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LED Lighting Systems

Installation Instructions

These installation instructions apply to the following items:

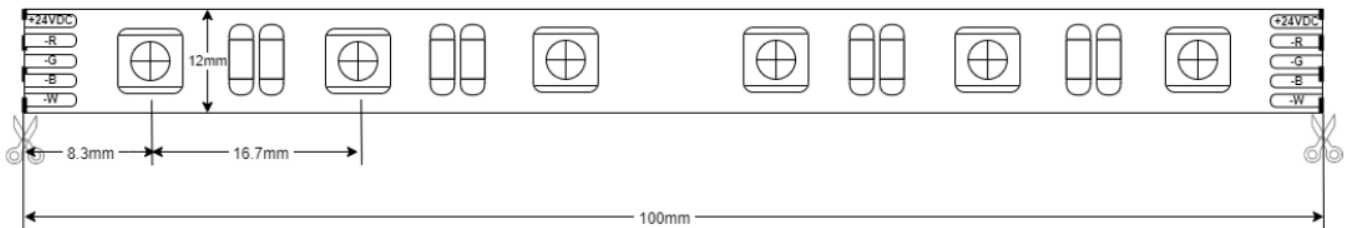| Product Codes *(suppliers product codes)*	20W Colour Changing LED Tapes – IP20 uncoated:	20W Colour Changing LED Tapes – IP65 splashproof:
	RGBWW/20W/24V *(RGBWW-20)* **RGBW/20W/24V** *(RGBW-20)*	**RGBWW/20W/24VI** *(RGBWW-20-IP)* **RGBW/20W/24VI** *(RGBW-20-IP)*

Before Installing – points to consider:

- Installation should be carried out in accordance with the latest edition of the National Wiring Regulations. If in doubt, consult a qualified electrician.

- It's vital that LED Tapes are handled with care – they are delicate.

- When installing, be sure to allow for access to product in the future (in the event of a refit, adjustment, or replacement).

- Attention should be paid to the polarity (positive and ground) of all components as reversing the polarity may damage your product.

- Attention should be paid to the power supply voltage to ensure it matches the LED tape. The LED tape will be damaged if a voltage used exceeds that specified on the tape.

- To prevent damage, be careful not to scratch, distort, or irregularly bend/twist the LED tape during installation.

- Do not bend the LED tape into an arc with a diameter of less than 10mm – doing so could result in damage to the tape, resistors and diodes, as well as reducing its longevity and reliability.

- If the actual length of the LED tape exceeds the specified maximum length, it could lead to overload, overheating and uneven brightness.

- IP20 uncoated and IP65 splashproof LED tapes are suitable for indoor use only.

- Ensure the LED driver is situated away from all direct heat sources.

- LED drivers must have unobstructed airflow, with a minimum area space of 100mm.

- The LED driver should offer an equal or greater power rating than the LED tape. E.g. 5 meters of 10 Watt tape needs a 50 watt power supply or greater.

- LED tape should be fitted to a thermally conductive material to draw heat away from the LEDs. If installed to a thermally insulative material the lifespan of the LED can be greatly reduced.
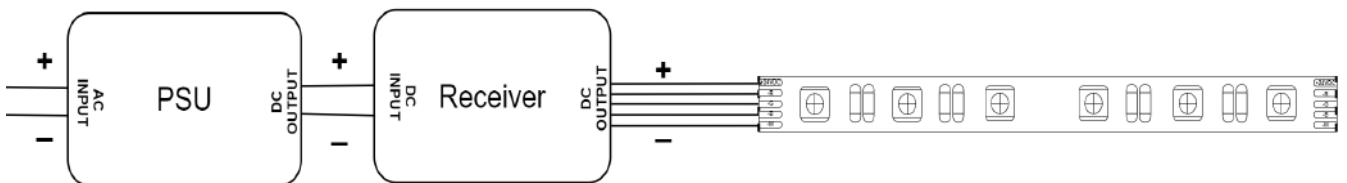
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Installation - Step-by-step instructions:

1. Ensure that the surface onto which the LED tape is to be installed is clean and free from grease.

2. Test all LED tapes first, prior to installing.
   Note – always unreel the LED tape before testing (otherwise overheating and damage will occur).

3. When cutting the LED tape to size, use the marked cut points.

4. Peel off the LED tapes backing tape. Position the LED tape on the clean surface in the required location and stick it into place using the self-adhesive backing.

5. If the LED Tape is being installed with the LEDs facing downward or sideways, consider combining with an Aluminium Profile for a more permanent fix/install.

1. If the total LED Tape lengths exceed the stated maximum run, then the LEDs must be wired to the power supply as multiple shorter LED Tapes in parallel – see **'Parallel Wiring Diagram'** below.

Technical Drawing:

Wiring Diagram:

Parallel Wiring Diagram:

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