

Notice: If you need technical support please contact us at 3dp@elegoo.com • Please keep the Saturn 2 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 1/3 of the resin tank only and don't over fill. • Please use 95% (or higher) ethyl alcohol or isopropyl alcohol to wash your model unless

• Please don't disassemble the Saturn 2 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,

• 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.

you are using water washable resin.

- and if you have any problems with the printer, please contact us at 3dp@elegoo.com.
- **SATURN 2 3D Printer Tech Specs**
- System: EL3D-3.0.1 Operation: 3.5 Inch Touch Screen **System Parameters** Slicer Software: CHITUBOX **Connectivity: USB**
- **Technology: MSLA Photocuring** Light Source: COB (wavelength 405nm)

Printing Specification

XY Resolution: 0.0285mm (7680*4320)

Weight: 24.25lbs(11kg)

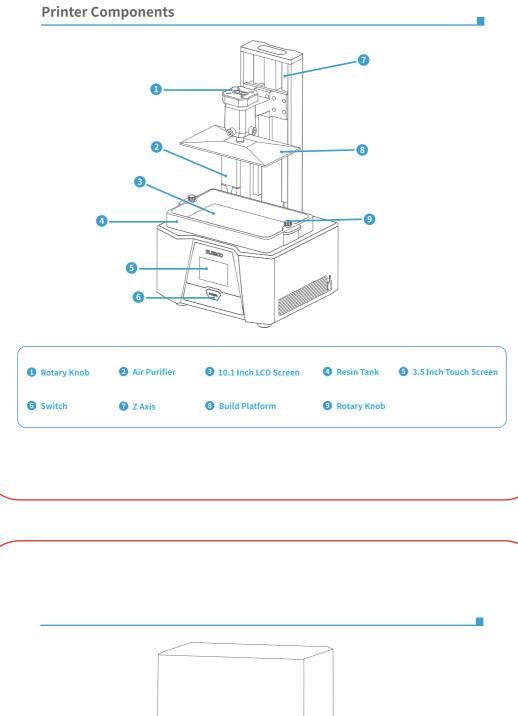
Z Axis Accuracy: 0.00125mm

Layer Thickness: 0.01-0.2mm Printing Speed: 30-70mm/h

Power Requirements: 100-240V 50/60HZ 24V 4A Dimensions: 305.9mm(L)*273mm(W)*567.3mm(H) 12.04in(L)*10.75in(W)*22.33in(H)

8.62in(L)*4.85in(W)*9.84in(H)

Build Volume: 218.88mm (L)*123.12mm (W)*250mm (H) Hardware Specification



Power Socket

Package List

Air Purifier

Scraper

U Disk

Funnel

Mask

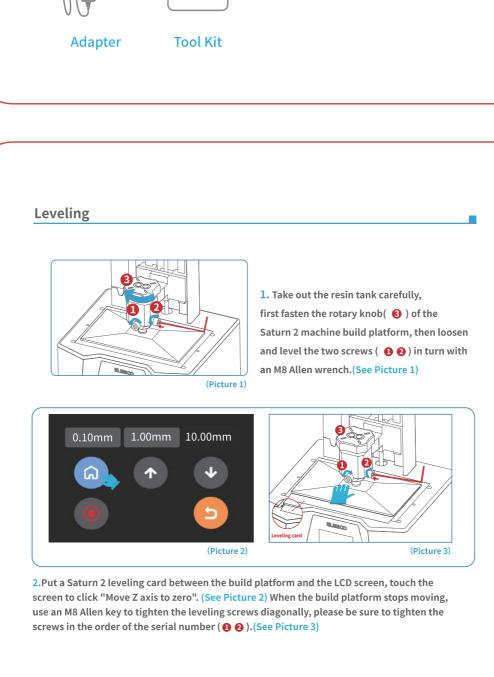
Backup Screws

Gloves

User Manual

2 Cover

3 Vent Cover



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 you find that the leveling card of Saturn 2 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 Saturn 2 leveling card. (See Picture 4) If you find the resistance of pulling out the Saturn 2 leveling card is too high,

(Picture 4)

pulled out with slight resistance. (See Picture 5)

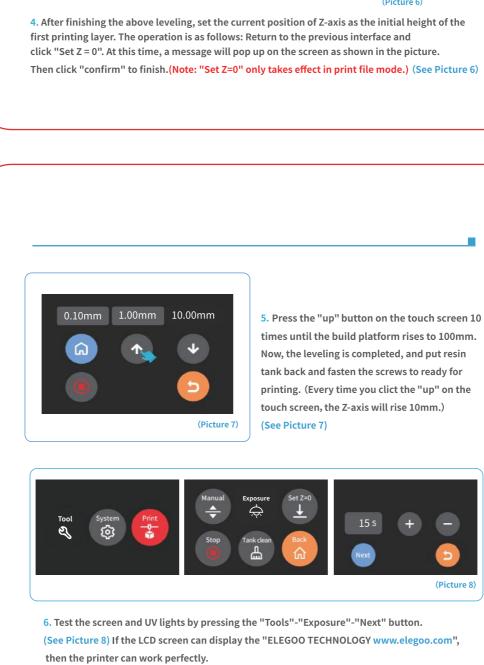
1.00mm 10.00mm

please click the "up" button (step value is 0.1mm) until the Saturn 2 leveling card can be

1.00mm 10.00mm

(Picture 5)

0.10mm



Test Printing

file "Rook.ctb" and start printing.

2. Wash Your Print and Clean the Tank

1. Model Printing (Cover the machine with the anti-UV cover.)

Carefully remove the protective film from the touch panel and metal trim.

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) $\,$ Put the resin tank back and fasten it tightly, wear a mask and gloves (avoid direct contact with the 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 plug the USB into the printer (See Picture 10), select the model

If the resin is not enough to complete the model in the printing process, You can press the "pause" button, and add more resin to the resin tank, then press the "print" button to continue printing.

Once printing is completed, please wait until the residual resin on the build platform doesn't drop any more, then loosen the rotary knob of the build platform and remove the build platform. Use the scrapper 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 12)

Resin Cost: You can enter the unit price of your resin, and after slicing you will see how

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

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,

Exposure Time: The exposure time of the normal printing layer; The default exposure time

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,

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

Transition Type: The transition type of the exposure time when transitioning from the bottom

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

Static Time After Return: The time difference between the build platform starting to standstill and

Bottom Lift Distance: During the bottom printing process, the distance when the build platform

Lifting Distance: In the normal printing process, the distance when the build platform away from

Bottom Retract Distance: During the bottom printing process, the retract distance of the build

Retract Distance: In the normal layer printing process, the retract distance of the build platform,

Bottom Lift Speed: During the bottom printing process, the movement speed of the build platform

 $\textbf{Lift Speed:} \ \textbf{In the normal printing process, the movement speed of the build platform away from } \\$

Bottom Retract Speed: During the bottom printing process, the movement speed of the build

Retract Speed: In the normal layer printing process, the movement speed of the build platform

starting to return after the build platform is lifted; the default setting is 0 seconds.

starting to exposure after the build platform moves to the printing surface;

away from the printing surface each time; the default setting is 3+4mm.

platform, do not change it if not necessary; the default setting is 5.5+1.5mm.

away from the printing surface each time; the default setting is 65&180mm/min.

platform close to the photocuring surface; the default setting is 180 \& 65 mm/min.

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)

the printing surface each time; the default setting is 3+4mm.

do not change it if not necessary; the default setting is 5.5+1.5mm.

the printing surface each time; the default setting is 65&180mm/min.

close to the photocuring surface; the default setting is 180&65mm/min.

is 2.5 seconds, the thicker you set, the longer time will be needed.

the stickier the bottom will be on the build platform.

the same as the normal layer; the default setting is 8.

the default setting is 0 seconds.

layer to the normal layer. The default setting is linear transition.

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

3.2 Build Volume

proportionally.

3.3 Resin Parameters (See Picture 14)

Resin Density:1.1g/ml

much it costs for your model.

3.4 Parameters (See Picture 14)

exposure time of each layer.

and the default setting is 5.

(Picture 13)

(Picture 14)



As to the residual resin on the platform and tank, you can clean and wipe them up using tissues.

 ${\bf 1.lf}~{\bf Z}~{\bf axis}~{\bf keeps}~{\bf making}~{\bf friction}~{\bf noises},~{\bf please}~{\bf add}~{\bf some}~{\bf lubricant}~{\bf to}~{\bf it}.$ 2. Please do not use sharp or pointy objects to scrape the resin tank in case of

 ${\bf 3.Be\ careful\ when\ you\ remove\ the\ build\ platform\ in\ case\ you\ may\ smash\ the\ 8K\ LCD\ screen.}$ 4.Remember to pour the rest of the resin in the tank back into the resin bottle and seal it well if

you're printing next time.

5. Maintenance

causing damages to release liner film.

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.

