# DALI
# 1Ch LED Dimmer

## Datasheet

**Control Gear**

1-channel LED Dimmer (CV, DT6)

Art. Nr. 89453826 (4A)
Art. Nr. 86459556 (8A)
Art. Nr. 86459572 (10A)
Art. Nr. 89453829 (16A)

# DALI 1Ch LED Dimmer CV Control Gear

## Overview

- 1 channel DALI LED-Dimmer
- suitable for constant voltage LED-modules
- the device can be controlled via 1 DALI address (DT6)
- **Sw&Dim or SwitchDim2**: 1 or 2 switch inputs offer control of light level control without DALI
- dimming range 0.1%-100%
- fixed 488Hz PWM (4A/10A/16A) or adjustable PWM-frequency (8A: 122Hz/244Hz/488Hz/976Hz)
- compact types for integration in luminaires or remote ceiling
- supply voltage type dependent of 12V to 28V DC or from 12V to 48V DC
- type dependent max. input currents of 4A, 8A, 10A or 16A
- 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 CV** | | | |
|---|---|---|---|---|
| article number | 89453826 | 86459556 | 86459572 | 89453829 |
| **electrical data:** | | | | |
| supply voltage Vin | 12V-28VDC | 12VDC-48VDC | | |
| maximum input current Iinmax | 4A | 8A | 10A | 16A |
| control input | DALI Sw&Dim 48V | DALI SwitchDim2 (mains voltage) | DALI Sw&Dim (mains voltage) | |
| current consumption DALI | 2mA | | | |
| number of DALI-addresses | 1 | | | |
| standby power consumption (12V) | 120 mW | | | |
| **technical data:** | | | | |
| power on behaviour | configurable via DALI: 0%-100% or last value | | | |
| ambient temperature | -20°C to +60°C | | | |
| expected lifetime (at Tc<=75°C) | >100000h | | | |
| protection class | IP20 | | | |
| max. connecting wire cross section | 1.5 $mm^2$ | | 2.5 $mm^2$, DALI/Sw&Dim: 1.5 $mm^2$ | |
| dimensions (LxWxH) | 40x28x14 mm | 59x33x15 mm | 120x30x22 mm | |
| housing/mounting | back box | | remote ceiling | |

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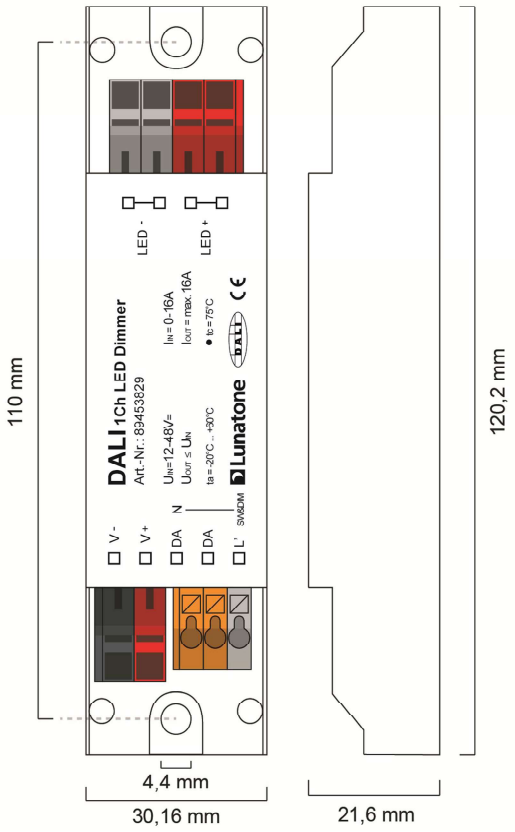
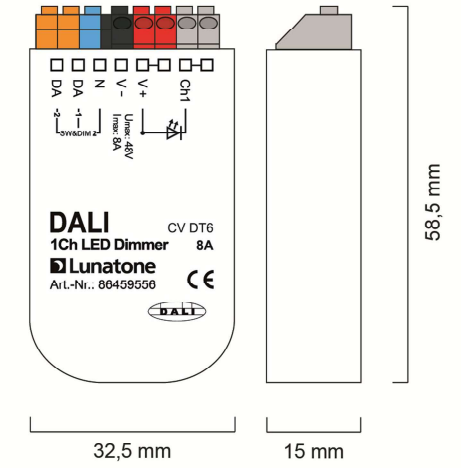
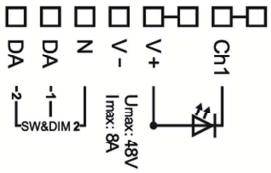



dimensions remote ceiling

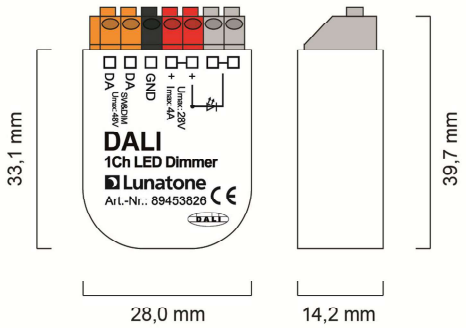
connection plan remote ceiling



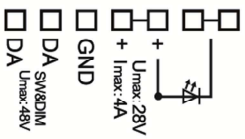

dimensions back box 8A




connection plan back box 8A




dimensions back box4




connection plan back box 4A

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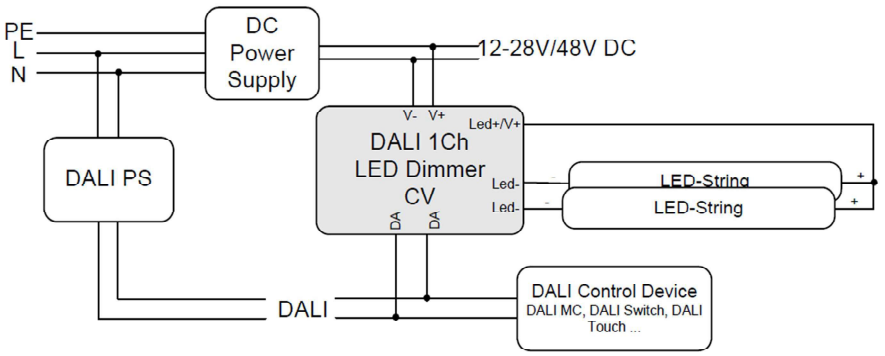
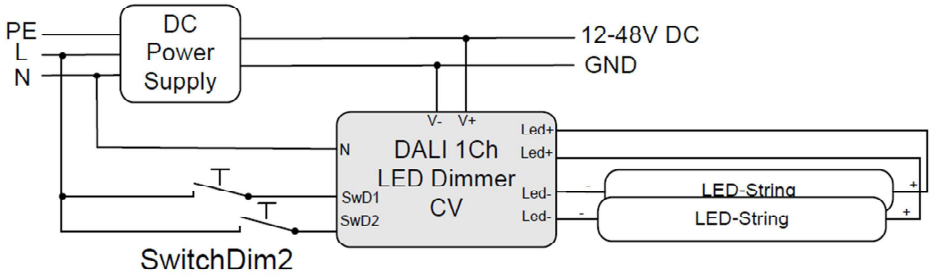
RECOMMENDATION: Care should be taken on keeping cable lengths between DC power supply and dimmer as well as between dimmer and luminaires (Led-Strings) as short as possible. This kind of installation will minimize the influence of voltage drops.

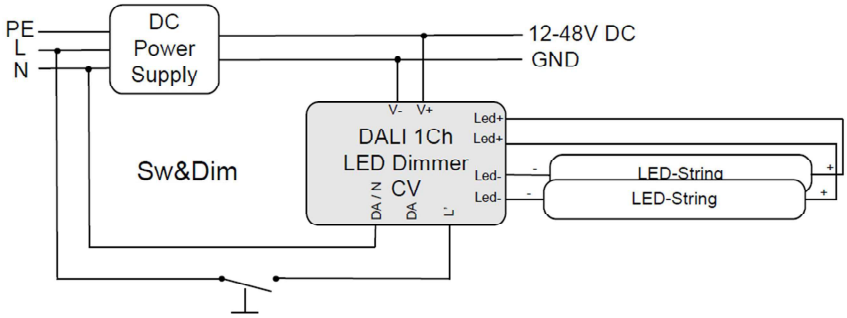
DALI:



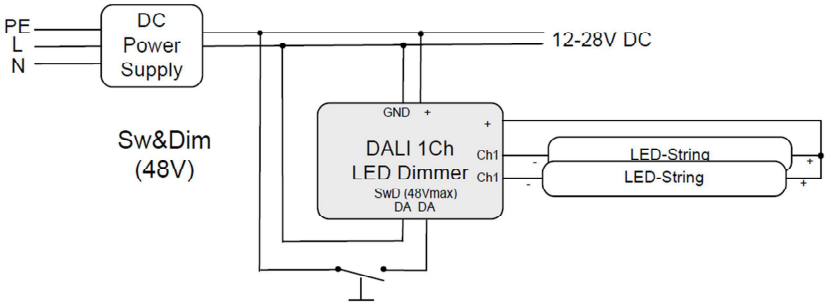

SwitchDim2 (8A type): SwD1 – Switch and Dim, SwD2 – scene selector




Sw&Dim (10A/16A types): – Switch and Dim




Sw&Dim 48V (4A type): – Switch and Dim



## DALI / Sw&Dim / SwitchDim2

The device can be controlled in different ways:

**DALI**

In this operating mode the output is controlled by its DALI address (Device Type 6).

**SwitchDim**

Alternatively the device can be controlled by one (Sw&Dim) or two switch inputs (SwitchDim2):

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

Hint: forerunner types of the 10A/16A, which do not have inputs marked with L' and N, do not support Sw&Dim with mains voltage, only 48V DC may be used for SwD operation.

## Factory Default Settings

The types supporting Sw&Dim (4A/10A/16A) are delivered with DALI default values. An exception is the power on level that is set to MASK.

The 8A type with Switchdim2 support provides group control before the initial addressing.

Summary of the factory default settings for devices with SwitchDim2 support:

| SwitchDim2 | SwD1: light level<br>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 | auto |
| Groups before intial addressing: | G0 – channel 0 |

## Purchase Order Information

ArtNr. 89453826: 1-channel LED Dimmer, CV, max. input current 4A, 12V-28V DC, back box

ArtNr. 86459556: 1-channel LED Dimmer, CV, max. input current 8A, 12V-48V DC, back box

ArtNr. 86459572: 1-channel LED Dimmer, CV, max. input current 10A, 12V-48V DC, remote ceiling & integration in luminaires

ArtNr. 89453829: 1-channel LED Dimmer, CV, max. input current 16A, 12V-48V DC, remote ceiling & integration in luminaires

## Additional Information and Equipment

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

Lunatone DALI products
http://www.lunatone.at/en/

Lunatone datasheets and manuals
http://lunatone.at/en/downloads/

## Contact

Technical Support: support@lunatone.com

Requests: sales@lunatone.com

www.lunatone.com

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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