



Light Stitches
E-Textiles for Education



Camper Van Key Ring Kit

Instructions

Kit Contents



- Easy-sew Battery holder
- Coin cell Battery
- 2 white LEDs
- Conductive Thread
- Soft Switch felt pad
- Metal key ring
- Black Felt
- Orange and white self adhesive felt
- Assembly instructions and template

You will Need:

- Needle
- Long Pointed Pliers
- Scissors
- Sewing Machine (or can be hand sewn)

Assembly Instructions:

1. Cut out the templates and use them to cut out shapes from the relevant colour felt.
Either draw around the templates or pin on to felt in order to cut out.
The camper van shape should be cut out on a double layer of black felt so you have 2 camper van shapes to use as front and back.



2. Taking one of the black van shapes to use as the front, stick on the orange bonnet, badge and white windows.

3. Push the LEDs through the white felt lights and from the front to the back of van. Sticking the felt lights onto the felt as you go.





Make sure the positive leg (longest) is pointing up and negative leg is pointing down.

Use the pliers to bend each LED leg round into a loop.



4. Knot one end of the conductive thread onto the negative hole on the battery holder. Make sure the knot is pulled very tight.

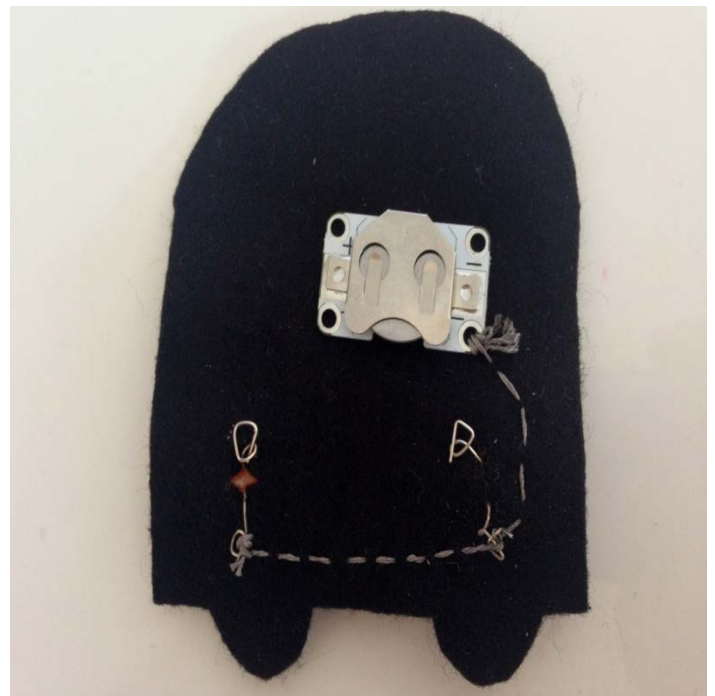
5. Place the battery holder (with coin) in position as shown in the picture.

Sew the battery holder in place sewing through the hole and felt.

Stitch a running stitch (not to be seen on the front of fabric) down to the negative leg of the right LED first.

Sew the conductive thread around the LED leg and felt making sure it is knotted before stitching to the next negative LED.

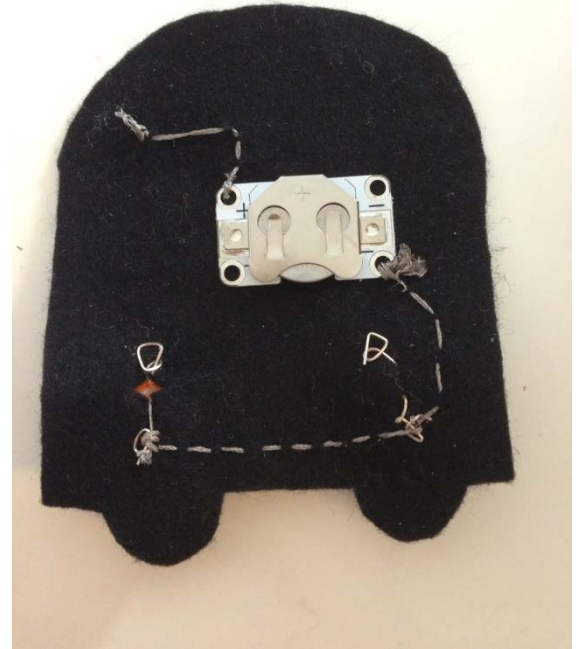
Sew a couple of stitches beyond the last LED leg and then knot tightly. Cut thread.



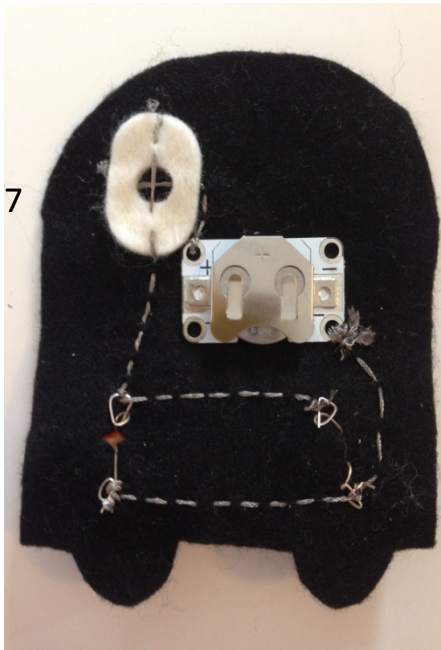
6. Knot conductive thread to the positive hole on the battery holder.

Stitch as shown in the picture up to where the soft switch is going to be placed (in the window), ending with a longer stitch that will be seen under the hole of the felt pad.

Knot and cut thread



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7. Stick the soft switch in place over the conductive thread.

Sew the conductive thread to lay over the top of the Soft Switch and then running stitch to the positive legs of the LEDs. Sew each LED leg as before finishing with a knot .

You should find that when the soft pad is pressed it acts as a switch to turn the van lights on.

8. Attach the other black felt van shape to cover the components and become the back of the camper van. Add the key ring tag to the top of the van ready to sew in place. Using conventional thread (not conductive), stitch around the shape just inside the border.



9. Attach metal key ring and Stick on white self adhesive felt bumper

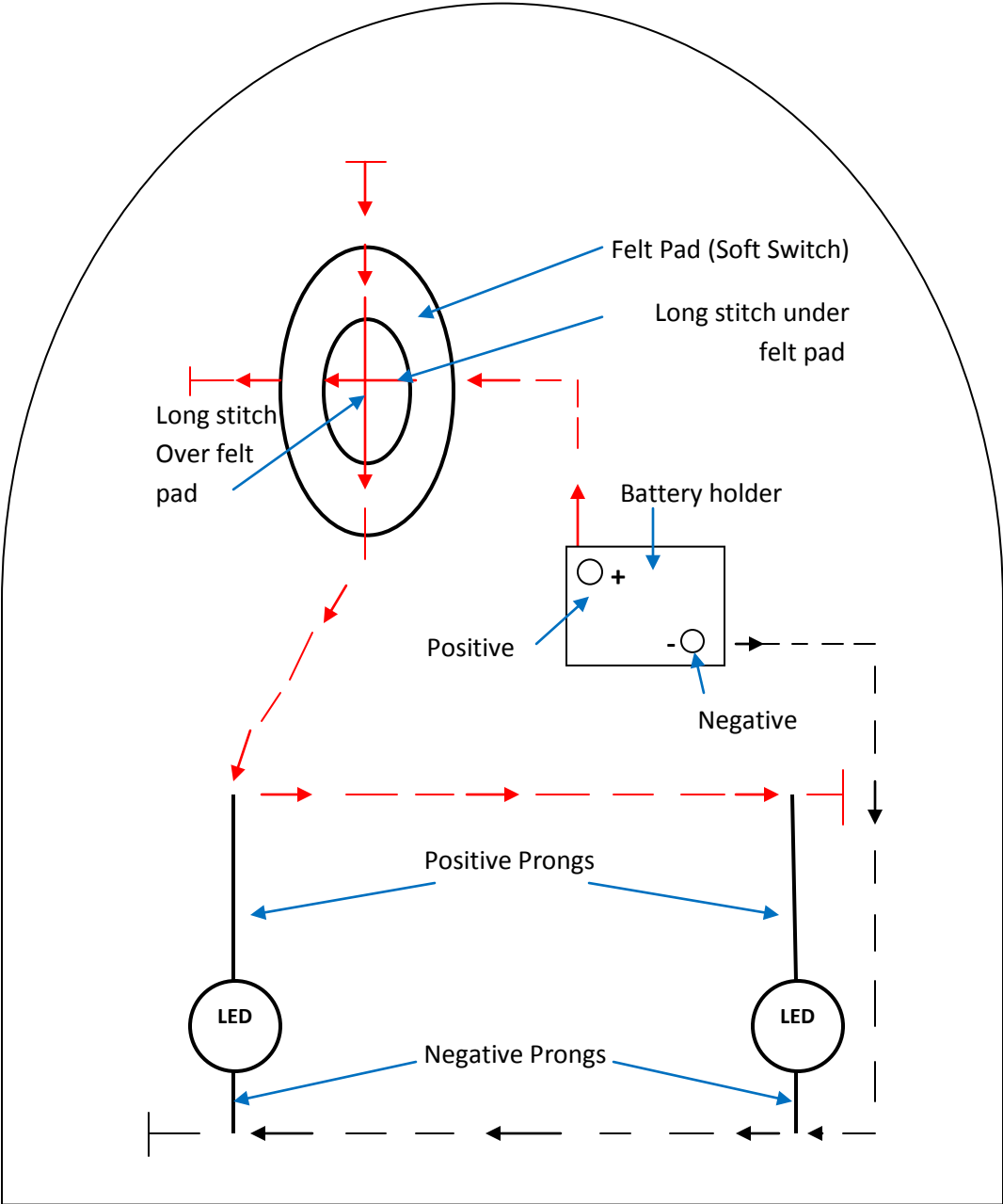


You will see that when the soft pad is pressed in the camper van window, it acts as a switch to turn the van lights on!

Diagram of the circuit

----- = Positive conductive thread stitching

----- = Negative conductive thread stitching



Camper Van Template

