



FLEXFIRELEDs

Outdoor IP67 UltraBright™ Valor Diffused LED Strip Light Installation Guide



UL Listing and Compliance Information:

Our products are safe to use and free from any hazardous substances. They are UL Listed in the USA and Canada. To comply with UL standards and inspections, please keep in mind that:

- A Class 2 power supply is to be used with each run of lights.
- Each installation of LED strip lights in series should consume no more than 100W max.

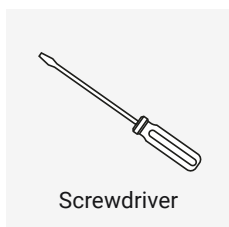
Español

- Se debe utilizar un transformador de Clase 2 cuando es necesario ajustarse a las normas de seguridad UL.
- La instalación no debe exceder un máximo de 100W cuando se conecta la tira LED en serie.

Français

- Pour être conforme aux règles de sécurité, une source d'alimentation de Classe 2 doit être utilisée.
- L'installation ne doit pas dépasser un total de 100W lorsque les bandes LED sont montées en série.

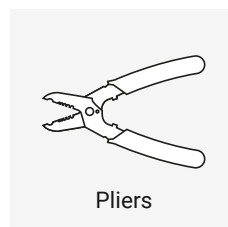
Tools Needed



Screwdriver



Scissors or Shears



Pliers



Silicone Sealant*

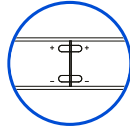


Utility Knife

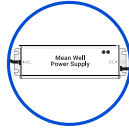
* Tube of neutral-based silicone electronics grade sealant.

Installation Instructions

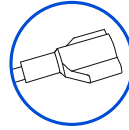
Component Check



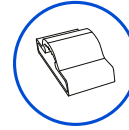
Outdoor (IP67) UltraBright™
Valor Series Diffused
LED Strip Lights



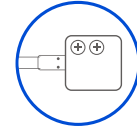
LED Driver



Front caps
(included with the
LED Strip Lights)



End caps
(included with the
LED Strip Lights)



Outdoor IP65 Grip
Connectors for Single
Color LED Strip Lights

- Make sure that you have everything you need to complete the installation.
- Before installation, make sure to complete a mock installation to test your lights and turn them on to make sure all components are working correctly.
- Do not exceed the maximum run length of your UltraBright™ Valor Series LED strip light, as this may cause voltage drop and unwanted effects.
- Make sure that all components are compatible.

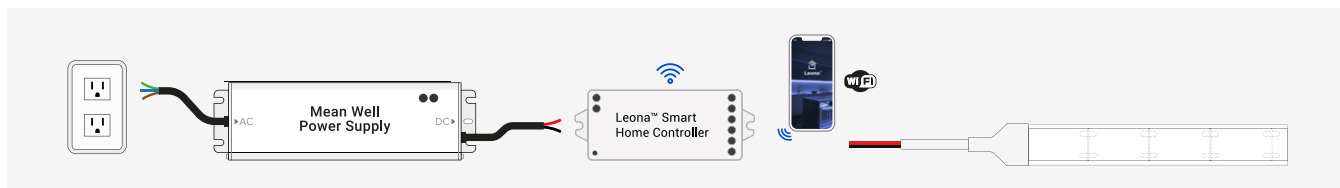
Warning:

Do not install the strip with the majority of the strip hanging or unsupported. Allowing the product to be suspended or dangling while installing may cause damage to the PCB due to the weight of the strip. When installing, support the rest of the strip to reduce strain on the piece you are installing (sticking with adhesive, mounting, etc).

1. First, Do a Mock Installation

- It is important that you have a clear vision of your project and know what you want the end result to look like. Plan where you want to install your lights, driver, and dimmer.
- Before cutting the LED strip, or permanently installing it, complete a mock installation to test your lights. Lay out all the components in the correct area, unrolling the strip in its entirety.
- Connect your LED strip to your dimmer and power supply.
- Turn on your lights and check to see if everything is working properly.

Below is an example setup diagram using a Leona Smart Home Controller. Remember, you can use a variety of other controllers and power supplies, granted that they are compatible.



2. Troubleshoot If Needed

The strips should light up after connecting them to your dimmer and power supply. If they do not, please check your connections and make sure the polarity matches all the way through from the strip light, through the controller (optional accessory), to the power supply. Make sure that indicators of positive and negative are matched.

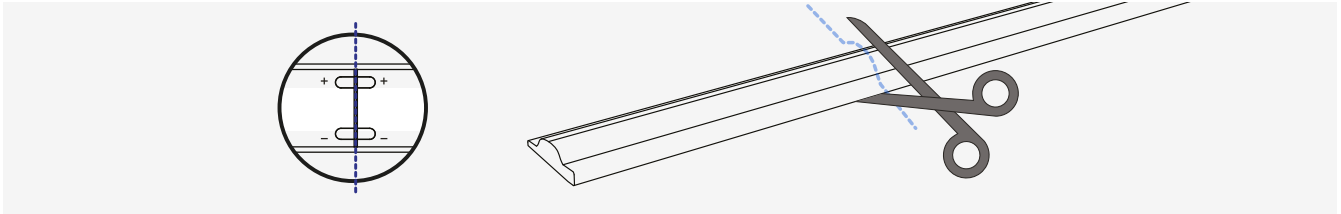
Before installing your lights, check to see if the brightness level and color temperature you chose for your project look the way you envisioned. You will be ready to proceed with the installation after testing your lights and components.

3. Turn Power Off at Circuit Breaker

If you are working with line voltage (hardwiring a power supply), make sure you turn the power off at the circuit breaker to avoid any possible injury before making a final installation to the project area.

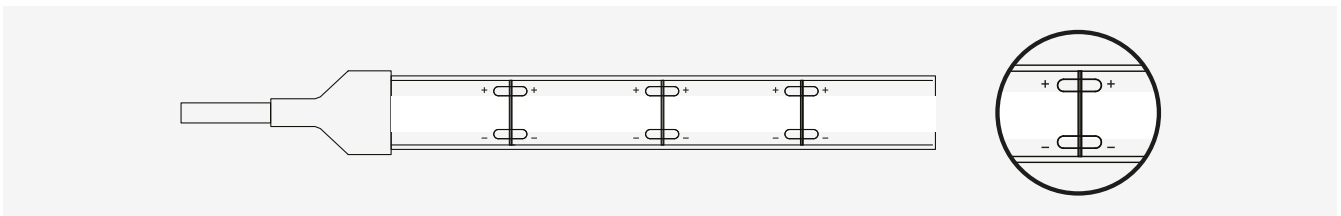
4. Cut Strip Light to Required Length

If you need to cut your LED strip light, first measure the length needed and only cut along the indicated cut marks with sharp scissors. Make sure that you cut straight along the strip's cut point to ensure a proper seal if using end caps or connectors. As a reminder, cutting the strip does void the IP67 nature of the strip as your modifications cannot be guaranteed an IP rating.



5. Make Sure Polarity is Matched Throughout The Setup

When installing separate segments of the LED strip together by soldering or using connectors, always make sure the polarity is matched from one strip to the next.

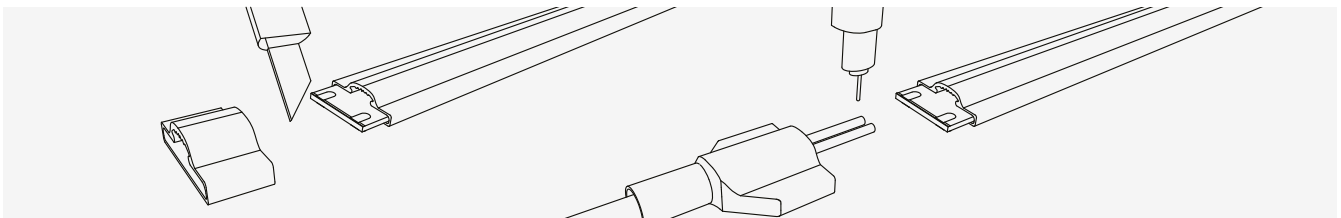


6. Attaching Additional Wire and Capping Exposed End

If you have cut your strip, add any additional wire, connectors, or end caps before making final installations (Nobody wants to solder upside down or work within tight spaces within crown moulding).

A. Method 1 - Soldering & End Caps

Cut 3 mm off the silicone cover, enough to expose the copper solder pads. Take the stranded wires you wish to solder on to the strip and feed it through the Front End Cap. Solder the wire to the solder pads on the strip, making sure that they are not crossing and there is no tin spilling over into the next solder pad. Then, fill the Front End Cap with silicone and push it over the solder pads, making a snug fit. Make sure it is properly adjusted before letting the sealant cure according to its instructions. When using the End Caps, repeat the last step for the opposite side of the strip.



B. Method 2 - Using IP65 Solderless Grip Connectors (End Cap included on connector)

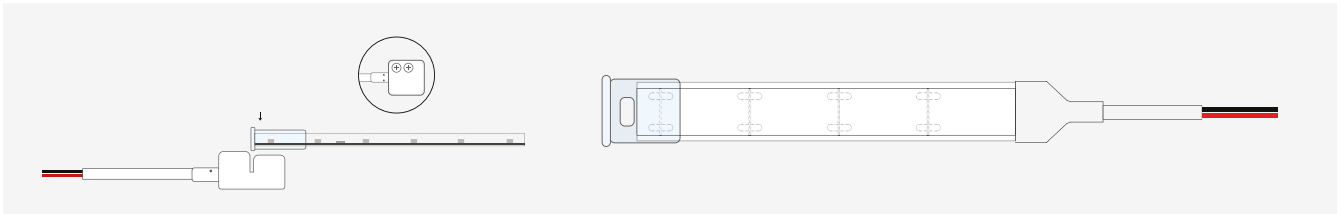
If you don't want to solder to the strip, you can also use IP65 Solderless Grip Connectors, sold separately. Carefully peel off 2" of the adhesive tape and its backer from the back of the LED strip light and push it back to make room for the connector. This will allow the silicone to seal properly and ensure that water is not pulled into the seal.



Installing IP65 Grip Connectors

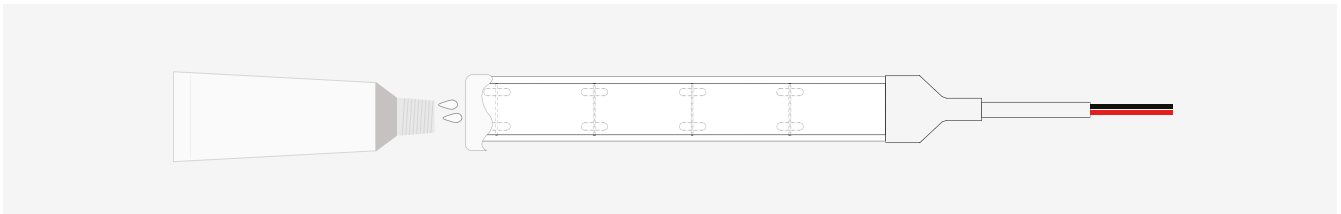
Coat the open end of the strip and approximately 1" of the top of the strip in silicone sealant. (Due to the dome-shaped nature of the strip, sealant does need to be applied to the top to fill in the gaps on the sides).

Slide the transparent case of your Outdoor IP65 Grip connector into the sleeve, until the strip is making proper contact with the end of the clear plastic. Then, grab the white plastic part of your connector and push the metal contacts through the window of the transparent case. Adjust it with pliers until you hear a click, and then let the sealant cure according to its own instructions.



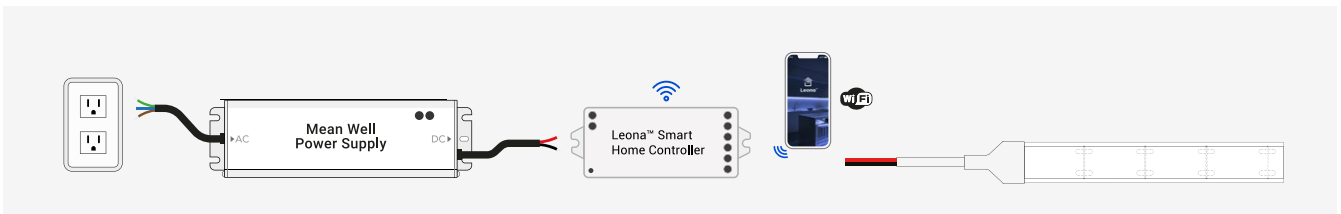
7. Apply Silicone Sealant

Open your silicone sealant and apply generously around the end of the connector to ensure that any gaps are filled between the strip and the connector to create a watertight seal.



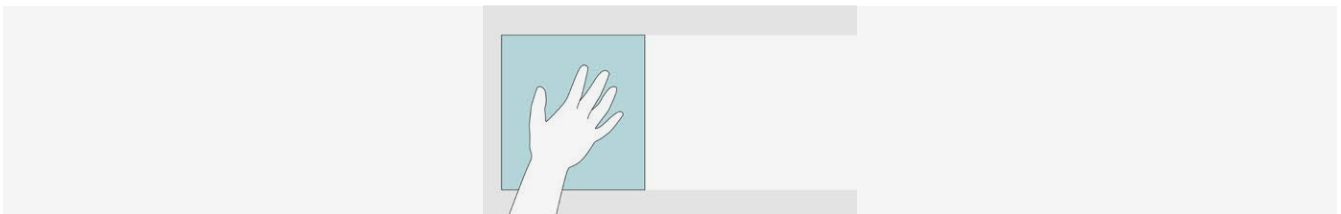
8. Retest the Setup

Test the strips again to make sure they all light up and are functioning properly before the final installation. Once you have verified all segments are working, you're ready to install them.



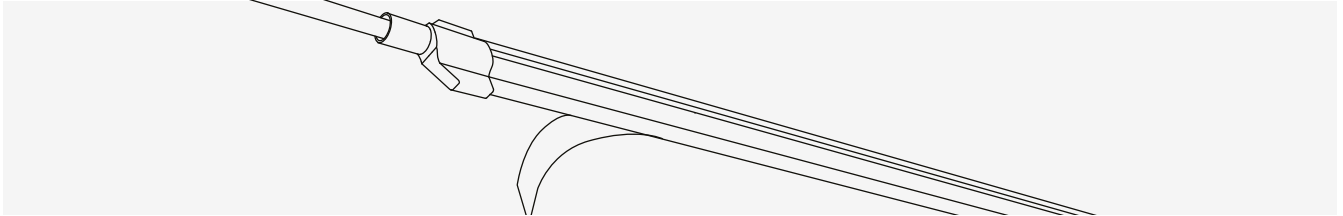
9. Strip Light Pre-install Preparation

Thoroughly clean any surface where you will be attaching your LED strip lights. The adhesive backing is strong, but will not stick to surfaces if they are dirty or dusty.



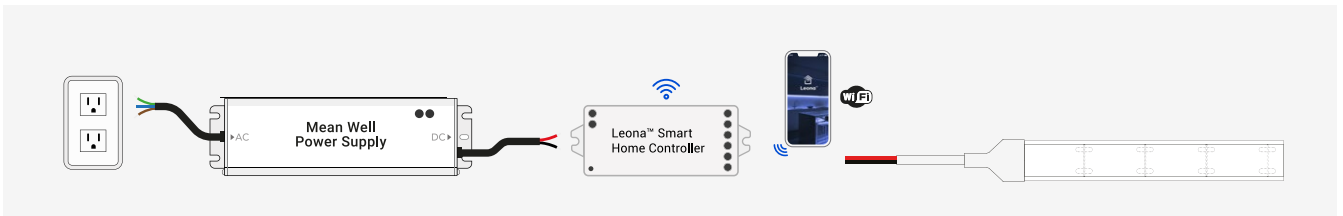
10. Attach the Strip Light in Place

Peel the rest of the 3M tape cover a few inches at a time while gently pressing the strip to the installation surface. Make sure the strip is secured on the surface. Use mounting clips to ensure permanent adhesion.



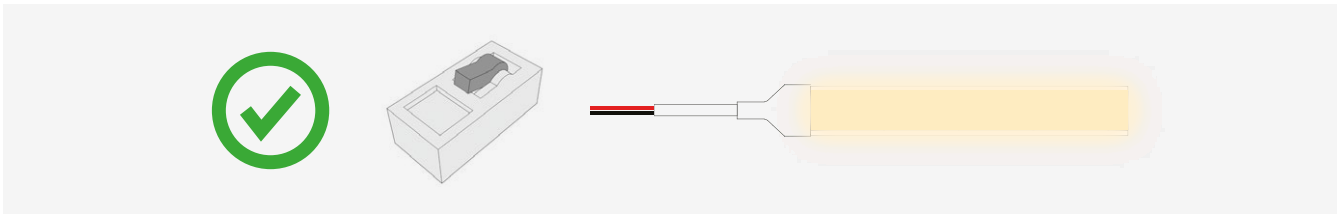
11. Complete All Connections

Complete the connections and wiring between your power supply, dimmers, and controllers. For more guidance, refer to the system diagrams below on how to connect your UltraBright™ Valor Series LED Strip Lights to your driver.



12. Turn Power on at Circuit Breaker

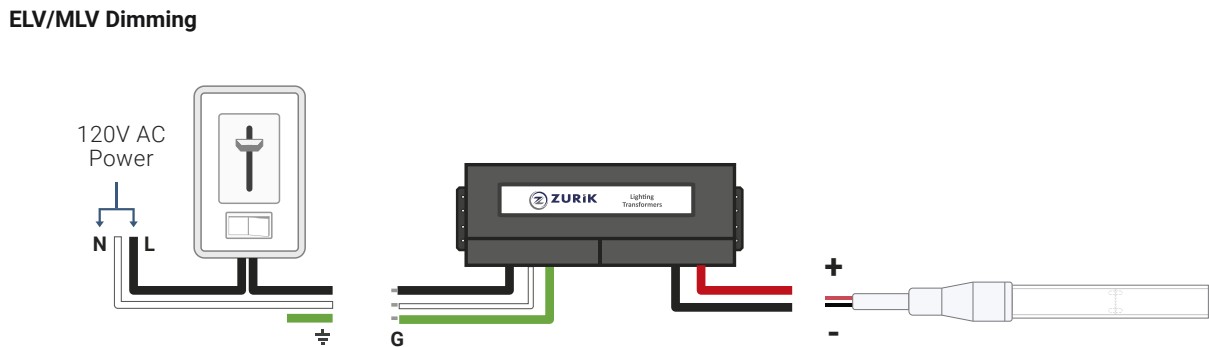
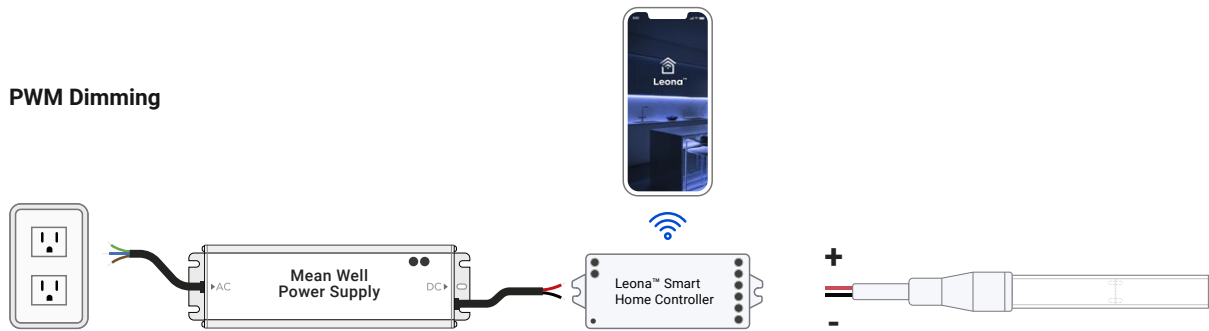
Turn on the power. The lights should light up and work properly. Test all dimming functions.



13. Contact us with any questions or troubleshooting

Almost all issues are an easy fix. If the lights are not lighting up, double check your connections and polarity. Check to make sure the power supply is plugged in and is properly functioning. We are always available to help! Contact our After-Sales Support Team with any questions.

System Diagrams



Warranty

You're Covered!

Flexfire LEDs' Industry Leading Warranty

We work our hardest to only use the highest quality components in our LED strip lights, drivers, controllers, and accessories. We recognize that most people do not use their lighting systems 24 hours a day, and would love to match our LED's longevity data with a warranty that fits the majority of our customers' use cases.

For that reason, we offer an industry topping (7) year warranty on most of our LED strip lighting products, and prolonged warranties on drivers, controllers, dimmers, and accessories. Please read over the warranty policy at www.flexfireleds.com/warranties to learn about the warranty period and exceptions.

Contact Information



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