



# Technical Data

Part #  
 LLB-45xx-xx-xx IP68 Outdoor  
 LLB-46xx-xx-xx IP20 Indoor  
 LLB-45AR-01-00 RGB Controller (optional)



Lighting Color Options:  
 White Warm White Red Green Blue  
 Red / Green / Blue



LFx-45AR-01-00

Voltage Range:	Without Controller	12VDC
	With Controller	12/24VDC
Power Consumption:	30 LED/Meter	7.2W/Meter
	60 LED/Meter	14.5W/Meter
Waterproof	IP68	
	Indoor	IP20
Brightness per LED	Red	1,200 mcd
	Green	6,500 mcd
	Blue	1,200 mcd
	Warm White	3,700 mcd
	RGB: Red	400 mcd
	Green	1,700 mcd
	Blue	400 mcd
Beam Angle	120 Degree	
Mounting	3M Adhesive included with strip Optional Silicon Clips (LLB-45AE-01-00)	
Connection:	Standard tinned wire	

LED Strip Lighting by Lunasea comes in both waterproof (IP68) and indoor (IP20).

Waterproof (IP68) Flexible LED strip lighting are the ideal solution to light up and create accent lighting in a variety of situations. Its flexible format and cool light output makes it ideal for a variety of projects:

- Cockpit Lighting
- Color changing lighting
- Outdoor Lighting
- Mast Lighting

Indoor (IP20) Flexible LED strip lighting are perfect for areas that will not be exposed to water. These are very easy to cut and splice to your application. Below is an example of where to cut and attach wires.

- Under cabinet LED Strip Lighting
- Indirect lighting in closed spaces
- Architectural Lighting

### Do I need a controller?

A controller is optional but adds the ability to turn on and off as well as other features such as dimming.

### How much can my controller run?

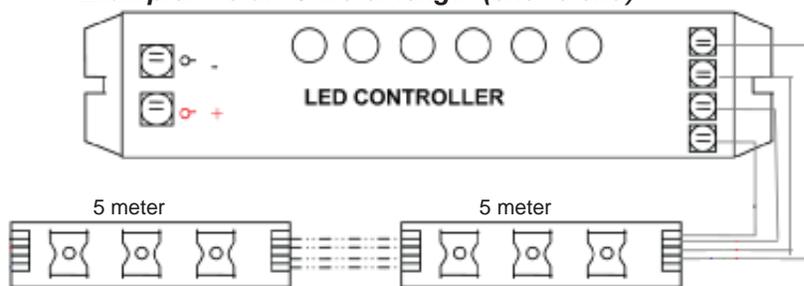
Example: LLB-45AR-01-00 is a 180W controller. This means that it can control 25 meters of the 30 LED/Meter LED Light strips ( $180W / 7.2 \text{ per M} = 25 \text{ Meters}$ ).

### Connecting Strips:

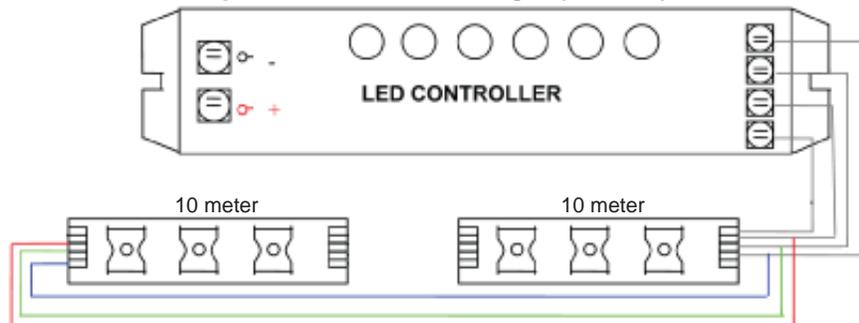
Strips can be connected end to end up to 10 Meters long. After that the light output will diminish greatly.

Example is you can have two (5) Meter strips tied end to end or five (2) Meter strips tied end to end. This is true for both Single color and RGB color strips.

**Example: Total 10 meter length (end to end)**



**Example: Total 20 meter length (Parallel)**



**Example: Where to cut and solder**

Cut every three LEDs at solder points



**Warning: Both IP20 and IP68 can be easily damaged when soldering if too much heat is applied.**

IP20 (indoor) is relatively easily cut and soldered

IP68 (outdoor) which takes time and is very difficult to solder after being cut due to the silicon shell.

After cutting strip to desired length the silicon must be carefully removed and cleaned. Consult Lunasea for custom lengths if you feel uncomfortable with this procedure.