

## Ultimaker 2.0 Links and information

This is the link to the User Manual: <https://ultimaker.com/en/resources/157-unboxing>

Along the righthand side you will see the following:

1. Get Started
  - a. Unboxing: <https://ultimaker.com/en/resources/157-unboxing>
  - b. Installation
  - c. Calibration
  - d. Loading Filament
  - e. Printing
2. The basics
  - a. Changing filament: <https://ultimaker.com/en/resources/16955-changing-filament>
  - b. Bed leveling: <https://ultimaker.com/en/resources/17083-bed-leveling>
    - i. This is useful to do if you notice that the nozzle isn't laying down the filament evenly (in the z-direction)
  - c. Using glue: <https://ultimaker.com/en/resources/16968-using-glue>
    - i. This is a trick to use with ABS filament (my team did not study the effects glue has)
  - d. CURA and firmware: <https://ultimaker.com/en/resources/148-cura-and-firmware>
    - i. Can link to download page for CURA and gives basic information about the program
  - e. Display and Controller: <https://ultimaker.com/en/resources/147-display-and-controller>
    - i. The display on the printer is pretty self-explanatory, but this page has some basic information about it
3. Maintenance
  - a. Cleaning the glass plate: <https://ultimaker.com/en/resources/152-cleaning-the-glass-plate>
    - i. If there are a lot of particulates, dust, glue, or fingerprints on the glass plate, you may want to remove it to clean.
    - ii. I had to do this about once a semester
  - b. The feeder: <https://ultimaker.com/en/resources/151-the-feeder>
    - i. This link comes in handy when the printer jams and the feeder needs to be cleaned out from any grinded filament
  - c. Lubricating the axes: <https://ultimaker.com/en/resources/150-lubricating-the-axes>
    - i. There is a yellow bottle of sewing machine oil for the X/Y axis and a tube of green grease for the Z axis by the printer
    - ii. If you notice that the printhead is not moving smoothly it may need oil
  - d. Atomic method: <https://ultimaker.com/en/resources/149-atomic-method>
    - i. This is the most effective way I have found to cleaning out the nozzle
4. Troubleshooting
  - a. Extrusion problems: <https://ultimaker.com/en/resources/11704-extrusion-problems>
    - i. It could be the feeder, the nozzle, or the PTFE coupler
    - ii. I have had to change the PTFE coupler about once a semester:  
<https://ultimaker.com/en/resources/250-disassembly>

The company that we order filament and parts from: <http://fbr8.com/>

\*\*If you have any other questions or issues with the printer, I highly recommend just Googling the problem. They have a great open source community.