YIDIMU

LCD 3D Printer
User Manual

Precautions

Please keep in mind the following precautions during assembly and use. Failure to follow these warnings may result in damage to the machine or even personal injury.

1. There is a FEP film at the bottom of the resin vat. It can't be pierced or scratched by sharp objects. Otherwise, the machine may not print properly.

2. The resin in the vat must be kept clean and free of cured resin and floc.

3. During the printing process, try to keep the top cover closed and keep the machine steady. Do not shake the machine.

4. After printing, turn off the power.

5. Please keep the equipment working on a stable surface.

6. If the power cord is damaged, the cable must be replaced by the manufacturer.

7. Do not power off the device during its operation.

8. After the model is printed, use a scraper to remove, taking care not to scratch your hand.

9. It is forbidden to print in the air (take off the resin vat or the vat without resin). If printing the air is severe, the LCD screen will be damaged.

10. After the skin touches the resin, please wash it in time.

11. If there is a model in the platform and resin vat after printing is finished, do not press reset (reset on the bottom), otherwise it will crush 2K screen.

Contents

Technical Specification

Print Parameters：

Build Volume:120（L）x 65（W）x165（H）mm

Layer Thickness:0.025mm/0.05mm/0.1mm

Print Speed:20mm/h(Z axis)

XY Resolution:47um

Machine Parameters：

Machine Size:220（L）x200（w）x426（H）mm

Packaging Size:292（L）x272（w）x622（H）mm

Software Parameters：

Printing Software:CHITUBOX

File Format:STL

Adaptive System:win7 above

Physical Parameters：

Consumable parameters: 405nm UV-resin

Connection method:USB Print

Light Source:UV led

Input Voltage:220V AC /47-63 Hz

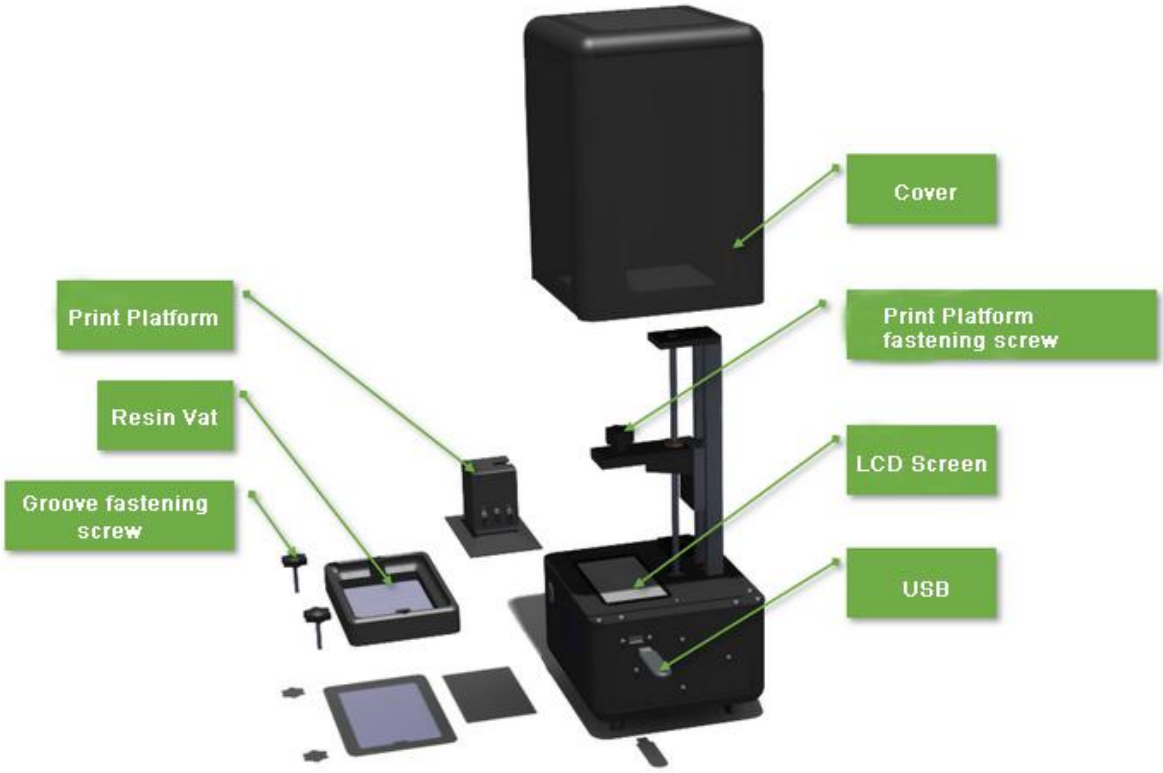
Rated Power：85W

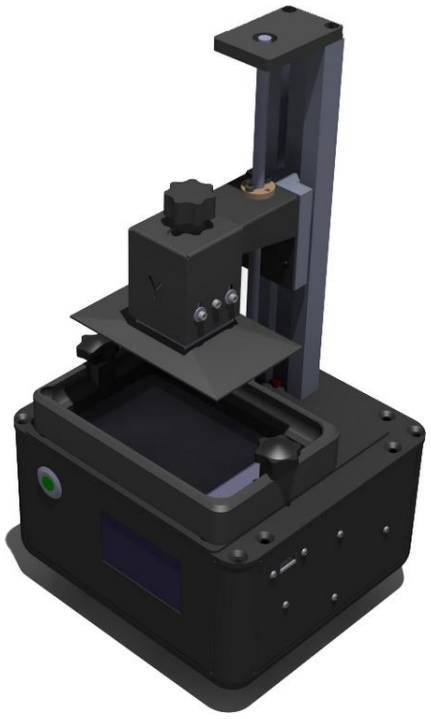
Packing List

		
YIDIMU 3D Printer 1PCS	Print Platform 1PCS	Resin vat 1PCS
		
	Resin 1PCS	USB 1PCS

			
Blade 1PCS	Tweezers 1PCS	Tool 1PCS	Finger sleeve 10PCS
			
Funnel 10PCS	Dust-free towel 3PCS	Masks 1PCS	Gloves 2PCS
			
Power adaptor/Power cord 1PCS			

Product Overview



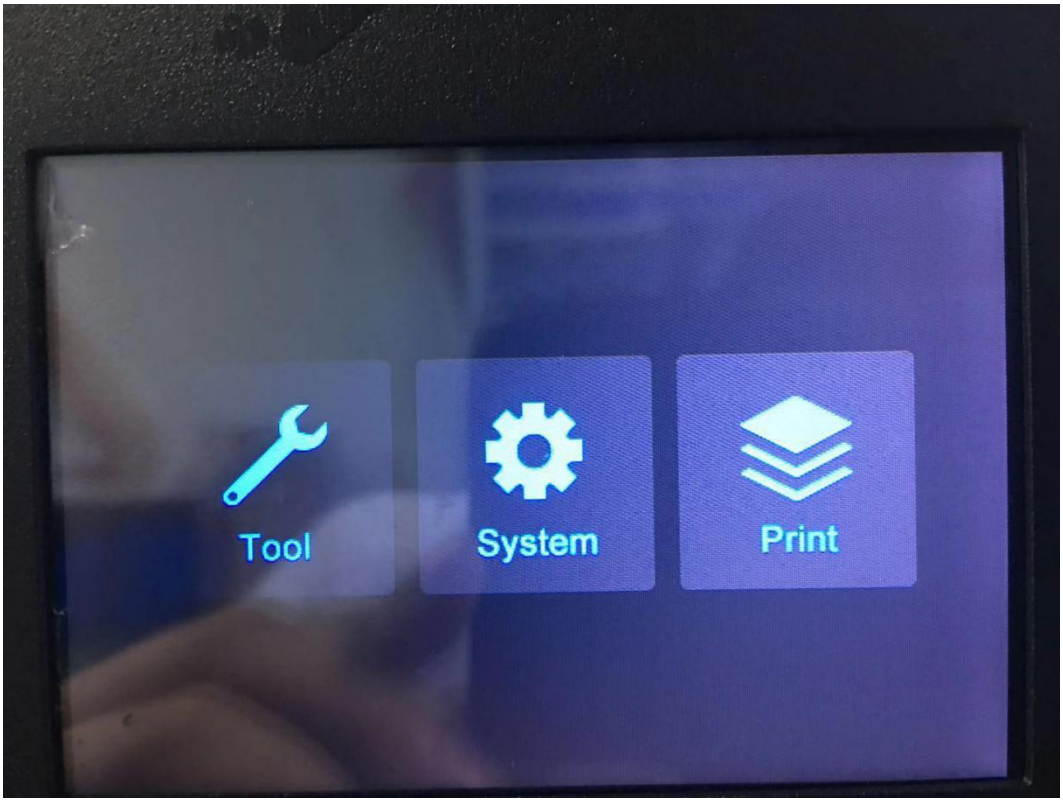


Print test

The machine must be tested before printing for the first time. The test content includes: Z-axis reset, switch light, switch between Chinese and English interface.

First plug the power cord and turn on the AC power switch, then turn on the switch diagram of the machine.

After the boot is completed, the interface is as shown.

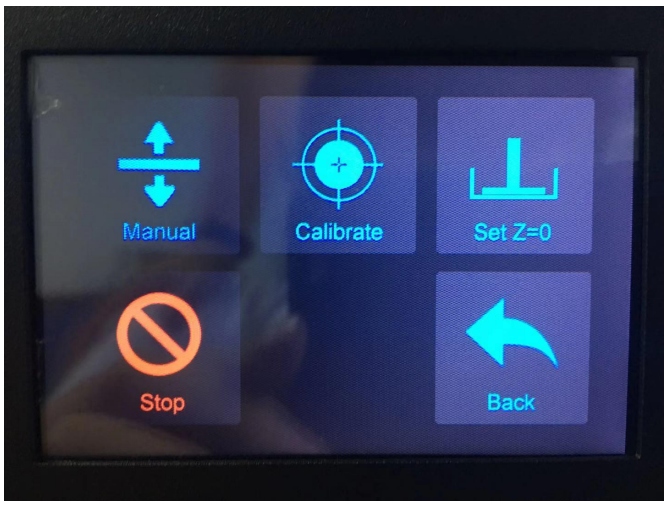


（**Operation interface**）

（1）Z-axis movement

After the machine is powered on, click “Tools” on the touch screen, click “Manual”, click on the map to move up or down. If the machine can't move normally, turn off the power and

contact the company for help. (Do not install the tray on the machine when testing the Z-axis for the first time. If the screen is damaged due to the tray problem, it will not be repaired!)



（Click manually）

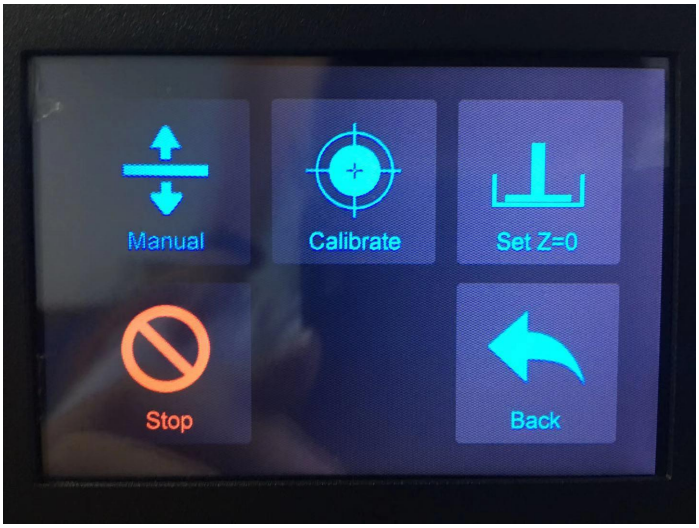
（Click the up arrow or down arrow to check if the Z axis is normal.）

（2）Switching lamp test

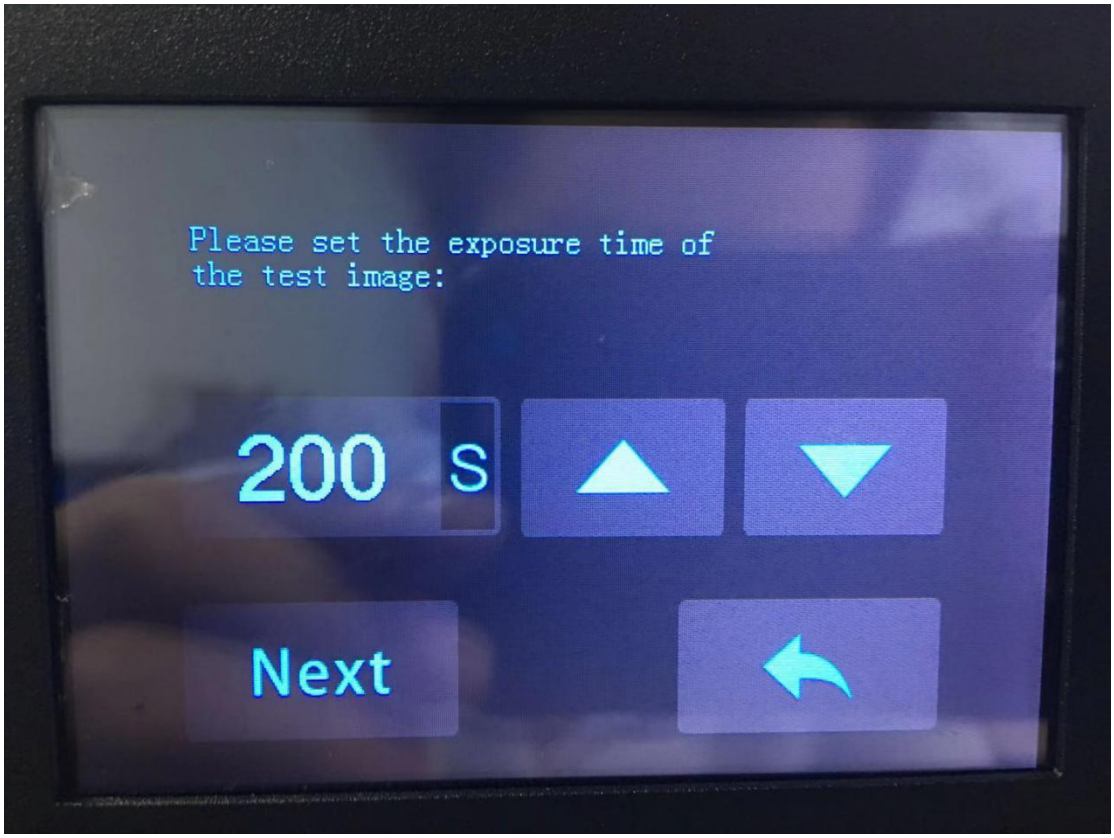
After the machine is powered on, click “Calibration” on the touch screen, and click Next to observe whether the LCD

screen of the machine displays the following figure (4). If it cannot be displayed normally, the power should be disconnected and contact the company for assistance.

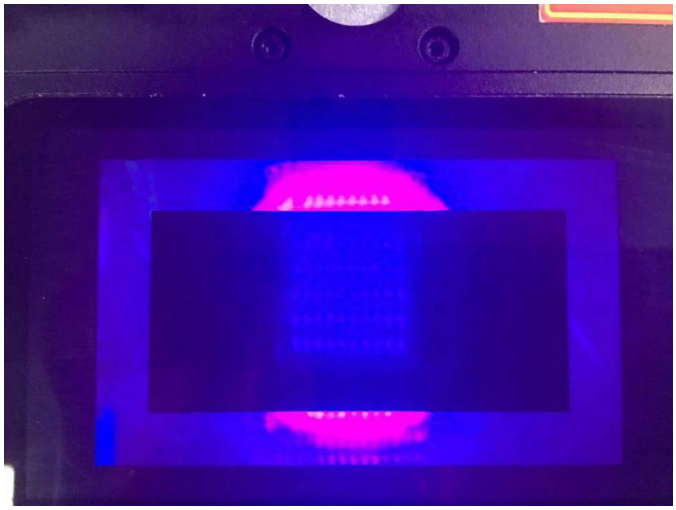
Click the “back arrow” on the touch screen to observe the machine. The LCD screen is dark. If it cannot be darkened, you should disconnect the power supply and contact the company for assistance.



(Click correction)



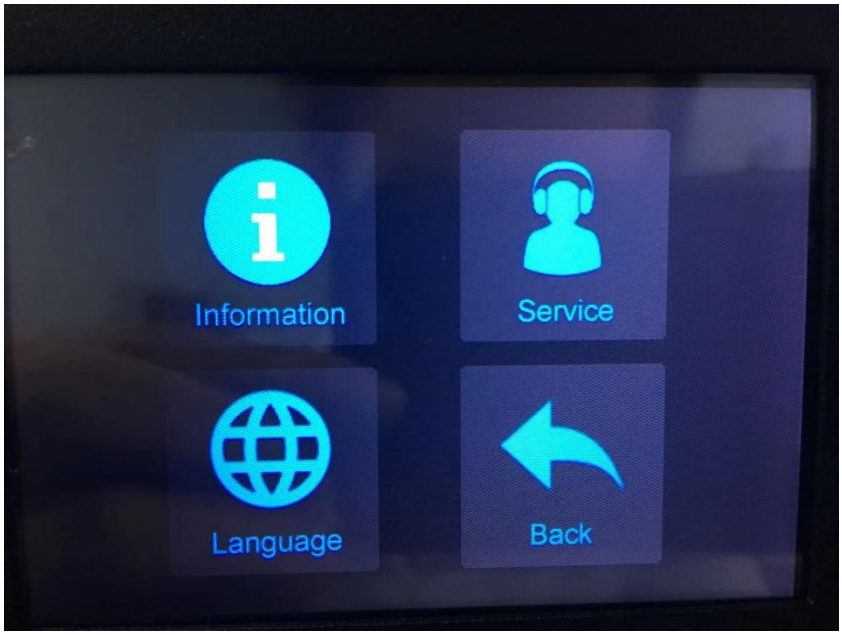
(Click the next step)



(Check whether the light is normal or not)

(3) Change the screen from Chinese to English

First click on "System" and then click on the language in the picture to switch to English (Chinese vice versa)



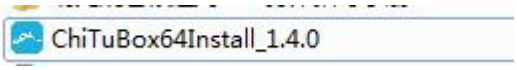
（Click“Language”）

（Change Options）

Software installation and operation instructions

1.1 Install CHITUBOX slicing software

First find "ChiTuBox64Install_1.4.0" in the U disk (As follows).

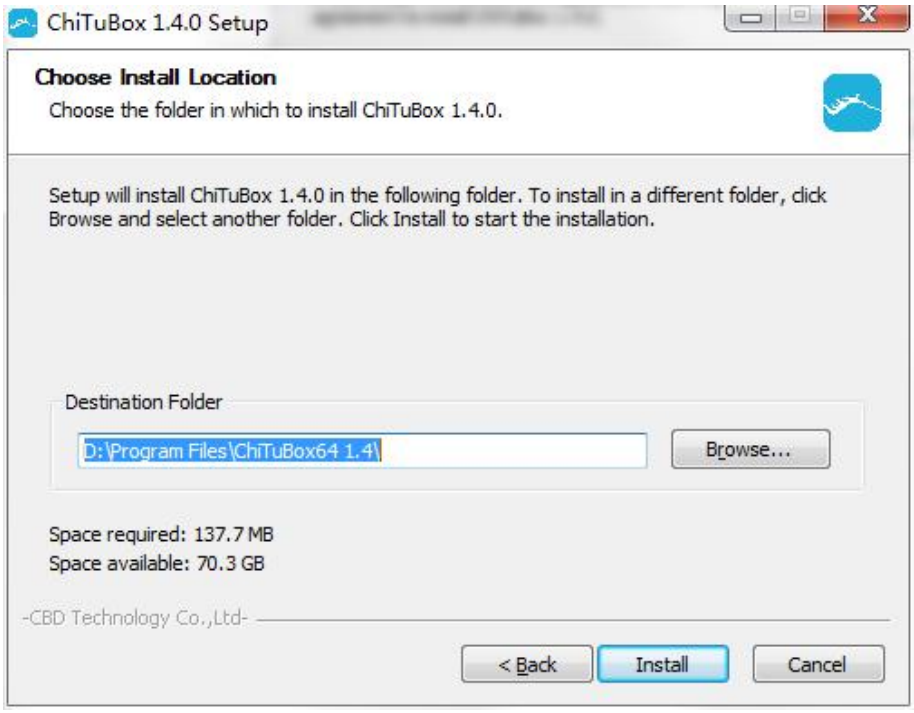


Double-click to open the "ChiTuBox64Install_1.4.0" installation application, select the software display language.

Click “ok” and Click the next step.

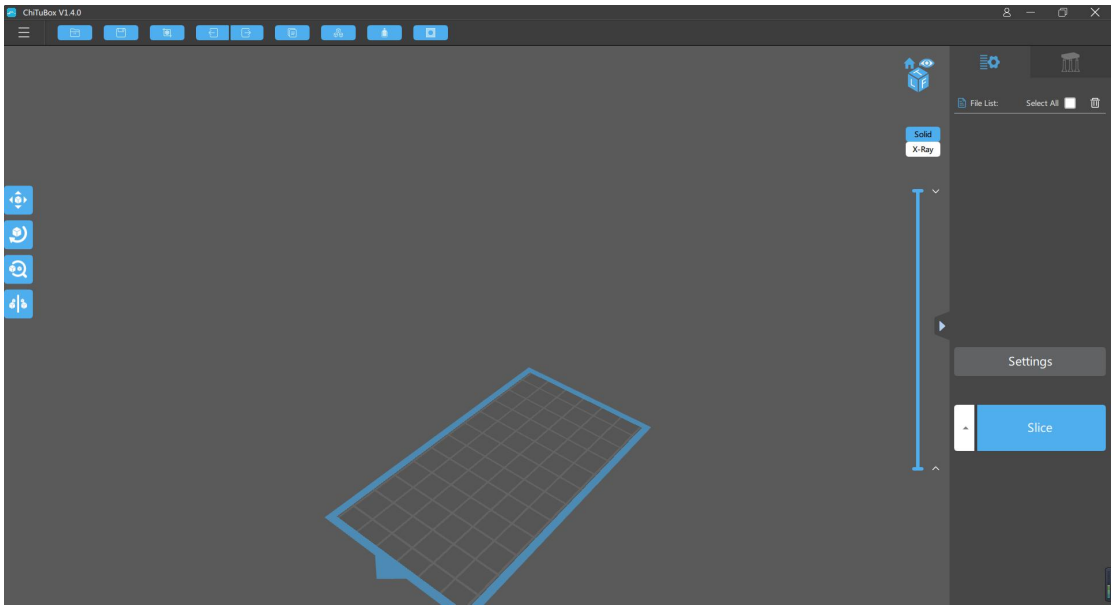
Click “I Agree”.

Select software installation location.



Installation is complete, choose whether to run the software immediately.

1.2 Interface introduction

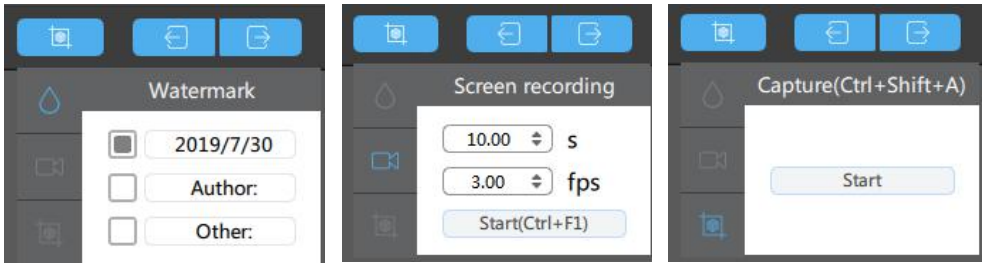


（**Menu Bar**）

1. 2. 1  Open file: open the file you need to operate.

1. 2. 2  Save file: store the operation file that has been performed.

1. 2. 3  Screenshot/recording: watermarking the screen, screen recording, screen capture



(1)Watermark: Check the date on the watermark (real time date), author & other (the gear can be edited).

(2) Screen recording: You can set the time (/s), frame rate (/fps), and then click Start.

(3) Screen capture: Click the "Start" button to start the screenshot.

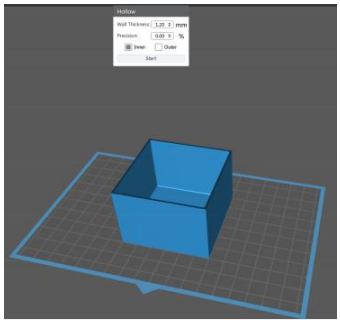
1. 2. 4  Restore & Redo (Remove forward, cancel later)

1. 2. 5  Clone and copy the current model (click once to copy a model on the current platform)

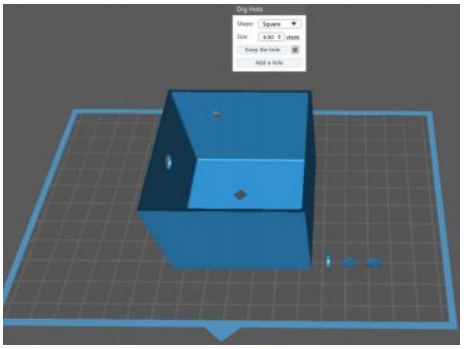
1. 2. 6  Automatic layout: centered, X side, Y side placed on

the platform.

1.2.7  Hollow: Internal hollow or external hollow, wall thickness and accuracy required.



1.2.8  Digging holes: need to set the shape and size, whether to keep the hole, add a hole.



1.3 Model editing

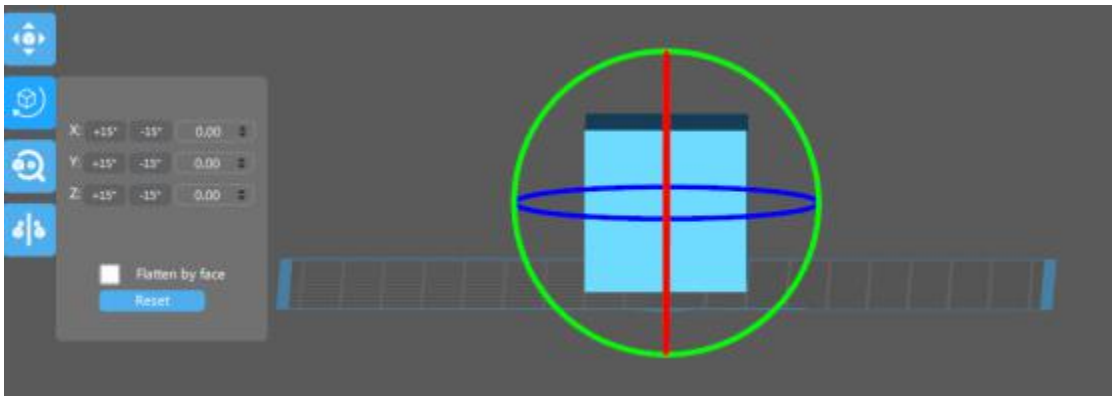
1.3.1 Moving model

(1) Move on the X, Y, and Z axes: directly place the cursor in

the number box and scroll the mouse.

You can place the model directly on the backplane, center it, and reset it.

1.3.2 Rotation model



(1) Rotate on the X, Y, and Z axes respectively:

Click once to rotate 15° in the positive direction of X/Y/Z;

Click once to rotate 15° in the negative direction of X/Y/Z;

The cursor scrolls the mouse over the number box and rotates every +5° / -5° .

(2)Place the cursor directly on the color bar on the model and

hold down the left mouse button to move (red-X, green-y, blue-Z)

1.3.3 Zoom model

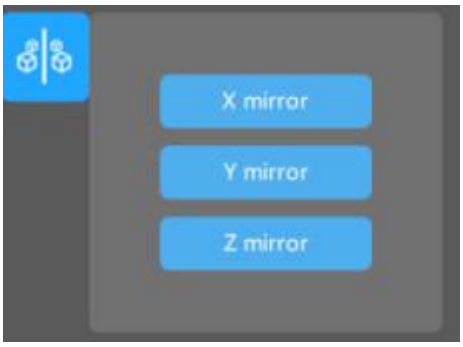
Scale on the X, Y, and Z axes respectively:

(1) The cursor can be zoomed by scrolling the mouse over the number box.

(2) When the scale is locked, no matter which axis is placed on the scale, the other two axes will become larger and smaller according to the scale.

(3) Reset: clear the previous zoom operation, re-scale

1.3.4 Model image

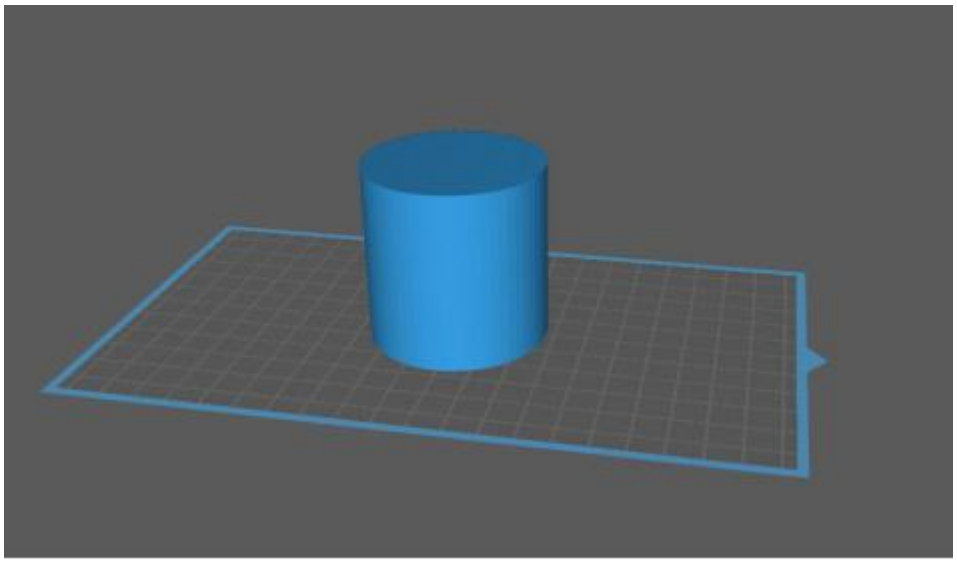


(1) X mirror: mirror the current model with the X axis as the axis of symmetry

(2) Y mirror: mirror the current model with the y-axis as the axis of symmetry

(3) Z mirror: mirror the current model with the Z axis as the axis of symmetry

1.4 Mouse operation (operation in Chinese layout)



1.4.1 Left click: Click on the model to select the model to operate, click on the platform or blank space

1.4.2 Left button long press

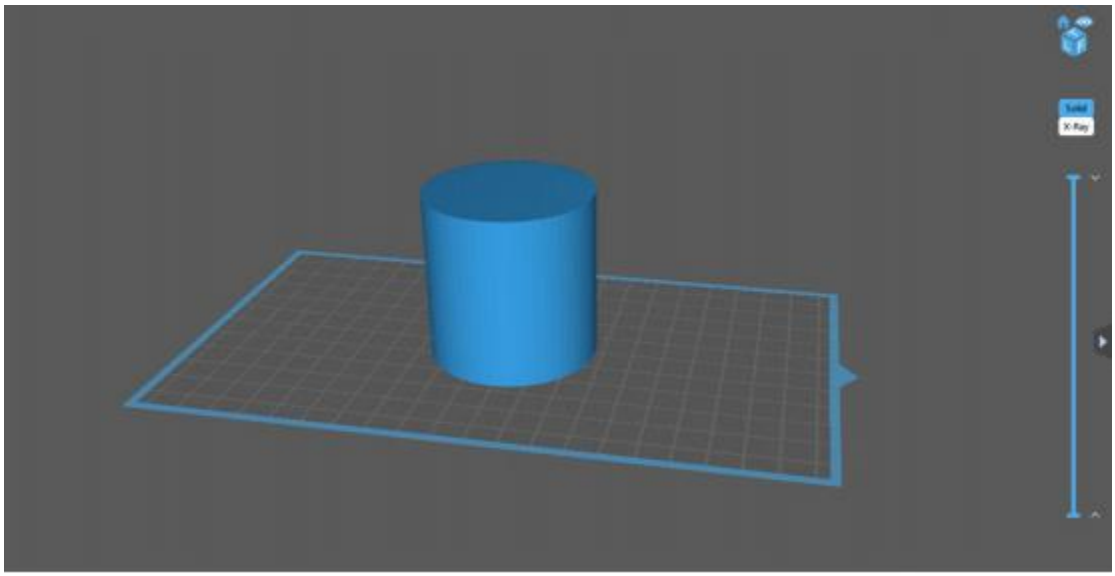
Left-click and long-press model to move the model on the current horizontal plane

（2） Left-click on the platform or blank space to drag the platform and model in all directions.

1.4.3 Right click and hold: right click to rotate the platform

1.4.4 Mouse scroll wheel: scales the entire platform and model

1.5 Scenes



1.5.1 Drag the scene: long press the left mouse button

1.5.2 Rotate the scene: long press the right mouse button

1.5.3 Zoom scene: scroll mouse wheel

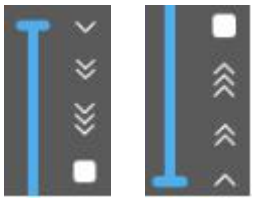
1.5.4  Front view: Click to make the scene and model right front view facing the user

1.5.5  Front view angle/ perspective view: for the current model can be forward view, perspective view switch

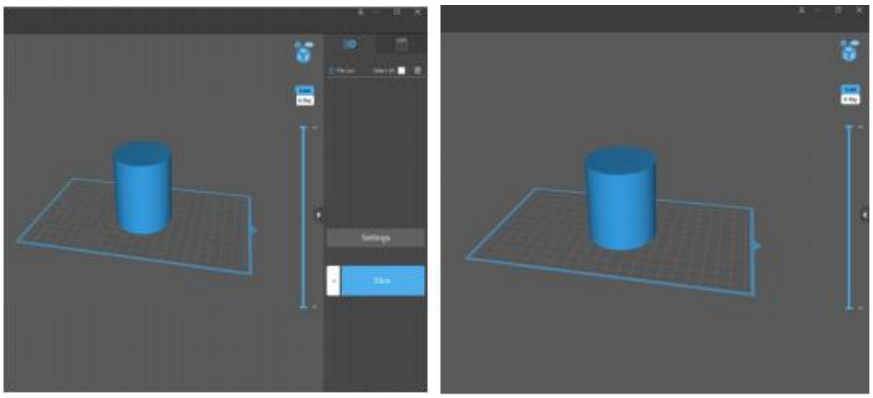
1.5.6  Top view / left view / front view: T - top view; L - left view; F - front view

1.5.7 

Entity/Pivot: Click to have the model switch between entity and perspective

1.5.8  Model strip: The model is subjected to real-time cross-sectional viewing in proportion to the entire model; the upper and lower right sides have one-, two-, and three-speed progress sections to play and pause.

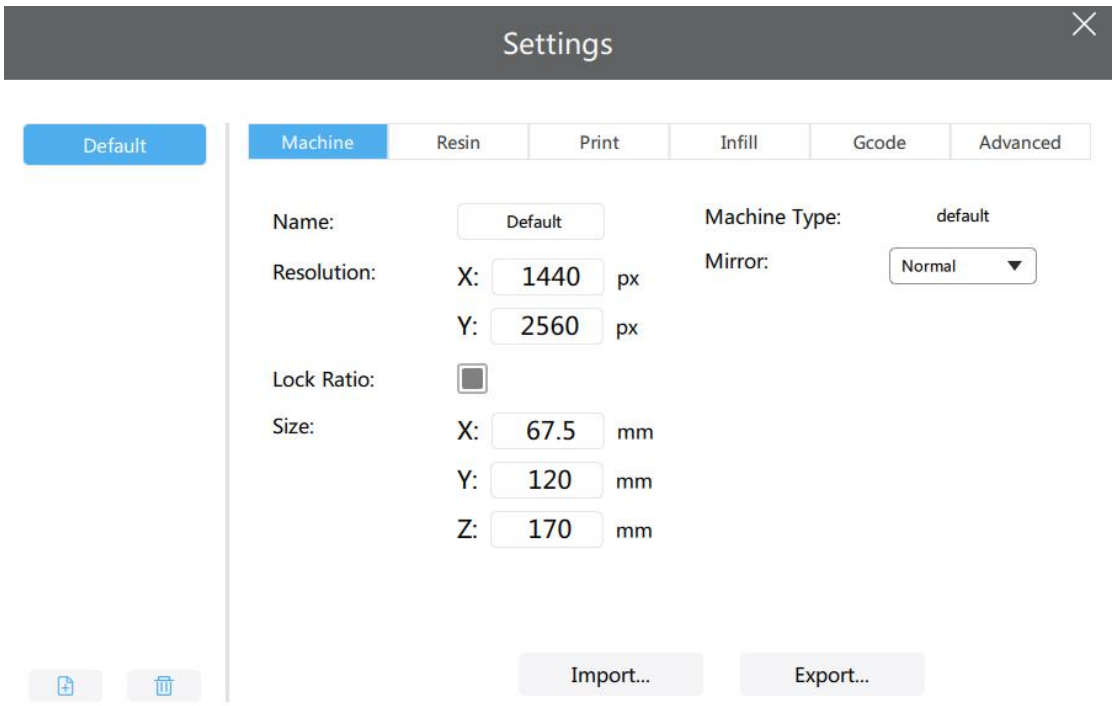
1.5.9  Expand/Hide: Click to expand and hide the content on the right to make the scene more empty.



1.6 Simple Setting 

1.6.1 File list: All models on the platform will be arranged in the file list, which can be edited or deleted by the full selection/single selection model.

1.6.2 Slice Setting 



<Import>: Import the saved machine configuration parameters (the cfg file also contains support parameters);

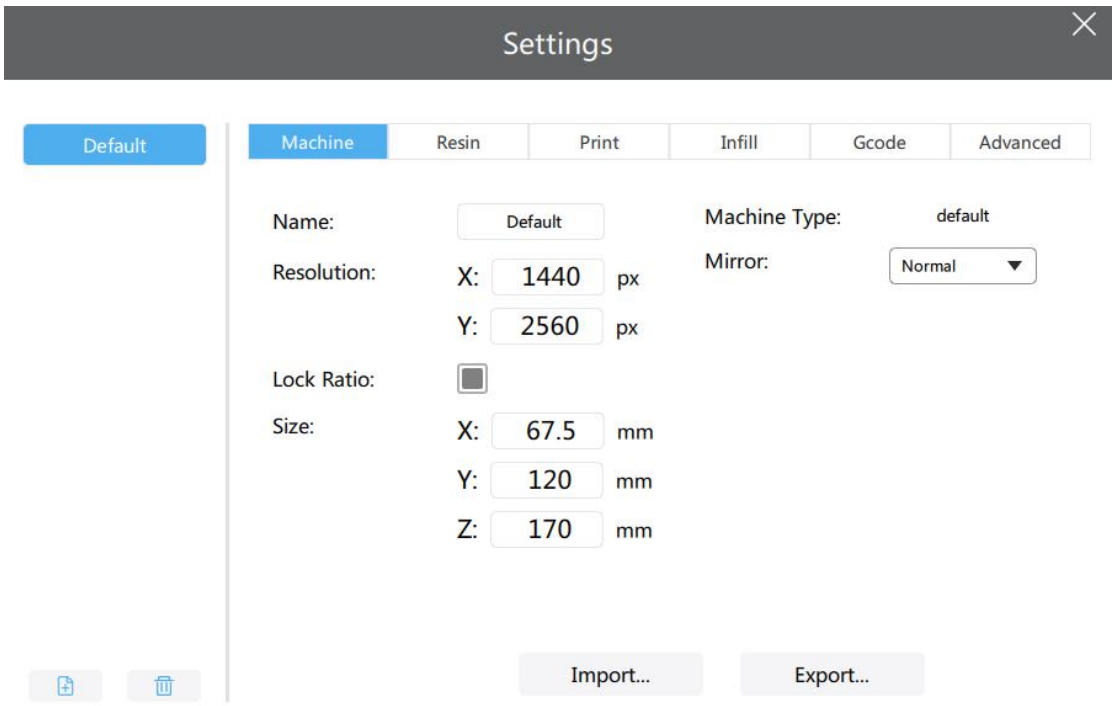
Special attention: There is already a set configuration parameter file in the U disk. You do not need to set any parameters for direct import, you can directly print the model!!!

（Configuration parameter file）

<export>: Export the configured machine parameters (the cfg file also contains the support parameters);

(The following parameters can be understood, do not need to follow the parameters set in the figure),

（1）Machine



<name>: The name of the machine, which can be directly entered into the text for custom naming;

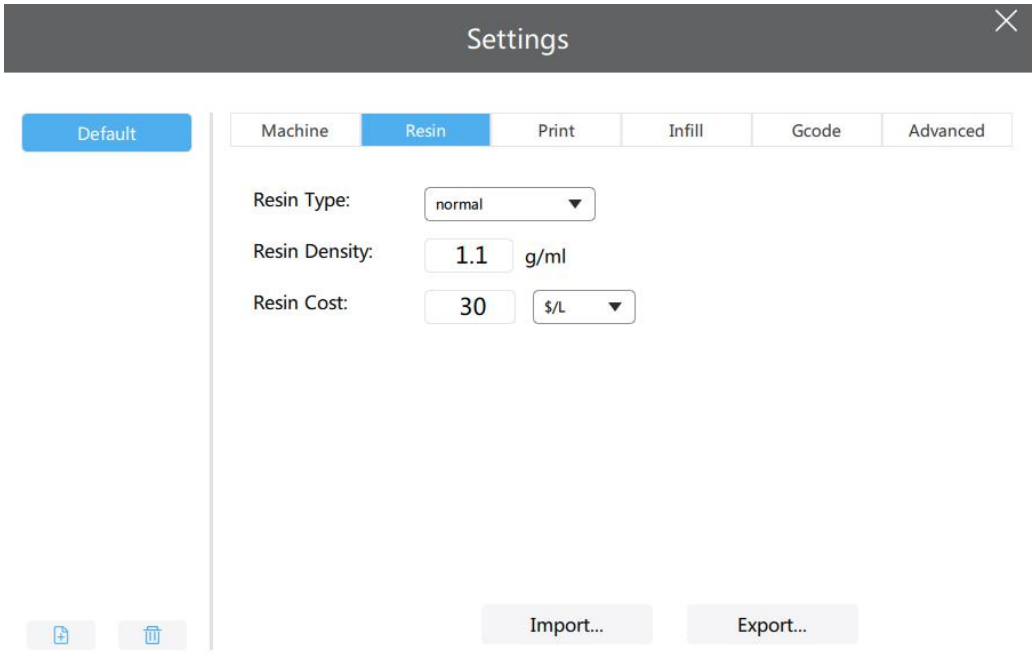
<resolution>: the resolution of the projector or LCD screen, this parameter directly affects the dimensional accuracy of the print;

<lock ratio>:

Under normal circumstances, the ratio of the molding size XY = the resolution ratio, that is, the locking ratio;
In some cases, such as DLP projectors, the XY dimensions may vary slightly due to accuracy or machine design, or may be filled in with the actual projection size without maintaining the scale;

<size>: The maximum forming size of the machine.

（2）Resin

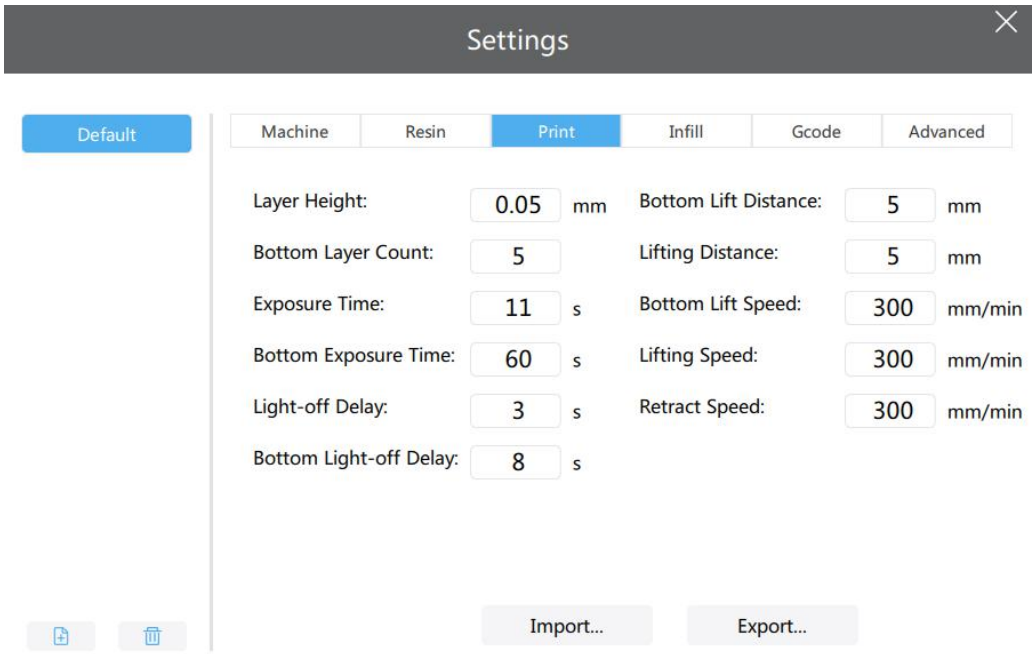


<Resin type>: Different resin types have different parameters, and some resin and corresponding parameters recommended by the company have been integrated;

<Resin density>: the density of the resin used to calculate the quality;

<resin price>: the cost of the resin used to calculate the cost;

（3）Print



<layer thickness>: the thickness of each layer of the model is generally 0.025/0.05/0.1mm

<Number of bottom layers>: The number of layers to be cured at the bottom of the model. In order to better adhere to the platform, the parameters of the bottom layer need to be separately set.

<Exposure time>: Exposure time of the normal layer
<Bottom exposure time>: The exposure time of several layers at the bottom, the general time will be longer than the normal layer exposure time, and the resin can be cured as much as possible to ensure sticking to the molding platform.
<Light out delay>: Calculated from the end of the previous exposure, the final light-off time = maximum (the total time of the Z-axis up and down movement, the configured light-off delay)

For example, the Z-axis moves up and down for a period of 6 seconds.
If the "lighting off delay" is set to 10 seconds, the final extinguishing time is 10 seconds.
If the "extinction delay" is set to 1 second, the final off time is 6 seconds.

<Underlighting delay]: The delay time of the bottom layer is calculated as above.

<Bottom lift distance>: The distance the molding platform lifts when printing the bottom layers

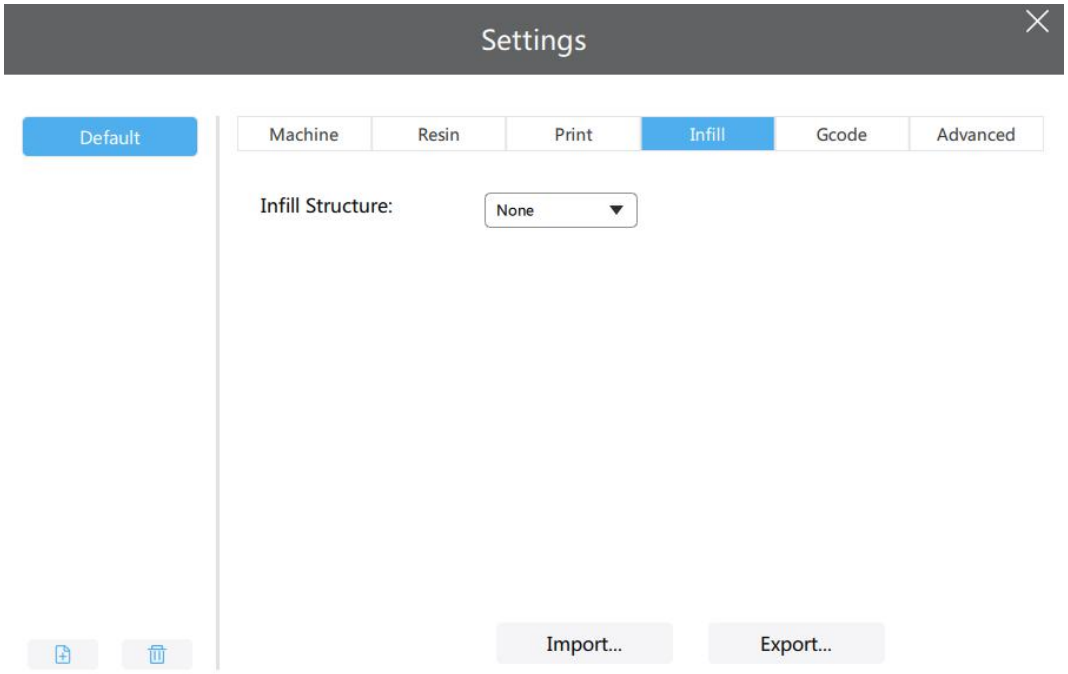
<lifting distance>: the distance the forming platform lifts when printing in the normal layer

<Bottom lift speed>: The speed at which the forming platform is lifted when printing the bottom layers

<lifting speed>: the speed at which the forming platform is lifted when printing in the normal layer

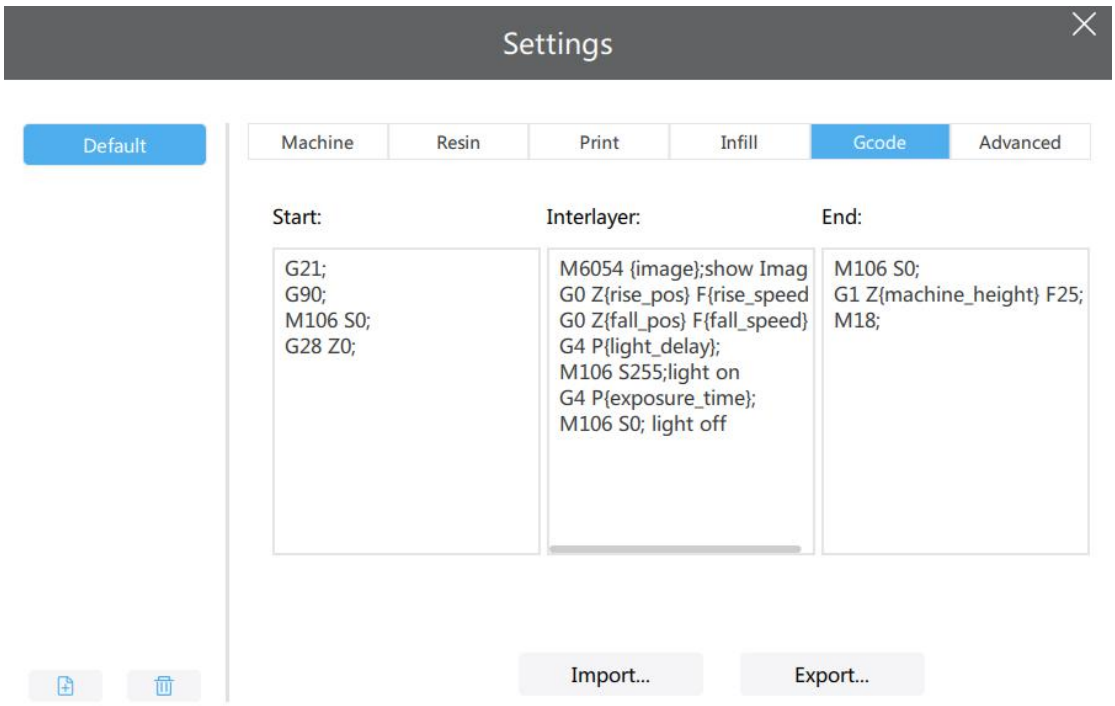
<Return speed>: the speed at which the forming platform descends

（4）Fill



<fill structure>: selection of fill type inside the model, such as mesh structure, etc.

（5）Gcode



<Start>: Preprocessing command executed at the beginning of printing (customizable)

<Interlayer>: Print processing commands executed at each layer in progress (customizable)

{image} The name of the resulting exposure image

{raise_pos} corresponds to the raised position, which is an absolute coordinate value, value = exposure position + lift height

{raise_speed} is the lifting speed, the lifting speed = the bottom lifting speed or the lifting speed

{fall_pos} corresponds to the lowered position, is an absolute coordinate, value = exposure position

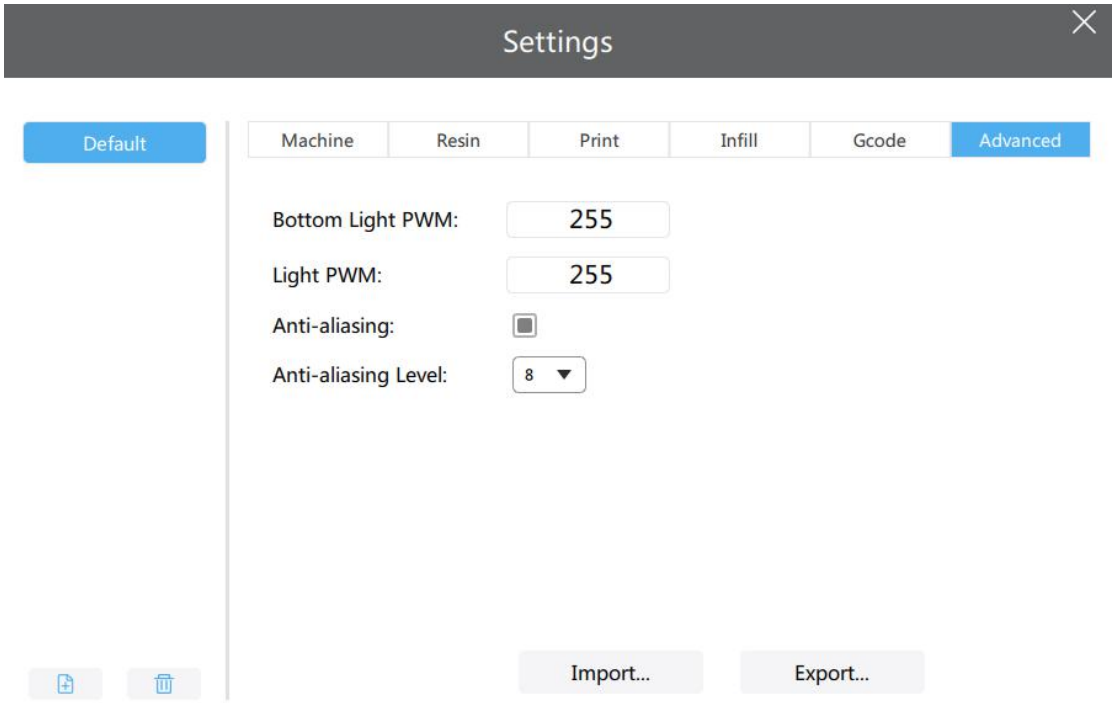
{fall_speed} is the descent speed, the descent speed = the bottom descent speed or the descent speed

{exposure_time} corresponds to the underlying exposure time or exposure time in ms

〈End>: Processing command executed at the end of printing (customizable)

{machine_height} corresponds to the height of the machine size
(Can understand, no effect on printing)

（6）Advanced



<Bottom Light Intensity PWM>: The intensity of the light source when printing the bottom layer (some printers support this command)

<Light intensity PWM>: The intensity of the light source when printing in the normal layer (some printers support this command)

<Anti-aliasing>: Anti-aliasing of sliced images, reducing surface texture and improving the surface roughness of the model.

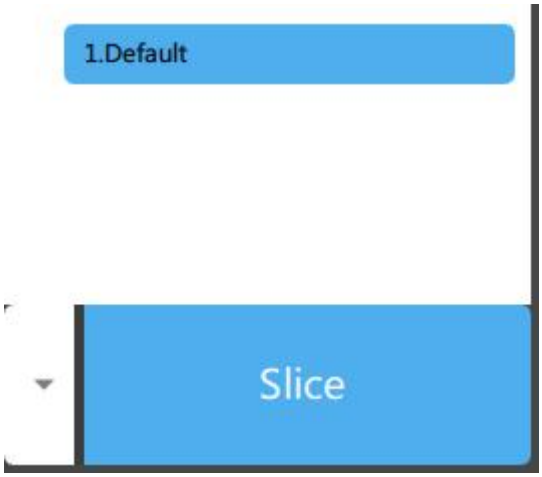
As follows：Anti-aliasing is not turned on, ☐
Anti-aliasing is turned on ■

Nothing

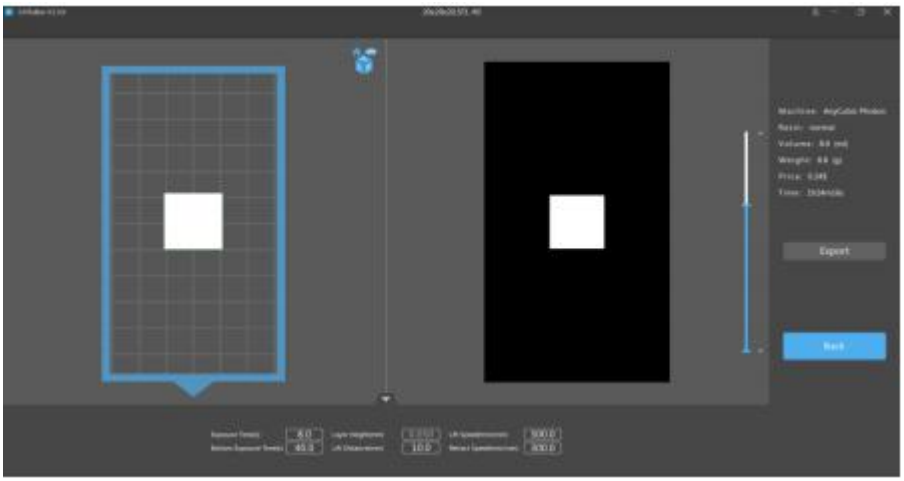
×4

1.6.3 Slice

Slice: Click on the slice to start the model slice processing (select the corresponding parameters for slicing)



1.6.4 Slice preview: Support cross-section and solid model preview at the same time (automatically jump to slice preview after clicking slice)



1.7 Support setting

1.7.1 Z-axis lift height (default is 5mm), customizable

1.7.2 Support Setting（Refresh the data, fold Expand ）

(1) Select the size of the support, which is available in fine, medium and thick.

(2) Top: Set the top of the support, there are default values, users can change according to their own preferences.

(3) Middle: Set the middle of the support, there are default values, users can change according to their own preferences.

(4) Bottom: Set the bottom of the support, there are default values, users can

change according to their own preferences.

(5) Bottom line: Set the bottom line, there are default values, users can change according to their own preferences.

1.7.3 Automatic support（ Refresh the data， fold Expand）：

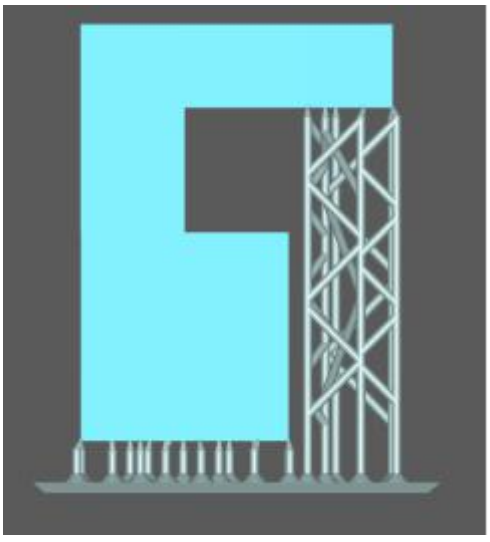
The data of the auto-support is set and has default values, which can be changed according to your own preferences.

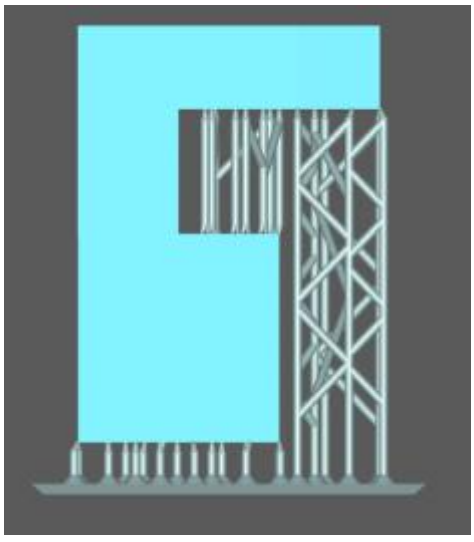
（1） 

Automatically add support to the model (no support is generated on the model, as shown below)

（2） 

Automatically add support to the model (support is also generated on the model, as shown below)


（Platform Support）


（Full Support）

1.7.4 Adding Support: Manually add support anywhere on the model

1.7.5 Deleting Support: Manually delete existing support anywhere on the

model

1.7.6 Edit Support: Manually edit existing support anywhere on the model

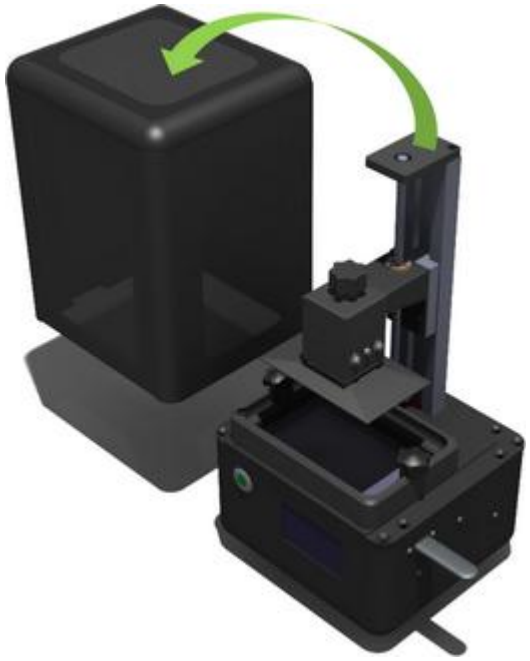
1.7.7 Remove all: remove all existing support

Assembling the printer and its leveling instructions

(1) Check the appearance of the outer box of the 3D printer for scratches, bumps, etc. Check the corners of the box for any deformation or cracking.

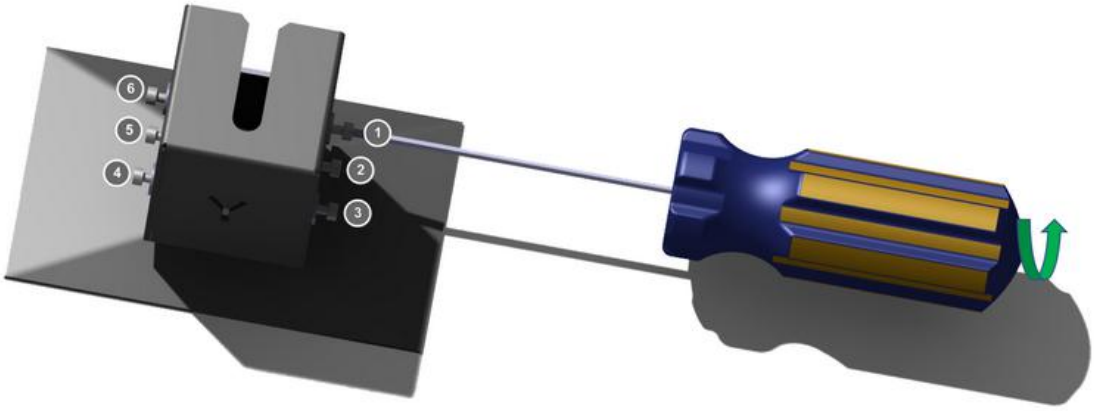
(2) Open the box and take out the machine and accessories. Check and keep the 2K screen and the platform clean and free of debris.

(3) Remove the cover



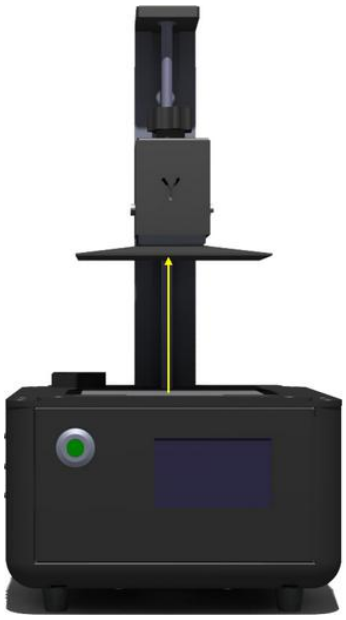
(1) Loosen the tray bracket fastening screw

（1） Loosen the tray fastening screw

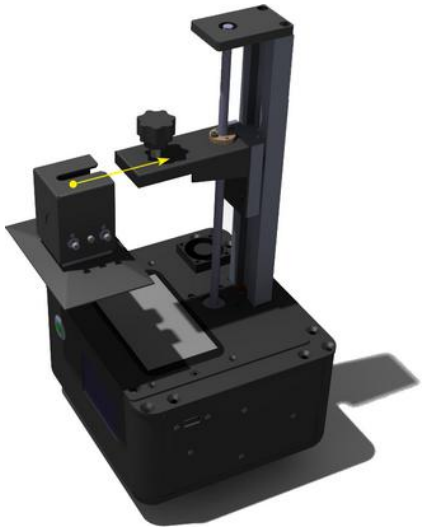


(Special note: the leveling has been completed before leaving the factory, the first print can ignore this step!!!)

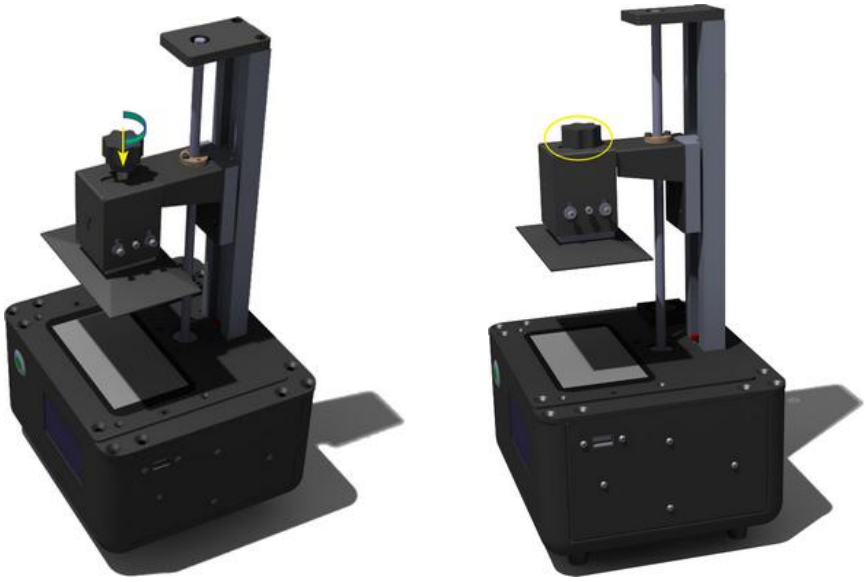
（2）Raise the Z axis to the middle



（3）loading tray

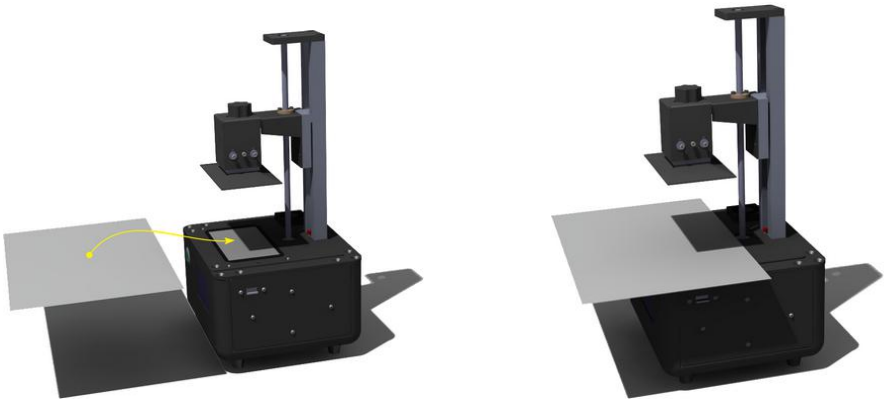


（4）Tighten the tray bracket fastening screws

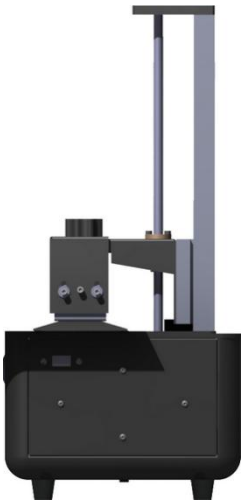


（5）Auto-leveling

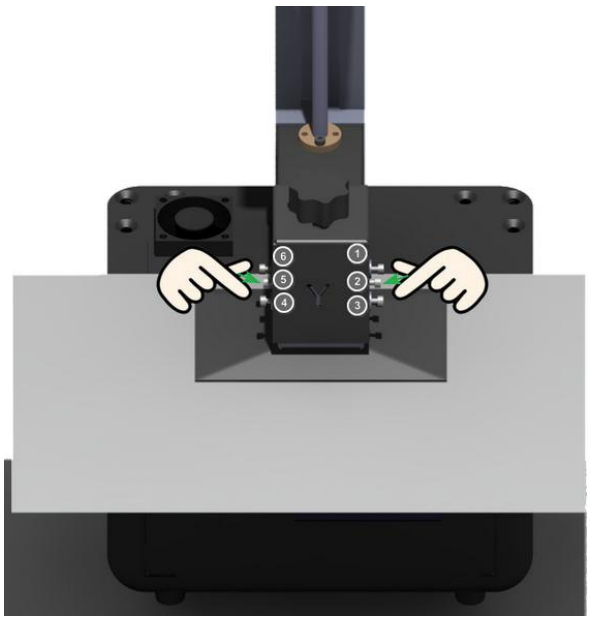
01.Place A4 paper on the LCD screen



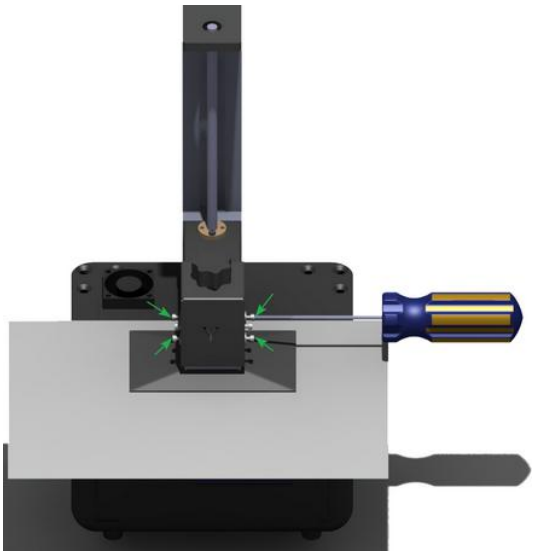
02.Auto-leveling



（6）Tighten the screws



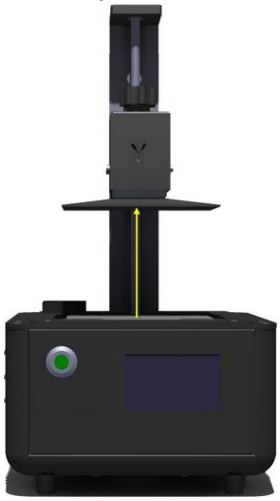
（Hold the tray firmly with one hand to ensure that the current position of the printing platform does not move, and tighten the screws No. 2 and No. 5 with the other hand.）



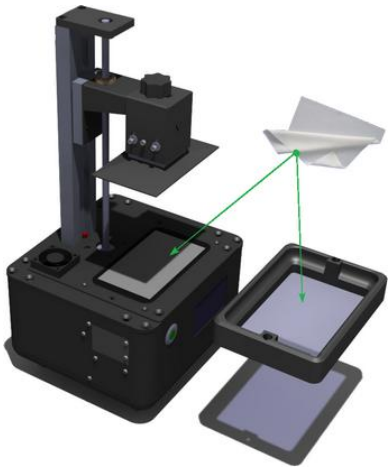
（Then use the wrench to tighten the remaining four screws one after the other.）

（7）Install Resin Vat

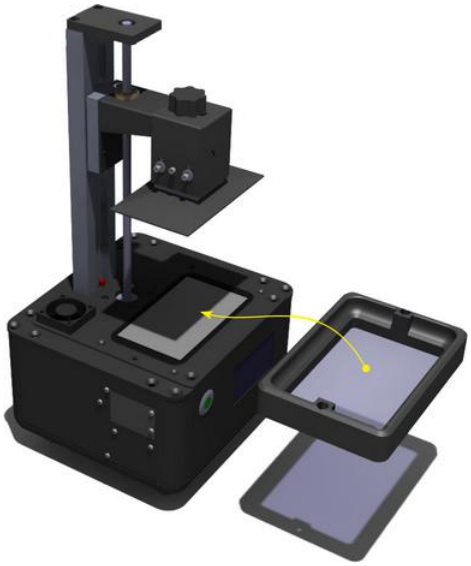
01.Raise the Z axis in the middle (there is a tutorial in front)

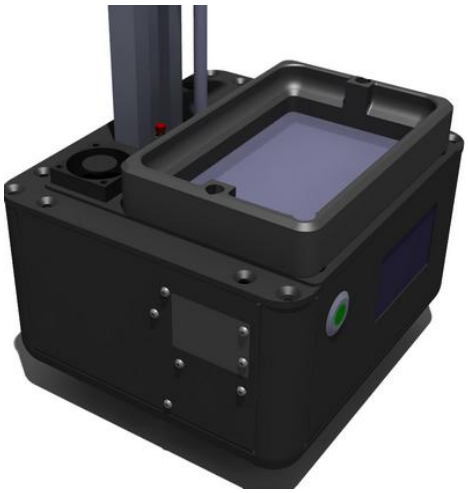


02.Clean the LCD screen and the flute release film with a clean cloth

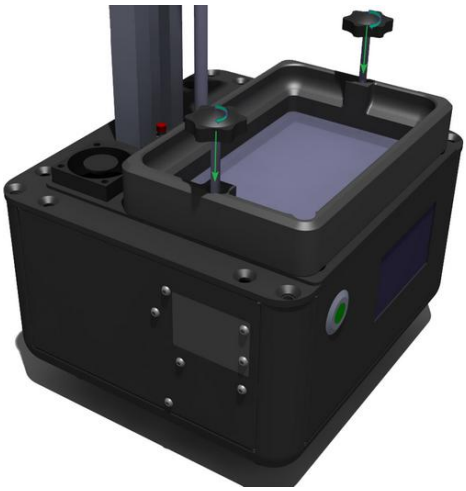


03.Put the trough on the LCD screen

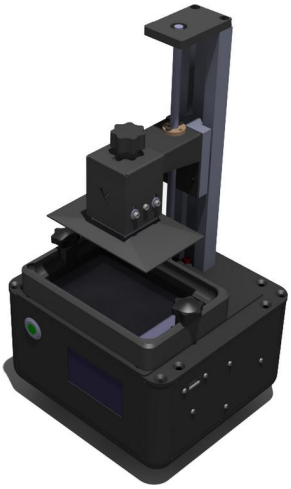




04.Insert the slot fastening screw and tighten



（8）Installation leveling completed

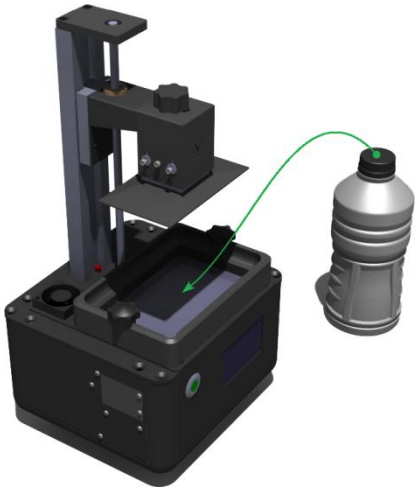


Printing process and post-processing instructions

(1) Preparation before printing (including machine testing, model slicing).

(2) After the model is sliced, save it to the USB flash drive, and then insert the USB flash drive into the USB port of the machine.

（1）Add 1/4-1/3 resin to the trough.



Note

（After the resin is added, please cover the resin bottle cap in time to place the resin deterioration and air pollution.）

（2）Printing operation

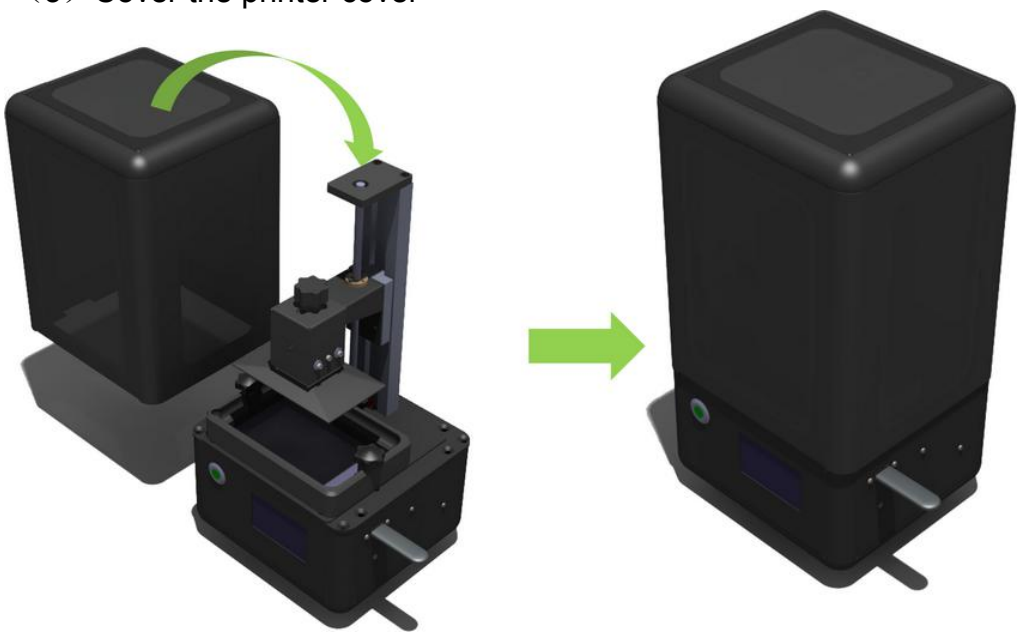
（Click Print）

（Check the model you want to print）

（Print interface）

（Print layer sectional view）

（3）Cover the printer cover



Note:

1. Be sure to cover the cover during printing to avoid air pollution

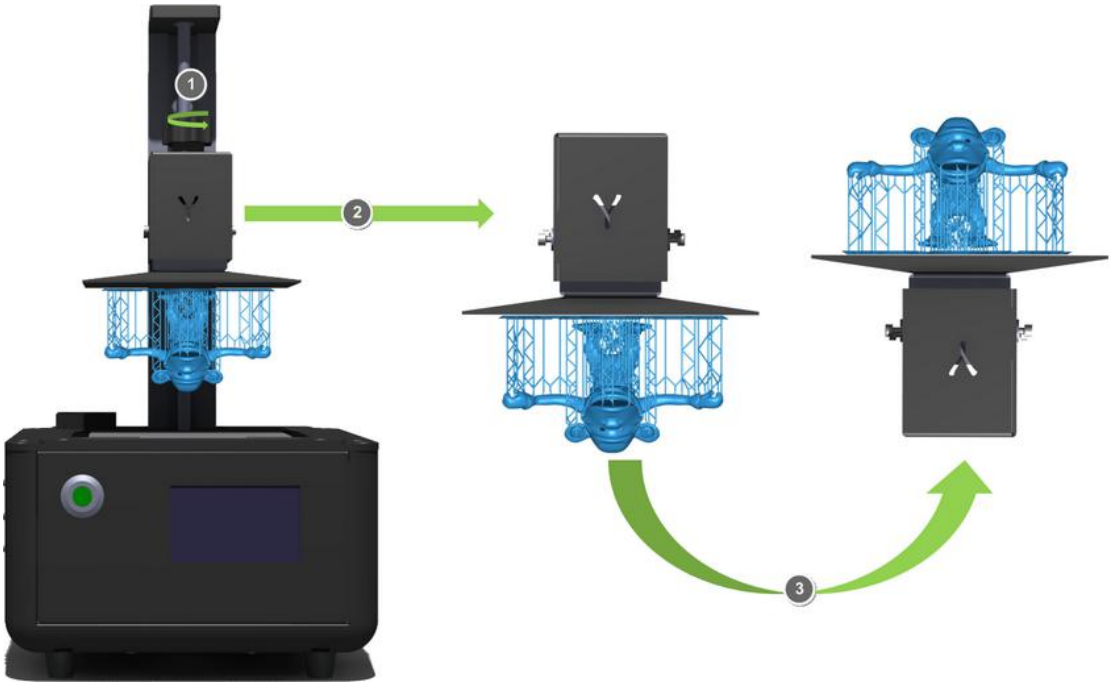
and other damage.

2. Protect the machine from working out of reach of children.

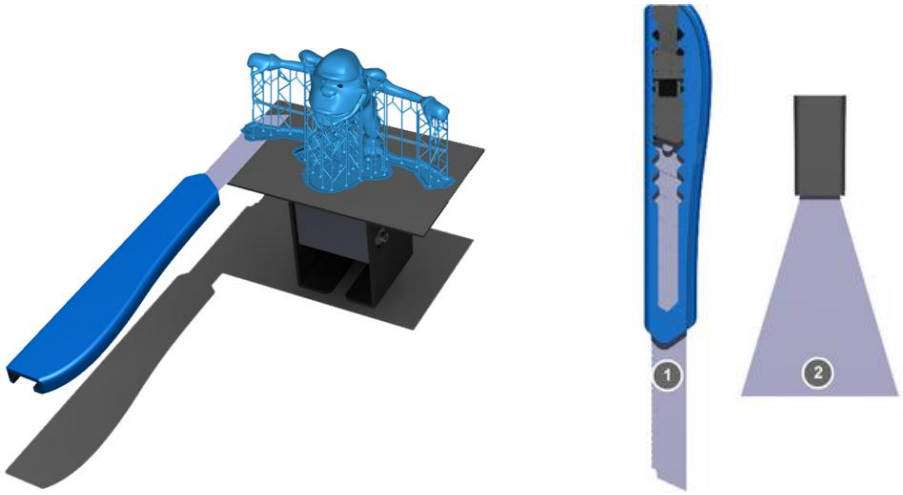
（4）Finishing the print and removing the cover

(7) Take out the tray

01. Loosen the tray bracket fastening screw
02. Pull out the tray
03. Turn over the desktop



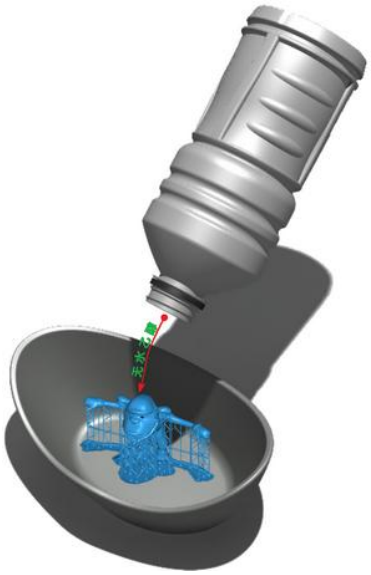
（5）Shovel the model



（Note: The accessories come standard with a blade. If you need a utility knife, please buy it yourself.）

（6）Clean the model

Put the model into the configured alcohol box and pour the pure amount of absolute ethanol into the box for 3-5 minutes.



（7）Drying model

Dry the model surface with a hair dryer (no blower)

（8）curing model

The model is placed in a 405-wavelength UV curing chamber for 3-5 minutes to achieve the best results on the surface of the model (not available, you can go to the official website of YIDIMU)

Note: In the case of incomplete printing or printing failure, the resin in the trough may have some solid residue. It is recommended to filter the

resin of the trough with a filter after each printing, and wipe the residue with a dust-free cloth. Clean, prevent the next print residue will crush the 2K screen,)

Machine maintenance

(1) The power must be cut off during maintenance;

(2) Wiping the resin tank and the printing platform with a dust-free cloth;

(3) The resin should be placed in a shaded place and stored in a shade;

(4) If the equipment is not used for a long time, please place the equipment in a dry and ventilated environment.

(5) When replacing different types or colors of resin, wipe the resin in the trough. If the tank is cleaned with alcohol, wipe the alcohol in the trough.

Quality assurance and after-sales service

Quality Assurance:

Behind every product is the commitment of EDIM Smart, and our rigorous parts processing standards and assembly inspection processes ensure that each product is a qualified, high quality product.

after-sale warranty:

1. Since the goods are received within 7 days, due to the problems caused by the quality of the products, we will bear the return shipping costs for your free replacement or repair.
2. Since the goods are received within 90 days, due to the problems caused by the quality of the products, we will replace or repair them for free.
3. Man-made damage is not covered by the warranty.
4. Our company does not recommend the use of other brand consumables. For the best printing results, please use our company's special consumables. Maintenance and repairs caused by the use of non-consumer consumables are not covered by the company warranty.

5, release film, LCD is a consumable item is not covered by the warranty, the release film is generally replaced once every 15 days, frequently used for 5-7 days to replace, the LCD screen life is generally one to two months.