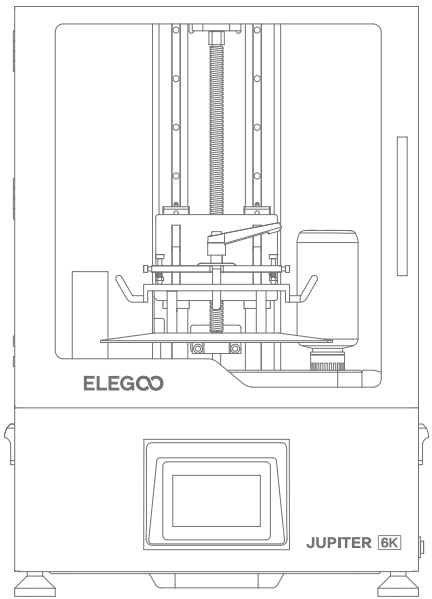


JUPITER 3D PRINTER

ELEGOO

Thank you for purchasing ELEGOO JUPITER series 3D printer.

This instruction applies to Jupiter printers.

Please unbox and inspect the printer upon receiving it.

If you have any questions regarding the printer, please contact us at 3dp@elegoo.com.

Please read the instruction carefully before you use the printer.

ELEGOO

Notice:

If you need technical support please contact us at 3dp@elegoo.com

- Please keep the JUPITER 3D printer and its accessories out of the reach of children.
- When you use the printer for the first time, you would need to level it refer to the leveling tutorial before printing.
- If the printing failed, you would have to clean the resin tank and change resin otherwise it may cause damage to your printer.
- Please fill the resin tank no less than 1/3 of its volume. If you need the automatic resin feeding function, please use the automatic feeding bottle cap in the accessory box.
  (At present, the automatic feeding bottle cap matches ELEGOO 1kg or 500 capacity resin bottles)
- Please use 95% (or higher) ethyl alcohol or isopropyl alcohol to wash your model unless you are using water washable resin.
- Please use the printer indoors and avoid direct sunlight and dusty environment.
- Please keep your printer away from water and dump environment.
- Please wear a mask or gloves before using and avoid direct skin contact.
- Please don' t disassemble the JUPITER 3D printer by yourself, which will cause your warranty expired.
- If the FEP of resin tank is white or high printing failure rate, please replace the FEP release film in time.
- If you run into emergency issues, please shut down the power of the printer first, and if you have any problems with the printer, please contact us at 3dp@elegoo.com.

JUPITER 3D Printer Tech Specs

Printing Parameter

System: ELE3D-J-V1.0
Operation: 5-inch Touch Screen
Slicer Software: CHITUBOX
Connectivity: USB

Printing Specification

Technology: MSLA 3D Stereo Lithography Printing Technology
Light Source: COB (wavelength 405nm)
XY Resolution: 0.051mm (5448*3064)
Z Axis Accuracy: 0.00125mm
Layer Thickness: 0.01-0.2mm
Printing Speed: 30-70mm/h
Power Requirements: 100-240V 50/60HZ 24V 7.5A

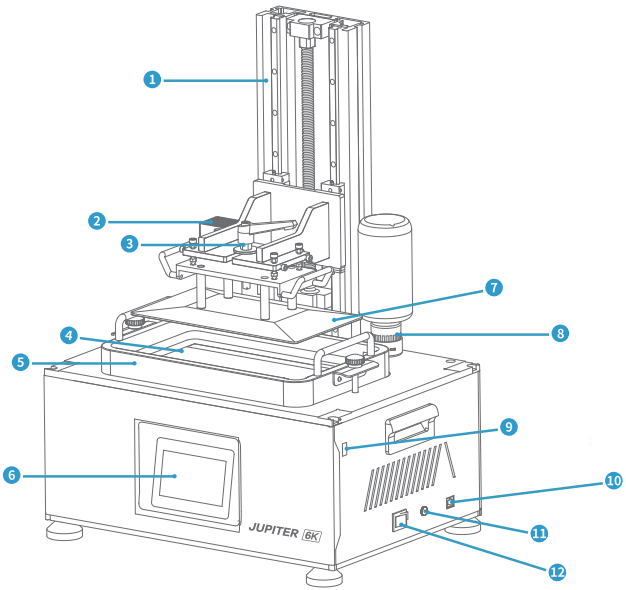
Hardware Specification

Dimensions: 52.3cm(L)*38cm(W)*72.8cm(H)
20.59in(L)*14.96in(W)*28.66in(H)

Build Volume: 27.7848cm(L)*15.606cm(W)*30.0cm(H)
10.94in(L)*6.14in(W)*11.81in(H)

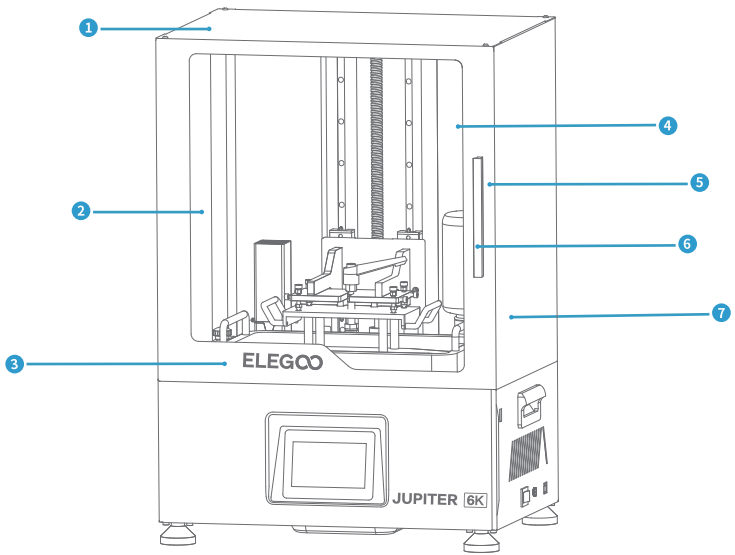
Weight: 76.72lbs(34.8kg)

Printer Components



1 Z Axis 2 Air Purifier 3 L-shaped Handle 4 12.8 Inch LCD Screen 5 Resin Tank 6 5 Inch Touch Screen

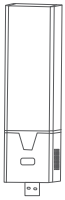
7 Build Platform 8 Automatic Feeding Bottle Cap 9 USB Interface 10 Network Port 11 Power Socket 12 Switch



1 Jupiter Top Panel
2 Jupiter Upper Left Panel
3 Jupiter Door Panel
4 Jupiter Upper Back Panel
5 Jupiter Upper Rear Right Profile
6 Jupiter Door Handle
7 Jupiter Upper Right Panel

Package List

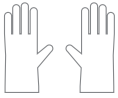
FEP2.0*2



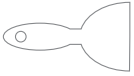
Air Purifier

U Disk

Mask



Gloves



Scraper

Funnel

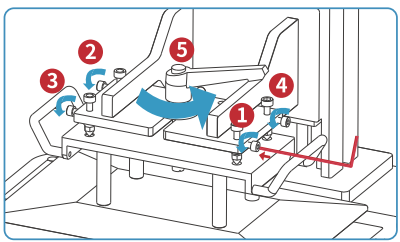
User Manual

Adapter

Automatic Feeding Bottle Cap X 5

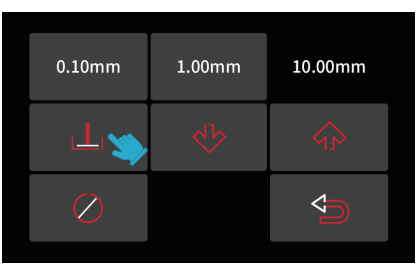
Tool Kit

Leveling

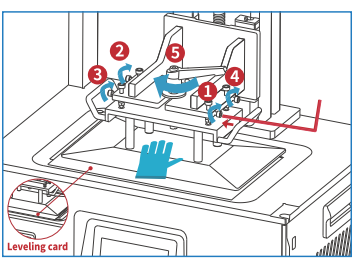


(Picture 1)

1. Take out the resin tank, first loosen the L-type handle (❺) of the Jupiter machine build platform, then loosen and level the four screws (❶ ❷ ❸ ❹) in turn with an M4 Allen wrench.(See Picture 1)



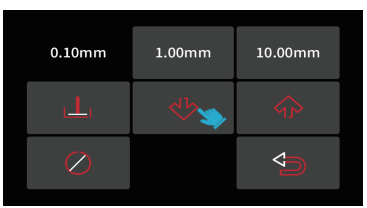
(Picture 2)



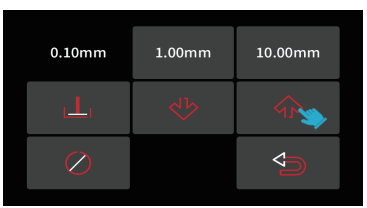
(Picture 3)

2. Put a Jupiter leveling card between the build platform and the 6K LCD screen, and click "Move Z axis to zero". (See Picture 2) When the build platform stops moving, use an M4 Allen key to tighten the leveling screws diagonally, please be sure to tighten the screws in the order of the serial number (❶ ❷ ❸ ❹), and finally tighten the L-shaped handle(❺) of Jupiter printer. (See Picture 3)

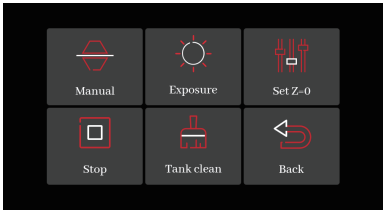
3. Since the distance between the build platform and the screen will be changed during the process of tightening the screws of the build platform, if the leveling card of Jupiter can be pulled out with no resistance, please click the "down" button (step value is 0.1mm) until there is slight resistance to pull out the Jupiter leveling card. (See Picture 4)
If the resistance of pulling out the Jupiter leveling card is too high, please click the "up" button (step value is 0.1mm) until the Jupiter leveling card can be pulled out with slight resistance. (See Picture 5)

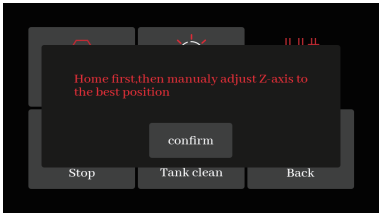


(Picture 4)



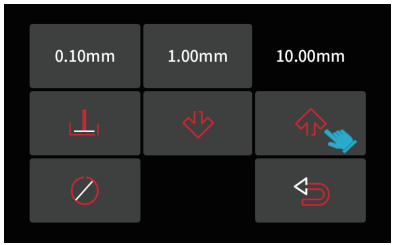
(Picture 5)





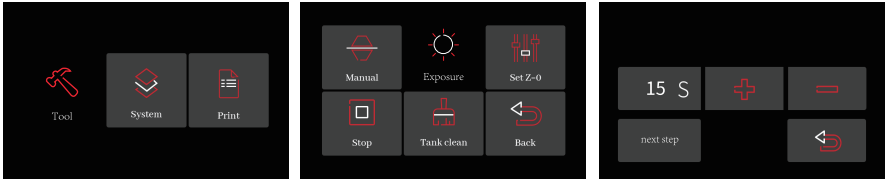
(Picture 6)

4. After finishing the above leveling, set the current position of Z-axis as the initial height of the first printing layer. The operation is as follows: Return to the previous interface and click "Set Z = 0". At this time, a message will pop up on the screen as shown in the picture. Then click "confirm" to finish. (See Picture 6)



(Picture 7)

5. Press the button on the touch screen, and the build platform will go up about 100mm. Now, the leveling is completed, then install the resin tank back, ready for printing. (Every time you click the on the touch screen, the Z-axis will rise 10mm.) (See Picture 7)



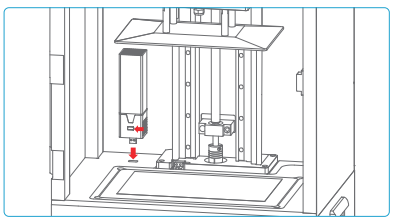
(Picture 8)

6. Test the LCD screen and UV lights by pressing the "Tools"-"Exposure"-"Next" button. (See Picture 8) If the LCD screen can display the "ELEGOO TECHNOLOGY www.elegoo.com", then the LCD screen and UV lights work perfectly.

Test Printing

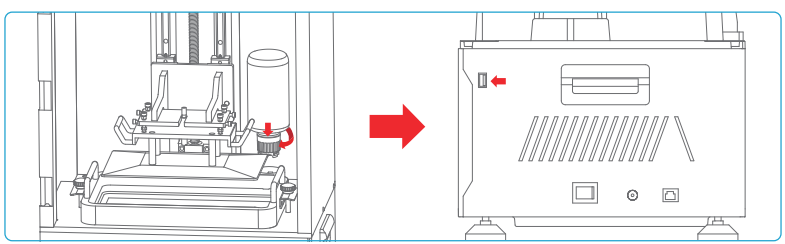
1. Model Printing

Before printing, insert the air purifier into the USB port with the front side facing out, and then the green light will light up, indicating that the air purifier is working normally. (See Picture 9)



(Picture 9)

Put the resin tank back and fasten it tightly, wear a mask and gloves (avoid direct contact with your skin), and then add resin slowly to the 1/3 level of the tank, making sure that the printer is level and will not wobble. Then replace the resin bottle cap with the automatic feeding bottle cap, tighten it on the resin tank; Plug the USB into the printer (See Picture 10), select the model file "Rook.ctb" and start printing.

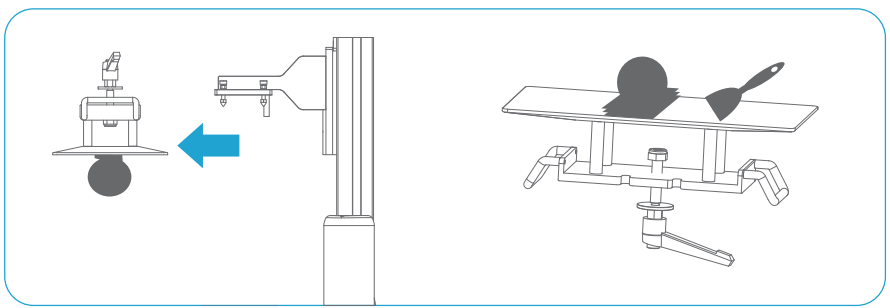


(Picture 10)

If the resin is not enough to complete the model during printing, you can press the "Pause" button, and add more resin to the resin tank or replace a full bottle of resin, then tighten the automatic feeding bottle cap and install it on the resin tank to continue printing.

2. Wash Your Print and Clean the Tank

Once printing is completed, please wait until the residual resin on the build platform doesn't drop any more, then loosen the L-shaped handle of the build platform and remove the build platform. Use the scraper to remove the model and wash it with 95% (or higher) ethyl alcohol if you are using standard resin or ABS-like resin. If you use the water washable resin, you can directly wash it with running water. (The rinse water is stored in a container). (See Picture 11)



(Picture 11)

1. Install Chitu Box

ELEGOO ChiTu Box is stored in the U Disk. Choose the right version and install it on your computer or you can download the latest version from www.elegoo.com/downloadifyouprefer.

2. How to Use Chitu Box

After installation is complete, run the ChiTu software. Click "File - Open File", and then open your own 3D model files (.stl type) or you can download some samples from our website www.elegoo.com. You can control and change the visual angle, size and position of the model by left-clicking the model and use the options on the left menu.

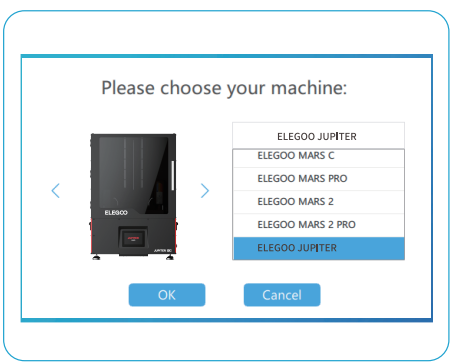
Software

Other Operations:

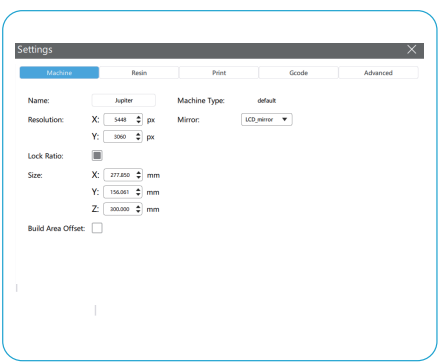
1) Long press the left click and drag the model to the position you want
2) Scroll the mouse wheel to zoom in or zoom out the model.
3) Long press the right click to see different perspectives of the model.

3. Chitu Box Settings

3.1 Click "Parameter Settings" and choose ELEGOO JUPITER as your default printer. (See Picture 12)



(Picture 12)



(Picture 13)

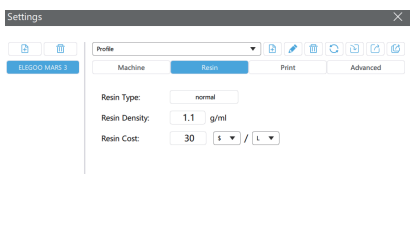
3.2 Build Volume

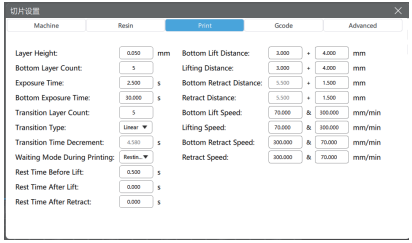
The default parameters don't need to change (See Picture 13). If the model is larger than the printer build volume, the corresponding direction (X, Y, or Z direction value) needs to be modified proportionally.

3.3 Resin Parameters (See Picture 14)

Resin Density: 1.1g/ml

Resin Cost: You can enter the unit price of your resin, and after slicing you will see how much it costs for your model.





(Picture 14)

3.4 Parameters (See Picture 14)

Layer Height: The thickness of each printed layer; Recommended height is 0.05mm but you can set it from 0.01-0.2mm. The higher you set, the longer time it will take for exposure time of each layer.

Bottom Layer Count: The setting of the initial printing layer count. If the count of bottom layers is n, the exposure time of the first n layers is the exposure time of the bottom layer, and the default setting is 5.

Exposure Time: The exposure time of the normal printing layer; The default exposure time is 2.5 seconds, the thicker you set, the longer time will be needed.

Bottom Exposure Time: The setting of the bottom layer exposure time; Appropriately increasing the exposure time of the bottom layer will help increase the stickiness between the printing model and the build platform; The default setting is 30 seconds, the longer you set, the stickier the bottom will be on the build platform.

Transition Layer Count: The count of transition layers after the bottom layer to make it stickier between layers. Except for the exposure time, the other parameters of the transition layer are the same as the normal layer; the default setting is 5.

Transition Type: The transition type of the exposure time when transitioning from the bottom layer to the normal layer. The default setting is linear transition.

Static Time Before Lifting: The time difference between the end of the printing exposure and the beginning of the build platform away from the exposed surface; the default setting is 0.5 seconds.

Static Time After Lifting: The time difference between the build platform starting to standstill and starting to return after the build platform is lifted; the default setting is 0 seconds.

Static Time After Return: The time difference between the build platform starting to standstill and starting to exposure after the build platform moves to the printing surface; the default setting is 0 seconds.

Bottom Lift Distance: During the bottom printing process, the distance when the build platform away from the printing surface each time; the default setting is 3+4mm.

Lifting Distance: In the normal printing process, the distance when the build platform away from the printing surface each time; the default setting is 3+4mm.

Bottom Retract Distance: During the bottom printing process, the retract distance of the build platform, do not change it if not necessary; the default setting is 5.5+1.5mm.

Retract Distance: In the normal layer printing process, the retract distance of the build platform, do not change it if not necessary; the default setting is 5.5+1.5mm.

Bottom Lift Speed: During the bottom printing process, the movement speed of the build platform away from the printing surface each time; the default setting is 70&300mm/min.

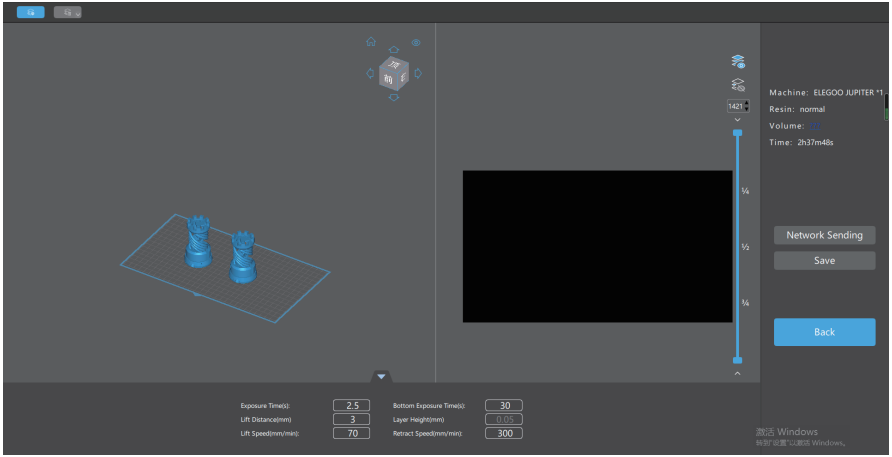
Lift Speed: In the normal printing process, the movement speed of the build platform away from the printing surface each time; the default setting is 70&300mm/min.

Bottom Retract Speed: During the bottom printing process, the movement speed of the build platform close to the photocuring surface; the default setting is 300&70mm/min.

Retract Speed: In the normal layer printing process, the movement speed of the build platform close to the photocuring surface; the default setting is 300&70mm/min.

4. Save Model

After setting up all the parameters, click "slice", and once it's done, click "export sliced files to U Disk", then plug the U disk to your printer and start printing. (See Picture 15)



(Picture 15)

FAQ

1. Model doesn't stick to the build platform

Bottom layer exposure time is too short, please add more time.
Model bottom has very small contact with the build platform and please add more bottom layers.
Leveling is not well set and it will cause first layer too thick or one side is very thick while the other side is very thin.

2. Model layer breakage

Printer is shaking during printing.
Release liner film is very loose due to long-time usage and need to be changed.
Build platform or resin tank is not fastened.

3. Abnormal Screen Exposure

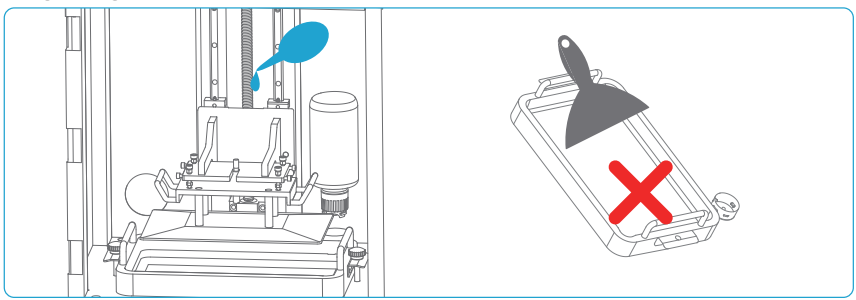
lf your printer doesn't work please contact us at 3dp@elegoo.com.
and as to better help and solve problems for you, please add your order ID in your email.

4. Printing failure

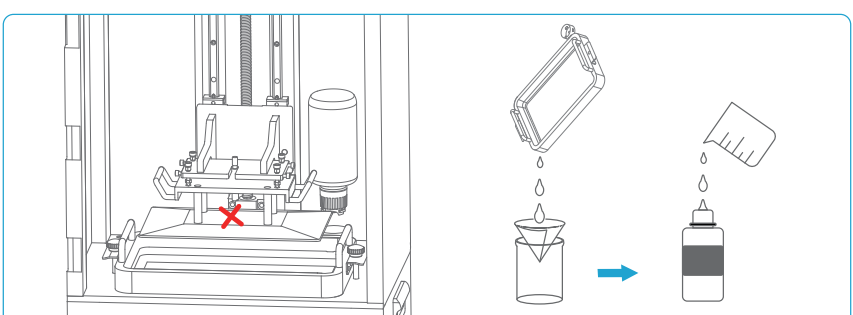
lf the model was not completely printed or failed,there might be some residues left in the resin, which can be filtered out using a funnel when you save the rest resin back into its sealed bottle.
lf you don't filter out the residues the platform may cause damage to the LCD screen when you're printing next time.
As to the residual resin on the platform and tank, you can clean and wipe them up using tissues or ethyl alcohol.

5. Maintenance

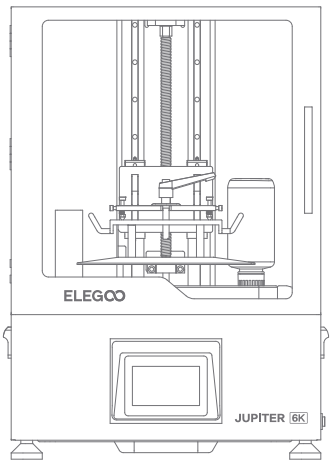
1.If Z axis keeps making friction noises, please add some lubricant to it.
2.Please do not use sharp or pointy objects to scrape the resin tank in case of causing damages to release liner film.



3.Be careful when you remove the build platform in case you may smash the 6K LCD screen.
4.Remember to pour the rest of the resin in the tank back into the resin bottle and seal it well if you don't use the printer in the next 48 hours.
And if there are any residues please use a filter to filter them out.



5.Please clean up the build platform and the printer using tissues or ethyl alcohol once you complete printing.
6.Please clean up the resin tank before changing another colors of resin.



Email Support Discussion Forums Help Articles

ELEGOO.COM