

Interactive 'Zine: Multi-page Circuit Instructions



Supplies:

- A zine-fold book, in any size and type of paper you choose.
(See <https://www.youtube.com/watch?v=OHYwtlfebR0&feature=youtu.be> for a video on how to fold a book)
- Pencil
- Scissors
- Copper Foil Tape
- MaKey MaKey Board

Step-by-Step Instructions:

1. Write Your Story

Across the six *inside* pages of your **Zine-Fold Book**, write a story (leave front and back for the cover)



2. Draw your circuit in the book (Use pencil, following the red lines in these illustrations as an example.)



NOTE: Your pencil-drawn circuit should look completely connected when you unfold the book, minus the gap noted below.

3. Lay in Copper Foil Circuits

Use your pencil-drawn circuit as a guide for where you are going to place the copper tape.



Lay in the rest of your copper tape into the book.



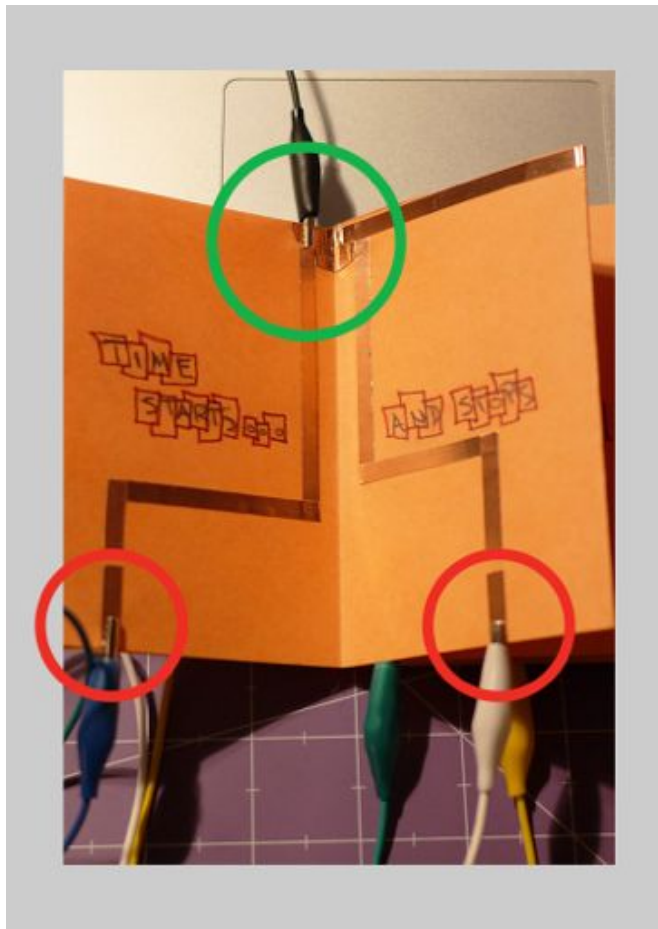
Make sure to leave a **gap** between your copper tape pieces at the bottom of each page. This leaves the circuit open so that you can use your finger to bridge the gap. Your finger is the switch in the circuit.

*NOTE: Your **Copper Circuit** should look completely connected when you unfold the book, with gaps for switches.*

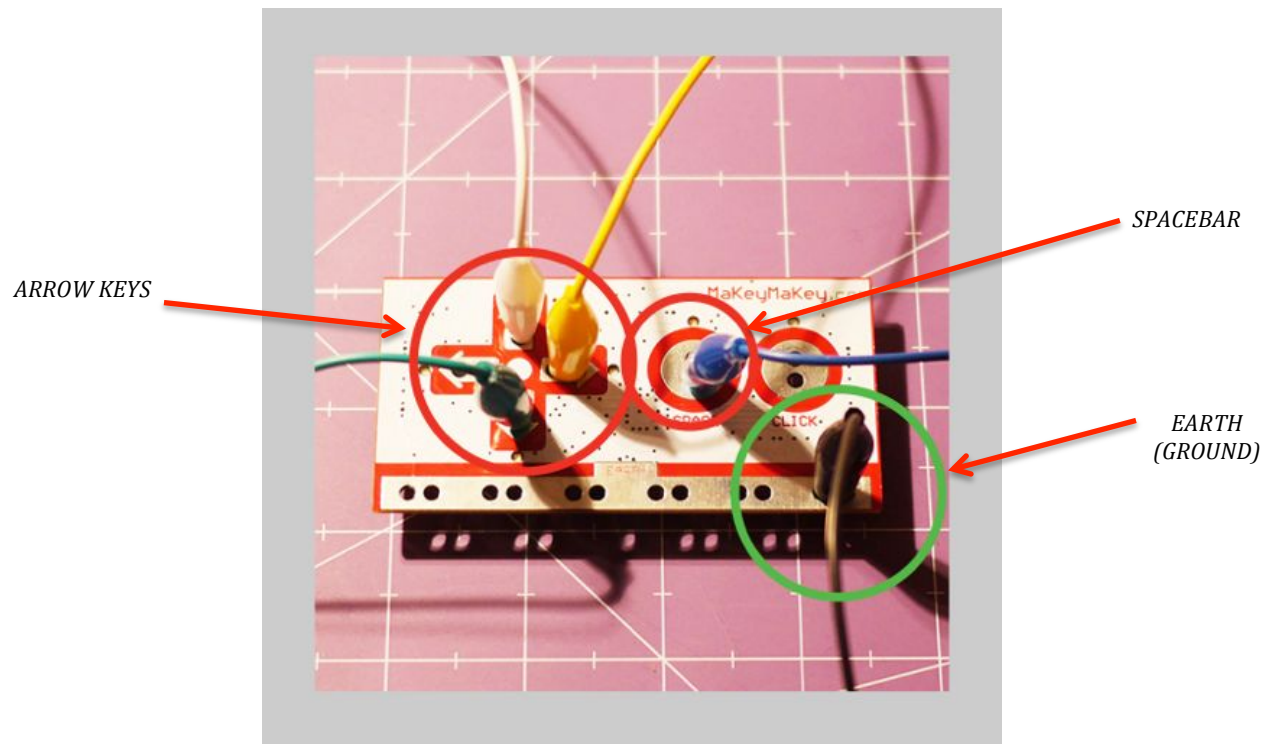


4. Connect the Makey Makey Board to your book

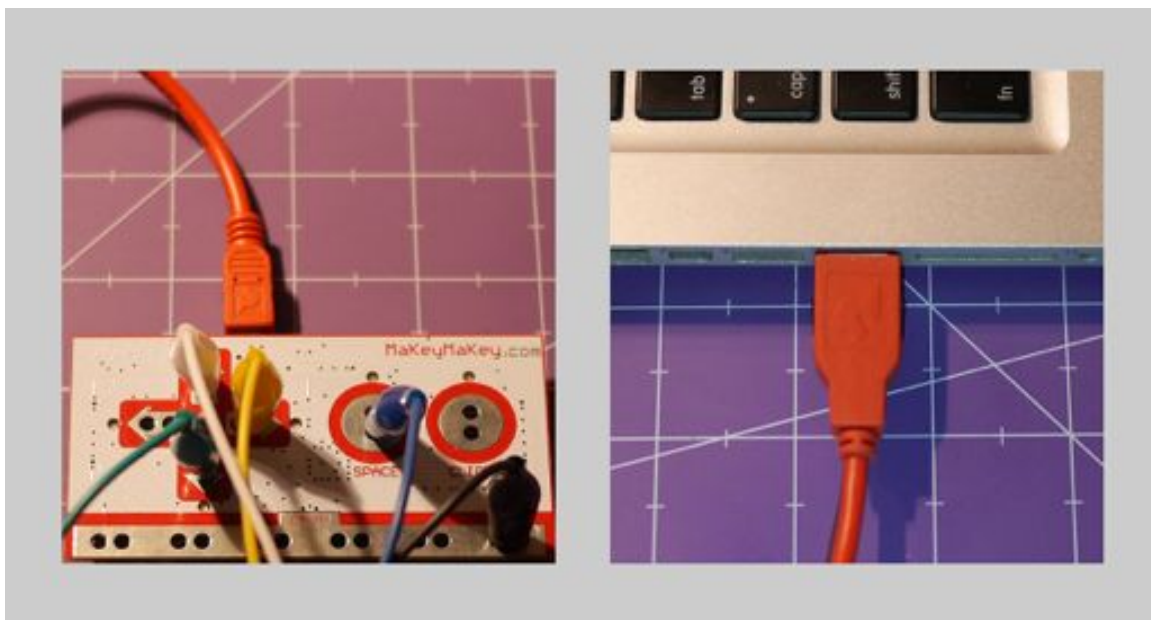
- a. Using the image below as a guide, hook up an alligator clip wire to each “switch” section of copper tape at the bottom of your book (red circles), and one at the point at the top that is the “ground” (green circle).



- b. Clip the single “ground” wire to the bottom strip of the **Makey Makey Board** labeled “EARTH.” (Green Circle)
- c. Clip the other alligator clips from your book to each section of the Makey Makey Board that are the Keyboard Controls you set up in your Scratch program. (Red Circle)

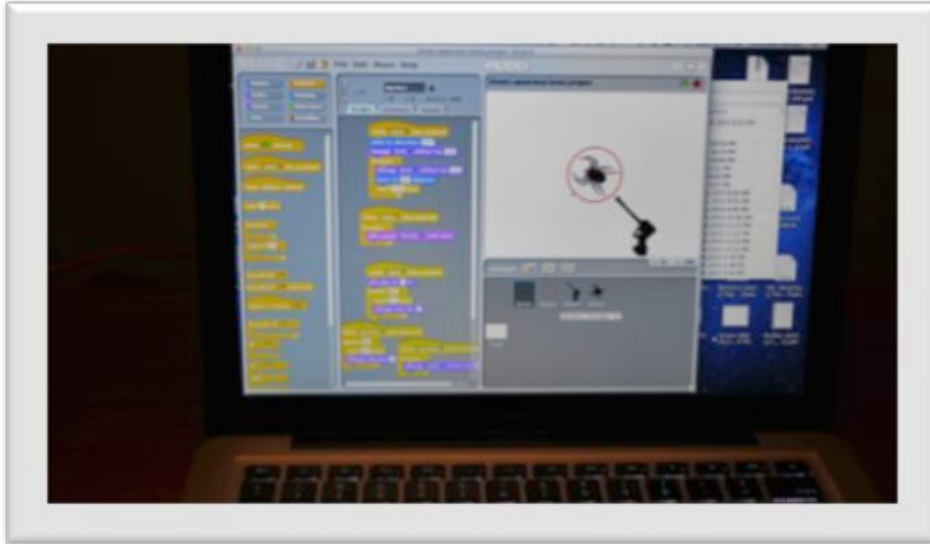


5. Use the USB cable to connect the Makey Makey Board to your computer.



6. Test your book's interactions with Scratch

Open the pre-made Scratch project, found at: <http://scratch.mit.edu/projects/10894151> to test your book's interactions. Remember to use your finger as the switch to activate each page.



7. Watch a video of the interactive book in action

NOTE: This interactive book also makes use of a planar coil speaker to play the audio directly through the book.

http://www.youtube.com/watch?v=pu_MSGZ1E4M



You can make your own Scratch project to interact with your book.

Log in to Scratch at <http://scratch.mit.edu> and click the CREATE button. Start building your own projects!