

The **Micha** 1-Channel Relay Module (PN: 101728) is designed to be connected to the Expansion Port of the MSRx and other products with an expansion port. It provides one high-current volt-free changeover relay contact, the function of which can be set by the end user via the host controller's interface.

**Using multiple Relay modules:**

It is essential that the Module Address selection switch on the side of each module being used is set to the corresponding Module Number on the selection screen. Multiple Relay Modules with unique address numbers may be connected to the Expansion Port, but do not have to be physically connected in numerical order.

It is possible to fit a maximum of any four types of Relay Modules to the same expansion port (numbered 1 to 4) giving a possible 16 auxiliary relay contacts. Different types of Relay Module may be used together - e.g. 1 or 4 Channel, but each must have a unique address. Note that it may be necessary to fit an additional power supply module, depending on the maximum number of relays that may operate simultaneously. See the specifications at the end of this document.

**Note:** The module address applies only to modules of the same type. For example, it is permissible to have an Auxiliary Relay Module configured to Address 1 and a 4-20mA Module set to Address 1.

**LED's**

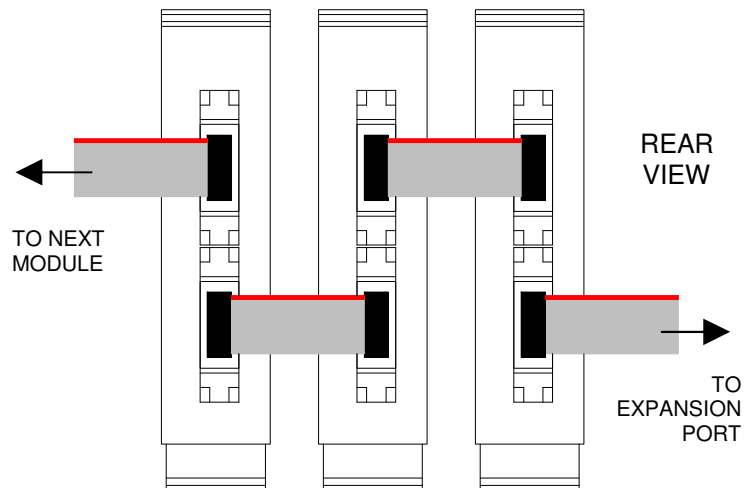
When connected to the expansion port, the green LED (Power) will pulse indicating communication with the host controller. When a relay is energised, the relevant red LED will be illuminated continuously.

**Fitting and Connection of Modules**

The modules clip onto standard 35mm symmetrical and 32mm asymmetrical din-rail. Each unit is supplied with 10-way IDC ribbon cable assemblies for connection to the controller Expansion Port and to an adjacent Din-rail unit.

Before fitting to the Din-rail, the module address should be set using the rotary switch on the side of the module. No two modules of the same type may have the same address.

**Note:** all ribbon-cable connections should be made before the controller is powered up. Cables can be plugged into either upper or lower connectors.





**Setup**

Navigate to the 'Set Exp Module - Relay Outputs' screen on the main controller setup menu and carry out the following procedure:

Display	Step	Description
Relay Module: 1 Rly 1: <b>Not Used</b>	1	Press <b>Select</b> to enter the Relay Module edit screen. The modules are automatically offered for setup in numerical order.
Relay Module: 1 Rly 1: <b>Hi V Alarm</b>	2	Starting with Module 1 : Rly 1, press <b>Select</b> , then <b>Up/Down</b> to change the relay function (e.g. Hi Volts Alarm), then <b>Select</b> to set.
Relay Module: 1 Rly 2: <b>Not Used</b>	3	Press <b>Down</b> to show Module 1 : Rly 2. Press <b>Select</b> , then <b>Up/Down</b> to change the relay function, then <b>Select</b> to set.
	4	Repeat steps 2 and 3 above until all required relay functions have been set for Module 1. After Module 1 : Rly 4, the menu automatically steps to Module 2 : Rly 1, and continues to the end of the available possible selections - Module 4 : Rly 4.  <i>Note: By default, the menu offers four relays per module, regardless of the actual number available. Assigning a function to a non-existent relay will have no effect.</i>
	5	To change a relay function, simply step through the screens using the <b>Up/Down</b> buttons until the required relay is displayed, then press <b>Select</b> to edit, <b>Up/Down</b> to change the relay function, then <b>Select</b> to set
CHANGE SETTINGS: Accept ? -> Sel	6	When setup is complete, press <b>Menu</b> to exit the Relay Module edit screen. If all changes to all parameters are complete, press <b>Menu</b> again to exit setup mode, and press <b>Select</b> to accept the changes.

**Specifications:**

Power consumption:

0 Relays activated	130 mW
1 Relay activated	375 mW

Relay contacts:

Material:	Silver Nickel Alloy.
Contact Rating:	5A @ 24VDC resistive / 5A @ 240VAC resistive.
Max. Switched Voltage:	DC: 30V / AC: 240V
Max. Switched Current:	5A
Max. Switched Power:	1200VA / 150W

**Note:** A maximum of 1W (1,000mW) may be drawn from the controller expansion port. Where the total consumption of all modules exceeds this value, an auxiliary power module must be used.

**Module information:**

<u>Module Dimensions:</u>	82mm x 91mm x 102mm	<u>Approx. Weight:</u>	0.1kg
<u>Manufacturer:</u>	The Micha Design Company Ltd	<u>Country of Origin:</u>	U.K.
		<u>Commodity Code:</u>	9032 8900