## How to Make a Craft Foam Switch - No Soldering

## **Materials Needed:**

Creatology sticky back soft Foam Sold by Michaels \$7.99 per package



2 - 6" squares 2 - 12" x ½"

(The foam comes in all different colors and glittered. Several different colors from different switches are used in the photos)

 $2-5 \frac{1}{2}$ " squares of heavy duty aluminum foil

1-12'' (or longer) length of 18 gauge speaker wire

Electrical tape - or wire glue (or both)



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One 1/8" speaker jack - Radio Shack - \$3.49 for a pack of 2



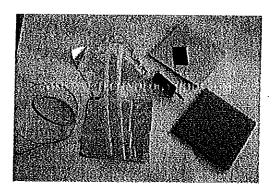
## Tools and Supplies needed:

scissors ruler



Wire strippers - optional but very helpful

Step1: Assemble your switch components:

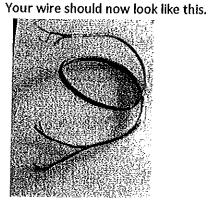


Step 2: Stripping all four ends of the speaker wire

Separate the 2 channels of speaker wire at each end using your fingers.

Use the wire stripper tool to take the plastic insulation off of one inch of each channel.

Repeat with the other end of the wire.

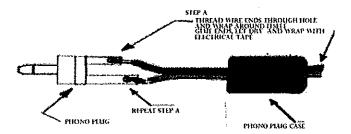


Step 3: Attaching one end of the speaker wire to the phono jack

Unscrew the cap off of the phono jack.



The inside of the jack will look like this drawing:



Put one end of the bare wire through the hole in the long prong.

Wrap it firmly around itself and coat with wire glue.

Attach the other end of the bare wire through the hole in the short prong. Coat with wire glue and allow to dry.

After the glue is dry, wrap each end with a small bit of electrical tape. Cover all of the stripped wire with electrical tape. The wire that is still encased in plastic does not need to be taped.

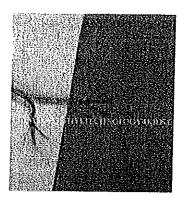


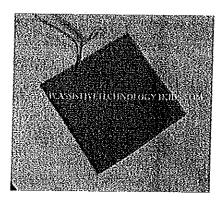
IMPORTANT: The bare wires of each strand must NOT touch each other. If they do Your switch will not work!

Work neatly as the two wires need to fit inside of the plastic housing of the jack. Screw the cap back onto the jack.

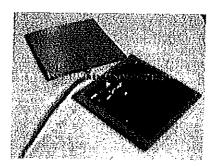
## STEP 4: Assembling the Foam Switch

Remove the sticky back from one piece of foam. Place the wire end so that all of the Stripped wire end is ¼" from the edge of the foam. Fan out the ends of the wire so that it will stick more easily to the foam. The second picture shows speaker wire that is a single strand. If you are using this type of speaker wire, bend it into an "s" shape so that it will adhere better And will be less likely to slide out from under the foil and prevent your switch from working.





Attach the other strand of the same end of the speaker wire to the other foam square. Then press each piece of aluminum foil to the sticky side of each foam square. The wire ends should be firmly sandwiched between the foil and the foam. Be careful Not to tear the foil.



After applying the foil to each side of the switch, cut the two 12" x  $\frac{1}{2}$ " pieces of foam in half. You will now have four strips. Remove the paper backing from each strip. Apply each strip to the edge of one of the foam squares.



Press the two sides of the switch together so that the foil sides are on the inside. Press around the edges The foam strips around the edges prevent the foil from touching. When the switch is pressed in the middle, the foil will touch and make the connection.

STEP 5: Your Finished Switch

