

Soldering wires and making splice connections with RibbonFlex LED tape light

Direct soldering of wires to tape light is the surest method for making extra-reliable electrical connections.



Choose the right soldering tools

We recommend using a soldering iron with a fine point conical soldering tip. Use thin rosin-core solder – 60/40 .032 in. light duty for example.

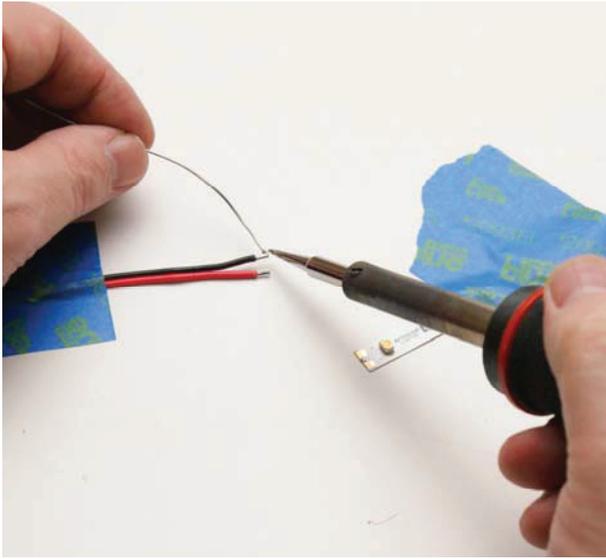


Use a fine point conical soldering tip. (Weller model ST7 shown below.)

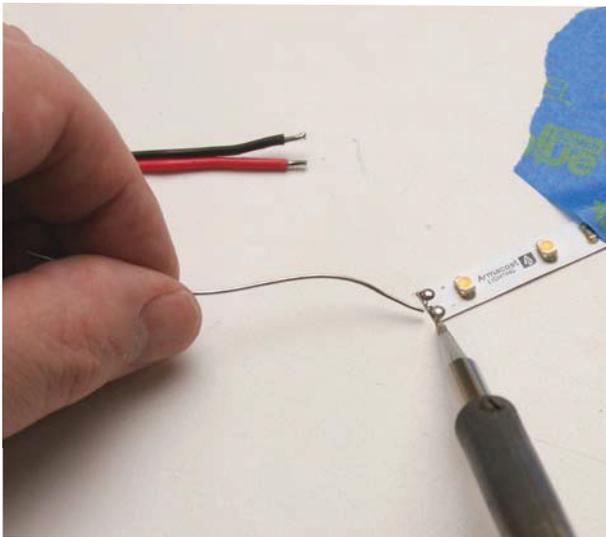
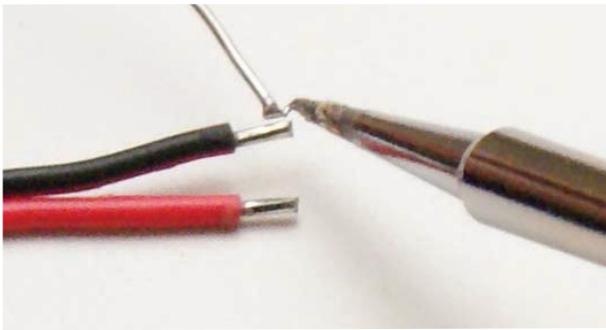


Use a wet sponge to remove excess solder and to keep tip clean. Soldering stations are also useful and readily available online. (Weller WLC 100 shown below.)

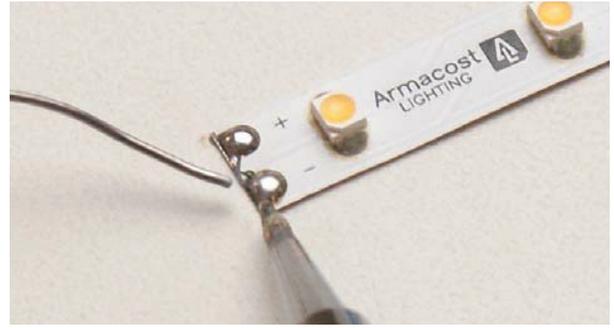




When soldering power wires to LED tape, first prepare the wire by “tinning” the stripped ends of each wire lead. Place the tip of the hot soldering iron against the wire and apply a light, even coat of solder as shown.



The same basic tinning process is also required on each of the copper pads on the LED tape lighting. Use painter's tape to secure the LED tape when you are soldering.



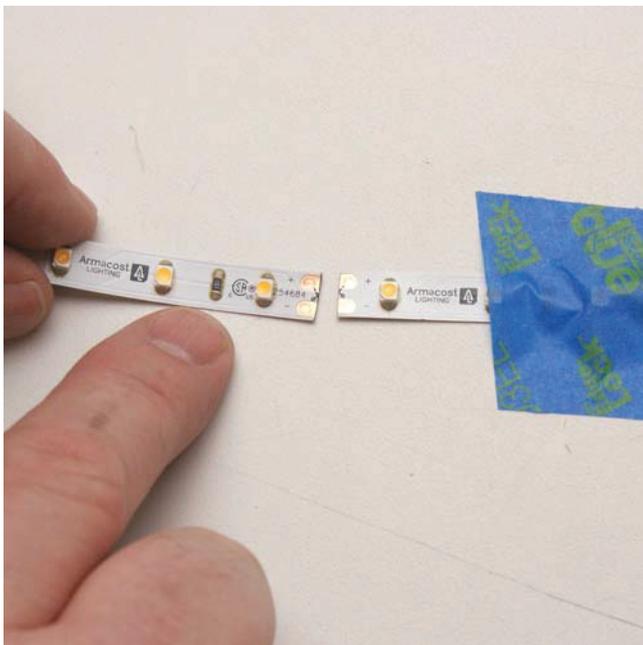
Once the wire leads and copper pads are tinned, join the wires to the copper pads and solder using a clean soldering tip. No extra solder is required since tinning has been done. Be sure to maintain correct polarity (+ to +, - to -, R to R, G to G, etc., depending on the type of tape light you're working with.



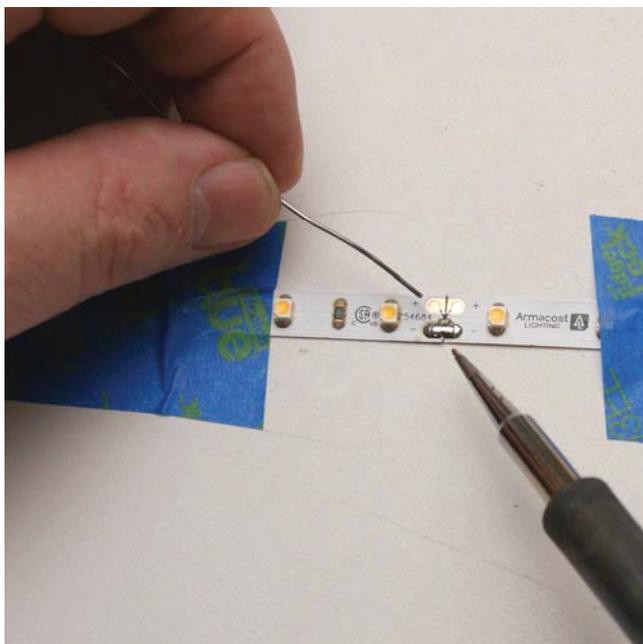
Adding a white shrink tube seal to new wire lead connections also makes for a more professional appearance.



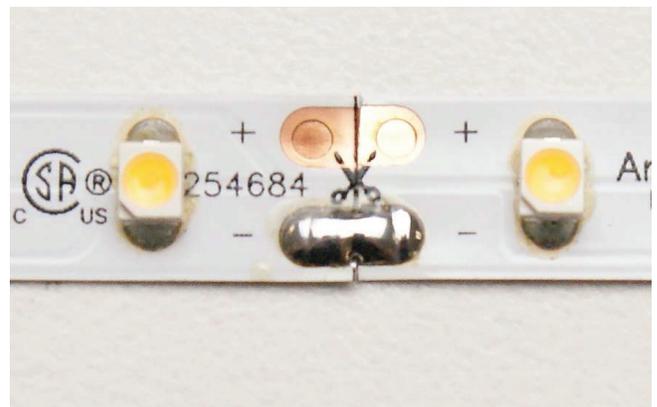
Longer lengths of LED tape lighting are factory-made by soldering together 1/2-meter sections of tape lighting. Likewise, it's easy to splice two sections of LED tape together using the same method.



Maintaining polarity with the tape lighting, join together two sections on a flat surface as shown. Secure the LED tape in place with painter's tape.



Next, tin each section of the copper pads with a small "mound" of solder. Then, with the tip of your hot soldering iron, drag one solder mound to the adjoining mound to form a single, continuous larger oval solder mound.



Repeat for each copper pad connection. Done properly, the soldered splice connection will be as strong, and last as long, as any factory-made connection.



Be sure to power up your LED lighting prior to final installation. Check to ensure that all tape sections are lighting properly and connections are solid.