

LEDVD5CH20A-V3

DMX512 interface

Voltage driver whereby the brightness, color or color temperature of the LED strips are set by a DMX 512 signal (without user interface circuit board)



DATA SHEET

- Custom embedded Software possible
- Adequate EMC design that enables correct and interference-free operation
- CE mark is attached to the PCB
- RoHS directive 2002/95/EC
- EMC Directive 2014/30/EC

The power supply

The total requested flow from the diet can be with all five channels at full load up to 100 Amps. If the power wires between power supply and voltage driver no more than 1 to 1.5 meters, it is sufficient 2x 10mm², 16mm² is recommended for longer lengths.

Colors and effects

With the DMX512 signal connected to the voltage driver, it is possible to adjust the brightness at each of the five channels in 256 steps. By connecting RGB LED strips and color temperature LED strips, it is possible to finetune every tint.

Terminator

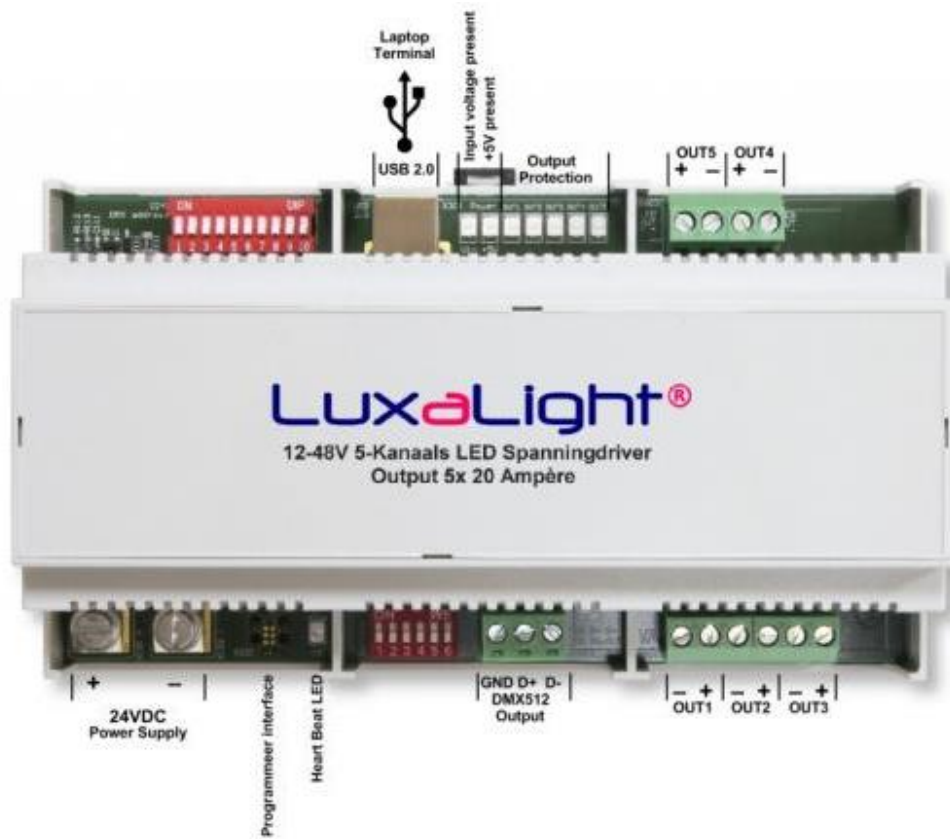
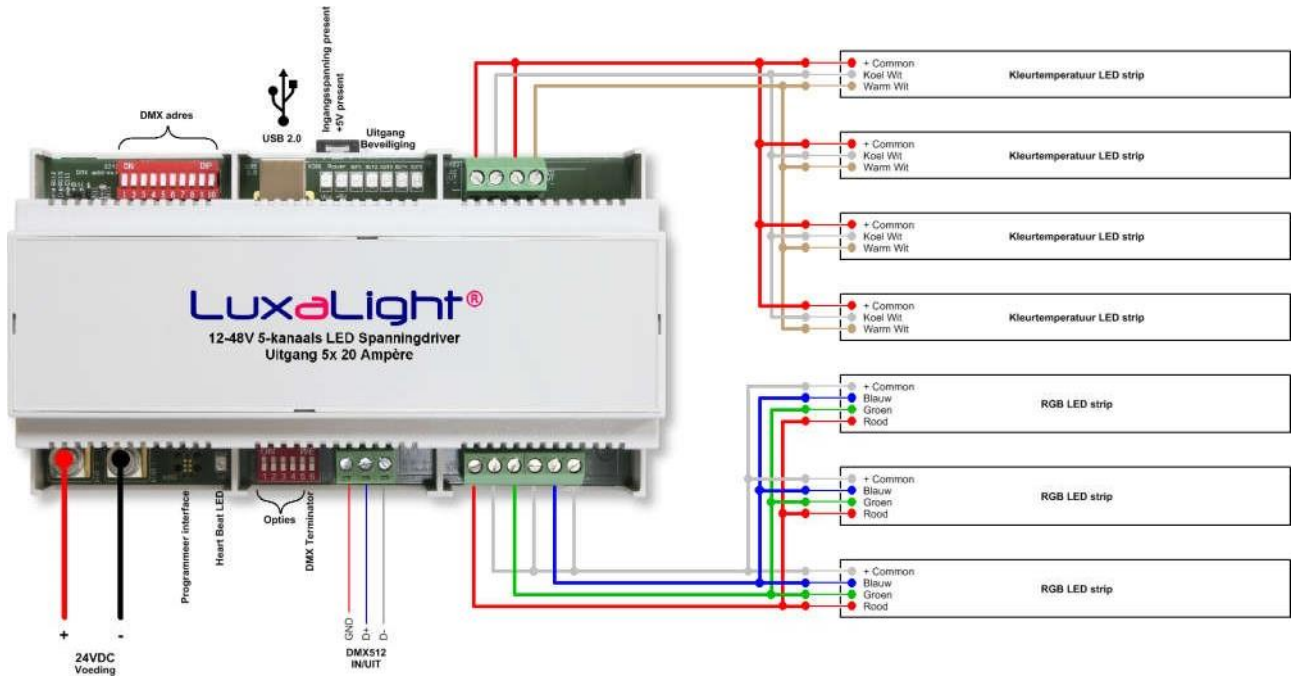
To the left side of the three-pole DMX terminal block there is a 6-way DIP switch S231 located where the 6th position is the 120 Ohm terminator. The terminator will be activated by setting the 6th DIP switch up to ON position, only when the voltage driver is connected to the end of a long DMX512 signal cable.

LED indicators

The green LED's at the top indicate that the supply voltage on the print is present. The green flashing LED at the bottom indicates the "heart beat" of the controller as a sign that it is working properly. There are also some red LEDs OUT 1 t / m OUT5, which light up as soon as a voltage output is overloaded. Above a certain value is, moreover, the overloaded channel turned off by software.

Custom made options

The LuxaLight voltage driver provides the proprietary software options for customer-specific applications, such as connecting a light sensor. The hardware of the voltage driver offers this possibility, but an additional light sensor has to be made and should also be made an extensions in the software here. Customization options will be included in the offer.





Specifications



<i>Input voltage</i>	12 - 48V
<i>Maximal input current</i>	100A (sum of the output currents)
<i>Standby current</i>	18mA (outputs fully dimmed)
<i>Own power consumption</i>	5W at 2400W load
<i>Efficiency</i>	Approx. 99.8%
<i>Output current per channel</i>	20 Ampère up to 24 Volt
<i>Output power</i>	12V – 5x 240 Watt = 1200 Watt (20A/channel) 24V – 5x 480 Watt = 2400 Watt (20A/channel) 36V – 5x 540 Watt = 2700 Watt (15A/channel) 48V – 5x 576 Watt = 2880 Watt (12A/channel)
<i>Overvoltage protection</i>	Yes, up to 60 Volts
<i>Short circuit protection</i>	Yes
<i>DMX512</i>	DMX512 input/output
<i>On-board DMX512 terminator</i>	Yes, switchable
<i>PWM frequency</i>	250 Hz
<i>No. of brightness steps per channel</i>	256 (8-bit)
<i>Color resolution</i>	8-bit (16.7 million colors, true-color)
<i>Outputs are EMC filtered</i>	Yes
<i>Temperature range</i>	-20°C ... +40°C
<i>Housing, b x h x d</i>	DIN rail housing, 159mm x 90mm x 58mm
<i>IP- class</i>	IP20
<i>Cooling</i>	On circuit board, with coolfan on fan controller

Compliant

Meets standards:

- CE mark is attached to the PCB
- RoHS Directive 2002/95/EC
- EMC Directive 2014/30/EC