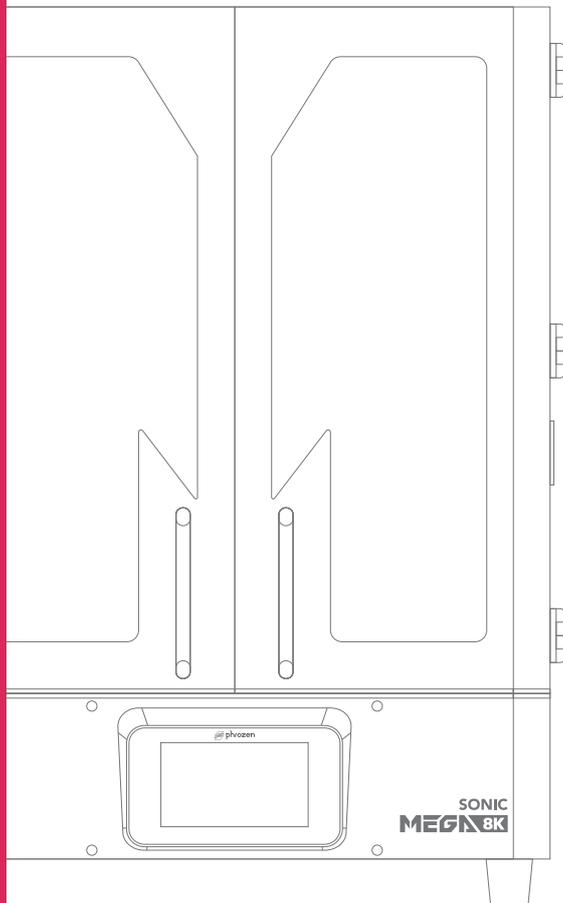




**User
Manual
for**

**SONIC
MEGA 8K**

Phrozen3d.com



<https://stomshop.pro>

Thank you for your purchase !

Dear Phrozen User,

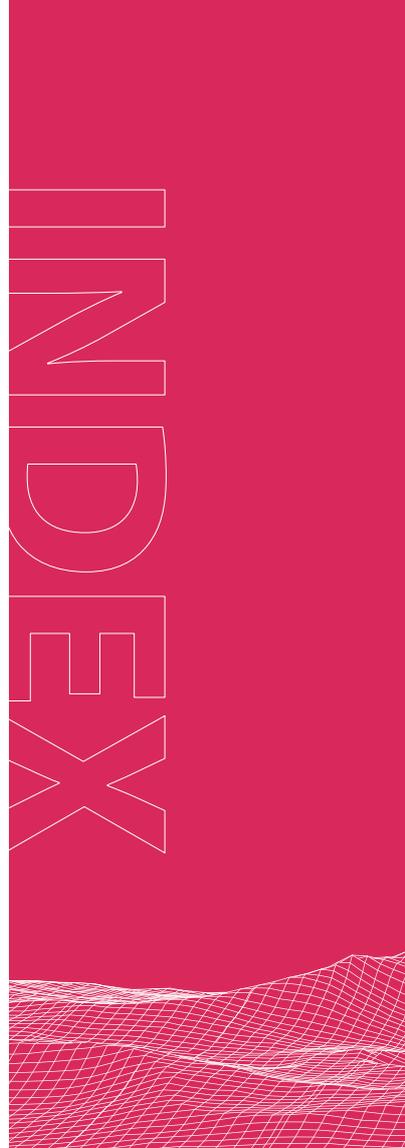
Thank you for joining us. Please read through the entire manual and follow step-by-step instructions to get the best printing experience.

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



Join Phrozen Facebook Community to interact with more 3D printing enthusiasts and share your 3D prints!

<https://stomshop.pro>

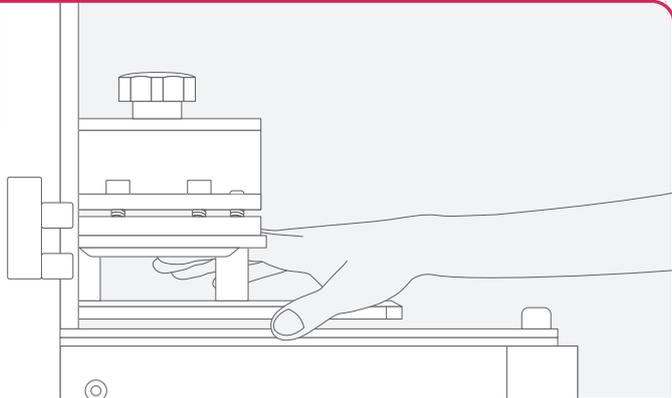


- 02 | 01. Key Notes Before We Start
- 04 | 02. What's in the Toolbox?
- 05 | 03. Sonic Mega 8K Printer Parts
- 06 | 04. Sonic Mega 8K Technical Specs

- 07 | 05. First Use Part 1: LCD Test
- 08 | 06. First Use Part 2: Perform the Printing Test
- 10 | 07. Post-Processing: Clean & Cure 3D Prints
- 11 | 08. Prepare Your 3D File
- 14 | 09. Import Your 3D File

- 16 | 10. Maintenance
- 17 | 11. FAQ

01 Key Notes Before We Start

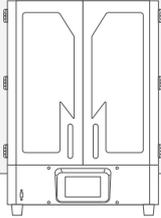


DO NOT Calibrate the Z-axis or Disassemble the 3D Printer

Sonic Mega 8K comes with a pre-calibrated Z-axis. Please **DO NOT** calibrate the Z-axis or disassemble the 3D printer on your own, as this may damage the 3D printer and cause your warranty to become invalid. In order to prevent damage against the LCD screen, please **DO NOT** install a screen protector nor **DO NOT** install or switch building plates from any other 3D printers as it may cause calibration failure.

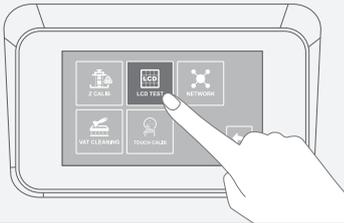
If you have any technical questions, please contact at support@phrozen3d.com.

<https://stomshop.pro>



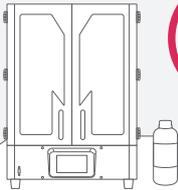
1 Place Your Printer on a Flat Surface

Please place your 3D printer on a flat surface. Avoid touching the printer while printing to prevent any damage from being caused.



2 LCD Test & Test Print File

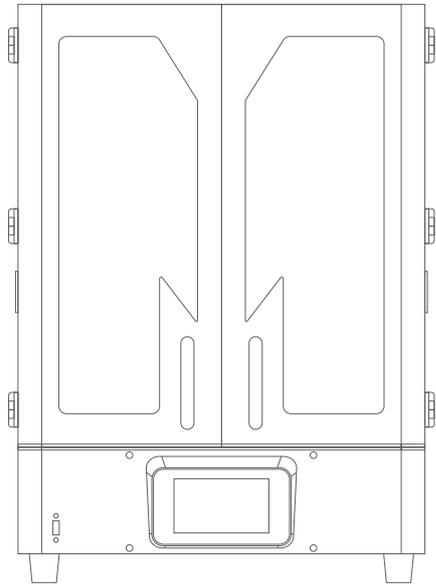
When printing for the first time, please follow instructions to perform the LCD test and print out the Test Print file.



3 How to Preserve Your 3D Printer & Resin

Please store your printer and resin indoors in a dry environment and avoid direct sunlight exposure.

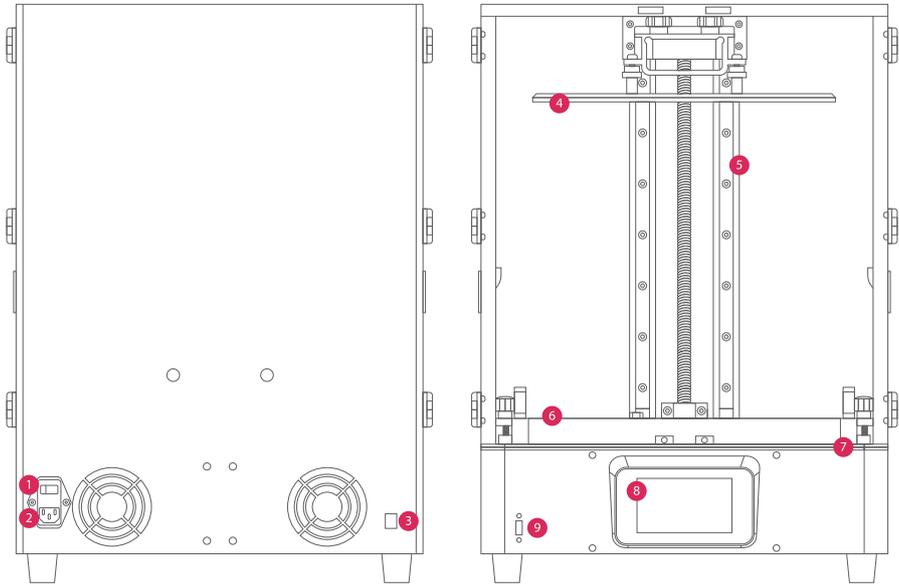
02 What's in the Toolbox?



- 1 User Manual
- 2 Power Connector
- 3 Gloves
- 4 Scrapers
- 5 Plastic Funnel
- 6 Allen Wrench
- 7 USB
- 8 Screws for Printer Handles

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03 Sonic Mega 8K Printer Parts



- 1 Power Switch
- 2 Power Socket
- 3 Network Port
- 4 Building Plate
- 5 Z-axis
- 6 Resin Vat
- 7 LCD
- 8 Touch Panel
- 9 USB Port

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04 Sonic Mega 8K Technical Specs

Operation

System		Phrozen OS
Operation		5 inch Touch Panel
Slicer Software		CHITUBOX V1.9.0 or above
Connectivity		USB Ethernet

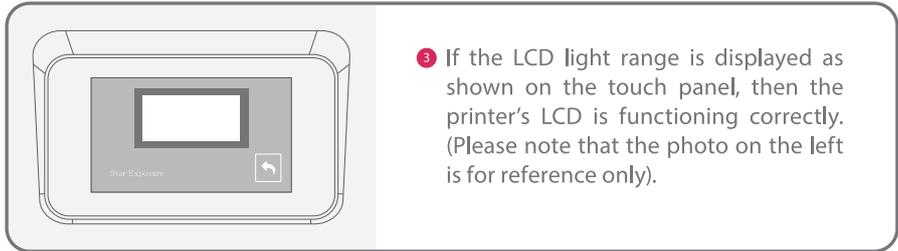
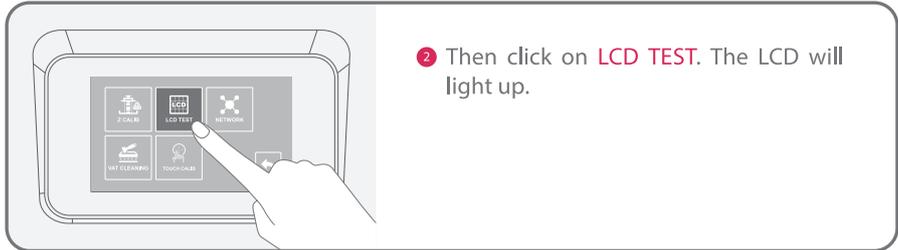
Printing Specifications

Technology		Resin 3D Printer - LCD Type
Light Source		405nm ParaLED® Matrix 3.0
XY Resolution		0.043 mm
Layer Thickness		0.01 - 0.30 mm
Printing Speed		70 mm / hr
Power Requirement		AC100-240V~50/60Hz

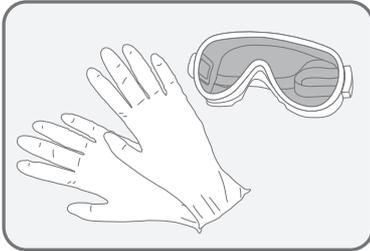
Hardware Specifications

Printer Size		L47 x W40 x H68 cm
Printing Volume		L33 x W18.5 x H40 cm
Printer Weight		35 kg

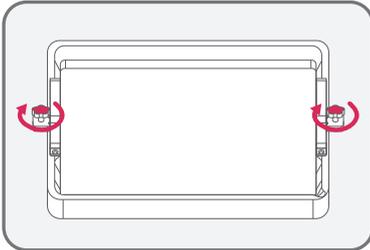
05 First Use Part 1: LCD Test



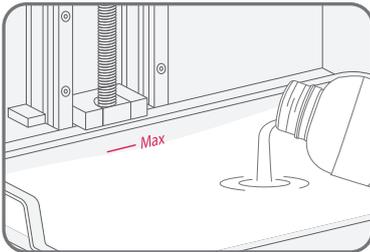
06 First Use Part 2: Perform the Printing Test



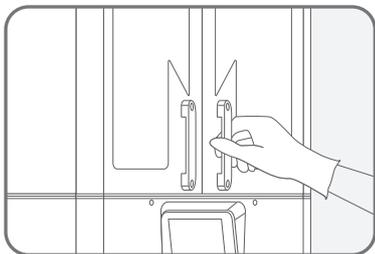
- 1 While printing and using resin, please make sure to put on gloves, masks, protective goggles, and long-sleeved clothing.



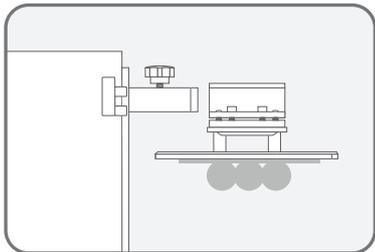
- 2 Use both hands to tighten the screws and fasten the resin vat at the same time. Make sure that both the resin vat and the building plate are parallel to the printer and clean.



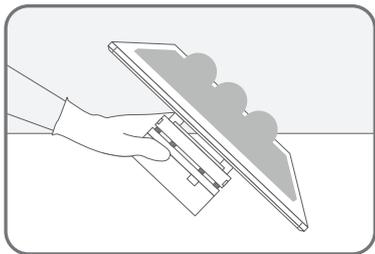
- 3 Shake the resin bottle for 1 minute. When pouring, make sure the resin does not exceed the mark on the resin vat.



- 4 Please take out the USB from your toolbox and insert it into the 3D printer. Choose your Test Print file and click **GO** to begin printing. While printing, please keep the chamber closed to prevent the 3D prints from distorting in shape.



- 5 Once printing is complete, please use both your hands and carefully remove the building plate and avoid touching the LCD screen. This is to prevent damage against the LCD screen.



- 6 Tilt and place the building plate onto a desk and use a metal scraper to carefully remove your print.

07 Post-Processing: Clean & Cure 3D Prints

1 How to Wash Prints after Printing?

- Use 95% alcohol, IPA, or detergent such as Phrozen Wash to clean your 3D prints.
- We recommend using Phrozen Ultra-Sonic Cleaner to thoroughly clean your prints. Feel free to use a larger container to clean your 3D prints if your prints are bigger in size.

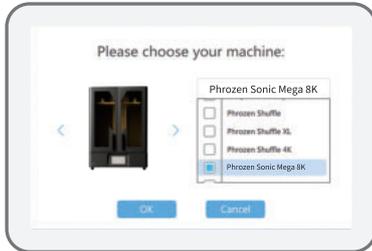
2 How to Cure Prints after Printing?

- Use a UV curing lamp to cure your prints. Curing time typically depends on the intensity and wavelength of the UV light provided by your lamp. We recommend using UV curing lamps with a wavelength of 405 nm for best results.
- Phrozen UV Curing lamps take an average of 30 minutes to cure prints. The curing time can be adjusted according to the thickness of your prints and the resin being used.

3 Safety Guide

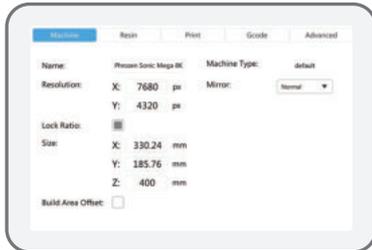
- Keep resin away from direct sunlight exposure.
- Wear PPE (Personal Protective Equipment) such as goggles, gloves, and masks, etc.
- Stop using UV resin immediately if it causes allergies.
- **DO NOT** swallow resin. **DO NOT** let resin come in contact with eyes and/ or skin. If resin accidentally comes in direct contact with skin, wash with soap and water immediately and visit the doctor if necessary.
- **DO NOT** dispose of liquid resin. Wait until the resin is fully cured, then dispose it as general plastic waste.

08 Prepare Your 3D File



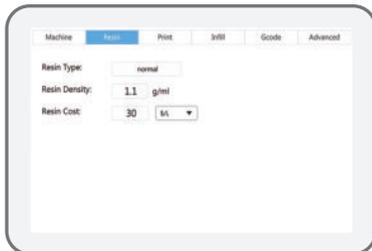
1 Install CHITUBOX

In your USB, install CHITUBOX V1.9.0 or above.



2 Find CHITUBOX Settings

Click Settings to add a new printer and select "Phrozen Sonic Mega 8K" as your default printer.



3 Add Resin Density

For resin density, type in 1.1g/ ml. This can help you estimate your printing cost.

Please visit Phrozen's official website to download CHITUBOX slicer software and other related documents.



4 Print Parameters

Layer Height

We recommend setting the layer height at a range of 0.03mm to 0.05mm. The thinner the layers are, the more delicate the prints will be. Please note that the printing time will be lengthened if the layer height is thinner.

Bottom Layer Count

We recommend setting 8 layers. Please add more layers for better adhesion to the building plate if needed.

Exposure Time

For UV resins, set the exposure time for at least 2.9 seconds. Please note that the thicker the layers are, the longer the exposure time will be.

Bottom Exposure Time

For UV Resins, set the bottom exposure time for at least 35 seconds, depending on the resin you use.

Parameters Setting

Using Aqua-Gray 4K as an example, the settings are as follows:

Layer Height:	0.050	mm	Bottom Lift Distance:	8.000	+	0.000	mm
Bottom Layer Count:	8		Lifting Distance:	7.000	+	0.000	mm
Exposure Time:	2.900	s	Bottom Ret... Distance:	8.000	+	0.000	mm
Bottom Exposure Time:	35.000	s	Retract Distance:	7.000	+	0.000	mm
Transition Layer Count:	8		Bottom Lift Speed:	45.000	&	0.000	mm/min
Transition Type:	Linear	▼	Lifting Speed:	45.000	&	0.000	mm/min
Waiting Mode During Printing:		s	Bottom Retract Speed:	150.000	&	0.000	mm/min
Waiting Mo... Printing:	Restin...	▼	Retract Speed:	150.000	&	0.000	mm/min
Rest Time Before Lift:	0.000	s					
Rest Time After Lift:	0.000	s					
Rest Time After Retract:	3.000	s					



Please visit Phrozen's official website to find out the profile settings for other resins.

<https://stomshop.pro>

5 Infill/ Gcode

Please use default settings.

6 Advanced Settings

The Anti-aliasing function is capable of making your prints smoother and more detailed. If your prints are already extremely detailed, you can choose to disable the function on CHITUBOX.

7 Load the Prints

Open the test .stl file on your USB.

8 Save Your Prints

Click "Slice" and then click on "Save" to save as .ctb file.

9 How to Operate CHITUBOX?

Operation Interface

Top Menu: Includes settings for replicating or hollowing prints and others.

Left Menu: Changes the size, angle, and position of your 3D file.

Right Menu: Adjust the resin parameters and support settings here.

Operation Method

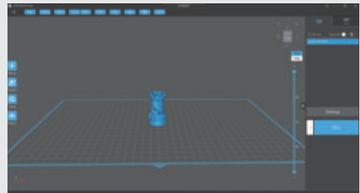
Left Button Long Press:

Drag the 3D file to the proper position.

Right-click Long Press:

View the 3D file from different angles.

Scroll Wheel: Zoom in/ out.



09 Import Your 3D File

Importing via USB

- 1 After slicing your .stl file via CHITUBOX slicing software, export the file as a .ctb file and save it onto your USB.
- 2 Insert the USB into the 3D printer.
- 3 Click on **PRINT** and choose your file to begin printing.

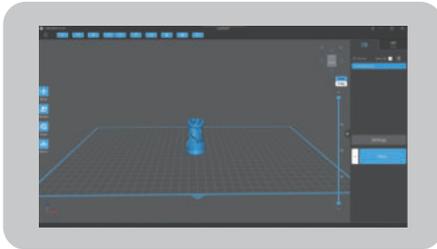


Importing via Ethernet

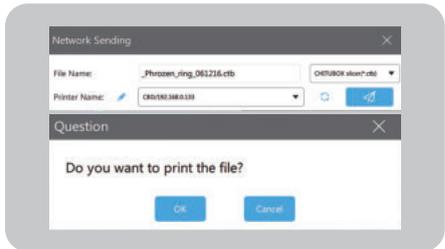
- 1 Insert in the USB and connect your printer to the same router your computer is connected to.
- 2 Click on **TOOLS**, and select **NETWORK**. The IP address will be shown on your printer's screen. (The IP address in the following photo is for reference only.)



- 3 Open CHITUBOX. Click on "Settings."
- 4 Then choose "Phrozen Sonic Mega 8K" as your printer.



- 5 Click on "Slice" and then click on "Network Sending."
- 6 Make sure that the Printer Name shows the same IP address as shown on Step 2. Choose .ctb as your file export format, and select the correct printer. Then click on the send button.
- 7 After successfully sending over your file, click on "OK" to start printing immediately. If not, then click on "Cancel." Your file will be saved automatically on your USB. Whenever you want to, click on PRINT on the printer's touch screen, choose your file and you can begin printing immediately.



10 Maintenance

1 How Do I Maintain My Printer's Z-axis?

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

2 Clean the Resin Vat

To protect your FEP film from damage, use the plastic scraper to clean the resin vat instead of a metal scraper.

3 Install and Remove the Building Plate and Resin Vat

While installing and removing the building plate and resin vat, please be careful in order to prevent damage against the LCD.

4 How to Clean the 3D Printer?

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

5 How to Store Excess Resins?

Please filter out excess resin by using a funnel and make sure there is no cured resin residue left behind. Preserve the resin in an opaque plastic bottle and seal it tight to prevent exposure to sunlight.

11 FAQ

1 Why is my Sonic Mega 8K not functioning properly?

- Phrozen offers a one-year warranty for all parts except consumable components, this includes the LCD and FEP film.
- LCD for Sonic Mega 8K is covered under a 3-month warranty. Please note that this warranty does not cover damage caused by human factors.
- If you encounter any difficulties, please contact us at support@phrozen3d.com. As long as the product is under warranty, you can provide us with your serial number so that we can provide you with after-sales service.
- If you purchased Sonic Mega 8K from our authorized resellers, please contact them for a claim of warranty.

2 Why are the base and/ or supports of my print attached to the building plate but my prints have fallen into the resin vat?

- Check to see if the curing time is in the correct range.
- Check your support settings. For better results, increase support density and the tip diameter.

3 Why are my prints incomplete after printing?

- Check to see if the curing time is in the correct range.
- Check to see if there is any debris between the resin vat and LCD.
- Check to see if there are dead pixels on the LCD.

4 Why do my finished prints crack easily?

- Check to see if your prints are cleaned properly, especially the hollow parts.

<https://stomshop.pro>

Congratulations!

You have just completed your first run of Sonic Mega 8K.
We hope you 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 one another.

<https://stomshop.pro>

If you have any questions,
please feel free to contact us and send us an email at
support@phrozen3d.com



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