

sound and light with kitronik

# Introduction

In this lecture we will get acquainted with Kitronik :move motor extension for mocro:bit. How to use sound and lights.

# Necessary:

* Micro:bit controller
* Kitronik :MOVE motor kit
* USB cable
* Micro:bit program or internet link in which to do programming

# Process!

1. Kitronik robot is equipped with a sound buzzer. To use it, you need to select the beep to horn block from MOVE motor ...Sounds

A screenshot of a computer

Description automatically generated

Now your code will look like this:

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1. . Download in micro:bit controller and try beep

Python:

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1. Kitronik robot is equipped with **four** **LEDs**. Block for the LEDs can be found under the ...Lights category.
2. To use it, choose block **on start** from **Basic.**
3. After that, choose **set moveMotorZIP to 0** **Move Motor with 4 ZIP LEDs** from **MOVE Motor ...Lights** and input in block **on start**.
4. Than input **moveMotorZIP set ZIP LED 0 to red** for each LED. You can enter for each LED different color. You can create your color with **RGB Color Codes** – for that you need to choose block where are **three colours (red 0, green 0, blue 0)** with color code fields. This means that if you want to create a yellow color, then input red 255, green 255, blue 0 (color codes you can find there: [RGB Color Code 🎨 Color Picker, Codes, Converters](https://rgbcolorcode.com/)).
5. And insert block **moveMotorZIP show** from **MOVE Motor ...Light**s.
6. Than using the **forever** loop from **Basic**, rotate LEDs around.
7. Input in **forever** block **moveMotorZIP rotate ZIP LEDs by 1** and block **moveMotorZIP show** from **MOVE Motor ...Lights**.
8. And input block **pause(ms)100** from Basic for rotate speed.

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1. **Download** in micro:bit controller

Python code:

A screenshot of a computer program

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# Challange:

1. Create two disco modes, also adding sound at certain times, then set them to be set by buttons - one disco mode on button A, the other on button B.