

DIM 8 8-Channel Dimmer Module (458)

freedom in lighting

Helvar



The 458/DIM8 is an 8-channel digital thyristor dimmer module, capable of leading-edge dimming of resistive and inductive loads. It has both a DALI and an S-DIM/ DMX interface, and therefore can be fully integrated into a Digidim or an Imagine router system. It can also be used on the TouchPanel, or used on standalone DALI or Digidim systems.

The module has 8 channels rated at 10 A, with a total current capacity of 48 A, which can be configured as 8 × 6 A channels or 4×10 A channels.

The front of the module is equipped with an LCD display and keypad to set basic configuration parameters and provide basic control of channel and output levels.

The module is easily fitted to a Digidim 458Mx mechanical chassis, in which each load channel is protected by an individual MCB.

Note: Digidim control modules are supplied separately from the 458Mx mechanical chassis: suitable chassis are ordered separately.

Key Features

- Easily attached to a 458Mx chassis and connected to the mains supply for quick installation.
- LCD display screen and a 5-button keypad for monitoring, configuration and manual control.
- Auxiliary power supply can be used to power one TouchPanel.
- Built-in Digidim power supply, which can be used to power DALI systems if required.

Options Module

There is an internal connection for an options module, which is sold separately. The options module is used to convert 4 channels into either:

1-10 V

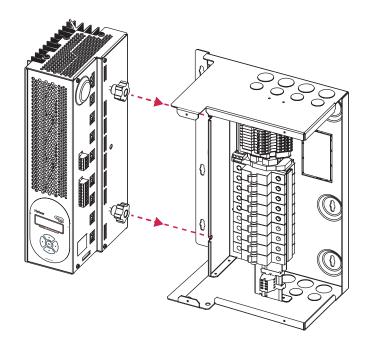
- → sink, 50 ballasts drive
- DSI (Digital Signal Interface)
- \rightarrow 10 ballasts drive
- PWM (Pulse Width Modulation) → 10 ballasts drive
- DALI broadcast
- \rightarrow 10 ballasts drive

Installation Notes

- This involves removing the cover from the chassis.
- Do NOT connect DALI and S-DIM or DMX at the same time.
- Refer to the 458/DIM8 Installation Guide and 458Mx Chassis Installation Guide for details.



Installation





Technical Data freedom in lighting

Connections

DALI: $0.5 \text{ mm}^2 - 1.5 \text{ mm}^2 \text{ (max. } 300 \text{ m}$

@ 1.5 mm²)

S-DIM / DMX: 0.22 mm² – 1.5 mm² low-loss

RS485 Type (multistranded, twisted

and shielded)

Override (OVR): 0.5 mm² – 1.5 mm²

(screened and twisted)

Power

Mains supply: 85 VAC - 264 VAC, 45 Hz - 65 Hz

Power consumption: 1.3 W (no DALI or TouchPanel PSU

used)

Supply

Supply current: 48 A (max.)

Nominal load: $8 \text{ A} \times 6 \text{ A} \text{ or } 4 \text{ A} \times 10 \text{ A loads (max.}$

48 A combined)

DALI supply: 250 mA (max.), 16 VDC (nominal) **TouchPanel supply:** 250 mA (max.), 16 VDC (nominal)

Protection

Electrical protection: 6 A MCB and PTC for control board

(MCB type C 10 kA). See 458Mx

installation guide.

Thermal protection: Control board – resettable fuse

Power devices - thermal sensing

Installation

Mounting: Attached to 458M1, 458M2,

or 458M3 chassis

Mechanical data

Dimensions: $360 \text{ mm} \times 105 \text{ mm} \times 170 \text{ mm}$ Housing:Power coated steel (Black)

Weight: 6.2 kg

Heatsink: Anodised aluminium

Isolation: 4 kV **IP code:** IP20

Operating conditions

Ambient temperature: 0 °C to +40 °C

Relative humidity: Max. 90 %, non-condensing

Storage temperature: $-10 \, ^{\circ}\text{C}$ to $+70 \, ^{\circ}\text{C}$

Conformity and standards

EMC emission: EN 55015
EMC immunity: EN 61547
Safety: EN 60950

DALI data transfer: According to DALI standard

IEC60929, with Helvar extensions

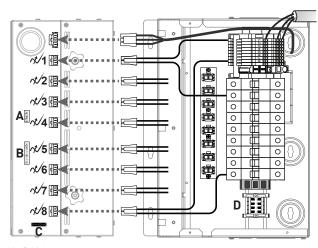
S-DIM data: Helvar protocol (RS485, 115 kbps)

DMX data: DMX512-A protocol

Environment: Complies with WEEE and RoHS

directives

Connections



- A: DALI supply
- B: TouchPanel supply, OVR,S-DIM/DMX
- **C:** Options module socket
- D: S-DIM/DMX cable loom

Dimensions (mm)

