

# Connecting headphones or a speaker to the micro:bit

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## Overview

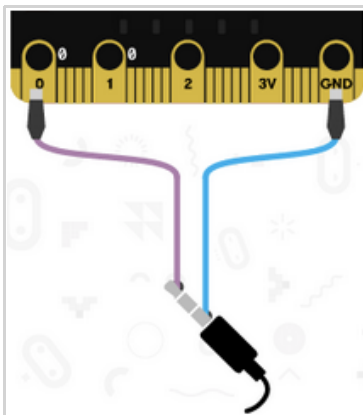
The latest micro:bit has a built-in speaker, but you can also output sound to a pair of headphones or an external speaker by sending a signal on **Pin0**.

Common ways to do this are by using a set of analogue headphones with a jack plug on the end or using an inexpensive **piezo speaker** ([https://en.wikipedia.org/wiki/Piezoelectric\\_speaker](https://en.wikipedia.org/wiki/Piezoelectric_speaker)).

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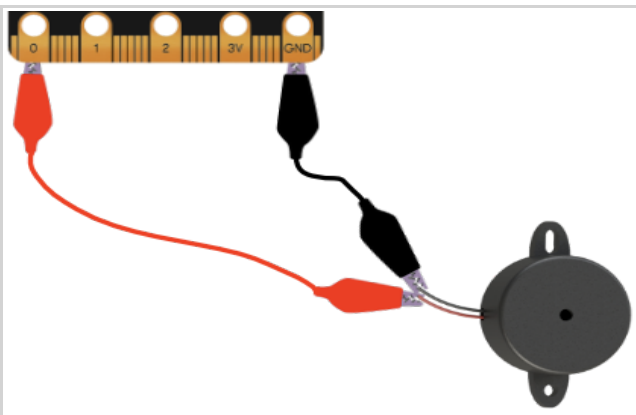
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## Connection



### Headphones/Audio jack

Connect **Pin0** to the **tip** and **GND** to the **sleeve** of the jack. If you have four rings on the headphones, choose the top and bottom rings.



### Piezo speaker

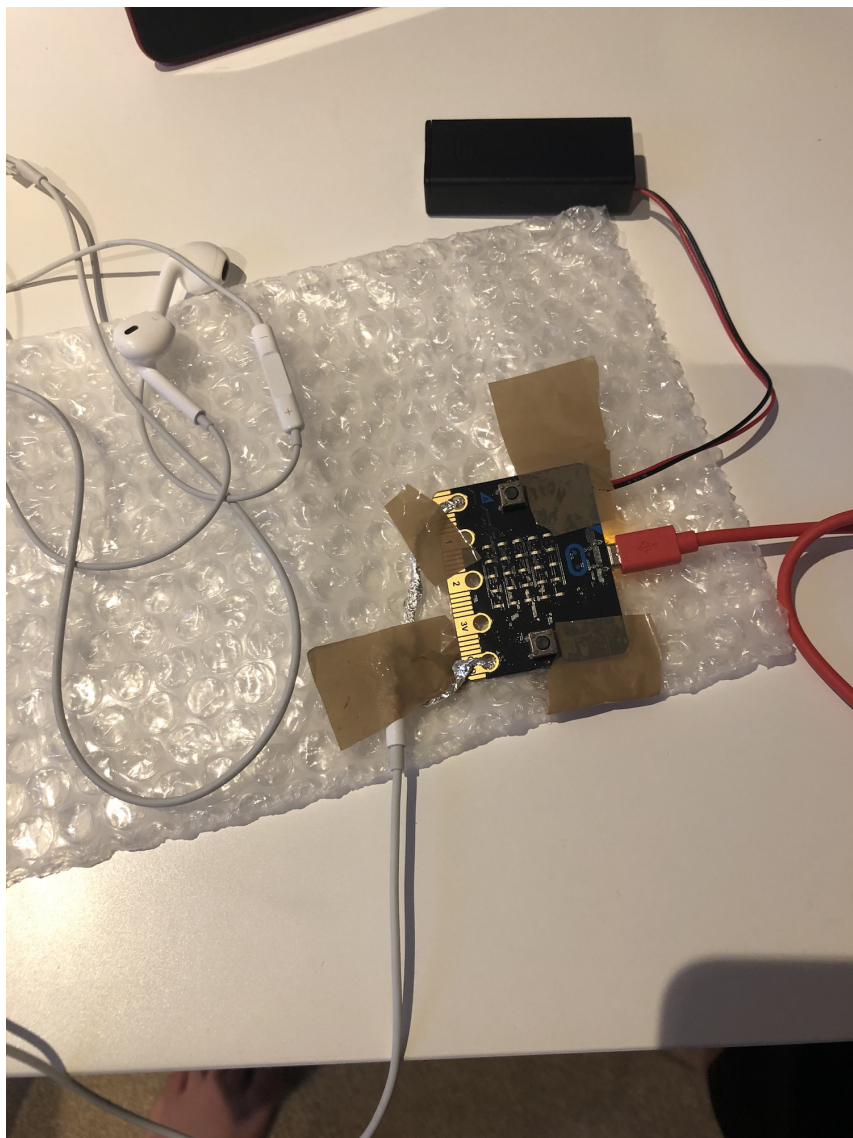
Connect **Pin0** to the **red lead** and **GND** to the **black lead** of the speaker.

There are lots of fun and interesting ways to connect up the headphones or speaker. If you have tried another method, let us know so we can share it in this article

This **example by @kgiori** (<https://twitter.com/kgiori/status/1287891991305392129>) shows the headphone jack inserted through the GND ring so that the sleeve of the jack is touching GND. A bent paperclip connects the tip of the jack to Pin0.



This example from Daisy shows tin foil and tape being used to connect the pins to the headphone jack:



## Programming

### MakeCode

Place a **play melody** block from the **Music** menu underneath the **on start** block to play a melody when the micro:bit is powered on or reset.

on start

play melody



at tempo

120

(bpm)

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## Python

Import the **music module** (<https://microbit-micropython.readthedocs.io/en/latest/music.html>), and then use `music.play()` to play a melody when the micro:bit is powered on or reset.

```
import musicmusic.play(music.ENTERTAINER)
```

Python

## Mute sound and control the volume

See our article (<https://support.microbit.org/support/solutions/articles/19000120590-mute-the-micro-bit-control-the-volume>) on **muting the micro:bit and controlling the volume** (<https://support.microbit.org/support/solutions/articles/19000120590-mute-the-micro-bit-control-the-volume>) for more information.