

Adjust Speed

Learning goals

In this lesson, we mainly learn how to control motor by micro:bit and Super:bit expansion board.

Code

```
1  from microbit import *
2
3  import microbit
4  import superbit
5
6  display.show(Image.HAPPY)
7  a = 0
8
9  def limit_change():
10     global a
11     if microbit.button_a.is_pressed():
12         a = a + 50
13         if a > 255:
14             a = 255
15     if microbit.button_b.is_pressed():
16         a = a - 50
17         if a < 0:
18             a = 0
19     return
20
21 while True:
22     limit_change()
23     superbit.motor_control(superbit.M1, a, 0)
24     sleep(500)
25
```

import superbit, microbit library;

[display.show \(Image.HAPPY\)](#): Micro:bit dot matrix display smile pattern;

[superbit.motor_control \(superbit.M1, 255, 0\)](#): M1 is the interface on the super:bit board, speed is 255.

[microbit.button_a.is_pressed\(\)](#): Determine if button A is pressed.

About wiring

We need to connect two building block motors to the **M1** interfaces of the Super:bit expansion board.

7. Experimental phenomena

After the program is successfully downloaded, open the power switch, the building block motor stops; press the micro:bit A button to increase the speed, the maximum speed is 250; press the micro:bit B button to decrease the speed, the lowest speed is 0.

[If you need to restart, please press the reset button on the micro: bit board.](#)