PRODUCT DATA SHEET

ColorBright™
Ultraviolet
399nm

15 Year Warranty

www.FlexfireLEDs.com
**Description**

ColorBright™ UV LED strip lights are linear UV LED chips mounted on a flexible strip of printed circuit board (PCB) with a strong adhesive backing. Sometimes referred to as "LED tape lights," the flexible design of LED strips allows for the addition of UV light to basically any space you can imagine. Though they are not extremely powerful LEDs, they are not meant to be directly stared into for prolonged periods of time. Before using the lights — please read UV LED eye safety.

**Product Features**

- Double density LEDs for high brightness output
- Fully dimmable
- Highest quality components and premium packaged 3528 LEDs
- Single BIN LED selection to ensure color consistency (3-Step MacAdam)
- Thermally Resistant 3M VHB 4930 adhesive for long lasting bond
- 120° Beam Angle
- Only 5/16" (8mm) strip width
- Short LED pitch of 5/16" (8mm)
- 12V DC Input (24V available by special order)
- Can be cut every 1” (25.4mm)
- 36 LEDs / Foot (120 / Meter)
- Thick double layer 2 oz copper PCB for excellent thermal management
- Operating Temperature -4°F to +104°F (-20°C to 40°C)
- Maximum Length in Series 32ft 10in (10 Meters)

**Product Specific Specifications**

<table>
<thead>
<tr>
<th>Product SKU: CB-UV</th>
<th>ColorBright™ UV LED strip light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color Spectrum Wavelength</td>
<td>365 nm - 460 nm (peak wavelength at 399nm)</td>
</tr>
<tr>
<td>Irradiance</td>
<td>At 1cm from the LED chip = 10 µW/cm²</td>
</tr>
<tr>
<td>Quantity per unit</td>
<td>Sold by the foot or by a 16 5&quot; reel</td>
</tr>
<tr>
<td>Special Instructions?</td>
<td>Do not look directly into the lights for prolonged periods of time</td>
</tr>
<tr>
<td>Working Voltage</td>
<td>12V DC constant voltage</td>
</tr>
<tr>
<td>Power consumption</td>
<td>2.92 watts per foot / 48 watts per reel</td>
</tr>
<tr>
<td>Maximum run length</td>
<td>32 feet before running in parallel is required</td>
</tr>
</tbody>
</table>
Ordering Code

**INDOOR**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Color</th>
<th>Voltage</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB - ColorBright™</td>
<td>UV - Purple</td>
<td>12V</td>
<td>01 FT - Less than 16 ft</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24V - (Special)</td>
<td>16 FT - 16 ft Reel</td>
</tr>
</tbody>
</table>

Dimensions

- **16 1/2" | 5m (Reel)**
- **1" | 25mm**
- **5/16" | 8mm**
- **1/8" | 2.5mm**
Example Installation and Layout

**IN SERIES**

AC Outlet (or AC source) → Transformer → Dimmer / Controller (Optional) → LED Strip

**IN PARALLEL**

AC Outlet (or AC source) → Transformer → Dimmer / Controller (Optional) → LED Strips
Dimming Options

Lutron Style Wall Dimmer

<table>
<thead>
<tr>
<th>Input Color</th>
<th>Symbol</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>G</td>
<td>Ground Wire</td>
</tr>
<tr>
<td>Black</td>
<td>L</td>
<td>Line (Hot)</td>
</tr>
<tr>
<td>White</td>
<td>N</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output Color</th>
<th>Symbol</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red (24V)</td>
<td>–</td>
<td>Negative</td>
</tr>
<tr>
<td>Purple (12V)</td>
<td>→</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Remote Control (SKU: SC-MZ-CTRL) can be paired to 8 total receivers. Multiple remotes cannot be paired to a single receiver (max 1 remote per receiver).
Strip Light Connectors

<table>
<thead>
<tr>
<th>SKU</th>
<th>Description</th>
<th>Wire Gauge</th>
<th>Amp Limit**</th>
<th>Mockup</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB-C1*</td>
<td>Attaches LED strip directly to a Power Supply/Driver, low voltage control or DC source.</td>
<td>22 AWG</td>
<td></td>
<td><img src="image1" alt="Mockup" /></td>
</tr>
<tr>
<td>CB-C2*</td>
<td>Attaches two sections of LED strip together. Wire lead allows for turns around tight corners.</td>
<td>22 AWG</td>
<td>5 Amps</td>
<td><img src="image2" alt="Mockup" /></td>
</tr>
<tr>
<td>CB-C3*</td>
<td>Attaches two sections of LED strip together in a continuous run.</td>
<td>-</td>
<td></td>
<td><img src="image3" alt="Mockup" /></td>
</tr>
</tbody>
</table>

* Calculate max length of LED strip to follow the solderless connector based on an amperage draw of 0.24 amps per foot (0.79 A/m) at 12 volts, or at 24 volts use 0.12 A/ft (0.40 A/m).

** The max continuous run of the White Series LED strip is 32 feet (10 meters). Be sure no more than 5 amps is drawn after any solderless connector.

1. The solderless connectors have a plastic housing with a small black tray on the underside. Pull the black plastic tray out until the tray stops. The tray will only pull out approximately 2-3mm, dont try to pull it out farther. See Diagram 1

2. Remove 1/4" of 3M adhesive tape on the back from the end of the strip that you want to connect. It must be removed to allow it to fit properly with the solderless connector. See Diagram 2

3. Slide the connector into the end of the LED strip by holding the tray out as you slide it in. Make sure the tray does not move into a locked position until the connector is all the way in. See Diagram 3

4. Once the LED strip is inserted into the solderless connector, close the black tray underneath by pinching the wings on the side of the connector (inward, toward the connector’s housing). See Diagram 4

Note: Soldering is the preferred method. If you need further assistance, please download our Solderless Connector Installation Guide from our website.
Compatible Drivers (12V only)

Wall Mounted Power Supply / Desktop Power Supply

<table>
<thead>
<tr>
<th>LED Strip Length</th>
<th>SKU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 3 ft</td>
<td>12V-WMPS-1</td>
</tr>
<tr>
<td>4 - 6 ft</td>
<td>12V-DPS-2</td>
</tr>
<tr>
<td>7 - 13 ft</td>
<td>12V-DPS-4</td>
</tr>
<tr>
<td>13 - 20 ft</td>
<td>12V-DPS-6</td>
</tr>
<tr>
<td>17 - 26 ft</td>
<td>12V-DPS-8</td>
</tr>
</tbody>
</table>

Mean Well

<table>
<thead>
<tr>
<th>LED Strip Length</th>
<th>SKU</th>
<th>LED Strip Length</th>
<th>SKU</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 ft</td>
<td>LPV-20-12</td>
<td>45 - 74 ft</td>
<td>HLG-320H-12A</td>
</tr>
<tr>
<td>6 - 11 ft</td>
<td>HLG-40H-12A</td>
<td>83 - 140 ft</td>
<td>HLG-600H-12A</td>
</tr>
<tr>
<td>10 - 17 ft</td>
<td>HLG-80H-12A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 - 29 ft</td>
<td>LPV-100-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 - 35 ft</td>
<td>HLG-120H-12A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 43 ft</td>
<td>HLG-150H-12A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 - 53 ft</td>
<td>HLG-240H-12A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Zurik

<table>
<thead>
<tr>
<th>LED Strip Length</th>
<th>SKU</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 6 ft</td>
<td>ZRK-20-12VDC</td>
</tr>
<tr>
<td>7 - 11 ft</td>
<td>ZRK-40-12VDC</td>
</tr>
<tr>
<td>11 - 17 ft</td>
<td>ZRK-60-12VDC</td>
</tr>
<tr>
<td>17 - 29 ft</td>
<td>ZRK-100-12VDC</td>
</tr>
<tr>
<td>26 - 43 ft</td>
<td>ZRK-150-12VDC</td>
</tr>
<tr>
<td>35 - 58 ft</td>
<td>ZRK-200-12VDC</td>
</tr>
<tr>
<td>43 - 73 ft</td>
<td>ZRK-250-12VDC</td>
</tr>
<tr>
<td>52 - 87 ft</td>
<td>ZRK-300-12VDC</td>
</tr>
</tbody>
</table>
Compatible Aluminum Extrusions

- **KLUS GIP Anodized Extrusion** (SKU: KL-B4574ANODA-1m)
  - Covers
    - G-L Frosted Cover (SKU: KL-00413-1m)
  - End Caps
    - GIP - L End Cap without Wire Hole (SKU: KL-00306)
  - Mounting Accessories
    - GP Surface Spring (SKU: KL-00293)
      - minimum surface thickness 10mm (3/8")
    - Mounting Bracket (SKU: KL-24143)

- **GIZA Anodized Extrusion** (SKU: KL-B5556ANODA-1m)
  - Covers
    - HS 22 Clear Cover (SKU: KL-17022-1m)
    - HS 22 Frosted Cover (SKU: KL-17011-1m)
  - End Caps
    - GIZA End Cap without Wire Hole (SKU: KL-24007)
  - Mounting Accessories
    - GP Surface Spring (SKU: KL-00293)
      - minimum surface thickness 10mm (3/8")
    - Mounting Bracket (SKU: KL-24143)

- **45-ALU Anodized Extrusion** (SKU: KL-B4023ANODA-1m)
  - Covers
    - HS Clear Cover (SKU: KL-1370-1m)
    - HS Frosted Cover (SKU: KL-1369-1m)
    - LIGER Frosted Cover (SKU: KL-17031-1m)
  - End Caps
    - 45-ALU End Cap without Wire Hole (SKU: KL-1383)
    - 45-ALU End Cap with Wire Hole (SKU: KL-1440)
  - Mounting Accessories
    - Zinc Mounting Bracket (SKU: KL-1399)
      - NOTE: All solderless connectors do not fit inside this aluminum extrusion.

- **KLUS MICRO-ALU Anodized Extrusion** (KL-B1888ANODA-1m)
  - Covers
    - HS Clear Cover (SKU: KL-1370-1m)
    - HS Frosted Cover (SKU: KL-1369-1m)
    - LIGER Frosted Cover (SKU: KL-17031-1m)
  - End Caps
    - MICRO-ALU End Cap without Wire Hole (SKU: KL-1059)
    - MICRO-ALU End Cap with Wire Hole (SKU: KL-1060)
  - Mounting Accessories
    - Zinc Mounting Bracket (SKU: KL-1072)
      - NOTE: All solderless connectors do not fit inside this aluminum extrusion.

- **KLUS PDS4-ALU Anodized Extrusion** (KL-B1718ANODA-1m)
  - Covers
    - HS Clear Cover (SKU: KL-1370-1m)
    - HS Frosted Cover (SKU: KL-1369-1m)
    - LIGER Frosted Cover (SKU: KL-17031-1m)
  - End Caps
    - PDS4-ALU End Cap without Wire Hole (SKU: KL-1055)
    - PDS4-ALU End Cap with Wire Hole (SKU: KL-1057)
  - Mounting Accessories
    - Zinc Mounting Bracket (SKU: KL-1072)
      - NOTE: All solderless connectors do not fit inside this aluminum extrusion.
Safety And Disclosures

1. Installation must be in accordance with local and national electrical code regulations.
2. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.
3. Only install with a Class 2 DC Constant Voltage LED driver to meet UL requirements.
4. Do not install in environment where excessive heat may exist.
5. LED strip lights must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.
6. Do not install indoor LED tape light products in outdoor / wet location environments. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.
7. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
8. Make sure the appropriate gauge wire is installed between driver, LEDs, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires, and cause fire.
9. Do not modify product beyond instructions or warranty will be void.
10. We reserve the right to modify and improve the design of our fixtures without prior notice. Although we try our best to order the same colors every time, due to changes in technology and phosphors over time, we cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

Warranty Information

Limited Warranty

This product has a 15 year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at https://www.flexfireleds.com/warranties/ within the Policies section. For warranty related questions please contact product support team at (support@flexfireleds.com).

Consumer's Acknowledgment

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser.

This limited warranty does not include product failures that are the result of:

- Not using a voltage regulated power supply to connect the LED product or controls; Connecting LED products to the wrong output voltage;
- Improper connection of power supplies, LED products, or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power supplies backwards to an AC power source;
- Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products;
- Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or “force majeure” incidences;
- Damage caused by a vehicle or other accident;
- Damage caused when transporting the item;
- Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident.
- Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company’s products and listed on Company’s website.
- Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.