

# 478 8-Subnet DALI Controller

The 8-Subnet DALI Controller can control up to eight DALI channels of up to 64 devices. It is for controlling ballasts and drivers when device addressing is not required.

This reduces commissioning and maintenance costs, as the load devices can be simply replaced. The flexible control inputs support multiple protocols by routing an input address or group to its corresponding subnet output.

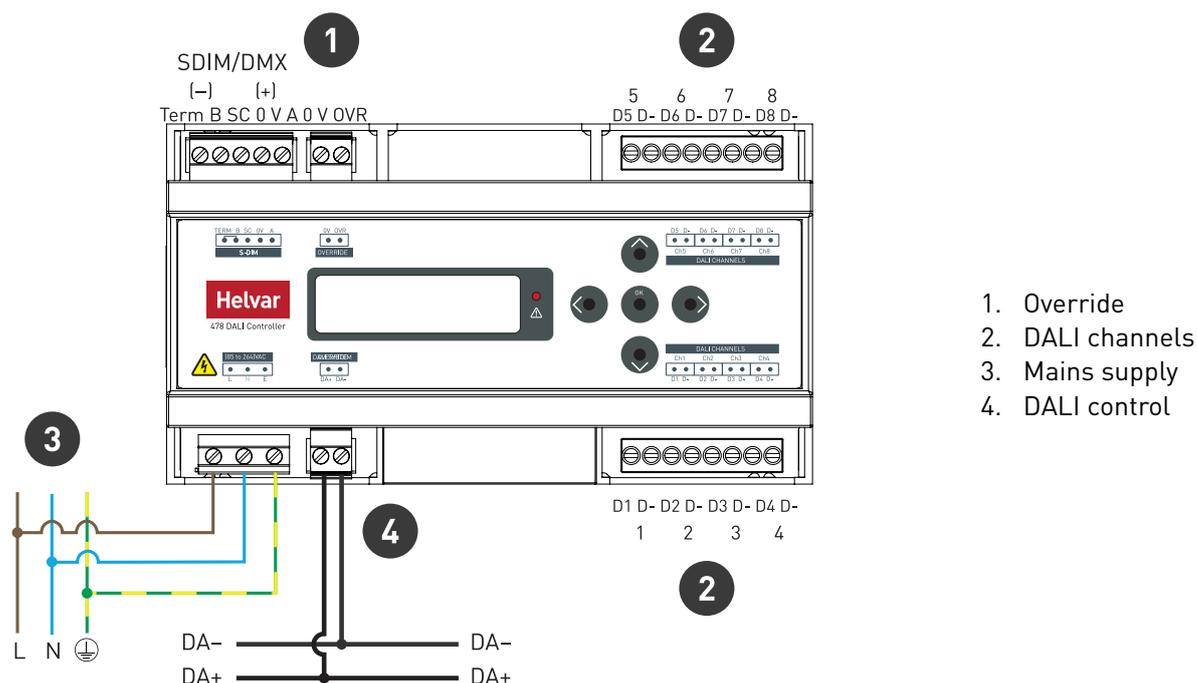
Connect the Controller to a DALI network, and configure using Helvar's Designer or Toolbox software.



## Key Features

- Control lighting using DALI Broadcast on each subnet
- Integral DALI power supply – supports up to 512 DALI devices (8 × 64 devices: 2 mA per driver/ballast)
- Lamp failure reporting per subnet
- Lower commission costs – device addressing/grouping on subnet not required
- DALI/SDIM/DMX control inputs

## Connections



1. Override
2. DALI channels
3. Mains supply
4. DALI control

# Input/Output Terminals

## SDIM/DMX

A:	Data +
B:	Data -
0 V:	Data reference
SC:	Screen: not data reference
Term:	Link to B for termination

## Override

OVR	V in < 1.5 V; I short = 1 mA
0 V	0 V return

## DALI channels 1–8

DA+:	D1;D2;D3;D4;D5;D6;D7;D8
DA-:	D-
<b>Note:</b> Max. 64 devices per channel.	

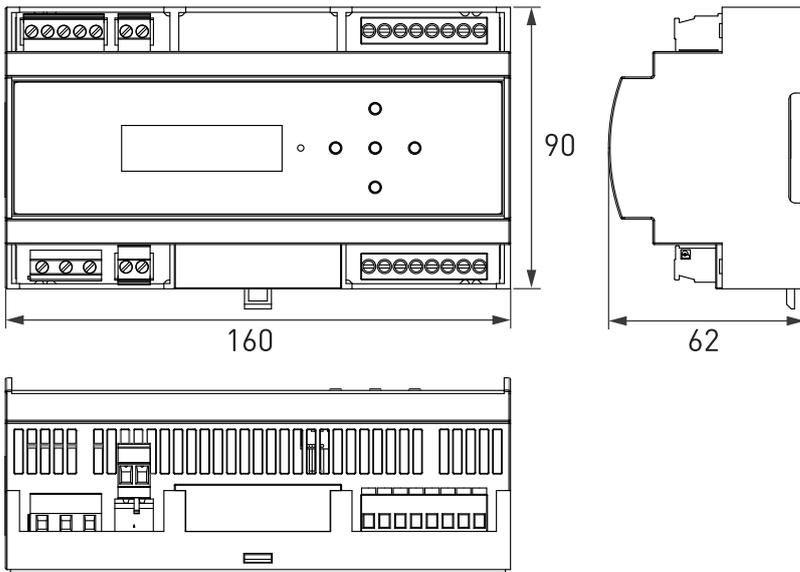
## DALI system

DA+
DA-

## Mains supply

L:	Live
N:	Neutral
Earth:	Protective earth must be connected.

# Dimensions (mm)



# Technical Data

## Connections

<b>Mains:</b>	Solid core: up to 4 mm <sup>2</sup> Stranded: 2.5 mm <sup>2</sup>
<b>DALI:</b>	Wire section: 0.5–2.5 mm <sup>2</sup> , Max. length: 300 m @ 1.5 mm <sup>2</sup>
<b>SDIM/DMX:</b>	0.22–1.5 mm <sup>2</sup> low-loss RS485 type (multistranded, twisted and shielded)
<b>Cable rating:</b>	All cables, including outputs, must be mains rated.

## Electrical data

<b>Mains supply:</b>	100–240 VAC, 50/60 Hz
<b>External MCB protection:</b>	Max. 6 A  The external power supply must be protected.
<b>Isolation:</b>	Between mains supply, DALI outputs, DALI system, and SDIM/Override connectors. DALI channels are not isolated from each other.
<b>Standby power:</b>	No standby mode – DALI power provided for DALI channels.
<b>Max. total losses:</b>	7 W
<b>DALI consumption:</b>	2 mA (DALI system input)

## Inputs

<b>Control:</b>	DALI, SDIM or DMX
<b>Override (OVR):</b>	Wired override input
<b>User interface:</b>	5 push buttons for configuration

## Outputs

<b>DALI:</b>	8 output channels
<b>Max. load per output:</b>	128 mA (up to 64 devices, limited by current consumption)

## Operating and storage conditions

<b>Ambient temperature:</b>	0 °C to +40 °C
<b>Relative humidity:</b>	Max. 90 %, noncondensing
<b>Storage temperature:</b>	-10 °C to +70 °C

## Mechanical data

<b>Dimensions:</b>	160 × 90 × 62 mm (9U)
<b>Mounting:</b>	DIN rail
<b>Material:</b>	Polycarbonate/ABS mix, UL94 V-0
<b>Weight:</b>	250 g
<b>IP rating:</b>	IP00 (For installation in a restricted access location only)

## Conformity and standards

<b>Conformity:</b>	 
<b>EMC emission:</b>	EN 55015
<b>EMC immunity:</b>	EN 61547
<b>Safety:</b>	EN 61347-2-11
<b>DALI:</b>	IEC 62386
<b>SDIM:</b>	Helvar protocol (RS485, 115 kbps)
<b>DMX:</b>	DMX512-A protocol (max. refresh rate: 33 Hz)
<b>Environment:</b>	Complies with WEEE, RoHS and REACH directives.

## Compatibility

<b>Designer:</b>	4.2.18 or higher
<b>Toolbox:</b>	2.3.3 or higher