digidim

Helvar

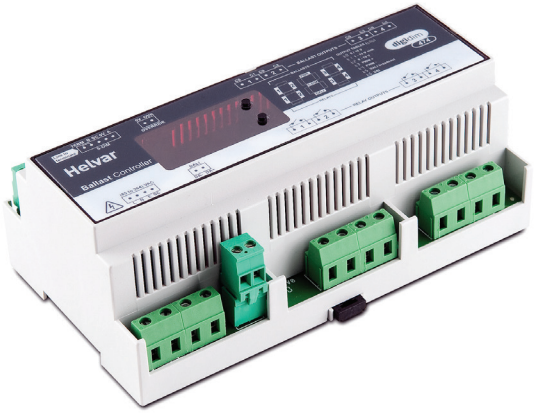
freedom in lighting

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 either a Helvar DIGIDIM or Imagine lighting control system. It is a DIN-rail mounted device for ease of installation.

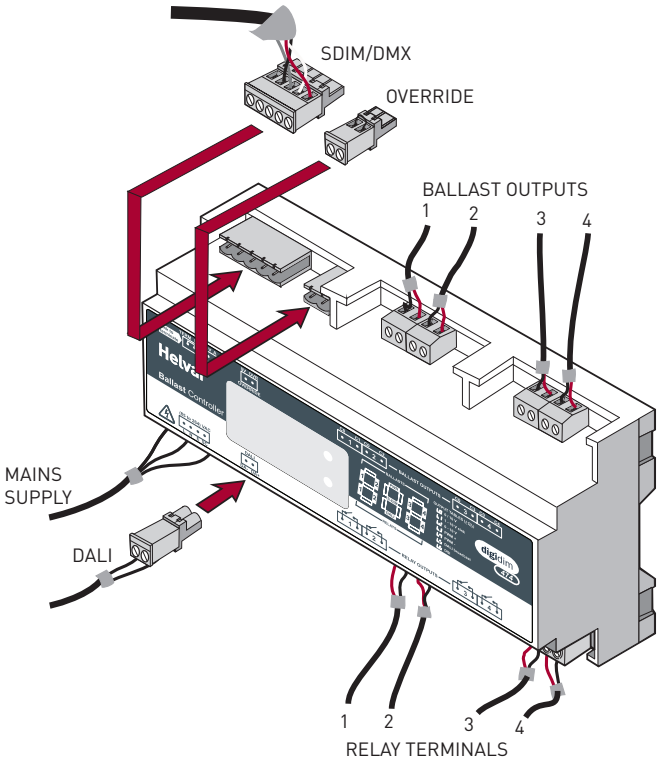
The 474 ballast controller has an intuitive LED segment display and push buttons for monitoring, manual configuration and control purposes.



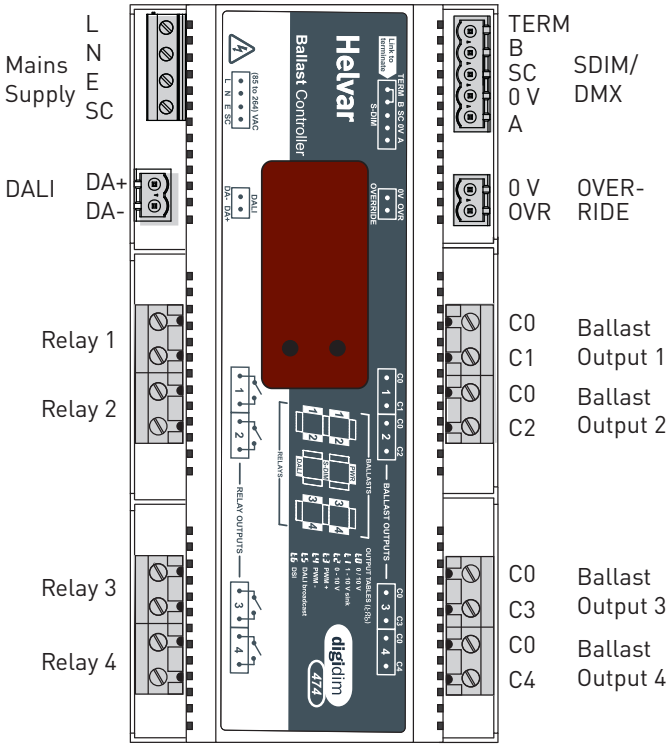
Key Features

- High inrush specification relays
- Wired override input to allow for external triggers
- 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



Installation Notes

- For installation in a restricted access location only.
- Isolate the mains supply before installation.
- The external mains supply must be protected. External protection must not exceed 6 A MCB.
- All DALI and mains cabling must be 230 V mains rated.
- Do not connect DALI and SDIM/DMX at the same time.
- Install the unit horizontally to allow for heat dissipation.
- Any enclosure must provide adequate cooling ventilation.
- Refer to the 4-Channel Ballast Controller Installation Guide.

DSI® is a registerd trademark of Tridonic GmbH.

Technical Data

Connections

Mains/relay/output:	Solid core: up to 4 mm² Stranded: 2.5 mm²
Mains:	0.5 mm² – 1.5 mm² (max. 300 m @ 1.5 mm²)
SDIM/DMX:	0.22 mm² – 1.5 mm² low-loss RS485 Type (multistranded, twisted and shielded)

Power

Mains supply:	85 VAC – 264 VAC 45 Hz – 65 Hz
Power consumption:	2.4 W (min.) to 11 W (all outputs fully loaded)
Power circuit protection:	6 A MCB maximum The external supply must be protected.
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

Relay contacts

Channels:	4
Relay contacts:	High inrush (200 µs at 800 A), single pole normally open (SPNO)
Max. load per contact:	16 A resistive/incandescent; 10 A HID (cos y = 0.6)
Number of devices:	For ballasts, quantity is limited by MCB. Refer to manufacturer's data. Relay circuit external protection must not exceed 16 A type C MCB.

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:	100 mm × 160 mm × 45 mm
Housing:	DIN-rail case; 9U
Weight:	280 g
IP code:	IP30 (IP00 at terminals)

Conformity and standards

Emission:	EN 61000–6–3
Immunity:	EN 61547
Safety:	EN 60950
DALI:	According to DALI standard IEC 62386, with Helvar additions
SDIM:	According to Helvar SDIM protocol
DMX:	According to DMX512-A protocol
Isolation:	4 kV between every connector (apart from common C0 ballast output terminals and SDIM and Override connectors)
Environment:	Complies with WEEE and RoHS directives.

Dimensions (mm)