

SpaceLogic KNX

SpaceLogic KNX DALI Gateway Pro

Product Information

This document is based on the installation instructions and gives you further product information about the SpaceLogic KNX DALI Gateway Pro.

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Warnings

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that accompany this symbol to avoid possible injury or death.



DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Additional notes



The specified information must be followed, otherwise a program or data error may occur



You will find additional information here to make your work easier.

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About this document

All information on safe installation and safe connection can only be found in the installation instructions.

This document gives you further product information about the SpaceLogic KNX DALI Gateway Pro.

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
- Connecting and establishing KNX networks
- Safety standards, local wiring rules and regulations

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



1 Getting to know the SpaceLogic KNX Gateway Pro

The SpaceLogic KNX Gateway Pro (hereafter referred to **gateway**) is a multi-master application controller for controlling electronic ballasts with DALI interface via the KNX installation bus. It supports ballasts according to EN 62386-102 ed1 (DALI1), devices according to EN 62386-102 ed2 (DALI2), as well as DALI2 motion sensors and light sensors according to EN 62386-303 and EN 62386-304.

The device transforms switching and dimming commands from the connected KNX system into corresponding DALI telegrams, or status and event information from the DALI bus into KNX telegrams.

The gateway has a DALI output which can control up to 64 ECGs. In addition, up to 8 DALI2 motion detectors or light sensors can be connected. Multi-master operation according to EN 62386-103 ed2 is permitted.

The required power supply for the connected ECGs and motion sensors is provided directly from the device. Additional DALI power supplies are not required



When using sensors supplied via the DALI bus, it must be ensured that the current consumption of all connected DALI devices does not exceed the guaranteed value.

The device is available in a 4TE wide DIN rail housing for direct installation in an electrical distribution board. The bus connection is made via a standard bus connector. Mains and DALI lines are connected via screw terminals on the device. Ethernet is connected via an RJ45 socket.

Per gateway the ECGs can be controlled in 16 groups. In addition to the group control the gateway also allows individual control of up to 64 ECGs.

In addition to the control of all standard operating devices, the gateway also allows the operation of single battery emergency lights (EN 62386-202). Emergency lighting systems with central battery are also supported.

A maximum of 8 motion detectors with light sensors can also be controlled.



The special interface for configuring the DALI segments is designed as a DCA (Device Control App) for the ETS 5. Please make sure that the corresponding *etsapp* is installed in addition to the product database *knxprod*. This is available for download at Konnex or on the Schneider Electric website.

1.1 ETS Functions

Which functions you can set in the ETS as well as a detailed description of the parameters and values can be found in the ETS application description. -> [ETS application description](#)

- Addressing of 16 DALI groups and/or individual addressing of up to 64 individual ECGs
- Flexible DALI commissioning concept: directly on the device, via integrated web server or in the ETS5 (DCA)
- Coloured light control with the support of Device Type 8 (DT-8) ballasts and control via communication objects

- Coloured light control depending on ballast Sub-Type:
 - Colour Temperatur (DT-8 Sub-Type Tc)
 - XY Colour (DT-8 Sub-Type XY)
 - RGB (DT-8 Sub-Type RGBWAF)
 - HSV (DT-8 Sub-Type RGBWAF)
 - RGBW (DT-8 Sub-Type RGBWAF)
- Automatic, time-controlled setting of light value, light colour and colour temperature (also for Human Centric Lighting applications) for groups and/or individual ECGs
- Automatic change of colour temperature depending on the light value (Dimm-To-Cold)
- Control of colour temperature via communication object for DT6, warm white and cool white
- Broadcast objects for controlling all connected ECGs simultaneously (also possible for color values)
- Various operating modes for groups such as continuous mode, night mode, staircase mode
- Integrated operating hours counter for each group and/or individual ECG with alarm when end of life is reached
- Individual fault detection with objects for each individual luminaire/EVG
- Complex error evaluation on group/device level with error number and error rate calculation
- Error threshold monitoring with individually adjustable threshold values
- Scene module for up to 16 scenes, which can be assigned to KNX scenes 1..64 as required
- Extensive scene programming, including the possibility of dimming scenes
- Setting of colour in DT-8 luminaires via scenes for groups and/or individual ECGs
- Effect module for sequence controls and lighting effects including colour adjustment in DT-8 luminaires
- Test mode for systems with emergency luminaires supplied by central battery
- Support of single-battery emergency lights DT-1
- Support of test procedures for emergency lights with time and date stamp
- “Quick Exchange Function” for easy replacement of individual defective ECGs
- “Energy saving function” allows the ECG power supply to be switched off when light is switched off via additional switching actuators
- Integrated web server with extensive options for commissioning and maintenance
- Integrated “Visualization” via Web browser for direct operation and display
- Cross-device summary of errors in the entire system
- Manual operation of group and broadcast telegrams via operating keys and display on the device
- Signalling of error states and status diagnosis via LEDs and display on the device

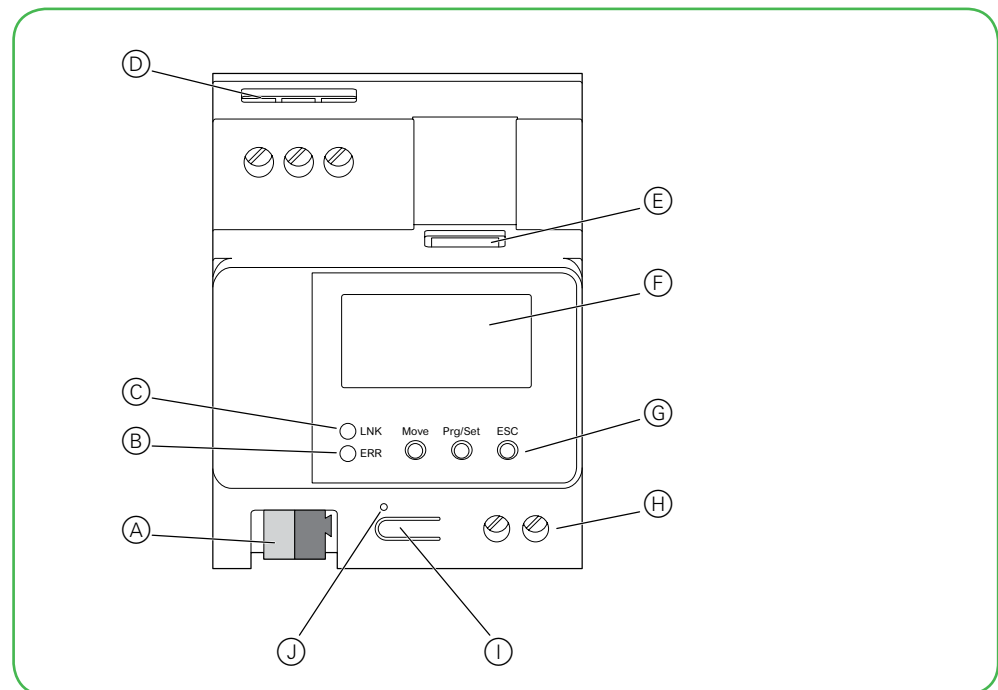
1.2 Commissioning

After complete connection and switching on the supply voltage, the gateway can now be commissioned and programmed with the ETS 5, including the necessary *etsapp*. Please refer to the application description for the execution of these further procedures. -> [ETS application description](#)

2 Connections and operating elements

The device connections, as well as the elements learn button and programming LED required for KNX commissioning are only accessible in the distribution board when the cover is removed.

The buttons required for DALI commissioning and parameterisation (MOVE, Prg/Set, ESC), as well as reading the 2-line display and the control LEDs (ERR and LNK) can be operated with the distribution board cover closed.



- Ⓐ KNX bus connection terminal
- Ⓑ Error-LED
- Ⓒ Ethernet-LNK-LED
- Ⓓ Mains connection
- Ⓔ RJ-45 socket
- Ⓕ Display
- Ⓖ Operating/programming buttons
- Ⓗ DALI output terminals
- Ⓘ KNX Programming button
- ⓵ KNX Programming LED

3 Technical Data

Power supply

Mains voltage:	AC/DC 100-240 V, 50-60 Hz
Maximum power consumption:	max. 8 W
Bus power supply via KNX bus:	DC 24 V (SELV), ca. 5 mA

Connectors

Mains connector L N PE:	Screw connector 3x 0.5- 4 mm ² single or threaded core
DALI-Bus :	Screw connector 2x 0.4-4 mm ² single or threaded core
KNX:	KNX Bus connector
Ethernet:	RJ-45

Control elements

KNX-Programming button:	Normal-/Addressing mode
Buttons (Move, Prg/Set, ESC):	for manual control and for activation of broadcast and service functions

Display elements

Programming LED red:	Indicates normal-/addressing mode
LNK-LED yellow:	Signals device Ethernet readiness
ERR-LED red:	Signals fault status
LC-Display 2x12 characters:	for configuration menu manual operation and device adjustments

KNX

KNX Medium:	Twisted Pair
Security:	KNX Data Secure Ready

DALI

Outputs:	1 output D+/D-
Output type:	Multi-Master Application Controller according to EN 62386-103 ed 2
Number ballasts:	max. 64 ECGs according to EN 62386-101 ed1 and ed 2
Number sensors:	max. 8 motion detectors and sensors according to EN 62386-303 / -304
DALI voltage:	typical DC 18 V, short-circuit proof max. 250 mA, basic insulation (no SELV)
Recommended wire cross-section:	min. 1.5 mm ²
Guaranteed supply current:	160 mA
Maximum supply current	250 mA
Shutdown delay:	600ms after DALI short circuit shutdown occurs
Start-up attempt after shutdown:	5s after short-circuit detection

Ethernet

Type:	100BaseT (100 Mbit/s)
IP address allocation:	via DHCP service or fixed IP address

Mechanical data

Material casing:	Plastic PC
Width:	4 TE = 72 mm
Dimensions WxHxD (mm):	72x65x90 mm
Weight	180 g

Elektrische safety

Protection type (in accordance with EN 60529):	IP20
Protection class (according to IEC 1140):	I
Overvoltage category:	III
Pollution class (in accordance with EN60664-1):	2
KNX Bus:	DC 24 V (SELV)
DALI Bus:	typical DC 18 V, 250 mA base isolation, (no SELV)

EMV requirements

Complies with directive 2014 / 30 / EU

Environmental conditions

Environmental conditions during operation:	-5 °C to +45 °C
Storage temperature:	-25 °C to +55 °C
Transportation temperature:	-25 °C to +70 °C
Relative humidity (non condensing):	5 % to 95 %

Approbation

KNX certified

DIIA certified according to EN 62386-101 ed 2 and EN 62386-103 ed 2

CE-Signage

According to EMC-Guidelines (Residential and commercial buildings), Low Voltage guidelines

Schneider Electric Industries SAS

If you have technical questions, please contact the
Customer Care Centre in your country.

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