



Design with high-intensity LED chips mounted on a flexible printed circuit board that allows for the addition of beautiful light in a home or a business. Well suited for lighting spaces that require a low-profile, low-heat light. Also, its wide 120° beam angle ensures it lights evenly and does not cast shadows on surfaces. The ZOLU Lighting LED Strip Light is a great way to provide professional-grade, bright and comfortable accent lighting that will last for many years.

LED Strip Light SMD 24V IP20

Features and benefits

- ZOLU Lighting quality and reliability
- IP20 Protection
- Better lighting consistency, no light dots visible
- Excellent heat dissipation with durable design
- No solder joints on PCB board.

Applications

- Architectural decorative lighting, amusement park, theater mood lighting
- Furniture, cabinets, shelf, direct or indirect lighting

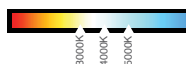
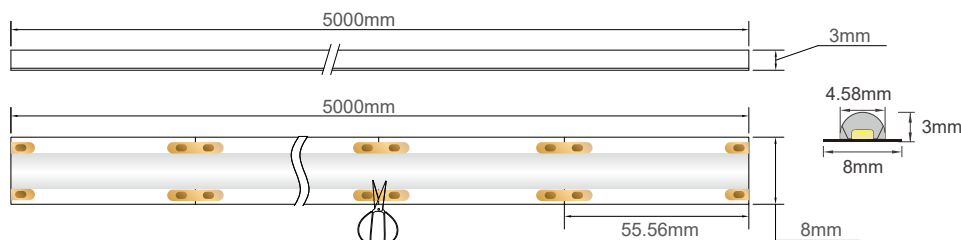
Technical specifications

Product code	Power*	Light output*	CCT	LED Qty*
ZL10WSMDSL24V27KIP20	9.6W	1250lm	2700K	288
ZL10WSMDSL24V30KIP20	9.6W	1260lm	3000K	288
ZL10WSMDSL24V40KIP20	9.6W	1350lm	4000K	288
ZL10WSMDSL24V50KIP20	9.6W	1310lm	5000K	288

*per meter

Compatible Drivers				
35LV-24V	35W	24V, Universal AC input rang 90-264VAC, IP65, 5 year warranty		
60LV-24V	60W	24V, Universal AC input rang 90-264VAC, IP65, 5 year warranty		
100LV-24V	100W	24V, Universal AC input rang 90-264VAC, IP65, 5 year warranty		
ZLPS-24VDIM-100W	100W	24V, 100-130VAC, IP67, Triac Dimmable, 3 year warranty		
ZLPS-24VDIM-150W	150W	24V, 100-130VAC, IP67, Triac Dimmable, 3 year warranty		
ZLPS-24VDIM-200W	200W	24V, 100-130VAC, IP67, Triac Dimmable, 3 year warranty		

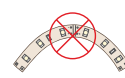
• **NOTE:** LED Strip Light 24V IP20 MUST be installed in an aluminum profile; otherwise, the warranty will be void. Aluminum profiles are sold separately.



Bends less than 10mm will damage circuit traces and void warranty.



Bending strips at sharp angles will damage circuit traces and void warranty.



Bending strips on horizontal plane will damage circuit traces and void warranty.

Main voltage	24V
IP rating	IP20
CRI	80% for 3W model // 90% for 9.6W model
Dimmable	0-10V
Beam angle	120° for 3W model // 130° for 9.6W model
LED chip	SMD2219 LED Type
Width	8mm
Minimun cut lenght	55.56mm
Ambient temp	-20°C to 45°C
Maximun lenght	5m
Certificates	UL
Warranty	5 Year

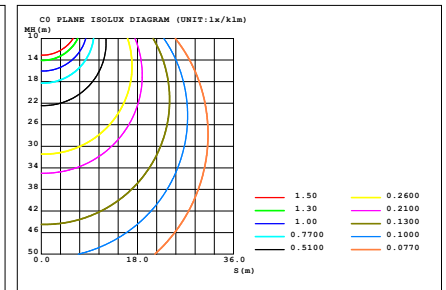
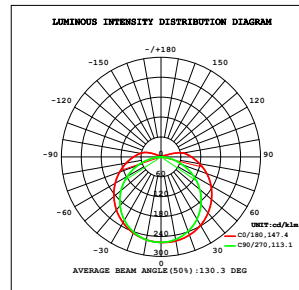
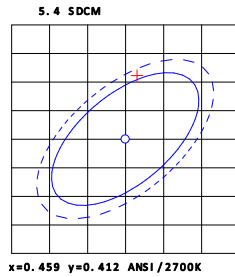
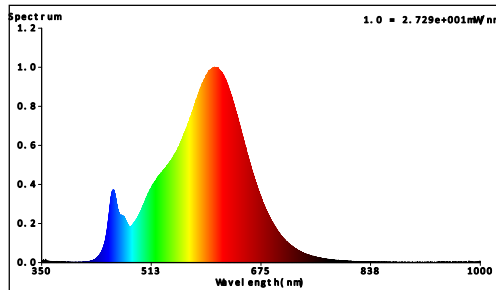


Accessories



LED Strip Light SMD 24V IP20

Spectrum



The cable length index for different LED Strip

CABLE SIZE			THE LONGEST CABLE LENGTH FOR 5m LENGTH 24V STRIP LIGHT					
AWG	ACREAGE (MM2)	RESISTOR (Ω/Km)	4.8W/m	7.2W/m	9.6W/m	14.4W/m	19.2W/m	24W/m
20	0.5189	33.9	14.7	9.8	7.4	4.9	3.7	2.9
18	0.8107	21.4	23.4	15.6	11.7	7.8	5.8	4.7
16	1.318	13.5	37.0	24.7	18.5	12.3	9.3	7.4
15	1.646	10.6	47.2	31.4	23.6	15.7	11.8	9.4
14	2.075	8.5	59.2	39.4	29.6	19.7	14.8	11.8
13	2.627	6.7	74.7	49.8	37.4	24.9	18.7	14.9
12	3.332	5.3	94.2	62.8	47.1	31.4	23.5	18.8
11	4.17	4.2	117.9	78.6	59.0	39.3	29.5	23.6
10	5.26	3.4	148.8	99.2	74.4	49.6	37.2	29.8

Remarks:

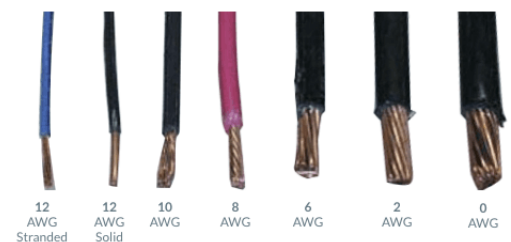
- Format: $0.5 \times 1000 \times V_{in} / (P \times L \times R)$; V_{in} : Rated voltage for LED Strip, P: Power per meter for LED Strip, L: Length of LED strip, R: Resistor of cable.
- The above form is made based on 24V and 5m length Strip. 12V and other length LED Strip can use the above format to calculate it.

The maximum allowed distances can be doubled as long as a driver is connected on both sides of the LED Strip Light. These can be two different drivers, however, it is important to properly connect the polarity of the cables to their respective drivers. If they are connected incorrectly, they could damage all the connected products, including the drivers and the LED Strip Light voiding warranty.

Size chart from AWG to millimeters:

AWG	10	11	12	13	14	15	16	18	20
Dia (mm)	2.588	2.30	2.05	1.83	1.63	1.45	1.29	1.024	0.812

American Wire Gauge (AWG) is the standard way to denote wire size in North America. In AWG, the larger the number, the smaller the wire diameter and thickness. The largest standard size is 0000 AWG, and 40 AWG is the smallest standard size.



LED Strip Light SMD 24V IP20 Installation Instructions

WARNING

DO NOT CONNECT THE LED STRIP LIGHT DIRECTLY TO A MAINS SUPPLY. MUST ONLY BE CONNECTED TO A SUITABLE 24V LED DRIVER

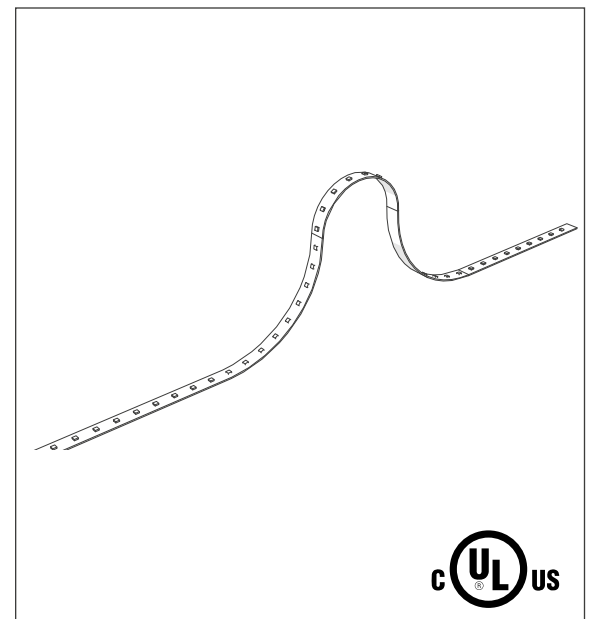
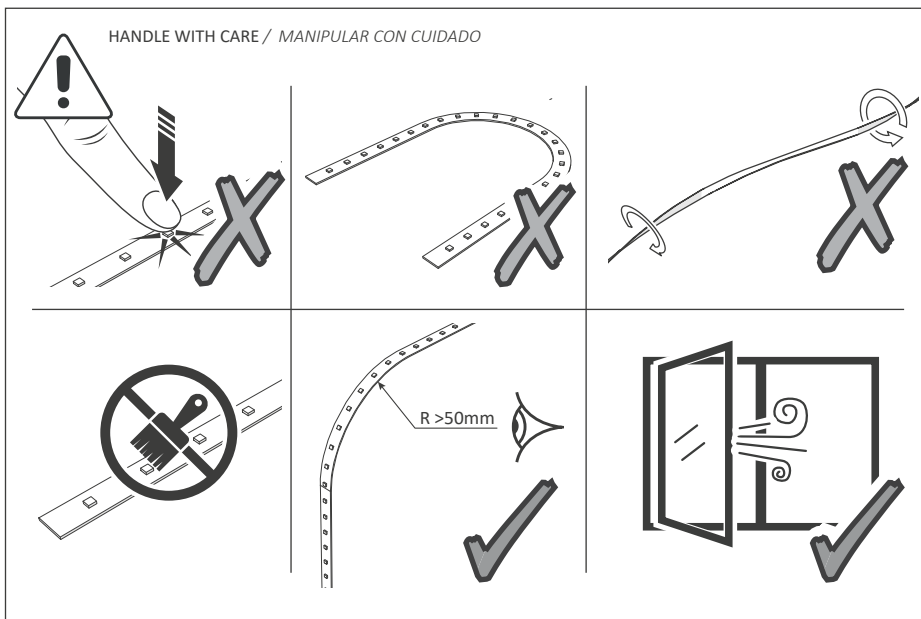


1. Read all product labels and directions.
2. Risk of fire or electric shock. LED STRIP LIGHT installation requires knowledge of luminaries electrical system.
3. Use a qualified electrician for installation of this lighting fixture.
4. Before installing the LED Strip disconnect power by shutting off the circuit breaker or by removing the fuse at the fuse box.
5. All electrical connections must be in accordance with local and National Electrical Code.
6. Avoid looking directly at the strip when turned on for a long period of time.
7. Switch ON only after complete installation and examination of the circuit.
8. We reserve the right to modify and improve the design of our fixtures without prior notice. Due to changes in technology and phosphors over time, we can not guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.



To avoid any damage to the LED Strip Light or driver and void warranty, please read carefully before use:

- Maximum Strip Light run length is 5 meters long. Each maximum run requires a dedicated power feed from the driver. DO NOT extend beyond the recommended maximum run length otherwise strip light will burn.
- Always disconnect or switch off the power supply before cutting or connecting an LED Strip Light. Wait at least one minute before connecting to a recently powered driver.
- Always handle the LED Strip Light with care: DO NOT twist the LED strip or touch the LEDs on the strip surface. Excessive handling, bending, and pressure may damage the circuit voiding the warranty.
- Observe the correct polarity for 24V connections, and use only authorized optional or additional accessories such as connectors and mounting clips.
- Make sure the appropriate gauge wire is installed between the LED driver, LEDs, and any dimmers. When choosing a wire, calculate voltage drop, maximum amperage rating, and location ratings on the wire. Improper wire selection and installation could overheat wires and cause fire.
- Safely route and secure all wires so that they cannot be pinched or damaged as this could result in a short circuit. Also, ensure that these do not touch any part of the structure where it sits.
- LED Strip must only be installed indoors, in a dry area, and on an Aluminum Profile for LED Strip Light (sold separately).
- To avoid damage or malfunction, DO NOT coat the LED strip with paint, varnish, or similar.
- DO NOT power the strip light while in its packaging reel.
- Switch ON only after complete installation and examination of the circuit.
- The LED Strip Light cannot be returned or exchanged once cut (unless the strip is defective due to factory damaged parts).
- Improper installation, abuse or miss-powering of the Strip Light, or failure to use the LED Strip for its intended purpose will void the warranty.

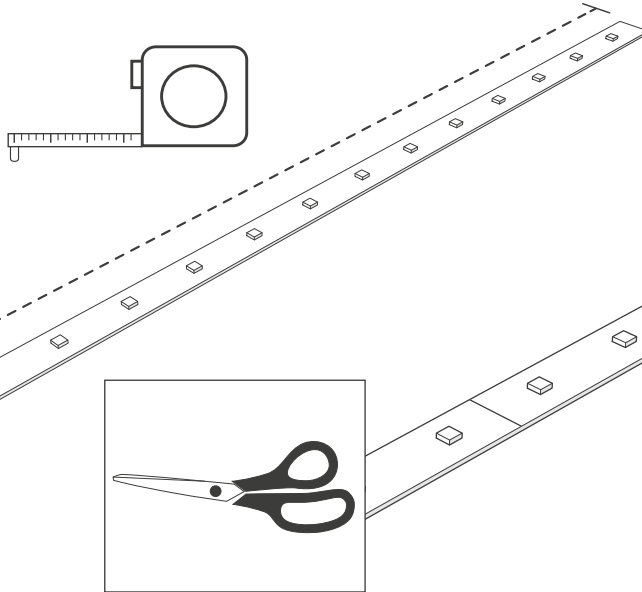


LED Strip Light SMD 24V IP20 Installation Instructions

1

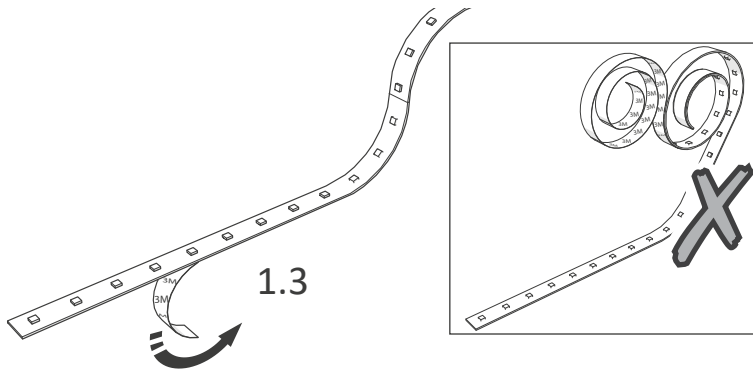
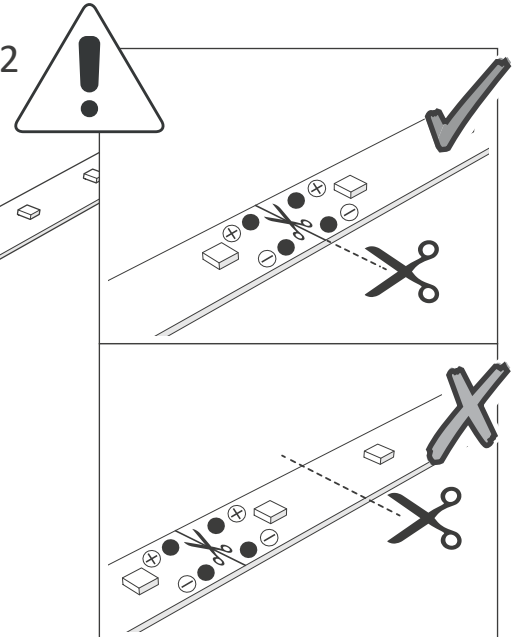
Installation / Instalación

1.1

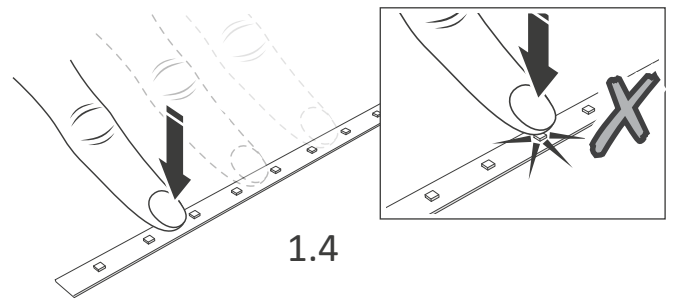


Recommended tool / Herramienta recomendada

1.2



1.3



1.4

- If the product needs to be cut to length: Measure and cut the LED Strip to the required length; Cut squarely at the cut marks only using a sharp pair of scissors. (fig. 1.1 & 1.2)
- To fix the led strip to a smooth surface: The strip is pre-fitted with 3M adhesive backing tape. Remove the 3M self-adhesive backing tape from the strip during installation. Do not remove it all at once to avoid the strip becoming entangled and sticking to itself. (fig. 1.3)
- Stick the LED Strip to the mounting surface by pressing on the strip in between components only. Do NOT press on the LEDs or other components on the strip. (fig. 1.4)
- Once the strip is fixed, it is ready to be wired.



Ensure that the strip is cut correctly. Ensure the back tape of strip light is removed completely when connectors are applied. Twisting, pressing on LEDs, over-bending, cutting at non-cut points, incorrectly powering or exposing to water, particles or direct sunlight will invalidate the warranty.

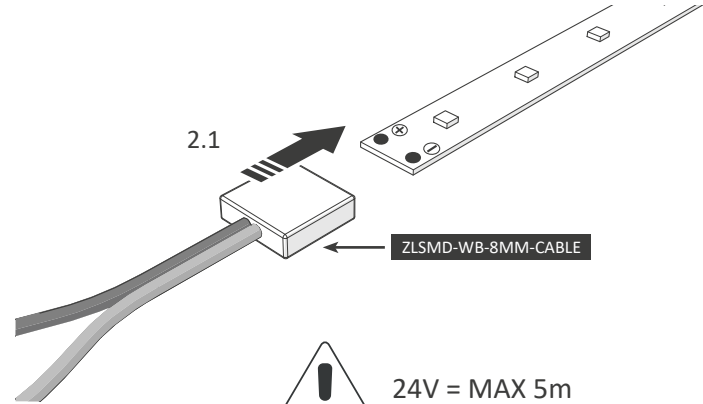
LED Strip Light SMD 24V IP20 Installation Instructions

2

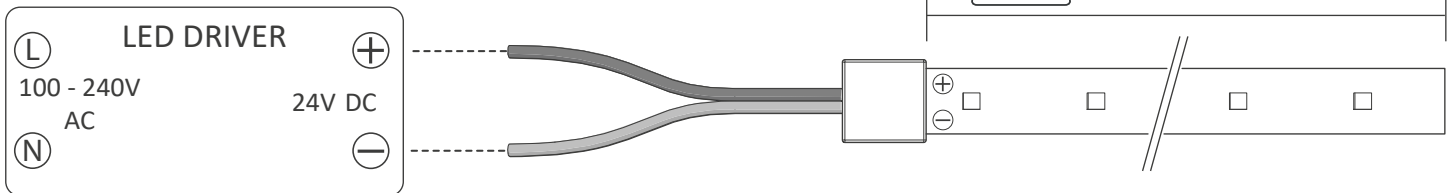
Connection / Conexión

LED STRIP W	DRIVER W NEEDED
24V = 3W/m	LED W/m x Length + 20%
24V = 9.6W/m	LED W/m x Length + 20%

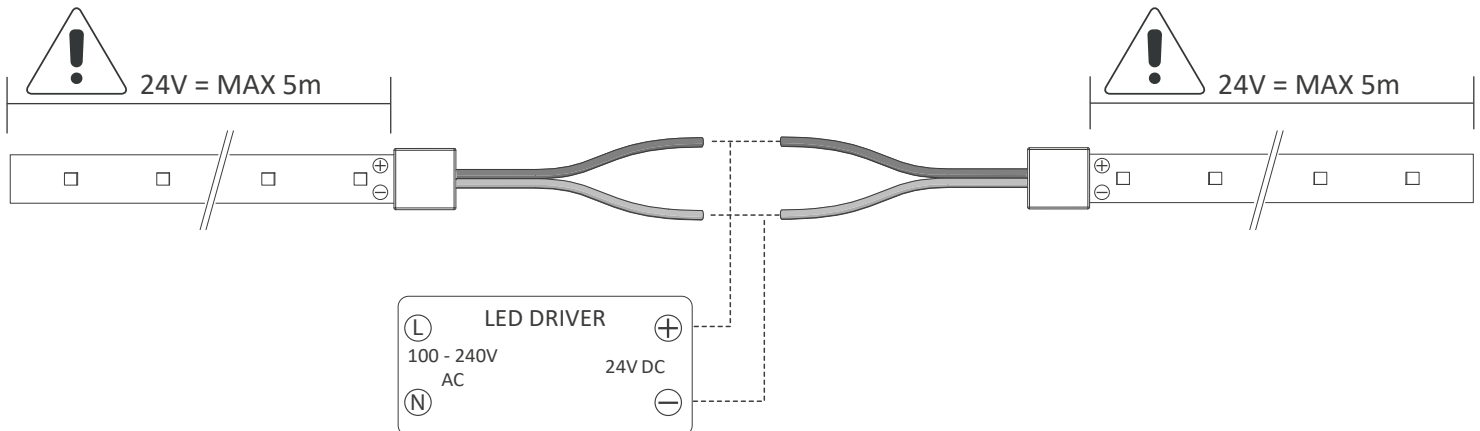
2.1



2.2.1



2.2.2



- This LED Strip Light operates with a 24V DC constant-voltage power supply known as driver. Drivers are sold separately and are available in varying wattage outputs, dimmable and no-dimmable options.
- Use the suitable connector and ensure that the correct polarity is observed. Always observe polarity for 24V connections to control unit, positive (+) to positive and negative (-) to negative.
- The specification of the driver required will depend on the total power requirements of the connected strip(s). The power output of the driver (wattage rating) must be at least 20% higher than the total required wattage of the strip(s) being powered. The maximum length must be 5 meters, exceed this length will burn the strip light.
- Straight run: An LED driver powers the first LED Strip. Additional strips can be connected in series. The installer will need to consider voltage drop. (fig. 2.2.1)
- Powered from the centre: Power one or two equal lengths of LED Strip from the centre. (fig. 2.2.2)
- Check the wire connections before switching the power on.

