

Tel.: 0207 450 5292 E-mail: support@ledcentre.uk.com

## Installation manual for outdoor 3528 SMD LED strips

Thank you for shopping from LEDcentre.uk.com.

We would like to help your electrician with the installation.

Performance: 4.8W / metre

Operating Voltage: 12V DC, constant voltage

Voltage tolerance: 10-15V DC.

Operating the lights with batteries (ship, boat, yacht, caravan, van) voltage may go up while the battery is being charged. Strip lights are not affected by higher voltage within the tolerance rate for up to five hours.

Maximum length: 5 metre, separate, parallel power connection required for each 5 metre strip.

**IP rating**: IP68 – waterproof, for outdoor use

Transformers: We strongly recommend using our stabilised 12V DC power supplies. To calculate the required output of the LED driver, please use the power consumption details displayed on the product description. The total power consumption of 12V SMD LED products connected to the power supply should never be higher than 90% of the output Wattage of the power supply. Batteries: The advantage of the SMD LED products is that they operate at 12V DC, so 12V batteries are suitable for running them. If the charging of the battery is not regulated, it is advisable to include a voltage regulator within the system for the long lifespan of the lights.

The strip lights can be operated for up to 12 hours a day. It is not suitable for constant run.

## Please note: Electronic transformers ruin the LED lights. If the light is damaged when used with unsuitable transformer, it looses its warranty.

Do not twist or step on the LED strip light since that can break the wires inside. The light is only flexible to one dimension.

There are cut points at every 50mm or after 3 LED units, positive and negative poles are marked and the soldering points are already on the strip. Connect red wire to (+) positive pole and black wire to (-) negative pole. Do not swap polarity as LED strips are polarity sensitive!

If you are connecting multiple LED strips which are some distance apart, your wiring may be affected by a voltage drop due to the length of the wires. Depending on the distance, you may have to increase the thickness of the wires to reduce the voltage drop. The further apart the lights, are the thicker the wires must be. Alternatively, you might consider using multiple wires in parallel instead of a single thick wire.

Our IP68 LED strips are not provided with adhesive tapes, since these tapes have a much shorter life span than the lights themselves; therefore their application is not a suitable form of fixing the LED strips. Also, adhesive tapes don't work in humid places. Instead, we recommend fixing the strip with silicone used in bathrooms and kitchens, but applying cable clips is also a stable mode of fixing. With each metre of strip light purchased, we send 4 cable clips for FREE.

The mains supply must always be isolated prior to installation. The overall electrical installation must conform to the relevant regulations.

The LEDcentre does not take any responsibilities for personal injuries or damage of the goods caused by incorrect installation. All installation must be carried out by qualified persons.