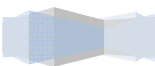
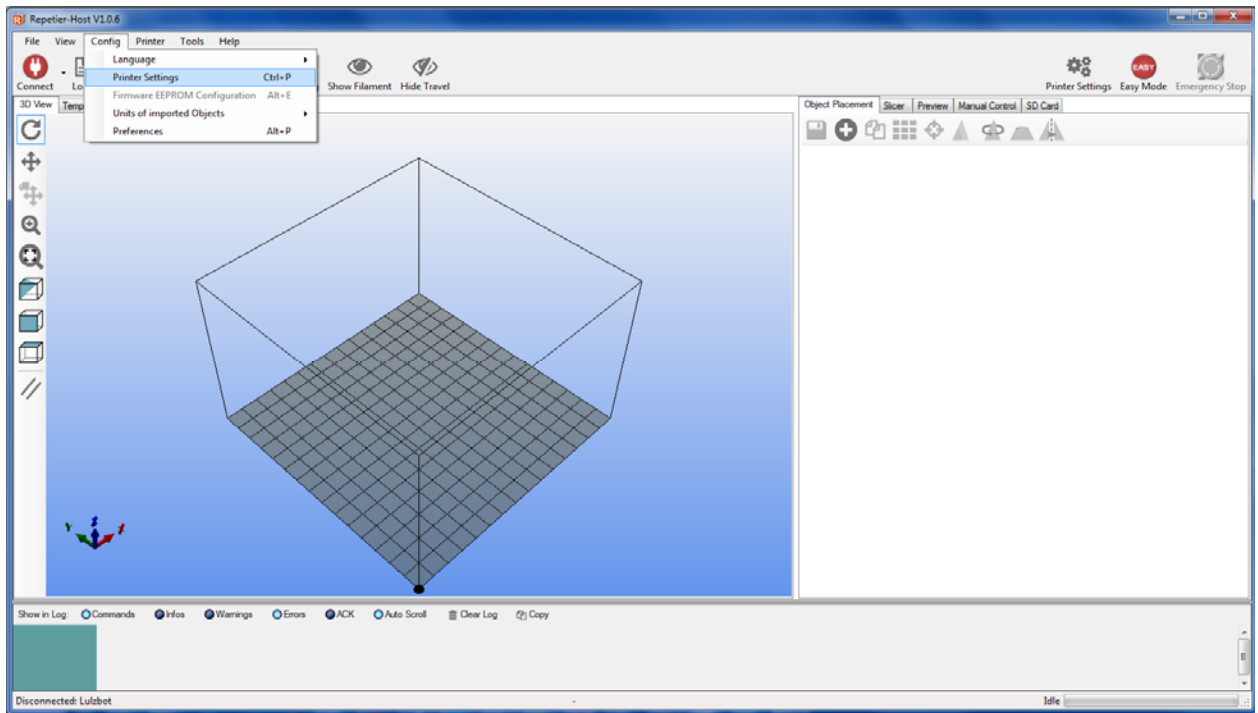


Lulzbot Laser Set-up Instructions

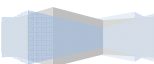
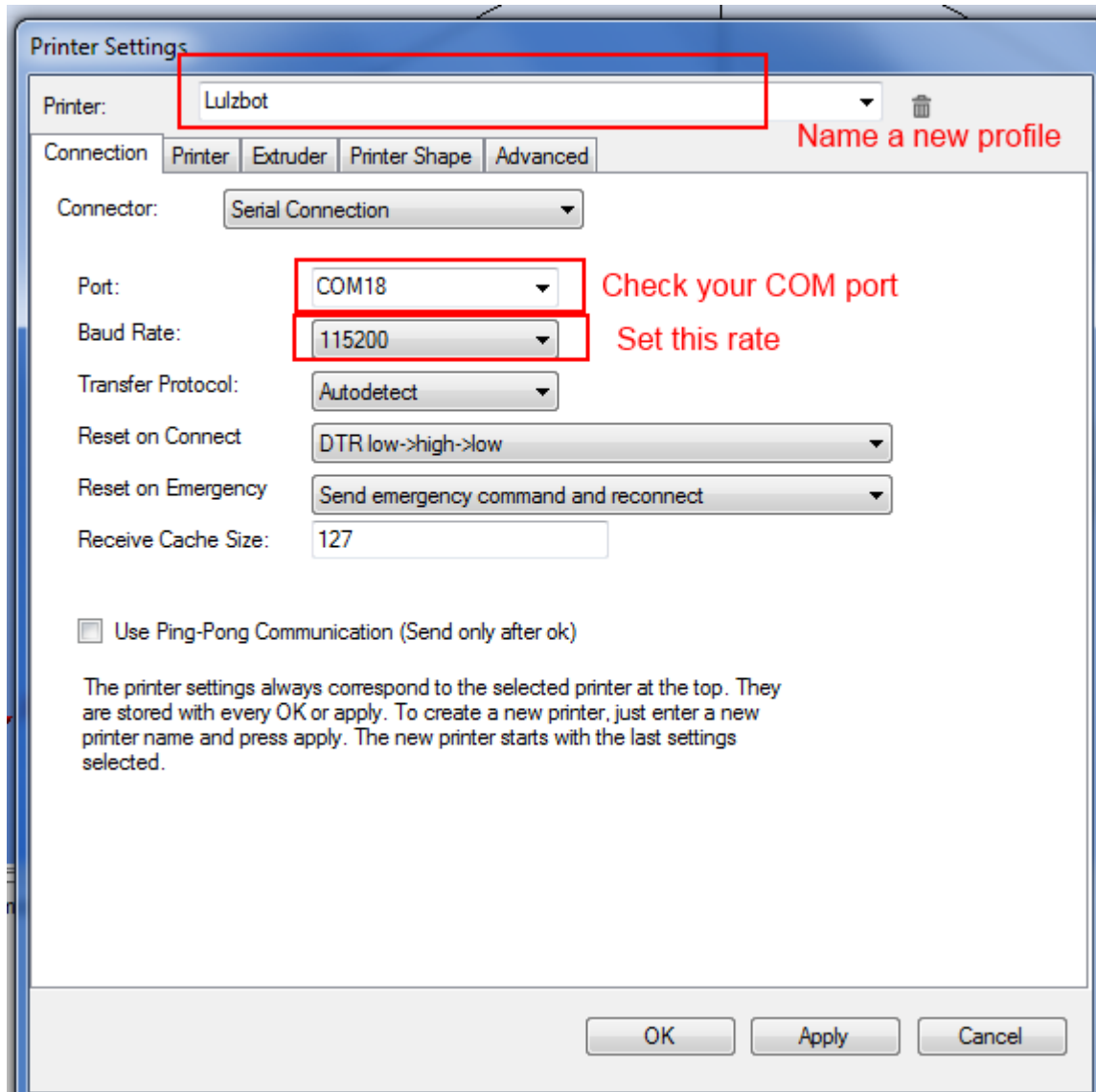
1. Open the "getting started" booklet included in the machine packaging.
2. Follow the instructions for downloading the CURA software onto your computer. This will also install the needed drivers for your machine.
3. Launch CURA and select Lulzbot mini from the drop down list.
4. Connect the USB cable, the power cord, and then power on the machine.
5. The computer will detect the RAMBO board and the drivers will be installed.
6. Exit CURA
7. Download and install Repetier Host. <http://www.repetier.com/downloads/>

Setting up Repetier Host software:

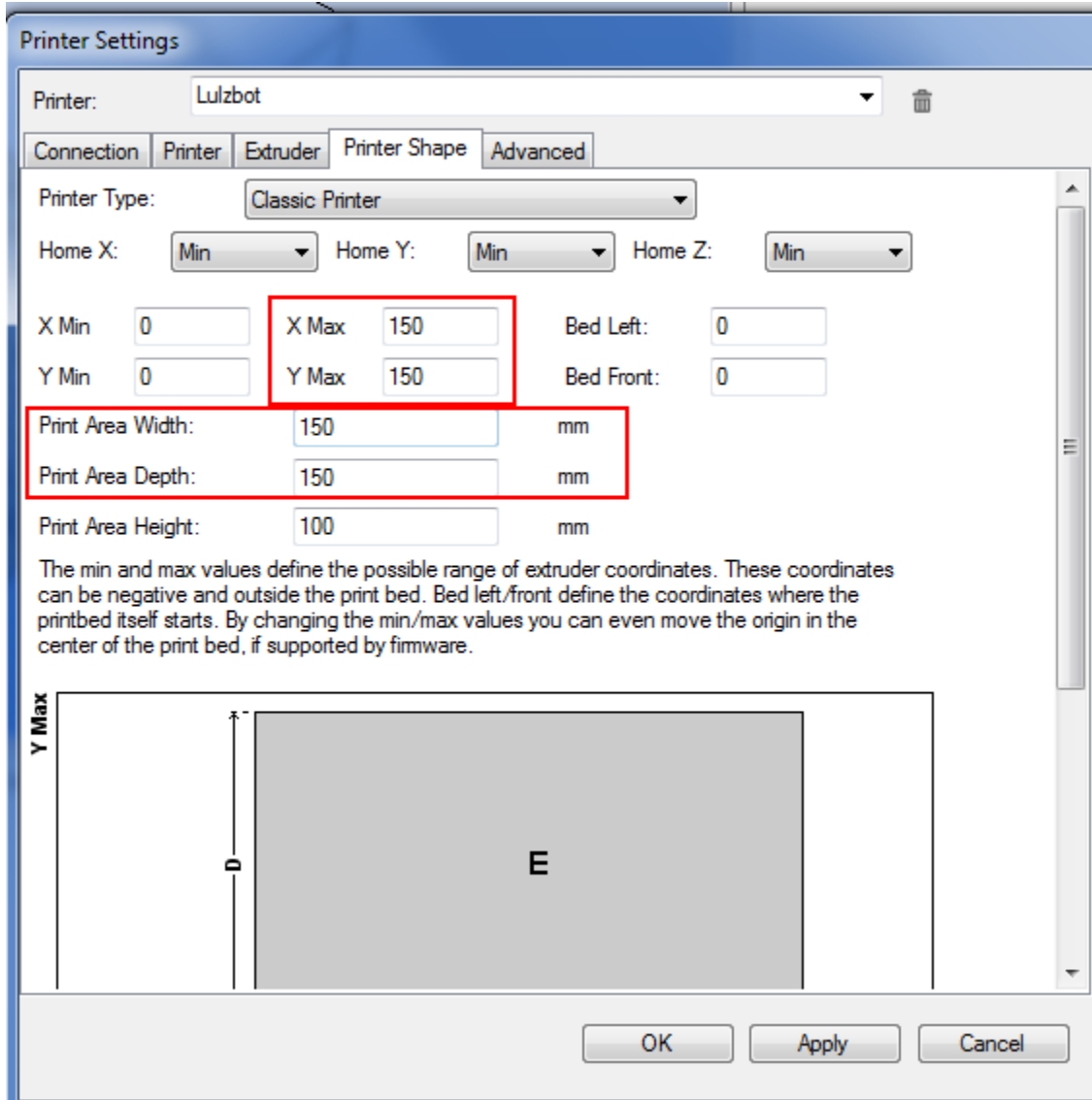
1. Set up your printer profile. Click on config -> printer settings.



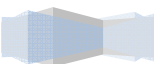
- Under CONNECTION tab, make a new profile name, set the COM port (find it in devices control panel) and set the speed. Make sure everything else is correct:



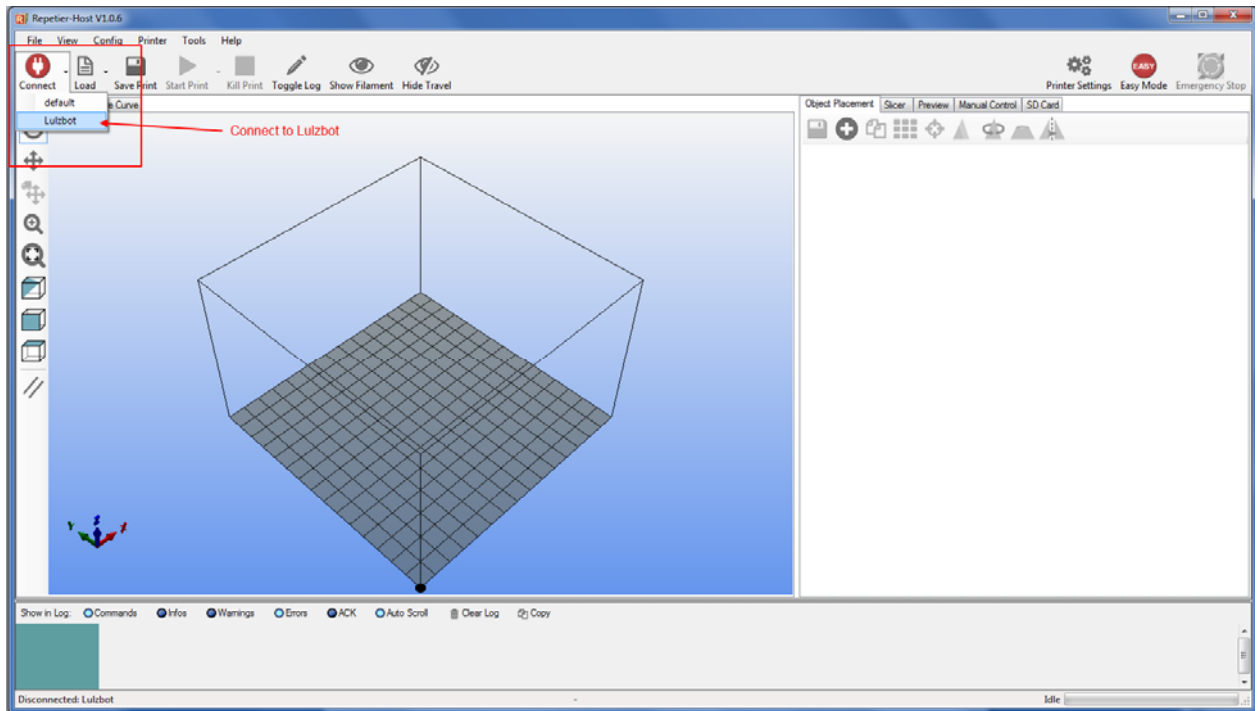
3. In PRINTER SHAPE tab, change the Y Max, X Max to 150 and Print Area Width and Depth to 150.



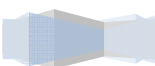
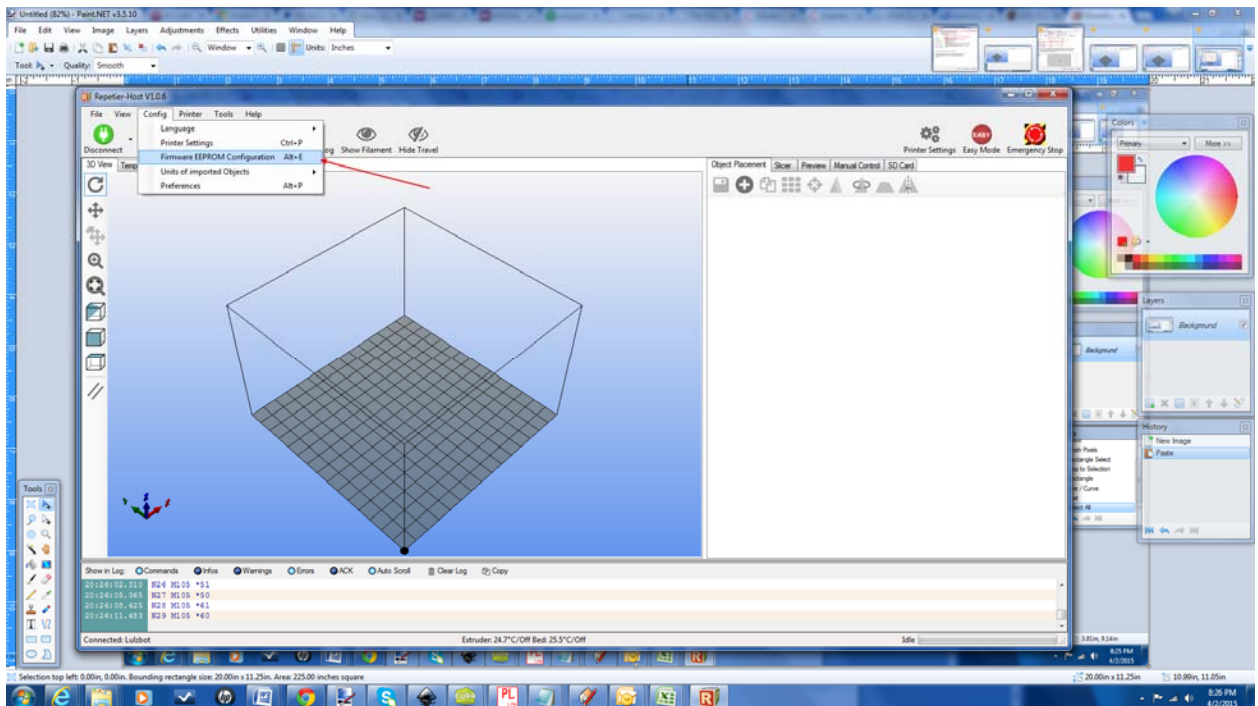
4. Press APPLY and then OK.



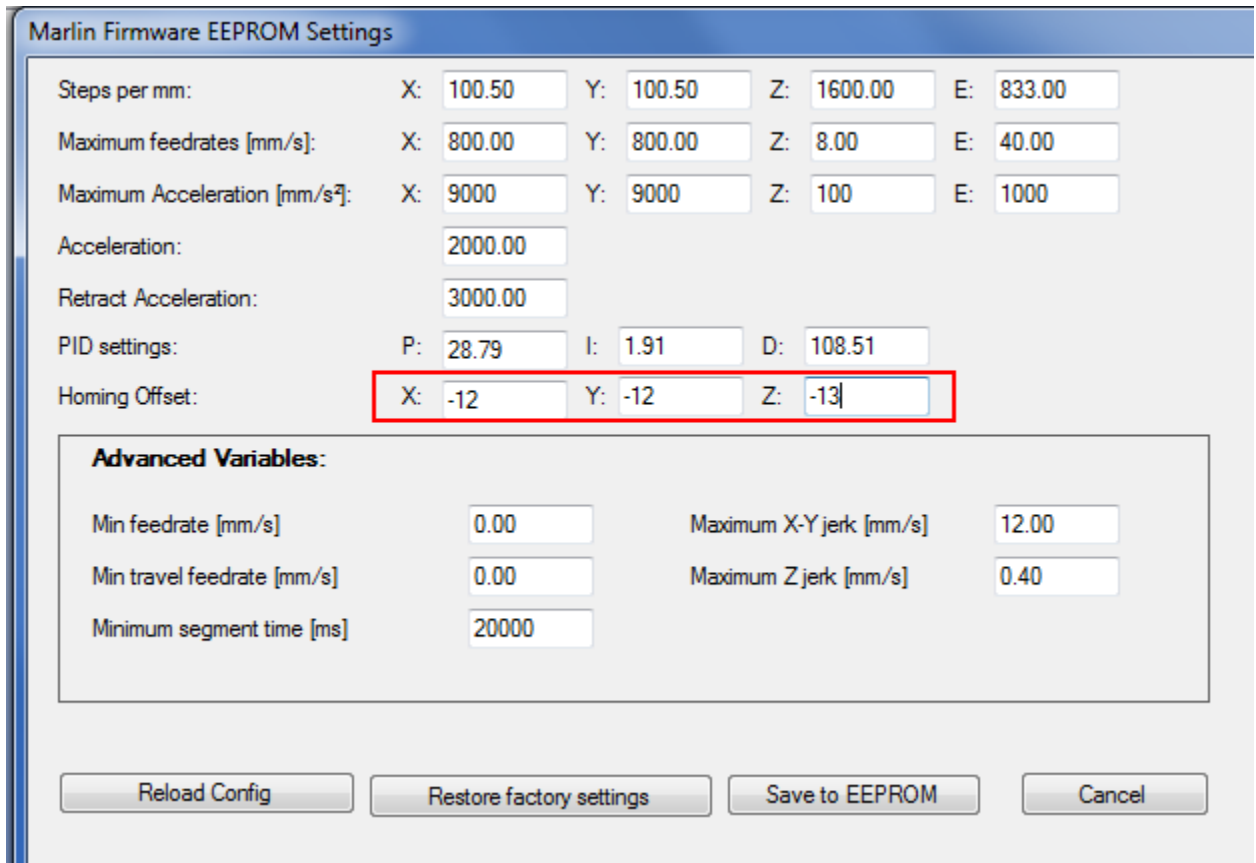
5. Connect to the profile Lulzbot



6. Click FIRMWARE EEPROM SETTINGS



7. Set the HOMING OFFSET to X: -12 Y: -12 and Z: -13



Marlin Firmware EEPROM Settings

Steps per mm:	X: 100.50	Y: 100.50	Z: 1600.00	E: 833.00
Maximum feedrates [mm/s]:	X: 800.00	Y: 800.00	Z: 8.00	E: 40.00
Maximum Acceleration [mm/s ²]:	X: 9000	Y: 9000	Z: 100	E: 1000
Acceleration:	2000.00			
Retract Acceleration:	3000.00			
PID settings:	P: 28.79	I: 1.91	D: 108.51	
Homing Offset:	X: -12	Y: -12	Z: -13	

Advanced Variables:

Min feedrate [mm/s]	0.00	Maximum X-Y jerk [mm/s]	12.00
Min travel feedrate [mm/s]	0.00	Maximum Z jerk [mm/s]	0.40
Minimum segment time [ms]	20000		

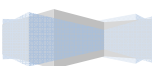
Reload Config Restore factory settings Save to EEPROM Cancel

8. Press SAVE TO EEPROM. This setting will set where the 0,0 position is for the laser. With this setting it is on the bottom left corner of the plate. If you want to move it farther, then adjust the values for X and Y to a bigger NEGATIVE number. This will move the 0,0 location out toward the center. You can use the to adjust where your files will start. The Z axis number is where the focus is above the build surface. It is set to 13mm.

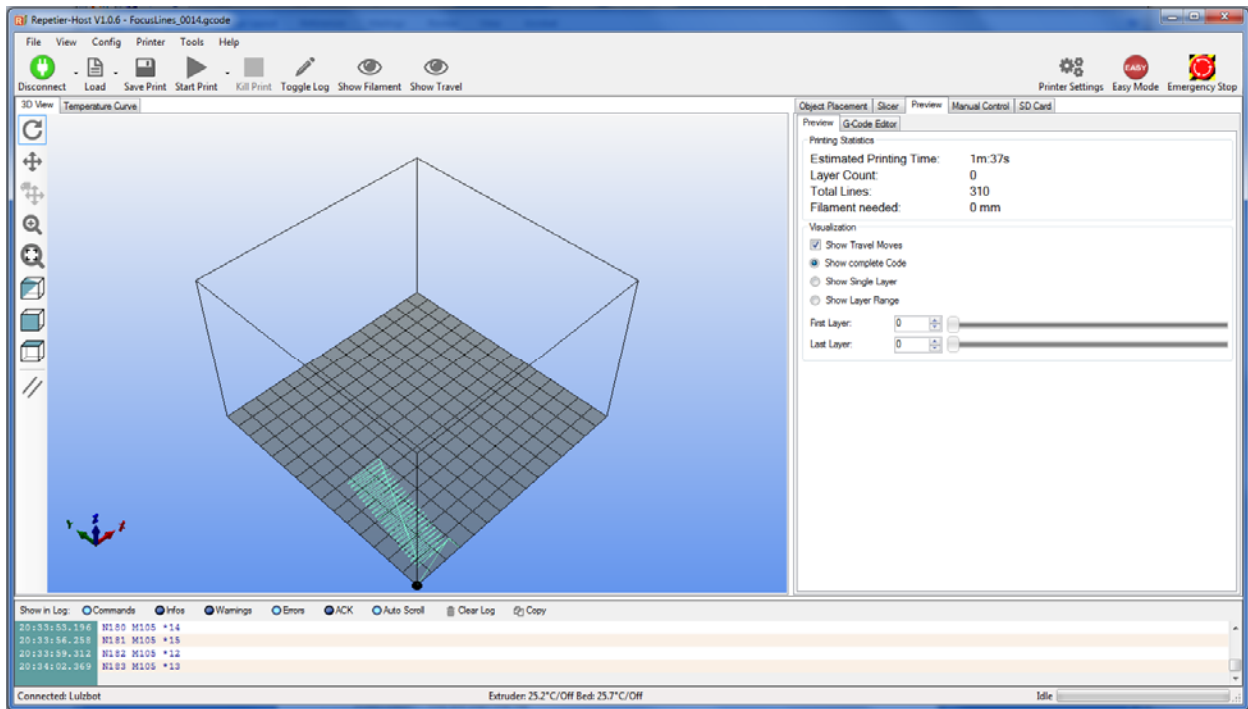
Using the Repetier Host Software

LOAD - this will load a G Code file.

START PRINT - This will start the file

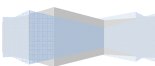


After loading a file the PREVIEW screen will show up. You can see the path in the visualization area.



MANUAL CONTROL TAB

In the manual control tab you can adjust X, Y, Z and home all the axis. Make sure you Home the printer before starting to print. If you moved Z, it will start at the new z location. If you moved Z to adjust the focus because the material is thick, then don't home Z after the adjustment. Just start the file after homing x and y.



Pressing the fan on slider will turn on the laser.

