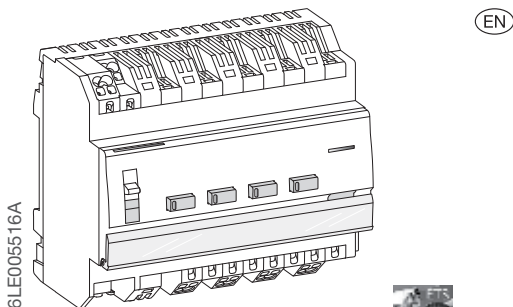


Presentation of the device



6LE005516A

EN



TXA664D

DALI broadcast
4 output module

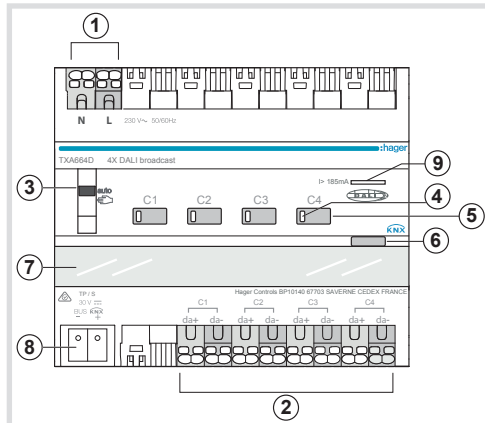


Image 1: presentation of the device

- ① Connection to the power supply (N, L)
- ② Connections to the DALI ballasts (da+, da-)
- ③ Auto/Manu switch (↔)
- ④ Status LED
- ⑤ Local command buttons
- ⑥ Illuminated physical addressing button
- ⑦ Label holder
- ⑧ KNX bus connection terminals (-, +)
- ⑨ Overload fault LED

Function

System information

This device is a product of KNX system and complies with KNX guidelines. Detailed, specialised knowledge obtained through specific KNX training courses is required for full understanding of the system. The device is programmed, installed and started up with certified KNX software.

ETS start-up

The functions of this device are software- and configuration-dependent. The application software is available in the product database. The product database, technical descriptions and conversion programmes as well as other up-to-date assistance software are available on our website.

Easy start-up

The functions of this device are software- and configuration-dependent. It can also be configured a tool specifically developed for easy set-up and start-up.

This configuration method is only possible with devices which are compatible with the Easy system. The Easy configuration method allows for simple set-up through a graphic interface. Preconfigured standard functions are assigned to the in/outputs by means of the configuration tool.

Functional description

The TXA664D 4-output module is used to control DALI ballasts over the KNX bus in single master broadcast mode. This product is DALI2 certified.

Typical scenario

Integration in the electrical box and rail mounting in accordance with DIN EN 60715.

Product features

- ON/OFF and dimmer control.
- Adjustable colour temperature (warm white/cool white) with the DT8 ballast.
- Adjustable RGB/RGBW colour with the DT8 ballast.
- Compatible with DALI ballasts (see chapter: Compatible ballast types).
- Possibility of manually controlling outputs on the device, site mode.
- Product secured against overloading and short-circuits (see chapter: Meaning of LEDs).
- Bus connection with the KNX connection terminals.

Short-circuit protection

To protect the device and the connected ballasts in case of short-circuit, the device determines the output concerned. During this search cycle, the product disables the output group (C1 + C2 + C3 + C4) according to the faulty outputs. Once identified, the latter remain disabled, and the others return to automatic mode.

This behaviour complies with the short-circuit behaviour set out in the IEC 62386-101 standard.

Protection against overloading

In case of overload, the device deactivates all the outputs and warns of an overload fault by illuminating the LED.

Test and start-up

Auto/Manu switch ③ and local command buttons ⑤:

- Switch ③ set to Manu(al) (↔). Short presses on the push buttons ⑤ turn the output on and off. Long presses alter the brightness.
- Use the Switch Auto position ③ in operating mode or to configure the product. In switch Auto position ③, the buttons ⑤ are inactive and the outputs respond to orders from the KNX bus.

Meaning of LEDs ④

LED	LED/Operation status	
Cx		output active
		output inactive
		short-circuit detected, flashes every 0.5 s
		no ballast or lamp fault, flashes every 0.5 s for 5 s

Image 2: LED operation and status

Illuminated physical addressing button ⑥

Press the illuminated button ⑥ to physically address the product or check the presence of the bus (LED lit = bus presence and product physically addressed).

Assembling the device

Irrespective of the assembly used (in an electrical box on DIN rail or in a wall mounted box), you must ensure the device is at the right temperature with sufficient cooling. For wall mounting in a box outside the electrical cabinet, Hager recommends the item TGC600.

Compatible ballast types

In accordance with IEC 62386, ballasts are categorised according to Device Type (DT). DTs that are compatible with the product are listed below:
 DT0 = fluorescent lamps
 DT2 = discharge lamps
 DT3 = low voltage halogen lamps
 DT4 = incandescent lamp dimmers
 DT5 = digital signal to DC voltage converters
 DT6 = LED modules
 DT7 = switching (ON/OFF only) control gear
 DT8 = colour and colour temperature control gear

The emergency lighting (DT1) ballasts are not compatible with the product.

Number of ballasts to connect

When designing an installation, ensure that the total consumption of the ballasts for the product as a whole does not exceed 185 mA. There are no restrictions on product channel distribution.

You must refer to the ballast technical sheets when designing your installation and base your calculations on the worst-case scenario.

Safety instructions

Electrical devices must only be installed and assembled by a qualified electrician. The accident prevention recommendations applicable in the country must be followed. Failure to follow the installation instructions may result in damage to the device, fire or other dangers. Please follow the recommendations and standards applicable for SELV electrical circuits during installation and when laying cables. Before any work on the device or the load, switch off the power to the installation. Do not forget all the circuit breakers that deliver voltages which are potentially dangerous to the device or the load. Risk of electric shock. The device is not suitable for disconnection/sectioning. These instructions are an integral part of the product and must be kept by the end user.



How to dispose of this product (electrical and electronic equipment waste). (Applicable in European Union countries and other European countries with selective waste collection systems). This symbol on the product or its documentation indicates that it must not be disposed of with other household waste at the end of its life cycle. As disposing of waste inappropriately may harm the environment or human health, please separate it from other types of waste and recycle it responsibly. In this way you will contribute to the sustainable re-use of material resources.

Individuals should contact the retailer who sold them the product or contact their local council to find out where and how they can dispose of this product for recycling in an environmentally friendly manner. Companies should contact their suppliers and read the terms of their sales contract. This product must not be disposed of with the other commercial waste.

i The continuous overload detection function built into the product can detect whether too many ballasts are connected to the product as a whole. If there are too many, the overload fault LED shows red (see § Protection against overloading).

! Additional DALI power supplies must not be added.

Connection diagram

- Device must only be installed by an electrician.
- Follow the SELV installation rules.
- DALI control voltage is FELV - Functional Extra-Low Voltage.
- Make sure you separate the KNX and DALI circuits properly during installation.

Start-up

ETS

- Loading the physical and application software address:
- switch on the bus voltage,
 - press the programming key,
 - load the physical address in the device,
 - download the application software to the device,
 - note the physical address on the device label,
 - stick the label to the device.

i If an incorrect ETS application is loaded, LEDs C1 to C4 will flash red.

Easy

Refer to the detailed description of the easy link service module for more information on the configuration of the installation.

Technical features

Configuration mode..... ETS and Easy
 KNX communication media..... TP1

Mains supply

Product power supply voltage:
 - 230 V~ +10/-15 %
 - 240 V~ +/-6 %
 Network frequency 50 / 60 Hz
 Typical consumption 900 mW

KNX

KNX power supply voltage 20...30 V= SELV
 Consumption on the KNX bus:
 - typical 2.35 mA
 - in standby 1.7 mA

DALI

DALI power supply voltage 16 V= FELV
 Guaranteed current 185 mA
 Maximum current 250 mA
 Start up time < 500 ms

Ambient conditions

Operating temperature -5 °C...+45 °C
 Storage / transport temperature -20 °C ... +70 °C
 Relative humidity 95% @ 20°C
 Pollution level 2
 Box protection rating: IP 20
 Protection rating box under faceplate: IP30
 Impact resistance IK04
 Maximum operating altitude 2,000 m
 Surge voltage 4 kV
 Circuit breaker protection 10 A

Box

Footprint 108 mm / 6 modules
 Installation method DIN rail in accordance with EN 60715

Output connection

Type of KNX connection KNX terminals
 Type of connection quick connect terminal
 - rigid / flexible 0.75...2.5 mm²
 DALI cable length:
 - Ø 1.5 mm² 300 m max.
 - Ø 1.0 mm² 224 m max.
 - Ø 0.75 mm² 168 m max.

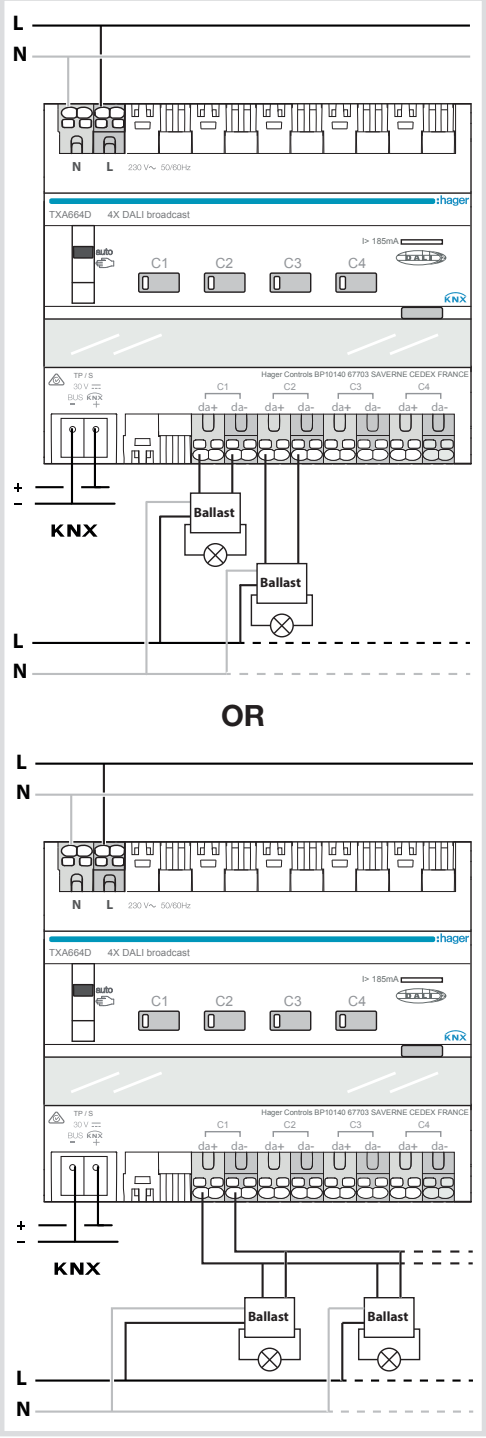


Image 3: 2 DALI ballasts wired up for single or dual channel operation.