

4-Channel Ballast Controller (474)

The DIGIDIM 474 is a 4-channel ballast controller fitted with high-inrush relays rated at 16 A per channel. These relays handle short-lived high peak currents during switch-on of loads.

The outputs can be configured to match common ballast control loads including 0/1–10 V, DSI®, DALI broadcast and PWM. They can be set to be independent of, or paired with, relay channels. The 474 ballast controller can operate with a Helvar DIGIDIM or Imagine lighting control system. It is a DIN rail mounted device for ease of installation.

The 474 ballast controller has an intuitive LED segment display and push buttons for monitoring, manual configuration and control purposes.

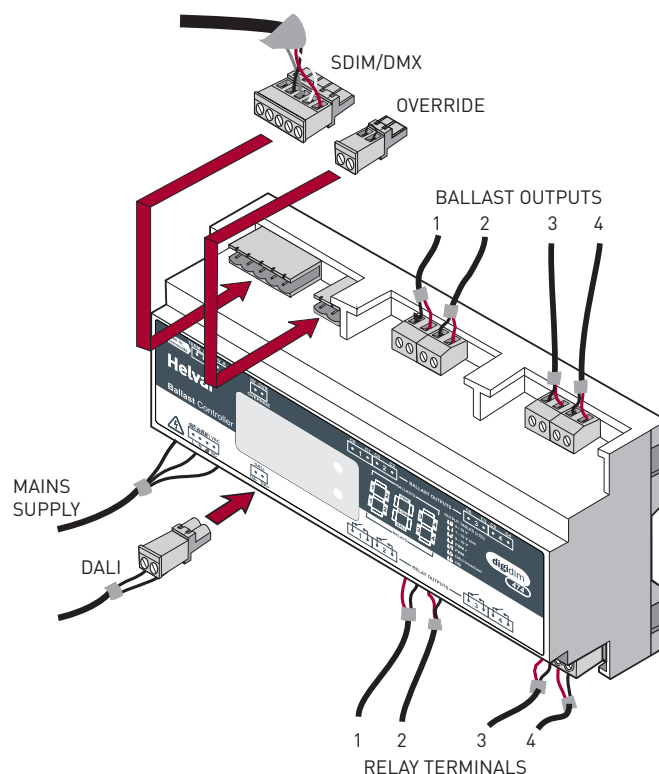
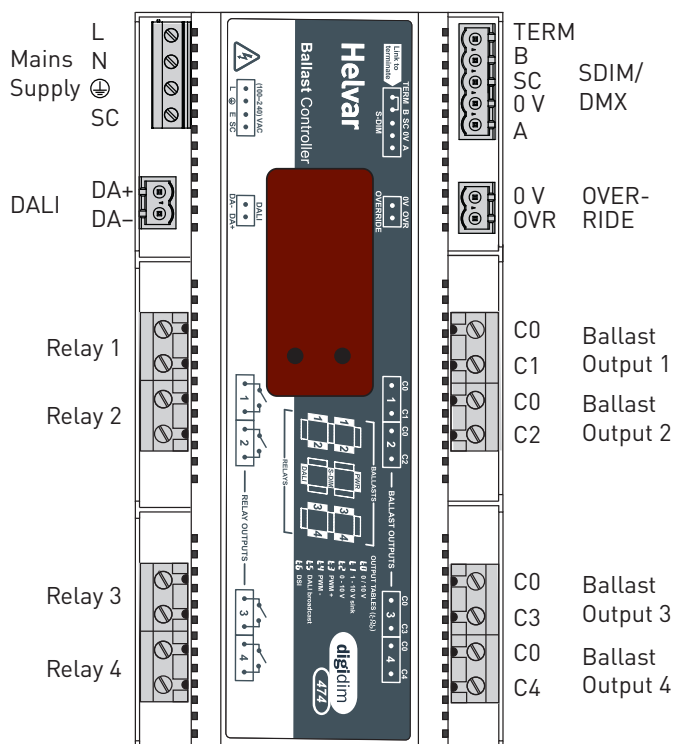


Key Features

- High inrush specification relays
- Wired override input
- LED segment display and push buttons
- Multiple output configurations of:

- 0–10 V: source 10 mA
- 1–10 V: sink 100 mA
- DALI broadcast: source 100 mA
- DSI®: source 100 mA
- PWM: source 100 mA

Connections



DSI® is a registered trademark of Tridonic GmbH.

Technical Data

Connections

Mains/relay/output:	Solid core: up to 4 mm ² Stranded: 2.5 mm ²
DALI:	0.5 mm ² – 1.5 mm ² Max. length: 300 m @ 1.5 mm ²
SDIM/DMX:	0.22 mm ² – 1.5 mm ² low-loss RS485 type (multistranded, twisted and shielded). Max. length: 1000 m (low-loss cable). Examples: Belden 8102 or Alpha 6222C. <i>Note: One twisted pair for A and B (85 Ω to 100 Ω impedance), one core or twisted pair for 0 V, and shield for screen.</i>

Power

Mains supply:	100 VAC – 240 VAC (nominal) 85 VAC – 264 VAC (absolute) 45 Hz – 65 Hz
Power consumption:	2.4 W (minimum) to 11 W (all outputs fully loaded)
External protection:	The mains supply must be protected at 6 A maximum. The relays must be protected by a 16 A Type C MCB maximum.
DALI consumption:	2 mA

Inputs

Communication:	DALI, SDIM and DMX
Override:	Wired override input
User interface:	2 push buttons for configuration

Outputs

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

Relays

Channels:	4
Relay contacts:	High inrush (800 A at 200 μs), single pole normally open (SPNO)
Max. load per contact:	16 A resistive/incandescent; 10 A HID (cos φ = 0.6). For ballasts, quantity is limited by MCB: refer to the manufacturer's data.

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:	160 mm × 90 mm × 58 mm
Housing:	DIN-rail case; 9U
Weight:	280 g
Mounting:	DIN rail (installation in switchgear/controlgear cabinet)
IP code:	IP30 (IP00 at terminals)

Conformity and standards

EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
DALI:	According to DALI standard IEC 62386, with Helvar additions
SDIM:	According to Helvar SDIM protocol
DMX:	DMX512-A protocol (max. refresh rate: 33 Hz)
Isolation:	All connectors are isolated from each other, except for SDIM/DMX to Override, and ballast output 1–2 to ballast output 3–4.
Environment:	Complies with WEEE and RoHS directives.

Dimensions (mm)

