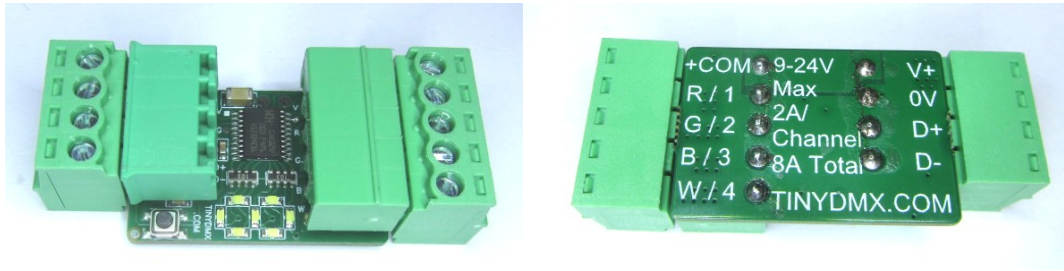


TinyDMX LED controller

www.tinydmx.com



TinyDMX is a very compact solution for controlling RGB, RGBW or monochrome constant-voltage LED strips & modules from a standard DMX512 signal.

Specification

Supply voltage 8-24V. Unit is protected against reverse polarity.

Maximum load : 3A/channel (36W @ 12v, 72W @ 24v), 8A maximum total of all channels.

Current consumption : 7mA

PWM frequency : 750Hz (Other frequency/resolution combinations available to special order)

PWM resolution : 13 bits (8192 levels)

Dimensions (including connectors) 45 x 19 x 11.5mm. Board only 29 x 19 x 11.5mm

(Wire-ended version without connectors populated available to special order 24x19x3mm)

Connection is via 3.5mm pluggable terminal blocks (included)

Display indications

In normal use , the display shows a rotating pattern which increments on reception of each DMX

frame :

If no data is received for 10 seconds, the outputs will blank, and the display will show



When the outputs blank, they are set to a very low level rather than completely off, to provide easy diagnosis of data vs. power problems.

Button functions

A single press shows the current DMX address and mode as a sequence of digits, for example



DMX channel 123, linear mode

A long press, until display shows



will enter setup mode.

The display cycles showing DMX address and a mode letter, with a short gap at the end, e.g.



DMX channel 1, linear mode

Press the button when each digit or mode letter is shown to increment that digit. The digit will get brighter while adjusting, and the digit-to-digit delay will be extended to allow easier setting. When the desired digit is shown, wait until the display resumes cycling to adjust the next digit.

To exit setup mode, press and hold the button until display shows



The DMX address is updated on each button press, so if DMX data is active, the outputs will update immediately based on the currently displayed DMX address.

If power is lost during setup mode, the settings will NOT be updated.

Operating modes

There are four operating modes, determining how the outputs behave :

LED pattern	Mode name	DMX channels per output	Description
	Linear	1	8 bit linear
	Curve	1	13 bit (8192 step) gamma-corrected from 8-bit channel value. The channel value is squared, and the top 13 bits of the result used. Recommended for use with monochrome LEDs for best low-end resolution.
	Extended / Hi-Res	2	13 bit (8192 step) high-resolution. Low/fine channel first
	Demo	-	Standalone test mode. Shows cycling R/G/B/W/Off pattern, ignores any DMX input

Firmware version

Hold the button while power is turned on. When released, a sequence of 3 digits will show the firmware version.