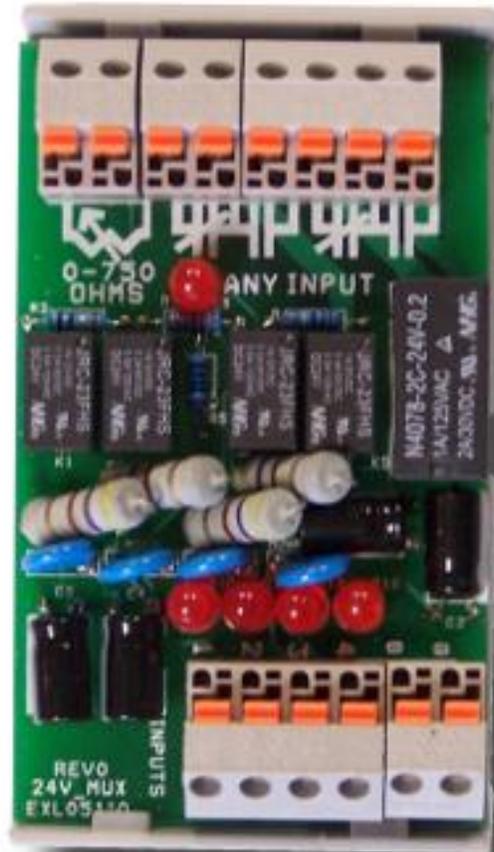


ExactLogic 24VAC/DC Digital Multiplexer



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Operation

The 24VAC/DC Digital Multiplexer will take up to four different normally open digital inputs and output a 0-750 ohms resistance output. Under normal operating conditions the output signal will read 750 ohms. There are LED's that will turn on to indicated that an input is powered.

The table below shows the resistance added to the output by each input channel.

Channel	Open adds	Closed adds
1	50 Ω	0 Ω
2	100 Ω	0 Ω
3	200 Ω	0 Ω
4	400 Ω	0 Ω

The resistance is decoded in the DDC controller to determine which of the 4 Binary inputs is on. Any combination of inputs can be detected. (i.e. If channel 3 and 4 are on the output resistance will be 150 ohms.)

The Form C relay is normally de-energized (NO is open, NC is closed). When any input channel turns on, the Form C relay will energize (NO is closed, NC is open). This is usefully for shutting power off to a HVAC unit. There is a LCD that will turn on to indicate that any input is powered and the Form C output relay is energized.

Input/Output Setup

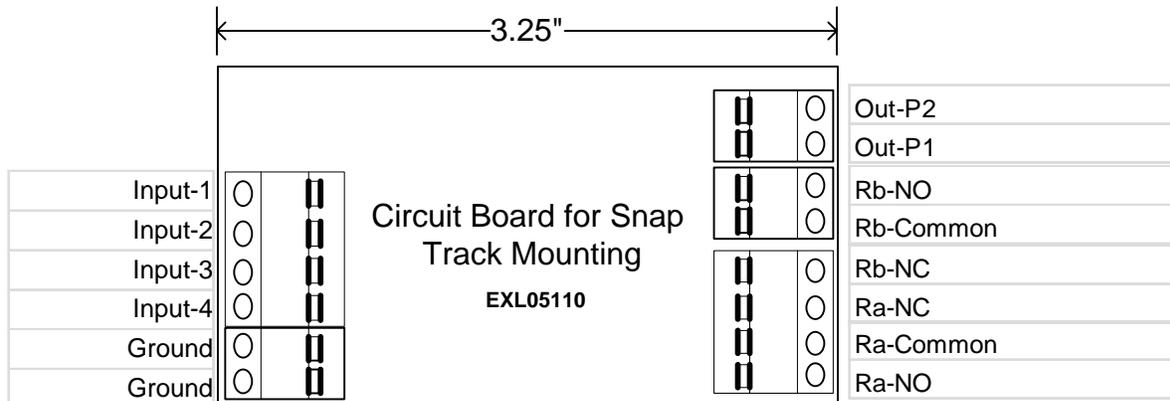


Fig. 1

*Note: Common usually 24VAC/DC input for Relays or R

* Snap Track is included for each circuit board

24VAC/DC – Input 1.....Normally Open Input1
 24VAC/DC – Input 2.....Normally Open Input2
 24VAC/DC – Input 3.....Normally Open Input3
 24VAC/DC – Input 4.....Normally Open Input4
 Ground Neutral/Ground
 Ground Neutral/Ground

Out-P2..... Sensor Ground
 Out-P1..... Sensor Signal
 Rb-NO..... Relay B Normally Open
 Rb-Common..... Relay B Common*
 Rb-NC.....Relay B Normally Closed
 Ra-NC.....Relay A Normally Closed
 Ra-Common..... Relay A Common*
 Ra-NO..... Relay A Normally Open

Wiring Example

