

RGBW LED Strip Range

Installation instructions for LED Tape



Warnings & cautions

- To avoid electric shock, serious injury or property damage, isolate power before installing, removing or servicing the product
- It is recommended that luminaires are installed by a qualified electrician and the installation complies with the local current wiring regulations.
- Any broken or damaged parts should be replaced as soon as possible.
- JCC will not accept responsibility for claims arising from sub-standard installations.

- These products are suitable for indoor(IP20) or outdoor use(IP65) depending on IP rating
- The light source of this LED tape is not replaceable: When the light source reaches the end of its life, the whole of the LED tape must be replaced.
- It may be necessary to upgrade your MCBs to allow for increased inrush current.
- Do not carry out insulation tests with the product connected to the circuit.
- It is recommended that the ambient room temperature should not exceed 25°C.
- Terminal blocks used for mains connection must comply to EN 60998-2-1 or EN 60998-2-2

Read instructions and check that you have all of the tools and accessories required to complete the installation correctly. Isolate power supply before starting the installation.

INSTALLATION

ENGLISH

LED tape input: 24VDC ⚡

IP65/IP20

(see descriptions for applicable IP ratings)

For use with:
JCC RF Remote Controls and
Controllers(JC121371/2/3/4)

Driver Wattage ÷ Tape Wattage (per metre) = max length of tape per driver
30 ÷ 7.2 = 4.16m
30 ÷ 17.6 = 1.7m
75 ÷ 7.2 = 10.4m
75 ÷ 17.6 = 4.2m
180 ÷ 7.2 = 25m
180 ÷ 17.6 = 10.2m

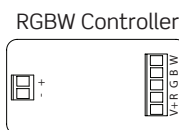
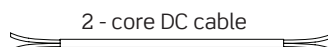
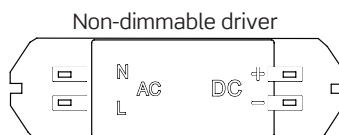
Controller Wattage ÷ Tape Wattage (per metre) = max length of tape per controller
350 ÷ 7.2 = 48.6m
350 ÷ 17.6 = 19.8m

Note: The tables above are for reference only. You should never exceed the driver maximum Wattage.

Please note: All LED tape can suffer voltage drop over distance, depending on configuration of LED tape, DC cable and driver. Any run over 10m may result in up to 2% loss of output per meter thereafter. Consider adding a new power supply every 10m to ensure you achieve the maximum performance of your tape. All the standard length LED tape products can be cut every 50mm if required. It is the installer's responsibility to ensure if the IP65 tape is cut, they maintain the IP rating of the tape by using heatshrink, silicone end caps with suitable silicone sealant where applicable.

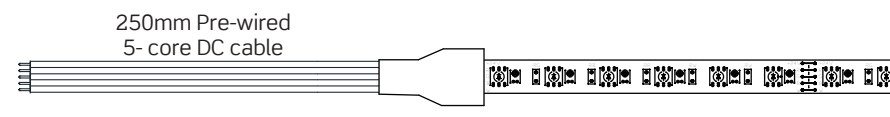
(1)

- Select a non-dimmable driver that is suitable to run the LED tape overall Wattage using the table on the left as a guide. All dimming is carried out by the controller. The total tape Wattage must not exceed the driver maximum Wattage. The controller maximum Wattage is 350W.



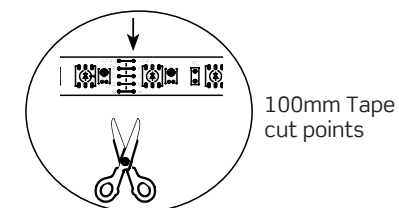
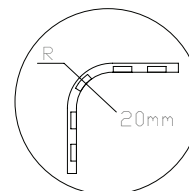
(2)

- RGBW IP20 and IP65, 5 metre tape packs are pre-wired with 250mm of 5 core DC cable, ready to connect to the controller output. The Tape can be cut at 100mm intervals to suite. You must only cut at the copper connection points(100mm intervals). If you cut any where other than the copper cut points, it will damage the LED tape and will affect the circuit board and/or light output.



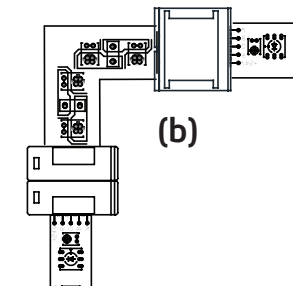
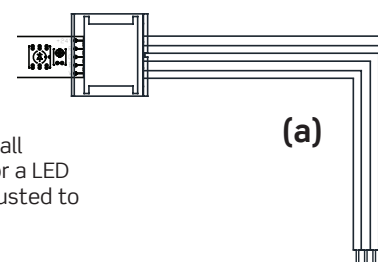
(3)

- LED Tape can be bent to curve around a corner in a continuous run, but only when placed on a vertical surface horizontally i.e. on a wall from left to right. The LED tape must only be bent with an inner radius of 20mm max as illustrated to the right. If bent past the 20mm max, it could damage the circuit board causing failure of the LED chips to illuminate.



(4)

- LED Tape cannot be bent to curve around a corner, when placed on a horizontal surface i.e. on the underneath of a kitchen wall cabinet from left to right. The LED tape can only continue around a corner if cut and a DC cable corner connector(a) is used or a LED Tape Corner(b) is used. If using the LED Tape Corner(b) the length of the tape and placement of the tape may need to be adjusted to allow for the width of the corner piece.
- Note: when cutting and re-connecting the RGBW LED tape, make sure that you match the polarity of the tape i.e. **RGBW+** (Red, Green, Blue, positive) to **RGBW+** (Red, Green, Blue, positive)



(5)

There are two types of connector available to use when connecting LED Tape, a Clamshell clip with pre-wired 5-core DC cable fig.1. or a Clamshell clip Strip to strip fig.2.

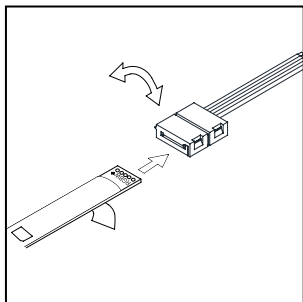


fig.1.

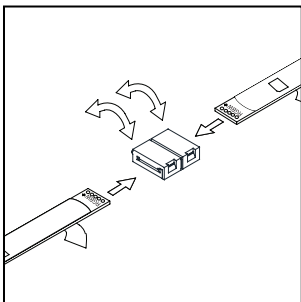
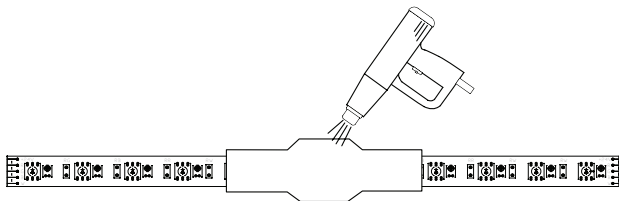


fig.2.

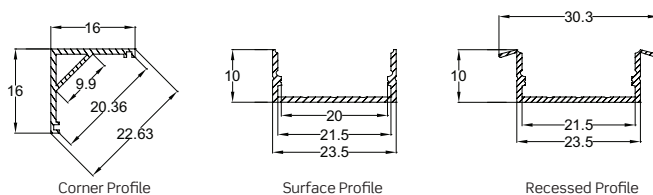
(6)

When cutting and re-connecting IP65 tape, with either type of connector or when soldering, you must ensure that all connections are protected using heathrink to assist with maintaing the IP rating

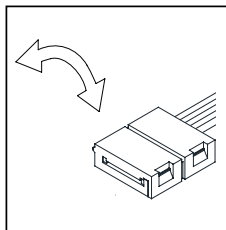


(7)

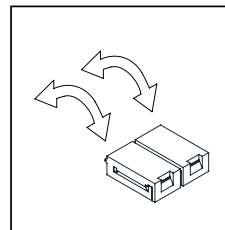
Aluminium profile can be used to install LED Tape, it diffuses the light and assists with heat disipation. It is available in three styles; Corner, surface or recessed in lengths from 0.5m to 2m in 0.5m increments.



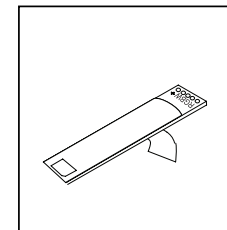
How to use Clamshell clips



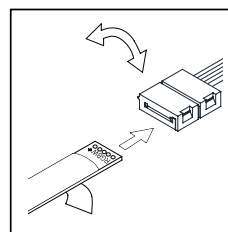
1. To connect IP20 LED tape, to the tape to DC connector open cover on the connector



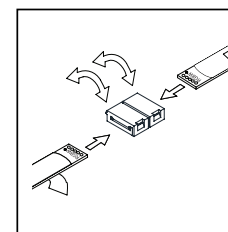
2. To connect IP20 LED tape to tape, open both covers on the connector



3. Peel back the adhesive protective cover



4. Align the tape and insert into the connector, ensure you match the polarity, close cover



5. Align the both pieces of tape and insert into the connector, ensure you match the polarity, close covers

Note: These connectors can be used for connecting IP65 tape, but the Silicone cover on the tape will need to be removed to allow the tape to be inserted into the connector. It is the installer's responsibility to ensure the IP65 rating is maintained by using heatshrink, silicone end caps with suitable silicone sealant where applicable.