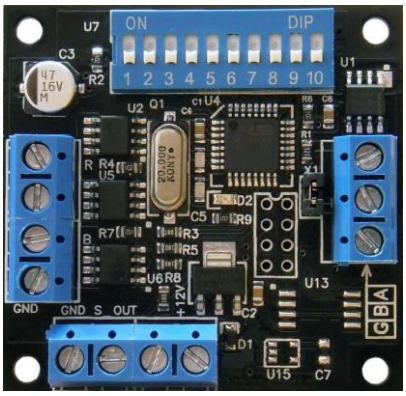
3- channel DMX dimmer, 3x 8 A

User´s manual



Components on board:

- 10 position switch for set mode
- 3 pins DMX input connector
- 4 pins high-power output connector
- 4 pins power connector /data output

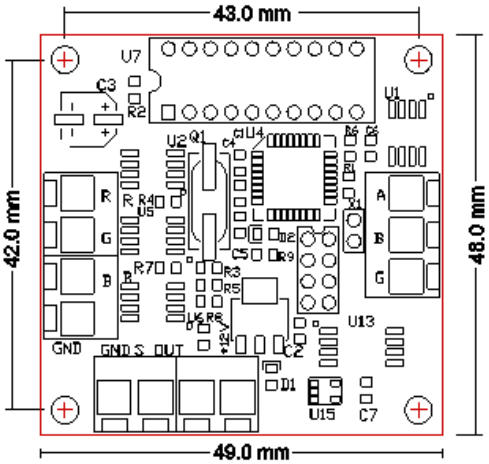
- Two-pin terminator resistor connects 120 Ohm
- Pins to set input speed for DMX
- DMX LED activity

Electrical:

- Supply voltage 4,5 V – 15 V.
- Supply current of the controller 50 mA.
- Current high-power output 8 A per ch.
- Elements must be connected to a common anode for high-power output.
- PWM high-power output 256 bit.
- Operation Range -40°C to 60°C.

Mechanical:

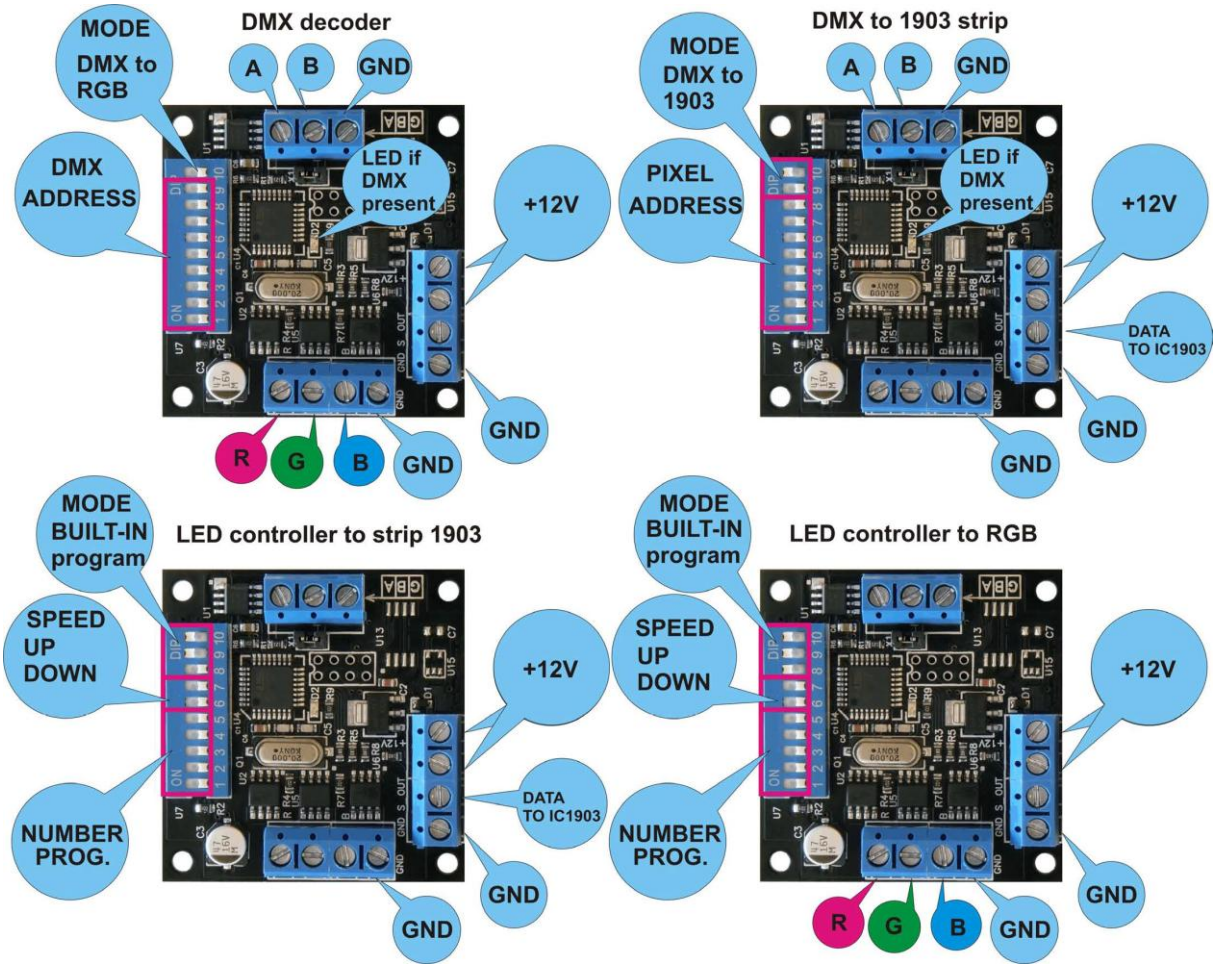
weight: 30 grams



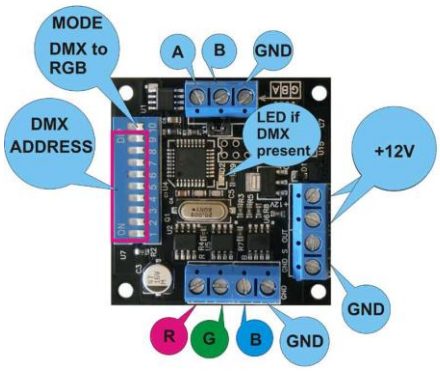
Features:

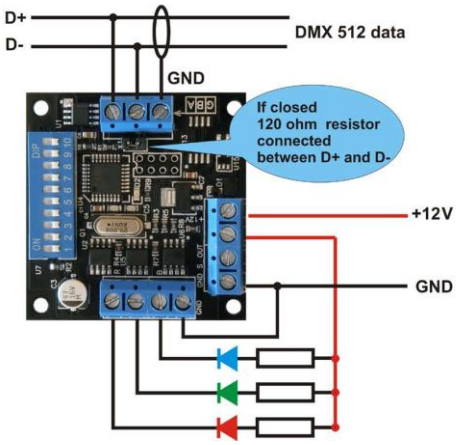
- decoder DMX 512/1990.
- DMX 512 to led strip driving TM1803, TM1804, TM1809, TM1812,UCS1903, UCS1909, UCS1912, • •
- •UCS2903 for high speed mode.
- 30 built-in program for RGB and for driving chip.
- Input Signal: DMX-512/1990 digital signal
- In mode decoder: RGB (256x256x256) -level brightness, full-color control.
  It can set the DMX address freely.
- In mode DMX to led strip: up to 480(160 pixels) channels out to strip.
  Address sets the number of pixels to start strip.

Modes:



DMX decoder



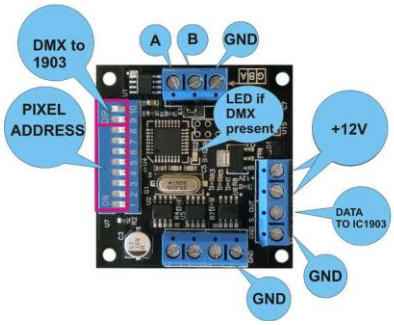


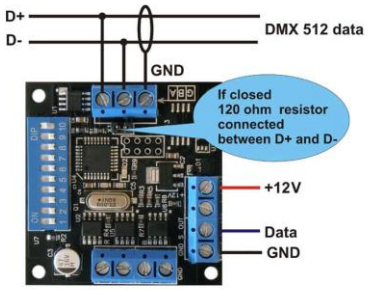
9 bits DMX address

1= “100000000”
2= “010000000”
.....
510 = “011111111”
511 = “111111111”

Bit 10 = 0(Off)

DMX to led strip 1903 IC



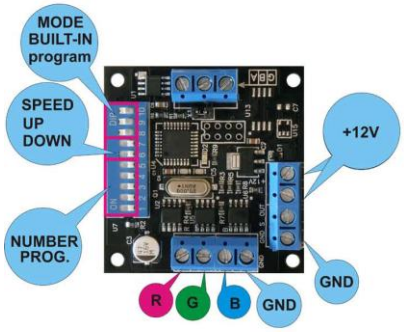


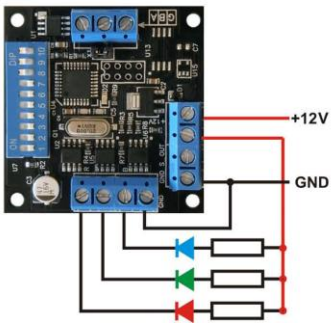
8 bits pixel address. In DMX = pixel*3-2

pixel 1= “10000000” = address DMX = 1
pixel 2= “01000000” = address DMX = 4
.....
pixel 254 = “01111111” = address DMX = 760
pixel 255 = “11111111” = address DMX = 763

Bit 9 = 0(Off)
Bit 10 = 1(On)

RGB led controller



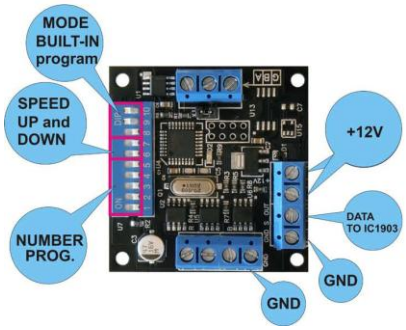


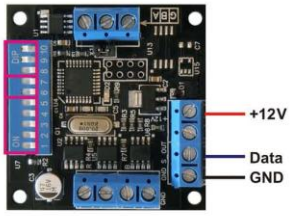
Bit 1 - 4 = Number of programs
Prog 1 = ”0000”
.....
Prog 16= “1111”

Bit 6 = increase speed
Set bit to 1 ->Wait -> Set bit to 0
Bit 7 = decrease speed
Set bit to 1 ->Wait -> Set bit to 0
Speed value is stored in the memory
For Bit 6 and 7 the normal state is 0(Off)

Bit 8 = 1(On)
Bit 9 = 1(On)
Bit 10 = 1(On)

1903 IC strip led controller

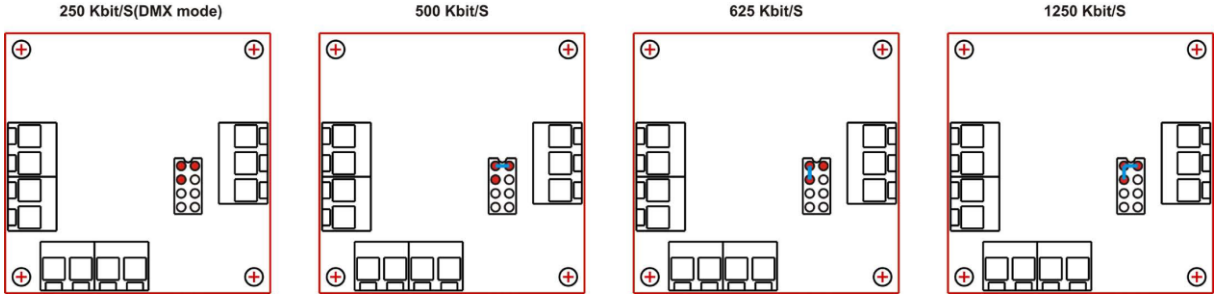




Bit 1 - 5 = Number of programs
Prog 1 = "00000"
.....
Prog 16= "11110"
Prog 17= "00001"
Bit 6 = increase speed
Set bit to 1 ->Wait -> Set bit to 0
Bit 7 = decrease speed
Set bit to 1 ->Wait -> Set bit to 0
Speed value is stored in the memory
For Bit 6 and 7 the normal state is 0(Off)

Bit 8 = 0(Off)
Bit 9 = 1(On)
Bit 10 = 1(On)

Set interface input speed



• On the controller has two ground terminals and has two plus terminals.
• Through the each terminal can be attached up to 12 amps.
• If the total current is greater 12 ampers, we recommend the power supply positive terminal connect directly to the load.