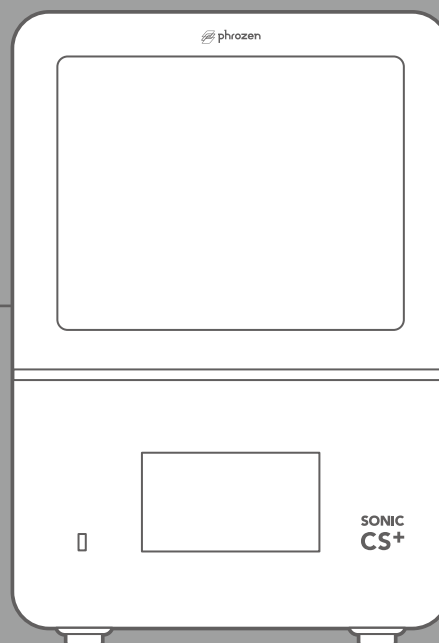


## Sonic CS+ Quick Start Guide

A comprehensive step-by-step guide to efficiently set up and begin printing.

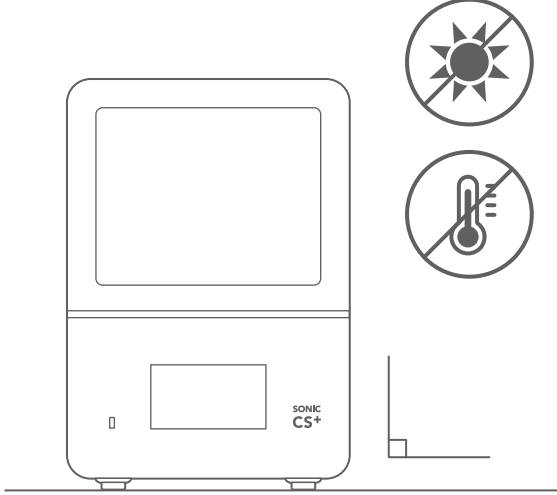
# SONIC CS+



## Table of Contents

<b>01 Optimal Printer Placement</b>	<b>01</b>
<b>02 Powering On</b>	<b>01</b>
<b>03 Smart Levelling</b>	<b>02</b>
<b>04 Resin Vat Installation</b>	<b>03</b>
<b>05 Resin Preparation</b>	<b>04</b>
<b>06 Connecting to a Wireless Network</b>	<b>04</b>
<b>07 Heating Your Printer</b>	<b>04</b>
<b>08 Installing Phrozen DS Slicer</b>	<b>05</b>
<b>09 Prepping Your Print Files</b>	<b>05</b>
<b>10 Pouring Resin</b>	<b>07</b>
<b>11 USB File Transfer to Sonic CS+</b>	<b>07</b>
<b>12 Cleaning Process</b>	<b>08</b>
<b>13 Post-Curing Process</b>	<b>09</b>

## 01 Optimal Printer Placement

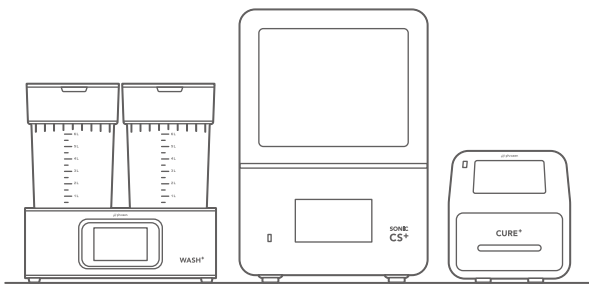


The diagram shows a Sonic CS+ printer on a flat surface. To its right are three circular icons: a sun with a slash through it (no direct sunlight), a thermometer with a slash through it (no excessive heat), and a sun with a slash through it (no dust). The printer is labeled 'SONIC CS+'.

The placement of your printer is essential for achieving consistent print quality. **Dust**, **excessive heat**, or **direct sunlight** can affect performance and lead to failed prints. To maintain optimal conditions, place the printer in a **clean, well-ventilated indoor space away from direct sunlight**.

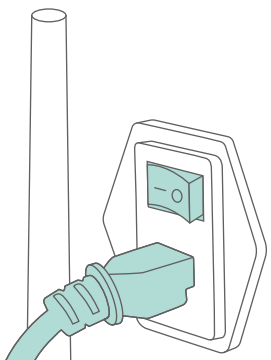
Make sure your printer is positioned on a **flat and stable surface**. Uneven or wobbly placement can interfere with the leveling process and cause print failures. Ensuring a steady surface helps maintain accuracy throughout the printing process.

### Quick Tip



If you have additional devices such as **WASH+**, **CURE+**, or **Heat & Mix**, position your Sonic CS+ nearby to optimize workflow efficiency.

## 02 Powering On



The diagram shows a power cable being plugged into a grounded outlet. The outlet is labeled 'GND'.

### Powering On

Connect the power cable to the printer and plug it into a grounded outlet. Press the power button to turn on the machine. Wait for the touchscreen to initialize before proceeding with the setup.

## 03 Smart Levelling



If you have already completed the initial setup, this step can be skipped. However, you may refer to these instructions again if re-leveling the building plate becomes necessary in the future.

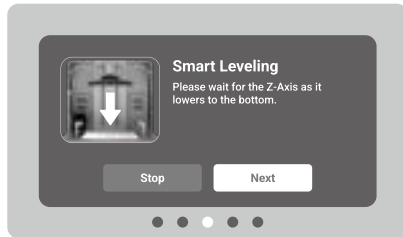
1



### Preparation

Remove the resin vat, install the building plate, secure it using the hand screws, and place an A4 sheet of paper over the LCD.

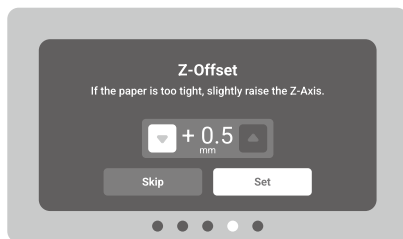
2



### Building Plate Positioning

Wait for the building plate to rise to the top and then drop to the bottom to trigger the actuators.

3

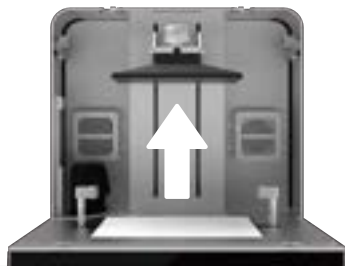


### Z-Offset

Pull the paper and determine if the friction at the corners of the paper is equal.

If paper in all corners is too tight or too loose, you can adjust it using Z-Offset.

4



### Completion

The Z-axis will automatically rise to the top, finalizing the leveling process.

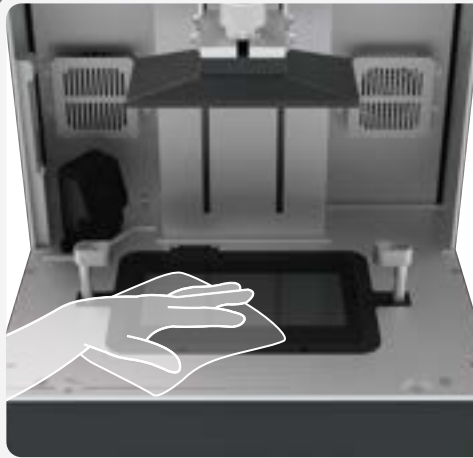


#### Quick Tip

- If Smart Levelling fails or the paper feels uneven at the corners, manually recalibrate the Z-axis.
- Switching between Standard and Mini resin vats requires redoing Smart Levelling, but manual recalibration is not required.

## 04 Resin Vat Installation

1



Maintaining a clean workspace is essential for ensuring consistent print quality over time. Before installing the resin vat, **carefully wipe the LCD screen** using a lint-free cloth and lens cleaner to remove any dust or debris.

To preserve optimal performance, clean the LCD screen each time the resin vat is removed or reinstalled.



### Quick Tip

Always **clean or remove the building plate first** before handling the resin vat. This prevents any leftover resins from dripping or falling onto the LCD screen.

2



Both the Standard and Mini resin vats are equipped with ergonomic side handles for easy handling.

When installing or removing the vat, always **grip it by the side handles** to prevent spills, avoid accidents, and minimize fingerprints on the underside of the vat.

3



Sonic CS+ is equipped with a **Slide & Lock** mechanism for secure and effortless resin vat installation. Simply **slide** the vat into position, **lock** it in place, and ensure a stable setup before printing.

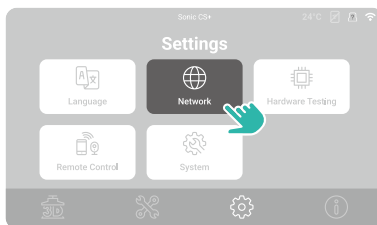
## 05 Resin Preparation



For enhanced consistency, use the **Heat & Mix Resin Mixer** to evenly heat and mix the resin before pouring.

**!** **Heat & Mix application guidelines** for the recommended mixing and heating durations.

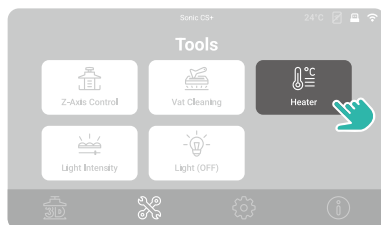
## 06 Connecting to a Wireless Network



Go to the Settings tab and select **Network** to configure the connection.

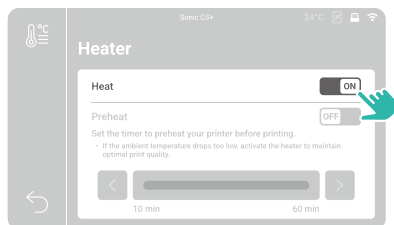
## 07 Heating Your Printer

1



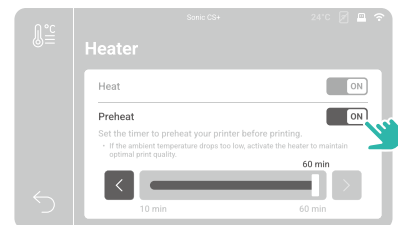
Navigate to the Tools tab, then select **Heater**.

2



Turn on the heating function.

or



Enable the **Pre-heat function** to allow the printer to automatically heat up at the start of the printing process.

**!** If the ambient temperature is below 20°C (68°F), we recommend turning on the heater 10–30 minutes before printing to ensure optimal performance.

## 08 Installing Phrozen DS Slicer

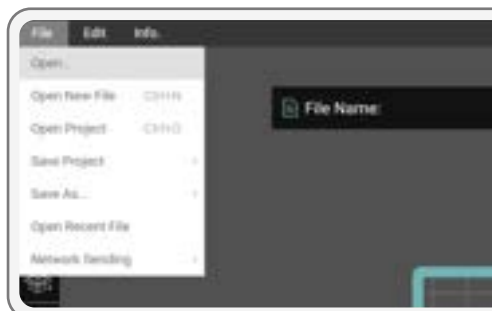


Head over to the [Phrozen DS Slicer website](#) and download the latest version of the software. Don't forget to insert the **DS Slicer dongle** that comes with your Sonic CS+ before launching the program.

**!** Make sure to keep your slicer up-to-date to prevent any slicing errors.

## 09 Prepping Your Print Files

1

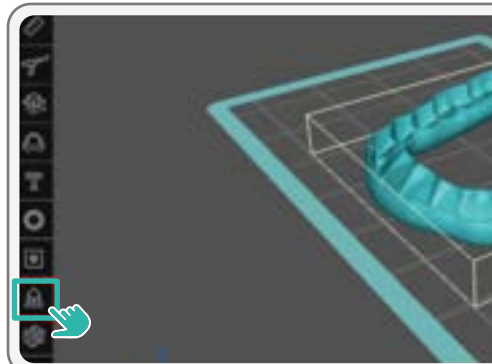


### Upload Your File

Begin by uploading your file to DS Slicer:

Click **File** ▶ **Open** ▶ Select your CAD files

2



### Set Up Supports and Orientation

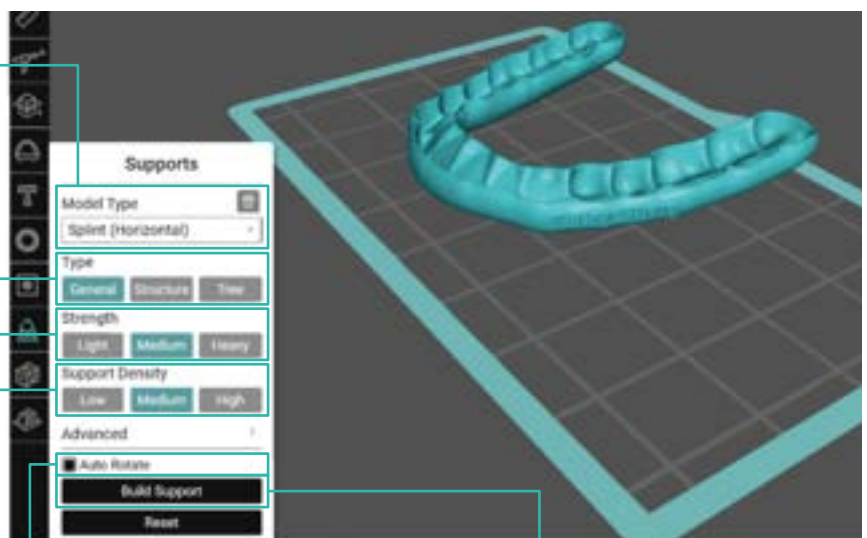
Head over to the build support function to set up **Auto-Support** & **Auto Orientation** features.

Choose your **type of application**

Choose **General** for support type

Set support strength to **Medium**

Set support density to **Medium**



Turn on the **Auto Rotate**

Click the **Build Support** to end the process

3



### Select Your Resin Settings

Once the orientation and support is set, click the **gear icon** (⚙️) in the top-right corner to open the settings menu.



Under the **Machine** tab, select Sonic CS+ printer.



Then switch to the **Print** tab, and select your dental resin brand and type. Still inside the **Print** tab, choose your desired **layer height** and **printing setup**.



#### Quick Tip

Use a **100 µm** layer height and **Turbo** setting for fastest printing performance.

4



### Start the Slicing Process

Click the **Single Para Slice** button at the bottom-right corner to begin slicing.



#### Quick Tip

Alternatively, switch to **Multi Para Slice** by clicking the arrow next to the slice button. Check out our DS Slicer guide for more info on **Multi Para Slice** mode.

5



### Save and Export Your File

Once slicing is complete, **name your file** and click **Save**.

Choose to either:

- Save it to a USB drive by selecting **Open Folder**.
- Send it via Wi-Fi using **Network Sending**.

## 10 Pouring Resin



Always wear nitrile rubber glove when handling uncured resins.

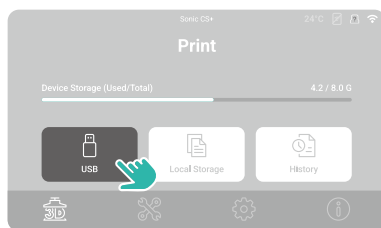


Pour resin directly into the vat, ensuring it stays below the **Max line** or filling it to **half to three-quarters** of the vat's capacity.

This helps prevent overflows while ensuring a sufficient resin supply for multiple print cycles.

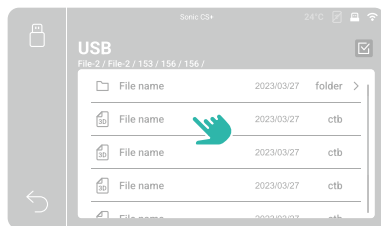
## 11 USB File Transfer to Sonic CS+

1



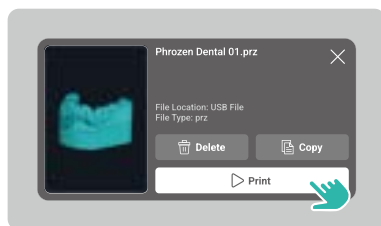
Insert the USB drive, navigate to the **Print** tab, and select the **USB** icon.

2



Browse and select your file from the USB storage.

3



Tap **Print** to initiate the printing process. You can also tap **Copy** to transfer the file to the printer.

## 12 Cleaning Process



Always use nitrile rubber glove when handling uncured resins.

1



### Remove First

**Gently** use a metal scraper to lift prints from the plate. Apply **light, steady pressure** to avoid damage.

**Caution:** Avoid excessive force to protect your prints and your hands.

2



### Then Wash

Place your prints into the **WASH+** washing basket.

**Caution:** Avoid excessive force to protect your prints and your hands.

3



### Drying

Make sure to **dry your prints** before moving to the post-curing process.

Let the model **sit in a dark place for up to 30 minutes** or use a **compressed air gun** for faster drying.

# 13 Post-Curing Process

**!** Always use nitrile rubber glove when handling uncured resins.

1



Place your prints into the **CURE+** curing station.

2



Select your **dental resin's curing profile** and tap **Start**.

3



Once curing is complete, remove any support attached to your parts..

**(Only when necessary)**

Polish and finish your prints according to the resin manufacturer's guidelines.

**(Only when necessary)**

4



Your printed appliances are now ready for use!