

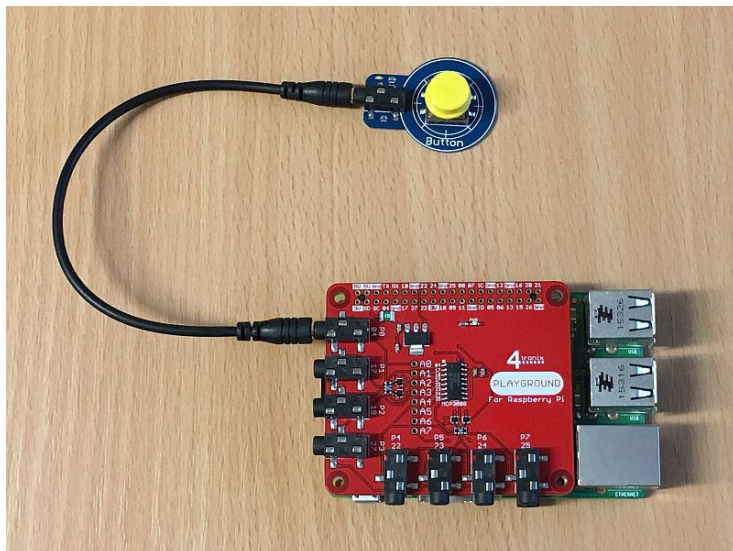
## Using the Button Gizmo with Playground for Raspberry Pi

### Requirements:

- Playground for Raspberry Pi
- Button Gizmo
- 1 x Connection cable

### Connections:

1. Plug connection cable into Gizmo and Port 0 on Playground



### Without Software:

Press the button on the Button Gizmo

➔ LED on Gizmo will light

### Python Demo:

This is a complete program, though not very useful. It simply prints “Button Pressed” whenever the button is pressed. Note the following:

- We are using the Button class from gpio zero
- We use the port definitions from the playground module to select Port0
- Because the Gizmo is High for active, we need to set pull\_up to False
- We define a function buttonPress() that is called when the button is pressed
- Then we can assign the buttonPress() function to the when\_pressed event of the button
- Finally we enter an infinite loop – press Ctrl-C to exit

```
from gpiozero import Button
from time import sleep
import playground as pg

def buttonPress():
    print ("Button Pressed")

button = Button(pg.port0, pull_up=False)
button.when_pressed = buttonPress

while True:
    sleep(1)
```

The above program works in Python2 or Python3. We can make a neater version in Python 3 (because Print has now become a function) by using lambda to create an inline anonymous function to pass back to the button.when\_pressed event. Don't worry if that is all gobble-de-gook! Just check the code below where the buttonPress() code has been removed completely and replaced by lambda.

```
from gpiozero import Button
from time import sleep
import playground as pg

button = Button(pg.port0, pull_up=False)
button.when_pressed = lambda: (print ("Button Pressed"))

while True:
    sleep(1)
```

For further information see [gpiozero.readthedocs.io/en/stable/api\\_input.html#button](https://gpiozero.readthedocs.io/en/stable/api_input.html#button)