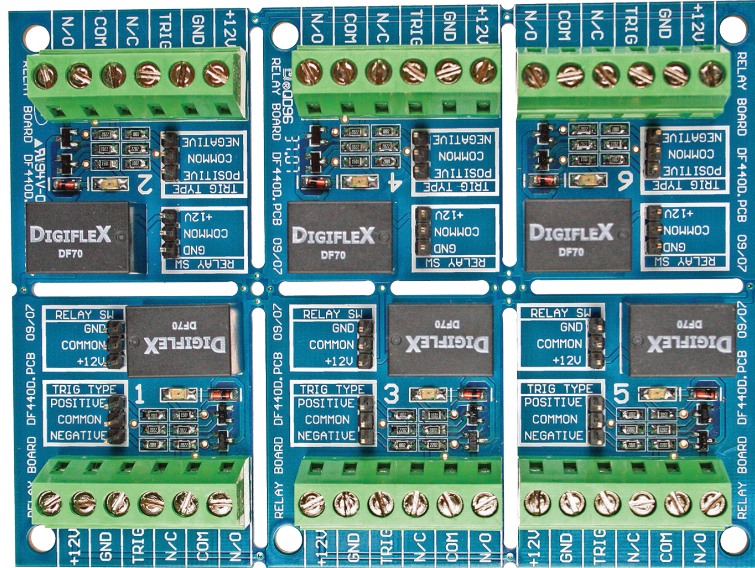


CM940B 6 Way Relay Module



Security Systems

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Installer Reference Guide
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CM940B - 6 WAY RELAY MODULE

The CM940B module provides 6 individual relay cards which can be used in any application where a relay output is required. Each relay can be independently configured for positive or negative input trigger and the output can be set to switch a positive, negative or be used as a dry contact if required.

The CM940B is supplied in a module format which allows it to be easily mounted in the MW700, MW710, MW720, MW350 or MW730 metal cabinets on a single module space. If fewer relays are required, the unit can be easily split into as many as six separate pieces to be used in different locations if required.

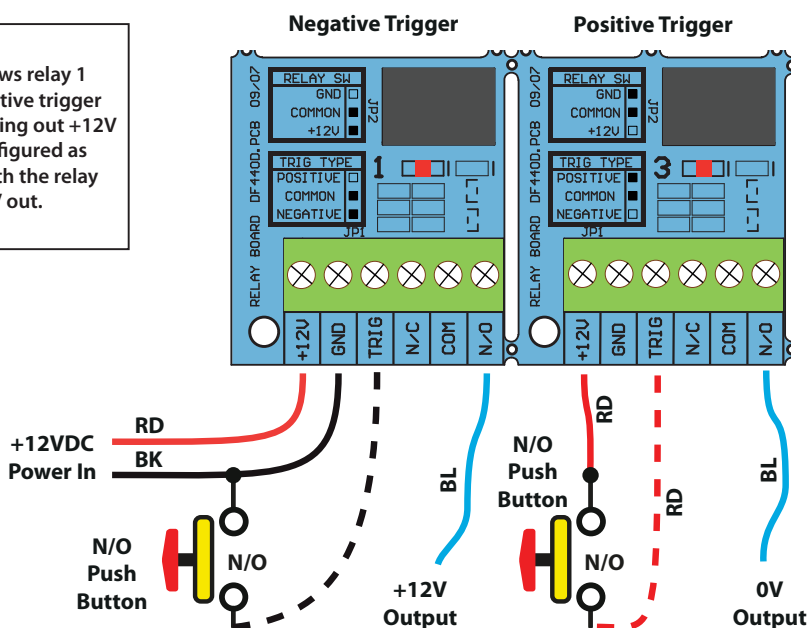
Each relay requires power to operate and the printed circuit board has been designed so that while the relays remain in the module configuration (ie. module still joined together), then you only need to provide power to one of the power input terminals to power all of the connected relay cards. Each individual relay card is numbered and includes a red LED indicator to show when the relay is energised.

Relay Switch Shunt Configuration			
GND	Common	+12V	Result
●	●	○	Relay Contact Switches GND
○	●	●	Relay Contact Switches +12V
○	○	○	Dry Relay Contact Switch

Relay Trigger Type Shunt Configuration			
Positive	Common	Negative	Result
●	●	○	Relay Triggers On Positive Input Signal
○	●	●	Relay Triggers On Negative Input Signal
○	○	○	Condition Not Allowed

To allow for the largest possible range of wiring options the CM940B does not include any on-board fusing. Care should be taken to not exceed the relay contact rating when switching un-fused power sources.

This example shows relay 1 configured as negative trigger with the relay switching out +12V and relay 3 is configured as positive trigger with the relay switching 0V out.



Note as the 2 modules are still joined together they can both be powered by connecting power to only one of the modules as shown.

In this example the +12VDC Power input terminals provide all of the current required to operate the cards as well as the current required to supply the load via the relay output.

Figure 1: Positive And Negative Trigger Wiring With 2 Joined Modules

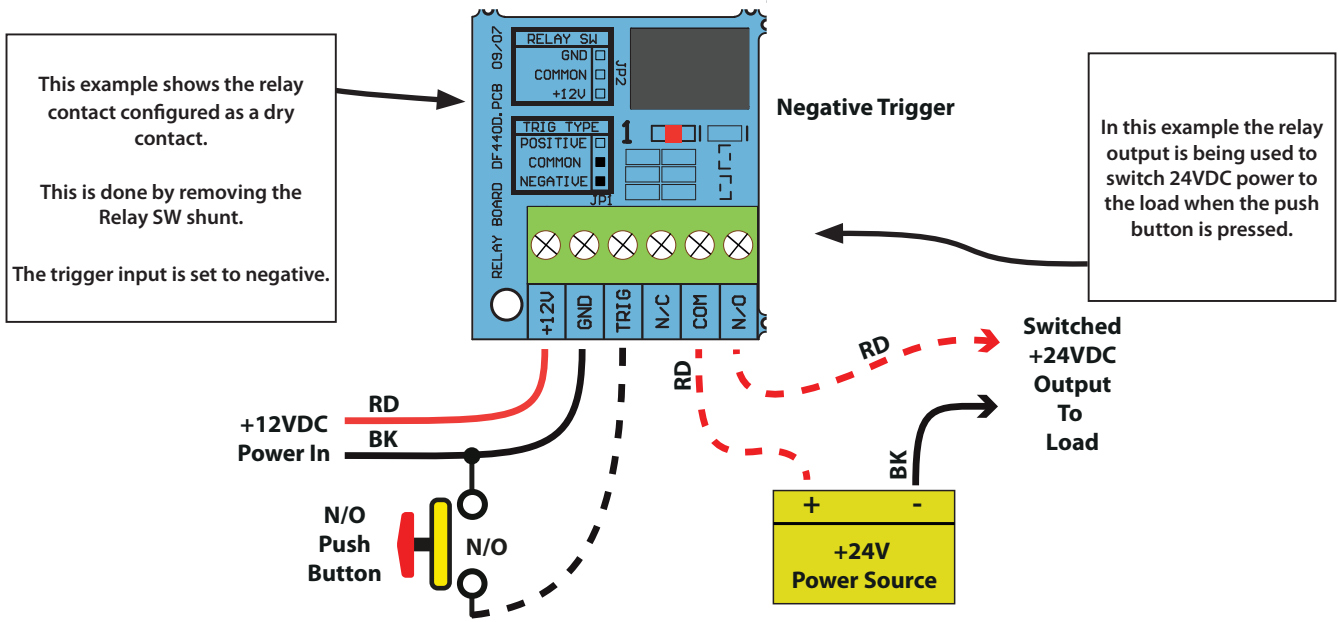
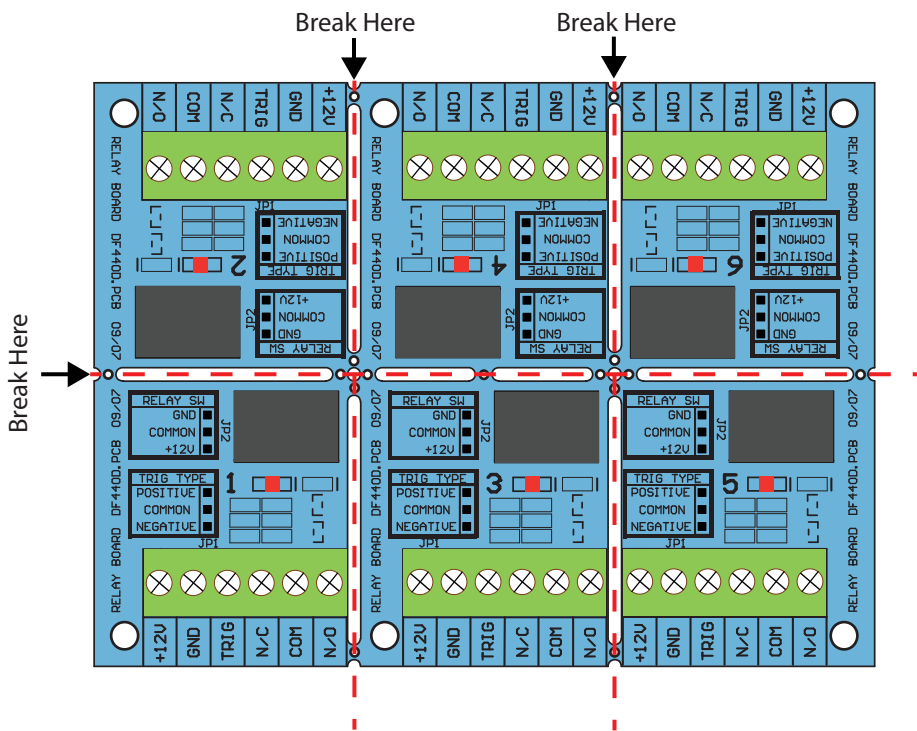


Figure 2: Negative Trigger With Dry Contact Output Switching 24VDC Source



To break the CM940B into individual relays, place the "BREAK HERE" line over the edge of a desk and gently press down on the overhanging area of the board until the two pieces come apart.

The module can be separated into 2x3, 3x2 or 6x1 configurations.

Note In dry contact mode or when the "Relay SW" shunt is not fitted, it is possible to use the relay contact to switch other signals simply by connecting them to the common terminal on the relay card.

Figure 3: CM940B Module Showing How To Separate The Relay Cards

CM940B Specifications

- Part Number:** CM940B - 6 Way Relay Module
- Operating Voltage:** 12.0V DC - 14.5V DC.
- Operating Current:** All relays powered from single supply - 180mA. (All relays and LEDs operated)
Individual relay cards - 30mA (Relay and LED operated)
- Operating Environment:** 0° to 55° C RH 5 to 85% at 30° C non-condensing
- Relay Outputs:** Form C Configuration - Contacts rated at 24V DC @2A Max
- Fixing Method:** The CM940B can be mounted in the MW700, MW710, MW720, MW350 or MW730 enclosures using clip in PCB mounts supplied.
- PWA Dimensions:** (L) 115, (W) 85, (H) 20mm (All relays connected in module configuration)
- Warranty:** 3 years from date of manufacture (return to base). Excludes short circuit or overload damage.



In the interest of ongoing product development this document is subject to change without notice.

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