24VDC CONSTANT VOLTAGE DRIVER

OVERVIEW

24VDC Constant Voltage LED Drivers are the driver of choice to pair with 120V switches, low voltage REIGN® Dimmers, and RGB(W)/DMX Controls. These hard-wired drivers are available in multiple form factors and voltage/wattage combinations to meet your low-voltage LED lighting needs. Note: only specific models may be paired with REIGN® Dimmers and RGB(W)/DMX controls.

FEATURES

- Available in wattages from 35W to 330W
- Short circuit, over current, over voltage, over temperature protections
- Class 2 power unit models available
- Fanless design models available
- UL Recognized Component (driver only)
- UL Listed models available (LO-PRO® Junction Box & Driver Combo)

RECEIVE A UL LISTED DRIVER WHEN ORDERING THE LO-PRO® JUNCTION BOX & DRIVER COMBO ON PAGE 2.
### SPECIFICATIONS - 24VDC Output Models

**LO-PRO® JUNCTION BOX & DRIVER COMBO**

**UL LISTED DRIVER OPTION**

[Image of components: LO-PRO® Junction Box, Driver, and UL Listed Driver from Diode LED]

SKUs highlighted in blue qualify for the Lo-Pro Junction Box & Driver Combo. An additional UL Listed E469769 Sticker will be placed on the outside of the Lo-Pro J-Box certifying the combo as a UL Listed Low Voltage Power unit. Conforms to Article 725.121(A)(2) of the National Electrical Code®.

<table>
<thead>
<tr>
<th>Component</th>
<th>Recognized Driver</th>
<th>LO-PRO® Junction Box</th>
<th>UL Listed Driver from Diode LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>LO-PRO® J-Box (Small) DI-JBOX-LPS</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LO-PRO® J-Box (Large) DI-JBOX-LPL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UL Listed Combo includes J-Box</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Input Voltage / Frequency
- **DI-0970**: 90 ~ 264VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')
- **DI-0970-LPS**: 90 ~ 295VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')

#### Max Load
- **DI-0970**: 35W / 1.46A (See Derating Curve)
- **DI-0954**: 96W / 4A (See Derating Curve)

#### Class 2 Certified
- **DI-0970**: Yes
- **DI-0970-LPS**: Yes
- **DI-0954**: Yes

#### Output Voltage
- **DI-0970**: 24VDC
- **DI-0970-LPS**: 24VDC
- **DI-0954**: 24VDC

#### Compatible Junction Boxes
- **LO-PRO® J-Box (Small)**
- **DI-JBOX-LPS**
- **UL Listed Combo includes J-Box**
- **LO-PRO® J-Box (Large)**
- **DI-JBOX-LPL**
- **UL Listed Combo includes J-Box**

<table>
<thead>
<tr>
<th>SKU</th>
<th>Input Voltage / Frequency</th>
<th>Max Load</th>
<th>Class 2 Certified</th>
<th>Output Voltage</th>
<th>Compatible Junction Boxes</th>
<th>Ambient Temperature</th>
<th>Operating Temperature</th>
<th>Minimum Load</th>
<th>Dimmability</th>
<th>Input Current Full Load</th>
<th>Primary Leads</th>
<th>Secondary Leads</th>
<th>Voltage Boost</th>
<th>Circuit Breakers</th>
<th>Efficiency / Power Factor Full Load</th>
<th>Environment</th>
<th>Working Humidity</th>
<th>Housing / Cooling</th>
<th>Dimensions</th>
<th>Weight</th>
<th>Warranty</th>
<th>Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI-0970</td>
<td>90 ~ 264VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')</td>
<td>35W / 1.46A (See Derating Curve)</td>
<td>Yes</td>
<td>24VDC</td>
<td>LO-PRO® J-Box (Small) DI-JBOX-LPS</td>
<td>-22 ~ 158°F (-30 ~ +70°C)</td>
<td>-22 ~ 158°F (-30 ~ +70°C)</td>
<td>None</td>
<td>Yes</td>
<td>1.1A@115VAC, 0.7A@230VAC</td>
<td>UL 1015 18/2AWG, AC/L (Brown), AC/N (Blue), No FG connection (Class II)</td>
<td>UL 1007 16/2AWG, V+(Red), V-(Black)</td>
<td>No</td>
<td>Auto Reset Hiccup</td>
<td>85%</td>
<td>Indoor / Dry</td>
<td>20 ~ 90% RH non-condensing</td>
<td>Plastic Class II power unit, no FG connection / free air convection</td>
<td>5.83 x 1.57 x 1.18 in. (L x W x H)</td>
<td>0.75 lbs (12 oz.)</td>
<td>2 Years</td>
<td>cULus R/C 1310, CSA C22.2 No. 223-M91, CE Certified.</td>
</tr>
<tr>
<td>DI-0970-LPS</td>
<td>90 ~ 295VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')</td>
<td>96W / 4A (See Derating Curve)</td>
<td>Yes</td>
<td>24VDC</td>
<td>LO-PRO® J-Box (Large) DI-JBOX-LPL</td>
<td>-22 ~ 122°F (-30 ~ +50°C)</td>
<td>-22 ~ 122°F (-30 ~ +50°C)</td>
<td>None</td>
<td>Yes</td>
<td>1.1A@115VAC, 0.55A@230VAC, 0.45A@277VAC</td>
<td>UL SVT 18/3AWG, AC/L (Brown), AC/N (Blue), GND (Green)</td>
<td>UL SVT 18/2AWG, V+(Red), V-(Black)</td>
<td>No</td>
<td>Auto Reset Hiccup</td>
<td>88.5% / PF&gt;0.95</td>
<td>Indoor / Wet</td>
<td>20 ~ 90% RH non-condensing</td>
<td>Powder-coated Steel / free air convection</td>
<td>7.87 x 2.78 x 1.38 in. (L x W x H)</td>
<td>2.65 lbs (42.4 oz.)</td>
<td>2 Years</td>
<td>cULus Listed 1598 E469769. UL 1310, CSA C22.2 No. 223-M91, CE Certified.</td>
</tr>
<tr>
<td>DI-0954</td>
<td>90 ~ 264VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')</td>
<td>35W / 1.46A (See Derating Curve)</td>
<td>Yes</td>
<td>24VDC</td>
<td>UL Listed Combo includes J-Box</td>
<td>-22 ~ 158°F (-30 ~ +70°C)</td>
<td>-22 ~ 158°F (-30 ~ +70°C)</td>
<td>None</td>
<td>Yes</td>
<td>1.1A@115VAC, 0.7A@230VAC</td>
<td>UL 1015 18/2AWG, AC/L (Brown), AC/N (Blue), No FG connection (Class II)</td>
<td>UL 1007 16/2AWG, V+(Red), V-(Black)</td>
<td>No</td>
<td>Auto Reset Hiccup</td>
<td>85%</td>
<td>Indoor / Dry</td>
<td>20 ~ 90% RH non-condensing</td>
<td>Plastic / free air convection</td>
<td>5.83 x 1.57 x 1.18 in. (L x W x H)</td>
<td>1.14 lbs (18.3 oz.)</td>
<td>2 Years</td>
<td>cULus R/C 1310, CSA C22.2 No. 223-M91, CE Certified.</td>
</tr>
<tr>
<td>DI-0954-LPL</td>
<td>90 ~ 295VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')</td>
<td>96W / 4A (See Derating Curve)</td>
<td>Yes</td>
<td>24VDC</td>
<td>UL Listed Combo includes J-Box</td>
<td>-22 ~ 122°F (-30 ~ +50°C)</td>
<td>-22 ~ 122°F (-30 ~ +50°C)</td>
<td>None</td>
<td>Yes</td>
<td>1.1A@115VAC, 0.55A@230VAC, 0.45A@277VAC</td>
<td>UL SVT 18/3AWG, AC/L (Brown), AC/N (Blue), GND (Green)</td>
<td>UL SVT 18/2AWG, V+(Red), V-(Black)</td>
<td>No</td>
<td>Auto Reset Hiccup</td>
<td>88.5% / PF&gt;0.95</td>
<td>Indoor / Wet</td>
<td>20 ~ 90% RH non-condensing</td>
<td>Powder-coated Steel / free air convection</td>
<td>7.87 x 2.78 x 1.38 in. (L x W x H)</td>
<td>3.84 lbs (61.4 oz.)</td>
<td>2 Years</td>
<td>cULus Listed 1598 E469769. UL 1310, CSA C22.2 No. 223-M91, CE Certified.</td>
</tr>
</tbody>
</table>

**See Page 5 for Important Notes.**
## SPECIFICATIONS CONT. - 24VDC Output Models

| Model                  | Input Voltage / Frequency¹ | Max Load     | Class 2 Certified | Output Voltage | Compatible Junction Boxes                      | Ambient Temperature² | Operating Temperature³ | Minimum Load | Dimmability⁴ | Input Current Full Load | Primary Leads                                           | Secondary Leads                  | Voltage Boost                  | Circuit Breakers            | Efficiency / Power Factor Full Load | Environment | Working Humidity | Housing / Cooling | Dimensions            | Weight       | Warranty | Certifications                  |
|------------------------|-----------------------------|--------------|-------------------|-----------------|-------------------------------------------------|----------------------|------------------------|--------------|---------------|----------------------------|------------------------------------------------------------|-------------------------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|----------------|----------------|---------------------------------|-----------------------------|----------------|----------------|------------------|
| DI-DV-24V60W-277       | 100 ~ 277VAC, 50/60Hz       | 60W / 2.5A   | Yes               | 24VDC           | *LO-PRO® Junction Box (Large) DI-JBOX-LPL        | -40 ~ +122°F (-40 ~ +50°C) | -13 ~ +149°F (-25 ~ +65°C) | None         | Yes, PWM & RGB(W) dimmers/controls & DMX controls | 6A@120VAC, 2.6A@277VAC        | UL STJW 18/3AWG, AC/L (Black), AC/N (White), GND (Green) | Yes. Voltage Adjustment Dial: 26 ~ 31.5V | Auto Reset Hiccup        | 87% / PF>0.95                      | IP 67 (driver only) Outdoor / Wet | 20 ~ 90% RH non-condensing | Aluminum / free air convection | Aluminum / free air convection | 9.50 x 1.70 x 1.14 in. (L x W x H) | 1.32 lbs. (21.12 oz.) | 5 Years | cULus Recognized Component 1310. UL # E332747. FCC Compliant. RoHS Compliant. |
| DI-CV-24V150W          | 90 ~ 132VAC / 47 ~ 63Hz     | 150W / 6.25A | No                | 24VDC           | *LO-PRO® Junction Box (Large) DI-JBOX-LPL        | -40 ~ +194°F (-40 ~ +90°C) | -13 ~ +149°F (-25 ~ +65°C) | None         | Yes, PWM & RGB(W) dimmers/controls & DMX controls | 3.0A@115VAC | SJTW 18/2AWG, AC/L (Brown), AC/N (Blue) |                          | Terminal Block w/ framed ground connection |                          | Auto Reset Hiccup        | 89%                      | Outdoor / Wet | 20 ~ 90% RH non-condensing | Plastic Class II power unit, no FG connection / free air convection | 7.52 x 2.5 x 1.48 in. (L x W x H) | 1.88 lbs. (30 oz.) | 2 Years | cULus Recognized Component 8750, CSA C22.2 No. 250.0-08. Listed in UL Sign Component Manual (SAM). FCC Compliant. |
| DI-CV-24V200W          | 88 ~ 264VAC, 47 ~ 60Hz      | 200W / 8.4A  | No                | 24VDC           | No compatible J-Box. Mounting Brackets (for driver only): DI-1733 | +14 ~ +185°F (-10 ~ +85°C) | -22 ~ +158°F (-30 ~ +70°C) | None         | On/Off Switching Only            | 20A@115VAC, 40A@230VAC       | Terminal Block                          |                          |                          |                          | Indoor / Dry Location. Install in a dust-free environment. |                          |                          |                          |                          |                          |                          | cULus Recognized Component 60950-1. |

* LO-PRO® Junction Box Note: Driver will fit in LO-PRO Junction Box indicated in the field **Compatible Junction Boxes** but is not available as a UL Listed LO-PRO Junction Box & Driver Combo.

See Page 5 for Important Notes.
## SPECIFICATIONS CONT. - 24VDC Output Models

<table>
<thead>
<tr>
<th>DI-CV-24V330W</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Input Voltage / Frequency</strong>&lt;sup&gt;1&lt;/sup&gt;</th>
<th>85 ~ 264VAC / 47 ~ 63Hz (Refer to 'Static Characteristics Curve')</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max Load</strong></td>
<td>330W / 13.75A</td>
</tr>
<tr>
<td><strong>Class 2 Certified</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Output Voltage</strong></td>
<td>24VDC</td>
</tr>
<tr>
<td><strong>Compatible Junction Boxes</strong></td>
<td>No compatible J-Box. Mounting Brackets (for driver only): DI-1733</td>
</tr>
<tr>
<td><strong>Ambient Temperature</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-40 ~ +158°F (-40 ~ +70°C)</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>-40 ~ +158°F (-40 ~ +70°C)</td>
</tr>
<tr>
<td><strong>Minimum Load</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Dimmability</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td>Yes. PWM &amp; RGB(W) dimmers/controls &amp; DMX controls</td>
</tr>
<tr>
<td><strong>Input Current Full Load</strong></td>
<td>3.5A@115VAC 1.8A@230VAC</td>
</tr>
<tr>
<td><strong>Primary Leads</strong></td>
<td>Terminal block w/ framed ground connection</td>
</tr>
<tr>
<td><strong>Secondary Leads</strong></td>
<td>Terminal Block</td>
</tr>
<tr>
<td><strong>Voltage Boost</strong></td>
<td>Yes. Voltage Adjustment Dial: 21.6 ~ 28.8V</td>
</tr>
<tr>
<td><strong>Circuit Breakers</strong></td>
<td>Auto Reset Hiccup</td>
</tr>
<tr>
<td><strong>Efficiency / Power Factor Full Load</strong></td>
<td>87% / PF&gt;0.99@115VAC / PF&gt;0.95@230VAC</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Indoor / Dry Location. Install in a dust-free environment.</td>
</tr>
<tr>
<td><strong>Working Humidity</strong></td>
<td>20 ~ 90% RH non-condensing</td>
</tr>
<tr>
<td><strong>Housing / Cooling</strong></td>
<td>Aluminum / built-in cooling fan</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>8.5 x 4.13 x 1.61 in. (L x W x H)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>2.09 lbs. (33.44 oz.)</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>5 Years</td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td>cULus Recognized Component 60950-1. CE Certified</td>
</tr>
</tbody>
</table>

### Notes

1. Refer to the 'Static Characteristics Curve' if installing under low input voltage conditions to properly derate the power supply load.
2. Refer to the 'Derating Curve' if nearing max. ambient temperature to properly derate the power supply load. Do not install product in an environment outside the listed ambient temperature.
3. Operating temperature is measured according to the minimum and maximum ambient temperature environment. Operating temperature is measured according to the minimum and maximum ambient temperature environment.
4. Not compatible with 120VAC dimming controls. PWM dimmer/control spec sheet will indicate if multiple controls can be paired to a single driver.
5. Varies per model. Some models (driver only) are suitable for wet location but must be installed in a wet location J-Box. Lo-Pro J-Box & Driver Combo is suitable for indoor / dry locations but also suitable for wet location when the full combo is installed in a wet location J-Box.
DERATING CURVE
24V 35W - DI-0970 / DI-0970-LPS

STATIC CHARACTERISTICS CURVE
24V 35W - DI-0970 / DI-0970-LPS

24V 96W - DI-0954 / DI-0954-LPL

24V 96W - DI-0954 / DI-0954-LPL

24V 150W - DI-CV-24V150W

24V 150W - DI-CV-24V150W
DERATING CURVE CONT.
24V 200W - DI-CV-24V200W

STATIC CHARACTERISTICS CURVE CONT.
24V 200W - DI-CV-24V200W

24V 330W - DI-CV-24V330W

MECHANICAL DIAGRAMS (Images are not to scale)
LO-PRO® JUNCTION BOX & DRIVER COMBO
24V 35W - DI-0970-LPS
MECHANICAL DIAGRAMS (Images are not to scale)

LO-PRO® JUNCTION BOX & DRIVER COMBO
24V 96W - DI-0954-LPL

24V 35W - DI-0970
- AC/N (Blue)
- AC/L (Brown)
- 100-240VAC~ 50/60 Hz
- 5.83 in.
- 1.57 in.
- 1.18 in.

24V 60W - DI-CV-24V60W-277
- AC/N (White)
- AC/L (Black)
- 120-277VAC~ 50/60 Hz
- 9.5 in.
- 1.7 in.
- 1.14 in.
MECHANICAL DIAGRAMS  
(Images are not to scale)

24V 96W - DI-0954

AC/L (Brown)
AC/N (Blue)
Ground (Green/Yellow)

100-240VAC~
50/60 Hz

To Low Voltage LED Load

7.80 in.
2.78 in.
1.30 in.

24V 150W - DI-CV-24V150W

AC/N (Blue)
AC/L (Brown)

90-132VAC~
50/60 Hz

To Low Voltage LED Load

7.52 in.
2.50 in.
1.48 in.
24V 200W - DI-CV-24V200W

Voltage Adj. 11.4 ~ 13.2V

4x Mounting brackets (DI-1733)

To Low Voltage LED Load

100-240VAC~ 50/60 Hz

Cooling fan (air flow out top)

4x Mounting brackets/hardware (sold separately). Hardware Size: M4 L=6.

Use applicable screws to mount driver/brackets to desired surface.

Voltage Adj. 10.2 ~ 13.8V

24V 330W - DI-CV-24V330W

100-240VAC~ 50/60 Hz

To Low Voltage LED Load

4x Mounting brackets/hardware (sold separately). Hardware Size: M4 L=6.

Use applicable screws to mount driver/brackets to desired surface.
SAFETY / WARNINGS / DISCLOSURES

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. DO NOT modify product beyond instructions or warranty will be void.
4. Turn power OFF at main breaker before servicing or installing this product.
5. Proper heat dissipation will prolong the working lifespan of this product. Install in a well-ventilated area free from explosive gases and vapors.
6. Refer to the 'Static Characteristics Curve' if installing under low input voltage conditions to properly derate the power supply load.
7. Refer to the 'Derating Curve' if nearing max. ambient temperature to properly derate the power supply load. Do not install product in an environment outside the listed ambient temperature.
8. Ensure a compatible LED fixture with the correct operating voltage is installed with this product.
9. Drivers in this specification sheet are not compatible with 120VAC dimming controls. Some models are compatible with PWM/RGB(W) and DMX Controls. The PWM dimmer/control spec sheet will indicate if multiple controls can be paired to a single driver.
10. To compensate for voltage drop, ensure applicable gauge in-wall rated wire is installed between driver and LED fixture.
11. Some models (driver only) are suitable for wet location but must be installed in a wet location J-Box. Lo-Pro J-Box & Driver Combo is suitable for indoor / dry locations but also suitable for wet location when the full combo is installed in a wet location J-Box.

WARRANTY

Limited Warranty

The limited warranty of this product begins from the date of shipment. The warranty of each item can be found in the 'Specifications' chart under 'Warranty'. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.diodeled.com/limited-warranty within the Policies section. For warranty related questions please contact product support.

Consumer’s Acknowledgment

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer’s bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer’s responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.