

# 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.

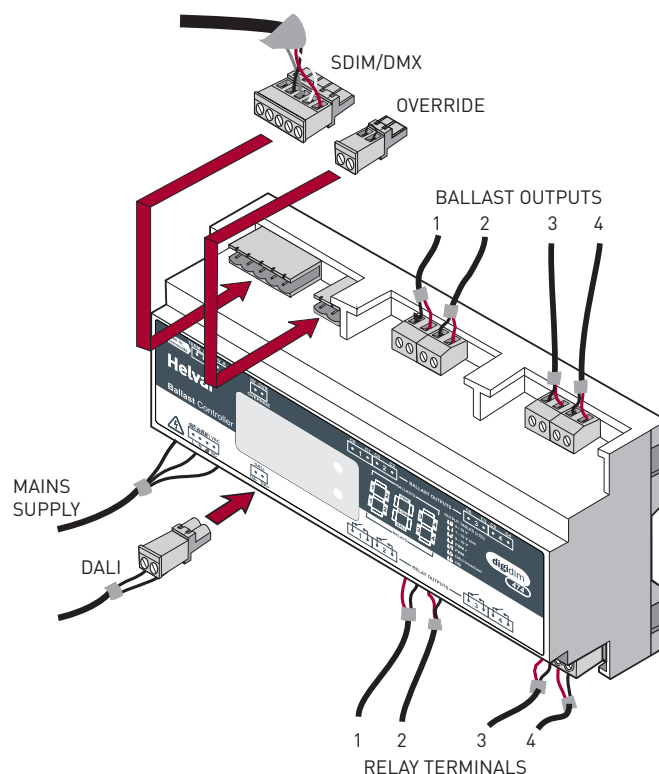
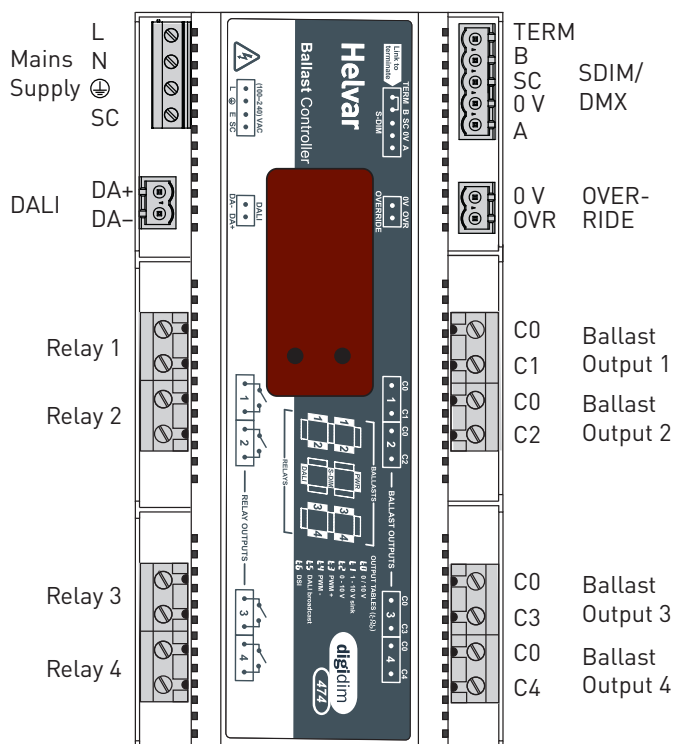


## Key Features

- 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

<b>Mains/relay/output:</b>	Solid core: up to 4 mm <sup>2</sup> Stranded: 2.5 mm <sup>2</sup>
<b>DALI:</b>	0.5 mm <sup>2</sup> – 1.5 mm <sup>2</sup> Max. length: 300 m @ 1.5 mm <sup>2</sup>
<b>SDIM/DMX:</b>	0.22 mm <sup>2</sup> – 1.5 mm <sup>2</sup> 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

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

### Inputs

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

### Outputs

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

### Relays

<b>Channels:</b>	4
<b>Relay contacts:</b>	High inrush (800 A at 200 μs), single pole normally open (SPNO)
<b>Max. load per contact:</b>	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

<b>Ambient temperature:</b>	0 °C to +40 °C
<b>Relative humidity:</b>	Max. 90 %, noncondensing
<b>Storage temperature:</b>	-10 °C to +70 °C

### Mechanical data

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

### Conformity and standards

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

### Dimensions (mm)

