

# **Model 3000/Access 4000 8 x 5A Passive Relay Board Type 2. P/N: 995084**

## **INSTALLATION NOTES**

### **Introduction**

The 8 x 5Amp Passive Relay Board provides eight independent, high current relay outputs, offering a general purpose interface in applications such as warning devices (strobes, etc.), air-conditioning, process control and access control including door locks.

The relays can be switched by any Open Collector Auxiliary Output capable of switching up to 50mA.

When used in conjunction with Type 2 or later Control Modules, the board can be connected directly to JP3 via the Ribbon cable supplied.

**IMPORTANT NOTE:** Ensure that the current required by the Relay Board is within the limits of the Module, Power Supply or other Device that is used to power the Relay Board.

### **Specifications**

Power Supply Input:	11V to 14V DC
Current Consumption:	45mA per relay.
Contact Rating.	
Maximum switching current:	5 Amps @ 50VAC or 24VDC
Physical dimensions:	Length: 180mm Width: 68mm
Installation environment:	0° to 40° Celsius
	15% to 85% Relative humidity (non-condensing)

**NOTE:** While the relays used on this product have higher AC Voltage contact ratings, the manufacturer does not recommend direct connection of AC voltages above 50VAC to the relay contact connections.

**8 x 5A Passive Relay Board**

- Relay PCB sub-assy.
- 4 x Hex brass spacer. 35mm.
- 4 x M3 screws.
- 4 x Plastic self adhesive PCB standoffs.
- Installation notes. (This document)
- 1 x 8 Way Plug-on screw terminal
- 1 x 2 Way Plug-on screw terminals.
- 4 x 6 Way Plug-on screw terminals.
- 1 x 20 way interconnection cable. 200mm

**Installation**

-Remove Power and disconnect the Battery from the Host Module and/or Power Supply.

-The 8 x 5Amp Relay Boards can be mounted in a convenient location by one of the following methods:

- a) -In any suitable enclosure using the self adhesive stand-offs provided.
- b) -In a Model 3000/Access 4000 enclosure where provision is available for use of the Hex brass spacers. e.g. To “piggyback” the board on an existing Module.
- c) -In a Model 3000/Access 4000 Type 2 enclosure where additional stand-offs are provided for the installation of ancillary boards; using the M3 screws provided.

-Connect T1 “1” to “8” to the required Auxiliary Outputs on the Model 3000/Access 4000 Module or Auxiliary Expander Board. *See diagram opposite.*

**OR**

-Connect the 20 way Box Header to JP3 on a Type 2 or later Control Module using the Ribbon cable supplied. *See diagram on Page 4.*

If powered from a Model 3000 / Access 4000 Module:

-Connect T2 “V+” and “GND” to “DET+” and “DET-” on the Module.

If powered from a separate 12V Power Supply.

-Connect T2 “V+” to the +12V output terminal of the Power Supply.

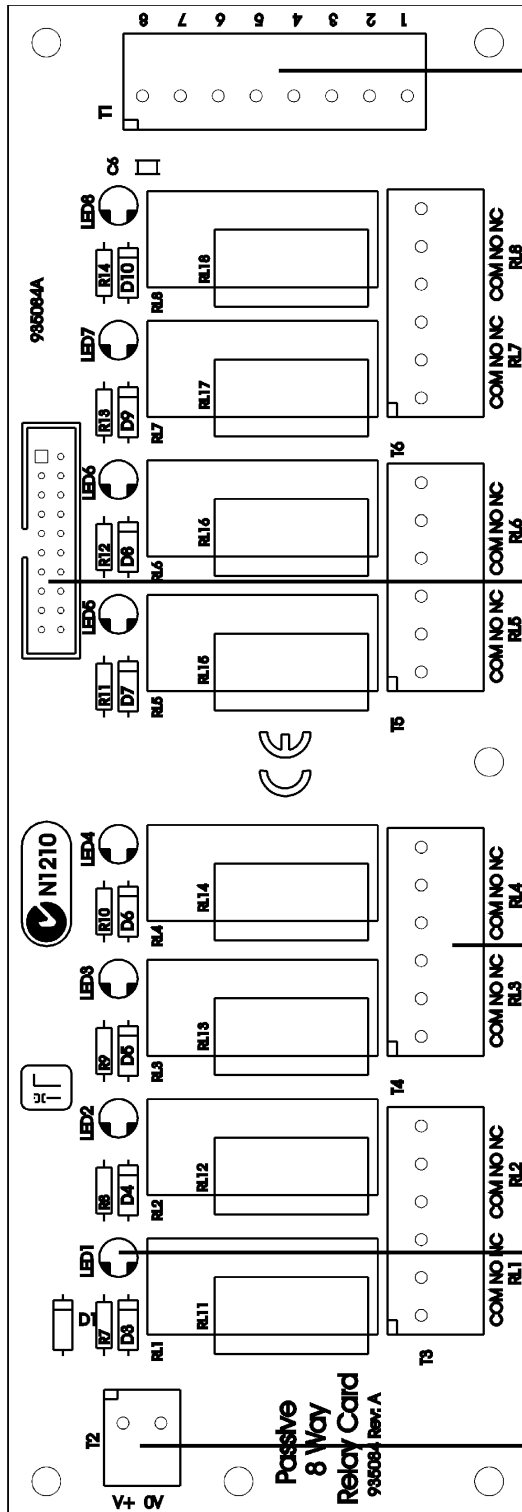
-Connect T2 “GND” to the 0V (-VE) terminal of the Power Supply, AND also to “DET-” on the Module that is being used to control the Relay board.

-Test the installation and wiring by following the steps under “Commissioning” on Page 4, then connect the Relay outputs to the device/s to be controlled and test again.

**IMPORTANT NOTES:**

- 1) If a separate Power Supply is used to power the Relay Board, ensure that a common Negative connection is provided between the Power Supply and the Module used to control the relays.
- 2) Ensure that any Relay boards plus other devices powered from the Module or separate Power Supply do not exceed the maximum auxiliary current allowed.

## 8 x 5Amp Passive Relay Board



T1.

Trigger input terminals for each Relay.  
Can be connected to Open Collector  
Auxiliary outputs such as:

- 8 Aux Expander 995055, T1.
- 8 Aux Expander 993055, JP2.
- Mini Expander Module, TB4.
- Intell 4 Door Access Module, T14.
- 24 Aux. Expander, T1, T2 or T3.
- Universal Expander Module, T8.

20 Way Header.

Alternative Trigger input connection.  
Connect to JP3 on Type 2 or later  
Control Module using 20 way Ribbon  
cable supplied. See Page 4.

T3 to T6.

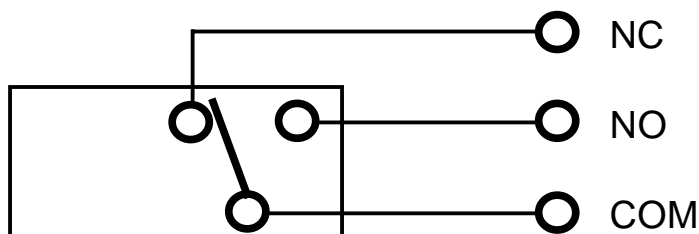
Common, Normally Open & Normally  
Closed Relay output contacts for each  
of the 8 Relays. See diagram below.

LED1 to LED8

Relay ON Indicator LEDs.

T2.

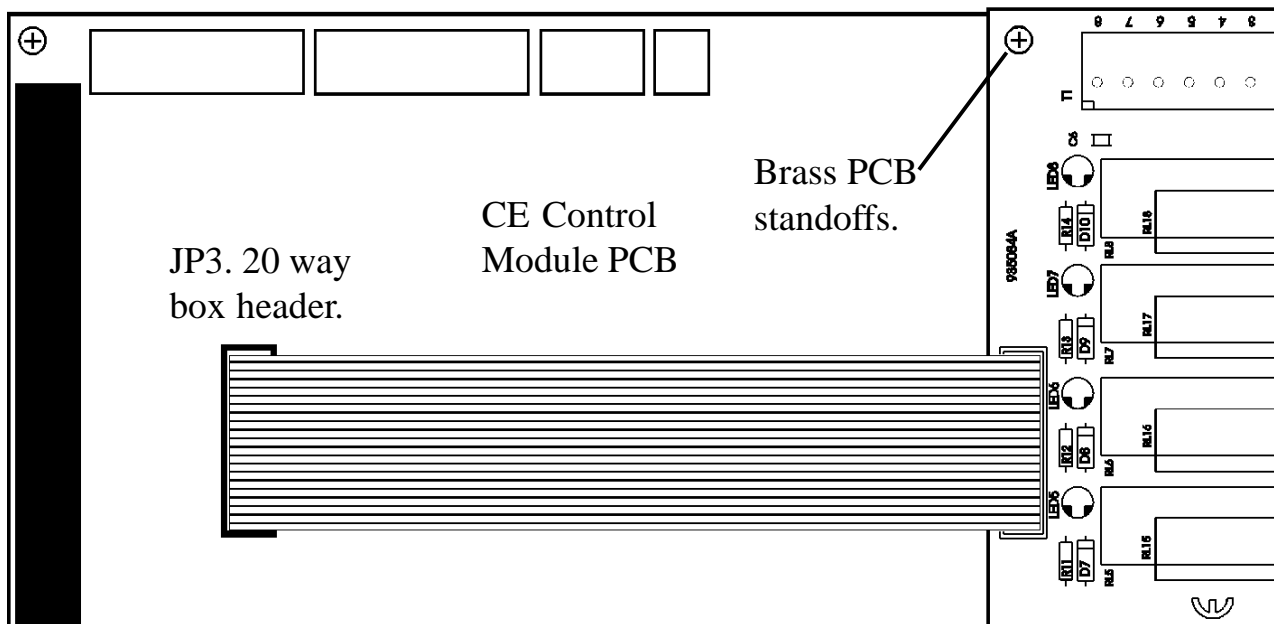
Power Supply input. +12V & 0V (Gnd)



Relay Contacts.

Schematic diagram.

Max: 5A@50VAC or 24VDC.

**Type 2 or later (CE) Control Module connection****Commissioning**

1. When wiring of the Control Inputs (T1 or the 20 Way header) and the Power Supply Input (T2) is complete and checked to be OK, apply power to the Module.
2. The Relays can be tested via the “Test Auxiliaries” option. <MENU>, 4, 2.
  - Determine the Auxiliary ID Numbers of the Auxiliaries connected to the Relay board.
  - Turn each Auxiliary On and Off in turn while monitoring the relevant LED on the Relay board to check that the Relay is functioning.

Note: When connected directly to JP3 on Type 2 Control Modules, the Relays will be controlled by C01:X03 to C01:X10.

While every effort has been made to ensure the accuracy of this manual, the manufacturer assumes no responsibility or liability for any errors or omissions. Due to ongoing development, this manual is subject to change without notice.

**Designed & manufactured in Australia.**