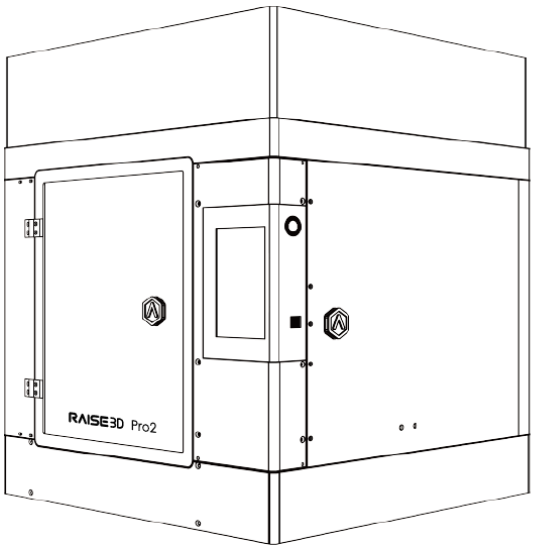
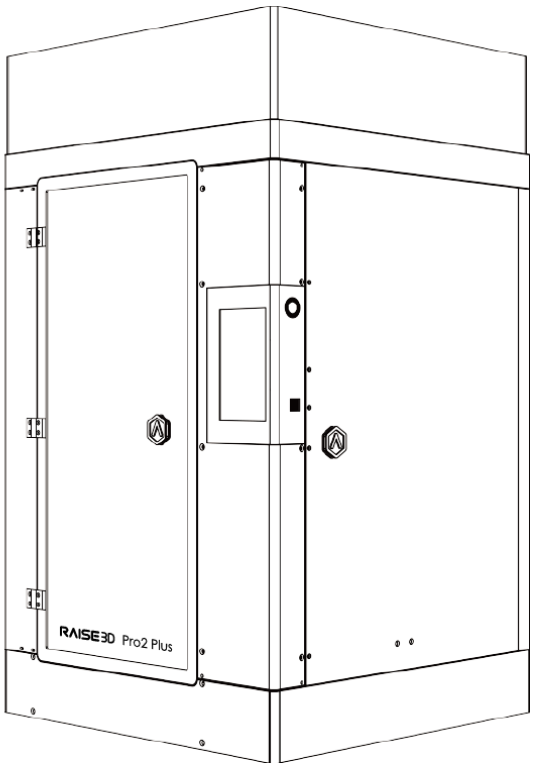
3D PRINTER MANUAL

RAISE3D PRO2 SERIES

REV: V1.0



Pro2



Pro2 Plus

The contents of this Quick Start Guide may be updated over time. For the latest version, scan the QR code or visit the link below.

www.raise3d.com/pages/download#down-quickguide

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Safety

Warning: Indicates a potentially hazardous situation which, if not avoided, may result in injury or damage.

Hot Nozzle: The hot nozzle sign indicates the presence of devices with high temperatures. Always use extra care when working around heated components. Always wear the heat resistant gloves provided in the Starter Box when working near the nozzle.

Nozzle temperatures in the printer can reach 300℃(572℉).

Hot Surface: The hot surface sign indicates the presence of devices with high temperatures. Always use extra care when working around heated components. Always wear the heat resistant gloves provided in the Starter Box.

Moving Parts: The moving parts sign indicates that a hazard exists where you touched, which can cause serious bodily injury. Always keeps hands clear of Moving Parts.

High Voltage: The high voltage sign indicates the presence of high voltages. Always stay away from exposed circuitry. It is recommended that all conductor be removed.

Electromagnetic Compatibility - EMC

- **Simplified EU Declaration of Conformity**

Pro2/Pro2 Plus declares that this device is in compliance with the essential requirements and other relevant provision of Directive 2014/53/EU. Full text of EU declaration of conformity is available at https://www.raise3d.com

The WIFI operation in the band 5150-5450MHz shall be restricted to indoor use for countries listed in the table below:

CE Mark Warning

This is a Class B product, in a domestic environment, may cause radio interference, in which case the user may be required to take adequate measures.

CE

AT	BE	BG	CZ	DK	EE	FR
DE	IS	IE	IT	EL	ES	CY
LV	LI	LT	LU	HU	MT	NL
NO	PL	PT	RO	SI	SK	TR
FI	SE	CH	UK	HR		

CE Output power table:

Function	Frequency	Maximum Output Power (EIRP)
WiFi	2412-2472 MHz	18.25dBm(b)/ 16.30dBm (g)/ 15.21dBm (HT)
	5150-5250 MHz	15.9 dBm(a)/ 14.71 dBm(HT20)/ 14.28 dBm(HT40)
	5725-5850 MHz	15.9 dBm(a)/ 14.71 dBm(HT20)/ 14.28 dBm(HT40)

FCC Output power table:

Function	Frequency	Maximum Output Power
WiFi	2412-2462 MHz	18.31dBm(b)/ 15.62dBm (g)/ 14.9dBm (HT 20)
	5150-5250 MHz	15.36 dBm(a)/ 14.79 dBm(HT20)/ 14.41 dBm(HT40)
	5725-5850 MHz	15.48 dBm(a)/ 14.49 dBm(HT20)/ 14.06 dBm(HT40)

- **FCC Statement**

This device and its antenna must not be located or operating in conjunction with any other antenna and transmitter.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

RF exposure information: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Technical Specifications

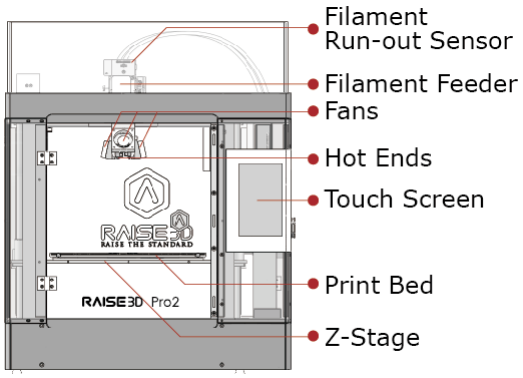
<table>
<tr><th>ITEM</th><th colspan="2">Pro2</th><th colspan="2">Pro2 Plus</th></tr>
<tr><td rowspan="5">CONSTRUCTION</td><td colspan="4">Build Volume (W×D×H)</td></tr>
<tr><td>Single Print</td><td>Dual Print*</td><td>Single Print</td><td>Dual Print*</td></tr>
<tr><td>12×12×11.8 inch
305×305×300 mm</td><td>11×12×11.8 inch
280×305×300 mm</td><td>12×12×23.8 inch
305×305×605 mm</td><td>11×12×23.8 inch
280×305×605 mm</td></tr>
<tr><td colspan="4">Machine Size (W×D×H)</td></tr>
<tr><td colspan="2">24.4×23.2×29.9 inch / 620×590×760 mm</td><td colspan="2">24.4×23.2×43.5 inch / 620×590×1105 mm</td></tr>
<tr><td>ELECTRICAL</td><td>Power Supply Input</td><td colspan="3">100-240 V AC, 50/60 Hz 230 V @ 3.3 A</td></tr>
<tr><td></td><td>Power Supply Output</td><td colspan="3">24 V DC, 600 W</td></tr>
<tr><td rowspan="15">PRINTER</td><td>Print Technology</td><td colspan="3">FFF</td></tr>
<tr><td>Print Head</td><td colspan="3">Dual-head with electronic lifting system</td></tr>
<tr><td>Filament Diameter</td><td colspan="3">1.75 mm</td></tr>
<tr><td>XYZ Step Size</td><td colspan="3">0.78125, 0.78125, 0.078125 micron</td></tr>
<tr><td>Print Head Travel Speed</td><td colspan="3">30 - 150 mm/s</td></tr>
<tr><td>Build Plate</td><td colspan="3">Heated aluminum build plate with magnetic holding</td></tr>
<tr><td>Max Build Plate Temperature</td><td colspan="3">110 °C</td></tr>
<tr><td>Heated Bed Material</td><td colspan="3">Silicone</td></tr>
<tr><td>Build Plate Leveling</td><td colspan="3">Pre-calibrated leveling</td></tr>
<tr><td>Supported Materials</td><td colspan="3">PLA/ ABS/ HIPS/ PC/ TPU/ TPE/ NYLON/ PETG/ ASA/ PP/ PVA/ Glass Fiber Filled/ Carbon Fiber Enforced/ Metal Particles Filled / Wood Filled</td></tr>
<tr><td>Nozzle Diameter</td><td colspan="3">0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)</td></tr>
<tr><td>Max Nozzle Temperature</td><td colspan="3">300 °C</td></tr>
<tr><td>Connectivity</td><td colspan="3">Wi-Fi, LAN, USB port, Live camera</td></tr>
<tr><td>Noise emission (acoustic)</td><td colspan="3"><50 dB(A) when building</td></tr>
<tr><td>Operating Ambient Temperature</td><td colspan="3">15 - 30 °C, 10 - 90% RH non-condensing</td></tr>
<tr><td>Storage Temperature</td><td colspan="3">-25 °C to +55 °C, 10 - 90% RH non-condensing</td></tr>
<tr><td rowspan="4">SOFTWARE</td><td>Slicing Software</td><td colspan="3">ideaMaker</td></tr>
<tr><td>Supported File Types</td><td colspan="3">STL, OBJ, 3MF</td></tr>
<tr><td>Supported OS</td><td colspan="3">WINDOWS/ macOS/ LINUX</td></tr>
<tr><td>Machine Code Type</td><td colspan="3">GCODE</td></tr>
<tr><td rowspan="9">PRINTER CONTROLLER</td><td>User Interface</td><td colspan="3">7 inch Touch Screen</td></tr>
<tr><td>Network</td><td colspan="3">10/100 Mbps</td></tr>
<tr><td>WLAN</td><td colspan="3">IEEE802.11b/g: 2412MHz
IEEE802.11n HT20: 2412MHz
IEEE802.11a: 5150 - 5250MHz, 5725 -5850 MHz
IEEE802.11an HT20: 5150 – 5250 MHz, 5725 - 5850 MHz
IEEE802.11an HT :5150 – 5250 MHz, 5725 - 5850 MHz</td></tr>
<tr><td>Resume Print after Power Outage</td><td colspan="3">Second Generation</td></tr>
<tr><td>Screen Resolution</td><td colspan="3">1024*600</td></tr>
</table>

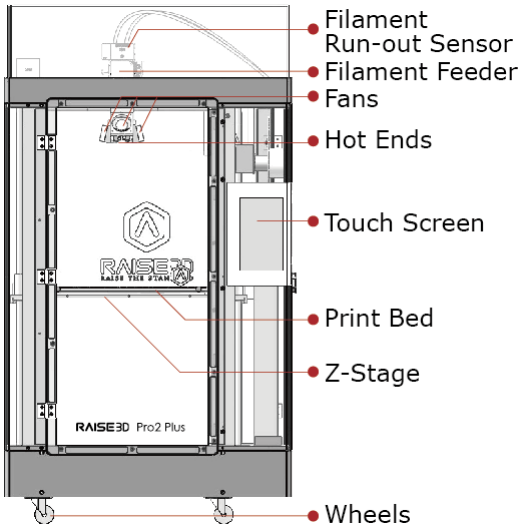
	Motion Controller	ATM Cortex M7.400MHZ FPU
	Logic Controller	Freescale i.mx6, Quad core 1Ghz ARM processor
	Memory	1 GB
	Onboard Flash	8 GB
	OS	Embedded Linux
	Ports	Usb2.0*2, Ethernet*1

* : When you are printing with dual material.

Printer Components and Parts

1. Front Parts





A. Filament Run-out Sensor

Detects whether filament is present.

Extruder Assembly

Includes extruder motor and feed gears.

B. Hot Ends

The hot end is made up of nozzle, heater block, thermocoupler, heater rod , throat tube and heat sink.

WARNING

Temperatures in the printer can reach 300℃(572℉).

C. Touch screen

D. Onboard computing system to display printer status, error messages and receive commands.

E. Print bed

Print bed includes Buildtak sheet, build plate and heat bed.

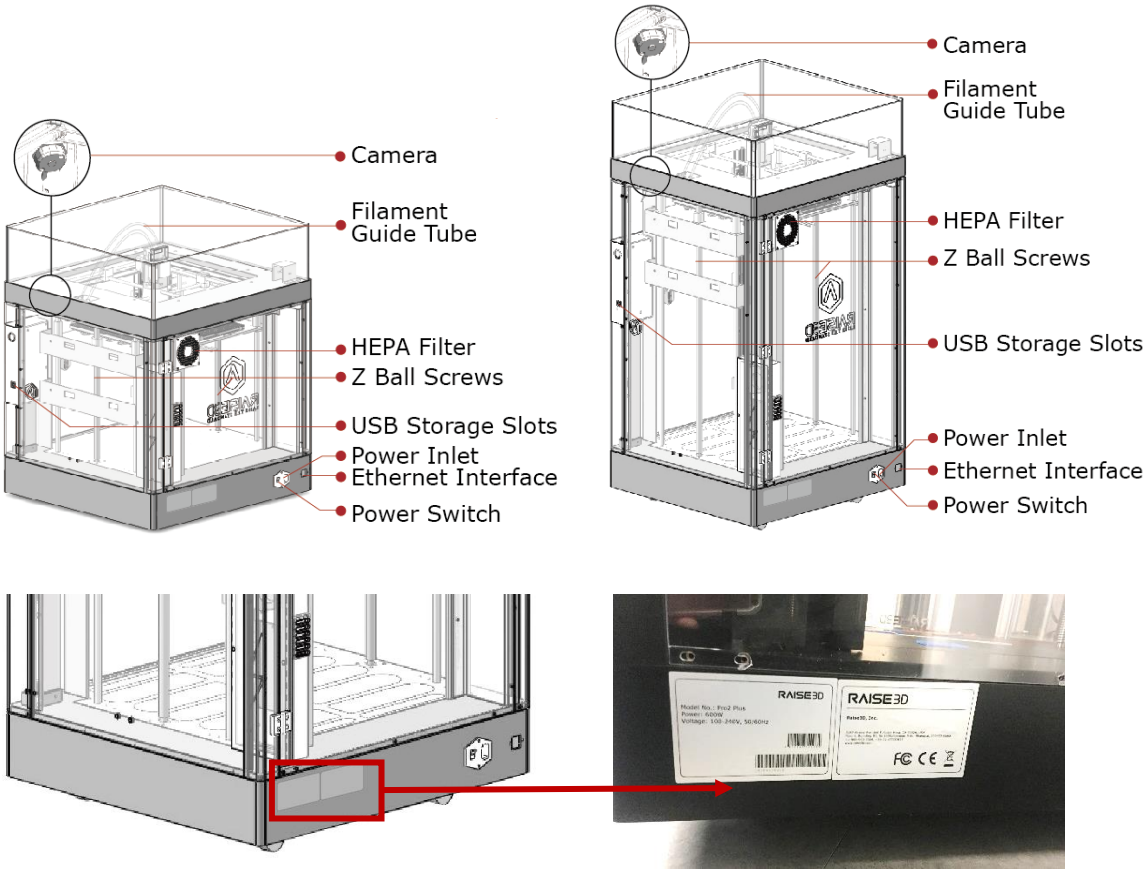
WARNING

Temperatures in the printer can reach 110℃(230F).

F. Z-stage

Platform supporting the print bed.

2. Rear Parts



A. Camera-

Remotely monitors the printing process.

B. Filament guide tube-

Tubing that protects filament material by minimizing bending and friction.

C. HEPA filter-

Designed to improve air quality on exhaust and reduce odor from filaments.

D. Z ball screws

Threaded rods that drive Z stage's movement.

Note: the nuts and bolts around the ball screws are loose by design

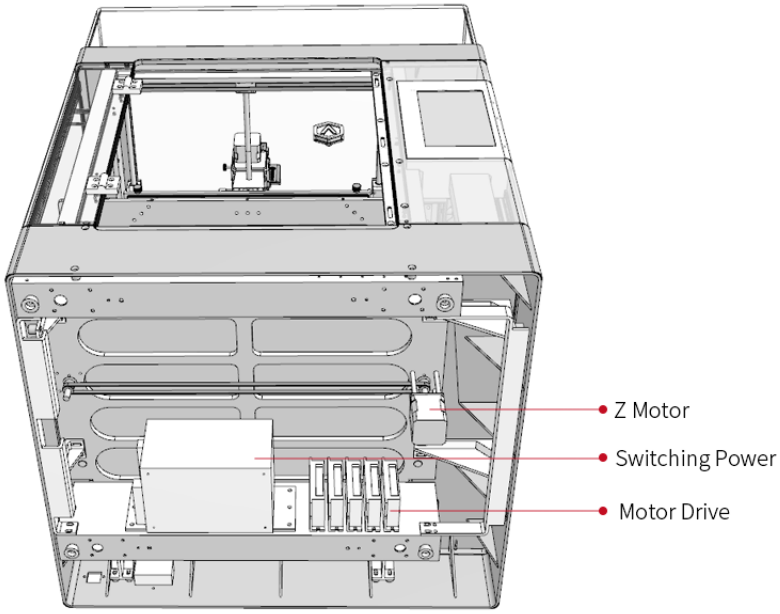
E. USB storage slots

F. Power inlet and Power switch

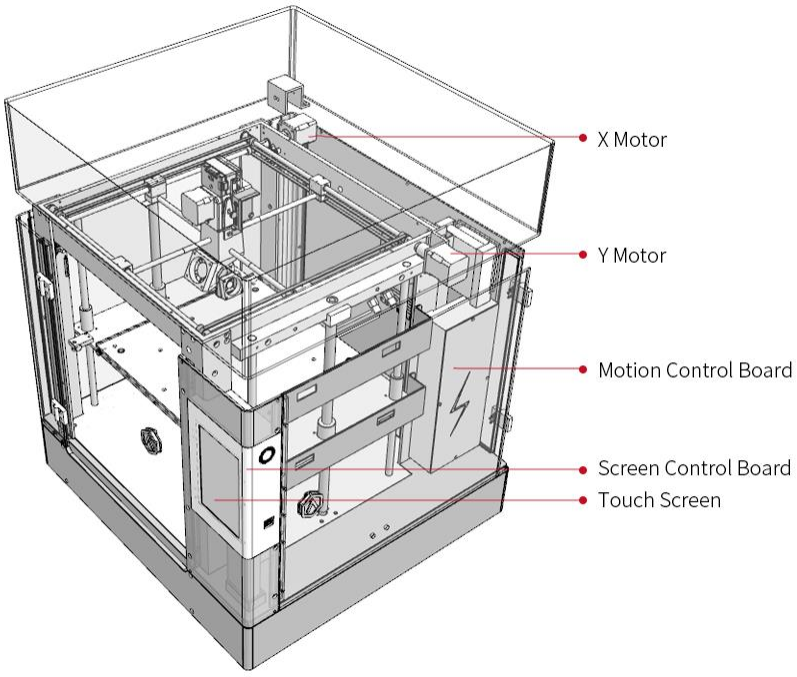
That is the power supply unit.

A 250V 10A fuse is located to protect the input power.

3. Bottom Parts.

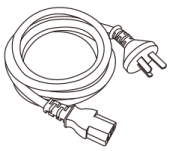


4. Electrical Parts

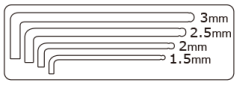


Spare Parts

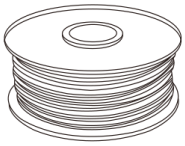
List of Contents



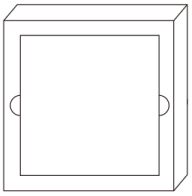
Power Cable
(×5)



Hex Wrenches



Filament
(×2)



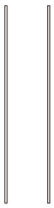
Build Plate
(with Build Surface inside Protective Cover)

USB Storage

Heat Resistant Gloves

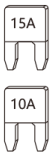
Filament Holder
(×2)

Spatula



Nozzle Cleaning Kit

Tweezers



Fuse

Thumb Screws
(Spare)

Other Accessories
(Spare)

Precaution and Hardware Installation

- **Read the entire installation section before starting installation**

⚠WARNING

Connect equipment to a grounded facility power source. Do not defeat or bypass the ground lead.
• Know the location of equipment branch circuit interrupters or circuit breakers and how to turn them on and off in case of emergency.
• Know the location of fire extinguishers and how to use them. Use only ABC type extinguishers on electrical fires.
• Know local procedures for first aid and emergency assistance at the customer facility.
• Use adequate lighting at the equipment.
• Maintain the recommended range of temperature and humidity in equipment area.
• Do not use this product in an environment containing volatile or flammable compounds.

- **Environmental requirements**

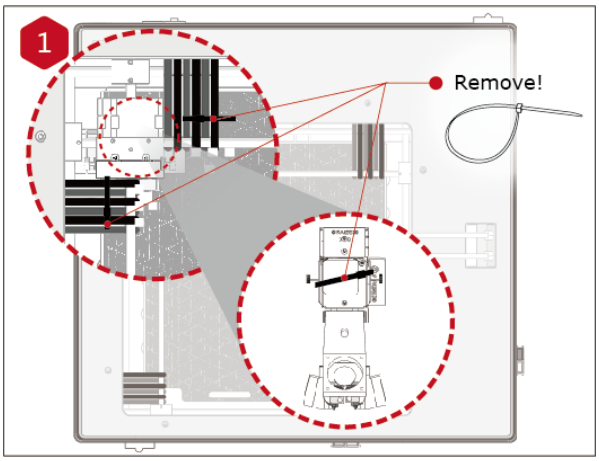
• The Pro2 and Pro2 plus are for indoor use only.
• Air quality conditions with excessive solid particulates (conductive or non-conductive) may result in system damage.
• Air quality conditions in which airborne oils are allowed to accumulate on or within the printer can damage the plastic components.
• Operating temperature shall be in the range of 15°C to 30°C(59°F to 86°F), with relative humidity range of 10% to 90% non-condensing.
• Storage temperature shall be in the range of -25°C to 55°C(-13°F to 131°F), with relative humidity range of 10% to 90% non-condensing.

NOTE: The Pro2 and Pro2 plus printers are capable of generating vibrations depending mainly on part build geometry and material characteristics. This consideration will need to be taken into account if locating the printer near vibration sensitive equipment.

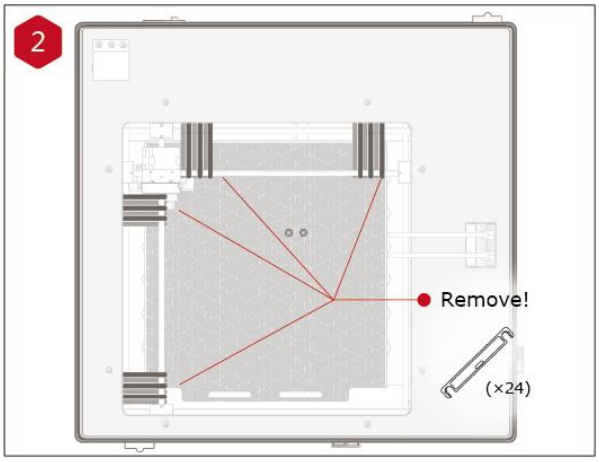
- **Input Supply Connection**

Installation and mains outlet socket shall be made and protected according to appropriate rules. Check the input voltage, phase, and frequency supplied to this machine before turning it on. Verify the connection of grounding wires from the machine to the input source. The allowable input voltages are 1x(90-240)V 50Hz/60Hz. For more information about input supply refer to the technical specification section of this manual and to the rating plate of the machine. Make sure the amount of power available from the input connection is adequate for normal operation of the machine.

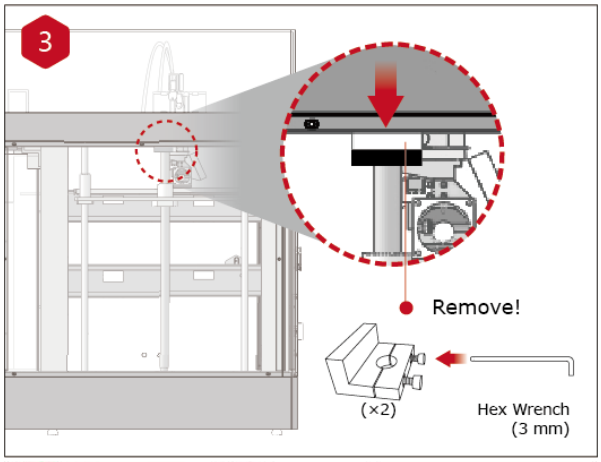
- **Hardware Installation**



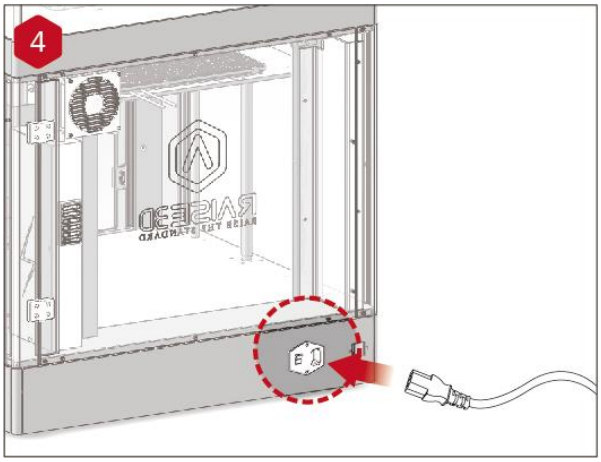
Locate the four shipping zip ties, and remove them. It's recommend to unclip these as opposed to cutting. They can be reused if you need to transport your machine in the future.



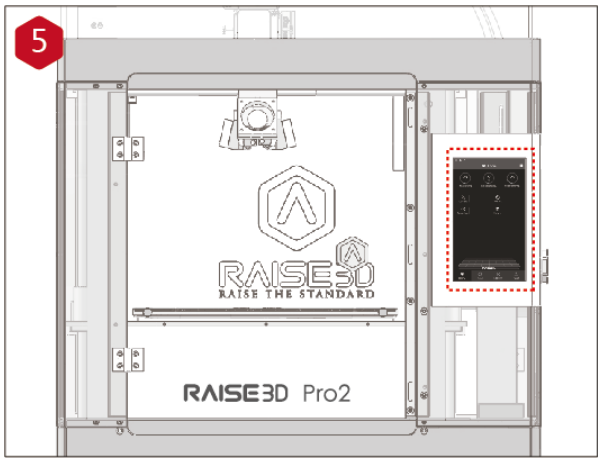
Peel the yellow sticker and remove the 24 security spacers.
These clips are designed to hold the extruder assembly in place during shipping and should be saved for future transport. Do not operate printer with clips installed.



Select the largest of the included hex head wrench (3mm), and remove all four hex head security bolts from Z-axis clamps (2 bolts each). These are located on the left and right sides on the printer on the ball screw thread.

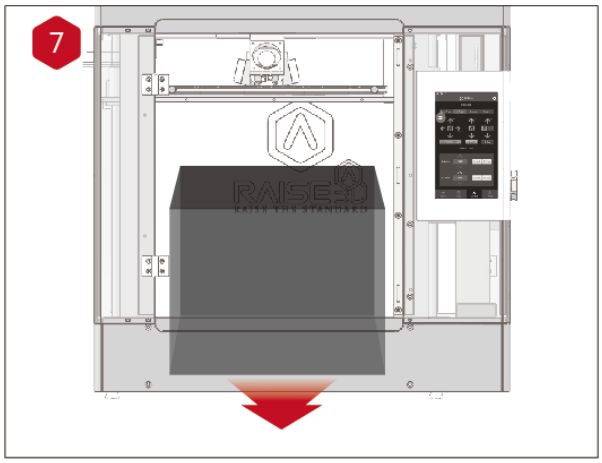


Plug the machine into a wall outlet using the power adapter for your designated country. (5 included)
Flip the switch to power the unit on.



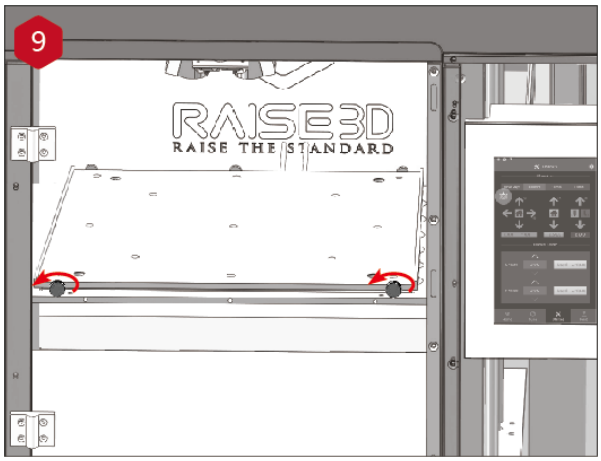
Once the unit has been powered, the printer will go through a start-up sequence. Your Raise3D printer will take approximately 60 seconds to boot up. When the touchscreen displays the "Home" screen, the printer is ready.

Open the "Utilities" tab, and press the Z Homing button.
OK the request, and the print bed will begin to “home” or move to the origin position. This will also allow you to access your accessory packages.

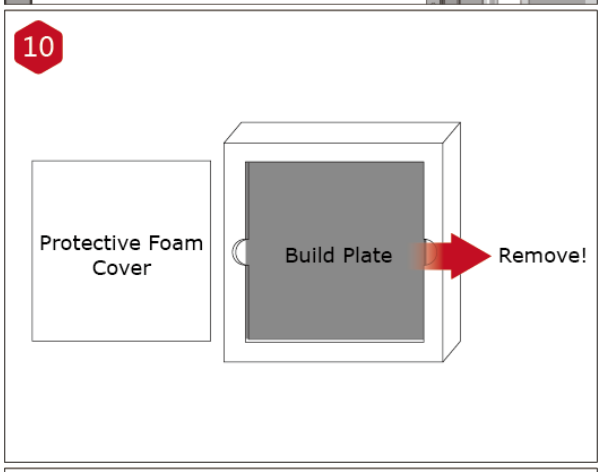


Open the front door, and remove the starter box and filament box from the base of the printer.
Open these packages, and compare with the following contents list.

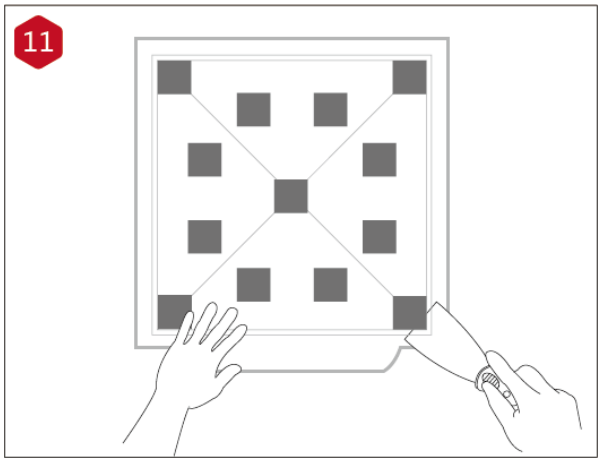
Lower the Z platform by 50mm.
To do this, set the interval at "10mm" by selecting it in the "Move Steps" bar. This will move the bed 10mm per arrow click. Click this downward arrow 5 times to move Z platform downward to 50mm.



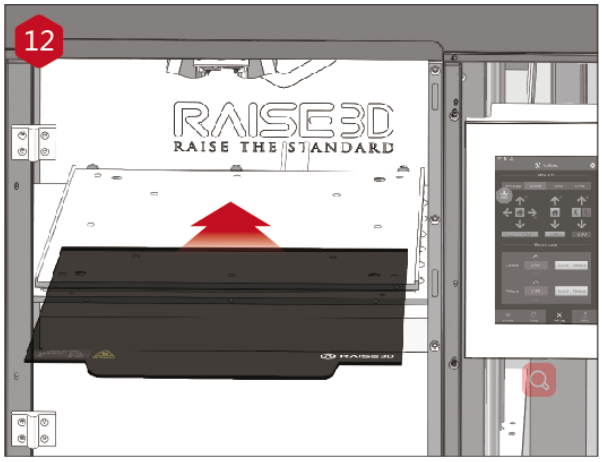
Loosen the two thumb screws on the Z platform by rotating them counter-clockwise.



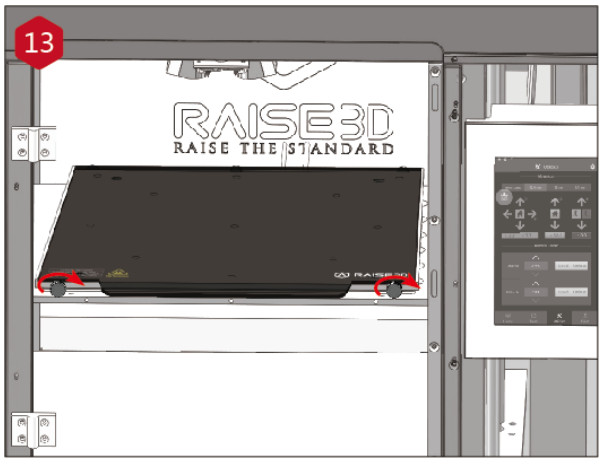
Remove the aluminum build plate from the foam packaging.



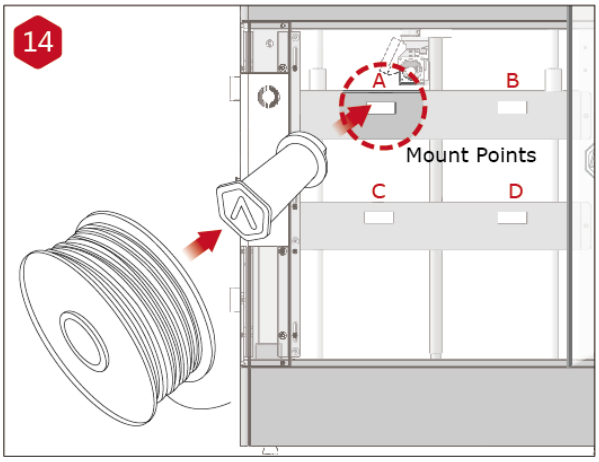
Using the included spatula, remove the leveling calibration model from your build plate.



Slide the build plate onto the Z platform with the logos facing upwards, and the handle edge facing the front of the machine.

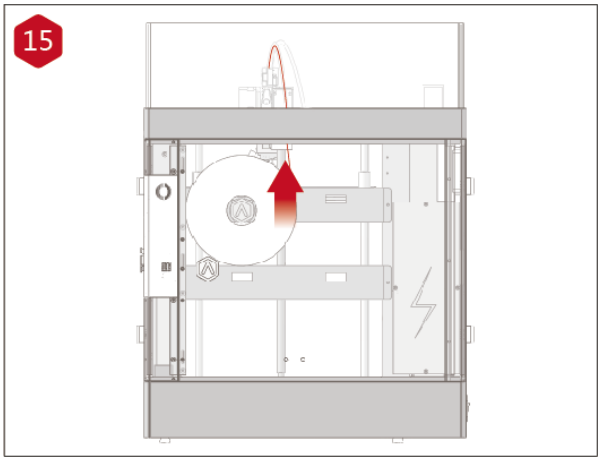


Re-install the thumb screws, rotating clockwise, to lock the build plate into position.

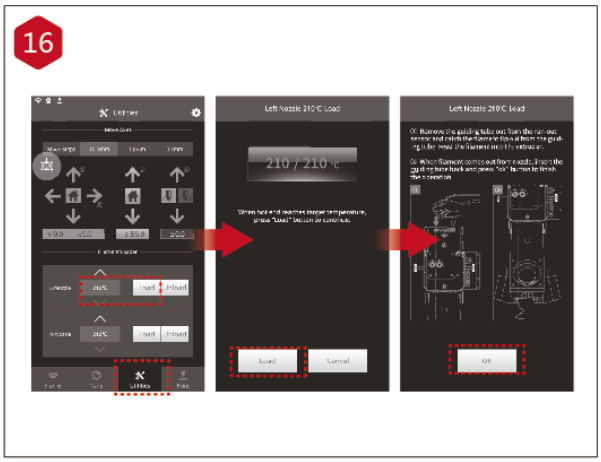


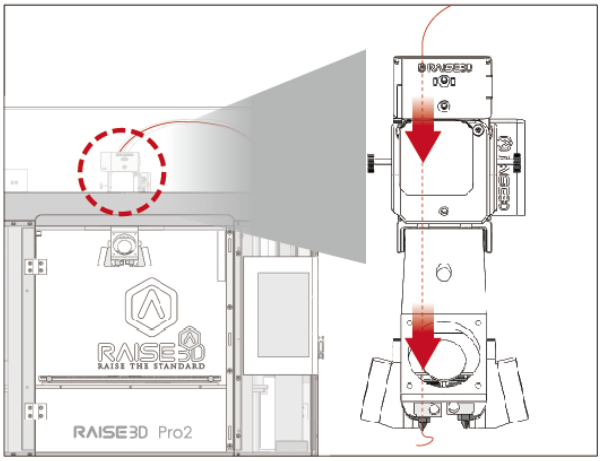
Open the side door of the printer, and install the spool holders into the mounting points. Open one of the included spools of filament, and place it on the holder.

NOTE: The direction of filament spool should be placed to rotate in clockwise if at points B and D, and should be oriented to rotate counterclockwise at mount points A and C.



Locate the open end of the filament, and feed it through the guide tube.





Press the “Utilities” tab on the screen and set the temperature of the left nozzle for the filament that you're using.

Press the “Load” button and the printer will begin to heat. When the target temperature is reached, press "Load". Complete the feeding operation according to the instructions on the screen.

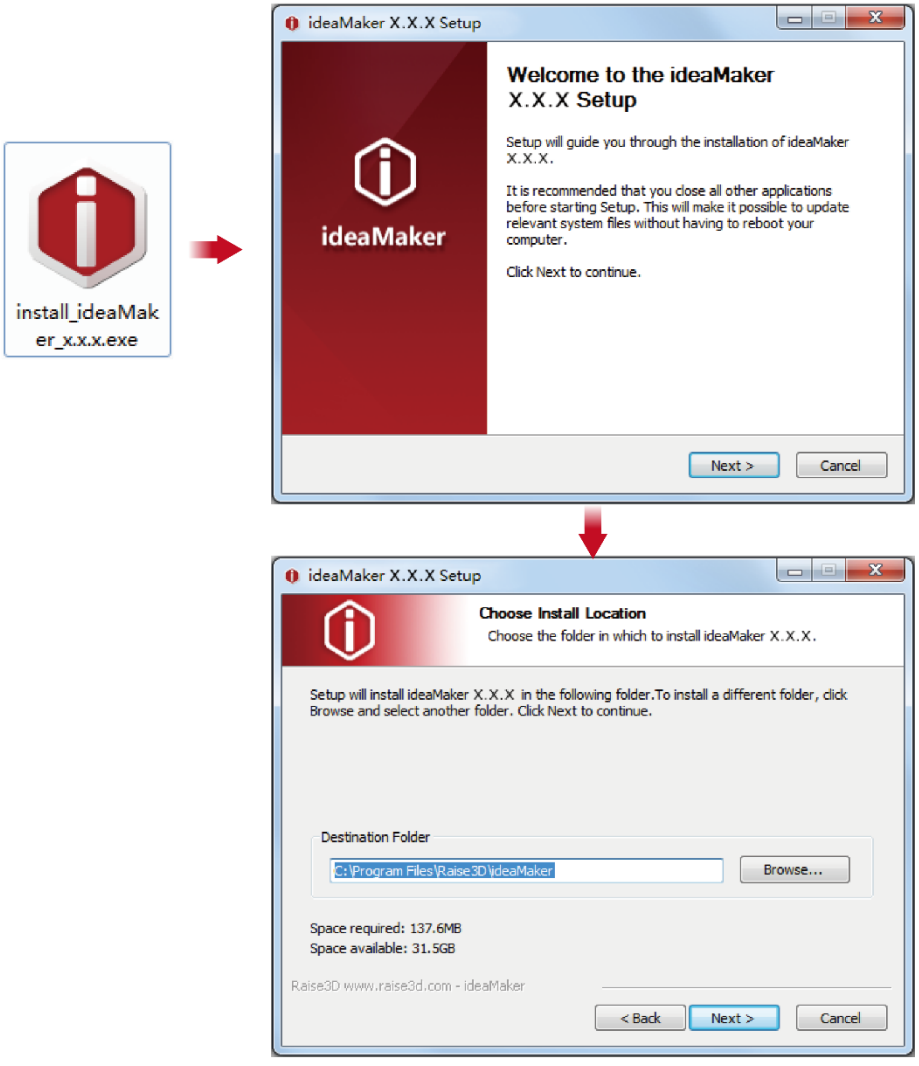
Software Installation

- **ideaMaker Installation**

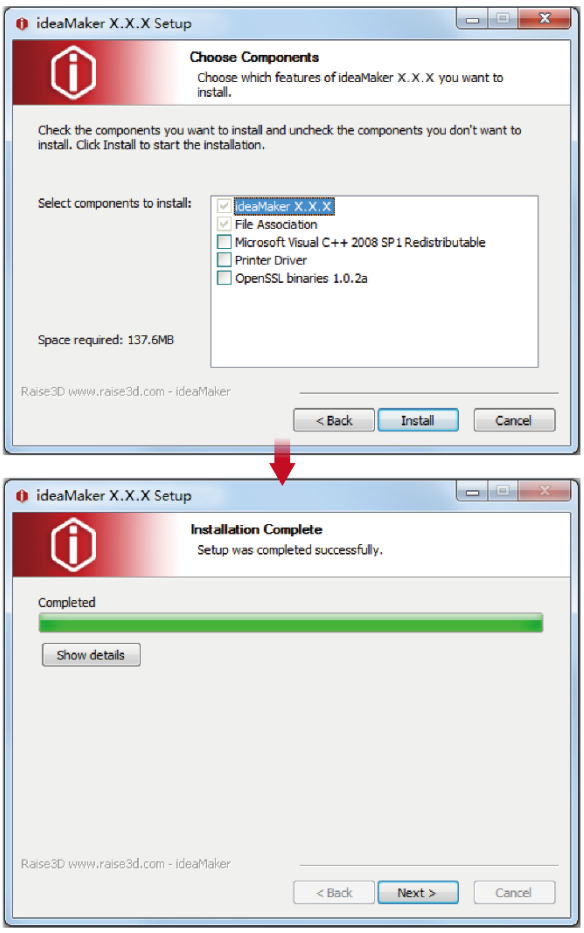
The ideaMaker slicing software is available on the USB storage drive included with your printer.
Additional downloads and versions are available online at:
www.raise3d.com/pages/download

WINDOWS

➢ Open the installer and choose your preferred language. Select the installation location for ideaMaker, and click "Next".



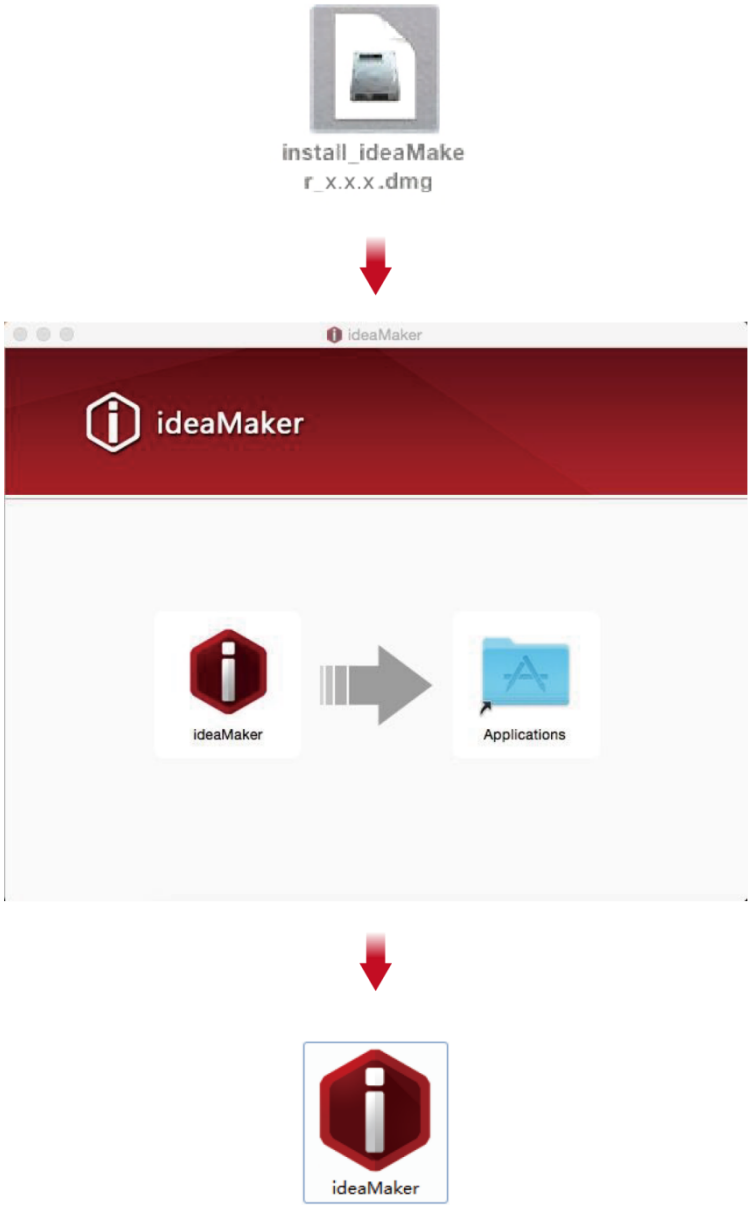
- Follow the instructions provided by the console, and click "Install". After the installation is finished, click "Next" to go to the next step.



- Click "Finish" and ideaMaker is installed.

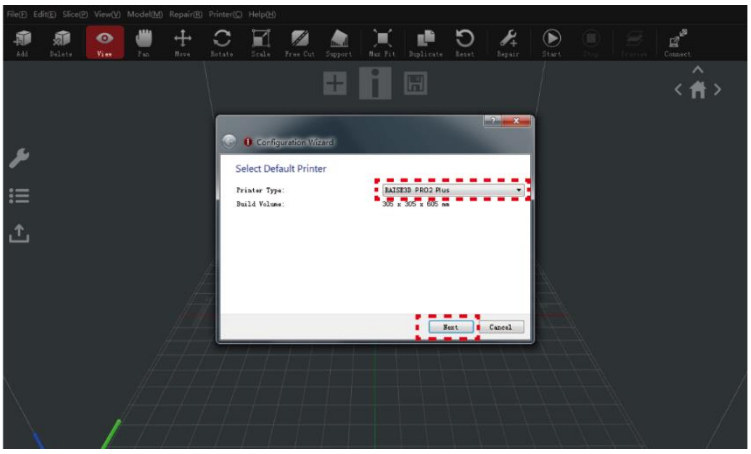
MAC OS X

Open the Disk Image for the ideaMaker installer. This is located in the USB storage drive Included with your printer, or download the latest version from www.raise3d.com/pages/download#down-im.
Drag the ideaMaker icon(left) into the Application folder on the right side.



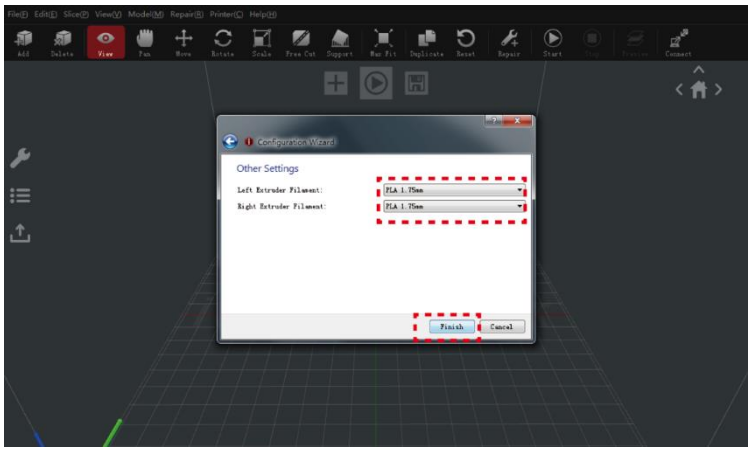
- **ideaMaker Initial Setting**

➢ When launching ideaMaker for the first time you, you will need to select your printer model from the drop-down list, then press "Next".



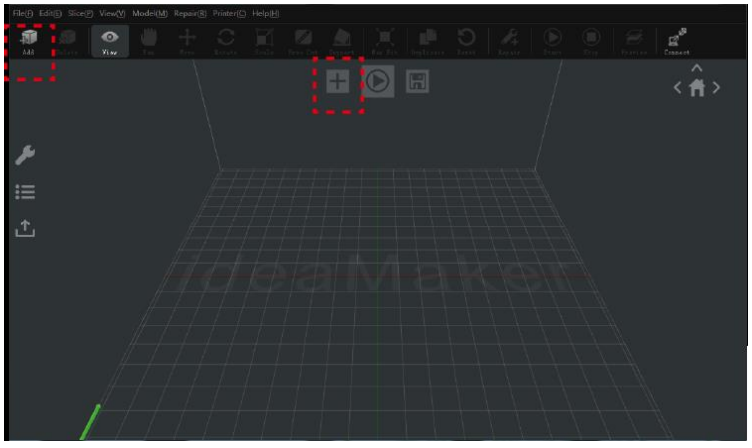
➢ Select the diameter of your filament. Press "Finish" to finalize the initial settings.

NOTE: ALL Pro2-Series printers use 1.75mm filaments.

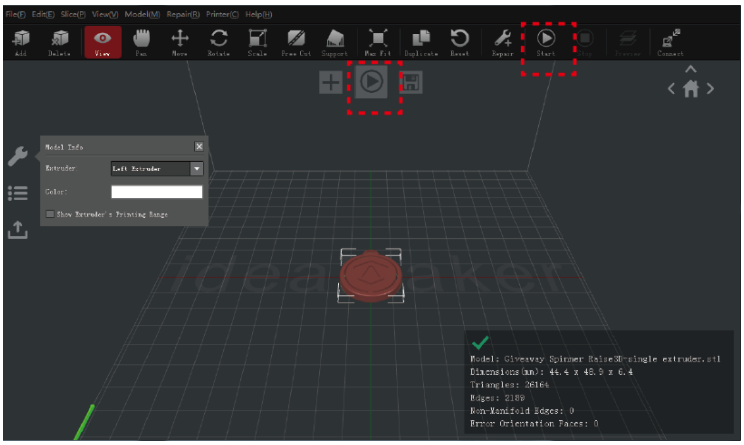


- **Using ideaMaker**

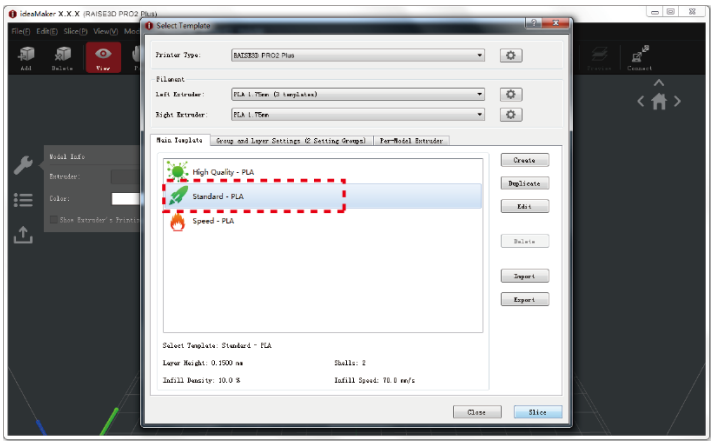
➢ Click the "+" button to import “Giveaway Spinner” included in the USB storage.



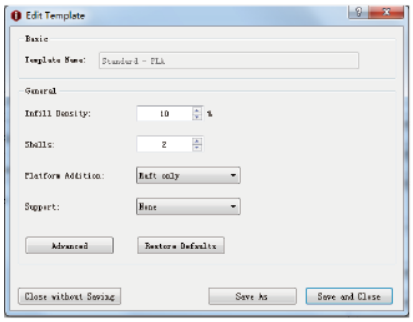
➢ Click the "Start" or “ ” button to begin slicing the model.

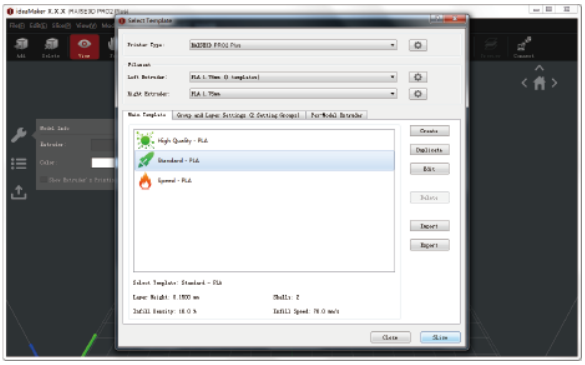


➢ Confirm your printer type and material are correct, then select the standard slicing template. Click “Edit” to select the type of Platform Addition and the type of Support.



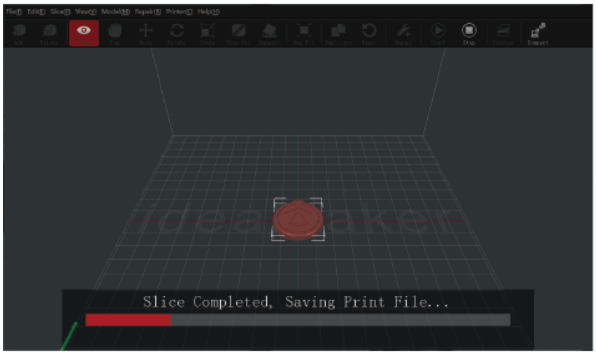
➢ Select your type of Platform Addition and Support in the "Edit" window. Click "Save and Close" to return to the previous menu. Click "Slice" to generate your file.

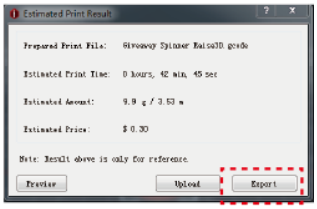




➢ Save the sliced files (.gcode and .data) by exporting to the USB storage drive.

NOTE: File names that do not conform to the Western Latin character set may not display properly.

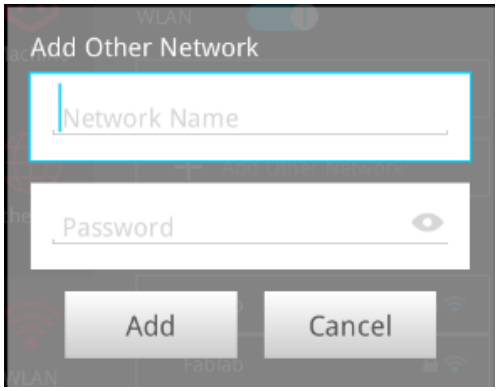




➢ Confirm that the files are saved and eject the USB storage.

WLAN Connection

You can connect to a network to by selecting the SSID and inputting the password. When the WIFI module is manufactured, 2.4G is set at HT20, 5GHz is set at HT40. The wifi's frequency is fixed before being manufactured. The customer is not allowed to modify WIFI's parameters. (If needed, please contact tech support at Raise 3D).



Or **Add Other Network** by inputting name and password.

Firmware upgrade

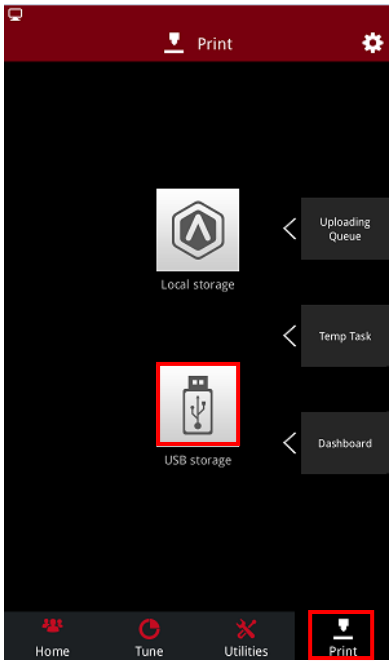
Download the latest version of the Raise Touch and motion controller board firmware from raise3d.com/pages/download. Save the Raise Touch and Motion Controller Board Firmware files inside the root directory of the USB drive included with your printer.

Power off the printer and insert the USB drive into one of the available ports on the side of the touchscreen.

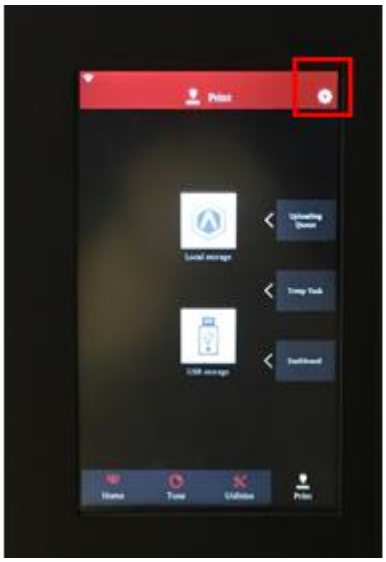
Power on. The Raise Touch Firmware will be automatically detected and start on boot up. Follow the on screen instructions to complete the installation.

After the update is completed, the screen will display the home page.

Click print at the bottom right of the touchscreen and select USB storage. Select your USB device and then click the firmware accept the pop up to update the machine and follow the onscreen instructions.

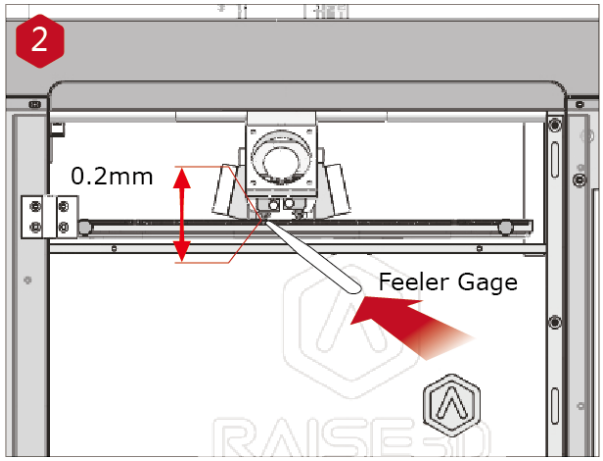


Click the ‘Settings’ icon in the top right-hand side of any tab. Confirm that the firmware has been updated properly. Allow this process to complete before removing the USB drive.

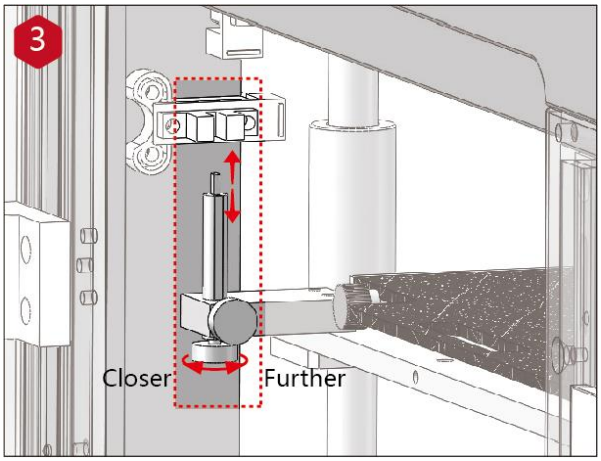


Start First Print

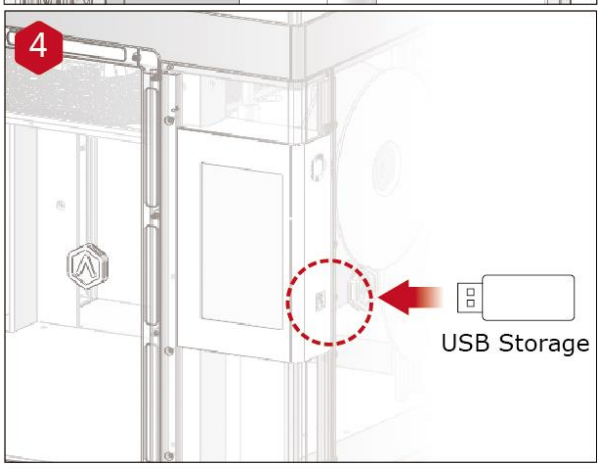
The Pro2/Pro2 Plus units are pre-leveled at the factory, but we recommend verifying that the leveling has not changed during shipping. First, home the X/Y Axis by selecting the "home" button, then Z axis "home" button. If the homing procedures complete without issues, reposition the print head.
Select "10mm" for "Move Steps" and move X to 50mm, Y to 10mm.



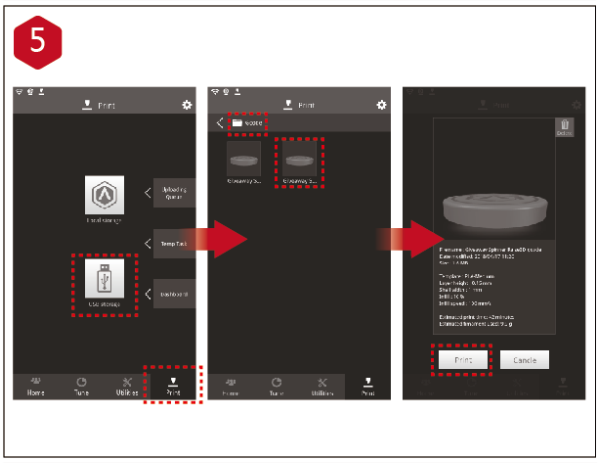
Use the feeler gauge to check the distance between nozzle and printing platform. The optimal distance between is 0.2mm.
The best indication of this is feeling only slight friction when you slide the feeler gauge into the gap.



The distance between the nozzle and the printing platform can be adjusted by turning the thumb screw on the left-front corner of the Z-plate, the higher the screw stands out, the further the distance between the nozzle to the printing platform becomes.



Insert the USB storage that contains your sliced model (.gcode and .data files).
Insert this USB drive into the USB slot on the side of touchscreen.

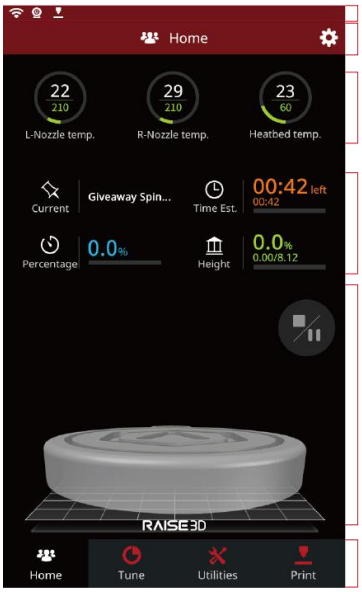


Select the “Print” tab, and choose “USB Storage”. Select the file and check the printing parameters and settings. Press “Print” to start printing the test file.

During printing, you can check the status of your print including printing time remaining and other parameters from the touchscreen in the “Home” interface.

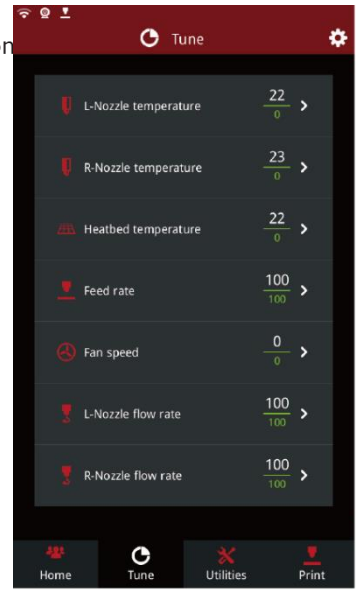
NOTE: The touch screen will display an image of your model on-screen during printing. This image will only be shown when the file is sliced by ideaMaker and the .data file is saved in USB storage or uploaded to screen.

User Interface



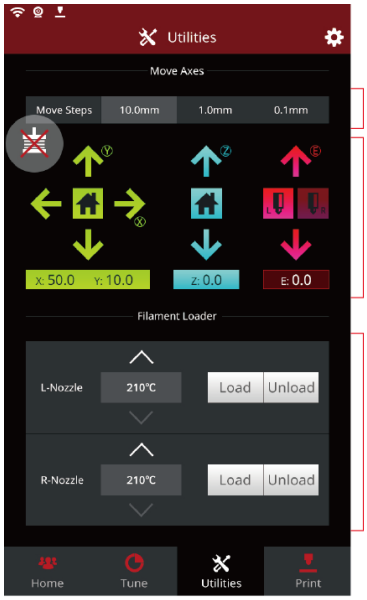
· Status bar
· Menu title, Settings Button
· Extruder and Heat Bed temperature
· Current model name, total print time, current printing status and height
· Visual display of current model
· Pause/Resume button
· Stop button
· Taskbar

Home



· Printing parameters and adjustment

Tune

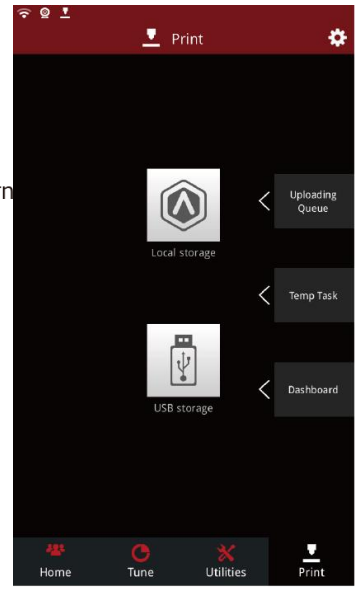


· Moving step distance setting
· Disable motor button
· X/Y/Z axes move/return to original position

Manual Control | Extruder

· Load and unload function for the L&R extruders.

Utilities



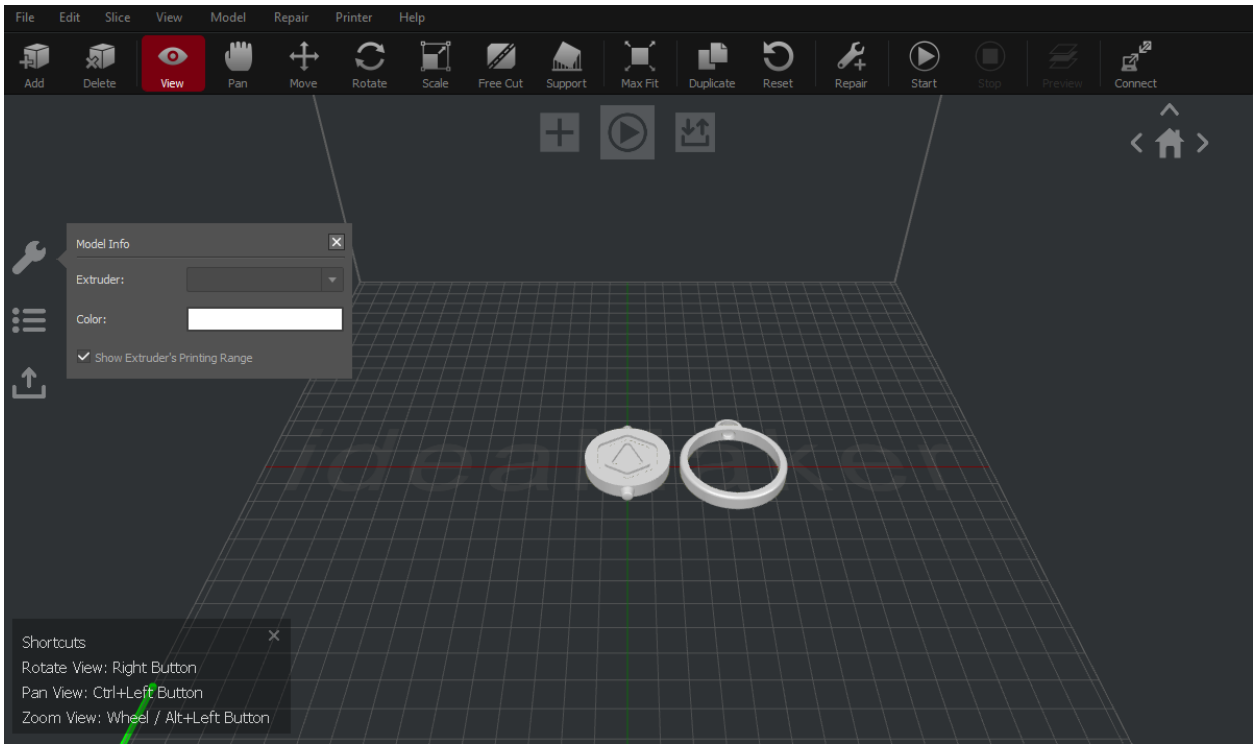
· Choose where to load the print job from
· Check uploading list, recovery task list, printing statistics

Print

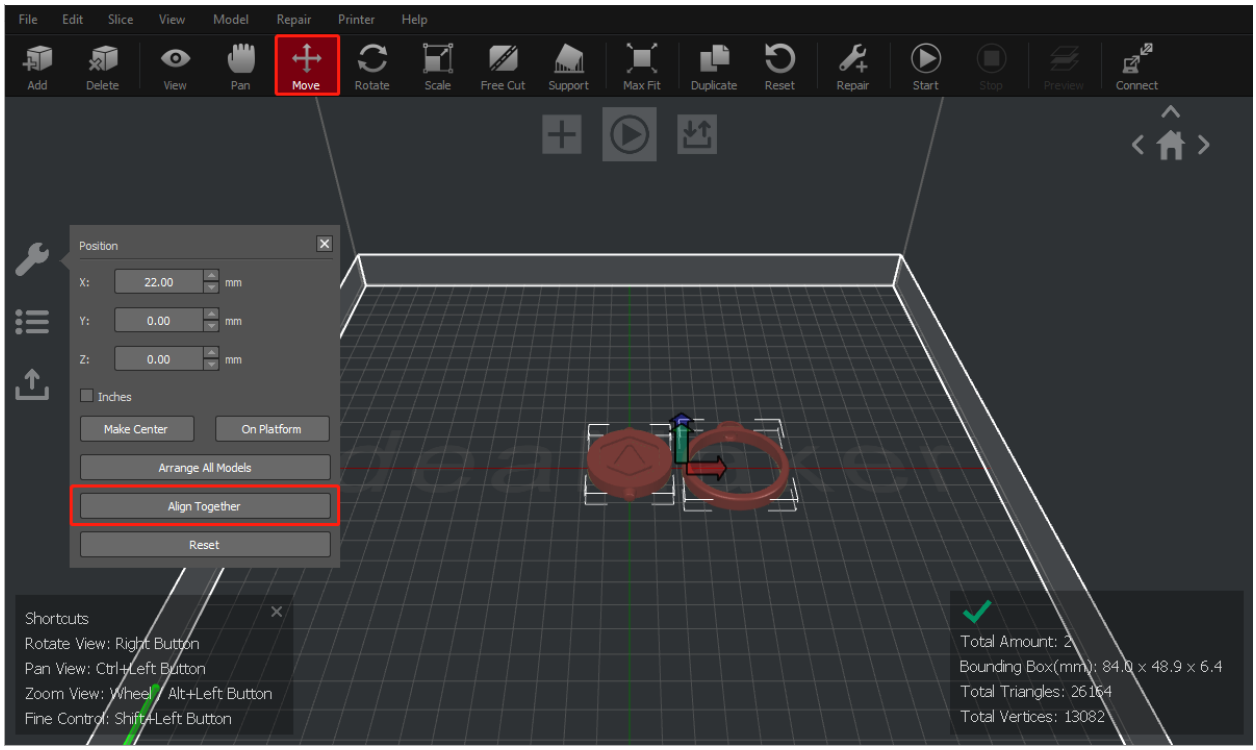
Dual-Extruder Print

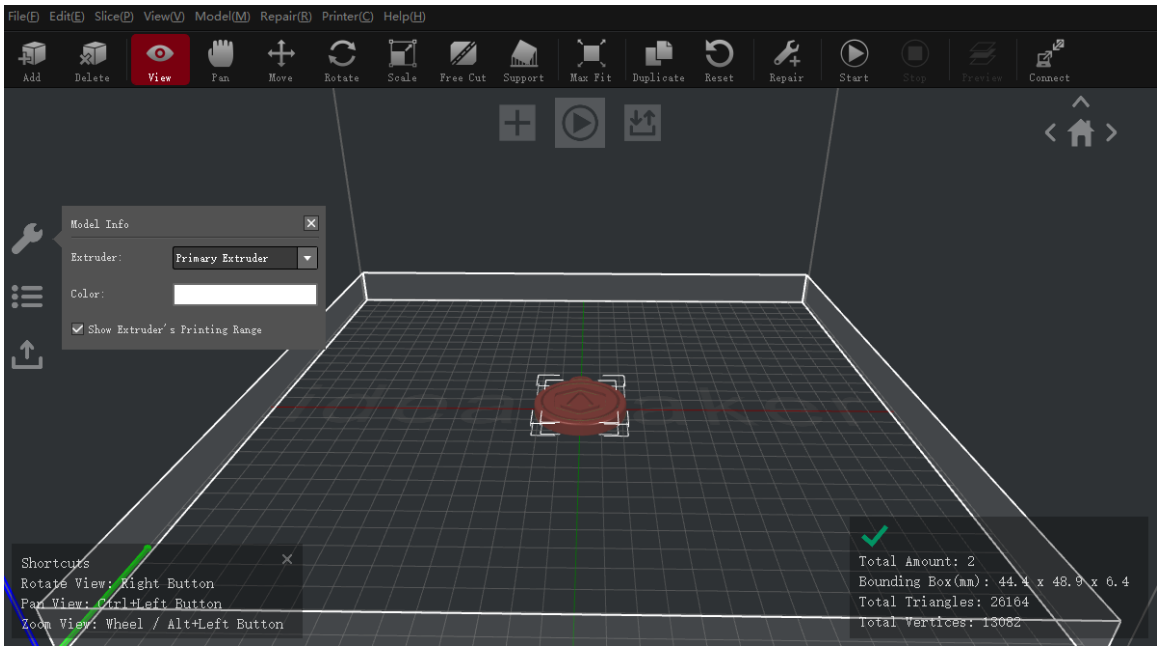
- **Dual-Extruder Print–Slicing**

➢ Open ideaMaker, Click the "+" button to import your two models (.stl/.obj/.3mf file). You can download a file or use the test model included in the USB storage drive.

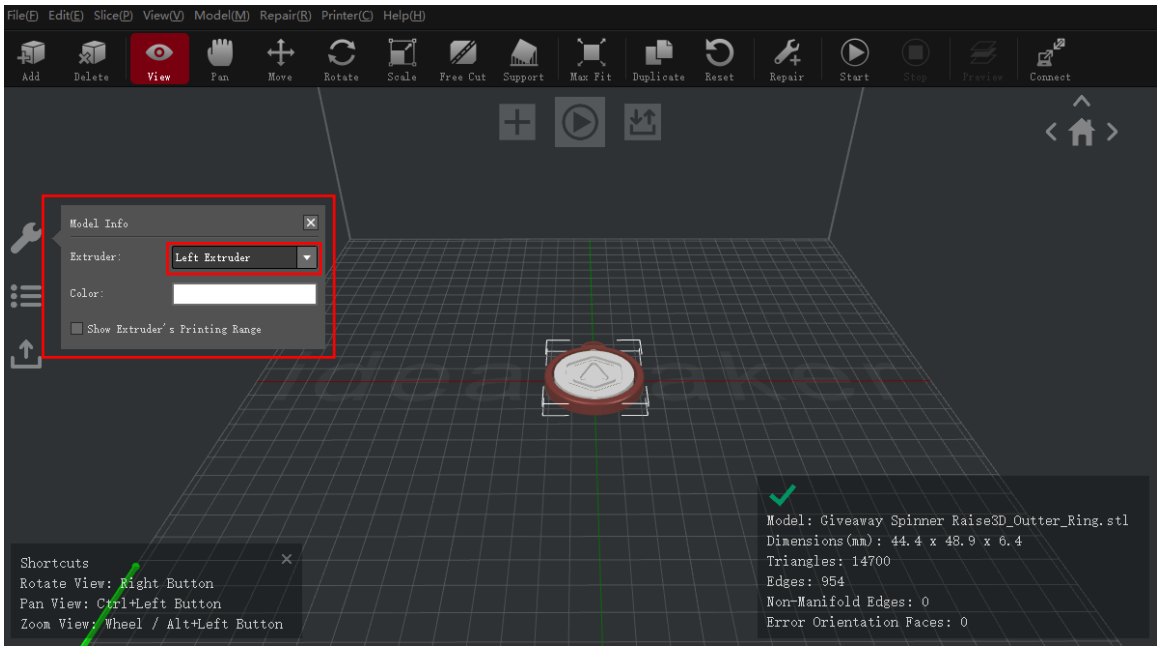


➢ Click "Move" and "Align Together".

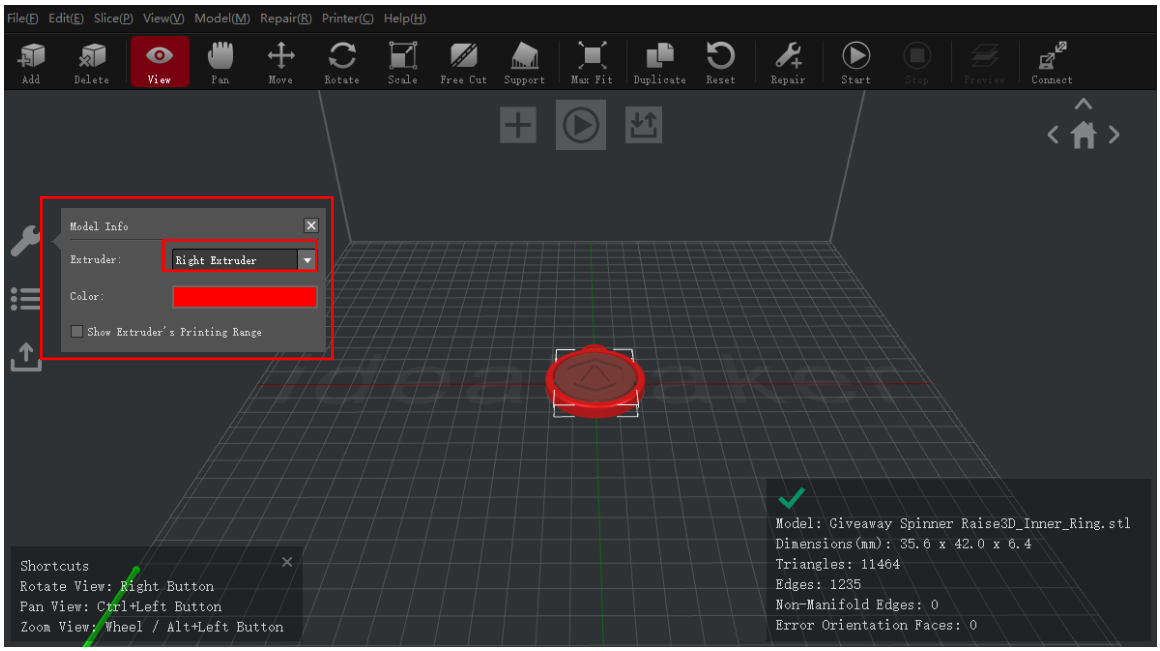




➢ Choose one of the models and set the designated Extruder as Left Extruder from the left side 'Model Info' window. (Note:Model info available with view or pan selected)



Choose the other model and set Extruder as the Right Extruder using the 'Model Info' window.



Wipe Wall

Enable Wipe Wall will add extra shell(s) around the model during dual-extruder printing. This wall(s) can help clean the oozing filament from the unused nozzle to reduce the effects of excess material on the final model.

Wipe Wall Offset refers to the distance between Wipe Wall and the outer shell of the model. If the wall is positioned too closely, the Wipe Wall may stick onto the model. If the wall is set too far, the wiping results may be affected.

Wipe Wall Angle refers to the maximum angle for generating the Wipe Wall. If the maximum angle is set too low, the wall may have a difficult time obeying the shape of the model, especially around curved surfaces.

Wipe Wall Loop Lines adjust the thickness of Wipe Wall.

Wipe Wall Type changes the shape of Wipe Wall. The difference among the following 3 types are the distance between Wipe Wall and the model.

Contoured type will generate a Wipe Wall structure with almost the same shape of the outlines of the model. In some cases, it will be too close to the model which may be difficult to remove especially with inner structures.

Water Fall will attempt to follow along the horizontal model contour.

Vertical will create a vertical wall at the height of the model. It is ideal for simple structures like tubes or cubes.

Dual-extrusion with Multiple Filament Types

Printing with multiple material types may limit printing compatibility. The table below lists all the officially-supported dual-extrusion material combinations currently possible on the Pro2.

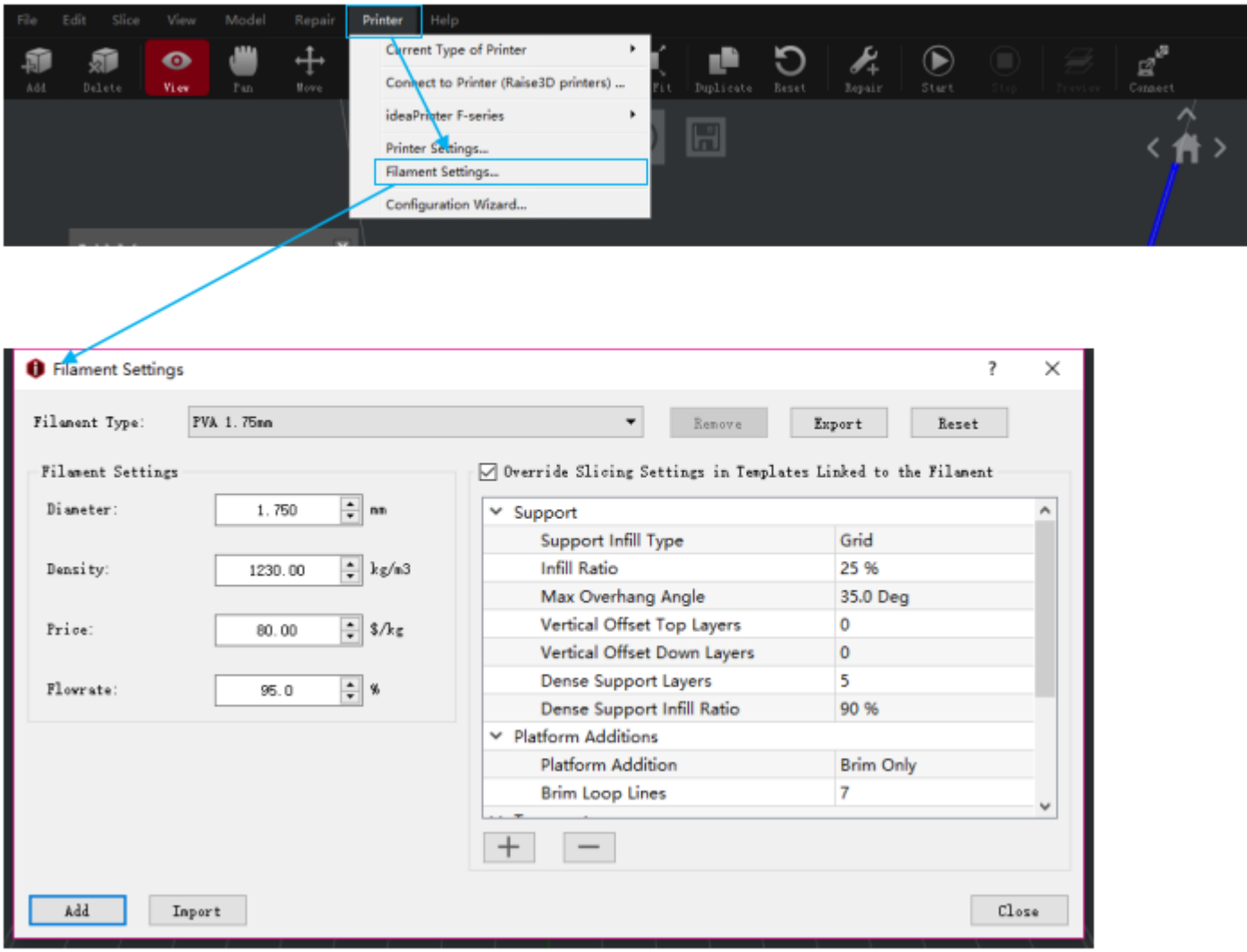
	LEGENDA
✔	Officially supported
✖	Not supported
*	Experimental

	PLA	ABS	Nylon	PC	TPU 95A	PETG	PVA
PLA	✔	✖	✖	✖	✖	✖	✔
ABS		✔	✖	✖	✖	✖	✖
Nylon			✔	✖	✖	✖	✔
PC				✔	✖	✖	✖
TPU 95A					*	*	✖
PETG						✔	✖
PVA							✖

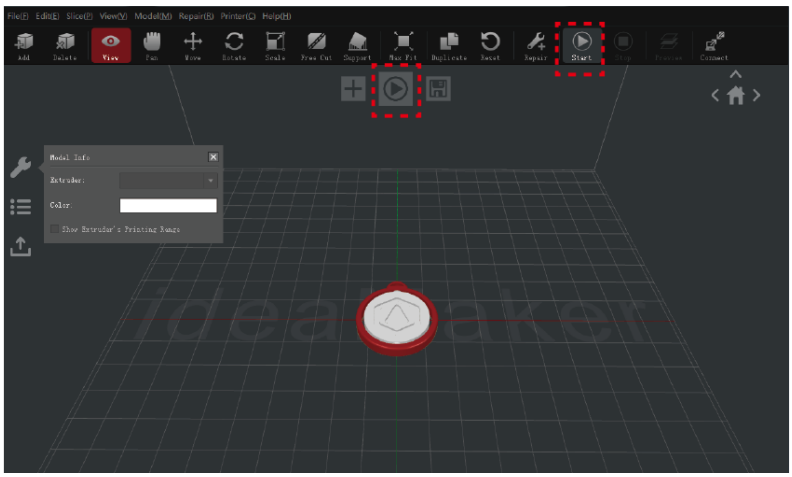
PVA Print

When a nozzle has been selected to print with PVA, ideaMaker will automatically edit some additional settings for better performance with PVA. This will disable some settings under the ‘Advanced’ menu and will not be directly editable. If you need to edit these settings, please open Printer > Filament Settings > PVA 1.75mm.

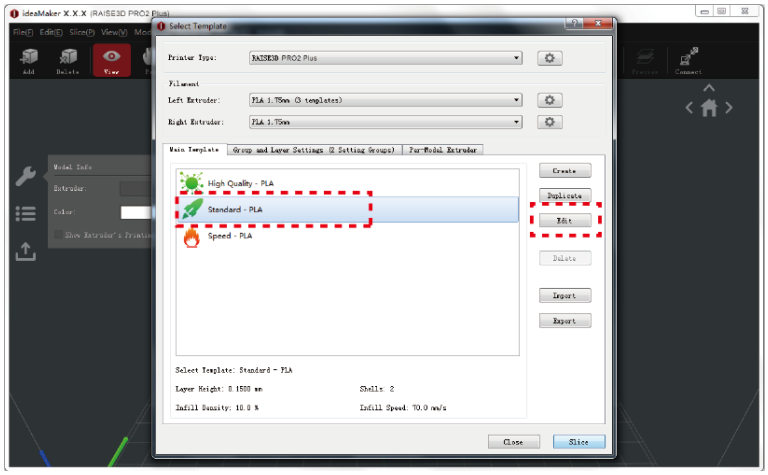
`



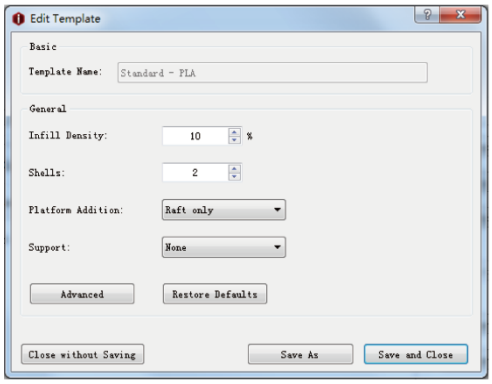
➢ Click the "Start" or " ▶ " button to begin the slicing of the model.

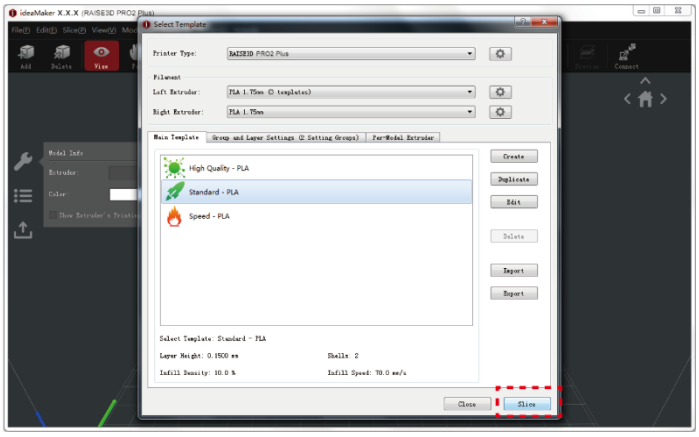


➢ Confirm your printer type and materials for both extruders, then select the standard slicing template. Click “Edit” to select the type of Platform Addition and the type of Support.



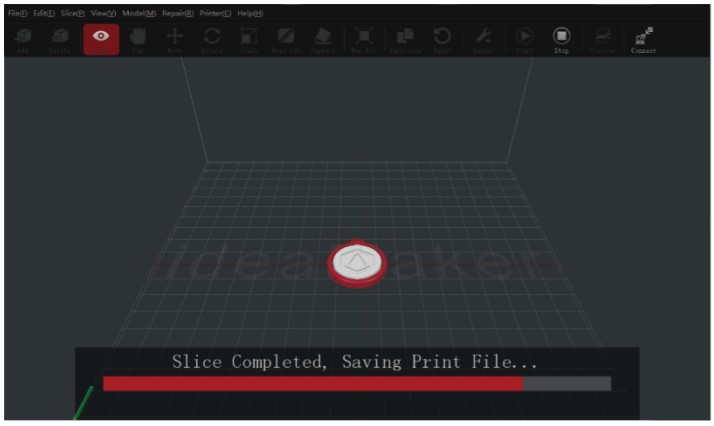
➢ Select your type of Platform and Support in the "Edit" window. Click "Save and Close" to return to the previous menu. Click "Slice" to generate your file.

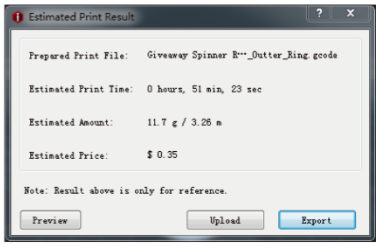




➢ Save the sliced files (.gcode and .data) to your USB storage drive.

NOTE: File names that do not conform to the Western Latin character set may not display properly.

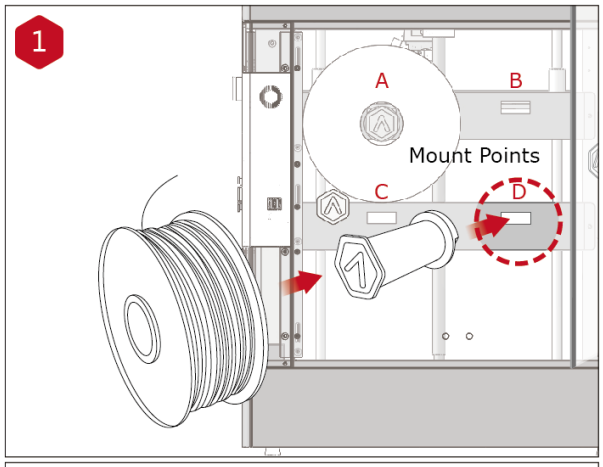




➢ Confirm that the files are saved and eject the USB storage.

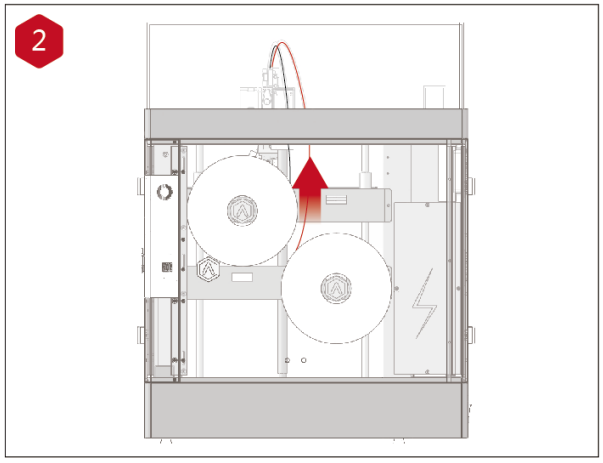
- **Dual-Extruder Print - Hardware Installation**

The following steps show how to feed the right nozzle. For the other hardware installations steps please see with Part **Hardware Installation** in this guide.

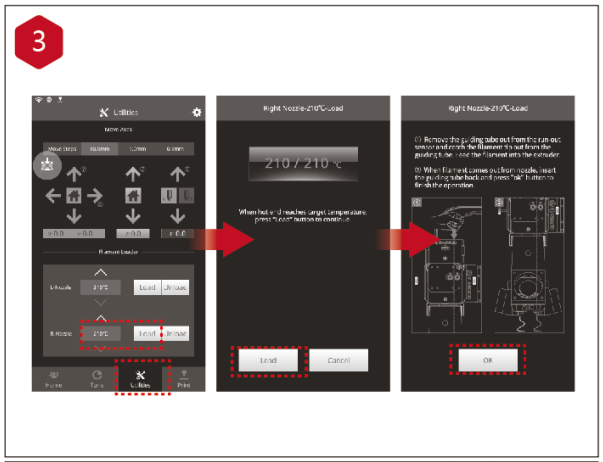


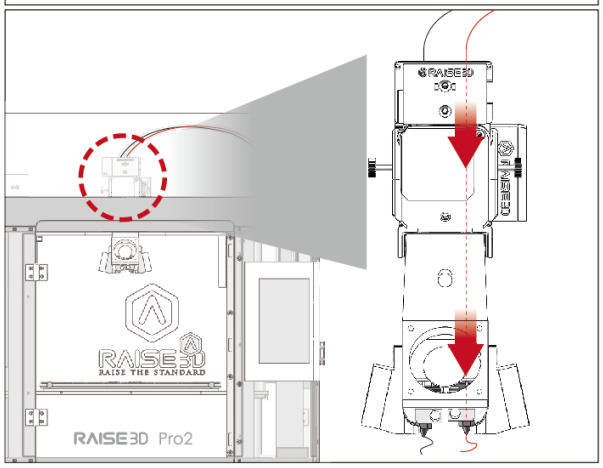
Install the filament holder in the mount point on the side of the printer and place a spool of filament on the holder.

NOTE: The direction of filament spool should be placed to rotate in clockwise at mount points B and D and counterclockwise at mount points A and C.



Feed the filament through the guide tube.

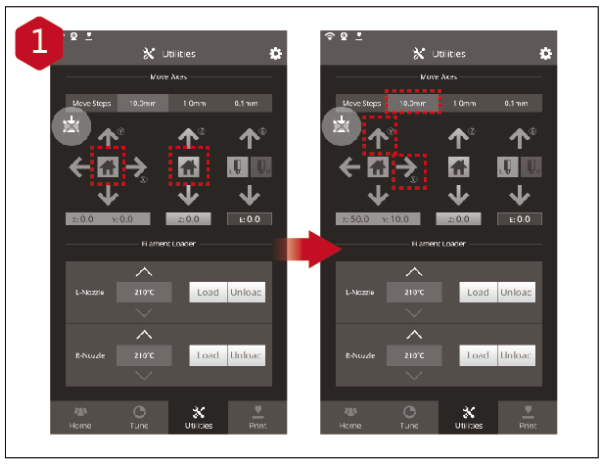




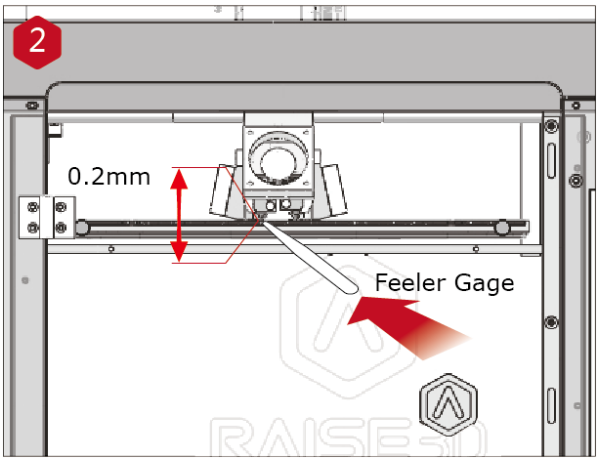
Open the “Utilities” tab on the screen and set the temperature of the right nozzle for the filament you're using, then press the “Load” button. Finish the feeding operation step by step according to the instructions on the screen.

NOTE: This document is set based on the Raise3D PLA filament, delivered with the printer.
We advise that using the Raise3D PLA for this initial setup and testing.

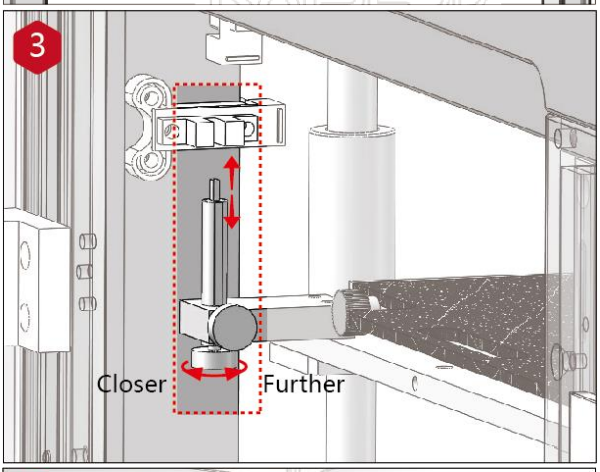
- **Dual-Extruder Print - Start First Print**



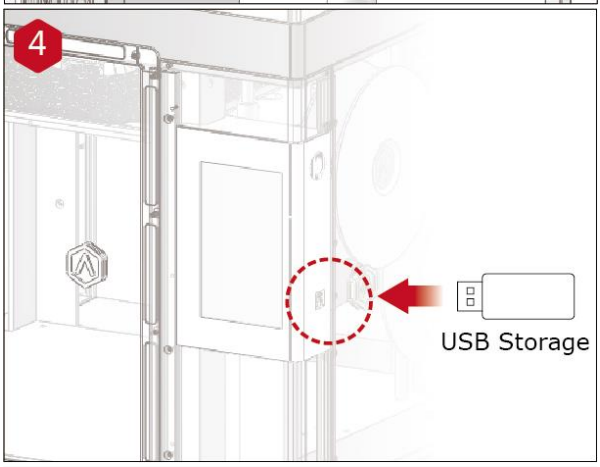
The Pro2/Pro2 Plus units are pre-leveled in the factory, but we recommend verifying that the z-offset has not changed during shipping. First, home the X/Y Axis by selecting the "home" button, then Z axis "home" button. If the homing procedures complete without issues, reposition the print head.
Select "10mm" for "Move Steps" and move X to
50mm, Y to 10mm.



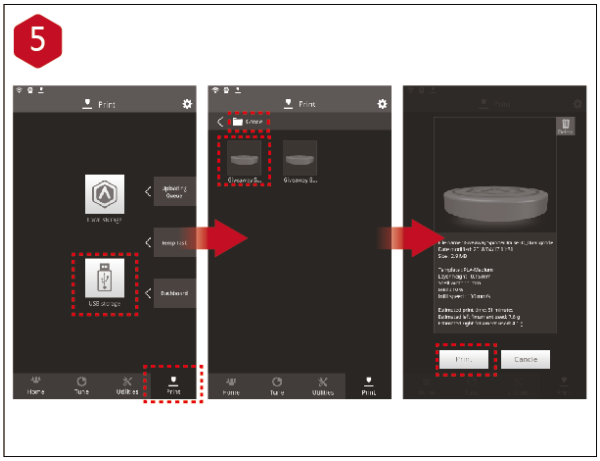
Use the feeler gauge to check the distance between nozzle and printing platform. The optimal distance between is 0.2mm.
The best indicator of this is minimal friction when you slide the feeler gauge into the gap.



The distance between the nozzle and the printing platform can be adjusted by turning the thumb screw on the left-front corner of the Z-plate, the higher the screw stands, the further the distance between the nozzle will be from the printing platform.
Home the Z axis after each adjustment.



Insert the USB storage that contains your sliced model (.gcode and .data files).
Insert this USB drive into the USB slot on the side of touchscreen.



Open the “Print” tab, and choose “USB Storage” to open the file storage path. Select your dual extrusion file to check the printing parameters and settings. Press “Print” to start printing test file.

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During printing, you can check the status of your model including the remaining printing time and other parameters from the “Home” interface on the touchscreen.

NOTE: The touch screen will display an image of your model on-screen during printing. This image will only be shown when the file is sliced by ideaMaker and the .data file is saved in USB storage or uploaded to screen.

Experiencing Difficulties

If you run into any issues during the guided setup, please contact our expert technicians by opening a ticket online at: http://help.raise3d.com.

RAISE3D

4th Floor, Building B5, 1600 North Guoquan Rd, Shanghai, China 200438
+86 21 65337855

43 Tesla, Irvine, CA 92618, USA
+1 888 963 9028

Stationsplein 45 Unit A4.004 3013AK Rotterdam, the Netherlands
+ 31 1080 8068

www.raise3d.com