



**Audio Specialties Group
Products Division**

**Model MAS-138
RF Signal Switcher**

Preliminary

1.1 Introduction

The MAS-138 is a 1-RU chassis which provides up to four sets of diversity RF relays with normally open and normally closed connections. Each relay can be controlled by a front panel switch or by an external GPI control port on the rear panel. Optional I.P. based Ethernet control is also available.

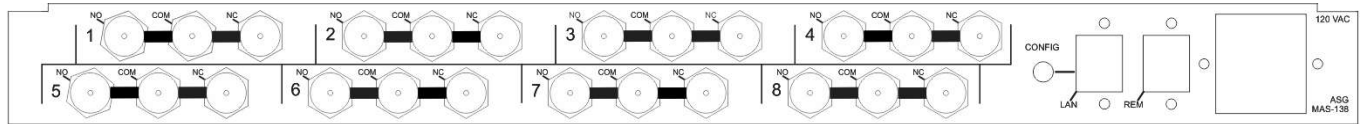
1.2 Capabilities

Each of the four sets of relay channels can be used for RX signal routing. (See Section #4, Specifications for details). The front panel contains activation switches which energize or de-energize each pair of relays independently. The rear panel contains three BNC connections for each relay circuit. The three connections allow access to the normally open (NO), normally closed (NC) and common (COM) contacts of each relay. This allows maximum versatility with each channel able to select one of two signals as an input selector, or direct a single signal to one of two destinations. By terminating either the N.O. or the N.C. connections, the relay can be used as a simple On/Off switch.

Figure 2.1
MAS-138 Front Panel Layout



Figure 2.2
MAS-138 Rear Panel Layout



Each of the four channels are identical. The following operational details apply to each channel.

3.1 Internal RF Block Diagram

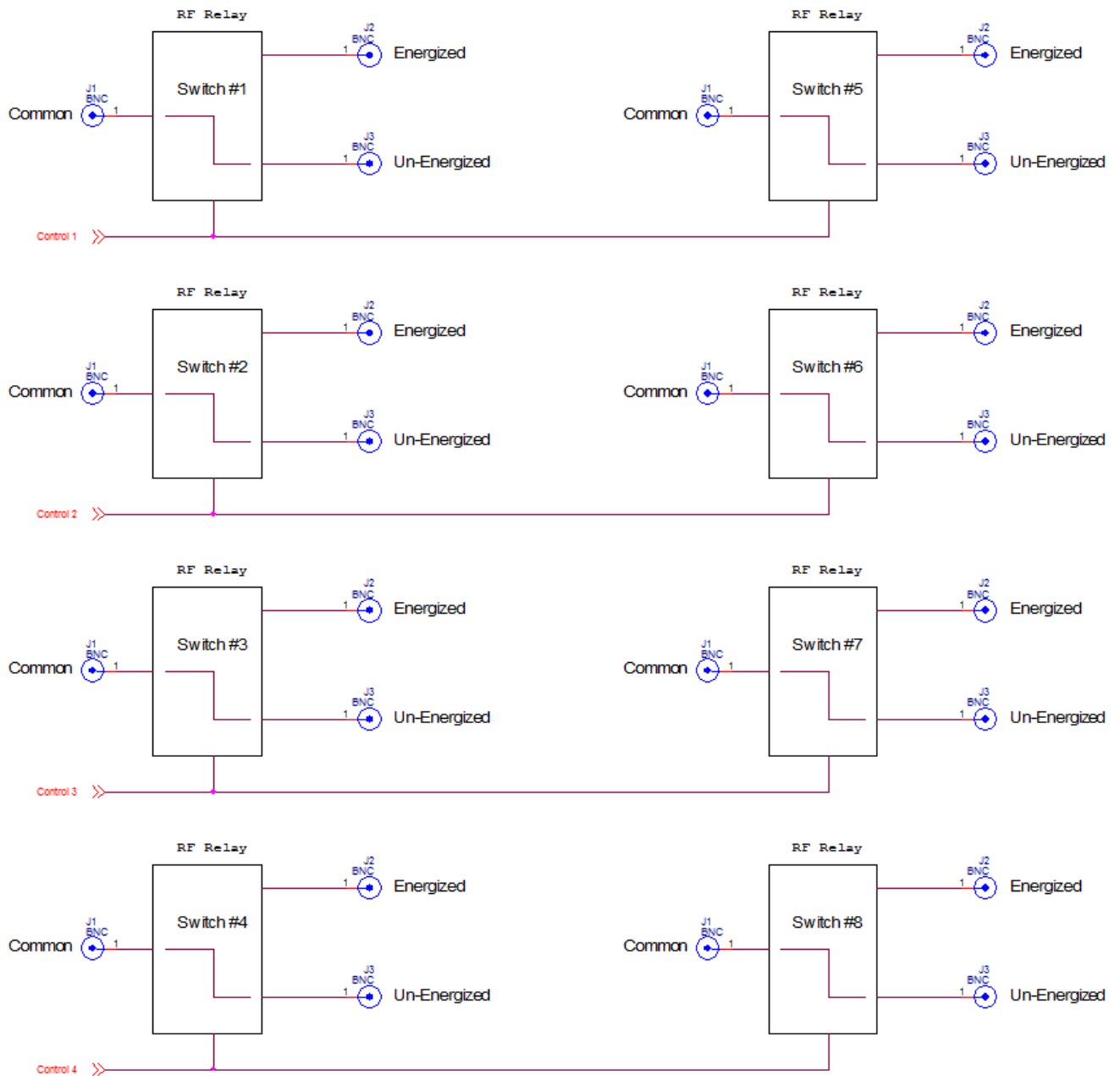


Figure 3.1
Four Channel Diversity “ON/OFF” System Wiring

Figure 3.2
Four Channel Diversity “ALTERNATE SELECT” System Wiring

4.1 Technical Details

Electrical Specifications

Power Requirements

120V AC 20W

Environmental

Temperature Operating: 0° to 60° C
Do not expose unit to rain.

Dimensions

Height: 3.5”
Width: 19” Over-all
Depth: 12”
Weight: 5Lbs

4.2 Control Wiring Variation Detail

4.2 Control Wiring

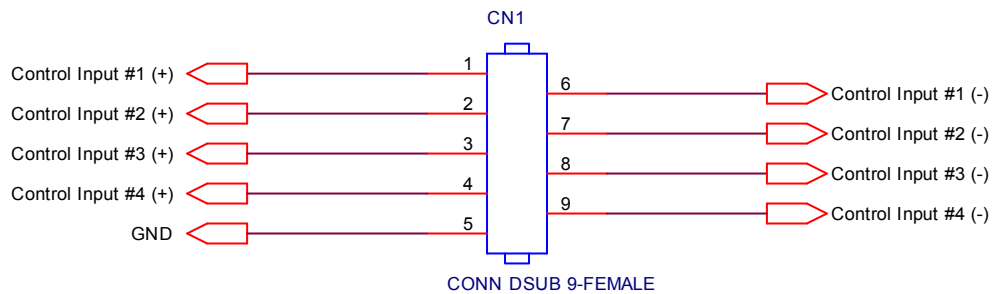


Figure 4.2
Remote Control Port Wiring