

Phenom Quickstart Guide

Revision 1.02

Published April 9th 2020



Step 1

Remove Packaging

Phenom is heavy and it is recommended that you have at least one more person to help.

The simplest way to remove.

Find the top side of the external box like below



Step 1

Remove Packaging

Turn the box over so the bottom of the box face up.
And cut open the plastic tapes like this



The turn it over again so the top of box facing up with bottom opened. You can pull the box up to find internal box



Step 1

Remove Packaging

Open the internal with top of box facing up, open the box



When moving the Phenom, it is recommended for a 2 person lift. If you try and move it by yourself, please make sure the door is facing away from you as the UV acrylic shield could break with the weight if it the door is pressed against your chest while moving the printer.

Step 2

Find a place for Phenom

Place the Phenom on a level and sturdy surface. If you have a level, you can place it on the top of the printer to ensure the printer is sitting level.



Keep in mind that the printer is large, (45.2 X 36.4 X 78cm / 17.8 x 14.3 x 30.7 inches) and is heavy (45kg / 99.2 pounds). Please make sure the area you put the printer on can support the weight and provide enough space for proper ventilation for the printer.

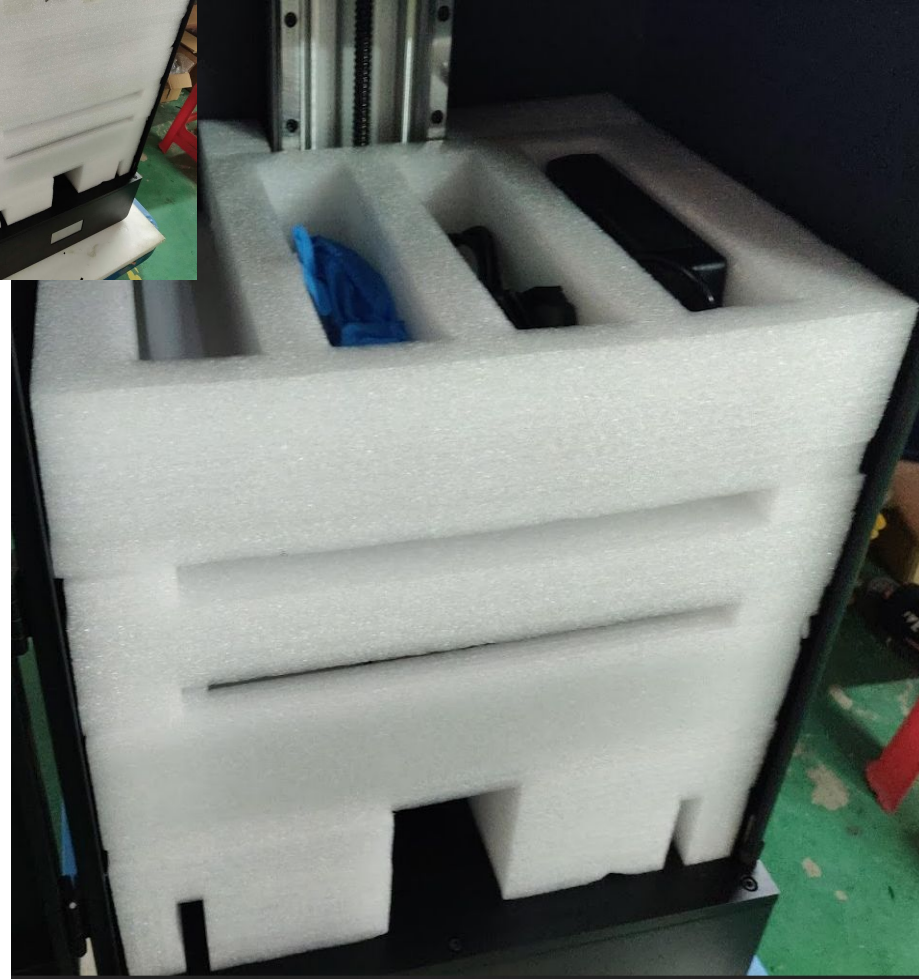
Also consider that you will need a washing and curing station near the printer when planning out your set up.

Step 3

Open The front door of Phenom and remove the foam inserts in the printer. **There are accessories in the foam protectors.**

The items from top to bottom are:

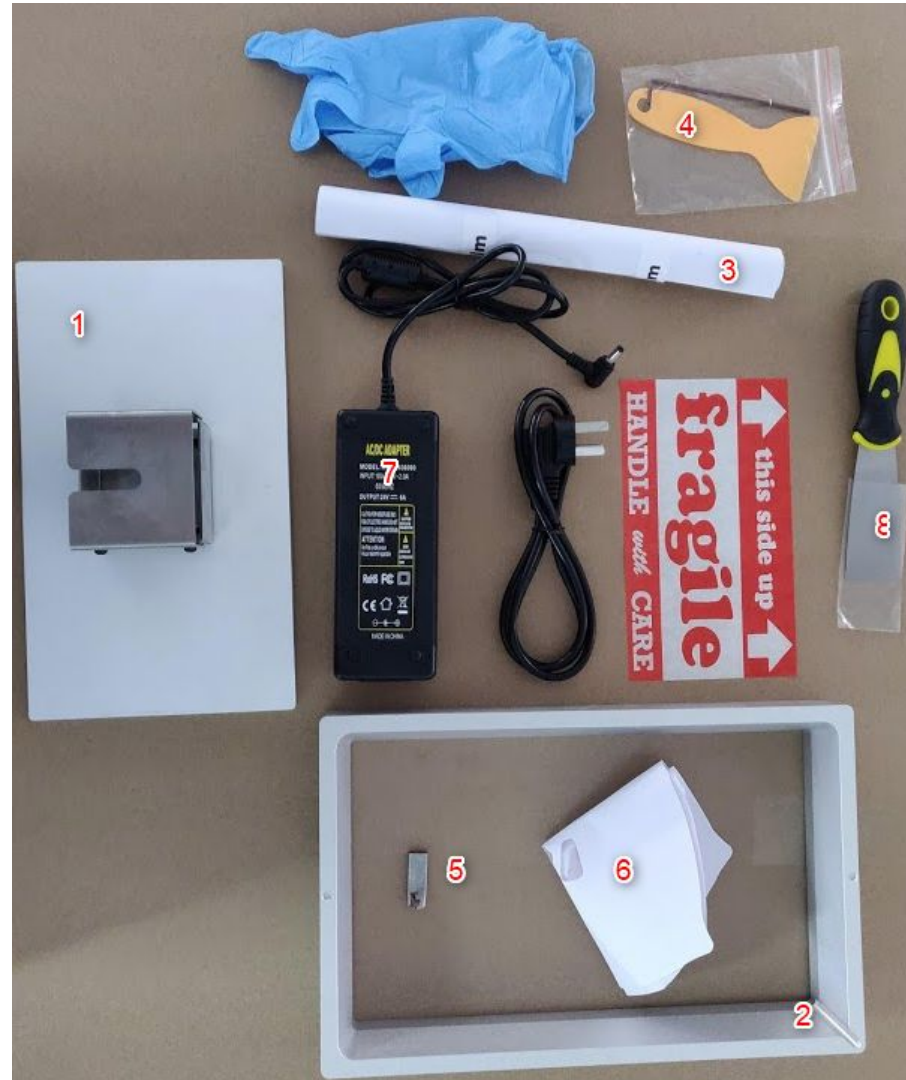
- LCD Panel (if purchased additionally)
- Vat
- Accessories
- Build Plate



Step 4

Identify the following items and place them off to the side:

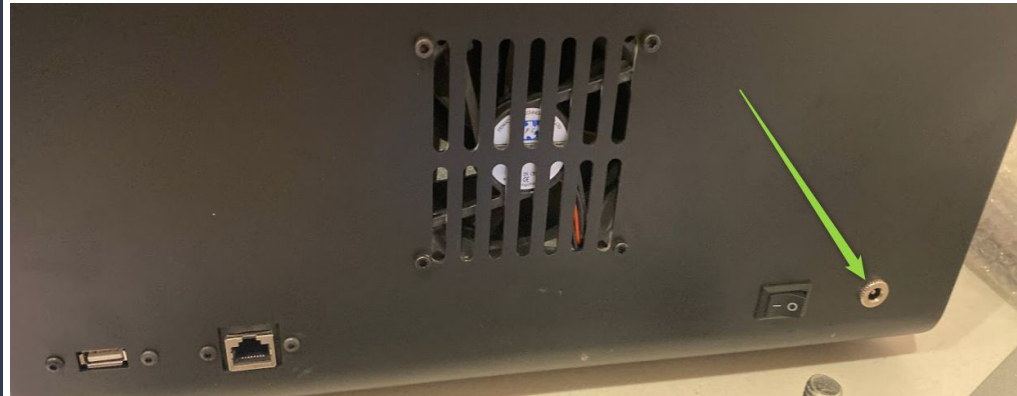
- 1). Build Plate
- 2). Vat
- 3). Extra FEP film
- 4). Tools
- 5). USB stick
- 6). Funnels
- 7). Power supply
- 8). Spatula



Step 5

Make sure the power cord is a 3 prong / grounded power cord.

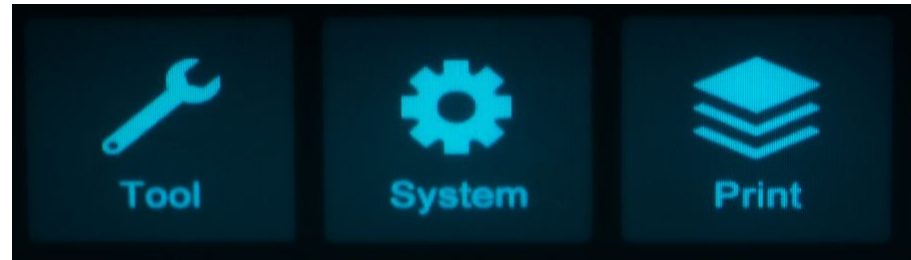
Connect the power pack to the Phenom and to a outlet



Step 6

Power on the Phenom and boot up the printer.

You should see the Peopoly logo and then the main control screen.



Step 7

From the touch screen, raise the build plate up high enough so the vat can be inserted.

This can be done by pressing the wrench (tool) (1).

Then manual (2).

Select the amount of movement in millimeters you want to use.

Then the up arrow.

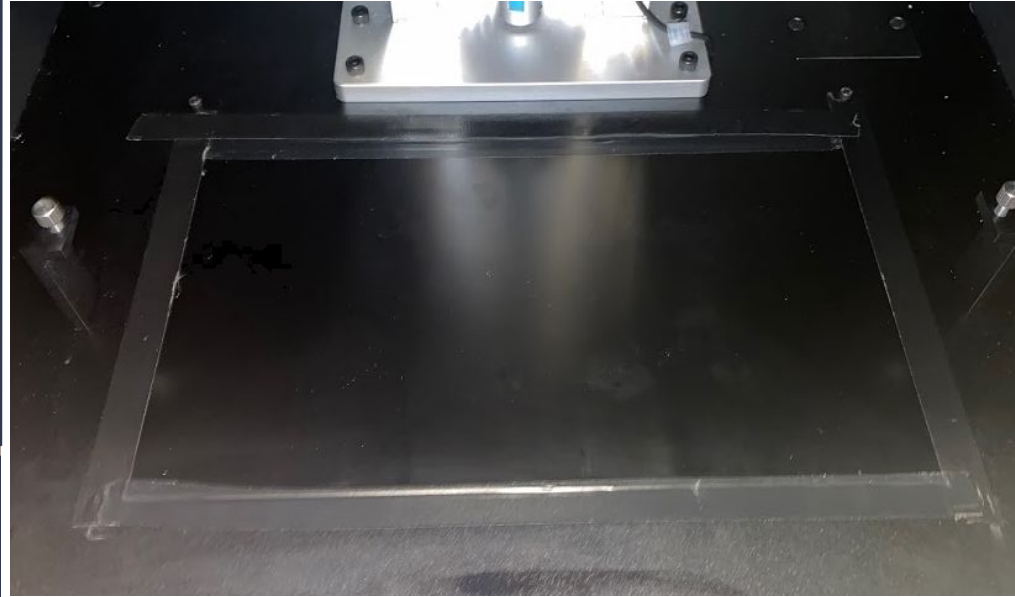


Step 8

Clean the LCD panel inside Phenom with some isopropyl alcohol (IPA) at least 90 to 99% pure to make sure the surface is clean.

It is recommended not to use glass cleaner as it could leave a residue on the screen that could affect print quality.

Another recommendation, is to use a lint free microfiber cloth, soft cloth or soft paper towel so the LCD screen does not get scratched.

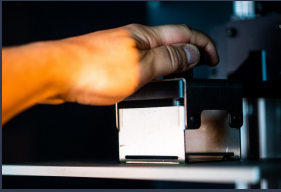


Step 9

Check to ensure the build plate is level to the LCD screen.

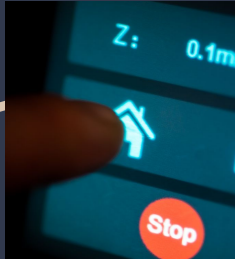
It is very important to make sure the build plate and LCD screen is clean of any debris for this next step. .

1). Ensure that the build plate is secure to the Z axis arm.



2). Get either a blank sheet of paper, or notebook paper.

3). Turn on the printer and go into Tools, Manual control, and then home.



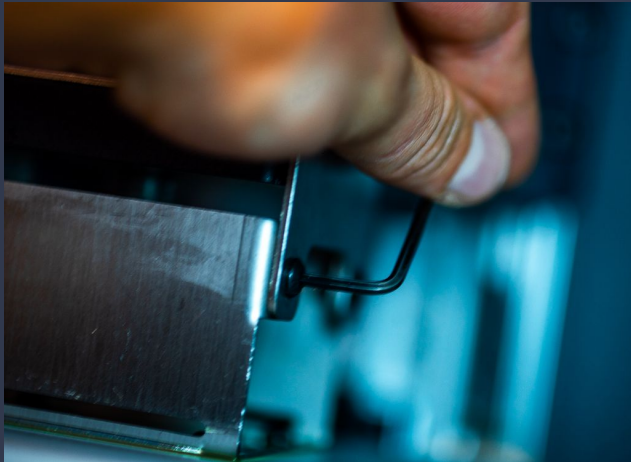
This will bring the build plate down to the LCD panel and we will check to make sure that it is level to the LCD plate.

4). Take the paper and try and slide it under where the plate meets the LCD panel all around. It should be that the paper should not slide under the build plate.



Step 9 (continued)

If the paper slides under the plate, then loosen up the 4 bolts on top of the build plate so that plate should descend slightly.

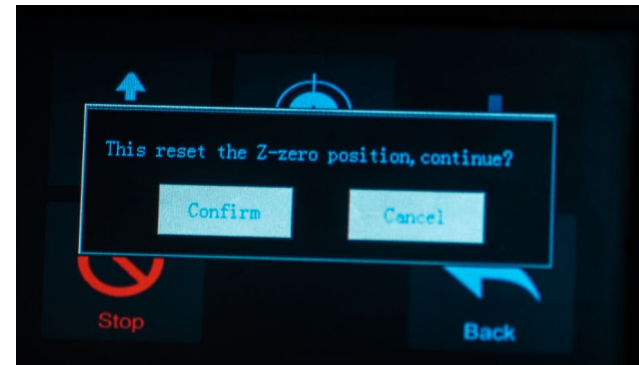


Recheck again to make sure the paper does not slide under the plate. GENTLY press down the plate to make sure it is level to the LCD and carefully re-tighten the bolts, again double checking to make sure the paper does not slide between the plate and LCD.

If it still does, then on the display screen, make sure 0.01 is highlighted, this is the distance the Z axis will move, press the down arrow and the plate will descend. Check the gap again, if there is still a gap, then repeat the process of lowering the Z axis and checking till the paper can not slide under the plate. You can keep moving down up to 0.6mm



Once the plate is level to the screen, press the back button and then press the button that says Set Z=0 This will store the new height as the default Z axis as 0 with the new height.



Step 10

Make sure the Vat FEP sheet (film) is clean on both sides. Use the same cleaning method mentioned in the previous step if need be.

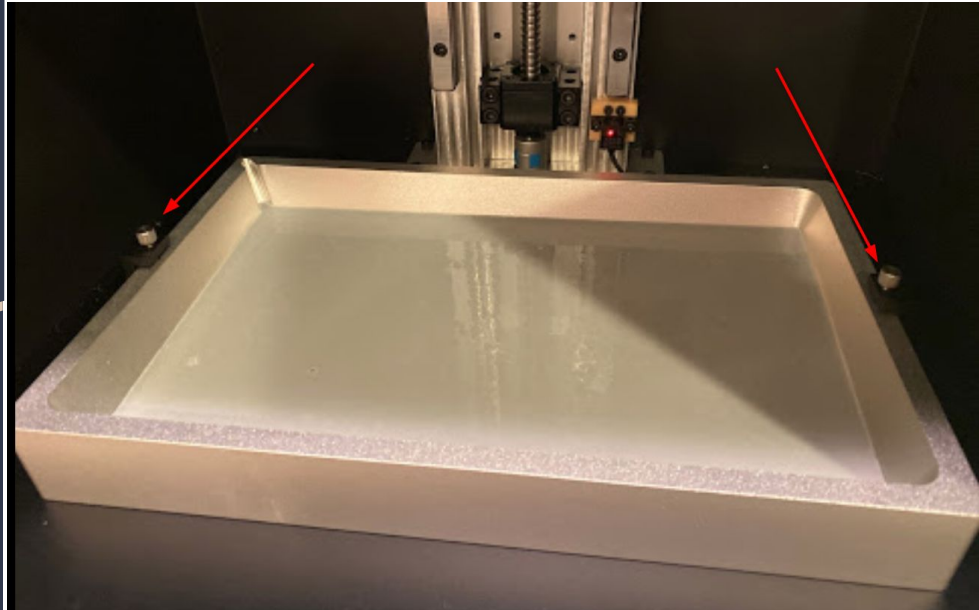


Step 11

Wait until alcohol in step 8 and 9 is evaporated before installing the vat.

Carefully slide the vat into place, so that it is under the vat holder on each side, and that the are in the middle along the width of the vat.

Turn both screws on each side so the vat is secured. Please note. It is not needed to overtighten the bolts, they should be finger tight.

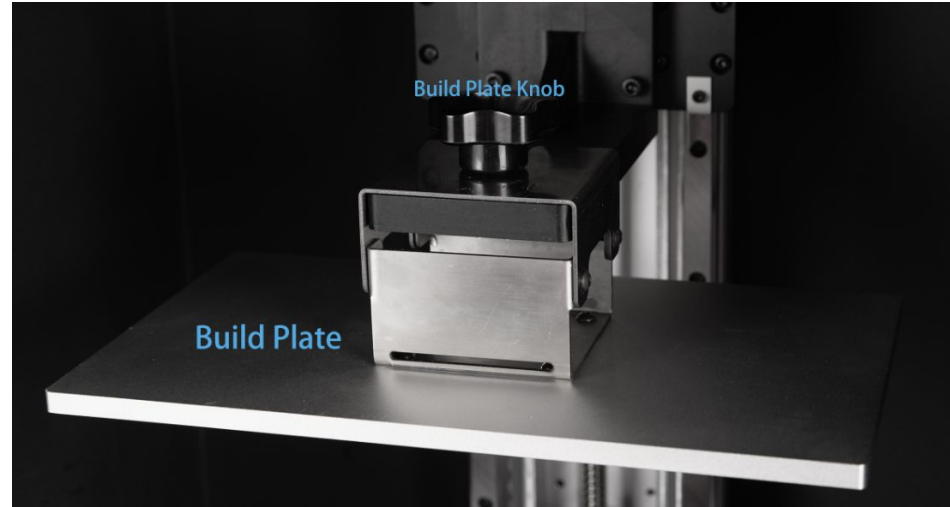


Step 12

With the Z axis raised all the way to the top. Take the build plate and with some IPA, clean the underside of the build plate.

Slide it onto the support arm and tighten down the build plate knob to secure it in place.

The build plate has been leveled at the factory and should not need to be adjusted. If by chance it has become loose via shipping, please refer to the main guide on how to level the build plate.

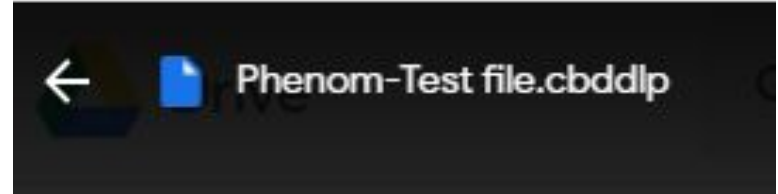


Step 13

Download Test Print File at the following location

https://drive.google.com/open?id=1Pa0krPp_hWJ5R2sBQSf4-Pd5STL2dJYc

Save / copy over the file to the included USB drive and insert to the printer



Step 14

Glove up! Make sure that the cover of the resin container is on tight and shake it up for about 15 - 30 seconds vigorously.

Open the bottle and pour it into the VAT, you can go a small bit past the angle line in the tank.

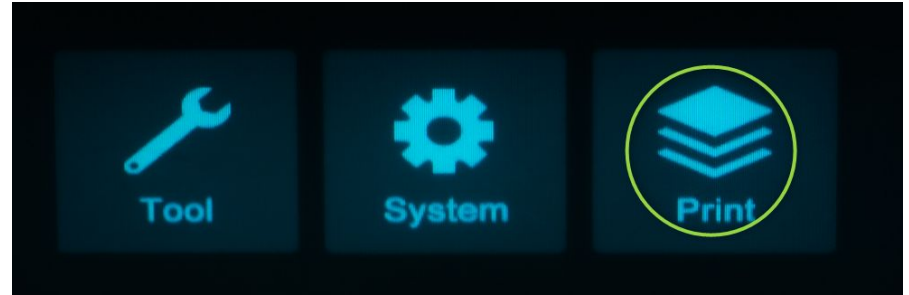
DO NOT OVERFILL THE TANK! If so, when the plate descends, resin will overflow.

****** For new resin bottles, after opening the first time, remove the retention ring on the bottle so it does not fall into the vat.



Step 15

With the test file copied over to the USB stick, insert it into the side of the printer. On the main control window, press print, then select the demo file, and print.



With the printer starting, let's get the software setup.

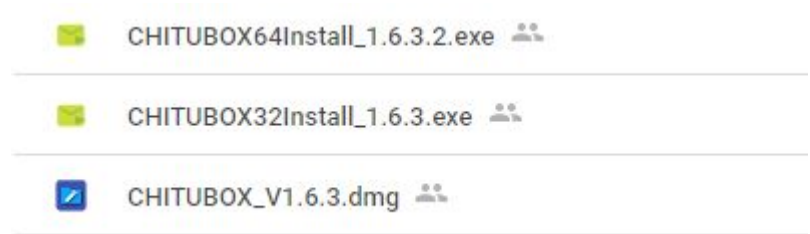
Step 16

Down and Install Chitubox Slicer Software

- Please note;
.exe files are for windows.
.gz is for Linux
.dmg is for MAC
- Please make sure you download the correct version for your computer.

You can download Chitubox 1.6.4.3 Beta here, if you do not already have it

<https://drive.google.com/open?id=1EWqZw656HbG7QJFlpsqj5PrLyVinardF>

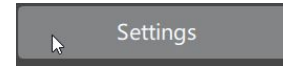


Download and install Chitubox as this is the default slicing program for the Phenom.

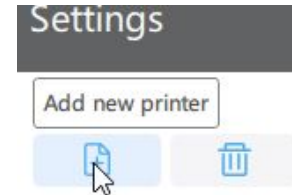
Step 17-1

Adding Phenom Printer in Chitubox

1. Click Setting in Chitubox on the right side of screen

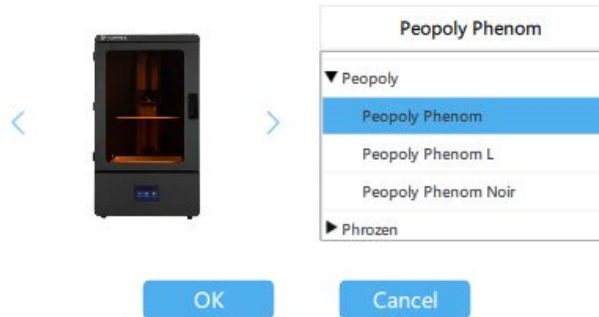


2. Add new printer by press + on the upper left corner



3. Select Peopoly Phenom from the list

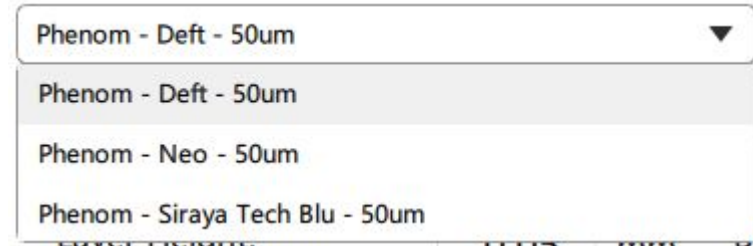
Please choose your machine:



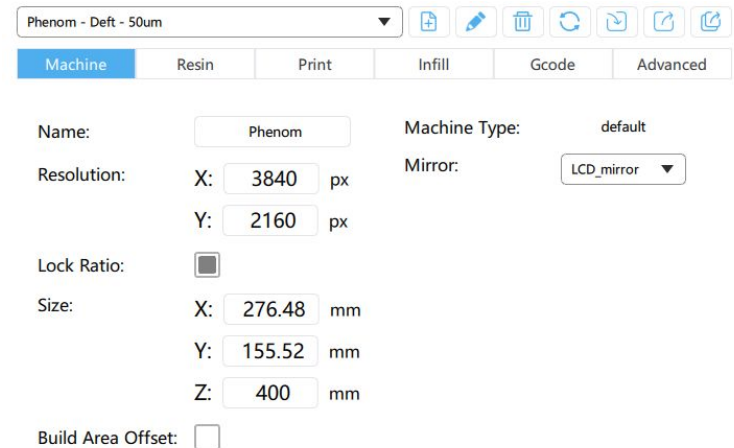
Step 17-2

Making Sure Phenom profile is correct

1 You will find 3 profiles for Deft, Neo and Blu



2. Double check machine setting matches to below

A screenshot of a software interface showing machine settings. At the top, there is a dropdown menu with 'Phenom - Deft - 50um' selected. Below the menu is a row of tabs: 'Machine' (selected), 'Resin', 'Print', 'Infill', 'Gcode', and 'Advanced'. The 'Machine' tab is active, displaying the following settings: 'Name: Phenom', 'Machine Type: default', 'Resolution: X: 3840 px, Y: 2160 px', 'Mirror: LCD_mirror', 'Lock Ratio: [checkbox]', 'Size: X: 276.48 mm, Y: 155.52 mm, Z: 400 mm', and 'Build Area Offset: [checkbox]'.

Machine	Resin	Print	Infill	Gcode	Advanced
Name: Phenom					
Machine Type: default					
Resolution: X: 3840 px, Y: 2160 px					
Mirror: LCD_mirror					
Lock Ratio: [checkbox]					
Size: X: 276.48 mm, Y: 155.52 mm, Z: 400 mm					
Build Area Offset: [checkbox]					

Step 17-3

Making Sure Phenom profile is correct

1 Deft 50um

Phenom - Deft - 50um

Machine Resin **Print** Infill Gcode Advanced

Layer Height:	0.05 mm	Bottom Lift Distance:	12 mm
Bottom Layer Count:	6	Lifting Distance:	10 mm
Exposure Time:	12 s	Bottom Lift Speed:	32 mm/min
Bottom Exposure Time:	50 s	Lifting Speed:	48 mm/min
Light-off Delay:	0 s	Retract Speed:	150 mm/min
Bottom Light-off Delay:	0 s		

2 Neo 50um

Phenom - Neo - 50um

Machine Resin **Print** Infill Gcode Advanced

Layer Height:	0.05 mm	Bottom Lift Distance:	8 mm
Bottom Layer Count:	6	Lifting Distance:	8 mm
Exposure Time:	10 s	Bottom Lift Speed:	32 mm/min
Bottom Exposure Time:	50 s	Lifting Speed:	48 mm/min
Light-off Delay:	0 s	Retract Speed:	150 mm/min
Bottom Light-off Delay:	0 s		

Step 18

Configure Chitubox Support

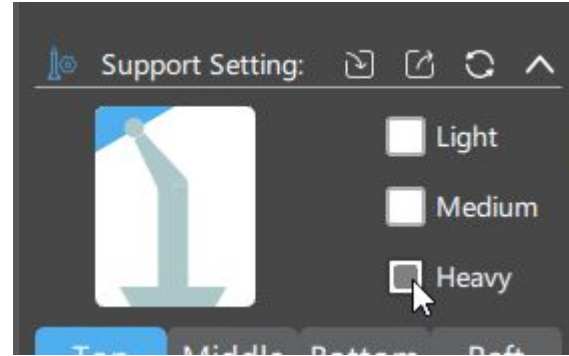
1. Select Support Setting icon in the upper right corner of the Chitubox program.
2. Set support type to Heavy
3. Set platform touch shape to skate and turn off the raft shape

Chitubox is now all set to be used with your Phenom

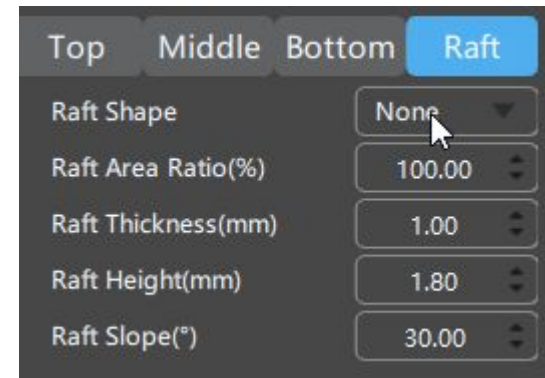
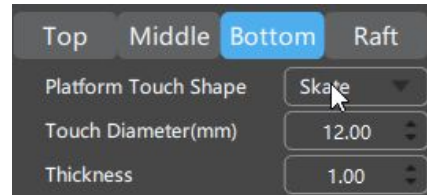
1).



2).



3).

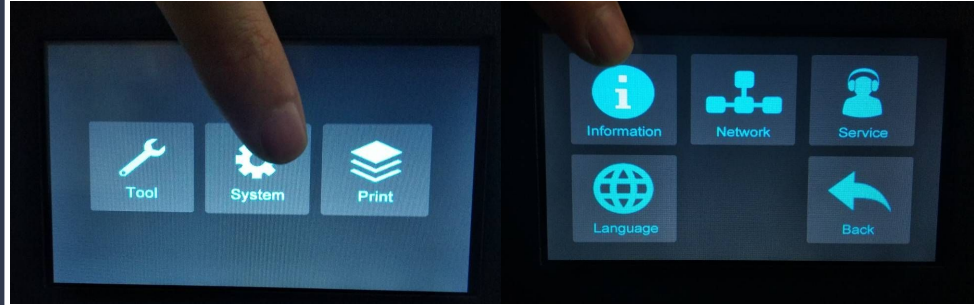


Step 19

Check for firmware updates

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You can find out the firmware version on your Phenom by using information under system menu



And check your firmware version.



The latest is 2.8. If yours is showing smaller number.

Upgrade to [2.8 here](#).

Step *Finito*



You are all set!

Your Phenom should be printing the test file, and you have Chitubox installed on your computer now.

If you need further assistance, please refer to the full guide here.

Or reach out to us via our facebook page or forums.

<https://www.facebook.com/peopoly/>

<https://forum.peopoly.net/>

Join our Phenom official facebook page

https://www.facebook.com/groups/2240866646207938/?ref=br_r_s

And share your prints on social media with the hashtag #Phenom