



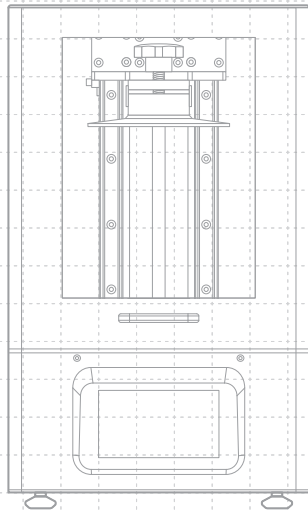
SONIC 4K
2 0 2 2



Dear User,

Thank you for joining us. Please read through the entire manual and follow step-by-step instructions to get the best printing experience.

Feel free to contact us if you have any questions. ✉ support@phrozen3d.com



01 Introduction

Printer Parts

PART.1

Building Plate

PART.2

Air Filtration System

PART.3

Resin Vat

PART.4

LCD

PART.5

Touch Panel

PART.8

Power Switch
Power Socket

PART.9

Network Port

PART.10

USB Port

PART.11

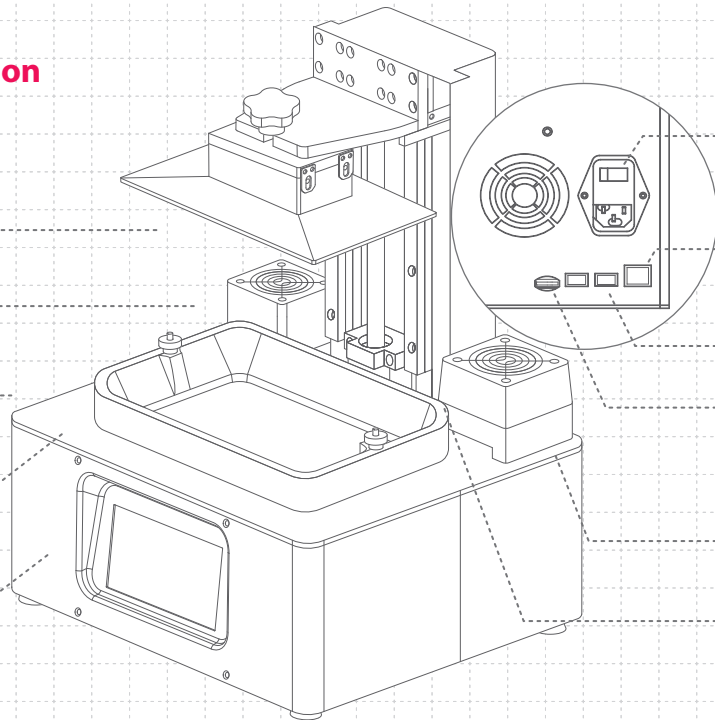
Phrozen OS
SD Card

PART.6

Heater

PART.7

Z-axis



The Toolbox



After Sales Service Card



Gloves



Power Connector



Plastic Funnel



Scrapers



Allen Wrench



USB



WIFI Dongle



Handle

Operation

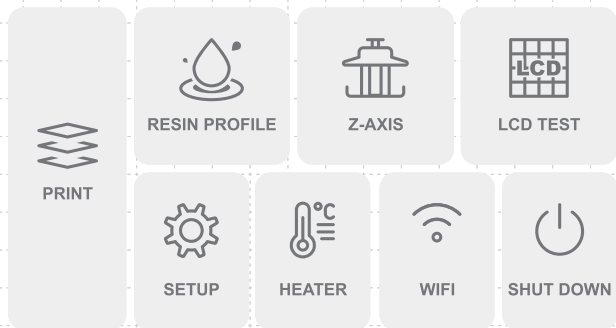
System	Phrozen OS
Operation	5 inch Touch Panel
Slicer Software	Phrozen Dental Synergy Slicer
Connectivity	USB Ethernet WIFI

Printing Specifications

Technology	Resin 3D Printer - LCD Type
Light Source	405nm ParaLED® 3.0 Module
XY Resolution	0.035 mm
Layer Thickness	0.01 - 0.30 mm
Printing Speed	90 mm / hr
Power Requirement	AC100-240V ; 50-60Hz

Hardware Specifications

Printer Size	L25 x W25 x H33 cm
Printing Volume	L13.4 x W7.5 x H20 cm
Printer Weight	20 kg



Notice:

For first-time usage, please follow the user manual and follow the steps:
Perform Z-axis Calibration, LCD Test, and Test Printing.

If you encounter any technical problems, please contact support@phrozen3d.com

PRINT

Choose your 3D file to begin printing.

RESIN PROFILE

To adjust your settings, click on RESIN PROFILE.

Z-AXIS

Follow instructions on the manual to calibrate the Z-axis.

LCD TEST

Please follow instructions in the user manual to conduct the LCD test.

WIFI

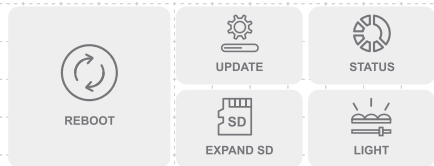
Connects to Phrozen OS Interface.

POWER BUTTON

Click on SHUT DOWN. Then switch off the button at the back to completely turn off the device and avoid system damage.

SET UP

Click on this button to REBOOT, UPDATE, EXPAND SD, adjust LIGHT settings, and view STATUS.

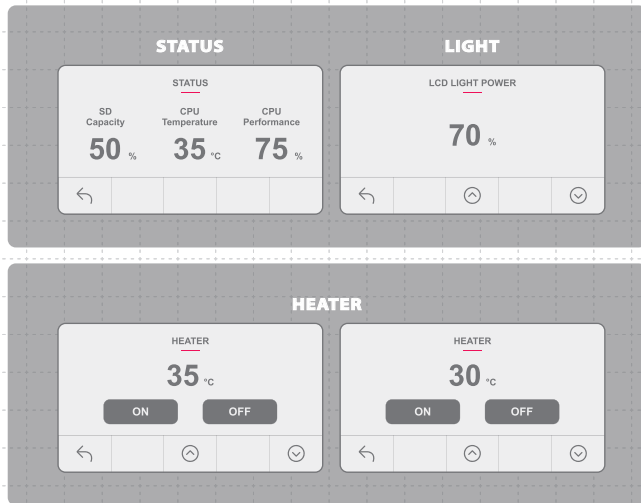


STATUS: Displays the SD Capacity, CPU temperature, and CPU Performance.

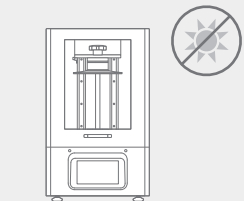
LIGHT: Manually adjust the LED light settings from 50% to 100%. The default value is set at 70%.

HEATER

Toggle the on/ off button to stabilize the printer temperature between 30 or 35°C

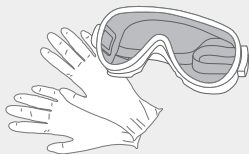


02 Key Notes Before Start



Stable Printing Environment

Please place your 3D printer on a flat surface and make sure to avoid direct sunlight and/or extreme temperatures.



Protective Measures

While printing and using resin, please make sure to wear gloves, masks, protective goggles, and long-sleeved clothing.

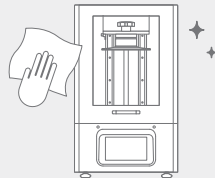
Maintenance

Clean the Z-axis

First, dry clean the Z-axis T-screw. Then apply general lubricant on the Z-axis screw to make it move smoothly.

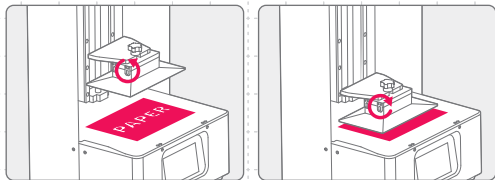
Clean the 3D Printer

Use sanitizing alcohol and tissue paper to carefully clean the printer, the resin vat, and the building plate.



03 Z-axis Calibration

- 1 Click on Z-axis. Then click on Z-axis Calibration.
- 2 Remove the resin vat and place a piece of paper on the LCD screen.
- 3 Install the building plate and loosen all 4 screws on the building plate.
- 4 Click on NEXT.
- 5 The building plate will then be lowered to touch the LCD screen.
- 6 Tighten all 4 screws on the building plate and click DONE.
- 7 Z-axis Calibration is now complete.



04 LCD Test

- 1 Click on LCD TEST.
- 2 There are three modes to choose from. Please test your LCD screen in the following order.
- 3 When all three modes are clearly displayed on the LCD, LCD TEST is completed.



LCD FILL UP

Confirm the LCD screen fully lights up and there are no black spots.



BLACKENED LCD SCREEN

Confirm the LCD screen covers all the light and there are no light spots.



LCD GRID

Confirm that the LCD screen displays the grid completely.

05 Set Up Resin Profiles

Setting on Printer

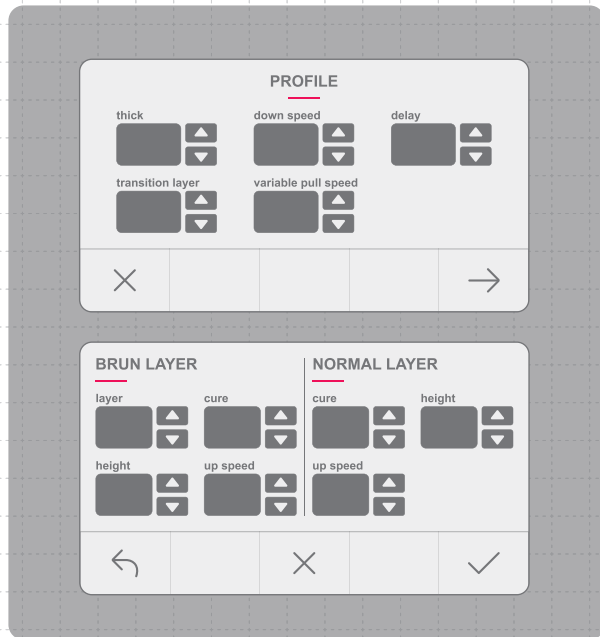
Using the touchscreen, follow these steps:

Resin Profiles > Choose the profile > Modify basic settings > "V"

Notice: This 3D printer will not read other settings from the slicer, except for layer height and anti-aliasing. You have to connect to Phrozen OS Interface to adjust Resin Profiles.

Connect to Phrozen OS Interface

- 1 Using the touchscreen, follow the steps:
WIFI > Choose the Wireless Network > Enter the password > Connect > OK
- 2 The WIFI network, the IP address will be shown on top of the touch panel.
- 3 Open the web browser, and type in the IP address of your resin 3D printer.



Resin Profile setting on Phrozen OS Interface

Select PROFILE page. You can adjust the resin settings, and then ADD, UPDATE, DELETE or EXPORT the resin profiles, according to your needs.



Online Resin Profile

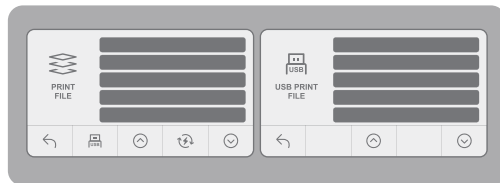
06 Import 3D Files

via Phrozen OS Interface

- 1 Slice your 3D prints in a slicer software and save it as a **.zip file**.
- 2 Enter Phrozen OS Interface. Select PLATES page. Choose the file from your device and upload it onto the 3D printer.

via USB

- 1 Plug in the USB drive into the 3D printer.
- 2 Using the touchscreen, follow these steps:
PRINT > USB icon > 3D file.zip > Wait for Upload

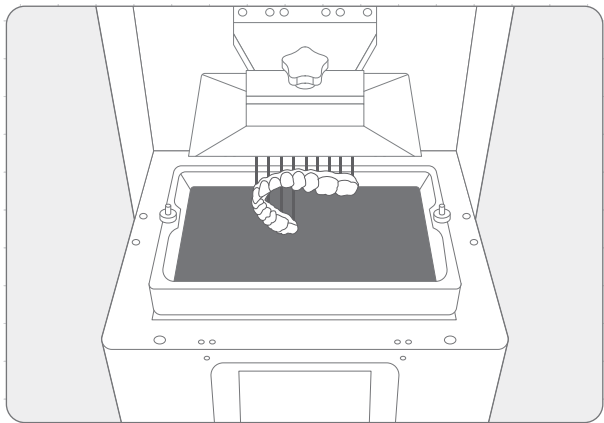


07 Perform the Printing Test

Test Printing

After adjusting the Resin Profile Settings and Importing your Files, we can now Perform the Printing Test.

- 1 Turn on the 3D printer then the Air Filtration System turn on.
- 2 Install the building plate and resin vat. Make sure that both are parallel to the printer and its surface is clean.
- 3 Shake the resin bottle for 1 minute. When pouring, make sure the resin does not exceed the mark on the resin vat.
- 4 Click on GO to begin printing. Keep the cover closed in order to prevent the 3D prints from distorting in shape.
- 5 Tilt and place the building plate onto a desk and use a metal scraper to carefully remove your print.



Resume Printing

During the printing process, if printing is interrupted due to power failure, or printer shutdown, the printing process will be halted. To continue printing the same 3D file, turn the power on and follow the steps below.

Click the following buttons on the touchscreen:

Print > Resume Function > Resume: Yes

Please be aware that there may be a few layer seams on the printed 3D model as a result of pausing the print.



Notice: Frequent abnormal power outages may result in system failure.

Check List

This 3D printer is designed to be user-friendly.

We recommend that you take the following steps before you begin printing.

- ☐ Double-check the contents of the 3D printer as well as the toolbox.
- ☐ Before printing, make sure to place the printer in a stable environment.
- ☐ Perform the Z-axis Calibration test and the LCD screen test.
- ☐ Perform the Test Print.
- ☐ Enjoy your printing journey!

Congratulations!

You have just completed your first run.
We hope you've had a great experience!

Please follow Phrozen's social media accounts
and subscribe to our YouTube channel to learn
more about printing tips and share information
with the community.



Facebook



Facebook Group



YouTube



Official Website