

DDC116-UL

Signal Dimmer Controller



Specification Sheet

Controllers > DALI Controllers



Speed up your lighting control design and installations

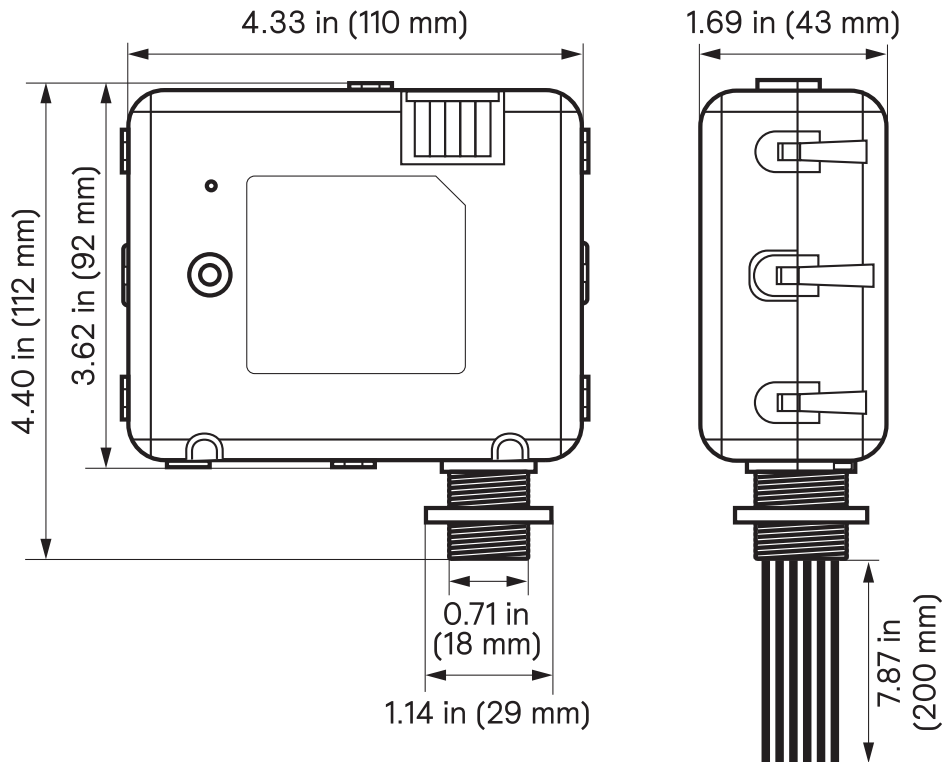
The Dynalite DDC116-UL provides intelligent networked control of 0-10 V and DALI broadcast lighting circuits, delivering the flexibility to easily scale your projects from room-based controls to complete building-wide networked controls.

The compact plenum-rated design is compatible with standard junction box wiring schemes, reducing your installation effort and project costs.

Key Features

- **Incorporates one relay output and one signal dimmer output** - Provides dimming control of 0-10 V or DALI broadcast drivers and transformers.
- **Driver standby power elimination** - Internal relay automatically isolates the lighting power circuit when driver is dimmed to 0%.
- **Compatible with DALI 209 drivers** - Provides control of tuneable white and RGBWAF luminaires.
- **UL 924 input** - Integrates seamlessly with compatible emergency systems.
- **Flexible mounting** - UL 2043 / Chicago plenumrated plastic enclosure designed for mounting directly onto a junction box.
- **Inbuilt diagnostic functionality** - Features Device Online/Offline status indication.
- **Easy to install and configure** - Reduce installation complexity and project costs.
- **Flexible deployment** - Suitable for room-based applications or integration across multiple spaces.
- **Standalone operation** - Single-button configuration assigns the DDC116-UL to one of five preconfigured lighting zones, enabling individual zone control via the Dyalite range of user interfaces and sensors, without the need for commissioning or head-end software.
- **Networked operation** - Seamless connectivity to the rest of the Dyalite system enables a range of expanded functionality such as automated scheduling, head-end software monitoring and management, and network gateway integration to third-party systems including BACnet, OPC UA, and others.

Dimensions



Specifications

Electrical		Physical	
Supply Type	Single-Phase	Dimensions	4.40 x 4.33 x 1.69 in (112 x 110 x 43 mm)
Supply Voltage	100-277 VAC	Packed Weight	0.6 lb (0.27 kg)
Supply Current	0.5 A	Construction	Polycarbonate
DyNet DC Output Voltage	12 VDC	Serial Ports	2 x RJ45 1 x 3-way cage clamp terminal (common ground)
DyNet DC Output Current	200 mA	Supply/Load Terminals	4 x flylead
Switched Outputs	1 x 20 A	Supply/Load Terminal Conductor Size	#12 AWG (2.5 mm ²)
IEC Overvoltage Category	III	Dry Contact Terminals	1 x 2-way cage clamp terminal (common ground)
Control		Cage Clamp Terminal Conductor Size	#24-16 AWG (0.2-1.5 mm ²)
Communication Ports	1 x RS-485	Control Terminals	2 x flylead
Supported Protocols	DyNet DMX Rx	Control Terminal Conductor Size	#18 AWG (0.75 mm ²)
DMX Rx Channels	1	Flylead Length	7.87 in (200 mm)
Control Channel Outputs	1 (0-10 V, DALI Broadcast) (Supports DALI 209 TW and RGBWAF)	Environment	
Dry Contact Inputs	1 x AUX/UL 924	Operating Temperature	32° to 113°F ambient (0° to 45°C)
User Controls	1 x service switch	Storage/Transport Temperature	-13° to 185°F ambient (-25° to 85°C)
Indicators	1 x service LED	Relative Humidity	≤90% non-condensing
Diagnostic Functions	Device online/offline status	IEC Pollution Degree	II
		Installation Note	For indoor installation only
		Compliance	
		Certifications	UL/cUL, FCC, ISED, RoHS
		IP Rating	IP20
		Plenum Rating	UL 2043

Diagnostic Note

- Dynalite System Manager required for analysing diagnostic data.
- The availability of some diagnostics is dependent on driver type.



Output Channel Ratings

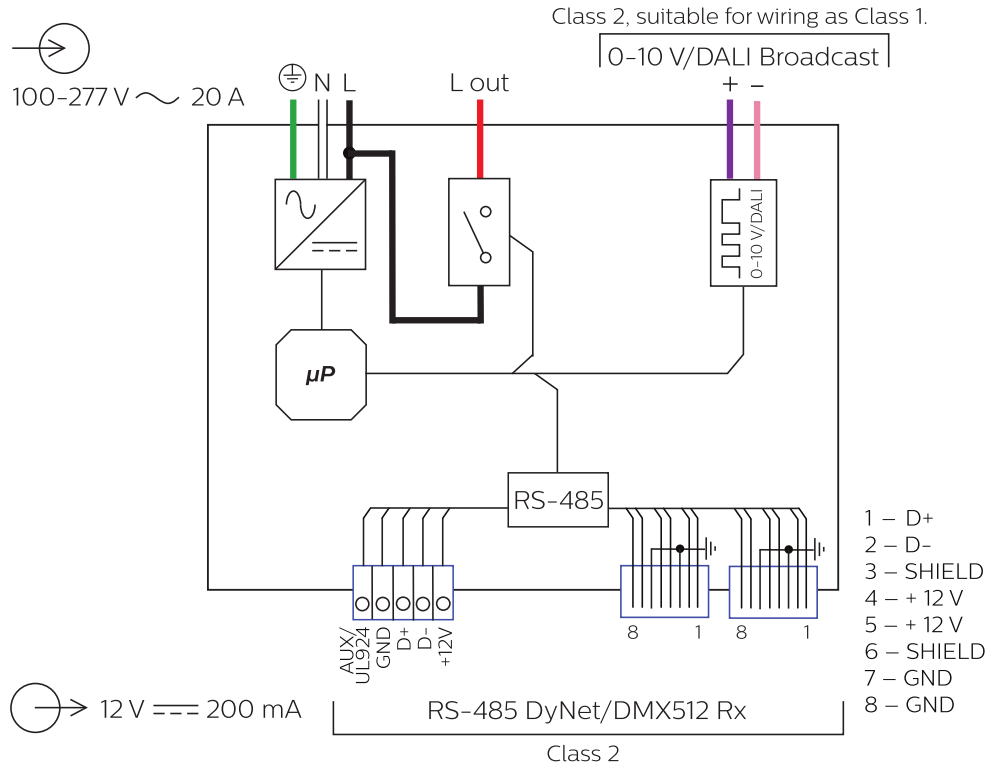
Load Type	CH1
General Use	20 A, 277 VAC Controlled receptacle (plug load)
Electronic Driver	16 A, 277 VAC
Motor	16 FLA (1 HP), 120 VAC 14.5 FLA (2½ HP), 240 VAC 14.1 FLA (3 HP), 277 VAC
Pilot Duty	6 A, 120 VAC 3 A, 240 VAC 2.6 A, 277 VAC

To avoid electrical overload, total external connected load must not exceed output rating.

Control Channel Ratings

DALI Broadcast	
Guaranteed Current	100 mA
Maximum Current	250 mA
Maximum Drivers/Channel	40
Insulation	Basic
0-10 V	
Current (Sink)	100 mA
Current (Source)	100 mA

Electrical Drawing



Ordering Codes

Product	12NC
DDC116-UL	913703376709