



 User Manual

# PHOTON MONO SE

Dear customer,

Thank you for choosing **ANYCUBIC** products.

Maybe you are familiar with 3D printing technology or have purchased **ANYCUBIC** printers before, we still highly recommend that you read this manual carefully. The installation techniques and precautions in this manual can help you avoid any unnecessary damage or frustration.

More information please refer to :

1. <http://www.anycubic.com/>

**ANYCUBIC** website provides software, videos, models, after-sale service, etc.

Please visit our website for technical support and we are likely to answer or solve all the questions for you!

2. Facebook page and Youtube channel as shown below.



**ANYCUBIC** Website



Facebook page



Youtube channel






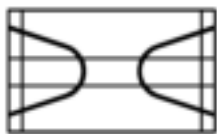


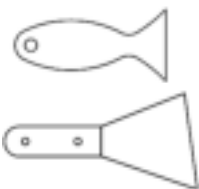





Team **ANYCUBIC**

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# Packing List

			
	<b>Print platform</b> 1PCS		<b>Resin vat</b> 1PCS
			
<b>Photon Mono SE</b>		<b>USB memory</b> 1PCS	<b>Door handle</b> 1PCS
			
<b>Mask</b> 1PCS	<b>Gloves</b> 3Pairs	<b>Funnel</b> 10PCS	<b>Scrapers</b> 2PCS
			
<b>Tool kit</b> 1 unit	<b>WIFI Antenna</b> 1PCS	<b>After-sale service card</b> 1PCS	
			
<b>Assembly Instruction</b> 1PCS		<b>Power adaptor/Power cord</b> 1PCS	

# Safety Instructions

*Always follow the safety instructions during assembly and usage, to avoid any unnecessary damage to the 3D printer or individual injury*



Please contact our customer service first if you have any issue after receiving the products.



Be cautious when using the scraper. Never direct the scraper towards your hands.



In case of emergency, please immediately cut off the power of ANYCUBIC 3D printer and contact the technical support.



ANYCUBIC 3D printer includes moving parts that can cause injury.



It is recommended to use protection glasses when cleaning/sanding the printed models to avoid small particles contacting eyes.



Keep the ANYCUBIC 3D printer and its accessories out of the reach of children.



Vapors or fumes may be irritating at operating temperature. Always use the ANYCUBIC 3D printer in an open and well ventilated area.



ANYCUBIC 3D printer must not be exposed to water or rain.



ANYCUBIC 3D printer is designed to be used within ambient temperature ranging 8°C-40°C, and humidity ranging 20%-50%. Working outside those limits may result in low quality printing.



Do not disassemble ANYCUBIC 3D printer, please contact technical support if you have any question.

# Technical Specification

## Printing

System	ANYCUBIC Photon Mono SE
Operation	3.5-inch Color TFT Screen
Software	ANYCUBIC Photon workshop
Connectivity	USB memory stick, Wifi

## Specifications

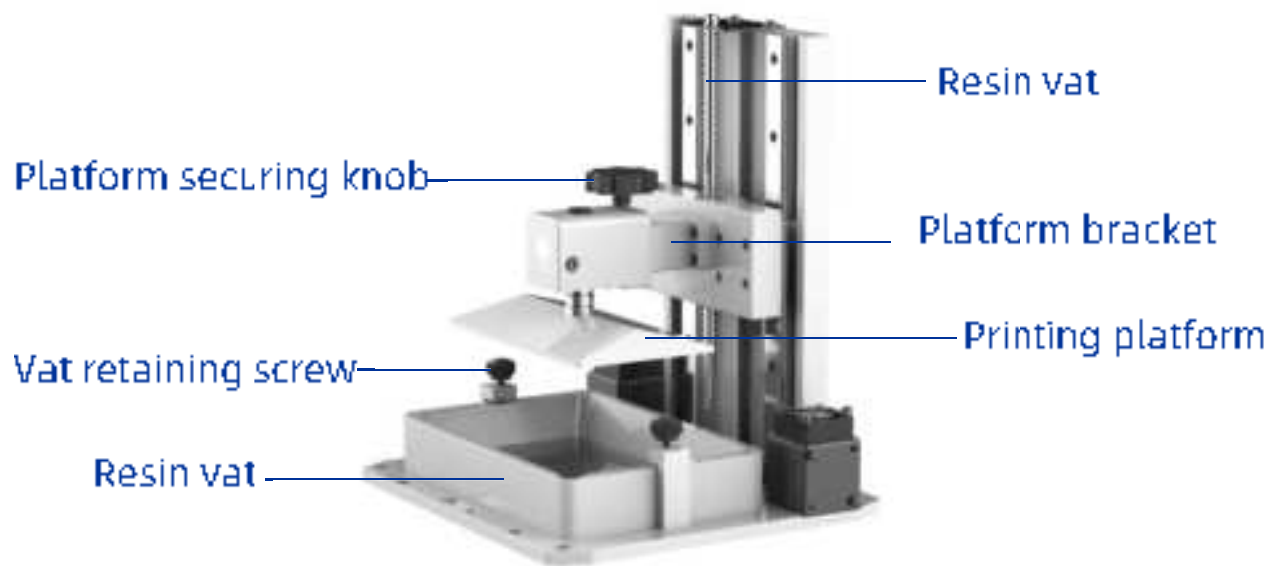
Technique	LCD Shadow Masking
Light source	UV-LED (wavelength 405nm)
Leveling	Ball Pressure Leveling
XY Resolution	0.051mm 2560*1620 (2K)
Z axis Accuracy	0.01mm
Suggested Layer Thickness	0.01 ~ 0.15mm
Suggested Print Speed	MAX 80mm/h
Rated power	55W

## Physical Dimensions

Dimension	220mm (L) *200mm (W) *400mm (H)
Build volume	130mm (L) *78mm (W) *160mm (H)
Materials	405nm LV-resin
Net weight	~8.2kg



# Product Overview



# Menu Directory

## Home menu



Print

System

Tools



## Home menu



Enter the Print Menu

Enter the System Menu

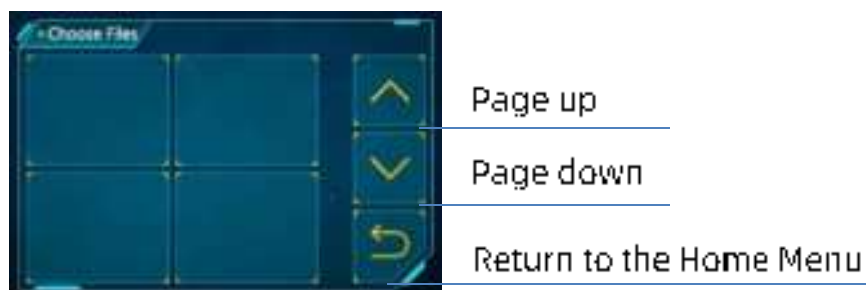
Enter the Tools Menu



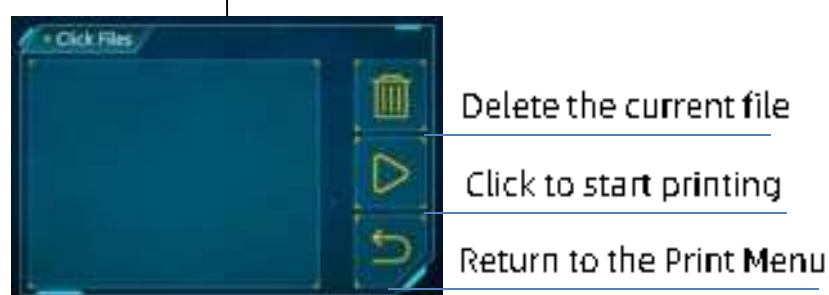
# Menu Directory

## Print

File List:



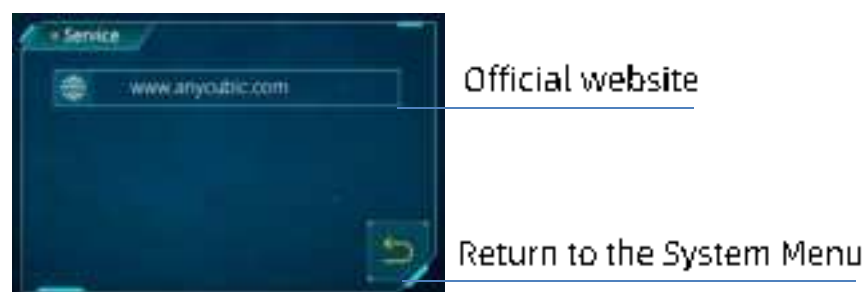
Click Files



## System

**Language:** Change language(English/Chinese)

**Service:**



**Information:**



# Menu Directory

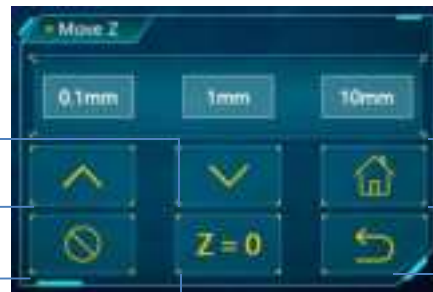
## Tools

### Move Z:

Move the Z axis downwards

Move the Z axis upwards

Stop moving the Z axis



Move Z by 0.1mm/1mm/10mm

Return to Zero

Return to the Tools Menu

Reset the zero point

### Detection:

Click to set the test time

Test LED and LCD for the preset time



Reduce the test time

Return to the Tools Menu

Increase the test time

### Exposure:

Click to set the exposure time

Expose for the preset time

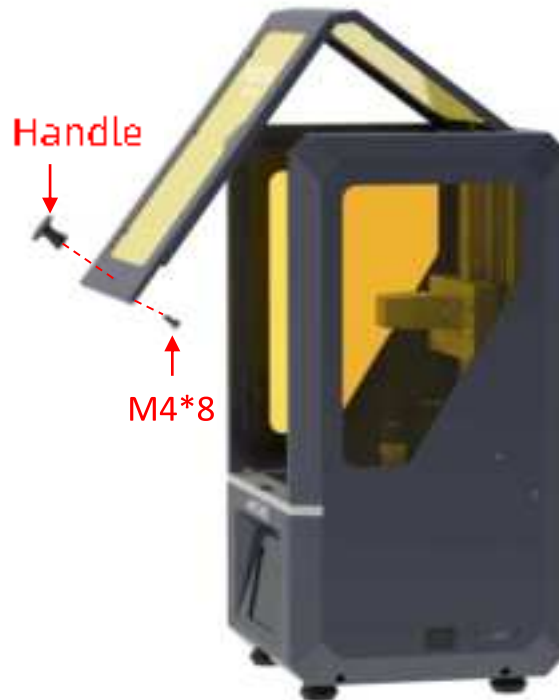


Select one of the images to expose

# Assembly and Leveling Instructions

## 1. Assembly instructions

(1) Unpack the machine and remove the protective film outside. Then install the handle on the top cover.



(2) Loosen the set screw on the printing platform with a Allen wrench so the platform can be moved freely.



# Assembly and Leveling Instructions

(3) Plug in the power cord and turn on the printer. Click "Tools" → "Move Z" → "10mm" on the touchscreen to raise Z axis. Then install the platform onto the platform bracket and **tighten the black platform securing knob on the top**.



**Note: The printing platform must be well installed to the end.**

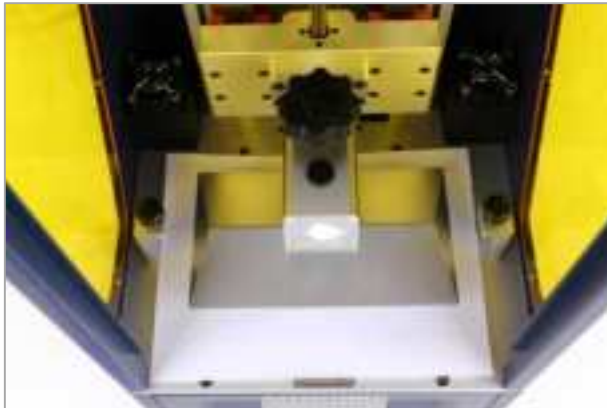
## 2. Leveling instructions

(1) Tear off the protective film on the LCD screen.




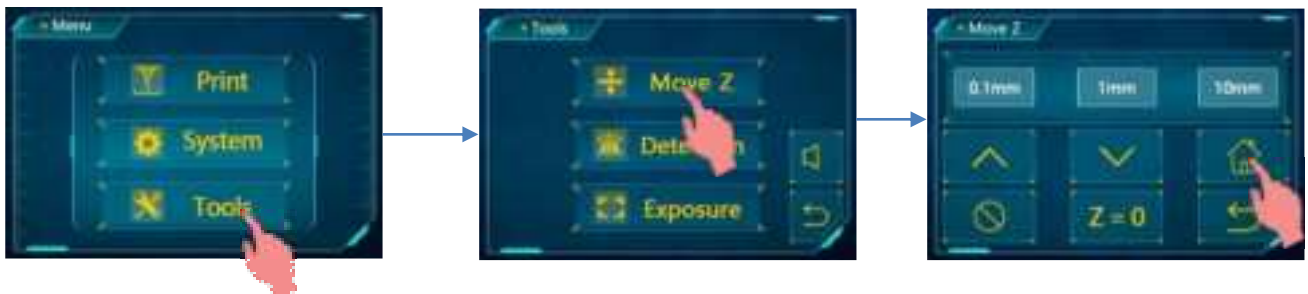
# Assembly and Leveling Instructions

(2) Ensure that the platform is aligned in every direction. Then put the leveling paper on the LCD screen.

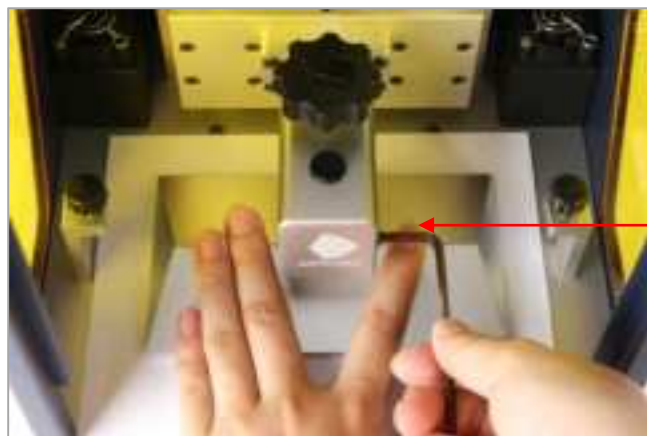


**The platform must be aligned in every direction.**

(3) Then click the "TOOLS" → "MOVE Z" → "  " on the touch screen. Wait for the Z axis to descend and then it will stop automatically.



(4) Use fingers to press on top of the platform gently, then tighten the screw on the right side of the platform.



**Tighten the set screw**

# Assembly and Leveling Instructions

(5) Lastly, click "Z=0" on the touch screen, and then click "Enter" on the pop-up window. Till now, the leveling process is finished. Click "Enter" again and pull out leveling paper. Make sure the platform is parallel to the 2K LCD screen.



## 3. Testing UV lights

(1) Click "Tool"→"Move Z"→"10mm" on the touch screen to raise the platform about 120mm.



(2) Return to tools menu, click "Detection", set the testing time, and then click "NEXT" on the screen as shown below. The 2K LCD screen should display a complete image as shown below. Otherwise, the UV light is malfunction and please contact the technical support.

# Assembly and Leveling Instructions

set the  
test time

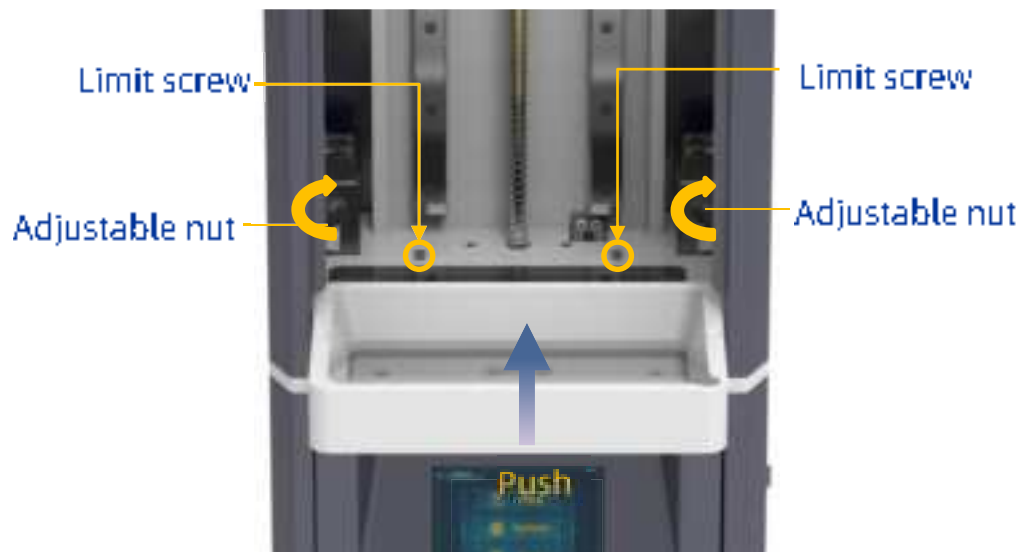


The detection result

## 4. Installing the resin vat

Check and ensure the LCD screen and platform are clean and free of dust.

Install the resin vat till it aligns with the two limit-screws on the panel. Finally tighten the adjustable nuts on both sides to secure the vat.





# Assembly and Leveling Instructions

## 5. Installing the Wi-Fi antenna

Install the Wi-Fi antenna on the back of the machine. And you can control the model printing via the application. For detailed instructions, please refer to "Anycubic 3D User Manual" from the USB drive.





# First Print Instructions

Before printing, to minimize the first time frustration, please ensure (1) Z axis is working fine; (2) the platform is well leveled and fit with 2K LCD screen; (3) the UV light is functional properly.

## 1. Print

Insert the USB memory (or the SD card with card reader) into the USB port. Then wear masks and gloves, slowly pour the resin into the vat until it reaches 1/3 volume of the vat. After that, close the door. Take off the gloves, select the "TEST.pwms" test files or your own files and start printing. During printing, avoid direct sun light and keep the printer flat without shaking. (The printing time on the screen is for reference only, we make no guarantee that it is the actual printing time.)



If you think the resin is insufficient to finish an ongoing print (or you wish to change the resin color), you can click "Pause", the platform will rise, and you can slowly pull (or change) the resin into the vat. After that, click "Start" to resume.



click to pause



click to start

# First Print Instructions

## 2. Handling models and residues

After printing, wait until the resin stop dropping from the platform and then unscrew and remove the platform. The model can be removed by scrapper carefully. The removed model should be washed with ethanol 95vol% concentration. The printed model may need post curing to achieve better hardness by direct sunlight or UV-curing box.



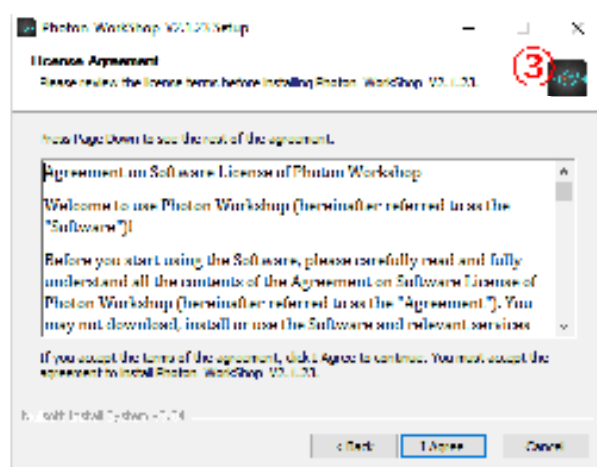
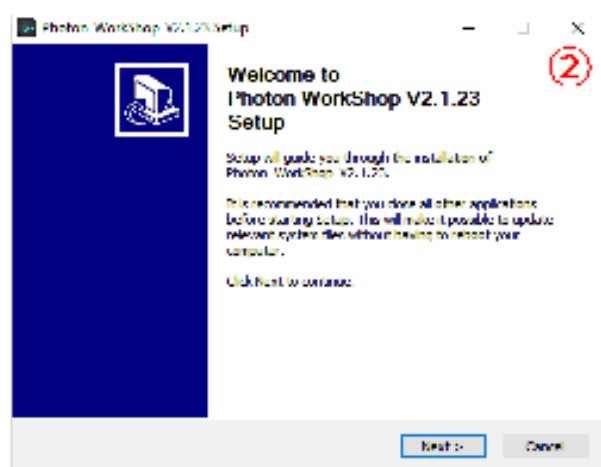
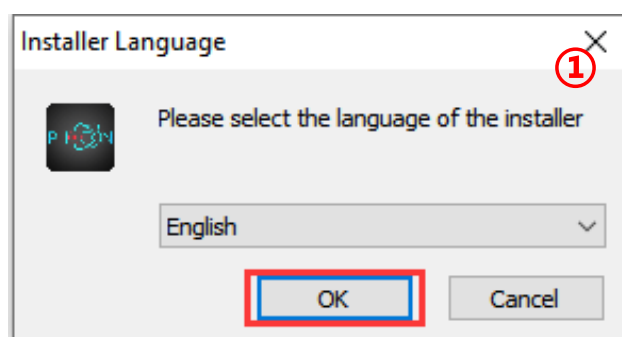
**【IMPORTANT】** Inevitably, in case of incomplete curing or failed prints, there might be some resin residues left in the vat. Then, please filter the resin by a funnel and store the resin in a sealed container. For the residues left in the vat or on the platform, please use paper towel or plastic scrapper to carefully get rid of that. Before each print, please ensure there is no solid residues in the vat or on the platform, otherwise the 2K LCD screen may be impacted and broken during printing or leveling.

# Introduction to Slicing Software

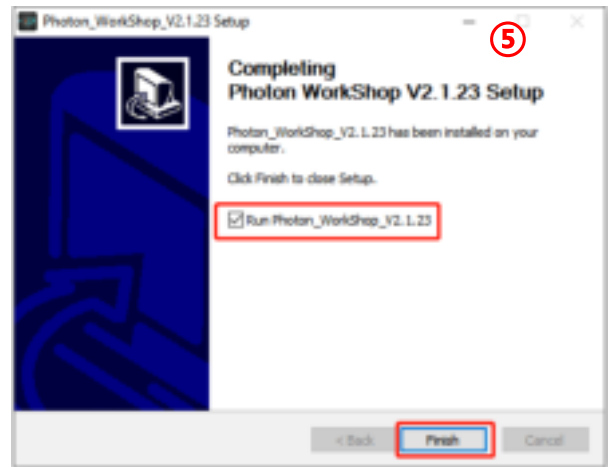
Photon 3D printer reads "pwms" file and prints. It is necessary to convert 3D files (such as stl file or obj file) into pwms files for machine to recognize. Software that convert 3D files into pwms files is called slicing software.

## 1. Slicing software installation

Here Windows PC is taken for example. Slicing software is located in memory stick: "File\_English\_Photon Mono SE" → "slicing software" → "windows". (You may have to close the anti-virus software before installing the slicing software.) Double click "Photon\_WorkShop\_V2.1.23\_x64.exe", and then follow the installation guide as shown below:



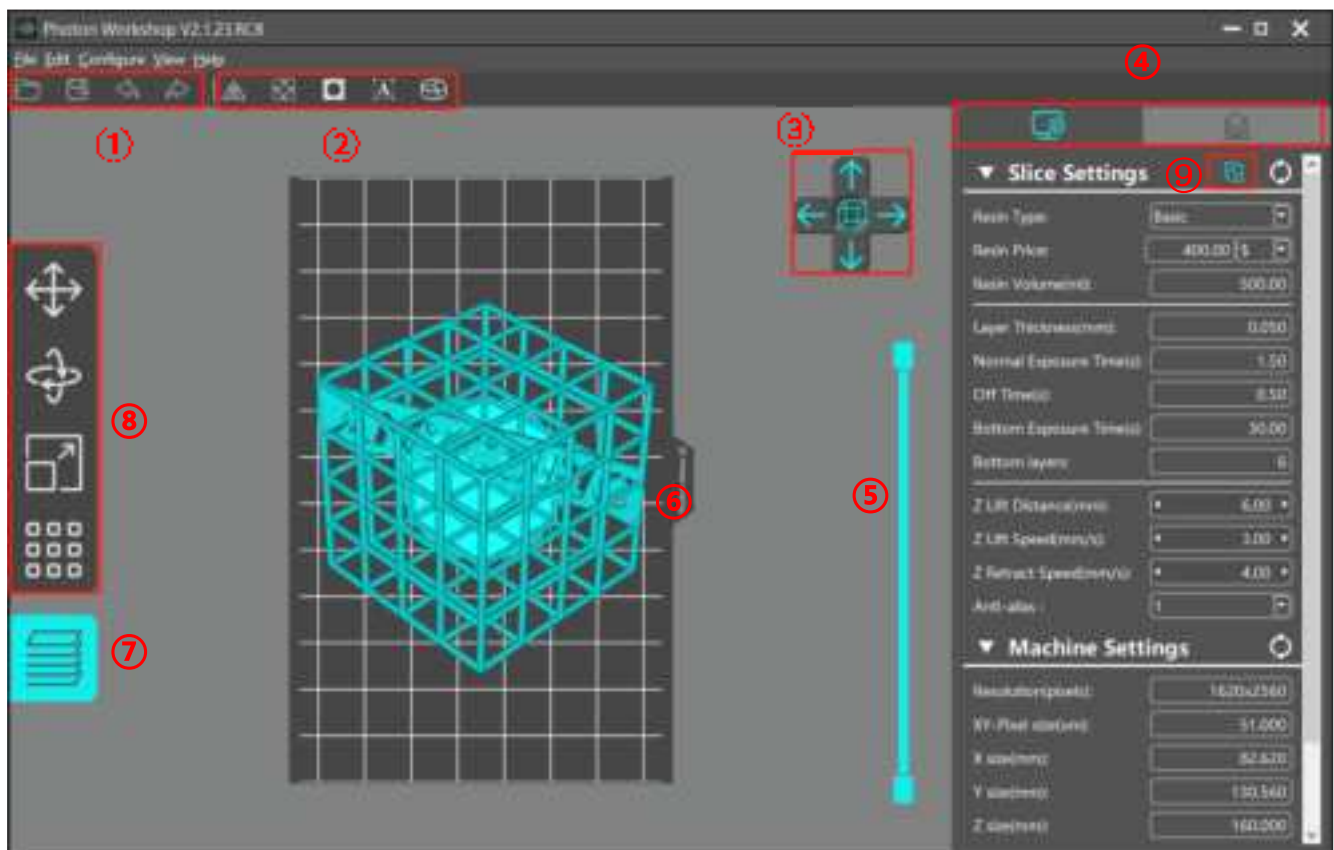
# Introduction to Slicing Software



For Mac PC, double click “Photon\_WorkShop\_V2.1.23.dmg” to install the slicing software and follow the pop-up messages.

**Note:** ANYCUBIC may update the software and firmware without notification. Please visit [www.anycubic.com](http://www.anycubic.com) for the latest updates.

## 2. Photon Workshop



# Introduction to Slicing Software

- ① Open, save, undo and redo.
- ② Model mirror, hollow and infill, punching, text paste and spilt model - explained in the following parts.
- ③ Click to switch the preset view.
- ④ Switch between slice/machine settings and support settings.
- ⑤ Drag the slider to preview each layer of the model.
- ⑥ 3D model preview.
- ⑦ Click to slice.
- ⑧ Move, rotate, scale and layout.
- ⑨ Click to switch to the AutoConfig Mode.

## 3. Manipulate 3D model in Photon Workshop

### (1) Model Importing

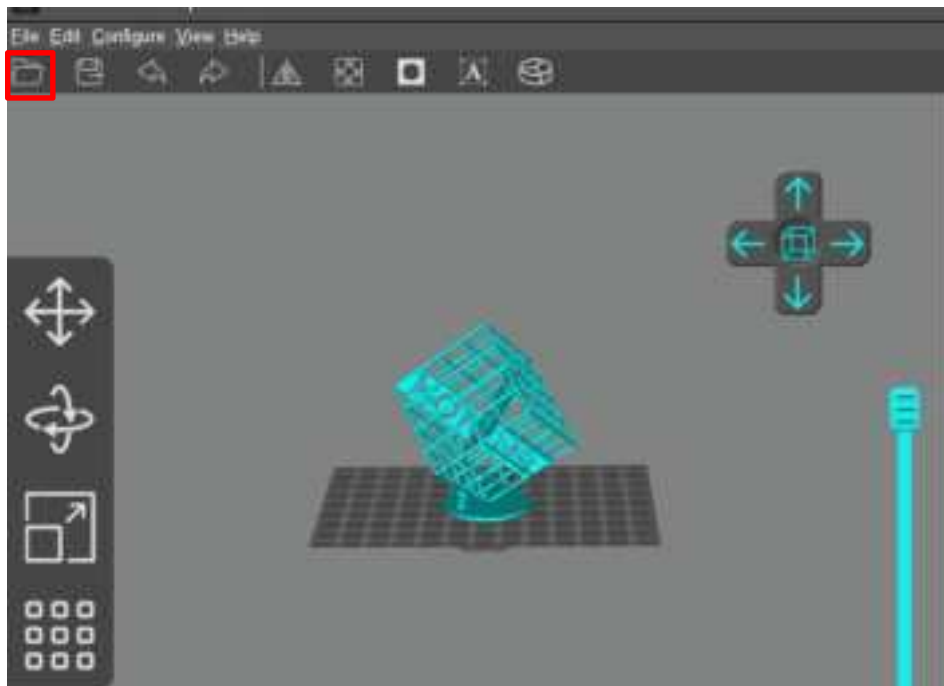
After software has been installed, please run it first. On the menu bar, Click “Configure” → “Machine Type” → “Photon Mono SE”.



**Note:** Different machine types have different printing parameters. Users need to choose the correct machine.

On the menu bar, click “File” → “Open file” (or click the “Open” icon at the top left (red square)) to import your own three-dimensional format model, i.e. STL file or OBJ file. Or you may input the test file (TEST.stl) in the memory stick.

# Introduction to Slicing Software

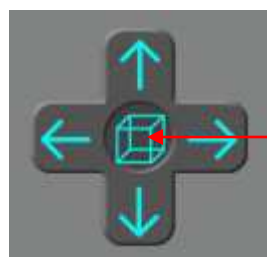


## (2) View Changing

### ① View changing by mouse

- Zoom in/out: scroll the mouse wheel.
- Position change: left click the platform, hold on and move the mouse.
- Change view angle: right click the platform, hold on and move the mouse.

### ② View changing by interface controls: click the arrow can change the viewing angle by 90° in its direction.



Click the center icon and the view will be automatically zoomed in. Click again to show the top view.

# Introduction to Slicing Software

## (3) Model Changing



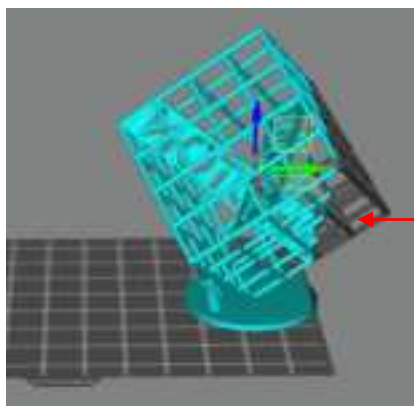
**Move selected:** click "move" icon, input a number or manipulate the controls can move the model. You also can center or reset the model.

**Rotate selected:** click "rotate" icon, input a number or manipulate the controls can rotate the model. You also can reset the model.

**Scale selected:** click "scale" icon, input a number or percentage or manipulate the controls can scale the model. You also can set the model to its maximum size.

**Layout models:** click "layout" icon, you can duplicate the model and arrange the models in X or Y direction.

## ① Model moving

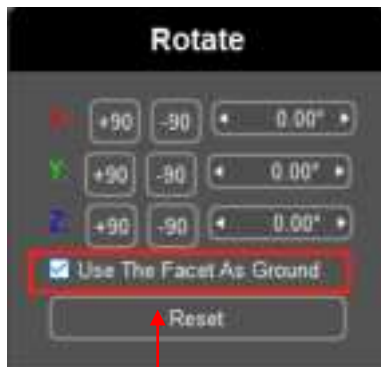


**NOTE:** The part out of the print range will turn dark grey, which is not printable.

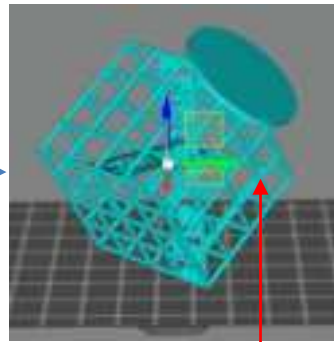


# Introduction to Slicing Software

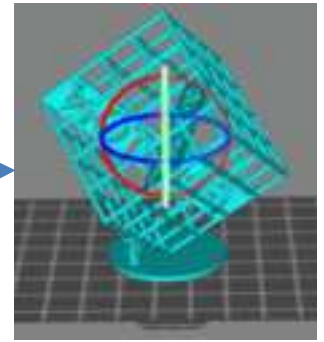
- ② **Model rotating:** Choose a larger facet as the ground fitting platform, which can improve print success rate.



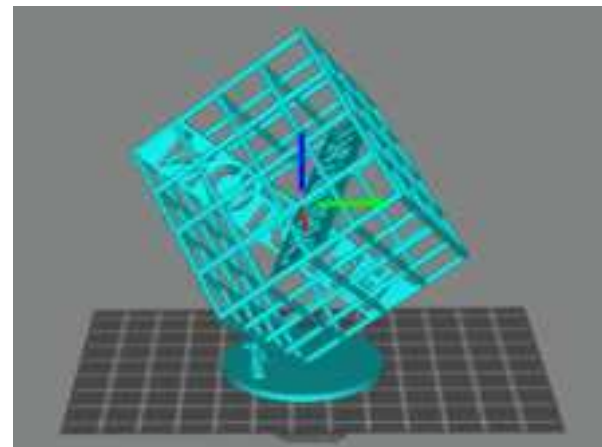
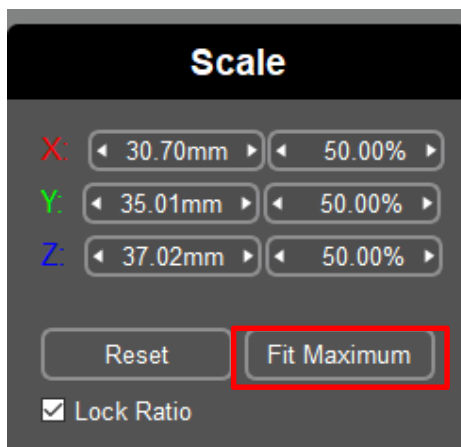
Check off



Click on the larger bottom of the model.



- ③ **Model scaling**

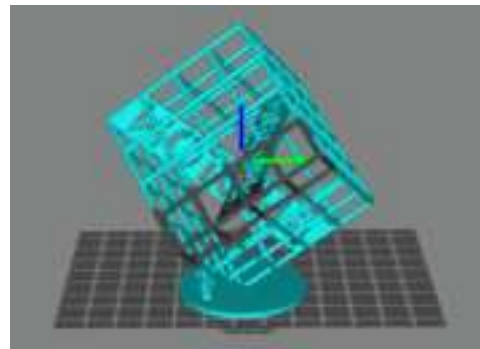


After setting the model to the maximum size, center it to avoid the model exceeding the print range.

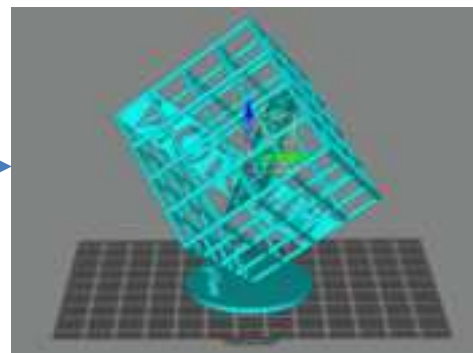


# Introduction to Slicing Software

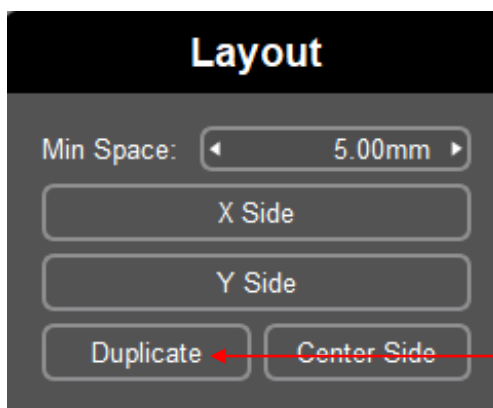
- Center the model:



Fix Maximum



## ④ Layout



Select the model and click "Duplicate", then an identical model will be duplicated. (Those models may overlap)

For multiple models, click "X Side" or "Y Side", the models can be aligned in X or Y direction.