

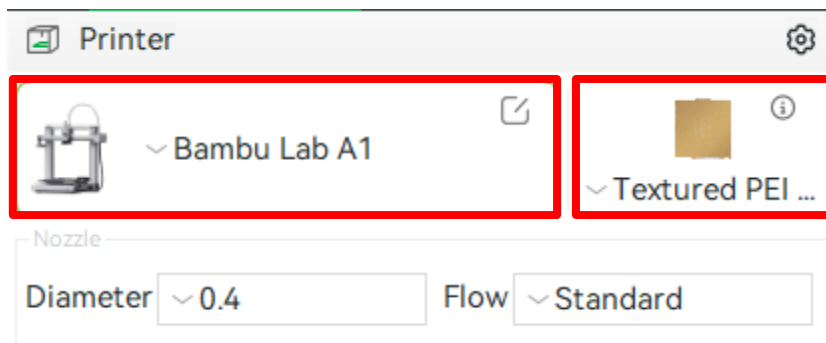
Bambu 3D Printing Guide

“I have a file and don’t know where to start”

1. Download your file onto the computer desktop.
2. Open **Bambu Studios**
3. Click on the **cube with a “+”** sign on it located in the top center tool bar,
4. Choose your file which can be an STL, 3MF, STEP or OBJ



5. **Arrange** and **Scale** your print as needed. For more details on the tools in the program, go to page 10 and 11!
6. In the upper right hand corner Select which Machine and type of plate you would like to use.



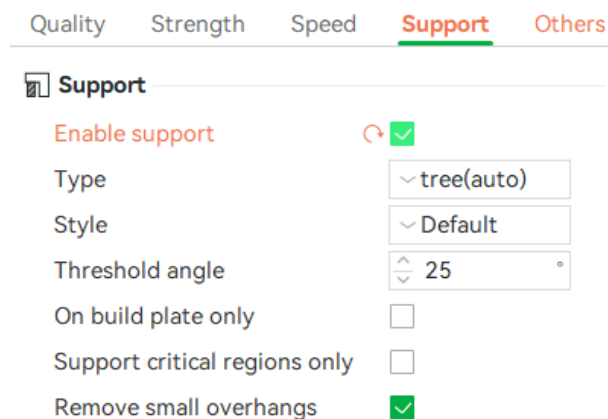
Note: We only have the textured plates or the Smooth PEI plates in the Makerspace.

Slicing your 3D Print

1. Once you are happy with the file arrangement, click the down arrow.
2. Click “Slice Plate” located in the top right of the screen.



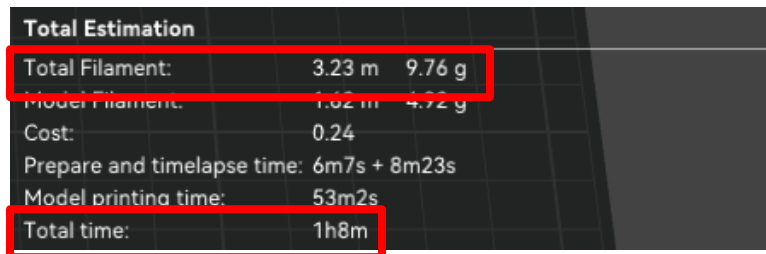
3. Make sure there are no warnings. The most common warning is a stability issue, which means your 3D Print needs supports.
 - a. If you feel unsure about what type of support you need, or if you have a different type of warning, ask a Makerspace Student Assistant.



Note: After making modifications to your file, you must click **Slice plate** again.

Filling out your Form

1. In the top right corner after slicing, take note of the print time and weight for the print.
2. Use this information to fill out your 3D Print form. Double check that the print time does not exceed our 3D printer hours.



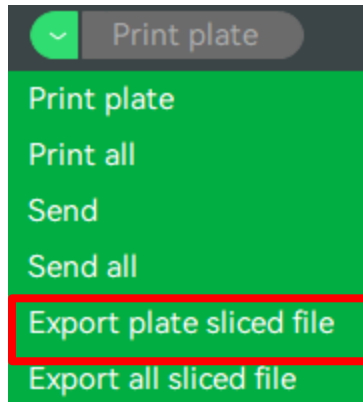
Total Estimation		
Total Filament:	3.23 m	9.76 g
Model Filament:	1.82 m	4.72 g
Cost:	0.24	
Prepare and timelapse time:	6m7s + 8m23s	
Model printing time:	53m2s	
Total time:	1h8m	

Selecting and weighing your spool of filament

1. Turn on the scale located by the window in the 3D Print Lab.
2. Place an empty spool on the scale to measure its weight.
3. Press **TARE** to reset the scale to zero.
4. Remove the empty spool and place your filament spool on the scale.
5. Check the displayed weight. This is the amount of filament left on the spool. Make sure it is greater than the required weight for your print.

Transferring your print to the 3D Printer

1. Select the **green arrow** at the top right corner of the tool bar and click it.
2. Select **Export plate sliced file**.
3. Click **Export plate sliced file**.

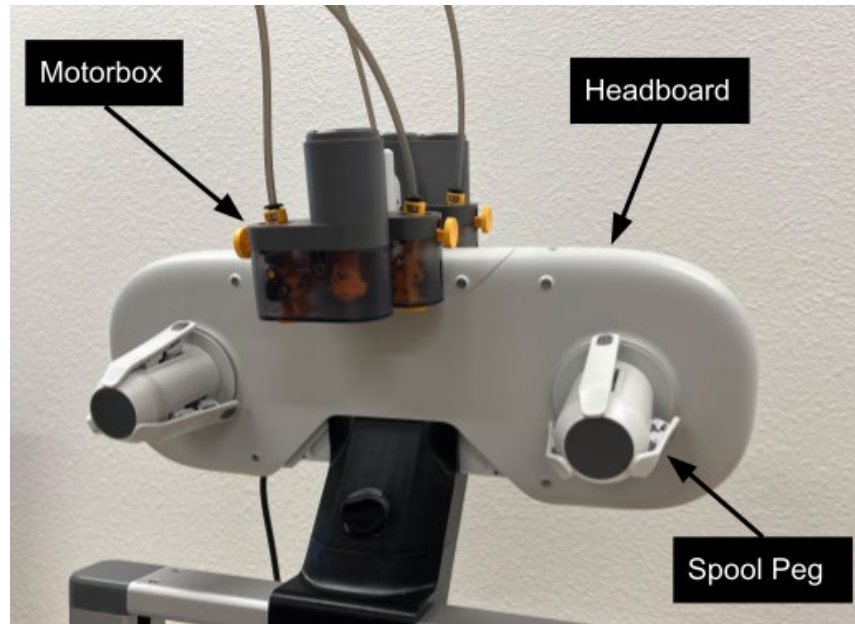


4. Select your USB drive and save your file there.
5. Safely Eject the USB Drive from the Computer
6. Take the USB with the SD Card to the appropriate Bambu Labs Printer.
7. If the machine is off locate the power switch on the back Left or Right of the printers.

Note: You can get a Micro SD Card and USB Adapter at the front desk.

How to load Filament into a Bambu A1

1. Use the touch screen and press *Filament*.
 - **If there is a spool already on the machine**, select it on the touch screen and press **Unload**.
 - When it's done, an **Unload Complete** message will pop up and take you back to the filament screen.
 - You can now remove the spool and pull the filament out of the motor box gently.



2. Take note of the spool peg numbers. These numbers are on the touch screen, physically on the top of the headboard, and on the top of the motor boxes.
3. Slide your spool onto one of the pegs. You want the loose end of filament to be on the **bottom** of the spool. The loose end of filament should also be on the side facing the middle of the 3D printer.



Note: be sure to slide the spool all the way against the headboard!

4. Lift the yellow thumb tab on the motor box that has the corresponding number to your spool peg. Holding this tab up will allow you to feed the filament into the yellow hole located at the bottom of the same motor box
5. A little motor will start to take the filament, that is normal! The touch screen should now show there is filament on the numbered slot you just put the spool on, tap the picture of your spool and tap **Load**.
6. The printer will take some time to extrude your filament. When it's done, a **Load Complete** message will pop up and it will take you back to the filament screen.
7. Go back to the main screen.
8. Select **Print Files**.
9. Start your print.

How to load Filament into a Bambu P1S

1. Use the down arrow key to select the tab that looks like a print head touching a plate.
2. Look to the back left side of the machine:
 - a. If filament is already in the machine and you would like to remove it
 - b. Click **Unload**
 - c. The machine will tell you when you can remove the spool from the back.
3. Place your spool onto the empty spool hook at the back of the machine.
 - a. Check if the loose end of the filament is coming off the **right side** of the spool.
 - b. Feed the loose end through the white straw, keep feeding until it cannot go in anymore.
4. Select **Load** on the screen for feed options.

5. Then, press the right arrow button to pick through the options under the tab.
 - a. Go down to **Feeding**
 - b. Once selected, press **OK** to look at feeding options
 - c. Select **Load**
6. Open the printer door and watch the nozzle to see if it extrudes plastic, the machine will let you select **Done** or **Retry** after a few moments.
 - a. If plastic was extruded
 - i. Click **Done**
 - ii. Let your print start
 - b. If plastic was not extruded
 - i. Click **Retry** until filament is extruded

How to load Filament into a Bambu X1C

1. Open the top lid of the **AMS Unit**



Note: If there is a spool already on the machine, gently pull it out. No button pressing required. Also, Tuck in the loose end of the filament into the holes on the spool (See Page 8)

2. Set your spool into an empty slot, the loose end of the filament should be coming towards you.
 - Take note of which slot it is in

3. Push the grey thumb tab away from you
4. Feed your filament into the hole while you push that thumb tab
 - The machine should start to whirl and eat the filament!



Proper Filament Spool Storage

When putting away a spool of filament, thread the Filament through the holes of the spool. This reduces tangle and breakage.



Want to learn more about 3D printing? Sign up for our 3D Printing Workshop on the University Libraries website!

Starting your Print on the 3D Printer

1. Insert the **microSD** at the bottom right of the touch screen.
2. Select your **File**

3. Click **Print**

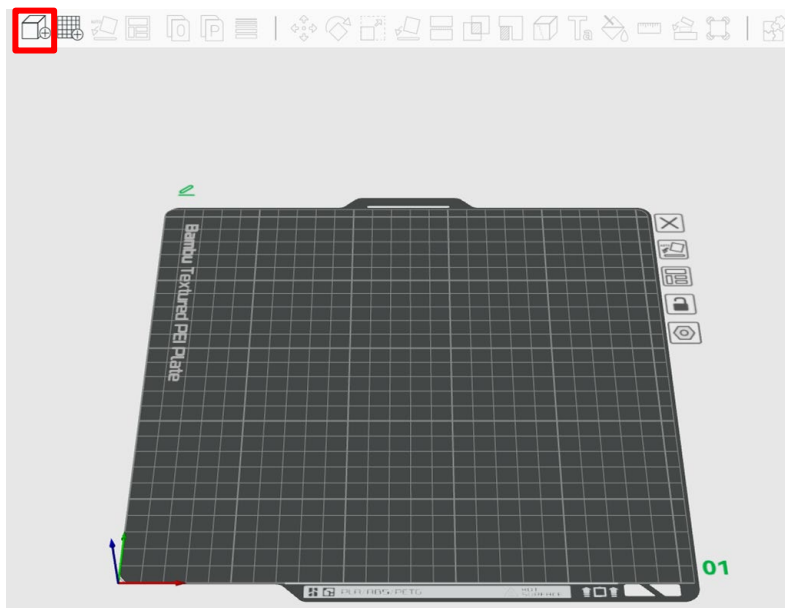
Note: We recommend you observe your print and make sure it begins printing. After a few minutes of calibration, you should see filament being piped out and sticking to the print bed. Many failed prints happens in the first 15 minutes!

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Bambu Studios Tool Guide

“I’m looking at the program but I am unsure what the tools mean”

1. You want to open the file you want to manipulate.
 - a. If there is no file in the program, the tools will be greyed out.
 - b. To add your file, hit the **Cube with the + sign**
 - c. Find your file on the computer.



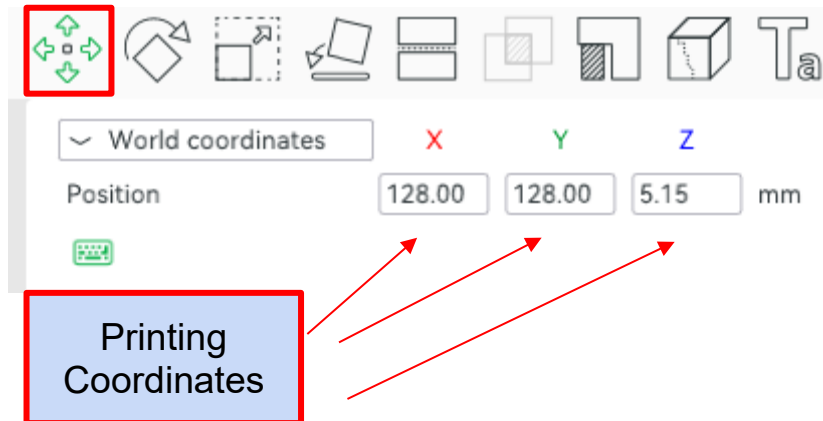
Tool Descriptions

Move Tool



The Move tool allows you to move a selected object on the build plate.

- Select the **Move tool** to display arrow handles on the model
- Drag an arrow handle to move the model along that axis
- You can also enter X,Y, and Z coordinates in the **Position fields** within the Object manipulation box

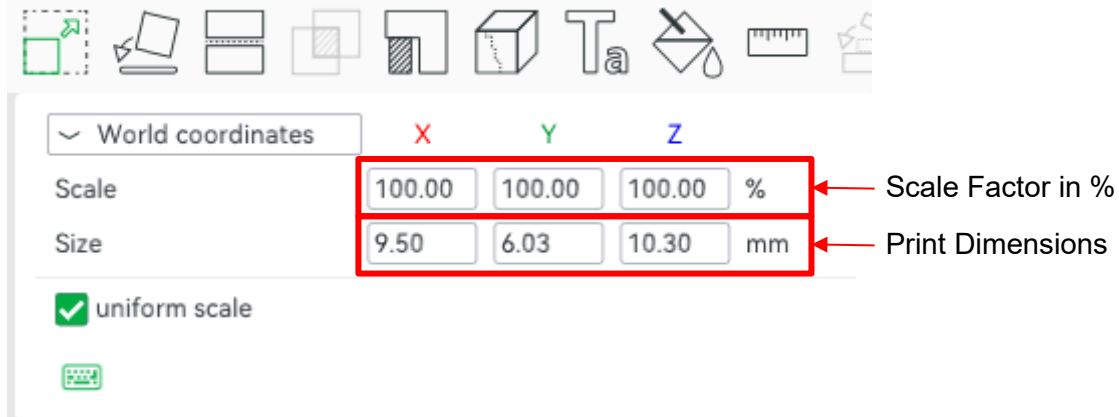


Scale tool

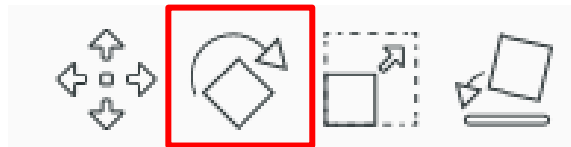


The Scale tool allows you to size your model as needed.

- Select the **Scale tool** to display scaling handles (cubes) on the model.
- Resize the model:
 - Drag a light blue corner cube to scale proportionally.
 - Drag a dark blue, green or red axis cube to scale along that axis only
- Enter exact values in the Scale factors panel or type target dimensions in the **Size fields**.
 - These fields appear in the model settings area of the interface.
- Below the scaling factors are the dimensions of the print once it is printed.

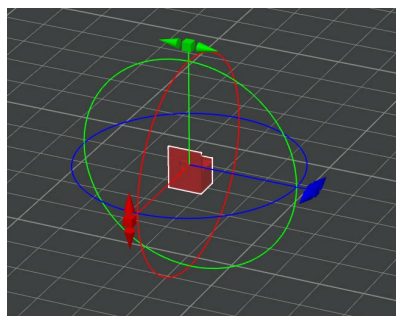


Rotate Tool



The Rotate tool allows you to change a models orientation on the build plate

- Select the **Rotate tool** to display circular rotation guides and cube handles around the model.
- Drag a cube handle along on of the rotation guides to rotate the model around that axis (X,Y, or Z).
- For precise adjustments, type rotation values in the rotation fields within the model settings area.
- To reset the model's orientation, use **Reset rotation** in the same panel.

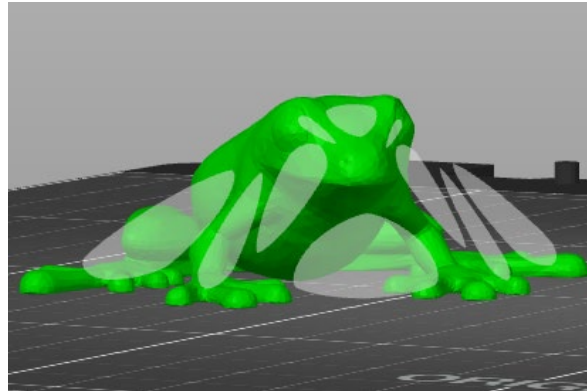
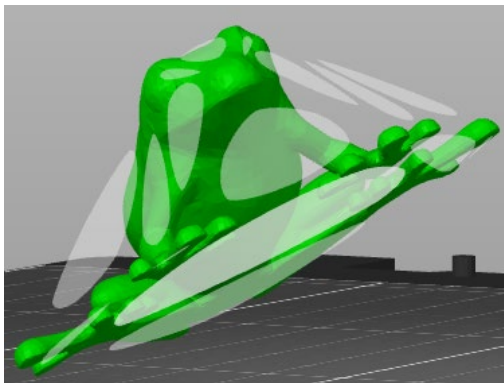


Lay on Face tool



The Lay on Face tool lets you choose which surface of your model rests on the print bed.

- Select the tool. A transparent circular highlight appears over the selectable surfaces.
- Click a highlighted face to set it as the bottom of the print.
- Use the flattest surface for best stability and bed adhesion.



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