DMX-LED-DIMMER S

User Manual

DMX4ALL

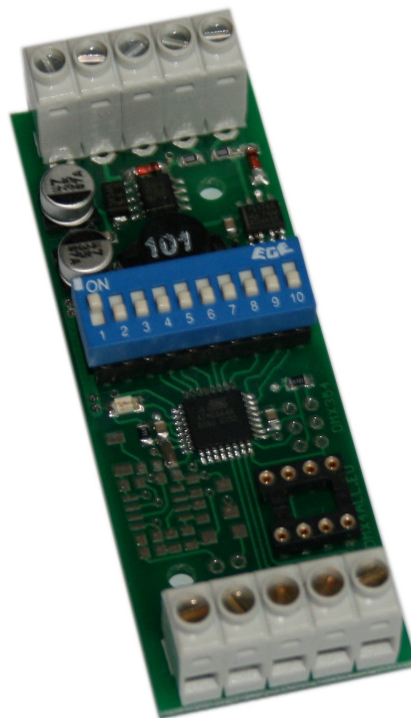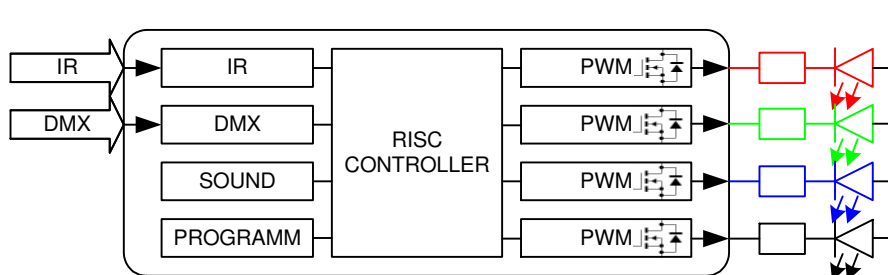WWW.DMX4ALL.EU

Description

The **DMX-LED-Dimmer S** is especially designed for controlling the RGB LED-Stripes. It has 4 PWM-Outputs which are autonomous controllable with DMX. Alternatively internal or user defined colour courses can be called without external control.

Energy Saving Design:
By modern switch-power-supply-technology it will be generated less warmth considerably and therefore the energy consumption is lowered.

Data Sheet

Voltage supply:
7-24C DC / 100mA (without connected loads)
DMX-IN:
4 channels
Output:
4 PWM-Signals in 256 steps
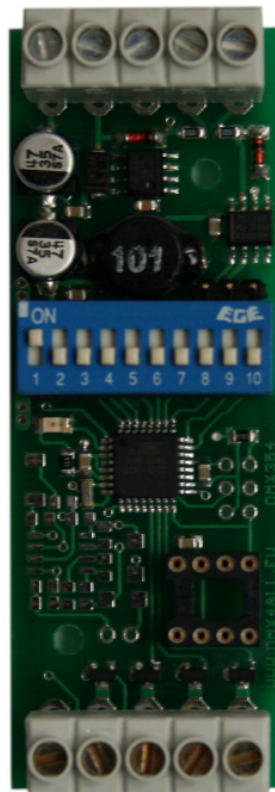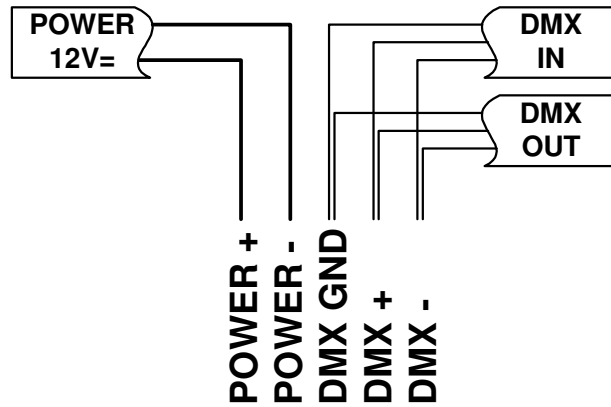max. 3A per output, common voltage supply
StandAlone-Function:
- 10 firm internal StandAlone-Programs or
up to 16 user defined StandAlone-Programs
- IR-control optionally available
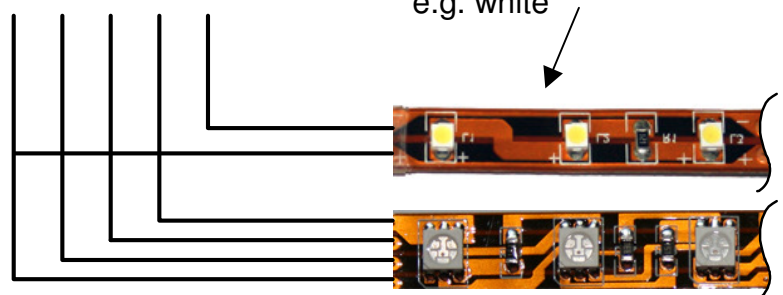**Board Dimensions:**
29,2 x 82mm

Connections

POWER
12V=

DMX
IN

DMX
OUT

POWER +
POWER -
DMX GND
DMX +
DMX -

IR-Sensor
The IR-Sensor is to be put
on the 3-pole pencil strip in
such a way which the
colours of the connecting
lead are yellow-black-red
from the left.

LED+
LED- OUT1
LED- OUT2
LED- OUT3
**LED- OUT4**

Single colour LED-Stripe
e.g. white

RGB LED-Stripe

DMX-Address

The DMX-starting address is adjustable about the switches 1 to 9.

Thereby switch 1 has the valency 2^0 (=1), switch 2 the valency 2^1 (=2) and so on … until switch9 with the valency 2^8 (=256). The sum of the switches standing on ON corresponds to the start address.

The switch 10 is exclusive for the StandAlone function and must stand in the DMX company on OUT.
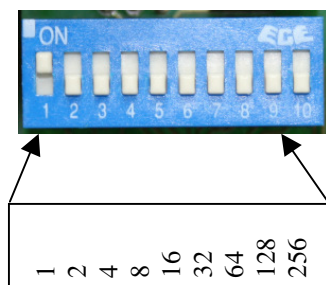
LED-Display-Codes

The integrated DMX-LED is an multifunctional display.
This LED lights nonstop in normal operation mode. In this case the device is working. Is the LED permanently dark, there is no DMX512-input-signal at the entry.

Also the LED signalled the operation status. In this case the LED lights up in short pitches and then turns into the off modus. The Number of flashing signals is equal to the error status:
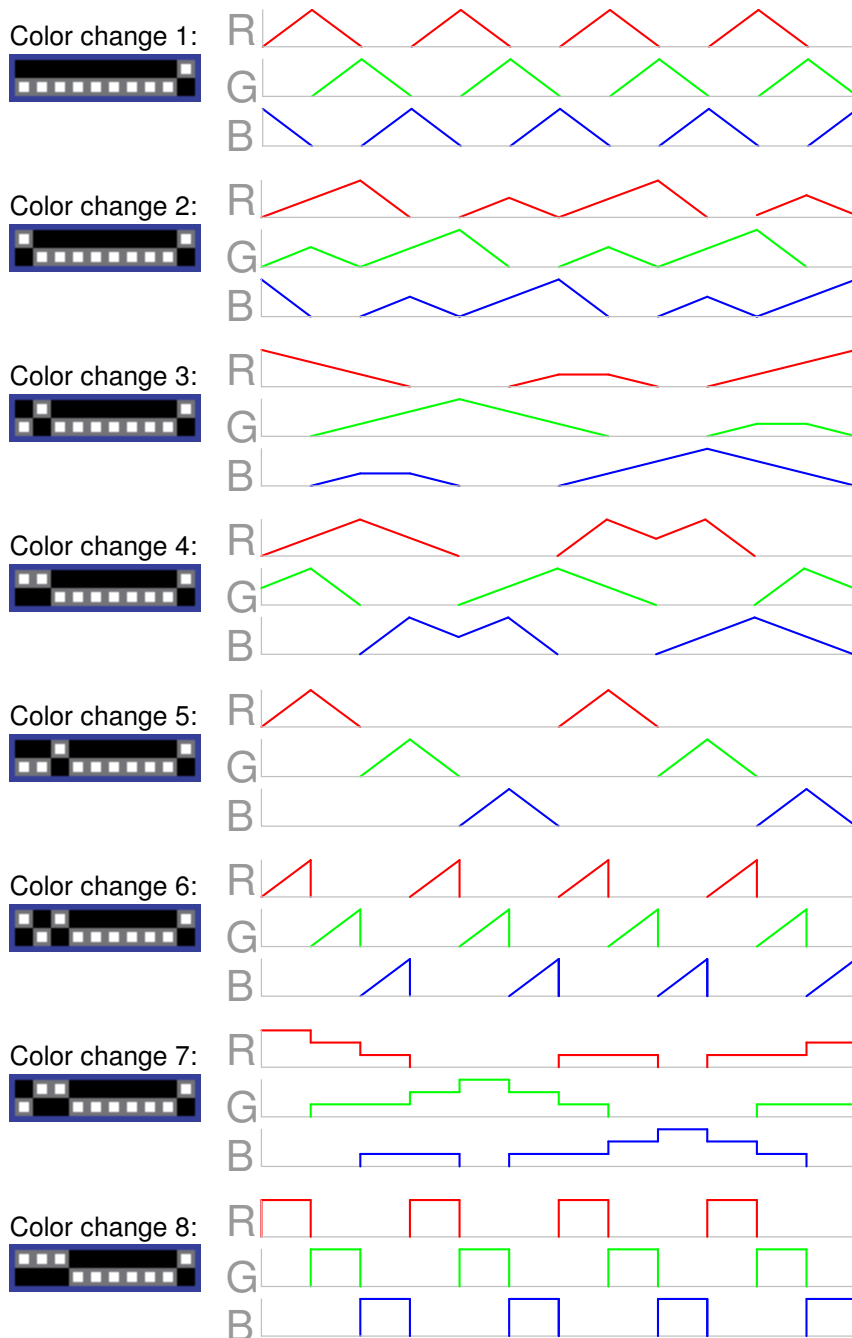
Error Status	Error	Description
1	No DMX	There is no DMX-signal on the dimmer.
2	Address Error	Check if a valid DMX- starting address is adjusted at the DIP-switch.
3	DMX-Signal error	An invalid DMX input signal is established. Invert the signal line by changing switch 2 and 3 or use a twisted pair wire.

Accessing the internal colour changes

To access the internal color changes, please switch counter 10 on On.
For slow colour changes the DMX-LED-Dimmer S allocates a SLOW-mode. This
will be activated, by switching counter 8 on ON.

Counter 8 = ON = Slow colour change
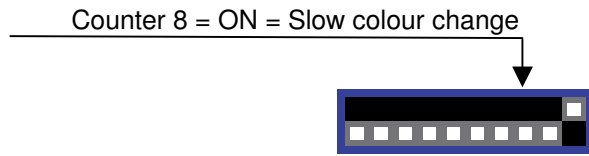
Now you can select the colour change program about the counters 1, 2 and 3.
The following colour changes are selectable:

Color change 1:
R
G
B

Color change 2:
R
G
B

Color change 3:
R
G
B

Color change 4:
R
G
B

Color change 5:
R
G
B

Color change 6:
R
G
B

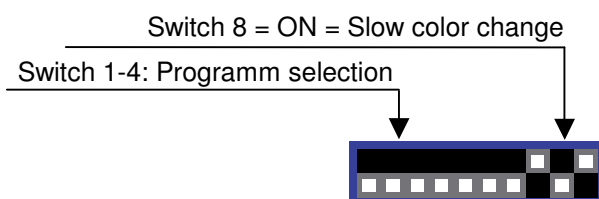Color change 7:
R
G
B

Color change 8:
R
G
B

User-defined color change

The DMX-LED-Dimmer S offers about a recordable internal memory the possibility to program freely up to 16 color changes.

Therefore a EEPROM and a EERPOM program device required. Also DMX-Player S can be used as a program device.
Following EEPROMs can be used: 24C64 / 24C128 / 24C256

The switches 1-4 are for the selection of the light pattern.

Switch 8 = ON = Slow color change

Switch 1-4: Programm selection

Accessing the Color change

The colour change will be accessed with the *DMX-Configurator*. Thereby the so adjustable DMX-channels 1-4 are allocated to the exits 1-4. The allocation of the programmable scenes is analogous to the selected light pattern. So the first Scene corresponds to the first light pattern (switches 1-4 OFF).

The production of light patterns with the *DMX-Configurator* is exactly described in the operating instructions to the programme.

> **Advice:**
> The given time units, by accessing the light patterns, can differ be replaying with the DMX-LED-Dimmer S. Hence, these are to be understood only as guideline.

If the preferred light patterns are provided, you must provide under *File→Export HEX-file* a program-file for the EEPROM. Now this file must be written with a customary program device in the EEPROM. Then the programmed EEPROM must be pocketed in the IC-holder of the LED-Dimmer S.

IR-Operation

With an IR-receiver the **DMX-LED-Dimmer S** can be controlled in the StandAlone-mode.

⚠️   The suitable IR-receiver as well as the remote control are available as equipment.

The program selection takes place about the keys **1,2,3 ... 9** according to the programs from 1 up to 9. The key 0 is for a free colour setting.

About the keys **+** and **–** the brightness and the speed is adjustable as well as a program selection is possible.
After actuating the key **SPEED**, the speed is adjustable;
After actuating the key **PROG SELECT**, the programs are selectable;
After actuating the key **R**, **G** or **B**, the brightness is adjustable.

Only the total brightness is adjustable for the programs 1-9. For the free colour setting the colours red, green and blue are separately adjustable.

The switch **BLACK OUT** activates and deactivates the BlackOut-function. Besides the brightness setting will be persist.

The switch **FLASH** activates and deactivates the Flash-function, which engaging all Channels on 100%. Besides the brightness setting will be persist.

The switch **SOUND ACTIVE** activates the SOUND-function (music control).

The switch **AUTO RUN** deactivates the SOUND-function (music control).

Free Colour Setting

Press **0** switch
Press **R** switch
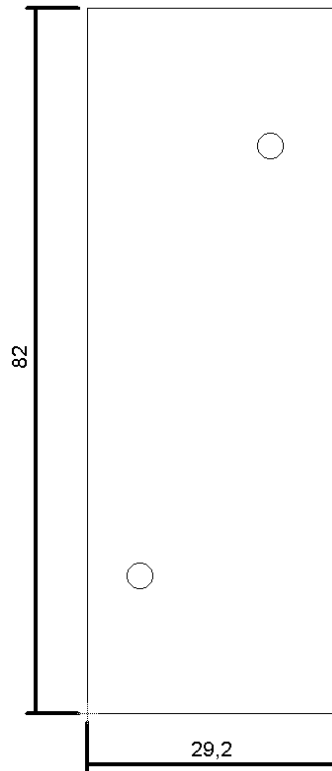With the switches **+** / **-** the red part of the preferred colour is adjustable
Press **G** switch
With the switches **+** / **-** the red part of the preferred colour is adjustable
Press **B** switch
With the switches **+** / **-** the red part of the preferred colour is adjustable

Dimensions

All informations in mm

Equipment

Housing for DIN rail mounting

Top-hat rail housing 350
Art.-Nr.: 50-0050

CE-conformity

This assembly (board) is controlled by a microprocessor and uses high frequency (8MHz). To get the characteristics of the assembly in relation to the CE-conformity, an installation in a compact metal casing is necessary.

Risk-Notes

You purchased a technical product. Conformable to the best available technology the following risks should not excluded:

Failure risk: The device can drop out partially or completely at any time without warning. To reduce the probability of a failure a redundant system structure is necessary.

Initiation risk: For the installation of the board, the board must be connected and adjusted to foreign components according to the device paperwork. This work can only be done by qualified personnel, which read the full device paperwork and understand it.

Operating risk: The Change or the operation under special conditions of the installed systems/components could as well as hidden defects cause to breakdown within the running time.

Misusage risk: Any nonstandard use could cause incalculable risks and is not allowed.

Warning: It is not allowed to use the device in an operation, where the safety of persons depend on this device.

DMX

4ALL

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