

PPU-109DA

Power Pack & Controller



OVERVIEW

The PPU-109DA is a DALI/0-10V selectable power pack and controller designed to provide standalone or network based smart lighting control with the connection of IR-TEC's SmartDALI sensor. This device not only supplies bus power for operating the connected sensor, but also provides DALI/0-10V output to control the integrated luminaire in response to the sensor detection.

The PPU-109DA can be used to control DALI, 0/1-10V or typical driver/ballast available in the market. IR-TEC's exclusive Hybrid Switching technology is employed to protect the relay contacts from being fused by the inrush current generated while switching on the LED drivers. A momentary push button input can be connected to enable manual on/off and dimming control while allowing the sensor to automatically shut off the light after the area is vacant for a period of time.

Through easy plug-in connection with the MRD-124S SmartDALI sensor, a standalone occupancy/vacancy sensing based control can be easily achieved. It can also connect with the ON-MRD-124S SmartDALI OS-NET sensor to deliver a state-of-the-art wireless networked smart lighting solution for general commercial application. In addition to smart lighting control, the PPU-109DA can be used as a load controller for motors, fans, ventilators, motorized dampers.

FEATURES

- Class 2 switching mode power supply device
- 120-277VAC line voltage power input
- DALI bus power output for sensor operation
- Hybrid Switching technology HIC protection
- Momentary contact input for manual control
- Available with DALI, 0/1-10V, or typical driver
- RJ connector enable easy sensor connection
- Push-in terminals for power and control wiring

APPLICATION

- Lighting Control
- Load Control

The PPU-109DA can be applied to control lighting circuits, motors, self-contained air conditioners, VAV systems, fans and motorized damper controls with the provision of sensor signal input. A momentary push button signal can be connected to provide manual control if required. It is ideal for application requires line voltage load switching with electrical safety low voltage (SELV) control signal.

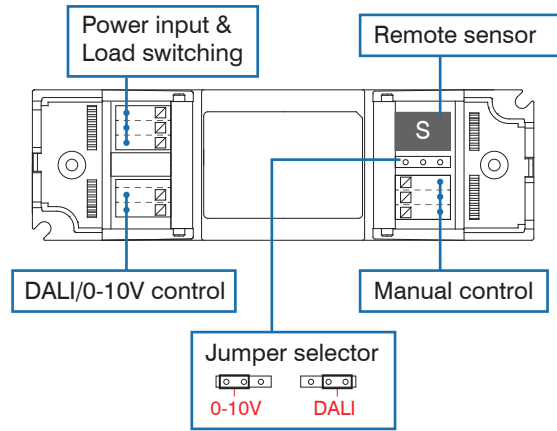
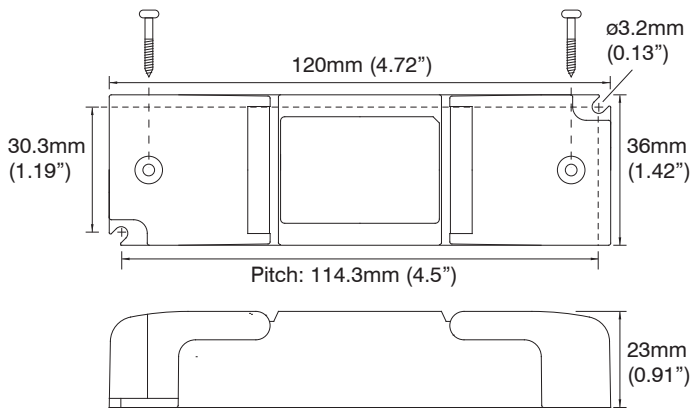
SPECIFICATIONS

Power supply	120/240/277VAC, 50/60Hz
Power consumption	<0.5W @standby
Bus power output	16 VDC, 100mA max.
Maximum load	720VA@120V (6A)
Ballast Electronic (LED driver)	1440VA@240V (6A)
	1660VA@277V (6A)
HIC protection	84A, 16.7 msec max.
Sensor input	DALI
Dim control output	DALI broadcast/0-10V selectable
Manual control input	Momentary contacts
Op. humidity	95% RH max.
Op. temperature	-20°C~70°C (-4°F~158°F)
Dimensions	120x36x23mm (4.72"x1.42"x0.91")

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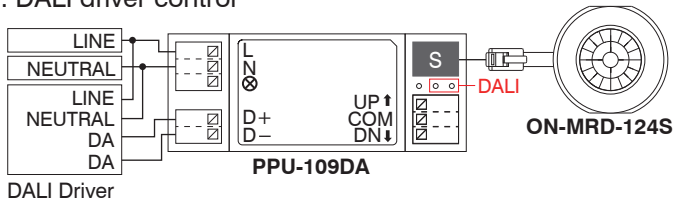
DIMENSIONS



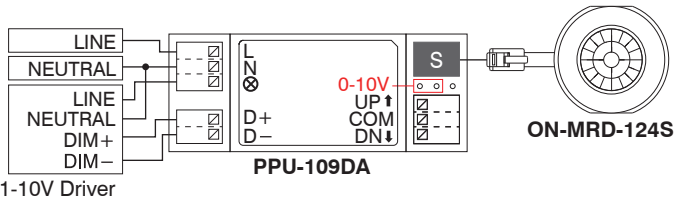
WIRING DIAGRAM

OS-NET Wireless Network Control

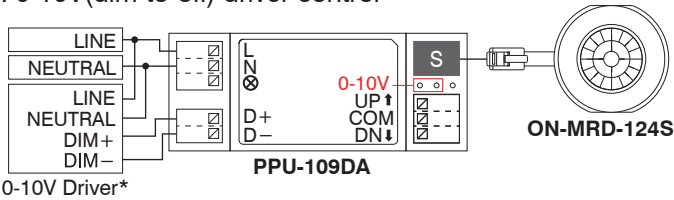
1. DALI driver control



2. 1-10V driver control

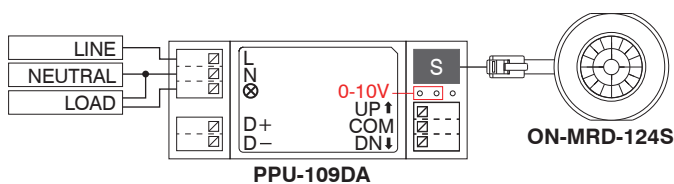


3. 0-10V(dim-to-off) driver control



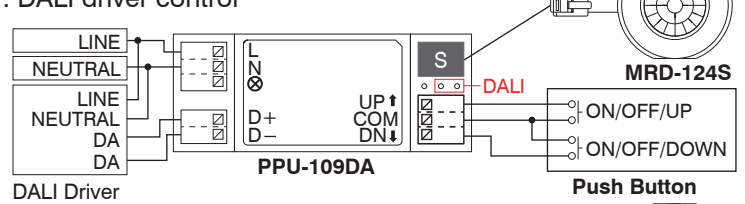
*Note: for the driver that cannot turn off the light at 0V, please try wiring diagram 2 above.

4. Non-dimmable lighting control, ON-OFF switching

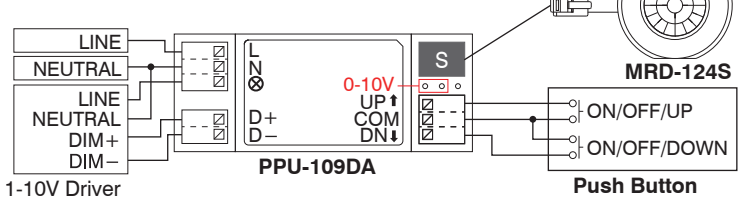


DALI/0-10V Standalone Control

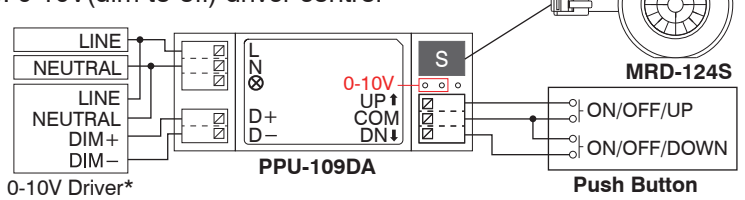
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2. 1-10V driver control



3. 0-10V(dim-to-off) driver control



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