

**Flush-mounted DALI Power control unit insert**

Order no.: 5406 00

**Operating instructions****1 Safety instructions**

Electrical devices may only be mounted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Please read and follow manual fully.

Danger of electric shock. Always disconnect before carrying out work on the device or load. In so doing, take all the circuit breakers into account, which support dangerous voltages to the device and or load.

These instructions are an integral part of the product, and must remain with the end customer.

**2 Intended use**

- Switching and brightness setting for luminaires with DALI interface
- Setting the colour temperature for luminaires with DALI Device Type 8 for Tunable White in accordance with IEC 62386-209
- Mounting in appliance box according to DIN 49073
- Operation with suitable cover

**i** Since error-free interaction cannot be guaranteed in combination with other DALI controls, it is thus not recommend.

**Product characteristics**

- DALI supply for a maximum of 18 DALI subscribers
- Parallel switching of up to 4 DALI control units with the option of supplying up to 72 DALI subscribers
- Storing of minimum brightness, coldest and warmest colour temperature
- Switching on with the last set brightness/colour temperature or saved brightness/colour temperature
- With 2-channel button cover: Adjustment of the colour temperature via right rocker

**3 Operation**

These instructions describe operation with a 1-channel button cover. Operation with different covers is described in the instructions for the cover in question. Operation using 2-wire or 3-wire extension essentially corresponds to operation on the main device.

**i** With a 2-channel button cover, the left rocker works like the 1-channel button cover. The right rocker is used to directly set the colour temperature.

**Switching the light**

- Brief press on the button cover: Light is switched on or off at the last set brightness/colour temperature or a saved brightness/colour temperature.
- Long press on the button cover at the bottom: Light is switched on at minimum brightness.

**Adjusting the brightness**

- Long press the button cover at the top or bottom.

**Setting the colour temperature**

- Press the button cover in the switched-on state at the top, bottom or over the entire surface twice within 0.4 seconds (double-click). The light switches off and on again.
- Long press the button cover at the top or bottom.

- i** After a further double click, the insert switches back to normal operation and signals this with a short switching off and on again. After one minute without operation, the insert also returns to normal operation.
- i** With a 2-channel button cover the right rocker is used to directly set the colour temperature.

**Saving the switch-on brightness/colour temperature**

- Set the brightness and colour temperature.
- Press the button cover over entire surface for longer than 4 seconds.  
The light switches off and on again. The brightness and the colour temperature are stored.

**Delete switch-on brightness**

- Press the button cover briefly: Light switches on at the saved switch-on brightness and colour temperature.
- Press the button cover for longer than 4 seconds: Switch-on brightness and colour temperature are deleted.  
When switching on, the brightness and colour temperature present prior to switching off are set now.

**Operating differences with push-button extension**

- Long press on the push-button: Adjust the brightness. The dimming direction is changed with each new long actuation.
- Double-click the push-button: The mode for changing the colour temperature is called up. The direction in which the colour temperature changes with each new long actuation.
- i** Saving a switch-on brightness is not possible.

**4 Information for electrically skilled persons**

---

**DANGER!**

Mortal danger of electric shock.

Before carrying out work on the device or load, disengage all the corresponding circuit breakers. Cover up live parts!

---

## Connecting and fitting the device

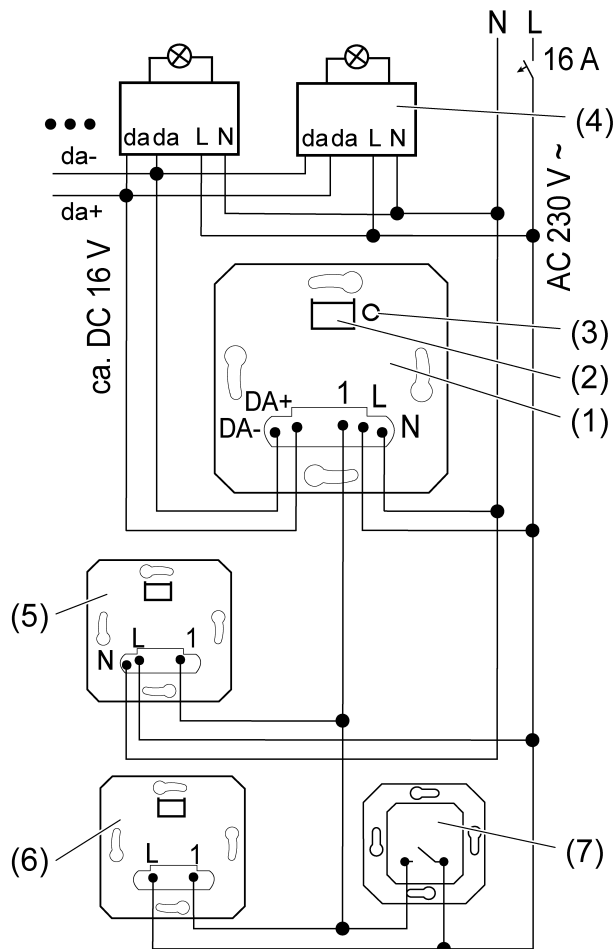


Figure 1: Connection diagram with optional extensions

- (1) DALI insert
- (2) Cover interface with LED
- (3) Button **Test**
- (4) DALI subscriber
- (5) 3-wire extension
- (6) 2-wire extension
- (7) Push-button, NO contact

DALI cable: type, cross-section and routing according to the specifications for 250 V cables. DALI and mains voltage wires can be run together in a cable, e.g. NYM 5x1.5 mm<sup>2</sup>.

- Connect the DALI insert (1) and the DALI subscriber (4) according to the connection diagram (Figure 1).
- 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.
- i** A 3-wire extension can only control one DALI insert. Central control is not possible on several DALI inserts.
- i** To increase the detection field of motion or presence detectors, up to 10 devices can be connected to the DALI insert via 3-wire extensions.
- i** The connected DALI subscribers may be operated on different phases.
- i** The connected lighting can also be switched without a cover by briefly pressing the **Test** button (3).

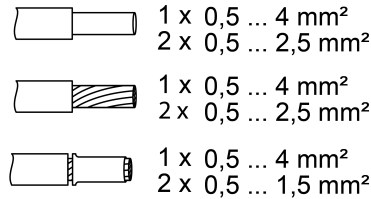


Figure 2: Terminal-specific cable cross-section:

- When switching multiple DALI inserts in parallel, ensure correct polarity (Figure 3).

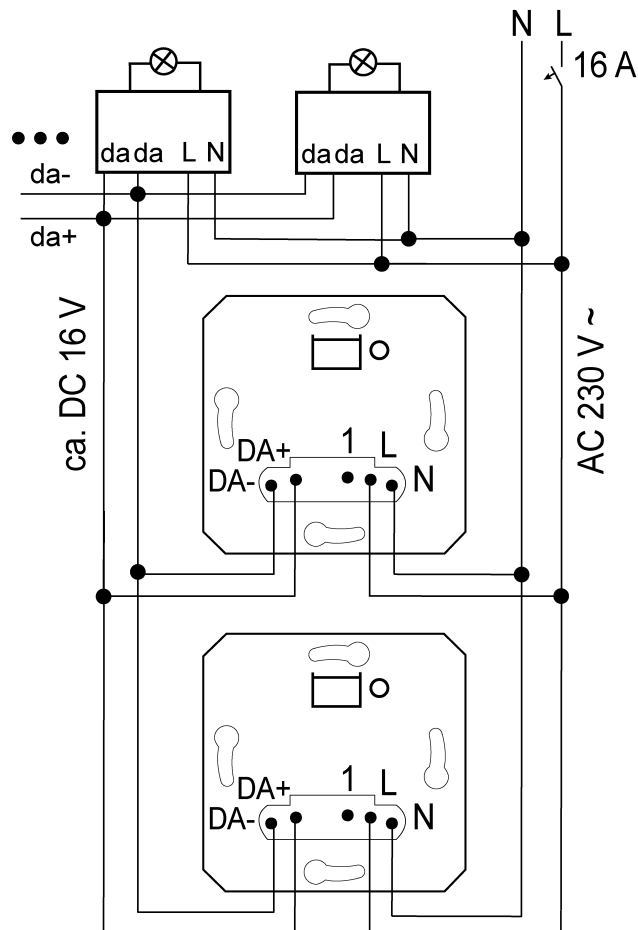


Figure 3: Switching DALI inserts in parallel

- i** Parallel switched DALI inserts cannot be operated with motion or presence detector covers.

### Adjusting the minimum brightness and colour temperature limits to the luminaire

Precondition: Light is switched on.

- Press the button **Test** (3) for longer than 4 seconds, until the LED (2) turns green. The connected luminaire switches to the currently set minimum brightness.
- i** If the button **Test** is not pressed for more than 30 seconds, the setting mode is automatically exited, the settings are applied and the LED goes out.
- To change the minimum brightness, press and hold the button **Test** for longer than one second. The LED flashes green and the luminaire starts to become brighter with minimum brightness.
- Once the desired minimum brightness is reached, release the button **Test**.

The LED lights up green. The minimum brightness is stored.

- To set the coldest colour temperature, press the button **Test** for less than one second.  
The LED lights up blue and the luminaire switches to the coldest colour temperature.
- To change the coldest colour temperature, press and hold the button **Test** for longer than one second.  
The LED flashes blue and the luminaire slowly starts to warm up at the coldest colour temperature (10,000 K).
- Release the button **Test** as soon as a change in the colour temperature is visible on the luminaire.  
The LED lights blue, the coldest colour temperature is stored.
- To change the warmest colour temperature, press and hold the button **Test** for longer than one second.  
The LED flashes red and the luminaire slowly starts to cool down at the warmest colour temperature (2,000 K).
- Release the button **Test** as soon as a change in the colour temperature is visible on the luminaire.  
The LED lights red, the warmest colour temperature is stored.
- To exit the setting mode, briefly press the button **Test** again.

#### Resetting the insert to factory settings

Precondition: Load is switched off.

- Press the **Test** button for at least 20 seconds.  
The red LED lights up.
- Release the button and press it briefly once again within 10 seconds.  
The red LED flashes three times.  
The insert is reset to default setting.

## 5 Technical data

Rated voltage	AC 230 V~
Mains frequency	50 / 60 Hz
Power consumption	max. 2.8 W
Rated voltage DALI	DC 16 V (typ.)
Output current	max. 36 mA
Short-circuit current	max. 60 mA
Ambient temperature	-5 ... +45 °C
Colour temperature setting	2,000 ... 10,000 K
Number of DALI subscribers	max. 18
Number of parallel control units	max. 4
Number of extension units	
2-wire, push-button	unlimited
3-wire, rotary dimmer extension	10
Total length of extension unit cable	max. 100 m

## 6 Warranty

The warranty is provided in accordance with statutory requirements via the specialist trade.

Please submit or send faulty devices postage paid together with an error description to your responsible salesperson (specialist trade/installation company/electrical specialist trade). They will forward the devices to the Gira Service Center.

**Gira**  
**Giersiepen GmbH & Co. KG**  
Elektro-Installations-  
Systeme

Industriegebiet Mermbach  
Dahlienstraße  
42477 Radevormwald

Postfach 12 20  
42461 Radevormwald

Deutschland

Tel +49(0)21 95 - 602-0  
Fax +49(0)21 95 - 602-191

[www.gira.de](http://www.gira.de)  
[info@gira.de](mailto:info@gira.de)