

# uArm Swift Pro Calibration

## 1. You'll need the following prepared before going to next steps.

Firmware: 3.1.16 or later  
Laser & 3D Printer Positioning Paper  
Flash tool (Arduino for example)

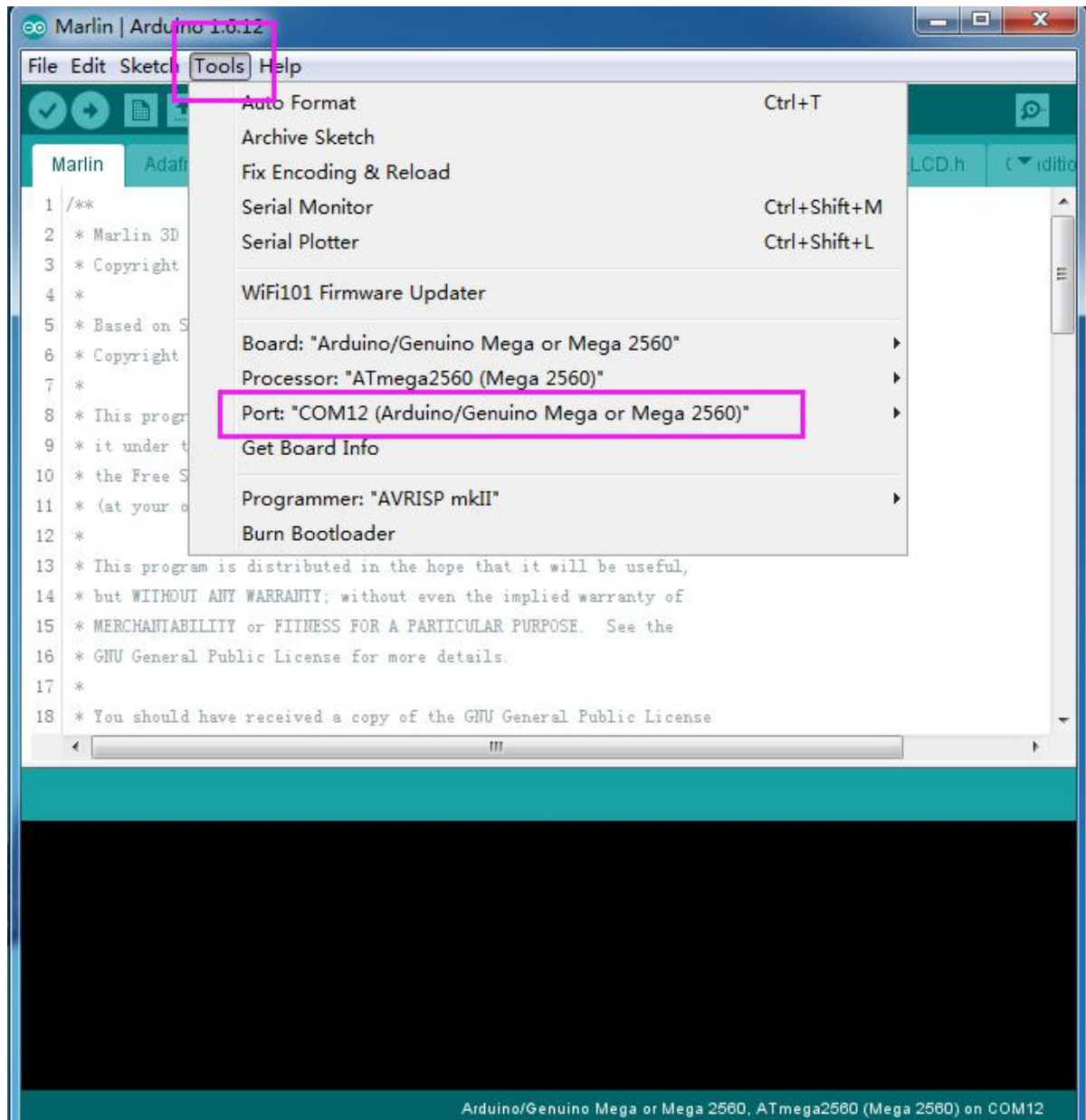
## 2. Now, update the firmware. Ignore this step if your firmware is 3.1.16 or later.

1. Download FlashTool in <https://github.com/altjz/flashtool/releases>.
2. Download Firmware here <https://github.com/uArm-Developer/SwiftProForArduino/releases> choose 3.1.16-dev or later.
3. Install Flash tool and connect uArm Swift Pro to computer via USB.
4. Drag '.hex' (firmware) file into the flash tool interface then confirm to install.

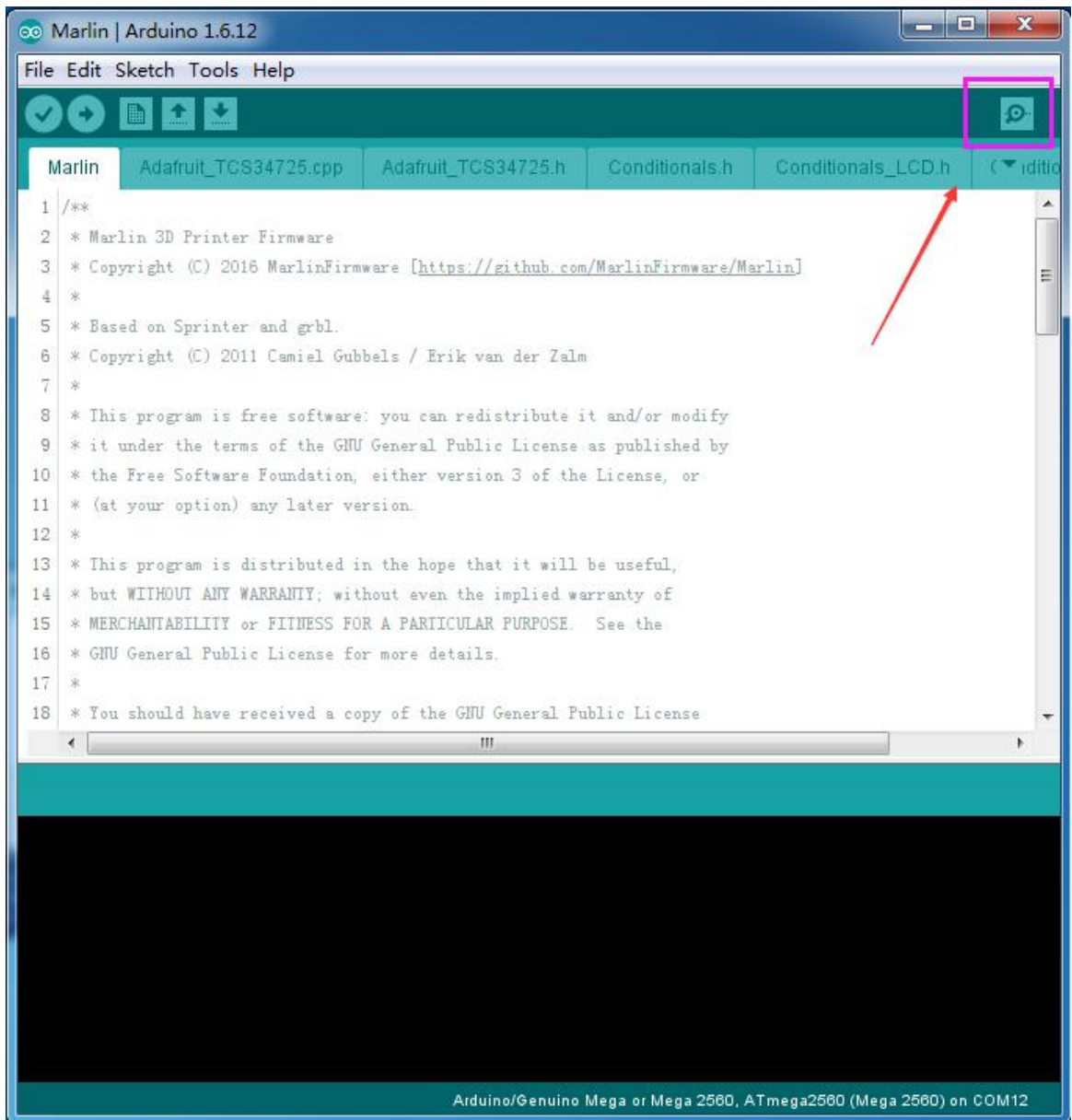
## 3. Next, let's get to calibrate by following steps below:

- 3.1 Plug in power cable and connect uArm Swift Pro via USB, then press power button on the base. Motors now are activated.

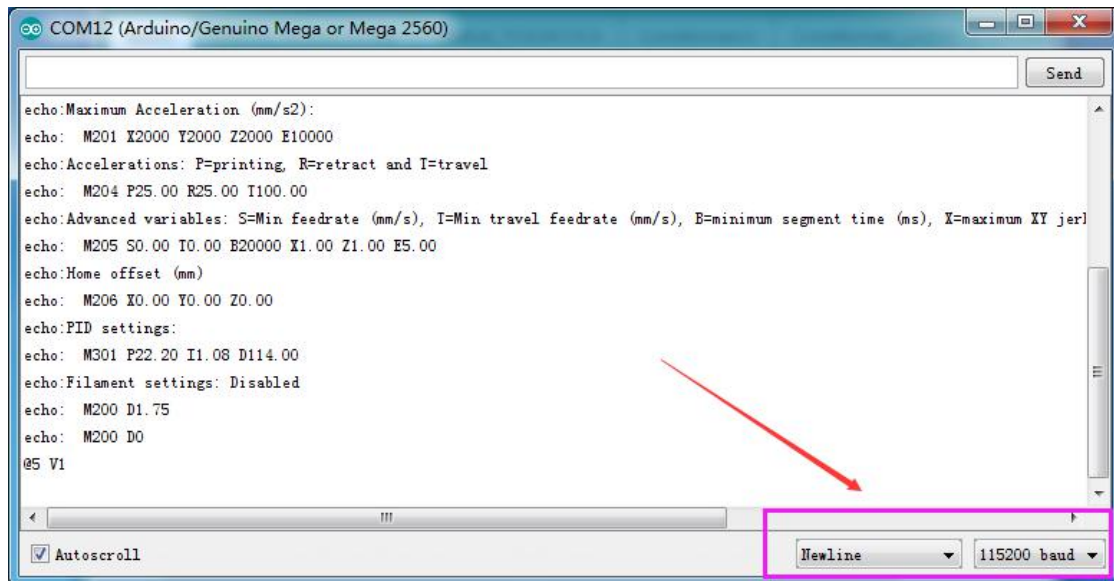
3.2 Launch Arduino and choose right the COM under “Tools” tab for Arduino Mega or Mega 2560. In Arduino case, we highlighted the COM in the screenshot.



### 3.3 Open COM tool by clicking the icon on the top right (highlighted in the screenshot)



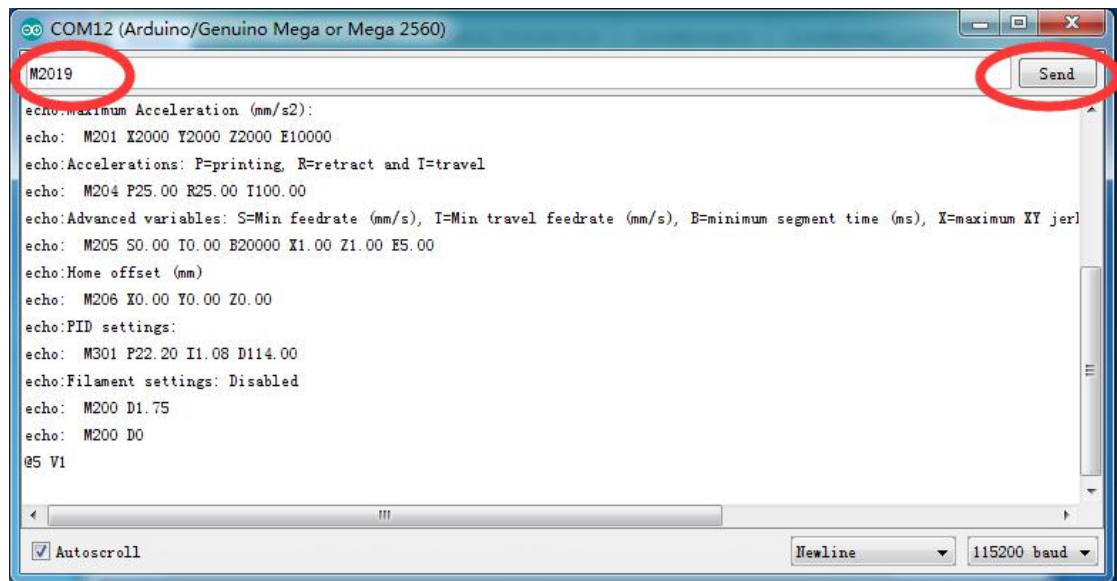
### 3.4 Choose “Newline” at the bottom and set baud value at “115200”



3.5 Place uArm Swift Pro right in the base prints on the calibration sheet, make sure the base perfectly matches it's prints on the sheet.



3.6 Type in “M2019” in the command box right on top and click “Send” to deactivate the motors



3.7 Uninstall all mounted tool kits and place the bare end effector right aligned with point B on the calibration sheet(see the screenshot below)



3.8 Type in “M2401 B” in the command box and click send to calibrate.  
Calibration is done when it returns “ok”

