

# 40 Way Programmable Mimic Driver Card

## Product Overview

The 40-Way programmable mimic driver is a compact remote I/O device for the ZX series intelligent multi protocol fire alarm control panels. This device, along with other remote I/O devices, the repeater units and the external printer provide a complete range of peripheral devices to further enhance the functionality and expandability of the ZX series systems.

The 40-way mimic driver card consists of 40 open collector outputs built on a single printed circuit board. The outputs can provide up to 15mA each to drive mimic LEDs (or other low-current external loads) and can be programmed to follow a zone or an event in the master panel.

The AUTO-LEARN facility in the ZX series control panels automatically determines the number of modules connected to the peripheral bus and add each mimic driver card to the list of outputs in the panel. Once the mimic driver cards are learned, then each of these cards can be programmed to follow a group of 40 zones or events on the system (e.g. zones 1-40, 41-80, etc., events 1-40, 41-80, 81-120, etc.).

The 40-way mimic driver card requires an external power supply to operate. This may be taken from the auxiliary power supply output on the ZX series control panel or any other suitable DC supply of suitable voltage and current rating. The open collector outputs can switch a voltage derived from an on-board power supply or from an external dc voltage source (max. 24Vdc). When the on-board power supply is used the outputs can drive up to 2 LED indicators. When a higher voltage external dc supply is used the outputs can drive up to five LEDs simultaneously. In both cases, a suitable current limiting resistor

must be connected in series with the LED(s) to limit the maximum current to 15mA.

The 40-way mimic driver card connects to the ZX series panel via the RS485 peripheral port (port D). A RS485 communication card must be fitted in the ZX series fire alarm control panel for that purpose.

## Key Features

- Provides 40 programmable open-collector outputs
- Compatible with ZX series intelligent multi protocol fire alarm control panels
- RS485 communication
- Connects to the peripheral bus (port D) on the fire alarm panel
- Up to 31 on a peripheral bus
- Zone or event operation
- Easy DIP switch addressing
- 12 to 24V switching capability



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The RS485 peripheral address is set via an onboard DIP switch and other peripherals can be daisy chained together on the same line. Up to a maximum of thirtyone, forty-way mimic driver cards can be connected to a peripheral bus. This number is reduced when any other peripheral devices are used on the same bus.

## Mechanical:

<b>Dimensions (HxWxD):</b>	113 x 160 x 29 mm
<b>Weight:</b>	226 gr. (8 oz)
<b>Operating temperature:</b>	0°C to 49°C
<b>Humidity:</b>	10% to 93% non- condensing

## Part Numbers:

Description	Order Codes
<b>EN54</b> 40-way programmable mimic driver card	795-065
Other accessories:	
RS485 communication module.	795-004-001
Hi-485 high integrity module.	795-038-001

For further details on these or any other Morley-IAS products please contact your local distributor, Morley-IAS Business Manager or via our contact details found below. Morley-IAS by Honeywell - Providing a control panel solution, for fire industry professionals, committed to supporting our device partners.



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## Electrical:

<b>Operating voltage:</b>	18 to 28 Vdc
<b>Current consumption:</b>	
<b>Stand by: (all outputs off) 19mA @ 18 Vdc</b>	
	29mA @ 24 Vdc
	39mA @ 28 Vdc
<b>Full load: (all outputs on) 370mA @ 18 Vdc</b>	
	277mA @ 24 Vdc
	247mA @ 28 Vdc

### Note:

An additional 15mA per output must be added when the on-board power supply is used to drive the external load(s). A suitable current limiting resistor required in series with the LED(s) to limit the output current to 15mA.

### Power consumption:

#### On-board power source:

<b>V<sub>ss</sub> (nom):</b>	6.5 to 7.0 Vdc
<b>I<sub>ss</sub> (max):</b>	15mA per output

#### External power source:

<b>V<sub>ss</sub> (ext):</b>	min. 12Vdc, max. 24 Vdc
<b>I<sub>ss</sub> (max):</b>	15mA per output

### LED indicators:

<b>485RX:</b>	Yellow, flashes when mimic card receives valid data.
<b>PWR:</b>	Green, flashes at a rate of 1Hz when mimic card has a DC supply and is operating.
<b>Screw terminals:</b>	Maximum cable cross sectional area 2.5 mm <sup>2</sup> . (13 AWG) removable block.

### Wiring:

#### Maximum distance from control panel:

1,200m (3937 ft).  
150 Ohm end-of line resistors required at both ends of the RS485 circuit.

**Recommended cable:** Belden 8760 or equivalent twisted shielded pair.