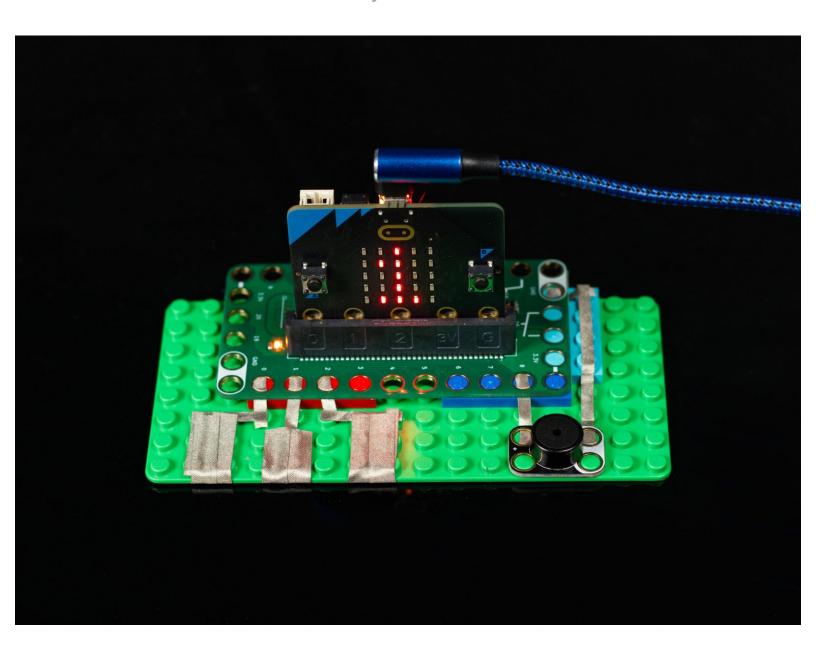


# **Touch for Sound**

Written By: Pete Prodoehl



#### **INTRODUCTION**

The micro:bit V2 has capacitive touch and a built-in speaker, but the default speaker pin conflicts with a touch pin, so we can use an external speaker instead.



### **TOOLS:**

- Scissors (1)
- Computer (1)



#### **PARTS:**

- Crazy Circuits Bit Board (1)
- micro:bit (1)

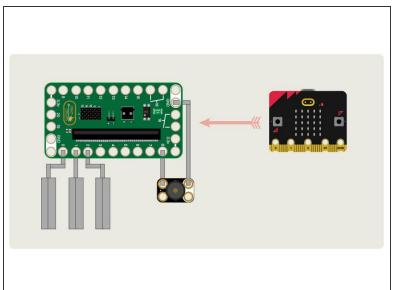
V2

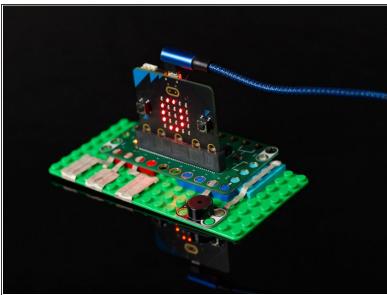
Maker Tape (1)

1/8"

Crazy Circuits Piezo Speaker Chip (1)

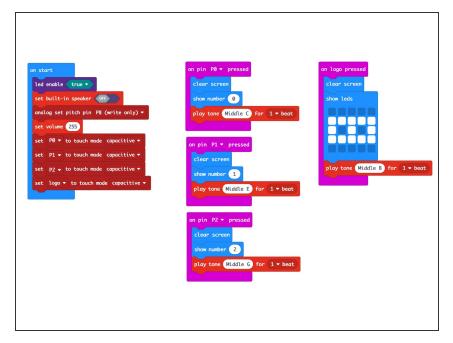
#### Step 1 — Build your Circuit





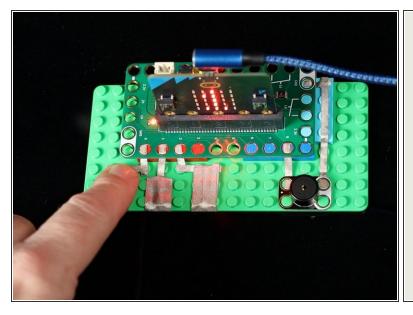
- Gather your components. You will need a micro:bit V2, a Bit Board, a Piezo Speaker, and some 1/8" Maker Tape.
- You do need a micro:bit V2 as it supports capacitive touch. Previous versions of the micro:bit will not work for this project without some modifications. (You might be interested in our <u>guide to capacitive touch on the micro:bit V1 board</u>.)
- Assemble on a LEGO baseplate and use Maker Tape to connect the Piezo Speaker. Then add tape connecting to Pins 0, 1, and 2.

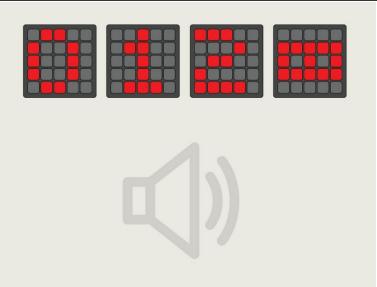
#### Step 2 — The Code



- Connect a USB cable to the micro:bit and then plug it into your computer.
- We'll be using <u>makecode.microbit.org</u> to program our board. It uses a simple drag and drop block interface.
- We're going to load the following code for our Touch for Sound V2 program:
  <a href="https://makecode.microbit.org/\_9of3\_TJJR6...">https://makecode.microbit.org/\_9of3\_TJJR6...</a>

## Step 3 — Test it Out!





- Touching the tape connected to Pin 0, 1, or 2 will play a tone on the Piezo Speaker and also show a number on the micro:bit's built-in LED matrix.
- Touching the logo on the micro:bit will play a tone on the piezo speaker and also show a symbol on the micro:bit's built-in LED matrix.

This document was generated on 2024-01-15 10:19:43 PM (MST).