

kitronik ultrasonic sensor

# Introduction

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

# Necessary:

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

# Process!

1. Kitronik robots are equipped with an ultrasonic sensor.
2. Put **Forever** loop
3. Creating new variable **distance**
4. From Variables choose **set distance to 0** and input them in **forever** loop
5. Take **measure distance** from **MOVE Motor …Sensors**
6. In **forever** loop insert **if – else** block
7. Then insert **0 > 0** block in **if** block and then insert **distance > 10**
8. In **if** loop insert block **move forward at speed 35**
9. In **else** block insert **distance < 10** and
10. in **else if** loop insert **stop, pause(ms) 500, move reverse at speed 20, pause (ms) 1000, spin left at speed 50, pause (ms), stop**

Now your code will look like this:

A screenshot of a computer

Description automatically generated

1. . **Download** in micro:bit controller.
2. !!! **Save** this **code** as a **hex** file as you will need it for the **next lesson.**

A screenshot of a computer

Description automatically generated

Python code:

A screenshot of a computer program

Description automatically generated

# Challange:

Improve the code so that green lights are on when driving forward, red lights are on when stopping and reversing, and the horn is working when reversing