GIRA

Operating instructions

DALI-2 Power control insert TW
Art. no. 5411 00

Product image non-binding

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1 Safety instructions

To avoid potential damage, read and follow the following instructions:

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

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.

Instructions are part of the product. So keep them in a safe place.

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 with dimensions according to DIN 49073
– Operation with suitable cover

The device functions as a DALI-2 single-master and should not be combined with other DALI controllers.

3 Product characteristics

– DALI-2 certified
– DALI supply for a maximum of 18 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-gang operating cover: adjustment of the colour temperature via right rocker

4 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.

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.

Setting the brightness

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

ⓘ 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.

ⓘ With a 2-channel button cover the right rocker is used to directly set the colour temperature.

ⓘ It is not possible to set the colour temperature with wireless operating attachments.

Saving the switch-on brightness / colour temperature

- Set the brightness and colour temperature.
- Press the push-button cover over the entire surface for longer than 4 seconds.

  The light switches off and on again. The brightness and the colour temperature are saved.

Deleting the switch-on brightness

- Press the button cover briefly: Light switches on at the saved switch-on brightness and colour temperature.
- Press the push-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

- Press and hold the push-button: Set the brightness. The dimming direction is changed each time it is pressed and held.
- Double-click the push-button: The mode for changing the colour temperature is called up. The direction of the change in colour temperature changes with each new long actuation.

  After one minute without operation, the insert returns to normal operation.

| i | Saving a switch-on brightness is not possible. |

5 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

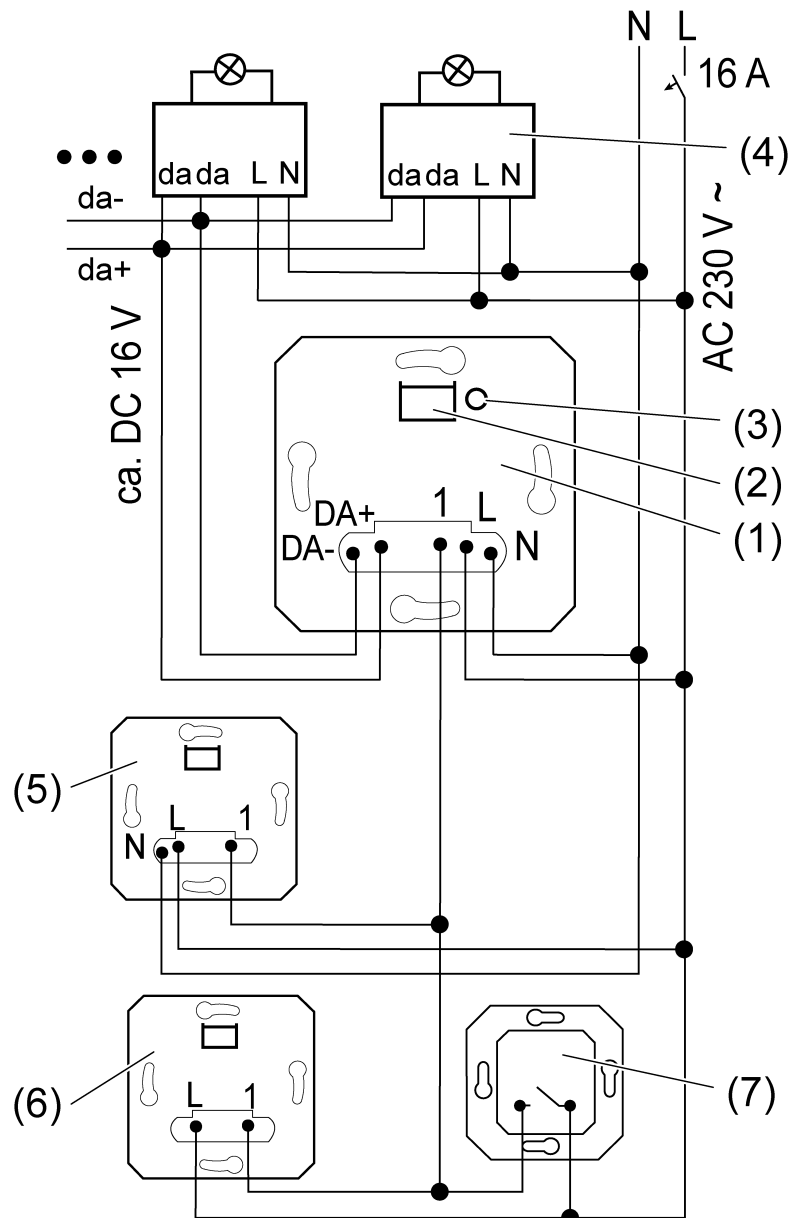Figure 1: Connection diagram with optional extension units

(1)   DALI insert
(2)   Cover interface with LED
(3)   Button **Test**
(4)   DALI subscriber

(5)	3-wire extension unit
(6)	2-wire extension unit
(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 mm².

- Connect the DALI insert (1) and the DALI subscriber (4) according to the connection diagram (see figure 1).

- If multiple circuit breakers supply dangerous voltages to the device or load, couple the circuit breakers or label them with a warning to ensure tripping.

- $\boxed{i}$ A 3-wire extension can only control one DALI insert. Central control is not possible on several DALI inserts.

- $\boxed{i}$ To increase the detection field of motion or presence detectors, up to 10 devices can be connected to a DALI insert via 3-wire extensions.

- $\boxed{i}$ The connected DALI subscribers may be operated on different phases.

- $\boxed{i}$ The connected lighting can also be switched without a cover by briefly pressing the Test button (3).

6 Commissioning

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.

- $\boxed{i}$ 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 saved.

- 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 up blue, the coldest colour temperature is saved.

- 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 up red, the warmest colour temperature is saved.

- 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 LED lights up red.

- Release the button and press it briefly once again within 10 seconds.

  The LED flashes red three times.

  The insert is reset to default setting.

7   Technical data

Rated voltage	AC 230 V~
Mains frequency	50 / 60 Hz
Power consumption	Max. 2.8 W
DALI	
Rated voltage DALI	DC 16 V (typ.)
Permitted bus power	Max. 250 mA
Guaranteed bus power	36 mA
Short-circuit current	Max. 60 mA
Colour temperature setting	2,000 ... 10,000 K
Number of DALI subscribers	Max. 18
Number of extension units	

2-wire, push-button	unlimited
3-wire extension, rotary extension	10
Total length of extension device cable	Max. 100 m
Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-20 ... +70 °C
Installation depth	30 mm
Clampable conductor cross-section (see figure 2)	

1 x 0,5 ... 4 mm²
2 x 0,5 ... 2,5 mm²

1 x 0,5 ... 4 mm²
2 x 0,5 ... 2,5 mm²
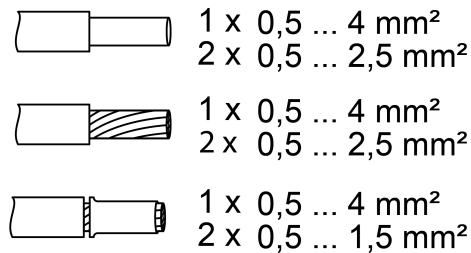
1 x 0,5 ... 4 mm²
2 x 0,5 ... 1,5 mm²

Figure 2: Clampable conductor cross-section

8   Warranty

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

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

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