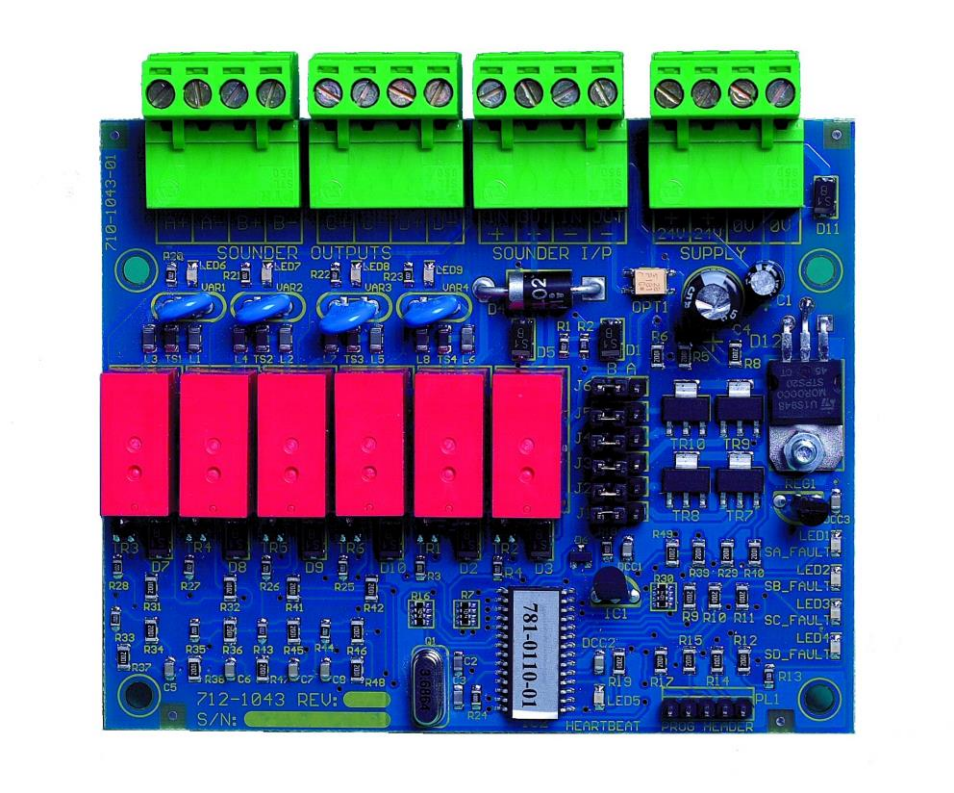
Sounder Splitter



The Mxp-021 Sounder Circuit Splitter is a peripheral unit for use with all of the MxPro 4 range of control Panels.

This additional unit takes a standard sounder circuit from either a control panel or other panel based sounder circuit controller and multiplies to provide up to 4 monitored outputs.

In operation, the additional outputs follow the output they are connected to. The circuits are fully monitored for open and short circuit and will take an independent supply to provide up to 1Amp per.

Features

The unit is available in two formats:

- **Mxp-021** a peripheral card usually factory fitted into an MxPro 4 multi loop panel.
- **Mxp-021-BXP** is a Splitter and 5 Amp EN54-4 PSE mounted in a metal enclosure. This unit provides up to 1 Amp output on each of the ancillary circuits

Specifications & Ordering:

Models, Sales Order Parts:	
Mxp-021:	4 Way Sounder Splitter Card
Mxp-021F:	4 Way Sounder Splitter Card fitted within MxPro 4 2-8 Loop Panels
Mxp-021-BXP:	4 Way Sounder Splitter Card and 4 Amp EN54-4 power supply mounted in a metal enclosure

Applications / Limitations:

The 4-way sounder splitter card can be supplied as a card only for mounting in a customer's/OEM enclosure or supplied fitted within an MxPro 4 2 Loop Panel / MxPro 4 4 Loop Panel / MxPro 4 8 Loop Panel enclosure when specified at the time of order. When supplied fitted in this format, the load at the outputs from the splitter will be limited to the sounder output loading of the input circuit from which it is driven.

For applications where additional output drive current is required, the Mxp-021-BXP should be specified. This will provide 4 monitored 1 Amp rated sounder circuits in addition to the 1 Amp sounder circuit output capability of the MxPro 4 control panels.

All 4 outputs on the sounder splitter card will operate in tandem and follow the output of the sounder circuit to which the card is connected.

Compatibility:

The Mxp-021 is compatible with all the MxPro 4 control panels

Item	Specification Details	
Sounder Input	"IN+" and "IN-" Connect to the Input trigger (panel sounder output circuit). "OUT+" and "OUT-" Connect to the remainder of the input sounder circuit or terminate with a 10KΩ EOL resistor.	
On board indication	4 "red" sounder LED's. LED's illuminate when the output is triggered. 4 "yellow" Fault LED's. LED's illuminate if the corresponding sounder circuit has a short or open circuit fault.	
Formats	1A Splitter	4A Splitter
Sounder Outputs	4 monitored sounder circuits (Total maximum load across all circuits = 1A)	4 x 1A rated monitored sounder circuits
Power Supply (Sounder outputs)	Sounder output supply provided by the input (trigger) sounder circuit.	Sounder output supply provided by an external 24Vdc 4A supply.
Power Supply (Card)	Quiescent: 25mA Driving: 50mA	Quiescent: 30mA Driving: 55mA
Dimensions (H x W x D)	PCB only: (Mxp-021) 95mm x 105mm x 18mm (including connectors) Enclosure: (Mxp-021-BXP) 320mm x 345mm x 85mm	

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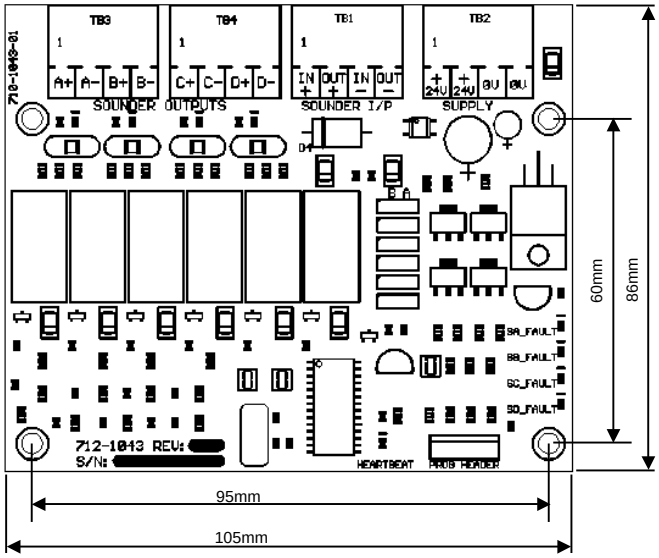
1 Installation

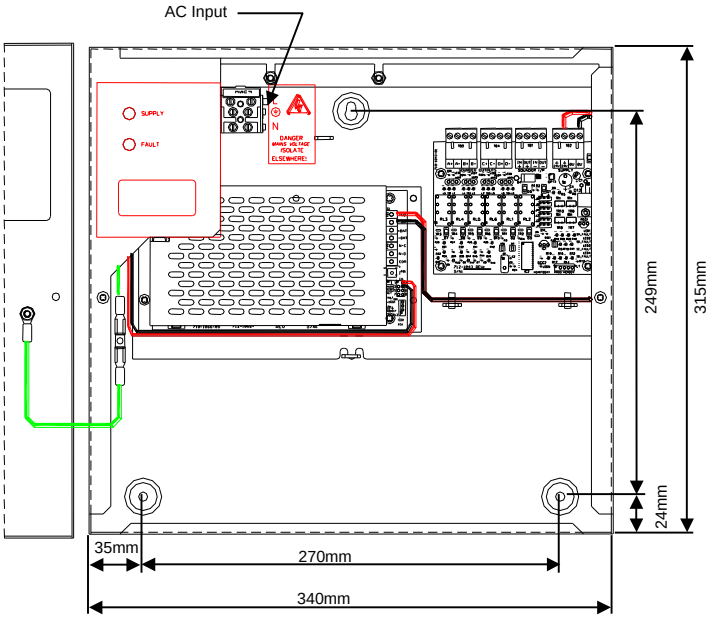
1.1 Mxp-021

The printed circuit card is designed to fit onto the chassis assembly of the MxPro 4 2-8 loop panels. For further details, refer to manual 680-014.



1.2 Mxp-021-BXP

The enclosure arrangement is shown in the diagram below:



For full details of the power supply, mounting of the enclosure and installation of the AC supply and installation of the batteries refer to manual 680-132.

Seven (7) 20mm knockouts are provided in the top of the enclosure for wiring.

Maintain segregation between the AC input feed and the sounder wiring.

2 PCB Configuration

The Mxp-021 will operate in one of two modes:

a) 1A splitter

b) 4A splitter

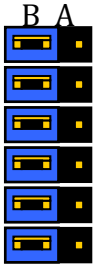
The mode is selectable via the on-board jumper switches (J1-J6).

2.1 1A Sounder Splitter

All six jumpers (J1-J6) must be set to position **'B'** as shown below.

The card still requires a 24V supply, which can be derived from the panel's 24V auxiliary supply or from another external supply. The supply to the 4 additional sounder output circuits is derived from the input (trigger) sounder circuit.

Note: The total maximum sounder load (input circuit + 4 output circuits) is determined by the input circuit maximum load current.

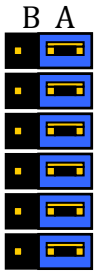


Jumper configuration for the 1A splitter (see wiring configuration diagram)

2.2 4A Sounder Splitter

Set all six jumpers (J1-J6) to position **'A'** as shown below.

The 24V supply is derived from an external supply. This supply must be rated at 100W (min) if each of the additional sounders is to drive up to a 1A load.

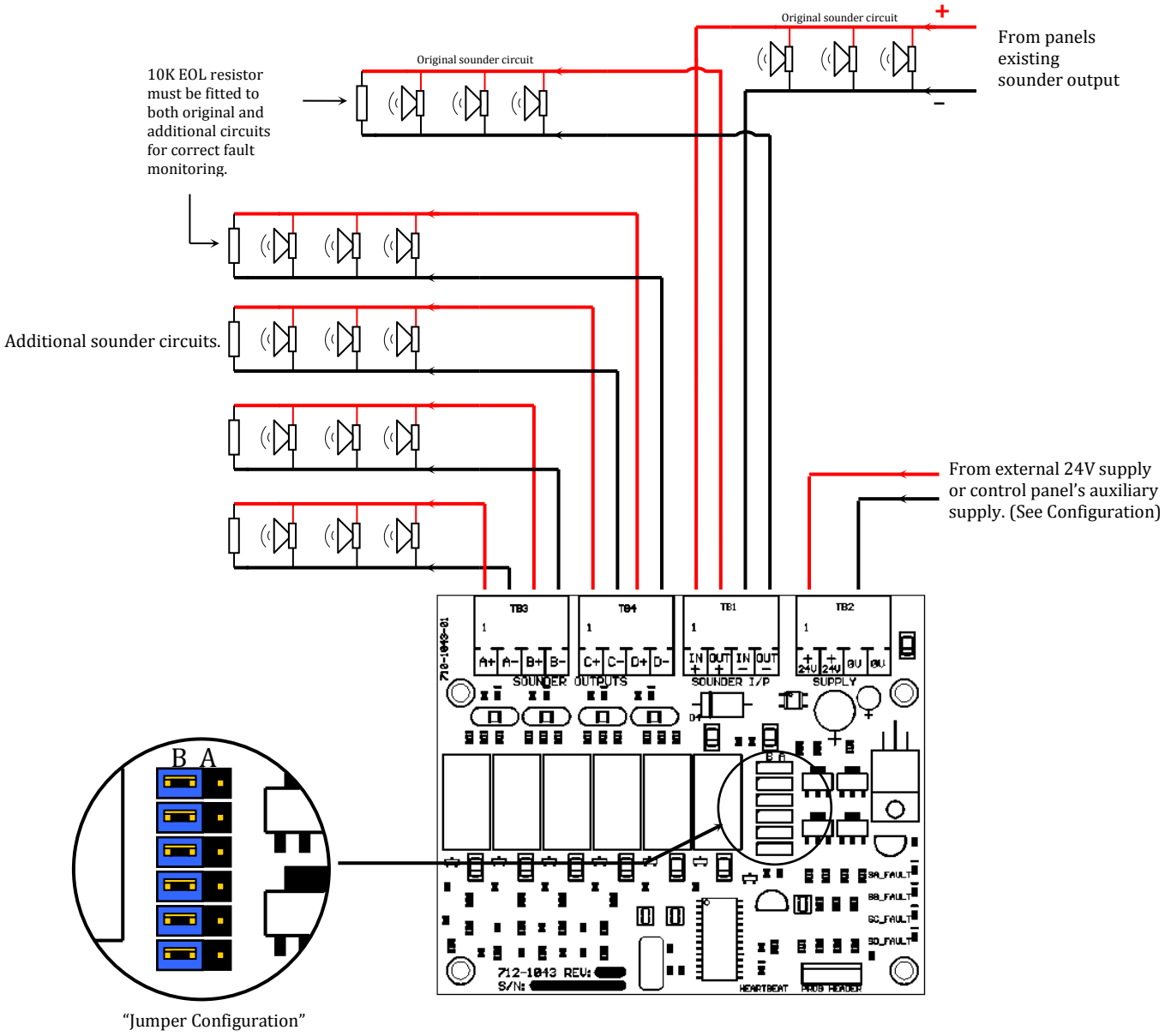


Jumper configuration for the 4A splitter (see wiring configuration diagram)

Please note any jumper configuration other than shown in a) or b) above, may result in a fault being indicated by the panel.

3 Wiring Configuration

Both the 1A sounder splitter and the 4A sounder splitter are connected as shown in the wiring configuration diagram below. The diagram shows a 'typical' application. Note that a 10KΩ EOL resistor must be fitted to the end of each sounder line to maintain correct fault monitoring.



Mxp-021 Wiring Configuration.

4 Fault Indication

Open circuit and short circuit fault indication is provided by means of on-board yellow LED's for each of the additional sounder circuits. On-board relays provide full fault monitoring of the additional sounder circuits back to the panel.

Note: If the sounder is connected to an original sounder circuit whilst no power is supplied to the card, a short circuit condition will be indicated back at the panel. This fault condition will clear once power to the card is established.

USER NOTES

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Advanced Electronics Ltd
Moorland Way, Cramlington, Northumberland, NE23 1WE UK
Tel: +44 (0)1670 707 111 Fax: +44 (0)1670 707 222
Email: sales@advancedco.com Web: www.advancedco.com