



Market Central, Inc.

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## 1U Remote Selector Switches

Part Numbers:

5001193 1U Remote Selector Switch A/B/C  
5101193-R1 1U Remote Selector Switch A/B/C/None (powered)  
5101193-R2 1U Remote Selector Switch A/B/C (powered)  
5001193-R3 1U Remote Selector Switch A/B/C/None



# 1. Specifications

- Connectors:** (1) Six position terminal block for dry contact closure outputs. (all models)  
(1) 3.5-mm DC power input jack, center positive (powered models only)  
(1) Eight position terminal block for remote status dry contact inputs (powered models only)
- Indicators:** (1) LED for power, (3) LEDs for remote status indicators (powered models only)
- Temperature:** 32 to 158°F (0 to +70°C) - operating,  
14 to 158°F (-10 to +70°C) - storage
- Relative Humidity:** up to 80%, non-condensing
- MTBF:** >100,000 hours or 15,000 switching cycles
- Power:** 100-240VAC, 50/60-Hz wall mount supply, 12VDC output (powered models only)
- Size:** 5.75"D x 19"W x 1.75"H
- Weight:** 2 lbs including external wall mount supply
- Remote Status Input:** 12 VDC supplied thru approximately (powered models only) 240 ohm pullup resistance to provide wetting current for external dry contacts being monitored. Resistance of external dry contact and associated cable not to exceed 100 ohms.
- Dry Contact Outputs:** 50 milliohms typ. contact resistance, 2.5A maximum switching current, 43 W maximum switching power

## 2. Introduction

The 1U Remote Selector Switch (RSS) devices are general purpose switches with dry contact closure outputs that can be used to control the selected connection state of other switch devices that have dry contact closure remote control interfaces. All four models have a front panel rotary switch that allows the user to close any one of the three rear panel dry contact outputs (A, B, or C connected to G). Two of the models also allow the user to select NONE of the dry contact closure outputs (all contacts open).

NOTE: When the RSS is used to control the connection state of a SecureSwitch revision B, C or D device, selecting the NONE position disables the RSS and allows the user to locally control the connection state of the SecureSwitch device using its front panel pushbutton switches. These selector switch models are intended to control a single SecureSwitch device. The NONE position will not work properly if multiple SecureSwitch devices are connected to the Selector Switch.

The two powered models of the RSS also include status inputs that can be used to monitor the connection state of other switch devices that have dry contact status output interfaces. These RSS models continuously display the status of three pairs of external dry contact closure inputs via front panel mounted status LEDs. When any of the dry contact closure input pairs on the RSS are shorted together, the corresponding front panel LED on the RSS illuminates. This allows the user to verify that the device being controlled by the RSS is in the selected connection state.

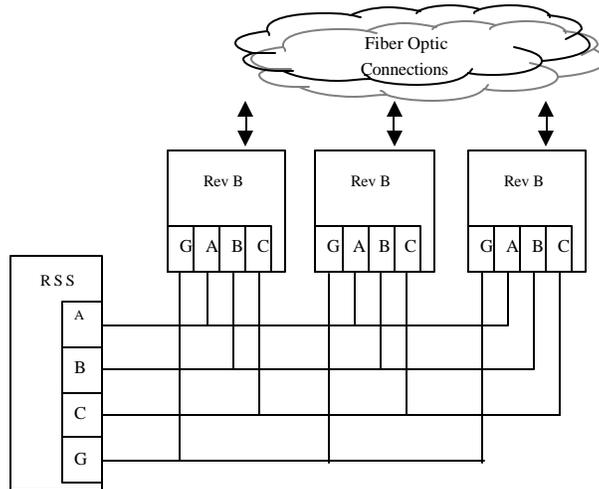
Note: that the rear panel terminal block connectors on these RSS products have been labeled to match the SecureSwitch products' Remote Status Output and Remote Control Input connectors to allow easier installation & operation when used with the SecureSwitch devices. The remainder of this manual describes using the 1U RSS with these switches.

### 3. Installation & Operation

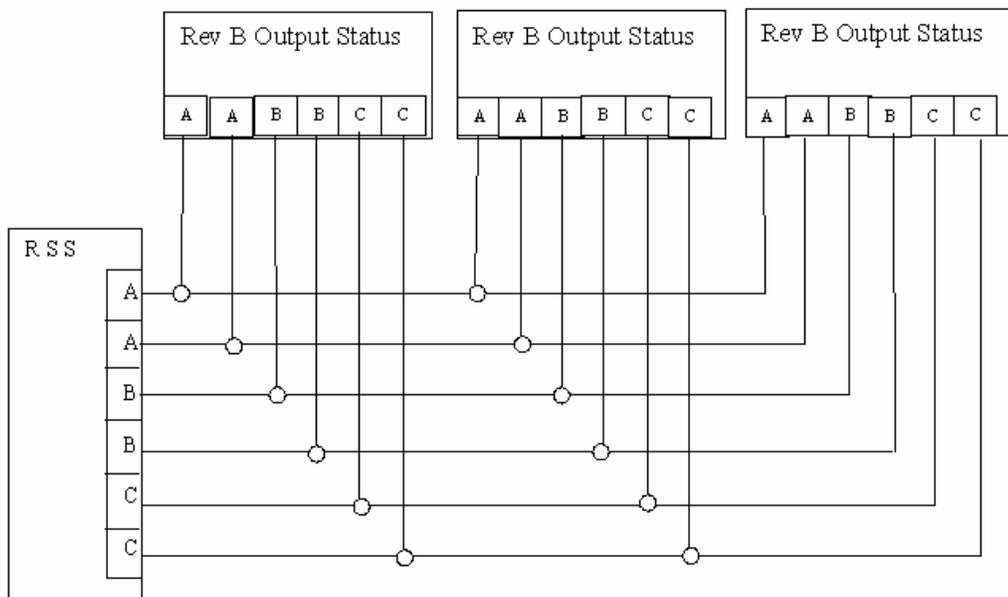
#### All Models:

To control one or more SecureSwitch devices using the 1U Remote Selector Switch, connect the 6 position terminal block connector on the RSS to the 6 position Remote Control Input terminal block connector on the SecureSwitch device(s) using a straight through cable (only pins 2, 4, 5 and 6 are used on the 6 position terminal block). Pin 2 = G, 4 = A, 5 = B & 6 = C

See diagram below.



Connect the 8 position terminal block connector on the powered versions of the RSS to the 8 position Remote Status Output terminal block connector on the SecureSwitch device(s) (only pins 1, 2, 4, 5, 7 and 8 are used on the 8 position terminal block), using a straight through cable. Pins 1&2 = C status, 4& 5 = B status or OFF status and 7&8 = A status on the SecureSwitch devices (see the example connection diagram below).



**Note:** When in the closed position, the total resistance of each dry contact closure and associated cable that the RSS is monitoring must be less than 100 ohms in order for the RSS to be able to reliably determine the contact closure status.

When all of the status and control connections have been made to the RSS, plug the external power supply into the RSS and then connect the supply to a source of AC power. Installation is now complete and the unit is ready for operation.

When a powered model of RSS is turned ON, it will illuminate the Power LED indicator on its front panel and continuously display the state of the SecureSwitch device's status contact outputs that are connected to the 8 position terminal block inputs on the RSS. For example, if port A is selected on the SecureSwitch, its A-A status contact outputs will be closed. This will cause the A LED indicator on the RSS to be illuminated. Likewise, if port B is selected on the SecureSwitch, the B LED indicator will illuminate on the RSS, and if port C is selected, the C LED indicator will illuminate.

If multiple SecureSwitch devices are connected in parallel to the RSS as shown in the previous diagram, should any of the SecureSwitch units fail to switch to the selected A, B or C position then multiple LEDs will be illuminated on the RSS indicating that a fault condition exists.

One consideration when using the above approach is that certain types of faults in the cabling that connect all of the Remote Status Outputs from the SecureSwitch devices to the RSS could go undetected (open connections may not be detected). As an alternative, you can connect the A-A pairs of Remote Status Outputs on each SecureSwitch device in a serial daisy chain (do the same for the B-B and C-C pairs), and then connect each of these three daisy chains to the appropriate pair of contacts on the 8 position terminal block on the RSS. With this wiring configuration, the status LEDs on the front of the RSS will only illuminate if all of the SecureSwitch units have the same port selected. If different ports on two or more switches are selected for any reason, then none of the A, B or C LEDs on the RSS will be illuminated indicating that a fault condition exists.

## **4. Troubleshooting**

### **4.1 Calling Your Supplier**

If you determine that your RSS is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Market Central, Inc. at (412) 494-2800

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description of the problem, including:

- the nature and duration of the problem.
- when the problem occurs.
- the components involved in the problem.
- any particular applications that, when used, appears to create the problem or make it worse.

### **4.2 Shipping and Packaging**

If you need to transport or ship your 1U RSS:

- Package it carefully. We recommend that you use the original container.
- If you are shipping the switch for repair, make sure you include everything that came in the original package.
- Before you ship, contact Market Central, Inc. to get a Return Materials Authorization (RMA) number.

MARKET CENTRAL, INC.

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