



SHINING 3D



ACCUFAB-F1

3.7.40

User Manual

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Overview

About the User Manual

This user manual (hereinafter referred to as "the Manual") introduces the functions, installation, usage and maintenance of the AccuFab-F1 printer (hereinafter referred to as "the printer").

Symbol Convention

Symbol	Meaning
	Note: This symbol is used to inform you of the additional information of the product.
	Caution: This symbol is used to inform you of incorrect operations that may damage the device or result in data loss.
	Warning: This symbol is used to inform you of the potential risks that may result in serious personal injury and other safety incidents.

The Declaration of Intellectual Property and Disclaimer

Thank you for using the products of SHINING 3D TECH CO., LTD. (hereinafter referred to as the "SHINING 3D"). Before you use the products, please carefully read and understand this declaration. Once you use this product, it means that you fully accept this statement and promise to comply with the relevant regulations.

1. The contents of the Product Instruction and User Manual (hereinafter collectively referred to as the "Product Usage Documentation") are critical to your personal safety, legal rights, and liabilities. Before you use the products, please ensure that you have carefully read the Product Usage Documentation, and use the product correctly in accordance with the requirements of the Product Usage Documentation. We also recommend that the products be operated by trained professional technicians.
2. Please inspect and/or maintain the product before use. If the product is damaged, deformed or in any other abnormal condition, stop using it immediately and contact the after-sales service personnel for maintenance. SHINING 3D will not be responsible for any problems caused by your failure to inspect or maintain the product in a timely manner.
3. SHINING 3D does not guarantee the applicability of the outcomes of your use of the products, and you are responsible for verifying the quality and functionality of the outcomes. You should check and verify thoroughly that any outcomes meet your requirements before using them, for which you bear full responsibility. If any damage arising from using the outcomes of any products, you shall bear the corresponding risk, and SHINING 3D shall not bear any responsibility.

4. SHINING 3D owns complete intellectual property rights for the contents of the for which you bear full responsibility. Without the written consent of SHINING 3D, it is not allowed to copy, transmit, publish, adapt, compile or translate any contents of the Product Usage Documentation in any form for any purpose.
5. The Product Usage Documentation is a guidance for installing, operating, and maintaining the product instead of serving as the quality guaranty for the products. SHINING 3D makes all efforts to ensure the applicability of the Product Usage Documentation, but reserves the right of final interpretation. Images and diagrams in the product documentation are presented to provide convenience to user understanding. In the event that any images or diagrams are inconsistent with the physical products, the later shall prevail. In addition to the mandatory provisions of laws and regulations, the contents of the Product Usage Documentation are subject to changes without further notice.
6. SHINING 3D shall not be held responsible for any damages and/or losses caused by human factors, environmental factors, improper storage and use, or any other factors other than due to the quality of the product. SHINING 3D also shall not be held responsible for any indirect anticipated profit loss, loss of reputation and other indirect economic losses. Except as otherwise expressly provided by laws and regulations, the total liability assumed by SHINING 3D (regardless of cause) shall not exceed the purchase price of the products you paid to SHINING 3D.
7. Disputes arising from this Declaration and the Product Usage Documentation thereof shall be governed by the laws of the People's Republic of China, excluding its conflict of law rules. In the event that certain provisions are in conflict with the applicable law, these provisions will be reinterpreted in full accordance with the law, while other valid provisions will remain in force.
8. All disputes between you and SHINING 3D that arise from, shall first be resolved amicably through negotiation. If a dispute cannot be resolved through friendly negotiation, any party may submit the dispute to the Court of Xiaoshan District, Hangzhou City, Zhejiang Province, People's Republic of China for litigation and settlement.
9. In the event of any questions about the contents of this Declaration and application of Product Usage Documentation, please contact us by the contact information provided in the User Manual. Thank you for your cooperation and support! We hope that our products can bring you a great experience of using.

About the Printer

Introduction

AccuFab-F1 is a high-precision, high-efficiency light-curing dental appliance manufacturing device, designed specifically for dental clinics and laboratories. It addresses the pain points of traditional dental restoration manufacturing through innovative technology and offers an efficient, precise, and cost-effective solution. The device features advanced optical calibration technology and optimized algorithms, enabling stable and precise production of various high-precision 3D models. It is widely used in the field of dental restoration, including the fabrication of surgical guides, temporary crowns, permanent crowns, denture bases, occlusal splints, retainers, and other dental appliances.

- **Platform Heating:** Stable heating control improves the adhesion of printed parts.
- **Resin Tank Heating:** Improving resin fluidity ensures print precision and enhances the surface details of printed parts.
- **High-Power Exposure Technology:** Provides ultra-high light power to increase printing speed.
- **Multi-Material Compatibility:** Supports a variety of resin materials, including ceramic resin (for crowns and bridges) and transparent resin.
- **Residue Detection:** Real-time monitoring of residue in the resin tank, with timely reminders to clean and avoid print failures.
- **Resin Tank Detection:** Automatically detects the installation status of the resin tank to ensure proper placement and safe printing.
- **HyperClear Resin Tank:** Improves light transmittance and reduces the need for post-processing.

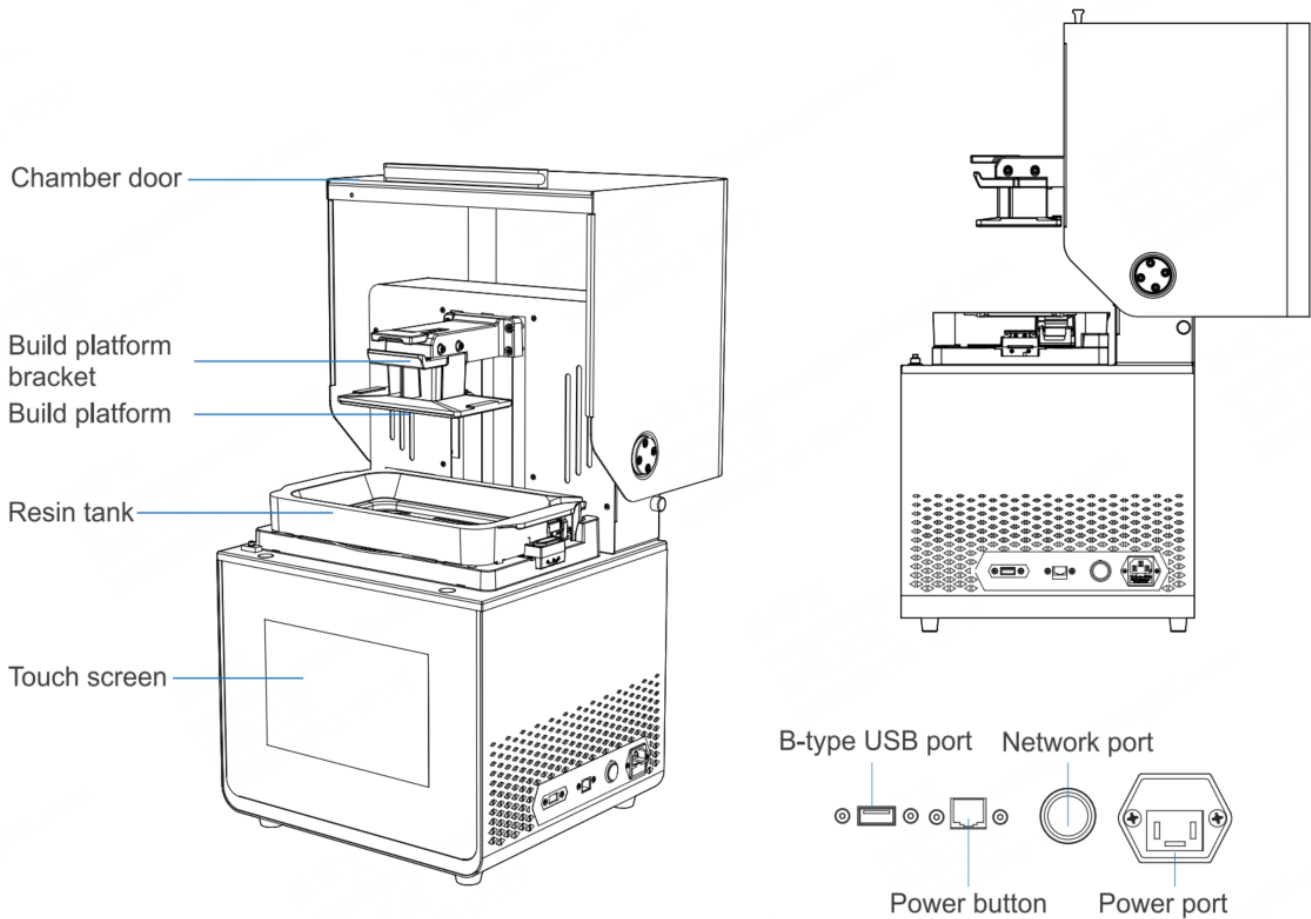


AccuFab-F1 offers a comprehensive digital solution for dental clinics and laboratories with its efficient, precise, and cost-effective features.

Parts List

After [unpacking](#), there are the [main equipment](#), an [accessory box](#), a resin tank and a power cord.

Components Overview



Note

The equipped **FabWare** software is controlled via the touch screen.

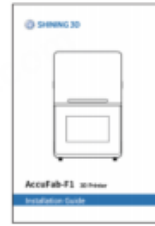
Accessories List



Power Cable



Quality Certification



Installation Guide



Wrench



Flash Drive^①



Angular Knife^②



Putty knife^③



Brush^④



Scraper^⑤



Cleaning Box^⑥



Cloth^⑦



PET^⑧



Leveling Paper^⑨



Disposable Gloves

Instructions for the use of some of listed accessories are shown in the table below.

Number	Accessory	Description
①	USB Flash Drive	Used to store factory files, Quick Start Guide, Installer of AccuWare.etc. Please be subject to the actual stored files.
②	Angular Knife	Used to remove models from the build platform after printing finished.
③	Putty Knife	Used to remove models from the build platform after printing finished.
④	Brush	Used to clean extra resin on the model.
⑤	Scraper	Used to stir resin in the tank to avoid sediment.
⑥	Cleaning Box	Used to store parts or alcohol.
⑦	Cloth	Used to clean optical path including projector lens, protection glass and resin tank glass.
⑧	PET Card	Used to detect leveling gaps and remove the cured layer.
⑨	Leveling Paper	Used to level the build platform of F1.



Warning

Please take care and keep safety in mind when using the scraper and putty knife which have sharpened edges.

Installation

Please follow the steps below to complete unboxing.

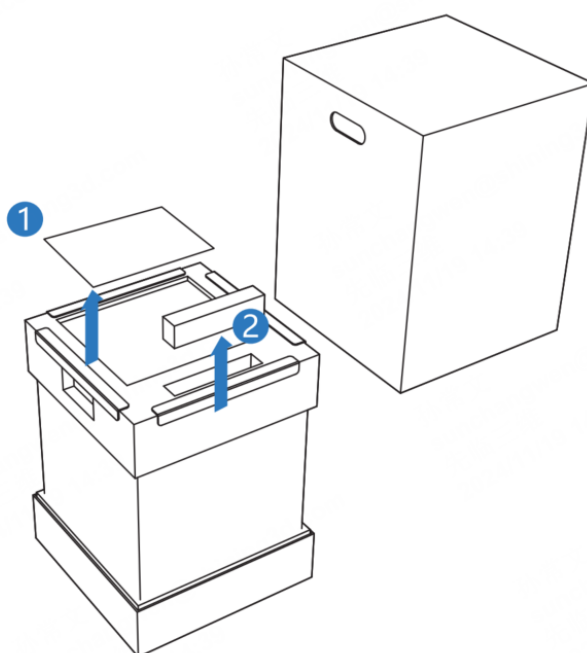
Caution

If the printer needs to be returned to the manufacturer, it should be shipped in its original packaging. Therefore, do not damage or discard any packaging materials.

1 Unbox and Remove Accessories >

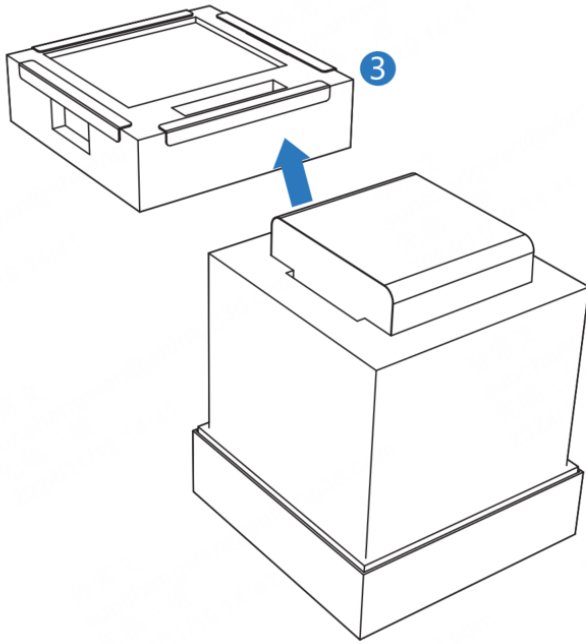
Open the device's packaging carton and take out the following items from the top foam layer:

- Product Qualification Certificate
- Warranty Card
- Installation Guide ①
- Power Cord ②



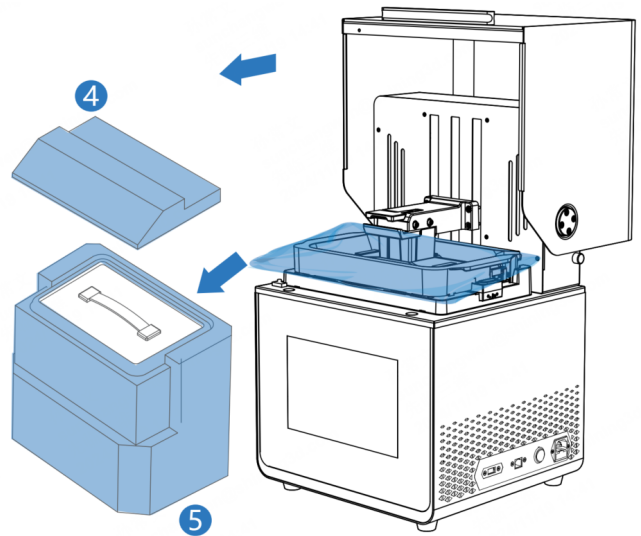
2 Remove Top Foam Layer >

Remove the top foam layer ③.



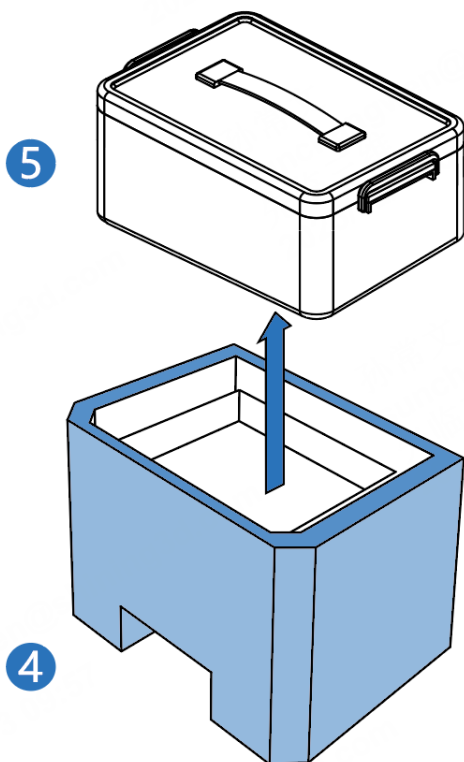
3 Take Out the Device >

1. Remove the device's outer carton, wrapping bag, and adhesive tapes.
2. Place the device in a stable workspace.
3. Open the chamber door while holding the foam insert.
4. Once the chamber door is fully opened, remove the foam insert ④ from inside.



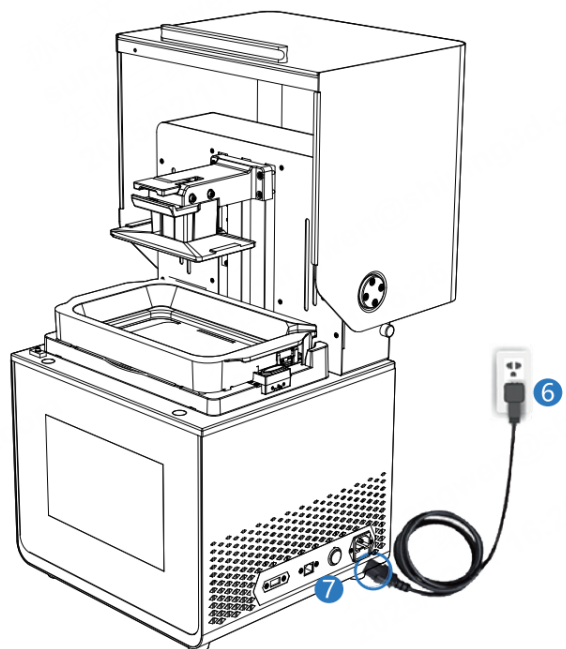
4 Remove the Accessory Pack >

Take out the accessory pack ⑤ from the foam insert ④.



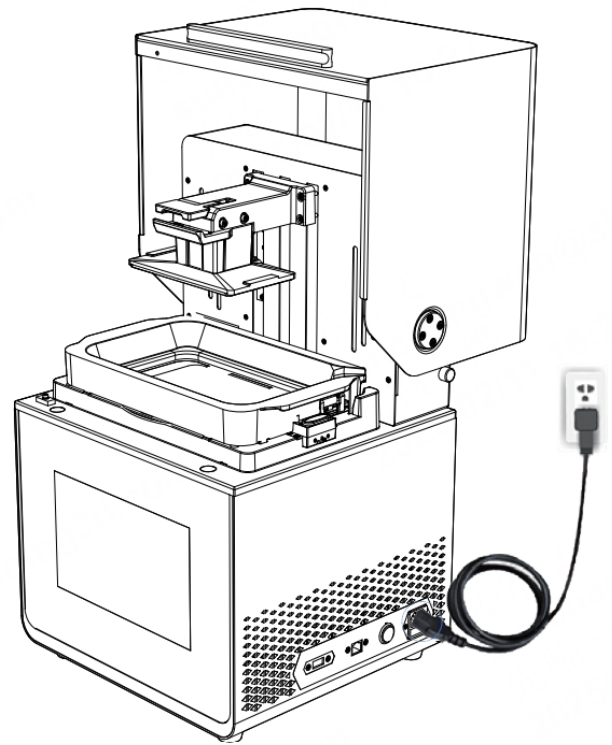
5 Power On and Start >

1. Connect the power cord ⑥ to the device.
2. Press the power rocker switch ⑦ on the right side of the device to turn it on.
3. Once powered on, the build platform will automatically rise to the highest position.
4. After the printing stops, remove the foam insert around the resin tank.



6 Installation Complete

The device installation is complete and it is ready to operate.



Specifications

Parameters

Parameter	Description
Packing Dimensions	565 mm x 565 mm x 680 mm (X, Y, Z)
Packing Weight	32 kg
Machine Dimensions	330 mm x 350 mm x 575 mm (X, Y, Z)
Net Weight	23 kg
Operating Temperature	18°C ~ 32°C
Operating Humidity	30% ~ 70%
Power Supply	100V ~ 240Vac, 50/60 Hz, 350 VA
Data Format	SLP3
Interface	USB / Ethernet / Wi-Fi
Authentication	FCC / ROHS

Optics Parameters

Parameter	Description
Optical Engine	black-and-white LCD screen
Resolution	1920 px x 1080 px
Pixel Size	0.075 mm
Light Source	405 nm UV-LED
Light Intensity	4 ~ 12 mw/cm ²

Parameters

Parameter	Description
Print Volume	144 mm x 81 mm x 75 mm (X, Y, Z)
Layer Thickness	0.05 mm ~ 0.125 mm
Print Speed	20 mm/h ~ 100 mm/h
Print Accuracy	± 0.025 mm

Environmental Requirements

Please ensure the working environment meets the requirements listed below before operating or storing the printer.

Environmental Requirement	Description
Voltage Range	110 V ~ 240 Vac, 50/60 Hz, 360 VA
Working Temperature	18°C ~ 32°C
Working Relative Humidity	30% ~ 70%
Storage/Transport Temperature	-20°C ~ 60°C
Storage/Transport Relative Humidity	30% ~ 93%
Working Air Pressure	86 kPa ~ 106 kPa
Storage/Transport Air Pressure	59.5 kPa ~ 106 kPa
Other Requirements	• A stable, level, and clean supporting surface without shaking or tilting. • A well-ventilated area, free from dust-generating equipment, direct sunlight, or strong light exposure.

Warning

Good ventilation is essential for the health of personnel.

Caution

- To reach optimal results, it is recommended that you create an environment staying $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and $50\% \pm 10\%$ humidity.
- Shaking of the supporting surface may damage the internal components of the device, and tilting may cause liquid resin to flow to the lower side, resulting in uneven distribution and affecting print quality.

Notice for Use

This section provides safety precautions which will also appear repeatedly within this Manual for reminding.

Warning

- Please read and strictly comply with all matters in this section, as failure to do so may result in personal injury or damage to the printer.
- No modification of this equipment is allowed. Replacement of a component could result in an unacceptable RISK.

Notice for Operation

- **Lifting Hazard:** Due to its size and weight, do not move or reposition the printer alone.
- **Operators:** Operators should be trained to operate the system and perform all the necessary tasks to build a part.
- **Touch Forbidden:** It is forbidden to touch the model, resin tank, build platform and any other components by hand. Remember to wear disposable gloves when handling the machine.
- **Sharp Tools:** Printer is equipped with sharp tools for model removal and support detachment. Proper protection is required when using these tools.

Note

The electromagnetic occurring during printing meets FCC standard and brings no harm.

Caution

Printer shall only use the original consumables and accessories. Any change to the printer without the manufacturer's permission will invalidate the warranty.

Notice for Material

Ultraviolet Light

Warning

The UV Light is harmful to the eyes, so please avoid direct eye contact.

Ethanol

The ethanol of 75% concentration or above is recommended for cleaning liquid resin.

Warning

- **Irritation:** Please **wear disposable gloves** when dealing with the ethanol, and always wash skin thoroughly after working with ethanol.
 - Skin Irritation: If skin contact happens, take off contaminated clothing and wash the skin area thoroughly with soap and **cold** water.
 - Eye Irritation: If eye contact happens, flash the eye with water and seek medical care immediately.
- **Respiratory Danger:** Smoking, eating and drinking are strictly forbidden in the working area. If oral contact happens, gargle, induce vomiting and seek medical care immediately.
- **Fire Hazard:** Liquid ethanol is flammable, please store it with caution.
 - Keep the container closed.
 - Store it in somewhere ventilated and cool (50 ~ 86°F / 10.0 ~ 30.0°C).
 - Keep it away from direct sunlight, heat, flames, or UV energy.
- **Spill Hazard:** Always keep the container upright and reseal it after use, in case of spilling over. If the ethanol spills, cover it with sand or the other nonflammable materials, or wash it with plenty of water and then sluice the diluted water to the wastewater system.
- **Disposal:** Avoid direct contact, and deal with liquid ethanol in ventilated places collectively.

Resin

The printing material used by the printer is photo-polymerized resin developed independently by SHINING 3D, including pure liquid resin, resin dissolved in solvents or partly cured resin (hereinafter referred to as "the Resin").

The Resin performs stable and safe in the test. **However, the direct contact with the Resin may still cause eye damage or skin irritation, and other adverse irritation reactions.**

In this case, please ask authorized reseller for Material Safety Data Sheet (MSDS) before working with the Resin. When working with the Resin, please wear wear rubber oil resistant gloves, protective clothing, eye protection equipments and protective masks while following the instructions in MSDS strictly.



Caution

- **Sediment treatment:** The Resin is classified as mixtures and tends to form small amounts of sediment after standing for a period of time.
Please follow the instruction in this User Manual to add resin and shake the storage container before use to reduce sediment.
- **Splash Hazard:** When adding liquid resin, please keep the liquid level not higher than the MAX line in the resin tank; otherwise, the liquid resin may splash out of the tank during printing.
- **printing Effect:** Please add liquid resin in time to keep the liquid level above the MIN line in the resin tank to ensure that the model products well.



Warning

- **Irritation:** Please **wear disposable gloves** when dealing with the Resin, and always wash skin thoroughly after working with the Resin.
 - Skin Irritation: If skin contact happens, take off contaminated clothing and wash the skin area thoroughly with soap and COLD water.
 - Eye Irritation: If eye contact happens, flash the eye with water and seek medical care immediately.
- **Respiratory Danger:** Smoking, eating and drinking are strictly forbidden in the working area. If oral contact happens, gargle, induce vomiting and seek medical care immediately.
- **Fire Hazard:** The Resin is flammable, please store it with caution.
 - Store it in somewhere ventilated and cool (50 ~ 86°F / 10.0 ~ 30.0°C).
 - Store it separately from incompatible substances and avoid mixing.
 - Keep it away from direct sunlight, heat, flames, or UV energy.
 - It is not suggested that the Resin be stored in oxygen-free environment, where the material could be frozen.
- **Spill Hazard:** Resin may spill over the resin tank walls if the container tilts, so please always keep the resin tank upright and place it on the stable platform. Besides, resin tanks are consumable materials and should be replaced immediately when reaching the end of its working life, in case of printing failure, the spillover of the Resin, or other potential problems.
 - If a small amount of resin spills on the exterior of the device, clean the screen and the resin tank film immediately to avoid affecting print quality.
 - More extensive resin spills that reach the inside of the printer may contaminate or erode critical components. For this case, cancel the operation and shut down the machine, keep the chamber hood closed to prevent ambient light from curing the resin, then photograph the spill and [contact SHINING 3D supporter](#) for further assistance.
- **Disposal:** The Resin is classified as hazardous waste and does harm to aquatic life, so please dispose it discreetly and follow the instructions in MSDS.

Software Interface

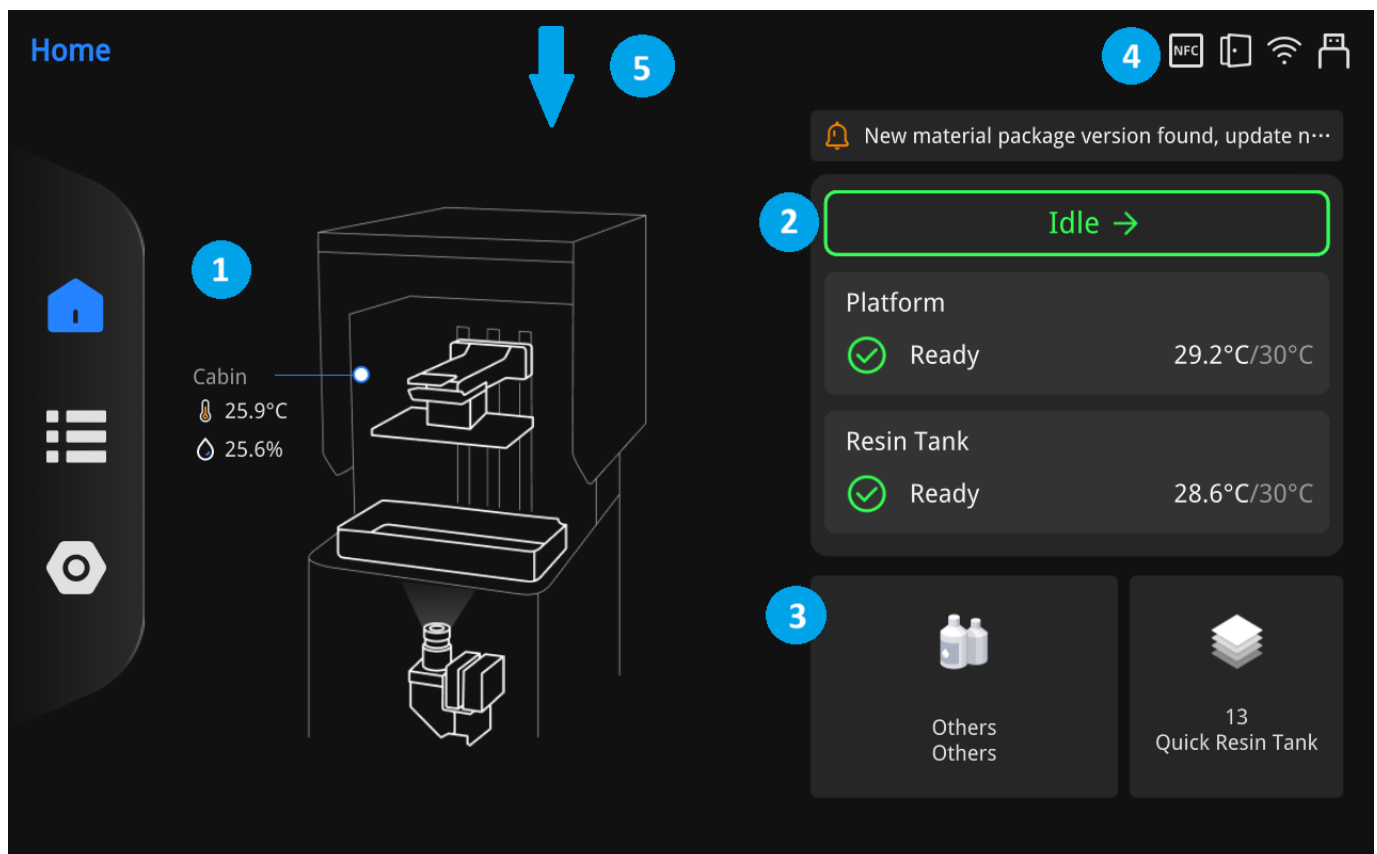
Home

On the **Home** interface, check the current status of the printer and the related information of the resin tank.



Note

- When the activation prompt appears, please enter **Settings** > **About** > **Activate License**, follow the instructions to activate the printer for full permissions.
- When you are prompted that the remaining days are insufficient, please go to **AccuWare** > **Settings** > **Printer Act and Auth** interface to process online activation, or [contact technical supporters](#) to process activation with the activation file.



Switch columns to view the introduction to each field.

① Cabin inspection

 : Displays the **Air Temperature** and **Humidity** inside the build chamber.

Caution

- Please ensure that the value displayed meets the [environmental requirements](#).

② **Printer status**

Idle: Printing has not started or is completed. Tap the field to enter **Queue** interface to select the file for printing.

Note

- In the idle status, the build platform and resin tank are temperature-controlled to maintain a constant temperature of 30°C.
- If the ambient temperature of the device is significantly lower than 30°C, the system will automatically heat up to 30°C, and the screen will display the heating status.

Printing: Tap the field to enter **Printing Details** interface to check the printing information and control the printing process.

After starting the print, the build platform and resin tank are heated to the target temperature based on the selected resin. The screen shows real-time temperature data for both.

Note

- After printing starts, to ensure the quality of the first layer, the build platform will be heated to the target temperature required by the resin. During the continuous printing, the build platform will maintain a constant target temperature.
- After printing starts, the resin tank will be heated to the target temperature required by the resin. If the temperature of the resin tank drops below the target temperature by 2°C, it will continue to heat up to the target temperature. During the printing process, the temperature of the resin tank will always be maintained within $\pm 2^\circ\text{C}$ of the target temperature.

③ **Resin tank information**

 : Displays the brand and type of the resin in the resin tank, as well as the cumulative number of printed layers (sensed by the chip on the back of the resin tank).

Tap the field to enter the **Resin Tank Information** interface to set the resin tank.

Resin Tank Settings:

- **Replace Resin:** Tap the checkbox to select the brand and type of the alternative resin.
- **Clean Residue:** When cleaning the resin tank, tap **Cure Resin**. The liquid or semi-solid resin attached to the build platform surface will harden through curing, allowing it to be easily removed with a tool (such as a scraper) without leaving sticky residue.
- **Resin Tank:** Displays the current cumulative number of printed layers and the resin tank serial number. Tap the **Reset Layers** to reset the layer count to zero and start counting again.

Caution

- Please use the photosensitive resin independently developed by SHINING 3D or other certified resin materials.
- Ensure you select the correct brand and type of resin actually added to the tank in the software to achieve optimal printing results. If the resin type is not listed, select Others instead.

④ **Status bar**

 : Connected to a wireless network. Operations such as [select queue files](#) and [network update](#) are available.

 : Connected to a wired network. Operations such as [select queue files](#) and [network update](#) are available.

 : USB flash drive inserted. Operations such as [select USB files](#), [activate license](#), export logs and [flash drive update](#) are available.

 : Chamber door is not closed.

 : Connected to the SHINING 3D Dental Cloud.

 : Records the usage time of the resin tank, the number of printable layers, and the number of layers printed; synchronizes this data to SHINING 3D Dental Cloud and AccuWare.

Warning

Keep the chamber door closed during the printing. Tap [Settings](#) > **Software Settings** and enable **Activate Cover Sensor When Printing** to ensure print quality and reduce safety risks.

⑤ **Status Menu**

Swipe down from the top of the screen to bring up the printer status menu, displaying the current network connection status of the printer (tapping this module will enter the [Network Settings](#) interface), connection status (tapping this module will enter the [Bind to Dental Cloud](#) interface), and curing box & cleaning machine connection status (tapping this module will enter the [Connect FabCure / FabWash](#) interface).

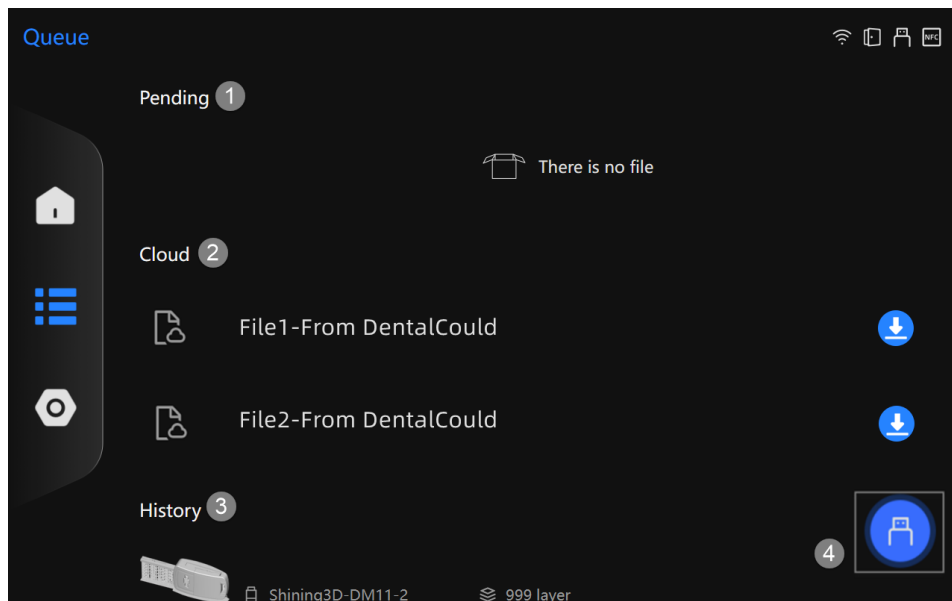


Note

Swipe up from the bottom of the screen or tap  to collapse the printer status menu.

Queue

On the **Queue** interface, browse and [select the print file](#).



Switch columns to view the introduction to each field.

① Pending Queue

Displays the files to be printed and the information of designated consumables.

Tap one file bar to check its detailed printing information:

- **Delete:** Delete the file from the queue.
- **Print:** Print the file.

② Cloud Queue

Displays the files which are [sent from the Dental Cloud](#) and the information of designated consumables.

- : Download files sent from the Dental Cloud. The downloaded files will enter **Pending** queue, for more see [select files from Dental Cloud queue](#).
- : Cancel downloading tasks.
 - Tap the download button  to download the file again;
 - Tap  button again to delete the file directly; the file can be sent through the Dental Cloud again subsequently.

③ History Queue

Displays the files having been printed and the information of designated consumables.

Tap one file bar to check its detailed printing information:

- **Export:** Export file information to the flash drive inserted to the printer.
- **Delete:** Delete the file from the queue.
- **Print:** Print the file.



Caution

When running out of the memory, the system will delete files from the bottom of the history queue.

In this case, please review uploaded print jobs on the queue page periodically, and you may need to delete files from the queue to ensure there is sufficient space left for further use, or tap **Settings** > **About** > **Restore** > **Clean up Local Files** to delete files listed in the queue by one click.

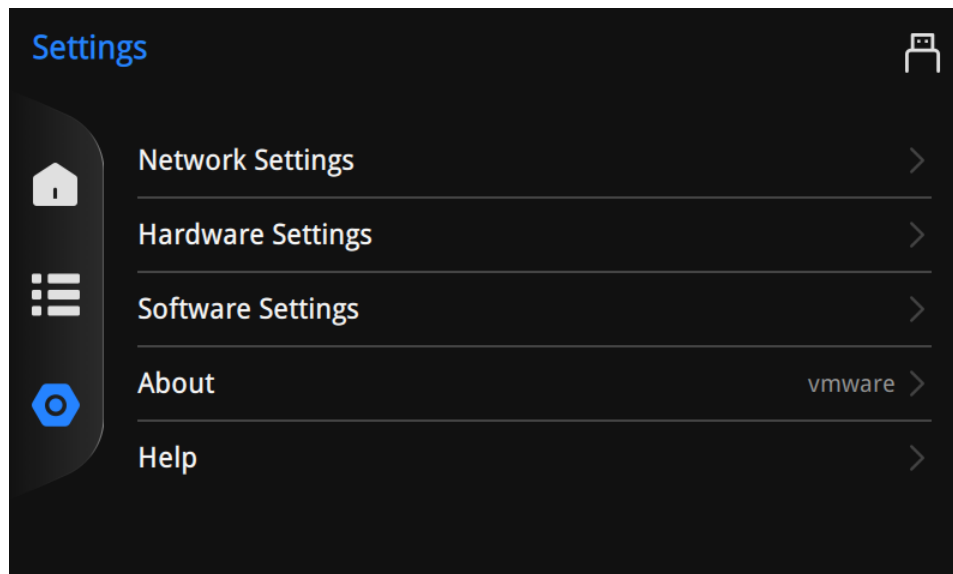
④ USB queue

After inserting the flash drive with SLP file,  icon appears in the corner of the **Queue** interface.

Tap  to enter the **Flash Drive** interface and select a file to import it to the **Pending** queue.

Settings

On the **Settings** interface, check or update current settings.



Note

The **Hardware Settings** and **Software Settings** are not available during printing. Debug the device before printing.

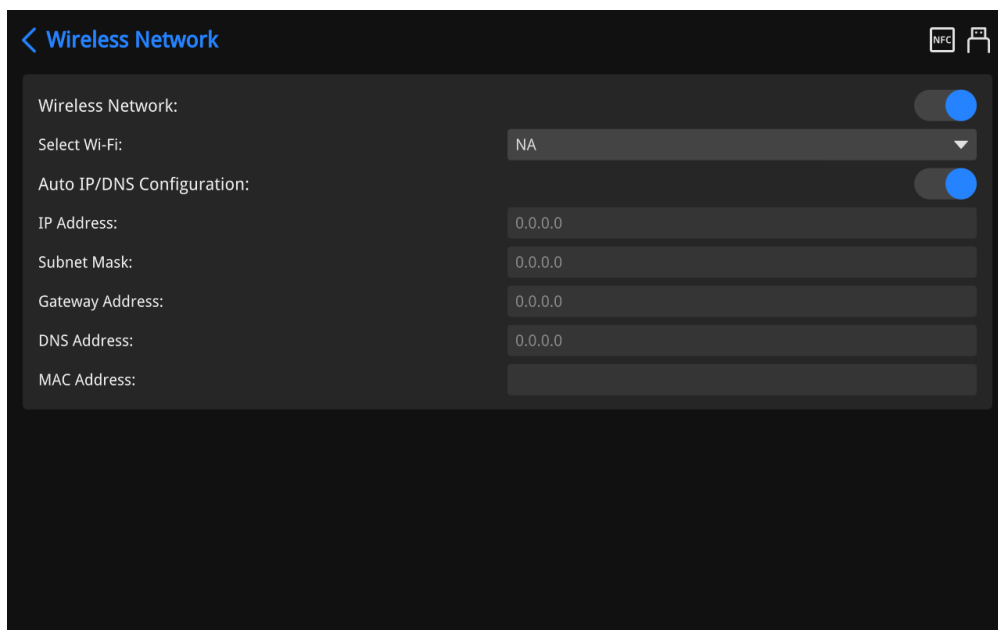
Switch columns to view the introduction of various functions.

Network Settings

- **Wireless Network:**

Check **Wireless Network** option, select a network and enter the key to connect.

The icon  will appear on the status bar since the network connection being done.



< Wireless Network

Wireless Network: ☒

Select Wi-Fi: NA

Auto IP/DNS Configuration: ☒

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Gateway Address: 0.0.0.0

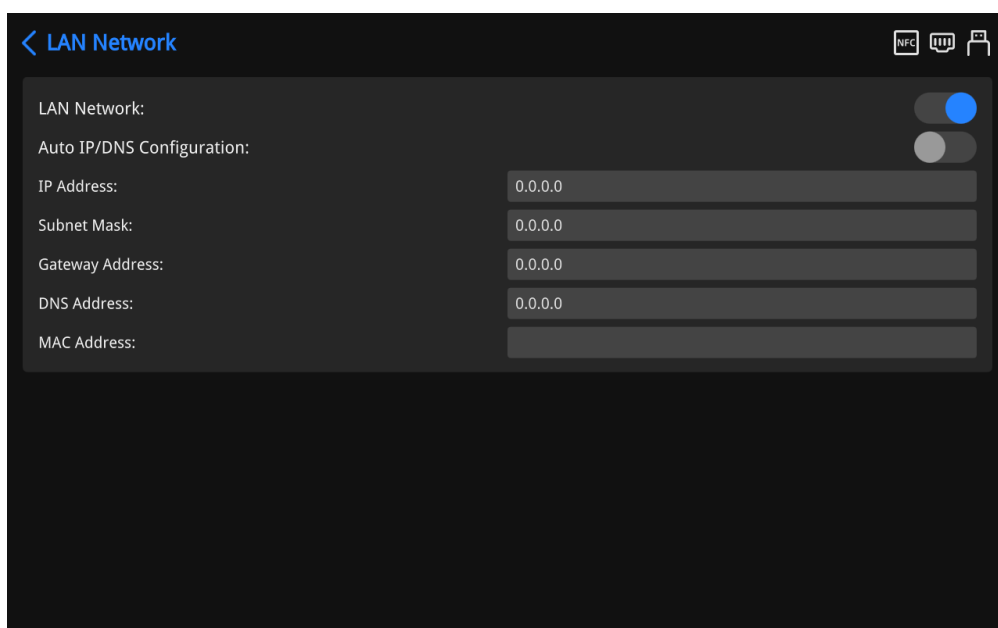
DNS Address: 0.0.0.0

MAC Address:

- **Lan Network:**

After inserting [network cable](#), check **Lan Network** option to connect.

The icon  will appear on the status bar since the network connection being done.



< LAN Network

LAN Network: ☒

Auto IP/DNS Configuration: ☐

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Gateway Address: 0.0.0.0

DNS Address: 0.0.0.0

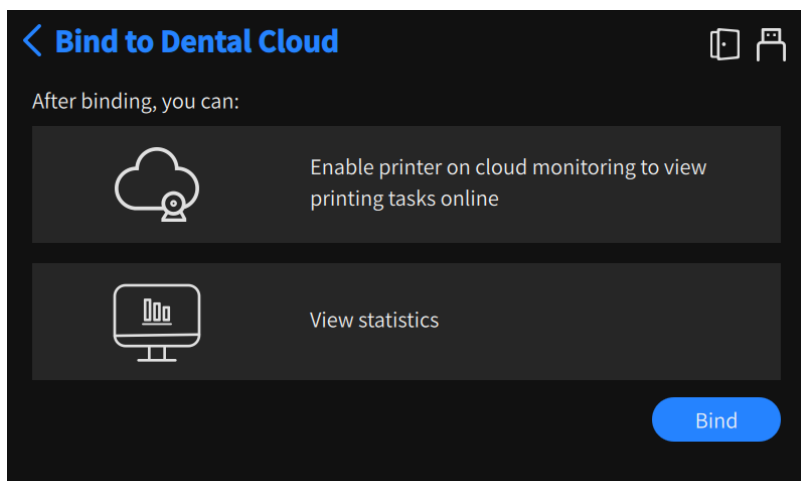
MAC Address:

 Note

Auto IP / DNS Configuration function is enabled by default, and the automatic filling of IP / DNS information suggests the network connection is successful.

- **Bind to Dental Cloud:**

Bind the printer to your Dental Cloud account, and monitor the queue status, printing status and temperature & humidity in real time on the Dental Cloud. For more see [Bind to Dental Cloud](#).

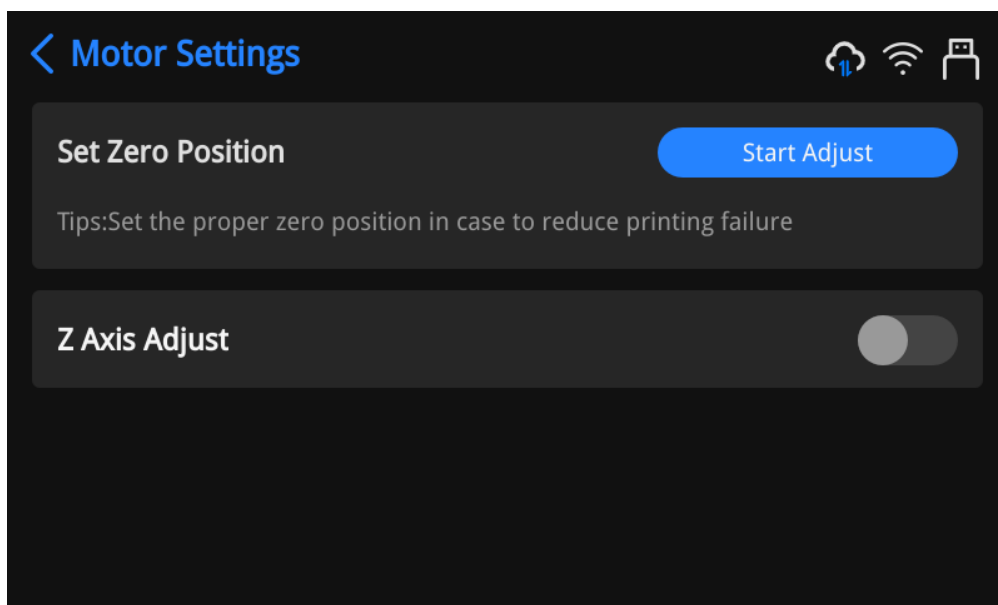


Hardware Settings

- **Motor Settings**

Caution

Before performing motor settings (such as zero position adjustment or Z-axis adjustment), it is necessary to clean the build platform and remove the resin tank to avoid the risk of collision. During the motor setting process, the build platform will move up and down. If the build platform is not cleaned or the resin tank is not removed, the build platform may collide with the resin tank, causing damage to the resin tank, resin leakage, or motor damage.



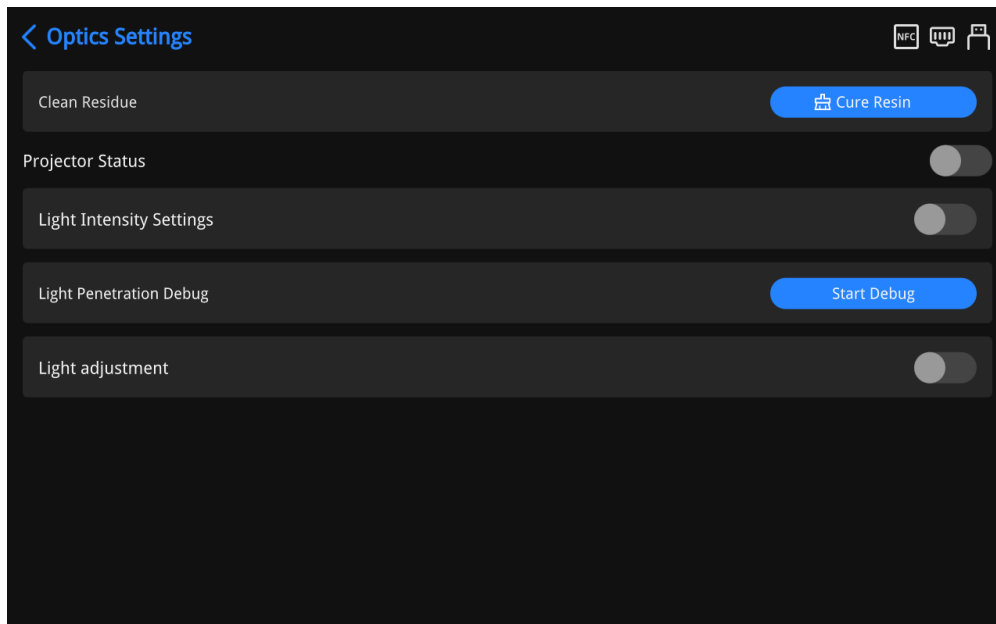
- **Set Zero Position:** Tap **Start Adjust** to enter the zero position adjustment guide. Please follow the guide to loosen the screws, lay out an leveling paper, tighten the screws, and so on.



Note

- If it prompts that "Please remove the resin tank", please follow the instructions.
- Do not perform any operations while the build platform is moving. After the prompt "Zero position adjustment successful," tap **Confirm** to return to the **Motor Settings** interface.

- **Z Axis Adjust:** Enable this function to unfold the settings columns, where you can adjust the moving distance and direction to control the build platform.
- **Optics Settings:**
 - **Clean Residue:** Tap **Cure Resin**, the printer projects LED light to cure the resin in the tank.
 - **Projector Status:** Enable this function to proceed with **Light Uniformity Verify** and **Light Intensity Correction**.



Warning

Do not change any settings of the projector unless you are manufacturer's technical staff.

- **Light Uniformity Verify:**
 - a. Please follow the instructions to remove the resin tank, clean the glass, and tap **Next**; then connect the optical power meter probe and tap **Detection**.
 - b. 13 circles will be illuminated on the software sequentially, and please place the probe on the corresponding illuminated circular spot on the projection screen to capture the light power, and the value will be recorded on the corresponding circle on the interface.

 Note

If prompted with "Verification fails", please follow the instructions to reverify.

- **Light Intensity Correction :**

- a. Please follow the instructions to remove the resin tank, clean the glass, and tap **Next**; then connect the optical power meter probe and tap **Correction**.
- b. The light will be projected onto the screen, and the printer will enter the low, medium and high power automatic calibration process, until prompted with "Automatic correction complete".

Software Settings

- **Printer Nickname:** Tap the nickname input box to rename. On the edit nickname interface, tap **Exit** to return to the software settings interface; tap **Enter** to confirm the nickname and return to the software settings interface.

- **Language :**

Tap the checkbox to select a language.

 Note

If you have inserted the [flash drive](#), it also allowed to tap **Import Language** to import the language package.

- **Activate Cover Sensor When Printing :**

When the chamber door is opened, the system will automatically pause the printing task. This function is designed to ensure printing quality and reduce security risks.

- **Auto Find FabCure/FabWash :**

With this function enabled (disabled by default), the printer will find power-on accessories (FabCure & FabWash) automatically and synchronize the data about the print material; and a window will pop up on the screen of an idle printer when any accessory which can be connected is found, and tap **Connect** to connect the accessory. Three connection status are listed as follows:

-  Connecting: The connection period is 0s ~ 30s, and if the connection is successful, it will display "Connected"; if it fails to connect after 1 min, it will be deemed as "Connection fails", when you can tap **Manual Connection** in the lower right corner.
-  Connected: Display the firmware version, curing parameter package version and the switch (enabled by default) for automatic synchronization of printing parameters.
-  Disconnected: On the interface of "Connected", tap "Disconnect" in the lower right corner to manual disconnect the accessory.



Note

- Each printer can connect to a maximum of one FabCure and one FabWash.
- The pop-up notification for attachment connection only appears on the **Home/Queue/Settings** interface, and the attachment which is in the **Network Settings** interface can not be found.
- If the wireless network signal to which the printer is connected is weak, it may affect the automatic search function.
- After the printer successfully connects to the accessory, if there is a power outage and reboot, it will automatically reconnect to the same accessory within the same local area network. If the network environment is switched, the connection status will change to "disconnected," and upon switching back to the original local area network, it will automatically reconnect.
- After the printer and the accessory are connected automatically, the accessory will synchronize the print material of the slice file when the print completes; if the connected accessory is still in operation, it will synchronize related data afterwards.
- After the printer and the accessory are connected automatically, the accessory's material package and firmware will be automatically checked for updates. When a new version is detected, the software will provide a pop-up prompt.

• Push Updates :

Enable **Push Updates** option, and the software will display a prompt for [update](#) when there is a new version of the system or material packages available for download.

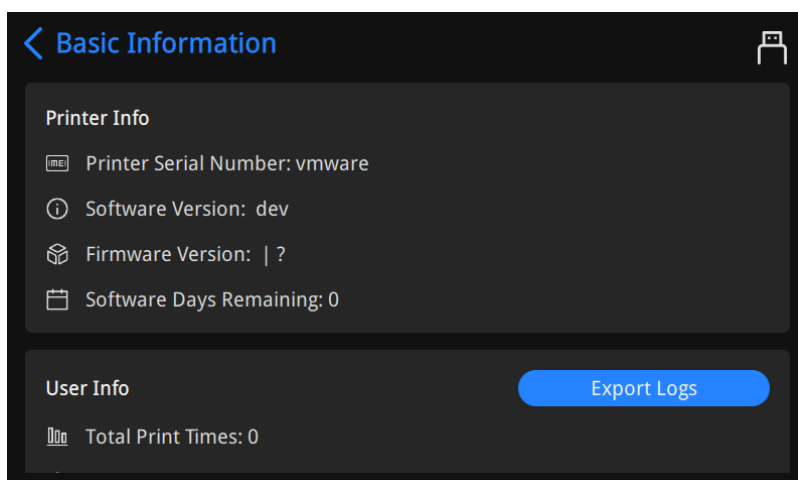
• Skip Print Wizard :

Enable **Skip Print Wizard** option, the printer will directly enter the [Home interface](#) after boot-up.

About

• Basic Information:

Displays the serial number, the version number, and the work log.





Note

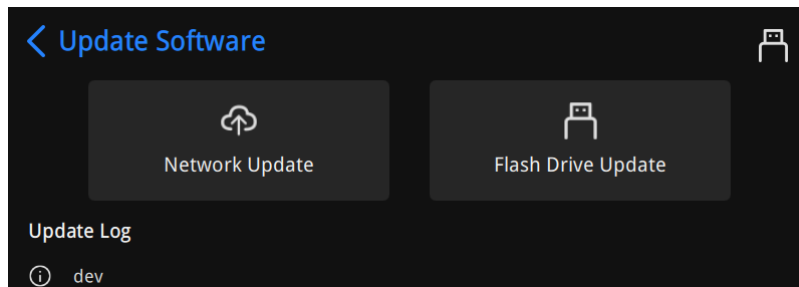
After inserting the flash drive, tap **Export Logs** to export the work log to the flash drive inserted.

The log records the volume of materials used in each completed printing task and the temperature & humidity of the last 20 printing tasks for traceability.

- **Update Software:**

When a new version is available, tap **Update Software** to choose **Network Update** or **Flash Drive Update**.

When there is an update to environment library files, you need to update it via network or flash drive.

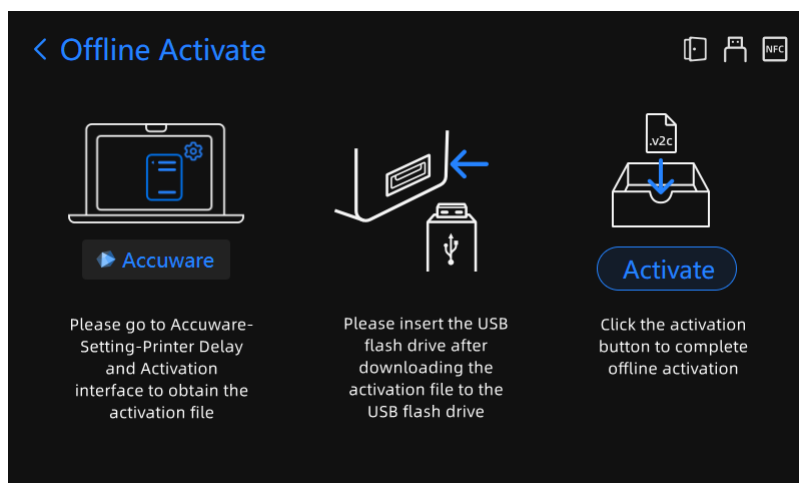


Note

Please [connect to the Internet](#) before updating environment library files.

- **Activate License:**

If the software has not been activated yet, it is suggested that tap **Activate License** and follow the instructions below to complete offline activation.



Note

When you are prompted that the remaining days are insufficient, please [contact SHINING 3D technical supporters](#) to process activation with the activation file.

- **Recovery:**



: Burn all the data;



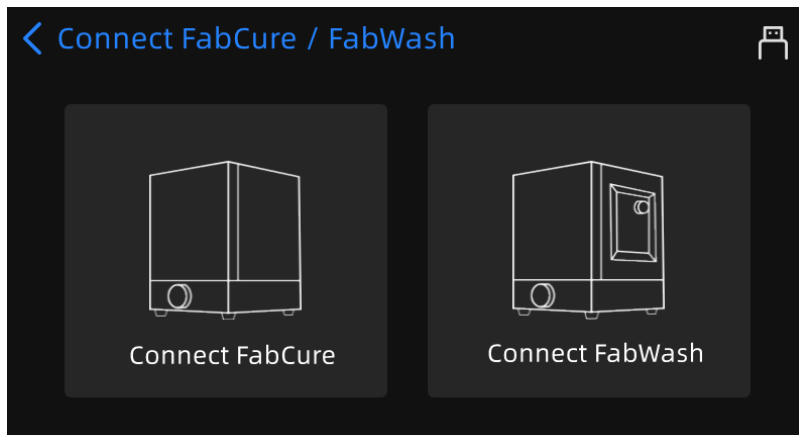
: Clear files on the [Queue interface](#);



: Restore default settings.

- **Connect FabCure / FabWash:**

After connecting to wireless network, tap **Connect FabCure / FabWash** and enter the hot-spot code of FabCure / FabWash to share their network signal.



Note

- It is recommended that you enable [Auto Find FabCure/FabWash](#) in the software settings.
- A printer can assist the networking of multiple FabCure / FabWash.

Help

- **User Guide:**

Tap to enter the [User Guide](#).



Note

If this is the first boot-up, the software will walk you through the User Guide automatically.

- **User Manual:**

Tap **User Manual**, scan the QR code, and view the web version of the User Manual.

User Guide

Activation Guide

The User Guide includes the **activation guide**, the [installation guide](#), and the [sample print guide](#).



Note

- If this is the first boot-up, the software will walk you through the User Guide automatically.
- If you need to re-enter the User Guide later, go to [Settings](#) > [Help](#) > [User Guide](#); tap **Skip All** to exit the User Guide and return to the **Settings** interface.



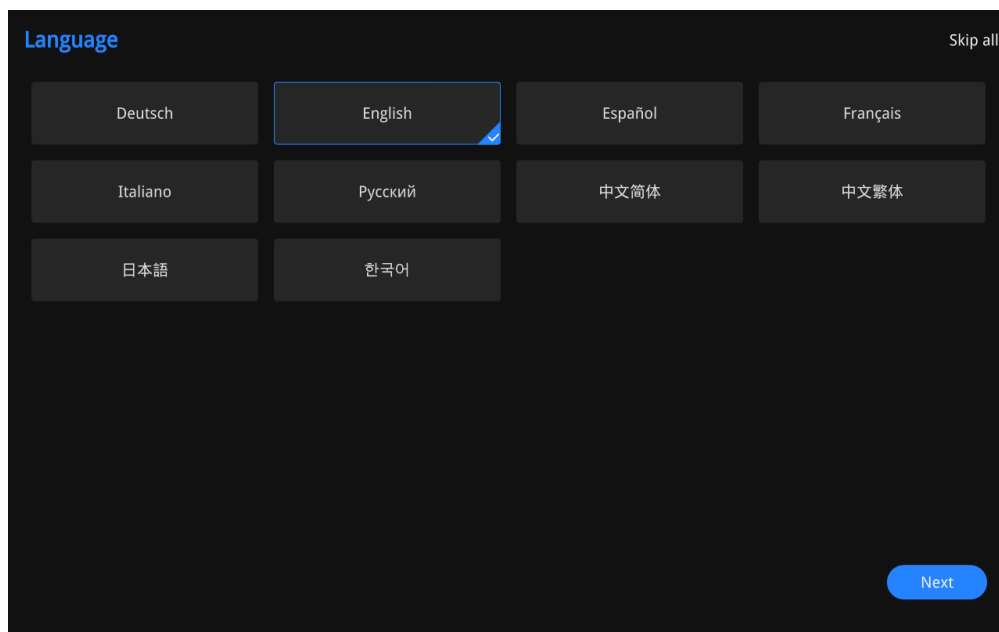
Caution

- Check whether the build platform moves normally, whether the light processing system works normally, and whether the sample is printed normally during the guidance process. If there is any problem, [contact SHINING 3D technical supporters](#) for help.
- Damage to the device, data loss and any other accidents caused by procedures not specified in this Manual are not covered by the warranty.

Please follow the instructions to activate the license:

1 [Select the language >](#)

The printer comes pre-installed with 10 languages: **Chinese, English, Traditional Chinese, Japanese, Korean, Russian, French, Italian, Spain, German.**



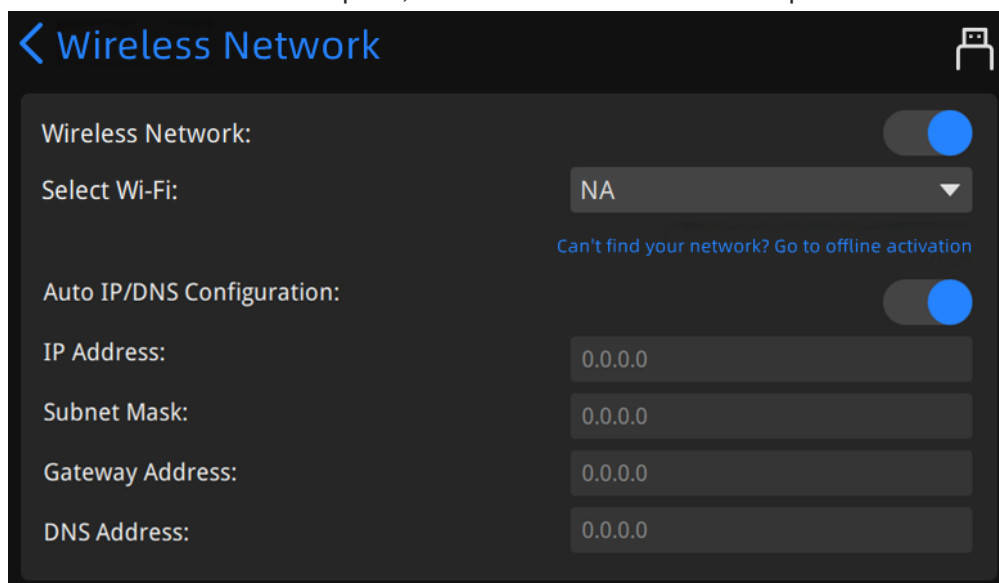
Note

To change the language later, go to **Settings** > **Software Settings**, tap the language selection box and choose the target language. Alternatively, insert the provided **USB flash drive** and tap **Import language** to import more language packs.

2 Connect to the network >

Wireless Network

Check **Wireless Network** option, select a network and enter the password to connect.





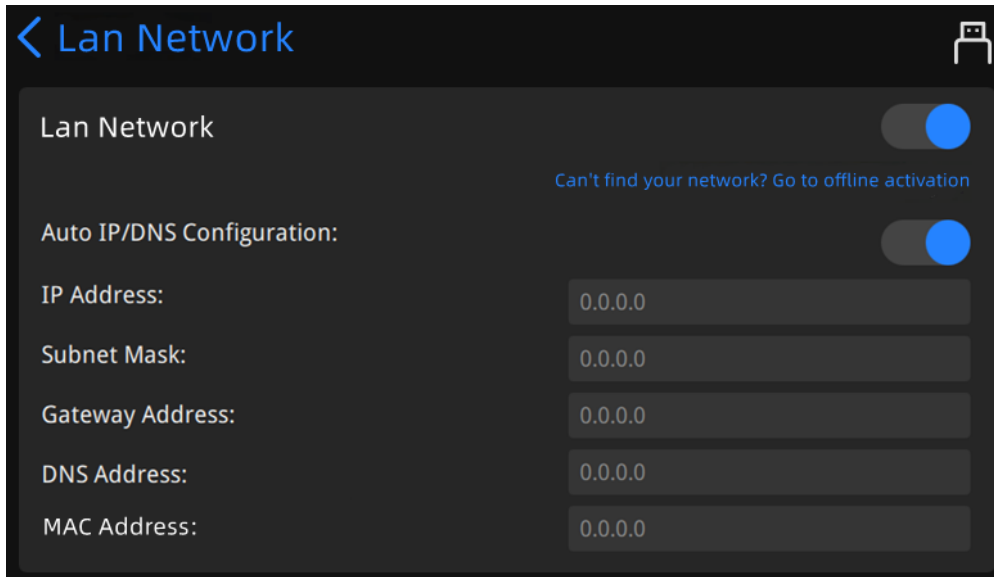
Note

- After a successful connection, the  icon will appear in the status bar.
- In demo mode, you have only 10 printing chances. When the remaining print times reach 0, you must activate the license promptly.

- **Successful Connection:** Tap the **Demo Mode** button, then **Confirm** to enter demo mode. This will guide you through the [printer installation](#) and [sample printing](#). Alternatively, tap **Next** to proceed with online activation.
- **Failed Connection:** You can still **Enter Demo Mode** or **Retry**. If you can't find your network, go to **offline activation** to activate the license via offline activation.

Lan Network

Insert the Ethernet cable into the network port, then enable the **Lan Network** option to connect.



Note

- After a successful connection, the  icon will appear in the status bar.
- In demo mode, you have only 10 printing chances. When the remaining print times reach 0, you must activate the license promptly.

- **Successful Connection:** Tap the **Demo Mode**, then **Confirm** to enter demo mode. This will guide you through the [printer installation](#) and [sample printing](#). Alternatively, tap **Next** to proceed with online activation.
- **Failed Connection:** You can still **Enter Demo Mode** or **Retry**. If you can't connect, tap the text button "Can't find your network? Go to offline activation" to activate the license via offline activation.



Note

- **Auto IP / DNS Configuration** function is enabled by default, and the automatic filling of IP / DNS information suggests the network connection is successful.
- Later you can go to [Settings](#) > **Network Settings** to set the network.

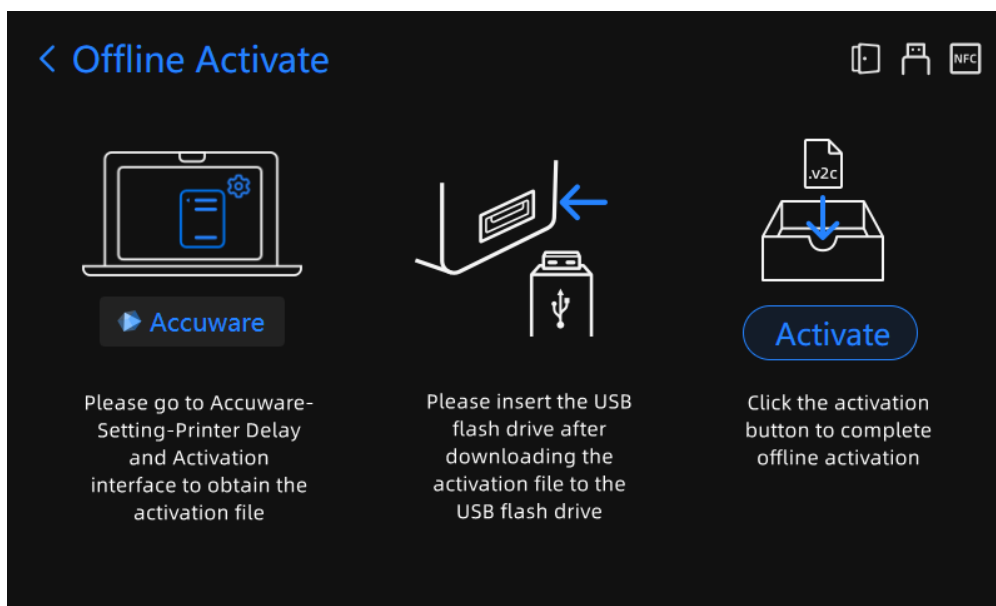
3 Activate the license

- **Online Activation:**

Scan the QR code on the interface or enter the given website address manually, and follow the instructions to complete online activation.

- **Offline Activation :**

On the **Wireless Network** or **Lan Network**, tap the text button "Can't find your network? Go to offline activation", and follow the instructions as shown below to complete offline activation.



After activating the license, please follow the instructions to [install the printer](#).

Installation Guide

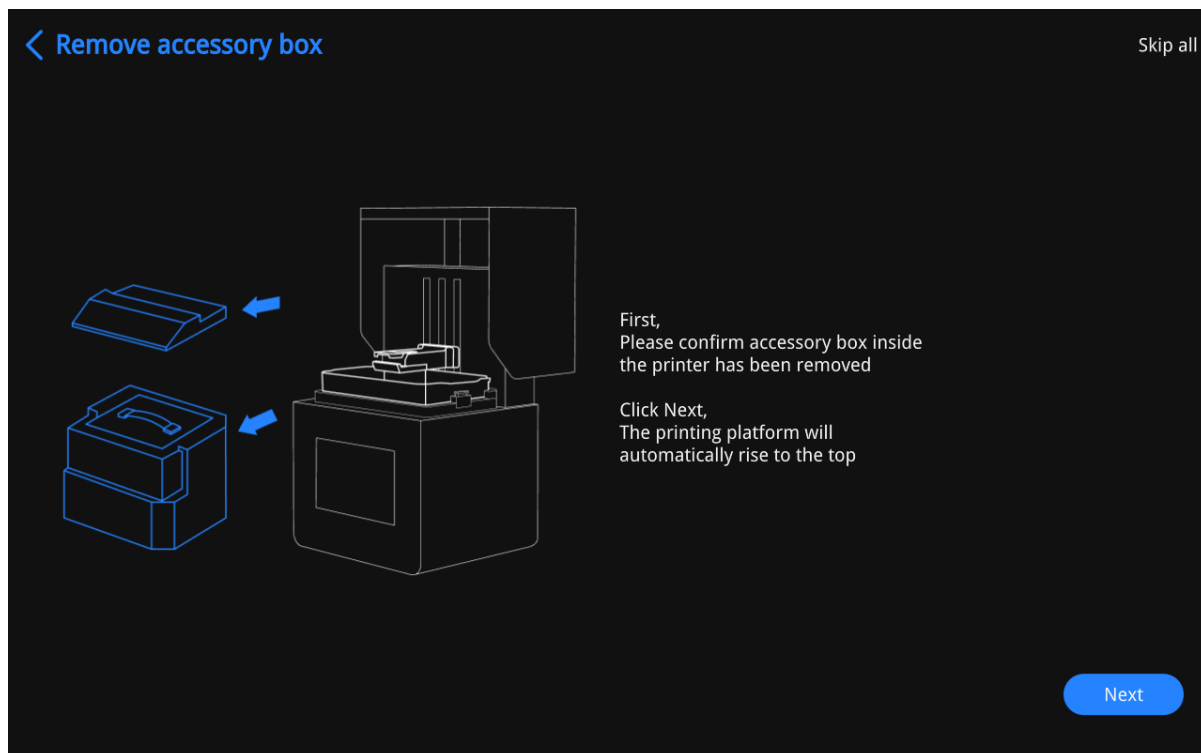
Please follow the instructions to complete the following operations step by step: **Remove Accessory** > **Remove Protective Film** > **Install Resin Tank** > **Install Platform** > **Start Settings**.

Warning

Please read and understand all relevant [safety instructions](#) and [environment requirements](#) thoroughly before installing the printer, and ensure that there are no dust-generating devices, direct or intense sunlight when working with the printer, and the working platform is clean and level.

1 Remove Accessory >

Please follow the instructions to remove the accessory box, and the build platform will automatically rise to the top.

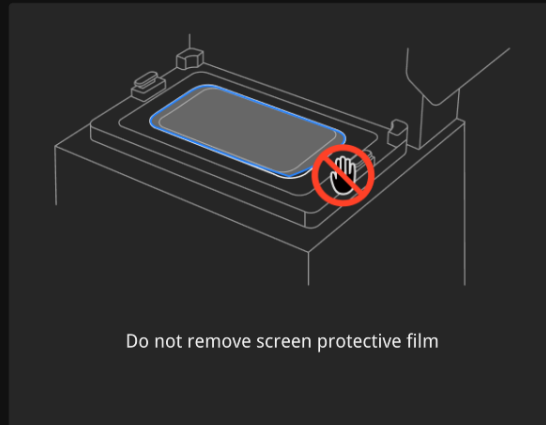


2 Remove Protective Film >

Please follow the instructions to remove protective film.

< Remove protective film

Skip all



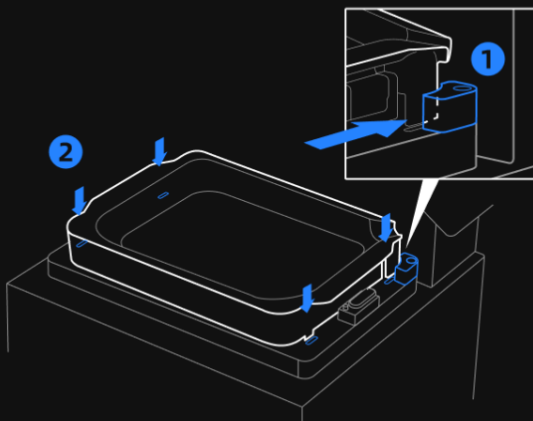
Next

3 Install Resin Tank >

Please follow the instructions to install the resin tank.

< Install resin tank

Skip all

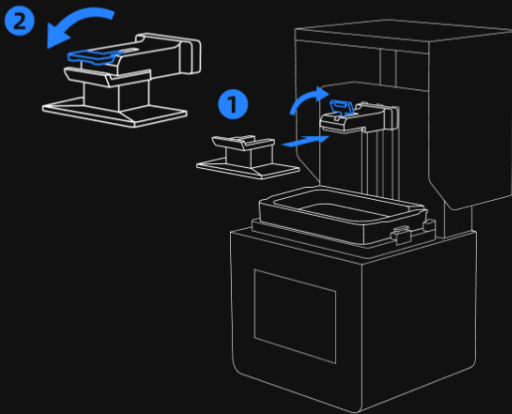


Insert resin tank into printer slot and push it into place

Next

4 Install Platform

Please follow the instructions to install the build platform, and press the handle down.



Install platform on the printer and
press the handle down

Next

5 Start Settings

Set the switch status for **Activate Cover Sensor When Printing**.

Tips: If the chamber door is opened during printing, the printing task will automatically pause. You can also modify this setting on the Settings-Software Settings page.

Activate Cover Sensor When Printing:



Finished



Note

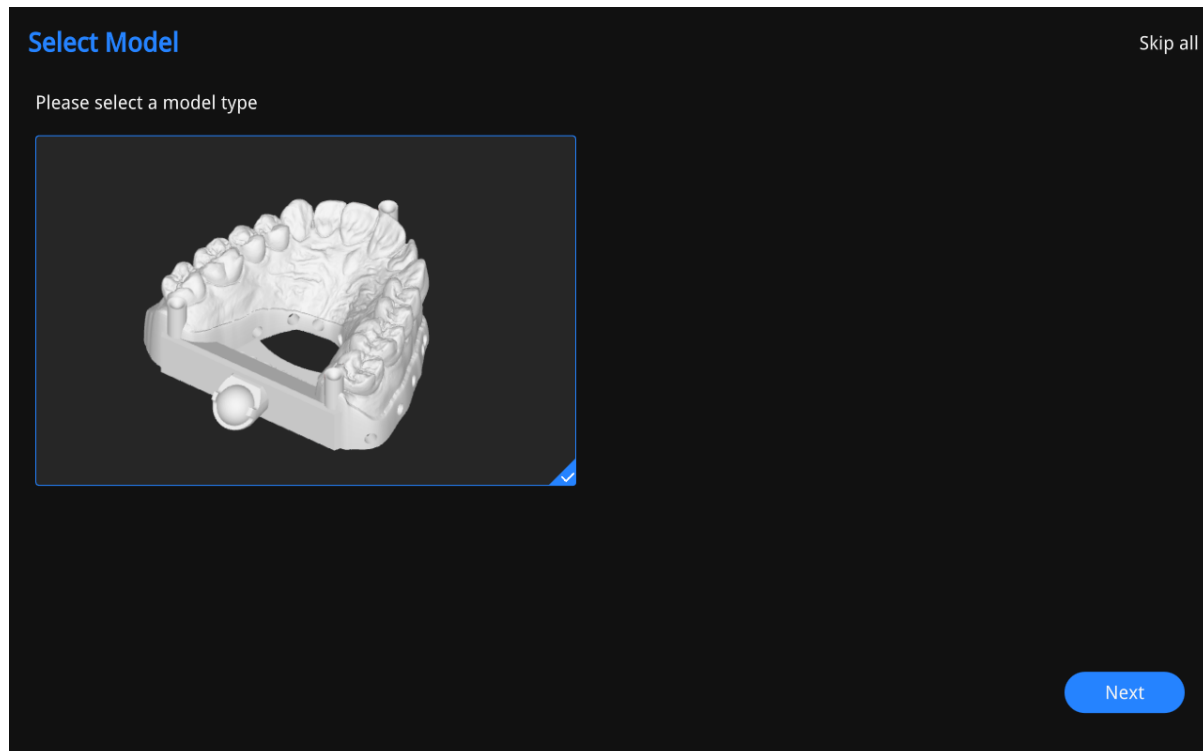
You can go to **Settings** > **Software Settings** interface to change operation settings afterwards.

After installation, please follow the instructions to [print sample models](#).

Sample Print Guide

Please follow the instructions to complete the following operations step by step: **Select Model** > **Add Resin** > **Select Resin** > **Cabin Inspection** > **Detail** > **Print Detail**.

1 Select Model >



2 Add Resin >

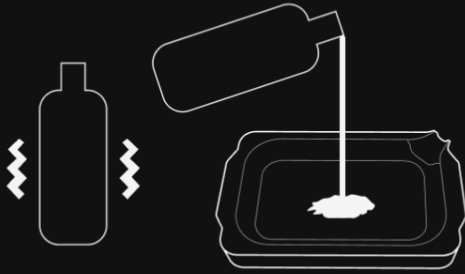
Warning

Please read and understand all relevant [notice for material](#) thoroughly before adding the resin.

Shake the resin bottle for about 2 minutes, and then pour the fully shaken liquid resin into the material box.

Add resin

Skip all



First:
Shake the bottle evenly for 2 min, then
pour resin into the tank

Tips:
Keep resin level between min and max

Back

Next



Note

Users can add resin during printing without interrupting the printing process.



Caution

Keep the level of liquid resin between the MAX and the MIN lines so as to prevent the liquid resin from splattering during printing and ensure the printing effect.

3 Select Resin >

Tap to select the brand and type of the resin to be added.

Select Resin

Skip all

Please select the name of resin you added

Tips: Uncertified materials are not guaranteed for printing result, This sample is for standard materials only

Brand

Shining3D

Type

DM12 (dental model)

Back

Next



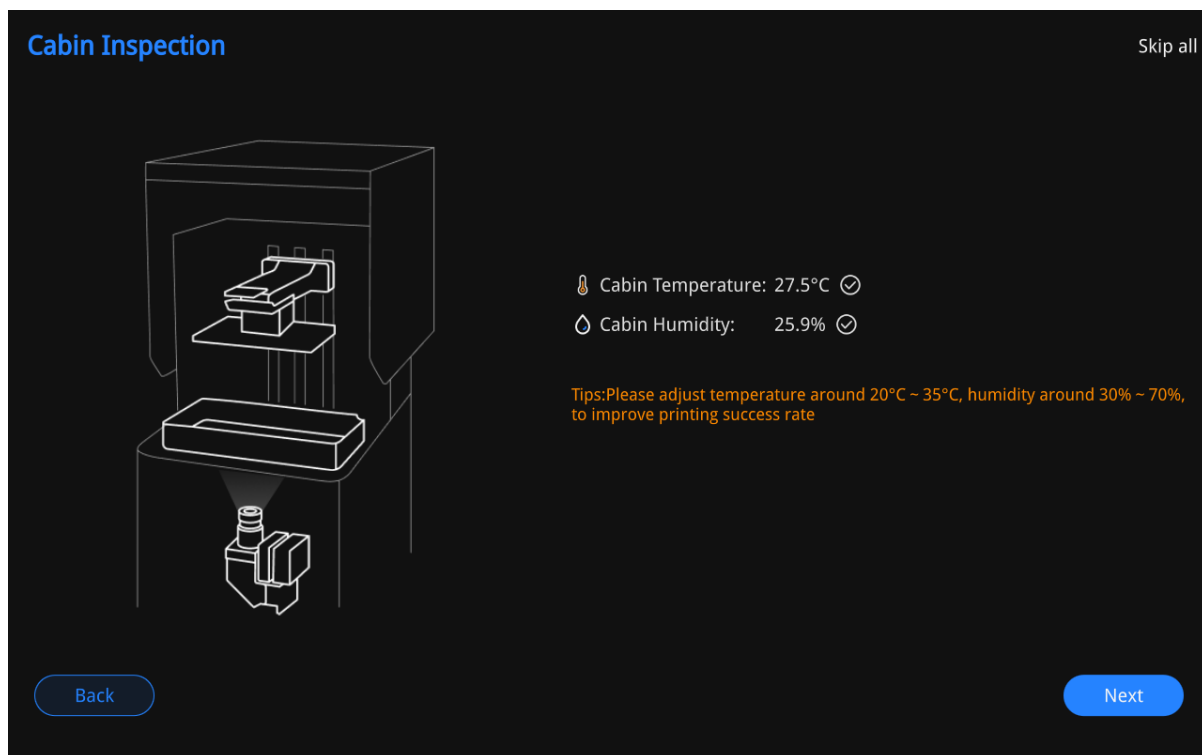
Caution

- The printing effect can not be guaranteed if the used printing material is not included in the list.
- Select the brand and type of resin actually added to the tank, or the printing may fail; If the resin type is not listed out, select **Others**.

4 Cabin Inspection >

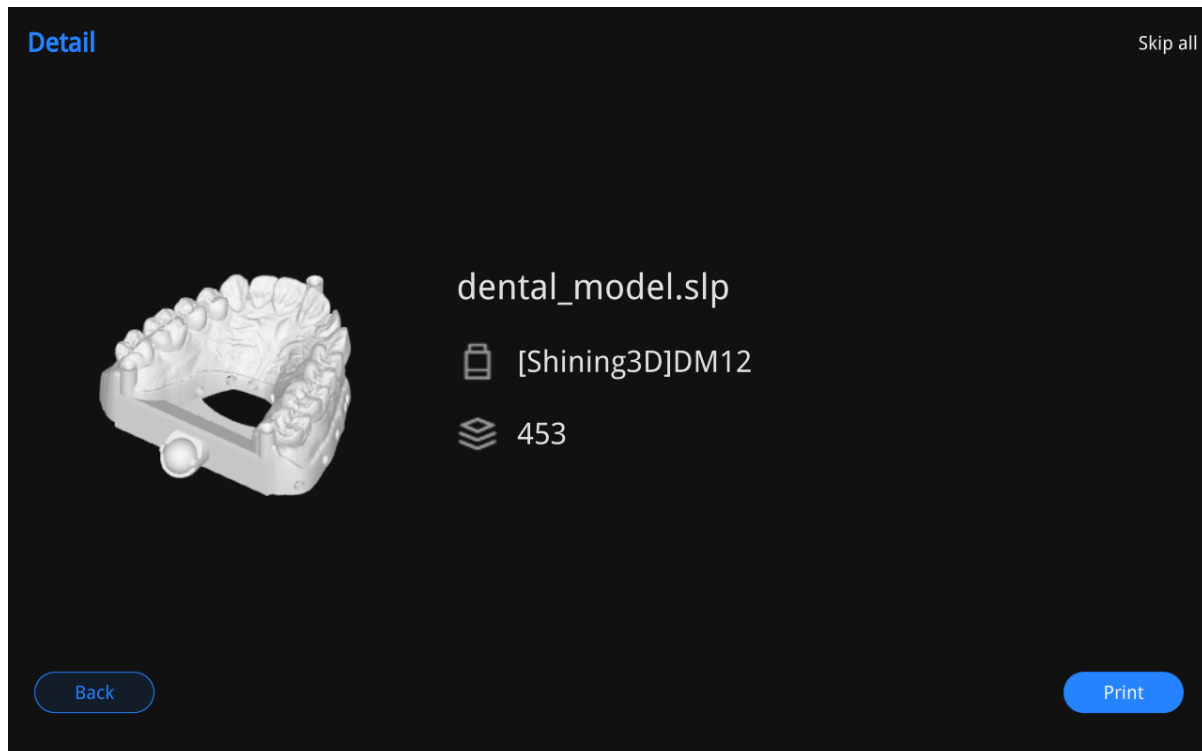
Please ensure the humidity and the temperature meets [environmental requirements](#).

If the temperature or the humidity inside the cabin does not meet requirements, the next step cannot be performed, as shown in the figure below.



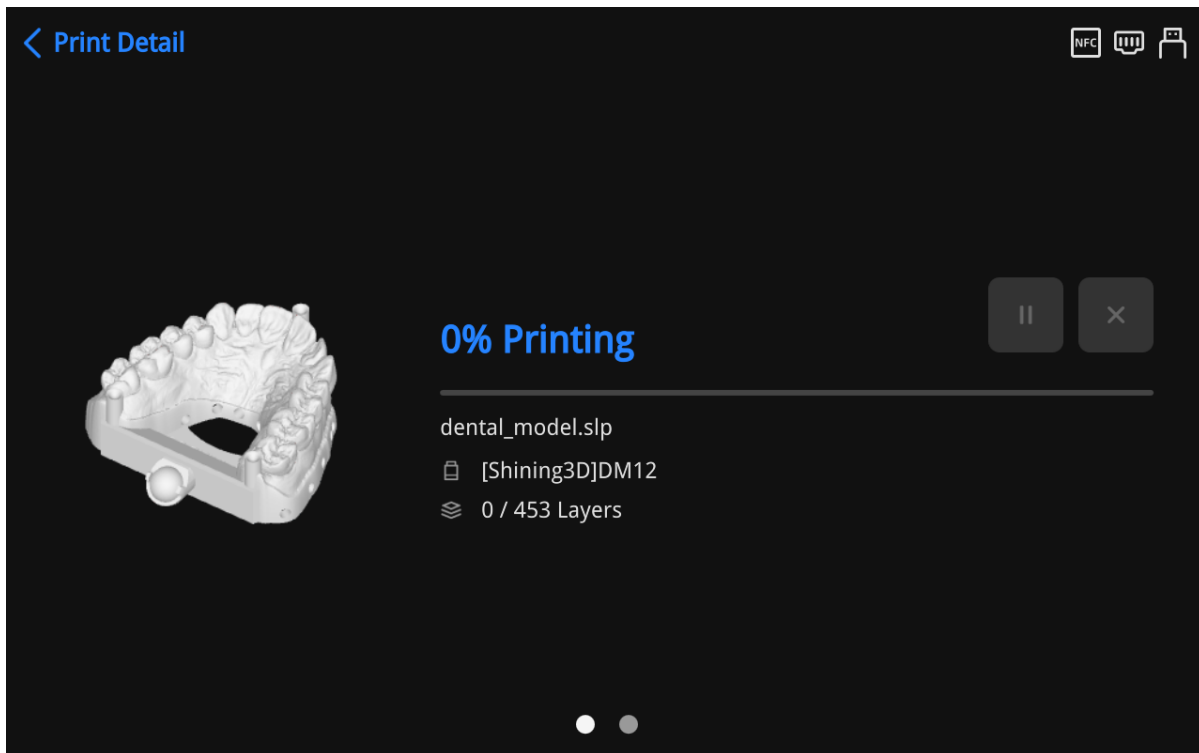
5 Detail >

Check the brand and type of the used resin and the number of slices of the sample model.



After confirming the information, tap the **Print** button to start printing the sample model.

6 Print Detail



Slide to switch between the left and right interface.

Left interface

Displays the name of the slice file of the sample model, the name of the used resin, the printing status, the estimated end time and other information related to the current printing job.



: Pause printing.



: Resume printing.



: Aborts the current print job and return to the [Home interface](#).



Caution

Please use the pause button with caution, as interrupting the printing task will lead to errors in the connection of slices and affect the printing effect.

Right interface

Displays the printing status, the thickness of slices, the serial number and other information related to the current printing job.

After the sample model is printed, the printer will sound 5 beeps, and the touch screen will display **Printing Completed**.

Now you can tap **Return** to return to the [Home interface](#); meanwhile, the build platform will rise to the top of the printing chamber and the printed model will be suspended.

About DentalCloud

Bind to Dental Cloud

Binding the printer to your Dental Cloud account for unlimited cloud storage and real-time [monitoring](#) and [managing](#) printers.



Note

The printer can only be bounded to 1 organization.



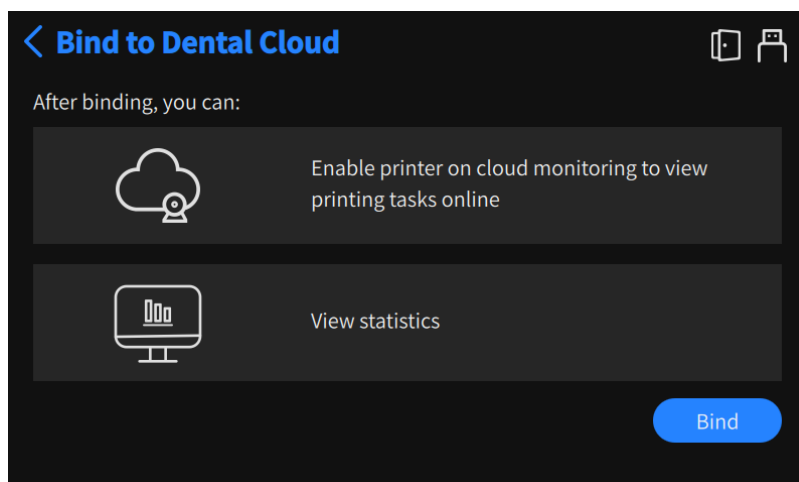
Caution

- **Administer Authority:** Only administer's accounts have the authority of adding printer to the Dental Cloud.
- **Net Requirement:** Binding the Dental Cloud account and all the other functions on cloud necessitates [the connection of the Internet](#).

Please follow the instructions below to bind the printer to your Dental Cloud account:

Step 1 >

Tap **Settings** > **Network Settings** > **Bind to Dental Cloud**, then tap **Bind**.



Caution

The printer should be [connected to the Internet](#) before being bound to the Dental Cloud, and [environment library files](#) should be updated as well.

Step 2 >

Tap  for loading the binding code.

< Bind to Dental Cloud

Enter the binding code on add printer page of Dental Cloud to complete connection

Printer Serial Number:

Binding code 

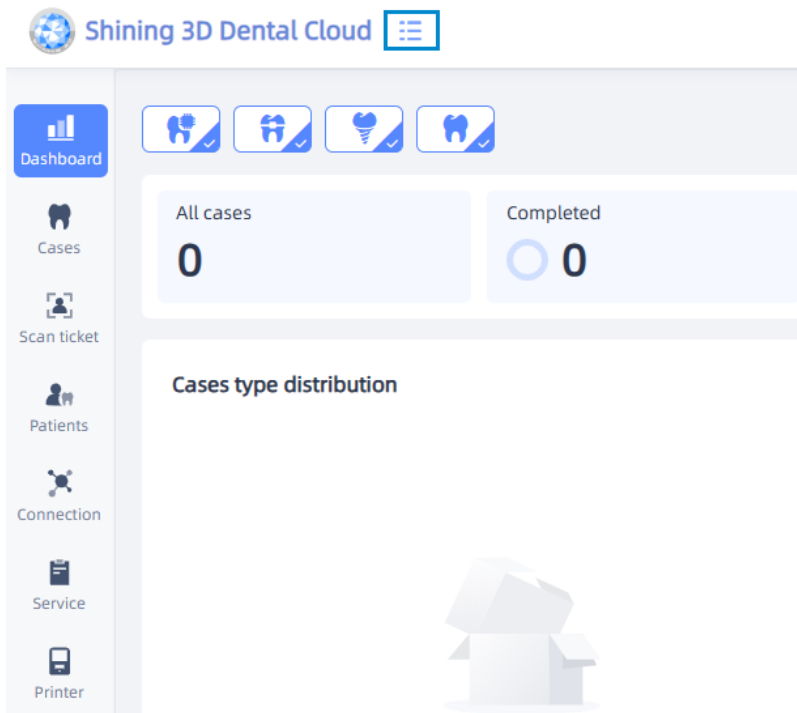
Dental Cloud Address:
<https://www.dental3dcloud.com/p/index>



Step 3 >

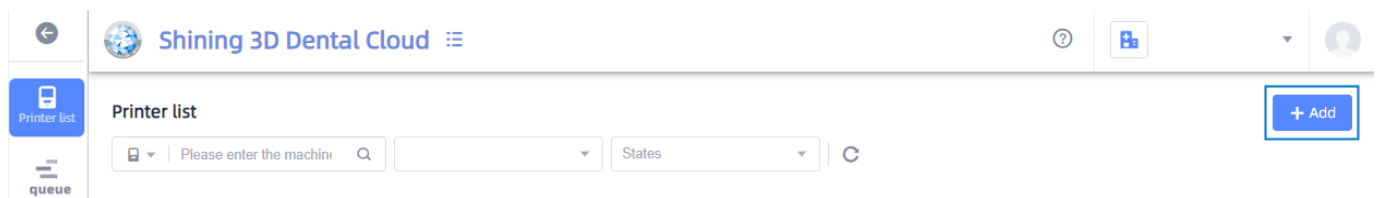
Open [the Dental Cloud](https://www.dental3dcloud.com/p/index) website through the QR code or the link on the interface.

Login with administrator account to the Dental Cloud, then click  to expand the left-side menu bar and select  **printer**.



Step 4 >

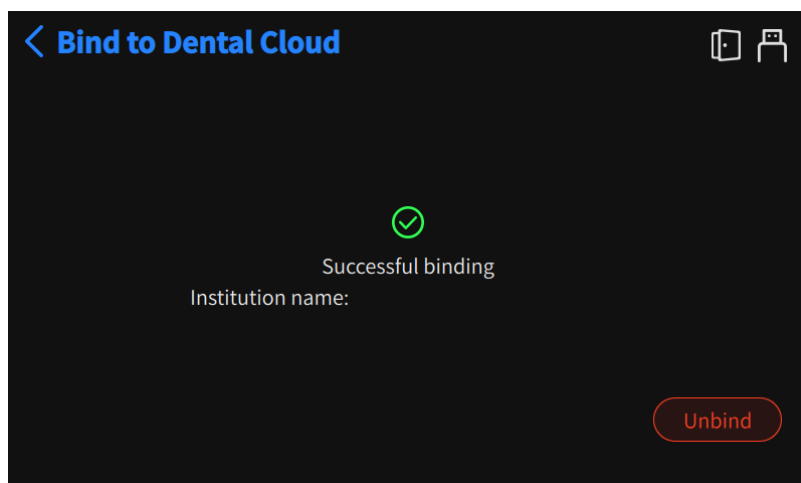
Click **+ Add** and enter the binding code.



Step 5

Click **Connect**, the data to printer will be loaded and added to the head of the **Printer List**.

Meanwhile, the touch screen displays **Binding Successfully** message and the Dental Cloud icon  appears on the status bar.



Note

- Dental Cloud icon:
 -  : The connection works.
 -  : The signal is missing, please check the network connection to the printer.
- To unbind, tap **Unbind** button on the touch screen and **Confirm**, or login with administrator account on the Dental Cloud and then process **unbinding** steps on the Dental Cloud. After unbinding, the data to the printer will not be displayed on the Dental Cloud anymore; to find back the missing data, just rebind the printer to the original organization.

Dental Cloud Operation

After [binding the printer](#) to your Dental Cloud account, you can [monitor](#) the printer and the status of print jobs in real time as well as [managing](#) printers.



Note

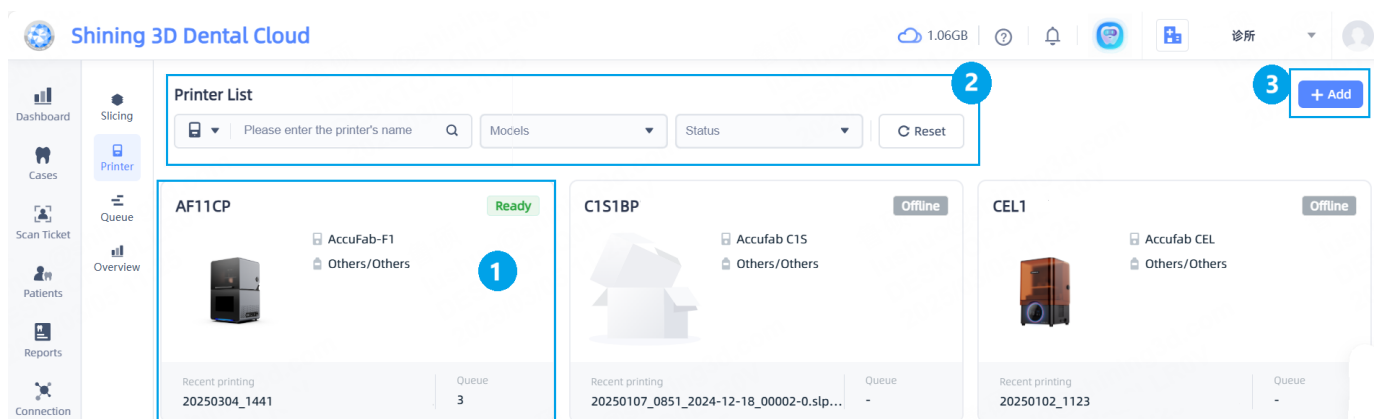
The Dental Cloud tracks data from printers and supports real-time data updating.

Dental Cloud Page



Printer list

All the printer data belonging to the current organization is arranged in the order of the most recent printing completion time and the printer, as shown in the figure below.



① Printer cards:

- Click to get detailed information to the machine (including temperature&humidity, the version of software&hardware, resin tank usage, printing data overview, etc.); for more, please expand the **Note** section below.
- Click **Queue** on the bottom-left corner of the card to enter the **Queue** page while tracking the location of current machine.

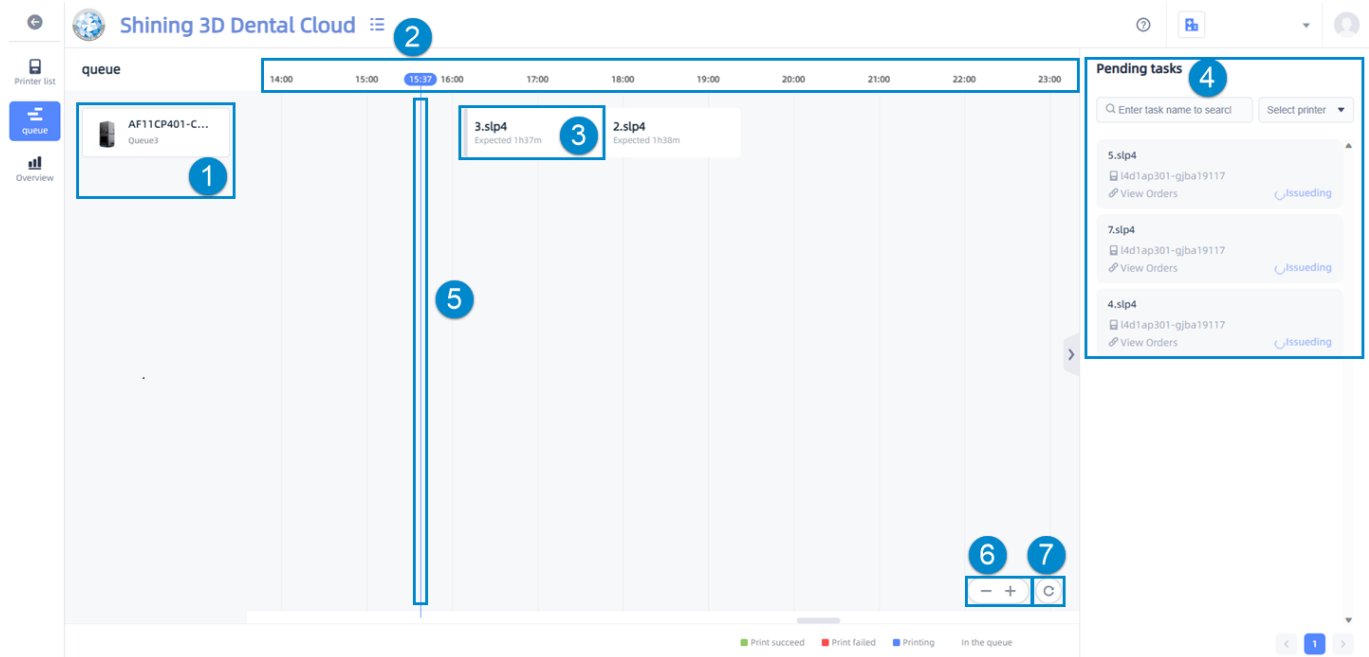
② **List Admin Widget**: Use filtering conditions such as machine name, serial number, type and status to [manage the Printer list](#).

③ **+ Add Button**: Enter the binding code to add printer to the list.



Queue

The **Queue** page records the tasks to all printers bounded to the current organization one week time before and after (14 days) clearly in the form of task cards, as shown in the figure below.



① **Vertical axis:** A list of all printers bounded to the current organization.

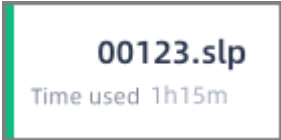
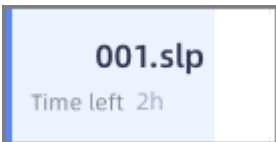
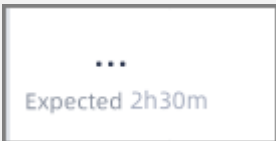
② **Horizontal axis:** Time axis.

③ **Task card:** Click on the card to check detailed information about the corresponding printing task (including the number of printing layers, layer thickness, total duration, etc.); for more, please expand the "Note" section below.



Note

There are 5 different statuses to printers reflected by various printer cards, as shown below.

Task Cards	Description
	Print succeed
	Print failed
	Printing
	In the queue



Note

- Task cards other than "in the queue" ones show their actual working time, while "in the queue" task cards array equidistantly and indicate estimated time through their length.
- Printing tasks can not be canceled, and tasks in the queue can be cancelled or deleted manually.
- Tasks in the queue correspond to that in the **Pending queue** of the printer: By dragging and adjusting the order of tasks in the **Queue** page, the **Pending** queue of the printer will also be changed; if a pending task is cancelled due to limited insufficient storage space or other reasons. the corresponding task card will also disappear, and the task can be reissued in the **Pending tasks** list.

④ **Pending tasks:** All the printable files that have not yet been issued by the current organization display the name of the task and the designated printer.

- Support fuzzy search task name or search based on the filtering condition of pinter.
- Click each task bar to go to the details page of the corresponding order.

- Click **issued** button to issue print tasks to the printer's **Cloud queue**.



Note

If the task is not issued successfully, please check the reason for failure in the **Pending tasks**.



Note

Here are methods facilitating seeking target tasks on the time line:

- Zoom in / out the timeline:** Use ⑥ **Zoom Widget**.
- Move forward or Backward in time:** Press and drag the left mouse button, or drag the horizontal scroll bar.
- Return to the current time:** Use ⑦ **Refresh Widget** for locating to ⑤ **Current Time**.

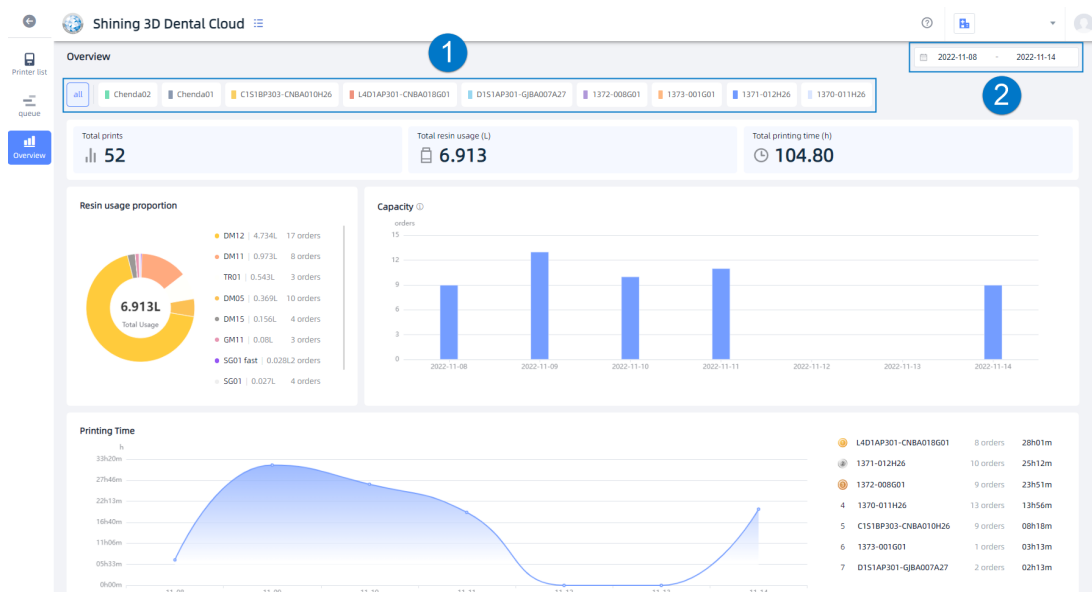


Overview

The **Overview** page displays various graphs relating to selected machine(s) within chosen day(s) for making the data self-explanatory.

① **Printers buttons:** Select **all** for viewing the data overview to previous organization in default; select one printer for viewing the printing record to one machine; select multiple printers for comparing the data between them.

② **Calendar:** Select **The day, In 7 days, In 30 days**, or choose start and end date manually by using the calendar, the duration shall be no longer than 7 days.



Monitoring Printing

Check States

Enter the  **Printer List** page for checking printers' status.

Click the printer card to get the real-time temperature and humidity, hardware and software information, printing history and overview data of machine.

Check Ongoing Printing Tasks

Check Ongoing Printing Within the Printer List

Find printer card(s) with **printing** tag, click the card to get detailed message such as **the progress bar to previous task**.

Check Ongoing Printing Within the Queue

Click  for returning to the current time.

Find the current task card(s), which being marked in blue and being divided by a vertical blue line. Click the card to get detailed message such as **printing time predication**.

Check History Printing Tasks

Check History Printing Tasks Within the Printer List

Click target card and then click **history** for entering the printing history page and viewing **the information of all the history printing tasks to this machine**.

Check History Printing Tasks Within the Queue

Press and drag the left mouse button, or drag the horizontal scroll bar to the right to find the target card.

Click the card to view **the information to the target task**.

Enable Printing Status Notification

Unfold the account management list in the right upper corner select **Notification**.

Enable the function and set receiving methods by clicking **Notification for printing status changing** sliders. The system will send the error message to the people uploading the printing task as set.

Notification

Description

Email



Messages



Order notice

Notice of new order



Notice of order received



Notice of new design



Notice of new logistics



Notice of states change



Notification for printing status changing



Note

The system will send the error message to the administrator instead if can't find the certain people uploading the printing task.

Charge Printers

Enter the printer list for charging printers.

Search Printers



Please enter the machine



Input keywords, then click  to filter printer(s) with this keywords in its name or serial number.

Filter by Models

Models



Click the **Models** search box and select a model to filter printer(s) of the same model.

Filter by States

Click the **Status** search box and select a states to filter printer(s) of the same states.

Update Data

Click  for resetting screen condition(s) and loading the latest data of printer(s).

Bind

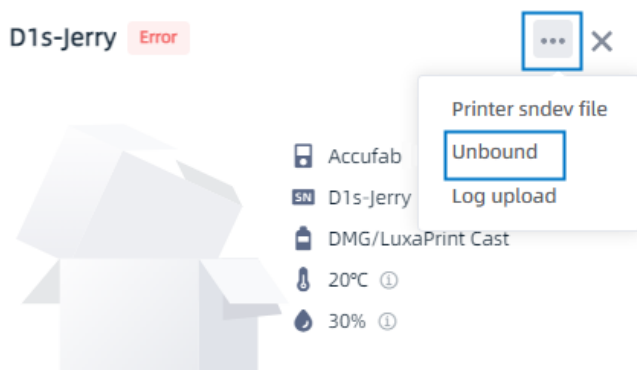
Specific operation steps are provided in the [Binding Dental Cloud Account](#) section.

Unbind

Caution

The **Unbind** function on Dental Cloud is only available to the administrator account.

To unbind, click the card of the target printer and click ... button on the detail information page, than select **Unbind** and confirm. The software built in printers also support the unbind function.



**Caution**

After unbinding, the data to printer will not be displayed on Dental Cloud anymore. To find back the missing data, rebind the printer to the original organization.

Printing Process

Power On & Off

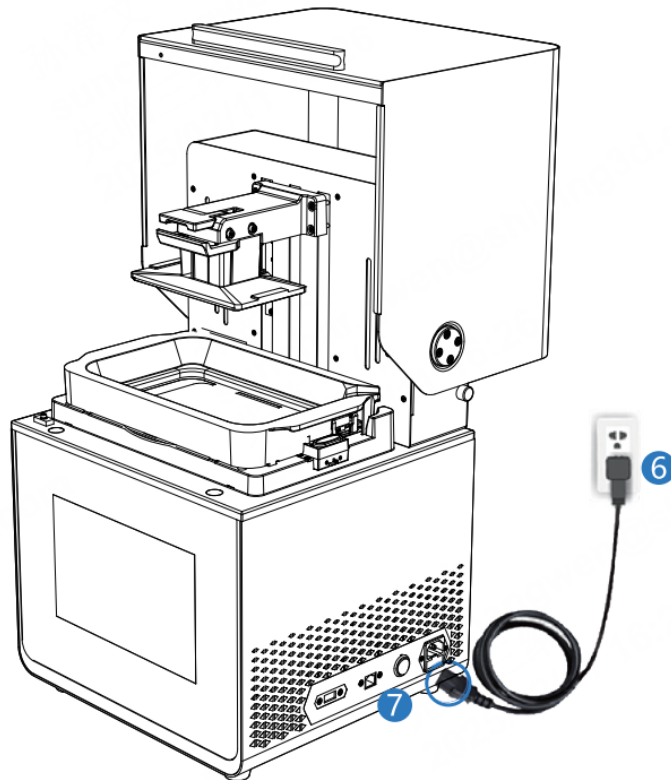
Please boot up the printer before printing.

Warning

At the very first, please check the [environment](#) before starting the device.

Power on

1. Connect the power cable to the printer.
2. Press the power button ⑧ to wake up FabWare.
3. The printer will beep once and display the SHINING 3D startup screen on the touch screen.



Caution

To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.



Note

- **For the first startup**, the software will walk you through the [User Guide](#).
- **For the subsequent startup**, the software will enter [Home](#) interface after being powered up.

Power off

Press the power button ⑨ on the right side to shut down FabWare.

Add Resin

Please select and add appropriate printing material for the model to be printed.

Caution

Damage to the device, data loss and any other accidents caused by procedures not specified in this Manual are not covered by the warranty.

Resin Type

SHINING3D provides various high-quality resin materials featuring different highlights to apply high-precision resin productions to multiple scenarios.

DM05 Implant Model Material

DM05 is used for printing implant models and removable models. Its high toughness and high pressure resistance and unbreakability contributes to its excellent fault-tolerant performance, which provides a better experience for removal and insertion.



DM12 V2 Dental Model Material

DM12 is the ideal choice for printing separated models for crown and bridge application. It optimizes model precision through its lower elasticity modulus. The hardness and mechanical properties of the cured resin allows DM 12 to resist abrasion during seating and finishing for crown and bridge cases, ensuring a perfect fit every time. The yellow color offers maximum detection of margin lines and adjacent contours, and cleanup is easy thanks to the low viscosity of the resin.



DM15 Aesthetic Model Material

With good molding stability, DM15 can accurately restore oral digital models with high color fidelity and good aesthetics results. It has good retention and less dimensional change over a long time. It is the ideal material for crowning shipping models.



GM11 Gingiva Mask Material

Gingiva Mask GM11 is an excellent choice for replicating gingiva contours for digital implant cases. Its flexibility can assist in planning the emergence profile for digital implant restorations.



SG01 Transparent Guide Material

SG01 is a clear and bio-compatible resin mainly used to print guide templates for implant, gingival cutting, orthodontic bracket bonding, bone grinding, etc. The printed model has transparent and clear colors, and high stability without warpage and deformation. Besides, its biocompatibility allows for short-term contact with the human body.



DC12 Dental Cast Material

DC12 is a printable wax-like photo-polymer specially developed for metal casting, suitable for dental casting applications such as crowns, bridges, and partial dentures. The printed model has delicate surface and is not easy to deform.



OD02 Orthodontic Model Material

OD02 is used to print orthodontic models that can withstand vacuum adsorption. The printed model has a high degree of detail reproduction, super surface hardness, and super edge stability. It has a small deformation at high temperatures, making the molding accuracy of invisible braces higher.



CB11 Temporary Restoration Material

CB11 is a light-curing resin material specifically designed for dental restoration and model fabrication. It is composed of photosensitive resin, acrylate monomers, and inorganic fillers (such as silica), offering moderate strength and good wear resistance. It is suitable for general restoration needs, such as temporary crowns, bridge fabrication, and dental model printing.



DT01 Try-In Base Material

DT01 can be used for printing try-in bases to confirm the shape, color, occlusion, and fit of removable dentures. The material features fracture resistance, bending resistance, and low water absorption. It comes in three colors, allowing for the reproduction of natural soft tissue colors and textures based on the patient's gingival shade.



SH01 Hard Splint Material

SH01 material offers strength and toughness comparable to traditional orthodontic base self-curing resins, making it an ideal choice to meet the performance requirements of hard splints in dental clinics.



DM03 High-performance Material

DM03 resin material is a high-performance material specifically designed for dental applications requiring precision models and surgical guides. It features high accuracy, exceptional strength, and excellent biocompatibility, making it ideal for applications such as implant guides and auxiliary models used in dental treatments.

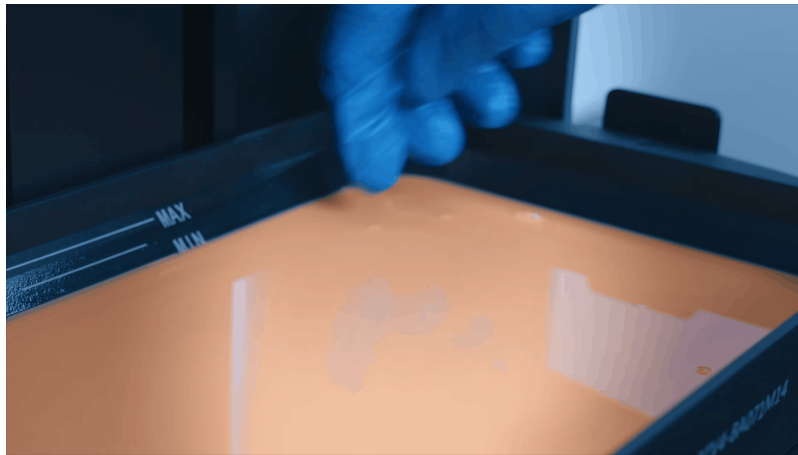


Operational Procedure

1 Clean residue >

Please check if there is any residual solid resin inside the tank; if there is, please follow the steps below to cure the resin at the bottom of the tank to avoid the residual resin affecting the printing effect and prevent damage to the components.

- ① Place the PET Card in the corner.
- ② Go to **Settings** > **Hardware Settings** > **Optics Settings** or **Home** > **Resin Tank Information**, tap **Cure Resin** and set curing time.
- ③ After curing is finished, carefully open the buckle and gently remove the resin tank.
- ④ Wear disposable gloves and use the resin tank cleaner to lift and remove the cured resin layer from the bottom.



Note

If there are still some residues floating, use an 80 to 100 mesh filter to filter the residues.



Caution

The bottom of the resin tank is made of a single layer of FEB film which is easy to be broken. Therefore, when removing the solid resin layer, be careful not to poke the bottom of the tank.

2 Add resin >

Please follow the instructions below to add resin materials.

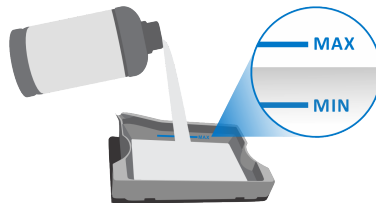
Warning

Please read and understand all relevant [notice for material](#) thoroughly before adding the resin.

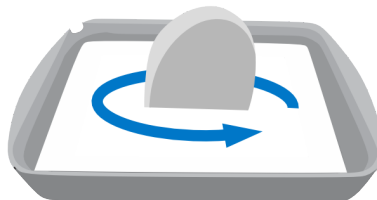
- ① Shake the resin bottle for about 2 minutes, and then pour the fully shaken liquid resin into the resin tank.

Caution

Keep the level of liquid resin between the MAX and the MIN lines so that to prevent the liquid resin from splattering during printing and to ensure the printing effect.



- ② Use the [scraper](#) to stir the liquid resin constantly until there is no sediment.



Note

During the printing process, it may be necessary to add resin material to ensure successful printing. Without interrupting the printing program, simply open the chamber door and slowly pour the resin into the resin tank when the build platform is moving upward and **the light source is turned off**.

3 Set the resin tank

Before printing, set the resin tank first.

Go to **Home**> [Resin Tank Information](#), tap to select the brand and type of the resin in the tank.



Caution

- The printing effect is not guaranteed when the used printing material does not appear in the list.
- Select the brand and type of resin actually added to the tank, or the printing may fail; if the resin type is not listed out, select **Others**.

If there is need to **change the resin**, please [clean the resin tank](#), then add the alternative resin following the procedure mentioned above.

Select and Print Files

Here are three ways to send a print job to the printer:

- [Transmit print files through AccuWare](#)
- [Issue print files on the Dental Cloud](#)
- [Import print files through the flash disk](#)

Caution

- Before selecting the file to print, please make sure that the printing material has been stirred well, the residue at the bottom of the resin tank has been cleaned, and the optical components have been cleaned.

Select Pending file

- ① Open the AccuWare under the same LAN, transmit the slice file on your computer to the **Pending queue** of the printer.
- ② Once the file transmission is completed, tap the target file on the  **Queue** interface to enter the **Detail** interface to check the brand and type of the resin material and the number of sliced layers of the model.
- ③ After confirming all the settings, close the chamber door and click **print** to start printing.

Select Cloud file

- ① Log in to the Dental Cloud and go to  **Printer** >  **Queue**, select the target file in the **Pending tasks** list on the right side, and click the **issued** button to issue the file to the **Cloud** queue of the printer.
- ② Once the file transmission is completed, the files will be downloaded in order and enter the **Pending** queue of the printer automatically; it is also allowed to tap the download button  of the target file to change the order.

Note

When running out of the memory (6 GB in total), the transmitted files will not be downloaded automatically, and it is required to tap the download button  of the target file in the **Cloud** queue manually if needed, and the system will delete earlier print jobs listed in the **Pending** queue.

- ③ Tap the target file to enter the **Detail** interface to check the brand and type of the resin material and the number of sliced layers of the model.
- ④ After confirming all the settings, close the chamber door and click **print** to start printing.

Select USB file

① Plug the flash drive that contains the slicing file into the printer, and  **Queue** interface will show the  icon.

② Tap  to enter the **Flash Drive** interface, and tap the target file to enter the **Detail** interface and simultaneously import the file to the **Pending queue**.



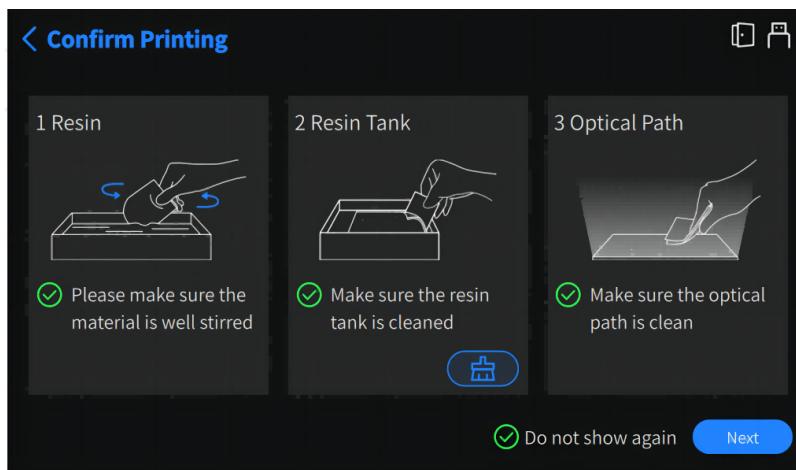
Note

The printer can recognize USB data in the format of **FAT32** or **NTFS**.

③ Tap the target file to enter the **Detail** interface to check the brand and type of the resin material and the number of sliced layers of the model.

④ After confirming all the settings, close the chamber door and click **Print** to start printing.

Finally, click **print**, the software will pop up a window as below to remind you to check relevant settings before printing.



Caution

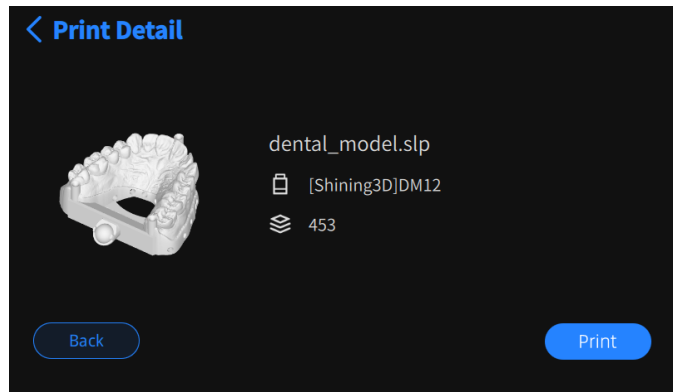
- When starting to **print**, if there is a prompt for "Inconsistent material type", please tap  to modify the brand and type of the printing material.

Check Printing Details

During the printing process, go to **Home > Print Detail** interface, and you can slide left and right to view the printing information and control the printing status.

Left interface

Displays the name of the file (the slice file of the sample model), the machine status, the name of the material used, the number of layers, the estimated end time and other information related to the current printing job.



⏸: Pause printing.

▶: Resume printing.

⊗: Aborts the current print job and return to the [Home interface](#).

⚠ Caution

Please use the pause button with caution, as interrupting the printing task will lead to errors in the connection of slices and affect the printing effect.

Right interface

Displays the machine status, the thickness of slices, the serial number and other information related to the current printing job.

After the sample model is printed, the printer will sound 5 beeps, and the touch screen will display **Printing Completed**.

Now you can:

- If the printing is successful, tap **< print Complete** in the top left corner or **OK** in the lower right corner to return to the [Home interface](#); meanwhile, the build platform will rise to the top pf the printing chamber and the printed model will be suspended.

- If there are issues with the print result, tap **print Failed?** in the top right corner to enter the **Feedback** interface.

Post-process

Remove the Model

Please follow the instructions below to remove the printed model.

1 Stand model >

After the printing process is finished, the build platform will rise to allow the clinging liquid resin to flow back into the resin tank.

2 Remove the build platform >

Lift the latch and slide the build platform outward along the rail until it stops. Then, hold the build platform by its edges and place it flat on a stable work surface beside the printer.

3 Remove the model

Use the angular knife to carefully remove the printed model from the build platform.



Caution

Be careful to keep the crescent ends flattening on the surface of build platform to avoid damaging the model or scratching the metal surface of the build platform.

Clean the Model

Please follow the instructions below to clean the produced model.

Warning

Please read and understand all relevant [notice for material](#) thoroughly before using the ethanol.

1 [Cleaning the model](#) >

- FabWash Cleaning

Place the model into the FabWash, select the corresponding model material, and confirm to start the cleaning process.

For detailed instructions, please watch the following video: [FabWash Operation Video](#) 

- Manual Cleaning

- a. Pour an alcohol solution with a concentration of $\geq 75\%$ into the [Cleaning box](#).
- b. Dip a soft brush in clean alcohol and gently scrub the model for about 1 minute.
- c. Replace the alcohol with a clean solution and repeat the above steps, rinsing again until no resin residue remains.

Caution

Avoid using hard-bristle brushes to prevent damage to the model surface, which may affect its usability.

- Ultrasonic Cleaning

- a. Place the model in a beaker filled with an appropriate amount of clean alcohol (concentration $\geq 75\%$).
- b. Put the beaker into the ultrasonic cleaner (power: 150 W ~ 500 W) and start the cleaning process.
- c. Replace the alcohol with a clean solution and repeat the cleaning once.

Note

The recommended cleaning time is 2 minutes. Prolonged cleaning may affect the model's accuracy and performance.

- Models Printed with SH01 and SH02 Resins:

- a. Place the model in a beaker filled with an appropriate amount of clean medical alcohol (concentration $\approx 95\%$), ensuring that the alcohol has not been used to clean other models and that the model is fully

immersed.

- b. Clean the model in the ultrasonic cleaner (power: 150 ~ 500W) for 90 seconds.
- c. After the first cleaning, use an air gun to blow away any residual resin on the occlusal surface to avoid residue.
- d. Replace the alcohol with a clean solution and clean once more.



Caution

- Avoid using hard-bristle brushes to scrub the model surface.
- If using alcohol with a concentration $\approx 75\%$, extend the cleaning time to 4 minutes.

2 Drying the model

Take the model outside of the cleaning box and use an air gun to blow dry the liquid on the surface. Ensure the model surface is completely dry, with no residual alcohol or resin.



Note

After blowing dry, place the model in a cool indoor area and allow it to air dry for at least 5 minutes.

Cure the Model



It is recommended that you perform secondary curing on the printed model twice after [cleaning](#), to make it more stable and easier to store. The post-cured model is also safer as it does not irritate the skin. Besides, its various properties such as smoothness and hardness are superior to those of the model before the secondary curing.

For more specific principle, please expand the "Note" section below.



Note

During the operation of the Curing Box (Fabware), the specific wave of UV light will cure the photosensitive resin in order to cure the printed resin models twice.

Please follow the instructions below to cure the printed model.

1 Place the model >

Wear disposable gloves and open the chamber door of the curing box, and place the cleaned model on the center of the acrylic turntable inside the box.

2 Cure the model

Close the chamber door and process the curing operation.

Remove the Support

Warning

Protection is required when using sharp tools to remove supports.

Please tear supports away by hand and then exert grinding papers or a portable grinder to polish the model and reduce the remaining marks.

Note

A polishing machine is recommended for further processing and polishing.

Clean the Build Platform

The ambient light can cause the liquid resin on the build platform to solidify and cause adhesion issues. Therefore, please clean the build platform immediately after each product job is completed.

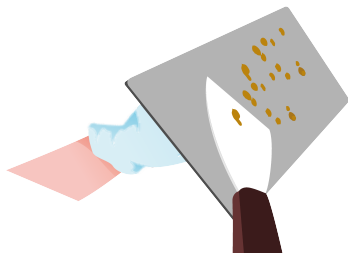
Warning

Please read and understand all relevant [safety instructions](#) thoroughly before cleaning.

Please follow the instructions below to clean the build platform.

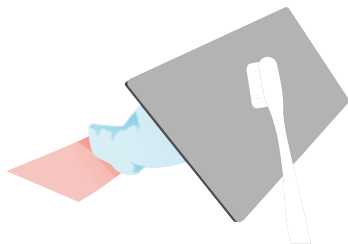
1 Remove residues >

Use the [putty knife](#) to remove residues on the build platform.



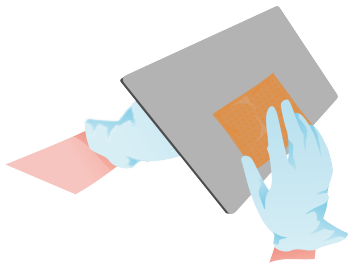
2 Brush the build platform >

Soak the [brush](#) with ethanol and clean the resin liquid on the build platform.



3 Dry the build platform >

Gently wipe the metal surface of the build platform with a tissue. Lay the build platform in a cool ventilated place for drying it completely before the next use.



4 Install the build platform

Hold the build platform horizontally and insert it into the bracket, and then fix the top screw firmly.

Maintenance

Update the Software

During the printer's upgrade process, the system will also require an update. To ensure optimal print quality, please update the hardware, software, material package and environment library files in a timely manner using either [Network Update](#) or [Flash Drive Update](#).



Note

When a new system version is available, a pop-up notification will appear on the touch screen. Please click "Confirm" to start the update process.

Network Update

① When the printer is **connected to the Internet**, go to  **Settings > About > Update Software** to download and install the latest version of the system.



Note

Please [contact SHINING 3D technical supporters](#) to acquire the latest version of the system.

② After completing the update, restart FabWare, and the latest operating interface will show the newly imported material package.

Flash Drive Update

① When the printer **cannot connect to the Internet**, insert the flash drive containing the latest version of the system into the device, then go to  **Settings > About > Update Software** and click **Flash Drive Update**.

② On the **Flash Drive Update** interface, select the latest package and then tap **Next** to download and install it.

③ After completing the update, restart FabWare, and the latest operating interface will show the newly imported material package.

When there is an update to the environment library files, you need to update the environment library files through **Network Update** or **Flash Drive Update**.

Set Zero Position

The occasional fall-off of the printed model means the current zero position of the build platform may be inaccurate, so please tap **Settings > Hardware Settings > Motor Settings** to [perform a zero position adjustment](#) in time.



Warning

Be careful to avoid collision when adjusting the zero position; in case of the collision, please [contact SHINING 3D technical supporters](#) immediately to deal with the damaged printer.



Caution

Damage to the device, data loss and any other accidents caused by procedures not specified in this Manual are not covered by the warranty.

Clean the Resin Tank

Please maintain and clean the resin tank regularly to maximize its performance and to ensure consistent, high-quality prints over a tank's lifetime.

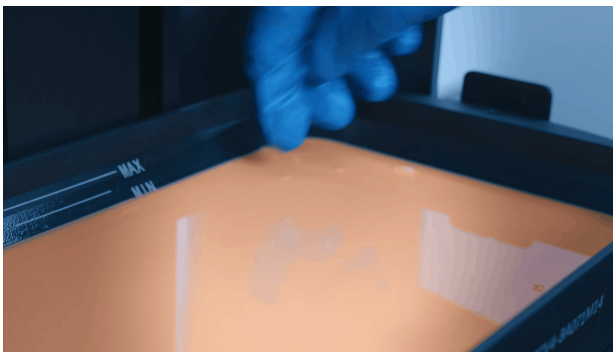
Warning

Resin may cause skin irritation or an allergic skin reaction, so please wear gloves when handling liquid resin or resin-coated surfaces and wash skin with plenty of soap and water.

1 Clean the residue >

Please follow the instructions below to cure and remove residues at the bottom of the resin tank.

- ① Place the [cleaning box](#) in the corner.
- ② Go to **Settings** > **Hardware Settings** > **Optics Settings** or **Home** > **Resin Tank Information**, tap **Cure Resin** and set **Curing time** and **Platform size**.
- ③ After curing is finished, loosen the buckle and gently remove the resin tank.
- ④ Wear disposable gloves and remove the cured resin layer from the bottom with the resin tank cleaner, as shown in the right figure.



Note

If there are still some residues floating, use an 80 to 100 mesh filter to filter the residues.

Caution

The bottom of the resin tank is made of a single layer of FEB film which is easy to be broken. Therefore, when removing the solid resin layer, be careful not to poke the bottom of the tank.

2 Clean the exterior surface

Please follow the instructions below to clean the exterior surface of the resin tank.

- ① Empty the liquid resin from the resin tank into the original container.
- ② Use the **brush** soaked by ethanol and the **cloth** to clean the liquid resin on the surface.

After cleaning, lay the resin tank in a cool ventilated place for drying it completely before the next use.

Light Intensity Correction

The intensity of the LED light will be weakened over time.

If the weakening of light intensity starts affecting the printing result, please correct the light intensity immediately.

Tap **Settings** > **Hardware Settings** > **Optics Settings**. After enabling the projector status, you can select **Light Intensity Calibration**. The printer will automatically adjust the light power based on preset values.

Replacing the Protective Film

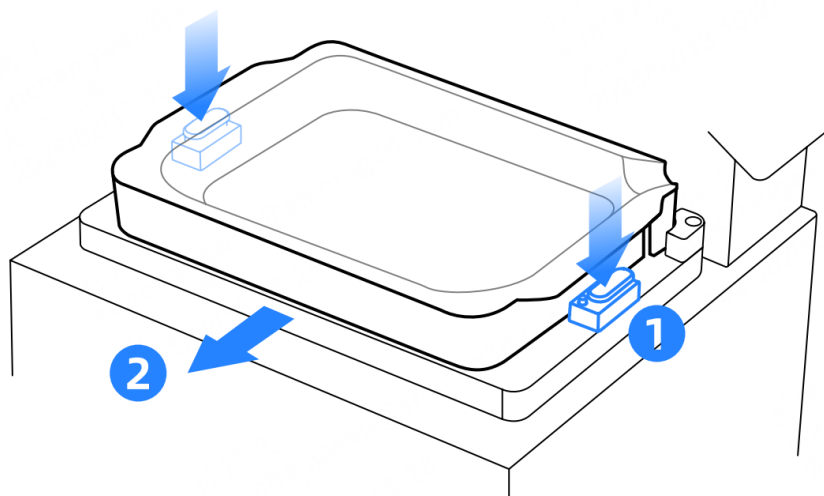
The protective film is a consumable part that needs to be checked regularly based on usage frequency. If you notice any damage or wear on the protective film, replace it promptly to ensure optimal performance.

Preparation

- Tools Required:
 - Disposable gloves
 - PET card cleaning tool
 - Cleaning cloth or soft cloth
 - Cleaning agent (e.g., alcohol wipes)
- Environment Preparation: Ensure the working area is clean and free of dust or impurities to avoid contamination during the replacement process.

Replacement

1. Open the buckle and remove the resin tank.

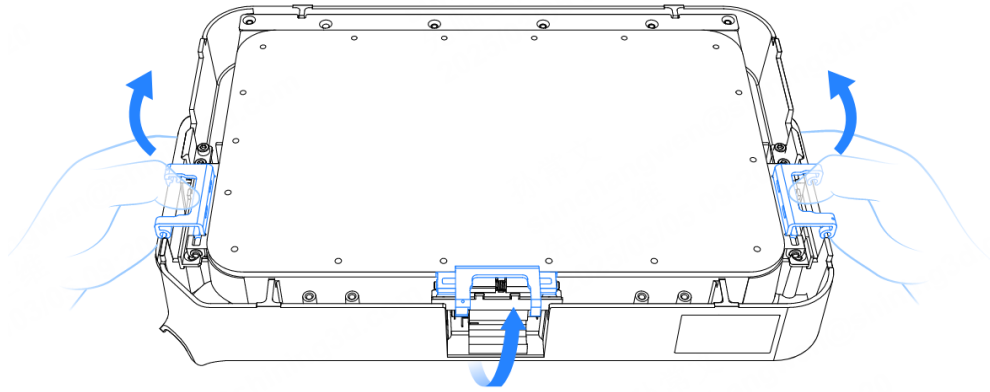


2. Put on disposable gloves and clean residual resin.

Caution

If there is resin material in the tank, pour it back into the resin storage bottle before proceeding. Ensure the tank is completely free of residual resin.

3. Open the buckles on the resin tank and carefully remove the old protective film from the frame.



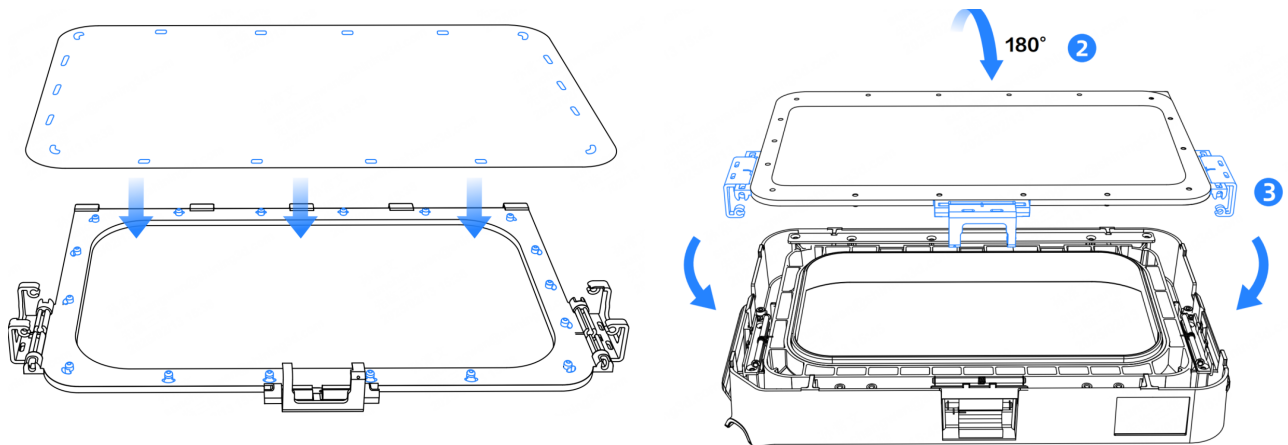
4. Wipe the resin tank with a cleaning cloth or soft cloth to remove any remaining impurities.

 Note

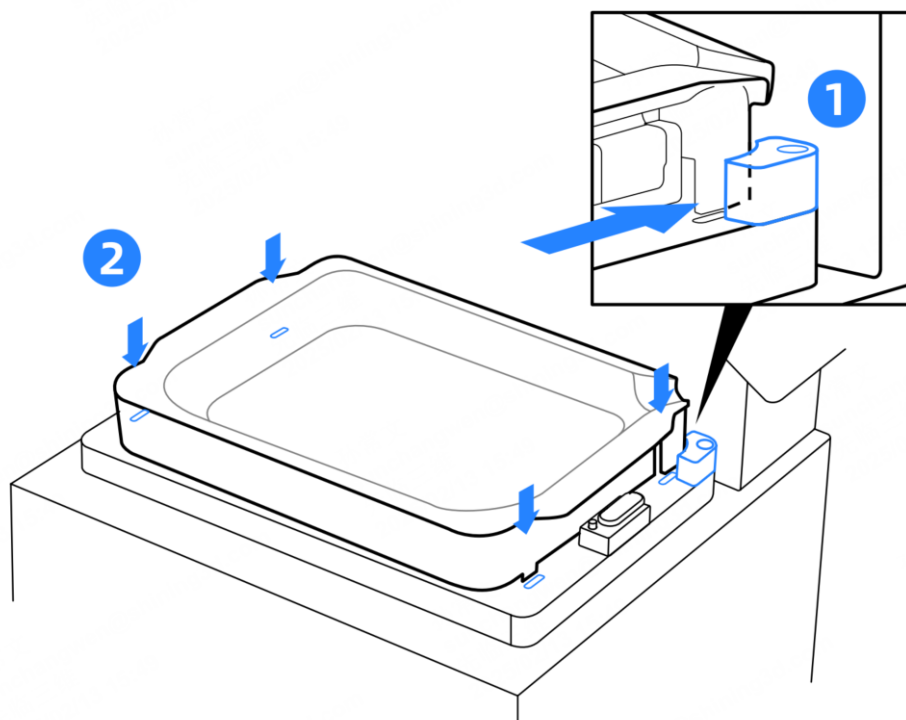
For stubborn stains, use alcohol wipes for more effective cleaning.

5. Install the new protective film.

- Align the holes on the new protective film with the cylinders on the frame.
- Flip the film 180 degrees and secure it to the resin tank using the buckles.



6. Place the resin tank back onto the device and ensure it is securely fastened.



Schedule of Maintenance

Please perform regular maintenance on the components of the printer according to the maintenance requirements and cycle in the table below to ensure print quality.

Components	Requirements	Maintenance Cycle
Light intensity	Equal to the set value	Every 6 weeks
Resin tank	The resin tank must be free of visible stains, breakages, cured resin, or debris. The protective film should be clean.	Before every print
Exterior surface	Stay clean	Daily
Ethanol	Stay clean	Every 2 days
Guide rail	Stay well-oiled	Every 3 Months
Build platform heating terminal	Clean the heating terminal with a clean paper towel or soft cloth.	Once a week

**Caution**

Please avoid damaging the optical components such as LCD Screen and Touch Screen, or the printer may fail to work.

Problem-solving Guide

? Only one side of the build platform can be used to print the model/ the model falls off during printing/ the height of the model does not match the pre-set value. ✓

Reason: The zero position is not accurate.

Solution: [Adjust the zero position](#).

? The model is not printed well. ✓

Reason: There are impurities remaining at the bottom of the resin tank.

Solution: [Cure the resin](#).

? There are abnormal noises from the tilting motor when peeling off the model. ✓

Reason: The frictional resistance is too high.

Solution: Apply lubricating oil to the screw of the tilting motor.

? There are abnormal noises when the build platform is reset after peeling off the model. ✓

Reason: The processing parameter package does not match.

Solution: [Contact SHINING 3D technical supporters](#) for appropriate parameter package.

? The model is displayed in red. ✓

Reason: The file size exceeds the build platform or the model needs repair.

Solution: Reduce the size of the model to within the build platform range or repair the model.

? A "Print error" prompt pops out. ✓

Reason: The printer does not function properly when printing SLP files.

Solution: [Reprint](#) or [restart the printer](#).

? A "No device" or "No material" prompt pops up.



Reason: The device or material was not selected before the operation.

Solution: Select the device or material first before performing other operations.

? A "No selected model" prompt pops up.



Reason: There is no model selected at the moment.

Solution: Select at least one SLP file before performing other operations.

? A "The target device does not respond" prompt pops up.



Reason: The device or material was not selected before the operation.

Solution: Select the device or material first before performing other operations.

? A "Unknown interruption" prompt pops up.



Reason: The file transfer is interrupted.

Solution: [Re-transfer](#) the file.

? A "Sending failed" prompt pops up.



Reason: Fail to obtain the SLP file.

Solution: [Resend](#) the file.

? A "Heating Platform Abnormality Alert" prompt pops up. ✓

Reason: Solid foreign objects may be blocking the heating contact terminal of the build platform, which could affect its heating function.

Solution:

1. Ensure the device is completely powered off.
2. Check if the build platform is properly installed and confirm that the heating contact terminal is free of foreign objects.
3. If foreign objects are found, gently scrape them off with a spatula to avoid damaging the heating terminal.
4. Clean the heating contact terminal with a clean paper towel or soft cloth to ensure it is free of residue.
5. Power on the device and check if the heating function is working properly.

? A "Resin Tank Missing Alert" prompt pops up. ✓

Reason: The resin tank may not be properly installed, or the sensor may not correctly identify it.

Solution:

1. Remove the resin tank and carefully inspect the contact points between the tank and the device for any foreign objects. If any are found, gently wipe the contact points clean using a soft cloth.
2. Reinstall the resin tank, ensuring it is properly seated. A long beep ("drip") will indicate successful installation.