Custom LED Light Box
Part No. UTLB-XX-XX/UTLB-XX-XX-L

The Ultra Thin LED Light Box from Environmental Lights is an innovative light source with an integrated frame that is easy to snap open and close. This LED light box provides absolute even illumination in a slim profile for backlighting graphics used in marketing campaigns and in-store visual merchandising. An optically-refined reflective pattern technology provides high and even brightness to a graphic or photo.

LED Light Boxes are predominantly used for backlighting graphics, retail displays, signs, menu boards, large visual merchandising or ad campaigns.

Customized sizes are available up to 4ft x 11.5 ft and custom shapes are also available based on the project requirements. Ultra Thin LED Light Boxes can also be custom made in a variety of whites, colors, and even color changing RGB.
Applications

The Ultra Thin LED Light Boxes are used in a wide variety of industries and applications including displays & fixtures, signage, architecture and more. They provide high and even brightness that traditional fluorescent tubes could not. With ease in interchanging graphics, installation and operation, any of your employees can use these out-of-the-box solutions, providing you with better capability to update your designs at any time. Revolutionize your professional or home environment by incorporating LED Light Boxes anywhere your guests and customers can see.

Displays & Fixtures

Increase your brand awareness, modernize your environment, and capture your customer’s attention to your products by utilizing easy-to-use LED Light Boxes. They are used most often in signage applications since it is easily customizable, ultra slim, and has the same brightness for all sizes which makes the panels modular.

Architectural Design

Highlight any area and create accent lighting elements in your commercial or residential project. Illuminate walls, ceilings and bar countertops in your new home, restaurant, retail store, museum, night club or any other location you or your designer wishes.

- Restaurants
- Retail Advertisement
- Architectural Design
- Tradeshows Exhibits
- Transportation Systems
- Casinos
- Hospitals/Clinics
- Nightclubs
- Museums
- More...Illuminate anything you need!

Signage  Retail Displays  Museums
Features

- Ultra Slim Profile: 5/8” or 7/8” thick, depending on overall panel size.
- Same brightness for all sizes makes the panels modular.
- CE Certified, RoHS compliant, and UL listed
- Tool-free graphic change, 4-sides of frame snap open.
- Create larger lit surfaces by assembling multiple units.
- Custom panel colors available:
  - Warm white, Neutral White, Red, Green, Blue, Orange, Yellow, RGB, and RGBW.
- Custom shapes and sizes available (up to 4ft x 8ft).
- Frame colors available.
- Low maintenance.
Snap Frame Light Box Design

Snap Frame Light Boxes utilize a panel design with an aluminum frame. The panel (acrylic and strip) is placed into a frame. The frame allows one to easily change a graphic.

How it Works

LED strip light and acrylic are placed into a frame. 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 Snap Frame Light Box
Figure 2: LED strips are mounted to the edges of the panel and shine inwards. The light from the LEDs bounce refract of the dots to spread light evenly

How to Install

1. Open the snap frame by pulling up on frame.
2. Remove the PC cover
3. Place your graphic into the frame
4. Place the PC cover on top
5. Close the frame
6. Mount the panel using the mounting option on the light box.
7. Connect the panel to a compatible DC power supply.

Customization

<table>
<thead>
<tr>
<th>Input Voltage</th>
<th>12 or 24 VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector</td>
<td>2.1mm Female Barrel Plug, Length 36”</td>
</tr>
<tr>
<td></td>
<td>Custom connector and length available upon request</td>
</tr>
<tr>
<td>Custom Colors</td>
<td>White: 3000k, 4100k, 5300k, 6500k</td>
</tr>
<tr>
<td></td>
<td>Monocolor: Red, Green, Blue, Yellow, Orange</td>
</tr>
<tr>
<td></td>
<td>Multicolor: White adjustable, RGB, RGBW</td>
</tr>
<tr>
<td>Water Proofing</td>
<td>Dry, Waterproofing available for panels</td>
</tr>
<tr>
<td>Length</td>
<td>4.723 to 59.05 inches</td>
</tr>
<tr>
<td>Width</td>
<td>4.723 to 118.11 inches</td>
</tr>
<tr>
<td>Thickness</td>
<td>0.394 to 2.362 inches</td>
</tr>
<tr>
<td>Mounting Option</td>
<td>Hanging Rings, Calabash/Keyholes, Sliding Plates</td>
</tr>
<tr>
<td>Frame Color</td>
<td>Silver, White, Black, Chrome, Any Color</td>
</tr>
<tr>
<td>Wire Exit</td>
<td>Wire exit can be located at any corner and can come out of the edge or the back of the panel</td>
</tr>
<tr>
<td>Location/Direction</td>
<td>Wire exit can be located at any corner and can come out of the edge or the back of the panel</td>
</tr>
</tbody>
</table>
Input Voltage
Light Boxes can be made to 12V or 24V. If your system does not have strict requirements, please allow the Environmental Lights engineering team suggest the voltage. 12V and 24V each have their advantages and disadvantages. Our experienced engineering team will suggest the voltage that best meets your application.

Connector
Light Boxes use a standard 36” black wire lead with 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 Light Boxes are ready to plug and play with a compatible driver. Multicolor panels require a compatible controller between the driver and panel.

Size (Length, Width, and Thickness)
Length and width are easily customizable.
The thickness and frame width is highly dependent on the size of the panel. The illustration below shows our standard frame width.

![Diagram showing frame width](image-url)
Mounting Options
We highly recommend using calabash (keyhole mounts) for all light boxes. These mounts are very sturdy. Please contact our Sales Engineers if you are interested in our other mounting options.

Calabash/Keyhole (top), Hanging Rings (bottom)

Frame Color
Our standard frame colors are silver, black, and white. If you would like a custom color, we can powdercoat the frame. In this case, please provide the RAL number.

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