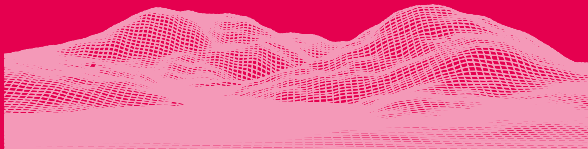


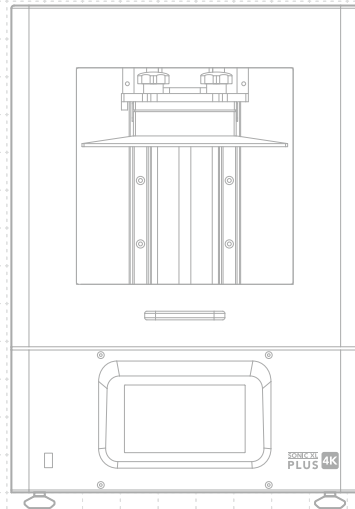


SONIC XL  
PLUS 4K



**Dear User,**

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



# 01 Introduction

## Printer Parts

PART.1

Building Plate

PART.2

Air Filtration System

PART.3

Resin Vat

PART.4

LCD Screen

PART.5

USB Port

PART.6

Touch Panel

PART.7

Power Switch  
Power Socket

PART.8

Network Port

PART.9

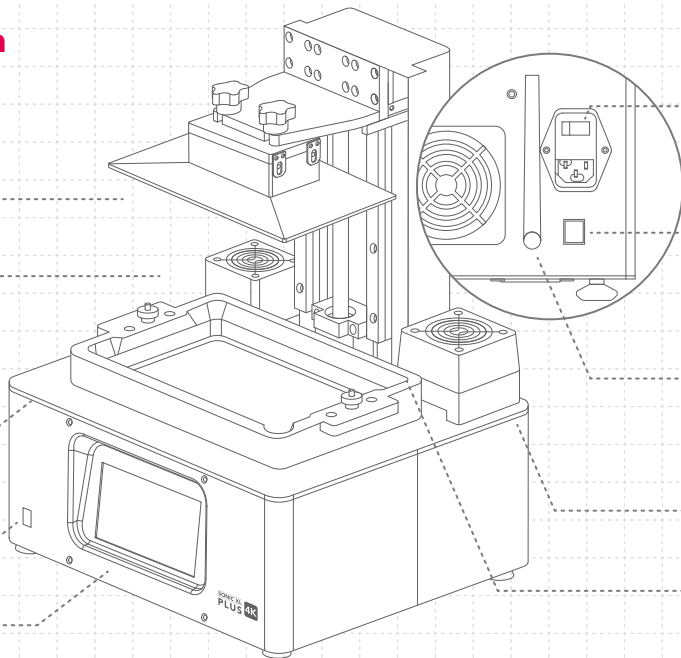
Wi-Fi Antenna

PART.10

Heater

PART.11

Z-axis



## The Toolbox



After Sales Service Card



Gloves



Power Connector



Plastic Funnel



Scrapers



Allen Wrench



USB



DS Slicer Dongle



Handle



Wi-Fi Antenna

## Operation

|                 |                               |
|-----------------|-------------------------------|
| System          | Phrozen OS                    |
| Operation       | 5 inch Touch Panel            |
| Slicer Software | Phrozen Dental Synergy Slicer |
| Connectivity    | USB   Ethernet   Wi-Fi        |

## Printing Specifications

|                        |                             |
|------------------------|-----------------------------|
| Technology             | Resin 3D Printer - LCD Type |
| Light Source           | 405nm ParaLED® 3.0 Module   |
| XY Resolution          | 52 µm                       |
| Layer Thickness        | 0.01 - 0.30 mm              |
| Max Printing Speed     | Up to 90 mm / hr            |
| Compatible File Format | .PRZ                        |
| Power Requirement      | AC100-240V : 50-60Hz        |

## Hardware Specifications

|                 |                   |
|-----------------|-------------------|
| Printer Size    | 33 x 29 x 47 cm   |
| Printing Volume | 20 x 12.5 x 20 cm |
| Printer Weight  | 17.2 kg           |

\* All specifications have been tested in a laboratory. Please note that certain specifications may be subject to change without prior notice.



PRINT



Z-AXIS



LCD TEST



HEATER



INFO



WIFI



UPDATE



LIGHT

## PRINT

Choose your 3D file to begin printing.

## 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.

## HEATER

To stabilize the temperature inside the printer chamber. Toggle the ON/OFF button to activate the heater function.

## WIFI

To connect the printer to your Wi-Fi internet.

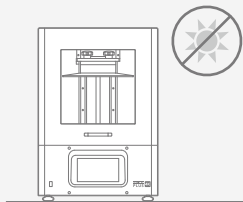
## LIGHT

Manually adjust the LED light settings from 50% to 100%. The default value is the best performance.

### Notice:

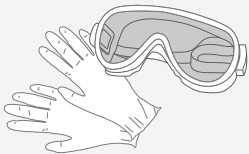
For first-time usage, please follow the user manual and conduct the following steps: Perform Z-axis Calibration, LCD Test, and Test Printing.

## 02 Key Notes Before Start



### Stable Printing Environment

Store your 3D printer in a dry and ventilated environment. Avoid exposure to direct sunlight. Make sure to place the printer on a flat surface.



### Protective Measures

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

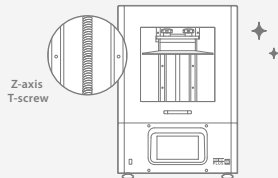
### Maintenance

#### Clean the Z-axis

First, dry clean the Z-axis T-screw. Then apply a thin layer of general lubricant on it, so that it whirls smoothly.

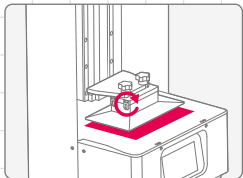
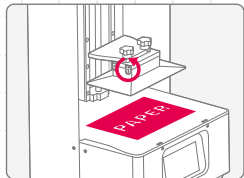
#### Clean the 3D Printer

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.

\* \*Please refer to the actual printer operation, based on the touchscreen display.

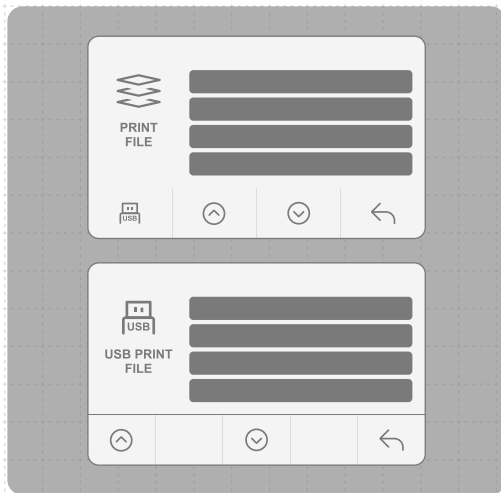
## 05 Import 3D Files

### via Wi-Fi

- 1 Slice your 3D prints in a DS Slicer software and save it as a **.PRZ** file format.
- 2 Click the **network sending** function inside the DS Slicer software. Enter your printer's IP address into the designated section labeled "**Machine URL**" within the network sending function. Make sure your PC and printer are connecting to the same Wi-Fi.

### via USB

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

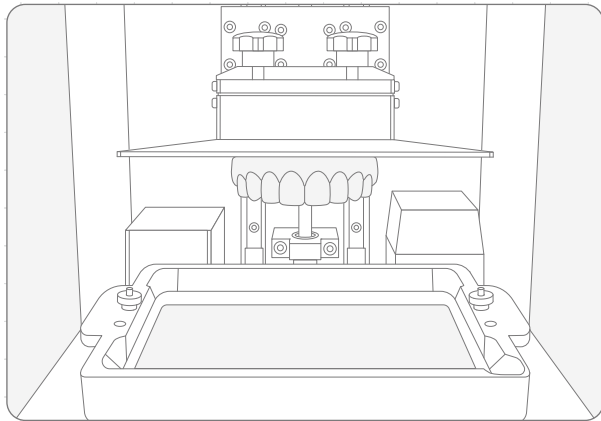


## 06 Perform Printing Test

### Test Printing

After importing your files, we can now perform the printing test.

- 1 Install the building plate and resin vat. Make sure that both are parallel to the printer and its surface is clean.
- 2 Shake the resin bottle for 1 minute. When pouring, make sure the resin does not exceed the mark on the resin vat.
- 3 The building plate will go down automatically and begin printing.
- 4 After the printing process begins, the Air Filtration System will turn on automatically.
- 5 Keep the cover closed during printing to prevent excessive UV light.
- 6 Tilt and place the building plate onto a desk and use a metal scraper to carefully remove your print.



## FCC Warning

### 15.19 Labeling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### 15.21 Information to user.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

### FCC RF Radiation Exposure Statement:

- 1.This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- 2.This equipment complies with RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

## IC Warning

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference;
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

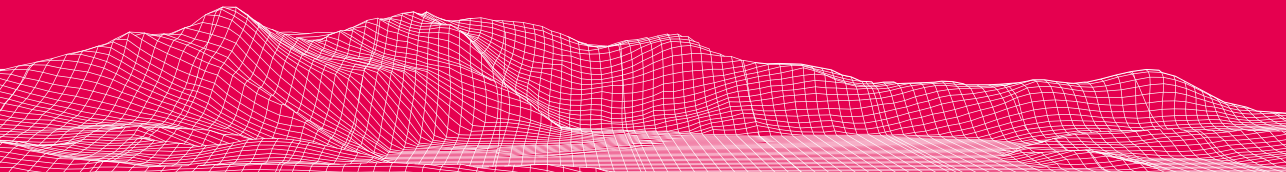
The information listed above provides the user with information needed to make him or her aware of a RF exposure, and what to do to assure that this radio operates within the FCC exposure limits of this radio.

The device complies with RF specifications when the device is used at 20cm from the body. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.

## After-sales service & warranty

- Phrozen offers a one-year warranty for all parts, excluding consumable components such as the LCD screen and FEP film.
- Sonic XL 4K Plus screen is covered under a 3-month warranty. Please note that this warranty does not cover any damages caused by human factors.
- If you encounter any difficulties, please scan the QR codes down below to contact us.

Contact us !



# Congratulations!

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

Please follow us on social media and subscribe  
to our YouTube Channel to learn more printing  
tips, share your creations with the community.



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**Facebook Group**



**Instagram**



**Phrozen Dental  
Official Website**



**YouTube**