

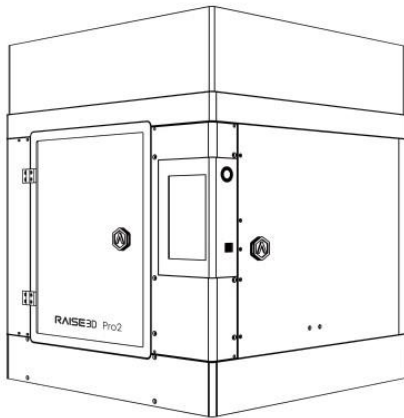
# ***Pro2-Series* 3D Printer**

## Quick Start Guide

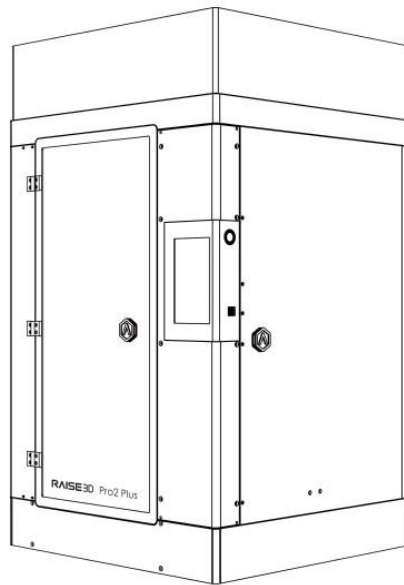
\* Please review this entire guide before operating the printer.

### **WARNING**

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



**Pro2**



**Pro2 Plus**



[www.raise3d.com](http://www.raise3d.com)

The contents of this Quick Start Guide maybe updated overtime. For the latest version, scan the QR code or visit the link below.



<https://www.raise3d.com/download/#down-quickguide>

# CONTENTS

Safety Precautions .....	4
Marks .....	8
A. Declarations and Safety Statements .....	9
B. Technical Specifications .....	11
B. List of Parts .....	- 12 -
C. Hardware Installation .....	13
D. ideaMaker Installation.....	13
E. ideaMaker Initial Settings .....	- 23 -
F. Using ideaMaker .....	- 24 -
G. Start First Print .....	- 28 -
H. User Interface .....	- 30 -
I. Dual-Extruder Print – Slicing .....	- 31 -
I. Dual-Extruder Print - Hardware Installation .....	- 37 -
I. Dual-Extruder Print - Start First Print.....	- 39 -
Experiencing Difficulties/Contact Information .....	- 44 -



## Safety Precautions

Please read the safety information to ensure that you use the appliance safely.

### General Information

You can find general information about this instruction manual here.



- Read this instruction manual carefully. Only this will ensure you use the appliance safely and efficiently.
- This manual is intended for the installer and the user of the appliance.
- Follow the safety instructions and warnings.
- Keep the instruction manual and the product information safe for future reference or for the next owner.
- Check the appliance after unpacking it. Do not connect the appliance if it has been damaged in transit.
- If you have any questions, please contact our local service center or distributors.
- Any failure and losses caused by ignoring the following mentioned items, and cautions mentioned in the operation and installation instruction are not covered by our warranty and any liability.

### Intended Use

Read the information on intended use to ensure that you use the appliance correctly and safely. Only use this appliance:

- According to this installation and instruction manual;
- In a well-ventilated and dry environment;
- The environmental conditions used are:
  - Operating Ambient Temperature: 15-30°C, 10-90% RH non-condensing
  - Storage Temperature: -25°C to +55°C, 10-90% RH non-condensing

### Restriction on User Group

- Keep children, pets and vulnerable persons away from the appliance.
- This equipment is not suitable for use in locations where children are likely to be present.
- This equipment is only allowed to be used by skilled person. This appliance may be used by people who have reduced physical, sensory or mental abilities or inadequate experience and/or knowledge, provided that they are supervised or have been instructed on how to use the appliance safely and have understood the resulting dangers.

## Safe Installation

Take note of the safety instructions when installing the appliance.

### ⚠ **WARNING - Risk of electric shock!**

- Improper installation is dangerous.
  - Connect and operate the appliance only in accordance with the specifications on the rating plate.
  - Connect the appliance to a power supply with alternating current only via a properly installed socket with earthing.
  - The protective conductor system of the domestic electrical installation must be properly installed. The installation must have a sufficiently large cross section.
  - Please ensure that the power supply system (current, voltage and cables) can meet the normal load requirements of the electrical appliances.
  - Never equip the appliance with an external switching device, e.g., a timer or remote control.
  - When installing the appliance, check that the power cable is not trapped or damaged.
  - Select the fuse according to the fuse safety identification requirements.
  - The power plug and the socket must be matched and the grounding blade must work properly, and the body must be properly grounded.



- If the insulation of the power cord is damaged, this is dangerous.
  - Never let the power cord come into contact with hot appliance parts or heat sources.
  - Never let the power cord come into contact with sharp points or edges.
  - Never kink, crush or modify the power cord.
- When the machine is energized, touch the machine shell and find that there is electrostatic inductance. This indicates that the machine in the home is not well grounded. Please stop the machine and repair the power connection immediately to ensure a good grounding.
- Do not connect the power supply with wet hands.



- If you have any questions, please consult a professional electrician.

### ⚠ **WARNING - Risk of fire!**

- It is dangerous to use an extended power cord and non-approved adapters.
  - Do not use extension cables or multiple socket strips.
  - If the power cord is too short, contact Customer Service.
  - Only use adapters approved by the manufacturer.
- If the insulation of the power cord is damaged, it is very dangerous.

### ⚠ **WARNING - Risk of injury!**

- The high weight of the appliance may result in injury when lifted.
  - Do not lift the appliance on your own.

**⚠ WARNING - Risk of suffocation!**

- Children may put packaging material over their heads or wrap themselves up in it and suffocate.
  - Keep packaging material away from children.
  - Do not let children play with packaging material.

**⚠ WARNING - Risk of injury!**

- The appliance may vibrate when in use.
  - Place the appliance on a clean, even, solid surface.
- If tubes and power cords have been laid incorrectly, this causes a tripping hazard.
  - Lay tubes and power cords in such a way that there is no risk of tripping.
- If the appliance is moved by holding onto protruding components, such as the appliance door, the parts may break off.
  - Do not move the device by holding onto protruding parts.

**⚠ WARNING - Risk of cutting!**

- Touching sharp edges on the appliance may lead to cuts.
  - Do not touch the sharp edges on the appliance.
  - Wear protective gloves when installing and transporting the appliance.

**Safe Use**

Follow these safety instructions when using the appliance.

**⚠ WARNING - Risk of electric shock!**

- If the appliance or the power cord is damaged, this is dangerous.
  - Never operate a damaged appliance.
  - Never pull on the power cord to unplug the appliance. Always unplug the appliance at the mains.
  - If the appliance or the power cord is damaged, immediately unplug the power cord.
  - For after-sales support or after-sales service, please refer to page 44 of this manual.
  - Repairs to the appliance should only be carried out by trained specialist staff.
- An ingress of moisture can cause an electric shock.
  - Never expose the appliance to intense heat or humidity.
  - Do not use steam cleaners or sprays to clean the appliance.

**⚠ WARNING - Risk of harm to health!**

- Children can lock themselves in the appliance, thereby putting their lives at risk.
  - Do not install the appliance behind a door as this may obstruct the appliance door or prevent it from opening.
  - With redundant appliances, unplug the power cord and cut through the cord.

**⚠ WARNING - Risk of suffocation!**

- Children may breathe in or swallow small parts, causing them to suffocate.
  - Keep small parts away from children.
  - Do not let children play with small parts.

**⚠ CAUTION - Risk of injury!**

- The covering plate may break if you stand on or climb onto the appliance.
  - Do not stand on or climb onto the appliance.
- The appliance may tip over if you sit on or lean against the open door.
  - Do not sit on or lean against the appliance door.
  - Do not place any objects on the appliance door.
- Reaching into the chamber while the three-axis system is still moving may cause hand injuries.
  - Wait for the three-axis system to come to a complete stop before reaching inside.
- The spatula provided in the accessory box has sharp parts. If the spatula is used improperly, the user may be injured.
  - Do not touch the edge of the spatula.
  - Keep children away from the spatula.
- Some parts in the printer are sharp and may cause injury.
- When removing the printing model, please refer to Section I. Remove the Printed Model.

### **CAUTION - Risk of burns!**

- When operating or printing at high temperatures, the shell of the appliance becomes hot.
  - Do not touch the build plate when the printer is heating up.
  - Please wear the heat-insulating gloves provided in the accessory box for operation.
  - Please keep children away from the heated build plate.
- The temperature of the extruder is very high when it is printing.
  - Please do not touch the extruder when it is heating.
  - Please wear the heat-insulating gloves provided in the accessory box for operation.
  - Please keep children away from the heated extruder.

## **Safe Maintenance**

Take note of the safety instructions when performing maintenance work on the appliance.

### **WARNING - Risk of electric shock!**

- Improper repairs are dangerous.
  - Repairs to the appliance should only be carried out by trained specialist staff.
  - Only use the manufacturer's original spare parts and original accessories when repairing the appliance.
  - If the power cord of this appliance is damaged, it must be replaced by the manufacturer, the manufacturer's Customer Service or a similarly qualified person in order to prevent any risk.
- An ingress of moisture can cause an electric shock.
  - Do not use steam cleaners or sprays to clean the appliance.

### **WARNING - Risk of injury!**

- The use of non-original spare parts and non-original accessories is dangerous.
  - Only use the manufacturer's original spare parts and original accessories.

## Marks

**Warning:** It 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 Accessory Kit. Nozzle temperatures in the printer can exceed 300°C (572°C).



**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 Accessory Kit.



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



**Moving Parts:** Do not put fingers, clothing or hair into gears and other hazardous parts to avoid electric shock, injury, fire, or damage to the device.



## **A. Declarations and Safety Statements**

### **FCC Statement**

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

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.

### **UKCA Conformity Statement**



This product is marked with "UKCA" and in conformity with the relevant UK statutory requirement: Radio Equipment Regulations 2017. Full text of the UK declaration of conformity is available at <https://www.raise3d.com>.

UK sales partner company name: 3DGBIRE Ltd

UK sales partner company address: 3DGBIRE, Unit 44/45 Chorley North Industrial Estate, Drumhead Road, Chorley, Lancashire, PR67BX

## Electromagnetic Compatibility - EMC

Simplified EU Declaration of Conformity Raise3D declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. Full text of the EU declaration of conformity is available at <https://www.raise3d.com>.

## RF Exposure Information

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must be co-located or operating in conjunction with any other antenna or transmitter.

## CE&UKCA Mark Warning

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.



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

CE&UKCA Output power table:

Function	Frequency	Frequency
Wi-Fi	2412-2472 MHz	18.5 dBm(b)/16.5 dBm(g)/15.5 dBm(HT)
	5150-5250 MHz	16 dBm(a)/ 15 dBm(HT20)/ 14.5 dBm(HT40)
	5725-5850 MHz	14 dBm(a)/ 14 dBm(HT20)/ 14 dBm(HT40)

FCC Output power table:

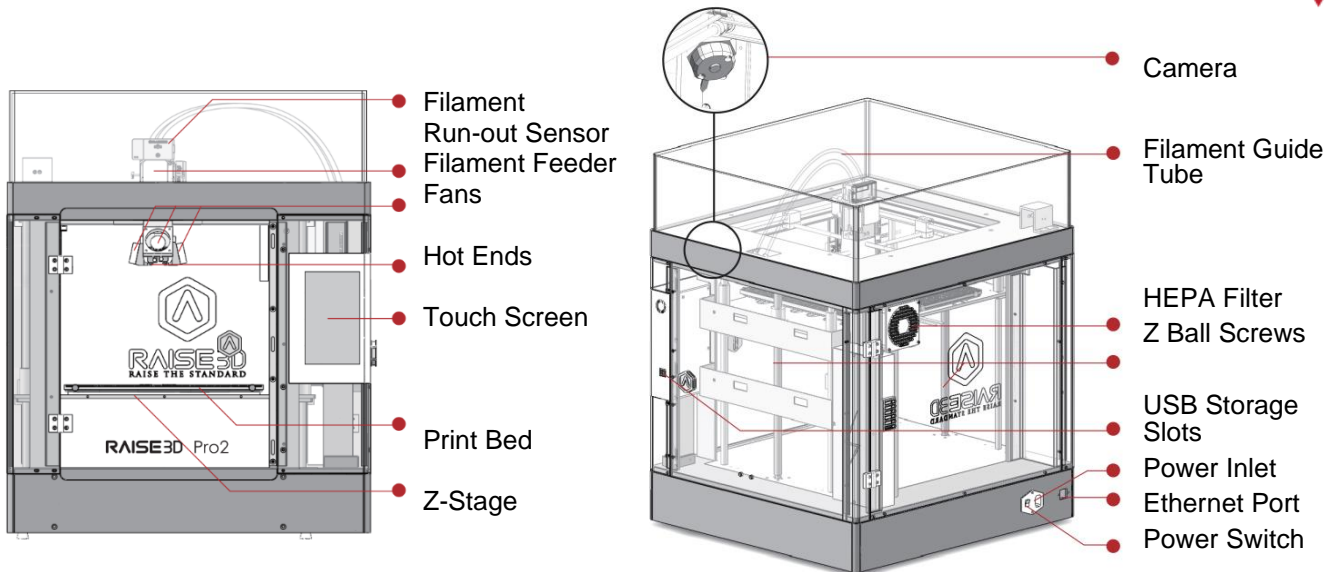
Function	Frequency	Frequency
Wi-Fi	2412-2462 MHz	18.31 dBm(b)/ 15.62 dBm(g)/ 14.9dBm(HT)
	5150-5250 MHz	15.36 dBm(a)/ 14.79 dBm(HT20)/ 14.41 dBm(HT40)
	5725-5850 MHz	15.48 dBm(a)/ 14.49 dBm(HT20)/ 14.06dBm(HT40)

## B. Technical Specifications

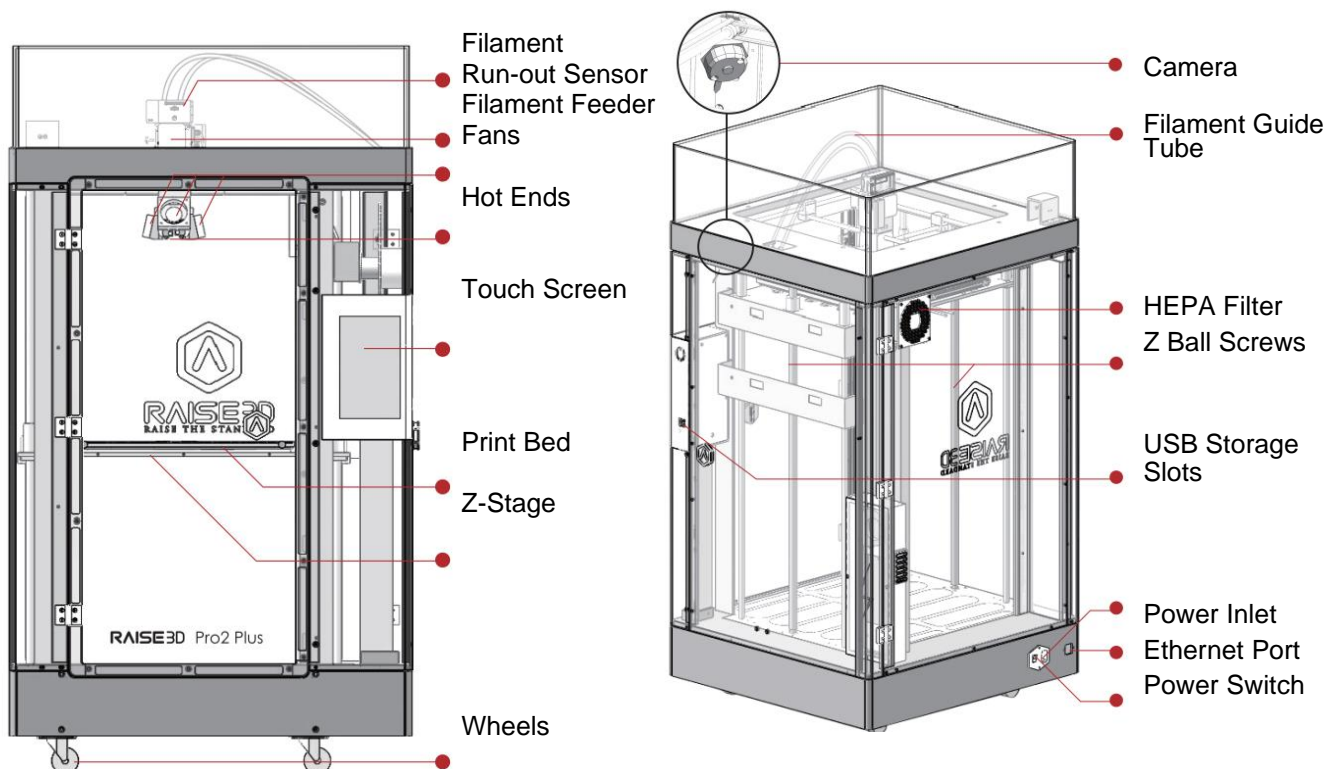
ITEM	Pro2	Pro2 Plus
CONSTRUCTION	Build Volume (WxDxH)	
	Single Extruder Print	Dual Extruder Print
	12X12X11.8 inch	11X12X11.8 inch
	305X305X300 mm	280X305X300 mm
	Machine Size (WxDxH)	
	24.4X23.2X29.9 inch	24.4X23.2X43.5 inch
ELECTRICAL	Power Supply Input	100-240 V AC, 50/60 Hz 230 V @3.3A
	Power Supply Output	24 V DC, 600 W
PRINTER	Print Technology	FFF
	Print Head	Dual-head with electronic lifting system
	Filament Diameter	1.75 mm
	XYZ Step Size	0.78125, 0.78125, 0.078125 micron
	Print Head Travel Speed	30 - 150 mm/s
	Build Plate	Heated aluminum build plate with magnetic holding
	Max Build Plate Temperature	110°C
	Heated Bed Material	Silicone
	Build Plate Leveling	Pre-calibrated leveling
	Supported Materials	PLA/ ABS/ H1 PS/ PC/TPU/ TPE/ NYLON/ PETG/ ASA/ PP] PVA/ Glass Fiber Infused/ Carbon Fiber Infused/ Metal Fill/ Wood Fill
	Nozzle Diameter	0.4 mm/ 0.2/ 0.6/ 0.8/ 1.0 mm
	Max Nozzle Temperature	300 °C
	Connectivity	Wi-Fi, LAN, USB port, Live camera
	Noise Emission (Acoustic)	< 50 dB(A) when building
	Operating Ambient Temperature	15 - 30 °C, 10 - 90% RH non-condensing
	Storage Temperature	-25 to +55 °C, 10 - 90% RH non-condensing
	Technical Certifications	CB, CE, FCC, UKCA
SOFTWARE	Slicing Software	ideaMaker
	Supported File Types	STL/ OBJ/ 3MF
	Supported OS	Windows/ IOS/ Linux
	Machine Code Type	GCODE
PRINTER CONTROLLER	User Interface	7-inch Touch Screen
	Ethernet	10/100 Mbps
	WLAN	IEEE802.11b/g: 2412-2472 MHz
		IEEE802.11n HT20:2412-2472 MHz
		IEEE802.11a: 5150-5250 MHz, 5725-5850 MHz
		IEEE802.11an HT20:5150-5250 MHz,5725-5850 MHz
		IEEE802.11an HT:5150-5250 MHz,5725-5850 MHz
	Resume Print after Power Outage	Firmware recording, no need for battery installation. Protection from any condition.
	Screen Resolution	1024*600
	Motion Controller	ATM Cortex M7.400MHZ FPU
	Logic Controller	32 bit freescale imx6, Quad core 1Ghz ARM processor
	Memory	1GB
	Onboard Flash	8 GB
	OS	Embedded Linux
	Ports	USB 2.0*2, Ethernet*1

## B. List of Parts

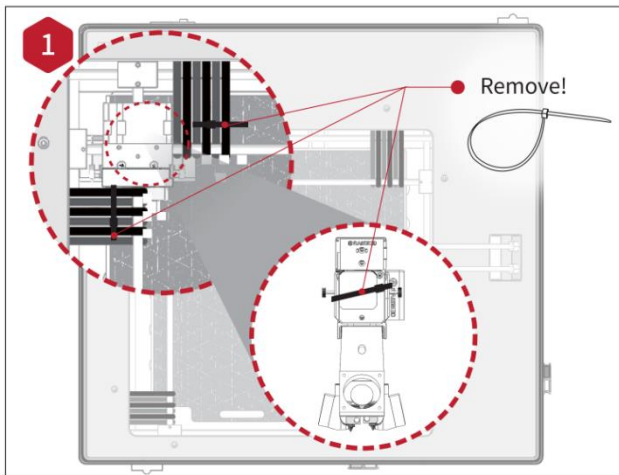
### Pro2



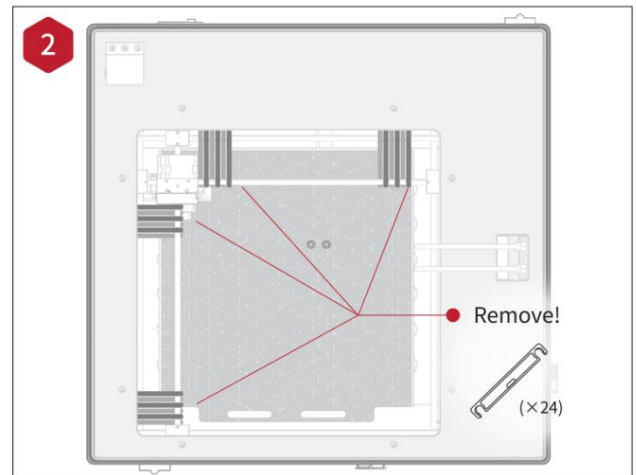
### Pro2 Plus



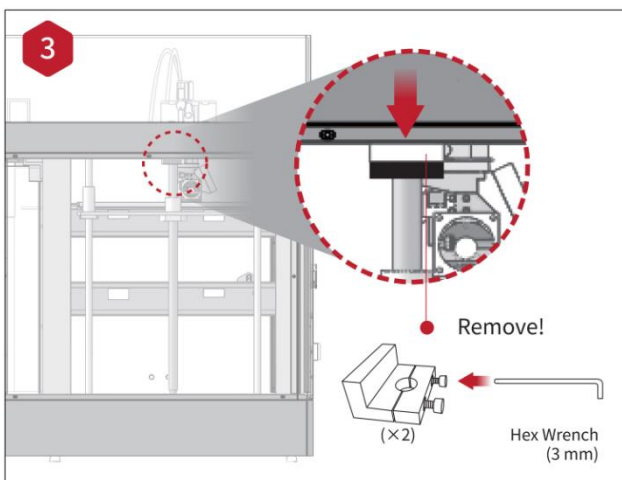
## C. Hardware Installation



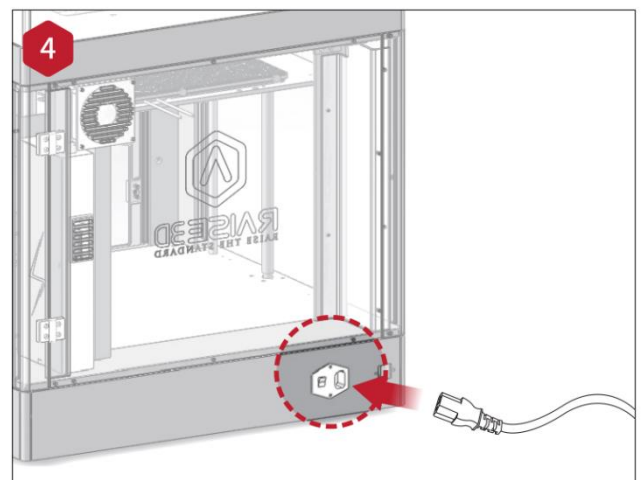
Locate the four shipping zip ties, and remove them. It's recommended to unclip these as opposed to cutting. They can be reused if you need to transport your machine in the future.



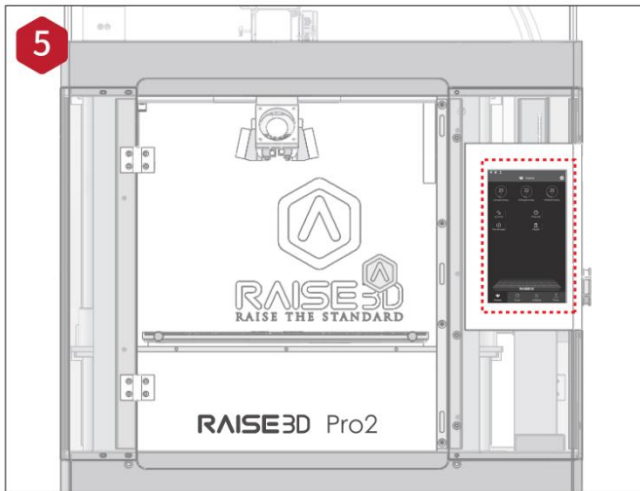
Peel off the yellow stickers and remove the 24 security spacers. These clips are designed to hold the extruder assembly in place during shipping and should be saved for future transport. Do not operate printer with clips installed.



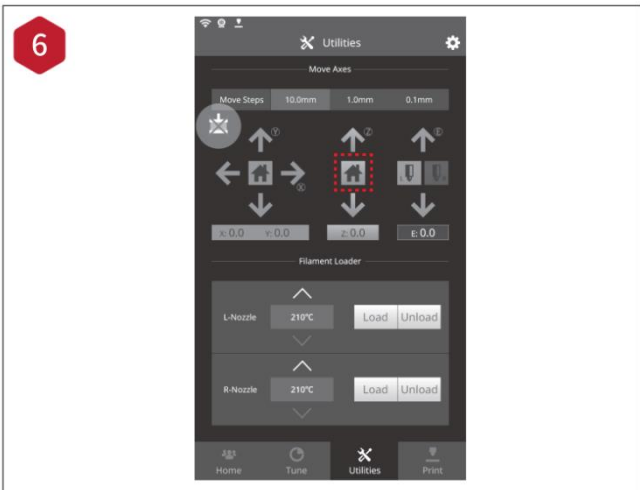
Select the largest of the included hex head wrenches (3mm), and remove all four hex head security bolts from Z-axis clamps (2 bolts each). These are located on the left and right sides of the printer of the ball screw thread.



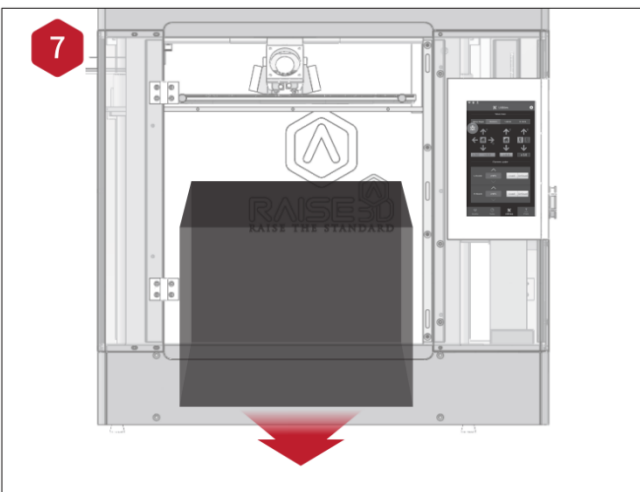
Plug the machine into a wall outlet using the power adapter for your designated country. (5 included)  
Flip the switch to power the unit on.



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



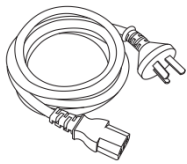
Tap the "Utilities" tab, and press the Z Homing button. Press OK, and the print bed will begin to "Home" to the origin position. This will allow you to access your accessory packages.



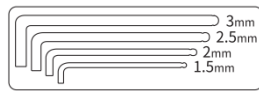
Open the front door, and remove the starter box and the filament box from the base of the printer. Open these packages, and compare them with the following Raise3d Supplies and Accessories list.

## C. Hardware Installation (continued)

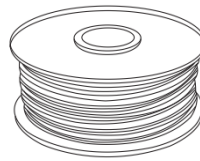
### Raise3d Supplies and Accessories



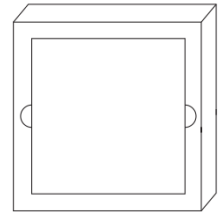
Power Cable  
(X5)



Hex Wrenches



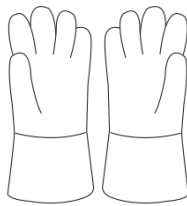
Filament  
(X2)



Build Plate  
(with Build Surface inside  
Protective Cover)



USB storage



Heat Resistant Gloves



Filament Holder  
(X2)



Spatula



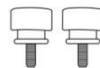
Nozzle  
Cleaning Kit



Tweezers



Fuse

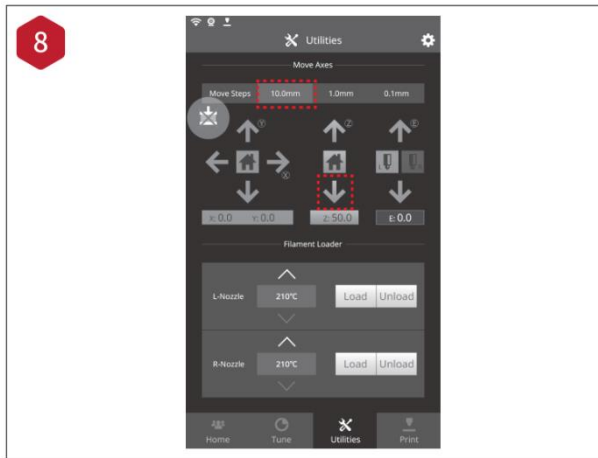


Thumb Screws  
(X2)

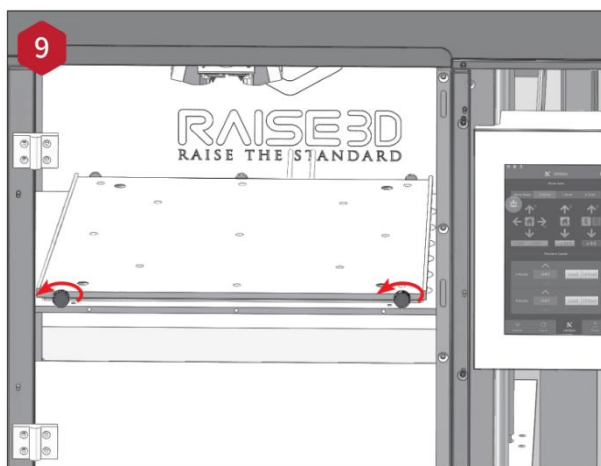


Other Accessories  
(Spare)

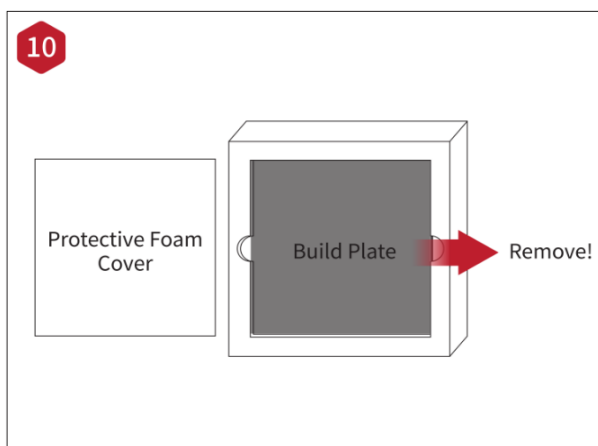
## C. Hardware Installation (continued)



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 at a time. Click this downward arrow 5 times to move the Z platform downward 50mm.

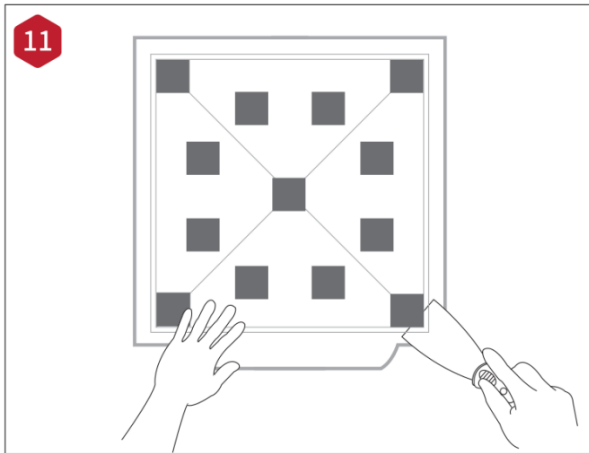


Loose the two thumb screws on the Z platform by rotating them counter-clockwise.

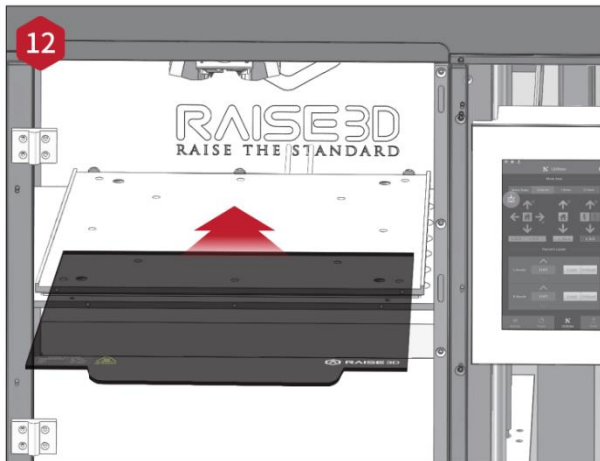


Remove the aluminum build plate from the foam packaging.

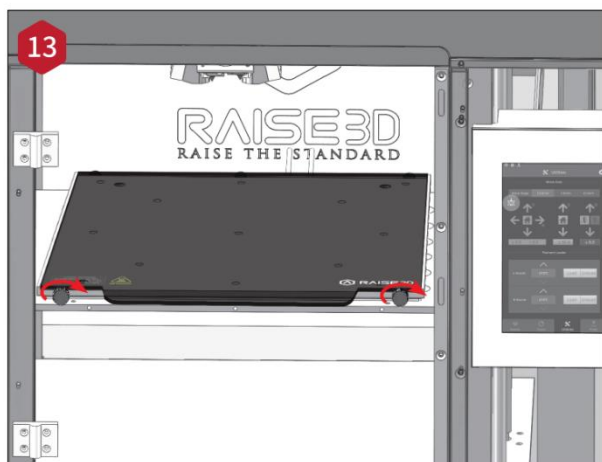
## C. Hardware Installation (continued)



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

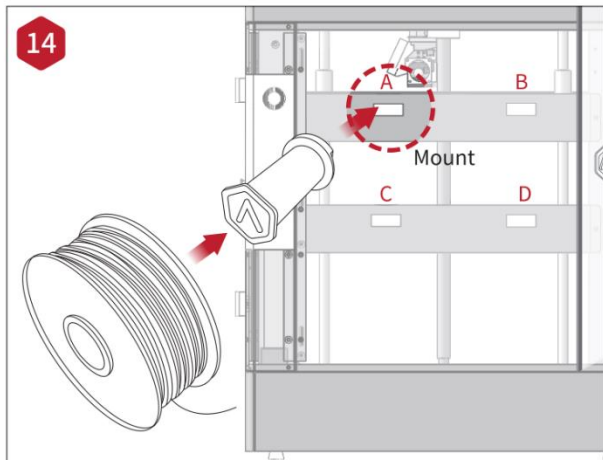


Slide the build plate onto the Z platform with the logo facing upwards, and the handle edge facing the front of the machine.



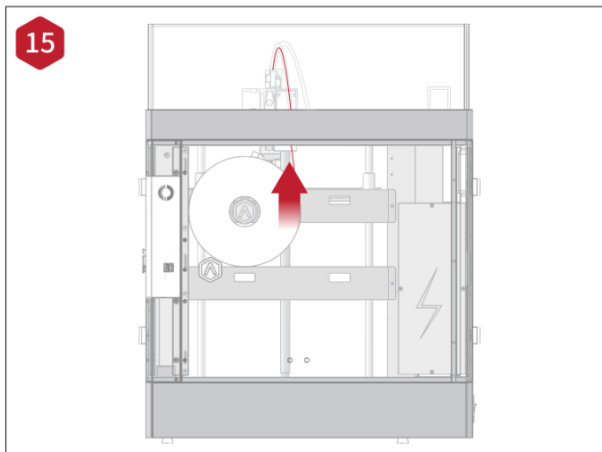
Re-install the thumb screws by rotating them clockwise, to lock the build plate into position.

## C. Hardware Installation (continued)



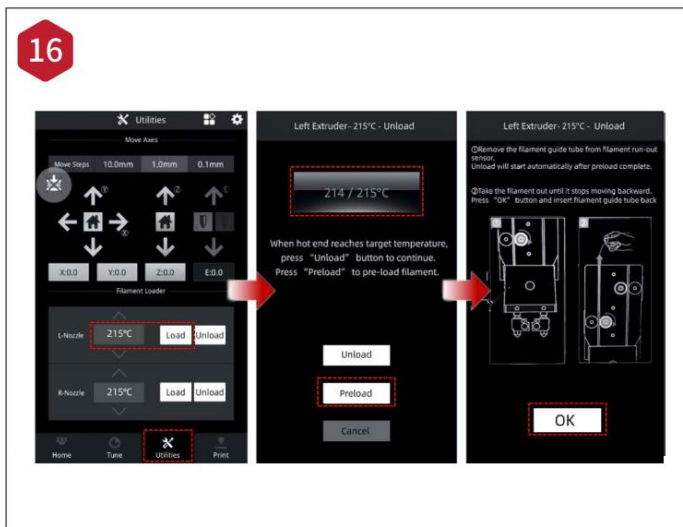
Open the side door of the printer, and install the filament holder onto the mount. Open one of the included spools of filament, and place it on the holder.

**NOTE:** The direction of the filament spool should be placed to rotate clockwise if the filament spool installed on the mount of B or the mount of D, and should be oriented to rotate counterclockwise if the filament spool installed on the mount of A or the mount of C.



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

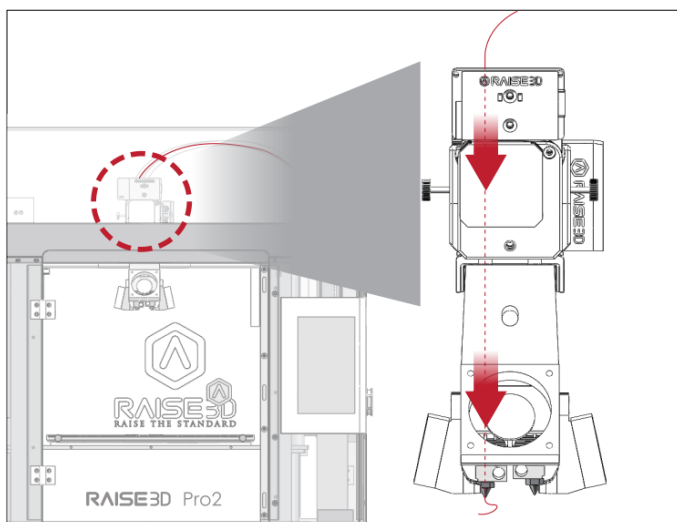
## C. Hardware Installation (continued)



Press the "Utilities" tab on the bottom of the screen and set the temperature of the left nozzle to match the requirements of 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.

**NOTE:** This document's instructions are based on the properties of Raise3D PLA filament. This is the standard filament included with your product and it is advised to use Raise3D PLA for testing and initial setup.



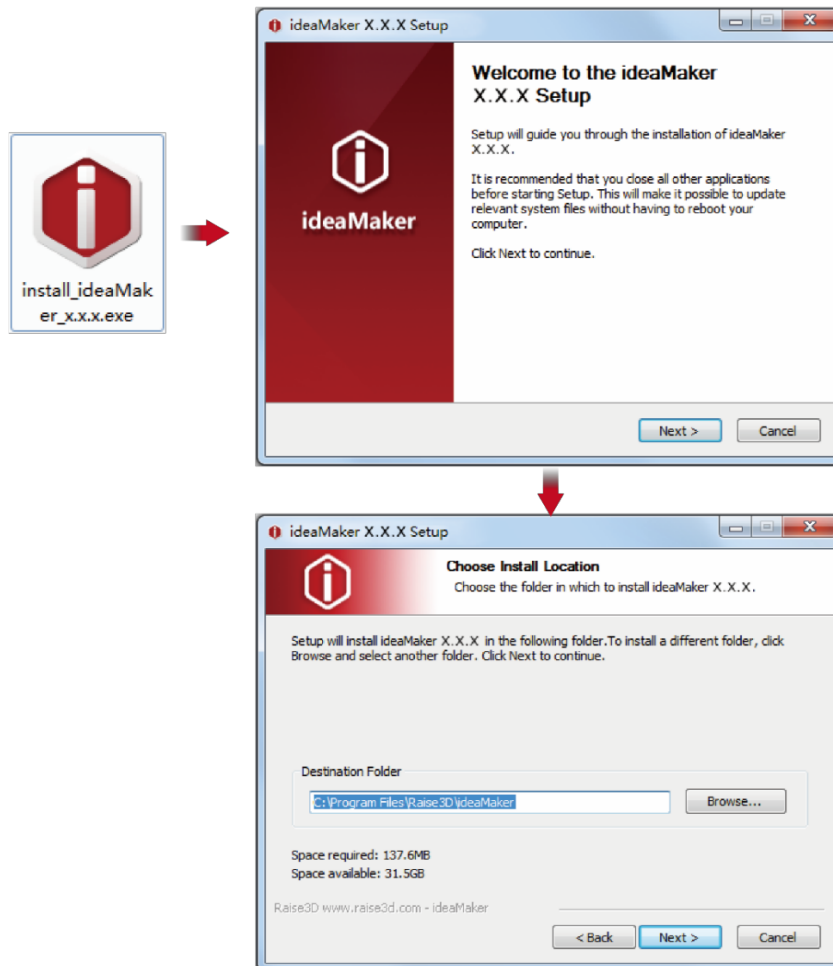
## D. ideaMaker Installation

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



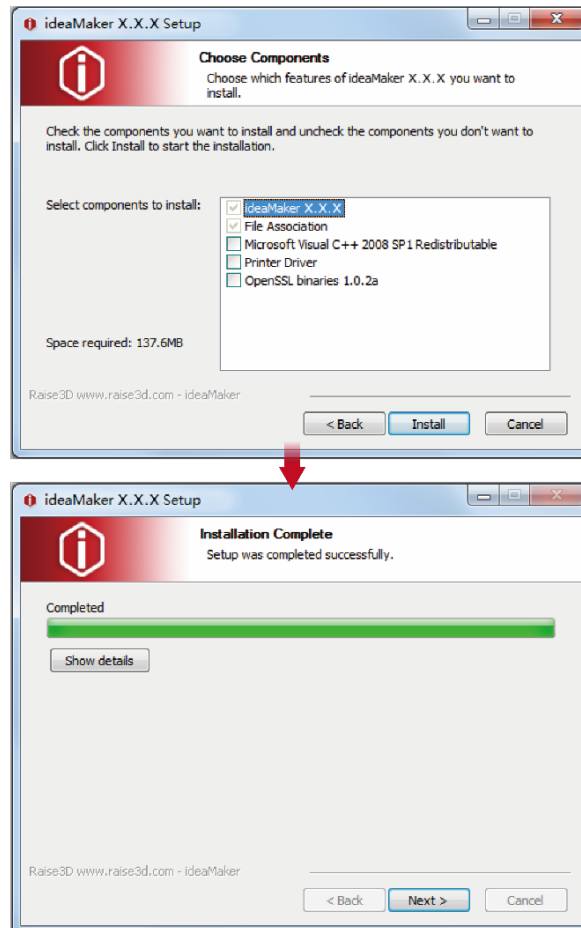
### WINDOWS

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



## D. ideaMaker Installation(continued)

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



- Click "Finish" and ideaMaker is installed.



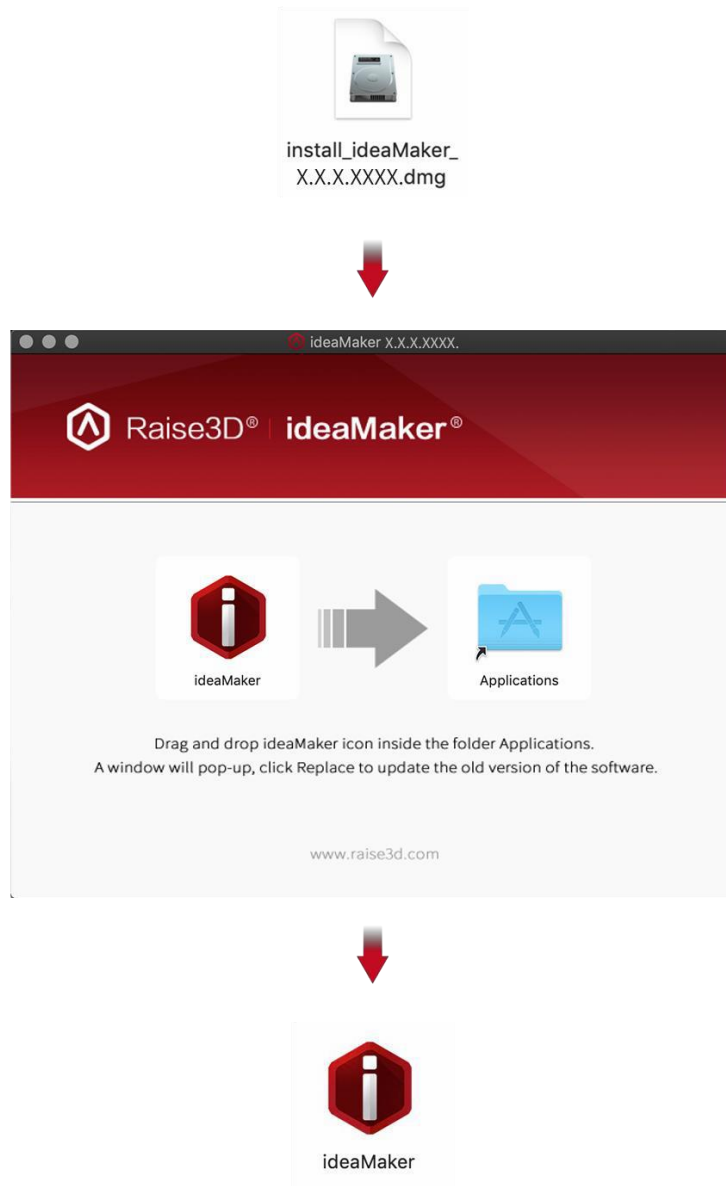
## D. ideaMaker Installation(continued)



### MAC OS X

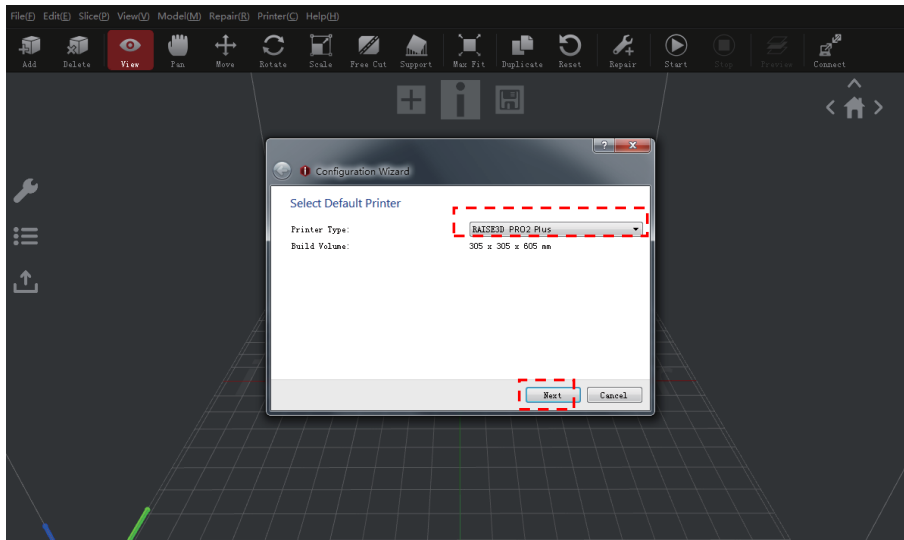
Open the Disk Image for the ideaMaker installer. This is located in the USB storage device included with your printer. Alternatively, you can download the latest version\_ from <https://www.raise3d.com/download/>.

Next, drag the ideaMaker icon(left) into the Application folder on the right side.



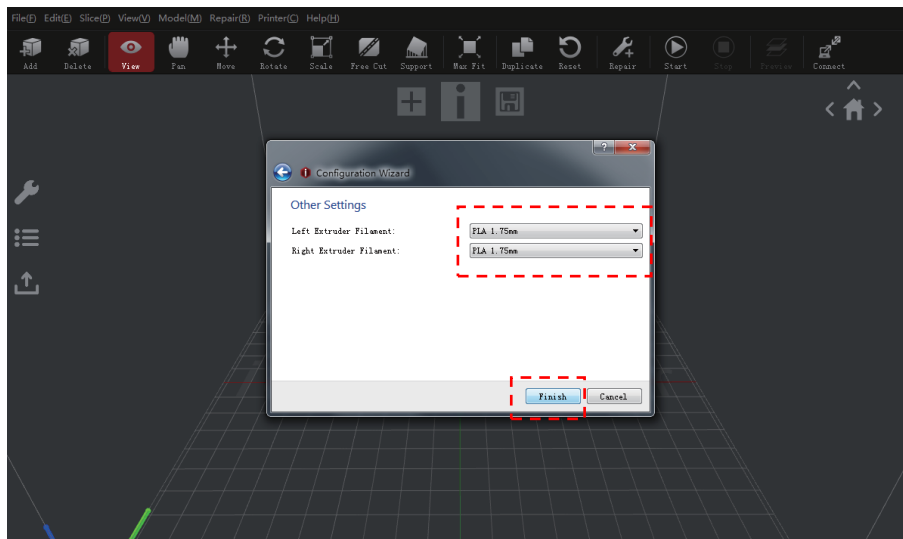
## E. ideaMaker Initial Settings

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



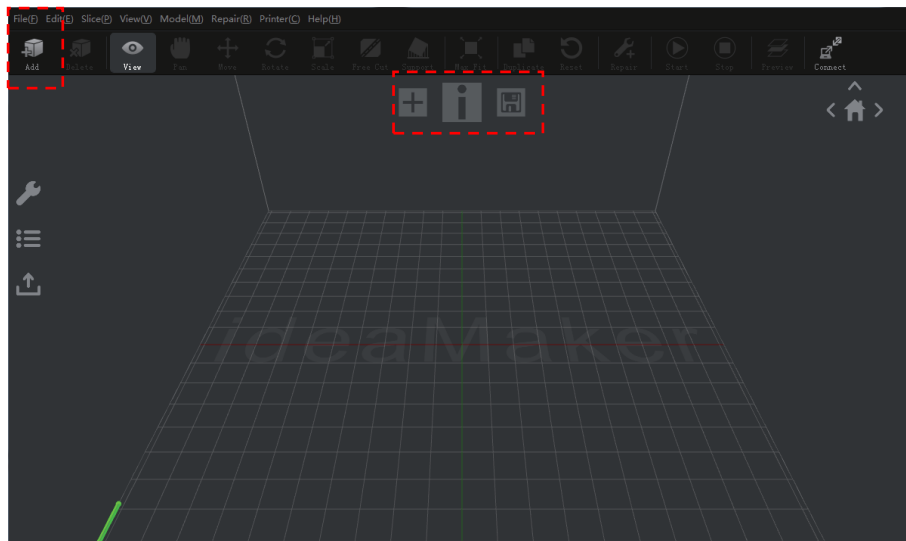
- Select the diameter of your filament. Press "Finish" to finalize the initial settings.

**NOTE:** ALL Pro-2 printers use 1.75 mm filaments.

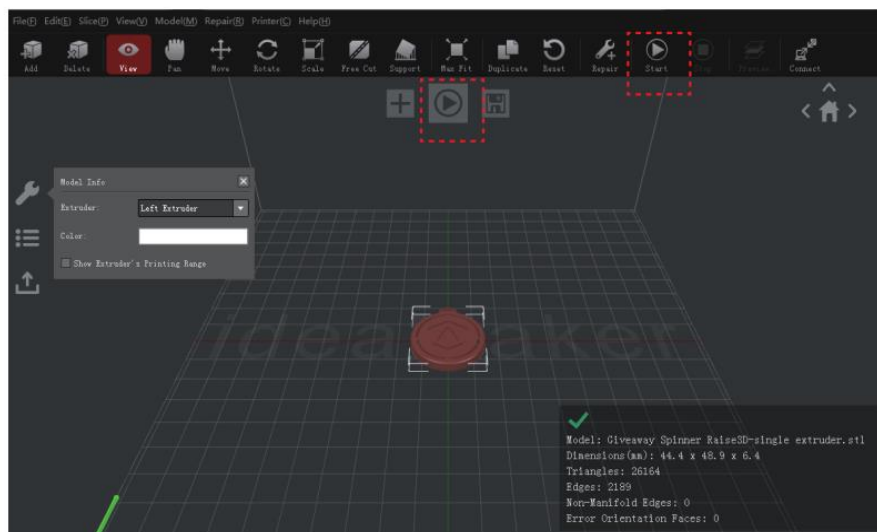


## F. Using ideaMaker

- Click the "+" button to import "Giveaway Spinner" included in the USB storage device.

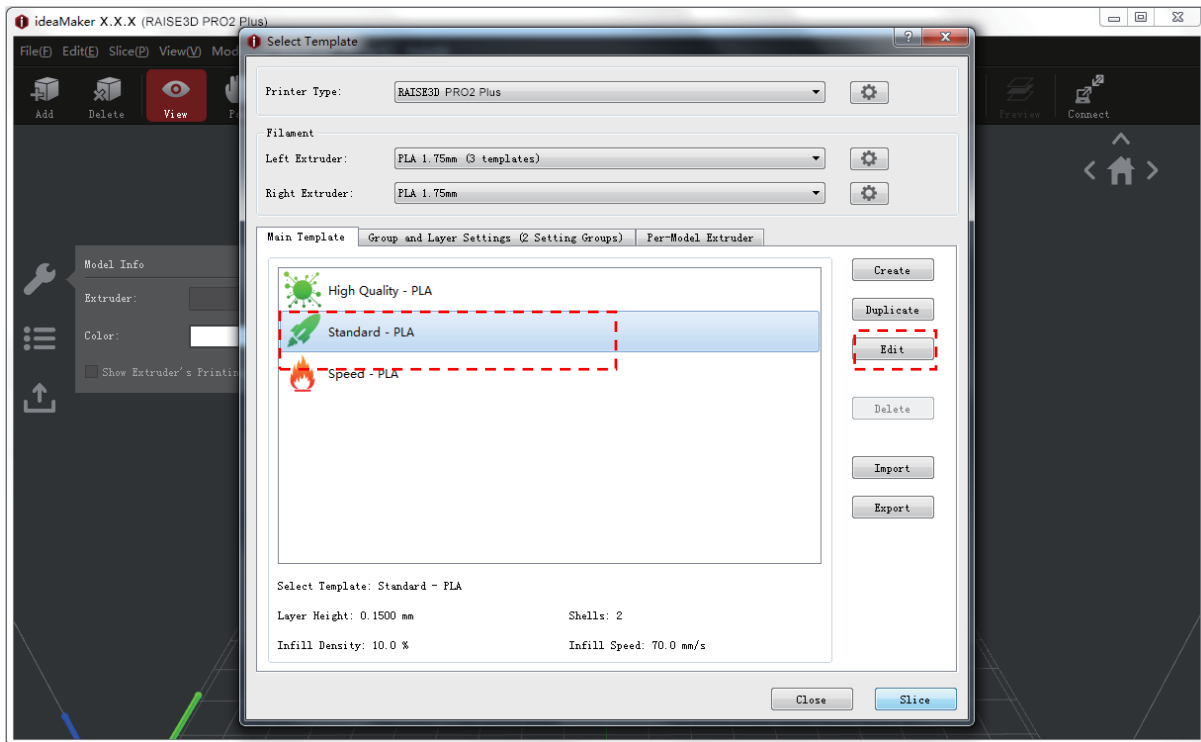


- Click the "Start" button to begin slicing the model.



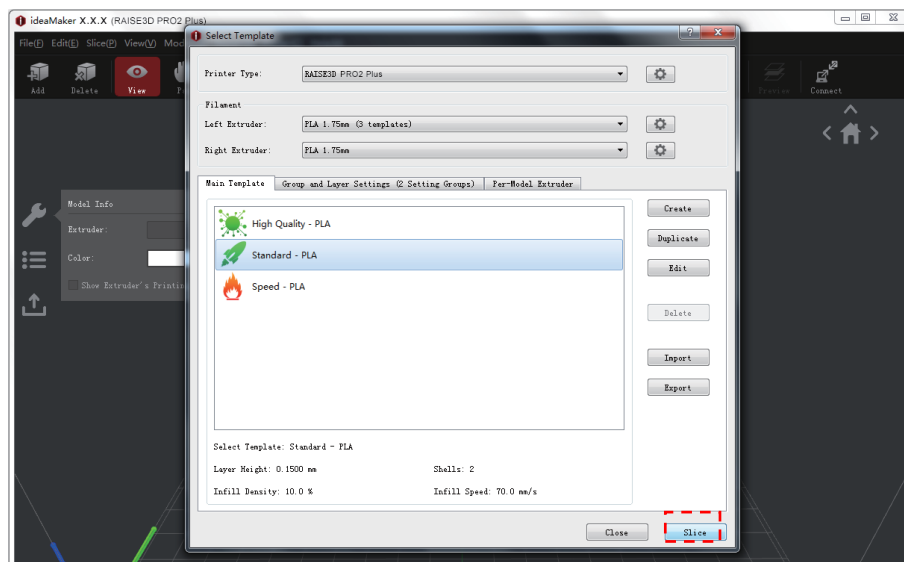
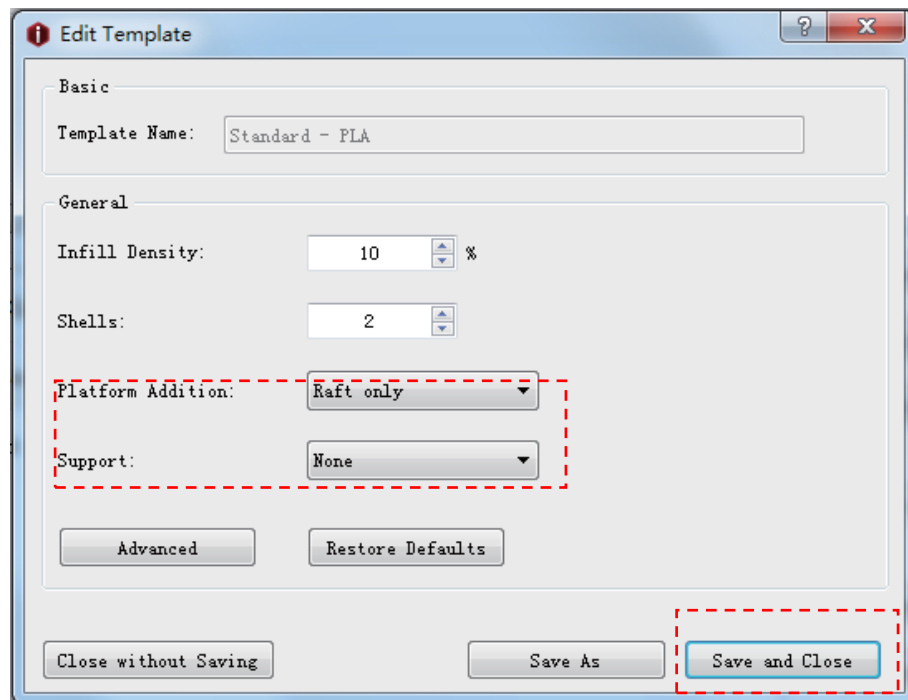
## F. Using ideaMaker

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



## F. Using ideaMaker(continued)

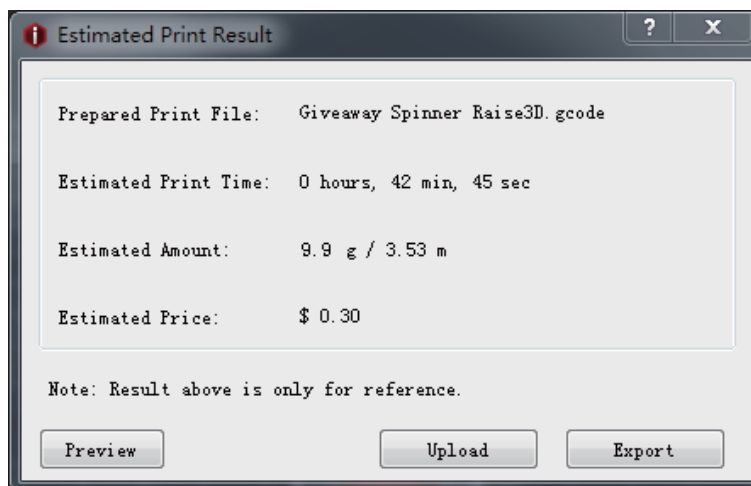
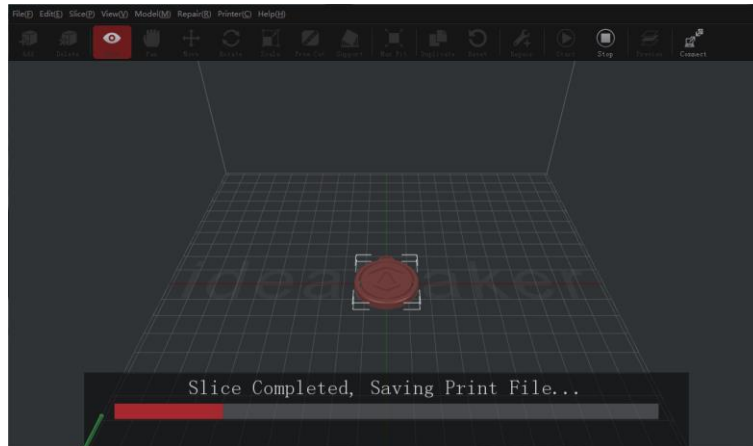
- Select your type of Platform Addition and Support in the "Edit" window. Click "Save and Close" to return to the previous menu. Click "Slice" to generate your file.



## F. Using ideaMaker (continued)

- Save the sliced files (.gcode and .data) by exporting them on the USB storage device.

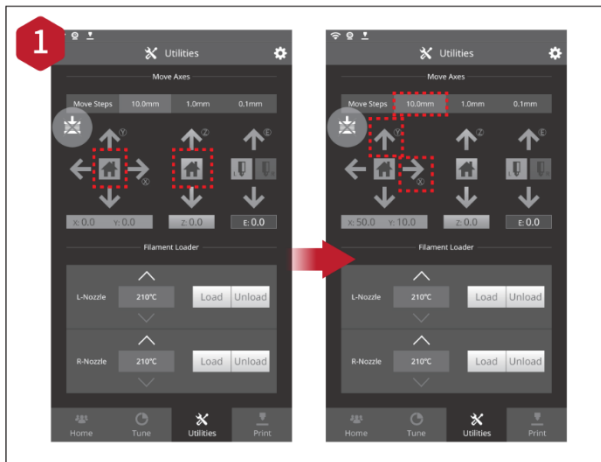
*NOTE: File names that do not conform to the Western Latin character set may not display properly.*



- Confirm that the files are saved and eject the USB storage device.



## G. Start First Print

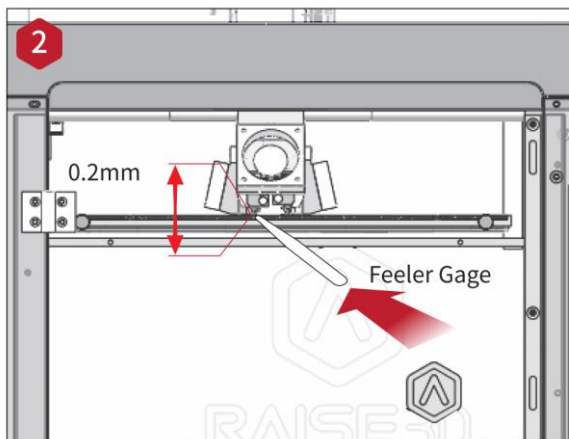


The Pro2/Pro2 Plus units are pre leveled in the factory, but we recommend verifying that the leveling has not changed during shipping.

First, home the X/Y axes by selecting the "Home" button, and then selecting the Z-axis "Home" button.

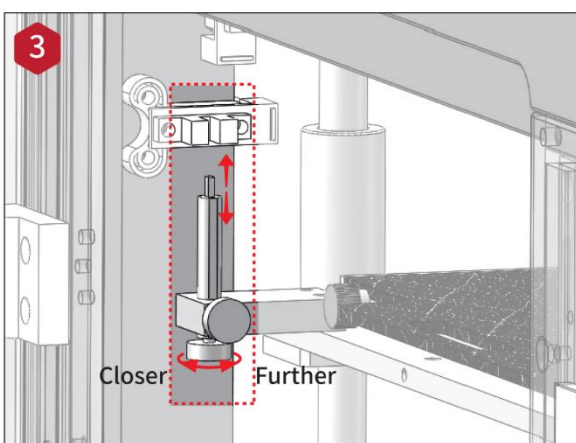
If the homing procedures complete without issues, reposition the print head.

Select "10mm" for "Move Steps" and move X to 50mm, Y to 10mm.



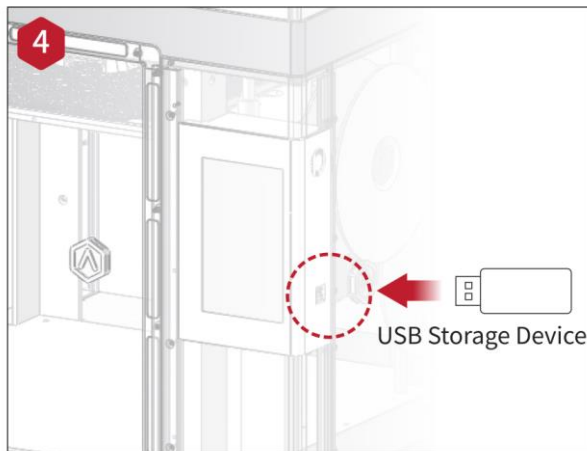
Please use the feeler gauge to check the distance between the nozzle and the printing platform. The optimal distance is 0.2mm.

Ideally, there should be a little friction whenever you slide the feeler gauge into the gap.

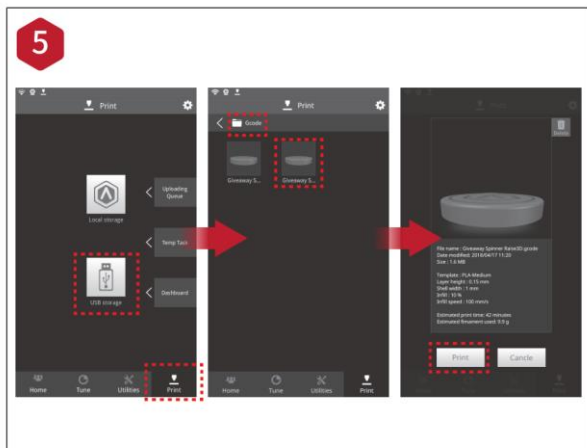


The distance between the nozzle and the printing platform can be adjusted by turning the thumb screw on the left-front corner of the Z-plate. The higher the screw stands out, the further the distance between the nozzle and the printing platform gets.

## G. Start First Print(continued)



Insert the USB device that contains your sliced model files (.gcode or .data) into the USB slot on the side of the touchscreen.



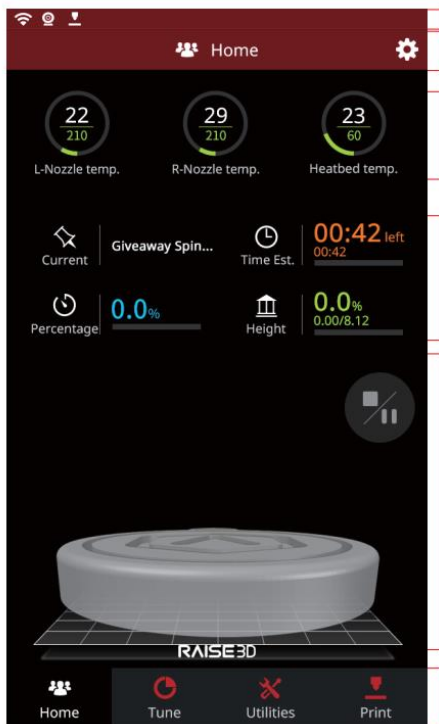
Select the "Print" tab, and choose "USB Storage". Select the file and check the printing parameters and settings. Press "Print" to start printing the test file.



During printing, you can check the status from the "Home" interface on the touchscreen, including the remaining print time and other parameters.

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

## H. User Interface



Home

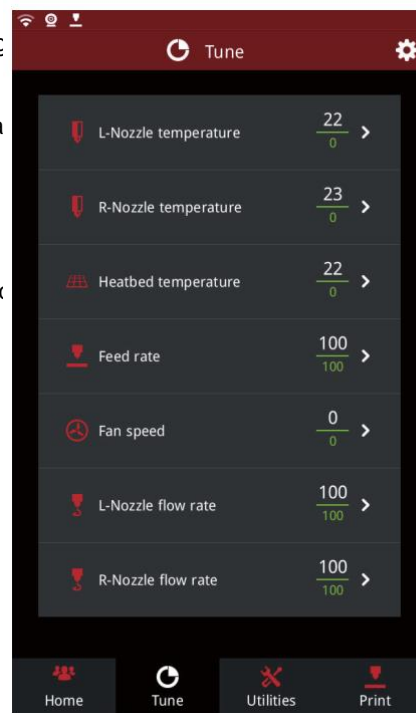
Status Bar  
Menu title, Setting button

Extruder and Heatbed temperature

Current model name, total print time, current printing status and height

Visual display of current model  
Pause/ Resume button  
Stop button

Taskbar



Tune

• Printing parameters and adjustments

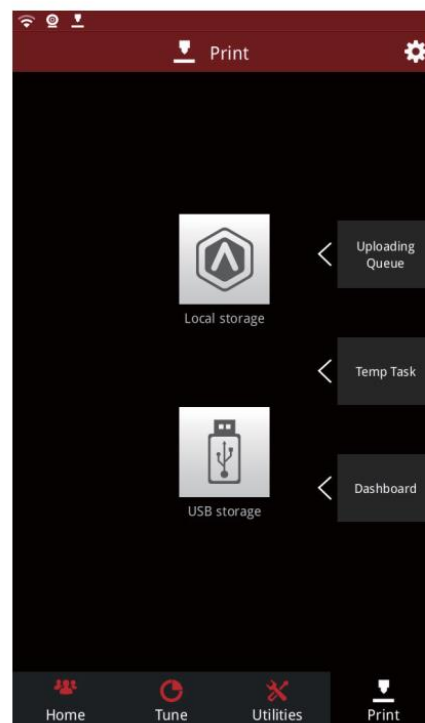


Utilities

Moving step distance setting

Disable Motor button  
X/Y/Z axes move/home

Load and unload function for the L&R extruders.



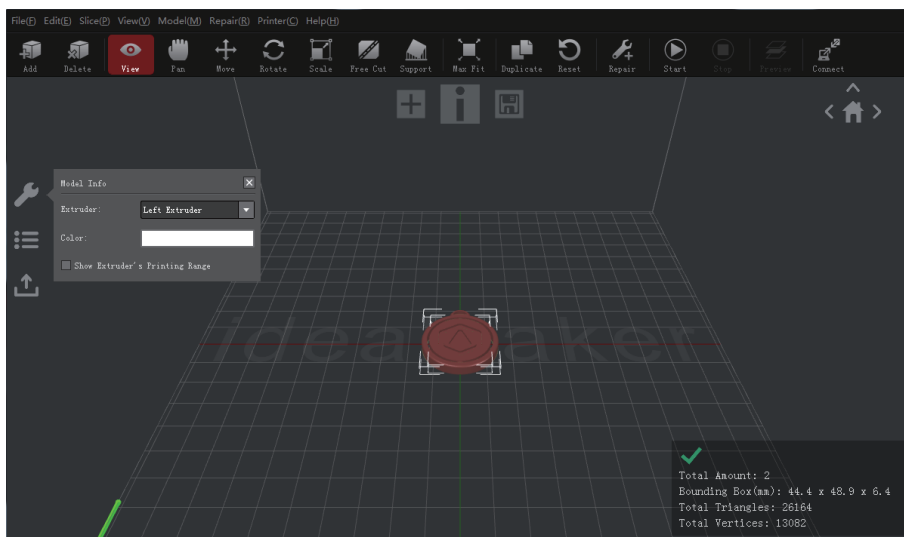
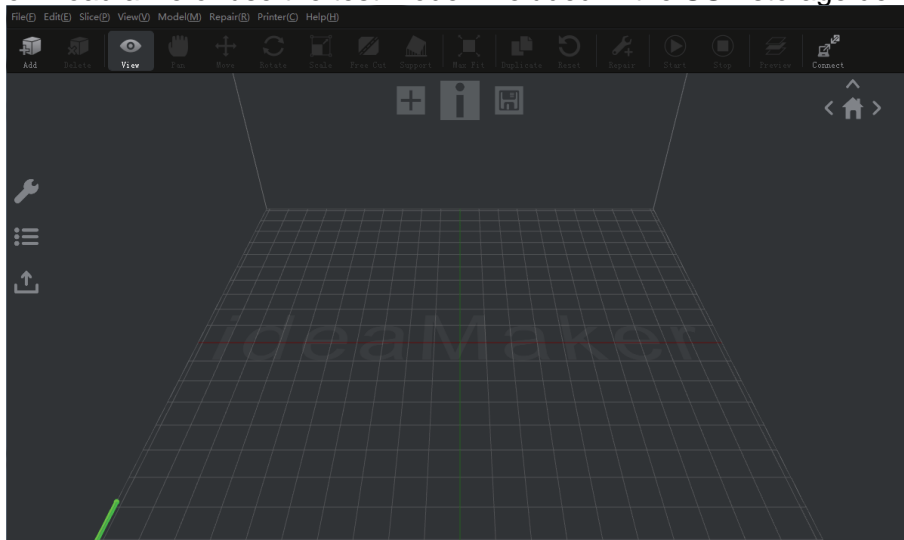
Print

• Choose where to load the print job from

• Check uploading list, recovery task list, printing statistics

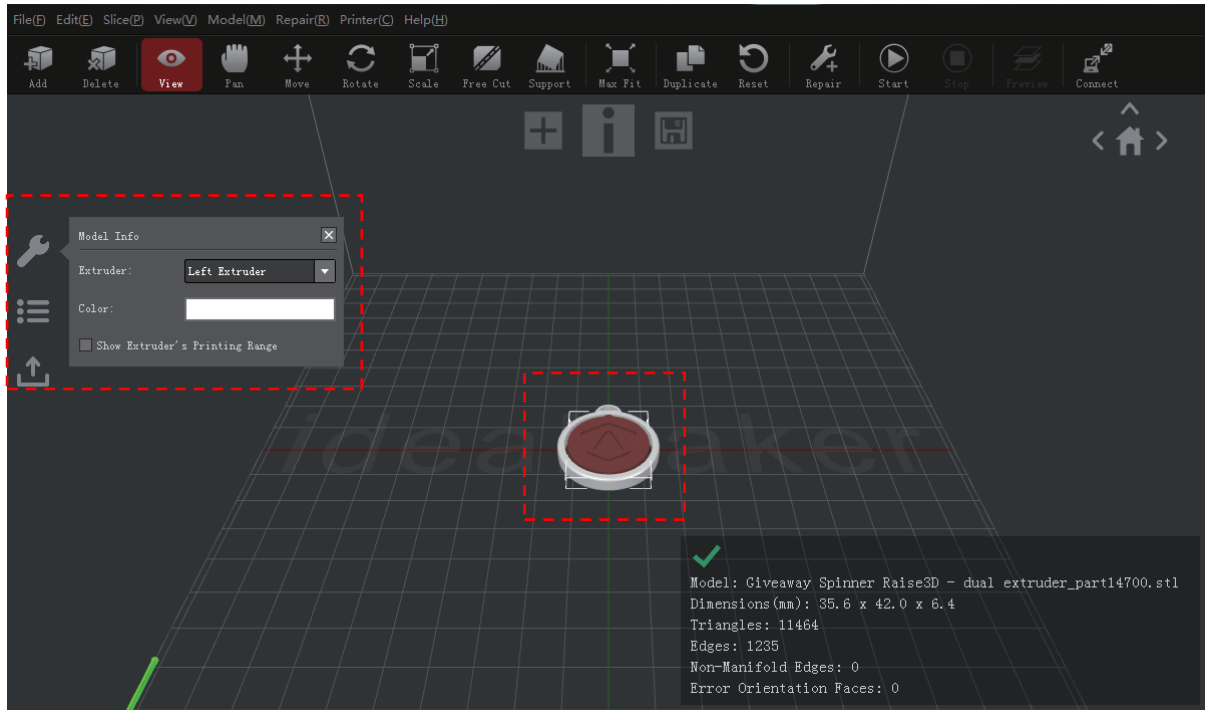
## I. Dual-Extruder Print – Slicing

- Open ideaMaker, Click the “+” button to import your two models (.stl/.obj/.3mf file). You can download a file or use the test model in eluded in the USB storage device.



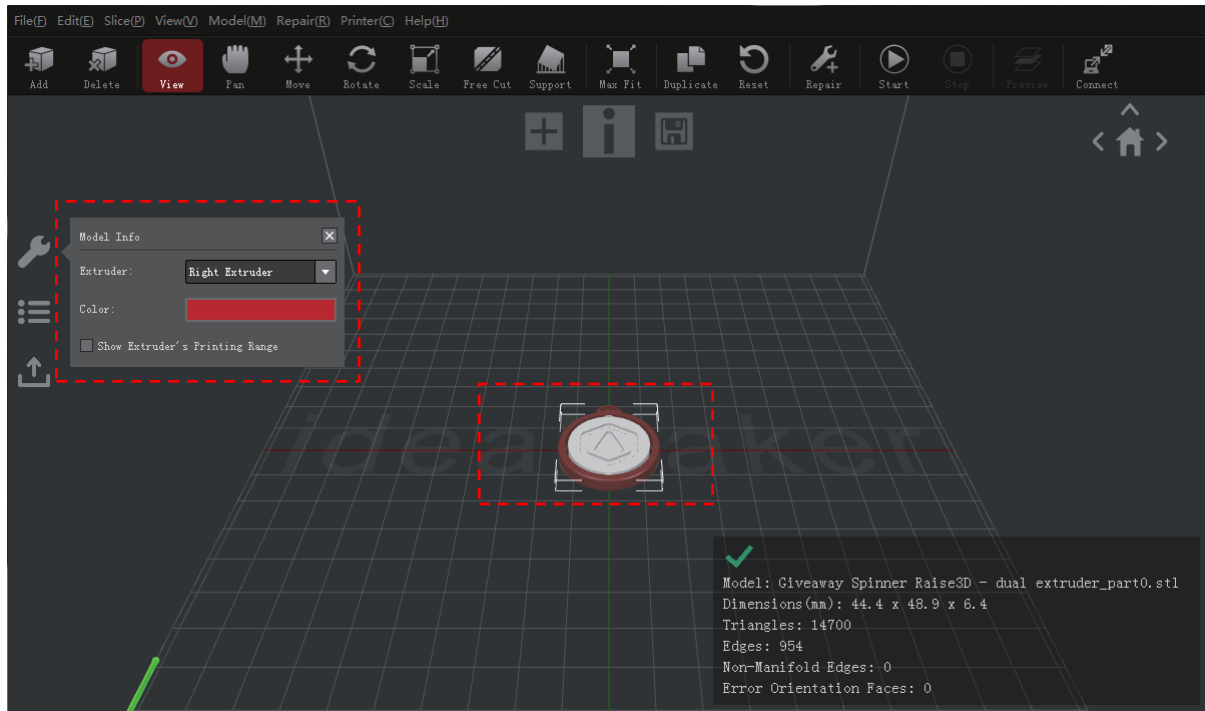
## I. Dual-Extruder Print – Slicing

- Choose one of the models and set its designated Extruder as Left Extruder from the left side 'Model Info' window.

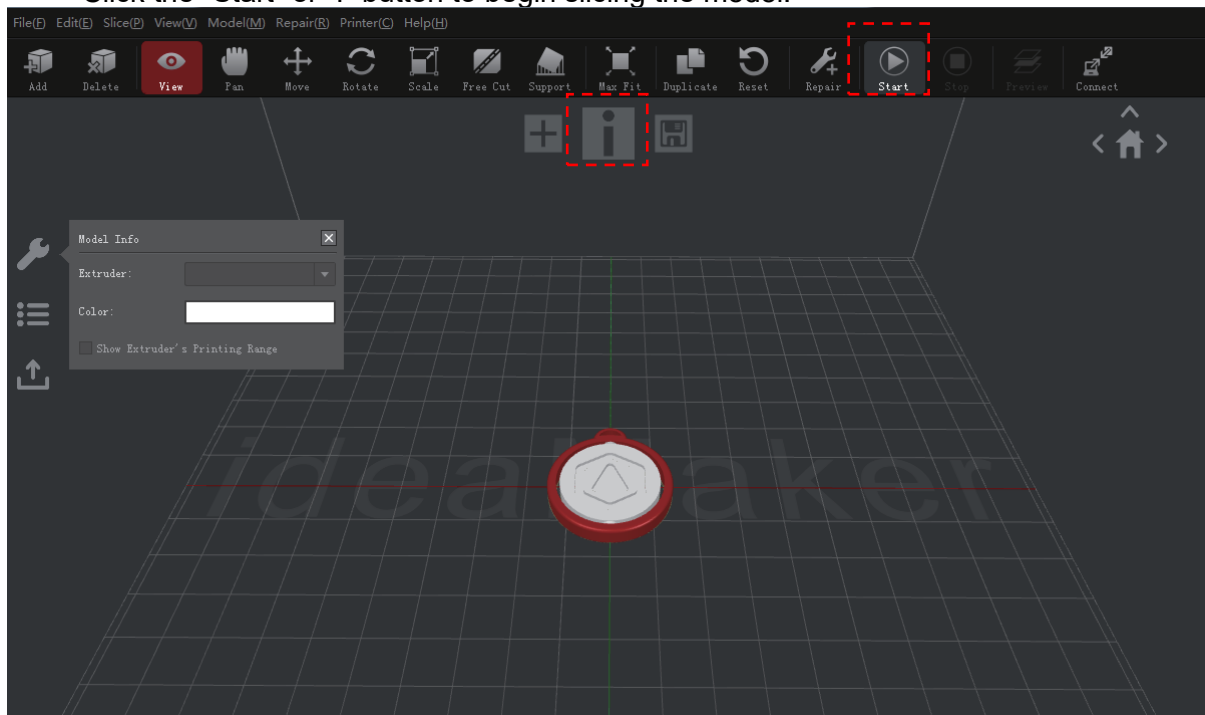


## I. Dual-Extruder Print – Slicing(continued)

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

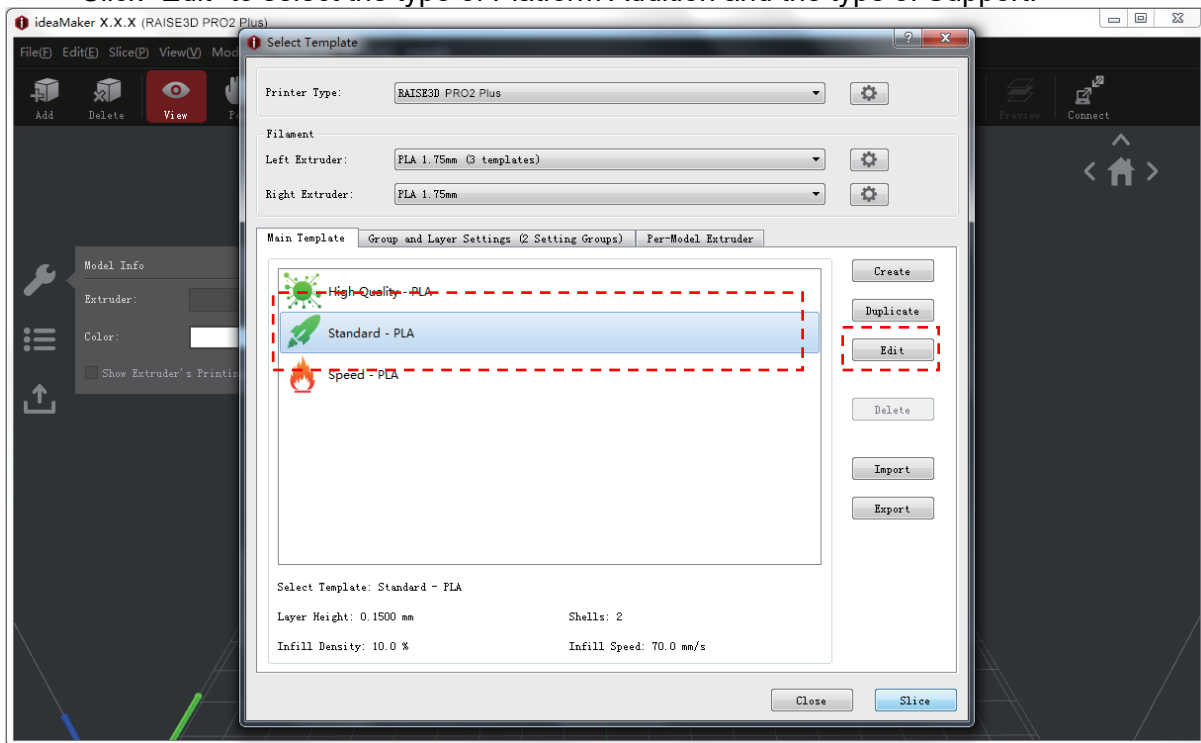


- Click the “Start” or “I” button to begin slicing the model.



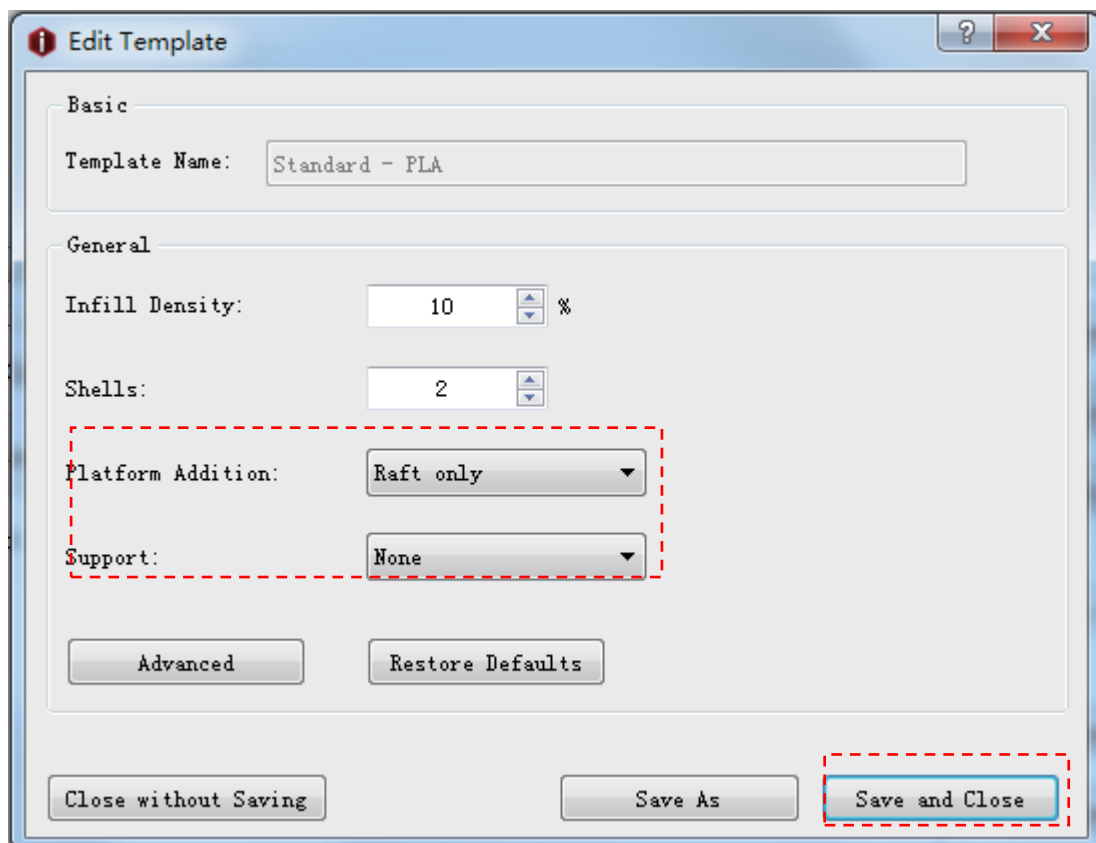
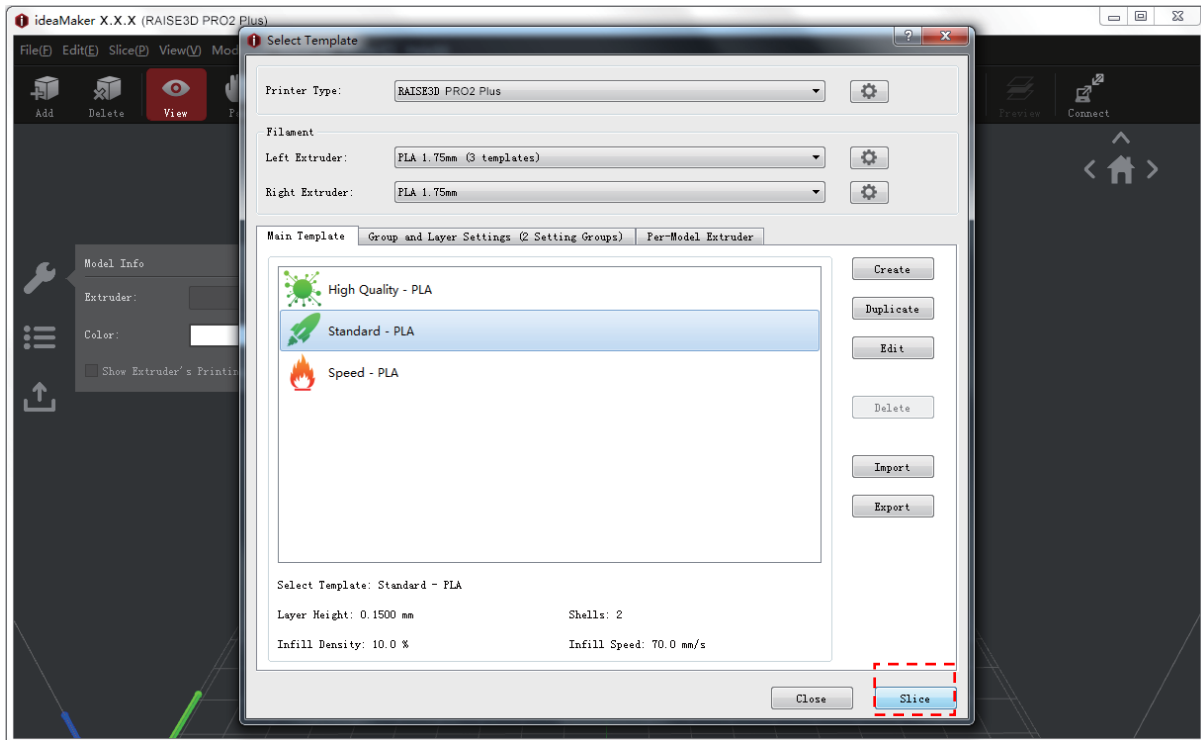
## I. Dual-Extruder Print – Slicing(continued)

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



## I. Dual-Extruder Print – Slicing(continued)

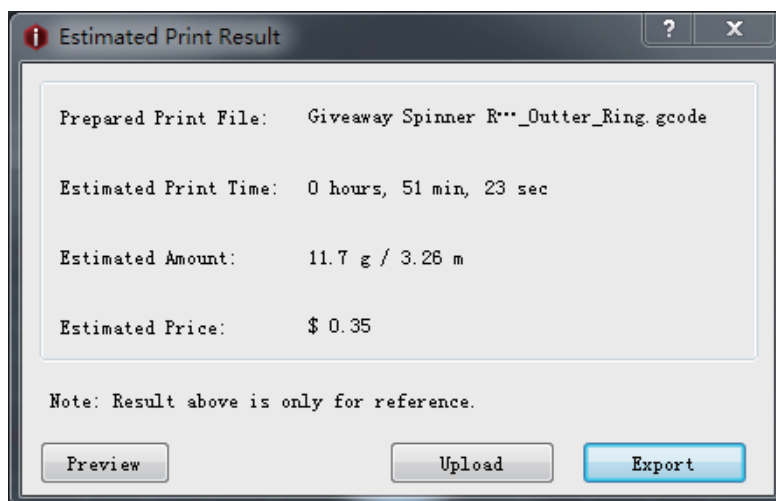
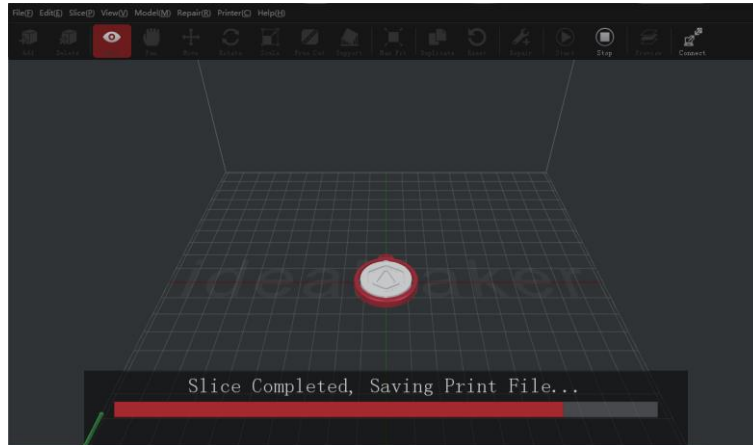
- Select your type of Platform and Support in the "Edit" window. Click "Save and Close" to return to the previous menu. Click "Slice" to generate your file.



## I. Dual-Extruder Print – Slicing(continued)

- Save the sliced files (.gcode and .data) to your USB storage device.

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

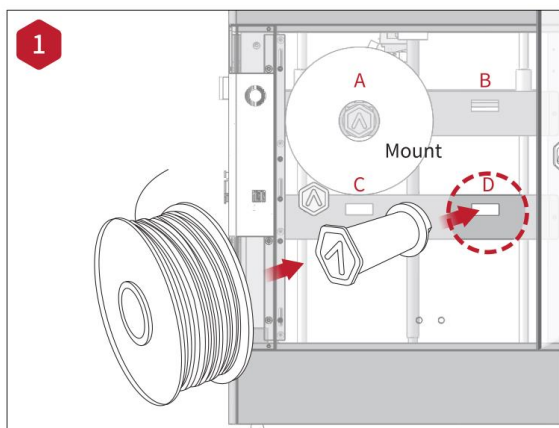


- Confirm that the files are saved and eject the USB storage device.



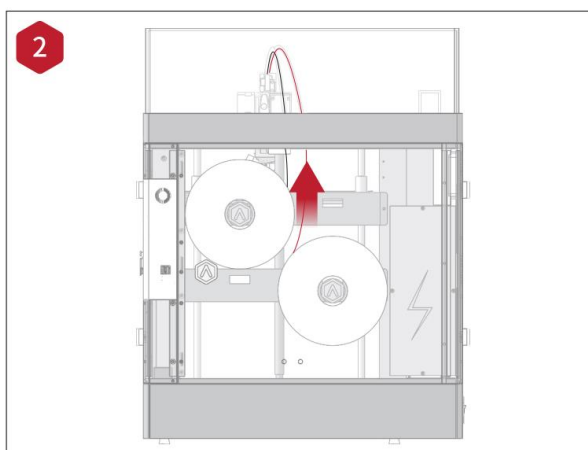
## I. Dual-Extruder Print - Hardware Installation

The following steps show how to feed the right nozzle. For other hardware installation steps please see with "Part B. Hardware installation" in the previous section of this guide.



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

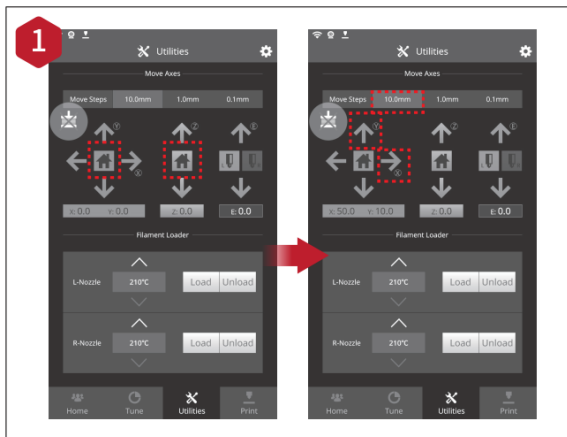
**NOTE:** The direction of the filament spool should be placed to rotate clockwise if the filament installed on the mount of B or the mount of D, and should be oriented to rotate counterclockwise if the filament installed on the mount of A or the mount of C.



Feed the filament through the guide tube.



## I. Dual-Extruder Print - Start First Print



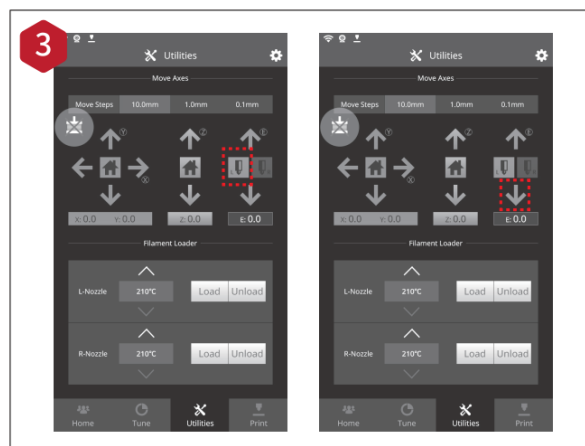
The Pro2/Pro2 Plus units are pre leveled in the factory, but we recommend verifying that the leveling has not changed during shipping.

First, home the X/Y axes by selecting the "Home" button, then selecting the 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.

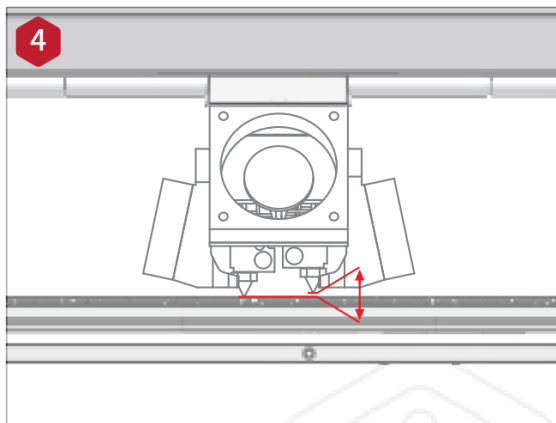


Press the nozzles button in the Utilities page and set the temperature to be 180 degrees. Wait until the nozzles heat up to the set temperature.

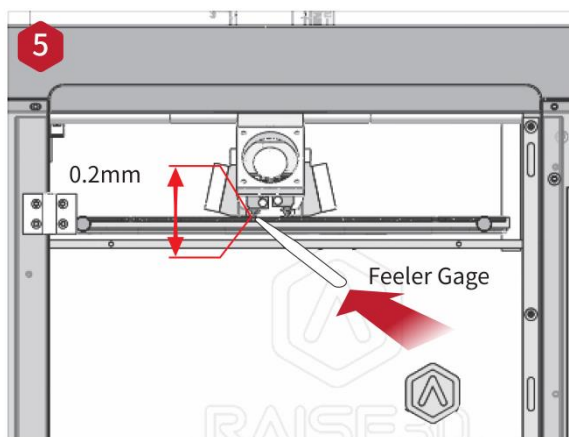


Press the left nozzle button and the downward arrow.

## I. Dual-Extruder Print - Start First Print(continued)

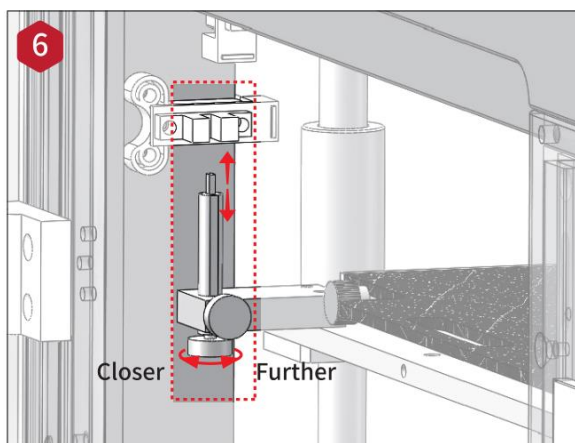


Once the left nozzle moves down, the right nozzle will go up.



Please use the feeler gauge to check the distance between the nozzle and the printing platform. The optimal distance is 0.2mm.

Ideally, there should be a little friction whenever you slide the feeler gauge into the gap.

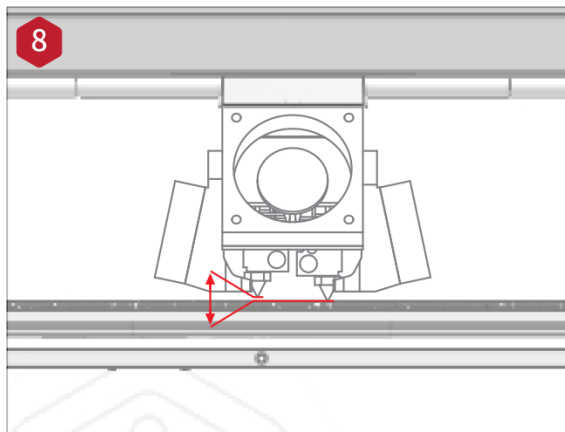


The distance between the nozzle and the printing platform can be adjusted by turning the thumb screw on the left-front corner of the Z-plate, the higher the screw stands, the further the distance between the nozzle and the printing platform. Home the Z-axis after each adjustment.

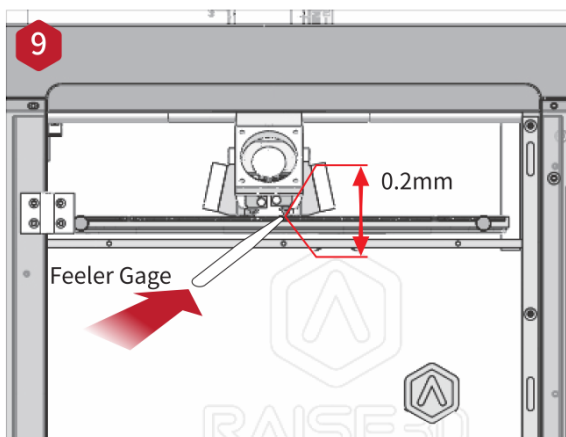
## I. Dual-Extruder Print - Start First Print (continued)



Press the right nozzle button and the downward arrow.

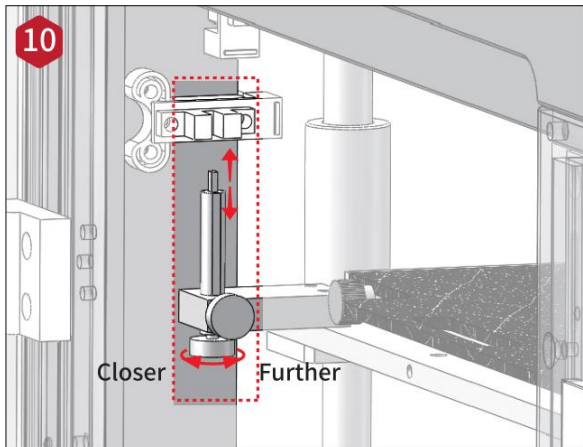


Once the right nozzle moves down, the left nozzle will go up.

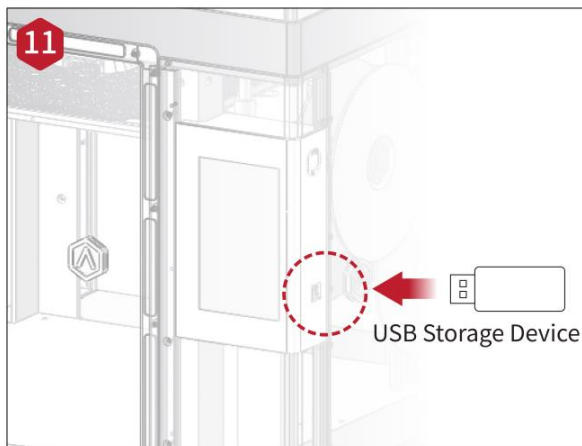


Please use the feeler gauge to check the distance between the nozzle and the printing platform. The optimal distance is 0.2mm. Ideally, there should be a little friction whenever you slide the feeler gauge into the gap.

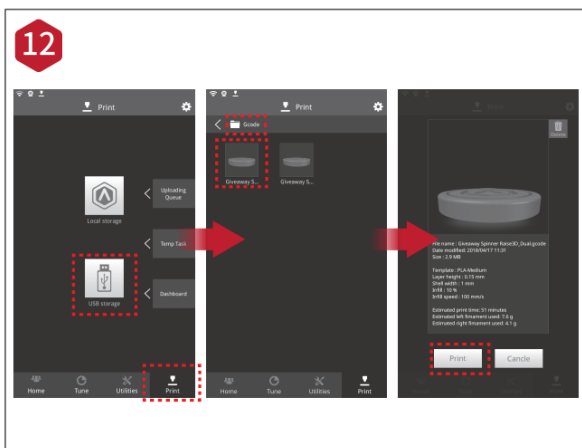
## I. Dual-Extruder Print - Start First Print (continued)



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 and the printing platform. Home the Z-axis after each adjustment.



Insert the USB device that contains your sliced model files (.gcode or .data) into the USB slot on the side of the 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 the test file.

## I. Dual-Extruder Print - Start First Print (continued)



During printing, you can check the status from the "Home" interface on the touchscreen, including the remaining print time and other parameters.

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

## Experiencing Difficulties/Contact Information

If you run into any issues during this guided setup, please contact our expert technicians by opening a ticket online at [support.raise3d.com](https://support.raise3d.com).





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[www.raise3d.com](http://www.raise3d.com)

