

HDD8200

Dimmer/Controller | DALI Broadcast | Wall Junction Box

HYTRONIK[®]
SENSORS & LIGHTING CONTROL



Benefits

Compact: Designed to fit into Wall Junction Box

Integrated: 80 mA DALI PSU for stable control

Flexible: 2 Push switch for manual control

Applications

Switch-Dim to DALI control dimming interface

Offices, Classrooms

Industry, Healthcare Spaces

Check Out the Complete System Solution on the Website:

<https://www.hytronik.com/product/HDD8200>



Product Description

HDD8200 is a versatile dimmer designed for easy installation into standard lighting backboxes. It provides smooth dimming control via Switch-DIM logic, enabling seamless integration with DALI-controlled lighting systems. Ideal for both retrofitting existing installations and new projects, it is suitable for office, commercial, and domestic applications, offering flexibility and convenience for a wide range of lighting environments.

Functions and Features

See additional details at the end of datasheet



Built-in DALI PSU



DALI Broadcast Output



DT6/DT8 Lighting Control



Designed for Junction Box Installation



Over load Protection



Permanent Memory



Push-Button Input



Short-circuit Protection

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Specifications

Main Capabilities

Dimming (Output) Interface	DALI/DALI-2
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Electrical Data

Operating voltage range	220-240 VAC 50/60 Hz
Stand-by power (Psb)	<0.5W
DALI bus maximum rated current (I _n max)	100 mA
DALI bus nominal DC voltage range (Un)	16 V
DALI bus nominal current (I guaranteed)	80 mA

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Specifications

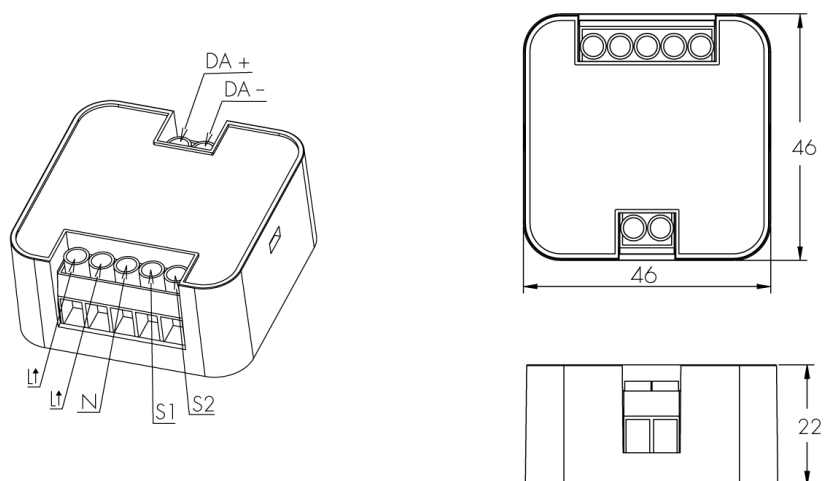
Technical	
Product weight	39.0 g
Product height	22.0 mm
Product length	46.0 mm
Product width	46.0 mm
Ambient temperature	-20 ~ +45 °C
Storage temperature	-40 ~ +70 °C
Humidity max	20 ~ 90%
IP Rate	IP20

Standard	
EMC	EN 55015, EN 61000, EN 61547, EN 62479
LVD	AS/NZS 61058, IEC/EN 61058
RED	EN 300328, EN 301489-1/-17, EN 62479

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Technical Drawing



Application Example



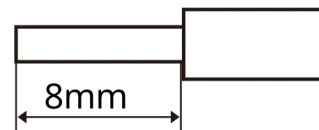
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Wire Preparation

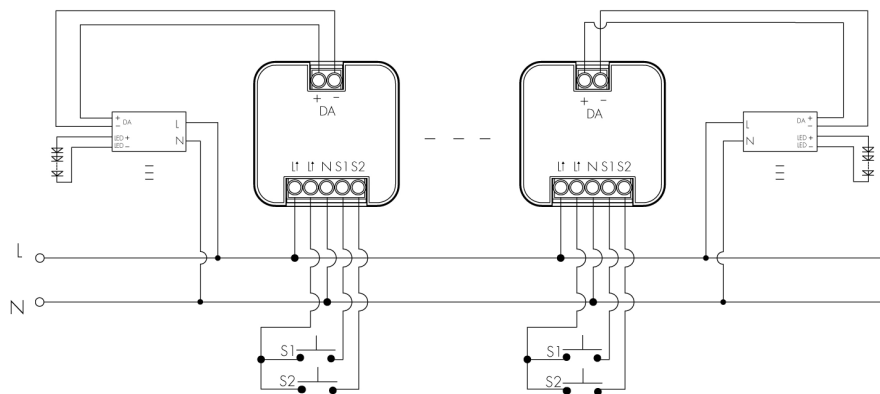


0.2~4mm²



Use a Phillips screwdriver to loosen or secure the cable at the contact screw connections. 1. 200 metres (total) max. for 1mm² CSA (Ta = 50°C) 2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50°C)

Wiring Diagram



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Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualified electrician.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to the official downloads.

<https://hytronik.com/service/downloads>

Dimming Interface Operation Notes

The Min Level, Power-on state, and Reset settings can only be configured after entering PUSH programming mode.

In this mode, dimming can be adjusted down to OFF. Press Push 1 or Push 2 three times to set the power-on state to OFF after power recovery.

Pressing Push 1 or Push 2 twice will not assign OFF to the Min Level; the device will use the physical minimum brightness level.

Switch function	Action	Descriptions
Enter / Exit Push programming mode	Push 1 / Push 2: Long press (≥ 15 second) (LED indicator light flashes slowly twice)	Enter PUSH setting mode
	Push 1 / Push 2: Short press (< 1 second)	Exit Push setting mode If no operation is performed, the mode will automatically exit after 1 minute
Min level setting	Push 1 & Push 2: Long press (≥ 1 second)	Adjust brightness
	Push 1 / Push 2: Short press twice (LED indicator light flashes slowly twice)	Save current brightness as Min Level If no operation is performed, the mode will automatically exit
Power-on state setting	Push 1 / Push 2: Long press (≥ 1 second)	Adjust brightness
	Push 1 / Push 2: Short press three times (LED light flashes slowly three times)	Saved as the power-on brightness after power restoration. If no operation is performed, the mode will automatically exit
	Push 1 / Push 2: Short press four times (LED light flashes slowly four times)	Restore default power-on state (power-off memory, factory default)
Push Switch Normal Operation	PUSH 1 / PUSH 2 : Short press (< 1 second)	Turn On/Off
	PUSH 1: Long press (≥ 1 second)	Dimming adjustment
	PUSH 2: Long press (≥ 1 second)	Color temperature adjustment
Reset	PUSH 1 / Push 2: Short press six times (LED light flashes slowly six times)	Reset device to factory settings

Functions and Features



Built-in DALI PSU

Built-in DALI PSU means the DALI bus power supply is integrated into the product, eliminating the need for an external DALI power unit.

This reduces wiring complexity, saves installation space, and simplifies commissioning, making the system more compact and efficient.



DALI Broadcast Output

This product supports DALI broadcast output, allowing control commands to be sent simultaneously to all devices on the DALI bus without individual addressing.

This enables simple group control, synchronized operation, and fast commissioning within a DALI lighting system.



DT6 / DT8 Lighting Control

Supports DT6 (single-channel dimming) and/or DT8 (tunable white / colour) lighting control via DALI, enabling brightness and colour temperature adjustment based on control logic such as occupancy or daylight.



Designed for Junction Box Installation

This product is designed for installation inside a standard junction box, offering a clean and integrated mounting solution for lighting control applications. The compact design allows secure fitting and straightforward wiring within the junction box, simplifying on-site installation while ensuring reliable electrical connections for both new installations and retrofit projects.



Over load Protection

This product incorporates overload protection that limits or disables the output when the connected load exceeds the rated capacity.

This protection helps prevent overheating, excessive component stress and unstable operation, ensuring safe and reliable system performance.



Push Button Input

This product integrates push-button (momentary switch) inputs, allowing external potential-free switches to trigger basic lighting control functions. Each input can be configured for actions such as on/off switching, dimming or scene recall, providing flexible manual control and user interaction within the lighting system. The push-button inputs operate independently of the sensor's automatic functions, enabling seamless coexistence of manual and sensor-based lighting control.



Short-Circuit Protection

This product incorporates short-circuit protection that automatically disables the output in the event of a short circuit. Normal operation is restored automatically once the fault condition is removed, protecting the device and connected components from damage.

Check out for further explanation of features

<https://hytronik.com/solutions/lighting-control-features>