

**Outdoor Mains Voltage (230v) Rope Lights**  
 FOR INDOOR AND OUTDOOR USE

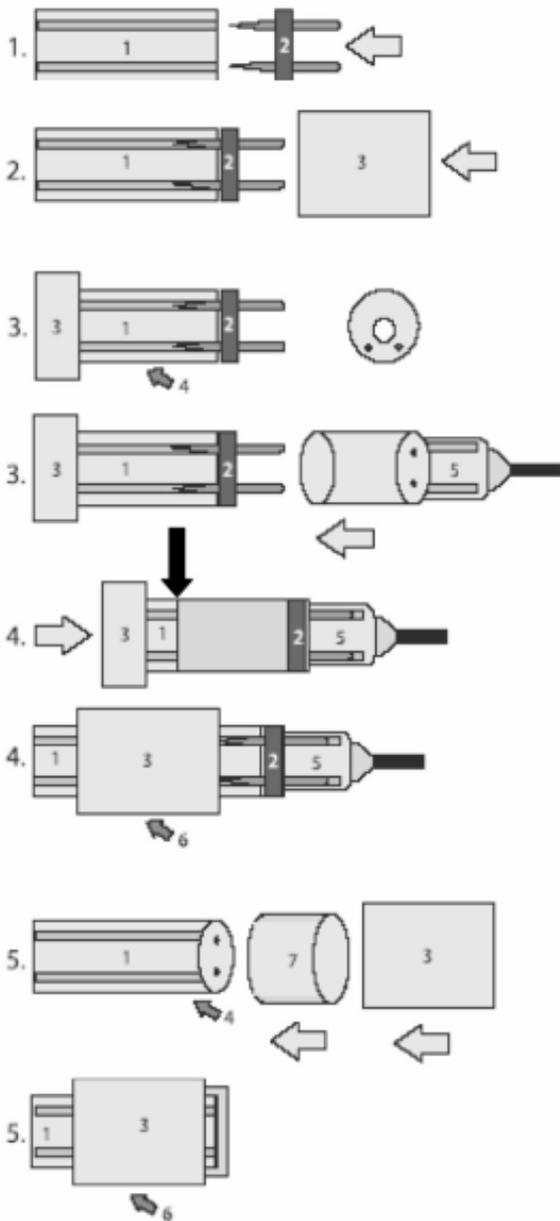
**Introduction**

Most users will receive their rope lights ready to plug in and use with the power cord attached. However for users with more advanced configurations, instructions are given below explaining how to attach a power cord and splice light sections together.

**Attaching the power cord**

In order to join the rope light with the power cable the rope light must be cut in one of the places specifically marked for this purpose. Use a sharp pair of cutting pliers and ensure that the cut is clean and vertical. Never connect the rope light to the electrical supply while the rope light is still coiled on the reel.

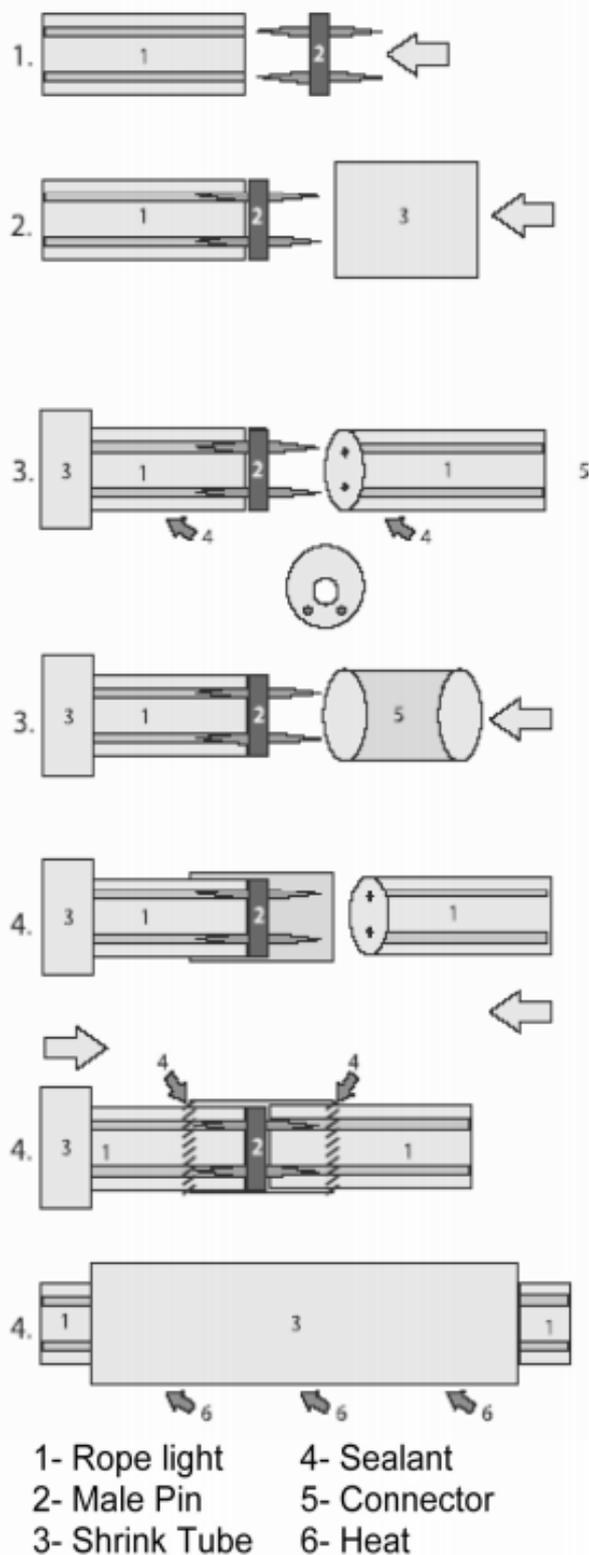
- 1)** Push the sharp end of the male power connector into the centre of the wire tubes making sure that the sharp ends make contact with the two off centre wires. Note that the male pin power connector and the rope light wires are off-centre and must run in a straight line.
- 2)** Push the shrink tube approx. 7cm–10cm up the rope light.
- 3)** Apply sealant to a 4cm section (measured from the male connector) of the rope light. Now push the rope light into the power supply cord so that the connector pins completely disappear into the sockets. Leave the sealant to dry before proceeding. Note that the sockets in the power supply cable are also positioned off-centre. To assure a tighter weather seal, apply a bead of sealant on the end of the power connector where indicated in illustration 4 by a black arrow.
- 4)** Now push half of the shrink tube over the power supply cable and half over the rope light and apply heat.
- 5)** To secure the end piece, apply sealant to about 3/8" section at the end of the rope light and push the end piece on to this. Push the shrink tube over the end piece and the rope light piece and apply heat to the shrink tube. Ensure that the sealant is hardened sufficiently. Connectors and joints can only withstand a limited amount of mechanical pressure.



- |                |                |
|----------------|----------------|
| 1- Rope light  | 5- Power cable |
| 2- Male Pin    | 6- Heat        |
| 3- Shrink Tube | 7- End Cap     |
| 4- Sealant     |                |

## Splicing two lengths of lights

Never connect the rope light to the electrical supply while making joins. In order to join the rope light with the connector, the rope light must be cut in one of the places specifically marked for this purpose. Use a sharp pair of cutting pliers and ensure that the cut is clean and vertical.



- 1) Push the sharp end of the male connector into the centre of the wire tubes making sure that the sharp ends make contact with the two off-centre wires. Note that the male pin connector and the rope light wires are off-centre and must run in and straight line.
- 2) Push the shrink tube approx.. 7cm – 10cm up the rope light.
- 3) Apply sealant to a 4cm section (measured from the end of the rope light) of the rope light. Now push half of the connector over the end of one of the rope light sections. Leave the sealant to dry before proceeding.
- 4) Now push the end of the second rope light section into the connector. Ensure that the ends of the male connector are positioned centrally and aligned correctly in the wire tubes. To assure a tighter weather seal, apply a bead of sealant on each end of the connector where indicated in illustration 4. Now push the shrink tube over the rope light and connector and apply heat. Ensure that the sealant is hardened sufficiently. Connectors and joints can only withstand a limited amount of mechanical pressure.

### Safety Warnings

- 1) Do **not** switch on while the rope is still on a reel, tangled, or while making joins to lights or the power cord.
- 2) Only cut at the cutting points shown (scissors symbol, photo on last page). ✂
- 3) Cut the rope light and bend again - there'll be 2-3mm copper wire at each end. Cut again and make sure there's not burrs at both sides to prevent a short circuit.
- 4) Always connect + to + and - to - .
- 5) Do not connect the power supply while installing.
- 6) The rope light should be well fixed and shouldn't

move or swing. This will prevent breakages occurring within the wire.

7) An endcap should be used at the end of the rope light to prevent water ingress.

8) Damaged rope lights should not be used.

9) Rope lights are not a toy, and should be kept out of reach of children.



LED Housing

Wire Tubes

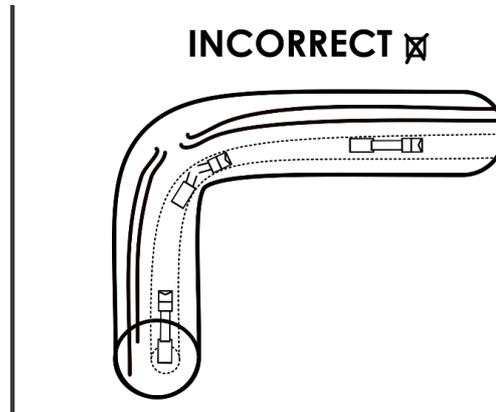
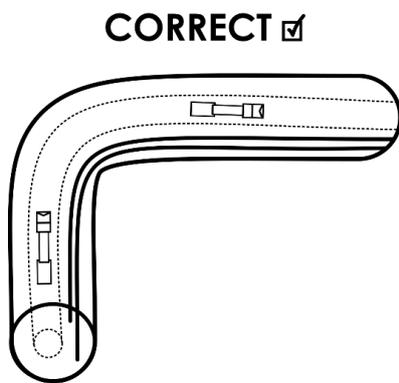
Ropelight Casing

### Bending rope lights correctly

When bending rope lights to conform to a shape, or when following the contours of a building, it is important to bend at the right place, in order to protect the LEDs and wires within the rope.

As you can see from this cross section, there is a central core which houses the LEDs, and also two wire tubes. When making a bend it is important that a) the two wire tubes are on the **inside** of the

bend to avoid breaking the wires and b) that LEDs aren't squashed in the bend. Following this will help to prolong the life of your rope lights, and reduce the risk of cable breaks within the rope.



For Full Instructions, technical information and diagrams, please refer to our websites

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