# How to install LED strips?

LED Strips are the preferred choice for lighting, decorating or highlighting any surface. In recent years, they have become trendy in **home and business lighting**, thanks to its versatility, consistency and practicality. In addition, they are very easy to install and we'll show you how. Let's get to work!



### Main **characteristics**





#### First and foremost...

These are the basic steps for installing one or more LED strip:

Measure the space where you are going to install the strip.

Before cutting, lay out the required section over the space where it is to be installed.

**Clean the surface** where the strip is to be applied, to ensure proper adhesion to the strip.

**Calculate if the length required is more than 5 meters.** If so, you will need to use more than one coil of LED strip.

**The power supply** for the LED strip must be 20% higher than the total wattage (W) of the section of strip you are installing. For RGB LED strips, you will also have to take into account the wattage of the controller.

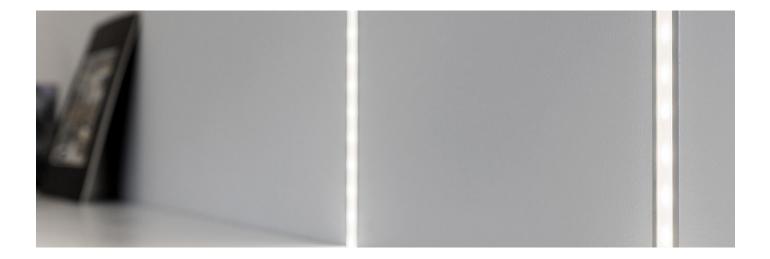


Choose between IP20 LED strips if you are going to install them indoors or IP65 for outdoors.

#### How to determine the wattage (W) of a power supply

W/m (consumption) × m (installation) = W of total consumption W (total consumption) × 1,20 (20% margin) = minimum W for the power supply

If an LED strip consumes 10W per meter and you are going to install 2.5 meters, the total consumption will be 25W. Applying the recommended 20% margin you will need a minimum 30W power supply. The above formula is applicable to any consumption and/or measurement.



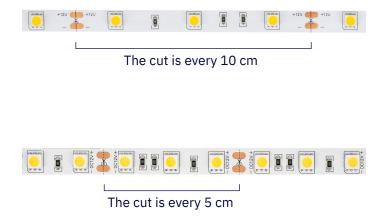
o Ledkía.

#### How **to cut** an LED strip?

The LED strips should **always** be cut along the cut indication line marked with a **scissor icon (**<sup>‡</sup>). The cut must be made depending on the model of the LED strip, as you must take into account the amount of LEDs per meter. Below we explain in detail how to cut each type of strip.







12V / 30 LED per meter

12V / 60 LED per meter

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The cut is every 5 cm

## 24V / 60 LED per meter

24V / 120 LED per meter

on one line

24V / 120 LED per meter on two lines

The cut is every 10 cm

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#### How to **solder** an LED strip?

All divisible strips contain **marked lines** so that they can be joined by welding. Be mindful that the soldering iron should maintain **brief contact** with the strip when soldering, as excessive heat will damage the conductor, resulting in non-functioning LED strips. If the strip is IP65 you will have to peel off the silicone housing on the end of the LED you have cut so that it can be soldered.



#### How to **splice** an LED strip? (without soldering)

Several accessories are available for making solderless joints:

**Type A:** used to join two LED strips. There are **rigid connectors** (those without cable) and **flexible connectors** (those with cable) to make this type of connection.



Hippo Connector





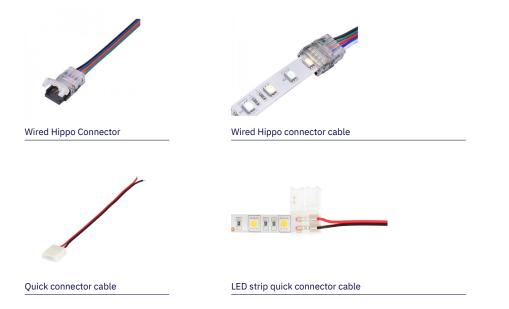
LED Strip Connectors



LED strip connector cables

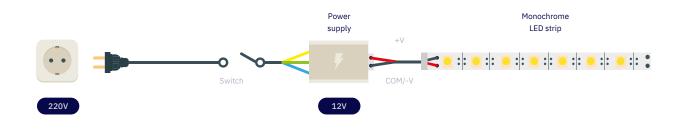


Type B: used to attach an LED strip to the wiring.



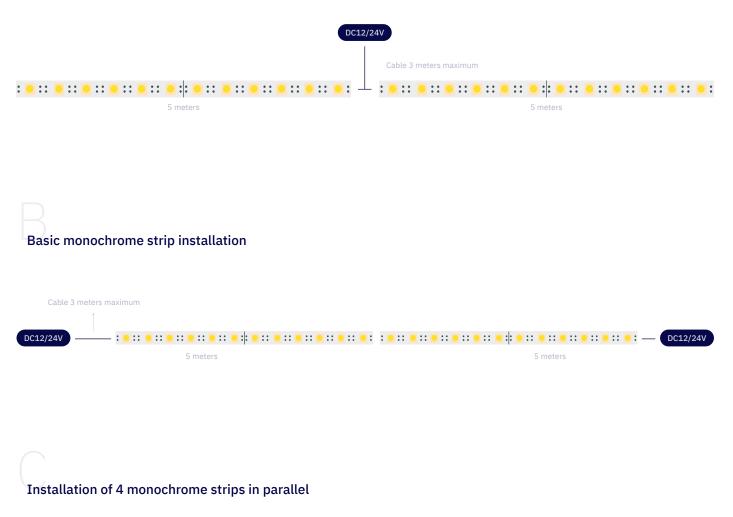
# Examples of monochrome strip installation

To avoid drops in voltage and to ensure that the LED strip lights up equally at every section, it is **advisable not to exceed the 5 metres** in length per section. You should also take into account that all installation cables should be the same length. Below are some installation examples.





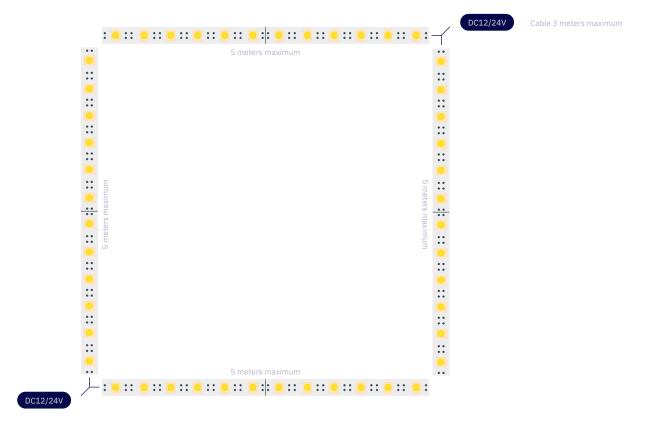
Installation of two monochrome LED strips to a power supply







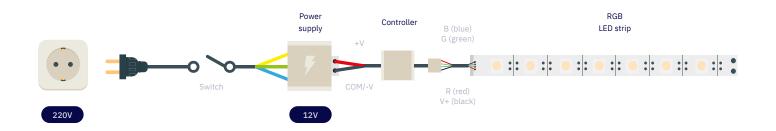
#### Installation of 4 strips to form a square





#### Examples of **RGB strip installation**

To avoid drops in voltage and to ensure that the LED strip lights up equally at every section, **it is advisable not to exceed the 5 metres in length per section.** Between the power supply and the LED strip the maximum length of the cable is 3 meters. Remember to check the technical specifications of the controller and LED strips to be used in the installation to know the maximum length of strip that the controller can support.

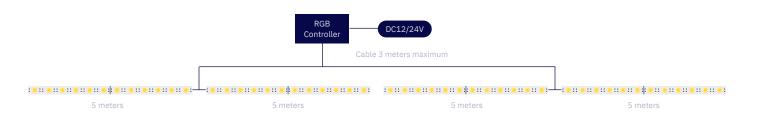


You should check the technical specifications of the controller and LED strips to be used in the installation to know the maximum meters of strip that the controller can support.

A very important fact to take into account in the installation, is that the **power** supported by the controller always has to be greater than or equal to the sum of the power of the LED strips. The power supply has to be **20% higher** than the total power consumed by all the strips.



#### Installation of 4 x 5 meter RGB strips in a row







5 meters maximum



#### Lastly...

Remember to have the following supplies available:

- LED Strip
- 12V transformer (switching source)
- Scissors
- Strip connector Transformer
- Wire stripper or cutter, soldering iron and flux for soldering
- RGB controller (for RGB strips only)



As you can see, the LED strips are very easy to install. Furthermore, they require no maintenance and have a **long lifespan.** They adapt to any location, integrating with minimum visual impact and achieving ideal lighting effect for all types of designs and projects. **What are you waiting for? Install your LED strips now!** 

