

PROGRAMMABLE LATCHING, SEQUENCE & MEMORY RELAY

PRODUCT
GROUP
G

TYPES: UNI-4LRS (4 x spno)

FEATURES

- Din rail modular design
- Tri voltage 24VAC/DC, 110VAC, 230VAC
- 4 programmable relay outputs
- Programmable for 6 sequencing/latching functions
- Selectable memory function
- Dual LED indication

DESCRIPTION & MODE OF OPERATION

A din rail mounted tri voltage modular latching / sequence relay with a selectable memory option. Outputs are four individual single pole normally open contacts. The unit is programmed via three front selector switches. Switch 1 determines the number of relays in play, switch 2 the function of the latching / sequencing of the relays, switch 3 selects if the memory function is required.

The unit requires a permanent supply to the coil and operation is then achieved by using up to three volt free trigger commands from A1 onto terminals **FWD**, **BCK** or **RESET**. The unit reacts to the leading edge of a trigger input only. If required the trigger input can then be held continuously, if then a leading edge is then seen on any of the other inputs the unit will operate accordingly. A trigger to **FWD** will cause the unit to switch the relays in a forward manner, whilst a trigger to **BCK** will cause the unit to step back a position. A **RESET** trigger will cause the unit to reset back to the first (start) position.

Two LED's indicate the units operation, a green LED to indicate the connection of a supply voltage. The red LED will predominantly be not illuminated however, every 2 seconds it will blink quickly the number of relays energised.

SWITCH 1 - RELAYS

Determines the number of relays to be in operation

- A: 0, 1 One relay, minimum relays on = 0
B: 0, 1, 2 Two relays, minimum relays on = 0
C: 1, 2 Two relays, minimum relays on = 1
D: 0, 1, 2, 3 Three relays, minimum relays on = 0
E: 1, 2, 3 Three relays, minimum relays on = 1
F: 0, 1, 2, 3, 4 Four relays, minimum relays on = 0
G: 1, 2, 3, 4 Four relays, minimum relays on = 1
H: All relays permanently off

SWITCH 2 - FUNCTION

Selects the relay operation pattern

- 1: Repeat sequential i.e. 1 - 2 - 3 - 4 - 1 - 2 - 3 - 4 -
2: Cycle sequential i.e. 1 - 2 - 3 - 4 - 3 - 2 - 1 - 2 -
3: Limit sequential i.e. 1 - 2 - 3 - 4 - 4 - 4 - 4 - 4 -
4: Repeat add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1 - 1&2 - 1&2&3 -
5: Cycle add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1&2&3 - 1&2 -
6: Limit add i.e. 1 - 1&2 - 1&2&3 - 1&2&3&4 - 1&2&3&4 - 1&2&3&4 -
* If relay position A, B, D or F is selected then "0" (no relay energised), also is applicable to any of the above functions settings, i.e. the first (start) position is "0".
* The above functions depict a forward stepping only, if a BCK input is made the unit will move back a position.

SWITCH 3 - MEMORY (circa 1 month)

ON: On power up the unit will return to the last output state before power was lost

OFF: Will power up on minimum relays set at the beginning of the set pattern, i.e. relay switch set to "E" relay 1 will only energise, set to "A" no relays will be energised.



SPECIFICATIONS

Supply Voltage

Nominal supply:	A1 to A2 (230VAC) A1 to A3 (110VAC) A1 to A4 (24 AC/DC)
Permanent tolerance:	± 15%
Power consumption:	< 5VA
Insulation:	2.5KV 50Hz impulse

Trigger inputs:

Min input time:	25mSec
Max input time:	Continuous

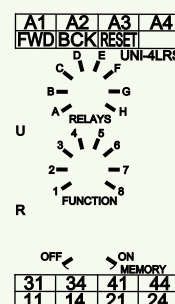
Relay outputs:

Output contacts:	4 x SPNO 5Amps/250V AC1
Mechanical life:	15 Million ops
Electrical life:	100K ops at max rated load

General:

Operating temperature:	-20°C to +65°C
Storage temperature:	-20°C to +65°C
Max cable size:	2.5mm
CE marked:	Yes
In accordance with:	EN61000-6-1: 2007 EN61000-6-3: 2007 EN61010-1: 2002
Housing material:	Polycarbonate, Auto extinguishable to UL 94 V-0

FUNCTION



CONNECTIONS

