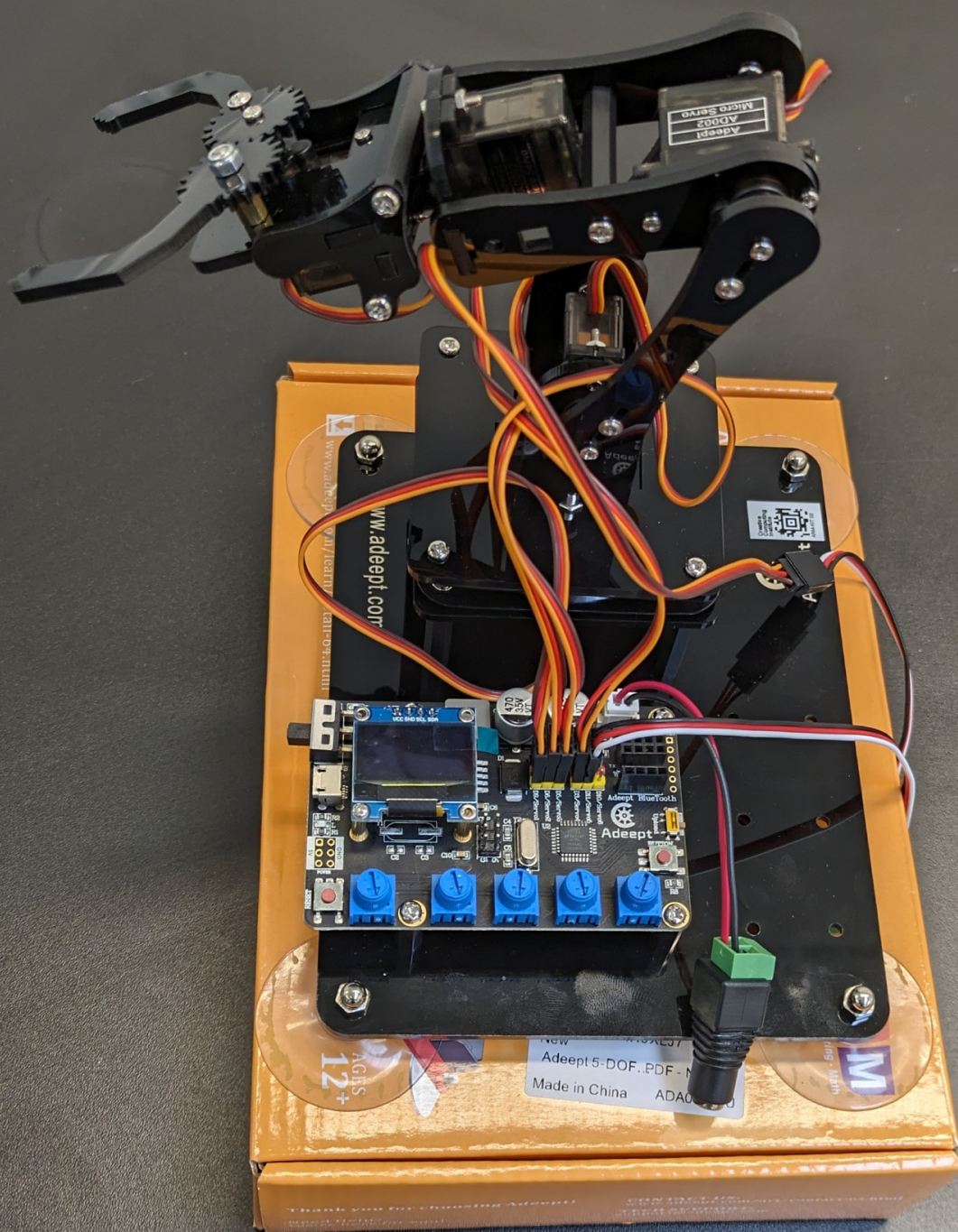


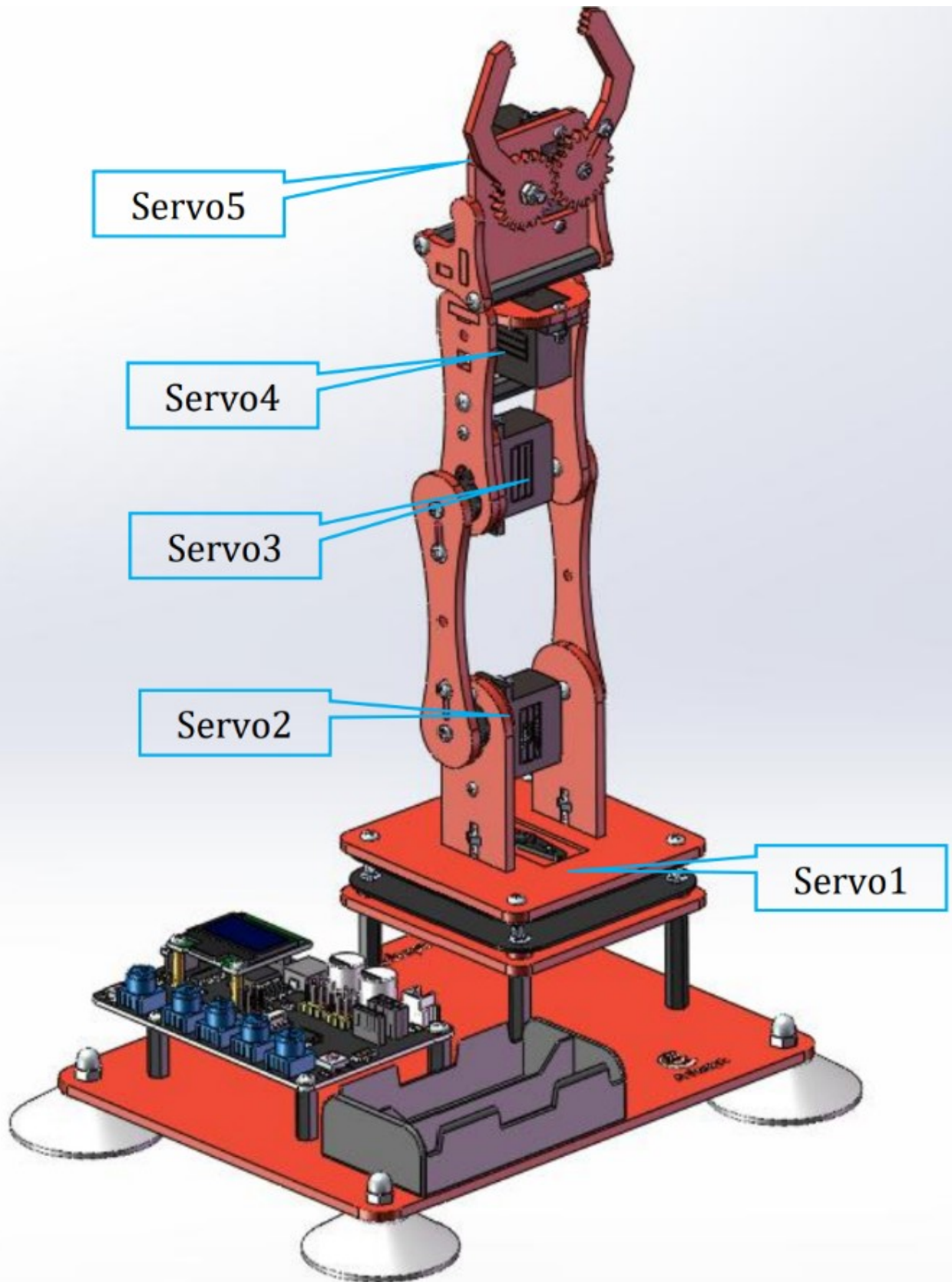
Using Adeept robot arm kit

What is it?

The robot arm kit from Adeept is an educational robotics kit that is mainly aimed towards beginners. 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](#)





Getting started

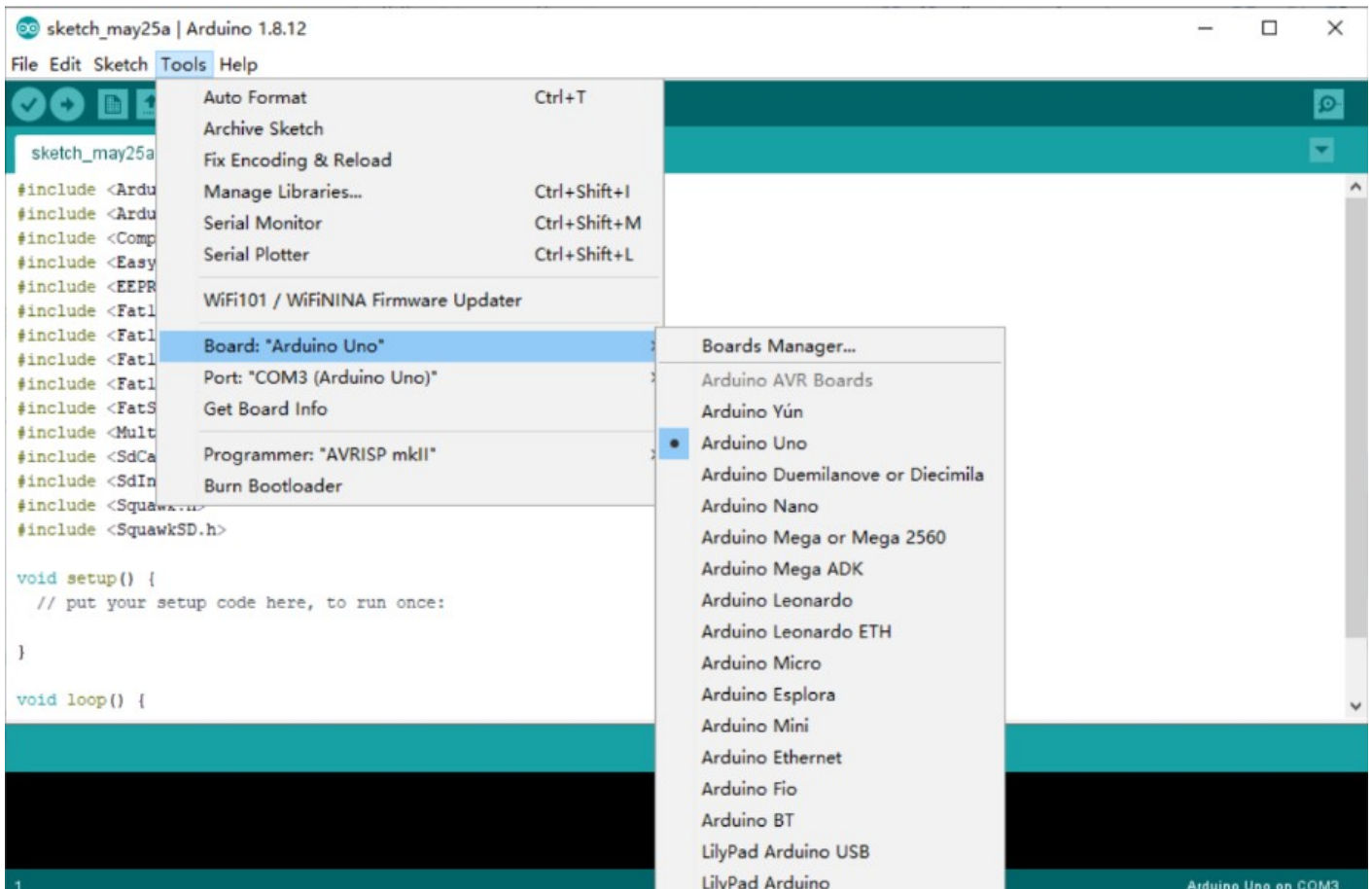
Setting up

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

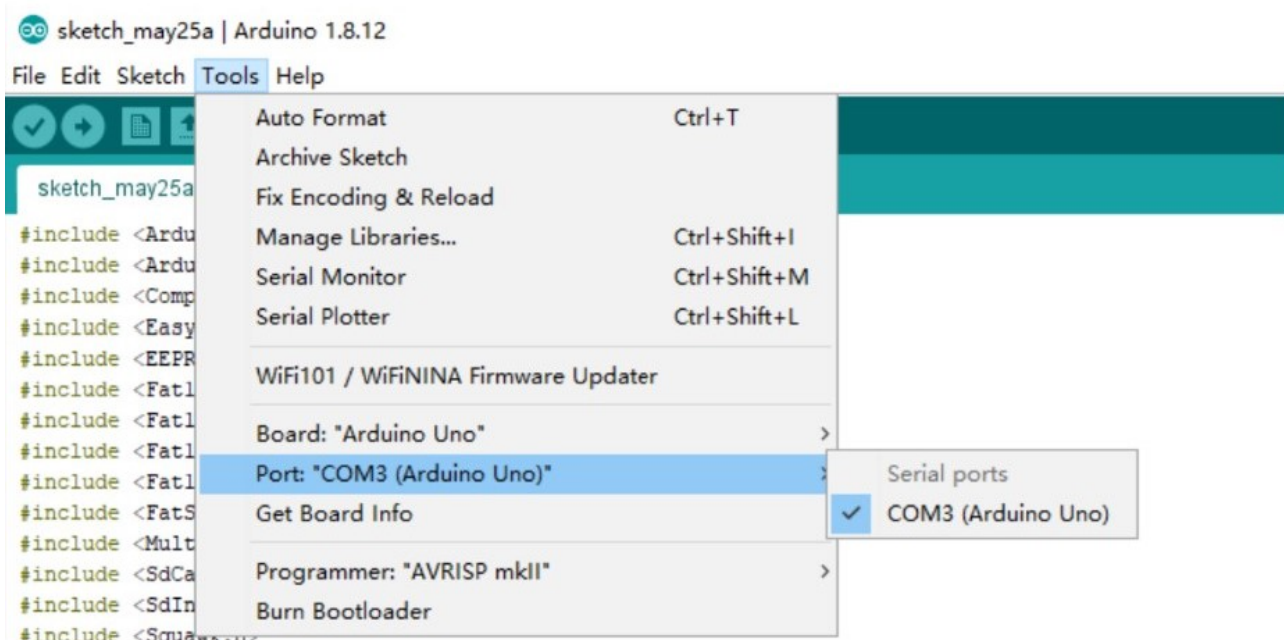
-
- The image shows a top-down view of the Adept ESP8266 development board. Key components and their labels are as follows:
- Power LED:** Located at the top left, indicated by a red line.
 - Servo:** Points to the potentiometer knobs, which are used to control servo motors. A green box highlights the servo pins on the knobs.
 - V_{in}:** Points to the power input pin at the top right.
 - Micro USB:** Points to the USB port on the left side.
 - RESET:** Points to the red reset button at the bottom left.
 - Potentiometer knob:** A red box at the bottom indicates the five blue potentiometer knobs.
 - BUTTON:** Points to the red push button on the right side.
- The board also features a black microcontroller (ESP8266), various capacitors (C1-C10), resistors (R1-R8), and connectors (D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12).

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

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 utilise 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 communication between the Arm Driver Board and your machine.

Additional Resources

- [Adept ADA031 robot arm kit sharepoint](#)
- [Adept 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](#)

Revision #3

Created 23 February 2024 15:22:10 by Rohit Ramesh Thampy

Updated 5 April 2024 17:41:38 by Rohit Ramesh Thampy