LEDstuff

LED NEON FLEX – INSTALLATION INSTRUCTIONS

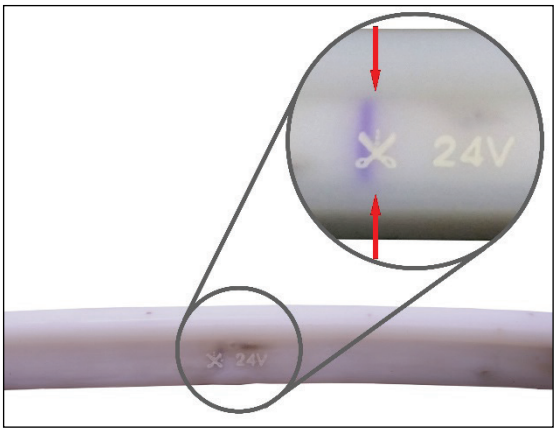
LED-NFL8024X

The wires in the Neon Flex are directional and must be connected the correct way around. If the flex is not working, simply reverse the pins or power from the other end. If many lengths of flex are being connected together, it is easier to test each length is working before proceeding with the next.

Cutting the Neon Flex

Cut the flex to the desired length. Cut only at the marked locations (approximately every meter), using a pair a sharp carton knife. Be sure the cut is clean and vertical.

If the neon flex is cut away from the cut mark (between the marks), then both pieces of that section either side of the cut may no longer work. This is because the circuit for that section is now broken.

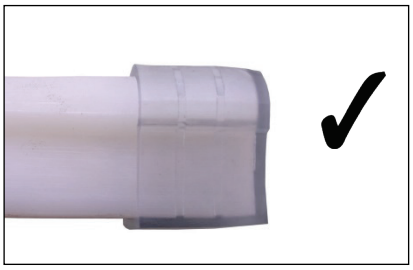


Apply End Caps

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

Caution: Never install accessories with the neon flex plugged into the power.

Put clear silicone into the end cap then push it firmly onto the end of the flex 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 create a water-tight seal.



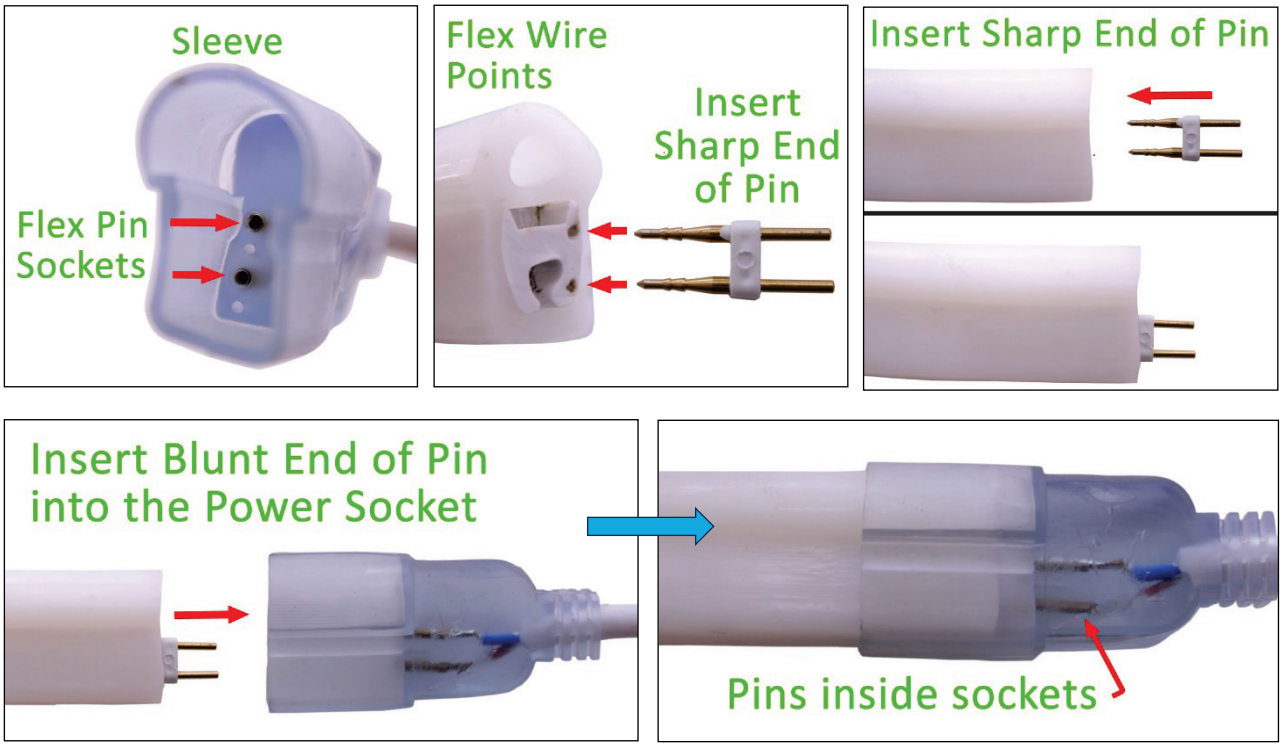
Attach Power Cords

Power cords connect the flex to its 24V power supply. You must use the power cord supplied as it has a rectifier built in, which is an electrical device that converts alternating current (AC), which periodically reverses direction, to direct current (DC), which flows in only one direction. Installation of the flex without the rectifier in place will cause permanent damage to the flex.

Caution: Never install accessories with the neon flex plugged into the power.

Push the sharp ends of the off-centre pin connectors into the wires on the exposed end of the flex until it stops. It's very important to push the pins in as level as possible to pierce down the wire length in order to make a good contact (make sure the pins are not angling off away from the wires inside the flex).

Then slide the flex 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').

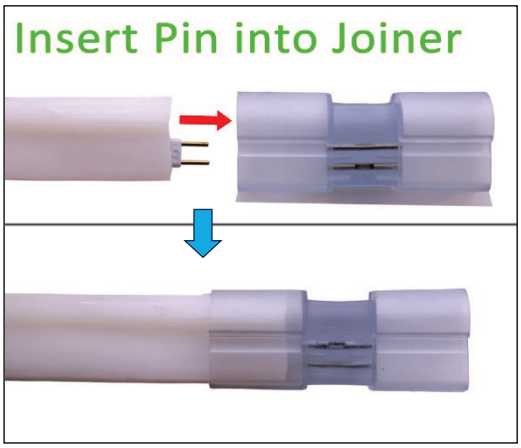
Joining Neon Flex

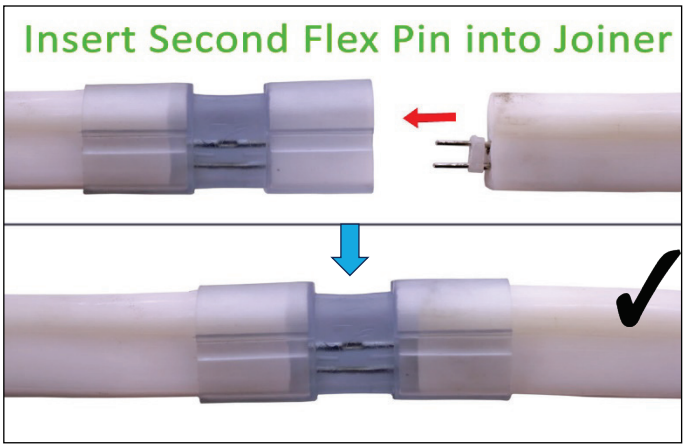
To connect two pieces of neon flex, use a joiner, or for a very close connection use a pin connector and seal with silicone and heat-shrink.

Apply Inline Joiners

Push the sharp ends of the joiner pins into the wires of one section of the neon flex, just like installing the pins for the power cord in the section previous. Then do the same for the other section of the neon flex to join the two pieces together. Then slide the flex 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.

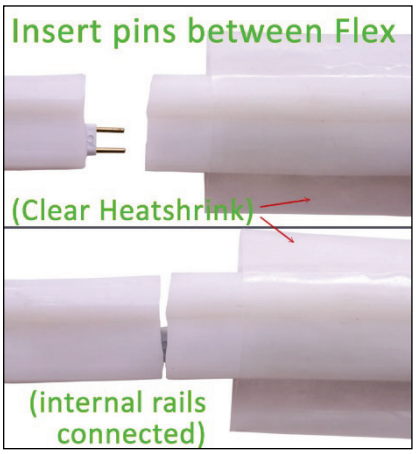
Note that the pins line up on the same side on the joiner, so make sure that the ends of the neon flex that you are joining line up with the same off-set from centre.

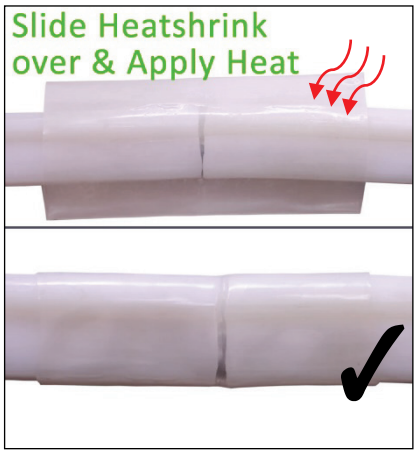




Or Apply Pin Joiners

Push the sharp ends of the joiner pins into the wires of one section of the neon flex, as above. Then push the blunt ends into the opposite piece of neon flex to be joined. This can be more difficult as the pins on this side are 'blunt', so if you wanted to 'sharpen' these pins with a file we would warn you to be cautious about it. Fill the gap between the flex ends with clear or translucent silicone, then cover & seal with clear heatshrink tubing.





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

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 flex, ready to slide into place over the connection. You may need to do this before you connect the flex to the power cord, otherwise run it down the flex 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 flex is working - it's very frustrating to get to the end and find out its not working!
3. Place the silicone in and around the join where the sleeve of the connector goes over the flex.
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 flex is connected properly and working before waterproofing connections.