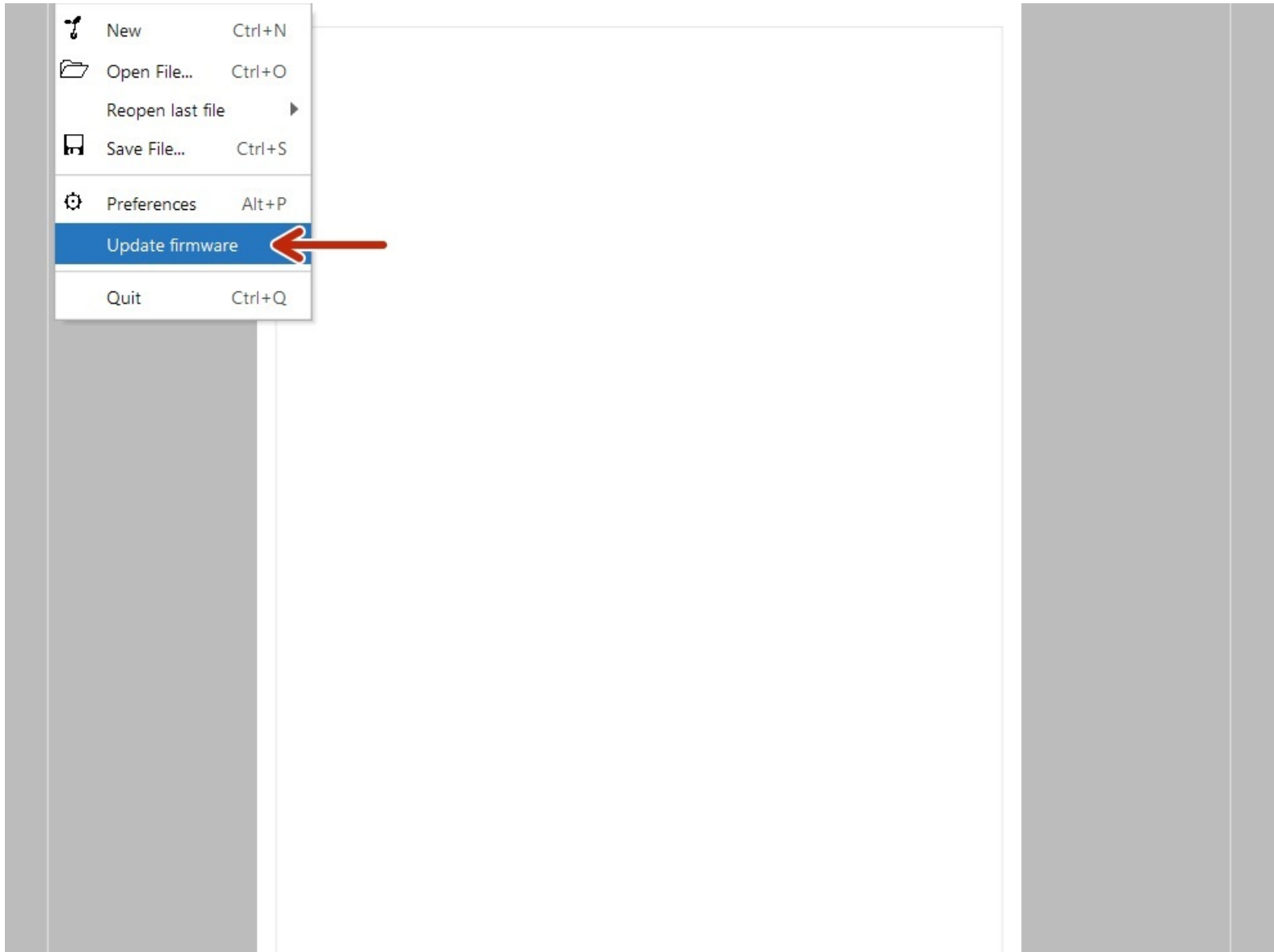


mcr

## 5. How To Update Makelangelo Firmware

How to use the Makelangelo app to update the robot firmware.

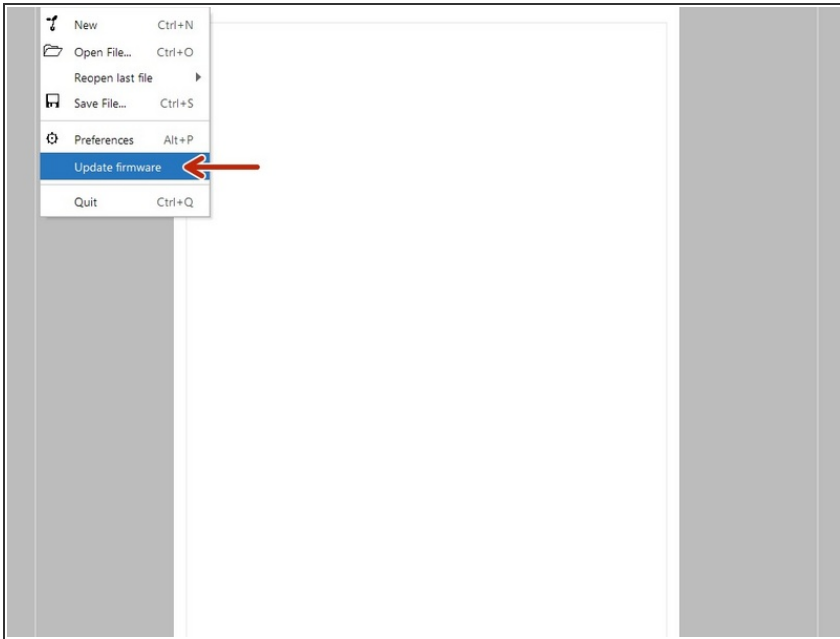
Written By: Dan Royer



## INTRODUCTION

This tutorial will show you how to use the Makelangelo app to update the robot firmware.

## Step 1 — Overview



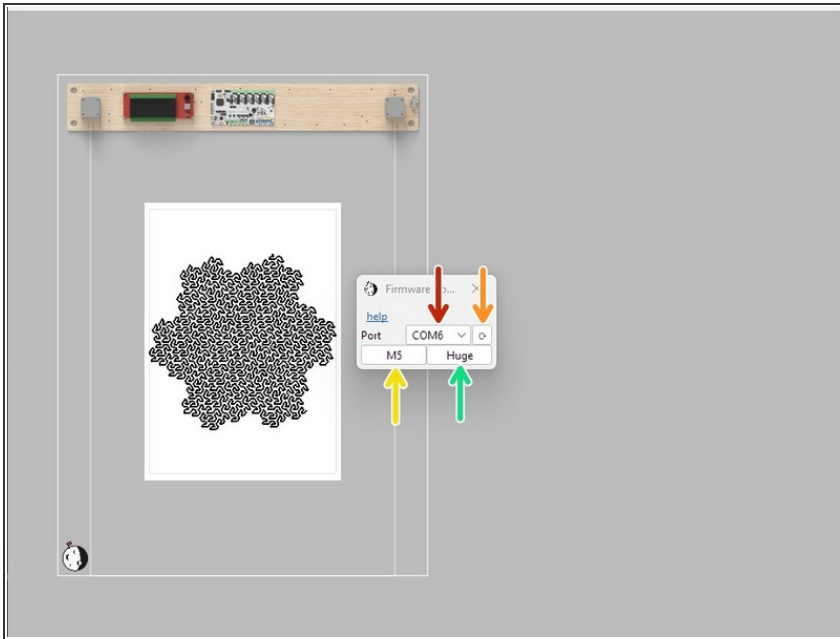
- Sometimes the code in the Makelangelo plotter robot is updated with improvements. Sometimes you might change from a Makelangelo 5 to HUGE or vice versa. These steps will help you make the change.
- The update tool in *File > Update firmware* will help you to upload the new code to your robot.
- ❗ Depending on your operating system, there may be extra steps.

## Step 2 — OSX/Linux extra steps



- The update tool relies on another program called **avrdude**. There are many ways to install it. This is one example.
- **Install Homebrew:** Please see <https://brew.sh/> for instructions. It should be two lines to copy and paste.
- **Install avrdude:** from a terminal window run `brew install avrdude`

## Step 3 — Run the Update Tool



- ✦ Connect the USB cable to the robot on the left side of the motherboard. Turn on power.
- Click the turning arrow button to the right of "port" to refresh the list of available ports.
- A new port should appear in the combo box next to *Port*. If there is more than one you may have to experiment.
- Press *M5* for Makelangelo 5...
- ... or *Huge* for HUGE, depending on your machine.
- ⓘ The application should take about a minute to download the firmware and then upload to the machine.
- ⚠ If it immediately says "finished", something has failed. Please contact us for more help.

## Step 4 — Final checks



- i** After successful upload the LCD panel will probably say there is an EEPROM change. Accept the change. Turn the dial and press in to click/accept.
- Confirm the change has been applied. Click the dial, navigate to *Configuration > Advanced Settings*.
  - For M5, verify that *Draw Min X* is -325, *Draw MinY* is -500, and *Belt length* is 1035.
  - For HUGE, verify that *Draw Min X* is -683, *Draw MinY* is -1000, and *Belt length* is 2035.

Congratulations! Your firmware should now be up to date with the latest and greatest features. [find out more about the software](#)