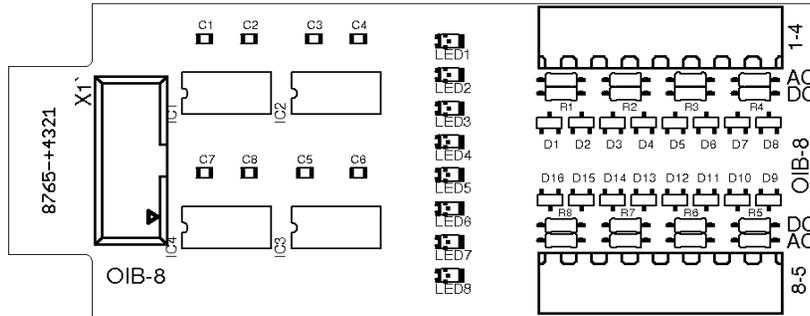


## Connection Identification



## Input Connector Pin Identification

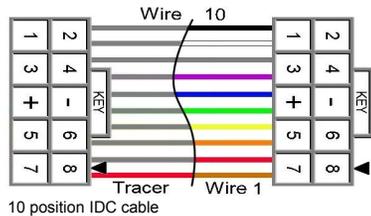
The port connector wiring is as follows.

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

## Input Connections

The input wiring is shown below.

Pin number	Connections
T1-1	JP1 Common
T1-2	Line 1
T1-3	Line 2
T1-4	Line 3
T1-5	Line 4
T3-1	JP2 Common
T3-2	Line 5
T3-3	Line 6
T3-4	Line 7
T3-5	Line 8



## Options

Input resistors must be placed at either the AC or DC positions. Calculate them to draw 10ma. at your required voltage. Filter capacitors may optionally be used at C1-C8, or else use the TC-64 debounce options for AC inputs to prevent triggering at each AC transition.

## RR-CirKits Contact Information

RR-CirKits, Inc.  
7918 Royal Ct.  
Waxhaw, NC USA 28173

(Manual Rev-a © 2-Sept-'09)

<http://www.rr-cirkits.com>  
sales@rr-cirkits.com  
service@rr-cirkits.com  
1-704-843-3769  
Fax: 1-704-243-4310

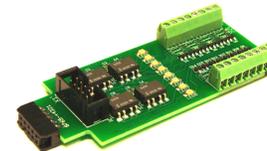
# RR-CirKits

Specializing in Affordable Electronics for Model Railroads

## OIB-8 8 line Opto Isolator Board User's Guide

### I/O Modules

All RR-CirKits Tower Controller I/O modules are designed to either be plugged directly into the TC-64, 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 allow for pass through wiring.



### OIB-8 (8 line Opto Isolator Board)

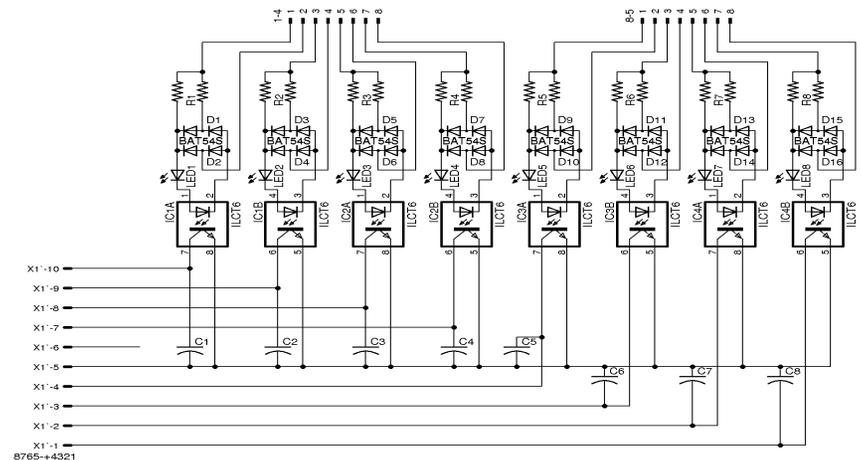
The OIB-8 board contains two 8 position input connectors. Each individual input pair has a position to mount a series limiting resistor and individual indicator LEDs. Each input may be connected as AC, or polarity sensitive DC.

The OIB-8 may be used any place that requires isolation between an input circuit and the TC-64.

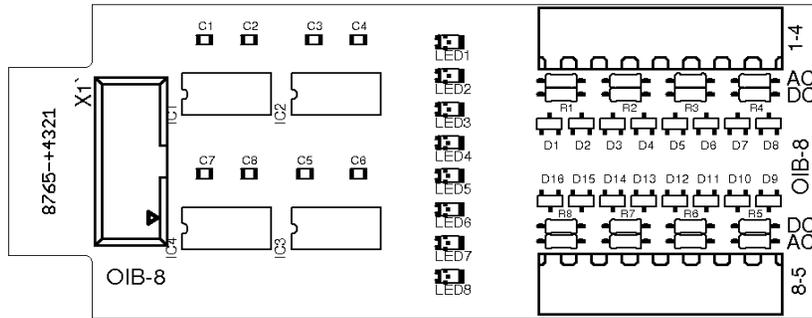
Some examples are train detection by isolated rails such as is commonly used in three rail layouts or overhead powered tracks. Another use is to monitor incandescent signal lamps and translate their state into TC-64 commands.

### Connections

There are 8 inputs and two output connectors on the OIB-8 board. The output connections are the standard TC-64 10 pin cable connections shared by all Tower Controller I/O modules. Screw connections are provided as inputs, and may be used as required.



## Connection Identification

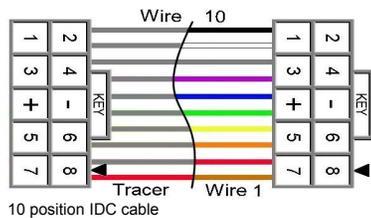


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