# Use a Continuous Rotation Servo

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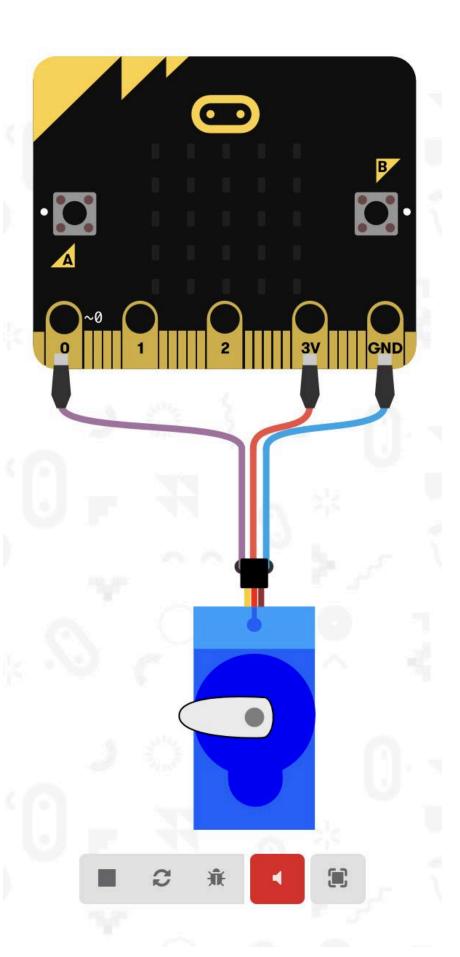
Required skills: Load code to micro:bit

MB skills: Move continuous rotation servo

Level: Basic

# MB Set Up:

Connect the servo strip as shown, with data input connected to P2.

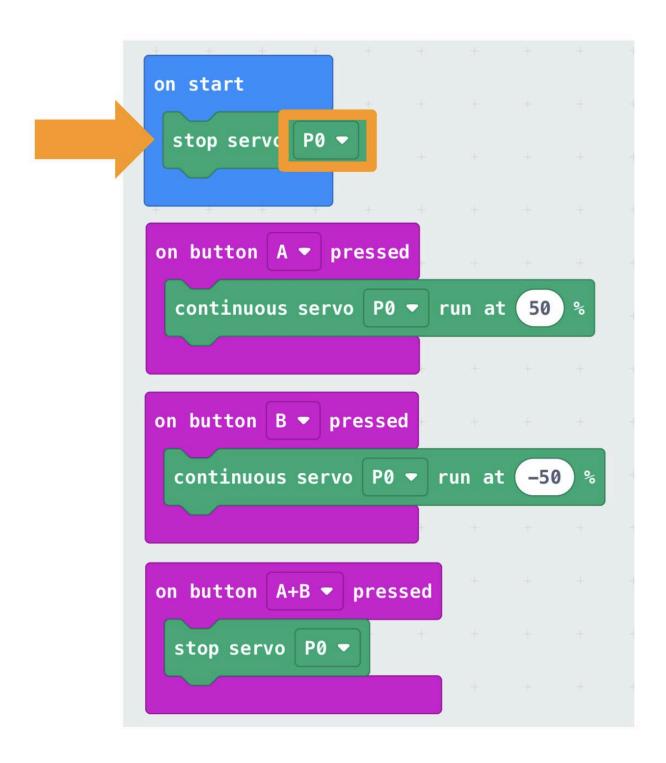


### PART 1

## MB Code:

- 1. Install the Servo Extension. Refer to <u>Adding Extensions</u> Document for instructions.
- 2. The basic code is provided below, but the player can change the speeds to whatever they want.

https://makecode.microbit.org/ cpUCpRbehRuq



3. Flash the code to the micro:bit.

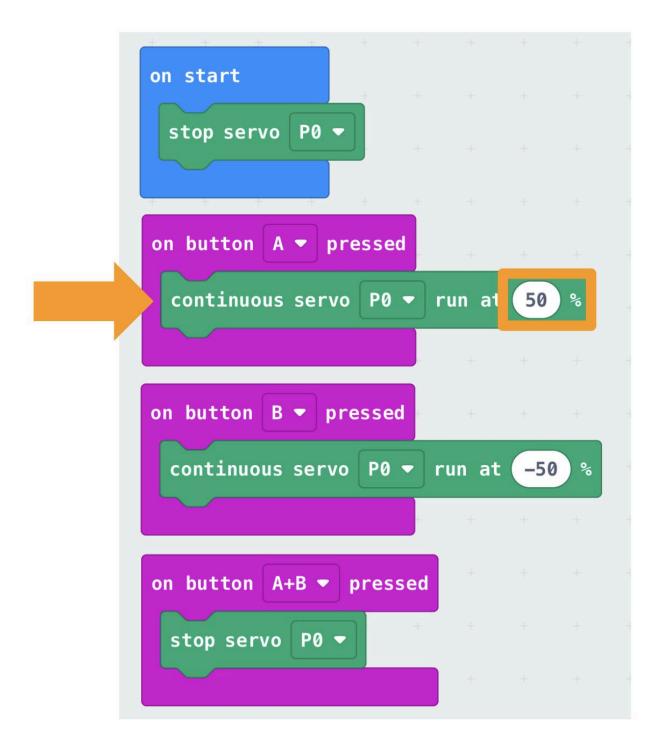
## **Explanation of the code:**

### Block 1:

• The "On start" block sets the initial speed of the servo — in this case, telling it to stop (so the servo doesn't start until there's an input).

### Block 2 & 3:

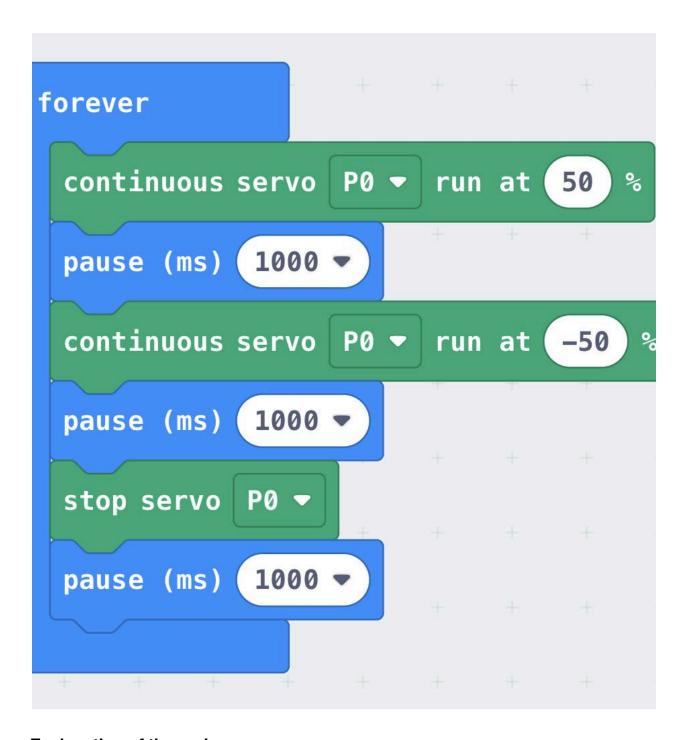
• "On button \_\_\_\_ pressed" are used as inputs to control the servo. The servo will spin at 50% speed one way, 50% the other way (hence the negative symbol) or stop.



Players should try different servo speeds to see what happens. They can also add more inputs to move the servo at multiple speeds, etc.

#### PART 2

1. The following code is provided to the player to demonstrate how the servo can be used with **loops**. <a href="https://makecode.microbit.org/">https://makecode.microbit.org/</a>\_7DP32gH7Jfjr



# **Explanation of the code:**

• This code is very similar to the **loop** used for the positional servos; the difference here is simply that it defines the speed, and the pause tells it how long to remain at that speed. (I.e., run the servo at 50% for 1000 milliseconds).

Players should try changing the speeds, the pause time, adding or removing servo blocks, etc. to see how they can change the results.