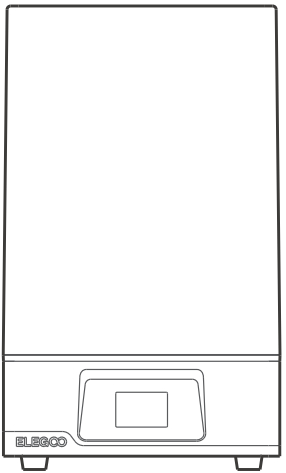
ELEGOO

JUPITER SE

3D Printer



User Manual

Thank you for purchasing ELEGOO brand products.

After receiving the product, please confirm whether the equipment is intact and the accessories are complete. If there is any damage or missing, please timely contact us at 3dp@elegoo.com.
(To ensure the performance of each product, each product will undergo strict printing tests before leaving the factory. There may be some slight scratches when you receive the product, which is normal, please rest assured to use.)

ELEGOO

Notice:

- Please keep the 3D printer and its accessories out of the reach of children.
- Please fill the resin tank no less than 1/3 of its volume, but do not exceed the MAX line position.
- Please place the printer in a dry environment and protect it from rain and moisture.
- If you run into an emergency during use, please turn off the power supply of the 3D printer first.
- Please use the printer indoors and avoid direct sunlight and a dusty environment.
- Please keep the original packaging box for 30 days for return/exchange (only ELEGOO original packaging boxes are accepted).
- Please use 95% (or higher) ethyl alcohol or isopropyl alcohol to wash your model unless you are using water washable resin.
- If the printing fails, you need to clean the excess cured resin in the resin tank and change the resin, otherwise, it may cause damage to your printer.
- When operating the 3D printer, please wear a mask and gloves to avoid direct skin contact with the photopolymer resin.
- When you use the 3D printer for the first time, please level the build platform according to the leveling tutorial before printing.
- If the release film in the resin tank is whitened, scratched, or has no elasticity, the printing failure rate is high, please replace the release film in time.
- If you have any problems with the printer, please contact us at 3dp@elegoo.com. Please do not disassemble or modify ELEGOO 3D printers by yourself, otherwise, the warranty will expire.

3D Printer Tech Specs

Printing Parameter

System: EL3D-3.0.1
Operation: 3.5-inch Touch Screen
Slicer Software: Chitu Box
Connectivity: USB Interface

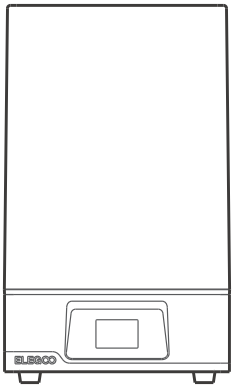
Printing Specification

Technology: MSLA Stereolithography
Light Source: COB+Refractive Light Source (wavelength 405nm)
XY Resolution: 51*51um (5448*3064)
Z-axis Accuracy: 0.02mm
Layer Thickness: 0.01-0.2mm
Printing Speed: MAX 70mm/H
Power Requirements: 100-240V 50/60 Hz 24V 7.5A

Hardware Specification

Dimension: 479.9mm(L)*377.4mm(W)*657.5mm(H)
Build Volume: 277.848mm(L)*156.264mm(W)*300mm(H)
Package Size: 870mm(L)*495mm(W)*475mm(H)
Gross Weight: 26.6KG
Net Weight: 19.5KG

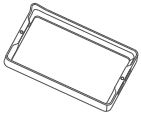
Packing List



JUPITER SE 3D Printer

USB Air Purifier

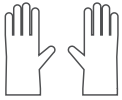
Build Platform



Resin Tank

U Disk

Mask



Gloves

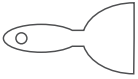
Funnel

Backup Screws

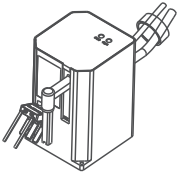
User Manual

Adapter

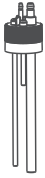
Tool Kit



Scraper



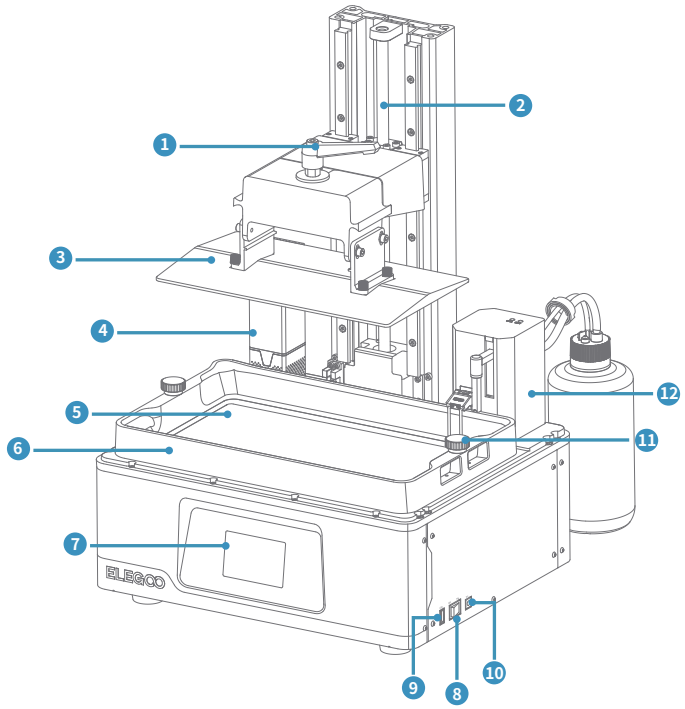
Auto Resin Feeding Main Module



Bottle Cap Module*2

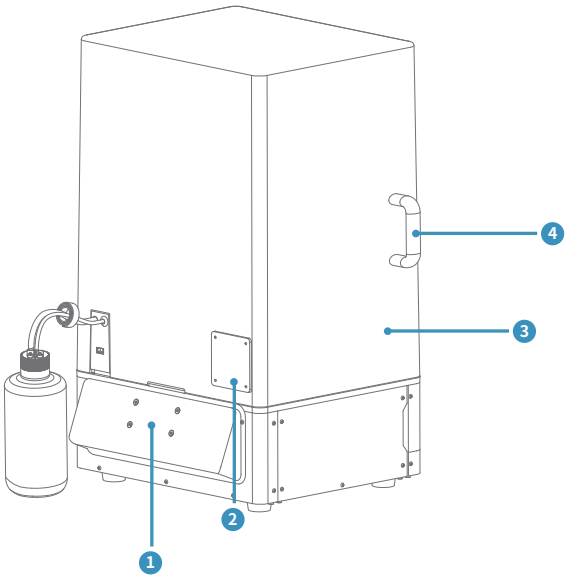
Cover Handle*2

Printer Introduction



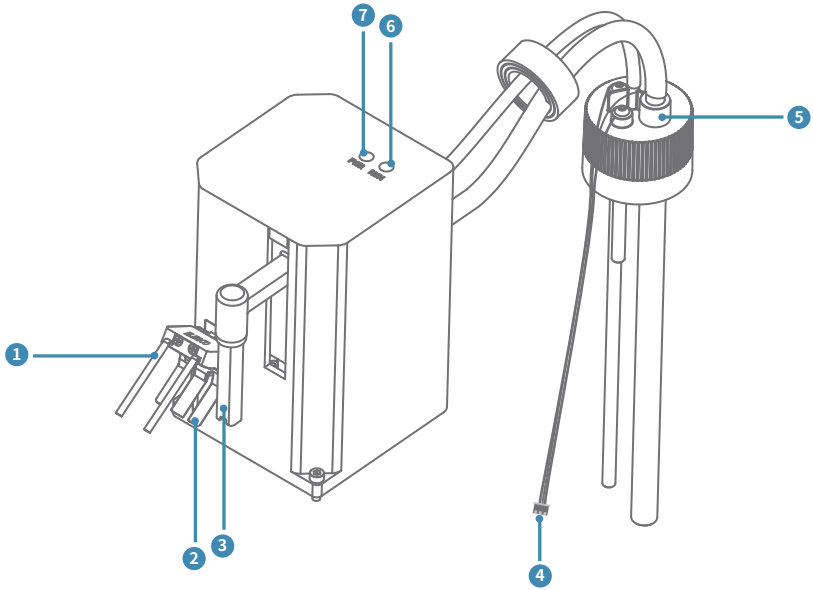
1 Rotary Handle	2 Z Axis	3 Build Plate	4 Air Purifier	5 LCD Display Screen	6 Resin Tank
7 Touch Screen	8 Switch	9 USB Interface	10 DC Socket	11 Screw Knob	12 Auto Resin Feeding Module

Printer Introduction



❶ Light Source Module ❷ Extension Port ❸ Anti-UV Cover ❹ Cover Handle

Machine Automatic Resin Feeding Module Introduction

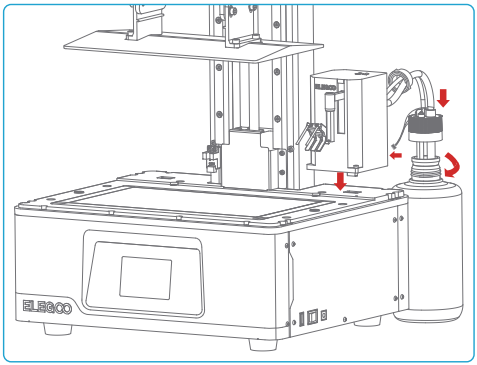


❶ Probe	❷ Probe Platen	❸ Resin Tube	❹ Signal Detection Terminal
❺ Bottle Cap	❻ Red Status Indicator	❼ Green Power Indicator	

Automatic Resin Feeding and Automatic Resin Recycle

1. Module Installation

Remove the resin tank, insert the automatic resin feeding module into the right USB port, and fix it with 2 screws. Insert the bottle cap module into the ELEGOO 1000g resin bottle and tighten it, insert the two hoses into the corresponding ports, and insert the signal detection terminal on the bottle cap into the interface on the back of the main automatic resin feeding module. (See Picture 1)



(Picture 1)

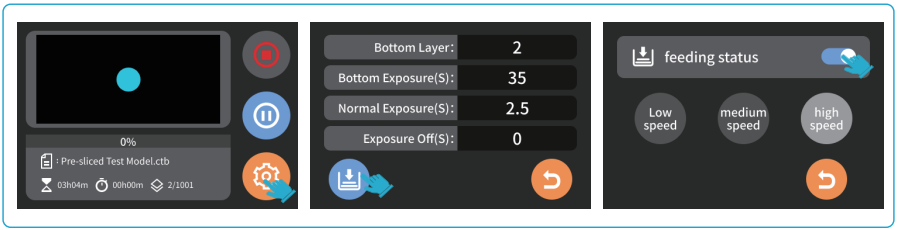
2. Instructions for Use

2.1 Before use, please make sure that the resin in the bottle is sufficient. This module can be used to refill resin and recycle resin. Click "System" - "Feeding Settings" to enter the page, and set the default state and default speed of the feeding function. (See Picture 2)

(Picture 2)

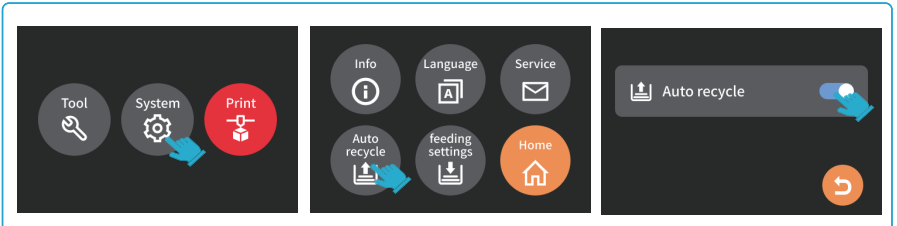
Automatic Resin Feeding and Automatic Resin Recycle

When the automatic resin feeding function is used, during the printing process, if the resin is detected to be insufficient, the device will automatically refill the resin. In the settings of the printing interface, the automatic resin feeding status of this printing can also be changed. (See Picture 3)



(Picture 3)

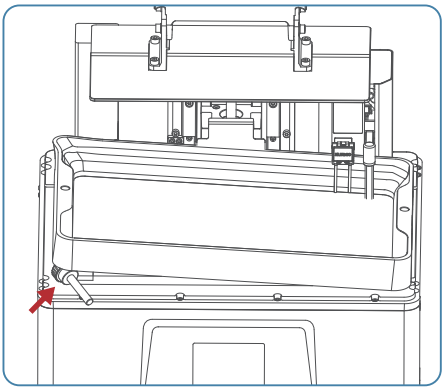
2.2 Click "System" - "Auto Recycle" to enter the automatic resin recycling page. (See Picture 4) The "automatic resin recycle" function is used: the resin tube moves down to the bottom of the resin tank and starts to recycle the resin until the resin bottle is detected to be full of resin, and the recycle stops. If there is still a lot of resin in the resin tank, please replace the resin bottle, and then turn on the "Auto Recycle" function to recycle the resin.



(Picture 4)

Automatic Resin Feeding and Automatic Resin Recycle

During the resin recycling process, if there is a small amount of resin remaining in the resin tank that cannot be recycled, please remove the screw knobs on the resin tank and place one of them under the resin tank for more complete recycling of the resin. (See Picture 5)



(Picture 5)

Precautions:

1. The device can automatically refill resin only in the printing state, and can automatically recycle resin only in the non-printing state.
2. The green light of the device indicates that it is powered on; The red light indicates that there is not enough resin in the resin tank and it needs to be refilled.
3. When printing, the resin bottle is detected to be insufficient, if you need to continue to use the automatic resin feeding function, please replace the resin bottle in time.
4. If you use non-ELEGOO resin, please test the resin by submerging the resin into the two probes of the detection module before printing. If the red indicator light cannot be turned off normally, the current resin cannot be used in this device.
5. After installing the bottle cap, do not vigorously shake or invert the resin bottle. If the inside of the cap is stained with resin, clean it immediately. To prevent the resin from entering the air tube or blocking the mouth of the bottle, causing the automatic resin feeding module to malfunction or even be damaged.

Automatic Resin Feeding and Automatic Resin Recycle FAQ

No.1 Automatic resin feeding does not take effect during printing

1. Check whether the automatic resin feeding function is enabled by default;
2. Check whether the USB interface is plugged in properly, and re-plug the installation module. If the green indicator light is always on, it is normal;
3. Check whether the probes are mistakenly connected. When the resin liquid level is lower than the probe, the red indicator light should be on.

No.2 There is enough resin in the resin bottle, but the pop-up window shows that the resin bottle is empty

1. The signal detection terminal is not inserted;
2. The screw fixing the signal line on the bottle cap is loose.

No.3 The resin in the resin tank is sufficient, but the device continues to add resin

1. It is not installed in place, causing the probe is not correctly extended into the resin tank, and re-install according to the installation steps in the instructions;
2. After the resin in the resin tank has passed through the probe, the red indicator light does not turn off. This device does not support the use of this resin. Replace other resins and test again.

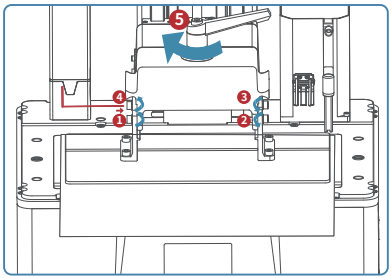
No.4 The automatic resin recycle function is turned on, but the resin cannot be recycled

1. Check whether the USB interface is plugged in properly, re-plug the installation module, if the green indicator light is always on, it is normal;
2. The signal detection terminal is not inserted;
3. The screw fixing the signal line on the bottle cap is loose.

No.5 The resin bottle is full, but the resin continues to be recycled

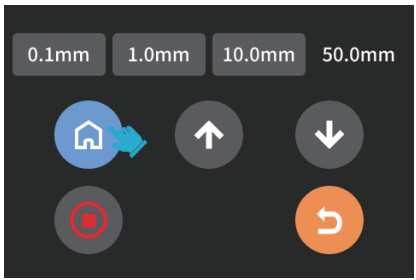
1. The signal detection terminal is not inserted;
2. This device does not support the use of this resin, replace other resins and test again.

Leveling

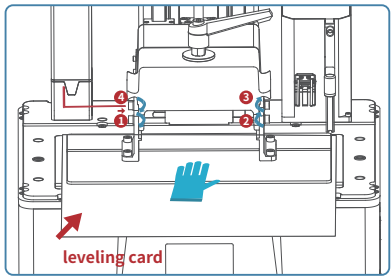


(Picture6)

1. Lock the rotary handle (❺), then loosen the four fixing screws (❶❸❹❷) of the build plate until the build plate can move freely. (See Picture 6)



(Picture 7)

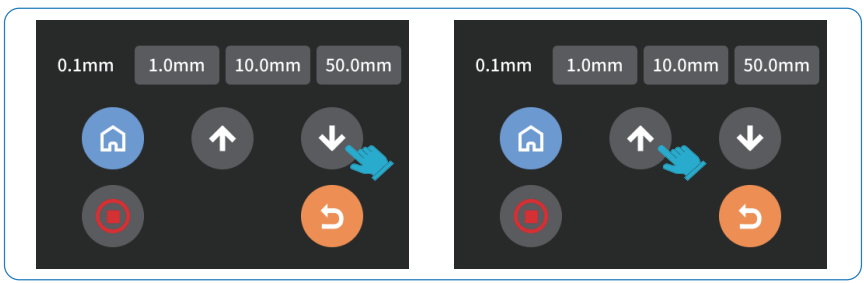


(Picture 8)

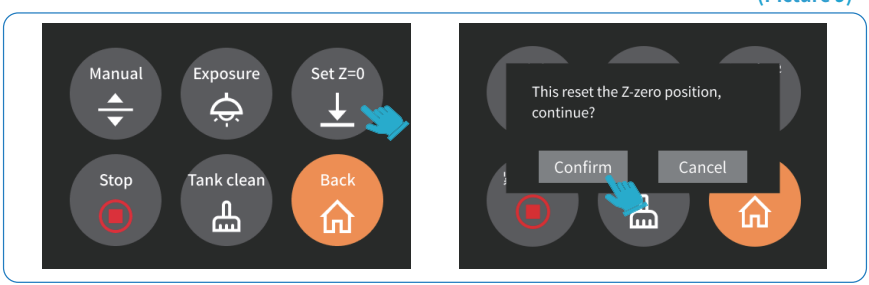
2. Place a leveling card between the build plate and the LCD screen, then click "Move Z axis to zero" (See Picture 7). After the printer stops moving, press the top of the build plate with one hand, and lock the four fixing screws (❶❸❹❷) with the other hand. (See Picture 8)

Leveling

3. **Pull the leveling card. If you find there is a slight resistance during this process, you can go directly to step 5.** (Note: If there is no resistance when pulling out the leveling card, please click the Z-axis "down" button (in steps of 0.1mm) until there is a slight resistance to pull the leveling card. If there is too much resistance or the leveling card cannot move, please click the Z-axis "up" button (in steps of 0.1mm) until there is slight resistance to pull the leveling card.) (See Picture 9)



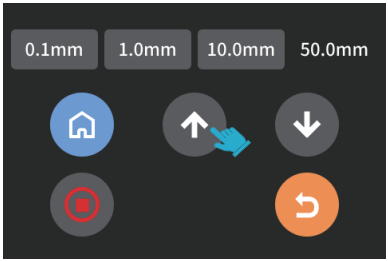
(Picture 9)



(Picture 10)

4. After completing the above operations, back to the previous menu, and click "Set Z=0", then a confirmation pop-up window will appear in the interface, click "Confirm" to complete the setting. At this time, the current Z-axis position is reset to the new initial height of the first printing layer. (See Picture 10)

Leveling



(Picture 11)

5. Click back to the "Manual" page (pay attention to the position of the probe when moving the build plate, please manually press down the probe before lifting to avoid damage to the device), and click the Z-axis "up" button to raise the Z-axis by a certain distance. (about 100mm) (See Picture 11)

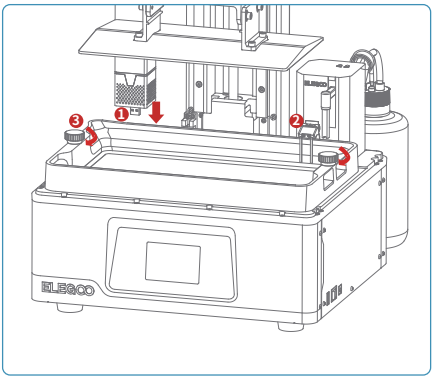
(Picture 12)

6. Take away the leveling card, and click the "Tool" - "Exposure" - "Next" buttons to test the LCD screen and LED light source. If the LCD can display "ELEGOO TECHNOLOGY www.elegoo.com", then the 3D printer works perfectly. At this time, the leveling is completed. (See Picture 12)

Test Printing

1. Model Printing

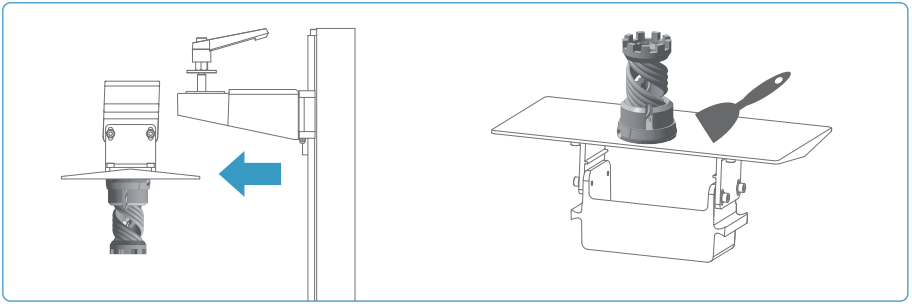
Plug the USB air purifier into the left USB port (See Picture 13 ❶), place the resin tank so that its inner edge presses the probe platen until the probe is inside the resin tank (See Picture 13 ❷), and tighten the screw knobs on both sides (See Picture 13 ❸). Then slowly add resin to the resin tank (do not exceed the MAX line), cover the printer and insert the U disk into the printer and select the pre-sliced test model for printing.



(Picture 13)

2. Model Processing

After the printing is completed, wait until the resin on the build plate stops dripping, then loosen the rotary handle of the build plate to remove it and remove the model with a scraper. You can use ELEGOO's cleaning and curing machine to post-process the model. (See Picture 14)



(Picture 14)

Software Installation and Setup

1. Install Chitu Box

Select the right version of slicing software on the USB flash drive and install it on your computer.

2. How to Use Chitu Box

After the installation is complete, run the Chitu Box software. Click "File-Open File", then open your 3D model file (.stl type). By left-clicking on the model and using the options on the left menu, you can control and change the viewing angle, size, and position of the model.

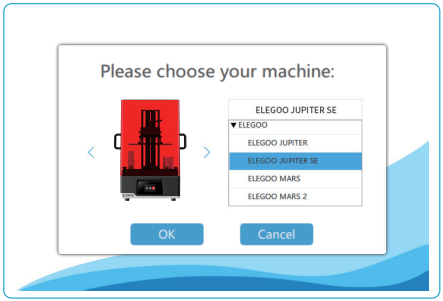
Other Operations:

1) Long press the left button 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 mouse button to view the different perspectives of the model.

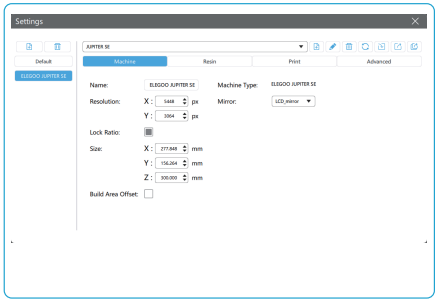
3. Chitu Box Setting

3.1 Machine Configuration Parameters

Click "Parameter Settings" and select ELEGOO JUPITER SE as your default printer. (See Picture 15)



(Picture 15)



(Picture 16)

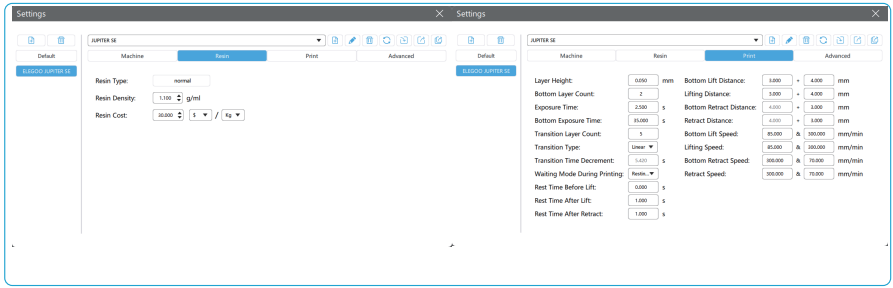
3.2 Build Volume

You don't need to change the default parameters (See Picture 16), and X indicates the maximum print size in the X-axis direction, and so on.

3.3 Resin Parameter (See Picture 17)

Resin Density: 1.1g/ml

Resin Cost: You can input the real price of the resin you purchased, and the slicing software can calculate the resin costs for each model you print.



(Picture 17)

3.4 Parameters (See Picture 17)

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

Bottom Layer Count: The setting number of initial printing layers. If the number of bottom layers is n, the exposure time of the first n layers is the exposure time of the bottom layer. The default setting is 2.

Exposure Time: The exposure time for normal printing layers. The default exposure time is 2.5 seconds, and the thicker the printing layer setting is, the longer time it will take.

Bottom Exposure Time: The setting of bottom layer exposure time. Properly increasing the bottom layer exposure time can help to increase the stickiness between the printed model and the printing platform, and the default setting is 35 seconds.

Software Installation and Setup

Transition Layer: The number of transition layers after the bottom layers for a tighter bonding between layers. Except for the exposure time, other parameters of the transition layer are the same as the normal layer.

Transition Type: Set the transition type of exposure time when transitioning from bottom layers to normal layers, the default is linear transition.

Wait After Cure: The time difference between the end of the exposure and the start of the build platform to leave the printing surface, the default setting is 0 seconds.

Wait After Lift: After the printing platform is lifted, the time difference between the printing platform starts to stationary and starts to return, the default setting is 1 seconds.

Wait Before Cure: After the build platform moves to the printing surface, the time difference between the build platform starting to stationary and starting to exposure, the default setting is 1 seconds.

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

Lifting Distance: In the normal layer printing process, the distance that the build platform leaves 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, please do not change if not necessary.

Retract Distance: In the normal layer printing process, the retract distance of the build platform, please do not change if not necessary.

Bottom Lift Speed: During the bottom printing process, the moving speed of the build platform away from the printing surface each time, the default setting is 85+300mm/min.

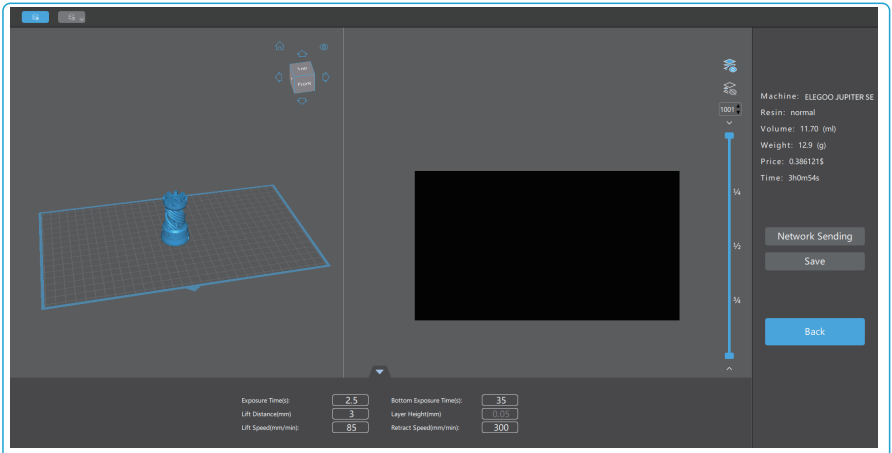
Lifting Speed: In the normal layer printing process, the moving speed of the build platform away from the printing surface each time; the default setting is 85+300mm/min.

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

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

4. Save the Model

After setting up all the parameters, click "Slice", and once it's done, click "Save" to export the sliced file and copy it to the U disk; then insert the U disk into your printer, and start printing. (See Picture 18)



(Picture 18)

Machine Maintenance

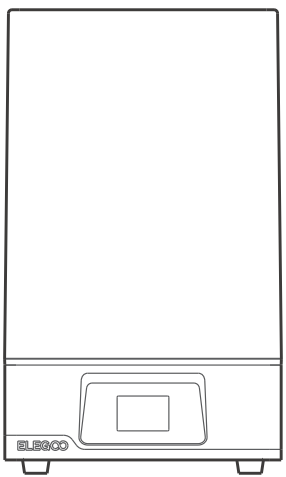
- Please do not use sharp or pointy tools to scrape the resin tank to avoid damaging the release liner film.
- Please clean up the resin tank before changing the resin to another color.
- Before and after printing, clean the build plate with paper towels or alcohol to ensure that there are no bumps or burrs on the build plate.
- Before each printing, daily check the exterior of the machine and all mechanical parts for any obvious damage, defects, or abnormalities.
- Try to keep the printing environment at 25-30 degrees Celsius when printing, and ventilate the printing room as much as possible to facilitate heat dissipation of the machine and resin odor volatilization.
- If the Z-axis keeps making friction noise, please add some lubricant to the lead screw. Please check and apply lubricant grease at least every 2-3 months, and increase the frequency of application as the printing frequency increases.
- If you don't use the printer in the next 48 hours, please pour the remaining resin from the resin tank back into the resin bottle and seal it well. If there is any residue, please use a filter to filter it out.
- Check the condition of the release film before each printing, and observe whether the release film is loose, whether there are scratches or severe whitening on the surface, and if so, replace it in time. The release film is a vulnerable part, please replace it at least once every 1-2 months, and increase the replacement frequency as the printing frequency increases.
- Please be careful when removing the printing platform to prevent damaging the LCD screen. The service life of the screen is about 2000+ hours and will decrease with increasing printing frequency. Do a good job of daily screen cleaning, and unplug the machine in time after printing. If there is a screen exposure problem or service life has seriously affected the print quality, please replace the screen in time.

Warranty Statement

1. From the date of purchase, ELEGOO printer is entitled to a 1-year free warranty service, except for consumables of the LCD screen and the release film.

2. The LCD screen enjoys a 6-month free warranty service.

3. The free warranty does NOT include problems caused by self-disassembly and improper use, wear and tear of the machine housing, etc.



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