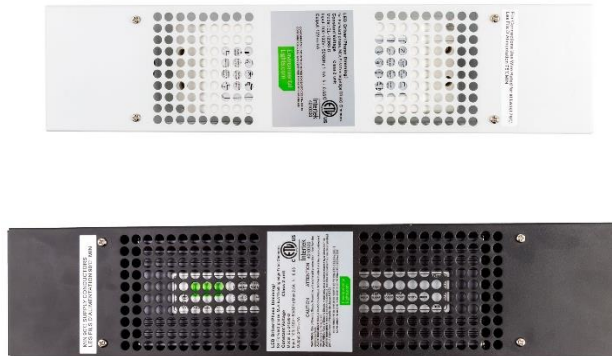


Professional Phase Dimming Drivers with Junction Boxes

Part numbers: **EL-12060-D, EL-24096-D**



LED Professional Phase Dimming Drivers with Junction Boxes from Environmental Lights are the perfect bridge between traditional wall dimmers and modern LED technology. They are ETL Listed Class 2 and compatible with a wide array of popular dimmers, including CFL/LED, ELV and MLV types. This makes the drivers easy to integrate into existing lighting installations and provides flexibility in new installations. See the accessories tab for specific recommendations.

Power is delivered to the LEDs through an efficient 410Hz PWM output. This kind of dimming is compatible with all kinds of low voltage LEDs, including those with current control ICs. They are available in 12VDC 60W or 24VDC 96W sizes, which are at the limit for Class 2 wiring. Both models come mounted in a rugged metal enclosure with integrated junction boxes for easy wire management.

Features

- Compatible with select MLV, ELV and CFL/LED dimmers.
- 12 or 24 Volt PWM output for driving LEDs, including products with current control
- 60 Watt output rating for 12V model.
- 96 Watt output rating for 24V model.
- ETL Listed Class 2, equivalent to UL Class 2
- The 12V model features a plastic housing with a metal enclosure.
- The 24V model features a metal housing with a metal enclosure.
- Drivers accept 100-130V AC input at 50-60Hz.
- 410Hz PWM output.
- Overload, overcurrent, short-circuit and over-voltage protection.
- 2-year warranty.

Specifications

Part Number	EL-12060-D
Dimensions	13.78" x 3.07" x 1.5"
	350mm x 78mm x 38mm
Input Voltage	100-130V AC
Output Voltage	12V DC
Max. Current Load	5A
Max. Output Power	60W
PWM Frequency	410Hz
Ingress Protection	IP20
Compatible Dimmers	Select MLV, ELV and LED/CFL



Part Number	EL-24096-D
Dimensions	14.96" x 3.07" x 2.24"
	380mm x 78mm x 57mm
Input Voltage	100-130V AC
Output Voltage	24V DC
Max. Current Load	4A
Max. Output Power	96W
PWM Frequency	410Hz
Ingress Protection	IP66
Compatible Dimmers	Select MLV, ELV and LED/CFL



MOUNTING AND INSTALLATION INSTRUCTIONS

WARNING: The drivers specified here must be installed by a qualified electrician in accordance with the National Electrical Code (NEC) and local building codes. Failure to do so voids the warranty and may result in serious injury or permanent damage to the unit.

For connection, use 12-22 AWG copper wires insulated for a minimum of 90°C rated for 600 V. Use wire connectors suitable for the number and size conductors being connected and applied in accordance with the manufacturer's instructions. There must be at least 20 amp supply side branch current. A disconnect device shall be located in the field wiring.

IMPORTANT SAFETY INSTRUCTIONS

When using electrical products, basic precautions should be practiced including the following:

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
2. Read and follow all instructions that are on the product or provided with the product.
3. Reference the National Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.
4. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
5. **WARNING:** Risk of fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician.
6. **WARNING:** Risk of electric shock. Mount the unit at a greater height than 1 foot from the ground surface.

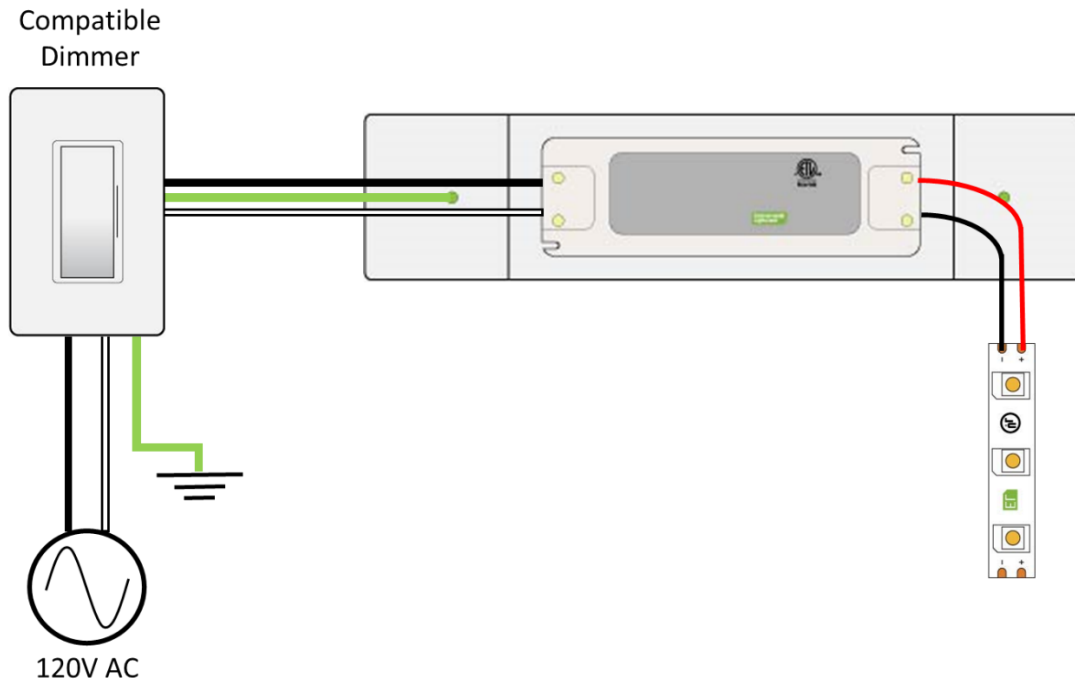
Troubleshooting

Wiring should be done by qualified people only. "Qualified" means, among other things, knowing what safety precautions to take to avoid injury. If you experience issues, double check all wiring and make sure your connections are secure. This goes for both the power supply and the load. If possible, substitute a known good power supply or LED load. This will help identify any defective parts in the unlikely event that you received one. Call Environmental Lights if you are still having trouble and need assistance.

SAVE THESE INSTRUCTIONS-This manual contains important safety and operating instructions for power units.

Wiring Phase Dimming Drivers

Both **EL-12060-D** and **EL-24096-D** should be wired with a compatible in-wall dimmer for dimming control. See the product page or dimming compatibility chart for recommended dimmers. Other dimmers may also work, but using dimmers other than the approved list may result in poor performance or damage to one of the products.



Wiring:

1. Turn off power at the building's breaker for safety.
2. Remove the appropriate knockouts on each end of the driver.
3. Remove the top plate of the metal enclosure and terminal block covers (12V only)
4. Wire the primary side to the output of the dimmer and nearest earth ground connection. Black is line (120V AC), white is neutral and green is earth ground. The 24V model has two grounds, one for the metal case and one for the driver. Both should be connected.
5. Wire the secondary side to the LED lights. Red is positive and black is ground. **Always make sure the power supply is the correct voltage for the LEDs you are using before turning on the power.** Applying the incorrect voltage can permanently damage the LEDs. Primary side wiring should always be done inside the junction box. It is recommended that the same be done for the low voltage side as well.
6. Secure the cover(s) back onto the driver.
7. Once all connections are secure, turn the building circuit breaker back on and test.

Operation:

From OFF, rotate the dimming knob clockwise until it clicks. This click indicates the output turning on. Continue turning the knob to increase brightness. Turn the lights off by rotating the knob counter-clockwise until it clicks, which indicates the LEDs are completely off.