

HOW TO: Make a Soft Battery Pouch

Create a battery holder for your soft circuit project



Materials

- Small piece of felt
- Sewing Needle
- 3V Coin cell battery
- Conductive thread
- Non-conductive thread
- Scissors
- Conductive fabric backed with double sided fusible web
- Puffy paint (optional)
- Iron + Ironing board (not pictured)

Directions

1. Cut your felt into a rectangle shape that will cover your battery when folded. You want the battery to be snug inside the pouch so don't make it too large.



2. Fold the felt in half and sew up the sides using your non-conductive thread. A good stitch to use to sew up sides is the whip stitch: <http://bit.ly/abrUGH>

3. Thread your conductive thread through the needle and make a big, fat knot at the end. This is crucial since this will be the point of contact for your battery.



4. Insert the needle through the center of one side of the pouch, from the inside outwards. That big fat knot should now be on the inside of your pouch.

5. Make a knot close to the surface of the felt. Trim off the extra thread.



6. Repeat steps 3-5 on the other side of the pouch.



7. Cut two strips of conductive fabric that is the length of your knot to the sewn edge of the pouch.

8. Iron down the conductive fabric so that it leads from the knot in the center of the sewn edge. Make sure that the copper fabric strips on both sides are leading opposite directions!

*Note: When ironing the copper fabric with double sided fusible web, make sure first that your paper is peeled from the back. A good temperature for your iron is medium range with no steam- be careful of how hot your copper fabric can get under heat!!



9. For practicality, you can mark one side as “+” for positive and the other as “-” for negative using puffy paint. I like puffy paint because it is puffy paint, but you can use a permanent marker or other marking device as well.



10. To use the pouch on your project, make sure that you sew the thread through the conductive fabric strips to make sure there is a solid connection. If you are using conductive fabric for the path of current, make sure that it overlaps the strips on your battery.

| Photos and text by Jen Liu
| If you have any questions, please feel free to contact me at: jenliu.uilnej@gmail.com
| June 2013. SHARE AND DISTRIBUTE! 😊