

ATIMPEX Ltd. 89 KELLAWAY ROAD,LONDON,SE3 8PL WEE/BA2109UW Tel.: 0207 450 5292 E-mail: <u>support@ledcentre.uk.com</u>

### Installation manual for RGB LED strips with controllers

Thank you for shopping at LEDcentre.uk.com.

We would like to help your electrician with the installation.

Specification of RGB strips:

Performance of RGB LED strip light: 7.2 W / 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. LED strip lights are not affected by higher voltage within the voltage tolerance rate for up to five hours.

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

The strip light can be operated for up to 12 hours a day to keep its lifespan. It is not suitable for constant use. **Indoor**: IP55 rating, splash proof, with silicone cover. The strip light has M3 adhesive tape on its back for easy installation.

**Outdoor**: IP68 rating, fully waterproof. No adhesive tape, for fixing we suggest using cable clips available in the shop or bathroom silicone.

#### Specification of RGB Controller:

**Input and output Voltage**: 12V DC, Operating temperature: -20 - +60°C, Recommended current: 2A to each colour. The RGB Controller can control up to a total 10 metres of our 30 SMD LED RGB strip (indoor or outdoor).

**Power supply**: Use constant voltage, LED compatible driver/power supply only. To calculate the required output of the LED driver, please use the details above. (Power consumption of the LED strip light / metre times the length used.)

**Batteries**: The advantage of the SMD LED products is that they operate at 12V DC, so 12V batteries are suitable for running them. If charging of the battery is not regulated, it is advisable to include a voltage regulator or converter within the system for the long lifespan of the lights.

The RGB LED strip light has cutting and connection points in every 100mm/4inch or after 3 LED units, so you can cut and join it to any size. The separate strips can be connected by soldering wires, the splicing points are already on the strip or with <u>LED connectors</u>.

Positive and negative poles are marked and the soldering points are already on the strip. The black arrow or 12V symbols the positive pole (black wire) and the G, R and B marked ends are the negative poles, connect each colour to their initials. Do not swap polarity as LED strips are polarity sensitive.

#### Caution:

The input voltage and current for the IR controller should follow the specification; overload input may damage the IR controller or LED strip lights.

Follow the sequence of the wires, incorrect connection of the output wires to LED strip light may cause different turn of colour modes.

Do not cover the IR signal receiver, and point remote control towards it when operating.

Please note: Electronic transformers ruin the LED lights. If the light is damaged when used with unsuitable transformer, it loses its warranty. Do not twist or step on the LED lights, as these can break the wires inside and the strip lights are flexible to one direction only.

Installation of the RGB controller:



#### Specification of controller:

- Input Voltage: 12V DC
- Input Current: 0~6A
- Output Voltage: 12V DC
- Output Current: 2A max each colour
- Connect Mode: Common Anode
- Remote powered by 1 x 3V CR2025 lithium battery
- working temperature: -20~60C
- Dimension: 63mm (L) X35mm (W) X 22mm (H)
- Weight: 70gram
- Work with 12VDC LED power supply or 12V batteries
- Static power consumption: <1W

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

## Do not twist or step on the LED lights, as these can break the wires inside and the strip lights are flexible to one direction only.

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.