Ceiling-mounted controller - 4 DALI outputs KNX

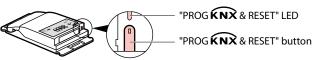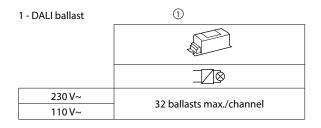### CONTENTS   Page

1. USE

The KNX ceiling-mounted controller Cat. No. 0 488 88 is equipped with 4 DALI outputs, each of which can control up to 32 ballasts. It can be installed in a false ceiling or on a cable tray. The device operating parameters can be configured using ETS (Engineering Tool Software). The following functions are available:
- ON/OFF
- Dimming
- Scene creation
- Fault

2. TECHNICAL CHARACTERISTICS

Control buttons

LEARN indicator: indicates the learning phase or RESET

legrand
0 488 88
100-240 V~
50-60 Hz
32 Ballasts max/out

CE

KNX

ON/+ ON/+ ON/+ ON/+

○ LEARN
⚠ ⚠
○ DALI

OFF/- OFF/- OFF/- OFF/-
1   2   3   4

+ -

Indicators (on if output activated)

DALI indicator: indicates the learning phase or RESET of the DALI or DSI ballasts

Red indicator: indicates that the BUS capacity has been exceeded

"PROG KNX & RESET" LED

"PROG KNX & RESET" button

1 - DALI ballast   ①

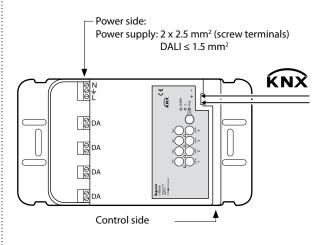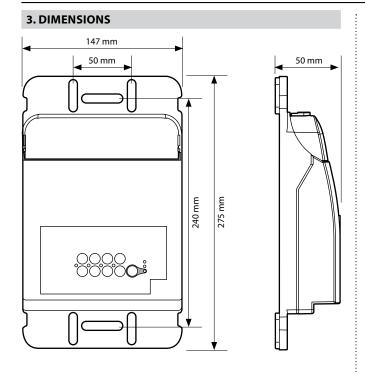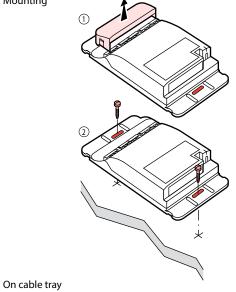| 230 V~	32 ballasts max./channel
110 V~	

2. TECHNICAL CHARACTERISTICS (continued)

- Voltage: 100-240 V~
- Frequency: 50/60 Hz
- No-load power consumption: 2.4 W
- Consumption on BUS/KNX: 5 mA
- Operating temperature: -5 °C to +45 °C
- Storage temperature: -20 °C to +70 °C
- Weight: 525 g
- Impact resistance: IK04
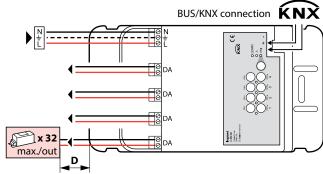- Penetration by solid and liquid matter: IP20

Power side:
Power supply: 2 x 2.5 mm² (screw terminals)
DALI ≤ 1.5 mm²

KNX

N
L

DA

DA

DA

DA

Control side

3. DIMENSIONS

4. CONNECTION

BUS/KNX connection **KNX**

D	🔩
≤ 100 m	0.5 mm²
≤ 150 m	0.75 mm²
≤ 300 m	1.5 mm²

150 m max.

x 32 max./out

Schematic diagram

BUS/KNX power supply
Cat. No. 0 035 12

IP communication module
Cat. No. 0 035 43

ETS software

BUS/KNX connection

Controllers

350 m max.

5. INSTALLATION

Device can be installed in a false ceiling or on a suitable cable tray
Mounting

On cable tray
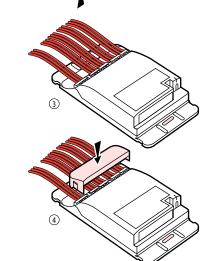

Data sheet: S000094042EN-1

Updated:

Created: 23/12/2016

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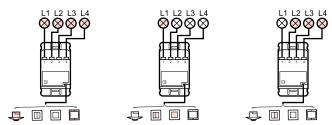## 6. PARAMETER SETTINGS

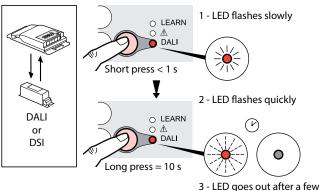**Reminder:** All wiring must be carried out with the mains power turned off.

Switching the controller on generates an automatic configuration. Configuring the controller means that the wiring can be checked. All sensors control all loads.

The KNX system must be configured using a PC with ETS software installed. This means that each peripheral can be connected to its load.

Technical documentation regarding KNX product settings is integrated in the ETS database available from January 2012.

Reminder: Addressing DALI channels

1 - LED flashes slowly

Short press < 1 s

2 - LED flashes quickly

Long press = 10 s

3 - LED goes out after a few seconds

→ DALI ballast: Total lighting of all loads, then gradual dimming and switching off of the loads in a random order

→ DSI ballast: Addressed automatically when switched on

Note:

Do not install DSI and DALI ballasts on the same channel.

Note:

All technical information is available at

 www.legrandoc.com

7. CARE

Do not use acetone, tar-removing cleaning agents or trichloroethylene.

Resistant to the following products: - Hexane (EN 60669-1)
- Methylated spirit
- Soapy water
- Diluted ammonia
- Bleach diluted to 10%
- Window-cleaning products

Important:

Always test before using other special cleaning products.

8. STANDARDS

CE marking

Installation standards: NFC 15-100

Product standards: EN 50428
IEC 60669 2-1

Environmental standards:
- European directive 2002/96/EC:
  WEEE (Waste Electrical and Electronic Equipment)

- European directive 2002/95/EC:
  RoHS (Restriction of Hazardous Substances)

- Decrees and/or regulations: Public buildings
Workplace buildings
High-rise buildings

9. COMMUNICATION OBJECTS

■ 9.1 List of objects

The controller can be configured using ETS version 3 or later.
The following (default) objects are available:

1	Channel 1 Switch, Channel 1
2	Channel 1 Relative dimming, Chanr
3	Channel 1 Level, Channel 1
4	Channel 1 Switch status, Channel 1
5	Channel 1 Level status, Channel 1
11	Channel 2 Switch, Channel 2
12	Channel 2 Relative dimming, Chanr
13	Channel 2 Level, Channel 2
14	Channel 2 Switch status, Channel 2
15	Channel 2 Level status, Channel 2
21	Channel 3 Switch, Channel 3
22	Channel 3 Relative dimming, Chanr
23	Channel 3 Level, Channel 3
24	Channel 3 Switch status, Channel 3
25	Channel 3 Level status, Channel 3
31	Channel 4 Switch, Channel 4
32	Channel 4 Relative dimming, Chanr
33	Channel 4 Level, Channel 4
34	Channel 4 Switch status, Channel 4
35	Channel 4 Level status, Channel 4
39	Scene Scene

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Created: 23/12/2016

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9. COMMUNICATION OBJECTS (continued)

■ 9.2 Parameters

9.2.1 General parameters

Minimum value 5 by default; value can be between 0 and 255.

Obj.	Function	Object name	Type	Flag
1, 11, 21, 31	Switch, Channel X	Channel X	Switch (1 bit)	CW

This object is used for ON/OFF control of luminaires connected to controller outputs 1/2/3/4.

Obj.	Function	Object name	Type	Flag
2, 12, 22, 32	Relative dimming, Channel X	Channel X	Dimming control (4 bit)	CW

This object is used to vary the light intensity of all luminaires connected to controller outputs 1/2/3/4.

Obj.	Function	Object name	Type	Flag
3, 13, 23, 33	Level, Channel X	Channel X	Percentage (0..100%) (1 Byte)	CW

This object is used to modify the brightness of all luminaires connected to controller outputs 1/2/3/4.

Obj.	Function	Object name	Type	Flag
4, 14, 24, 34	Switch status, Channel X	Channel X	Switch (1 bit)	CT

This object is used to access the status of the luminaires connected to the controller output. A 1-bit status (ON/OFF) is sent.

Obj.	Function	Object name	Type	Flag
5, 15, 25, 35	Level status, Channel X	Channel X	Percentage (0..100%) (1 Byte)	CT

This object is used to access the status of the luminaires connected to controller output 1. A status with the value of 1 byte (50…100%) is sent.

Obj.	Function	Object name	Type	Flag
6, 16, 26, 36	Enable, Channel X	Channel X	Enable (1 bit)	CW

This object is used to lock or unlock (NO/YES) the output in its present state. Commands will not be recognised.

Obj.	Function	Object name	Type	Flag
7, 17, 27, 37	Override, Channel X	Channel X	Switch Control (2 bits)	CW

This object is used to control the state of the controller output with the concept of priority:
Bits = 01: Output ON
Bits = 00: Output OFF
Bits = 11: Output forced ON
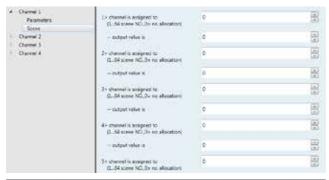Bits = 10: Output forced OFF

Obj.	Function	Object name	Type	Flag
8, 18, 28, 38	Dali fault, Channel X	Channel X	Boolean (1bit)	CT

This object is used to signal a fault on channel 1/2/3/4 of the DALI bus.
If the object = 1: Fault (short circuit, ballast communication, bulb)
If the object = 0: No fault

9. COMMUNICATION OBJECTS (continued)

■ 9.2 Parameters (continued)

9.2.2 Scene parameter

Obj.	Function	Object name	Type	Flag
39	Scene	Scene		CW

This object is used to call scenes which have been configured on the controller. Up to 64 scenarios can be configured.

> **Warning:**
>
> Each controller output can be controlled in a maximum of 10 scenarios.