Ultra-Thin LED Light Panels
Part No. UTLP-XX-XX

Ultra Thin LED Light Panels from Environmental Lights are ready-to-use out of the box and create a bright uniform light surface. The Ultra Thin LED Light Panels are energy efficient, light weight, easy to configure, customizable, and UL listed (E345867).
Features

- Ultra Slim Profile: 3/8” to 1/2” thick.
- Custom shapes and sizes are available.
- All panels are RoHS compliant, CE Certified and UL listed.
- Even distribution of light exceeds industry standard.
- Create larger lit surfaces by assembling multiple units.
- Double-sided panels available.
- Many available colors:
  Warm white, neutral white, red, green, blue, orange, yellow, RGB, & RGBW.

Applications

LED Light Panels are the perfect solution for backlighting graphics, retail displays, signs, menu boards, interior décor – the possibilities are endless!

Ultra Thin LED Light Panels can be made in various sizes and colors. Please call us to customize the panel to your exact needs.
Panel Design

LED strip light is placed into an aluminum profile and fixed to an acrylic panel. The LEDs shine light into the acrylic. In order to create an even distribution of light, we laser dot the acrylic. Without laser dots, the panels will have streaks of light. The laser dots help distribute light evenly throughout the surface.

Figure 1: Profile-View of Standard Panel

Figure 2: LED strips are mounted to the edges of the panel and shine inwards.
How to Install

Place the panel into a fixture. As an option, we can precut holes to mount the panel onto a surface. Please let us know if you need mounting holes as our standard panels do not have holes.

To power single color panels:
  Connect the output of your DC driver to your panel
  **Warning:** Be sure the driver voltage matches the panel voltage. Any discrepancy may damage the LEDs and potentially cause a fire.

To power multi-color panels:
  Connect the hardwires of the panel to the input of a controller.
  **Warning:** Be sure to follow the wiring diagrams in the respective controller manual to avoid and circuit issues.

**Special handling instructions**

Large panels (over 36 inches in length) should be handled by 2 or more people. Panels are flexible. The more a panel flexes the higher chance an LED can be damaged, ultimately creating a dark area in the LED product. Therefore, carry the panel at various locations that will best distribute the weight load and reduce flexure. Please do not carry the panels flat. In other words, the large faces of the panel should not be parallel with the floor. Please see the following diagrams for more information.
Customization

<table>
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<tr>
<th>Input Voltage</th>
<th>12 or 24 VDC</th>
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| Connector          | 2.1mm Female Barrel Plug, Length 36”
|                    | Custom connector and length available upon request |
| Custom Colors      | White: 3000k, 4100k, 5300k, 6500k
|                    | Monocolor: Red, Green, Blue, Yellow, Orange
|                    | Multicolor: White adjustable, RGB, RGBW |
| Water Proofing     | Dry, Waterproofing available for panels |
| Length             | 1.57 to 118 inches    |
| Width              | 1.57 to 48 inches     |
| Thickness          | 0.185 to 1.18 inches  |
| Custom Shape       | We can create geometrically defined shapes and cutouts |
| Wire Exit Location/Direction | Wire exit can be located at any corner and can come out of the edge or the back of the panel. |
**Input Voltage**
Panels can be made to 12V or 24V. If your system does not have strict requirements, please allow the Environmental Lights engineering team to suggest the optimal voltage. 12V and 24V each have their advantages and disadvantages. Our experienced engineering team will suggest the voltage that best meets your application.

**Connector**
Panels use a standard 36” black wire lead with a female barrel plug. Multicolor panels require a controller, therefore they have hard wires instead of a female barrel plug. We can customize the wire length and gauge. For custom connectors, please provide a specification sheet and clarify the polarity of your connector.

**Custom Colors**
Single color panels are ready to plug and play with a compatible driver. Multicolor panels require a compatible controller between the driver and panel.

**Water Proofing**
Panels can be waterproofed to various ratings. Please let us know your application and we can customize the panel for the environment.

**Custom Shapes**
We can create any geometrically defined shapes. Panels may also have cutouts or holes. In order to cut these unique shapes, please provide fully dimensioned drawings to us. Geometrically defined shapes are reserved to straight edges, circles, radius corners/edges.

Please call us at 1-(888)-880-1880 for quotes/orders/questions