

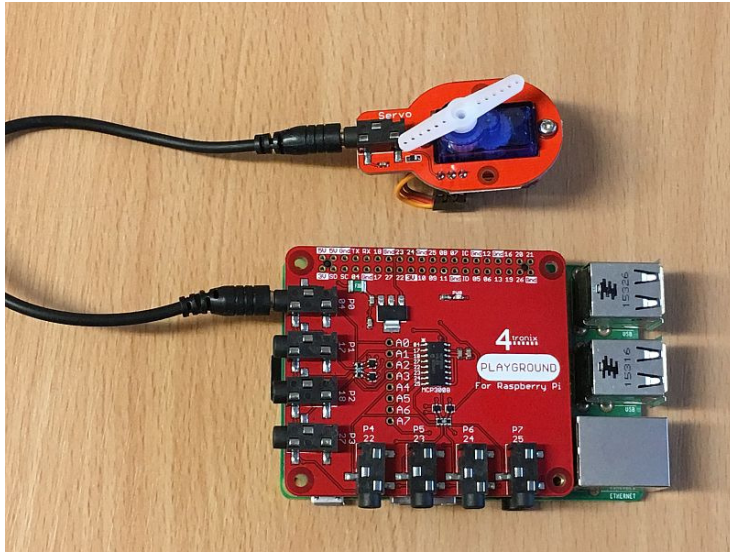
## Using the Servo Gizmo with Playground for Raspberry Pi

### Requirements:

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

### Connections:

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



### Python Software Demo:

This software will Move the servo almost fully left, then centre it, then almost fully right, centre and repeat.

- We are using the AngularServo class from gpiozero and specifying the minimum and maximum pulse widths. These vary between different types of servo
- Then we can simply specify the angle that we want the servo to be at and will move immediately there (at the maximum speed of the servo)
- The program below moves 90 degrees one way, then to the centre position then 90 degrees the other way and finally back to the centre
- This then loops endlessly until Ctrl-C is pressed

NB. Servos are generally intended to be used at 4.8V, so running them at 3.3V as we do on the Playground reduces their operating range and you may not get the full 180 degrees of travel.

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

```
myServo = AngularServo(pg.port0, min_pulse_width=0.0005, max_pulse_width=0.0025)
```

```
while True:
    myServo.angle = -90
    sleep(2)
    myServo.angle = 0
    sleep(2)
    myServo.angle = 90
    sleep(2)
    myServo.angle = 0
    sleep(2)
```