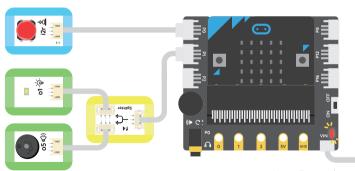
BOSON Project 1 Alarm Device







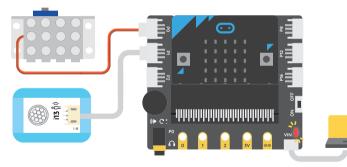
BOSON Project 1 Alarm Device



```
forever
          ⊚ digital read pin P0 ▼ ■ ▼ (1)
then
     repeat (10) times
         ⊙ digital write pin P1 → to [1]
         Ⅲ pause (ms) ( 300
         ⊙ digital write pin P1 → to 🚺 🕖
         Ⅲ pause (ms) ( 300
     ⊙ digital write pin P1 → to 🕡
```

BOSON Project 2 Automatic Door







BOSON Project 2 Automatic Door

Blocks Editor
Sample Program

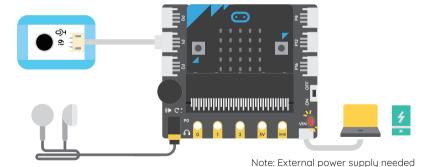
```
forever
if
         ⊚ digital read pin P1 ▼ ■ ▼ 1
then

    servo write pin P0 ▼ to [ 0]

     Ⅲ show icon
     Ⅲ show icon
else
     ⊚ servo write pin P0 v to 120
```

BOSON Project 3 Sound Activated Music Player







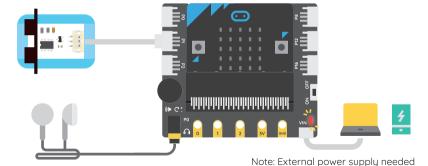
BOSON Project 3 Sound Activated Music Player



```
Playing around with this value
                                          gives a better result!
forever
            ⊚ analog read pin P1 ▼ ≥
then
      ດ start melody 🕻
                         o ringtone •
                                          repeating once -
         show icon
         pause (ms) ( 3000)
         show icon
```

BOSON Project 4 Gesture player







BOSON Project 4 Gesture player



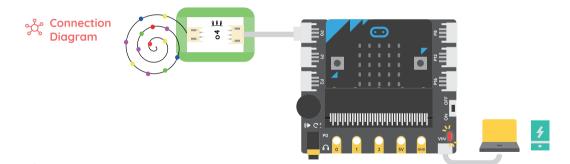
```
and of analog read pin Pl v (128)
         🕻 💿 analog read pin 🖭 🔻 🔰 🕖
then
     ດ play tone ( ດ Middle C for ( ດ 1 → beat

    pause (ms) □ 1000

                                          and of analog read pin Plot 256
         ( o analog read pin Plan > 1 128
     ດ play tone ເດ Middle D for ເດ 1 v beat
     Ⅲ pause (ms) ( 1000
         ( analog read pin Pl > 1 256 and ( analog read pin Pl < 1 384
     ດ play tone ເ ດ Middle E for ເ ດ 1 v beat
then

    pause (ms) ( 1000 )
```

BOSON Project 5 Gravity magic lights





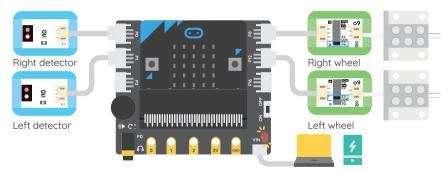
BOSON Project 5 Gravity magic lights



```
o on shake v
 call function Breathing light -
function Breathing light
  for index v from 0 to (512)
     • analog write pin (PO • to ( index.
     male (ms) (5
  for index from 0 to (512)
     • analog write pin P0 • to ( 512 - ) index •
     male (ms) ( 5)
```

BOSON Project 6 Tracing car







Note: External power supply needed

BOSON Project 6 Tracing car



```
to the actual situation.
                                                        function (left)
forever

    analog write pin (P8 (write only) → to (

    digital read pin PØ ▼ ■ ▼ 1

    analog write pin P12 (write only) ▼ to ▼ 0

                 🕻 💿 digital read pin 🖭 🖘 🛮 0
then call function left -
                                                        function right
else if [

    analog write pin P8 (write only) → to ( ∅)

                 ( o digital read pin Pl  - 1 1

    analog write pin P12 (write only) 
    to 
    500

then call function right
else if
                  ⊚ digital read pin 🕬 🔻 💶 🚺
                                                        function go

    analog write pin P8 (write only) 
    to ( 500)

                 ( ⊙ digital read pin Pl → 1 1
then call function go

    analog write pin P12 (write only) 
    to 
    500
```

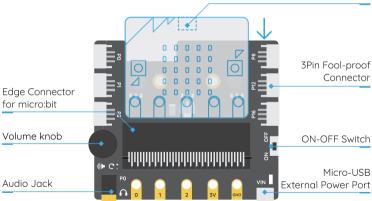
A more detailed tutorial for Tracing Car can be found at https://www.dfrobot.com/boson

This value is adjusted according

BOSON Quick Start Guide

Program Download Port

micro:bit Expansion Board for Boson





To get started, you will need following things ready by your hand:



micro:bit



A Computer with USB port and internet connection.



Ear pods/headphone (3.5mm audio connector)

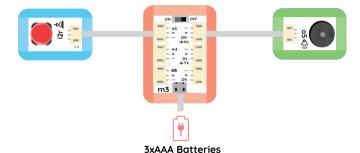


USB power bank as external power supply (optional)

→ Start programming, Visit: makecode.microbit.org

BOSON Project 7 Gesture recognition based on Intel® Curie™ platform







BOSON Project 7 Gesture recognition based on Intel® Curie™ platform

This project is able to recognize a **pre-recorded gesture**.

To record the gesture, hold the button and make a hand movement such as drawing a circle or writing a letter.

Now, whenever make the same gesture again, the buzzer will beep!

Note: Hold on the Boson 101 Mainboard in the same direction!

For more detailed instruction, please visit https://www.dfrobot.com/boson.