

**RELAY CONTROLLER'S MANUAL** 



# **RELAY CONTROLLER**

RELAY CONTROLLER by Milestone is a device that helps person/s to control various electric appliances sitting at one place through remote keypad or local keypad or RS 232 interface.

Models Available :		
ML 4 RL	4 Relay Control	
ML 8 RL	8 Relay Control	
ML 16 RL	16 Relay Control	

Features :		
Installation	Easy to Install 100% Plug and Play Unit	
Compatibility	Can switch 230 V 8 Amp. Device	
Selection	<ul> <li>Individual Relay controlled through</li> <li>➢ Individual Local keypad</li> <li>➢ Individual remote keypad (optional).</li> <li>➢ Remote contact closure.</li> <li>➢ RS232C interface.</li> <li>➢ RS422/RS485 interface (optional).</li> </ul>	
Indication	LED Indication for working channel	
Power	230 V AC.	



Models:				
<b>Technical Specifications</b>	ML 4 RL	ML8 RL	ML16 RL	
Nos. Of Relay	4	8	16	
Input Power Terminal Block 230 V 60 Amp	1	1	2	
Out Put – Captive Screw 230 V 8 A	4	8	16	
LED Indication	1-4 & Power	1-8 & Power	1-16 & Power	
Key Pad Selection	1-4	1-8	1-16	
Remote Keypad Port	D9M-x1	D9M x 1	D9M x 2	
Manual / RS232 Select switch	Yes	Yes	Yes	
RS232 Interface	D9Fx1	D9Fx1	D9Fx1	
Mains Input (AC.)	230 V	230 V	230 V	
Dimension (Table Top)	288x130x52	288x130x68	N/A	
Dimension (Rack Mount)	19" 1U	19" 1U	19" 2U	
Weight for (Table top)	1770g	2000g	N/A	
Weight for (Rack Mount)	3250g	3500g	3770g	

# **OPERATION**

### A. Manual Mode

Keep the select switch on rear panel to **NORMAL** Mode.

# Local Keypad

Controls the required output from the front panel keypad Pressing the individual keypad will toggle the respective relay output.

Remote contact closure/Remote keypad

Rear panel has a D9 male connector to connect Milestone's remote keypad or any other remote contact closure that can be operated from a distance of 50 meters.



The connector diagram for D9 male connector is as follows:

D-9 Male	Relay Driver
1	1
2	2
:	:
:	:
8	8
9	Common ground

Note: Particular relay can be operated by shorting respective pin to pin 9 through contact switch or by using Milestone's remote keypad.

#### B. Remote RS232 interface

Keep the select rear panel to RS 232 Mode. D9 female connector from rear panel is used for selecting the relay drive through RS232C Interface.

The pin configurations are:

D-9 Female (RS-232 Port of Unit)	Signals
3	RX
5	GRD



The simple command used for selecting the channels is

RELAY	Decimal	ASCII
1 ON	1!	31, 21
2 ON	2!	32, 21
:	:	:
8 ON	8!	38, 21
1 OFF	a!	61, 21
:	:	:
8 OFF	h!	68, 21

Communication parameters are 9600 baud, 8-bit, 1 stop bit and no parity.

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