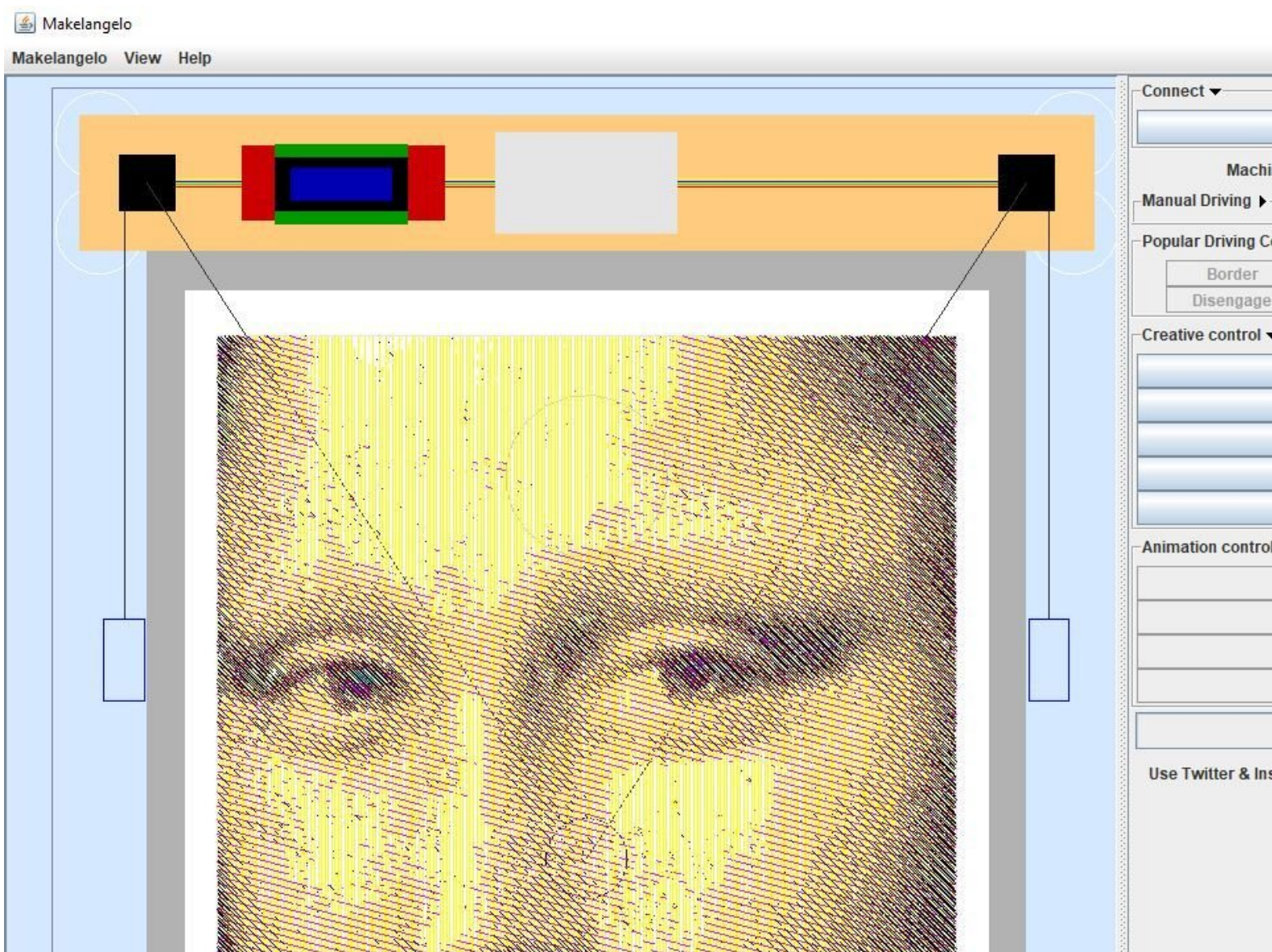


mcr

[old] How to use Makelangelo Software 7.24-7.31

Instructions for running the software for the first time, preparing the drawing and loading it to Makelangelo 3.3 or 5.

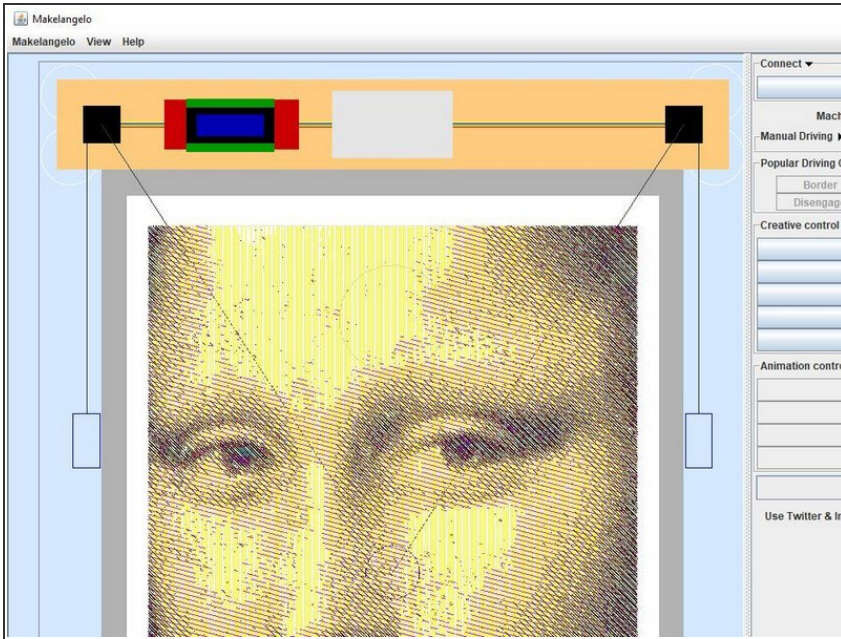
Written By: Dan Royer



INTRODUCTION

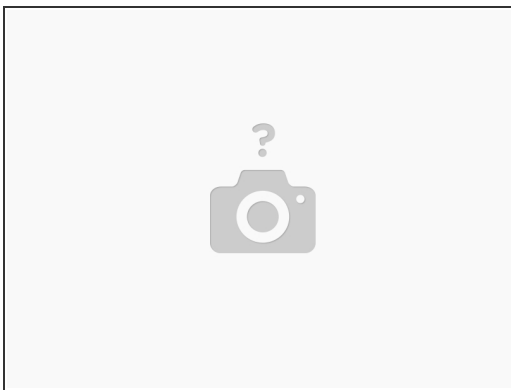
There is more than one way to **Prepare** art and more than one way to **Run** the robot. It's OK to skip some steps.

Step 1 — Install Java and Makelangelo Software



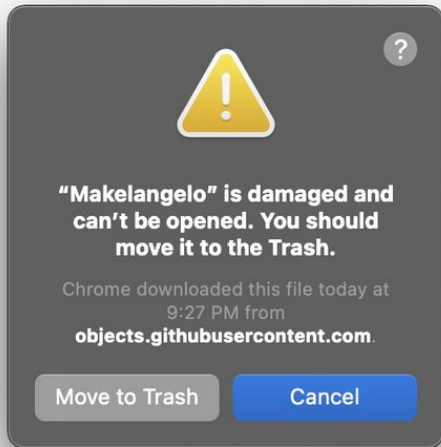
- I don't have a picture for this. Please enjoy this Mona Lisa.
- Java can be downloaded from <https://www.java.com/en/download/>
- Makelangelo Software can be downloaded from <https://www.marginallyclever.com/product...>

Step 2 — Windows only: Install Drivers



- If you are on Windows, please make sure you already have the drivers for the RUMBA board from https://reprap.org/wiki/RUMBA#RUMBA_USB_...

Step 3 — MacOS "Makelangelo is damaged"



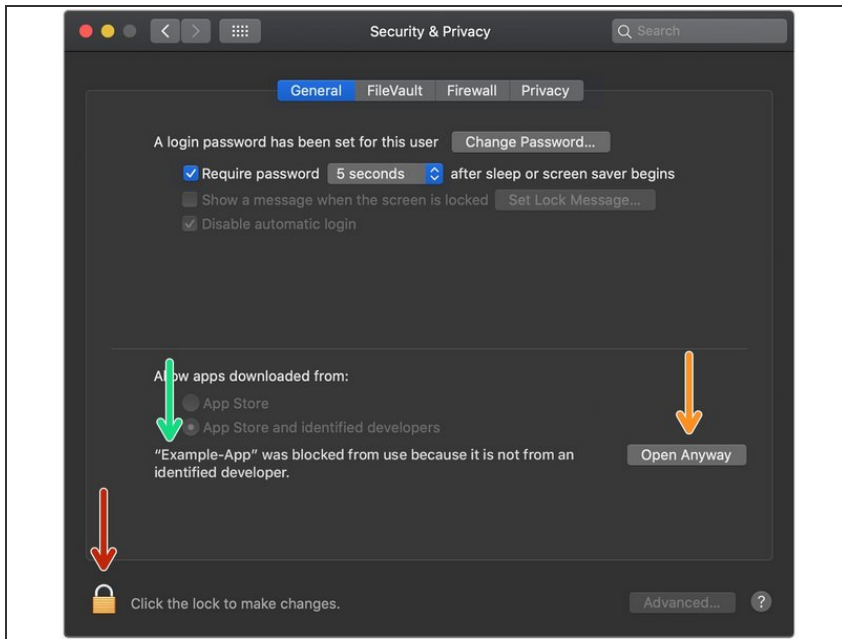
- on macOS, when launching the app, you will have an error: **Makelangelo is damaged and can't be opened, you should move it to the trash.**
- It can be fixed by opening a console and entering the command **sudo xattr -cr /Applications/Makelangelo.app**
- ⓘ This is due to [this bug](#)
- To open a console, do one of the following:
 - Click the Launchpad icon in the Dock, type Terminal in the search field, then click Terminal.
 - In the Finder , open the /Applications/Utilities folder, then double-click Terminal.

Step 4 — Run Makelangelo Software



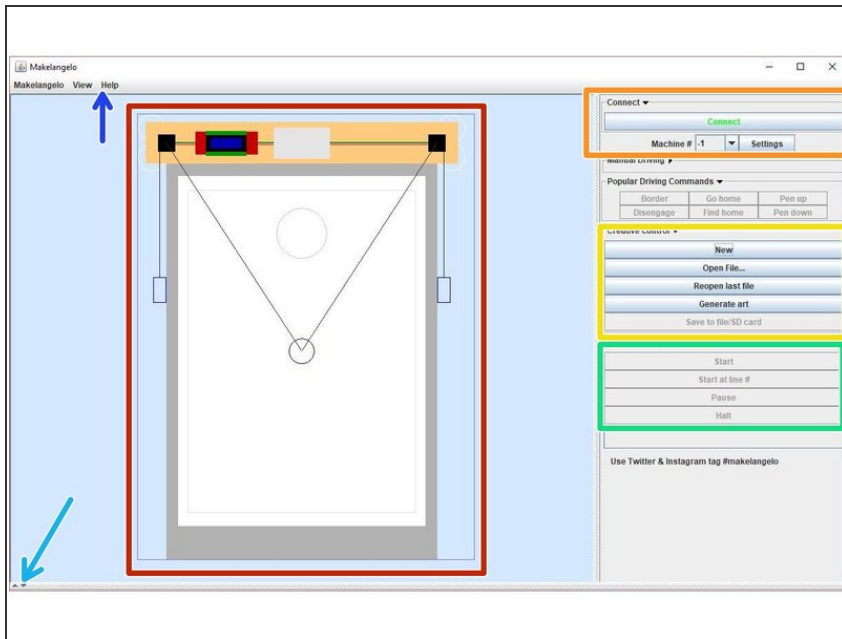
- Double click on the app in your PC.
- Some windows users may need to click the *start windows.bat* file instead.

Step 5 — OSX only: Security issues?



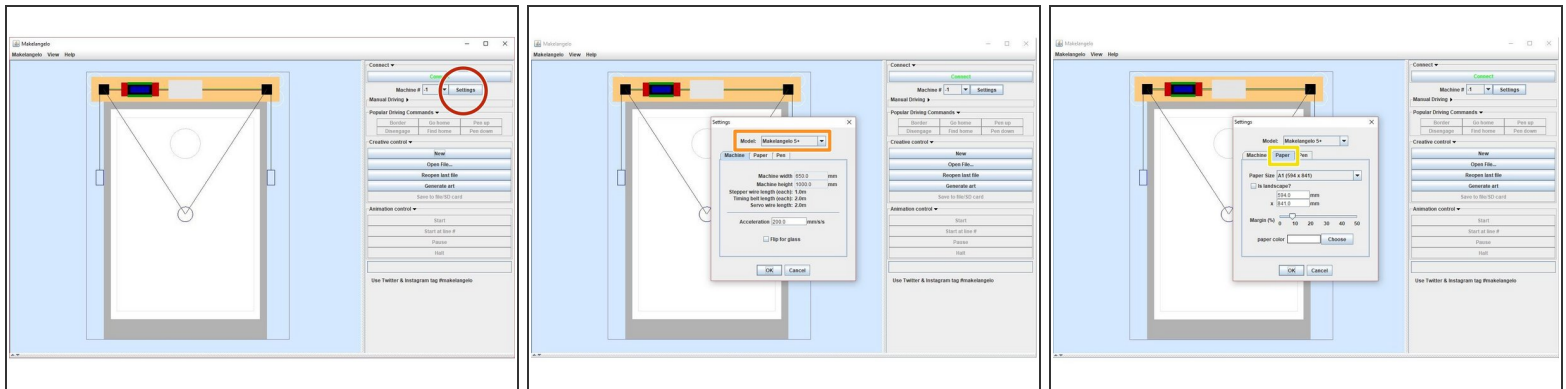
- OSX may block the Makelangelo Software because it is from an "unidentified developer".
 - Click the apple icon in the top left, then *System Preferences*, then *Security & Privacy*. Having just tried to run `Makelangelo-software*.jar`, it should appear in this message.
 - You might need to unlock to allow security changes.
 - Click *Open Anyways*.
- ❗ Your security for this version of the app should now be set forever. Next time the app updates you might need to do this again.

Step 6 — Familiarize yourself with the controls



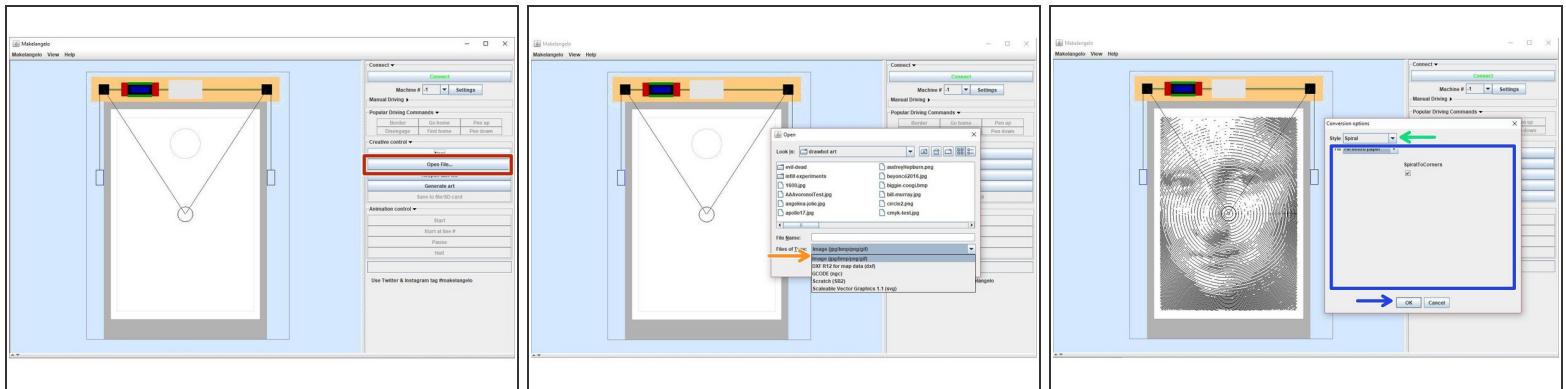
- In the main window you can drag to pan and scroll the mouse wheel to zoom the *what you see is what you get* preview.
- The *Connect* panel is like a phone call from your PC to your robot and allows for direct control.
- The *Creative control* panel is for managing art that will be drawn by the robot.
- The *Animation control* panel is also used for direct control of the robot: start, stop, pause, etc.
- The advanced dialog at the bottom shows the conversation with the robot and gives you a way to directly type commands in text.
- The top level menu has helpful links to the support forums and more configuration options.

Step 7 — Adjust settings



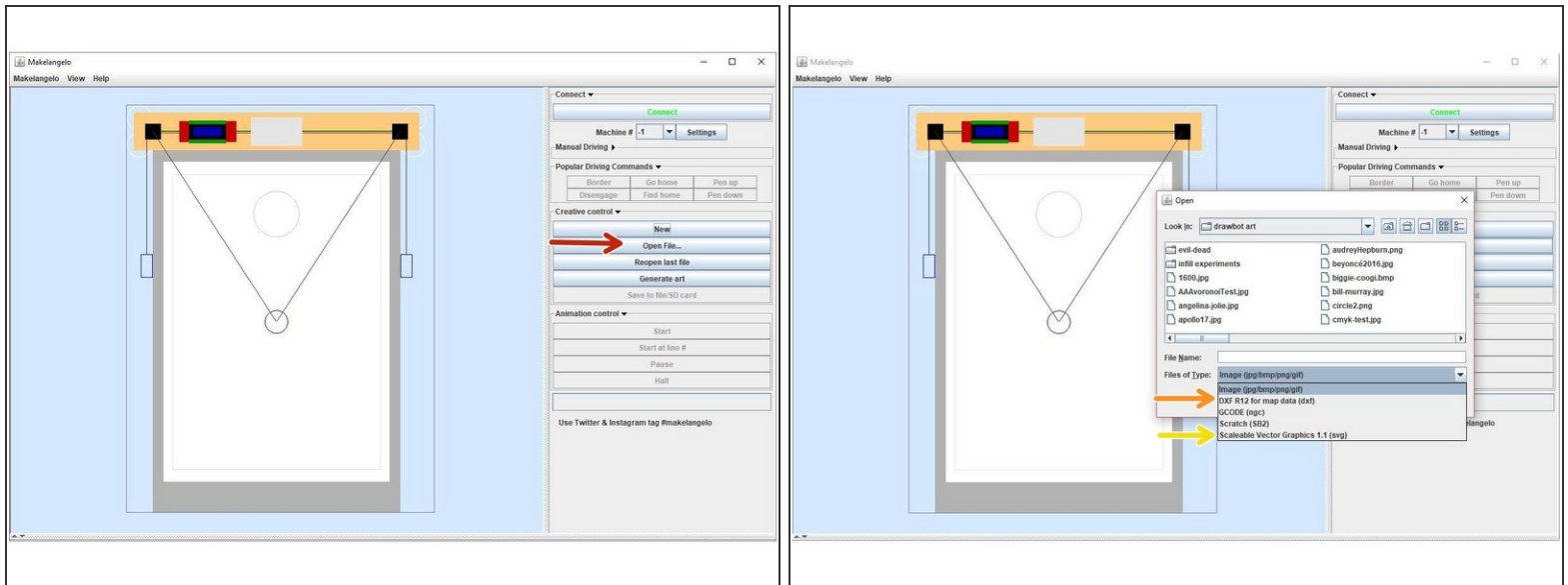
- Click the *Settings* button.
- Change the *Model* to your machine version.
- Click *Paper* and then change the *Paper Size*, *Is Landscape*, and *Margin* to match your preferences.
- ❗ A Makelangelo 5 can draw A1 portrait, A2 landscape.
- Close the settings dialog by clicking 'OK'. You are now ready to prepare a drawing.

Step 8 — Prepare a photo



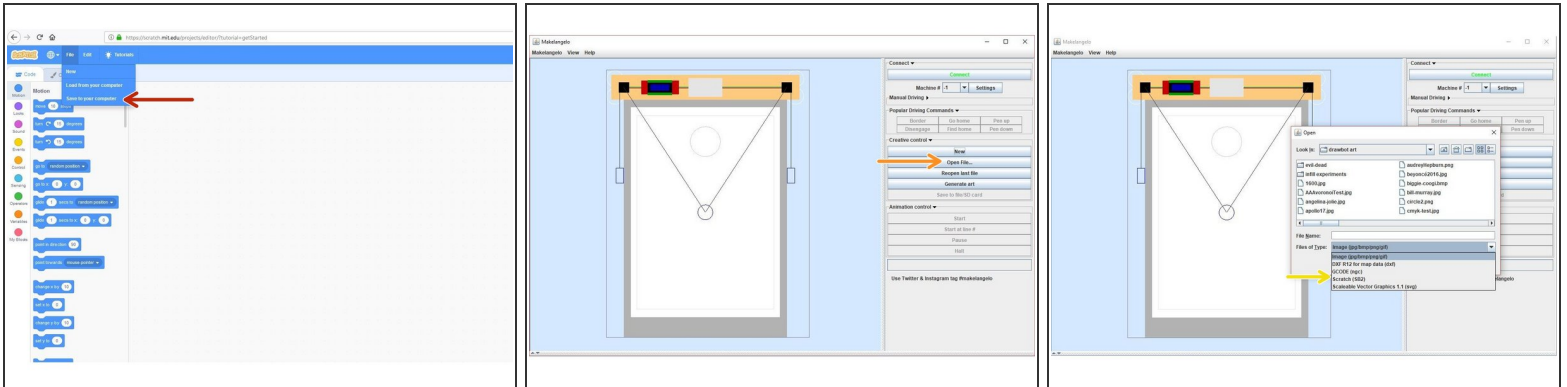
- Click *Open File...*
- At the bottom of the save dialog change the **Files of Type** to *Image*. Select your jpg, png, bmp, or gif.
- Play with *Conversion Options* until the preview looks appealing. There are several major styles.
- Some styles are *iterative* and take time to generate results - let them run until you are satisfied. Others may have sub-options for tweaking.
- Close the *Conversion Options* dialog. Your image is ready to Run.
- Here's a [Youtube example](#) of the same lesson.

Step 9 — Prepare a vector file



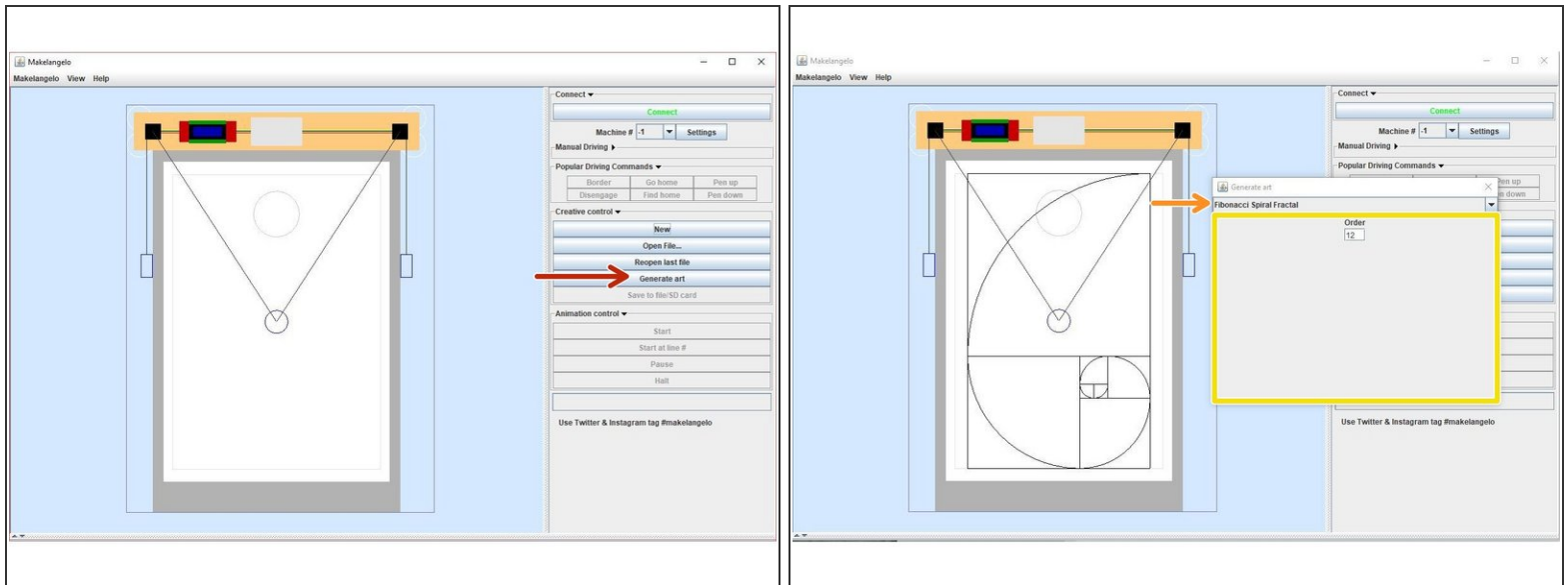
- Click *Open File....*
- At the bottom of the save dialog change the **Files of Type** to *DXF R12 for map data (dxf)*. Select your file.
- ❗ DXF may offer to *optimize on load*. This will greatly improve your drawing time AND will take longer to load your file. Choose wisely.
- Another option is *Scalable Vector Graphics 1.1 (SVG)*. SVG files are automatically scaled to fill the margins of the paper.
- Your image is ready to Run.

Step 10 — Prepare a Scratch file



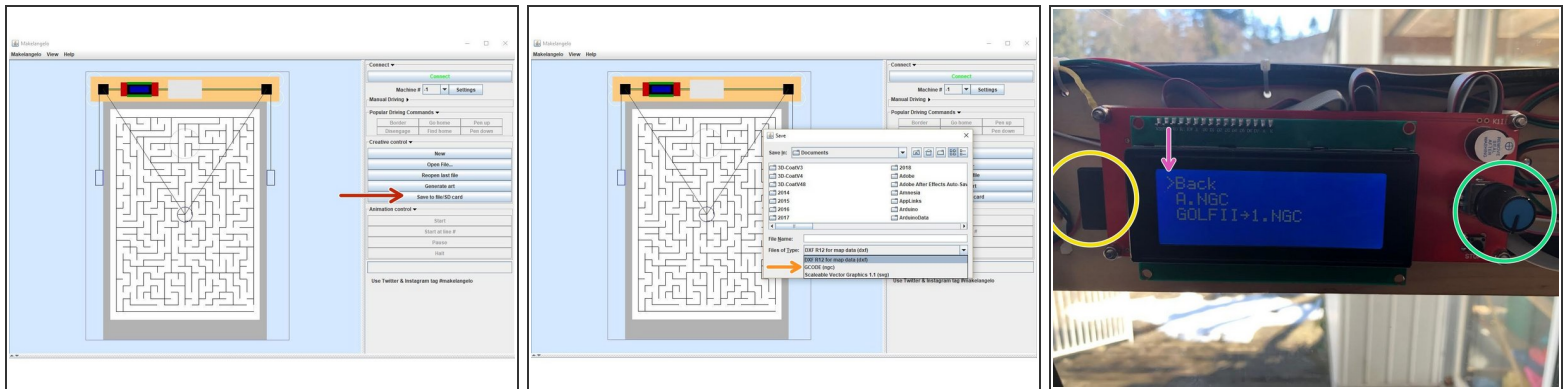
- Build your Scratch drawing at <https://scratch.mit.edu/>.
- Click *File > Save to your computer*.
- In Makelangelo Software, Click *Open File...*
- At the bottom of the save dialog change the **Files of Type** to *Scratch (SB2)*. Select your file.
- Your image is ready to Run.

Step 11 — Prepare a Generated drawing



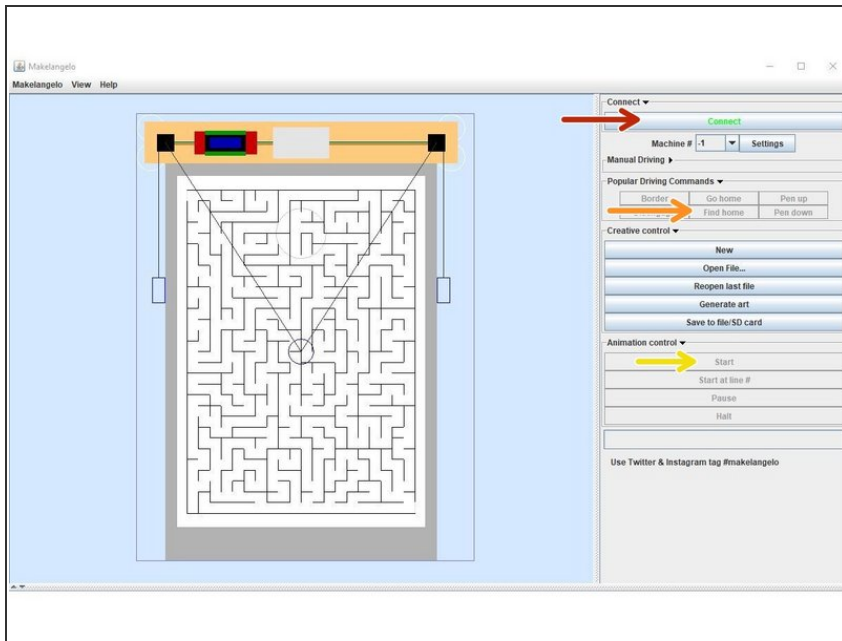
- Click *Generate Art*.
- From the first drop down, select a style of art to generate.
- Adjust any additional parameters. After changing a parameter you may need to press the Tab key to see changes in the preview window.
- Close the additional parameters dialog. Your image is ready to Run.

Step 12 — Run the robot unconnected



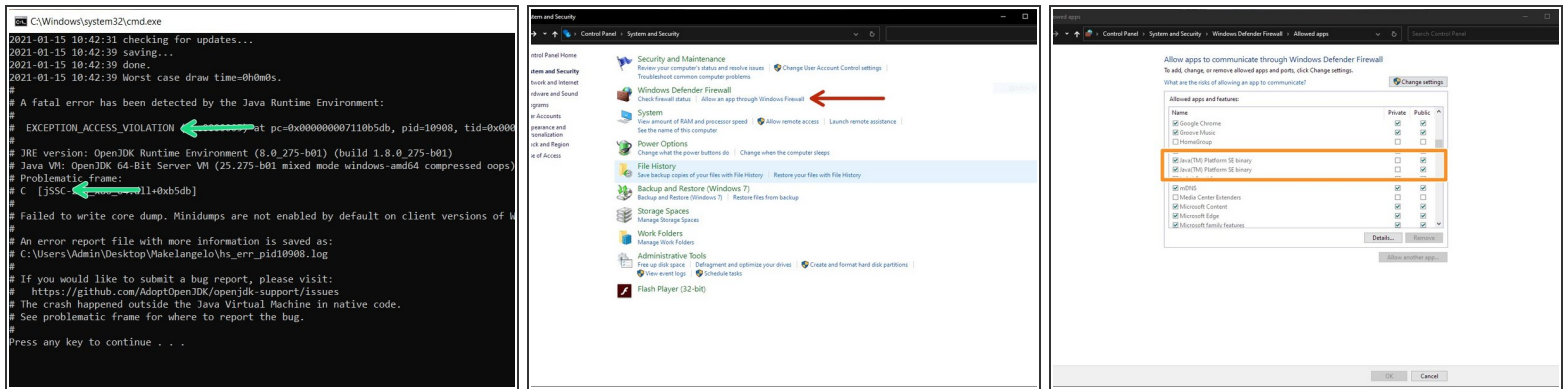
- Put your SD card in your computer and click *save to file/SD card* in the Makelangelo Software.
 - At the bottom of the save dialog change the **Files of Type** to *GCODE (.ngc)*. Save your file to the SD card.
 - Eject the SD card and plug it into the robot on the left side of the LCD panel.
 - Click the dial, scroll down to **print from SD card**, click again, scroll to the file, and click one more time. Follow the prompts on the LCD panel.
- ☛ Don't forget to **Find home** on the robot before starting your drawing! Find home can also be done through the LCD menu.

Step 13 — Run the robot connected



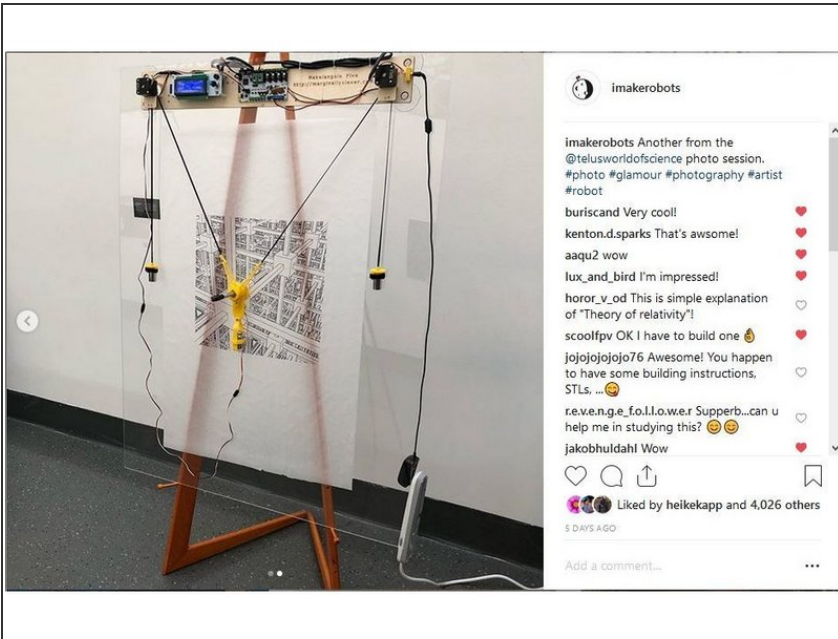
- Plug the a USB cable from the robot into your PC running Makelangelo Software.
- Click *Connect* and choose one of the USB ports. After a few seconds the buttons under connect should turn from grey to black.
- ❗ If there are no ports, refer to the *Updating Makelangelo firmware* guide steps for updating the USB driver.
- ⚠ If the application gets angry when it tries to connect, *don't panic*. See the next step for more information.
- Click *Start*. Follow the prompts on the LCD panel.

Step 14 — If Windows Firewall is blocking Makelangelo



- This error often looks like Windows crashes when you click **Connect**.
- Press Windows Key + R to open Run.
- Type **control** and press **OK** to open Control Panel.
- Click on *System and Security*, then *Windows Defender Firewall*, then *Allow an app or feature through Windows Defender Firewall*
- In the allowed app window, scroll through all the apps. Locate the **Makelangelo**. If it does not appear, locate **Java(TM) Platform SE binary**.
- If it is unchecked, the app is blocked on the Firewall. Check the app and click **OK**.

Step 15 — Share your results



- Take a picture.
- Post it on social media.
#plottertwitter is a great tag to use!
- Tag your post #makelangelo or @imakerobots so we can +1 like kudos it.

Your robot should now be drawing your work of art. Congratulations! For more help and robots, join us on Discord at <https://discord.gg/QtvHqAv8yp>