SpectraDim64

from software version: V2.6
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LDDE
LIGHTING IDEAS

Lighting
Design
Development
Electronics

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Overview DMX Modes

You can choose between 6 DMX modes each designed for different applications and preferences:

CH1 - ONE CHANNEL (1 CHANNEL):

One DMX circuit for all six outputs.

CH2 - TWO CHANNEL HIGH RESOLUTION (2 CHANNELS):

All outputs are controlled on 2 DMX channels with 16-Bit.

CH3 - TWO CHANNEL SPLIT (3 CHANNELS):

Two outputs are controlled per channel. (Output 1 + 4 / Output 2 + 5 / Output 3 + 6).

CH4 - DUAL OUTPUT SPLIT (4 CHANNELS)

The outputs 1 to 3 are individually controlled eg. for RGB LED Strips.
The outputs 4 to 6 are controlled jointly, eg.for single-color LED Strips.

CH6 - SINGLE OUTPUT (6 CHANNELS)

Each output (1 to 6) is separately controlled.

CH12 - SINGLE OUTPUT HIGH RESOLUTION (12 CHANNELS)

Same as CH6 - Single Output, but with 16-bit control. 2 DMX channels per output.

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Operating Mode

The table below shows the different available modes and the DMX channels required for the corresponding mode.

Output 8-bit	8-bit interpolated	Ch1 - 1 Channel (901)	Ch3 - 3 Channels (903)	Ch4 - 4 Channels (904)	Ch6 - 6 Channels (906)
1	Output 1	1	1	1	1
2	Output 2	1	2	2	2
3	Output 3	1	3	3	3
4	Output 4	1	1	4	4
5	Output 5	1	2	4	5
6	Output 6	1	3	4	6
Output 16-bit	**16-bit**	**Ch2 - 2 Channels (902)**	**Ch12 - 12 Channels (912)**		
1	Output 1	1	1		
2	Output 1 fine	2	2		
3	Output 2	1	3		
4	Output 2 fine	2	4		
5	Output 3	1	5		
6	Output 3 fine	2	6		
7	Output 4	1	7		
8	Output 4 fine	2	8		
9	Output 5	1	9		
10	Output 5 fine	2	10		
11	Output 6	1	11		
12	Output 6 fine	2	12		

In the brackets, the BCD & Remote command is used to set the desired mode.
For example. To switch to the Ch12 - Single Output High Resolution, use 912 on the BCD switch.

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Changing Operating Mode

Changes with BCD switch possible **only before** commissioning!
Changes with LDDE RemoteControl possible **only during** operation!

The respective mode or setting can be accessed via the BCD switch or LDDE RemoteControl.

Changes to the settings and DMX addresses affect all LDDE devices that are connected via the same DMX cable!

Settings with BCD switch

The settings of the SpectraDim64 can be made using the BCD switch on the back of the device, therefore the SpectraDim64 must be disconnected from the power supply.

To make changes, please proceed as follows.

1. Disconnect SpectraDim64 from the power supply!
2. Set the desired mode to the BCD switch.
3. Connect the SpectraDim64 back to power supply.
4. The Status LED of the SpectraDim64 flashes 6x “blue”.
5. Set the desired DMX start address again.

Settings with LDDE RemoteControl

To change the settings of the SpectraDim64, you need a LDDE RemoteControl.
This allows various changes to the basic settings and the DMX mode during operation.

To change the settings on the SpectraDim64 with the LDDE RemoteControl, please follow the steps below.

1. Disconnect the DMX connection to the SpectraDim64.
2. Please note that no devices that could perform DMX value changes, such as a light console, are connected to this DMX line.
3. Connect a DMX cable between SpectraDim64 and the LDDE RemoteControl.
4. Send the desired setting or DMX address to the SpectraDim64.
5. After sending, the Status LED of the SpectraDim64 light up in the following colors.

green ..... DMX address, Settings / Parameter
red .....Invalid command

Overview Settings

Command	Function
600 - red 100% (only available in 3Ch mode)	„red“ with 100% Intensity
601 - green 100% (only available in 3Ch mode)	„green“ with 100% Intensity
602 - blue 100% (only available in 3Ch mode)	„blue“ with 100% Intensity
603 - magenta 100% (only available in 3Ch mode)	„magenta“ with 100% Intensity
604 - yellow 100% (only available in 3Ch mode)	„yellow“ with 100% Intensity
605 - cyan 100% (only available in 3Ch mode)	„cyan“ with 100% Intensity
606 - amber 100% (only available in 3Ch mode)	„amber“ with 100% Intensity
607 - lavender (only available in 3Ch mode)	„lavender“ with 100% Intensity
608 - light green (only available in 3Ch mode)	„light green“ with 100% Intensity
609 - full (only available in 3Ch mode)	„full“ all channels with 100% Intensity
700 to 799 - Intensity 0-100% (all channels)	Set desired Intensity 0-100% for all channels
801 - DMX Hold disabled	After 5 seconds without a DMX signal, all outputs are set to 0 (zero)
802 - DMX Hold enabled	Last DMX value is held until shutdown
812 - Fade to Zero enabled	Fade to Zero on
813 - Fade to Zero disabled	Fade to Zero off
850 - Status LED 0%	Status LED is switched off
851 - Status LED 5%	Status LED illuminates with 5% intensity
852 - Status LED 30%	Status LED illuminates with 30% intensity
853 - Status LED 100%	Status LED illuminates with 100% intensity
921 - Linear	No characteristic is used
922 - Normal	Normal dimming curve is used
923 - Smooth	Smooth dimming curve is used
666 - Reset	Reset to factory default

The commands 600 to 799 can only be changed using the BCD switch!

The SpectraDim64 is delivered with factory settings in the Ch6 Single Output mode,
which can be changed via the BCD switch on the back of the device or with a LDDE RemoteControl.

Factory default	
Channelmode	Ch6 - Single Output
Dimming parameter	Normal
DMX Hold	enabled
Fade to Zero	enabled
Status LED	enabled - 30% intensity

Fixed colors (only available in Ch3 - Two Channel Split mode)

600 - red	„red“ illuminates with 100% intensity.
601 - green	„green“ illuminates with 100% intensity.
602 - blue	„blue“ illuminates with 100% intensity.
603 - magenta	„magenta“ illuminates with 100% intensity.
604 - yellow	„yellow“ illuminates with 100% intensity.
605 - cyan	„cyan“ illuminates with 100% intensity.
606 - amber	„amber“ illuminates with 100% intensity.
607 - lavender	“lavender“ illuminates with 100% intensity.
608 - light green	„light green“ illuminates with 100% intensity.
609 - full	„full“ all channels light up with 100% intensity.

Intensity (eg. for fixed installations where no DMX is available)

700 to 799 - Intensity 0-100%	The intensity can be set between 0 and 100%. This is suitable for fixed installations where no changes have to be made by DMX eg. cabinet lighting.

DMX Hold

801 - DMX Hold disabled	5 seconds without DMX signal, all outputs are set to 0.
802 - DMX Hold enabled	The last DMX value is held until the shutdown (Hold last look).

Fade to Zero

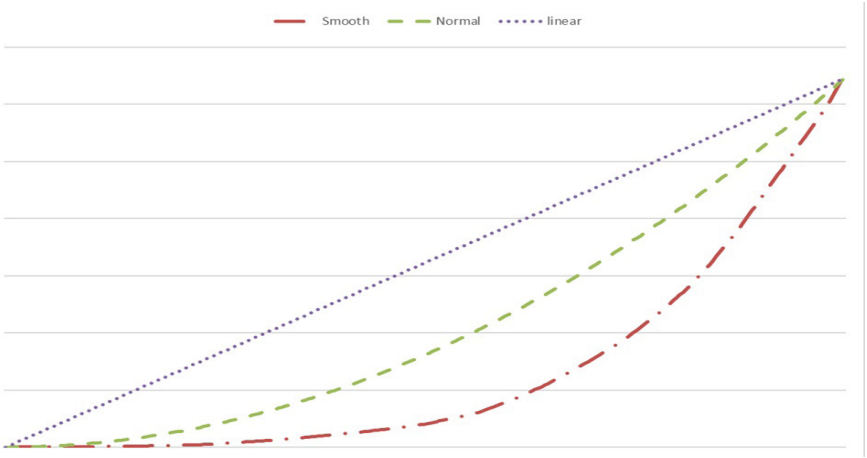
812 - enabled	For a new DMX value (below DMX value 15) is dimmed to 0.
813 - disabled	For a new DMX value (below DMX value 15) --> Snap to 0.

Status LED

850 - Status LED 0%	The Status LED is switched off.
851 - Status LED 5%	The Status LED illuminates with 5% intensity.
852 - Status LED 30%	The Status LED illuminates with 30% intensity.
853 - Status LED 100%	The Status LED illuminates with 100% intensity.

Dimming parameter

921 - Linear	„Linear“ no characteristic is used.
922 - Normal	„Normal“ characteristic is used.
923 - Smooth	„Smooth“ characteristic is used.



Factory default

666 - Reset	The device is reset to factory settings.

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Technical Specifications

Dimensions / Weight

Lenght	100 mm / 3,9 Inches
Width	87 mm / 3,42 Inches
Height	25 mm / 0,98 Inches
Weight	270g / 0,60 lb

Control

Protocol	DMX512/1990
Dimming	8-bit interpolated / 16-bit
DMX-Channels	1 / 2 / 3 / 4 / 6 / 12 DMX-Channels
Address setting	BCD switch or LDDE RemoteControl

Frequency

PWM Frequency	8kHz

Connections

Power	0,5 bis 2,5mm²
Output 1 + 2	0,5 bis 2,5mm²
DMX	0,5 bis 1,5mm²
Typ	Spring clamp

Electricals specifications

Input voltage	2x 12-48VDC
Input current	max. 2x 24A
Output	max. 8A per channel

Construction

Housing	aluminium
Color	black
Cooling	convection cooling
Protection class	IP20

Safety standards

Certifications	EN 60598-1, EN 60598-2-17, EN 55103-1, EN 55103-2, EN 60950, EN 61000-3-2, EN 61000-3-3

Temperatures

Maximum ambient temperature	ta: +40°C / +104°F

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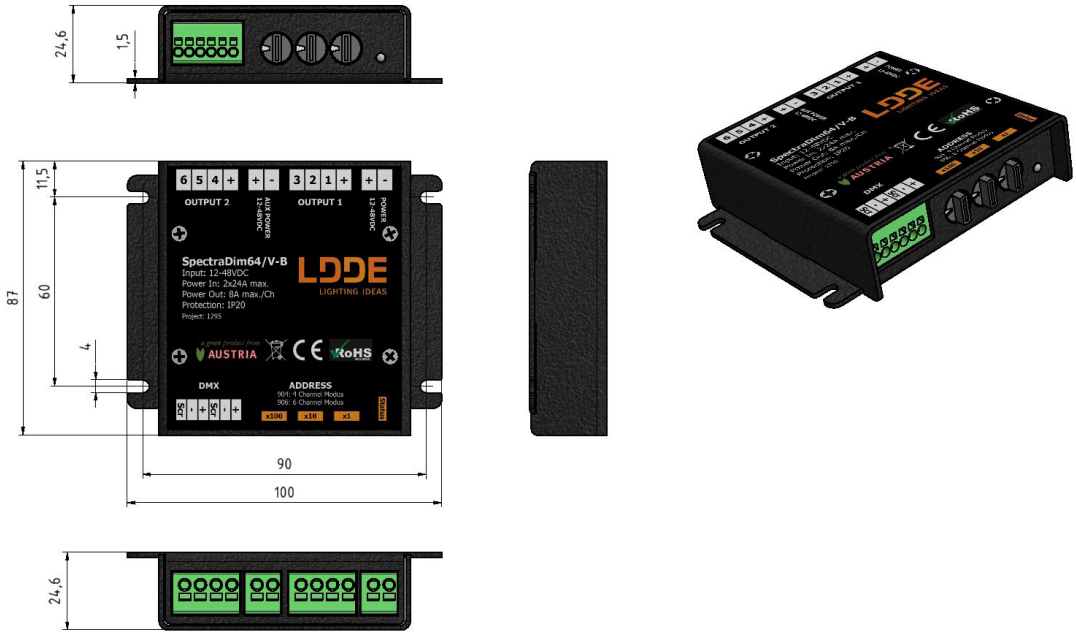
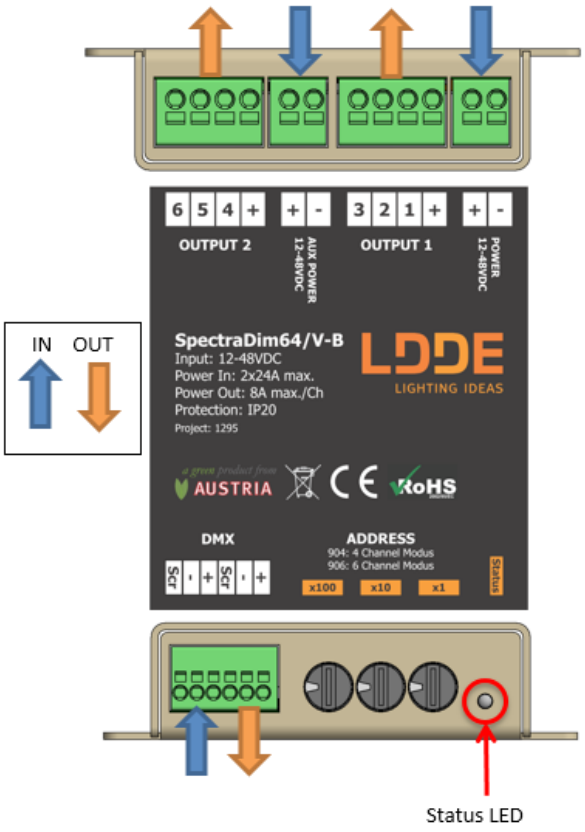
Dimensions



Connection



Power:
Voltage input for
Dimmer and Output 1

Output 1:
+ ... Output voltage
for Channel 1 + 2 + 3
1 ... Channel 1 -
2 ... Channel 2 -
3 ... Channel 3 -

AUX Power:
Voltage input for
Output 2

Output 2:
+ ... Output voltage
for Channels 4 + 5 + 6
4 ... Channel 4 -
5 ... Channel 5 -
6 ... Channel 6 -

DMX Input / Output:
Scr ... Screen
- ... Data -
+ ... Data +

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