

INSTRUCTIONS

These step-by-step instructions explain the basic assembly of this sensor kit. For more detailed instructions please visit the following link:

>> www.plusea.at/?category_name=kits

If you have any questions about or problems constructing this kit, please contact:

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TRACE AND CUT OUT THE STENCILS

1

Cut or trace the stencils from the other side of this instruction sheet and transfer them to the appropriate materials. Then cut out the shapes from the materials and peel away the paper backing from the conductive fabric.

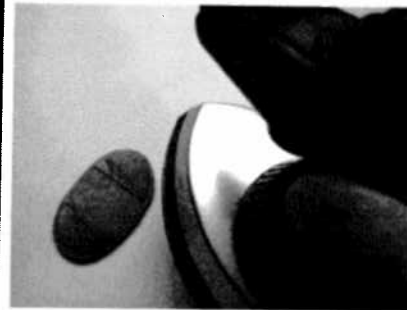


FUSE CONDUCTIVE FABRIC

2

Place the conductive fabric pieces with the glue side (shiny side) facing the neoprene.

Set you iron to a medium heat (too hot will burn the fabric) and iron over the conductive fabric to melt the glue and fuse the fabrics together.

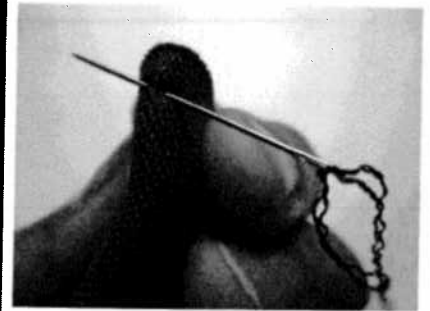


STITCH CONDUCTIVE THREAD

3

Thread the needle with conductive thread, feel free to take the thread double or quadruple.

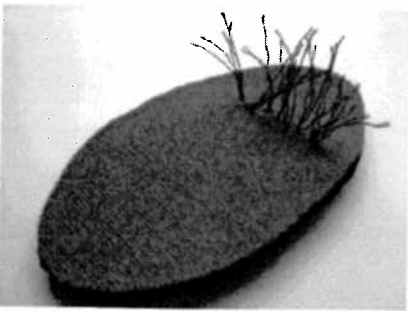
Stitch into the neoprene from the top side (the side without conductive fabric), but don't pull the thread all the way through.



STITCH CONDUCTIVE FUR

4

After stitching cut the thread at desired fur length, roughly 2cm. Repeat 5 or 6 times. Each time the conductive thread should penetrate all the way through the neoprene and make contact with the conductive fabric fused to the reverse side.

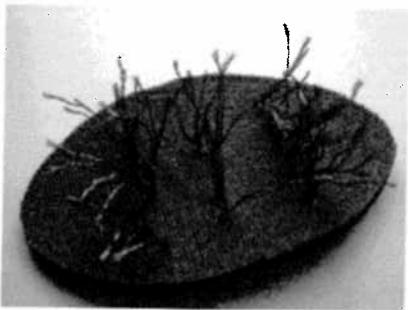


STITCH MORE CONDUCTIVE FUR

5

Continue stitching conductive fur to both patches of conductive fabric and then add two or three stitches of fur to the center.

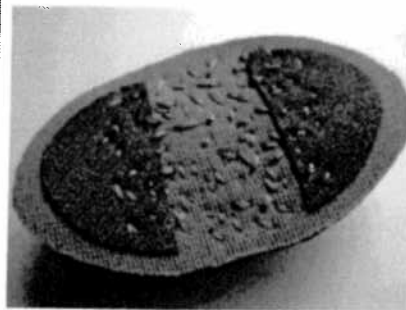
When you stroke over the fur, from one side to the other, the conductive threads from one side should touch the center ones, and these in turn should touch those on the other end.



ADD SOME NON-CONDUCTIVE FUR

6

Thread your needle as before, but this time with a non-conductive thread of similar weight. Any colour you like. Proceed to stitch fur until the sensor is dense and the conductive fur contacts are isolated from one another, yet make contact when stroked.



TEST FINISHED SENSOR

7

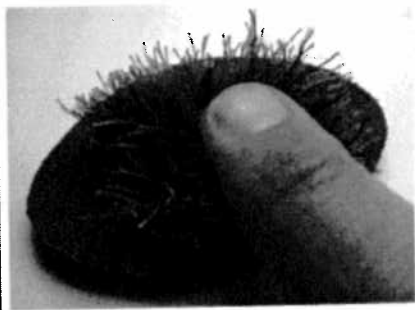
Connect the ends of your sensor to a multimeter set to measure continuity. As you stroke across the sensor the resistance should sink to near zero Ohm. Flickering is normal. When the sensor is not being stroked the multimeter should measure no connection. Ruffling of fur may be necessary at times.



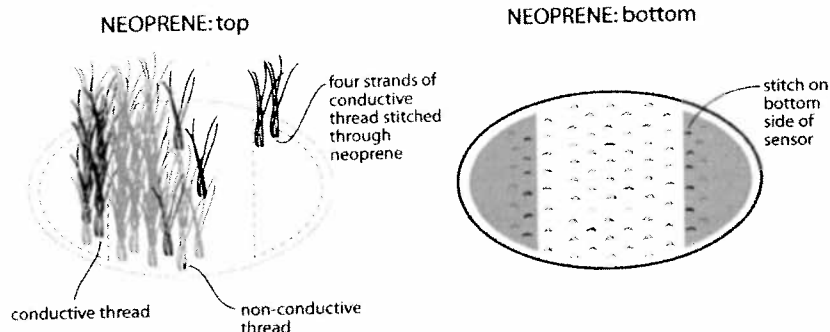
KIT

NEOPRENE STROKE SENSOR

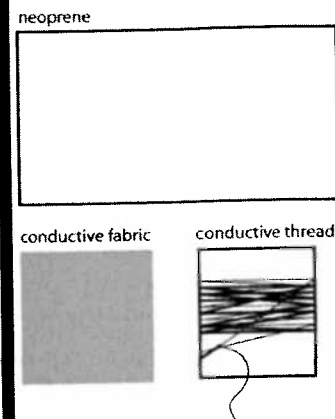
Using conductive thread and neoprene to stitch a fabric stroke switch. While tedious to make, the basic construction of this sensor has a wonderful effect.



DIAGRAMS

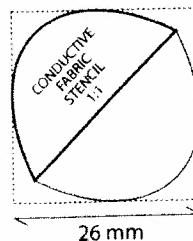
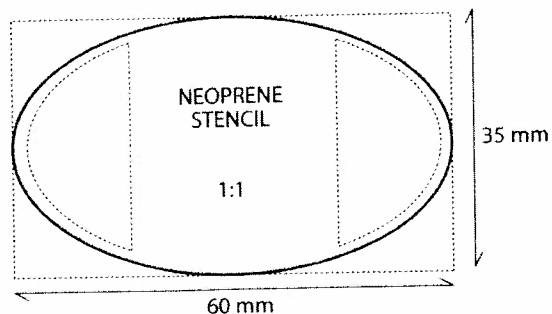


CONTENTS



In addition to the contents of this kit, you will need the following items to complete this sensor: *pen or pencil, iron, regular thread, sewing needle, scissors*

STENCILS



OPEN SOURCE HARDWARE

"Open source hardware is hardware whose design is made publicly available so that anyone can study, modify, distribute, make, and sell the design or hardware based on that design."

>> <http://freedomdefined.org>

>> www.plusea.at/downloads/kits.svg



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