

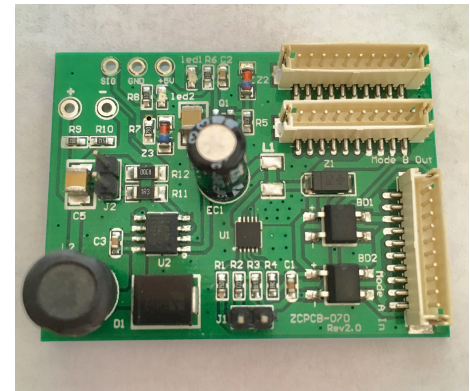


# Austin Led Consultants

DMX and Led power over ethernet

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## PL-AT-DR1-OEM 802.3af/at LED driver

### Product Description - PL-AT-DR1 ( OEM )

This LED driver is powered by Ethernet cable! You can now add LED light anywhere – without the need for 110v wiring. Bright 8 or 20 watts of long lifetime LED lighting is activated by a high signal on the SIG pin – for example from a Passive Infrared Sensor or Dusk/Dawn photocell. PoE allows power and data to be carried on Cat-5e cable, and our solution allows a LED to share one cable with another PoE device – like a Camera. Use either 802.3af or passive injectors and switches over CAT5e, CAT6 or CAT7 Ethernet network cable.

The board has connectors for either Mode A active or Mode B passive PoE. Intended for use with Cisco or similar PoE switches, the Mode A input uses active PoE to negotiate with the switch to activate power for the LED. The PoE switch supplies 48, 51 or 56 volts DC at the source location, the LED can be up to 328 ft away. A 100 cm cable with water proof connectors is available. A 10k resistor is placed across C4 keeps PoE active.

The mode B passive PoE connector allows you to attach a PoE Camera and LED from the same CAT-5e cable up to 328 ft from the source. Connect a PL-POE-Flood and PL-AT-Flood in series to cover two areas from one CAT-5 line. A 200 cm cable with female ( Power and Passthru PoE in) to male ( passthru PoE out) is available.

The PCB has the following jumpers

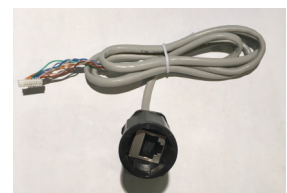
- a) J1 selects 802.3at ( default is 802.3af)
- b) J2 sets the current to 800 mA ( default is 650 mA)

### Specifications

Power source connector	ZHR 10 pin connector for cable to RJ45
Power Protocol ( Mode A)	802.3af class 3 for 8 watt LED 802.3at class 4 for 20 watt LED
Power input	44 to 56 volts 802.3af or 802.3at or Passive PoE
Pinout 802.3af / 802.3at	Pins 1,2 and 3,6 provide power - either polarity
Pinout passive PoE	Pins 4,5+ and 7,8- : 0 mw standby and higher efficiency
Option Mode A RJ45 Connector - female	IP67 waterproof, 150cm length
Option Mode B RJ45 female in, male out	Power on female only, 10/100 data rate
Max Power consumption	9 watts in for 8 watts of LED light 21 watts in for 20 watts of LED light
Input Current at 48v	200 ma input delivers 8 watts to LED
802.3af keep alive	680 ohm resistor on 5v/ground needed
PIR control	5v power, 2v or greater to turn on.
Output Voltage	9v to 42v with 802.3af, to 50v with 802.3at a) with 802.3af max current 300 ma = 12 watts b) with 802.3at max current 700ma = 23 watts c) with passive PoE = 35 watts with 56v in
Power output	
Dusk / Dawn sensor	Use a DPW85 or similar phototransistor
Dusk / Dawn	External 30k resistor and 1N4148 needed
Inrush limiter	External 180k and 1 uf Capacitor needed
Output current	Programmable 600 or 800 ma
Bridge PCB option	Provides all external components
Operating Temperature	0°C ~ 50°C
Size	50 x 37 x 15 mm with 40 cm cord



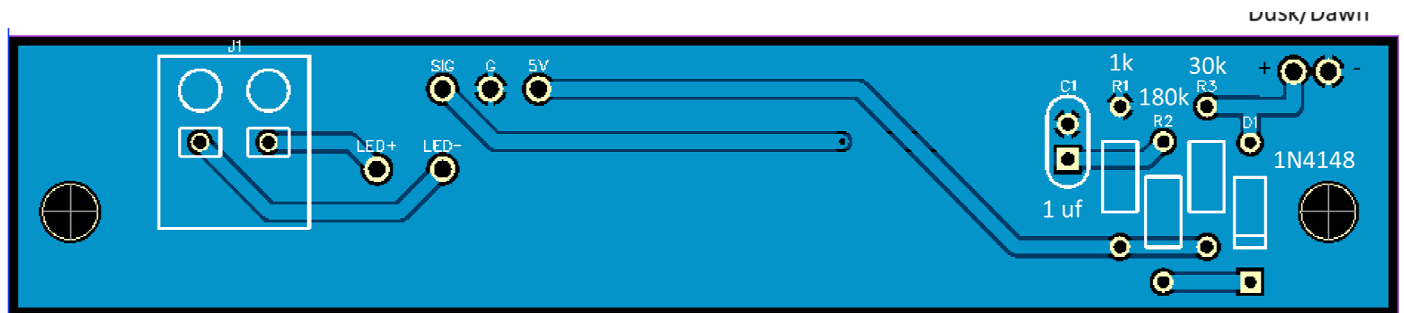
Use any PoE switch up to 328 ft from the LED flood light.



802.3af cable



passive pass thru cable



add on bridge board for:

Keep Alive ( R1 1k )

Slow turn on ( C1 1uf, R2 180k)

Photocell current source for dusk/dawn (R3 30k, D1 1n4148) Use a DPW85 or similar phototransistor

Physical mounting holes

KF246 type spring load connector