

The tl;dr ver. Instructions for the MakerBot

- Open up **mcgrew@makerbot~** terminal; this will allow you to bypass the permissions in order to connect the Makerbot to the computer
- Type in: **/usr/local/replicatorg/replicatorg** and hit enter.
- This will open up the user interface, ReplicatorG which tells the printer what to print through the computer.
- Go to the tool bar and hit **machine**, then **Connection**, and then on **/dev/ttyACM1**; this is going to actually connect the machine to the computer.
- Now hit **Connect**
- Now open up whatever file you need to print. Files that are best suited for this are .stl files. If your file is not that, then find a converter on Google; 'whatever file extension' to stl.'
- Now that you see your file in the ReplicatorG please review through it and see if it is the right dimensions. Usually if you downloaded the .stl file from a community site like Makerbot, those files should be already in the right dimensions.
- Alright now hit **GCode** and hit **Generate** up top. A menu of some options will come up.
 - **PLEASE DO NOT USE THE RIGHT NOZZLE**; there is no right nozzle and heating it up will only waste your time, and by waste, maybe another 30 minutes or so. We had to remove that nozzle because it was sort of pointless and it was interfering with the print outs by dragging the 'just-laid' prints.
 - Highly recommended; using support will help the quality of your models. The Makerbot tends to shake a lot, the support will help keep consistency with your models. If you do not want to use one, have fun with a messy print out. The other

option is to slow down the extruder, but that will take up a lot of time.

- After your GCode is done, go to the **gcode* tab** and look for **two values, M109 and M104**.
- **Change them to 120 for M109 and 225 for M104**: this will set the temperature for your left nozzle and the raft.
- Afterwards hit **done** and your file shall start making its way in three dimensions.
 - **Some pointers:**
 - The machine will first heat up if this is the first print out from a couple of hours ago. This stage takes about a couple of minutes.
 - Make sure you use the plastic tent and cover over the Makerbot. It helps with conserving the shape of your models a lot better.
 - If you hear a series of ticks coming from the spool, please check on the spool and pull the spool **SLIGHTLY** counterclockwise.
 - Although a mentor should check up on the printer every so often, if the mentor is a bad one, check if the plastic got tangled or knotted as this does happen! Also check on it too every so often, as sometimes the printer might make a mistake.
 - All prints will have ridges; if you are OCD about them, use putty. This printer isn't fine-tuned enough and isn't the newest either, so these ridges will appear.



MakerBot