**product introduction**

The LLPX Series is Smart Vision Lights second generation of LLP backlights that allows for more intensity with the same familiar ease of mounting. With its new optically clear internal light dispersion grid and matte white finished backing plate more light is reflected up and out through the diffusion acrylic. The LLPX Series new Multi-Drive™ driver allows users to OverDrive this product for that extra burst of intensity or operate it in constant ON.

**product features**

- Large LED Backlight With 30mm Frame Profile
- Driver Built In – No External Wiring To A Driver
- M12 Quick Disconnect
- Edge Lit LED Panel
- PNP and NPN Strobe Input
- Custom Sizes/Hole Placement Options
- Continuous Operation or OverDrive Strobe Mode

**constant ON product specs**

Wiring configuration for **CONSTANT ON** operation

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Signal</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power In</td>
<td>+24VDC</td>
<td>BROWN</td>
</tr>
<tr>
<td>2</td>
<td>NPN Ground (common)</td>
<td>Ground</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>GND Ground</td>
<td></td>
<td>BLUE</td>
</tr>
<tr>
<td>4</td>
<td>PNP &gt; 4VDC</td>
<td></td>
<td>BLACK</td>
</tr>
<tr>
<td>5</td>
<td>Intensity Control</td>
<td>1-10VDC</td>
<td>GREY</td>
</tr>
</tbody>
</table>

* Some cables use green with yellow stripe for 1-10V adjustment.

**Electrical Input**

24 VDC +/- 5%

- **Current**
  - 306x306 = 0.8 – 1.2A / 459x459 = 1.2 – 1.8A Note: current is LED color dependent
  - 306x306 = 19.2 – 28.8W / 459x459 = 29 – 43W

- **Strobe Input**
  - PNP ▶ +4VDC or greater to activate
  - NPN ▶ GND (<1VDC) to activate

- **PNP Line**
  - 6.2mA @ 5VDC
  - 12.6mA @ 10VDC
  - 30.4mA @ 24 VDC

- **NPN Line**
  - 22mA @ Common (0VDC)

- **Continuous Mode**
  - Light will be in continuous mode by leaving signal on strobe input active – analog dimming is active

- **Connection**
  - 5 pin M12 connector

- **Lifespan**
  - 100,000 hrs

- **IP Rating**
  - IP50

- **Certification**
  - CE and RoHS certified

- **IEC 62471 Rating**
  - See page 3 for details

- **Weight**
  - 306x306 = 2.5kg / 459x459 = 3.8kg

- **Ambient Temperature**
  - -40º - 50º C (-40º - 122º F)
Wiring configuration for OverDrive operation

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Signal</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power In</td>
<td>+24VDC</td>
<td>BROWN</td>
</tr>
<tr>
<td>2</td>
<td>NPN Sinking</td>
<td>WHITE</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
<td>BLUE</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PNP Sourcing</td>
<td>BLACK</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>OverDrive Signal</td>
<td>GREY</td>
<td></td>
</tr>
</tbody>
</table>

Electrical Input
- 24 VDC +/- 5%

Current
- 306x306 = 3.2A Peak, .32A Average @10% DC
- 459x459 = 4.8A Peak, .48A Average @10% DC

Wattage
- 306x306 = 7.7W
- 459x459 = 11.6W

Strobe Input
- PNP ➤ +4VDC or greater to activate
- NPN ➤ GND (<1VDC) to activate
- 5µS LED activation time

PNP Line
- 3.7mA @ 3VDC
- 6.2mA @ 5VDC
- 12.6mA @ 10VDC
- 30.4mA @ 24 VDC

NPN Line
- 22mA @ Common (0VDC)

OverDrive Mode
- Connect Pin 5 to GND (more info. in wiring configuration) - analog dimming is inactive
- Duty Cycle Max. 10%
- Strobe Duration Max. 125mS

Product Family:
- Light Panel LLPX Series

Size:
- 306x306
- 459x459
- Custom Sizes upon Request

Color:
- 470 - Blue
- 530 - Green
- 625 - Red
- WHI - White

Attention
Please note that the power requirements vary according to size. Failure to supply each unit with its correct amount of current will result in non-repeatable lighting. Contact Smart Vision Lights for more information.
Each LLPX Series backlight is constructed using Smart Vision Lights own proprietarily made 30mm black anodized extrusion with 8mm T-Slot.

Drop in T-nuts make for quick and easy mounting or utilize the four corner cubes.

Complete mounting hardware is available upon request.

The LLPX offers a very diffuse light pattern at any defined working distance. The Pixel Graph representation shows a steep drop off in intensity outside of the active area with a very diffuse light pattern inside.

<table>
<thead>
<tr>
<th>Average Intensity</th>
<th>8,000 lux</th>
</tr>
</thead>
</table>

*Lux measurement taken at surface of LLPX.

According to IEC 62471:2006. Full documentation upon request.

Notice
Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use.
Applicable for wavelengths: 470, 530, 625 and WHI.