

# 8600 Relay Expansion Card



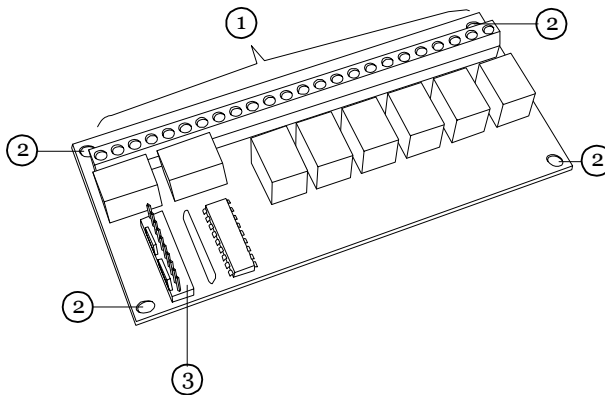
## Installation Guide

## **1. INTRODUCTION**

The 8600EUR-00 relay expansion card is designed to fit a range of Cooper Security Ltd equipment, and provides a means of converting open collector transistor outputs to NO/NC voltage free relay contacts. This card contains eight relays, each with its own dedicated input.

## **2. TECHNICAL DESCRIPTION**

Figure 1 shows the layout of the 8600 PCB (Printed Circuit Board).



- 1. Connector for relay outputs
- 2. Fixing holes
- 3. Connector for interface cable

Figure 1. 8600 Relay Board

## **INTERFACE CABLES**

The 8600 is supplied with three interface cables, illustrated in Figures 2 to 4. Cable 485123 is fitted to the input connector at the factory.



Figure 2. Interface Cable 485123



Figure 3. Interface Cable 485354

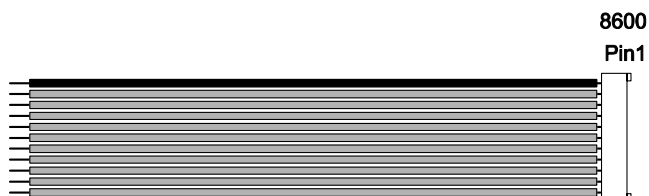


Figure 4. Interface Cable 485345

To remove the factory fitted interface cable you may need to ease the polarising clips on the input connector with a small screwdriver.

## **CONNECTORS**

Figure 5 shows the input connector for the 8600. Note that on all the interface cables, pin 1 (black lead) is 0VDC.

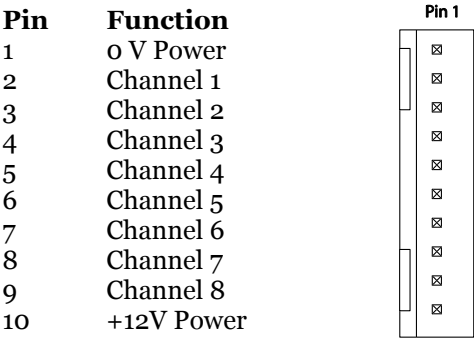


Figure 5. 8600 Input Pins

Figure 6 shows the relay output connectors available on the 8600.

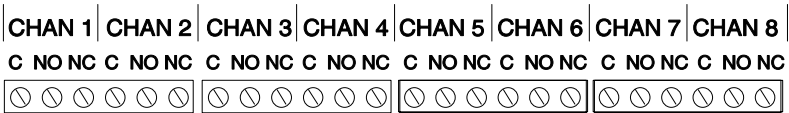


Figure 6. Relay Output Connectors.

**SPECIFICATION**

- Outputs

Relay contacts, no/nc, 1A at 30VDC, 120VAC
- Inputs

Vin(ON) : 4V (min), V+ (max) or Open circuit.

Iin (ON) : 5mA (max), Vin = 15V.

Vin (OFF) : < 1V.

Iin (OFF) : -1.2mA (typ).

Each input has a 10K pullup resistor connected to the +ve supply.

Supply Voltage            V+: 9-15VDC. 12VDC nominal.

Power Consumption      150mA all relays active, (19mA per active relay).

Dimensions      H x W x D = 25 x 130 x 60 mm.

## **COMPATIBLE EQUIPMENT**

The following equipment is compatible with the 8600 using the interface cables supplied:

9x5x range            Eight channel receiver (with cable no: 485354).

768r/769r & 4618/9            Eight channel receivers (with cable no 1-485123)

65/85/95EN, M-Series and most other panels      Control Unit (with cable no 485345)

## **FITTING THE RELAY CARD**

To fit the relay card within a 4618/9 or 768/9r please read the Installation Guide supplied with those products.

When fitting a 8600 within a 95EN Cooper Security recommend two alternative positions for the unit, see Figure 7.

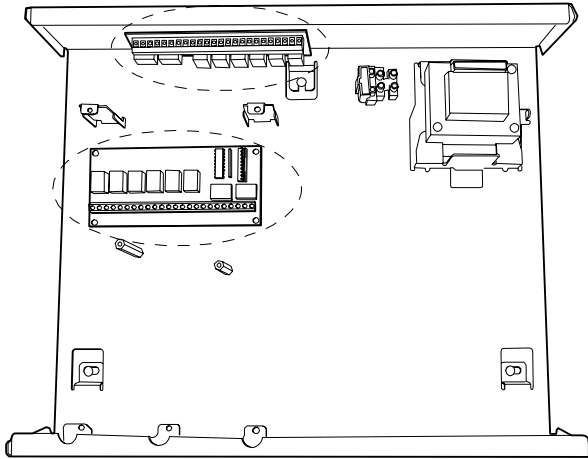


Figure 7. Mounting Positions with 95EN case

To fit the relay card :

1. Remove all power from the control unit, both mains and battery.
2. Connect any required wiring to the 8600 relay outputs and route the cable through the back of the case.
3. Fit adhesive backed stand off pillars in the holes at the corners of the relay card.
4. Remove the main control unit PCB from the case (if fitting the 8600 behind the main pcb).
5. Mount the relay card in position in the case (see Figure 7).
6. Refit the control unit pcb (if necessary)
7. Fit the interface cable from the relay card to the connector on the main circuit card .

## **Programming the Control Unit**

To program the 4618/9 and 768/9r please read the Installation Guide supplied with those units.

To program the 95EN or any of the M-Series control units, please read the Engineering manual supplied with those control units.

Note that for the 95EN and M-Series control units, the hardwired digi outputs are defaulted to +12V inactive 0V active (+ve removed). This will energise the relays on the 8600. If you wish to change this use option 45-07 for the 95EN series or option 1-9-1-07 for the M-Series to invert the digi outputs.

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