

# 458/CTR8 8-Channel Ballast Controller Module

The 458/CTR8 is an eight-channel digital ballast controller module capable of controlling 0–10 V, 1–10 V, DSI®, DALI broadcast or PWM loads. It has both a DALI and an SDIM/ 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 eight high-inrush relays, rated at 16 A per channel.

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

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



Note: The 458/CTR8 8-Channel Ballast Controller Modules are supplied separately from the 458Mx chassis.

## Key Features

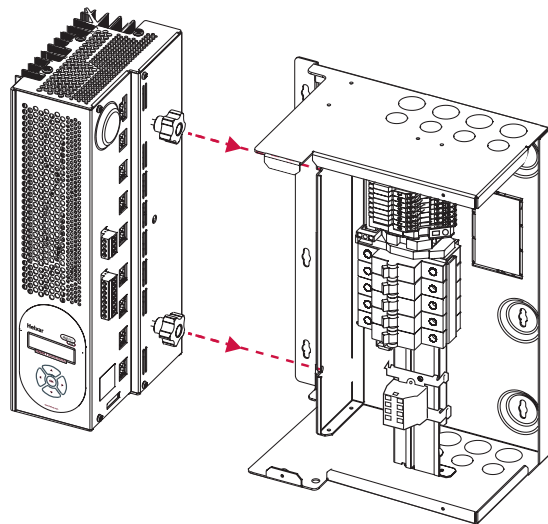
- Easily attached to a 458Mx chassis and connected to the mains supply for quick installation.
- LCD display screen and a five-button keypad for monitoring, configuration and manual control.
- Universal mains power supply: 85 VAC – 264 VAC (absolute).

## Control Features

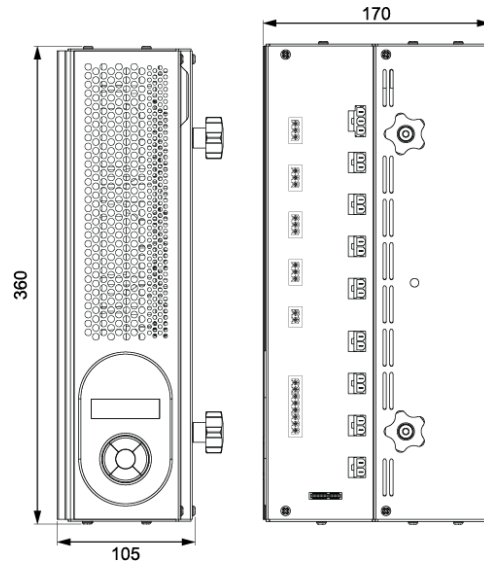
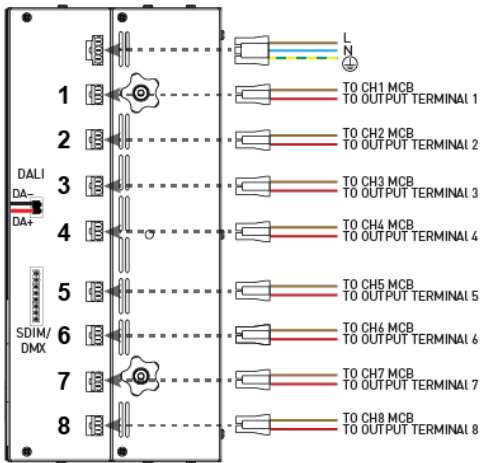
Each channel of the control module can be configured to operate in any of the following modes:

0–10 V	source 20 mA
1–10 V	sink 100 mA
DSI® (Digital Signal Interface)	source 100 mA
PWM (Pulse Width Modulation)	source 100 mA
DALI broadcast	source 100 mA

DSI® is a registered trademark of Tridonic GmbH.




## Connections and Dimensions (mm)



## Technical Data

Connections	
DALI:	0.5 mm <sup>2</sup> – 1.5 mm <sup>2</sup> (max. 300 m @ 1.5 mm <sup>2</sup> )
SDIM/DMX:	0.22 mm <sup>2</sup> – 1.5 mm <sup>2</sup> low-loss RS485 Type (multistranded, twisted and shielded)
Override (OVR):	0.5 mm <sup>2</sup> – 1.5 mm <sup>2</sup> (screened and twisted)

Relay	
Relay contacts:	High inrush, single pole, single throw (SPST), normally open (NO), volt-free
Voltage:	400 VAC
Max. load per contact:	16 A resistive/incandescent, 10 A HID (cos $\gamma = 0.6$ ).  Note: For ballasts, 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	
Mains supply:	100 VAC – 240 VAC (nominal) 85 VAC – 264 VAC (absolute) 45 Hz – 65 Hz
Power consumption:	1.2 W (excluding loads)

Protection	
Power circuit protection:	6 A max. external protection, earth mandatory
Thermal protection:	Control board – resettable fuse

Operating and storage conditions	
Ambient temperature:	0 °C to +40 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	-10 °C to +70 °C

Mechanical data	
Dimensions:	105 mm × 360 mm × 170 mm
Weight:	2.2 kg
Mounting:	Attached to 458M1, 458M2, or 458M3 chassis
Housing:	Powder coated steel (black)
IP rating:	IP20

Conformity and standards	
Conformity:	
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
DALI data transfer:	According to DALI standard IEC 60929, with Helvar extensions
SDIM data:	Helvar protocol (RS485, 115 kbps)
DMX data:	DMX512-A protocol (max. refresh rate: 33 Hz)
Environment:	Complies with WEEE and RoHS directives.