USER MANUAL

Wireless Relay Single Module

Quicksilver SKU *wr-sin*

Please Visit Quicksilver Radio: http://www.qsradio.com

Wireless Relay Single Module Specifications

Vendor Source: Quicksilver Radio

Model: Wireless Relay Single

Vendor SKU: *wr-sin*

URL: http://www.qsradio.com/shop-now.html#!/Relays/c/13310077/offset=0&sort=normal

Description: Wireless Relay Single, remote relay module. The current version of the Quicksilver SKU *wr-sin* is shown in the photo. The information in this User Manual is based on this circuit board assembly. Prior versions had terminal strips at each end of the main circuit board assembly.

Operating Radio Frequency: 315 MHz

Power Requirements: The relay module is specified to work at 12 VDC. Using a power supply voltage of 13.8 VDC, the measured quiescent current is 3 mA. When one relay is activated, the operating current increases to 35 mA. These are nominal values based on measurements.

> **Power Connections (relay module): IN+** 12VDC Positive   **IN-** 12VDC Negative

Relay Contacts: 1 relay, with isolated contacts, ratings 5A @ 250VAC, 10A/30VDC, SPDT

> **NO** Normally Open   **NC** Normally Closed   **C** Common

Size/Weight: Relay Module, 1.5x1.5x1 in. / weight 1.0 oz.
                    Remote Sender Unit, 2.25x1.5x0.5 in. / weight 1.1 oz.

Remote Sender Pushbutton: The Remote Sender Unit pushbutton that is programmed with the 1-Channel Wireless Relay is shown in the figure at top. This module uses a single battery, type A23, alkaline, 12V that is delivered with the Wireless Relay. There are two buttons on the sender unit under a slide cover. Only one button is used to control the relay board. A short, extendable antenna can be extracted to increase the range.

Operating Range: The range for operating the wireless relay is approximately 200 feet (61 m) but dependent on obstructions and terrain. At extended ranges, the remote control sender antenna needs to be extended for the greatest range.

Price Class: $20 each

Programming Instructions, Wireless Relay Single Module

Introduction: The Relay Module Single is programmed using the Remote Sender Unit. Each Wireless Relay Single Module board is set at the factory with a digital code matched to a Remote Sender unit. The Relay Module Single can easily be reprogrammed to a new Remote Sender Unit. The following text explains how to program the Wireless Relay Single Module. Refer to the photograph for the location of the white Learn pushbutton and the LED indicator.

Relay Operation Modes: There are 3 modes for the Wireless Relay Single Module.

> Mode 1 is Momentary, meaning when you press the button on the sender unit the relay closes (connecting the Normally Open and Common contacts). Releasing the sender button opens the relay.
>
> Mode 2 is Toggle Press On/Press Off that alternates the open/closed state of the relay with each button press.
>
> Mode 3 is Time Delay meaning the contacts close when the sender button is pressed momentarily and the relay maintains the closed contacts state until a time delay of 5, 10 or 15 seconds occurs. The time delay is selectable to one of the 3 values determined during programming.

Erase the Current Mode: Press the white Learn button 8 times, the LED indicator will flash briefly with each press of button. LED will then rapidly flash 8 times indicating erasure was successful. Now set one of 3 modes below.

Mode 1 - Momentary: Press the white Learn button once, the LED indicator will flash <u>once</u>. In about a second, the LED will turn on, then press the Remote Sender button for a few seconds, as the LED quickly flashes twice and then stays on, release the Remote Sender button, The LED will go off and then come back on in 3 seconds indicating the mode is set.

Mode 2 -Toggle Press On/Press Off: Press the white Learn button once, the LED indicator will flash <u>once</u>. In about a second, the LED will turn on, then press the Remote Sender button for a few seconds, as the LED quickly flashes twice and then stays on, release the Remote Sender button, The LED will go off and then come back on in 3 seconds indicating the mode is set.

Mode 3 -Time Delay, 5-15 Seconds
> Time Delay, 5 Seconds: Press the white Learn button 4 times, the LED indicator will flash 2 times. In about a second, the LED will turn on, press the Remote Sender button, the LED will quickly flash 2 times, go off and then come back on in 3 seconds indicating the mode is set.
>
> Time Delay, 10 Seconds: Press the white Learn button 5 times, the LED indicator will flash 2 times. In about a second, the LED will turn on, press the Remote Sender button, the LED will quickly flash 2 times, go off and then come back on in 3 seconds indicating the mode is set.
>
> Time Delay, 15 Seconds: Press the white Learn button 6 times, the LED indicator will flash 2 times. In about a second, the LED will turn on, press the Remote Sender button, the LED will quickly flash 2 times, go off and then come back on in 3 seconds indicating the mode is set.

Important Note: While setting the modes above, if you make an error, <u>such as pressing the white Learn Button 3 times</u>, you will have to remove power from the device and perform the Erase the Current Mode in order to reset the Relay Unit.