8-Channel Ballast Controller Module (458/CTR8)

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.
Technical Data

Connections

**DALI:** 0.5 mm² – 1.5 mm² (max. 300 m @ 1.5 mm²)

**SDIM/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**

**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 φ = 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

**Installation**

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

**Mechanical data**

**Dimensions:** 105 mm × 360 mm × 170 mm

**Housing:** Powder coated steel (black)

**Weight:** 2.2 kg

**IP code:** IP20

**Operating conditions and storage**

**Ambient temperature:** 0 °C to +40 °C

**Relative humidity:** Max. 90 %, noncondensing

**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

**SDIM data:** Helvar protocol (RS485, 115 kbps)

**DMX data:** DMX512-A protocol (max. refresh rate: 33 Hz)

**Environment:** Complies with WEEE and RoHS directives.

Dimensions (mm)