

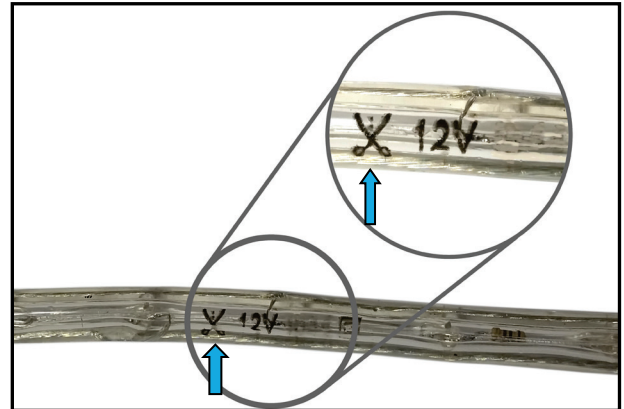
## 12V LED ROPE LIGHT – INSTALLATION INSTRUCTIONS

LED-RL12XX

The wires in the rope light are directional and must be connected the correct way around. Although the holes in the rope light are offset from the middle, the connector pins may not be, so if the rope light is not working, simply reverse the pins. If many lengths of rope light are being connected together, it is easier to test each length is working before proceeding with the next.

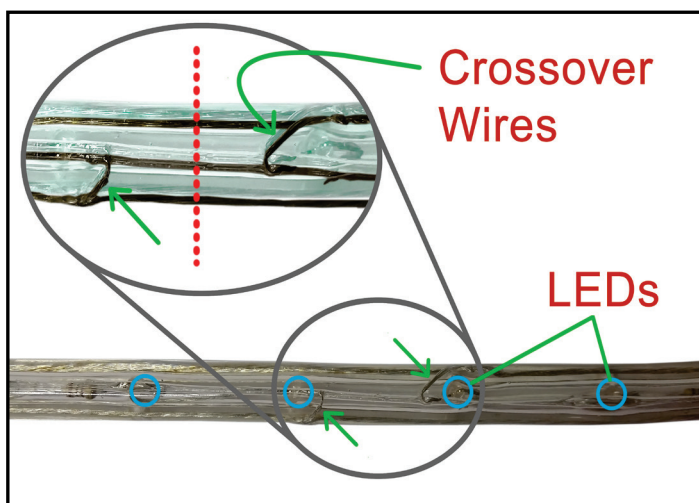
### Cutting the 2-Wire Rope Light

Cut the rope light to the desired length. Cut marks are located every 1m, but it can be cut every 4 LED's, using a pair of scissors or carton knife. Be sure the cut is clean and vertical. Bend the rope light to the left approximately two inches from the end and trim off any excess wire that might protrude. Bend the rope light to the right approximately two inches from the end and again trim off any excess wire that might protrude with side cutters.



### Cutting off the cut mark:

There are three wire rails inside the rope, and every 4x LED's the outer rails are joined to the central one to make a full circuit. Where this happens, the rope can be cut in between these crossover wires, and will not affect its operation. If the rope is cut or if the rails are broken within the 4-LED section then that section will no longer work, and may affect the rest of the rope's function. If this happens, trim the rope back to the nearest cut section so that only full circuits remain.



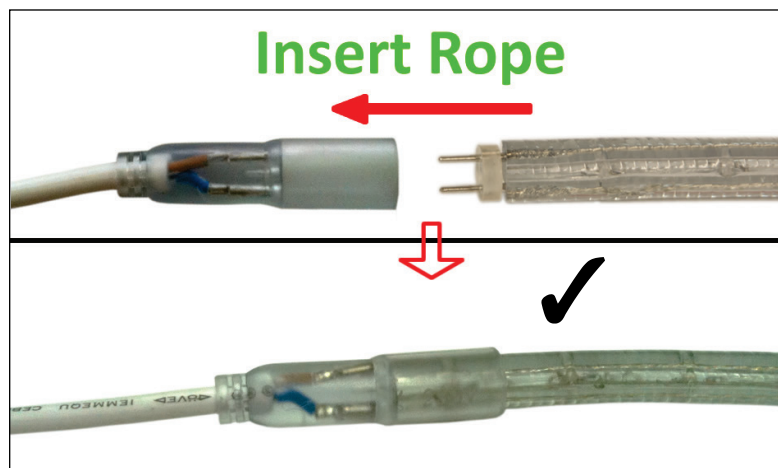
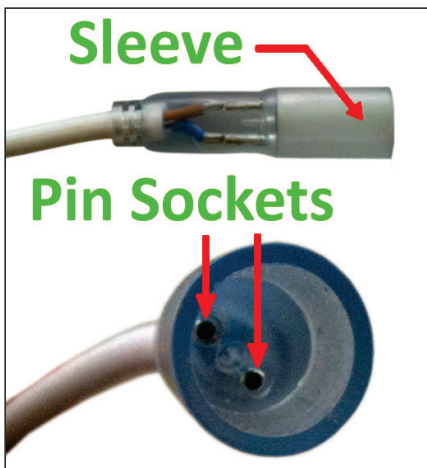
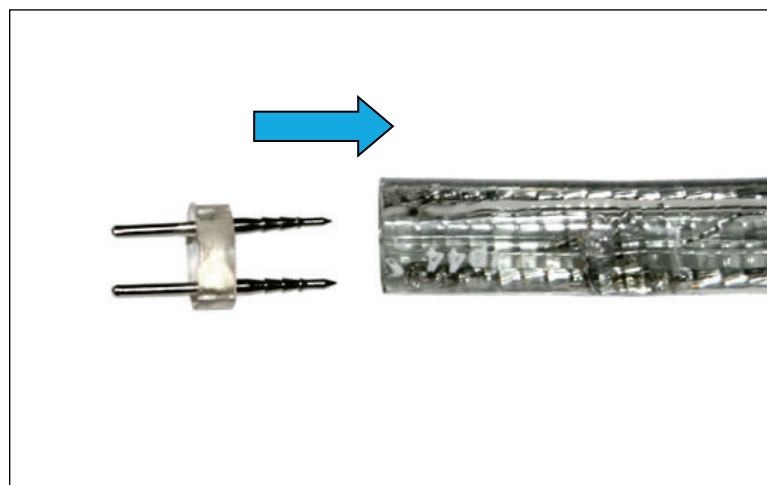
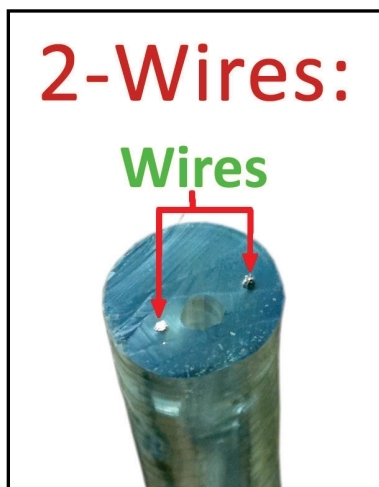
## Attach Power Cords

Power cords connect the rope light to a low voltage supply (12VDC).

**Caution: Never install accessories with the rope light plugged into the power.**

Push the sharp ends of the pin connectors into the wires on the exposed end of rope light until it stops. It's very important to push the pins in as level as possible to pierce down the wire inside in order to make a good contact – check the pins are not angling off away from the wires inside the rope.

Then slide the rope with the pins into the sleeve of the power cable socket, lining up the blunt connector pins with the pin sockets inside the power cable socket. Push firmly into place until it is in as far as it can go. For waterproofing, see the 'waterproofing connections' section below.

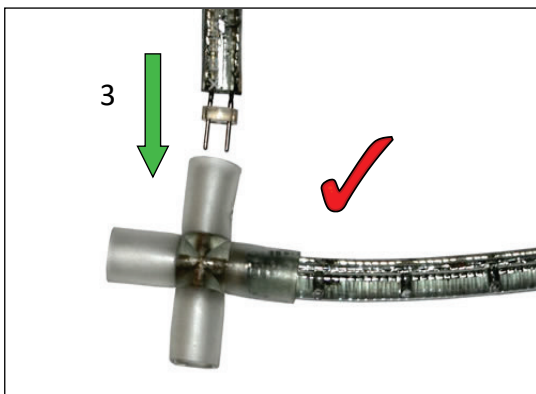
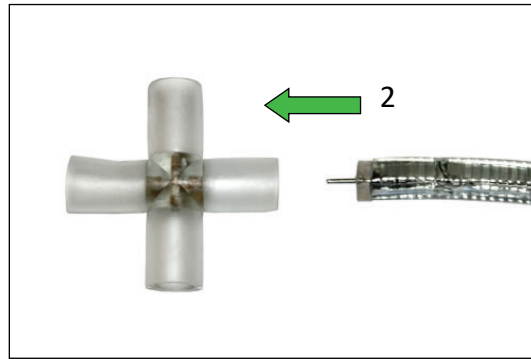
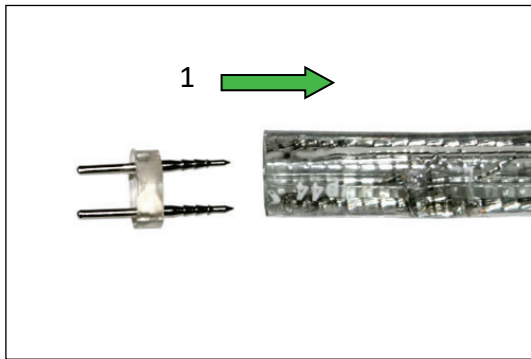


**Important: For wet locations, seal the connection with silicone sealant and cover with glue lined heat shrink tubing (see 'waterproofing connections').**

## Apply Inline Joiners

To connect two pieces of rope light, use a joiner.

Push the sharp pins of the pin connector into the wires of the rope light until it stops. Push the rope light all the way into a free socket on the junction making sure the pins are aligned with the holes in the socket. Repeat these steps for the other sides of the connector.



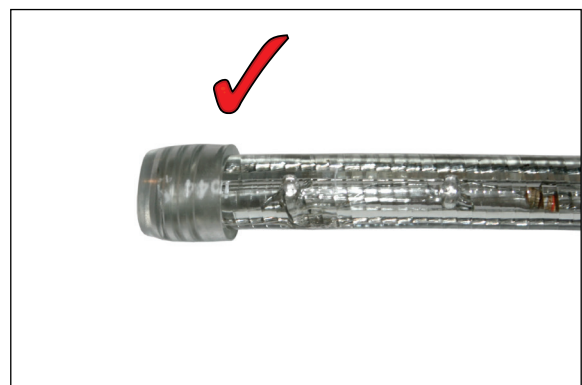
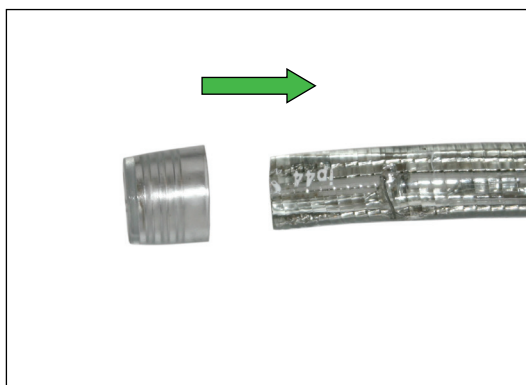
**Important: For wet locations, seal the connection with silicone sealant & heatshrink.**

## Apply End Caps

End caps are required at the exposed end of the rope light for both waterproofing and for safety.

**Caution: Never install accessories with the rope lights plugged into the power.**

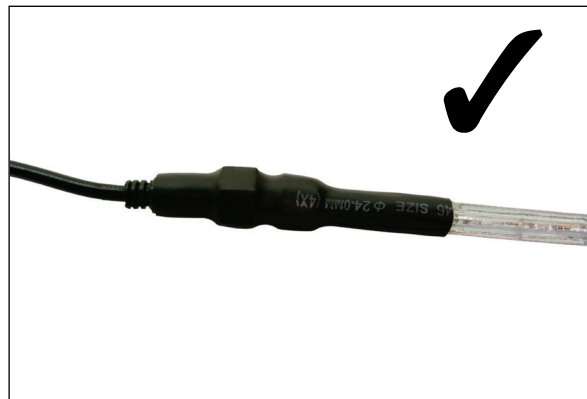
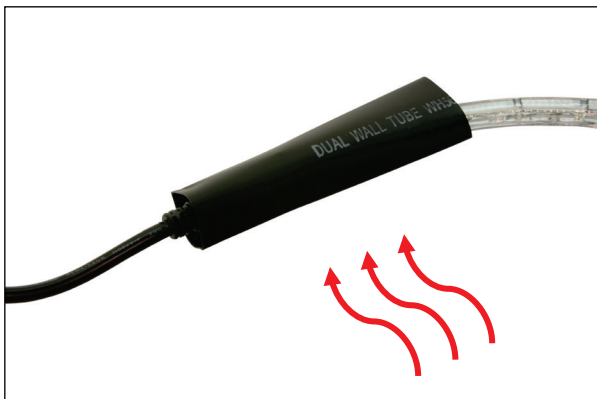
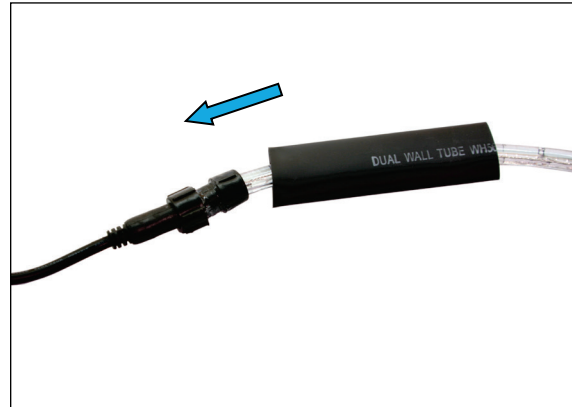
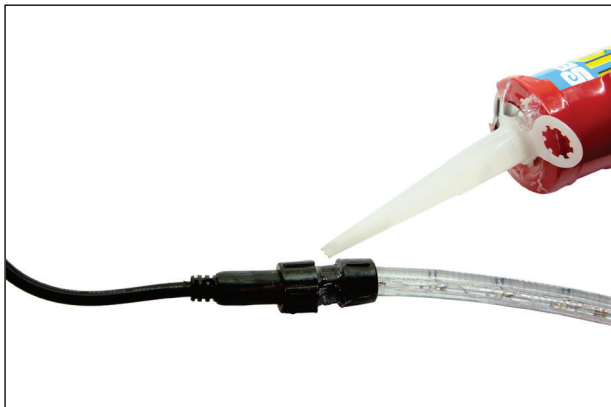
Put clear silicone into the end cap then push it firmly onto the end of the rope light not attached to the power cord. Squeeze out and wipe away any excess silicone that emerges from around the edge of the cap. The silicone will prevent the end cap from falling off and also create a water-tight seal.



## Waterproofing Connections

You will need:

- Clear silicone sealant
  - Heatshrink tubing ~24mm Diameter (any colour will do, but we recommend the black dual-wall tubing from Jaycar, as it has a glue lining which melts, and when set creates a good water-tight seal)
  - Heat gun or hairdryer
1. Place the heatshrink tubing over the rope, ready to slide into place over the connection. You may need to do this before you connect the rope to the power cord, otherwise run it down the rope from the other end. Make sure the tube is long enough to cover the connection with a little to spare.
  2. Then check that your connection of the power cord to the rope is working - it's very frustrating to get to the end and find out its not working!
  3. Place the silicone around the join – both around the tightening threaded jackets and where the rope enters the connector.
  4. Slide the heatshrink tubing into place over the connection – it should cover the entire connection, then apply heat to the tubing evenly all around – it will start to shrink down and encase the connection. Let it cool.
  5. Let the connection sit for 24 hours before installation to let the silicone inside set and allow the connection to become robust.



**Important: It's a good idea to test if the rope is connected properly and working before waterproofing connections.**