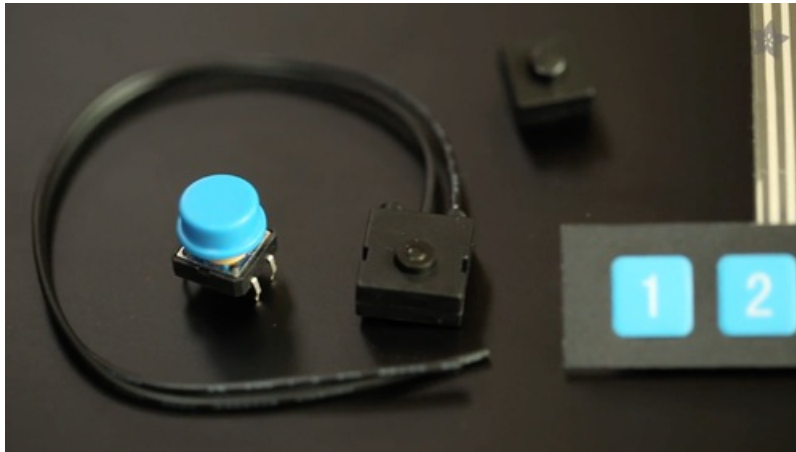




## Costume Triggers & Actuators

Created by Becky Stern



Last updated on 2018-08-22 03:44:07 PM UTC

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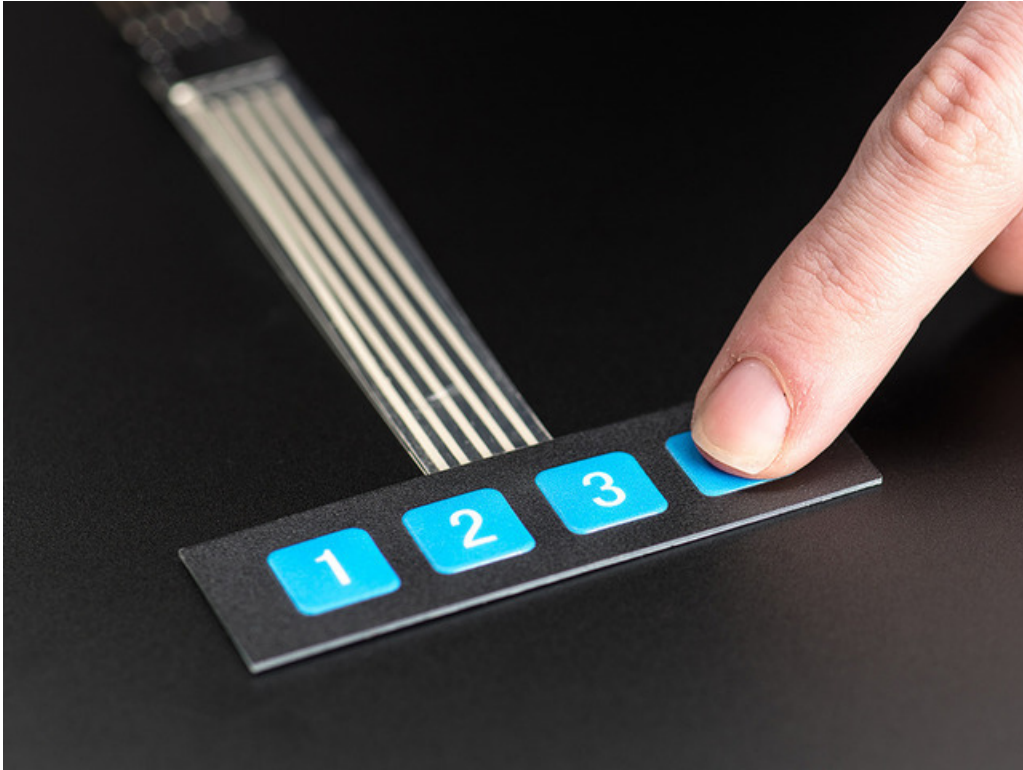
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## Switches

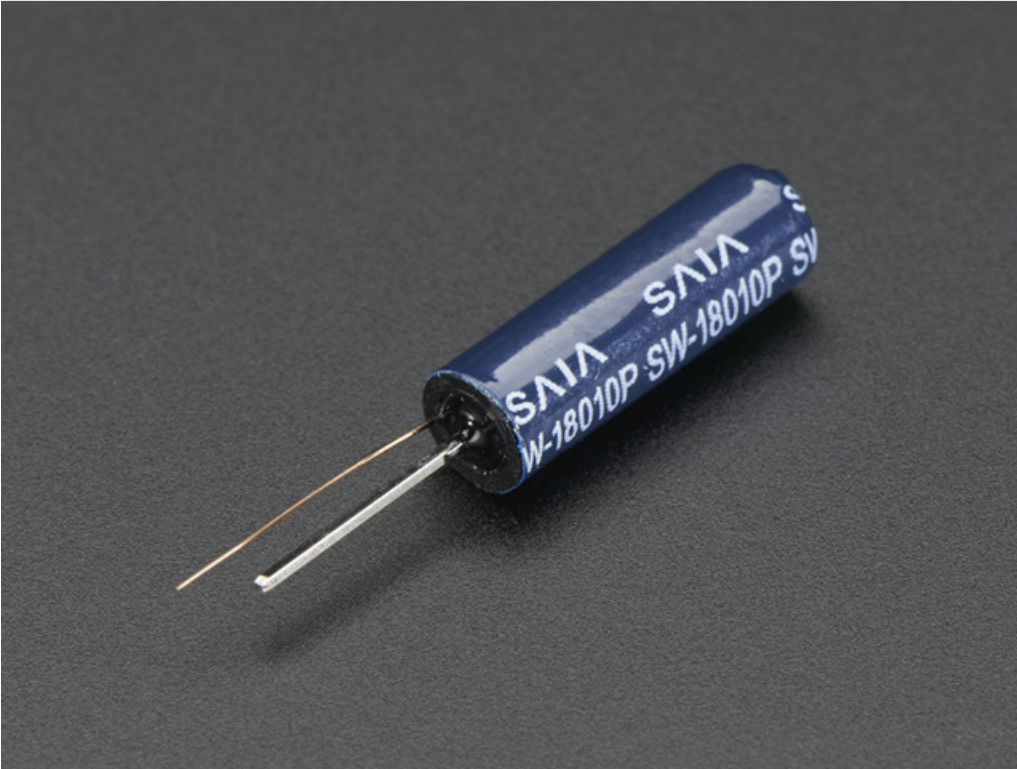
When you think about electronics in your Halloween or cosplay costume, you probably imagine that it *does something* when *you* do something; it's interactive. This guide provides some tips and suggestions for adding triggers to your costumes and props. To add light to your project, check out the "[Let's put LEDs in Things!](https://adafruit.it/CdP) (<https://adafruit.it/CdP>)" guide.



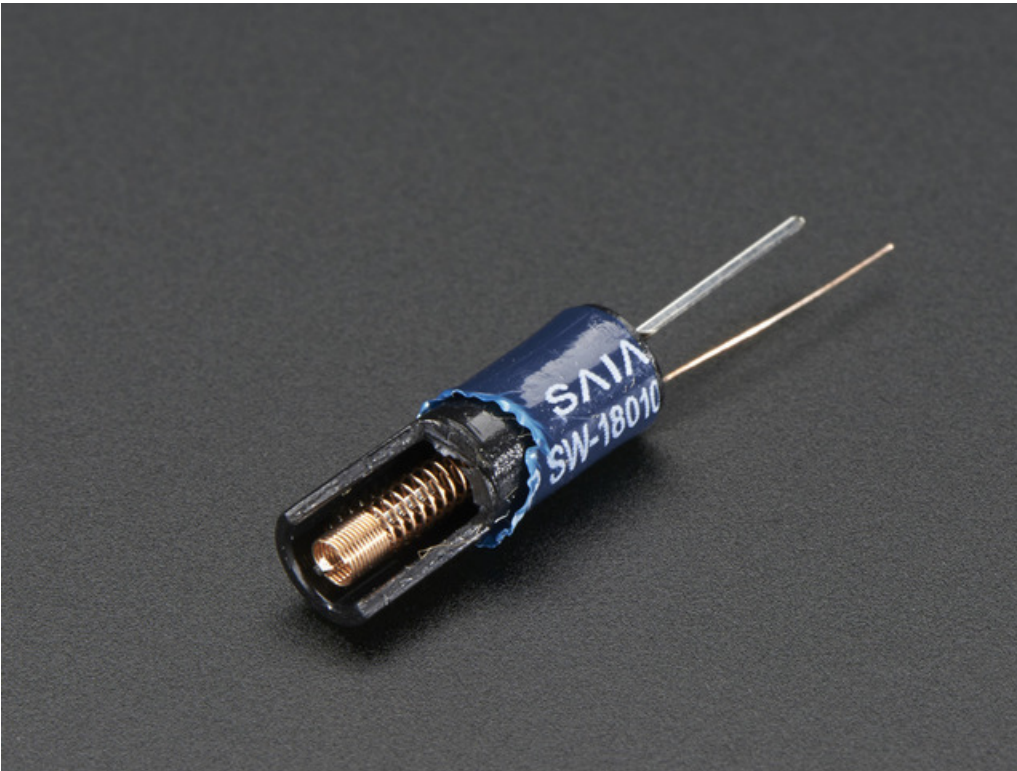
Simple [momentary pushbuttons and tactile switches](https://adafruit.it/eOJ) (<https://adafruit.it/eOJ>) can be added to any part of your costume, like the trigger on your Portal gun, the back of your Star Trek communicator, or the fingers of a glove. Adafruit carries all sorts of switches in different sizes and trigger styles. Just hook one up to your Arduino or other digital I/O board and read the switch's high/low states!

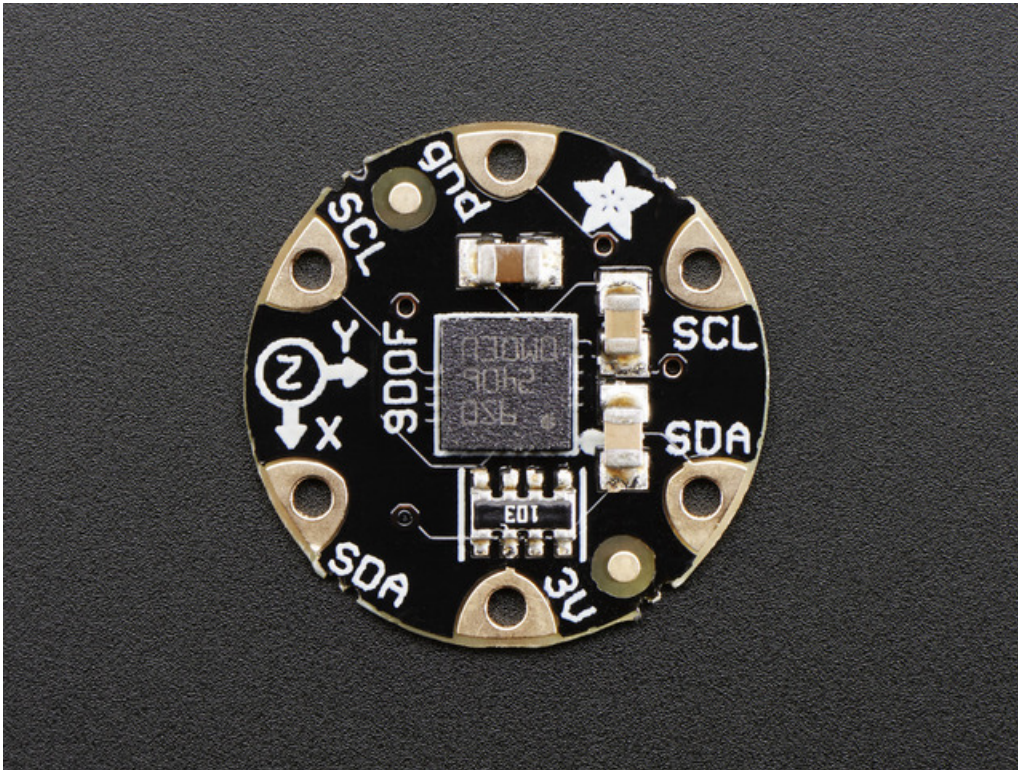


## Motion



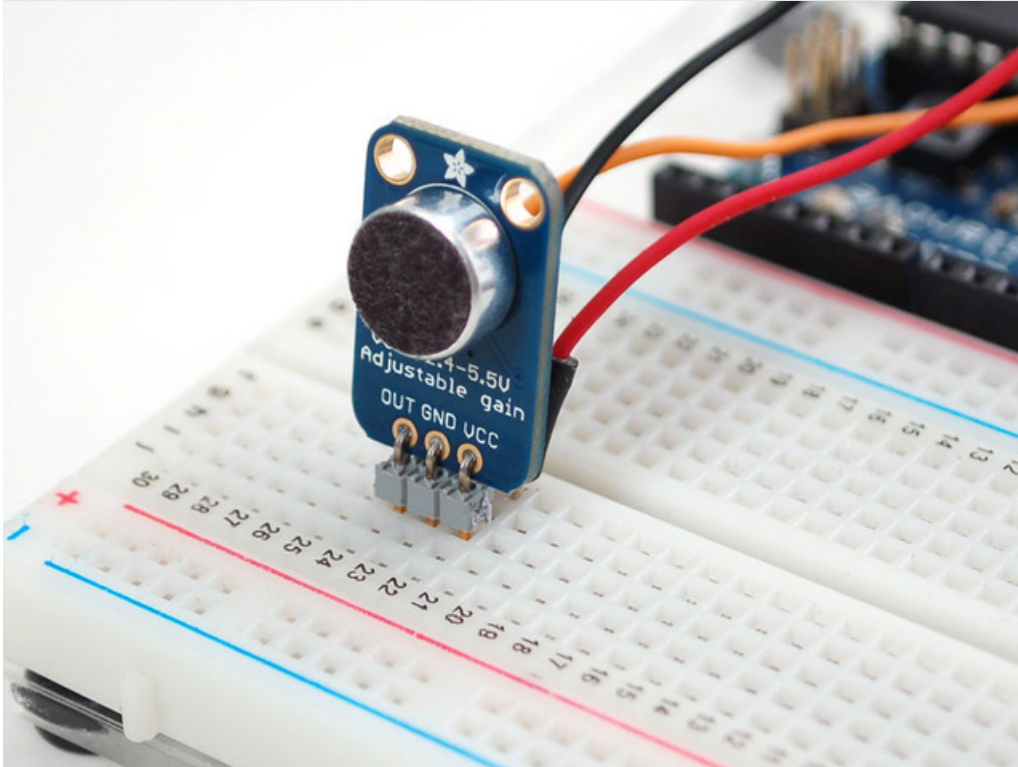
If you want to detect a gesture, like dancing or waving a magic wand, you might try a simple [vibration sensor](https://adafru.it/eOK) (<https://adafru.it/eOK>), which triggers each time the spring inside shakes around.





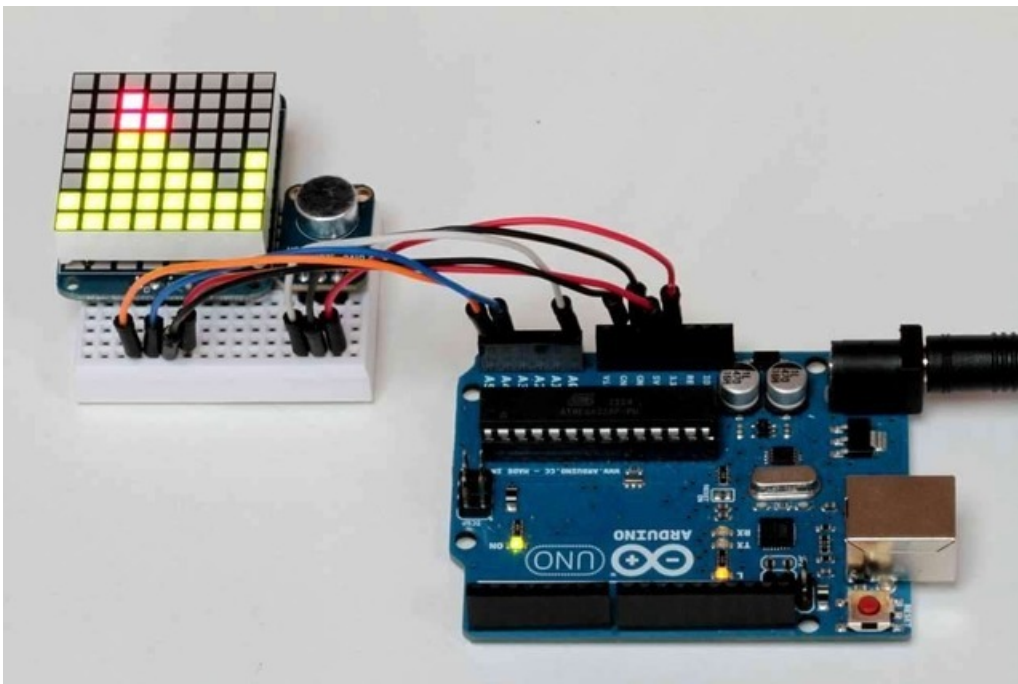
For more complex and precise gesture sensing, consider an accelerometer module like the [FLORA nine-degrees-of-freedom sensor](https://adafruit.it/e0L) (<https://adafruit.it/e0L>).

## Sound



Sound is another popular trigger-- you can use the Adafruit electret microphone breakout to add audio-sensitivity to your microcontroller project, or use a volume-activated inverter for EL wire projects.

[Wave Shield Voice Changer \(https://adafru.it/CdQ\)](https://adafru.it/CdQ)



[Adafruit Microphone Amplifier Breakout \(https://adafru.it/CdR\)](https://adafru.it/CdR) guide

[Tiny Arduino Music Visualizer \(https://adafru.it/CdS\)](https://adafru.it/CdS)

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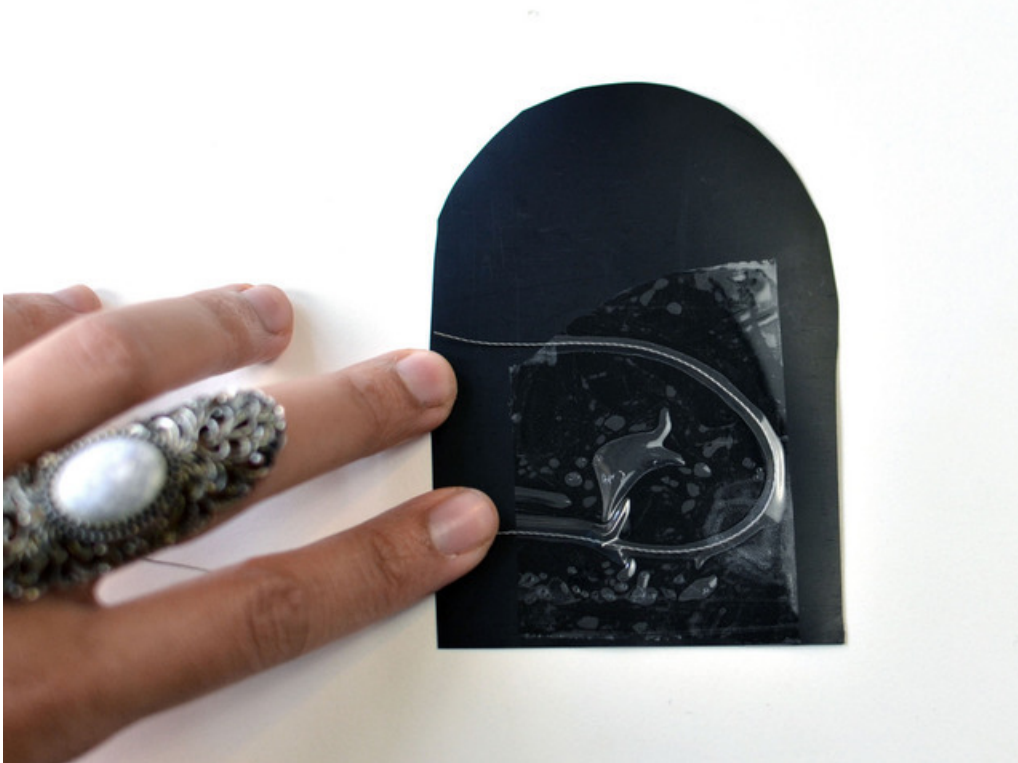
[LED Ampli-Tie \(https://adafru.it/CdT\)](https://adafru.it/CdT)

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[VU Meter Baseball Hat \(https://adafru.it/CdU\)](https://adafru.it/CdU)

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You can make sensors from nontraditional materials, like the [velostat](https://adafru.it/e0S) sensors on our Firewalker Sneakers, made by taping a piece of conductive thread to each side and reading the changing resistance as your foot steps down.

[Firewalker LED Sneakers](https://adafru.it/CdV)

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