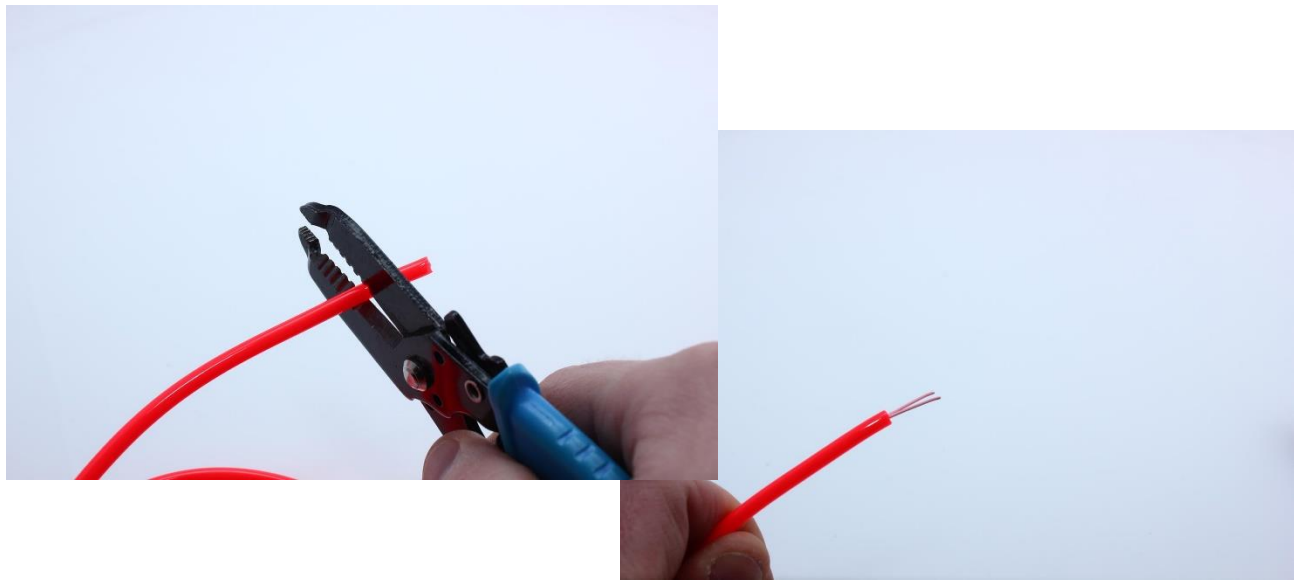


## TruEL™ WIRE CONNECTION GUIDE

Making a connection with TruEL™ Wire is a little different than standard EL Wire. Rather than having smaller angel hair wires that are easily broken, TruEL™ Wire uses two robust core wires to deliver a better and more stable EL cabling product. Follow along this guide to help make a solid connection that will ensure your TruEL™ Wire is connected properly.

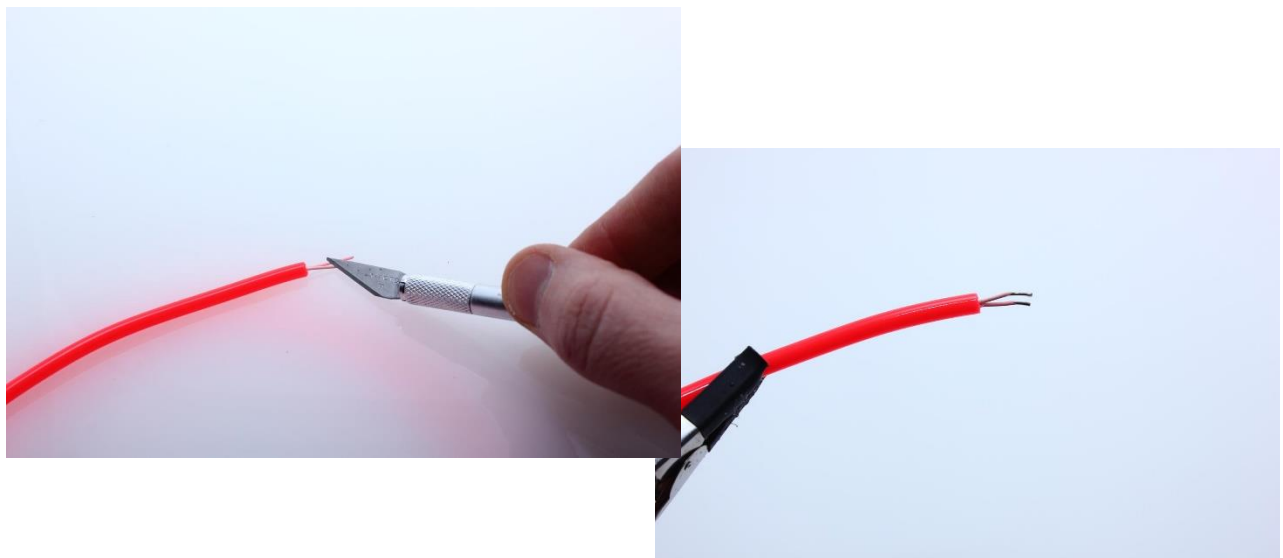
### STEP 1: Remove Outer TPU Jacketing

The jacketing on TruEL™ Wire can be removed with a pair of wire strippers that have a 20AWG (0.8mm) to 18AWG (1mm) setting. Cut off around 0.5-1" (12-25mm) of material to expose the core wires.



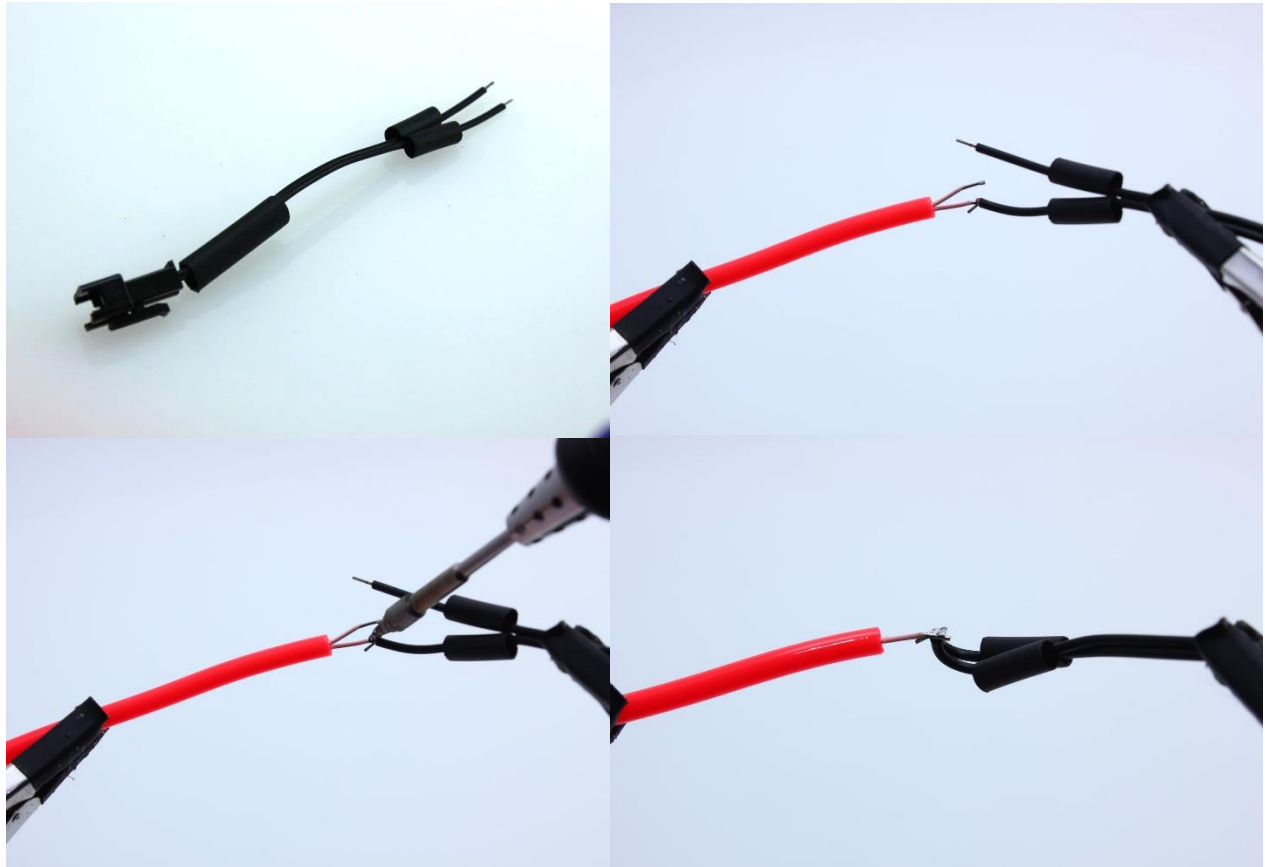
### STEP 2: Strip Off Phosphor

The two core wires have a powder coated phosphor surrounding each wire. The phosphor can be stripped off using a flat head (thin tipped) screwdriver, exacto knife, or razor blade. Use caution when stripping to avoid cutting through the wire. Leave approximately 0.25-0.5" (6-12mm) of phosphor on the base, and exposing the silver core wire at the tip of each wire.



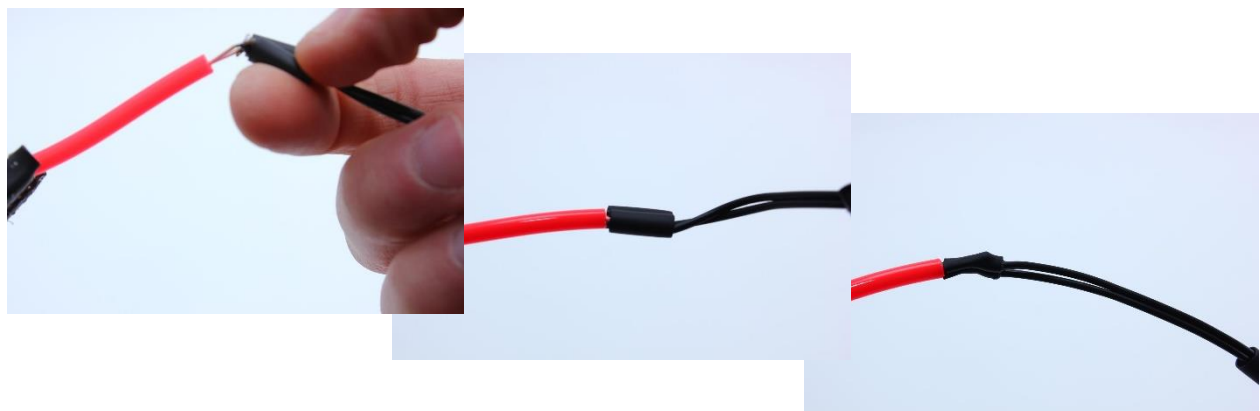
### STEP 3: Solder Connector/Wires

The Connector or wiring used should have 3 pieces of heat shrink tubing attached (1 for each core wire, and 1 to wrap the entire connection area). Align one wire and wrap around one of the exposed core wires. Solder to each wire separately and ensure you have a solid connection. Trim away any excess wire.

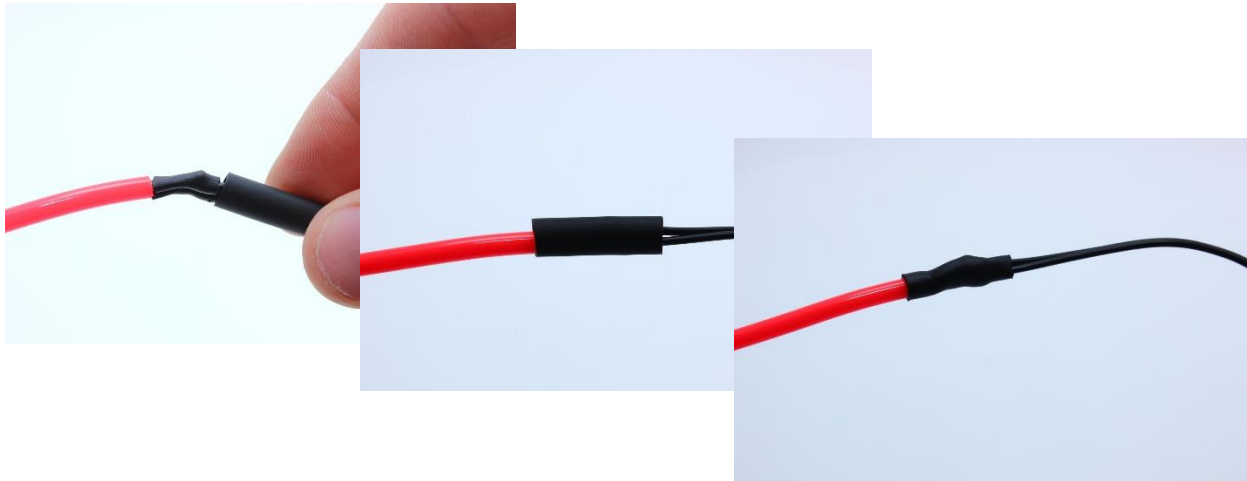


### STEP 4: Apply Heat Shrink

Surround the entire exposed wire with the heat shrink tubing and heat until it shrinks fully to the wire.



Slide the larger heat shrink over the connection area and apply heat until fully shrunk.

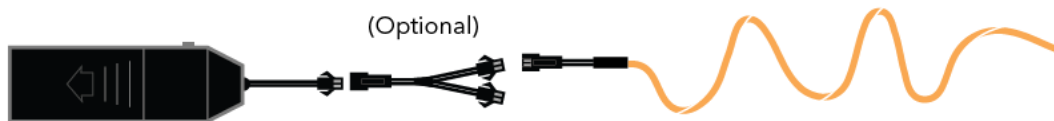


### STEP 5: Test

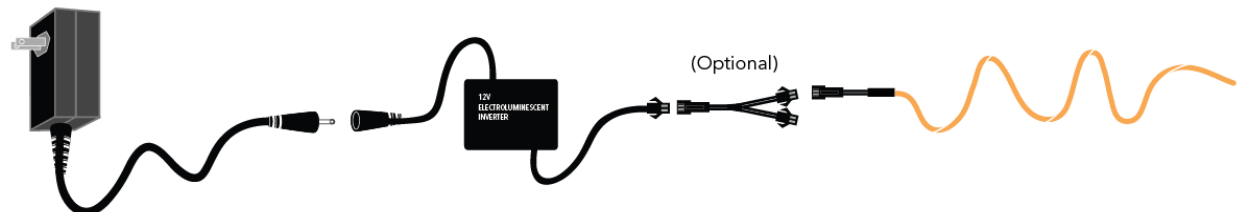
To ensure your connection is working properly, hook up to a TruEL™ Wire inverter to test. At this point you should have a working connection! If you have troubles connecting or lighting up your wire, feel free to send any images to [info@ellumiglow.com](mailto:info@ellumiglow.com) so we can help further. For custom inquiries, if you would like us to pre-install a connector for you, we are happy to do so. Please check any TruEL™ Wire by the foot pages and read the description, or feel free to contact us.

### WIRING DIAGRAM:

#### BATTERY OPERATION



#### PLUG-IN OPERATION



### ADDITIONAL INFORMATION

What's great about TruEL™ Wire is the material is far more water resistant than common EL Wire. It's also more robust so it's great to be used in stage or theatrical settings, and the increased brightness allows it to be used better for scenery, and accents that need to stand out. If you need DMX Control over your TruEL™ Wire, we released a DMX Inverter that is capable of powering up to 150ft of TruEL™ Wire per inverter. Sync up multiple inverters to power your entire show!

---

## FAQ

- **What is TruEL™ Wire?**  
TruEL™ Wire should be known as the way EL Wire should have always been made. It is essentially two thin copper wires wrapped in a coating of Phosphor. There are two electrodes in the wire, and when a specific voltage and frequency are applied, the wire magically lights up evenly along the length. TruEL™ Wire is flexible, efficient and all kinds of fun. It requires an inverter to operate, which operates on a frequency between 400-4000Hz. Many times batteries or inverters tend to operate in an audible range, so depending on the battery or inverter you are using, you may hear a high pitched frequency when operating. If you are looking for a custom solution that reduces noise up to 95%, please feel free to call or email us.
- **Does TruEL™ Wire Need An Inverter?**  
Yes. All Electroluminescent material needs an inverter to operate. The inverter sends a specific voltage and frequency to the phosphor layer through the wire. This excites the phosphor particles inside and creates a beautiful glow. TruEL™ Wire can use a much wider voltage and frequency range than common EL Wire. This allows it to be overdriven for maximum brightness and remains stable when proving its extra glow.
- **How Bright is TruEL™ Wire?**  
TruEL™ Wire has a wider range of brightness than common EL Wire. Typical EL Wire is around 75-150cd/m<sup>2</sup>, whereas TruEL™ Wire can be driven to brightness levels over 600cd/m<sup>2</sup>! That's about 2x the brightness of a TV backlight! Special inverters need to be used to increase the brightness that are specific to TruEL™ Wire. If you need help selecting the right inverter for your project, please feel free to contact us.
- **Can TruEL™ Wire Be Cut?**  
Yes, TruEL™ Wire can be cut at any point along the line. The wire will continue to glow to the point where it is cut. We recommend to cut at a 30° angle and immediately after cutting to apply an end cap to the wire. This will keep debris and moisture out of the wire and keep it lasting time after time.
- **How Do You Cut And Connect TruEL™ Wire?**  
For information on how to connect EL Wire, visit our YouTube channel at <https://www.youtube.com/user/Ellumiglow>
- **Can EL Wire Customized?**  
Yes, We offer customized wire and lengths for many different applications. If you have a project in mind, please feel free to contact us and we will be happy to help. We offer both custom cutting and connecting services as well as custom profiles.
- **Do You Make Custom TruEL™ Wire Inverters?**  
Yes, for any custom inquiries or bulk purchases, please contact us via phone or email.