HOW TO USE THE PRUSA 3D PRINTER

Prepare the printing software…

1. Turn on the printer.

2. Start the PrusaSlicer program on the desktop (in the 3D Lab/Prusa folder).

Choose filament loading method...

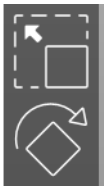
1. Choose “Prusa i3 MK3S (Manual load, Single color object) from the Printer list on the right.

Load object in program…

1. Click the Add button in the center toolbar, then locate the STL file that you want to print.

2. Click the STL file, then click [Open].

3. To rotate or resize object, right-click object, then click Rotate or Scale buttons on the left side of the screen.



4. Specify a print quality mode (Draft, Speed, Quality, UltraDetail) from the Print Settings list on the right. Smaller “mm” values print with more detail, but slower.

“0.20mm Speed MK3” is recommended; other modes print slowly. Choose “0.30mm Draft” for best speed.

5. If supports are needed, choose “Everywhere” from the Supports list on the right.

Change filament (if you want a different color)…

1. On the orange panel on the printer, push the knob to display the menu.

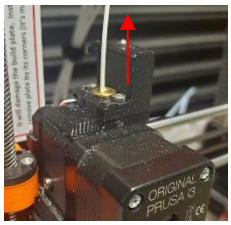
2. Turn the knob to highlight “Preheat”, then push the knob to select. Choose “ABS” from the list.

3. Wait for the nozzle to reach 255 degrees.

4. Choose “Settings > Move axis > Extruder” from the printer panel.

5. Turn the knob <u>counter-clockwise</u> to negative 75 to fully unload the filament

6. Gently pull the filament from top of extruder.



To load different filament…

1. Locate a spool with a “Prusa” label on it. **Do <u>not</u> use a spool that does not have this label!**

2. Place the spool on the top spool holder.

3. Choose “Preheat > ABS” from the printer control panel, then push the knob to select. Wait for the nozzle to reach 255 degrees.

4. Trim filament with scissors so that it has a sharp edge.

5. Choose “Settings > Move axis > Extruder” from the printer panel.

6. Turn the knob <u>clockwise</u> to “0”.

7. Insert filament into hole at top of extruder until the motor grips & pulls it in slowly by itself.

8. When filament stops extruding from the nozzle, choose “Yes” on the panel to confirm that the filament has loaded.

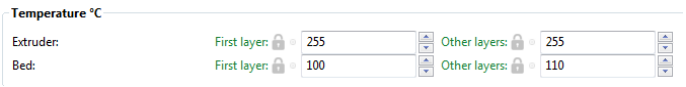
flip over →

Change filament settings…

1. On the filament spool's label, note the Material Type, Printing Temp, and Build Plate Temp.

2. In PrusaSlicer, choose the correct material type from the Filament drop-down list(s) on the right. (usually "Generic ABS" or "Makerbot ABS").

3. On the [Filament Settings] tab at the top, choose the filament type from Step 2 from the down-down list below the tabs. Enter the spool's Printing Temperature in the Extruder: "First layer" and "Other layers" fields and Build Plate Temperature in both "Bed" fields.

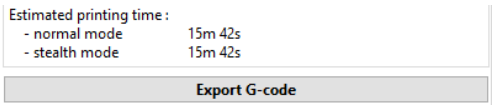


4. if the filament spool's label states it, choose "Enable Cooling > "Keep fan always on" on the left side of the screen

Start printing…

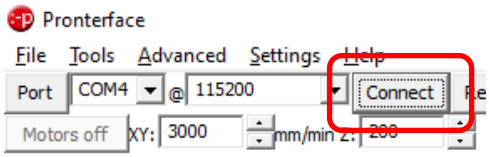
1. To ensure that your object sticks to the build plate, clean the plate with rubbing alcohol and a rag. **Do not use glue stick with this printer.**

2. Click the [Plater] tab at the top, then [Export G-code] at the bottom. Save the g-code file as prompted to a flash drive, 3D Lab drive, desktop hard drive, etc.



3. On the computer's desktop, run the "Pronterface" program on the computer's desktop (in the 3D Lab > Prusa folder).

4. Click the [Connect] button in the toolbar at the top.



5. Click the [Load file] button at the top, then choose the g-code file that you saved in Step 2 above.

6. Click the [Print] button to start the printing process.

7. On the printer control panel, if you see the message: "G-code sliced for a different printer type. Continue?", press the orange knob.

8. The printer begins heating the build plate and nozzle. When they are fully heated, printing will begin.

After printing…

1. **Do not use a scraper nor knife to remove your part!** These will damage the build plate.

2. Wait until bed cools to room temperature. **This is important!**

3. The build plate is magnetic and removable. Lift its edges to remove.

4. **Gently** flex the plate and your part will pop-off.

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