CTR8 8-Channel Ballast Controller Module (458)

The 458/CTR8 is an 8-channel digital ballast controller module, capable of controlling either 0–10 V, 1–10 V, DSI®, DALI broadcast or PWM 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 on standalone DALI or Digidim systems.

The module has 8 high inrush relays, rated at 16 A per channel.

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: The 458/CTR8 modules are supplied separately from the 458Mx mechanical chassis.

LCD Display

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.
- Universal mains power supply (85 VAC – 264 VAC, 45 Hz – 65 Hz).

Control Features

Each channel of the control module can be configured to operate in any of the following modes:

- 0–10 V $\rightarrow$ source 20 mA
- 1–10 V $\rightarrow$ sink 100 mA
- DSI® (Digital Signal Interface) $\rightarrow$ source 100 mA
- PWM (Pulse Width Modulation) $\rightarrow$ source 100 mA
- DALI broadcast $\rightarrow$ source 100 mA
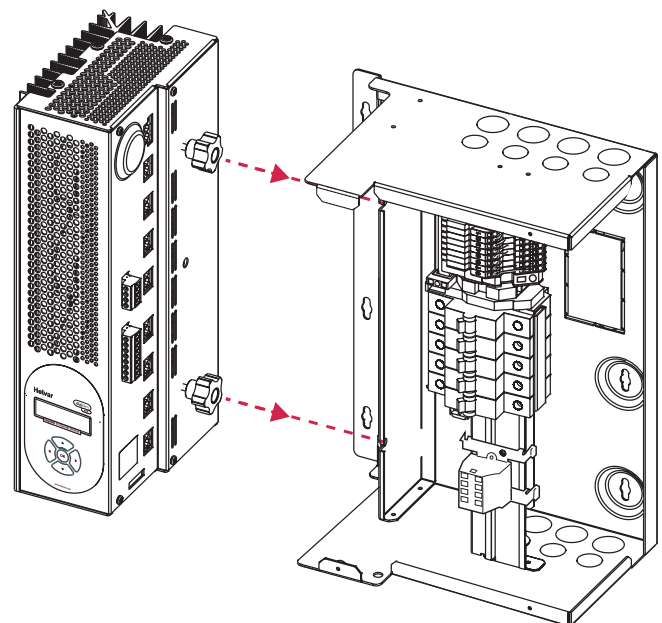
Installation Notes

- 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/CTR8 Installation Guide and 458Mx Chassis Installation Guide for details.

Installation

DSI® is a registerd trademark of Tridonic GmbH.

Technical Data

Connections

DALI:	0.5 mm² – 1.5 mm² (max. 300 m @ 1.5 mm²)
S-DIM / DMX:	0.22 m² – 1.5 mm² low-loss RS485 Type (multistranded, twisted and shielded)
Override (OVR):	0.5 mm² – 1.5 mm² (screened and twisted)
Relay contacts:	High inrush, single pole single throw (SPST), normally open (NO), volt-free
Voltage:	400 VAC
Isolation:	4 kV
Max. load per contact:	16 A resistive/incandescent, 10 A HID (cos y = 0.6)
Number of devices:	Quantity is limited by MCB: refer to manufacturer's data. External protection must not exceed 16 A type C MCB.

Outputs

0–10 V:	Source 20 mA
1–10 V (50 ballasts)	Sink 100 mA
DALI/DSI® (50 ballasts)	Source 100 mA
PWM +/- (50 ballasts)	Source 100 mA

Power supply

Mains supply:	85 VAC – 264 VAC, 45 Hz – 65 Hz
Power consumption:	1.2 W (excluding loads)

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

Installation

Mounting:	Attached to 458M1, 458M2, or 458M3 chassis

Mechanical data

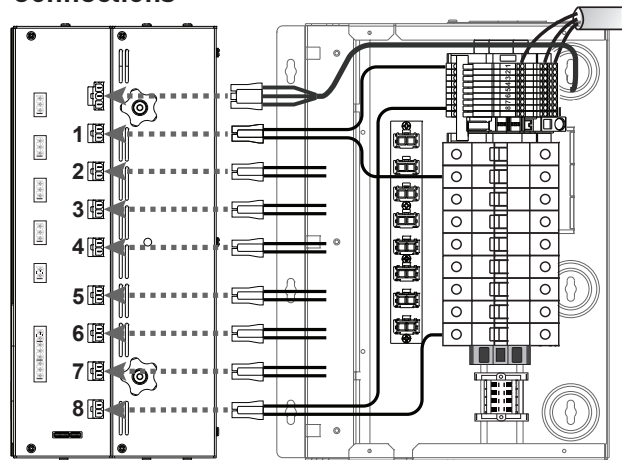|	
Dimensions:	360 mm × 105 mm × 170 mm
Housing:	Power coated steel (Black)
Weight:	2.2 kg
Heatsink:	Anodised aluminium
IP code:	IP20

Operating conditions

Ambient temperature:	0 °C to +40 °C
Relative humidity:	Max. 90 %, non-condensing
Storage temperature:	–10 °C to +70 °C

Conformity and standards

EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 60950
DALI data transfer:	According to DALI standard IEC 60929, 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: Control output
B: DALI output
C: OVR, S-DIM/DMX
D: S-DIM/DMX cable loom

Dimensions (mm)