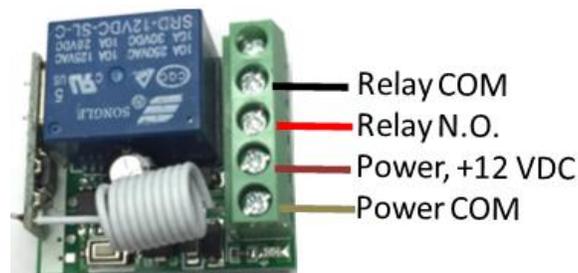
**Description:** Wireless Remote Relay, Single Channel

**Notes:** Photo from Quicksilver Radio webpage is a former version of the wireless relay. The photo on the instruction page (next page) is the current production version being shipped by Quicksilver Radio.

*Use caution if ordering a look-alike, or knock-off, wireless relay from the Internet (e.g., eBay). We have found that some look-alike sources are wired differently and in one case the switch closure actually supplied 12 VDC power from the relay instead of a switch closure! To be safe, please verify all connections and operate the wireless relay prior to connecting to your radio! Always use caution when purchasing from sources.*

**Price Class:** \$20 each

**Power Requirements:** The remote relay module is specified to work at 12 VDC. Using a power supply voltage of 13.8 VDC, I measured the operating resting current at 2.5 mA. During relay activation, the operating current increased to 35 mA. These are nominal values based on my single measurements.



**Power Connections and Relay Contacts on wr-sin Wireless Relay Board**

## Wireless Relay and Remote Button Programming



**Radio Frequency of Button and Wireless Board:** Remote Control Button RF Frequency Needs to Match the Receiver Board inside Wireless Relay. As a side note, there exists a version of the wireless relay that uses 433 MHz instead of 315 MHz. The RF frequency will vary somewhat as the hand comes in contact with the remote button and if you touch the antenna. Each remote is also set at the factory with a digital code that the receiver matches during the programming setup below. However, if the remote button transmitter frequency is off frequency too much from the receiver, there can be relay drop outs.

### Momentary

Press the learn button (white) once, the LED indicator will flash once. In about a second, the LED will turn on, press the remote control button, the LED will flash 3 times. Finished.

### Push On/Push Off

Press the learn button twice, the LED indicator will flash 2 times. In about a second, the LED will turn on, press the remote control button, the LED will flash 3 times. Finished.

### Self Latching (Works Same as Push On/Push Off)

Press the learn button three times, the LED indicator will flash 3 times. In about a second, the LED will turn on, press the remote control button, the LED will flash 3 times. Finished.

### Erase the Present Mode

Press the learn button 8 times, the LED indicator will flash with each press of button. LED will then rapidly flash 8 times indicating erasure was successful. Now set one of three modes above that you want to learn.