

# PERTRONIC INDUSTRIES LTD

## INSTALLATION NOTE

### 48-WAY OPEN CONNECTOR BOARD

### 24-WAY OPEN CONNECTOR BOARD



#### Overview:

The 48-way open collector board when used in conjunction with the LED address controller board provides a simple, economical method of driving large numbers of LEDs and/or relays.

NOTE: The 24-way board is a component reduced version of the 48-way open collector board.

The open collector outputs are accessed via 10-way IDC connectors. Each connector provides eight open collector outputs, along with a +ve output and 0V reference. For compatibility, each connector's pin layout is identical to the open collectors pin layout on the F16e, F100 and F120 panels.

Each open collector output has a link that when removed, connects an in line 2K2 resistor to the output. This removes the need to hand solder resistors to remote LEDs.

A DC connector is provided for when connection to an external supply is necessary. A link is used to connect the external DC supply to the output connectors +ve output.

When the OE link is in the 'normal' position, the outputs drive low when addressed. If the OE link is set to the 'external' position, then the outputs are disabled.

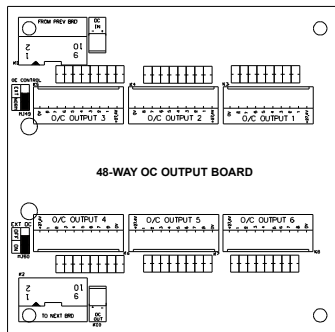
To reduce wiring congestion, the connectors on the PCB have been arranged so that wire looming flows from the edge of the board, to the middle, and out the sides. Two holes are provided for when cable ties are needed to secure the loom. All sensitive components are located away from where they can be damaged. See diagram below.

A maximum of ten 48-way or twenty 24-way Open Collector Boards may be connected together (480 outputs total).

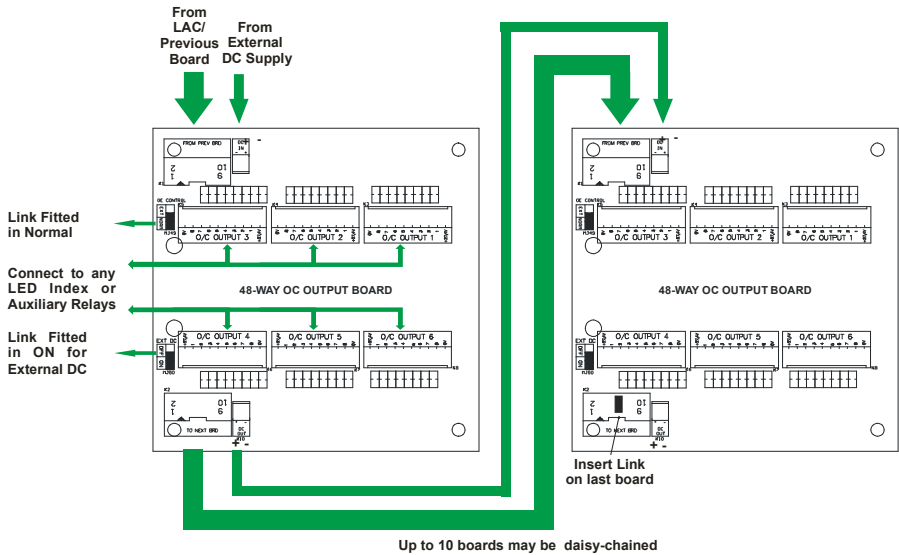
#### Specification:

Dimensions:	96mm x 97mm
Quiescent Current:	<1mA
Compatible Controller:	Led Controller Board and RS485 Controller
Maximum Daisy Chained Boards:	10 x 48 Way, 20 x 24 Way
Maximum Source Current per Output:	10mA
Maximum DC in:	27.4V
In line Resistance with Link Fitted:	2K2
10 Way Connector Pin-out Layout:	pin 1 = +ve pin 2-9 = o/c 1-8 pin 10 = 0V

#### Diagram:

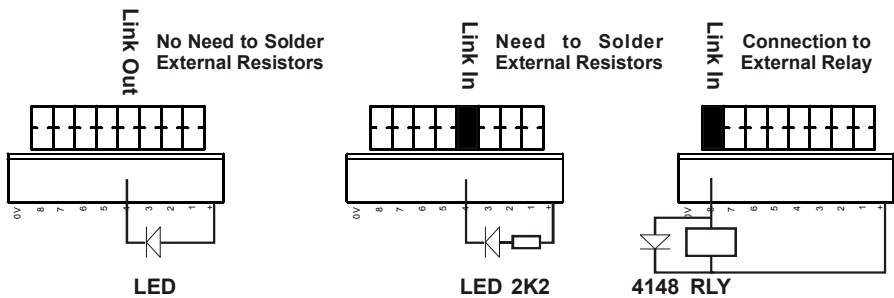


## Connection Diagram:



Note: Up to 20 boards may be daisy-chained when using the 24-way open collector board.

## Output Configuration:



Note: Each 10-way IDC connector may be connected to a mix of Relays and LEDs as required for the application