

Project

„M911B_DMX-Colorbooster /

development of a modular system of DMX protocol communing high power light controller“. (2005/2006)

Principals:

LUXLIKE GmbH, Hamburg / Germany www.luxlike-online.de ,

Mobile, Media & More Ltd., Kirchheimbolanden / Germany www.mmm-ltd.de ,

WDR, Cologne / Germany www.wdr.de ,

in cooperation with My-Tronic GmbH, Morbach / Germany www.my-tronic.com, www.my-led.com

Description:

Development, prototyping and enhancements till series-production readiness of a system of several controllers for RGB LED-Lightsources (RGB = red, green, blue).

Applicable as LED-Lightsystem for stages, in studios, in architecture, and for landscape architecture.

The system consist of a DMX-source (e.g. a PC with corresponding software, mixer console, and the like), of the 8-RGB-channel mastercontroller and up to three 16-RGB-channel slavecontrollers. (see figure 1)

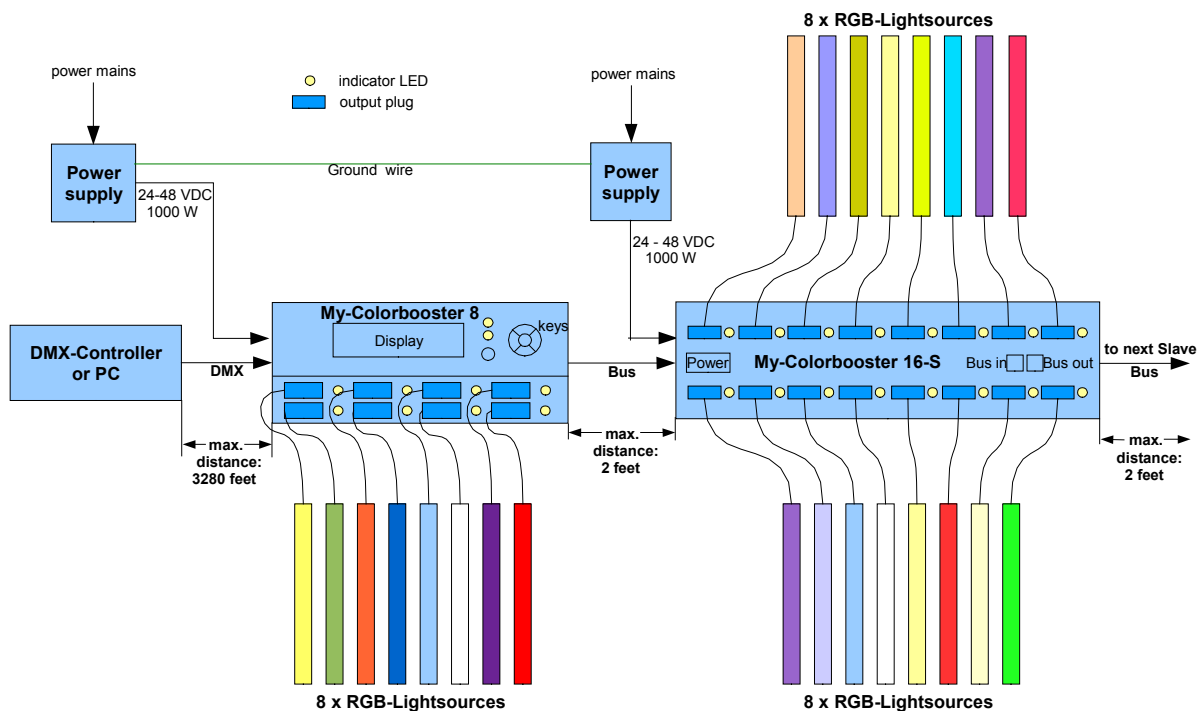


fig.1 example of a combination of DIN-rail devices

The DMX source is connected with the master controller (My-Colorbooster8) via a RS485 serial bus (DMX 512 USITT (1990) standard protocol) . Behind the master, via a seperate bus can be chained yet another additional slaves. (e.g. My-Colorbooster16-S)

At the maximum expansion stage can be controlled up to 168 channels (56 RGB-channels).

The master devices are available in DIN-rail housing or as 19-inch rack.

The DIN-rail versions can be driven with 12V-48V DC , the 19“-racks have internal 1800W power supplies and get connected direct to 190-245V AC mains.

The features of the slaves My-Colorbooster8-S and My-Colorbooster16-S respectively (DIN-rail PWM-drivermodules)

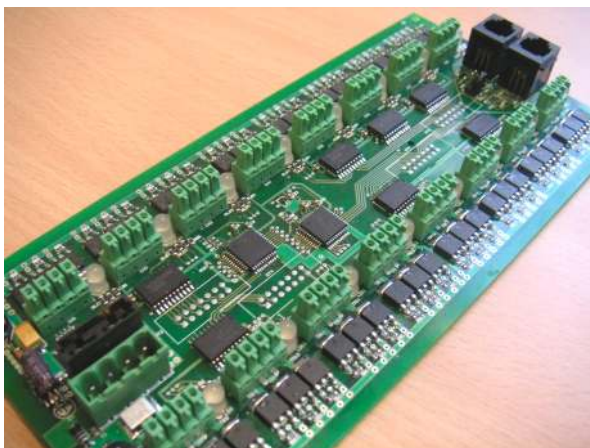
- 24 and 48 output channels (8 and 16 RGB channels)
- operating voltage range from 12VDC up to 48V DC
- up to 1,5 Amp. / 48V per channel
- total output power max. 1000 W
- electronic fuse with status feedback for remote inquiry
- pseudo-random-PWM generation avoids flickering in critical applications (e.g. TV studios)
- optional enhancement of even more slave modules. Up to 144 channels (48 x RGB) additionally.
- 3-color channel activity indicator LEDs
- 14-bit PWM-oversampling
- full protected outputs (overload /short circuit / overtemperatur / ESD)



My-colorbooster16-S (slave)



DIN-rail housing



16x3 channel PWM driverboard



DMX-source, master, 8-channel slave and LED-teststrips

The features of the My-Colorbooster8 (DIN-rail master device)

- 8x3 outputs, like My-Colorbooster8-S, furthermore:
- up to 2.0 Amp. / 48V per channel, 1000W output power total
- up to 2500V full isolated digital interface for working in wide area DMX Networks
- supports USITT DMX 512 (1990) protocol
- RJ45 connectors or XLR connectors for DMX signal
- setting DMX addresses under using the menu guided navigation keys or by manufacturer.
- 2x16 char display, transmission error indicator, DMX activity indicator.
- additional flash memory card for storing several light programs in stand-alone mode

Yet another features of the 19-inch rack versions (distribution identifier Meira1908 and 1916)

- integrated power supplies 3x600W
- total output power max. 1500 W / 48V
- metal XLR-connectors even for the outputs
- 8 RGB-channels (Meira1908) or 16 RGB-channels (Meira1916)



DIN-rail master My-Colorbooster8 with a LED-teststripe



host processor board for master



8-channel rack Meira1908



16-channel rack Meira1916 as prototype