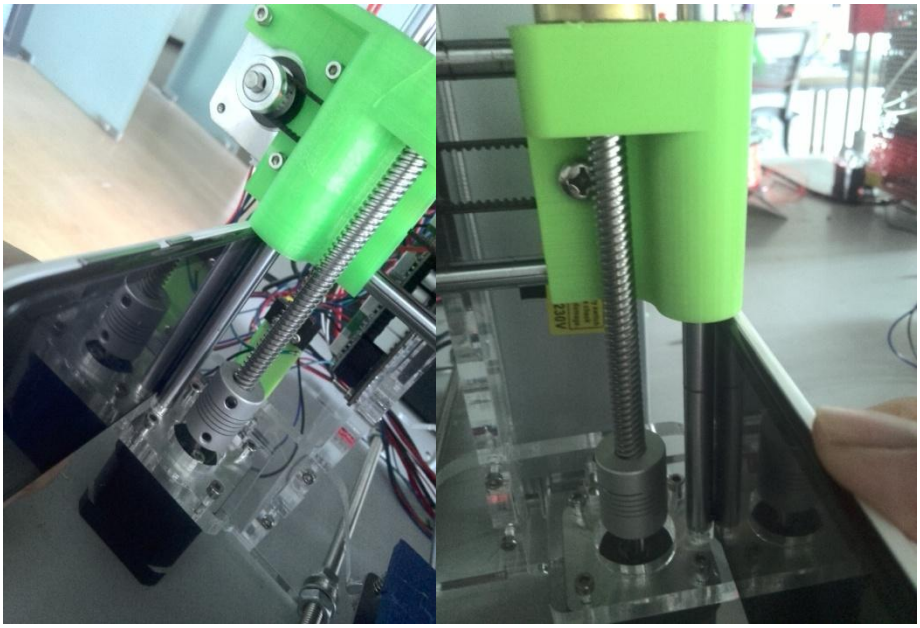
RAISCUBE 3D Printer User Manual

1. X-Motion Leveling.

Keep a same distance between top surface of Z-Axis Motor Fixed Plate and bottom face of Z-Axis Link Block (Left&Right). If not, turn a side of "Flexible Coupling" to keep two sides same to make it level.



2.Hotbed Level.

2.1 In the control panel, press control button and spin and press it to "Prepare" – "Z Home", then Extruder moves torwards hotbed. Check if nozzle top almost touches hotbed surface. If not, find the long screw behind Left Z-Axis Link Block, and adjust it to be.

2.2 Panel Control, "Prepare" – "Auto Home", to move nozzle to origin point. And still check if the distance between nozzle top and hotbed surface. It should be only allow a piece of A4 paper to pass through. If not, make clockwise (or coutercolockwise) rotation of the Wing Nuts beneath hotbed surface. Manually move hotbed or slide Extruder to other vertexes of hotbed to make it level evenly.

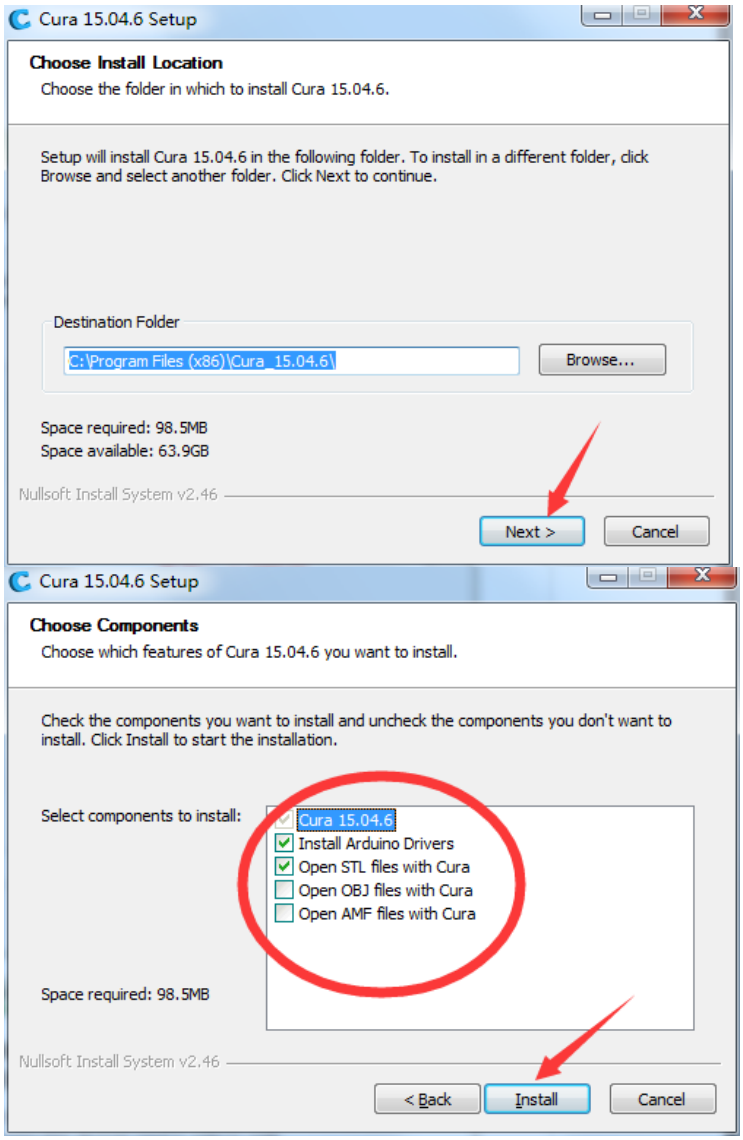
3. CURA 3D Slicing Software

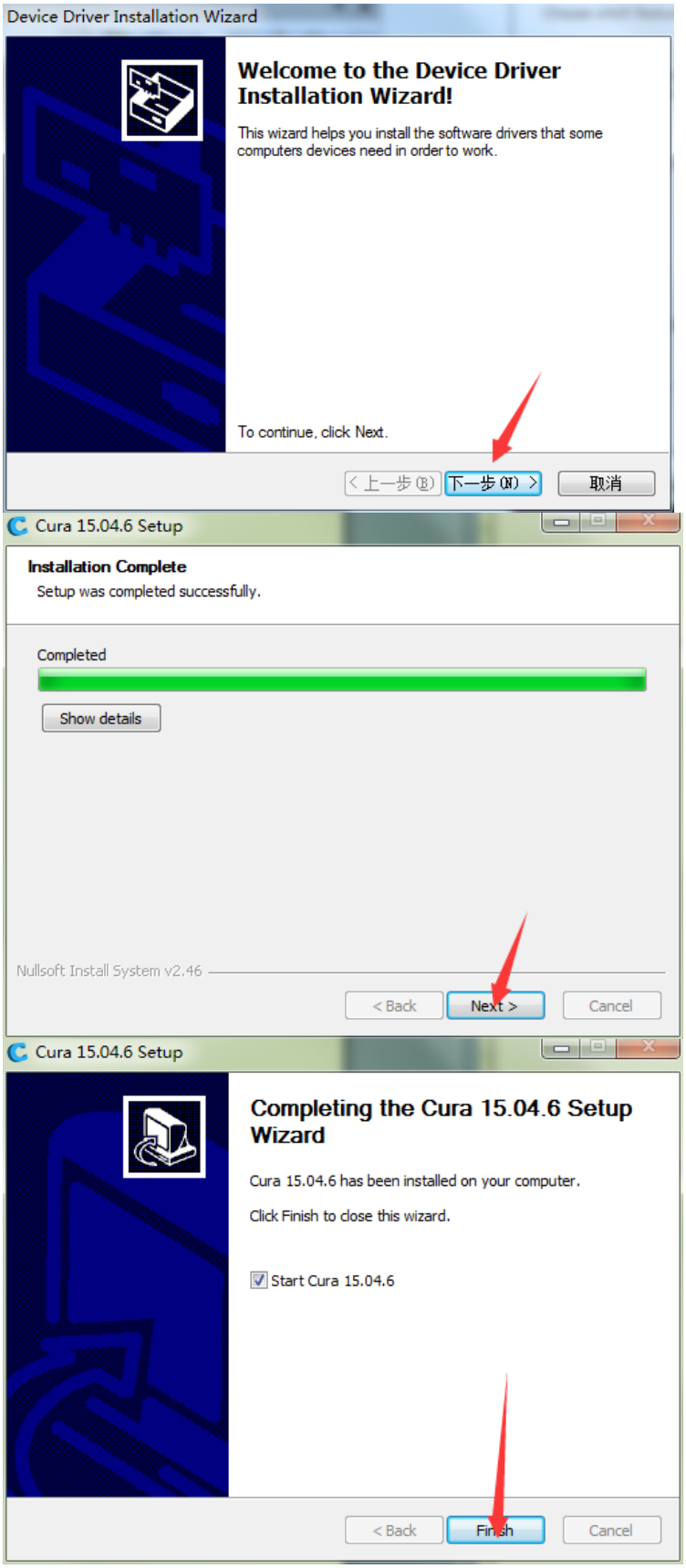
3.1 What can CURA help us?

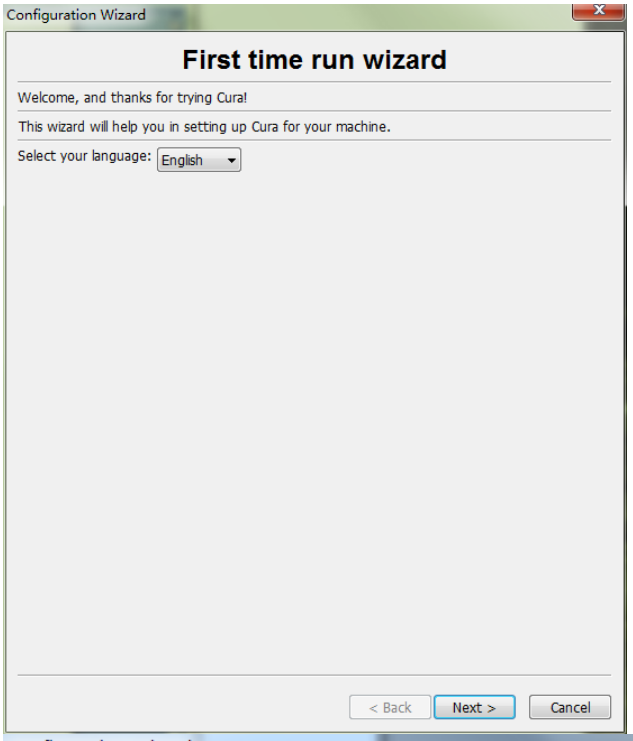
Cura is mainly used for model slicing. It calculates paths upon the model files, and then generates 3D model codes, named ".gcode". "STL" is the most common origin model files. These files can be save as ".stl" in a certain drawing software or download online.

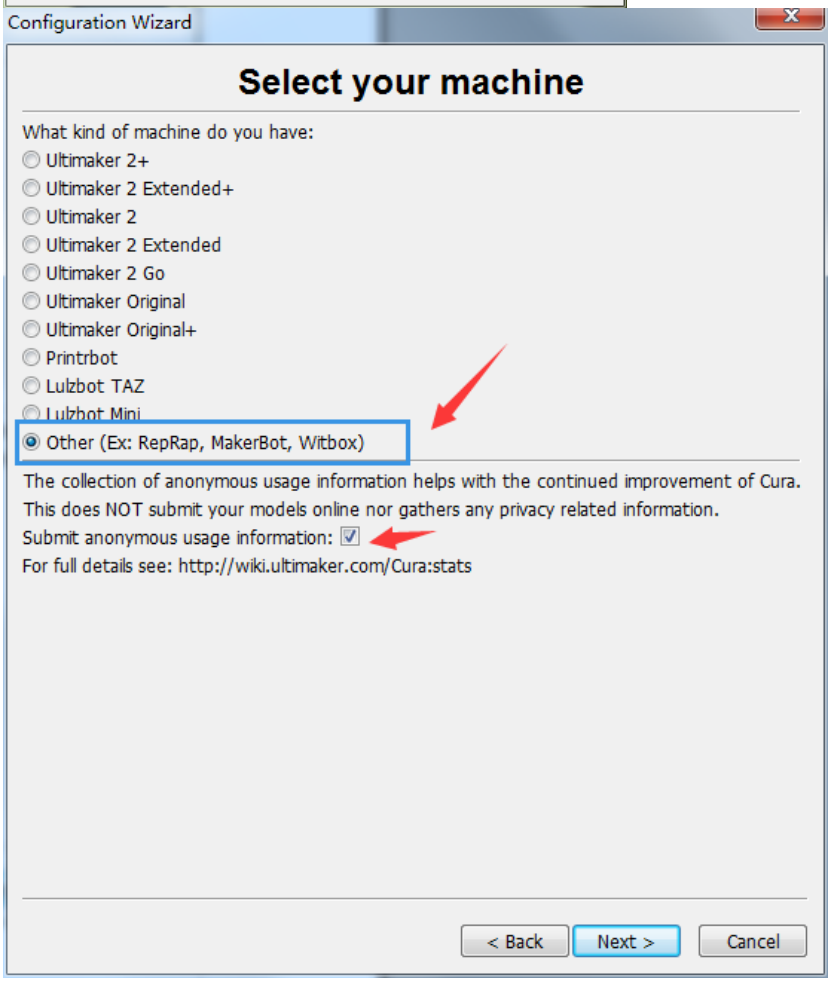
3.2 Installation of Cura.

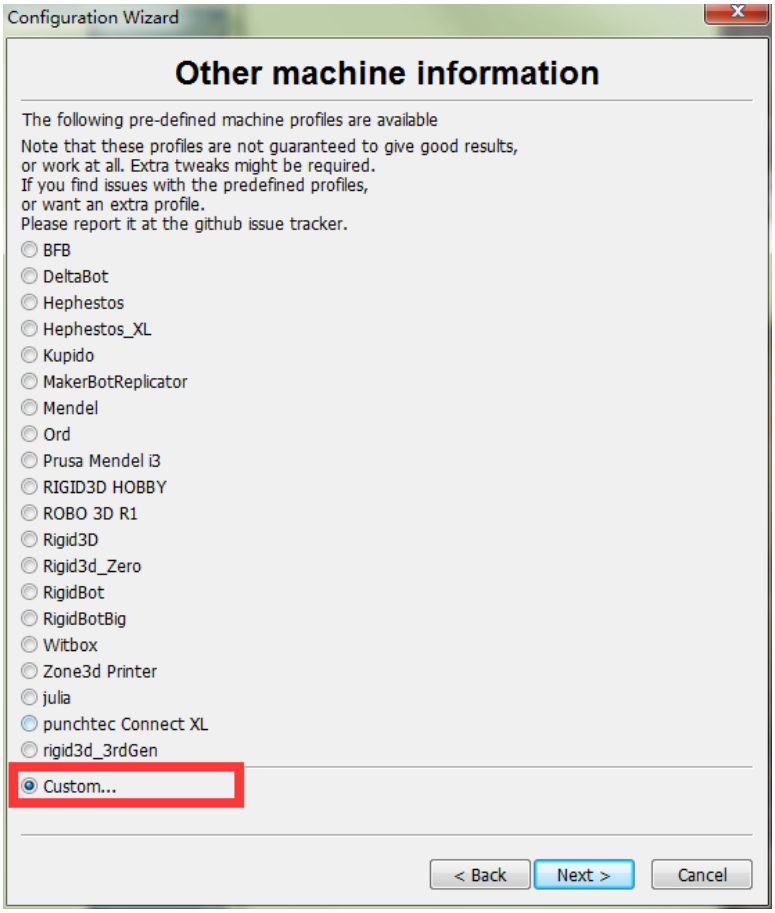
Just like any other normal software installation. Find the “Cura.exe” in SD Card, and double click to cause the following window.

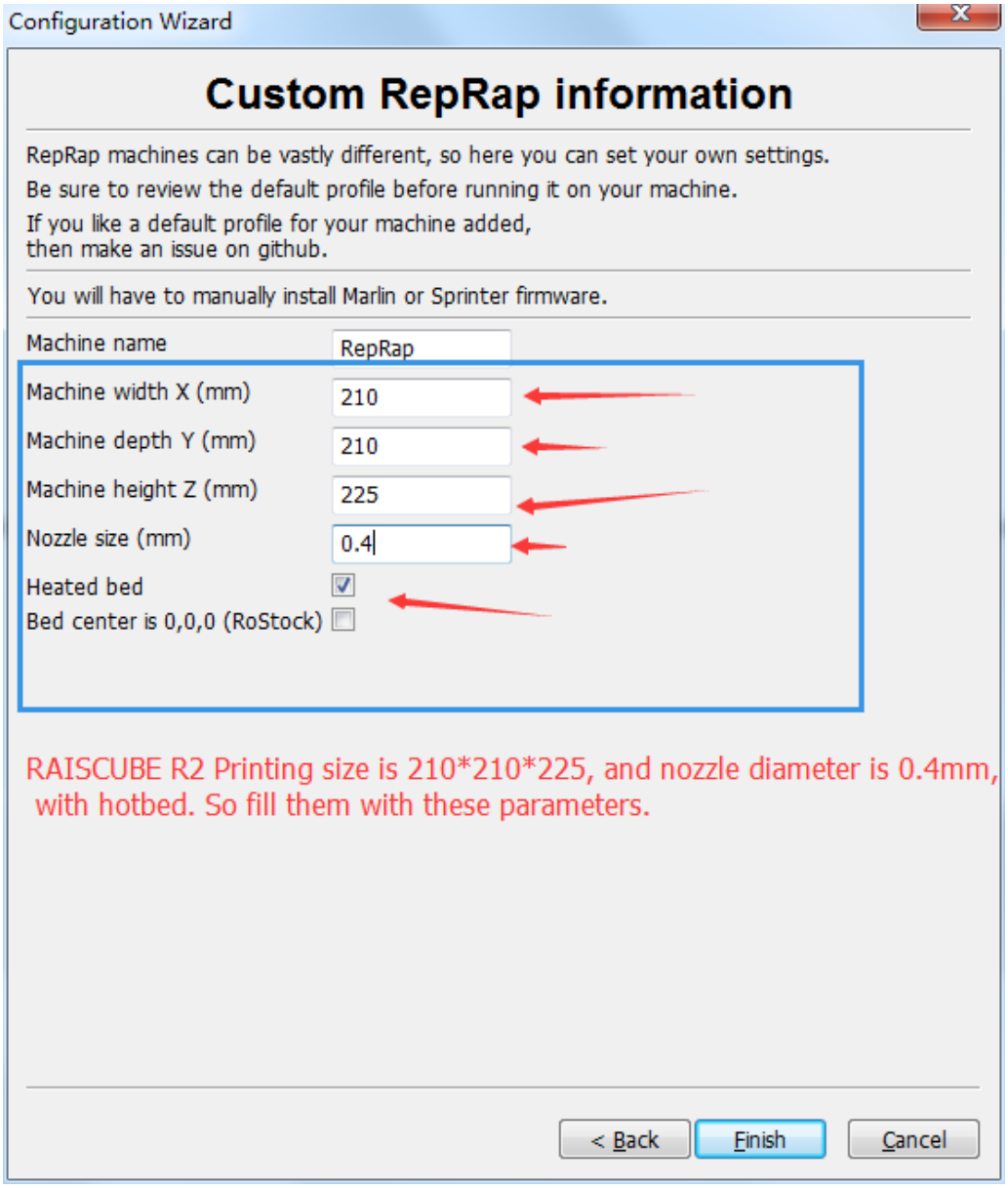



Device Driver Installation Wizard
Welcome to the Device Driver Installation Wizard!
This wizard helps you install the software drivers that some computers devices need in order to work.
To continue, click Next.
< 上一步(B)
下一步(N) >
取消
Cura 15.04.6 Setup
Installation Complete
Setup was completed successfully.
Completed
Show details
Nullsoft Install System v2.46
< Back
Next >
Cancel
Cura 15.04.6 Setup
Completing the Cura 15.04.6 Setup Wizard
Cura 15.04.6 has been installed on your computer.
Click Finish to close this wizard.
Start Cura 15.04.6
< Back
Finish
Cancel


Configuration Wizard
First time run wizard
Welcome, and thanks for trying Cura!
This wizard will help you in setting up Cura for your machine.
Select your language:
English
< Back
Next >
Cancel

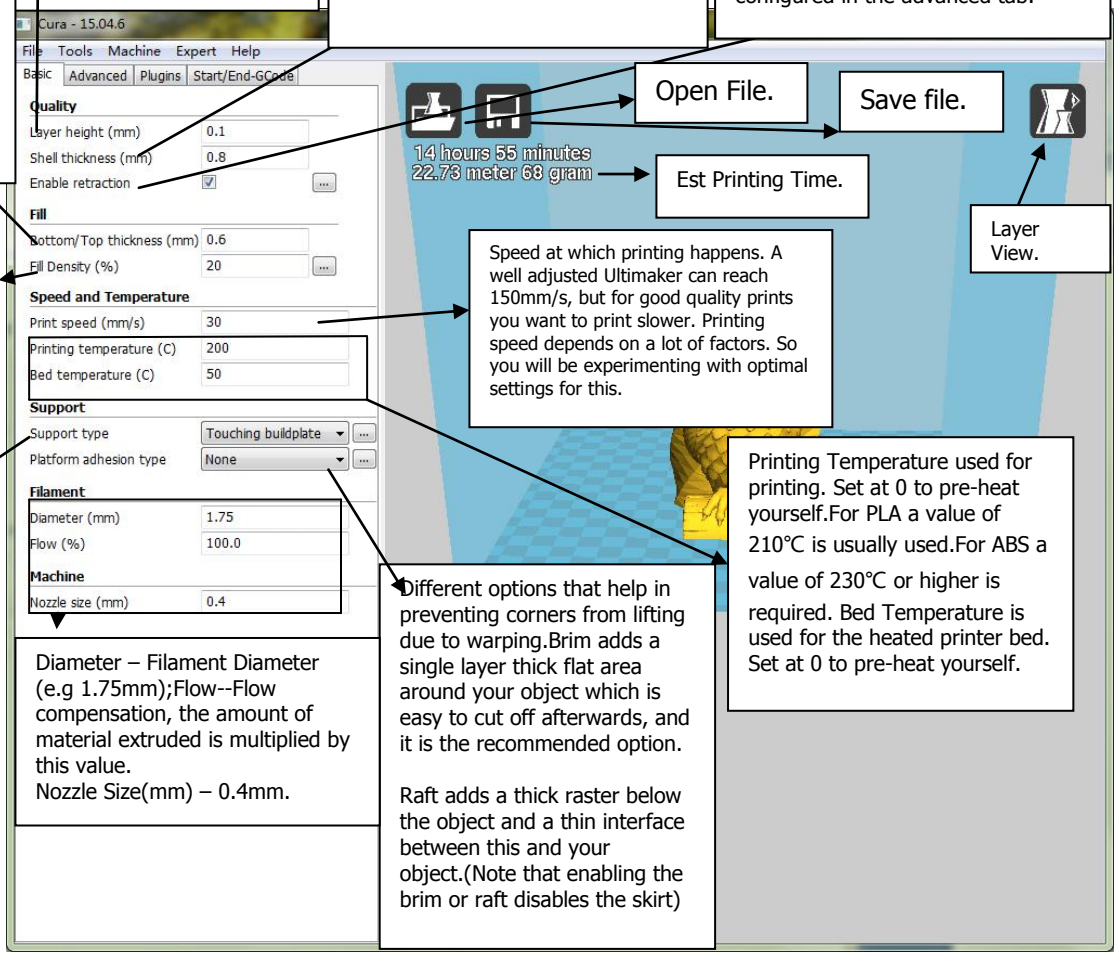

Configuration Wizard
Select your machine
What kind of machine do you have:
Ultimaker 2+
Ultimaker 2 Extended+
Ultimaker 2
Ultimaker 2 Extended
Ultimaker 2 Go
Ultimaker Original
Ultimaker Original+
Printrbot
Lulzbot TAZ
Lulzbot Mini
Other (Ex: RepRap, MakerBot, Witbox)
The collection of anonymous usage information helps with the continued improvement of Cura.
This does NOT submit your models online nor gathers any privacy related information.
Submit anonymous usage information:
For full details see: http://wiki.ultimaker.com/Cura:stats
< Back
Next >
Cancel

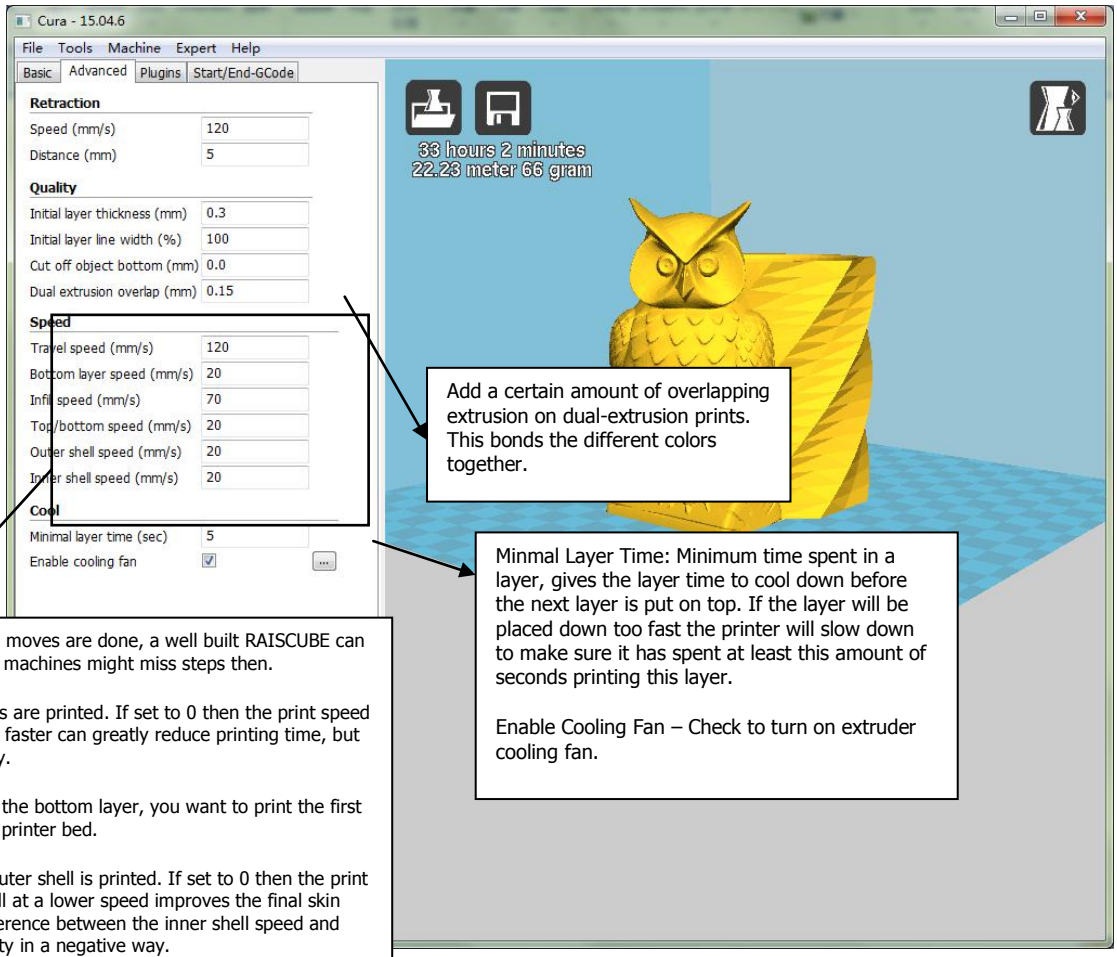

Configuration Wizard
Other machine information
The following pre-defined machine profiles are available
Note that these profiles are not guaranteed to give good results,
or work at all. Extra tweaks might be required.
If you find issues with the predefined profiles,
or want an extra profile.
Please report it at the github issue tracker.
BFB
DeltaBot
Hephestos
Hephestos_XL
Kupido
MakerBotReplicator
Mendel
Ord
Prusa Mendel i3
RIGID3D HOBBY
ROBO 3D R1
Rigid3D
Rigid3d_Zero
RigidBot
RigidBotBig
Witbox
Zone3d Printer
julia
punchtec Connect XL
rigid3d_3rdGen
Custom...
< Back
Next >
Cancel



Click “Finsh” after configure the parameters as in pix, then Cura is installed successfully and show up.

1.4 Cura 3D Printing Slicing Configuration.





Add a certain amount of overlapping extrusion on dual-extrusion prints. This bonds the different colors together.

Minmal Layer Time: Minimum time spent in a layer, gives the layer time to cool down before the next layer is put on top. If the layer will be placed down too fast the printer will slow down to make sure it has spent at least this amount of seconds printing this layer.

Enable Cooling Fan – Check to turn on extruder cooling fan.

TravelSpeed -- Speed at which travel moves are done, a well built RAISCUBE can reach speeds of 250mm/s. But some machines might miss steps then.

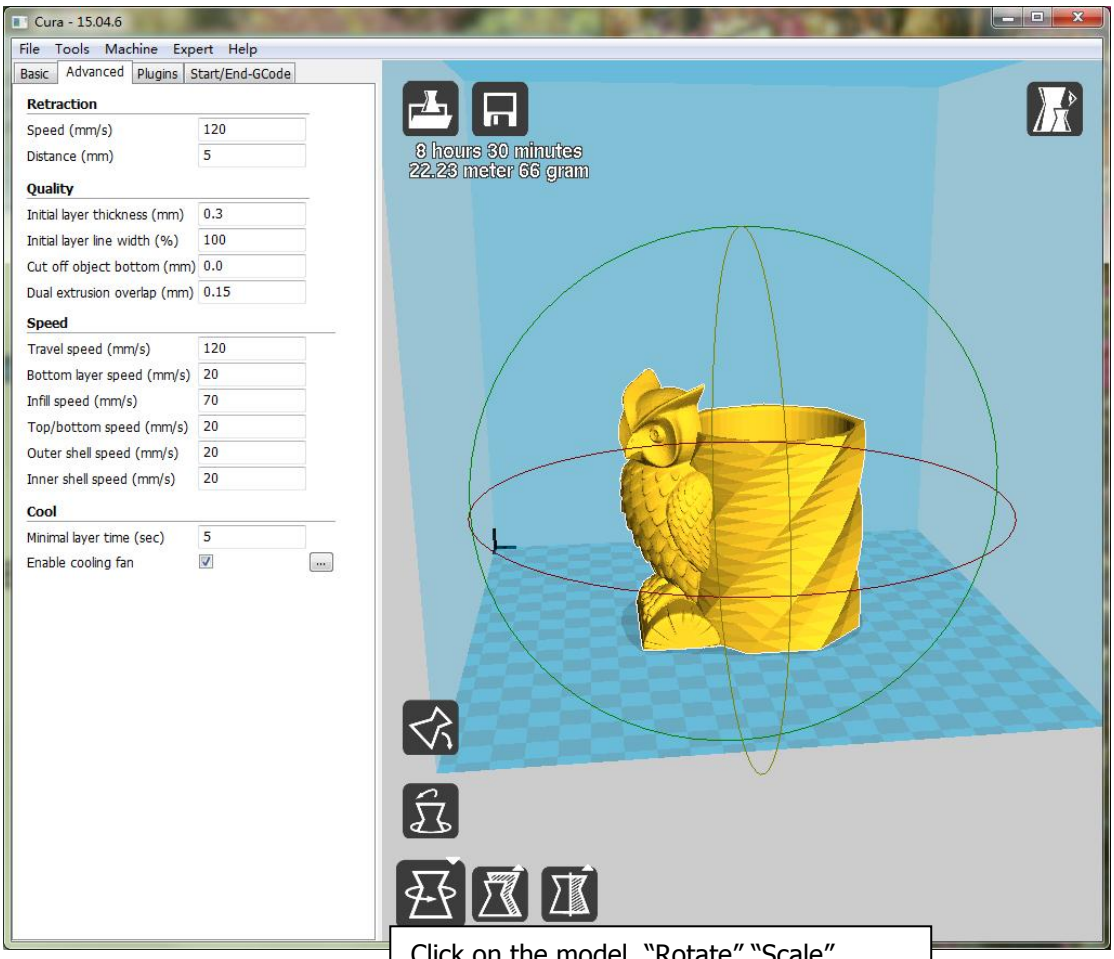
InfillSpeed: Speed at which infill parts are printed. If set to 0 then the print speed is used for the infill. Printing the infill faster can greatly reduce printing time, but this can negatively affect print quality.

Bottom Layer Speed: Print speed for the bottom layer, you want to print the first layer slower so it sticks better to the printer bed.

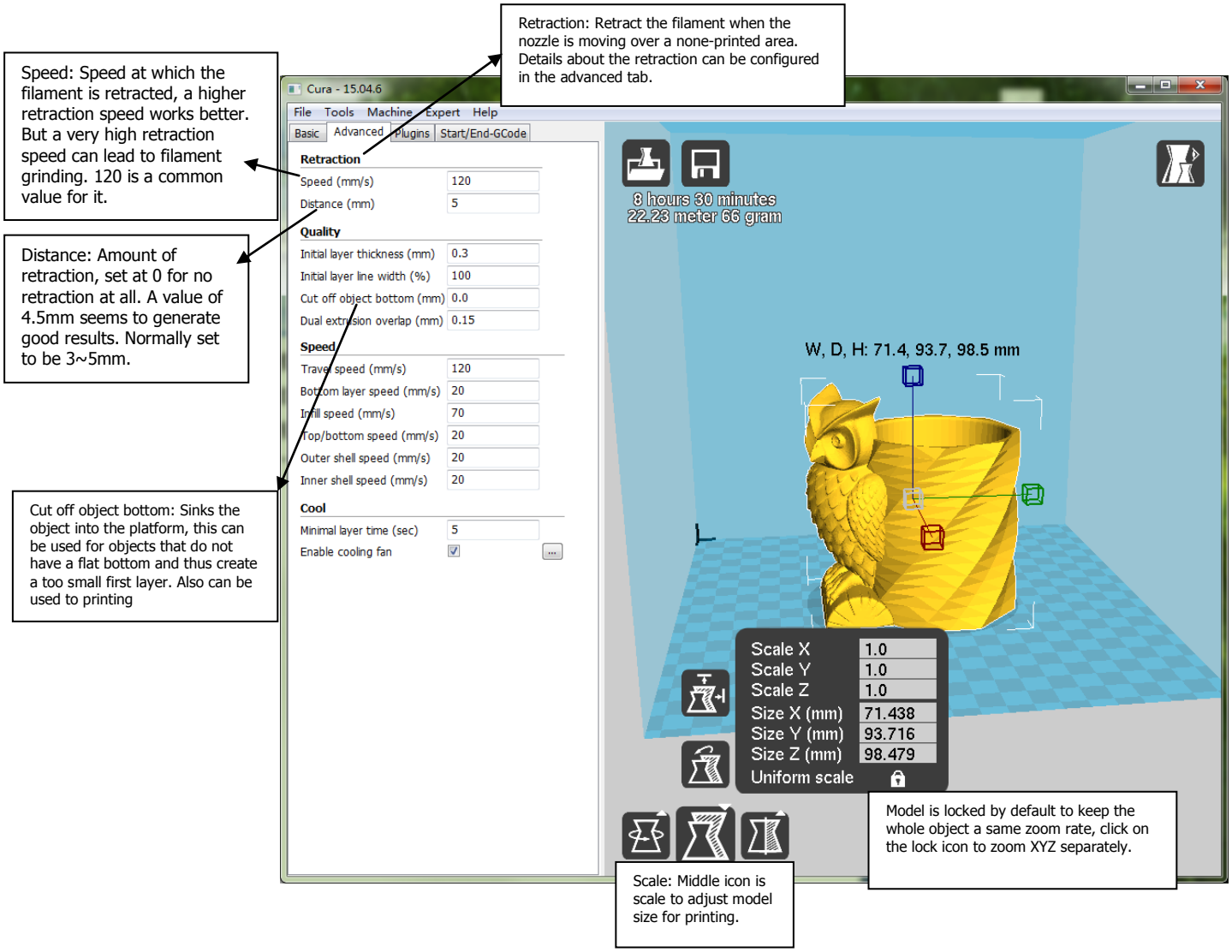
Outer Shell Speed: Speed at which outer shell is printed. If set to 0 then the print speed is used. Printing the outer shell at a lower speed improves the final skin quality. However, having a large difference between the inner shell speed and the outer shell speed will effect quality in a negative way.

Inner Shell Speed: Speed at which inner shells are printed. If set to 0 then the print speed is used. Printing the inner shell faster then the outer shell will reduce printing time. It is good to set this somewhere in between the outer shell speed and the infill/printing speed.

“Rotate” “Scale” “Mirror”



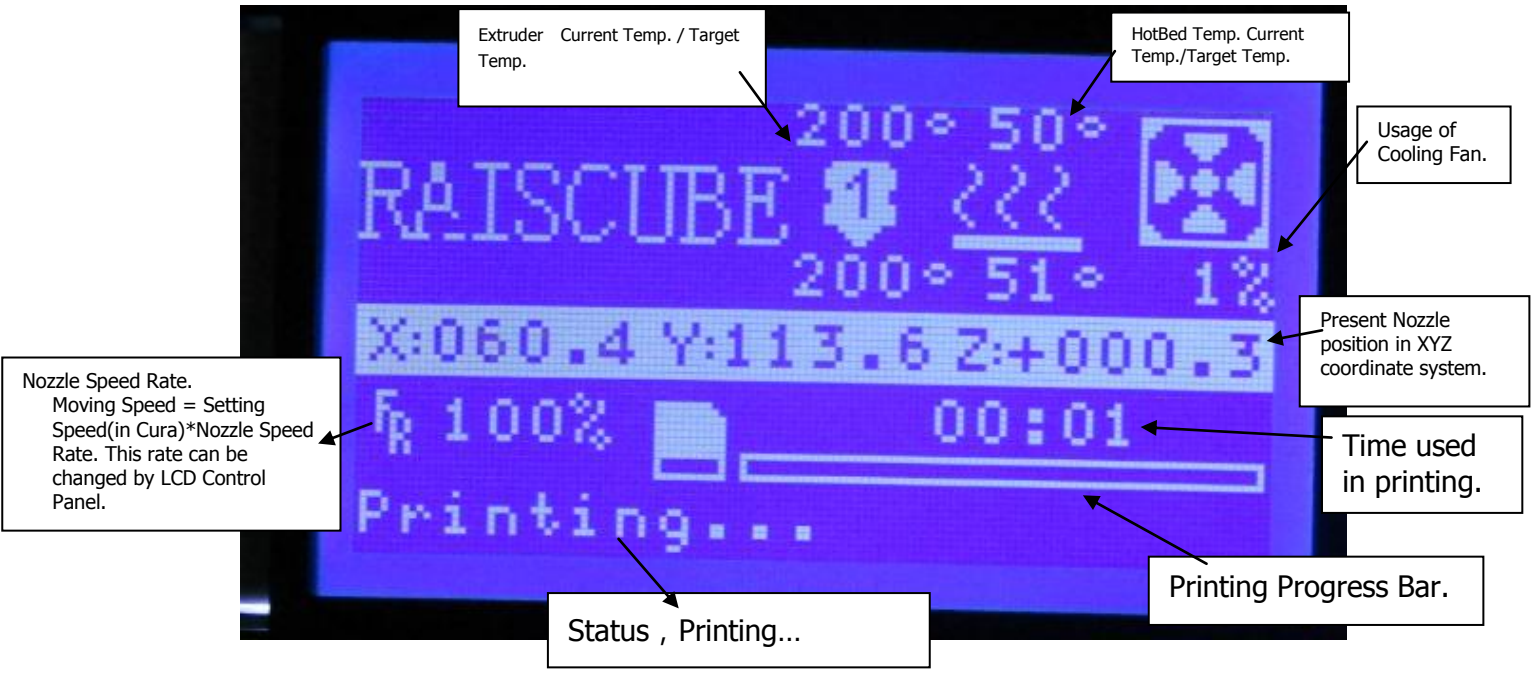
Click on the model, “Rotate” “Scale” “Mirror” 3 buttons appear on left bottom coner.



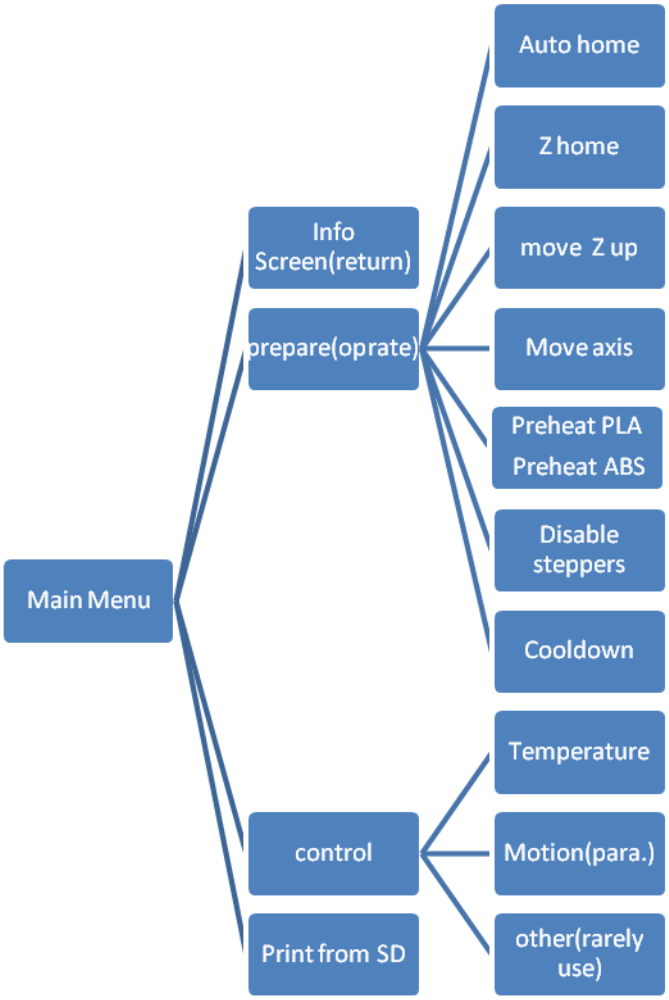
After Configuration of Parameters, remember to save files to SD Card. Pleaes note to name file in English, or will fail to printing.

4. LCD Control Panel Menu

4.1 Screen Display Explanation.



4.2 Menu Map


Main Menu
Info Screen(return)
prepare(oprate)
control
Print from SD
Auto home
Z home
move Z up
Move axis
Preheat PLA
Preheat ABS
Disable steppers
Cooldown
Temperature
Motion(para.)
other(rarely use)