

## LED dimming actuator 4-gang

### Safety instructions

Electrical equipment may only be fitted and connected by electrically skilled persons.

Serious injuries, fire or property damage possible. Read and observe instructions fully.

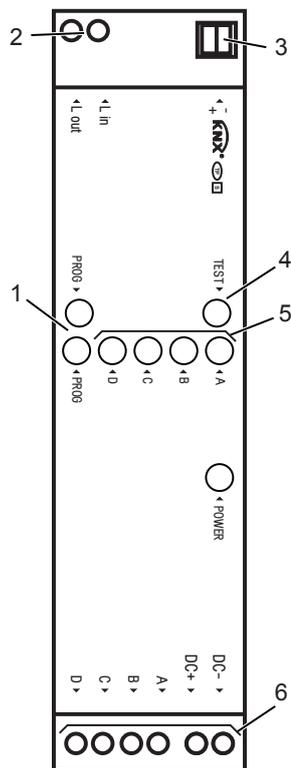
**Danger of electric shock. Before working on the device, disconnect the mains voltage and switch off the circuit breakers.**

Do not connect any LED modules which are not expressly suitable for dimming using pulse width modulation. Device can be damaged.

During installation, make sure that KNX and mains voltage are securely isolated.

These instructions are a component part of the product and must remain with the end customer.

### Structure of the device



- 1) Programming button and LED
- 2) Input / output (230 V AC)
- 3) KNX connection
- 4) Button for commissioning test (construction site operation)
- 5) Status LEDs
- 6) Inputs / outputs (12 ... 24 V DC)

### Function

#### Correct use

- LED dimmer for controlling LEDs and LED modules 12 - 24 V (pulse width-modulated PWM)
- Mounting in false ceilings, surface mounting or in/under furniture

### Product characteristics

- 4 individually configurable LED dimming channels
- Maximum output current of 5 A per channel
- At 24 V DC up to 480 W LED output
- Possible channel combinations:
  - 4 x independent channels
  - 2 x Tunable White channels
  - 2 x independent channels, 1 x Tunable White channel
  - 1 x RGB channel, 1 x independent channel
  - 1 x RGBW channel
- Activation of the colour channels via "HSV" or "RGB"
- Integrated 230 V C-load network relay to switch the LED power supply
- Integrated protection with on-site display against:
  - Overcurrent
  - Overvoltage
  - Overtemperature
  - Reverse polarity

### Operation

- Using an insulated screwdriver, carefully actuate the buttons through the opening.

#### Construction site operation

- Press the Test button (4) briefly  
Channel A is switched on  
LED A (5) lights up  
Repeated actuation switches the channels B, C, D.

### Information for electrically skilled persons

#### Installation and electrical connection

**DANGER**  
**Electrical shock on contact with live parts in the installation environment.**  
**Electrical shocks can be fatal.**  
**Before working on the device, disconnect the power and cover live parts in the area!**

#### Mounting the device

Observe temperature range.  
Provide adequate cooling.

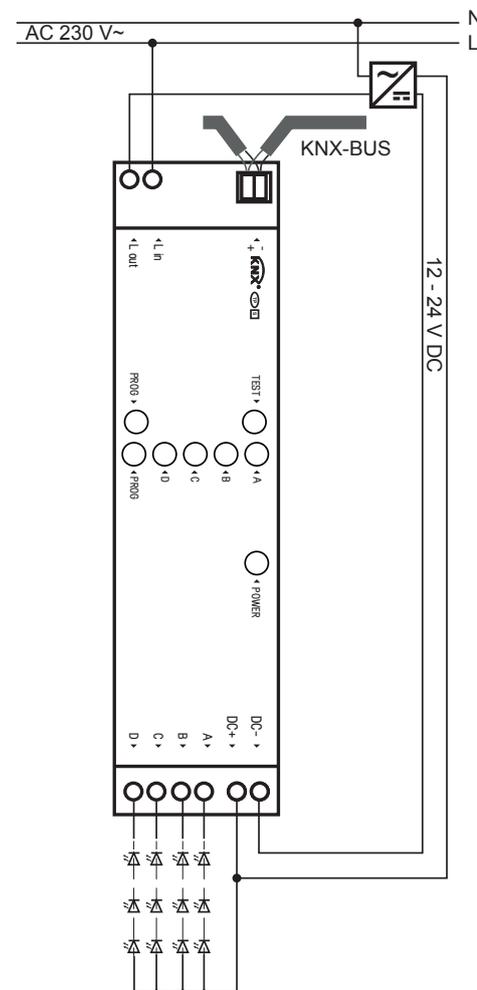
#### Electrical connection

Connect the LED modules.  
Only connect identical modules to each output.  
Do not connect any other loads.

Do not exceed the maximum load per output (see Technical Data).

Observe the technical data of the LED modules.

- Connect the LED modules according to the connection diagram.
- Due to the voltage drop and the warming up of the cables, a cross-section of 4.0 mm<sup>2</sup> is recommended. Temperature range of the cables up to 90°C or higher.



- Connect the mains voltage to the terminals (2).
- Use circuit breakers for the leads (rated current ≤ 16 A, B characteristics). The assignment to disconnect device from the mains voltage must be labelled. Select supply cables with the appropriate current carrying capacity.
- Connect the bus cable using the connection terminal (3).

#### Status indicator

The status LEDs A, B, C, D signal the current switching state of the appropriate channel or relevant error states of the LED dimmer.

LED A	LED B	LED C	LED D	Function
Flash-ing	Flash-ing	Off	Off	Undervoltage switch-off
Flash-ing	Off	Flash-ing	Off	Overcurrent switch-off
Flash-ing	Off	Off	Flash-ing	Overtemperature switch-off

Table 1: Error display of the LED dimmer

### Commissioning

#### Loading the address and application software

- Switch on the bus voltage.
- Press the Programming button (1).
- Load the physical address into the device.
- Load the application software into the device.
- Note the physical address down on the device label.

### Technical data

Rated voltage	AC 230 V ~
Rated current	16 A (C load)
Mains frequency	50 Hz
Power dissipation	max. 6 W

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Ref.-no.: 3904 EB LED

### Quick guide



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#### Connection terminals

Single-wire	2.5 ... 4 mm <sup>2</sup>
Fine-wire without end sleeve	4 mm <sup>2</sup>
Fine-wire with wire end sleeve	2.5 mm <sup>2</sup>

#### KNX

KNX Medium	TP
Commissioning mode	S-Mode
KNX rated voltage	DC 21 ... 32 V SELV
Current consumption KNX	< 18.9 mA
Bus connection type	connection terminal

#### LED

Connection	DC 12 ... 24 V SELV <20 A
	From device acc. to DIN EN 61347-2-13
	for LED modules with constant output voltage
Current consumption	20 mA

#### Outputs

Number	4
max. current/output	5 A
	for LED modules with constant input voltage to DIN EN 62031.
	LED modules with shared anode.
PWM frequency	488 Hz / 600 Hz
Cable length	Depending on the cable resistance (Voltage drop)

#### Connection terminals

Single-wire	4 mm <sup>2</sup>
Fine-wire without end sleeve	4 mm <sup>2</sup>

Dimensions	196 x 40 x 32 mm (L x W x H)
Protection rating	IP20
Protection class	II

#### Ambient conditions

Ambient temperature	-5 ... +45 °C
Storage/transport temperature	-25 ... +70 °C

### Warranty

Warranty is offered according to the statutory provisions via specialist dealers.