# **MILFORD INSTRUMENTS Limited**

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# DMX Relay Board (part # 1-493)



The DMX Relay board provides up to 8 digital outputs when connected to a DMX theatre control network. The base address may be set to between 1 and 505. Ordering options include a custom case and provision for solid state relays.

## Connections

The board requires a 12V DC supply at 0.5 Amps (or 24V DC at 250mA for the 24V version) Connect the board to the DMX network using 5-pin connectors- if the Relay board is the last item on the network, remember to place a jumper over the pins marked TRM. This will improve the performance of the DMX network.

Connect your loads to the relevant volt-free relay outputs. Each relay is rated at 10 Amps at 240V AC.

#### Settings

Set the address of output # 1 as follows:

Add the value of the address switches set to the ON position to calculate the base address. Eg: switches 16 and 32 set to ON, the base address is 48 and the data on channel 48 is used to determine the output of relay 1, 49 to determine relay 2 etc (when not in byte mode- see below)

Please note that jumper next to the input power socket should be set to the V position when using mechanical relays and set to the 5 position when using Solid State relays.

#### **Control Syntax**

Byte Output switch set to Off:

The output on a particular channel will go high when the DMX transmitted value for that channel exceeds 224.

Byte Output switch set to On:

The outputs act as a binary representation of the data on the base address channel- eg if the base address is set to 33 and the dmx value on channel 33 is 240 (ie 11110000 in binary) then relays 5 through 8 would be energised and relays 1 through 4 off. If the value on channel 33 was 15 (00001111) then relays 1 through 4 would be on and 5-8 off.

#### Miscellaneous

Board Dimensions: 125x138 mm (5" x 5.4")

DMX LED lit when a suitable DMX signal is being received, flashing LED when no valid DMX signal stream is being received.

# Ordering options

## Part number 1-562

Cased version of the DMX relay board with 8 knock-out holes for cables and 8 leds to indicate relay status.



# Part Number 1-563

This version of the 1-493 board (uncased) has no relays fitted and allows customers to fit their own solid state relays.

The pcb is laid out to accept either standard mechanical relays or standard pitch solid state relays such as the Crydom CMX60D5 for switching DC loads (0-60V at up to 5 Amps) or CX240D5 for AC loads (0-240V AC at up to 5 Amps).

Please note that jumper next to the input power socket should be set to the V position when using mechanical relays and set to the 5 position when using Solid State relays.

#### **Special Requirements**

Please contact us for pricing if you require boards already fitted with solid state relays or with 24V DC relays fitted in place of the standard 12V DC types.