



## Model # CPOE60W

### Power Over Ethernet (PoE) Low Voltage Lighting Power Supply

Environmental Suitability: Interior dry or damp location only. Indoor mount only. Class 2 power supply unit rated: Maximum 60.0 watts 30 Volts DC 2.0 amps max (Cat 5/6 cable length/wattage capacity see below, chart C.)

#### INSTALLER NOTES

- A. Distance from router/switch to PoE Low Voltage Lighting Power Supply using Cat 5 or 6 wire will determine the maximum wattage (load) that can be delivered to lighting system.
- B. Router/switch must be capable of delivering 60 Watts or better to provide full power to CPOE60W Low Voltage Lighting Power Supply. Commonly referred to as a PoE++ switch.
- C. See chart:

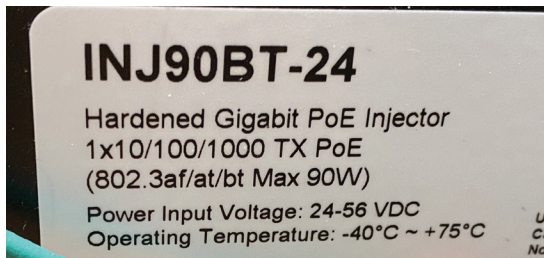
MAXIMUM WATTAGE (LOAD) Depending on Distance of Cat 5 or 6 Wire Length from Router/Switch to CPOE60W	
Distance	Maximum Wattage
From 1-25 feet to PoE	60 Watts 30V DC 2.00 Amps
From 26-50 feet to PoE	50 Watts 30V DC 1.67 Amps
From 51-150 feet to PoE	43 Watts 30V DC 1.44 Amps
From 151-300 feet to PoE	33 Watts 30V DC 1.13 Amps
*Installer: Recommended # 14-2 gauge wire to lighting system.	

#### Step #1:

Mount unit to wall using appropriate mounting hardware. Unit provided with four wood screws and anchors. Positive ventilation required, do not install in a sealed cabinet.

#### Step #2:

Attach model # CPOE60W to router/switch using either Cat 5 or Cat 6 wire. Understand that different routers/switches deliver different wattages of power that can range from 15 to 30 to 60 to 100 watts of power over the Cat 5 or Cat 6 wire. This low voltage lighting power supply model # CPOE60W is only capable of delivering the wattage that the router can supply. If installer requires full 60 watts of power the router must be capable of delivering 60 watts or greater of power to the low voltage lighting power supply. A PoE switch capable of delivering 60 watts of power is commonly referred to as a PoE++ switch.



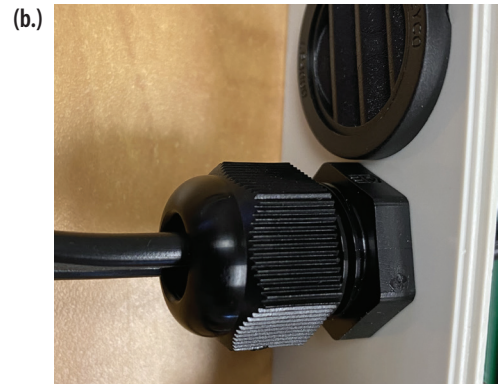
Typical router/injector switch, PoE++ by Etherwan



Attach Cat 5/6 cable from router switch/PoE++ to low voltage power supply model # CPOE60W

### Step #3:

- a. Separate secondary wire and insert into cable gland as shown. Tighten after slack wire has been taken up inside PoE.
- b. When finished, tighten the cable gland nut to secure wire.



- c. Attach secondary low voltage wire that is powering the low voltage lighting fixtures to the + and - blue screw **terminal block** inside unit. Make sure no strands of the multi-strand low voltage wire are cut. Polarity + or - does not matter as fixtures are not polarity dependent.
- d. Use correct screwdriver, 1/8" flat-head, to tighten blue terminal block screws.
- e. Make sure the secondary wires inside PoE do not rest on top of the yellow PoE power supply winding, as this will cause the wire insulation to melt.
- f. Pull wires back in cable gland to take up slack wire.
- g. It is recommended to use #14-gauge wire (CAST Part # CLW142500) to power the low voltage lighting to reduce voltage loss AND IMPROVE LIGHT PERFORMANCE.

Make sure wires do not rest atop yellow PoE transformer winding which will melt wire insulation (e.)



Secondary 30V DC terminal block, use 1/8" flat-head screwdriver to tighten terminal connection. (d.)

Pull wires back in cable gland to take up slack wire. (f.)



### NOTES:

Router/switch, PoE++ depending on the software (i.e. Lantronix, Etherwan) allow for on/off remote activation. (For example: by a card reader or dry contact signal.) Above manufacturers also provide days of the week/time on-off programming. This low voltage lighting power supply model # CPOE60W is a slave to the programming of the router/switch.

Once power is applied to CPOE60W, there will be a several second time lag before the lights come on, dependent on the distance of the wire run and the load on the run. SHOULD the power be turned off, dependent on the operating load it will take between two and a half minutes to turn back on under full load and one minute under half load.

This unit is not designed for rapid cycling on/off of the low voltage lights.

**For Questions please call CAST Lighting, 973-423-2303**