

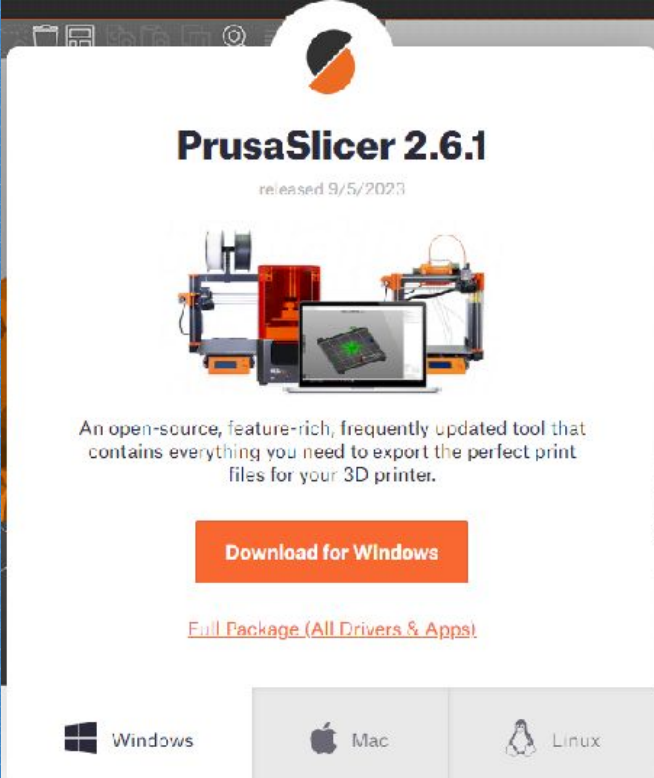
Welcome to Prusa Slicer

By: JT Raymond

Oct. '23

1) you'll need to download the Prusa Slicer

- URL:
<https://www.prusa3d.com/page/prusaslicer-424/>
- Download whichever version aligns with your OS.
- Throughout this tutorial, I'll be using the Windows version.



PrusaSlicer 2.6.1
released 9/5/2023

An open-source, feature-rich, frequently updated tool that contains everything you need to export the perfect print files for your 3D printer.

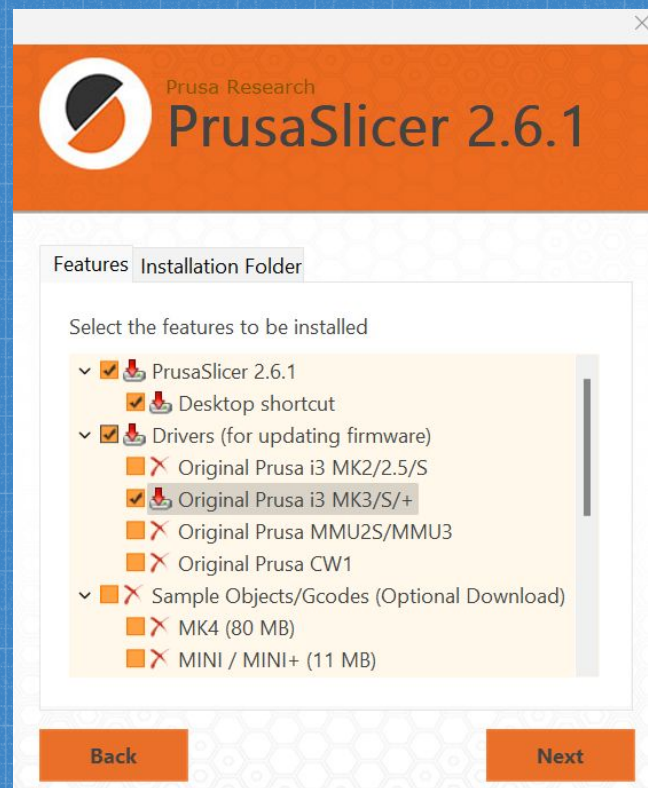
[Download for Windows](#)

[Full Package \(All Drivers & Apps\)](#)

Windows Mac Linux

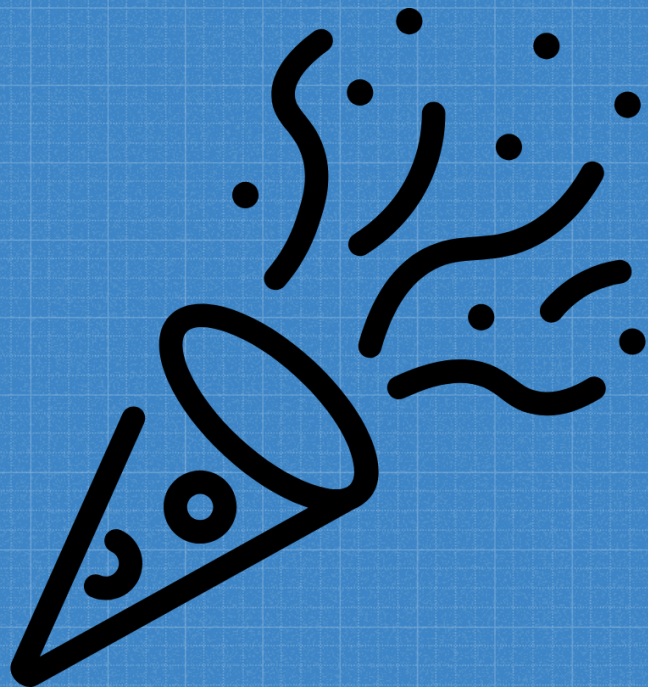
2) Installation Settings

- You will be prompted with this screen.
- Select only the boxes that I do, as we will not be using the other drivers.
- Our printers are Prusa i3 MK3S+, so I selected that box.



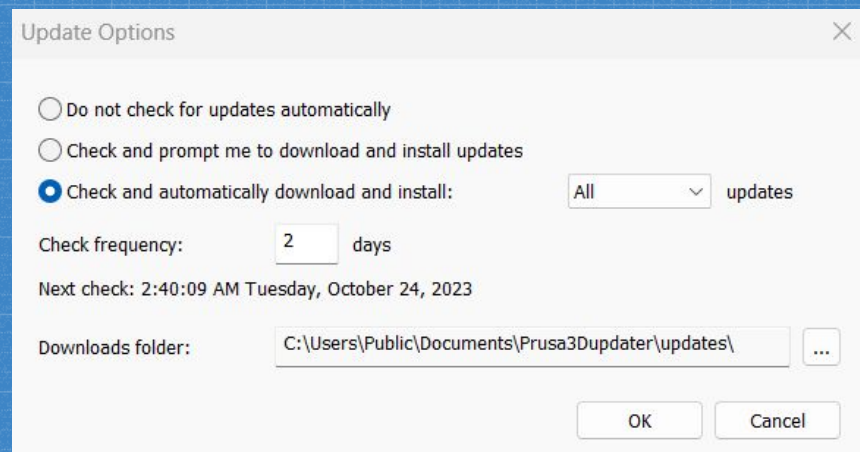
3) Finalizing Installation

- Follow all of the remaining steps to install the Prusa Slicer.
- Finally, click "finish."
- Congrats! You've downloaded the Prusa Slicer!



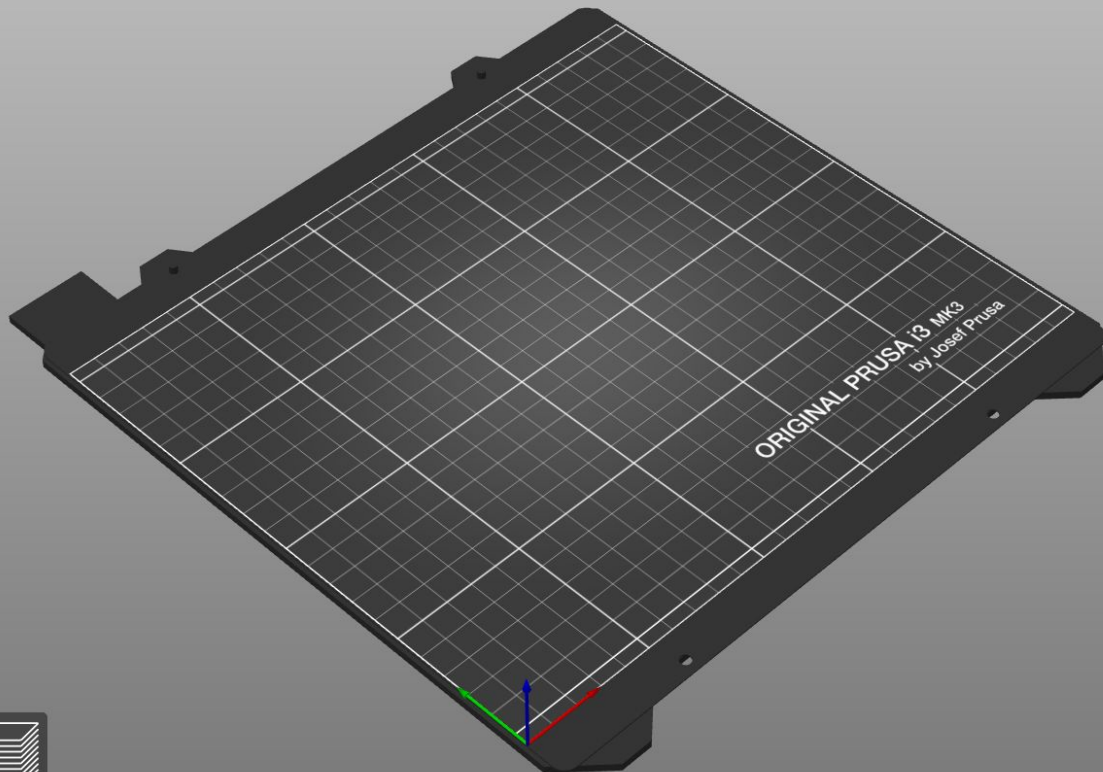
4) Automatic Updates Setup

- When you open the “Configure Automatic Updates” program for the first time, you’ll be met with this screen.
- You shouldn’t have to change anything, but try to match mine.
- Click OK and exit the program.



5) Welcome to the Prusa Slicer!

- When you first open the slicer, you will be met with the following screen.
- It is important to familiarize yourself with the basics.
- For basic prints (almost all), you will stay between the "Plater" and the "Print Settings" menus (Top Left).
- The "Plater" will let you adjust you file orientation, scale, slice, and rotate features (You are on this now).



Print settings:

0.05mm ULTRADETAIL

Filament: Prusa PLA

Printer: Original Prusa i3 MK3S & MK3S+

Supports: None

Infill: 15% Brim:

| Name | Editing |
|------|---------|
|------|---------|

Slice now

6) Print Settings Menu Basics

- The "Print Settings" menu will look different.
- It will be confusing if you don't already know what you're doing.
- If you follow these steps, you won't need to vary too far from the basics to see success.
- The following few slides will show the basic print settings that you will need to know.

****PLEASE NOTE**** you will have to set these again for EVERY print you do in a new session.

0.05mm ULTRADETAIL @MK3

Layers and perimeters

- Infill
- Skirt and brim
- Support material
- Speed
- Multiple Extruders
- Advanced
- Output options
- Notes
- Dependencies

Layer height

- Layer height: mm
- First layer height: mm

Vertical shells

- Perimeters: (minimum)
- Spiral vase:

Recommended object thin wall thickness for layer height 0.05 and 2 lines: 0.89 mm , 4 lines: 1.77 mm , 6 lines: 2.65 mm

Horizontal shells

- Solid layers: Top: Bottom:
- Minimum shell thickness: Top: mm Bottom: mm

Top shell is 0.7 mm thick for layer height 0.05 mm.
Bottom shell is 0.5 mm thick for layer height 0.05 mm.

Quality (slower slicing)

- Extra perimeters if needed:
- Extra perimeters on overhangs (Experimental):
- Avoid crossing curled overhangs (Experimental):
- Avoid crossing perimeters:
- Avoid crossing perimeters - Max detour length: mm or % (zero to disable)
- Detect thin walls:
- Thick bridges:
- Detect bridging perimeters:

Layers and perimeters

- Infill
- Skirt and brim
- Support material
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Infill

- Fill density: 10% %
- Fill pattern: Gyroid
- Length of the infill anchor: 2.5 mm or %
- Maximum length of the infill anchor: 12 mm or %
- Top fill pattern: Monotonic Lines
- Bottom fill pattern: Monotonic

Ironing

- Enable ironing:
- Ironing Type: All top surfaces
- Flow rate: 15 %
- Spacing between ironing passes: 0.1 mm

Reducing printing time

- Combine infill every: 1 layers

Advanced

- Solid infill every: 0 layers
- Fill angle: 45 °
- Solid infill threshold area: 0 mm²
- Bridging angle: 0 °
- Only retract when crossing perimeters:
- Infill before perimeters:

0.05mm ULTRADETAIL @MK3 (modified)

Layers and perimeters

Infill

Skirt and brim

Support material

Speed

Multiple Extruders

Advanced

Output options

Notes

Dependencies

Skirt

- Loops (minimum): 1
- Distance from brim/object: 2 mm
- Skirt height: 3 layers
- Draft shield: Disabled
- Minimal filament extrusion length: 4 mm

Brim

- Brim type: Outer brim only
- Brim width: 0 mm
- Brim separation gap: 0.1 mm

File Edit Window View Configuration Help

Plater Print Settings Filament Settings Printer Settings

0.05mm ULTRADETAIL @MK3 (modified)

Layers and perimeters

- Infill
- Skirt and brim
- Support material
- Speed
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- Advanced
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- Notes
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Support material

- Generate support material:
- Auto generated supports:
- Overhang threshold: 50 °
- Enforce support for the first: 0 layers
- First layer density: 90 %
- First layer expansion: 3 mm

Raft

- Raft layers: 0 layers
- Raft contact Z distance: 0.1 mm
- Raft expansion: 1.5 mm

Options for support material and raft

- Style: Grid
- Top contact Z distance: 0.1 (detachable) mm
- Bottom contact Z distance: Same as top mm
- Pattern: Rectilinear
- With sheath around the support:
- Pattern spacing: 4 mm
- Pattern angle: 0 °
- Closing radius: 2 mm
- Top interface layers: 2 (default) layers
- Bottom interface layers: 0 (off) layers
- Interface pattern: Rectilinear
- Interface pattern spacing: 0.2 mm
- Interface loops:
- Support on build plate only:

Support on build plate only:

XY separation between an object and its support: mm or %

Don't support bridges:

Synchronize with object layers:

Organic supports

Maximum Branch Angle: °

Preferred Branch Angle: °

Branch Diameter: mm

Branch Diameter Angle: °

Branch Diameter with double walls: mm

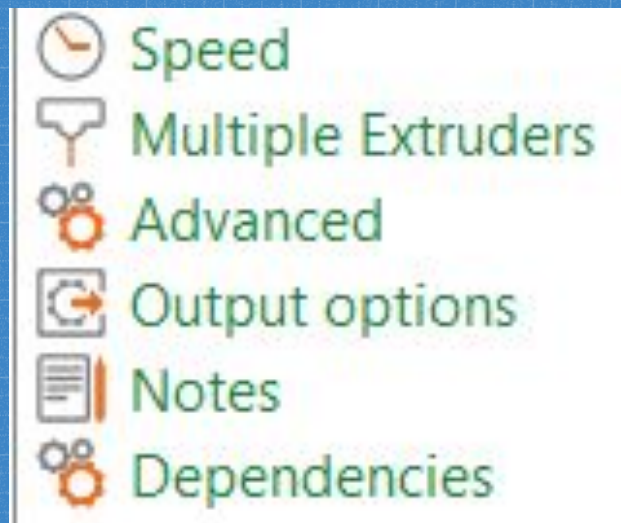
Tip Diameter: mm

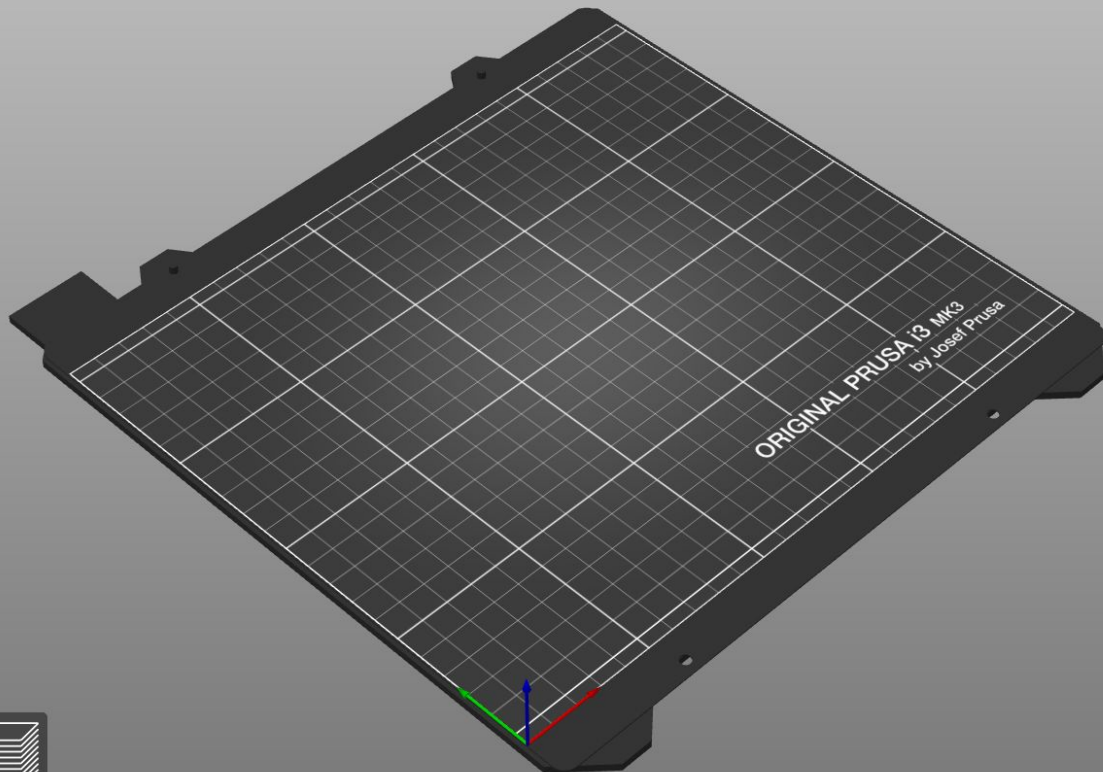
Branch Distance:

Branch Density: %

5) Prusa Slicer Basics Follow-Up

- For the remainder of the sub-menu settings, you won't have to change anything to see successful prints.





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Slice now

7) Plater Menu Basics

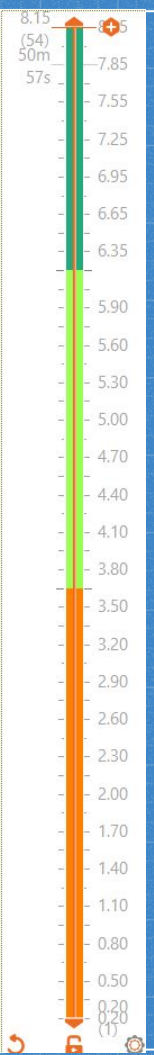
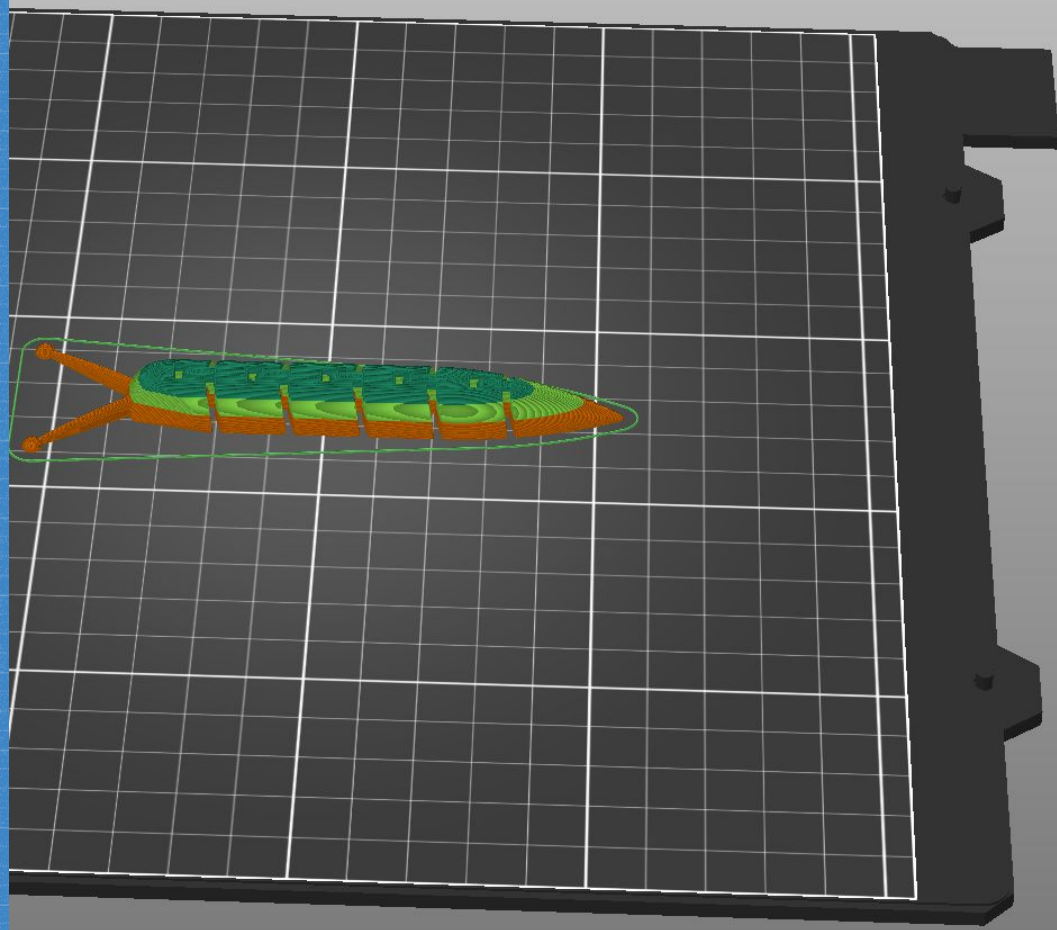
- When you want to add an STL file into the slicer, you will select the "cube with a plus" icon.



- After clicking that, you will be greeted by your computer's file browser. From there, you need to select the file you'd like to print, then click "Open."
- All other options in the "Plater" menu are self-explanatory and can be used to organize and move objects.

Color Changes While Printing

- This should be rarely used, but may be fun to experiment with.
- While dragging through the layers, like normal, if you click the little "+," you will see a new color added into your sliced model. For example, you can see the 3 different colors on the slug.
- By doing this, your Prusa printer will automatically pause the print when it finishes a certain color, then ask you to manually remove and load new filament.
- This will occur as many times as you request a filament change.





Happy Printing! :)