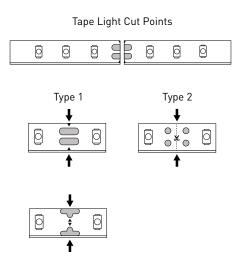
# **ALLOY**LED<sup>®</sup> Installation Instructions **PrimaLine<sup>®</sup> and Radialux<sup>®</sup> 12V / 24V LED Tape Light**

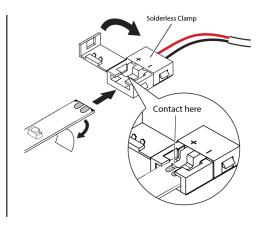
Safety & Tips

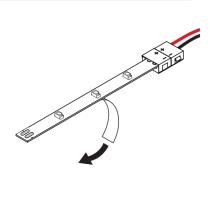
#### DO NOT CONNECT 12V / 24V DC TAPE LIGHTS DIRECTLY TO 120V AC POWER.

- Tape light should ONLY be powered by a UL Listed Class 2 DC 12V or 24V power supply.
- ALWAYS install in accordance with local and national electrical code regulations.
- This product should be installed and serviced by a qualified, licensed electrician.
- Do not install where diodes can be exposed to direct sunlight as this can damage the diodes, reduce their operational life span and alter their operational characteristics.
- Do not install the product in a location where the ambient temperature is outside the listed ambient temperature range of the product. Failure to do so could result in damage to the tape light and may alter the tape light's operational characteristics.
- Do not exceed the listed maximum run of the product, which is shown on the product packaging. Each maximum run requires a dedicated power feed from the driver.
- Do not overload the 12V or 24V DC power supply. Overloading the power supply may cause shorting, overheating, and possibly fire.
- Do not stare directly into LED lights when illuminated.
- Always disconnect the power supply before cutting or connecting tape light.
- Apply power to test the tape light and connections before mounting.
- Do not expose dry location tape light to direct or indirect moisture.
- Do not crimp tape light, attempt to bend tape light width-wise or lengthwise to a radius less than 0.6 in. / 15mm.

## Using Tape Connectors and Installing Tape







1. [PrimaLine 3 & 4.4 Tape Lights have dedicated instructions. Please see their product pages on our website.]

Cut the tape light at the middle of the solder points (marked by black arrows).

\*If soldering lead wires onto PrimaLine 5.5 LP tape, set the soldering iron to 500° F. Also note that the product has adhesive tape on the back: soldering too long can compromise the tape light's internal components and adhesive integrity. 2. Peel away a portion of the tape light adhesive backing at one end. With the tape connector open, slide the tape end all the way into the connector tray, making sure that the solder points are seated under the metal tabs. Important: be sure that the polarity of the tape matches the polarity of the connector (both are marked with + and -). Then close the connector until it clicks.

\* The number of solder points on tape light differs per model.

\*\* Due to LED chip density, PrimaLine 3 connectors feature a notch so that tape light can be fully inserted into the connector. 3. Remove the remaining adhesive backing and attach the tape light to the clean, flat, dry surface.

(Continued on the other side)

# **ALLOY** L = D° Installation Instructions PrimaLine® and Radialux® 12V / 24V LED Tape Light

### Voltage Drop

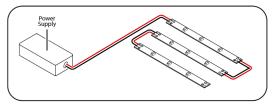
Voltage drop is the normal loss of voltage that occurs as power flows along a wire connection in low voltage systems, with voltage decreasing along the wire as its length is increased. Wire length and thickness, as well as total light wattage, influence the amount of voltage drop.

Examples of Recommended Maximum Wire Lengths from Power Supply to Tape Light to Avoid Voltage Drop

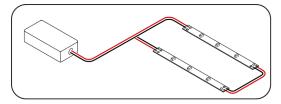
22 AWG Wire		18 AWG Wire	
Tape Length*	Max. Wire Length*	Tape Length*	Max. Wire Length*
12	10	12	20
24	8	24	16

\* Length in feet. Caution: always observe maximum tape light run length.

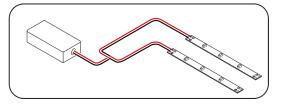
## Layout Options\*



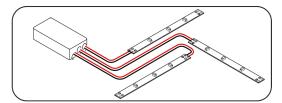
"Straight" run: tapes that are furthest from the power supply are more likely to exhibit voltage drop.\*



"Loopback" connection: also produces more consistent results. Often used for room perimeter and coves.\*



Center feed connection: produces more consistent brightness and color between tapes.\*



"Array" option: tape runs are individually powered\*

\* Please consult the instruction sheets for RGB and RGB-W color controllers for detailed instructions for installing Radialux Tape Lights.

#### Troubleshooting

Tape light does not light up

- Make sure the DC power supply is turned on and receiving power.
- Confirm you have maintained correct polarity (+ to + and to -) when joining tape lights as well as when connecting to the 12V or 24V DC power supply.
- Check all light connections and any switch or dimmer connections from the power supply to the tape lights.
- Consider testing with a multimeter to ensure tape light is receiving 12V or 24V DC power.

Only part of the tape light is lit

- Check connections to the part of the tape light that is not lit.
- Confirm you have maintained correct polarity (+ to + and to -) when joining tape lights as well as when connecting to the 12V or 24V DC power supply.
- If only 1 LED series is out, cut out and remove the damaged 3-LED group and splice together tape lights or replace with new 3-LED section.

Tape lights blink on, then go off

• Your power supply is not adequate for the length of tape lights you are powering. Install a higher wattage power supply or reduce watts used by shortening the lengths of your tape lights.

LEDs farthest from the power supply are noticeably dimmer

- This is the result of voltage drop. Decrease the length of the 12V or 24V DC power feed wires or use thicker power feed wires between the 12 or 24V DC power supply and the lighting tapes. (See the "Voltage Drop" section.)
- Use shorter lengths of tape lights. Refer to the "Layout Options" above. Consider a different layout.