

HCD038

Control unit | DALI with PSU | Attachable sensor heads



Benefits

Adaptable: Small control unit with strain relief

Versatile: Multi sensor options for DALI control, one push

Support: available to control DT8 LED drivers

Applications

Master luminaire with sensor

Classrooms

Offices

Check Out the Complete System Solution on the Website:
<https://www.hytronik.com/product/HCD038>



Product Description

HCD038 is a DALI control unit with 30mA DALI power supplies built in. It works with a wide range of microwave and PIR sensor heads. It's ideal for metal luminaire designs because the Bluetooth module is placed inside the sensor head instead of control unit, so that the Bluetooth signal transmission is viable. It makes communication much easier without any hardwiring, which eventually adds values to luminaires and saves costs for projects.

Functions and Features

See additional details at the end of datasheet



Built-in DALI PSU



DT6/DT8 Lighting Control



Push-Button Input

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Specifications

Main Capabilities

Dimming (Output) Interface	DALI
Connector Type	Standard 2 cables

Electrical Data

Operating voltage range	220-240 VAC 50/60 Hz
Stand-by power (Psb)	<0.5W
Warming-up	20 s
DALI bus maximum rated current (I _n max)	30 mA

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Specifications

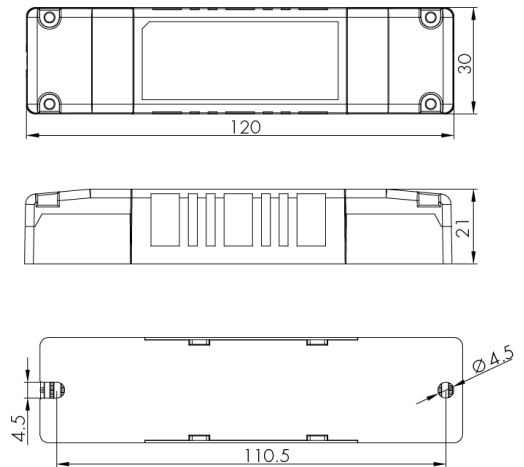
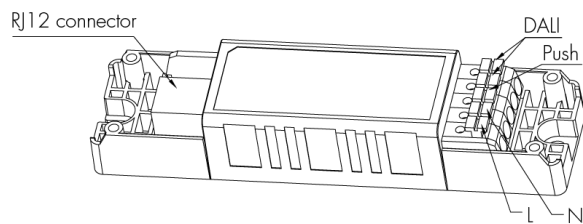
Technical	
Product weight	50.0 g
Product height	21.0 mm
Product length	120.0 mm
Product width	30.0 mm
Mounting hole	4.5 mm
Ambient temperature	-20 ~ +55 °C
Storage temperature	-20 ~ +70 °C
Humidity max	10 ~ 90%
Case Temp.max	75.0 °C
IP Rate	IP20

Standard	
EMC	EN 55015, EN 61000, EN 61547
LVD	AS/NZS 60669-1/-2-1, EN 60669-1, EN 60669-2-1
RED	EN 300328, EN 300440, EN 301489-1/-17, EN301489-3, EN 62479

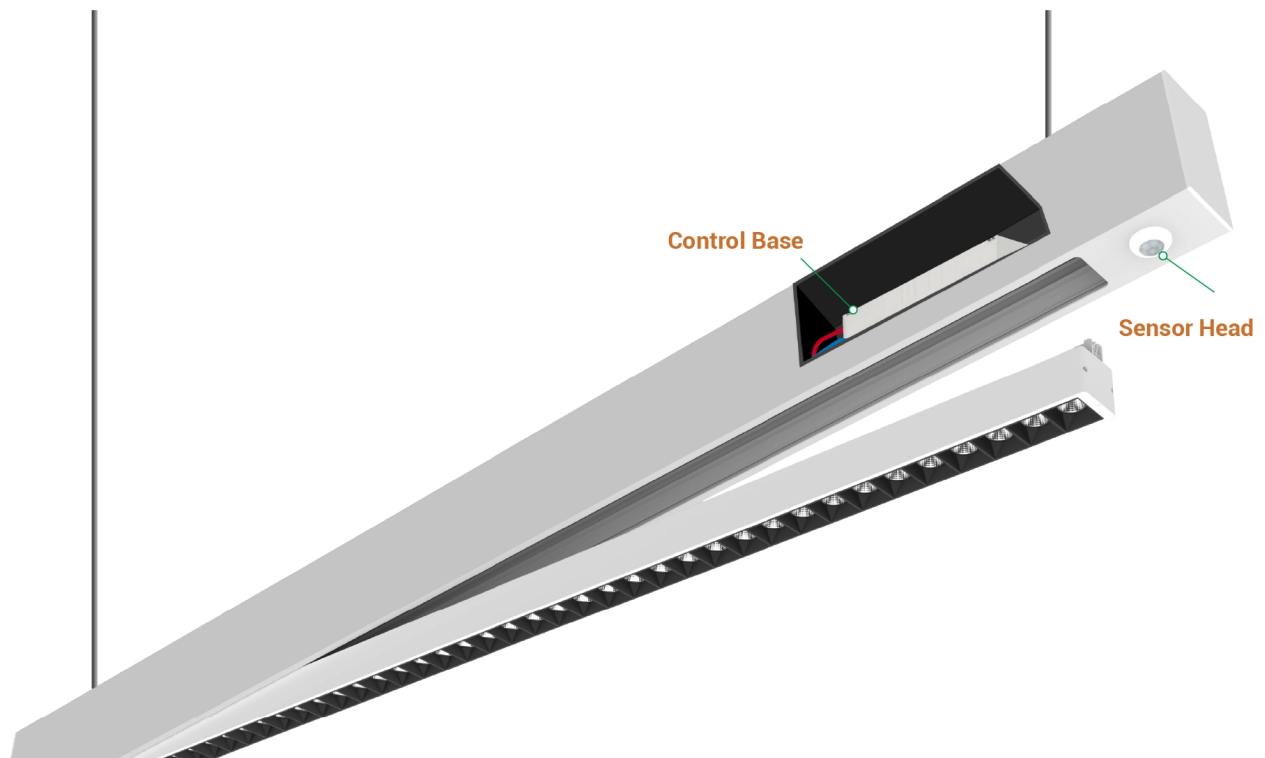
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Technical Drawing



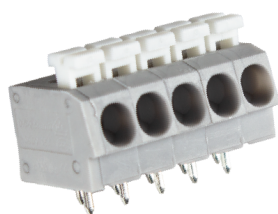
Application Example



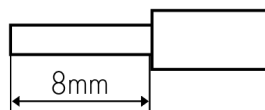
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Wire Preparation

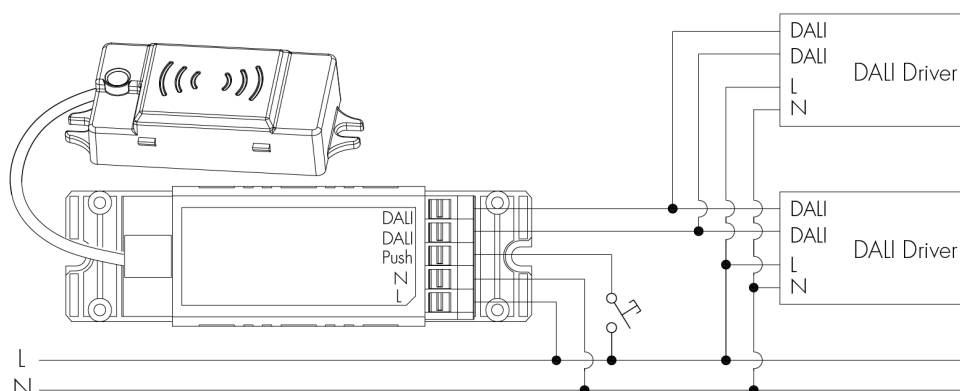


0.75~1.5mm²



To make or release the wire from the terminal, use a screwdriver to push down the button. 1.200metres (total) max. for 1mm² CSA (Ta = 50°C) 2.300metres (total) max. for 1.5mm² CSA (Ta = 50°C)

Wiring Diagram



Commissioning Instructions and Precautions

A. Installation Notes

1. This product should be installed by a qualified electrician.
2. To ensure better detection, keep the sensor lens part beyond the surface of the light fixture.
3. We recommend the mounting distance between sensor to sensor should be more than 2m to prevent sensors from false-triggering.

B. Sensor head Precautions

1. The control base can be used only after it is connected to the sensor head via RJ12 connection.
2. The push function and commission type are determined by the included sensor head.
3. This is a non-Bluetooth base. All Bluetooth functions (such as tri-level control, daylight harvest, and circadian rhythm) can only be realized when it is connected to a Bluetooth sensor head.

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

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

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Options

Compatible products (for full functionality)



HBT01

Bluetooth HF Lowbay | Photocell Advance | RJ12 connector to control body
www.hytronik.com/product/HBT01



HBT02

Bluetooth Receiver | Photocell Advance | RJ12 connector to control body
www.hytronik.com/product/HBT02



HIR01/AA

PIR Lowbay | Daylight Harvest | RJ12 connector to control body
www.hytronik.com/product/HIR01-AA



HIR01/FM

PIR Lowbay | Daylight Harvest | RJ12 connector to control body
www.hytronik.com/product/HIR01-FM



HIR02

PIR Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/HIR02



HIR02/AA

PIR Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/HIR02-AA



HIR02/FM

PIR Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/HIR02-FM



HIR04

PIR Lowbay | Photocell Advance | RJ12 connector to control body
www.hytronik.com/product/HIR04



HIR09/AA

PIR Highbay | Adjustable Angle | RJ12 connector to control body
www.hytronik.com/product/HIR09-AA



HIR09/F

PIR Highbay | Daylight harvest | RJ12 connector to control body
www.hytronik.com/product/HIR09-F



HIR09/S

PIR Lowbay | Daylight harvest | RJ12 connector to control body
www.hytronik.com/product/HIR09-S



HIR10

PIR Highbay | Daylight Harvest | RJ12 connector to control body
www.hytronik.com/product/HIR10



HIR13/AA

Bluetooth PIR Highbay | Adjustable Angle | RJ12 connector to control body
www.hytronik.com/product/HIR13-AA



HIR13/C

Bluetooth PIR Highbay | Circadian Rhythm | RJ12 connector to control body
www.hytronik.com/product/HIR13-C



HIR13/F

Bluetooth PIR Highbay | Circadian Rhythm | RJ12 connector to control body
www.hytronik.com/product/HIR13-F



HIR13/S

Bluetooth PIR Highbay | Circadian Rhythm | RJ12 connector to control body
www.hytronik.com/product/HIR13-S



HIR16

Bluetooth PIR Highbay | Circadian Rhythm | RJ12 connector to control body
www.hytronik.com/product/HIR16



HIR17

PIR Lowbay | Daylight harvest | RJ12 connector to control body
www.hytronik.com/product/HIR17

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Options

Compatible products (for full functionality)



HIR17/R

PIR Midbay | Daylight harvest | RJ12 connector to control body
www.hytronik.com/product/HIR17-R



HIR19/AA

PIR Highbay | Adjustable Angle | RJ12 connector to control body
www.hytronik.com/product/HIR19-AA



HIR19/C

PIR Highbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/HIR19-C



HIR19/F

PIR Highbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/HIR19-F



HIR62

Bluetooth PIR Lowbay Sensor Head | RJ12 connector | Conduit Screws
www.hytronik.com/product/HIR62



HIR62/R

Bluetooth PIR Midbay Sensor Head | RJ12 connector | Conduit Screws
www.hytronik.com/product/HIR62-R



SAM11

HF Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/SAM11



SAM11/I

HF Lowbay | Photocell Advance | RJ12 connector to control body
www.hytronik.com/product/SAM11-I



SAM7

HF Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/SAM7



SAM7/FM

HF Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/SAM7-FM



SAM7/I

HF Highbay | Photocell Advance | RJ12 connector to control body
www.hytronik.com/product/SAM7-I



SAM8

HF Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/SAM8



SAM8/RC11

HF Lowbay | Tri-level dimming | RJ12 connector to control body
www.hytronik.com/product/SAM8-RC11

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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.



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.



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.

Check out for further explanation of features

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