

Hello, amazing person! Thank you for being willing to help me with the Magical Steps electronics! 😊

(btw I think this is probably best for only one person to work on at a time)

Preliminary Stuff

- The needed materials are in a plastic bag on the steps in the back of the tent. You'll find:
 - A couple #4 x 3/8" self-drilling screws
 - You'll need more of these. Ask Joe, or look for them yourself in the center area in the workshop.
 - A multimeter:



- Several vibration sensors (the brass-looking circular things), and breakout boards (the green and blue square things)
- A set of screwdrivers

Steps

Note: A few of the steps are already done! Use them as reference!

1. Use a screwdriver to loosen the screws in the breakout board (they are embedded in the green plastic).
2. On each step, there are wires coming out of the underside of the step, and attached to a vibration sensor on the other side. For each step, stick the black wire into the GND hole on the breakout board, and the red wire to the INPUT. To secure in place, retighten the screws.
 - a. Once secured, you should be able to yank on them **a little** and they should stay in place.
 - b. Yeah, it's hard and annoying 😞
3. Secure the breakout board to the wooden wall with one of the self-drilling screws.
4. TEST!
 - a. Set the multimeter to "continuity mode" (the setting in the image above).
 - i. In this mode, the multimeter will beep if the red and black leads are "shorted"/"electronically connected". You can test it by touching them to each other.
 - ii. Test the INPUT connection: touch one of the leads to the GOLD outer ring of metal on the vibration sensor. Touch the other lead to the "S" pin on the breakout board. It should beep!

- iii. Test the GROUND connection: touch one of the leads to the WHITE inner ring of the metal on the vibration sensor. Touch the other lead to the “-” pin on the breakout board. It should beep!
- b. If all this works, yay you did it! On to the next one! 🙌

Text or call if you have any questions!

Reference Pictures (if needed)



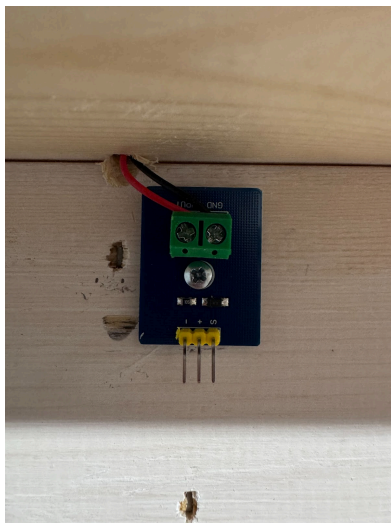
(the two leads of the multimeter. touch them like this and it should beep in “continuity mode”!)



(self-drilling screws)



(vibration sensor)



(breakout board)