

Walle documentation
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Setting up for the Arduino:

- 1- Download Arduino IDE
- 2- Download the Makeblock library from the git
<https://codecademy.com/Makeblock-official/Makeblock-Libraries/zip/master>
- 3- From the Arduino IDE: Sketch → Include Library → Add .ZIP Library -> select the downloaded file (Makeblock library) → Open
- 4- From Arduino IDE: File → Examples -> MakeBlockDrive → Firmware_for_Auirga
- 5- From Arduino IDE: Tools → Board → Arduino Mega or Mega 2560
- 6- From Arduino IDE: Tools → Port → COM3 or (depends on which one you choose on your computer)
- 7- From Arduino IDE: File → Examples → MakeBlockDrive → Firmware_for_Auirga

Setting up for the Raspberry Pi:

- 1- Download and install Raspberry pi Imager on the computer.
- 2- Insert a microSD card into the computer
- 3- Click Choose OS and select Raspberry Pi OS
- 4- Click Choose SD card.
- 5- Click Write
- 6- Connect HDMI cable to the screen → connect power supply to Raspberry Pi

Setting up the camera:

- 1- Connect the camera in Raspberry Pi
- 2- From Raspberry Pi terminal, run `sudo raspi-config`
- 3- Select “Navigate to interface options” → “legacy camera” → enable → yes
- 4- Select finish and reboot the Raspberry Pi
- 5- In [python IDE] or terminal, install the following:
 - `sudo apt-get update`
 - `sudo apt-get upgrade`
 - `pip3 install picamera`

6- From Raspberry Pi terminal, run `v4l2ctl /dev/video0 get_camera`. If you get `(supported=1 detected=1)`, that's mean your camera is connected successfully

Setting up the socket:

In [python IDE] or terminal, install the following:

- `pip install python-socketio`