



PROLED IP20 Flex Lightning Strip User Manual

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PROLED[®]

FLEX STRIP IP20 / IP53 / IP68



User manual

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Preface

Thanks for choosing the PROLED FLEX STRIP. Before installation and use, we strongly recommend you to read this manual carefully. If the Flex Strip has been damaged during transport, please report this to your supplier immediately. Please don't take any action without contacting your supplier first.

Limited Warranty

In case of quality problems we provide free repair or replacement from the day of purchase, if this product has been used properly in accordance with the user's manual, except in following cases:

1. Any defects caused by wrong operation.
2. Any damages caused by unauthorized removal, maintenance, modifying, incorrect connection and replacement of chips.
3. Any damages due to transportation, vibration etc. after purchase.
4. Any damages caused by earthquake, fire, lightning, pollution and abnormal voltage.
5. Any damages caused by negligence, inappropriate storing at high temperatures and humidity or near harmful chemicals.
6. Product has been updated

Safety Warnings

1. Please don't install this Flex Strip during thunderstorms, intense magnetic or high-voltage electrical fields. Take care about correct connections to minimize the risk of damage of components or short circuits.
 2. Always be sure to mount this unit in an area with proper ventilation to avoid overheating.
 3. Check if the power supply fulfills the voltage and power requirements of the Flex Strip as well as the polarity.
 4. Make all connections only in powerless condition and make sure that no short circuit is existing before switching on the Flex Strip.
- Please contact your local dealer for updates.

Product description

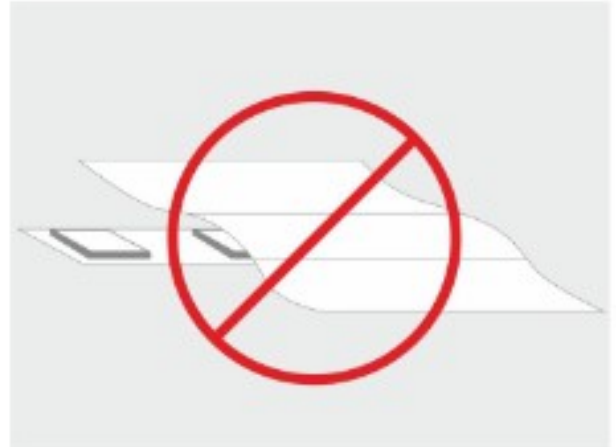
PRO LED FLEX STRIP allows making different types of illumination. It can be used for main illumination, for background illumination, ambient illumination, etc. as well as inside or outside or even underwater.

Cautions

Please follow below information using Flex Strips.



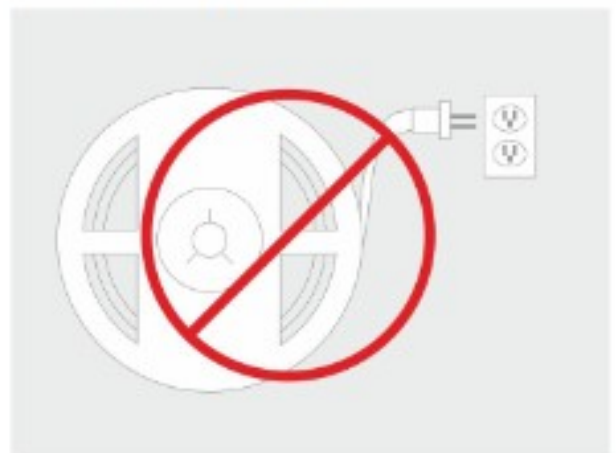
Do not bend sharply



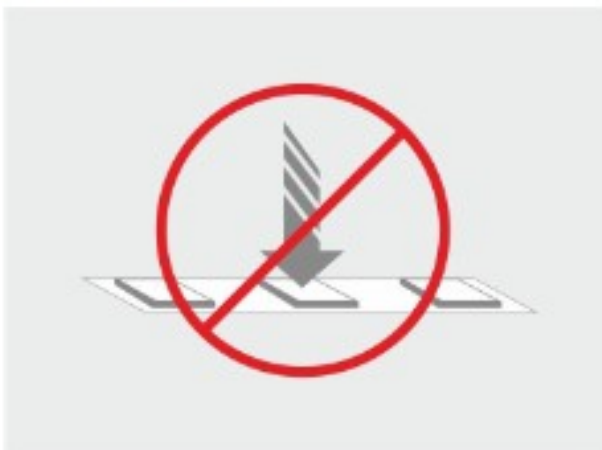
Do not cover during working



Do not bend horizontally



Do not connect to mains supply



Do not expose to pressure

Safety cautions

- Installation only according to local specifications
- Installation only by professional staff
- Use only Class 2 power supplies
- Power supply must have correct voltage. Voltage must correspond to voltage listed on Flex Strip
- Use only cables which are specified for more than 80°C
- Use correct dimension of cables. Wrong cables can lead to overheat and eventually result in fire. Cable must be approved for the existing voltage and current
- Use the Flex Strip only at an ambient temperature of -10 – 45°C
- Do not stick IP20 & IP53 Flex Strips on conductive surfaces

Installation place

1. Do not install the Flex Strip in an overheated ambient, for example near a radiator, or in a bad cooling surrounding.
2. If the installation is in a high humidity surrounding, please use, suitable for the application, Flex Strip IP53 or IP68.
3. Do not use the Flex Strip in an aggressive surrounding, for example containing sulfur, chlorid, brom etc.
 - a. Gas vapour can diffuse through the silicon cover and react with the LED surface. Due to this, the light output will be significant lower and a temperature shift can't be avoided. Further more the resistance will rise, which result in higher current.
 - b. Organic materials, which contains N, P, S. Heavy metals like Sn, PB, Hg, Sb, Bi, As etc.

Installation

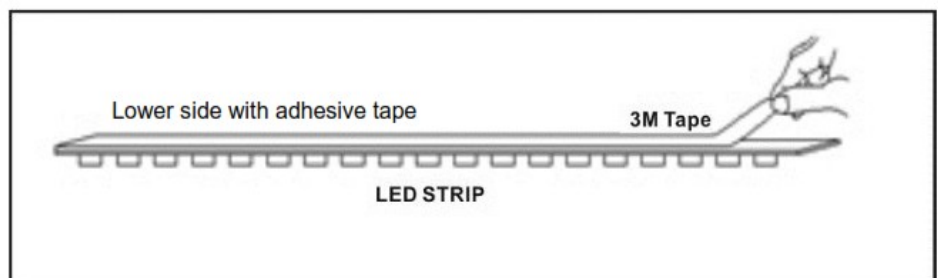
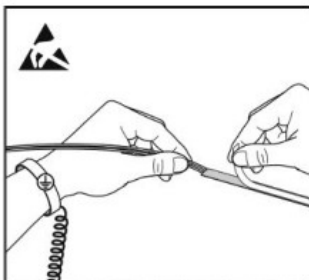
- Check the correct function of the Flex Strip, but in unrolled shape, before fixing it. Complaints after installation can not be accepted.
- Switch off the mains supply and secure it against switching on.
- Please check if the correct units will be installed, this means that the power supply must have same voltage like the connected Flex Strip.
- Please check if the power supply has enough power, for example to compensate power loss due to long cables and if the correct cables are used to minimize voltage loss. It is suggested that the power supply has ca. 20% more power than the connected load.
- When connecting the cables, please take care about the polarity.
- Adhesive surface must be non-conductive. It is recommended to stick the Flex Strips into anodized aluminium profiles.
- Flex Strip can only be bend sharply at areas with no electronical components. The minimum bending radius is 2 cm. Flex Strip is not allowed to be twisted.



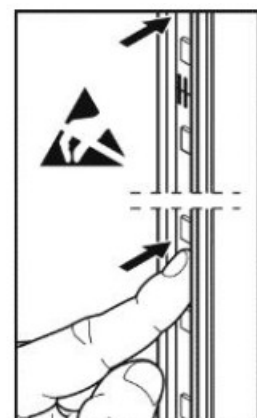
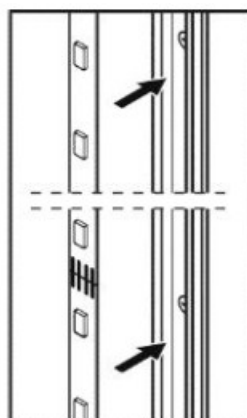
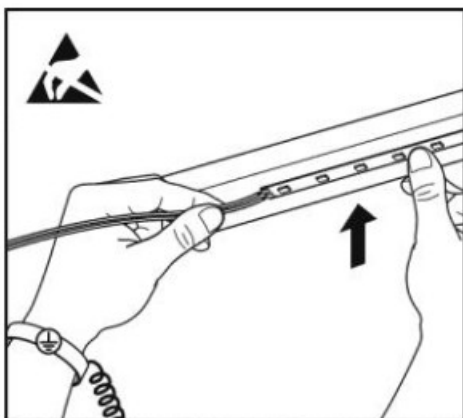
- Installation must be made on a heat disposal underground, which is adequately dimensioned, to remove the heat of the desired Flex Strip. The underground must be free of greas, oil, silicone, dust, and dirt. We suggest Isopropanol for cleaning.
- Installation on uneven, low heat-conductive grounding is not suggested as the lifetime will be shorted and make fixing difficult. These include wood, plasterboard, wallpaper, etc.
- Avoid fixing over profile splice. Because of thermal expanding or shrinking a damage of Flex Strip can happen. Divide the Flex Strip in this case and use flexible connections, for example wire strap.

Installation steps:

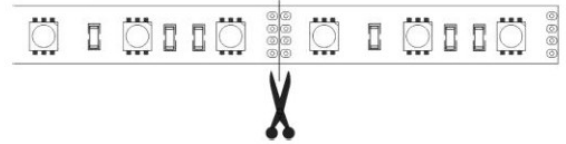
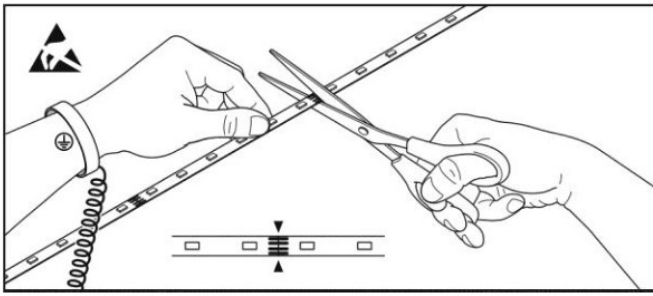
1. Remove the protection foil of the adhesive tape



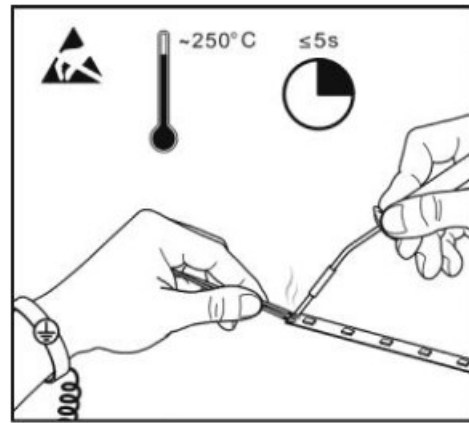
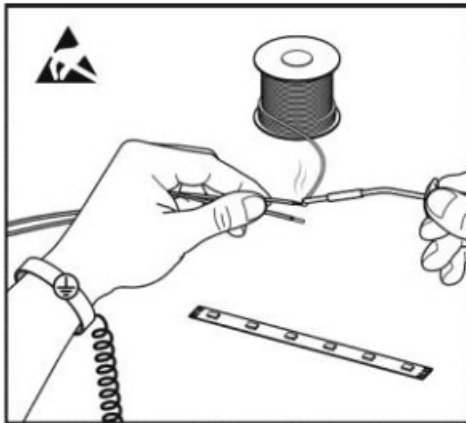
2. Place the Flex Strip in the profile and stuck it gently. Do not use any sharp or metallic tools.



3. Cut away the not needed part of the Flex Strip, with a scissor, at the marked cutting line.



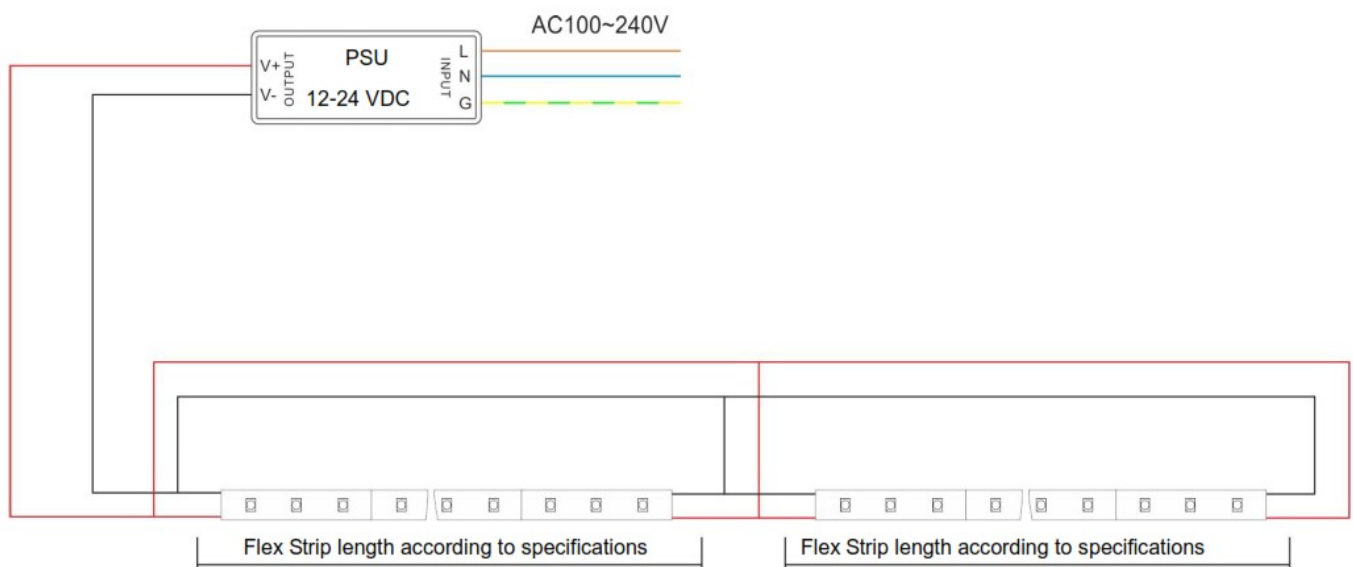
4. Please pay attention, that an already stuck Flex Strip should not be removed again. It is possible that electronical parts or soldering points will break, which isn't covered by guarantee or warranty.
5. Rest pieces can be used at other project. Only connection cable must be soldered to the Flex Strip.



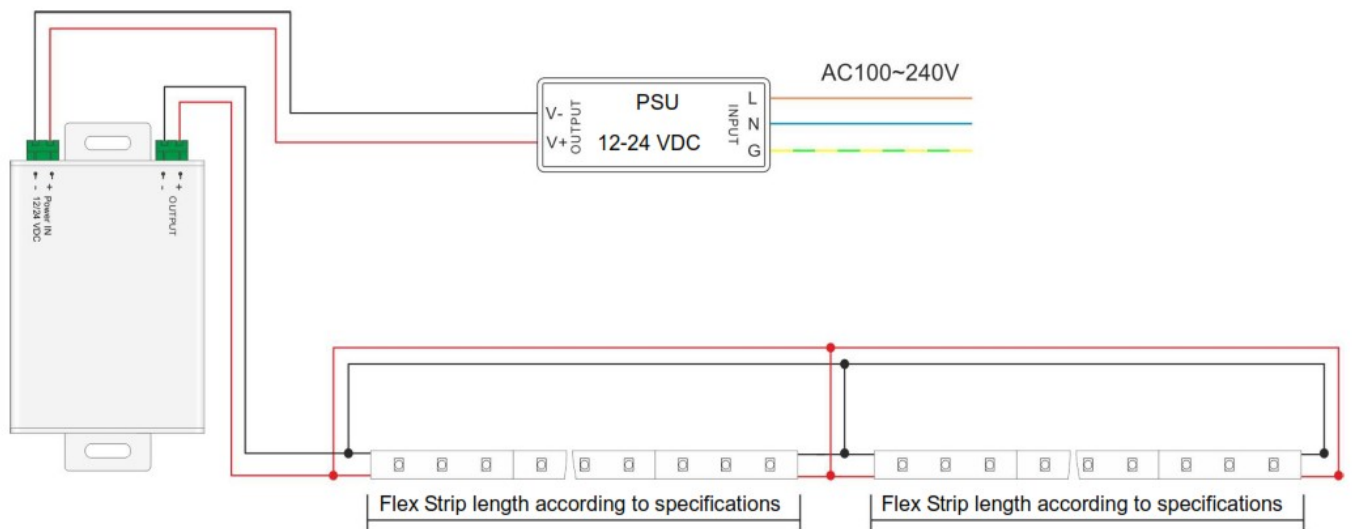
Connection diagram

Following diagrams show the connection of Flex Strips. Please refer to the manual of your controller/dimmer for exact connection diagram.

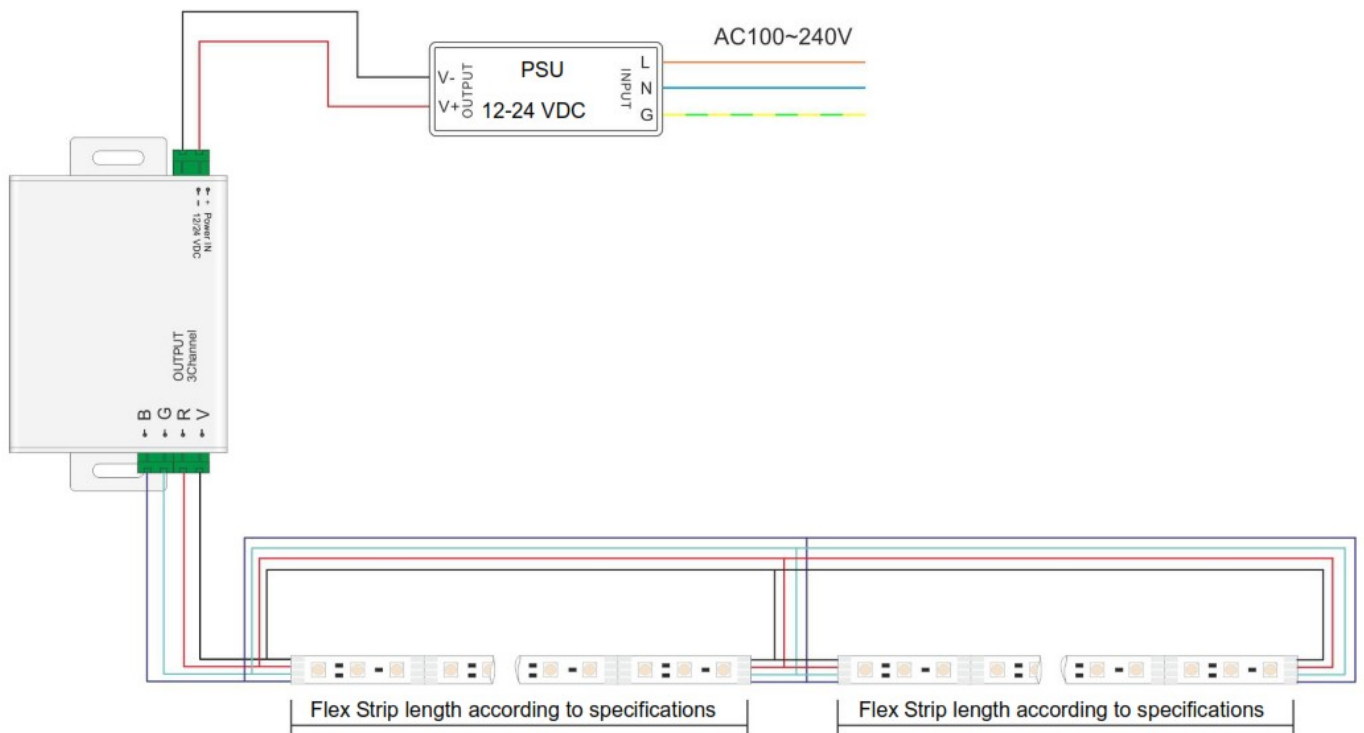
Connection of monochromatic Flex Strips without dimmer



Connection of monochromatic Flex Strips with dimmer

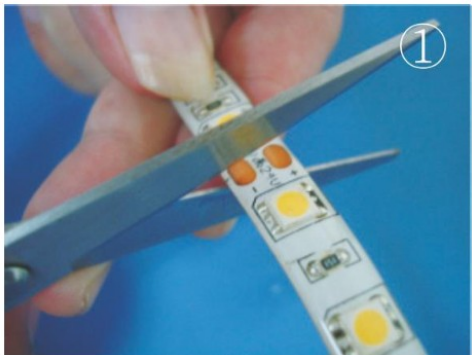




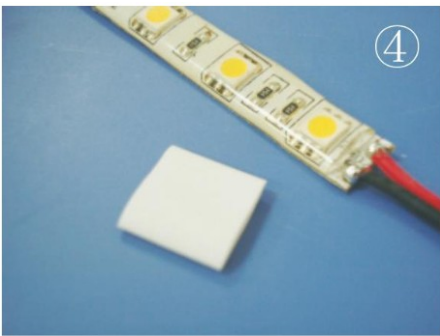


Connection of RGB Flex Strips with Dimmer



Soldering of cables at IP53 Flex Strips

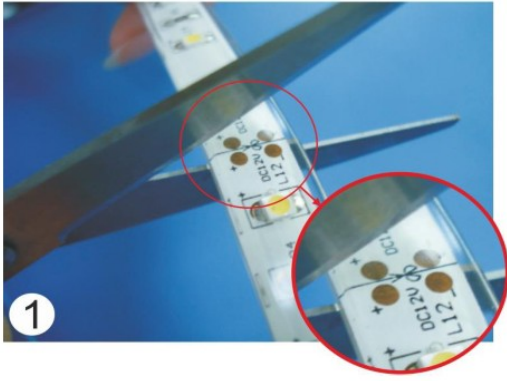
If you have to solder a connection to a Flex Strip IP53, please work according to following steps.

		
<p>Cut the Flex Strip on marked cutting line</p>	<p>Remove silicone from the soldering pads and Solder the cable correctly. Please take care about correct polarity.</p>	<p>Cover the soldering point with heat shrink tube for example</p>

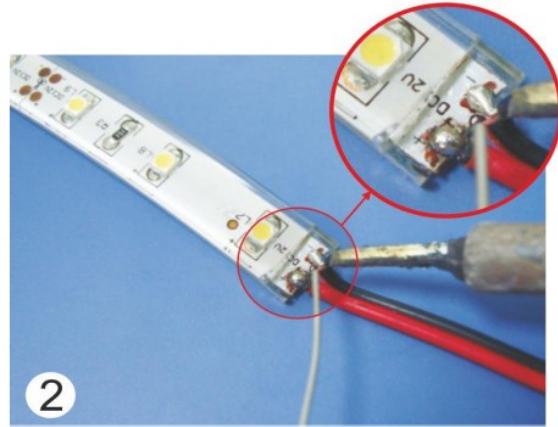
		
<p>Cut a small piece of heat shrink tube.</p>	<p>Cover the soldering point with heat shrink tube</p>	<p>Take care that the security is maintained.</p>

Soldering of cables at IP68 Flex Strips

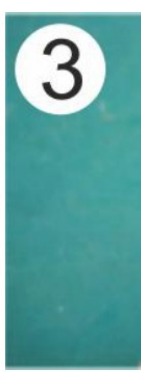
If you have to solder a connection to a Flex Strip IP68, please work according to following steps. Please be advised, that correctly sealed end caps have only a IP65 classification.



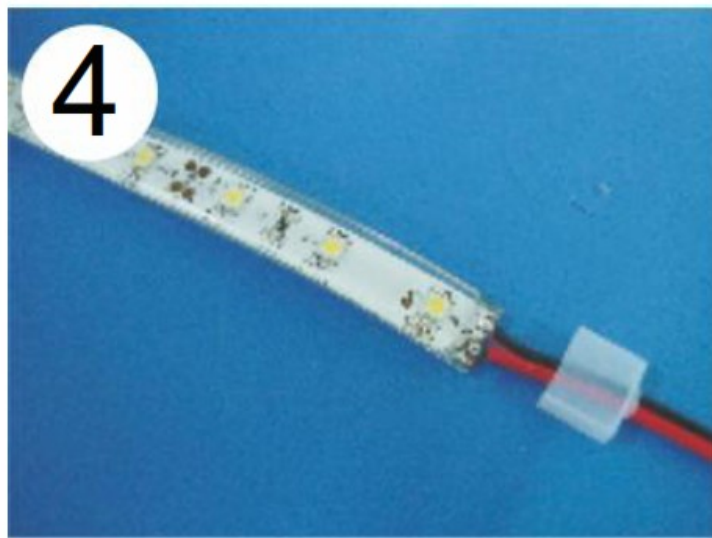
Cut the Flex Strip on marked cutting line.



Remove the silicone from the soldering pads. Solder the cable correctly . Please take care about correct polarity.



Cut a hole for p



Move the end cap over the cable.



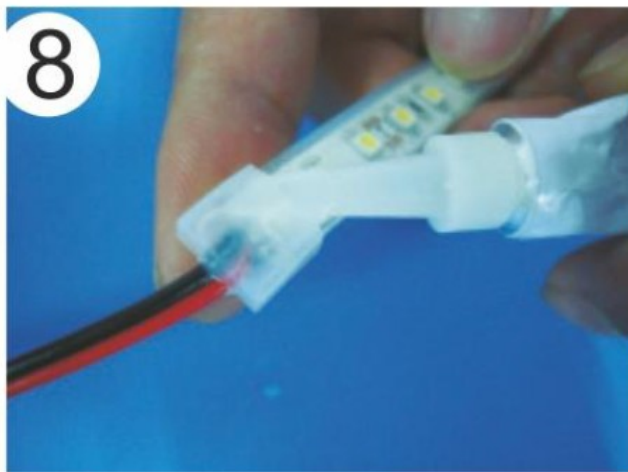
Pierce the tube outlet with the cap of the sealing glue



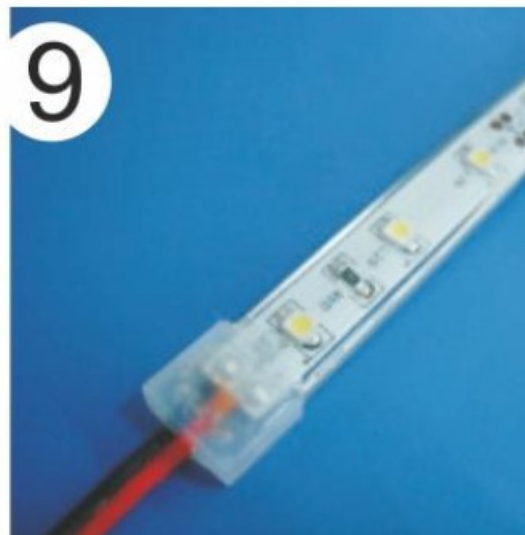
Screw the outlet funnel on the tube.



Cut the funnel diagonally.



Fill the end cap completely with the glue.



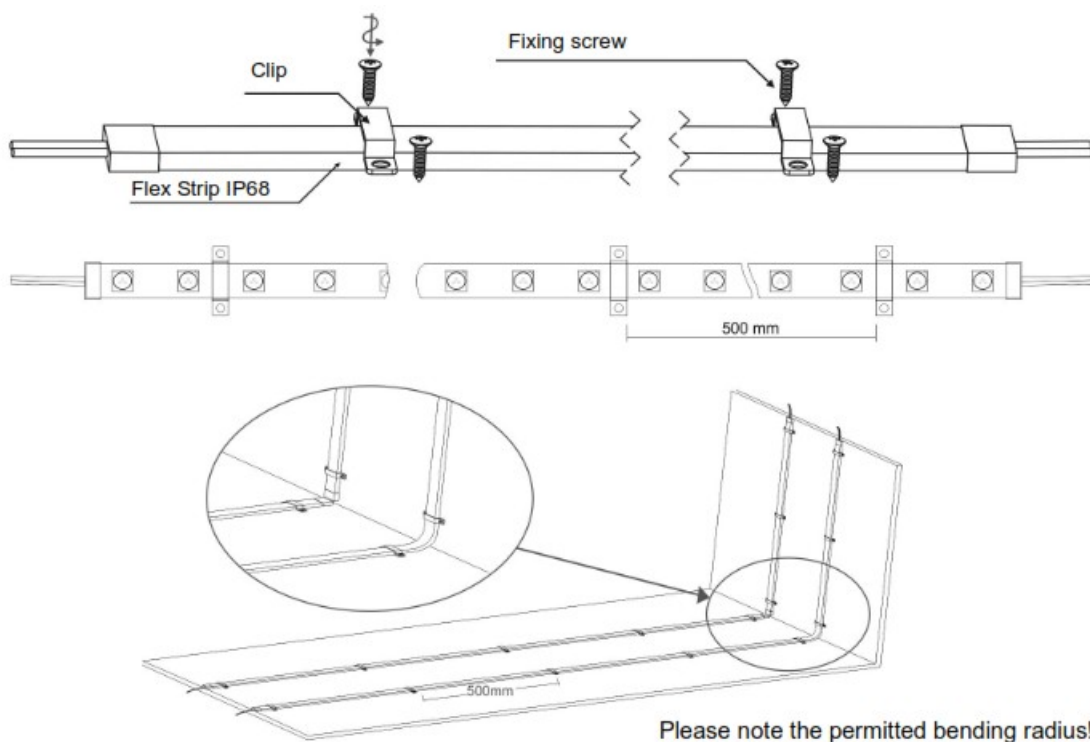
Move the end cap over the strip, so that the soldering pads

Caution:

Please leave new glued end cap minimum 24 h without movement for drying. Please be advised, that silicone is not a maintenance-free. The glue must be checked regularly, but at least once a year, and must be replaced if needed.




Fixing of IP68 Flex Strips

For fixing of Flex Strip IP68 is possible with corresponding plastic clips. Following please see examples, how they can be attached.



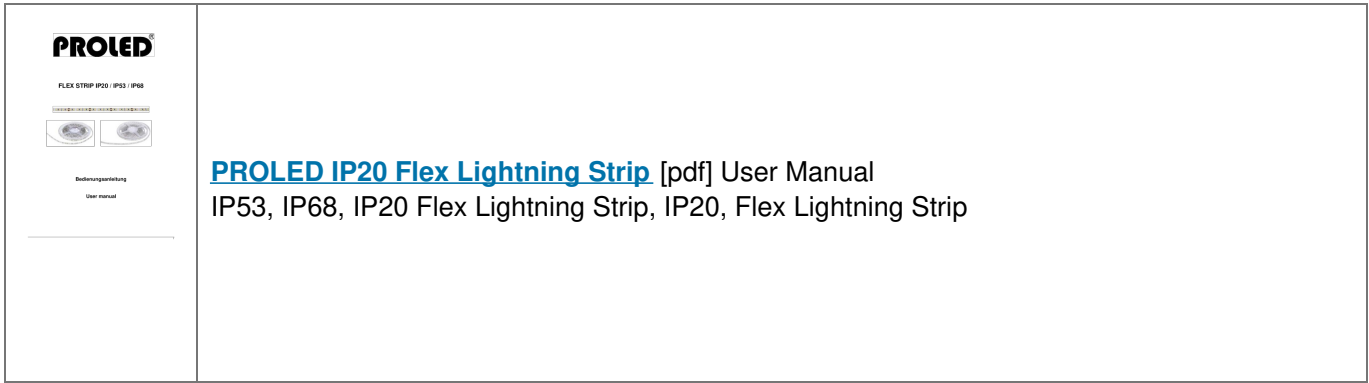
Troubleshooting


Following you will see some failures and their results

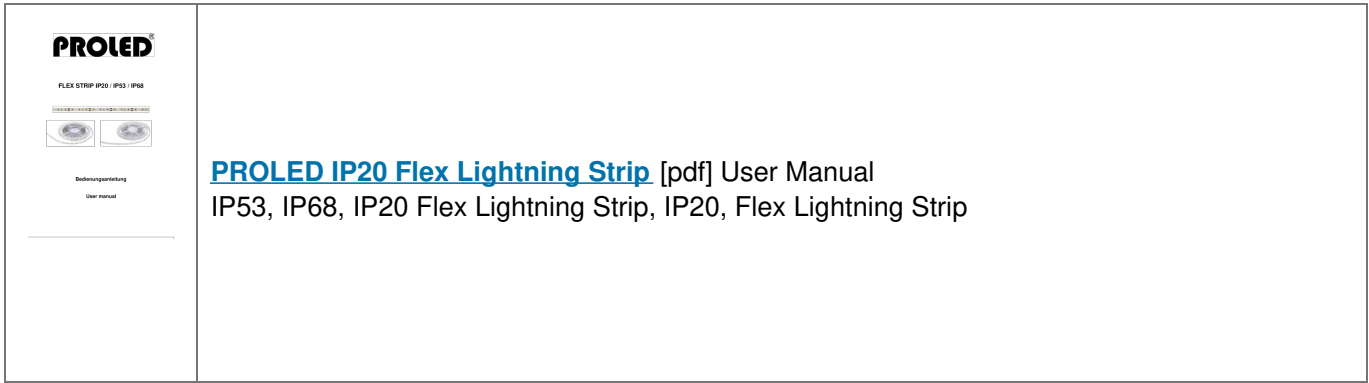
	<p>Flex Strips has been installed before finishing the room. painting work paint has been placed on LED and causec shift.</p>
	<p>Placing of strip wasn't made equal over the whole length put is different on some positions.</p>
	<p>Supply cable wasn't placed correctly. Shadow of cables</p>


MBN GmbH, Balthasar-Schaller-Str. 3, 86316 Friedberg – Germany
www.proled.com


Documents / Resources



<div data-bbox="154 105 261 123">PROLED</div> <div data-bbox="164 150 252 156">FLEX STRIP IP20 / IP53 / IP68</div> <div data-bbox="154 176 258 183"></div> <div data-bbox="181 244 233 250">Bedienungsanleitung</div> <div data-bbox="191 264 223 268">User manual</div>	<div data-bbox="317 230 1080 291"><p>PROLED IP20 Flex Lightning Strip [pdf] User Manual IP53, IP68, IP20 Flex Lightning Strip, IP20, Flex Lightning Strip</p></div>
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References

- [PROLED: proled.com](http://proled.com)