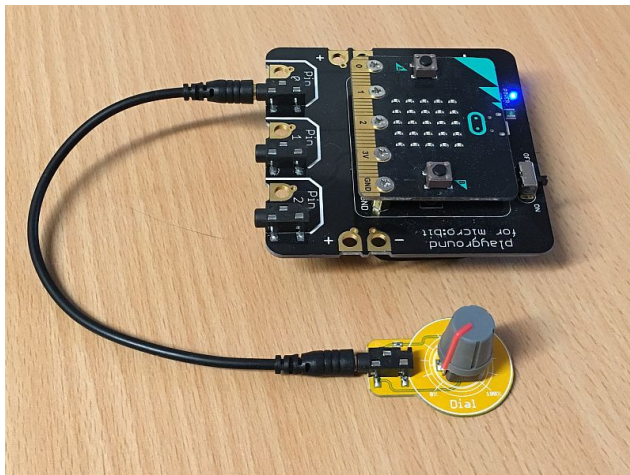## Using the Dial Gizmo with Playground for micro:bit

Requirements:

- Playground for micro:bit, with micro:bit and batteries installed
- Dial Gizmo
- 1 x Connection cable

Connections:

1. Switch Playground OFF
2. Plug connection cable into Gizmo and Pin 0 on Playground
3. Switch Playground ON

Without Software:

Turn the dial fully anti-clockwise, then gradually turn it clockwise

➔ LED on Pin 0 of Playground will start lighting from about half-way

PXT Software Demo:

This software will display a number from 0 to 9 depending how far the dial is turned. Reading the analog value can give a reading from 0 to 1023, but in practice a value over 950 is unlikely given the various voltage losses in the system. We then divide by 100 to get it into a single digit range.
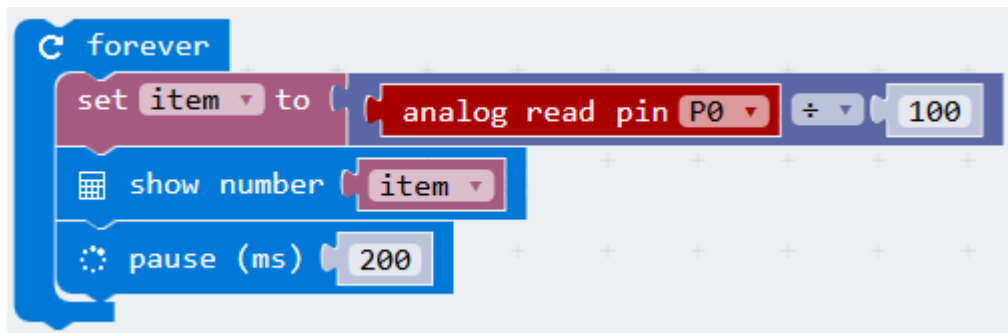
MicroPython

We can do the same thing in micropython as follows:

```
from microbit import *
while True:
    value = int(pin0.read_analog()/100)
    display.show(str(value))
    sleep(200)
```

In this case we have to explicitly convert the result of the division into an integer so that only one digit is shown on the display.