

Guide to Installing LED Ribbon

Important:

- Use only with approved low voltage 24V DC power supplies.
- Do not stare directly into the LED lights when illuminated.
- Do not power the LED ribbon while it's coiled on a reel.
- Always check polarity for 24V connections, positive (+) to positive and negative (-) negative.
- Do not install indoor versions in areas that are susceptible to direct exposure to the elements.
- Route and secure wires so they will not be pinched or damaged.
- Do not install Class 2 low voltage wiring in the same runs as AC main power. If AC and low voltage wires cross, keep them at 90 degree angles if they are running parallel to each other keep them at least six inches apart.
- Warning do not connect LED ribbon light directly to 120v AC power. Only connect to an approved low voltage driver.

All wiring must be in accordance with national and local electrical codes, low voltage class 2 circuit. If you are unclear as to how to install and wire this product please contact a qualified professional.

Recommended planning:

- Decide where you are going to place the power supply.
- How are you going to switch your LED ribbon, will you use a dimmer?
- Plan the best layout configuration for your particular installation.
- Note: temporarily mounting LED ribbon light using painters tape and or masking tape allows you to experiment with the light effect before permanent installation.

Power supply:

- Make sure if you are using a dimmer appropriately dimmer rated for the power supply.
- Use a power supply of higher wattage than your needs.
- You cannot over power LED ribbon lights using a higher wattage driver
- DO NOT use standard 120V AC wall dimmer and make sure to adjust the trim settings when using in home lighting systems.
- Due to voltage drop we do not recommend you exceeding 32ft lengths. Anything longer will require a new home feed.
- Excessive voltage drop can result in LEDs flickering or not lighting up at all.

How and where to cut the LED ribbon

- Use a sharp pair of scissors to cut the LED ribbon.
- Cut directly in the center of the cut marks on the LED ribbon. On the EV1 it's every 100mm (approx. 4") and EV3 every 50mm (approx. 2").
- Do not cut on the hard solder points.
- You can also solder the 24V power lead wires at these points.



How to connect the wire lead clip connectors

- Wire lead clip connectors can be used to go around corners, butting multiple pieces together or to start new feeds. Note: make sure polarity is correct when connecting these connectors.
- Pry open the clip connector.
- Using a side to side motion, carefully slide the LED ribbon into the connector until the contacts on the connector are over the contacts on the LED ribbon.
- Close and make sure you hear a click so you know the connector is fully closed.
- Make sure to test before final installation.
- If LEDs do not work and or flicker then repeat the steps above.



Joining two separate sections together

Use a power feed on both ends of the LED ribbons you want to join together, per connection method above.
Run the appropriate size wire between the two ribbons.
Create a splice on the end of the power feed and 18AWG (or low voltage wire used). Make sure to keep the polarity throughout.
Test the ribbon to make sure your connections are correct and it works.



Wiring power supply

You need to run a 120V AC main feed to the one of the knockouts on the driver and use an appropriate connector to enter into the driver enclosure.
Then go out the other knockout to your low voltage feed (make sure you use the appropriate size wire for voltage drop).
Connect the other side of the low voltage cable you used to a starter feed on the LED ribbon. Connect using the clip method above.

Surface preparation and installing peel and stick Led ribbon light

Before sticking the LED ribbon to your final product it is important to test the LED ribbon and make sure it's going to work the way you desire. Once the LED ribbon is stuck and the light is installed you cannot reposition or move the LED ribbon, this will result in it not sticking properly. It is also recommended to use an aluminum channel to make sure you get it exactly where you want and to help make it straight.

When you have determined your preferred position, clean and prep the surface area to ensure the 3M self-adhesive backing will adhere properly. Alcohol wipes work best for cleaning the surface area. It is important that the surface be dry and dust free before installation.

When you adhere the LED ribbon in place make sure to firmly press the ribbon down the entire length of the strip.

Troubleshooting:

LED ribbon light does not light

Make sure your power supply is receiving power.
Confirm you have the correct polarity throughout the LED ribbon.
Make sure all connections are done correctly (IE: polarity) and are not loose.
Make sure your runs do not exceed recommended lengths and consider testing the voltage output and input on the LED driver.

LED ribbon light blinks on, then goes off

Your power supply is too small, check your lengths and wattage and upgrade your power supply or shorten your length of LED ribbon.
One or all of your connection points are loose or polarity is incorrect.

LEDs farthest from the power supply are noticeably dimmer

This is usually the cause of voltage drop, check your runs and feeder AWG to make sure they are adequate for the distance.
Make sure you don't have more than the recommended length of continuous runs of LED ribbon.

LEDs flicker when dimming

Check to make sure you are using a dimmable approved LED driver for the LED ribbon.
Make sure you are using the correct dimmer for the driver.
Make sure you adjust the trim settings on the dimmer and/or for the lighting system.

Limited 5 year warranty

Improper installation, improper powering, abuse, or misuse from it's intended purpose will void warranty. LED ribbon cannot be returned or exchanged once cut unless for warranty replacement. Proof of purchase is required for all and any returns or warranty exchanges.