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, 6 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.
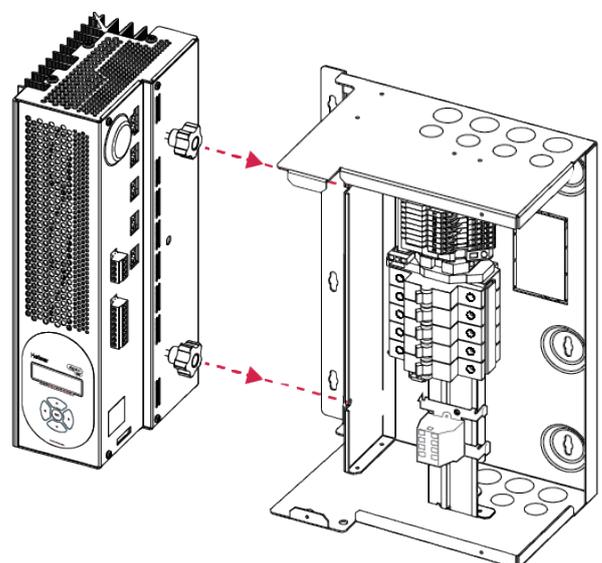
Key Features

- 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
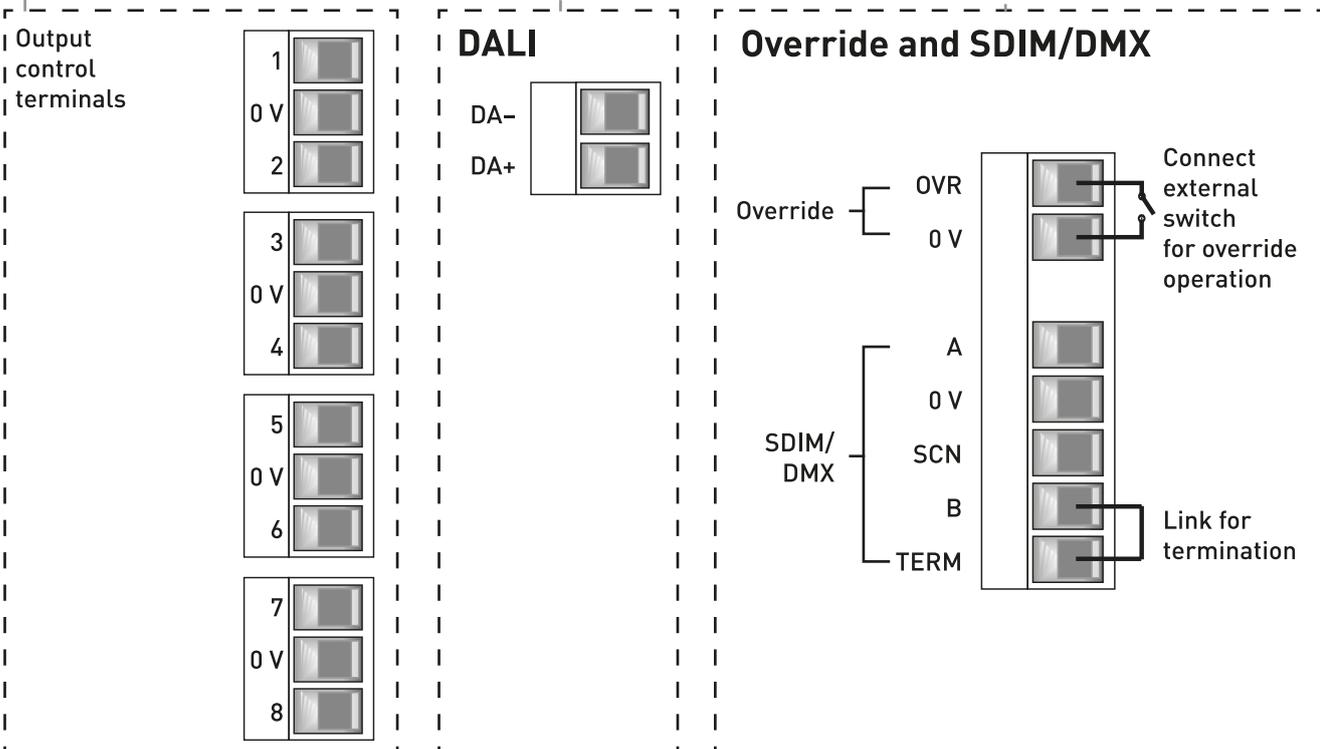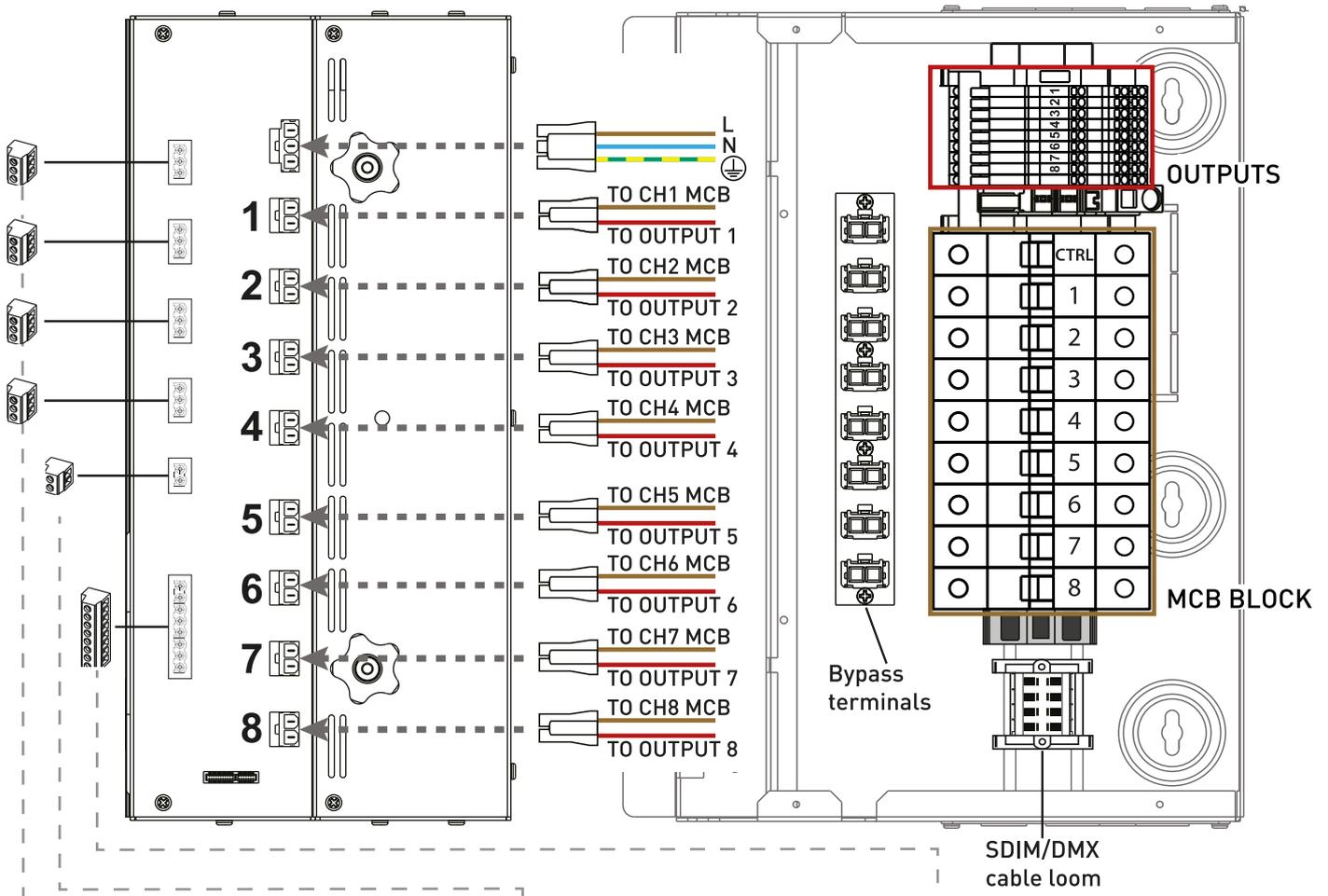- Universal mains power supply: 100–240 VAC

Control Features

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

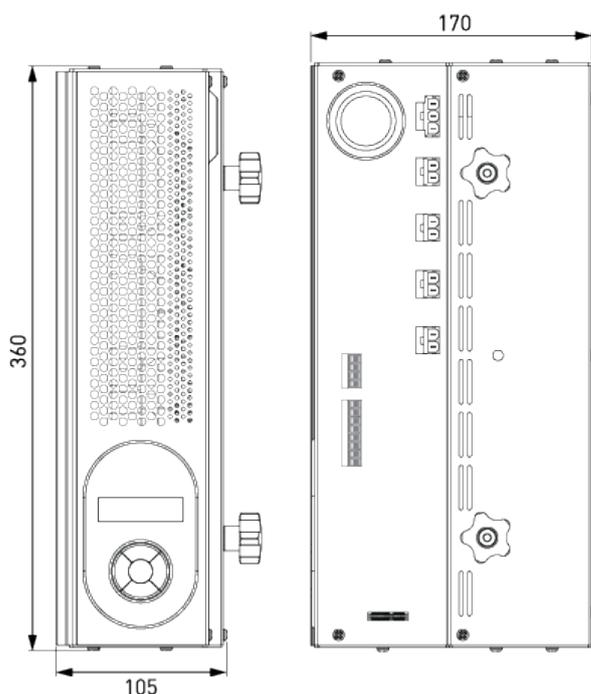|	
0–10 V	source 20 mA
1–10 V	sink 100 mA
DSI® (Digital Signal Interface)	source 100 mA
PWM (Pulse Width Modulation)	source 100 mA
DALI broadcast	source 100 mA

DSI® is a registerd trademark of Tridonic GmbH.

Connections

OUTPUTS

MCB BLOCK

CTRL
1
2
3
4
5
6
7
8

Bypass terminals

SDIM/DMX cable loom

L
N

TO CH1 MCB
TO OUTPUT 1
TO CH2 MCB
TO OUTPUT 2
TO CH3 MCB
TO OUTPUT 3
TO CH4 MCB
TO OUTPUT 4
TO CH5 MCB
TO OUTPUT 5
TO CH6 MCB
TO OUTPUT 6
TO CH7 MCB
TO OUTPUT 7
TO CH8 MCB
TO OUTPUT 8

Output control terminals

1
0 V
2

3
0 V
4

5
0 V
6

7
0 V
8

DALI

DA–
DA+

Override and SDIM/DMX

Override — OVR
0 V

Connect external switch for override operation

SDIM/DMX — A
0 V
SCN
B
TERM

Link for termination

Dimensions (mm)

Technical Data

Connections

DALI:	0.5–1.5 mm² (max. 300 m @ 1.5 mm²)
SDIM/DMX:	0.22–1.5 mm² low-loss RS485 type (multi-stranded, twisted and shielded)
Override (OVR):	0.5–1.5 mm² (screened and twisted)

Electrical data

Mains supply:	100–240 VAC, 50/60 Hz
Power consumption:	1.2 W (excluding loads)

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

Relay

Relay contacts:	High inrush, single pole, single throw (SPST), normally open (NO), volt-free
Voltage:	400 VAC
Max. load per contact:	Chassis MCB limit 6 A per channel
	Note: For ballasts, quantity is limited by MCB: refer to manufacturer's data. External protection must not exceed 6 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

Protection

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

Conformity and standards

Conformity:	CE UKCA
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
Harmonics:	EN 61000-3-2*
	* Professional equipment. Total rated power > 1 kW.
DALI & 1–10 V:	IEC 60929 with Helvar extensions
SDIM:	Helvar protocol (RS485, 115 kbps)
DMX:	DMX512-A protocol (max. refresh rate: 33 Hz)
Environment:	Complies with WEEE, RoHS and REACH directives.