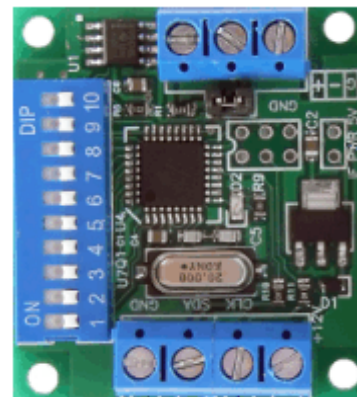




## miniDMX 2801 1.0

DMX512 to SPI decoder



This compact DMX512 to SPI decoder is used to control RGB LEDs driven by either the WS2801 or WS2803 IC in 12V or 5V setups. It can be used with a DMX512 input signal or run as a stand alone controller. In stand alone mode there are 17 programs available.

### ***Connecting power***

Connect the power input to the outer 2 terminals on the 4-terminal block marked (GND) and (+12V). If 5V power input is used, solder a jumper into the two holes marked “IF POWER 5V”.

**CAUTION:** SUPPLYING 12V TO A BOARD WITH A POWER JUMPER INSTALLED WILL BURN OUT THE CIRCUIT BOARD.

This power may be also be used to supply the LED strip/circuit, but if different power supplies are used they must share a common ground.

### ***Connecting SPI output***

Connect the data (SDA) and clock (CLK) terminals to the data and clock lines of the LED strip/circuit.

### ***Connecting DMX512 input***

If using in DMX512 mode connect the DMX512 line to the 3-terminal block. Connect ground to the outermost pin. Then connect D- and D+ to other two terminals marked (-) and (+). If this is the last fixture in the DMX512 chain leave the black jumper installed to provide a 120 ohm termination.

If this is NOT the last fixture in the DMX512 chain remove this jumper.

## ***DMX512 mode***

DIP switch 10 must be turned OFF for DMX512 mode.

DIP switches 1 through 9 specify the start pixel, NOT the start DMX address. The DMX address = pixel\*3-2.

Up to 160 pixels can be controlled via DMX512.

## ***Stand alone mode***

DIP switch 10 must be turned ON. DIP switches 8 and 9 have no function.

DIP switches 6 and 7 adjust the speed of the internal programs. Momentarily turn 6 or 7 on to adjust the speed up and down.

DIP switches 1 through 5 set the program

### **PROGRAM DIP SWITCH**

Prog1	00000	Blue
Prog2	00001	Red
Prog3	00010	Green
Prog4	00011	White
Prog5	00100	Pink
Prog6	00101	Yellow
Prog7	00110	Aqua
Prog8	00111	Flash all colors
Prog9	01000	Chase blue
Prog10	01001	Chase red
Prog11	01010	Chase green
Prog12	01011	Chase rainbow
Prog13	01100	Chase blue on white
Prog14	01101	Chase aqua on white
Prog15	01110	Chase yellow on white
Prog16	01111	Chase red on blue
Prog17	10000	Chase alternate 7 colors

## Specifications

Voltage: 12-15 VDC (5V power option)  
Input: DMX512  
Output: SPI (WS2801/WS2803)  
Pixel count: Max 160 pixels  
Size: 38 x 43 x 15mm  
Weight: 25g

