HDL®

M/DALI.1

KNX-DALI Gateway

Hardware Version: D

KNX®

Datasheet

Issued: March 11, 2022
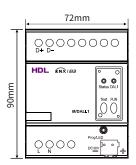
File Edition: V1.0.1

Figure 1. KNX-DALI Gateway

72mm

90mm

Figure 2. Dimensions - Front View

64mm

Figure 3. Dimensions - Side View

Total 64

DALI ballast ... DALI ballast
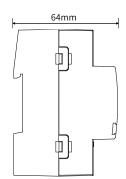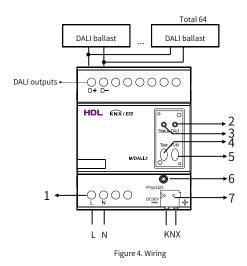
DALI outputs

D+ D−

1
2
3
4
5
6
7

L N   KNX

Figure 4. Wiring

Overview

With built-in DALI power supply and a single DALI Bus, KNX-DALI Gateway (See Figure 1) can be connectted to up to 64 DALI devices. Real-time failure detection enables the gateway to detect ballast failure and lamp failure etc. Its main functions include:

■ Real-time failure detection for ballasts and lamps, etc.

■ Target control: Broadcast control, Channel control, Group control, Scene control, Staircase light control, Sequence control, Emergency light control

■ Each channel and group supports Switch ON/OFF, Relative dimming, Absolute dimming, Status response function.

■ In conjunction with HDL KNX Assistant Software, DALI Gateway enables address management and assignment of DALI ballast.

■ Group scene control supported, which can be configured and managed via HDL KNX Assistant Software.

■ Color temperature control function supported, which can be applied to broadcast, channel, group and scene control of DT8 type color temperature control ballasts.

■ Online update.

Components and Operation

Dimensions - See Figure 2 and 3
Wiring - See Figure 4

1. Input voltage : AC100~240V supported

2. DALI LED indicator:

   - Keeps on in green when the module is working properly,

   - Flashes in red when the DALI bus communicates.

3. LED status indicator

4. TEST button

5. FUN button

6. KNX programming button/indicator: Red LED indicates programming mode.

7. KNX interface.

Functions of Button and LED indicator

  - Red LED ON/OFF:

Short press the FUN button to broadcast control on or off, and the status indicator turns red. When broadcast on, red LED is on; when broadcast off, red LED is off.

Keep pressing the FUN button for 30s to clear all the addresses. During the clearing process, the red status indicator will turn on and off for three times, and the flashing interval is one second.

  - Green LED ON:

Keep pressing the TEST button for 30s to reassign the address and the green status indicator flashes during the reassigning process.

Short press the TEST button, and the ballasts will be on and off one second at a time. At this time, the green indicator indicates the status of the ballasts.

In the case of a ballast that supports DT8 type color temperature control, the lamp will be lit up, and adjusted to the coolest color temperature value, then adjusted to the warmest color temperature value, and finally extinguished, with each phase lasting for 1s.

Press the button "TEST" and "FUN" for 15 seconds simultaneously to restore the recorded fault ballast. During the recovery process, the red status indicator and the green status indicator flash alternately, and the flashing interval is 1s. If there is no ballast to restore, the red and green indicators keep on for 3s then turn off at the same time.

Note(s)

■ Installation - Distribution box

■ Programming - The device is compliant with the KNX standard and the parameters are set by the Engineering Tool Software (ETS).

■ KNX Bus voltage - 21~30V DC, no AC power supply allowed.

■ Input voltage - AC100~240V supported

⚠ WARNING Safety Precautions

■ The installation and testing for the product must be carried out by HDL Automation Co., Ltd. or its appointed service agencies. The electric construction shall comply with local laws and safety regulations.

■ The device should be installed with DIN rail in DB box. HDL will not be responsible for any consequence caused by the inexpert or faulty installation and wiring methods, which are not in accordance with the instructions contained in this operating instruction.

■ Please do not privately disassemble or replace any parts of the product. Otherwise, it may cause mechanical fault, electric shock, fire or personal injuries.

■ Please contact our after-sales departments or our designated service agencies for your maintenance service. Product failures caused by private disassembly are not subject to this warranty.

Package Contents
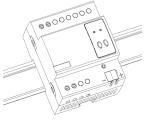
M/DALI.1*1 / Label*5 / Datasheet*1

Technical Data

Basic Parameters

Working voltage	21~30V DC
Working current	5mA/30V DC
Input voltage	AC100-240V, 50/60Hz
DALI output	64 channels
Communication	KNX
Cable diameter of KNX terminal	0.6 – 0.8mm

External Environment

Working temperature	-5°C~45°C
Working relative humidity	≤90%
Storage temperature	-20°C~60°C
Storage relative humidity	≤93%

Specifications

Dimensions	72mm×90mm×64mm
Net weight	241g
Housing material	Nylon
Installation	35mm DIN rail installation (See Figure 5 - 7)
Protection rating (Compliant with EN 60529)	IP20

Approved

CE, RoHS

KNX

KNX Cable Guide

KNX	KNX cable
-	Black
+	Red

Installation

Installation - See Figure 5 - 7

Step 1. Fix the DIN rail with screws.
Step 2. Buckle the bottom cap of the KNX-DALI Gateway on the edge of the DIN rail.
Step 3. Press the device on the DIN rail, slide it and fix it up until an appropriate position is adjusted.

Figure 5

1

Figure 6

2
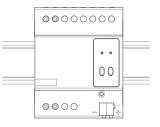

Figure 7

Figure 5 - 7. Installation

Technical support

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