SOFTWARE INSTALLATION

# Installing Arduino Software and Drivers

## Windows Instructions

* + 1. Download the Arduino IDE (1.6.5) from: <https://www.arduino.cc/en/Main/Software>
    2. Download the drivers from : <http://www.kupply.com/wp-content/uploads/2015/01/CH341SER.zip>
    3. Unzip the contents of the folder and connect the DCcduino to the computer via USB.
    4. Install the setup file as admin (on Windows, right click and “Run as administrator”).
    5. Your Arduino should show up on the device manager and will be assigned a COM port. under Ports (Com and LPT).
    6. Open the Arduino IDE application. Use the tools dropdown menu → Boards → Arduino UNO.
    7. Under tools dropdown menu → PORT select the COM port your Arduino was assigned in device manager.
    8. Now you are ready to compile and upload your code.

## OS X Instructions

* + 1. Download the Arduino IDE (1.6.5) from: <https://www.arduino.cc/en/Main/Software>
    2. Download the drivers from :   
       <http://www.wch.cn/downfile/178>
    3. Install the driver by opening ch34xInstall.pkg and then run the following command in Terminal  
       sudo nvram boot-args="kext-dev-mode=1"
    4. Open the Arduino IDE application. Use the tools dropdown menu → Boards → Arduino UNO.
    5. In the Arduino IDE, under Tools →Port, your Arduino should show up as /dev/tty.usbserialxxx or some similar name.
    6. Now you are ready to compile and upload your code.

# Installing the Libraries.

* 1. Start the Arduino program.
  2. Using the top dropdown menus select Sketch → Include Library → Manage Libraries.
  3. In the search bar, type the name of the library you are searching for. We will be using the following libraries. Included are the links to their online documentation.
     1. NewPing (http://playground.arduino.cc/Code/NewPing)
     2. PID\_v1 (http://playground.arduino.cc/Code/PIDLibrary)