

# PERTRONIC INDUSTRIES LTD

## 8-Way Common Relay Board Installation Note



### Overview:

The **8-Way Common Relay Board** may be used with **F100A**, **F120A** and **F16e** panels, where clean contacts are required instead of open-collector outputs.

The board contains 8 single-pole changeover (form C) relays, each of which is operated from the panel's open-collector output.

The relay outputs may be isolated due to 'AUXM Isolate' or 'Bell Isolate', using inputs provided from the panel's 'AUXM' and 'BELL' outputs. Each relay has three jumper links (+, A, W) provided to select the desired mode. **NOTE:** Only **ONE** jumper can be inserted at a time for each relay.

A 10-pin IDC connector connects the relay board to the fire alarm panel's open-collector output.

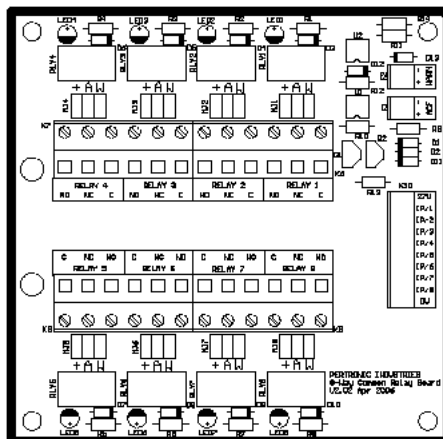
The relay contact connectors accept flexible stranded wire up to 1.5 mm<sup>2</sup> (2.5 mm<sup>2</sup> solid).

To reduce wiring congestion, the connectors on the PCB have been arranged so that the wiring loom flows from the edge of the board, to the centre and out to the connectors. Two holes are provided for cable ties to secure the loom.

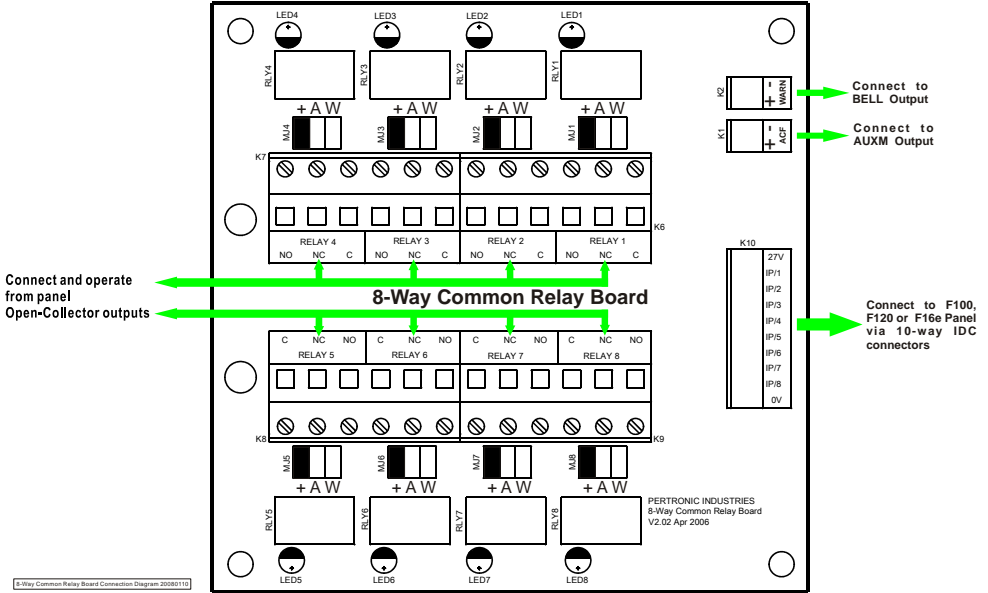
### Specifications:

|                                 |                                       |                               |
|---------------------------------|---------------------------------------|-------------------------------|
| Dimensions:                     | 93 x 92                               | W x H mm                      |
| Mounting Holes:                 | 86.5 x 85                             | W x H mm                      |
| Operating Voltage               | 18 Vdc to 30 Vdc                      |                               |
| Operating Current:              | 8.5 mA per energized relay @ 27.4 Vdc |                               |
| 10-Way Connector (K10) Pin-Out: | Pin 1:                                | +27.4 VDC                     |
|                                 | Pins 2-9:                             | Open-Collectors 1-8           |
|                                 | Pin 10:                               | 0V                            |
| 2-Way Connector (K1) Pin-Out:   | Pin 1:                                | AUXM –                        |
|                                 | Pin 2:                                | AUXM +                        |
| 2-Way Connector (K2) Pin-Out:   | Pin 1:                                | BELL1 – or BELL2 –            |
|                                 | Pin 2:                                | BELL1 + or BELL2 +            |
| Relay Contacts:                 | 1A @ 30 Vdc,                          | resistive load, single form C |

### Diagram:

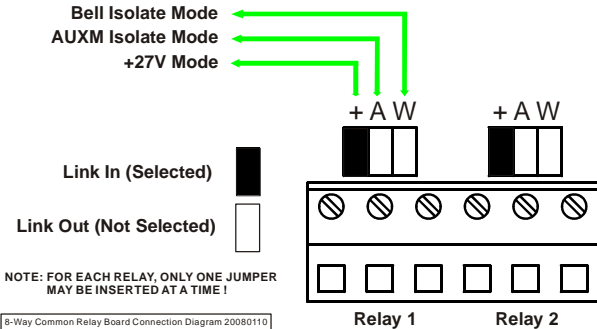


# Connection Diagram:



8-Way Common Relay Board Connection Diagram 20080110

## Links:



8-Way Common Relay Board Connection Diagram 20080110

| Open-Collector Link | OFF    | ON  |     |     |    | ON  |     |     |    | ON  |     |     |    |
|---------------------|--------|-----|-----|-----|----|-----|-----|-----|----|-----|-----|-----|----|
|                     | +/A/W  | +   |     |     |    | A   |     |     |    | W   |     |     |    |
| Bell Relay          | OFF/ON | OFF | ON  | OFF | ON | OFF | ON  | OFF | ON | OFF | ON  | OFF | ON |
| AUXM Relay          | OFF/ON | OFF | OFF | ON  | ON | OFF | OFF | ON  | ON | OFF | OFF | ON  | ON |
| Relay Output        | OFF    | ON  | ON  | ON  | ON | OFF | OFF | ON  | ON | OFF | ON  | OFF | ON |

Note: When the **A** or **W** link is selected, operation of the relay requires the appropriate AUXM or BELL relay to operate at the panel.

## Ordering Information:

| Product Code | Description              |
|--------------|--------------------------|
| 8WCOMR       | 8 Way Common Relay Board |