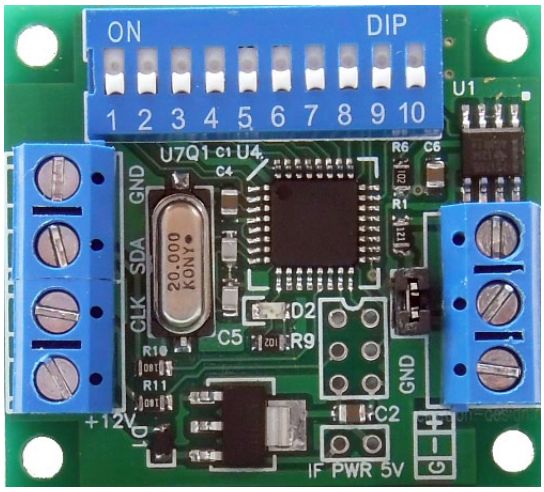
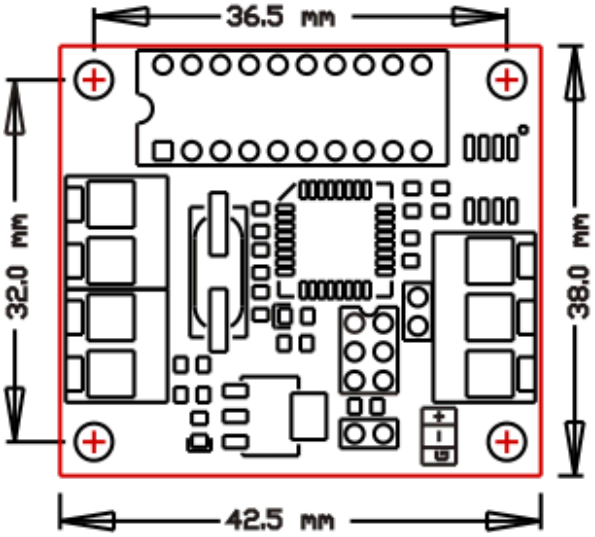
User manual 10.07.17





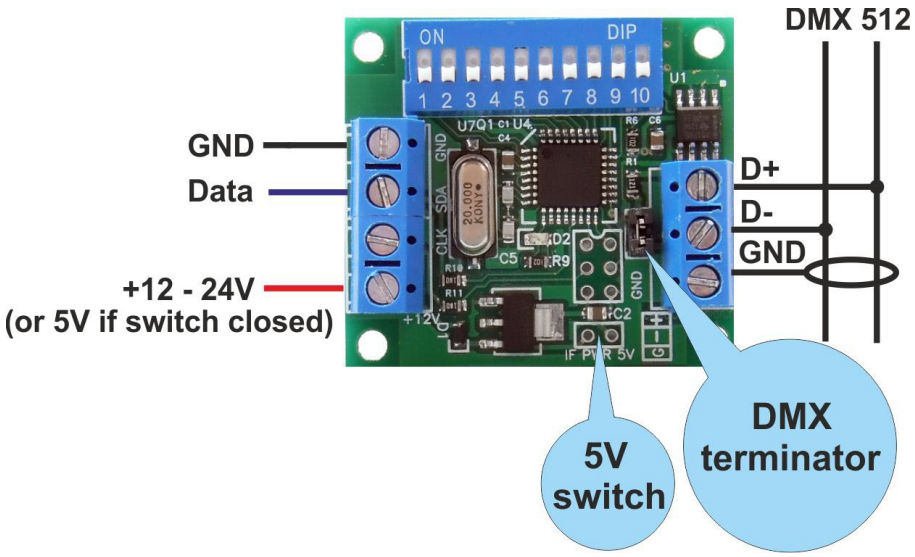
Components on board:

- 10 pos. switch for DMX address and mode set
- 3 pins DMX input connector
- 4 pins high-power output connector
- Two-pin DMX terminator connector
- Two-pin 5V connector (support 5V if closed)
- DMX LED activity
- Weight 30 grams

Electrical:

- Supply voltage 12V - 24V or 5V.
- Supply current of the controller 50 mA.
- Operation Range -40°C to 60°C.

Connection diagram:



Caution: you must not connect more than 5 volts if the 5V switch is closed!

Features:

1. The controller is designed to change the DMX 512 input data into data fot SPI led chips.
2. Supported chips: TM1803, TM1804, TM1809, TM1812,UCS1903, UCS1909, UCS1912, • • • • UCS2903, WS2811, WS2812, WS2812(b), WS2813, SK6812-RGB, SK6812-RGBW.
3. This controller changes the order of color as RGB, GRB, BGR.
4. This controller can increase the number of pixels' output.
5. Maximum pixels output number is 400. One led of WS2812(b), WS2813 = pixel. You must specify the pixel size from LED supplier.

Modes of operation:

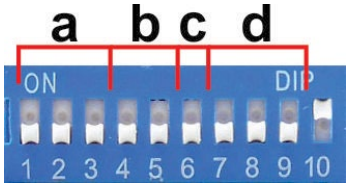
1. Standard operating mode. In standard mode, you can set the DMX address and type of leds as RGB or RGBW.

2. Enter the programming mode. To enter the programming mode, you must:

A: turn off the power of controller and turn off the DMX input data signal.
B: set all switches pins as ON.
C: turn on the supply voltage.

The control LED should be lit. The controller is in the programming mode.

3. Programming Options. 1 - is On, 0 - is Off



a: Number of pixels in the merged pixel:

RGB mode

Switch	Number	Output	fps.
000	- 1	170	117
100	- 2	340	61
010	- 3	396	53
110	- 4	400	52
001	- 5	400	52
101	- 10	400	52
011	- 100	400	52
111	- 400	400	52

RGBW mode

Switch	Number	Output	fps.
000	1	128	117
100	2	256	61
010	3	384	40
110	4	400	39
001	5	400	39
101	10	400	39
011	100	400	39
111	400	400	39

b: Led pixels order color:

00 - RGB
10 - GRB
01 - BGR

c: Type white data output in RGBW mode :

0 - as white data from channel 4 . rgbW
1 - set all white data of leds from channel 512. This mode allows you to connect RGBW pixels as RGB fixture.

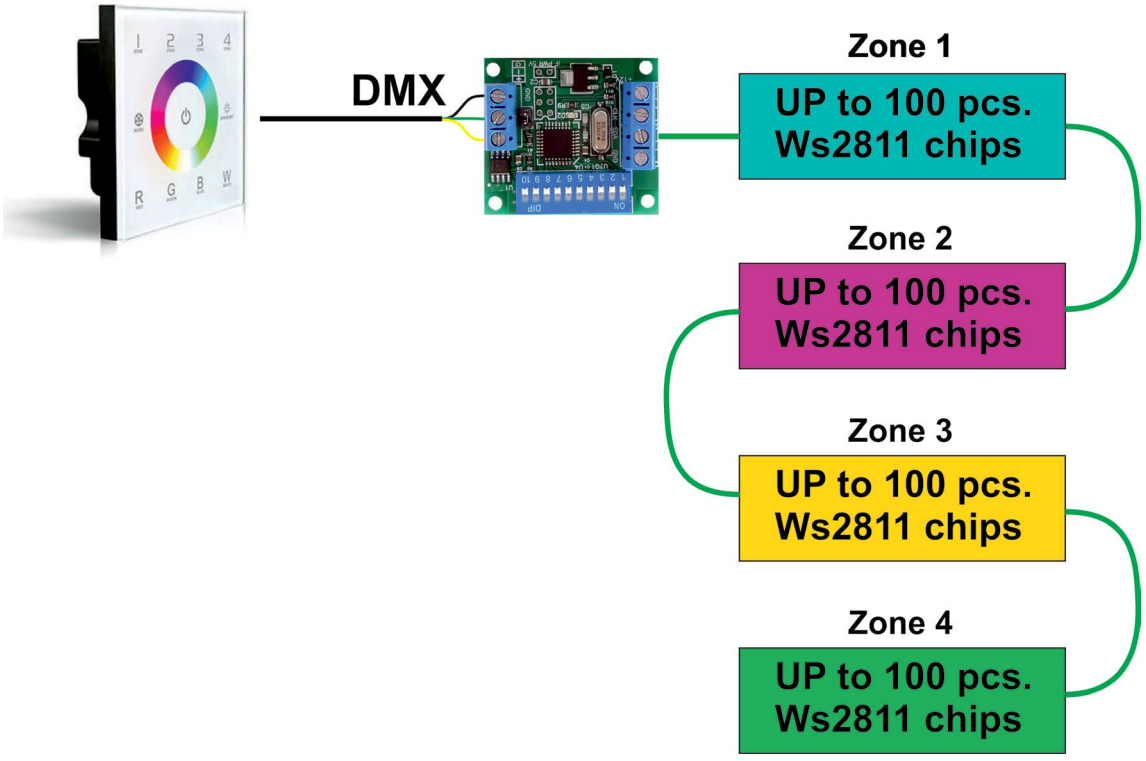
d: Reserved :

4. Saving the configuration: turn bit 10 of switch to OFF position and wait for 5 seconds.

5. The combination «1111111111» of the switch is forbiddenin the standard operating mode.

Example:

DMX 512 4Zone RGB White LED controller + miniDMX V3.1 controller



Links:

1. www.electrondigit.com
2. This controller on eBay