

Application Note APNT-0006

Configuration of R-165 As a 5x1 Switch

This note shows how a Monroe Electronics Series 3000 Model R-165 A/V Relay Panel may be configured as a 5x1 switch. RF, IF or just audio may be switched as well.

Typical video, RF or IF connections are shown in the signal flow depiction of the back of the R-165 panel in Figure 1, below. Audio wiring is connected in a similar manner.

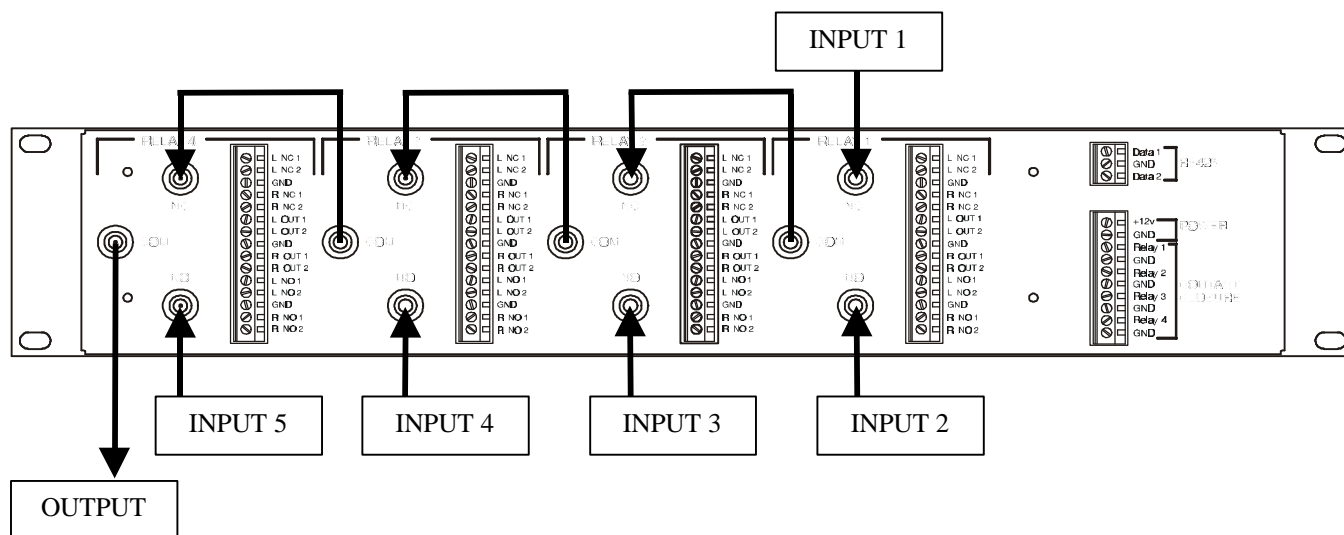


Figure 1

Control may be from a Monroe Electronics Series 3000 Program Timer (R-149 or R-153), a Series 6000 Remote Control (6002 or 6003) or other source of contact closures or logic inputs. A dedicated PC equipped with SWITCHWARE[®] software may also be used through the RS-485 interface.

When used with the timers or remote controls, the switches in the timers or remote controls should be set up as “latching” and “1 of *n*” or “no-two-of *n*” rather than *independent* so that only one switch can be ON at a time. Connect timer or remote control switches 2 through 5 to Model R-165 relay control inputs 1 through 4. Then, when switch #1 on the timer or remote control is energized, all relays on the R-165 will be in the N.C. position and INPUT 1 is connected to the OUTPUT. When switch #2 on the timer or remote control is energized, INPUT 2 is connected to the OUTPUT, etc. See Table 1.

When you use SWITCHWARE[®], you need to be aware of how the relay switches affect the matrix behavior; i.e., always subtract 1 from the relay to be activated to allow a direct correlation of input to output.

Relay ON	OUTPUT From
None	INPUT 1
1	INPUT 2
2	INPUT 3
3	INPUT 4
4	INPUT 5

Table 1