
Cromatix SPI Driver

Product Datasheet



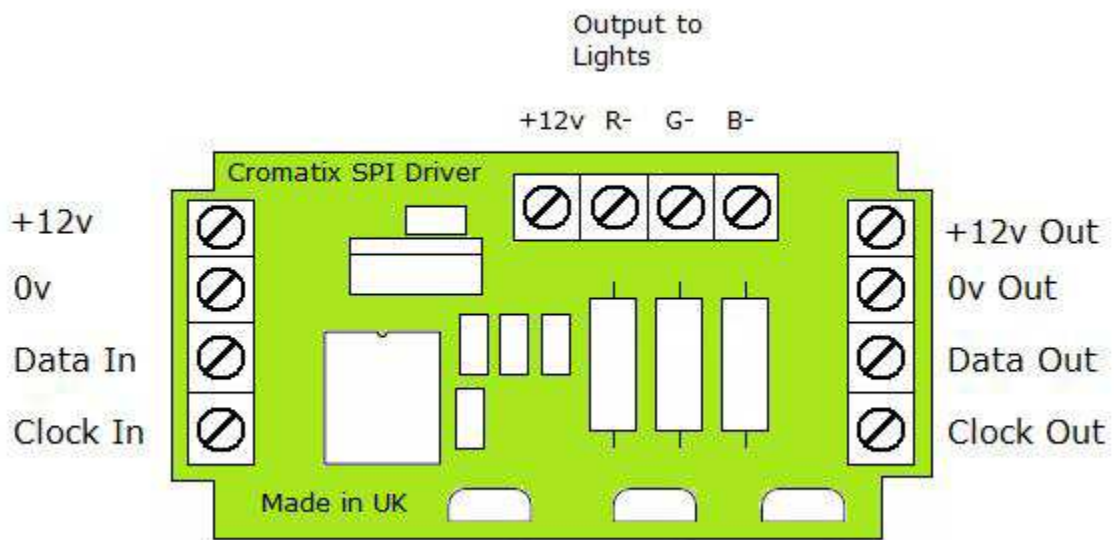
Key Features

- A low cost 'Plug and Play' 3 channel DMX driver alternative
- Compatible with the Cromatix DMX-SPI converter for easy connection to DMX
- Drives any 12v LED product such as flexible striplights and downlights
- Output rated at 1A per channel at 12v
- Allows multi-zone systems without expensive and bulky DMX decoders
- Allows standard 12v LED products to connect to dream SPI controllers
- Self-Addressing, each unit in the chain assumes the next 3 DMX channels
- Compatible with the HL6803 LED driver protocol
- Two independent buffered CLK and Dout Signals for reliable communication
- Available as an open PCB or boxed for indoor use
- Exterior version available with heavy duty IP68 connectors

Electrical Characteristics

Recommended Operating Voltage	Typical Operating Current	Typ Operating Power (W)
9 - 12vdc	10mA	0.12W

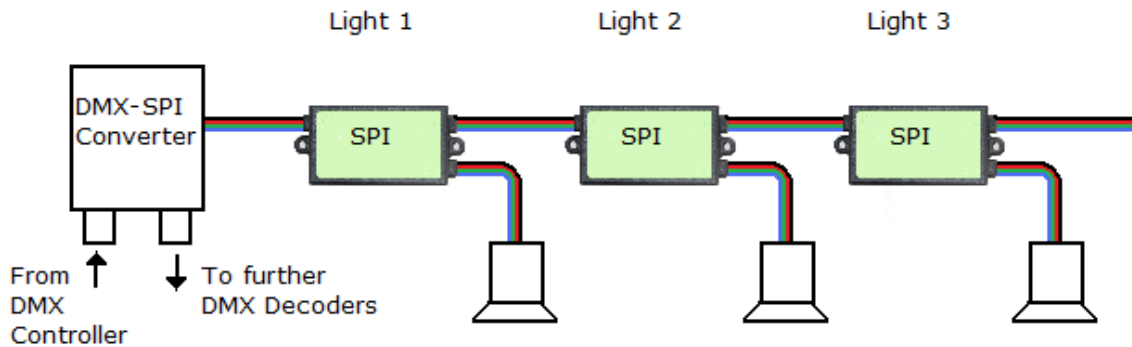
Connection Details to Internal PCB



Connection Details to DMX Controller

The SPI drivers require a 12v connection and a clock and data input. The SPI driver provides a clock and data out as well as a 12v feed to the next unit in the chain.

The most common use for the SPI driver is via a DMX converter. This allows seamless connection to a DMX decoder and offers significant cost savings over using individual DMX decoders.



DMX Addressing

Each SPI driver automatically allocates itself 3 DMX channels. The Cromatix DMX-SPI converter has a selectable base address so for example if the base address is set to 1, the DMX allocation for the 3 light system above will be:

Light No	DMX Address
1	R: 1 G: 2 B: 3
2	R: 4 G: 5 B: 6
3	R: 7 G: 8 B: 9

Interfacing to a Microcontroller or PC

The SPI drivers have been designed as an easily implemented 'plug and play' system. However, for system builders or enthusiasts it is sometimes more convenient to use a microcontroller to drive the SPI units directly. In this event the device timing and electrical requirements are as follows:

Parameter	Range
Input Voltage Vin	9-12v
CLKin, Data In	4.5v - 5.5v
Clock Frequency	0-10MHz
Rise/Fall time	10ns Max
Input Current	40mA typ
CLKOut, DataOut	4.5 - 5.0v

Warranty

12 months unconditional from date of purchase. For product support, please contact info@ledlightingproducts.co.uk

Product Disposal

When you eventually decide to update or upgrade this product, do not dispose of it with your normal household waste or at a local amenity tip. You should either take it to a recycling centre or return it to the retailer from which you bought it where they will arrange for it to be recycled.