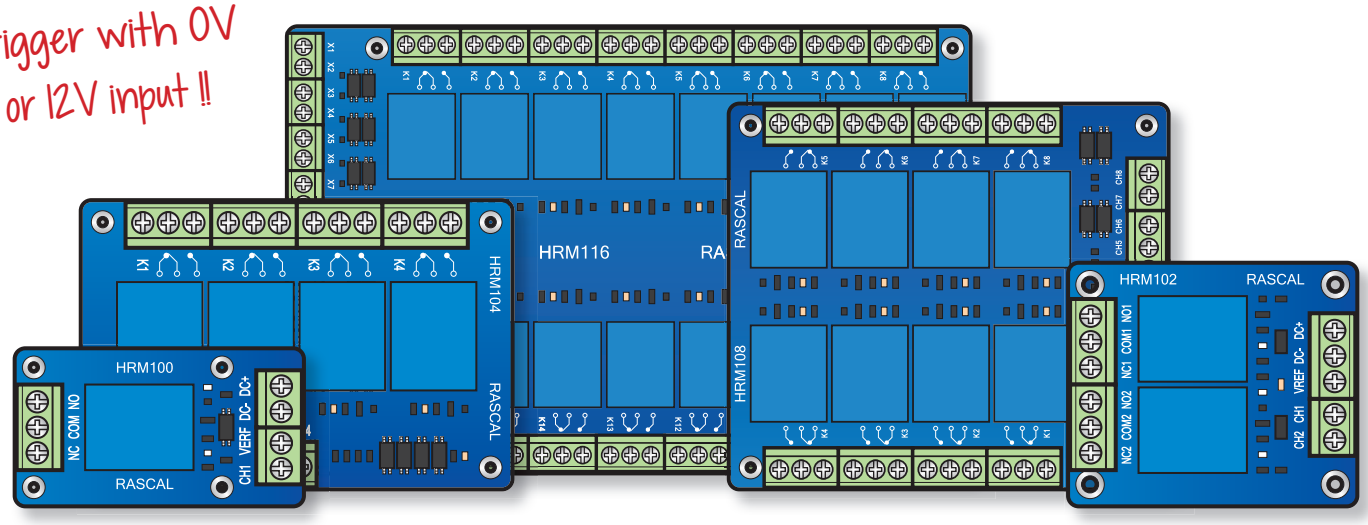
Rascal™ Handy OPTO Isolating Relays

Trigger with 0V or 12V input !!



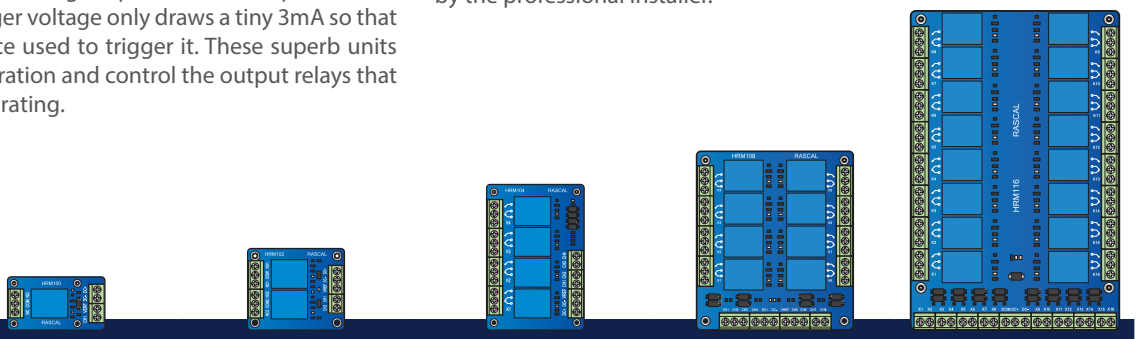
A superb range of handy relay modules for the professional engineer.

The Rascal Handy Relays boast "opto isolation" of input to output for added safety and to ensure circuits are truly electrically isolated.

For maximum versatility you can select the Rascal Relays to either be triggered by a low input (0V) or a high input (12V). The opto isolator input also means that the trigger voltage only draws a tiny 3mA so that it does not overload the device used to trigger it. These superb units are industry standard 12V operation and control the output relays that have a maximum 240VAC 10A rating.

There are 1, 2, 4, 8 and 16 way models so that you can pick the correct Rascal relay to suit your application for a neat and professional job.

Typical uses are for linking and controlling independent systems together such as CCTV, burglar or fire alarms, access control, gate automation, lighting and HVAC but they can be used in multiple ways by the professional installer.



Comparison	HRM100	HRM102	HRM104	HRM108	HRM116
Relays	1 x N.O/N.C	2 x N.O/N.C	4 x N.O/N.C	8 x N.O/N.C	16 x N.O/N.C
Input Voltage	12V DC	12V DC	12V DC	12V DC	12V DC
Trigger Voltage	Selectable 0V or 12V	Selectable 0V or 12V	Selectable 0V or 12V	Selectable 0V or 12V	Selectable 0V or 12V
Output Relay(s)	240V AC 10A	240V AC 10A	240V AC 10A	240V AC 10A	240V AC 10A
Dimensions	50 x 27mm	50 x 42mm	75 x 50mm	90 x 79mm	152 x 100mm

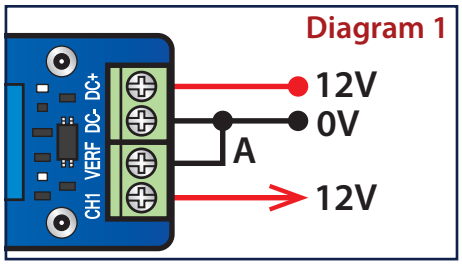
Selecting a Positive or Negative Trigger

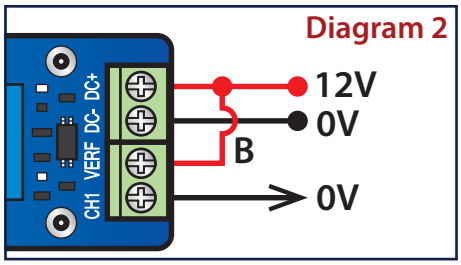
You can trigger the Rascal Opto isolators with either a positive or negative trigger input.

To trigger using a positive input (12V) simply connect VREF to 0V as in diagram 1 with link A.

To trigger with a negative input (0V) connect VREF to 12V as in diagram 2 with Link B.

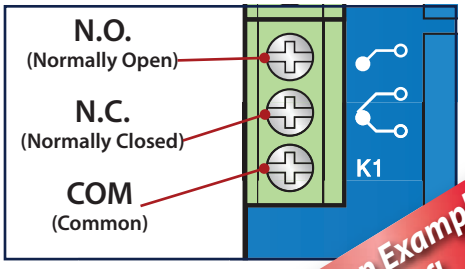
**Note - on the 16CH model HRM116 VREF is labelled XCOM. On Multi relay models if you select a positive or negative trigger it applies to all the individual relays on the board. You can't mix positive and negative inputs on the same PCB.*





Identifying Terminals

On the 4, 8 and 16 relay models the N.C. & N.O. terminals are marked with symbols. Below is an example as to how relay 1 would be marked and what the symbols mean. The trigger for each relay is labelled as CH e.g. CH1 for relay 1 or X e.g. X1



Application Examples Overleaf!

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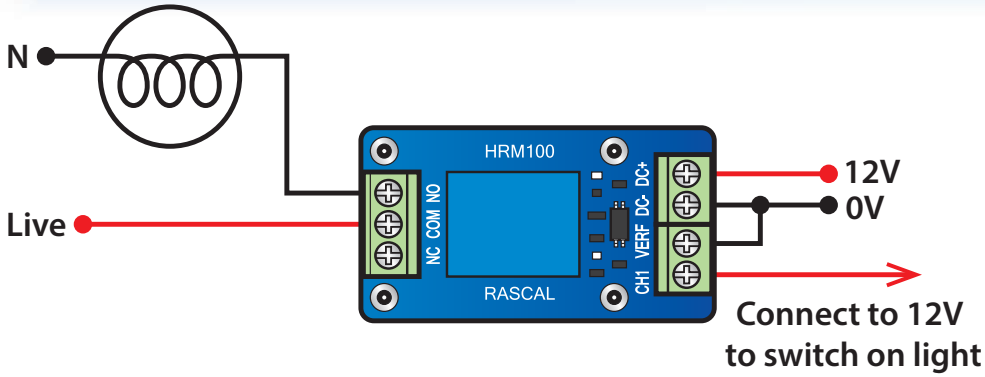
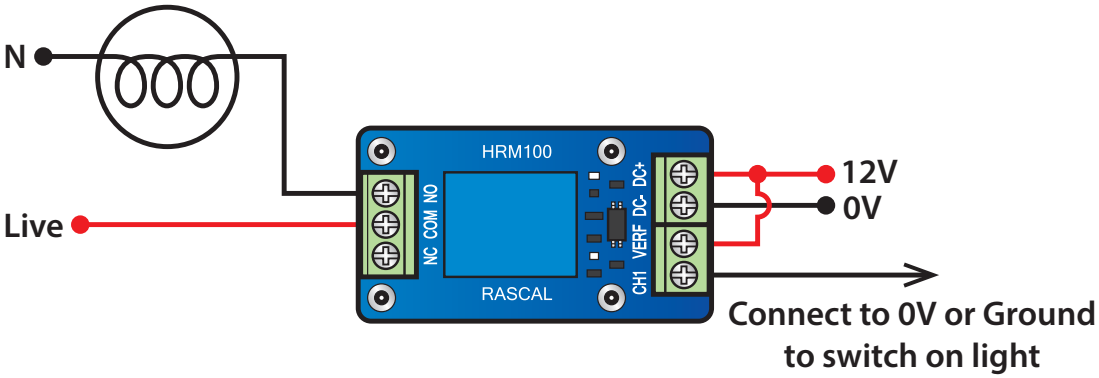
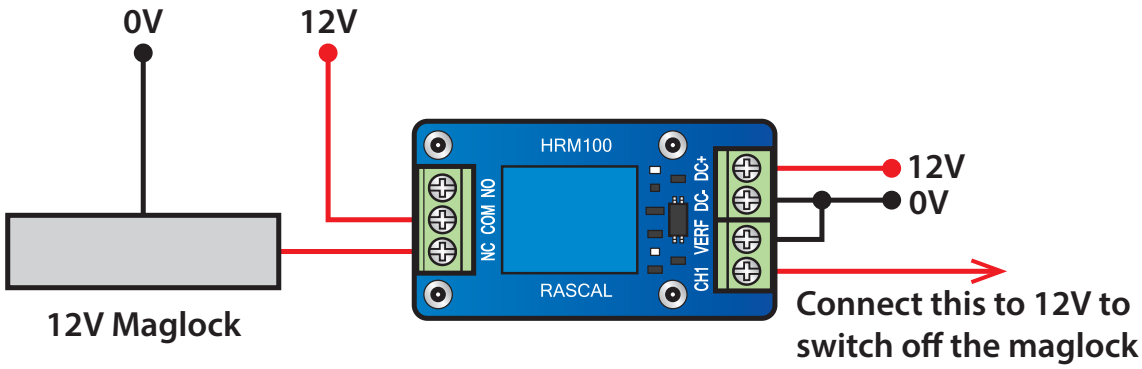
Application Example 1 - Lighting a Bulb when 12V Power is Applied



Application Example 2 - Lighting a Bulb when 12V Power is Removed



Application Example 3 - Releasing a Maglock when 12V Power is Applied



Application Example 4 - Opening and Closing a Security Barrier