JUMiTECH

DALI LED Power Supply CW-WW

Datasheet
Control Gear

DALI LED Power Supply (DT8) for independent control of light level and colourtemperature of tunable white luminaires

constant voltage:
Art.Nr. 89453849-CWW-24V (24V, 25W)
Art.Nr. 89453849-CWW-36V (36V, 25W)

DALI LED Power Supply CW-WW Control Gear

Overview

- DALI LED Power Supply for the control of tunable white luminaires

- **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)

- supply voltage 230V AC

- CV-Type: output 24V PWM (max. 1A) or 36V PWM (max. 700mA)

- configuration via PC-software DALI-Cockpit and DALI USB-interface

- overtemperature shutdown, integrated short circuit protection

- user-friendly factory default settings

Specification, Characteristics

constant voltage (CV):

type	DALI 25W LED Power Supply CW-WW CV 24V	
article number	89453849-CWW-24V	89453849-CWW-36V

electrical data:

|		
supply voltage	220-240V AC / 50-60Hz, Iin=0.12A, power factor > 0.95, inrush current < 0.2A	
output	24V ± 0.5V PWM	36V ± 0.5V PWM
max. output current I_{led}	1A	700mA
control input	DALI or SwitchDim2	
number of DALI-addresses	2mA	
number of DALI addresses	operating mode DT8, Dim2Warm: 1 operating mode Balance&Dim: 2	

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**technical data:**

power on behaviour	configurable via DALI: 0%-100% or last value
storing and transportation temperature	-20°C … +75°C
operational ambient temperature	-20°C … +45°C
expected lifetime (at tc<=65°C)	>50000h
protection class	IP20
max. connecting wire cross section	1.5 mm²
dimensions (LxWxH)	120mmx41mmx22mm
mounting/housing	remote ceiling / integration in luminaires

DALI CE

IEC 61347-2-13
IEC 61000-3-2
CISPR 15
IEC 61547
IEC 62384
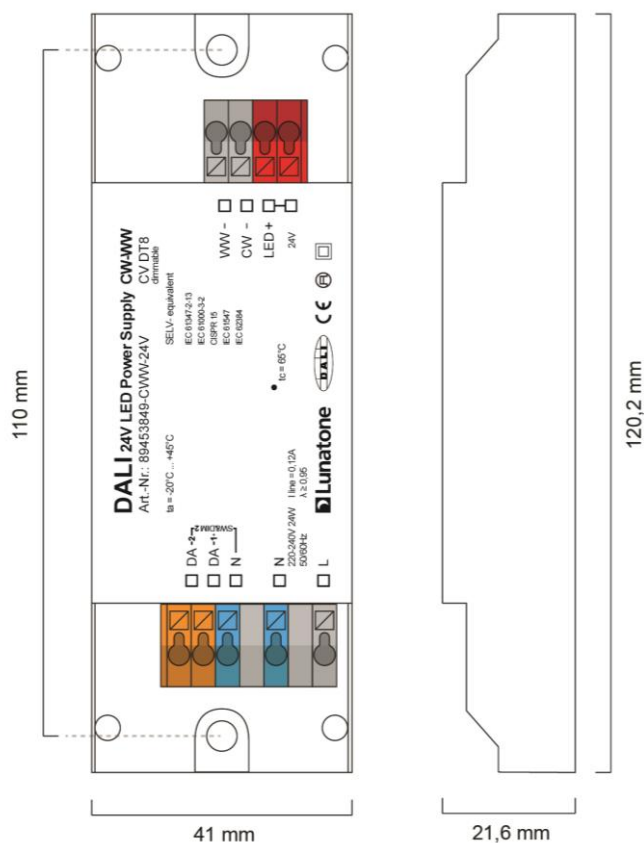
dimensions CV
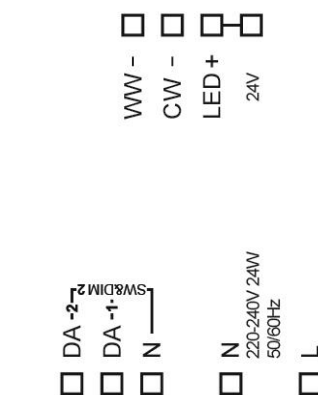
connection plan CV

DALI:
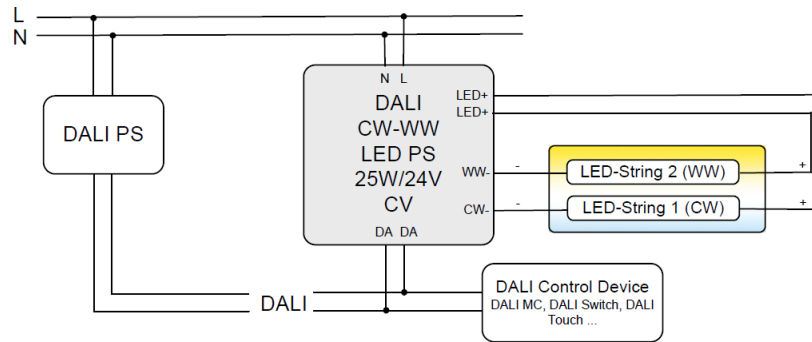
SwitchDim2:
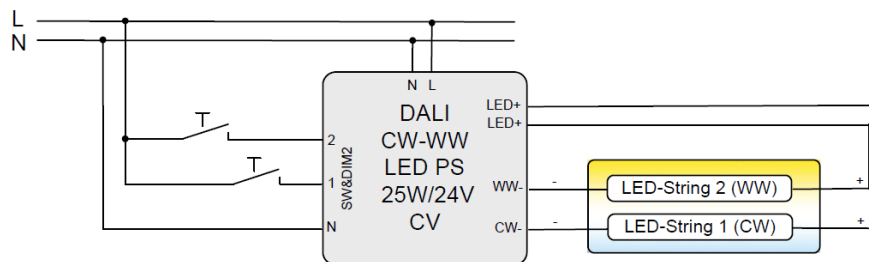
Operating Modes

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

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

Balance&Dim
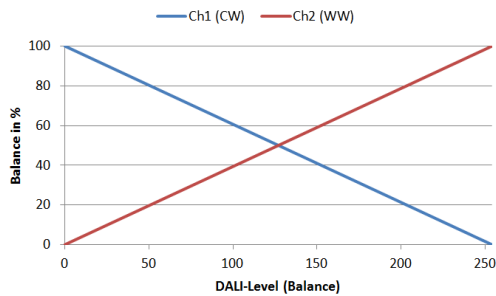
Dim2Warm

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
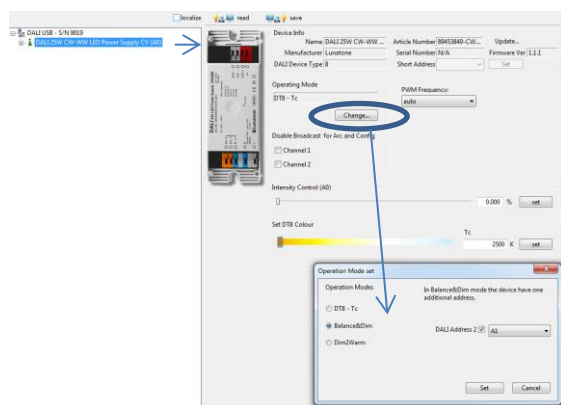   long press: dimming
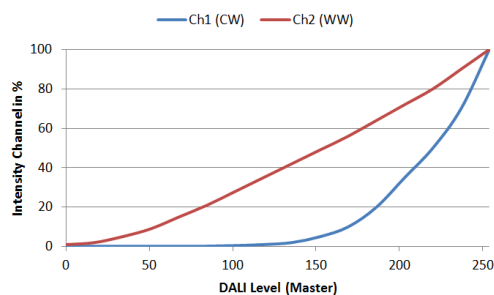

SwD2: scene selector
Selection of operating mode

With the help of the PC-software tool DALI-Cockpit the operating mode can be easily set on the general settings page.
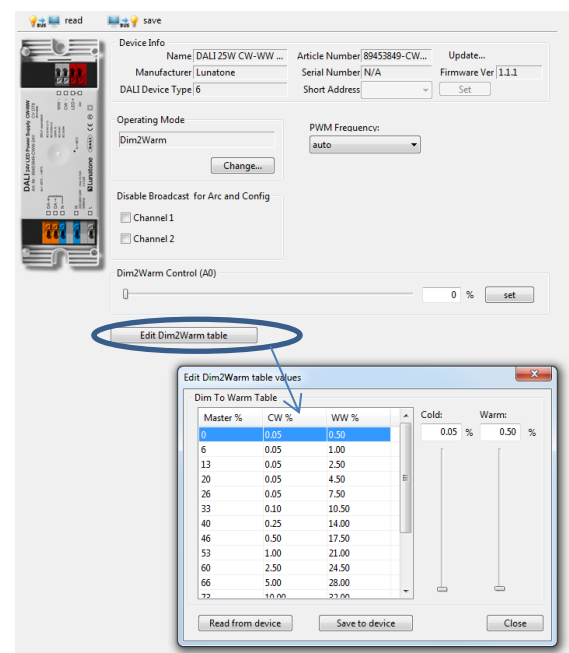
Operating mode DT8-Tc:

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). Furthermore the broadcast control can be deactivated for each channel individually.

Operating Mode Balance&Dim: slider for level and balance
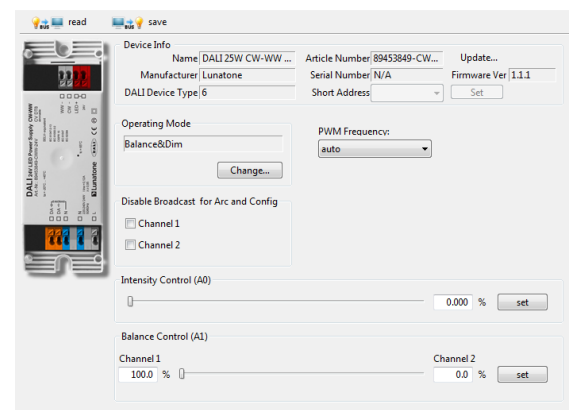
Operating Mode Dim2Warm: slider for input value adaption and Edit-Function for the Dim2Warm-table

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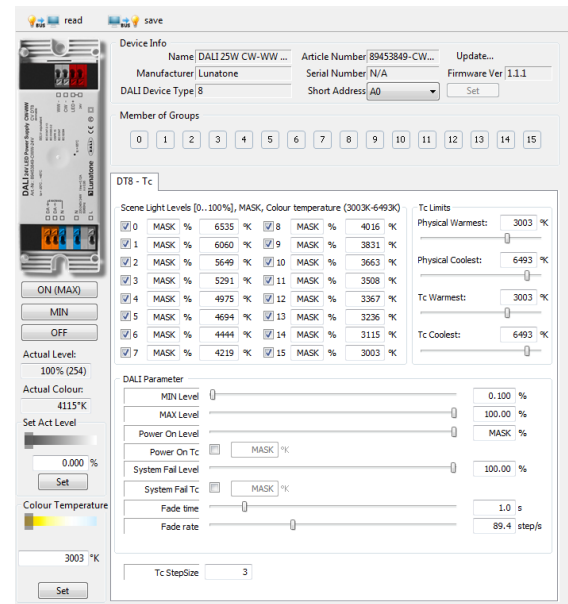
Beside the DT8 Tc standard settings, the Tc stepsize can be increased, this is a simple way to speed up colour temperature changes when using the commands TC STEP COOLER/WARMER.

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

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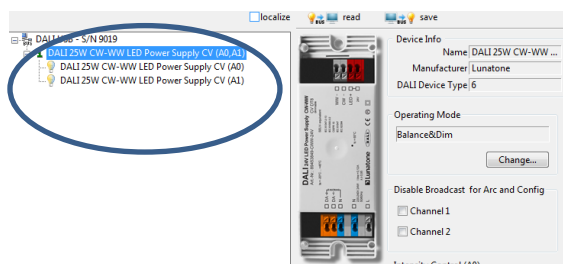
Settings in the operating mode DT8-Tc (displayed parameters are the factory default values):

Operating mode Balance&Dim; Dim2Warm:
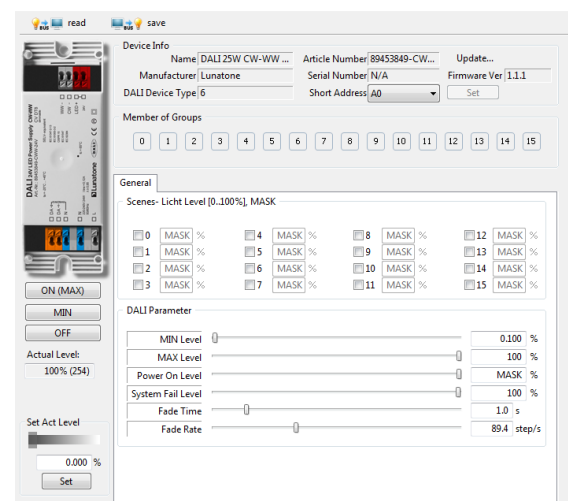
For each address the group membership can be set as well as scene values and DALI-parameters. In Balance&Dim operating mode all values assigned to channel 2 are representing the balance.

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).

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	CV: 488Hz fixed
Groups before intial addressing:	G0 (or G0 and G1 in operating mode Balance&Dim)
Predefined Scene Values:	

Purchase Order Information

Art. Nr. 89453849-CWW-24V: DALI 25W CW-WW LED Power Supply, constant voltage (CV), 24V, 25W, Imax=1A, SwitchDim2, remote ceiling

Art. Nr. 89453849-CWW-36V: DALI 25W CW-WW LED Power Supply, constant voltage (CV), 36V, 25W, Imax=700mA, SwitchDim2, remote ceiling

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

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.