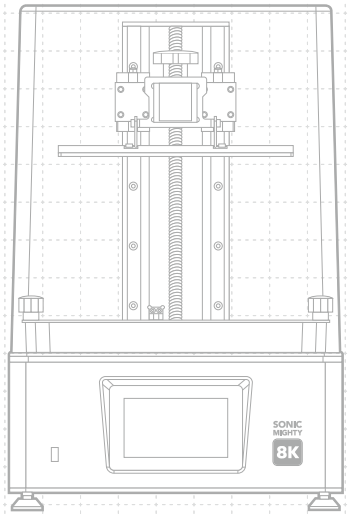
phrozen

SONIC MIGHTY 8K

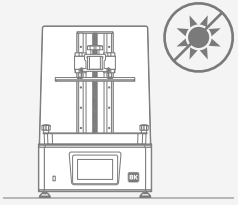
Dear User,

Thank you for joining us. Please read the Sonic Mighty 8K manual thoroughly and follow the instructions step-by-step to get the best printing experience.



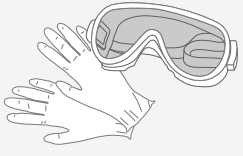
Please scan the QR code for Sonic Mighty 8K user manual in other languages.

01 Before You 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.

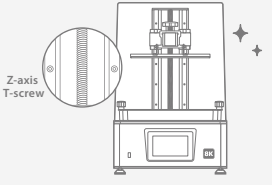
Maintenance

Clean the Z-axis

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

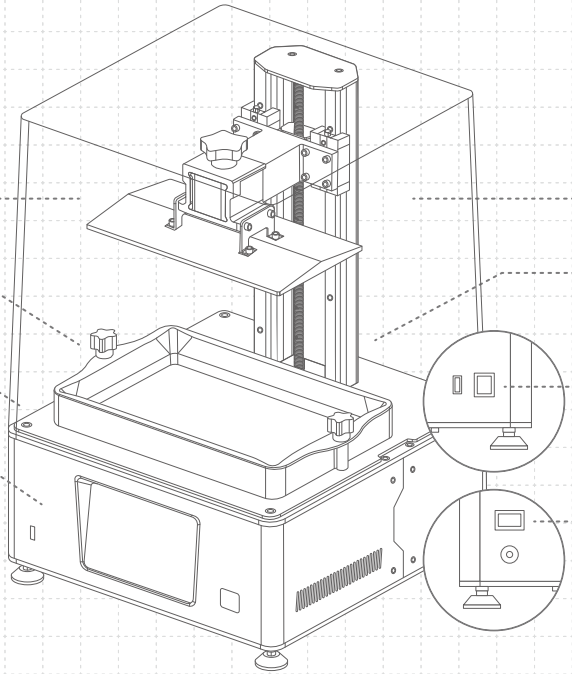
Clean the 3D Printer

Use 95% alcohol and tissue paper to carefully clean the printer, the resin vat, and the building plate.



02 Introduction

Printer Parts



PART.1
Building Plate

PART.2
Resin Vat

PART.3
LCD Screen

PART.4
Touch Panel

PART.5
USB Port

PART.6
Plastic Case

PART.7
Z-axis

PART.8
USB Port
Network Port

PART.9
Power Switch
Power Socket

The Toolbox

After Sales Service Card


Gloves


Power Adapter


Plastic Funnel


Scrapers


Allen Wrench


USB


Wi-Fi Adapter

Operation

System	Phrozen OS
Operation	5 inch Touch Panel
Slicer Software	CHITUBOX V2.0
Connectivity	Front USB Port | Ethernet | Wi-Fi

Printing Specifications

Technology	Resin 3D Printer - LCD Type
Light Source	Linear Projection LED Module
XY Resolution	28 μm
Layer Thickness	0.01-0.30 mm
Max Printing Speed	70 mm / hr
Power Requirement	DC 24V ； 5A

Hardware Specifications

Printer Size	33.7 x 33.7 x 51.6 cm
Printing Volume	21.8 x 12.3 x 23.5 cm
Printer Weight	14.3 kg

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

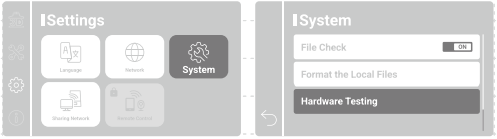
03 Prepare Your 3D Printer

Guided Process for Initial Use

Follow the guides on the touch screen during initial use to complete the LCD test, Z-axis calibration, and test printing (XP_finder.stl file) in order to confirm the relevant settings of the printer. If you missed the guided process, you can set it up by following the steps in the manual.

Hardware Test

It is recommended to perform the hardware test when printing for the first time by following the steps below:



Operate the left column and switch to the "Settings" page > click "System" > Swipe down and click "Hardware Testing."

The test contents include:

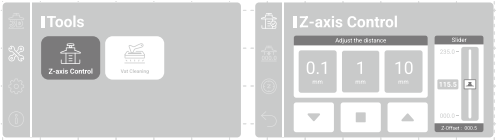
1. **Light cooling fan switch test.**
2. **LCD test:** Please refer to the "LCD Test."
3. **Z-axis running test:**
   Press and hold the key all the way to the bottom to confirm that the building plate moves normally.
4. **Z-axis sensor detection:**
   When the building plate reaches the bottom, the light display will turns green.
5. **Printer firmware version.**

LCD Test

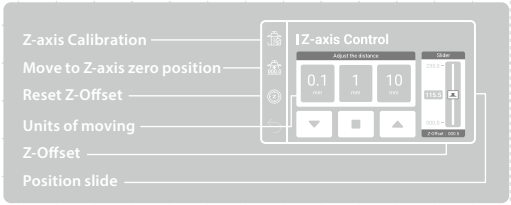
1. Remove the resin vat and wear anti-UV goggles to avoid eye injury.
2. Test the "LIGHT UP, LCD GRID, and BLACKEND" modes one after another to make sure the LCD screen displays the same images as shown on the touch panel. The test will run for 30 seconds in each mode.
3. When the LCD screen fully displays the three modes. The LCD Test is completed.

Z-axis Calibration

1. Notice! The other Z-axis control could NOT be turned on, If the Z-axis calibration was not executed during initial use.
2. Use the following steps to calibrate your Z-axis:
   Click "Tools" > click "Z-axis Control" > click "Z-axis Calibration."



3. Follow the instructions on the screen to execute Z-axis calibration:
   - Remove the resin vat. Place an A4 paper on the LCD screen.
   - Loosen the four screws on both sides of the building plate.
   - Wait until the building plate touches the LCD screen.
   - Then tighten all four screws.
   - Click "DONE" to finish calibration. Wait until the building plate retracts to the TOP.



Z-Offset Setting

After calibrating the Z-axis, you can use this function to modify your Z-offset position when needed. You may also use this function if you want to print flat on the building plate or if the resin flow is slow.

1. For initial use, please perform Z-axis calibration first.
2. Click "Move to Zaxis zero position."
3. We recommend to use 0.1mm setting as an elevating unit to fine-tune the position.
4. After confirming the position, click "Reset Z-Offset" to complete the setting.

IMPORTANT NOTICE: After resetting or rebooting the hardware, please reconfirm the Z-offset distance before printing.

04 Prepare Your 3D File

1. We provided the "Phrozen_Test_Rook" and "Phrozen_XP_Finder" 3D models and the print files in the USB for print testing; the STL editable files and CTB print files are included for both of them.
2. The STL files require the use of slicing software (such as CHITUBOX) to convert them into CTB files for printing.
3. If the Aqua-Gray 8K resin is used, the CTB print file provided can be used directly to print.
4. Use a computer to import your STL file into the slicing software, add the "Sonic Mighty 8K" printer, and set the print parameters according to the resin used.
5. Once the setting is complete, slice the 3D file and import it as a CTB file and place it on the USB drive, and the file preparation is complete.

Slicing Software

Resin Parameters

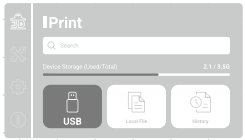
Learn & Download Phrozen_XP_Finder

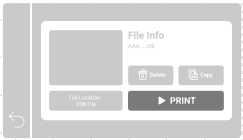
05 File Import & Internet Connection

Sonic Mighty 8K can transfer files through USB drive and internet connection. The printer has 3.5GB of built-in memory, able to save transferred files.

Import Files Through USB

1. Use CHITUBOX to slice the printing file, save it as a CTB file onto the USB drive, and insert the USB drive into the printer.
2. Perform the following operations on the touch panel in the "Print" page: Click the "USB" > select file > "PRINT."





Connecting The Printer to a Computer

1 Select the internet connection method

Use the USB wireless network card included in the accessory box to connect to Wi-Fi, or insert the network cable and connect through Ethernet.

2 Connecting to the internet

Enter the "Settings" page, click "Network," and select "Wi-Fi" or "LAN Cable" on the side.

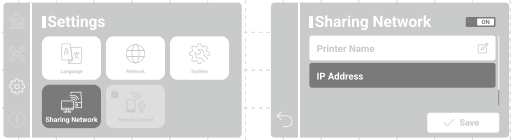
3 Confirm the printer IP

Return to the "Settings" page > Click "Sharing Network" > Enable the setting. The IP address is at the bottom-most field.

4 Connecting the printer to a computer

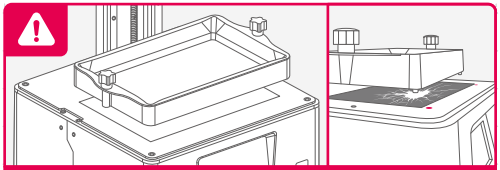
Have the computer connect to the same local area network as the printer, and enter the printer IP number into the empty folder location.

*The username and password have to be entered manually for initial use.



06 Printing Test

1. Use Aqua-Gray 8K resin and the "Phrozen_XP_Finder" model CTB file to perform testing.
2. Install the building plate and resin vat. Confirm that both are clean with no foreign objects.
3. Shake the resin evenly and pour it into the resin tank. Do not exceed the "MAX" mark on the resin tank when pouring.



NOTICE: When installing the resin vat, please make sure the bottom screws of the resin vat are perfectly aligned with the platform grooves, then tighten the screws on both sides. Please pay attention to the bottom screws when placing the resin vat, and **DO NOT** damage the LCD screen.

4. Insert the USB drive or select the "Phrozen_XP_Finder_AQ8K.ctb" file in the printer and click "Print."
5. Keep the plastic case closed during printing to prevent excessive UV light exposure.
6. Once printing is complete, remove the building plate from the printer. Then tilt, place the building plate onto a table and use the metal scraper to carefully remove your print.
7. Use 95% alcohol or Phrozen Wash Resin Cleaner to rinse your printed model, Then cure your models with a post-curing chamber; after curing, your first print is complete.

After-sales service & warranty

- Phrozen offers a one-year warranty for all parts, excluding consumable components such as the LCD screen and PFA(nFEP) film.
- Sonic Mighty 8K LCD 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 code to contact us.

Contact us !

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

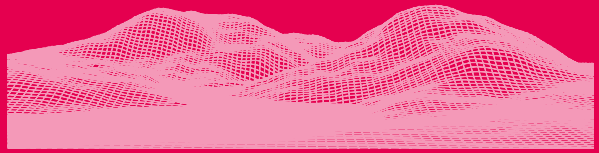
Facebook Group
Sonic Mighty 8K

YouTube

Instagram

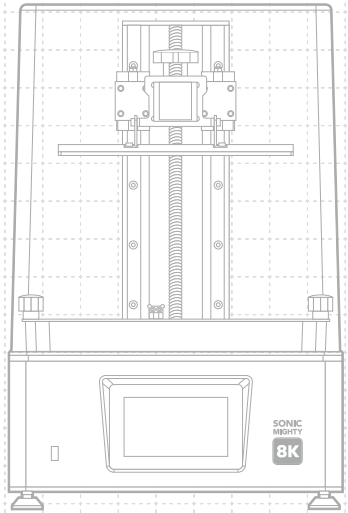
phrozen

SONIC MIGHTY 8K



親愛的使用者您好，

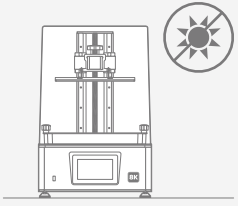
非常開心您的加入，為了您良好的使用體驗，請您務必詳閱 Sonic Mighty 8K 說明書進行產品測試及列印。



親愛的使用者您好

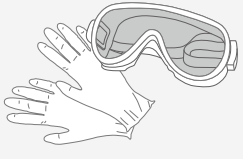
Sonic Mighty 8K 支援多種語言
請掃描左方連結下載。

01 使用前注意事項



列印環境

請將3D列印機置於室內乾燥通風處之水平桌面，並避免陽光直射與高溫曝曬。



保護措施

進行列印時，請佩戴手套、口罩、護目鏡、長袖衣物等個人防護設備。

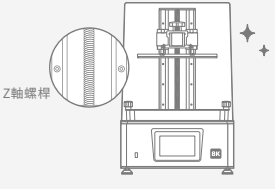
機台保養

Z軸清潔

擦乾Z軸螺桿後，請使用少量一般潤滑油，潤滑Z軸螺桿使其運行更順暢。

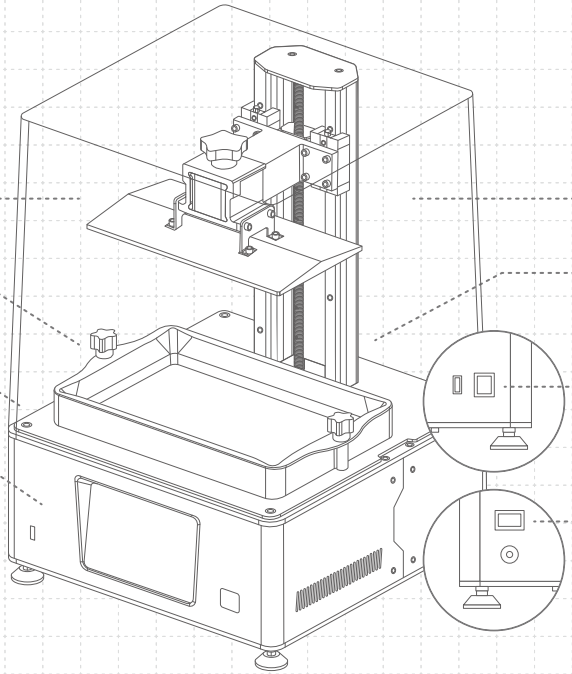
機台清潔

可使用酒精(建議95%酒精)與紙巾小心擦拭機台、樹脂槽與列印載台。



02 產品介紹

機台構造說明



PART.1
列印載台

PART.2
樹脂槽

PART.3
LCD面板

PART.4
觸控螢幕

PART.5
USB插孔

PART.6
壓克力遮光罩

PART.7
Z軸

PART.8
USB接孔
網路接孔

PART.9
電源開關
電源接孔

配件盒內容物

客服保固卡

手套

變壓器

塑膠漏斗

軟硬刮刀

六角板手

USB

USB無線網卡

操作系統

機台系統	Phrozen OS 系統
操作介面	5吋 OLED 觸控面板
切層軟體	CHITUBOX V2.0
檔案傳輸模式	前置USB插孔 | 乙太網路 | Wi-Fi

技術規格

技術規格	LCD光固化
光源設計	Linear Projection LED Module
XY 解析度	28 μm
切層厚度	0.01-0.30 mm
最快列印速度	70 毫米 / 小時
適用電壓	DC 24V；5A

硬體規格

機台尺寸	33.7 x 33.7 x 51.6 公分
列印尺寸	21.8 x 12.3 x 23.5 公分
機台重量	14.3 公斤

* 以上為實驗測試數據，若有內容更改恕不另行通知。

03 準備您的3D列印機

初次使用引導流程

初次使用請依照觸控螢幕的引導，完成LCD測試、Z軸校正與測試片列印，以確認列印機相關設定；若錯過引導流程，請依照說明書步驟進行設置。

設備測試

建議您在初次列印時，依照下列步驟進行設備測試：
操作左側欄位切換至「設定」頁面 >「系統設定」>「設備測試」。

1 **光源散熱風扇**
2 **LCD 測試：**參考右側「LCD測試」步驟。
3 **Z軸運轉測試：**長按下鍵將載台降至底部，確認載台正常移動。
4 **Z軸限位感應：**當載台到達底部後，確認顯示為開啟並轉為綠色。
5 **機台固件版本**

LCD 測試

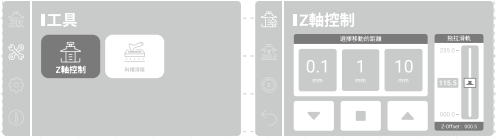
1 移除樹脂槽並佩戴抗UV的護目鏡，以避免眼睛受傷。
2 依序測試「全亮、網格、全暗」模式，確認LCD螢幕顯示圖像與觸控螢幕上的相同。
3 各模式持續30秒，確認無誤即完成測試。

Z軸校正

1 提醒您，初次使用未執行Z軸校正則無法開啟其他Z軸控制功能。

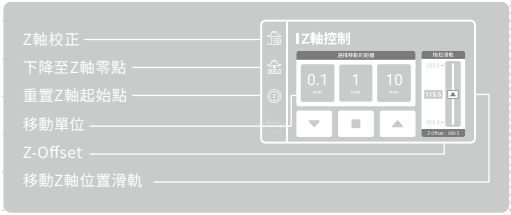
2 依照下列步驟進入Z軸校正：

左側切換至「工具」頁面 >「Z軸控制」>「Z軸校正」。



3 依照螢幕指示執行Z軸校正：

- 移除樹脂槽，並放置一張A4紙張在LCD面板上方。
- 安裝列印載台並旋緊，接著鬆開載台兩側的四顆螺絲。
- 等待載台下降至底部接觸到LCD面板。
- 將載台兩側的四顆螺絲重新鎖緊。
- 點擊「完成」等待載台歸位後即完成Z軸校正。



Z軸零點設定

在使用較黏稠樹脂時，可使用此功能微調Z軸零點位置，減少列印失敗。

1 初次使用請先執行Z軸校正。

2 點選「下降至Z軸零點」。

3 建議設定0.1mm上升微調零點位置。

4 確認位置後點擊「重置Z軸起始點」完成設定。

提醒：重置或重刷硬體後，建議在列印前再次確認Z-Offset距離。

04 準備3D列印檔

1. USB中我們提供測試列印用的「Phrozen_Test_Rook」及「Phrozen_XP_Finder_V2」3D模型及列印檔，兩者皆有STL可編輯檔案與CTB列印檔。
2. 使用湖水灰8K樹脂可直接使用提供的CTB列印檔列印。
3. STL檔案需使用切層軟體儲存成CTB檔案列印。
4. 使用電腦將您的STL檔放入切層軟體，新增「Sonic Mighty 8K」列印機，並依照使用的樹脂設定列印參數。
5. 設定完成後，將3D檔案進行切層儲存成CTB檔，並放入USB，3D列印檔案準備即完成。

切層軟體

樹脂參數

下載並了解更多
Phrozen_XP_Finder

05 檔案匯入與網路連線

Sonic Mighty 8K 可透過USB與網路連線傳輸檔案。機台內建3.5G 記憶體可儲存檔案。

以USB匯入檔案

1. 使用CHITUBOX將列印檔切層儲存成CTB檔存入USB，並將USB插入列印機。
2. 在「列印」選單中依下列步驟操作觸控面板：
   點選「隨身碟」> 選擇檔案 > 點選「列印」。

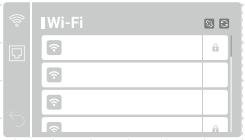
將列印機連線至電腦

1 選擇網路連線方式

使用配件盒中的USB無線網卡連線至Wi-Fi或插入網路線以乙太網路連線。

2 連線至網路

操作左側欄位進入「設定」頁面，點擊「網路設置」，選擇側邊「Wi-Fi」或「網路線」。



3 確認列印機IP

回到「設定」頁面 > 點擊「共享設置」> 開啟設定。

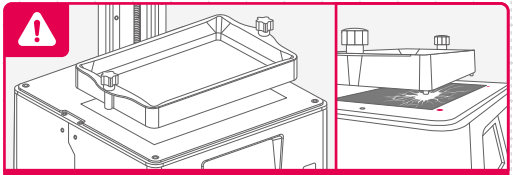
最下方欄位的IP地址即為您的列印機IP。

4 將列印機連線至電腦

將電腦連線至與列印機同一區域網路，並將列印機IP碼輸入至空白資料夾位置(初次使用需手動輸入使用者名稱與密碼)。

06 執行列印測試

1. 使用湖水灰8K樹脂與「Phrozen_XP_Finder」模型CTB檔進行測試。
2. 安裝樹脂槽與列印載台。確認兩者皆乾淨無異物。
3. 將樹脂輕搖均勻後倒入樹脂槽，倒入時請勿超出樹脂槽上的「MAX」標記。
4. 插入USB或選擇列印機內的「Phrozen_XP_Finder_AQ8K.ctb」，選取檔案並點選「列印」。
5. 列印時請蓋上壓克力遮光罩防止其他光線影響列印。
6. 列印完成後，將列印載台斜靠桌面，使用金屬刮刀將列印成品小心取下。
7. 使用 95% 的酒精或 Phrozen Wash 等清洗劑清洗模型，再使用固化燈固化模型，列印測試即完成。



注意：安裝樹脂槽時，請將樹脂槽底部螺絲對準平台凹槽，放置平穩後鎖上兩側螺絲。放置時請特別注意底部螺絲，避免造成LCD面板損毀。

產品保固與售後服務

- 普羅森3D列印機台提供1年非人為損壞保固，列印耗材LCD面板與PFA離型膜除外。
- Sonic Mighty 8K 的 LCD 面板提供3個月非人為損壞保固。
- 若使用上遇到任何問題，請掃描右方QRcode，聯絡普羅森團隊。

普羅森
客服團隊

恭喜

恭喜您完成初步操作流程，感謝您的支持並期望您有良好的使用體驗。

歡迎關注普羅森的社群帳號，並訂閱我們的YouTube頻道學習更多關於列印的技巧並分享您的列印經驗。

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