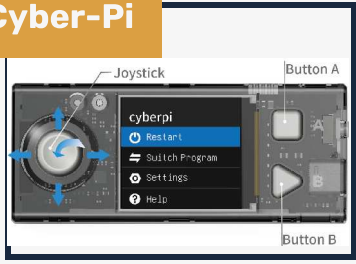
Programming mBot Neo

A step by step guide to program your mBot Neo!

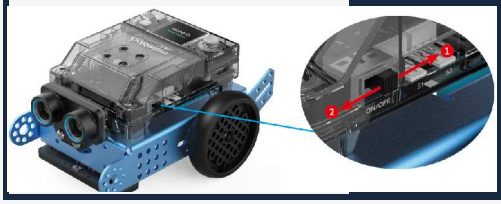
Cyber-Pi



Get to know your Neo!

CyberPi: The 'Brain'/Control Board
Input: Buttons A, B, and Joystick on CyberPi;
Sensors, such as Ultrasonic/distance sensor, Quad RGB sensor
Output: Screen on CyberPi
RGB LED on the back of the Bot

Step 1



Charge your Bot!

Use the USB Cable to connect the mBot Neo to your PC and charge it up before turning it on. The On and Off buttons are located on the side of mBot2 Shield.

Step 2

Download and install mBlock- PC Version

Use the following link to download and install Makeblock PC version for Windows or Mac:
https://mblock.makeblock.com/en-us/download/
Note: mBlock supports both Block based programming and Python programming

Step 3

Connect to Cyber-Pi

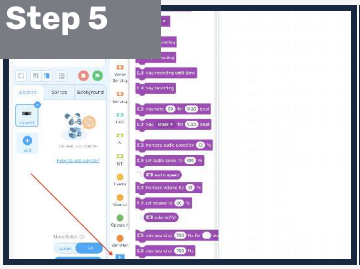
When opening mBlock app, Cyber-pi is the default device which you connect to your computer to program. Click connect.

Step 4

Add & Update devices

Use the + icon below Cyber-pi to add devices of your choice. Green arrow means your device needs update. Click on the green arrow for firmware update and click restart after the download is completed to install the updates. Lastly, don't forget to click to Connect!

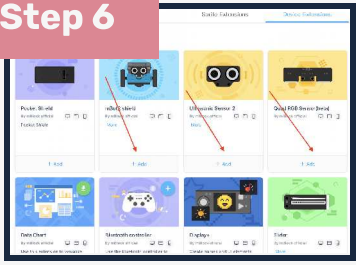
Step 5



Add Extensions

Mbot Neo requires adding extension to control the additional features of Cyber Pi such as motion detector, color detector etc. Click on + (add) extension to add Device Extensions.

Step 6



Extensions that you need

1. mBot2 Shield
2. Ultrasonic Sensor 2
3. Quad RGB Sensor (beta)

Don't forget to click connect after adding these extensions!

Step 7

Programming 101

Drag and drop blocks from left hand side to the white space on the right to program your bot.

Step 8

Upload codes

Step i) Switch the mode from Live to Upload
Step ii) If you see the 'Connect' button, click Connect

Step 9

Upload codes cont...

Step iii) Click the upload button to upload the Code

Experiment with the blocks to create unique and creative lessons for your students!