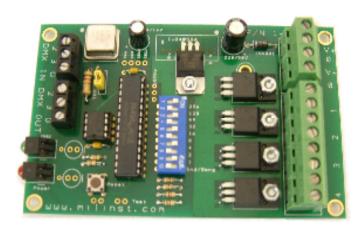# DMX- 4 Channel LED Driver Board

Part # 1573b

The DMX-4 Channel LED driver board allows up to 4 LED arrays to be controlled directly from a DMX512 network. The board provides 4 output channels of individual or ganged PWM running at 2kHz.
The base address may be set anywhere between 1 and 511.

Connections:

DMX In/Out: Dual 3-pin terminal connections plus termination resistor.

Power: Dual Ganged Terminal connections 0/12V, Board power requirements are 9 -12V DC at 0.5 Amps + LEDs load current: Maximum 9 amps.

Outputs: 4 +/- voltage outputs via screw terminals at up to 3 amps per channel @ 12 Vdc.

Control Modes:

Individual DMX mode: *All outputs are controlled by **individual channel values.***
DIP switch #10 set to **Ind.**

Ganged DMX mode: *All outputs are controlled by the **value on the base address.***
DIP switch #10 set to **Gang.**

The value in the base address channel controls the PWM on channel 1 a DMX value of 0 will switch the load completely OFF and a value of 255 will switch the load completely ON a value of 128 will generate a 50% duty PWM signal running at 2kHz. The resolution of the PWM stream is 8-bit.
The DMX input value on the base address +1 controls channel 2, etc.
The PWM signal is suspended if a valid DMX signal is not being received.

Base Address Selection:
The base address may be set using the DIP switches. Calculate the setting by adding the value of the switches that are set to the ON position.
The Base Address is read continuously and may be set between 1 and 511.
 With no address set (all switches OFF) the base address defaults to 1.

Outputs:
The 4 output channels are rated at 3 Amps each @ 12VDC and are arranged as open collector devices.

Connections:
The LEDs should be wired in common anode format to the "**+**" input and the cathodes routed via a suitable current limiting resistor to the relevant "**-**"input on the board **see connection diagram**.

Reset Button: see Test mode   Auxiliary connection point available.

Test Mode: Remove the DMX signal short out the test connections and press the reset button, all 4 channels will switch to a 10% output without the need for a DMX signal generator.

Indicators:
Red Power LED
Correct power applied   Auxiliary connection points available.

DMX Status LED
Valid DMX signal = Solid green LED.
No DMX signal   = Flashing green LED.   Auxiliary connection points available.

Mechanical:
PCB size: 112mm x 70mm. 4mm mounting holes at 104mm x 64mm

Connection Diagram: