JUMITECH

DALI RGBW
LED Dimmer CC

Datasheet

Control Gear

RGBW LED Dimmer (CC, DT8)

common plus connector:
Art. Nr. 86458912-100 (100mA)
Art. Nr. 86458912-250 (250mA)
Art. Nr. 86458912-350 (350mA)
Art. Nr. 86458912-500 (500mA)
Art. Nr. 86458912-700 (700mA)

common minus connector:
Art. Nr. 86458912-350GM (350mA)
Art. Nr. 86458912-500GM (500mA)
Art. Nr. 86458912-700GM (700mA)

2018-08-09

DALI RGBW LED Dimmer CC Control Gear

Overview

- DALI LED-Dimmer for RGBW colour control
- Suitable for constant current LED-modules
- **Operating Mode DT8**: one DALI-address for the independent control of level and colour (DALI DT8, Type RGBWAF)
- **Operating Mode Colour&Dim**: control by 2 DALI-addresses, one for adjusting the level and one for adjusting the colour
- **SwitchDim2**: 2 switch-inputs offer control of level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types for constant currents of 350mA, 500mA and 700mA
- types with common plus and common minus connector available
- suitable for integration in luminaires or remote ceiling
- supply voltage 12V to 48V DC
- output voltage up to 45VDC
- integrated short circuit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

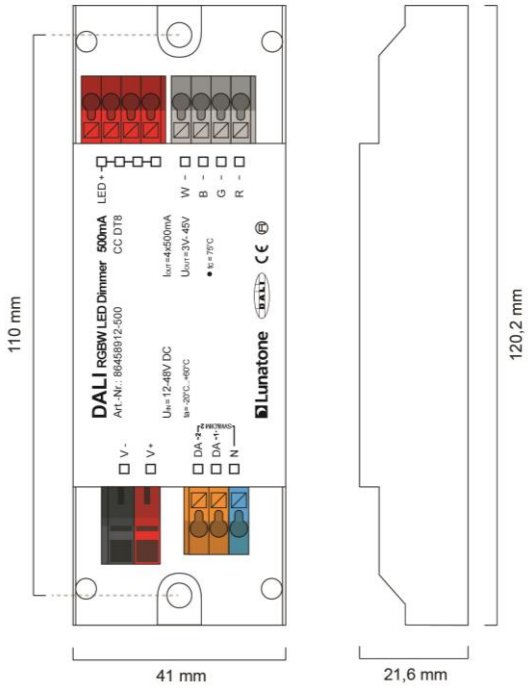
Specification, Characteristics

common plus connector:

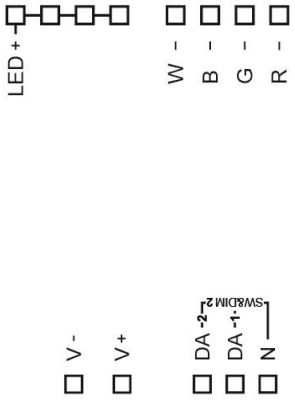
type	**DALI RGBW 100mA GP**	**DALI RGBW 250mA GP**	**DALI RGBW 350mA GP**	**DALI RGBW 500mA GP**	**DALI RGBW 700mA GP**
article number	86458912-100	86458912-250	86458912-350	86458912-500	86458912-700
electrical data:					
supply voltage V_{in}	12VDC-48VDC				
max. input current I_{inmax}	100mA	250mA	350mA	500mA	700mA
max. output current I_{led}	100mA	250mA	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)				
control input	DALI SwitchDim2 (mains voltage)				
current consumption DALI	2mA				
number of DALI-addresses	operating mode DT8: 1 operating mode Colour&Dim: 2				
standby power consumption (12V)	~ 180mW				
technical data:					
power on behaviour	configurable via DALI: 0%-100% or last value				
ambient temperature	-20°C to +60°C				

expected lifetime	>100000h (at Tc<=75°C)
protection class	IP20
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2
dimensions (LxWxH)	120mmx41mmx22mm
housing/mounting	remote ceiling

on request: output currents from 100mA to 700mA available



dimensions common plus connector type



connection plan common plus connector type

common minus connector:

type	**DALI RGBW 350mA GM**	**DALI RGBW 500mA GM**	**DALI RGBW 700mA GM**
article number	86458912-350GM	86458912-500GM	86458912-700GM

electrical data

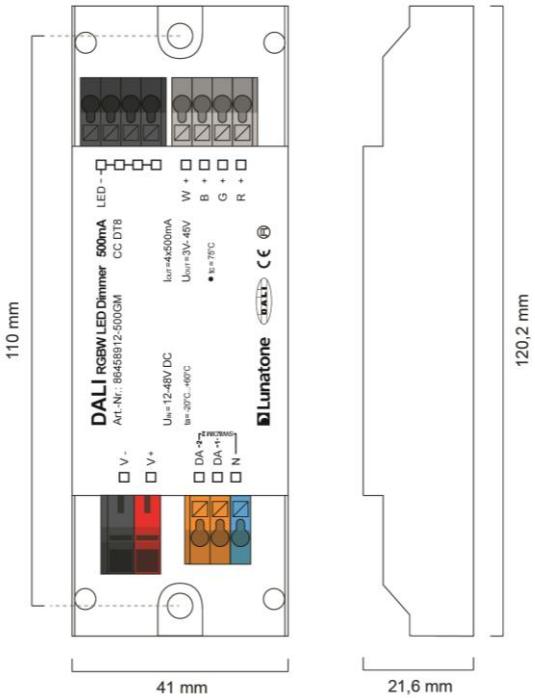
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	350mA	500mA	700mA
max. output current I_{led}	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2 (mains voltage)		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT8: 1 operating mode Colour&Dim: 2		
standby power consumption (12V)	~ 180mW		

technical data:

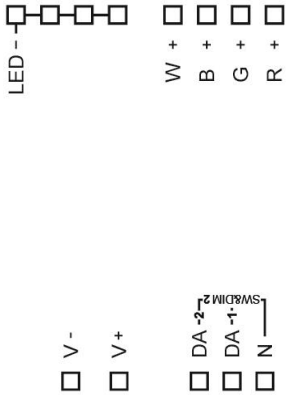
power on behaviour	configurable via DALI: 0%-100% or last value
ambient temperature	-20°C to +60°C

expected lifetime	>100000h (at Tc<=75°C)
protection class	IP20
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2
dimensions (LxWxH)	120mmx41mmx22 mm
housing/mounting	remote ceiling

on request: output currents from 100mA to 700mA available



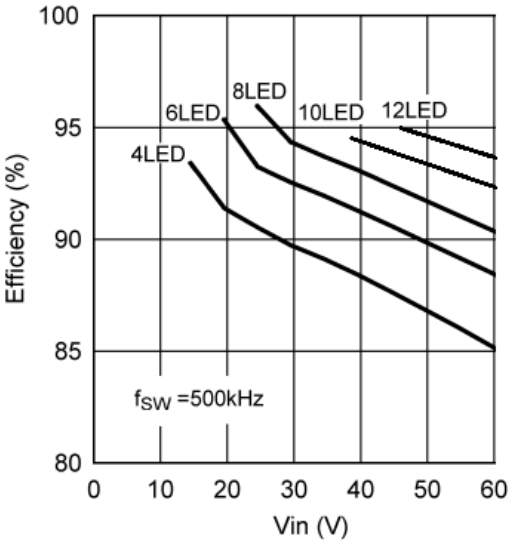
dimensions GM



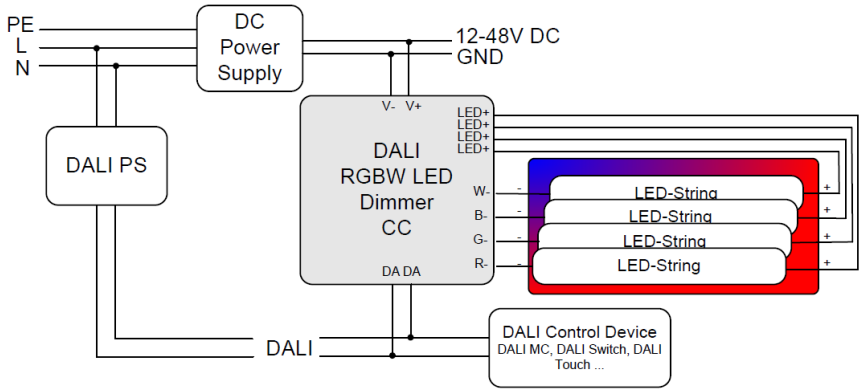
connection plan GM

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

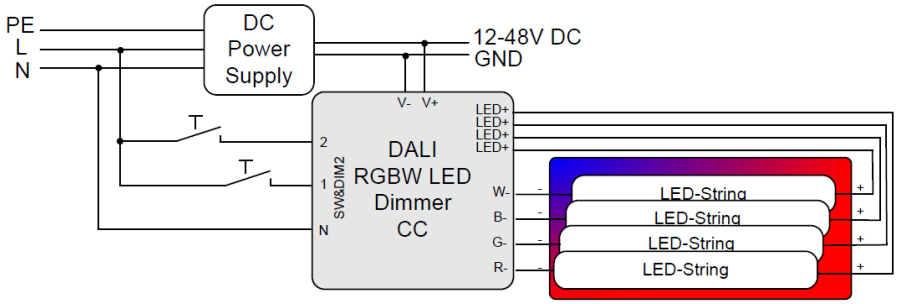
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT8 (factory default)

In this operating mode one DALI-address for the independent control of light level and colour is used (Device Type 8 RGBWAF).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: colour
long press: change colour

Colour&Dim

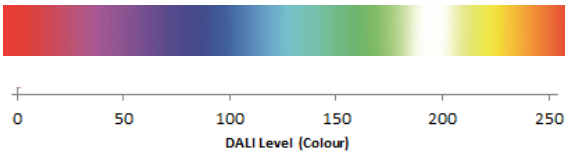
This operating mode is suitable for operating RGB—luminaires. Two DALI-addresses are used, the first to control the light level and the second for changing the distribution on the output channels (e.g. for colour adjustments).

The Colour&Dim mode allows colour adjustments without affecting the level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Colour&Dim mode provides an alternative to the DT8-RGBWAF mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

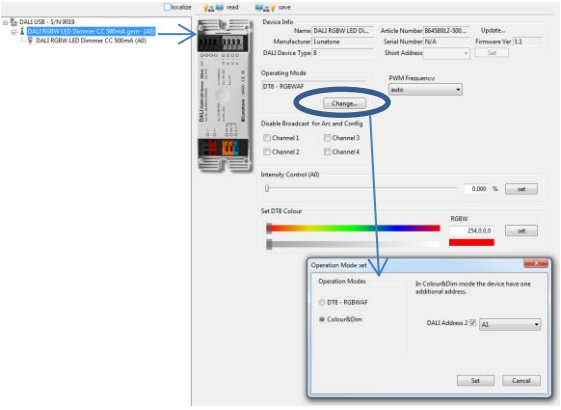
DALI-address 2, SwD2: colour



Selection of operating mode

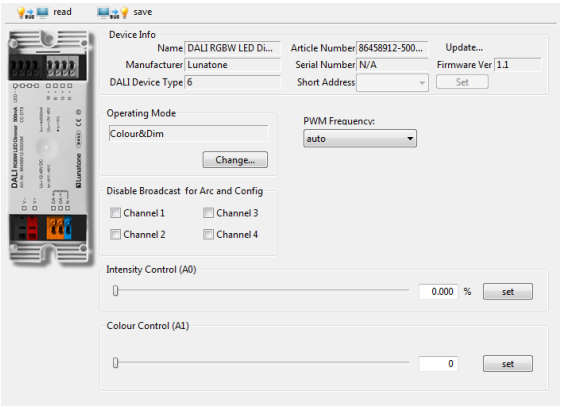
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT8-RGBWAF:



In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (slider for level and colour in the operating modes DT8 and Colour&Dim). Furthermore the broadcast control can be deactivated for each channel individually.

Operating mode Colour&Dim:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

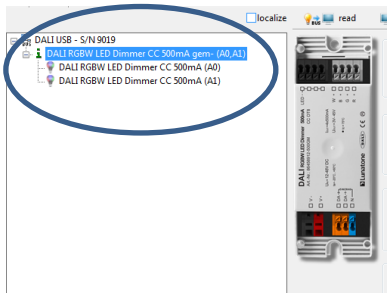
Operating Mode:

number	operating mode
0x0	DT8 (factory default)
0x92	DT8
0x93	Colour&Dim

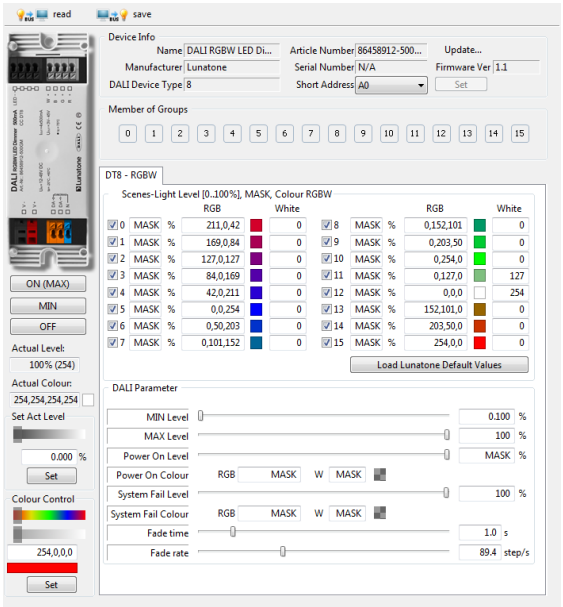
Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

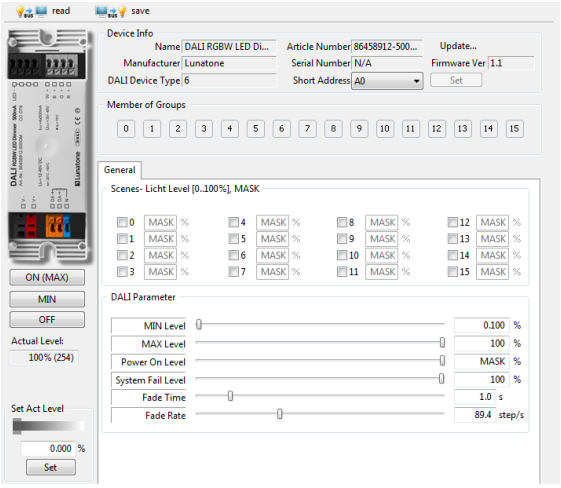
Component Tree:



Settings in the operating mode DT8-RGBWAF (displayed parameters are the factory default values):



Settings for each channel in the operating mode Colour&Dim:



For each address the group membership can be set as well as scene values and DALI-parameters. In Colour&Dim operating mode, all values assigned to channel 2 are representing colours.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by a group address. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI-Cockpit). By sending a DALI-Reset command the device is set to the DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

Operating mode	DT8
SwitchDim2	SwD1: level SwD2: colour
Min Level	0.1%
PowerOn Level	MASK (last value)
Fade Time	2 (1s)
Fade Rate	5 (89.4 steps/s)
PWM-frequency	122Hz

Groups before intial addressing:	G0 (or G0 and G1 in operating mode Colour&Dim)
Predefined Scene Values:	

			RGB		White
0	MASK	%	211,0,42		0
1	MASK	%	169,0,84		0
2	MASK	%	127,0,127		0
3	MASK	%	84,0,169		0
4	MASK	%	42,0,211		0
5	MASK	%	0,0,254		0
6	MASK	%	0,50,203		0
7	MASK	%	0,101,152		0
8	MASK	%	0,152,101		0
9	MASK	%	0,203,50		0
10	MASK	%	0,254,0		0
11	MASK	%	0,127,0		127
12	MASK	%	0,0,0		254
13	MASK	%	152,101,0		0
14	MASK	%	203,50,0		0
15	MASK	%	254,0,0		0

Purchase Order Information

Art.Nr. 86458912-xxx: DALI RGBW LED Dimmer, CC – constant current xxx mA (100mA-700mA), **common plus connector**, supply 12V-48V DC, output voltage 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Art.Nr. 86458912-xxxGM: DALI RGBW LED Dimmer, CC – constant current xxx mA (100mA-700mA), **common minus connector**, supply 12V-48V DC, output voltage 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

www.jumitech.dk

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Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.

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DALI RGB
LED Dimmer CC

Datasheet

Control Gear

RGB LED Dimmer (CC, DT8)

common plus connector:
Art. Nr. 86458913-350 (350mA)
Art. Nr. 86458913-500 (500mA)
Art. Nr. 86458913-700 (700mA)

common minus connector:
Art. Nr. 86458913-350GM (350mA)
Art. Nr. 86458913-500GM (500mA)
Art. Nr. 86458913-700GM (700mA)

2018-08-09

DALI RGB LED Dimmer CC Control Gear

Overview

- DALI LED-Dimmer for RGB colour control
- Suitable for constant current LED-modules
- **Operating Mode DT8**: one DALI-address for the independent control of level and colour (DALI DT8, Type RGBWAF)
- **Operating Mode Colour&Dim**: control by 2 DALI-addresses, one for adjusting the level and one for adjusting the colour
- **SwitchDim2**: 2 switch-inputs offer control of level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types for constant currents of 350mA, 500mA and 700mA
- types with common plus and common minus connector available
- suitable for integration in luminaires or remote ceiling
- supply voltage 12V to 48V DC
- output voltage up to 45VDC
- integrated short circuit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

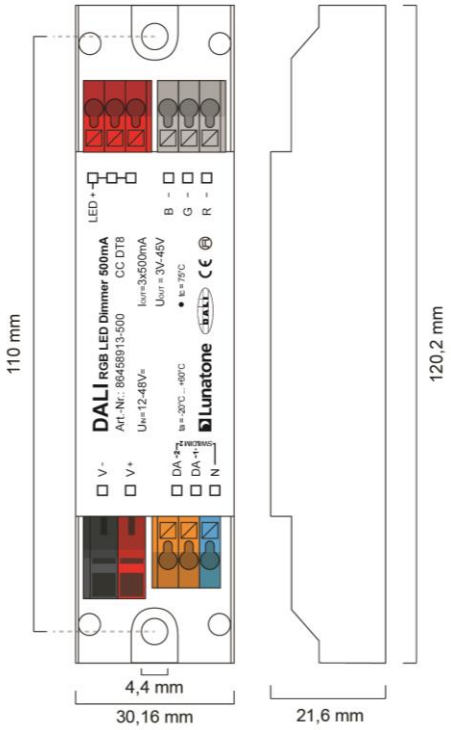
Specification, Characteristics

common plus connector:

type	**DALI RGB 350mA GP**	**DALI RGB 500mA GP**	**DALI RGB 700mA GP**
article number	86458913-350	86458913-500	86458913-700
electrical data:			
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	350mA	500mA	700mA
max. output current I_{led}	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2 (mains voltage)		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT8: 1 operating mode Colour&Dim: 2		
standby power consumption (12V)	~ 180mW		
technical data:			
power on behaviour	configurable via DALI: 0%-100% or last value		
ambient temperature	-20°C to +60°C		
expected lifetime	>100000h (at Tc<=75°C)		

protection class	IP20
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2
dimensions (LxWxH)	120mmx30mmx22mm
housing/mounting	remote ceiling

on request: output currents from 100mA to 700mA available



dimensions common plus connector type

connection plan common plus connector type

common minus connector:

type	**DALI RGB 350mA GM**	**DALI RGB 500mA GM**	**DALI RGB 700mA GM**
article number	86458913-350GM	86458913-500GM	86458913-700GM

electrical data:

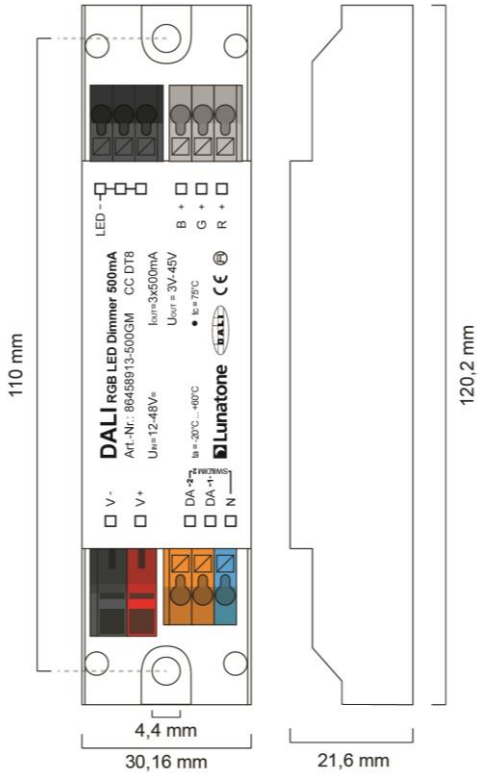
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	350mA	500mA	700mA
max. output current I_{led}	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2 (mains voltage)		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT8: 1 operating mode Colour&Dim: 2		
standby power consumption (12V)	~ 180mW		

technical data:

power on behaviour	configurable via DALI: 0%-100% or last value
ambient temperature	-20°C to +60°C

expected lifetime	>100000h (at Tc<=75°C)
protection class	IP20
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2
dimensions (LxWxH)	120mmx30mmx22mm
housing/mounting	remote ceiling

on request: output currents from 100mA to 700mA available

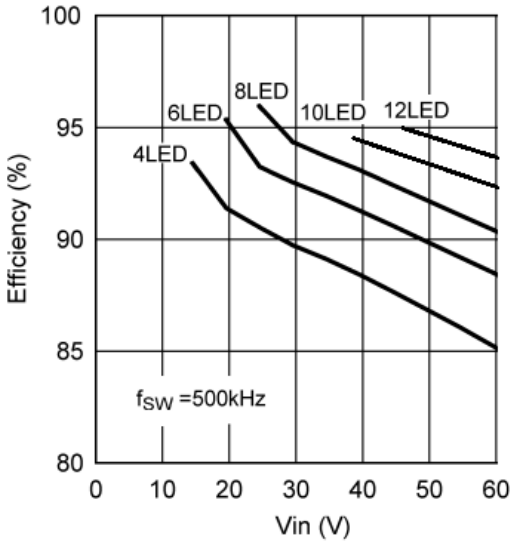


dimensions GM

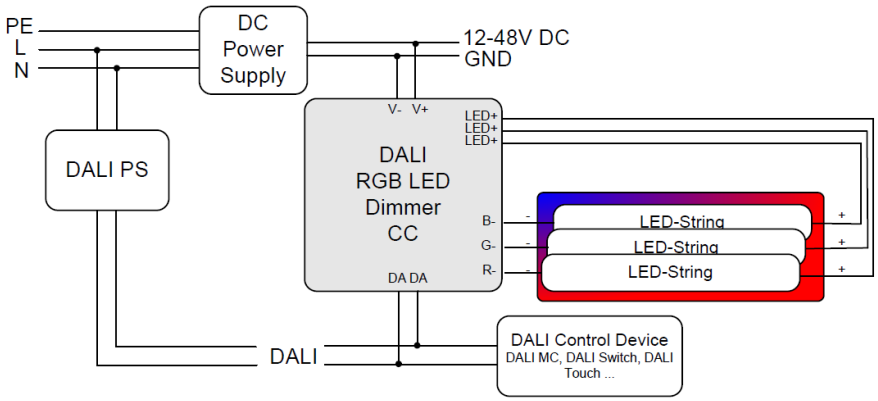
connection plan GM

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

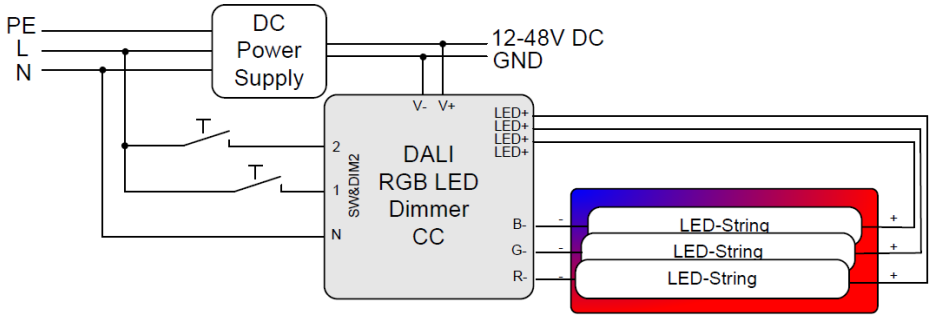
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT8 (factory default)

In this operating mode one DALI-address for the independent control of light level and colour is used (Device Type 8 RGBWAF).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: colour
long press: change colour

Colour&Dim

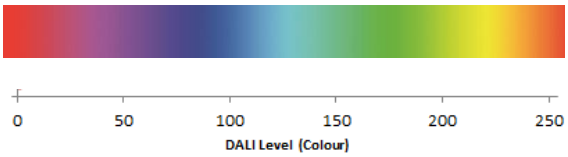
This operating mode is suitable for operating RGB—luminaires. Two DALI-addresses are used, the first to control the light level and the second for changing the distribution on the output channels (e.g. for colour adjustments).

The Colour&Dim mode allows colour adjustments without affecting the level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Colour&Dim mode provides an alternative to the DT8-RGBWAF mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

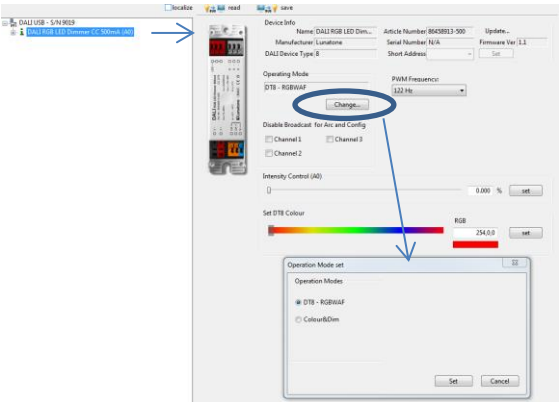
DALI-address 2, SwD2: colour



Selection of operating mode

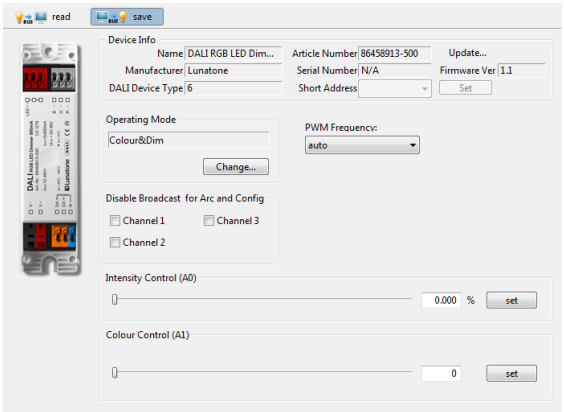
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT8-RGBWAF:



In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (slider for level and colour in the operating modes DT8 and Colour&Dim). Furthermore the broadcast control can be deactivated for each channel individually.

Operating mode Colour&Dim:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

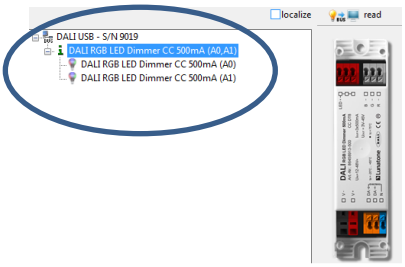
Operating Mode:

number	operating mode
0x0	DT8 (factory default)
0x92	DT8
0x93	Colour&Dim

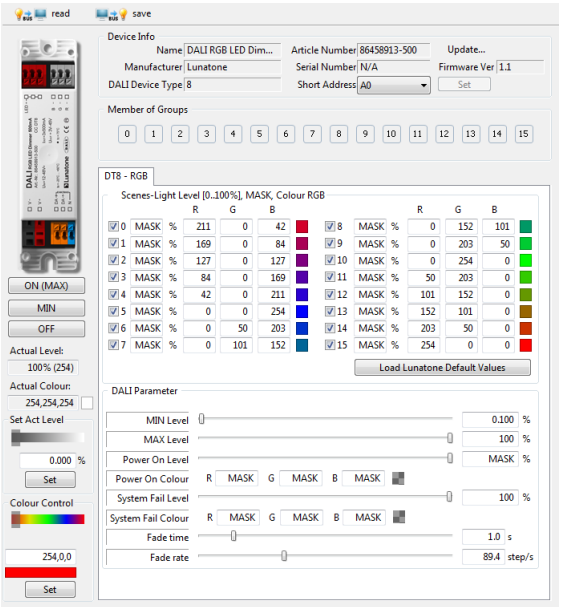
Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

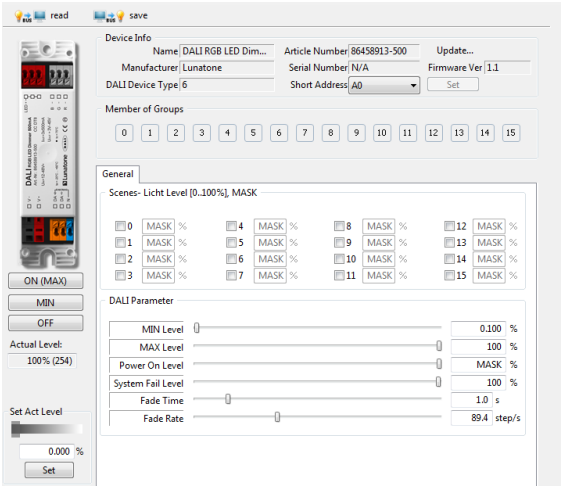
Component Tree:



Settings in the operating mode DT8-RGBWAF (displayed parameters are the factory default values):



Settings for each channel in the operating mode Colour&Dim:



For each address the group membership can be set as well as scene values and DALI-parameters. In Colour&Dim operating mode, all values assigned to channel 2 are representing colours.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by a group address. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI-Cockpit). By sending a DALI-Reset command the device is set to the DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

Operating mode	DT8
SwitchDim2	SwD1: level SwD2: colour
Min Level	0.1%
PowerOn Level	MASK (letzter Wert)
Fade Time	2 (1s)
Fade Rate	5 (89.4 steps/s)
PWM-frequency	122Hz
Groups before intial addressing:	G0 (or G0 and G1 in operating mode Colour&Dim)
Predefined Scene Values:	

			R	G	B
0	MASK	%	211	0	42
1	MASK	%	169	0	84
2	MASK	%	127	0	127
3	MASK	%	84	0	169
4	MASK	%	42	0	211
5	MASK	%	0	0	254
6	MASK	%	0	50	203
7	MASK	%	0	101	152
8	MASK	%	0	152	101
9	MASK	%	0	203	50
10	MASK	%	0	254	0
11	MASK	%	50	203	0
12	MASK	%	101	152	0
13	MASK	%	152	101	0
14	MASK	%	203	50	0
15	MASK	%	254	0	0

Purchase Order Information

Art.Nr. 86458913-xxx: DALI RGB LED Dimmer, CC constant current xxx mA (100mA-700mA), **common plus connector**, supply 12V-48V DC, output voltage 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Art.Nr. 86458913-xxxGM: DALI RGB LED Dimmer, CC – constant current xxx mA (100mA-700mA), **common minus connector**, supply 12V-48V DC, output voltage 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

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Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The function in installations with other devices must be tested for compatibility in advance.

JUMITECH

DALI CW-WW
LED Dimmer CC

Datasheet

Control Gear

DALI LED Dimmer (CC, DT8) for the control of tunable white luminaires (CW-WW)

common plus connector:
Art. Nr. 86458911-350 (350mA)
Art.Nr. 86458911-350DE (350mA)
Art. Nr. 86458911-500 (500mA)
Art. Nr. 86458911-500DE (500mA)
Art. Nr. 86458911-700 (700mA)
Art. Nr. 86458911-1000 (1000mA)

common minus connector:
Art.Nr. 86458911-350GMDE (350mA)
Art.Nr. 86458911-500GMDE (500mA)
Art. Nr. 86458911-700GM (700mA)
Art. Nr. 86458911-1000GM (1000mA)

2018-08-09

DALI CW-WW LED-Dimmer CC Control Gear

Overview

- DALI LED-Dimmer for the control of tunable white luminaires
- suitable for constant current LED-modules
- **Operating Mode DT8**: one DALI-address for the independent control of light level and colour temperature (DALI DT8, Colour Type Tc)
- **Operating Mode Balance&Dim:** control by 2 DALI-addresses, one for adjusting the light level and one for adjusting the channel balance (e.g. colour temperature)
- **Operating Mode Dim2Warm:** one DALI-address for simultaneous adjustment of light level and colour temperature
- **SwitchDim2**: 2 switch-inputs offer control of level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types for constant currents of 350mA, 500mA, 700mA and 1000mA
- types with common plus and common minus connector available
- compact types for integration in luminaires or remote ceiling
- supply voltage from 12V to 48V DC
- output voltage up to 45VDC
- integrated short circuit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

Specification, Characteristics

common plus connector:

type	**DALI CW-WW 350/500mA**	**DALI CW-WW 350/500mA DE**	**DALI CW-WW 700mA**	**DALI CW-WW 1000mA**
article number	86458911-350 / 86458911-500	86458911-350DE/500DE	86458911-700	86458911-1000

electrical data:

supply voltage V_{in}	12VDC-48VDC			
max. input current I_{inmax}	350mA / 500mA	350mA / 500mA	700mA	1000mA
max. output current I_{led}	350mA / 500mA	350mA / 500mA	700mA	1000mA
output voltage range V_{led}	3V-45V (at 48V supply)			
control input	DALI	DALI SwitchDim2		
current consumption DALI	2mA			
number of DALI-addresses	operating mode DT8, Dim2Warm: 1 operating mode Balance&Dim: 2			
standby power consumption (12V)	~ 180 mW			

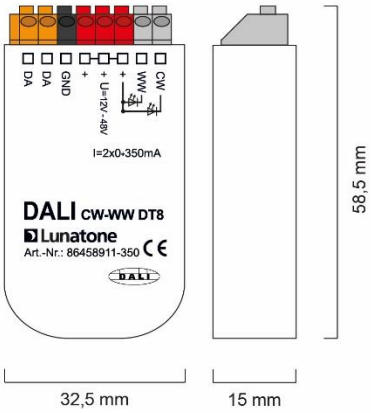
type	DALI CW-WW 350/500mA	DALI CW-WW 350/500mA DE	DALI CW-WW 700mA	DALI CW-WW 1000mA

technical data:

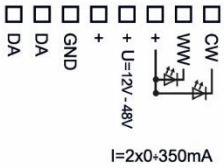
power on behaviour	configurable via DALI: 0%-100% or last value		
storage and transportation temperature	-20°C to +75°C		
operational ambient temperature	-20°C to +60°C		
expected lifetime	>100000h at Tc<75°C		
protection class	IP20		
max. connecting wire cross section	up to 1.5 mm^2	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	59mm x 33mm x 15mm	120mm x 30mm x 22mm	120mm x 41mm x 22mm
housing/mounting	back box	remote ceiling	

on request: output currents from 100mA to 1000mA available

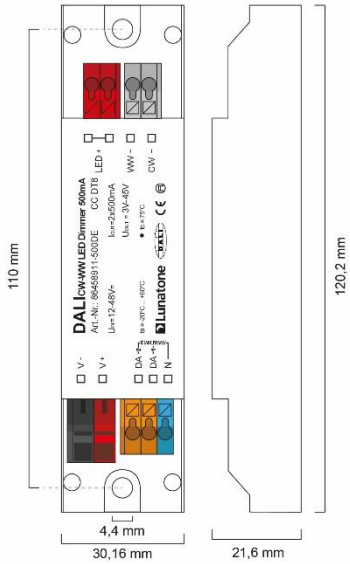
for constant currents up to 500mA:



dimensions (common plus, back box)



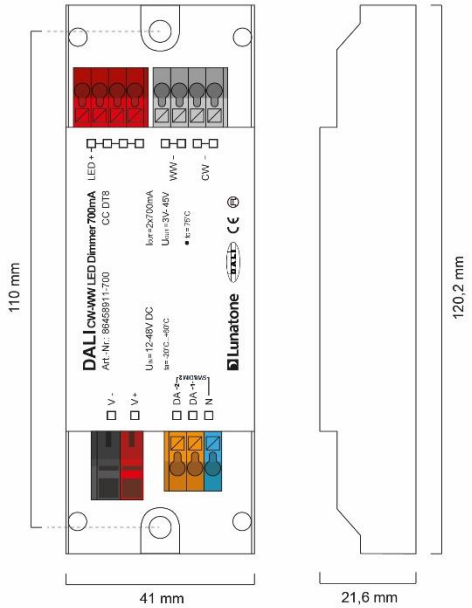
connection plan (common plus, back box)



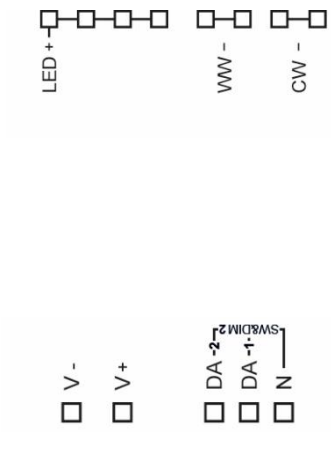
dimensions (common plus, remote ceiling)

connection plan (common plus, remote ceiling)

for constant currents >500mA



dimensions (common plus, remote ceiling)



connection plan (common plus, remote ceiling)

common minus connector:

type	**DALI CW-WW 350/500mA GMDE**	**DALI CW-WW 700mA GM**	**DALI CW-WW 1000mA GM**
article number	86458911-350GMDE/500GMDE	86458911-700GM	86458911-1000GM

electrical data:

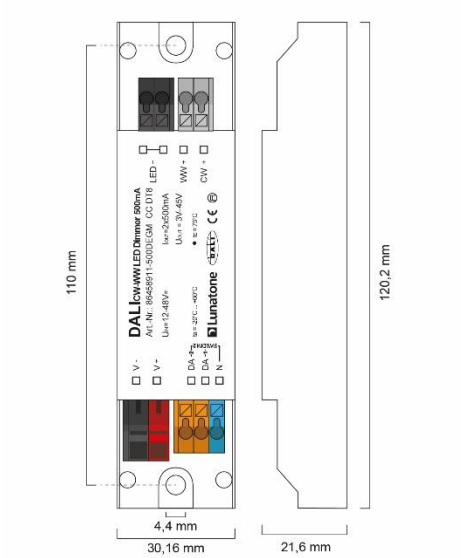
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	350/500mA	700mA	1000mA
max. output current I_{led}	350/500mA	700mA	1000mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT8, Dim2Warm: 1 operating mode Balance&Dim: 2		
standby power consumption (12V)	180 mW		

technical data:

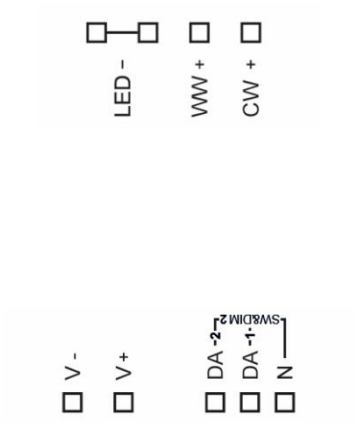
power on behaviour	configurable via DALI: 0%-100% or last value	
storage and transportation temp.	-20°C bis +75°C	
operational ambient temperature	-20°C bis +60°C	
expected lifetime	>100000h (at Tc<75°C)	
protection class	IP20	
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	120mmx30mmx22mm	120mmx41mmx22mm
housing/mounting	remote ceiling	

on request: output currents from 100mA to 1400mA available

for constant currents up to 500mA (on request up to 700mA):

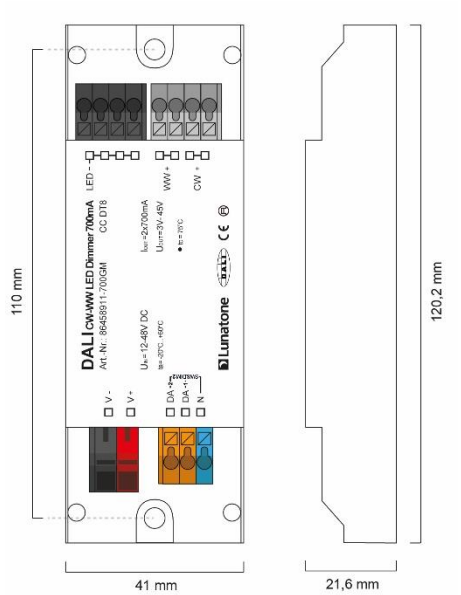


dimensions (common minus, remote ceiling)

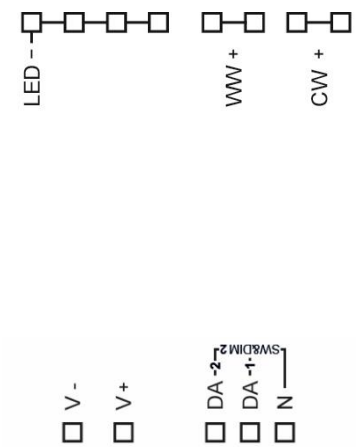


connection plan

for constant currents > 500mA:



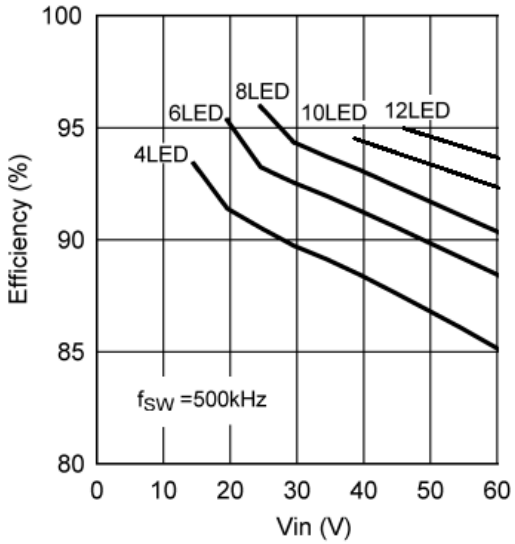
dimensions (common minus, remote ceiling)



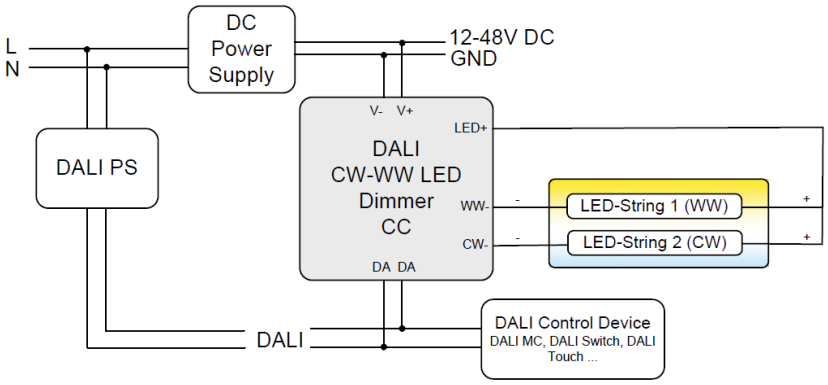
connection plan

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

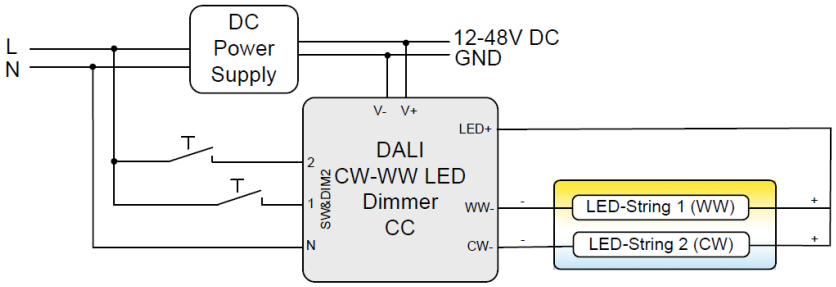
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT8 (factory default)

Default when connected to DALI in this operating mode one DALI-address for the independent control of light level and colour temperature is used (Device Type 8 Mode Tc).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: colour temperature
long press: change colour temperature

Balance&Dim

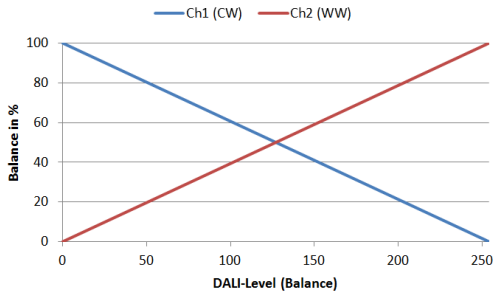
This operating mode is also suitable for operating tunable white luminaires using two DALI-addresses. The first controls the light level and the second is used for changing the distribution on the output channels (e.g. for tunable white applications or balancing direct/indirect lighting).

The Balance&Dim mode allows colour temperature adjustments without affecting the light level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Balance&Dim mode provides an alternative to the DT8-Tc mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

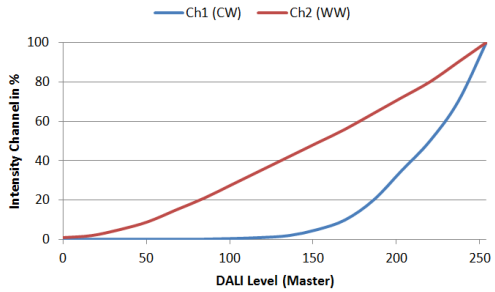
DALI-address 2, SwD2: balance



Dim2Warm

Both output channels are controlled by one DALI-address or SwD-input. The balance is coupled directly to the DALI dim level – the smaller the dim level the warmer the light.

DALI-address 1, SwD1: Dim2Warm (Master)
short press: On/Off
long press: dimming

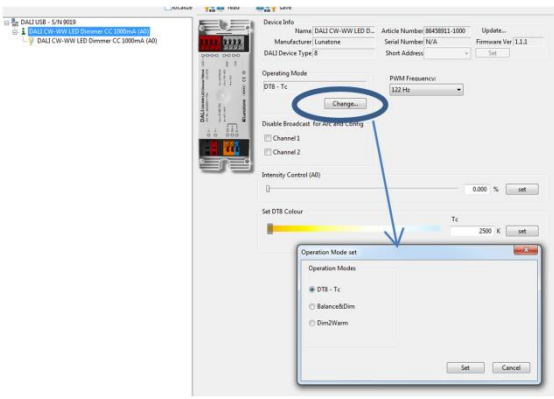


SwD2: scene selector

Selection of operating mode

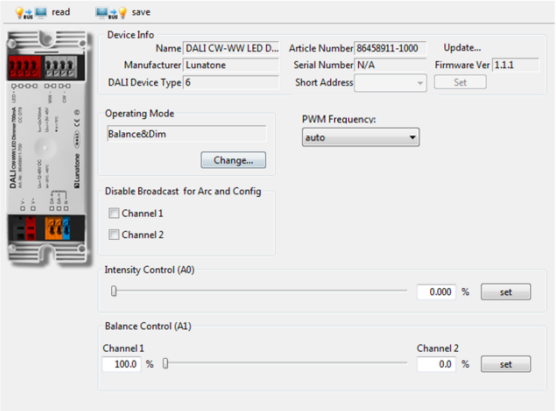
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT8-Tc:

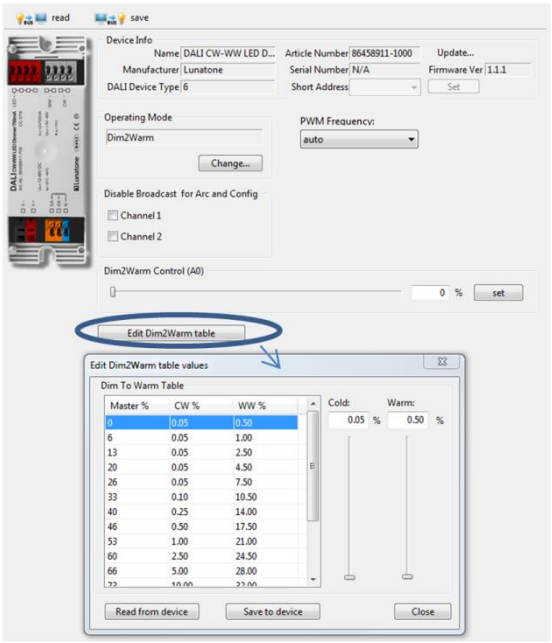


In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (DT8: slider for level and colour temperature, Balance&Dim: slider for level and balance, Dim2Warm: slider for input value adaption and Edit-Function for the Dim2Warm-table). Furthermore the broadcast control can be deactivated for each channel individually.

Operating Mode Balance&Dim:



Operating Mode Dim2Warm:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

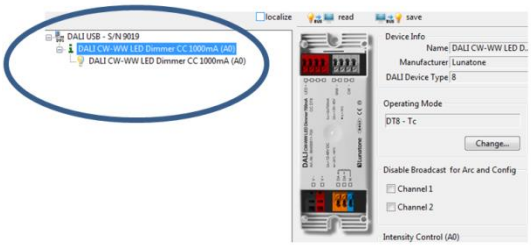
Operating Mode:

Number	Operating Mode
0x0	DT8 (factory default)
0x92	DT8
0x94	Balance&Dim
0x95	Dim2Warm

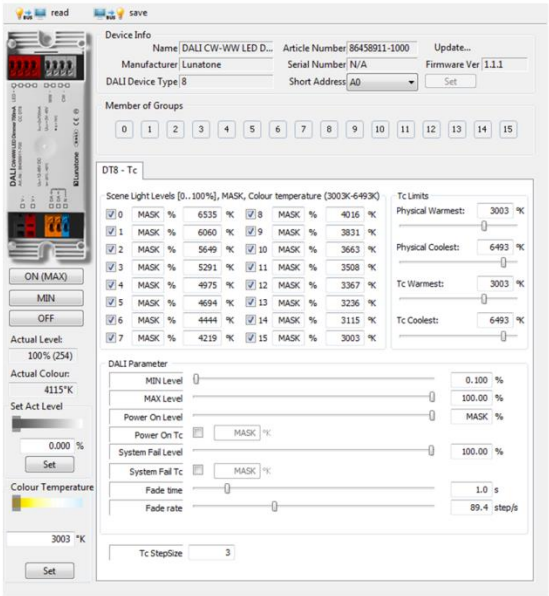
Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

Component Tree:



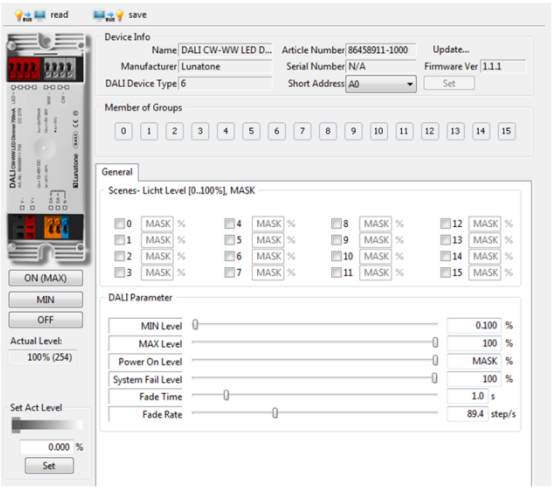
Settings in the operating mode DT8-Tc (displayed parameters are the factory default values):



Beside the DT8 Tc standard settings, the Tc stepsize can be increased, this is a simple way to speed up colour temperature changes when using the commands TC STEP COOLER/WARMER.

In all other operating modes (Balance&Dim /Dim2Warm) the following settings are provided.

Operating mode Balance&Dim; Dim2Warm:



For each address the group membership can be set as well as scene values and DALI-parameters. In Balance&Dim operating mode all values assigned to channel 2 are representing the balance.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by a group address. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit). By sending a DALI-Reset command the device is set to the default values defined in the standard.

Summary of the factory default settings (delivery state):

operating mode	DT8
SwitchDim2	SwD1: level SwD2: colour temperature
Min Level	0.1%
PowerOn Level	MASK (last value)
Fade Time	2 (1s)
Fade Rate	5 (89.4 steps/s)
Tc-Stepsize	3 increments
PWM-frequency	122Hz
Groups before intial addressing:	G0 (or G0 and G1 in operating mode Balance&Dim)
Predefined Scene Values:	

☑ 0	MASK	%	6535	°K	☑ 8	MASK	%	4016	°K
☑ 1	MASK	%	6060	°K	☑ 9	MASK	%	3831	°K
☑ 2	MASK	%	5649	°K	☑ 10	MASK	%	3663	°K
☑ 3	MASK	%	5291	°K	☑ 11	MASK	%	3508	°K
☑ 4	MASK	%	4975	°K	☑ 12	MASK	%	3367	°K
☑ 5	MASK	%	4694	°K	☑ 13	MASK	%	3236	°K
☑ 6	MASK	%	4444	°K	☑ 14	MASK	%	3115	°K
☑ 7	MASK	%	4219	°K	☑ 15	MASK	%	3003	°K

Purchase Order Information

Art.Nr. 86458911-xxx: DALI CW-WW LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range: 3V-45V , 100mA - 500mA, back box

Art.Nr. 86458911-xxxDE: DALI CW-WW LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range: 3V-45V, **SwitchDim2**, 100mA-500mA, remote ceiling & integration in luminaires

Art.Nr. 86458911-xxx: DALI CW-WW LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range: 3V-45V, **SwitchDim2**, 500mA -1000mA, remote ceiling & integration in luminaires

Art.Nr. 86458911-xxxGMDE: DALI CW-WW LED Dimmer, CC – constant current xxxmA,

common minus connector, supply 12V-48V DC, output voltage range: 3V-45V, **SwitchDim2**, 100mA-500mA, remote ceiling & integration in luminaires

Art.Nr. 86458911-xxxGM: DALI CW-WW LED Dimmer, CC – constant current xxxmA, **common minus connector**, supply 12V-48V DC, output voltage range: 3V-45V, **SwitchDim2**, 500mA -1400mA, remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

www.jumitech.dk

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DALI CE

Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.

JUMITECH

DALI
4Ch LED Dimmer CC

Datenblatt

Control Gear

4-channel LED Dimmer (CC, DT6)

common plus connector:
Art. Nr. 89453855-350 (350mA)
Art. Nr. 89453855-500 (500mA)

common minus connector:
Art. Nr. 89453855-350GM (350mA)
Art. Nr. 89453855-500GM (500mA)
Art. Nr. 89453855-700GM (700mA)

2018/08/09

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DALI 4Ch LED Dimmer CC Control Gear

Overview

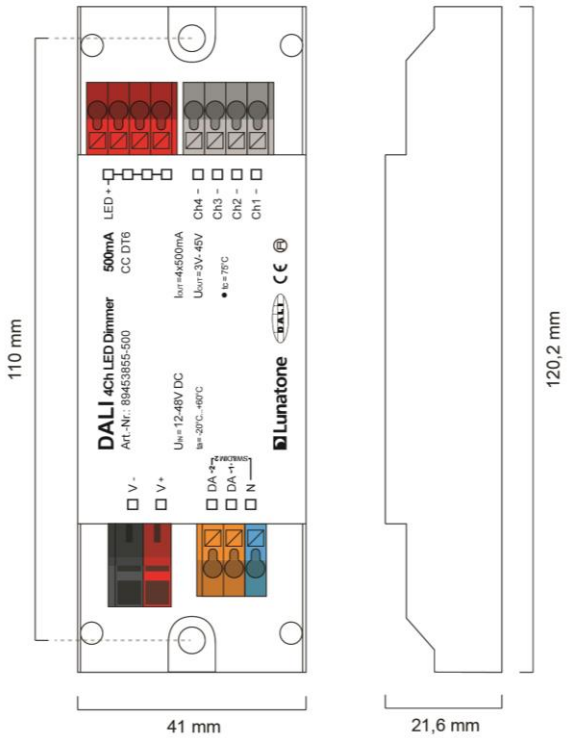
- 4 channel DALI LED-Dimmer
- suitable for constant current LED-modules
- **Operating Mode DT6**: individual channel control via 4 DALI addresses
- **Operating Mode Colour&Dim**: control by 2 DALI-addresses, one for adjusting the light level and one for adjusting the colour
- **SwitchDim2**: 2 switch-inputs offer control of light level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types with common plus connector with constant currents up to 500mA
- types with common minus connector with constant currents up to 500mA
- suitable for integration in luminaires and remote ceiling
- supply voltage 12V to 48V DC
- output voltage up to 45VDC
- short ciruit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

Specification, Characteristics

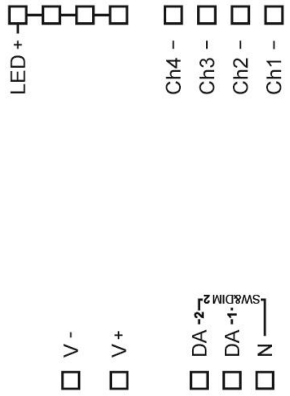
common plus connector:

type	**DALI 4Ch 350mA GP**	**DALI 4Ch 500mA GP**
article number	89453855-350	89453855-500
electrical data:		
supply voltage V_{in}	12VDC-48VDC	
max. input current I_{inmax}	1400mA	2000mA
max. output current per channel I_{led}	350mA	500mA
output voltage range V_{led}	3V-45V (at 48V supply)	
control input	DALI / SwitchDim2 (mains voltage)	
current consumption DALI	2mA	
number of DALI-addresses	operating mode DT6: 4 operating mode Colour&Dim: 2	
standby power consumption (12V)	~ 180mW	
technical data:		
power on behaviour	configurable via DALI: 0%-100% or last value	
ambient temperature	-20°C to +60°C	
expected lifetime	>100000h (at Tc<=75°C)	
protection class	IP20	
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	120mmx41mmx22 mm	
housing/mounting	remote ceiling	

on request: output currents from 100mA to 500mA available



dimensions common plus connector type



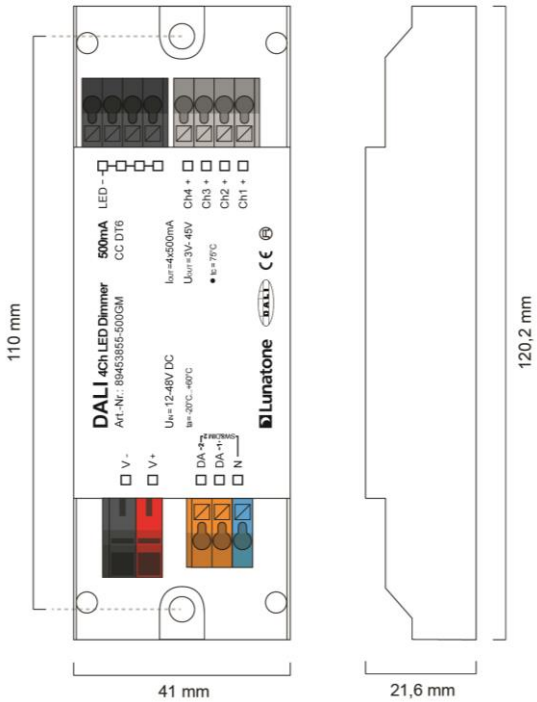
connection plan common plus connector type

common minus connector:

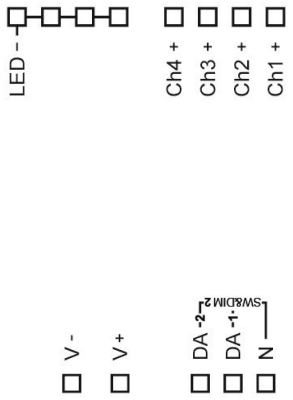
type	**DALI 4Ch 350mA GM**	**DALI 4Ch 500mA GM**	**DALI 4Ch 700mA GM**
article number	89453855-350GM	89453855-500GM	89453855-700GM
electrical data:			
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	1400mA	2000mA	2800mA
max. output current per channel I_{led}	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2 (mains voltage)		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT6: 4 operating mode Colour&Dim: 2		
standby power consumption (12V)	~ 180mW		
technical data:			
power on behaviour	configurable via DALI: 0%-100% or last value		
ambient temperature	-20°C to +60°C		
expected lifetime	>100000h (at Tc<=75°C)		
protection class	IP20		
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2		
dimensions (LxWxH)	120mmx41mmx22 mm		

housing/mounting	remote ceiling

on request: output currents from 100mA to 700mA available



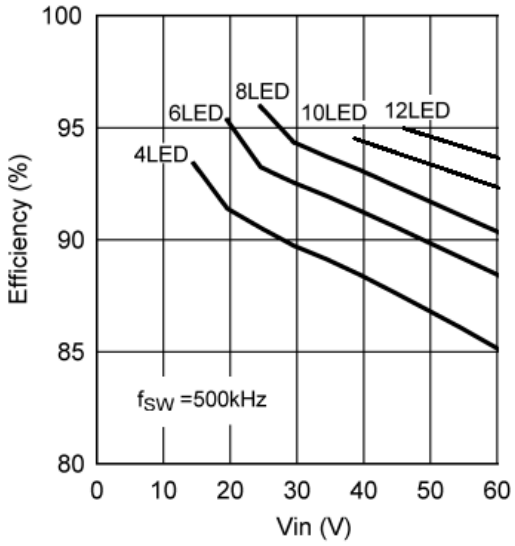
dimensions GM



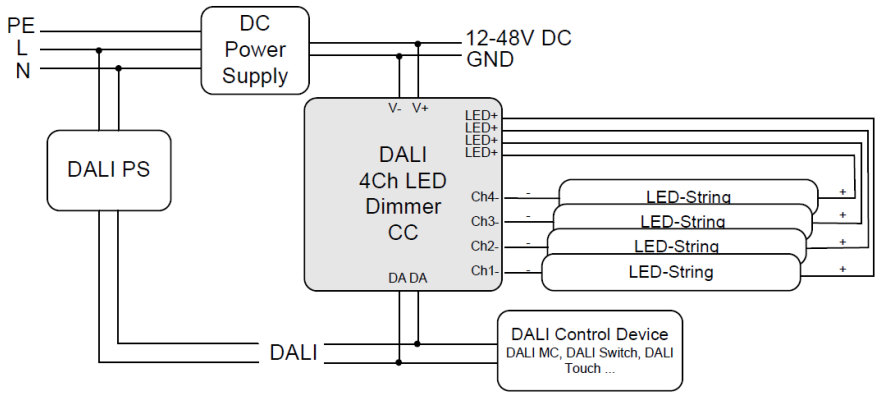
connection plan GM

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

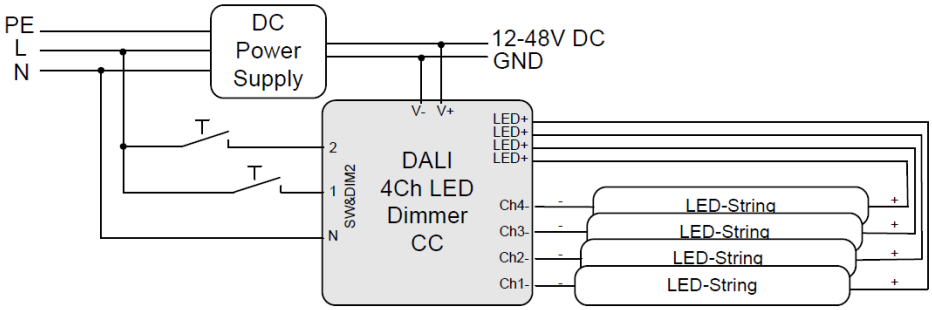
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT6 (factory default)

In this operating mode each channel can be controlled by its own DALI address (Device Type 6).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: scene selector (short press)

Colour&Dim

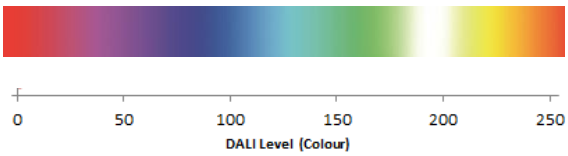
This operating mode is suitable for operating RGBW—luminaires. Two DALI-addresses are used, the first to control the light level and the second for changing the distribution on the output channels (e.g. for colour adjustments).

The Colour&Dim mode allows colour adjustments without affecting the light level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Colour&Dim mode provides an alternative to the DT8-RGBWAF mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

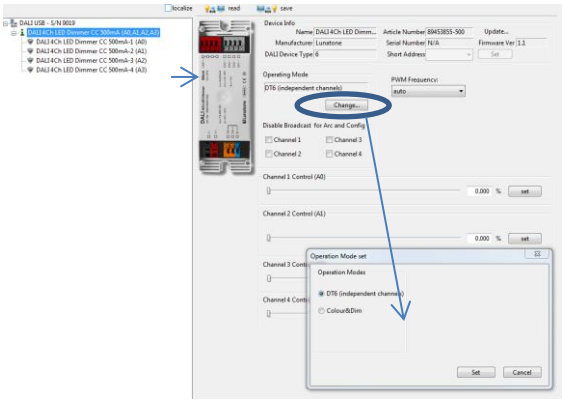
DALI-address 2, SwD2: colour



Selection of operating mode

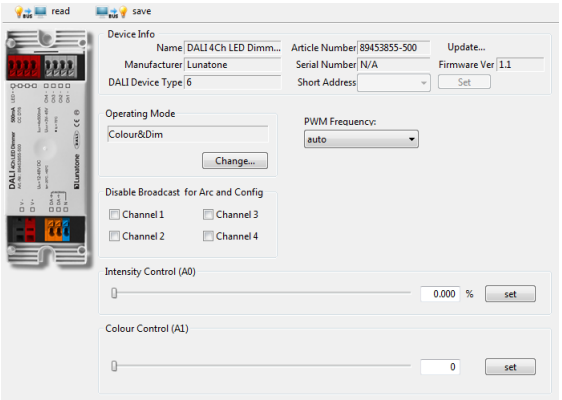
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT6:



In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (4 sliders for the level of each channel in operating mode DT6 and slider for level and colour in the operating mode Colour&Dim). Furthermore the broadcast control can be deactivated for each channel individually.

Operating mode Colour&Dim:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

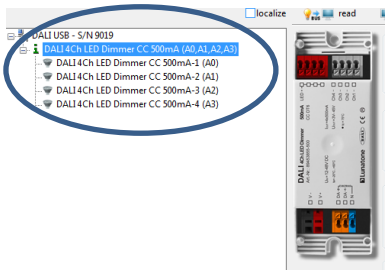
Operating Mode:

Number	Operating Mode
0	DT6 (factory default)
0x90	DT6
0x93	Colour&Dim

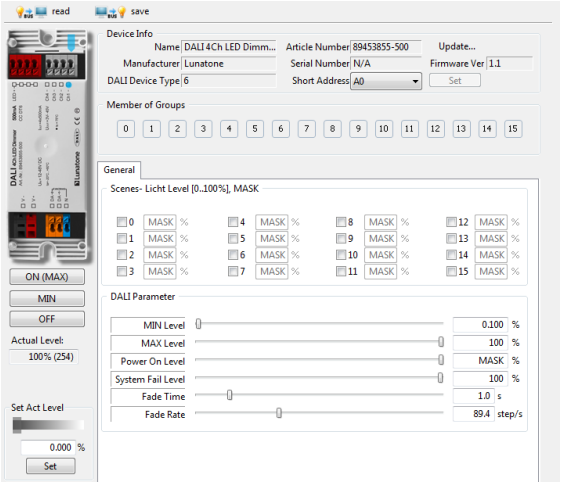
Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

Component Tree:



Settings for each channel (operating mode DT6 and Colour&Dim, in screenshot factory defaults are shown):



For each address the group membership can be set as well as scene values and DALI-parameters. In Colour&Dim operating mode, all values assigned to channel 2 are representing colours.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by group addresses. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit). By sending a DALI-Reset command the device is set to DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

Operating mode	DT6
SwitchDim2	SwD1: light level SwD2: scene selector
Min Level	0.1%
PowerOn Level	MASK (last value)
Fade Time	2 (1s)
Fade Rate	5 (89.4 steps/s)
PWM-frequency	122Hz
Groups before intial addressing:	G0 – channel1 G1 – channel2 G2 – channel3 G3 – channel4
predefined scene values:	

Scene	Ch1	Ch2	Ch3	Ch4
0	100%	0%	0%	0%
1	0%	100%	0%	0%
2	0%	0%	100%	0%
3	0%	0%	0%	100%
4	0%	0%	100%	100%
5	0%	100%	0%	100%
6	100%	0%	0%	100%
7	100%	0%	100%	0%
8	100%	100%	0%	0%
9	0%	100%	100%	0%
10	100%	0%	100%	100%
11	100%	100%	0%	100%
12	100%	100%	100%	0%
13	0%	100%	100%	100%
14	100%	100%	100%	100%
15	0%	0%	0%	0%

Purchase Order Information

Art.Nr. 89453855-xxx: DALI 4Ch LED Dimmer, CC – constant current xxx mA (100mA-500mA), **common plus connector**, supply 12V-48V DC, output voltage range 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Art.Nr. 89453855-xxxGM: DALI 4Ch LED Dimmer, CC – constant current xxx mA (100mA-700mA), **common minus connector**, supply 12V-48V DC, output voltage range 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

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www.jumitech.dk

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Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.

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DALI
3Ch LED Dimmer CC

Datasheet

Control Gear

3-channel LED Dimmer (CC, DT6)

common plus connector:
Art. Nr. 89453846-350 (350mA)
Art. Nr. 89453846-500 (500mA)

common minus connector:
Art. Nr. 89453846-350GM (350mA)
Art. Nr. 89453846-500GM (500mA)
Art. Nr. 89453846-700GM (700mA)

2018/08/09

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DALI 3Ch LED Dimmer CC Control Gear

Overview

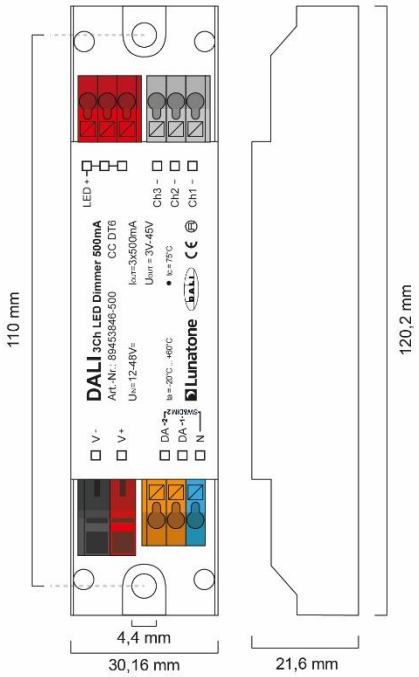
- 3 channel DALI LED-Dimmer
- suitable for constant current LED-modules
- **Operating Mode DT6**: individual channel control via 3 DALI addresses
- **Operating Mode Colour&Dim**: control by 2 DALI-addresses, one for adjusting the light level and one for adjusting the colour
- **SwitchDim2**: 2 switch-inputs offer control of light level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types with common plus connector with constant currents up to 500mA
- types with common minus connector with constant currents up to 700mA
- suitable for integration in luminaires and remote ceiling
- supply voltage 12V to 48V DC
- output voltage up to 45VDC
- short ciruit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

Specification, Characteristics

common plus connector:

type	**DALI 3Ch 350mA GP**	**DALI 3Ch 500mA GP**
article number	89453846-350	89453846-500
electrical data:		
supply voltage V_{in}	12VDC-48VDC	
max. input current I_{inmax}	1050mA	1500mA
max. output current per channel I_{led}	350mA	500mA
output voltage range V_{led}	3V-45V (at 48V supply)	
control input	DALI / SwitchDim2 (mains voltage)	
current consumption DALI	2mA	
number of DALI-addresses	operating mode DT6: 3 operating mode Colour&Dim: 2	
standby power consumption (12V)	~ 180mW	
technical data:		
power on behaviour	configurable via DALI: 0%-100% or last value	
ambient temperature	-20°C to +60°C	
expected lifetime	>100000h (at Tc<=75°C)	
protection class	IP20	
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	120mmx30mmx22 mm	
housing/mounting	remote ceiling	

on request: output currents from 100mA to 500mA available



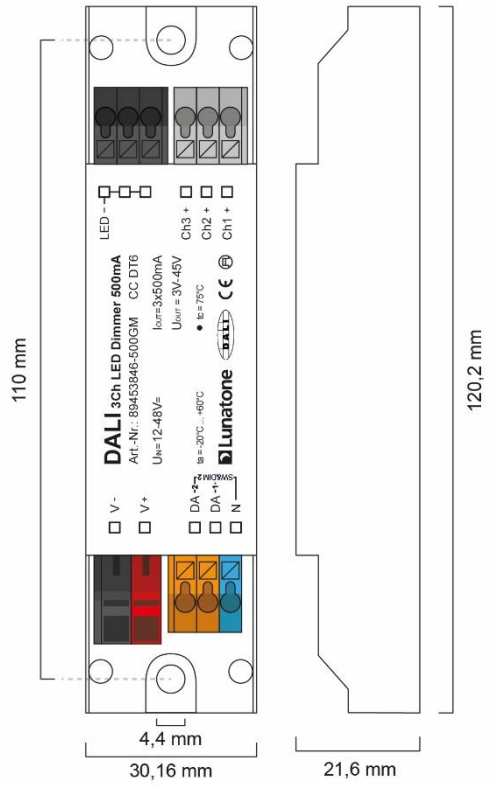
dimensions common plus connector type

connection plan common plus connector type

common minus connector:

type	**DALI 3Ch 350mA GM**	**DALI 3Ch 500mA GM**	**DALI 3Ch 700mA GM**
article number	89453846-350GM	89453846-500GM	89453846-700GM
electrical data:			
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	1050mA	1500mA	2100mA
max. output current per channel I_{led}	350mA	500mA	700mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2 (mains voltage)		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT6: 3 operating mode Colour&Dim: 2		
standby power consumption (12V)	~ 180mW		
technical data:			
power on behaviour	Configurable via DALI: 0%-100% or last value		
ambient temperature	-20°C to +60°C		
expected lifetime	>100000h (at Tc<=75°C)		
protection class	IP20		
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2		
dimensions (LxWxH)	120mmx30mmx22 mm		
housing/mounting	remote ceiling		

on request: output currents from 100mA to 700mA available

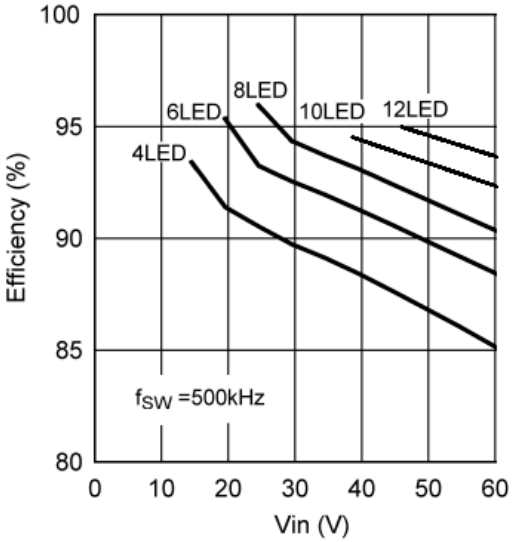


dimensions GM

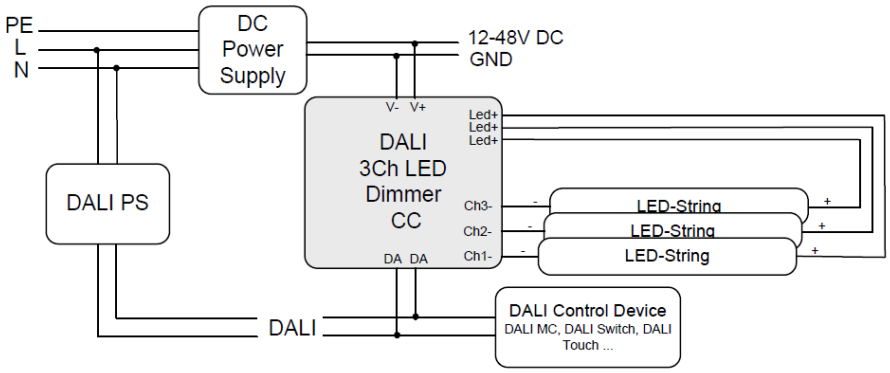
connection plan GM

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

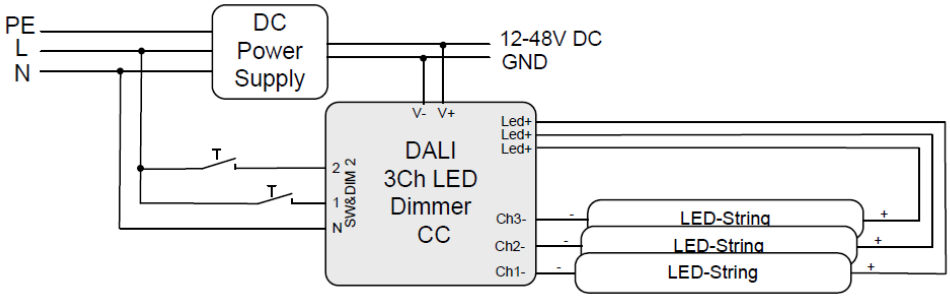
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT6 (factory default)

In this operating mode each channel can be controlled by its own DALI address (Device Type 6).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: scene selector (short press)

Colour&Dim

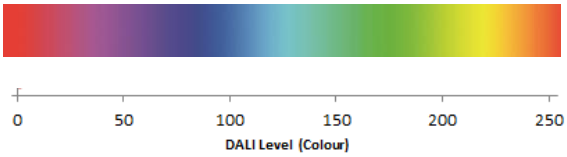
This operating mode is suitable for operating RGB—luminaires. Two DALI-addresses are used, the first to control the light level and the second for changing the distribution on the output channels (e.g. for colour adjustments).

The Colour&Dim mode allows colour adjustments without affecting the light level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Colour&Dim mode provides an alternative to the DT8-RGBWAF mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

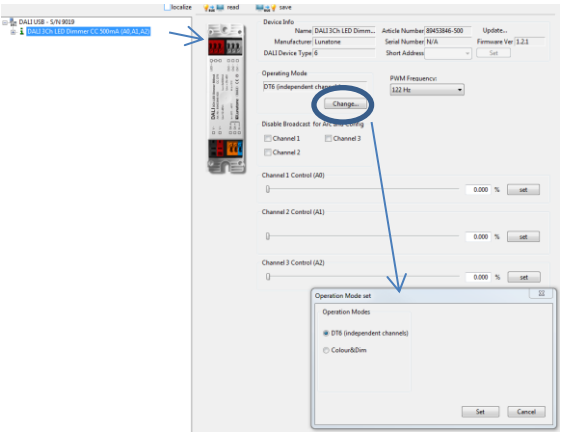
DALI-address 2, SwD2: colour



Selection of operating mode

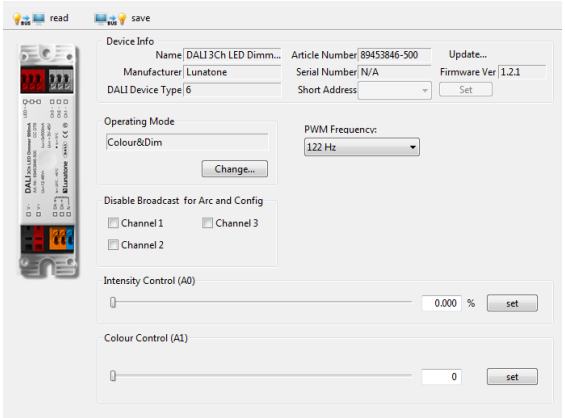
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT6:



In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (3 sliders for the level of each channel in operating mode DT6 and slider for level and colour in the operating mode Colour&Dim). Furthermore the broadcast control can be deactivated for each channel individually.

Operating mode Colour&Dim:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

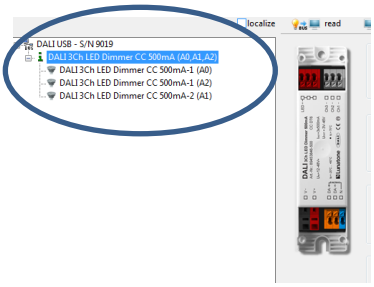
Operating Mode:

Number	Operating Mode
0	DT6 (factory default)
0x90	DT6
0x93	Colour&Dim

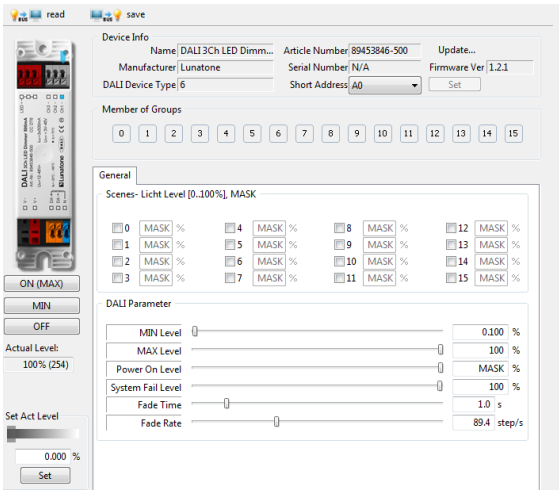
Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

Component Tree:



Settings for each channel (operating mode DT6 and Colour&Dim, in screenshot factory defaults are shown):



For each address the group membership can be set as well as scene values and DALI-parameters. In Colour&Dim operating mode,

all values assigned to channel 2 are representing colours.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by group addresses. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit). By sending a DALI-Reset command the device is set to DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

Operating mode	DT6			
SwitchDim 2	SwD1: light level SwD2: scene selector			
Min Level	0.1%			
PowerOn Level	MASK (last value)			
Fade Time	2 (1s)			
Fade Rate	5 (89.4 steps/s)			
PWM-frequency	122Hz			
Groups before intial addressing:	G0 – channel1 G1 – channel2 G2 – channel3			
predefined scene values	**Scene**	**Ch1**	**Ch2**	**Ch3**
	0, 8	100 %	0%	0%
	1, 9	0%	100 %	0%
	2, 10	0%	0%	100 %
	3, 11	0%	100 %	100 %
	4,12	100 %	0%	100 %
	5, 13	100 %	100 %	0%
	6, 14	100 %	100 %	100 %
	7, 15	0%	0%	0%

Purchase Order Information

Art.Nr. 89453846-xxx: DALI 3Ch LED Dimmer, CC – constant current xxx mA (100mA-500mA), **common plus connector**, supply 12V-48V DC, output voltage range 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Art.Nr. 89453846-xxxGM: DALI 3Ch LED Dimmer, CC – constant current xxx mA (100mA-700mA), **common minus connector**, supply 12V-48V DC, output voltage range 3V-45V DC, **SwitchDim2**, remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

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www.jumitech.dk

JUMITECH

Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.

JUMITECH

DALI
2Ch LED Dimmer CC

Datasheet

Control Gear

2-channel LED Dimmer (CC, DT6)

common plus connector:
Art. Nr. 89453845-350 (350mA)
Art.Nr. 89453845-350DE (350mA)
Art. Nr. 89453845-500 (500mA)
Art. Nr. 89453845-500DE (500mA)
Art. Nr. 89453845-700 (700mA)
Art. Nr. 89453845-1000 (1000mA)

common minus connector:
Art.Nr. 89453845-350GMDE (350mA)
Art.Nr. 89453845-500GMDE (500mA)
Art. Nr. 89453845-700GM (700mA)
Art. Nr. 89453845-1000GM (1000mA)

2018/08/09

DALI 2Ch LED-Dimmer CC Control Gear

Overview

- 2 channel DALI LED-Dimmer
- suitable for constant current LED-modules
- **Operating Mode DT6**: individual channel control via 2 DALI addresses
- **Operating Mode Balance&Dim:** control by 2 DALI-addresses, one for adjusting the light level and one for adjusting the channel balance (e.g. colour temperature)
- **Operating Mode Dim2Warm:** one DALI-address for simultaneous adjustment of light level and colour temperature
- **SwitchDim2**: 2 switch-inputs offer control of light level and colour without DALI
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types for constant currents of 350mA, 500mA, 700mA and 1000mA
- types with common plus and common minus connector available
- compact types for integration in luminaires or remote ceiling
- supply voltage from 12V to 48V DC
- output voltage up to 45VDC
- integrated short circuit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

Specification, Characteristics

common plus connector:

type	**DALI 2Ch CC 350/500mA**	**DALI 2Ch CC 350/500mA DE**	**DALI 2CH CC 700mA**	**DALI 2Ch CC 1000mA**
article number	89453845-350/ 89453845-500	89453845-350DE/500DE	89453845-700	89453845-1000

electrical data:

supply voltage V_{in}	12VDC-48VDC			
max. input current I_{inmax}	700/1000 mA	700/1000mA	1400mA	2000mA
max. output current per channel I_{led}	350/500 mA	350/500mA	700mA	1000mA
output voltage range V_{led}	3V-45V (at 48V supply)			
control input	DALI	DALI SwitchDim2		
current consumption DALI	2mA			
number of DALI-addresses	operating mode DT6, Balance&Dim: 2 operating mode Dim2Warm: 1			
standby power consumption (12V)	~ 180 mW			

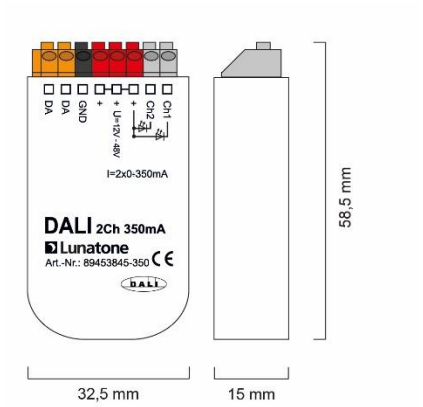
type	DALI 2Ch CC 350/500mA	DALI 2Ch CC 350/500mA DE	DALI 2CH CC 700mA	DALI 2Ch CC 1000mA

technical data:

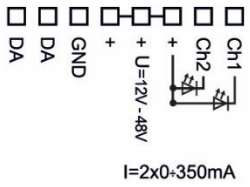
power on behaviour	configurable via DALI: 0%-100% or last value		
storage and transportation temperature	-20°C to +75°C		
operational ambient temperature	-20°C to +60°C		
expected lifetime	>100000h at Tc<75°C		
protection class	IP20		
max. connecting wire cross section	up to 1.5 mm^2	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	59mmx33mmx15mm	120mmx30mmx22mm	120mmx41mmx22mm
housing/mounting	back box	remote ceiling	

on request: output currents from 100mA to 1000mA available

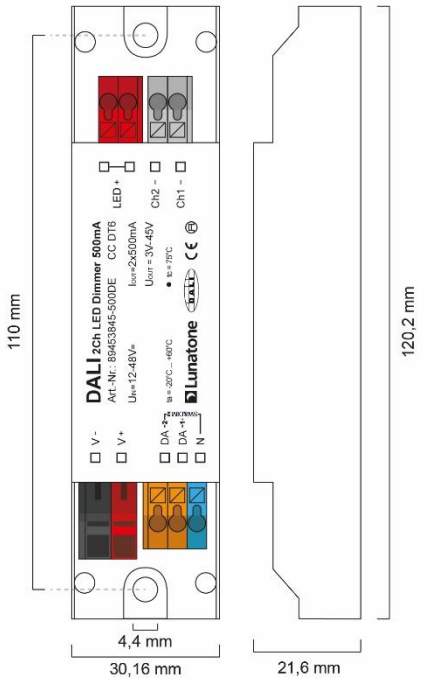
for constant currents up to 500mA:



dimensions (common plus, back box)



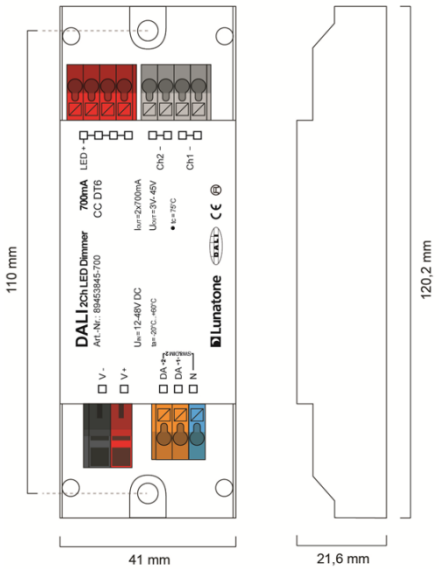
connection plan (common plus, back box)



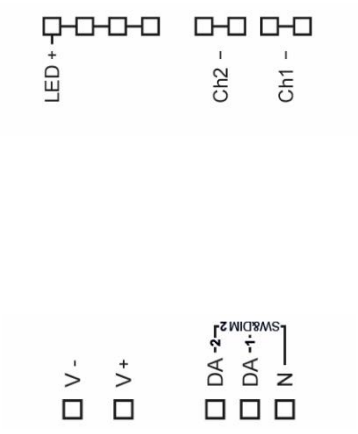
dimensions (common plus, remote ceiling)

connection plan (common plus, remote ceiling)

for constant currents >500mA



dimensions (common plus, remote ceiling)



connection plan (common plus, remote ceiling)

common minus connector:

type	**DALI 2CH CC 350/500mA GMDE**	**DALI 2CH CC 700mA GM**	**DALI 2Ch CC 1000mA GM**
article number	89453845-350GMDE/500GMDE	89453845-700GM	89453845-1000GM

electrical data:

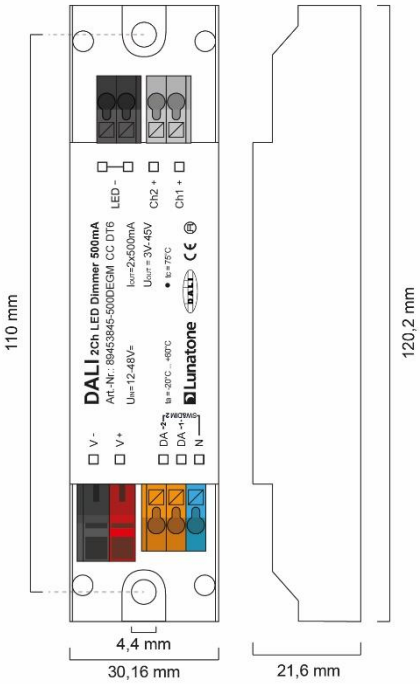
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	700/1000mA	1400mA	2000mA
max. output current /channel I_{led}	350/500mA	700mA	1000mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI SwitchDim2		
current consumption DALI	2mA		
number of DALI-addresses	operating mode DT6, Balance&Dim: 2 operating mode Dim2Warm: 1		
standby power consumption (12V)	~ 180 mW		

technical data:

power on behaviour	configurable via DALI: 0%-100% or last value	
storage and transportation temperature	-20°C to +75°C	
operational ambient temperature	-20°C to +60°C	
expected lifetime	>100000h (at Tc<75°C)	
protection class	IP20	
max. connecting wire cross section	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
dimensions (LxWxH)	120mm x30mmx22mm	120mm x 41mm x 22mm
housing/mounting	remote ceiling	

on request: output currents from 100mA to 1400mA available

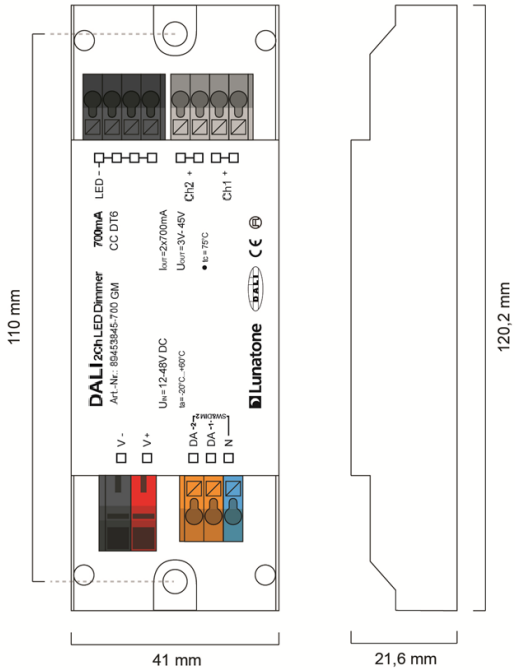
for constant currents up to 500mA (700mA on request):



dimensions (common minus, remote ceiling)

connection plan

for constant currents > 500mA:

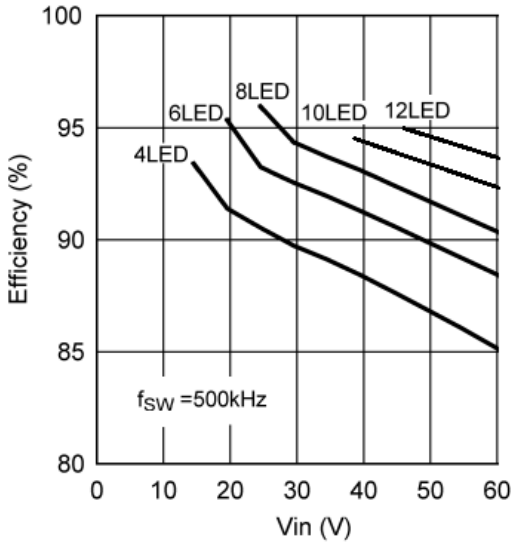


dimensions (common minus, remote ceiling)

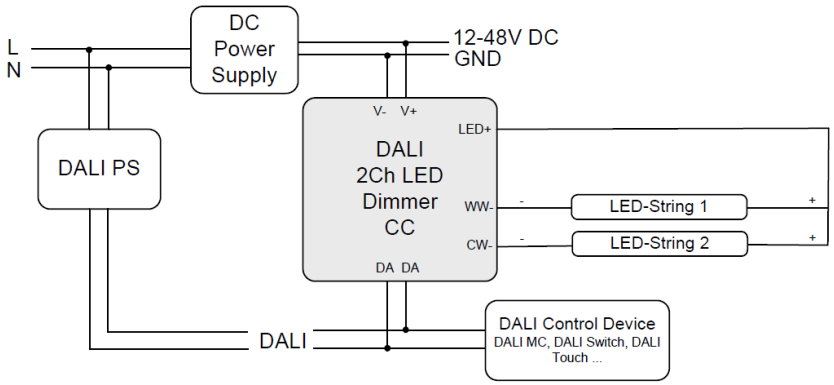
connection plan GM

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

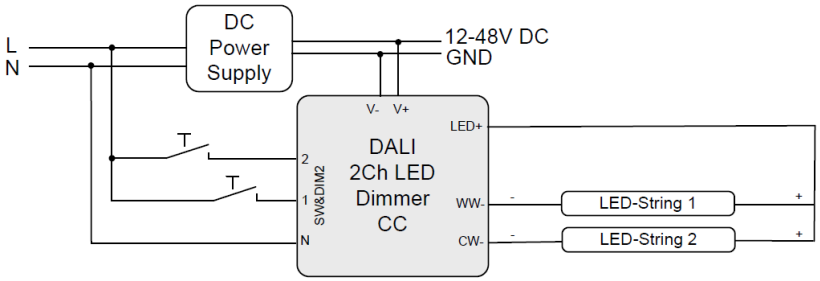
4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V



DALI (common plus connector type):



SwitchDim2 (common plus connector type):



Operating Modes

The device offers several operating modes:

DT6 (factory default)

In this operating mode each channel can be controlled by its own DALI address (Device Type 6).

Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: scene selector (short press)

Balance&Dim

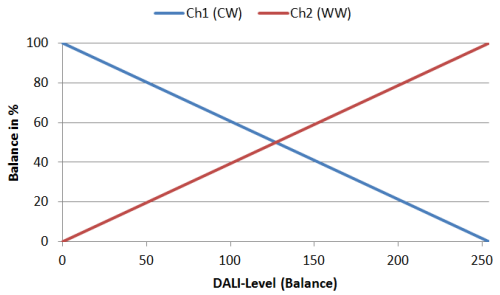
This operating mode is also suitable for operating tunable white luminaires using two DALI-addresses. The first controls the light level and the second is used for changing the distribution on the output channels (e.g. for tunable white applications or balancing direct/indirect lighting).

The Balance&Dim mode allows colour temperature adjustments without affecting the light level and vice versa. For each channel only DALI-standard commands like dim up/down but also DAP are used. Thus the device can be used with all common controls and gateways (e.g. KNX). The Balance&Dim mode provides an alternative to the DT8-Tc mode.

Can be operated via DALI or SwitchDim2:

DALI-address 1, SwD1: light level

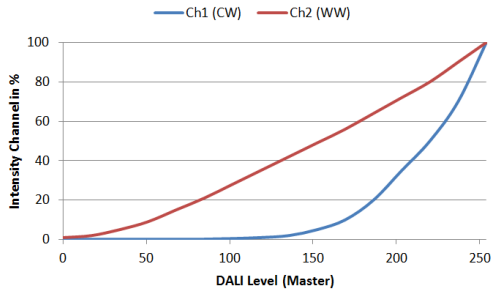
DALI-address 2, SwD2: balance



Dim2Warm

Both output channels are controlled by one DALI-address or SwD-input. The balance is coupled directly to the DALI dim level – the smaller the dim level the warmer the light.

DALI-address 1, SwD1: Dim2Warm (Master)
short press: On/Off
long press: dimming

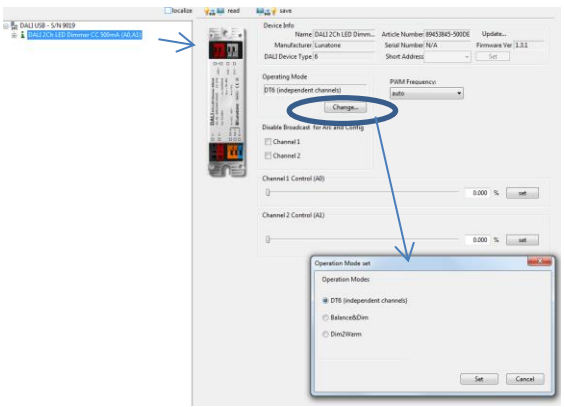


SwD2: scene selector

Selection of operating mode

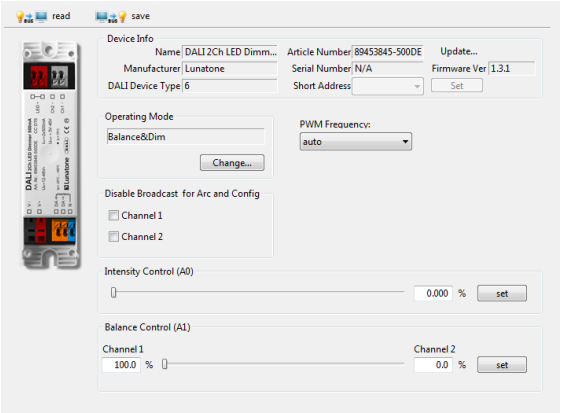
With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.

Operating mode DT6:

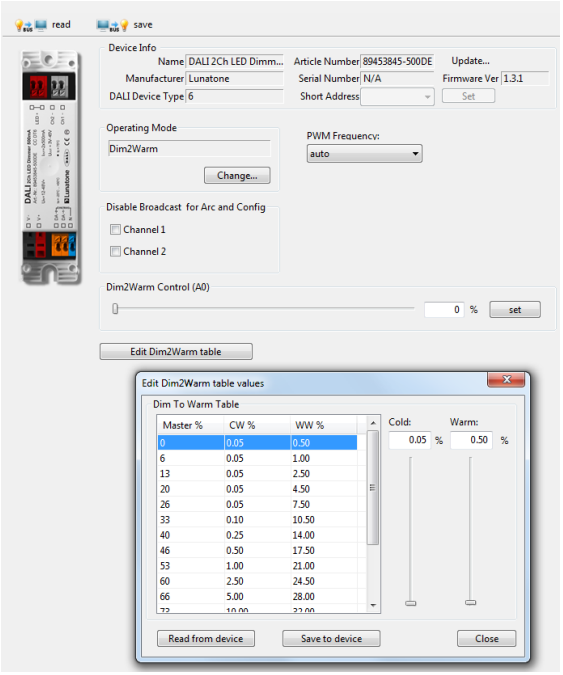


In addition, on the same page the PWM-frequency can be selected and basic control elements for testing each operating modes are available (2 sliders for the level of each channel in operating mode DT6; Balance&Dim: slider for level and balance, Dim2Warm: slider for input value adaption and Edit-Function for the Dim2Warm-table). Furthermore the broadcast control can be deactivated for each channel individually.

Operating Mode Balance&Dim:



Operating Mode Dim2Warm:



Switching between operating modes can also be done with the help of the DALI-command SET OPERATING MODE (IEC 62386-102 Ed.2). When changing the operating mode the number of used DALI-addresses can change as well and this requires a new addressing procedure. In the DALI-Cockpit this address assignment is performed automatically.

Operating Mode:

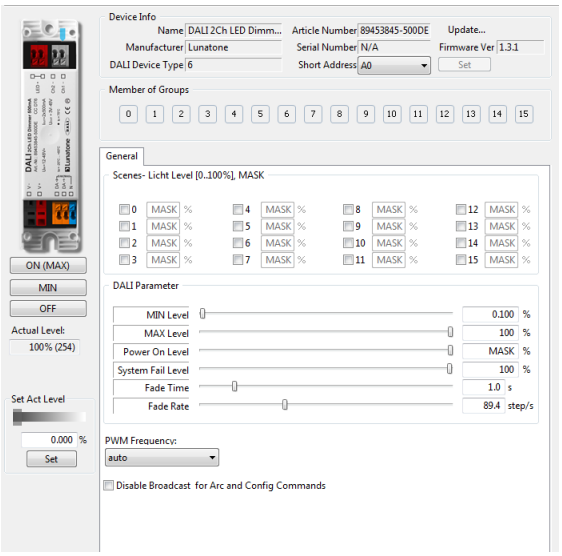
Number	Operating Mode
0x0	DT6 (factory default)
0x90	DT6
0x94	Balance&Dim
0x95	Dim2Warm

Additional Settings

Besides the settings on the general page each channel can be selected separately in the component tree for individual configuration.

Component Tree:

Settings for each channel (similar for all operating modes), the displayed parameters are the factory default values:



For each address the group membership can be set as well as scene values and DALI-parameters. In Balance&Dim operating mode all values assigned to channel 2 are representing the balance.

Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by group addresses G0 and G1. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit). By sending a DALI-Reset command the device is set to DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

operating mode	DT6		
SwitchDim2	SwD1: light level SwD2: scene selector		
Min Level	0.1%		
PowerOn Level	MASK (last value)		
Fade Time	2 (1s)		
Fade Rate	5 (89.4 steps/s)		
PWM-frequency	122Hz		
Groups before intial addressing	G0 – channel 0 G1 – channel 1		
predefined scene values	**Scene**	**Ch1**	**Ch2**
	0, 4, 8, 12	100%	0%
	1, 5, 9, 13	0%	100%
	2, 6, 10, 14	100%	100%
	3, 7, 11, 15	0%	0%

Purchase Order Information

Art.Nr. 89453845-xxx: DALI 2Ch LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range 3V-45V, 100mA -500mA, back box

Art.Nr. 89453845-xxxDE: DALI 2Ch LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range 3V-45V, **SwitchDim2**, 100mA-500mA, remote ceiling & integration in luminaires

Art.Nr. 89453845-xxx: DALI 2Ch LED Dimmer, CC – constant current xxxmA, **common plus connector**, supply 12V-48V DC, output voltage range 3V-45V, **SwitchDim2**, 500mA -1000mA, , remote ceiling & integration in luminaires

Art.Nr. 89453845-xxxGMDE: DALI 2Ch LED Dimmer, CC – constant current xxxmA, **common minus connector**, supply 12V-48V DC, output voltage range 3V-45V, **SwitchDim2**, 100mA-500mA, , remote ceiling & integration in luminaires

Art.Nr. 89453845-xxxGM: DALI 2Ch LED Dimmer, CC – constant current xxxmA, **common minus connector**, supply 12V-48V DC, output voltage range 3V-45V, **SwitchDim2**, 500mA -1400mA, , remote ceiling & integration in luminaires

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

Technical Support: support@jumitech.dk

Requests: salg@jumitech.dk

www.jumitech.dk

JUMITECH

Disclaimer

Subject to change. Information provided without guarantee.
The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.

JUMITECH

DALI

1Ch LED Dimmer CC

Datasheet

Control Gear

1-channel LED Dimmer (CC, DT6)

Art. Nr. 89453844-350 (350mA)
Art. Nr. 89453844-500 (500mA)
Art. Nr. 89453844-700 (700mA)
Art. Nr. 89453844-700DE (700mA)
Art. Nr. 89453844-1000DE (1000mA)
Art. Nr. 89453844-1500DE (1500mA)
Art. Nr. 89453844-2000DE (2000mA)
Art. Nr. 89453844-2500DE (2500mA)

2018-08-24

DALI 1Ch LED Dimmer CC Control Gear

Overview

- 1 channel DALI LED-Dimmer
- suitable for constant current LED-modules
- **SwitchDim2**: 2 switch-inputs offer control of light level and colour without DALI, up from FW 4.0 device can be alternatively controlled directly by a motion sensor (corridor function)
- dimming range 0.1%-100%
- adjustable PWM-frequency (122Hz/244Hz/488Hz/976Hz)
- types for constant currents of 350mA to 2800mA
- compact types for integration in luminaires or remote ceiling
- supply voltage from 12V to 48V DC
- output voltage up to 45VDC
- integrated short circuit protection
- low standby power consumption
- high efficiency
- configuration via PC-software DALI-Cockpit and DALI USB-interface
- user-friendly factory default settings

Specification, Characteristics

type	**DALI 1Ch LED-Dimmer CC**		
article number	89453844-350 89453844-500 89453844-700	89453844-700DE 89453844-1000DE 89453844-1500DE	89453844-2000DE 89453844-2500DE

electrical data:

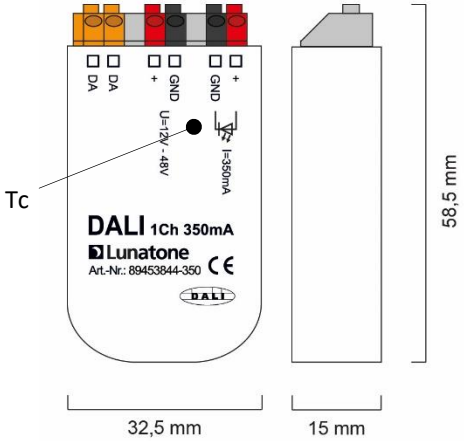
supply voltage V_{in}	12VDC-48VDC		
max. input current I_{inmax}	350mA / 500mA / 700mA	700mA/1000mA/1500mA	2000mA/2500mA
max. output current per channel I_{led}	350mA / 500mA / 700mA	700mA/1000mA/1500mA	2000mA/2500mA
output voltage range V_{led}	3V-45V (at 48V supply)		
control input	DALI	DALI SwitchDim2 / corridor function	
current consumption DALI	2mA		
number of DALI-addresses	1		
standby power consumption (12V)	180mW		

type	**DALI 1Ch LED-Dimmer CC**		
article number	89453844-350 89453844-500 89453844-700	89453844-700DE 89453844-1000DE 89453844-1500DE	89453844-2000DE 89453844-2500DE

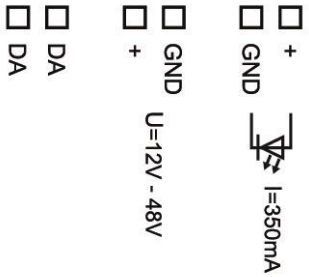
technical data:

power on behaviour	configurable via DALI: 0%-100% or last value		
storing and transportation temperatue	-20°C … +75°C		
operating ambient temperature Ta	-20°C … +60°C		
expected lifetime	>100000h at Tc<75°C		
protection class	IP20		
max. connecting wire cross section	up to 1.5 mm^2	up to 1.5 mm^2, supply (V+, V-): up to 2.5 mm^2	
housing/mounting	back box	remote ceiling	
dimensions (LxWxH)	59mmx33mmx15mm	120mmx30mmx22mm	120mmx41mmx22mm

for constant currents up to 700mA (DALI):

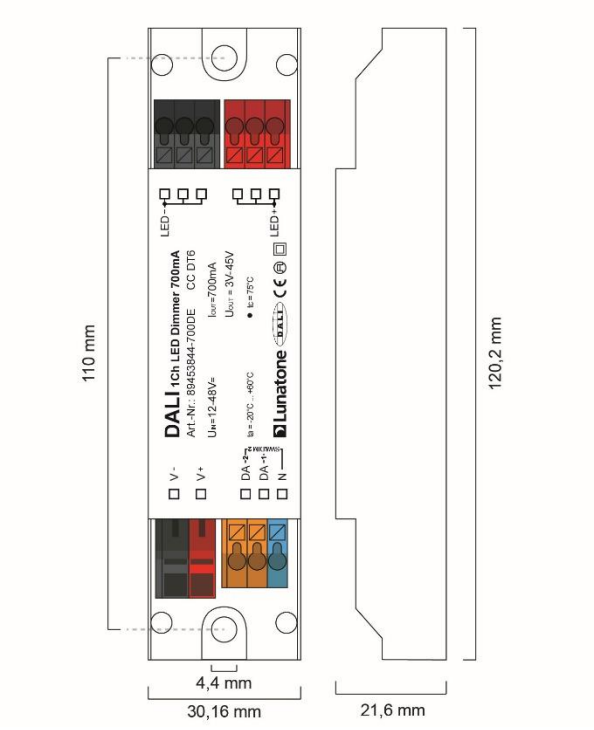


dimensions

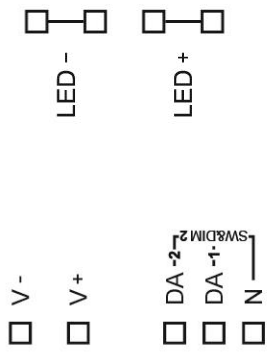


connection plan

for constant currents up to 1500mA (DALI&SwitchDim2):

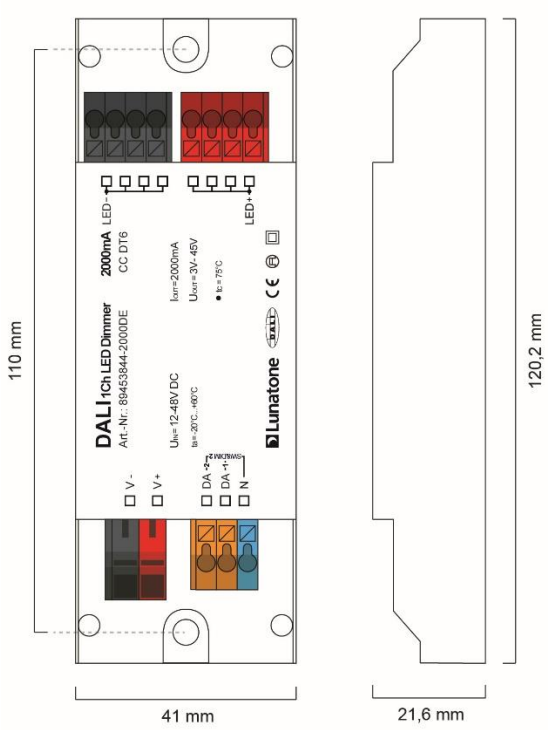


dimensions

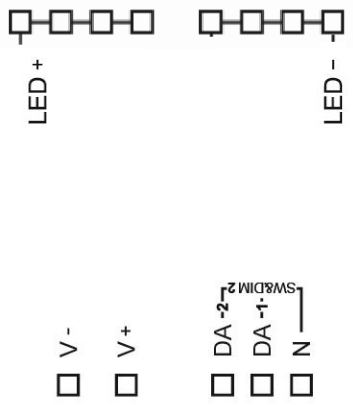


connection plan

for constant currents from 1500mA (DALI&SwitchDim2):



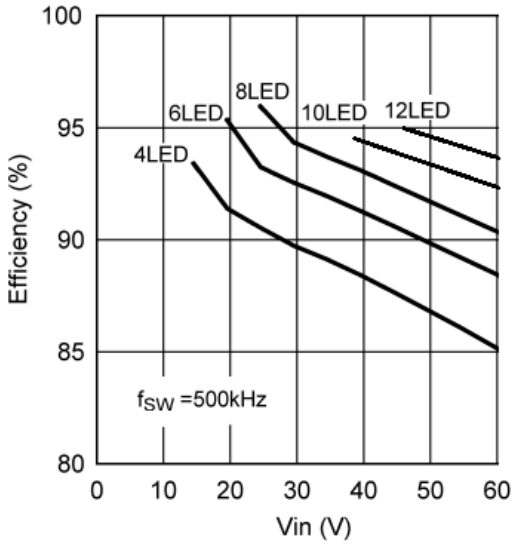
dimensions



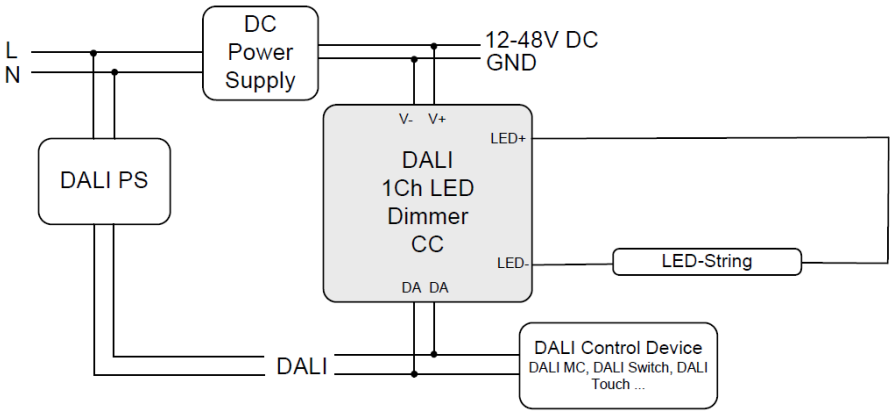
connection plan

Hint:
For highest efficiency the input voltage should range between 3V and 10V above the LED-voltage:

4-6 LEDs: 24V
6-9LEDs: 36V
10-12 LEDS: 48V

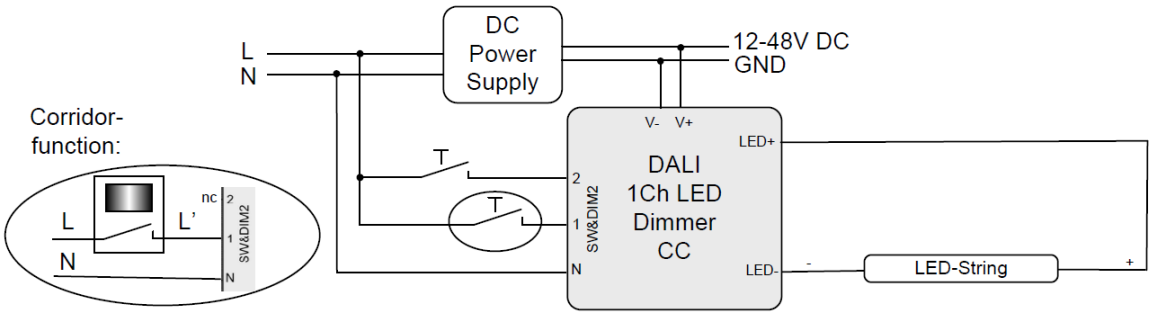


DALI:



SwitchDim2:

- control via 2 pushbuttons or
- alternatively by a motion sensor with relay output (on input SwD1)



Operating Modes

The output is controlled by by its DALI address (Device Type 6).

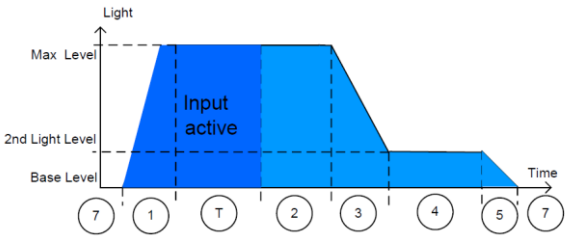
Alternatively the device can be controlled using 2 switch-inputs for mains voltage (SwitchDim2):

SwD1: light level
short press: On/Off
long press: dimming
SwD2: scene selector (short press)

If the SwD1-input is pressed for 2 minutes the device changes the operating mode to „corridorfunction“. This mode stays active until the device is power cycled (on power up the standard switchdim operation is active).

Corridor Function (up from FW 4.0)

This mode provides a staircase function (e.g. to control the device directly with the relay output of one or more motion sensors). On input action the LED-output is switched to max level. After the holdtime the output switches to a second light value before switching to the base level. If the input is activated again, the sequence is restarted.



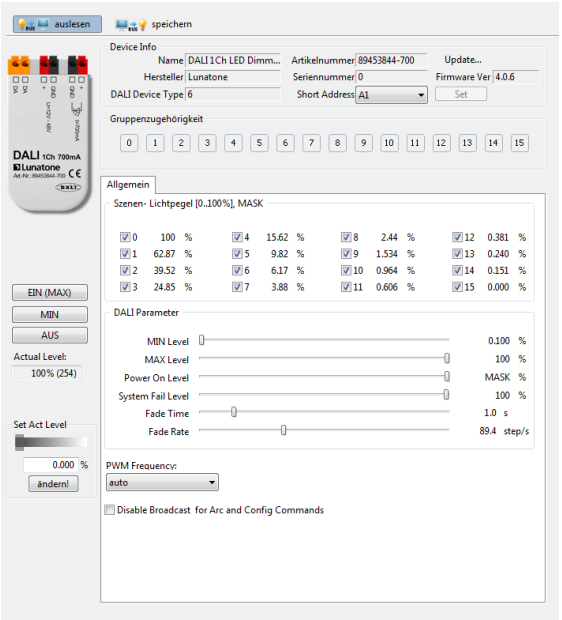
sequence of corridor function

States and Default values of the corridor function:

1 – Fade-In Time:	immidiate
2 – Holdtime Max Level:	10 minutes
3 – Fade Time:	5 seconds
4 – HoldTime 2nd Level:	10 minutes
5 – Fade Out Time:	5 seconds
Max Level (P,2):	100%
2nd Light Level (4):	50%
Base Level (7):	0%

DALI-Cockpit Settings:

With the help of the DALI-Cockpit software the device can be configured. The device can be assigned to groups, scene values can be set and parameters can be defined (the parameters shown in the pic are default values):



Factory Default Settings

Before the initial addressing is performed, the device can already be controlled by group address G0. This predefined grouping will be deleted during the first addressing procedure. Afterwards groups can be assigned as usual (e.g. with the help of the DALI Cockpit). By sending a DALI-Reset command the device is set to DALI default values as defined in the standard.

Summary of the factory default settings (delivery state):

operating mode	DT6	
SwitchDim2	SwD1: light level SwD2: scene selector	
Min Level	0.1% back box type: 1%	
PowerOn Level	MASK (last value)	
Fade Time	2 (1s)	
Fade Rate	5 (89.4 steps/s)	
PWM-frequency	122Hz back box type: 976Hz	
Groups before intial addressing	G0	
scene values:	Scene 0: 254 Scene 1: 237 Scene 2: 220 Scene 3: 203 Scene 4: 186 Scene 5: 169 Scene 6: 152 Scene 7: 135	Scene 8: 118 Scene 9: 101 Scene 10: 84 Scene 11: 67 Scene 12: 50 Scene 13: 33 Scene 14: 16 Scene 15: 0
	back box type: all scene values set to MASK	

Purchase Order Information

Art.Nr. 89453844-350/500/700: DALI 1Ch LED Dimmer, CC – constant current 350/500/700mA (other currents from 100mA-700mA on request), supply 12V-48V DC, output voltage range 3V-45V, back box;

Art.Nr. 89453844-700DE/1000DE/1500DE, DALI 1Ch LED Dimmer, CC – constant current 700/1000/1500mA (other currents from 100mA-1500mA on request), supply 12V-48V DC, output voltage: 3V-45V, SwitchDim2/Corridorfunction, remote ceiling & integration in luminaires;

Art.Nr. 89453844-2000DE/2500DE, DALI 1Ch LED Dimmer, CC – constant current 2000mA/2500mA (other currents from 1500mA-2800mA on request), supply 12V-48V DC, output voltage: 3V-45V, SwitchDim2/Corridorfunction, remote ceiling & integration in luminaires;

Additional Information

Datasheets and manuals
https://jumitech/produkter

DALI-Cockpit – free configuration tool from Lunatone for DALI systems
http://lunatone.at/en/downloads/Lunatone_DALI-Cockpit.zip

Contact

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www.jumitech.dk

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Disclaimer

Subject to change. Information provided without guarantee. The datasheet refers to the current delivery.

The compatibility with other devices must be tested in advance to the installation.