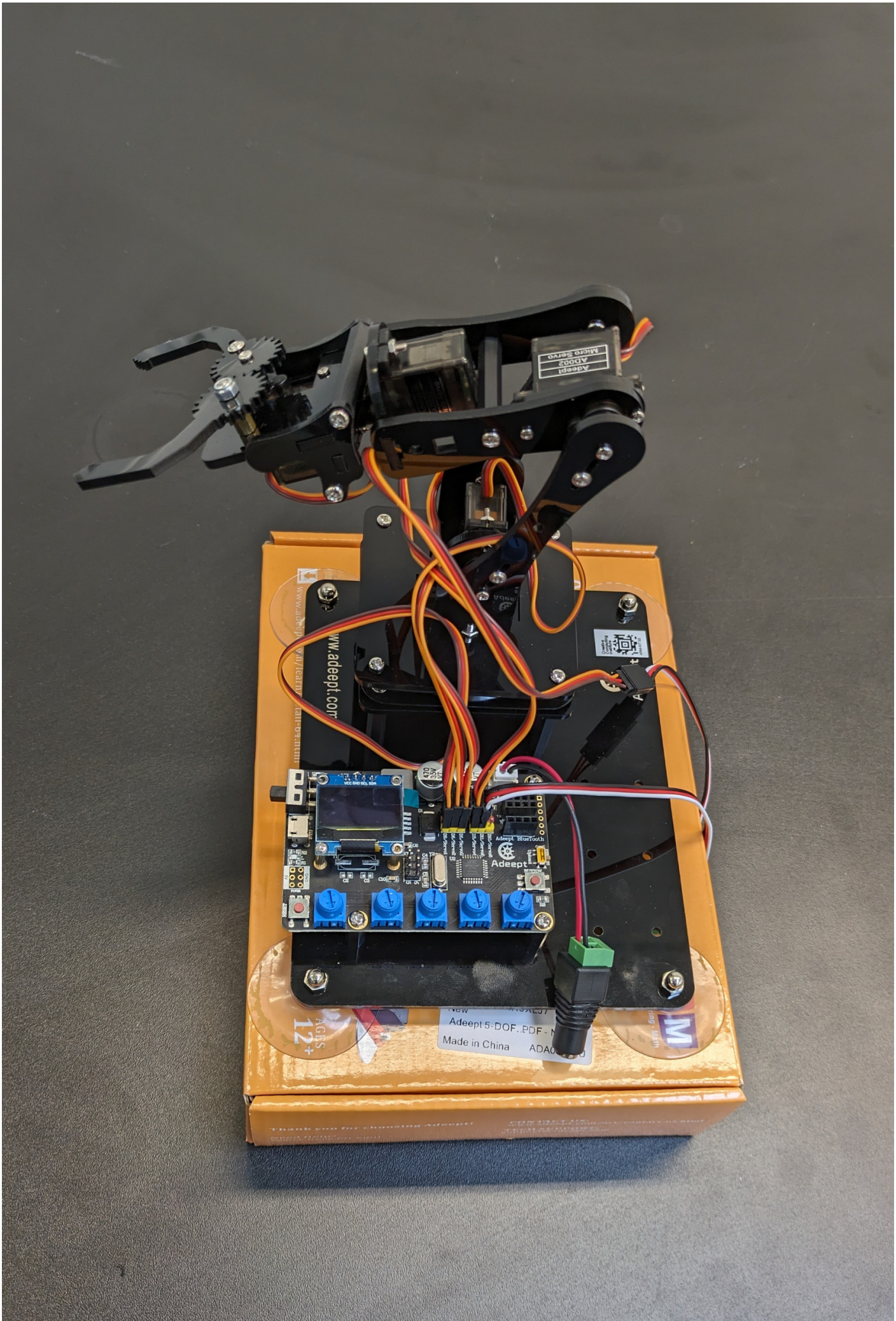
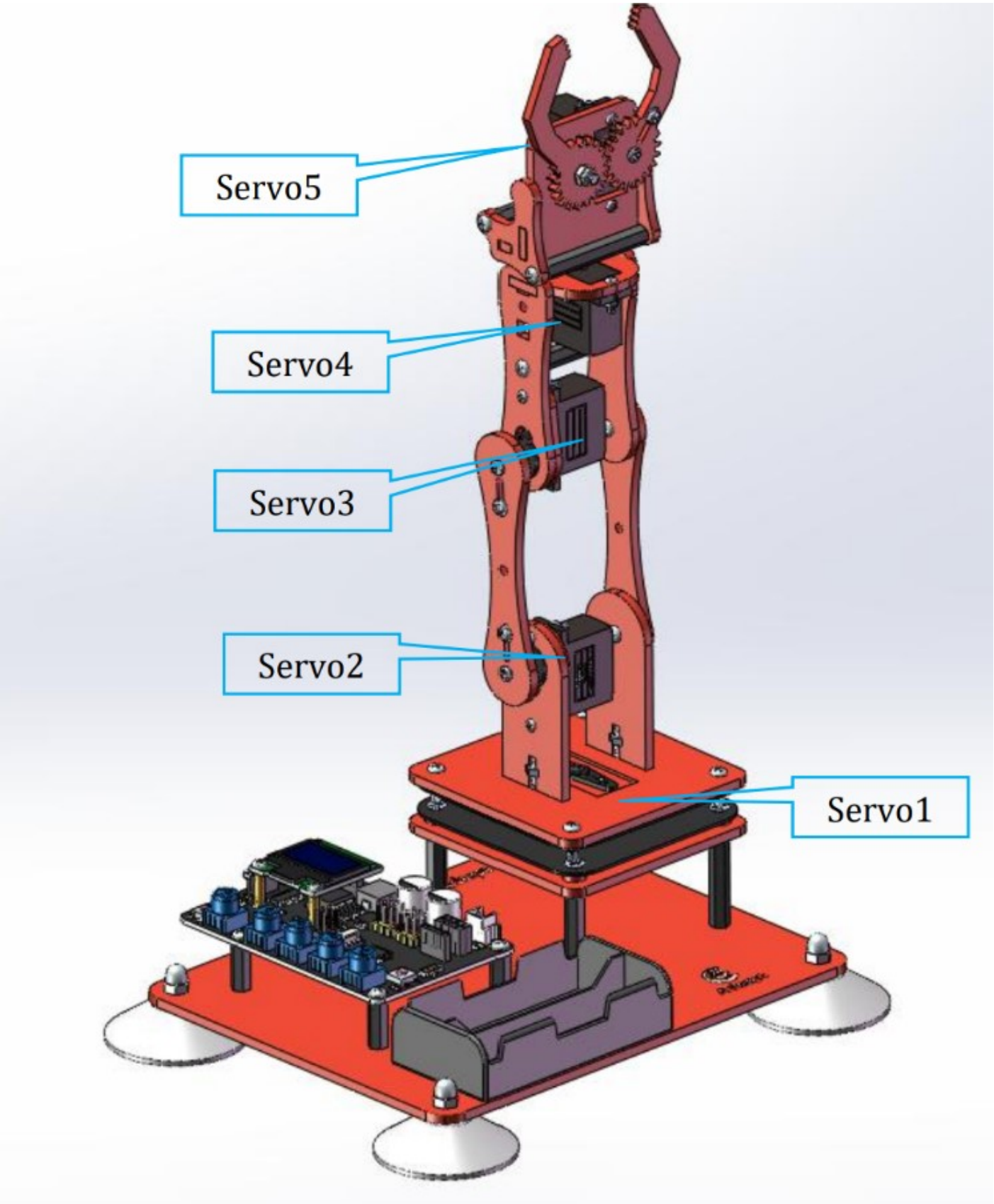
Using Adeept robot arm kit

What is it?

The robot arm kit from Adeept is an eduational robotics kit that is mainly aimed towards begineers. This robotics kit consists of a 5 degree of freedom robot and the Adeept Arm Drive Board which is based off an arduino uno. This means users can programme this robot arm using the Arduino IDE and the most of the libraries that arduino provides.

To learn more about this robot, please click here


Adeept
AD002
Micro Servo
www.adeept.com
Adeept BlueTooth
Adeept
Made in China

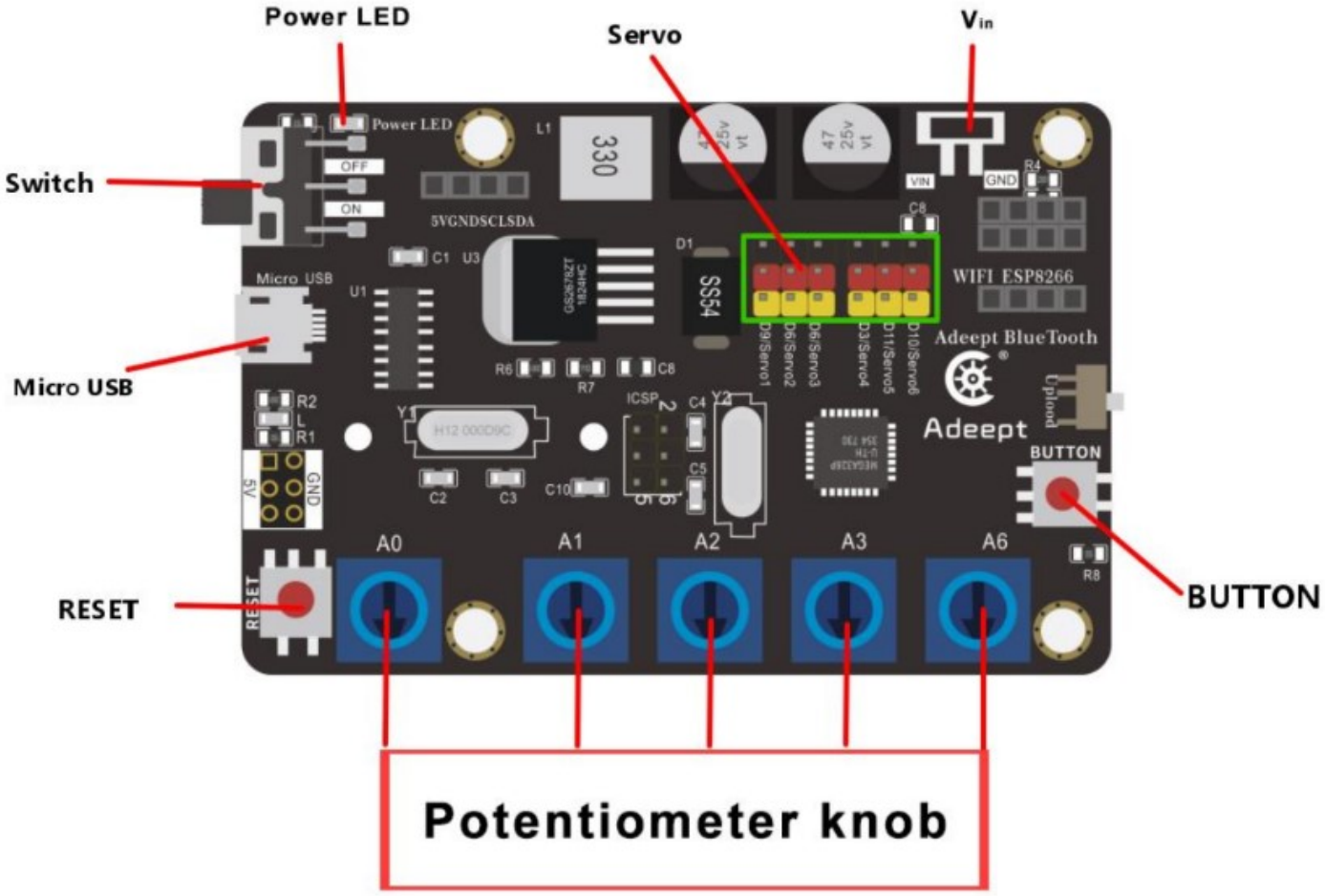


Getting started

Setting up

1. Connect the Adeept Arm Drive Board to your laptop/PC using the correct USB cable.

2. To power on the robot, connect an appropriate 5V 3Amp or 5V 5Amp power supply to the barallel jack of the robot.
3. Ensure to switch on the Arm Drive Board, otherwise the servo motors will not receive any power.

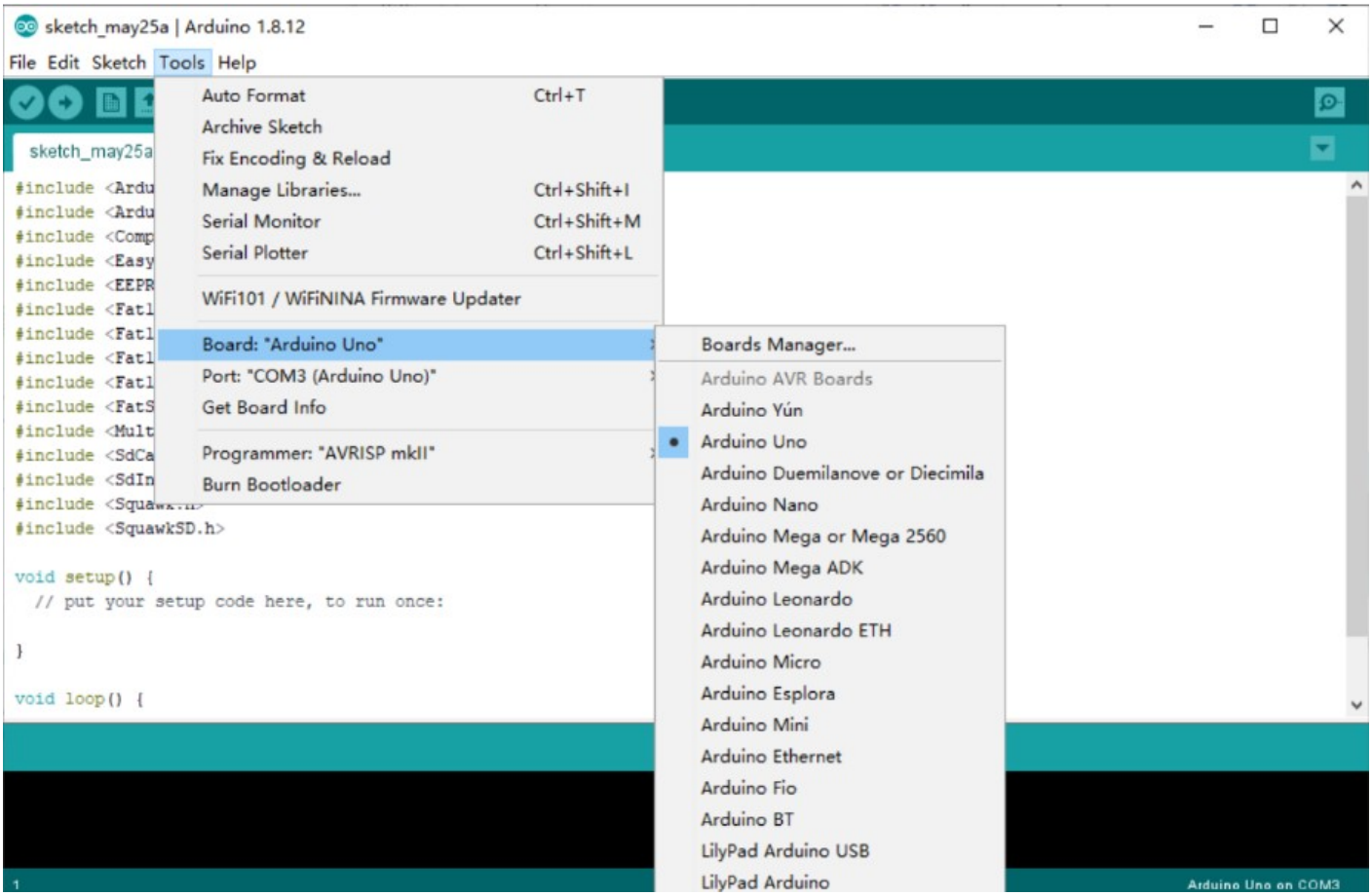


Setting up Arduino IDE to use with the robot

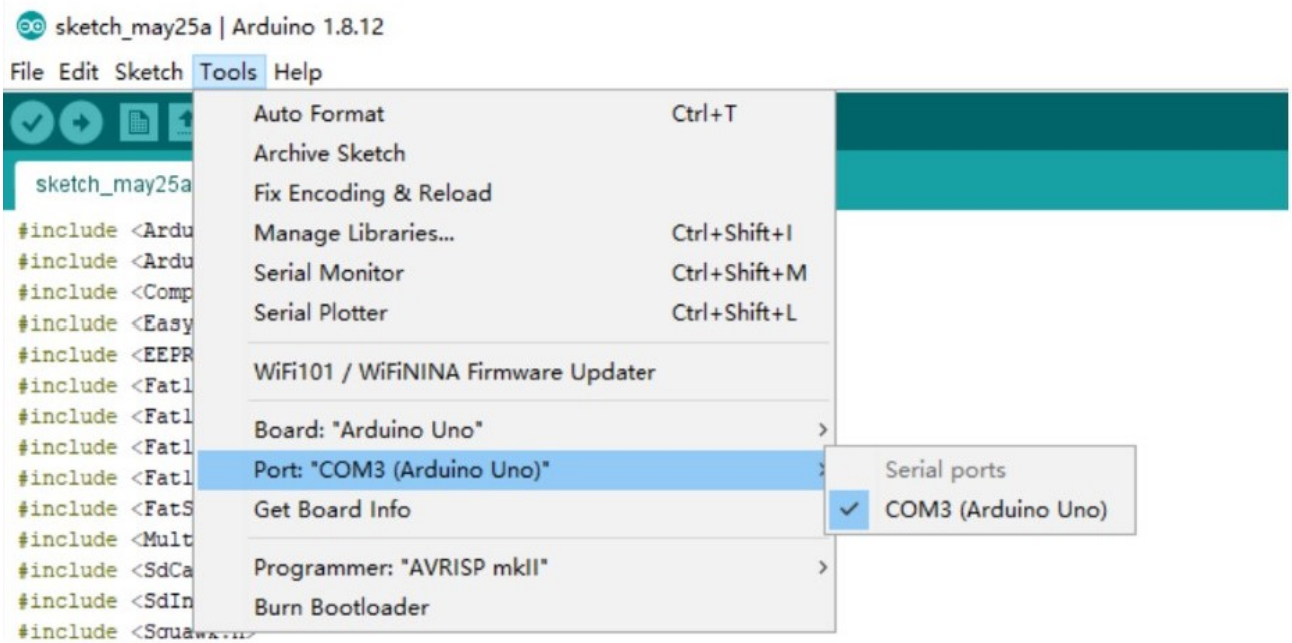
If you already have Arduino IDE installed and worked with igt in the past, then all you need to do is to change the board to `Arduino Uno`.

To do this:

1. Go to the Tools -> Board.



2. From the drop down list, choose `Arduino Uno`.
3. Make sure to choose the correct COM port as well.



Setting up from scratch

If you are setting it up from scratch, as in you do not have Arduino IDE installed and setup, then click here

Required Libraries

These extra libraries will be required if you plan to utlise the OLED screen within the Arm Driver Board.

The instructions for configuring the libraries can be found here on page 21 under the heading `8. Configuring the "libraries" folder of the Arduino IDE`.

You can find the libraries here, please download all of them.

Verification

Try uploading the blink example sketch to verify comminication between the Arm Driver Board and your machine.

Additional Resources

- Adeept ADA031 robot arm kit sharepoint
- Adeept Arm Drive Board Documentation
- How to read the data of the potentiometer
- How to show some text on the OLED
- Saving data with EEPROM
- Using a GUI to control the robotic arm
- Using the potentiometer to control the robotic arm
- Recording action for the robotic arm
- Using processing to control the robotic arm
- How to make Robotic Arm imitate people's pen writing
- How does processing control the robotic arm to write

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