

RB-4

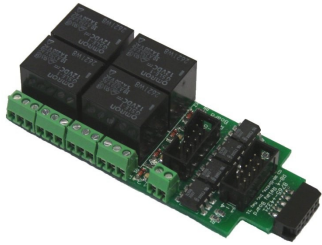
4 line SPDT 10A Relay Board

User's Guide

I/O Modules

All RR-CirKits Tower Controller and LNCP I/O modules are designed to either be plugged directly into the unit, or else mounted in Tyco 3-1/4" Snap-Track® mounted to the bench work and connected with short ribbon cables. (Snap-Track® is a plastic channel designed to mount PC cards to a chassis, not something to run trains on.) This I/O module is equipped with three connectors to facilitate these connection options and to allow for pass through wiring.

RB-4 (4 line Single Pole Double Throw 10A Relay Board)

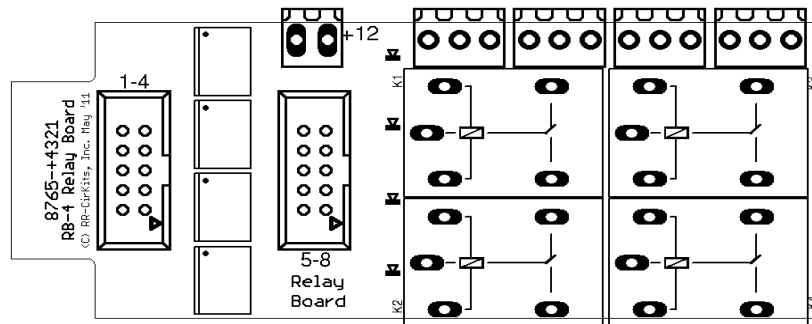


The RB-4 may be used any place that requires isolation between a high current and/or high voltage output circuit to a TC-64 or LNCP.

Some examples are driving high current high voltage circuits or controlling power to track circuits for automated stopping.

Power The RB-4 must be supplied with 12V at 150ma. for its relay coils. Use the RR-CirKits PS-S-12-500 (per 4) or PS-S-12-800 (per 5)

Switching adapters if you lack a suitable 12VDC source.

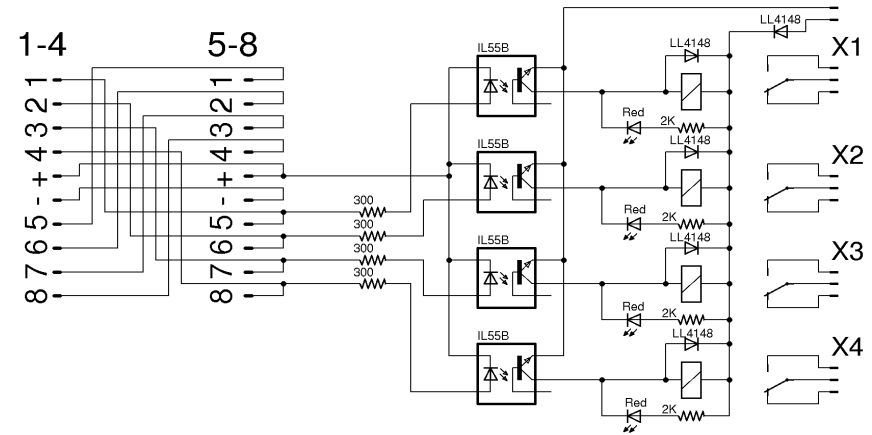


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Input Connector Pin Identification

The connector 1-4 wiring is as follows.

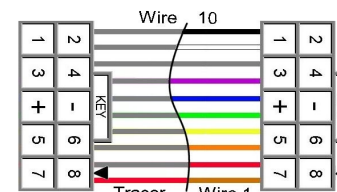
The connector 5-8 wiring is as follows.

Pin number	Port	Connection
1	h (line 8)	NC
2	g (line 7)	NC
3	f (line 6)	NC
4	e (line 5)	NC
5	Ground	Ground
6	+5VDC	+5VDC
7	d (line 4)	X4
8	c (line 3)	X3
9	b (line 2)	X2
10	a (line 1)	X1

Pin number	Port	Connection
1	h (line 8)	X4
2	g (line 7)	X3
3	f (line 6)	X2
4	e (line 5)	X1
5	Ground	Ground
6	+5VDC	+5VDC
7	d (line 4)	NC
8	c (line 3)	NC
9	b (line 2)	NC
10	a (line 1)	NC

Connections

Connection Identification



10 position IDC cable

Options

The first Input connection may be made to either connector 1-4 or to the crossover connector 5-8. The crossover connection determines if the relays respond to lines 1-4 or to lines 5-8. If a daisy chain connection is made from the 5-8 port to the 1-4 port of a second RB-4 then it will respond to lines 5-8.

If the daisy chain connection is made from the 5-8 connector of the first board to the 5-8 connector on the second board, then the second board will also respond to lines 1-4. This option may be used to switch two different circuits with the same command.

Warnings! Do not use this option to create a reversing relay! Time delays differ between the separate relay circuits and cause a momentary short circuit.

Keep all high power circuits well clear of low power circuits!