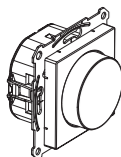


DALI Rotary dimmer Tunable White with power supply

User Guide



Art. no. MEG5147-0000

For your safety

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Safe electrical installation must be carried out only by skilled professionals. Skilled professionals must prove profound knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables
- Safety standards, local wiring rules and regulations

Failure to follow these instructions will result in death or serious injury.

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK

The outputs may carry an electrical current even when the device is switched off.

- Before working on the loads, always disconnect the device from the supply via the upstream miniature circuit breaker.

Failure to follow these instructions will result in death or serious injury.

Notice

HAZARD OF EQUIPMENT DAMAGE

- Ensure that the device is disconnected from its circuit during the insulation resistance test.

Failure to follow these instructions can damage the device.

Dimmer introduction

With the DALI Rotary Dimmer White with integrated power supply (hereafter referred to as **dimmer**) you can switch and dim lamps with DALI-interfaces (Electronic Control Gear, "ECG").

Additionally you can set the colour temperature for lamps with DALI Device Type 8 for Tunable White according to IEC 62386-209.

The installation takes place in an appliance box according to DIN 49073.

Product features:

- Active operation: if mains voltage is connected to the device, it supplies the control current for 28 DALI subscribers.
- Passive operation: if no mains voltage is connected, then the device is powered using the DALI voltage (counts as DALI subscriber) and serves as an additional control unit.
- Parallel switching of up to four active DALI dimmers with the option of supplying up to 112 DALI subscribers is possible.
- Saving of colour temperature limiting values and a basic and switch-on brightness.

i Since faults can occur in combination with other DALI controls, it is thus not recommend.

Behaviour after a mains voltage failure

When the mains voltage returns, the lighting is switched to the brightness and colour temperature present before the mains voltage failed.

Installing the dimmer

Wiring the insert

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK

When wiring the insert, observe the following:

- If multiple circuit breakers supply dangerous voltages to the device or load, couple the miniature circuit breakers or label them with a warning to ensure disconnection is guaranteed.
- Ensure that the control cable is of the appropriate type, cross-section and routing for the VDE specifications for 250 V cable, and that it has basic insulation.

Failure to follow these instructions will result in death or serious injury.

Wiring example for an installation with active and passive dimmers

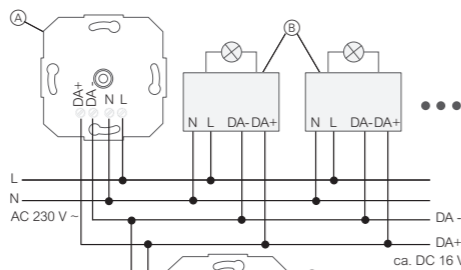
- 1 Connect the DALI Rotary Dimmer insert and DALI ECG referring to the example.

i Respect the specifications of DALI ECG manufacturers.

i When wiring multiple DALI dimmers in parallel, ensure correct polarity!

i The control cable and load cable can be run in a shared cable, e.g. NYM-J 5x1,5 mm².

i The connected DALI subscribers may be operated on different phases.

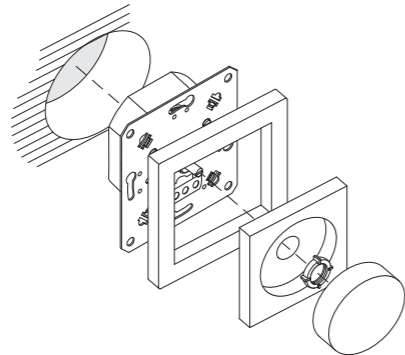


A DALI Rotary dimmer with connection to mains voltage: active operation

B DALI subscribers, e.g DALI ECG, DALI Device Type 8 for Tunable White

C DALI Rotary dimmer without connection to mains voltage: passive operation

Mounting the dimmer



Setting the dimmer

Setting the basic brightness

The basic brightness should be set if turning the rotary knob at minimum brightness does not directly lead to an increase in brightness.

- 1 Set lighting to minimum brightness.
- 2 Turn the rotary knob to the point that where the brightness begins to increase.
- 3 Press the rotary knob for longer than 10 s.

The lighting briefly switches off and on again. The basic brightness is saved.

Setting the colour temperature limiting values

With this setting you can adjust the setting range of the dimmer to the colour temperature of the lighting.

i When saving the colour temperature, you must ensure that the last turn of the pressed control knob is made to the left for the warmest light colour (W) and to the right for the coldest light colour (C).

- 1 Turn pressed control knob to the left (W) until reaching the warmest light colour required, and hold it in this position for more than 10 s.

The lighting switches off three times and then switches on again. The warmest light colour is saved.

- 2 Turn pressed control knob to the right (C) until reaching the coldest light colour required, and hold it in this position for more than 10 s.

The lighting switches off and on again three times. The coldest light colour is saved.

Deleting the basic brightness and temperature limiting values

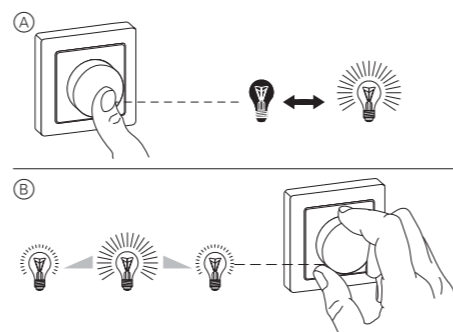
- 1 Switch off the lighting.
 - 2 Press the rotary knob for longer than 10 s.
- The lighting briefly switches on to maximum brightness and then off again. The basic brightness and temperature limiting values are deleted.

i DALI subscribers from different manufacturers may deviate from the acknowledgements given here.

Operating the dimmer

i Operation can take place from multiple control units and always applies to all connected subscribers (DALI Broadcast)

Switching and dimming the lighting



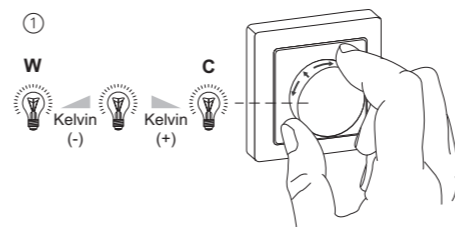
A Short press the rotary knob: the connected lamps are switched on or off.

B Turn the rotary knob to the left or to the right: the connected lamps are dimmed darker or brighter.

Turn slowly = Brightness change small

Turn quickly = Brightness change great

Setting the colour temperature



- 1 Hold the rotary knob pressed and turn it to the left or to the right at the same time. The colour temperature changes:

– Turning left (W): warmer light (decreasing the colour temperature)

– Turning right (C): colder light (increasing the colour temperature)

Saving the switch-on brightness

If the lighting shall be always switched on with the same brightness, then this can be saved as a switch-on brightness.

- 1 Switch on the lighting.
- 2 Set the desired switch-on brightness.
- 3 Press the control knob briefly twice in succession (double-click)

The lighting briefly switches on to maximum brightness twice.

The switch-on brightness is saved.

i If the lighting switches off after the double-click, then the time between the first and second presses was too long.

i Repeat the procedure.

Deleting the switch-on brightness

- 1 Switch off the lighting.
- 2 Press the control knob briefly twice in succession (double-click)

The lighting switches on to maximum brightness after approx. 2 s.

The switch-on brightness is deleted.

What should I do if there is a problem?

The colour temperature cannot be changed.

- A** Before saving the temperature limiting values, the control knob was turned in the wrong direction.
 - Delete basic brightness and colour temperature limiting values. Then repeat the saving procedure.
- B** The controlled DALI lamp does not include a DALI Device Type 8 for Tunable White in accordance with IEC 62386-209.
 - Exchange the DALI lamp.

Technical data

Mains voltage:	AC 230 V ~, 50/60 Hz
Power consumption:	max. 2 W
Ambient temperature:	-5 bis +45 °C
Nominal voltage DALI	16 V DC (typical)
Output current:	max. 56 mA
Short-circuit current	max. 61 mA
Number of DALI subscribers:	max. 28
Number of active DALI Rotary dimmers:	max. 4
Colour temperature setting:	2000 - 10000 K
Connecting terminals:	Screw terminals for max. 4 mm ² (single stranded)

Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

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