

# IO-xRM Sequencer and Raise/Lower Modules

The 2 RM module is intended for use with Direct Digital Controllers or BMS Outstations to convert an analogue output signal to a raise / lower or stepped switching output. Applications include the control of electric heater banks, raise / lower valve and damper actuators and plant lead / lag changeover.

The 3 RM module is intended for use with Direct Digital Controllers or BMS Outstations to convert an analogue output signal to three stages of relay output or Fan/Cool/Heat sequenced output. Applications include the control of electric heater banks, boilers and Fan Coil Units.

The 4 RM module is intended for use with Direct Digital Controllers to convert an analogue output signal to four stages of relay output. Applications include the control of electric heater banks and boilers.

LEDs indicate relay output status and on board jumpers select Auto/On/Off, if required an optional remote Auto/On/Off switch can be supplied .

### FEATURES:-

- Provides two, three and four SPDT relay output channels
- Jumper selectable raise / lower or stepped dual output relay (2RM)
- Jumper selectable 3 stage relay or Fan/Cool/Heat output (3RM)
- LED status indication
- Auto/On/Off jumper for system checkout
- Designed for DIN rail mounting
- · Rising cage terminals







Model Types	Model	Description		
••	IO-2RM	IO-2RM Two Stage Sequencer or Raise/Lower Module		
	IO-3RM	IO-3RM Three Stage Sequencer		
	IO-4RM	IO-4RM Four Stage Sequencer		
Technical Data	Power Supply	24 V ac/dc ( +/- 15 % )		
	Power Consumption	40mA – 2RM 60mA – 3RM 70mA – 4RM		
	Inputs	0-10 Vdc @ 1mA		
	Outputs	2 x 230Vac 10A (resistive) SPDT Relay Contacts – 2RM 3 x 230Vac 10A (resistive) SPDT Relay Contacts – 3RM 4 x 230Vac 10A (resistive) SPDT Relay Contacts – 4RM		
	Operating Modes	Jumper Selectable MOD-2RM  Raise/Lower Relay Output Stepped Relay Output MOD-3RM Fan/Cool/Heat Relay Output Stepped Relay Output NOD-4RM NOD-4RM NO selection required		
	LED Indication	ON when relay is energised		

Technical Data Cont'd...

Output Selection Jumper Selectable

- Auto - On - Off

Terminals  $0.5 - 2.5 \text{ mm}^2 \text{ cable}$ 

Enclosure Flame retardant green Polyamide 66, UL 94VO

Ambient Temperatures -10 to +50°C

Mounting DIN rail

Dimensions W45 x H77 x D45 mm - 2RM

W68 x H77 x D50 mm - 3RM W90 x H77 x D50 mm - 4RM

Operation

## MOD-2RM Raise/Lower Configuration

## **MOD-2RM Stepped Configuration**

	Relay 1	Relay 2		Relay 1	Relay 2
0V	Off	Off	0V	Off	Off
4V	On	Off	5V	On	Off
7V	Off	Off	10V	On	On
10V	Off	On			

### **MOD-3RM Stepped Configuration**

### MOD-3RM Heat Cool Configuration

	Relay 1	Relay 2	Relay 3		Fan	Cool	Heat
<b>0V</b>	Off	Off	Off	0V	Off	Off	Off
4V	On	Off	Off	4V	On	On	Off
7V	On	On	Off	7V	On	Off	Off
10V	On	On	On	10V	On	Off	On

## MOD-4RM Stepped Configuration

	Relay 1	Relay 2	Relay 3	Relay 4
0V	Off	Off	Off	Off
2V	On	Off	Off	Off
4V	On	On	Off	Off
6V	On	On	On	Off
8V	On	On	On	On

Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.