



## EL Wire Sign

Created by James DeVito



## Guide Contents

Guide Contents	2
Overview	3
Tools	4
Prep the Design	5
Sew	7
Power	10
Glow	12

## Overview

---

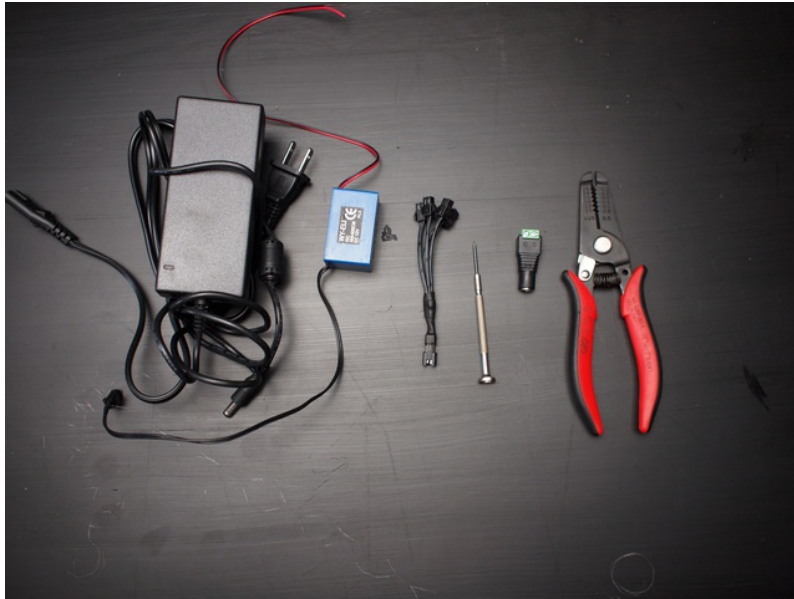
Looking to liven up an already pretty sweet laser tag arena for your music video? My band was. With help from [Becky Stern \(http://adafru.it/aPY\)](http://adafru.it/aPY), we had four 3'x4' signs completed in a day's time. After all, everything looks cooler in EL...

For EL basics, check out: [Working with Electroluminescent Wire \(http://adafru.it/aPZ\)](http://adafru.it/aPZ)



## Tools

---



You'll need:

- [EL wire \(http://adafru.it/aQ0\)](http://adafru.it/aQ0)
- EL inverter (we went with our [12V EL inverter \(http://adafru.it/448\)](http://adafru.it/448), but you could use [battery powered \(http://adafru.it/564\)](http://adafru.it/564), or even [sound activated \(http://adafru.it/832\)](http://adafru.it/832))
- [12V power supply \(http://adafru.it/352\)](http://adafru.it/352)
- [1-to-4 splitter \(http://adafru.it/402\)](http://adafru.it/402)
- [Wire strippers \(http://adafru.it/527\)](http://adafru.it/527)
- Clear thread & [needle \(http://adafru.it/615\)](http://adafru.it/615)
- Black poster board
- Small screw driver
- [Female DC adapter - jack to terminal blocks \(http://adafru.it/368\)](http://adafru.it/368)

## Prep the Design

---



Start by projecting your design onto the black poster board. Once you get it lined up, tape it in place and trace the design by poking holes every inch or so... We used an awl but even a ballpoint pen would work. Don't worry if you poke too many or mess up- you won't be able to see these when it's all done.



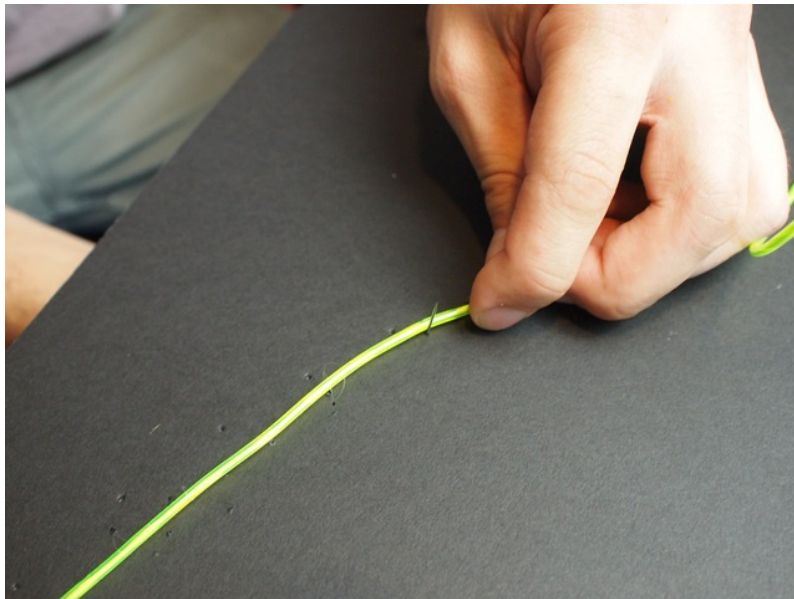


## Sew

---



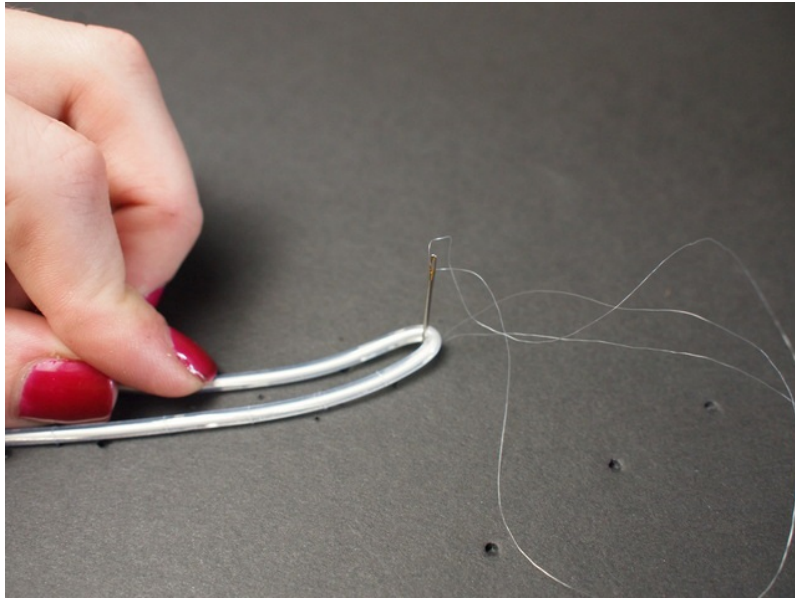
Thread the EL wire from the back, widening the hole with your awl so that the whole wire fits through. Keep in mind the starting hole's location matters in more intricate designs- you want to minimize the amount of wire 'lost' when threading it back behind the board. Pull the wire all the way through, leaving just the tail connector behind. Double up the clear thread on your needle so that you're essentially tying a big loop of thread around it. This will make it much easier to start and end each length of thread and strand of EL.



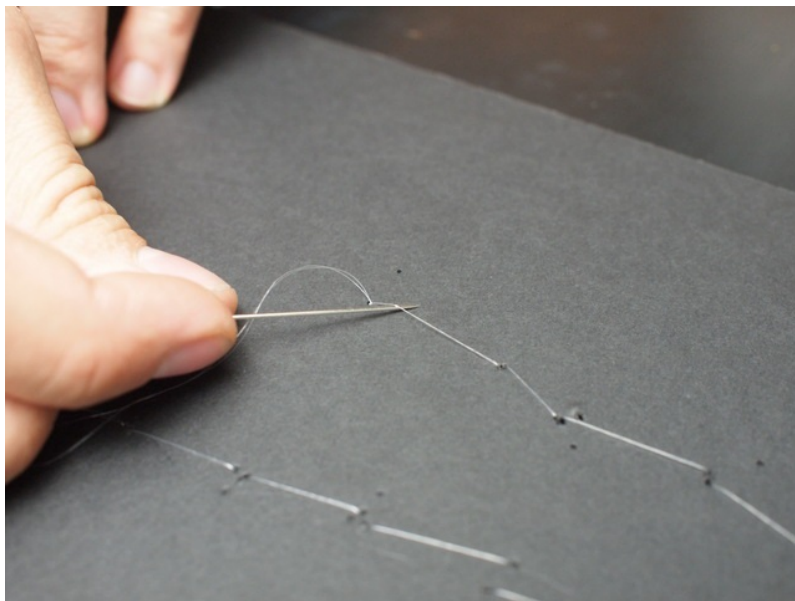
Sew loops around the wire every inch or as needed around tight turns so that you're tacking it down. The tighter you pull the EL wire and the thread, the more clean and smooth your designs will look. Create short stitches that are perpendicular to the EL wire, then run longer stitches



across the back of the poster board over to the next stitch location.



Create tight corners by bending the EL wire around the needle, but be careful not to break the interior corona wires.



When you've reached the end, tie it off!





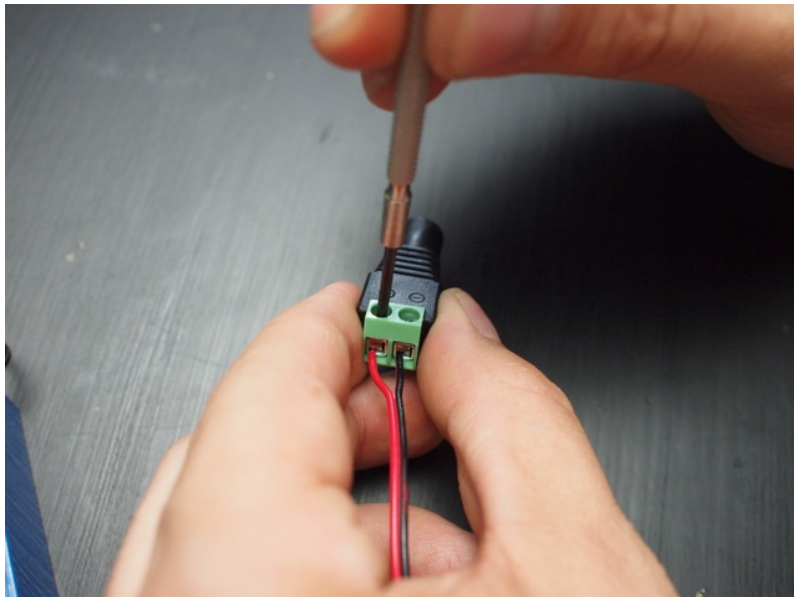
We didn't have to, but if you want to salvage as much EL as possible, you can [cut and solder \(http://adafru.it/aQ1\)](http://adafru.it/aQ1) on a [male in-line power connector \(http://adafru.it/319\)](http://adafru.it/319).

## Power

---

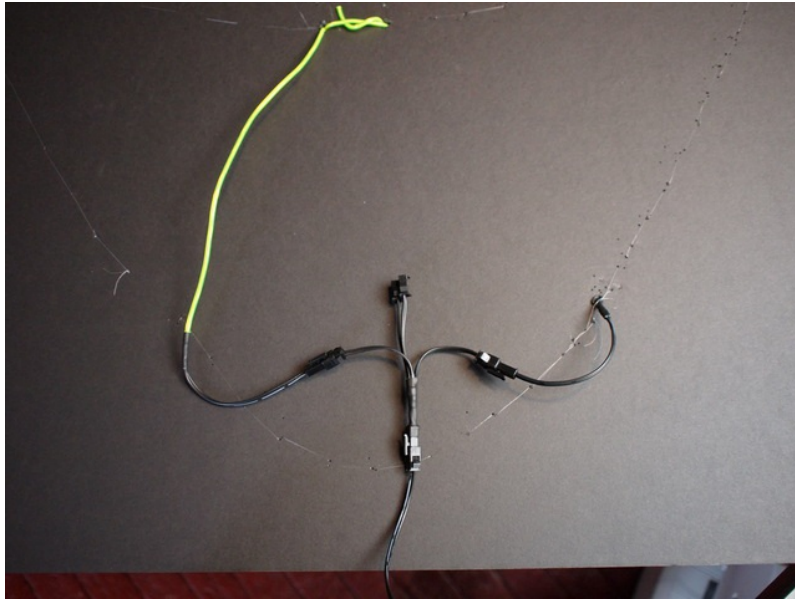


Strip the positive and negative wires on the EL inverter



Attach the female DC adapter, and plug into a 12V adapter

If you don't want the inverter so close to the board, use an [extension \(http://adafru.it/616\)](http://adafru.it/616) and/or [splitter \(http://adafru.it/402\)](http://adafru.it/402)



This alien sign uses two segments of EL wire connected to the inverter by a splitter.

## Glow

---

