

Users manual

3 ch. DMX luxeon led driver



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www.Lux-Lumen.com

- Introduction

The RGB luxeon driver uses the latest PWM techniques to achieve a perfect dimming. Smooth dimming from 0-100% is available by DMX control. DMX addresses are set on the integrated DIP switches. A thermal feedback system regulates the current if temperature rises above safe levels.

- Specifications

Specifications:

- 3 constant current outlets.
- Digital dimming from 0% to 100%
- integrated DMX 512 interface
- LED temperature feedback circuit
- Energy friendly switched mode power supply
- Outlets protected against short circuit.
- High mbtf (>50.000u)
- Solid construction.
- CE approved.
- Suited for all 350mA LEDs
- Maximal distance to LEDs : 30m

Electrical specifications:

Input

Vin : 195 – 265Vac

Frequency : f : 50 – 60 Hz

Consumed power : Pin : 6 – 54 W

Power Factor : Pf : 0.95

Efficiency +- 80%

Output

Poch : 4.8 – 14.4 W each channel

Ioch : 350mA @ 100%

Voltage: Vo : max 48Vdc

Control input:

Dimming control : DMX : DMX512

By means of constant-current PWM.

Address range : 1 – 505 with DIP switch

Channel 1 : = n

Channel 2 : = n+1

Channel 3 : = n+2

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- Specifications

Special functions : 0 = "Witte Mix"

- : 511 = Self Test function
- : 510 = Ch 1 100%
- : 509 = Ch 2 100%
- : 508 = Ch 3 100%
- : 507 = All channels 100%

Temperature sensor : tfb : 10kOhm SMT Thermistor Epcos B57621C103J62

Note:

1. Temperature sensor is to be mounted very close to the LEDs on the MCPCB.
2. The driver reduces output power if the temperature exceeds $>80^{\circ}\text{C}$ and trips if higher then 90°C .
3. A 120 ohm end of line resistor is integrated in the dipswitch array.
4. Output isolation : 3000V op 50Hz

Working conditions.

Operating temperature : Top : -10°C tot $+ 40^{\circ}\text{C}$

Storage conditions : Tst : -20°C tot $+ 70^{\circ}\text{C}$

Max housing temperature : Tc : $+65^{\circ}\text{C}$

Rel. humidity : RH : 80%

MTBF L50.000hr : 5%

Mechanical.

Construction : Zintec coated soft steel 1.0 mm IP20

AC Input : Wieland 3 Pole GST18 Series Connector (1.0m cable included)

DMX Input : RJ45 Connector

LED output : MOLEX Micro Fit 3.0 System (female)

Mounting : 2x M3 bout



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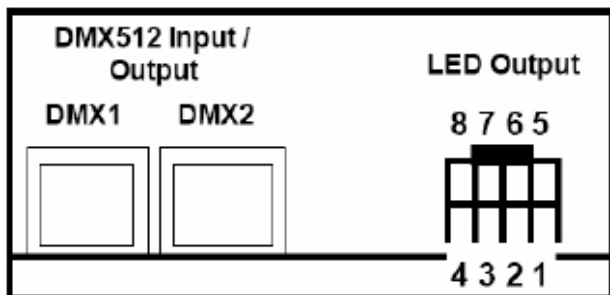


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- Connections

Electrical connections.

- CH1 : Red
- CH2 : Green
- CH3 : Blue



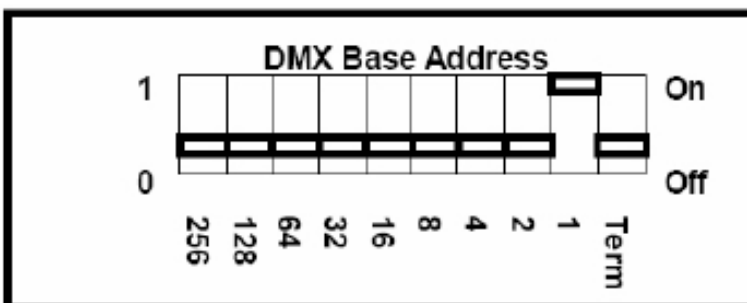
DMX / RJ45 Connections	LED Output
Pin 1 : Data +	1 : CH1 Common (+)
Pin 2 : Data -	2 : CH2 Common (+)
Pin 7 : Common	3 : CH3 Common (+)
Pin 8 : Common	4 : tfo 1
	5 : CH1 (-)
	6 : CH2 (-)
	7 : CH3 (-)
	8 : tfo 2

Electrical connections for CAT 5 cables

- White / orange : Data +
- Orange : Data -
- White / bruin : common
- Brown : common

- DMX

DMX addressing



Shown address = address 1.
 TERM : Termination resistor for DMX line included (120 ohm)

CAUTION:

Connecting non DMX signals in the RJ45 connector will cause damage to the driver. !!!

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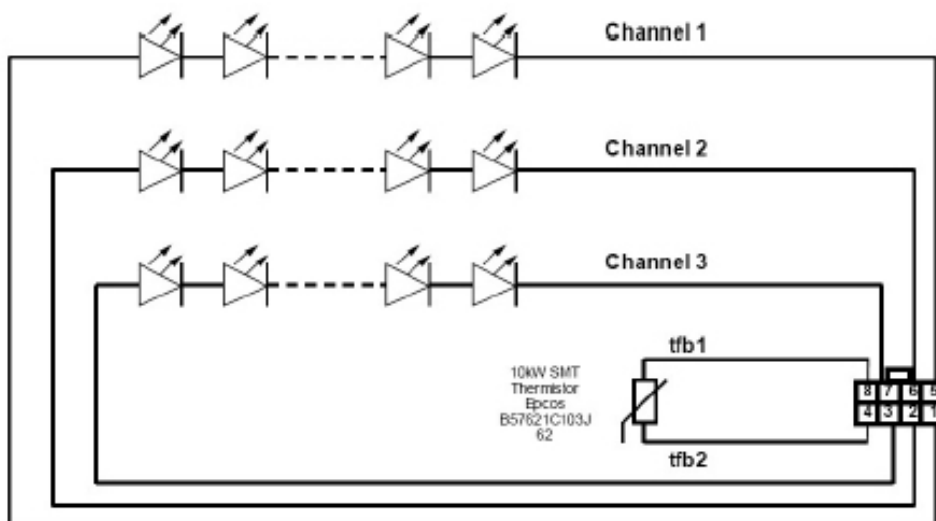
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- Connections

Connecting LEDs:

CH1 : Red
 CH2 : Green
 CH3 : Blue

Max. 12 leds per output.
 Min. 4 leds per output.



-Colour code cables

Colour codes moxex cables:

- | | |
|-----------|---------------|
| 1: black | red common. |
| 2: yellow | green common. |
| 3: white | blue common. |
| 4: brown | temp 1 |
| 5: red | red |
| 6: green | green |
| 7: blue | blue |
| 8: purple | temp 2 |

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