

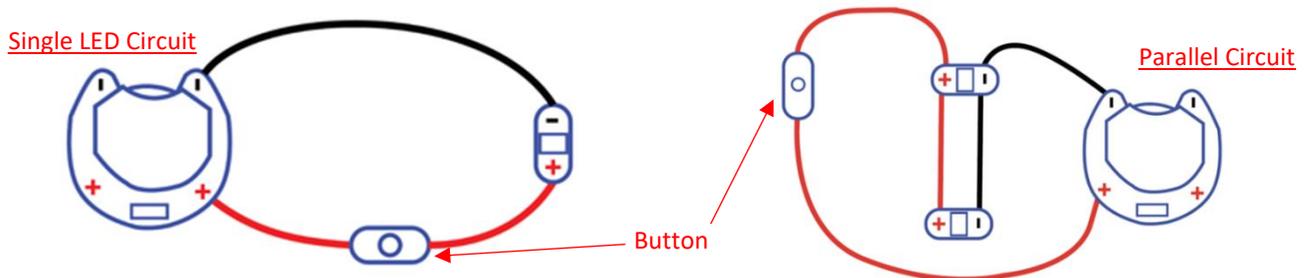
Push buttons can be added to a circuit, as an alternative to using the switch on the power source. Buttons are especially helpful when the project is designed to be interacted with.

Push Buttons and Switches



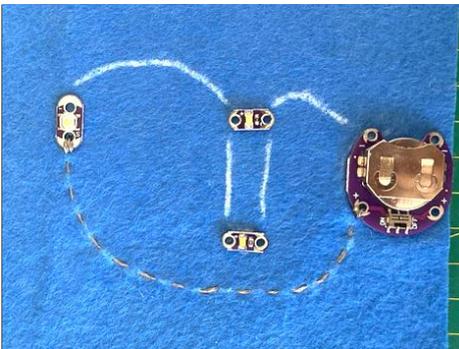
A push button has a small hidden mechanism inside which acts like a spring. When it is not pushed, it stops the circuit from completing itself, making it appear to be turned off. When the button is pushed down, it completes the circuit by letting electrical current pass through.

Button components can be connected to LED circuits to turn them on and off without needing to use the power supply. Switches work very similar to this, and are available as a standard switch, along with other options such as being activated by a magnet or tilting the circuit.



Push buttons can be added to both simple 1-led and parallel circuits. However if you are adding a push button to a parallel circuit, it needs to be placed on the strings leading to/from the battery holder and not between the LED's.

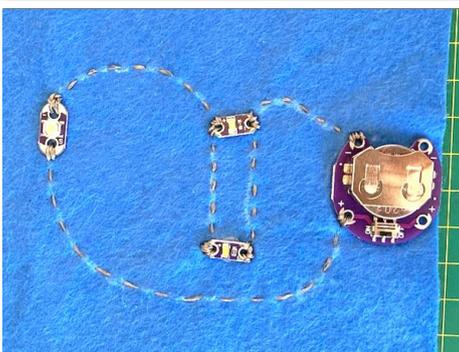
Sewing a Parallel Circuit (with Button):



Sew the 1st stitching line, leading from the positive (+) pin on the power source to the push button. Knot off and cut the end tidily.



Sew the 2nd stitching line going from the other side of the push button and connecting to the positive (+) pin of the 1st LED. Continue to connect your stitching to any remaining positive pins on the LED's.



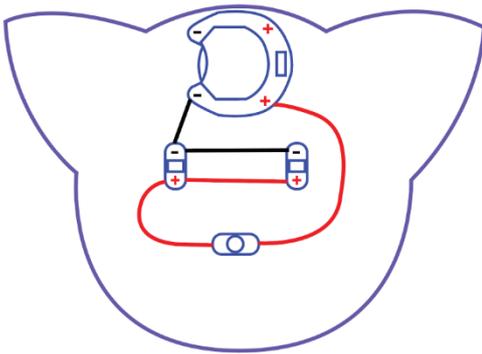
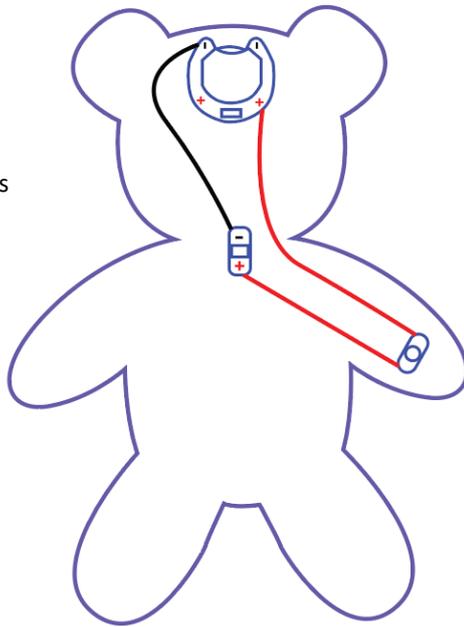
Finish the circuit by starting at the negative (-) pin of the power source and sewing to the remaining negative (-) pins of the LED's.

Knot off tidily, secure with clear nail polish and the circuit will be complete.

How this can be applied to your project:

Interactive Toys or Patches – The project can be designed to have the button in a specific area, such as the nose or paw of an animal. When the button is pressed, it will light up the LED's.

This single LED circuit example has the button located on the bear's paw, when the button is pushed, the bowtie will light up.



This parallel circuit example has the button at the cat's nose – when the button is pushed, the eyes will light up.