



SHINING 3D



DCRAFT-4

1.0

Instruction for Use

Table of contents

Read This First

- **About the Instruction for Use**
 - Release Date
 - Symbol Convention
 - The Declaration of Intellectual Property and Disclaimer
- **Introduction**
- **Device Information**
- **Basic Information**
 - Intended Purpose
 - Contraindications
 - Target Users
- **Principle**
- **Product Performance**
- **Labels and Symbols**
- **Manufacturer Information and Production Address**
- **Environmental Requirements**
- **Production Date and Life Time**

Safety Information

- **Precautions and Warnings**
- **Electrical Safety**
 - FCC Regulations
 - ISED Statement
 - 20Cm: Radiation Exposure Statement
- **EMC Notice**
- **Biological Safety**
- **Waste Disposal**
- **Warranty**

Hardware

- **Installation**
- **Parts List**

- Accessories List
- **Notice for Use**
 - Notice for Operation
 - Notice for Resin Tank
 - Notice for Material
- **Specifications**
 - Parameters
 - Optics Parameters
 - Parameters
- **Power On & Off**
 - Power on
 - Power off
- Software
- Interface
 - **Home**
 - **Queue**
 - **Settings**
- User Guide
 - **Activation Guide**
 - **Installation Guide**
 - **Sample Product Guide**
- About DentalCloud
 - **Bind to Dental Cloud**
 - **Dental Cloud Operation**
 - Dental Cloud Page
 - Check States
 - Check Ongoing Production Tasks
 - Check History Production Tasks
 - Enable Production Status Notification
 - Search Devices
 - Filter by Models
 - Filter by States

- Update Data
- Bind

Production Process

- **Add Resin**
 - Resin Type
 - Operational Procedure
- **Select and Product Files**
- **Check Production Details**

Post-process

- **Remove the Model**
- **Clean the Model**
- **Cure the Model**
- **Remove the Support**
- **Clean the Build Platform**

Maintenance

- **Update the Software**
- **Set Zero Position**
- **Clean the Resin Tank**
- **Light Intensity Correction**
- **Replacing the Protective Film**
 - Preparation
 - Replacement
- **Schedule of Maintenance**
- **Problem-solving Guide**

Appendix

- **Wireless Compliance Notification**
- **FCC Statement**
- **Industry Canada Statement**

Read This First

About the Instruction for Use

This instruction for use (hereinafter referred to as "the IFU") introduces the functions, installation, usage, and maintenance of the Dcraft-4 device (hereinafter referred to as "the device").

Release Date

Version	Release Date	Language Version
1.0		English - Original Instructions

Symbol Convention

Symbol	Meaning
	Note: This symbol is used to inform you of additional information about 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 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 "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 its requirements. 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 arises 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 Product Usage Documentation. 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 guide for installing, operating, and maintaining the product instead of serving as a quality guarantee 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 for user understanding. In the event that any images or diagrams are inconsistent with the physical products, the latter 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 the quality of the product. SHINING 3D also shall not be held responsible for any indirect anticipated profit loss, loss of reputation, or 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 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 conflict with 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 this Declaration 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 the application of the Product Usage Documentation, please contact us using the contact information provided in the Instruction for Use. Thank you for your cooperation and support! We hope that our products can bring you a great experience.

Introduction

Dcraft-4 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.



Dcraft-4 offers a comprehensive digital solution for dental clinics and laboratories with its efficient, precise, and cost-effective features.

Device Information

Product Name: Dental Appliances Manufacturing Device

Model: Dcraft-4

Main Components

The Dcraft consists of the device body, resin tank, build platform, power adapter, network cable, and cleaning box (with resin tank cleaner). Additionally, it includes a bolt, putty knife, angular knife, brush, scraper, wrench, gloves, cloth, PET leveling card, and a flash drive containing the AccuWare installation package. Device Control Software Version: V3.



Note

The length of the network cable is less than 3 m.

Basic Information

Intended Purpose

The Dental Appliance Manufacturing Device is dedicated to manufacturing dental appliances, primarily including surgical guides for the oral cavity, customized trays, crown and bridge structures, denture bases, orthodontic appliances, and retainers.

Contraindications

None identified yet.

Target Users

Dentists, dental assistants or dental technicians for in-house production of dental appliances at dental clinics or hospitals. Intended patient population: No direct contact with patients; it is used to manufacture trays, crown and bridge structures, denture bases, orthodontic appliances, and retainers for patients.



Note

The Dcraft-4 can establish an encrypted communication connection with the slicing software AccuWare through the tcp/ip protocol for remote reception. The slicing file sent by the slicing software. You can also communicate encrypted with the SHINING 3D Dental Cloud through the MQTT communication protocol to receive production files sent from the Dental Cloud. The instructions for use shall specify any restrictions on other equipment or NETWORK/DATA COUPLINGS, other than those forming part of an ME SYSTEM, to which a SIGNAL INPUT/OUTPUT PART may be connected.



Caution

Do not use the Dcraft-4 for purposes other than those intended and expressly stated above.

Principle

The Dental Appliances Manufacturing Device utilizes a UV light source along with an image projector or screener to solidify resin, thereby creating a dental model for a variety of applications, including diagnostic and treatment processes.

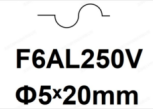
Product Performance

- **Appearance and structure:** The appearance should be smooth, crackless, stainless with no obvious deformation. The device should be flexible and reliable for operation.
- **Requirements for operating and controlling:**
 - The design and positioning for the operation and control of the device should be able to prevent accidental starting.
 - The graphic symbols for operation and control of the device should meet the requirement ISO 9687.
- **Noise Requirement:** ≤ 50 dB (A).
- **General Requirements:** It should be driven by software installed in the device or by software specified by the manufacturer.

Labels and Symbols

The following symbols provide information on the product's labels and regulatory compliance.

Labels and symbols on the device/carry box.

Symbol	Explanation
	Indicates that the contents of the transport package are fragile and the package should be handled with care.
	Indicates that the transport package should be kept away from rain and in dry conditions.
	Indicates the correct upright position of the transport package.
	Indicates that the device must be disposed of by handling it over to the applicable take-back scheme.
	Indicates that the package of the device can stacked for a maximum of 3 layers.
	Indicates that the position of the fuse protector of the device, the fuse will be blow when the power supply exceeds 6A current or 250 voltage.

Symbol	Explanation
	Indicates that the Instruction for Use should be read.
	Indicates the serial number.
	Indicates the manufacturing date.
	Indicates the batch code.
	Indicates the use-by date.
	Indicates that the item is a medical device.
	Indicates the medical device manufacturer.
	Indicates PTC heating with a heating power of 150W.
	Indicates that the marked item or its material is part of a recovery or recycling process.
	Indicates that one should not look directly at the light source.



Indicates that one should not look directly at the light source.



Indicates that one should keep hands clear of the pinch point.

Manufacturer Information and Production Address

Manufacturer	
Manufacturer name	SHINING 3D Tech Co., Ltd.
Production Address	No. 1398 Xiangbin Road, Wenyan, Xiaoshan, Hangzhou, Zhejiang, China
Email	dental_support@shining3d.com
Customer Support	https://support.shining3ddental.com/en/support/home

Environmental Requirements

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

Environmental Requirement	Description
Voltage Range	100 V ~ 240 Vac, 50/60 Hz, 350 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. • Positioning of the medical equipment shall not obstruct access to or interfere with the operation of the emergency disconnection device.



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 product quality.

Production Date and Life Time

The production date is shown on the product label.

Life time: 3 years.

Safety Information

Precautions and Warnings

Precautions

Failure to observe the instructions or disregard for the warning may result in damage to the product, personal injury, or even death of the user or the patient.

- Do not use the hardware and software for any application until you have read, understood, and are familiar with all the safety information, safety procedures, and emergency procedures contained in the chapter. Operating the hardware and software without proper awareness of safe use could lead to fatal damage to the hardware or permanent data loss.
- Ensure that the connection is performed correctly.
- The hardware and software should only be used in a medical facility under the supervision of trained personnel.
- Only authorized service labs should perform maintenance. It is expressly prohibited to open the device with tools.
- The hardware and software have been fully adjusted and tested prior to shipment from the factory. Unauthorized modifications will void your warranty.
- If the hardware or software is modified, appropriate inspection and testing must be conducted to ensure continued safe use.
- Check the device and components for sharp edges.
- Before use, check the device for damage, loose parts, wear and tear, and other cosmetic problems. In case of such problems, please contact after-sales service.
- During use, always pay attention to abnormal conditions of the device. In case of abnormal conditions, you need to stop using it immediately. Consult technical support staff promptly.
- To ensure the performance and safety of the device, use only the original accessories provided with the device (or accessories specified by SHINING 3D, consult technical support for details) and software.
- Use only supplied accessories and approved software with the device in order to achieve the designed performance.
- Do not use a power adapter other than the one supplied with the package.
- Connecting the device to an unknown power adapter is very dangerous and may lead to fire or explosion.
- Using cables or accessories other than those specified for use with the device might result in increased emissions or decreased immunity of the device.
- The supplied power adapter should only be connected to a grounded power socket.
- Reasonably arrange communication cables, power lines, and other types of cables to prevent users or patients from tripping over the wires. Do not forcibly pull or bend cables of any kind.

- The device is not intended for use in environments with high concentrations of flammable liquids, gases, or atmospheric oxygen.
- Do not dispose of the device as unsorted municipal waste. The device must be collected separately and disposed of in accordance with local laws and regulations. For proper disposal of this device, contact your local representative of SHINING 3D Corporation.
- Do not attempt to disassemble, repair, or modify the device. If necessary, please contact the manufacturer or its designated distributor.
- Any serious incident that occurs in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which you are established.

Warnings

Please read and strictly comply with all matters in the [notice for material](#) section, as failure to do so may result in personal injury or damage to the device.

- Ensure proper ventilation when operating the device.
- Take care and keep safety in mind when using the scraper and putty knife, which have sharpened edges.
- No modification of the device is allowed. Replacement of a component could result in an unacceptable RISK.
- UV light is harmful to the eyes, so please avoid direct eye contact.
- This product should not be used close to or stacked with other devices. If needed, observe and check that it can operate properly in the intended configuration.
- Using cables or accessories other than those specified for use with the device might result in increased emissions or decreased immunity of the device.
- Avoid using the device together with mobile phones, electrosurgical devices, and MRI equipment, as this may cause electromagnetic interference and compromise the safety and functionality of the devices.

Electrical Safety

Caution

- This device is designed, manufactured, and tested in compliance with IEC 60601-1 for safety in medical settings.
- For equipment cleaning, maintenance, or prolonged storage, disconnect the power plug to ensure complete electrical isolation. This prevents standby power consumption, protects against damage from power grid fluctuations or electrical faults, and eliminates the risk of electric shock.

Type of protection against electric shock: Class I

The degree of protection against electric shock: N/A

Enclosure protection: IPX0

Level of safety when used with flammable anesthetic gas mixed with air or flammable anesthetic gas mixed with oxygen or nitrous oxide: Non-AP/APG equipment.

The mode of operation: Continuous operation caution

Degree of protection against incoming liquids: Common device

Rated voltage of the device: Input AC 100 ~ 240 V, 50/60 Hz

Whether the device has a protective application against defibrillation discharge effects: No

Whether the device has a signal output or input section: Yes

Permanent installation device or non-permanent installation device: Non-permanent installation device

FCC Regulations

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Note

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- RF exposure statement:
 - This equipment complies with radio frequency exposure limits set forth by the FCC for an uncontrolled environment.
 - This equipment should be installed and operated with a minimum distance of 20 cm between the device and the user or bystanders.
 - This device must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED Statement

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.
3. The device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

20Cm: Radiation Exposure Statement

This equipment complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

EMC Notice

Caution

- Don't use near active HF surgical equipment and the RF shielded room of an ME system for magnetic resonance imaging, where the intensity of EM disturbances is high.
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Use of accessories, transducers, and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 12 in (30 cm) to any part of the equipment, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Note

- **Transmission Security**
Industry-standard encryption protocols are employed to ensure data transmission security (compliant with RFC 8445).
- **Authentication**
Access to cloud platform user data requires identity verification mechanisms, with support for hierarchical permission management.

Guidance and Manufacturer's Declaration – Electromagnetic Emissions	
Emissions Test	Compliance
RF emissions CISPR 11	Group 1
RF emissions CISPR 11	Class B
Harmonic emissions IEC 61000-3-2	Class A
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

Immunity Test	IEC 60601-1-2 Test level	Compliance level
Electrostatic discharge CISPR 11	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air	±8 kV contact ±2 kV, ±4 kV, ±8 kV, ±15 kV air
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines	±2 kV for power supply lines
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 0.5 kV, ± 1 kV line(s) to line(s) ± 2 kV line(s) to earth
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0.5 cycle at 0°,45°,90°, 135°, 180°, 225°, 270°, 315° 0% UT ; 1 cycle 70% UT; 25/30 cycle 0% UT; 250/300 cycle	0% UT; 0.5 cycle at 0°,45°,90°, 135°, 180°, 225°, 270°, 315° 0% UT ; 1 cycle 70% UT; 25/30 cycle 0% UT; 250/300 cycle
Power frequency magnetic field IEC 61000-4-8	30 A/m 50 Hz/60 Hz	30 A/m 50 Hz/60 Hz
Conducted RF IEC61000-4-6	3 V r.m.s. 150 kHz to 80 MHz 6 V RMS in the ISM and amateur bands between 0.15 MHz and 80 MHz	3 V r.m.s. 150 kHz to 80 MHz 6 V RMS in the ISM and amateur bands between 0.15 MHz and 80 MHz
Radiated RF IEC61000-4-3	10 V/m 80 MHz – 2,7 GHz 80% AM at 1 kHz	10 V/m 80 MHz – 2,7 GHz 80% AM at 1 kHz
NOTE: UT is the a.c. mains voltage prior to application of the test level.		

Guidance and Manufacturer's Declaration - IMMUNITY to proximity fields from RF wireless communications equipment

Immunity Test	IEC60601 test level				Compliance level
	Test frequency	Modulation	Maximum power	Immunity level	
Radiated RF IEC 61000-4-3	385 MHz	**Pulse Modulation: 18Hz	1.8 W	27 V/m	27 V/m
	450 MHz	*FM+ 5Hz Deviation: 1kHz sine	2 W	28 V/m	28 V/m
	710 MHz 745 MHz 780 MHz	**Pulse Modulation: 217Hz	0.2 W	9 V/m	9 V/m
	810 MHz 870 MHz 930 MHz	**Pulse Modulation: 18Hz	2 W	28 V/m	28 V/m
	1720 MHz 1845 MHz 1970 MHz	**Pulse Modulation: 217Hz	2 W	28 V/m	28 V/m
	2450 MHz	**Pulse Modulation: 217Hz	2 W	28 V/m	28 V/m
	5240 MHz 5500 MHz 5785 MHz	**Pulse Modulation: 217Hz	0.2 W	9 V/m	9 V/m

NOTE*: As an alternative to FM modulation, 50% pulse modulation at 18 Hz may be used because while it does not represent actual modulation, it would be worst case.

NOTE**: The carrier shall be modulated using a 50% duty cycle square wave signal.

Guidance and Manufacturer's Declaration - IMMUNITY to proximity magnetic fields		
Test Frequency	Modulation	Immunity Level (A/m)
30 kHz	CW	8
134.2 kHz	*Pulse Modulation 2.1 kHz	**65
13.56 kHz	*Pulse Modulation 50 kHz	**7.5
NOTE*: The carrier shall be modulated using a 50% duty cycle square wave signal. NOTE**: r.m.s., before modulation is applied.		

Biological Safety

Meets biological criteria:

- ISO 10993-5:2009

Biological evaluation of medical devices — Part 5: Tests for in vitro cytotoxicity

- ISO 10993-10:2021

Biological evaluation of medical devices — Part 10: Tests for skin sensitization

- ISO 10993-23:2021

Biological evaluation of medical devices — Part 23: Tests for irritation

Waste Disposal

This symbol on the product or packaging indicates that the product cannot be disposed of as household waste. Users must dispose of the waste equipment by handing it over to the applicable take-back scheme for the recycling of electrical and electronic equipment and/or batteries.

For more information about recycling this equipment, please contact your city office, the shop where you purchased the equipment, or your household waste disposal service. Recycling materials will help conserve natural resources and ensure that they are recycled in a manner that protects human health and the environment.



Given possible cross-contamination and the potential negative impact of hazardous materials on the environment and human health, all electrical and electronic devices must be disposed of separately from other household waste to promote reuse and recycling, and to reduce the amount of waste in landfills.

Please safely dispose of the device and its accessories in accordance with applicable laws and regulations.

Warranty

Do not disassemble or repair the device privately, as this may void the warranty. If there is any problem covered by the warranty, please contact technical support.

Hardware

Installation

Please follow the steps below to complete unboxing.

Caution

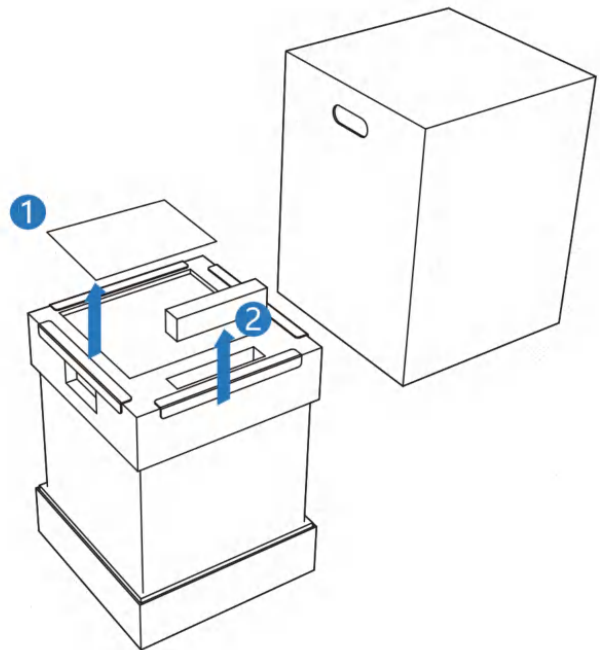
- If the device needs to be returned to the manufacturer, it should be shipped in its original packaging. Therefore, do not damage or discard any packaging materials.
- The device's ports require IEC 60601-1-compliant connections to ensure safety and full compatibility.

1 Unbox and Remove Accessories >



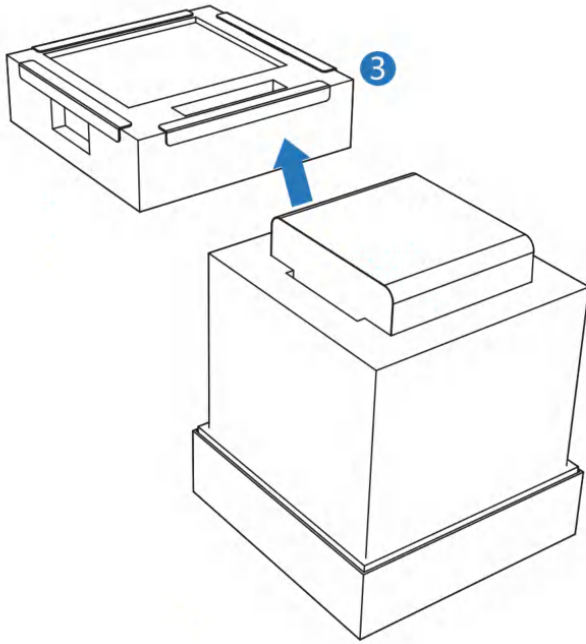
Open the device's packaging carton and take out the following items from the top foam layer:

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



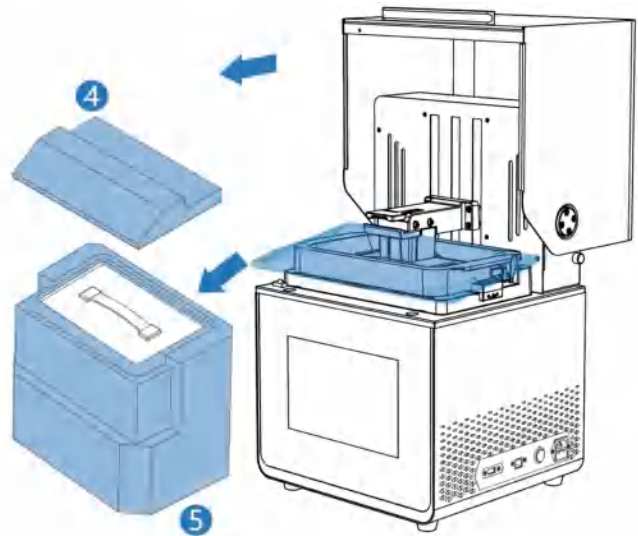
2 Remove Top Foam Layer >

Remove the top foam layer ③.



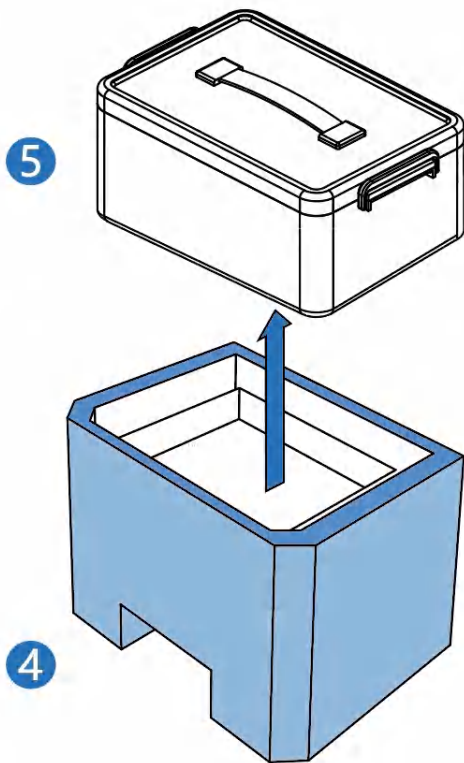
3 Take Out the Device >

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.



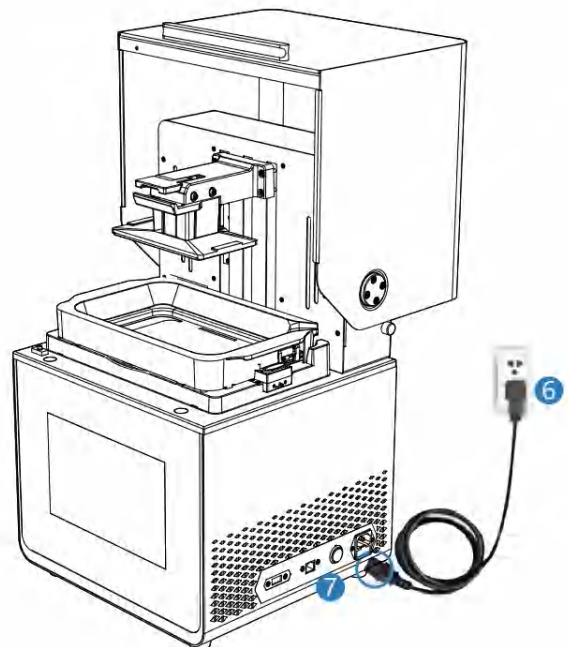
4 Remove the Accessory Pack >

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



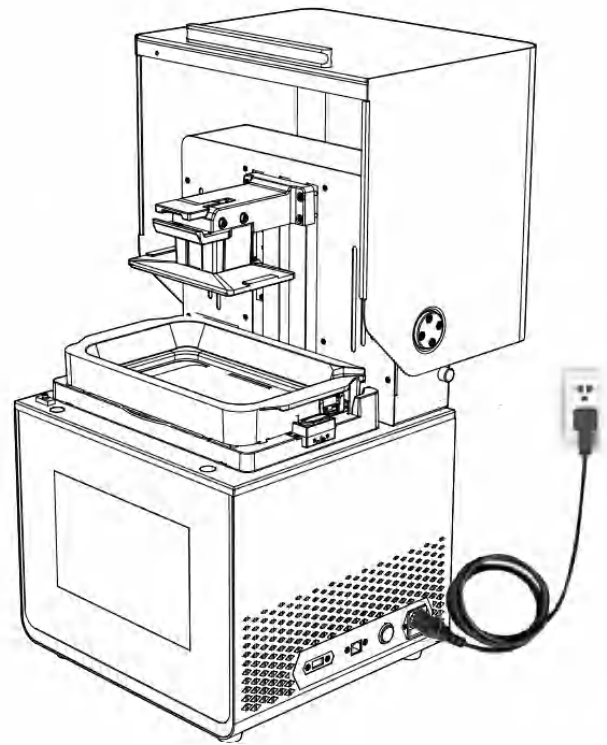
5 Power On and Start >

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.



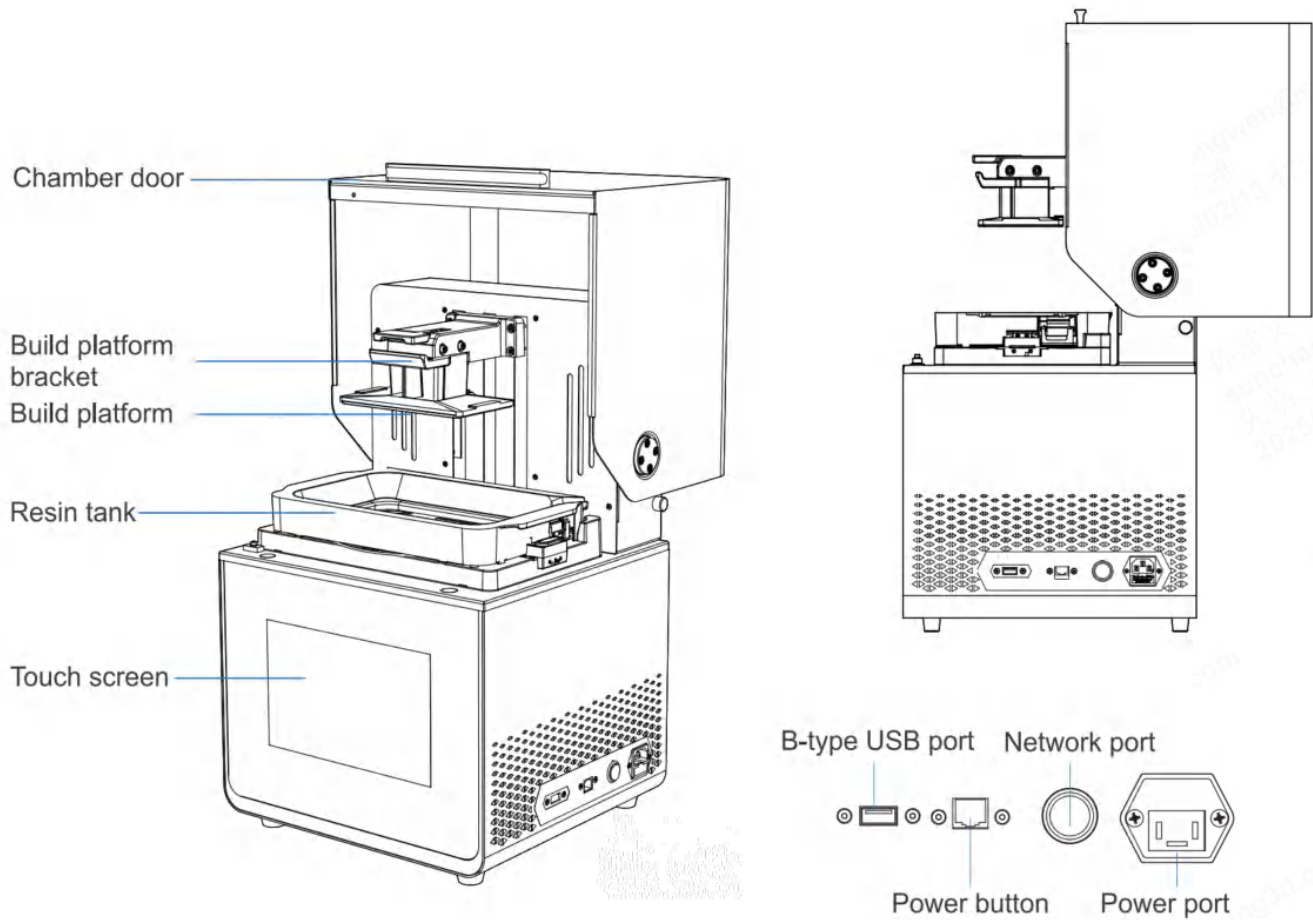
6 Installation Complete

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



Parts List

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



Note

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

Status Indicator Lights

Mode	LED Indicator
Idle	Blue (steady on)
Printing	Blue (breathing pulse)
Print Completed	Green (steady on)
Error	Red (fast blinking)

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 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 refer to the actual stored files.
②	Angular Knife	Used to remove models from the build platform after production is finished.
③	Putty Knife	Used to remove models from the build platform after production is 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 the optical path, including the projector lens, protective 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.

Notice for Use

This section provides safety precautions, which will also appear repeatedly within this IFU as reminders.

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 device.
- 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 device 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, or any other components by hand. Remember to wear disposable gloves when handling the machine.
- **Sharp Tools:** Device is equipped with sharp tools for model removal and support detachment. Proper protection is required when using these tools.

Note

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

Caution

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

Notice for Resin Tank

- This resin tank enables a fast printing process.
- Do not puncture the film on the surface of the tank.
- Do not use tweezers or a scraper to clean the residue on the film.
- Keep the bottom glass of the tank clean.
- Stir the resin using the wiper before every print.

- Fill the resin to the MAX level mark on the tank, ensuring it does not exceed this level.



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 production material used by the device 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 Instruction for Use 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 production.
- **production 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 production 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 device 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.

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/cm²

Parameters

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

| Resin Tank Heating Power | 70 W (Max.) | | Build Platform Heating Power | 150 W (Max.) | | Total Maximum Power Consumption | Approx. 250 W |

Power On & Off

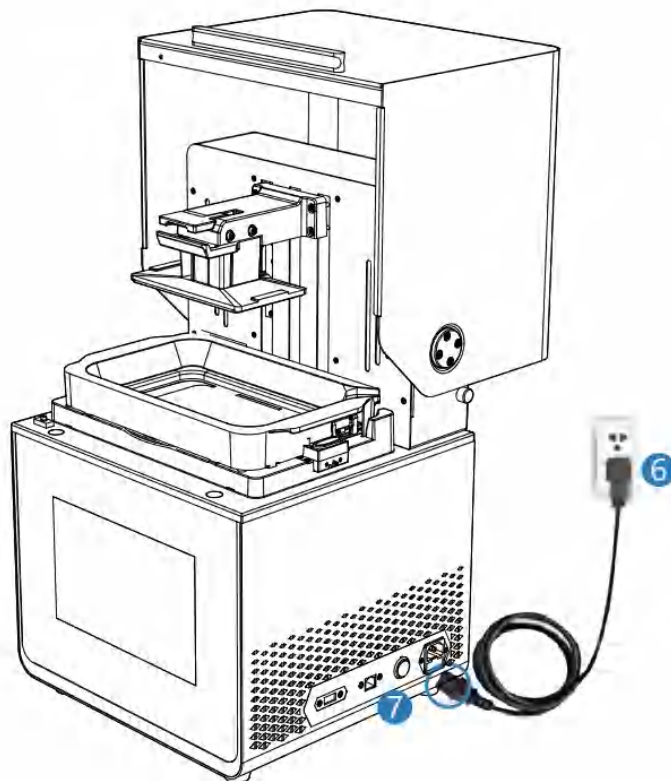
Please boot up the device before production.

Warning

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

Power on

1. Connect the power cable to the device.
2. Press the power button  to wake up FabWare.
3. The device 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 guide you through the [User Guide](#).
- **For subsequent startups**, the software will enter the [Home](#) interface after being powered up.

Power off

Press the power button ⑦ on the right side to shut down FabWare.

Software Interface

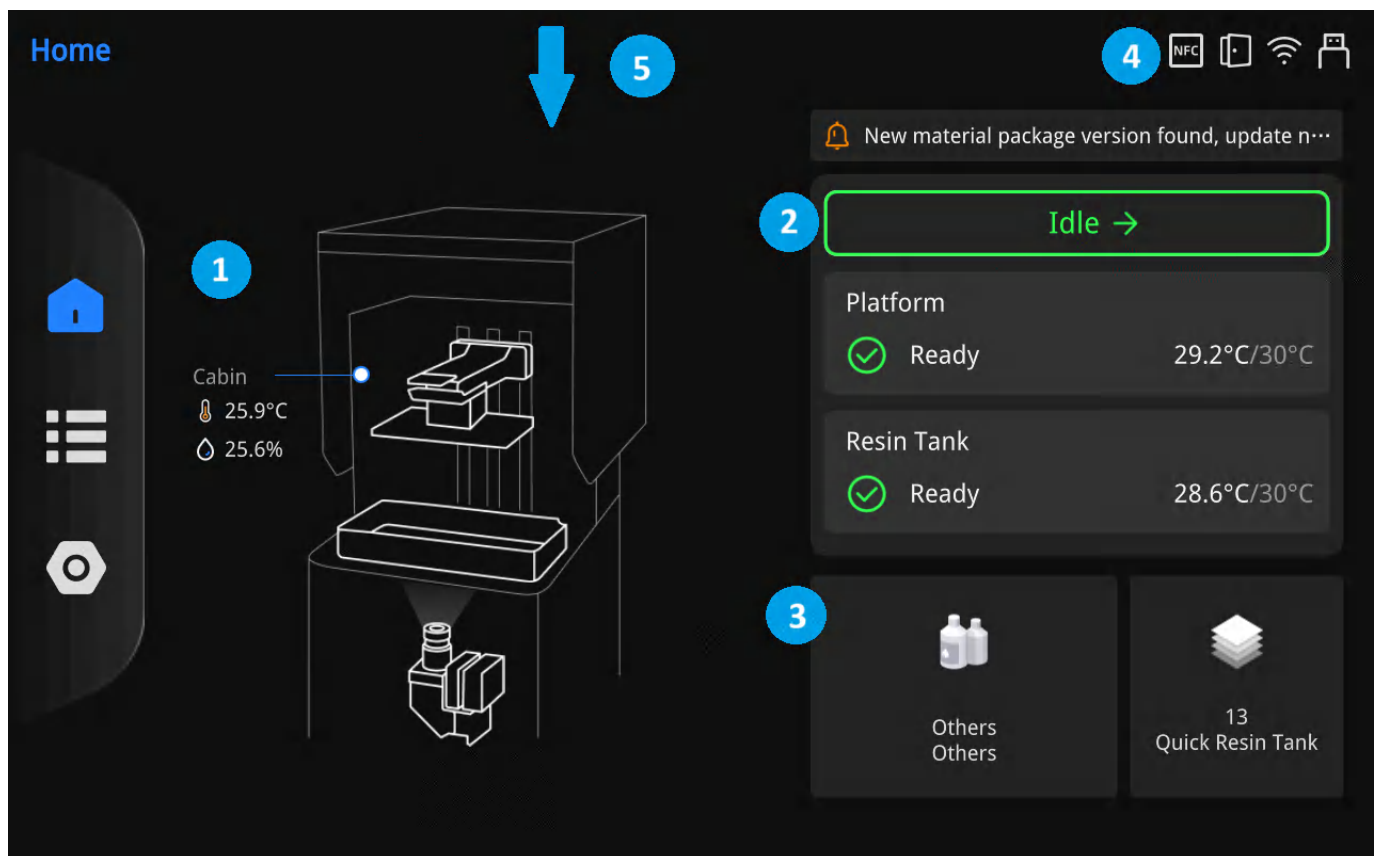
Home

On the **Home** interface, check the current status of the device 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 device for full permissions.
- If you are prompted that the remaining days are insufficient, please go to **AccuWare** > **Settings** > **Device Act and Auth** interface to complete online activation, or contact technical support to activate using 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 Device status

Idle: Production has not started or is completed. Tap the field to enter [Queue](#) interface to select the file for production.

Note

- In 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.

Production: Tap the field to enter [Production Details](#) interface to check the production information and control the production 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 produced 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 Information

NFC

Replace Resin

BrandOthers

TypeOthers

Clean Residue

Cure Resin

Resin Tank(Quick)

Resin Tank has been printed for: 13 / 150000

Resin Tank Serial Number: FDAC

Reset Layers

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 (Quick):** 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.



Note

After installing the resin tank, the device will automatically recognize its type and adjust settings accordingly. The following two types of resin tank are supported:

- Quick Resin Tank: Increases production speed, suitable for large-scale model production.
- HyperClear Resin Tank: Enhances model details, suitable for producing high-quality models.



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 produced; synchronizes this data to SHINING 3D Dental Cloud and AccuWare.

Warning

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

⑤ Status Menu

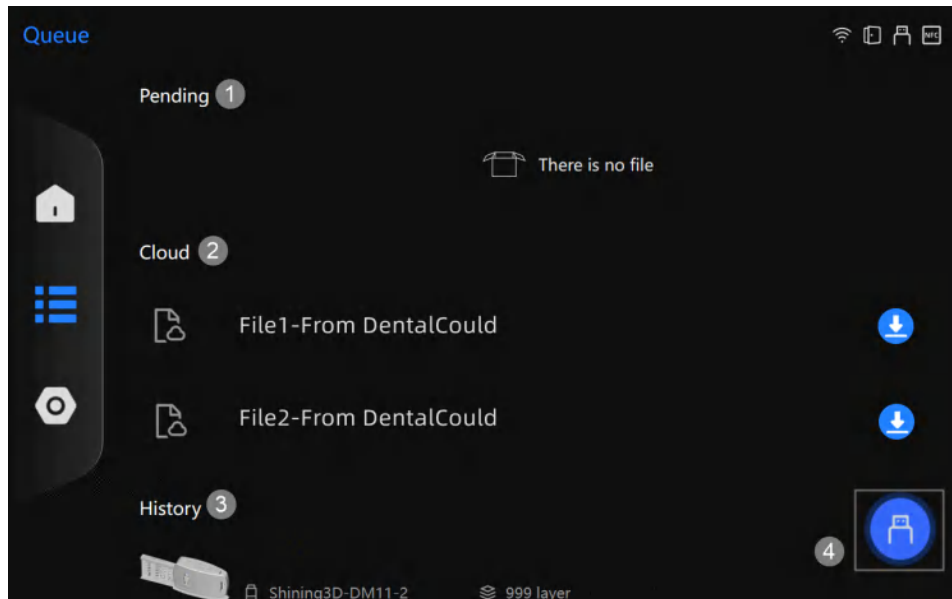
Swipe down from the top of the screen to bring up the device status menu, displaying the current network connection status of the device (tapping this module will enter the [Network Settings](#) interface), connection status (tapping this module will enter the [Bind to Dental Cloud](#) interface), and 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 device status menu.

Queue

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



Switch columns to view the introduction to each field.

① Pending Queue

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

Tap one file bar to check its detailed production information:

② Cloud Queue

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

You can download files sent from the Dental Cloud. The downloaded files will enter Pending queue.

③ History Queue

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

Tap one file bar to check its detailed production information:

 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 product jobs on the queue page periodically. 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 with one click.

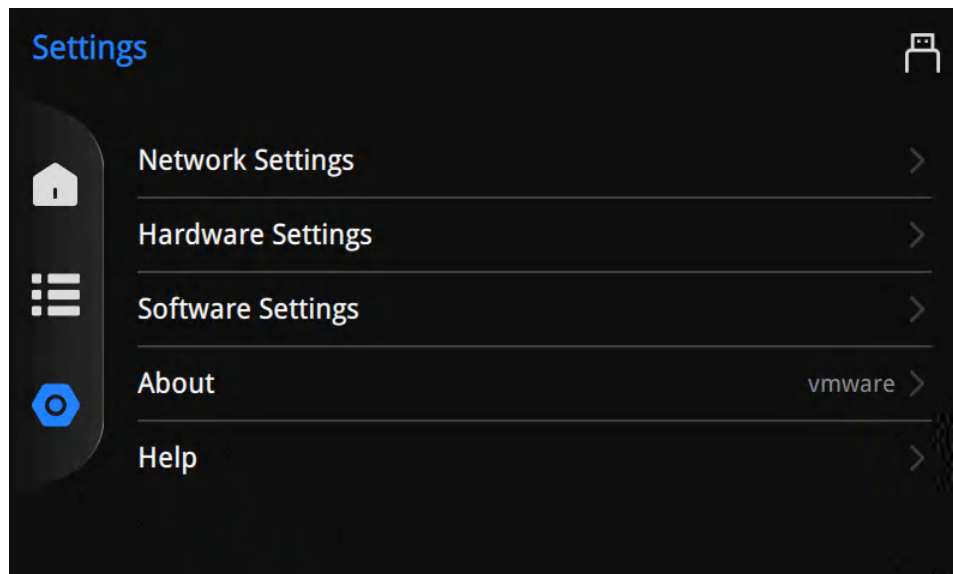
④ **USB queue**

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

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

Settings

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



Note

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

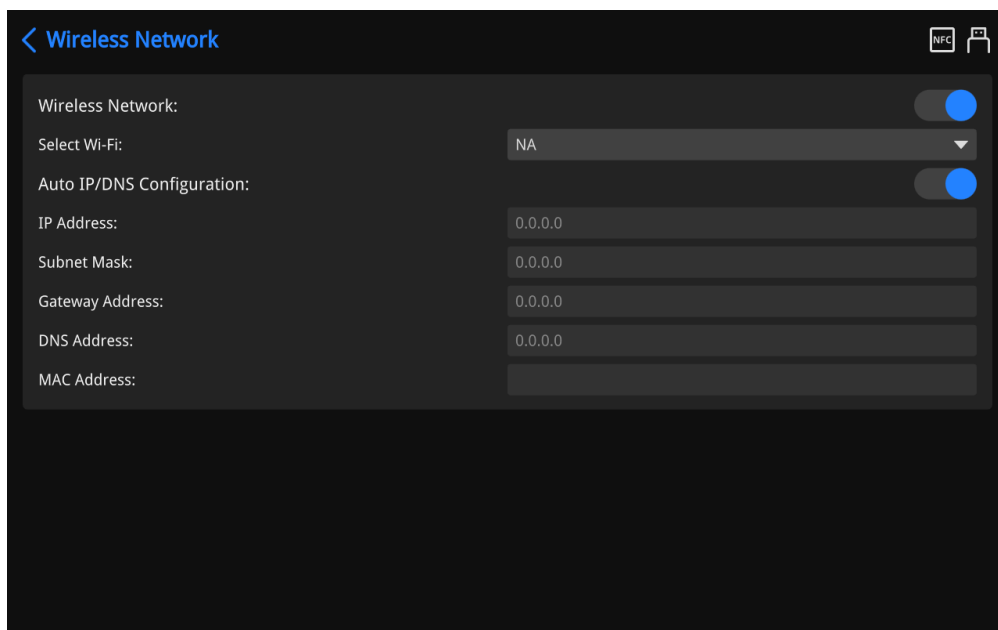
Switch columns to view the introduction of various functions.

Network Settings

- **Wireless Network:**

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

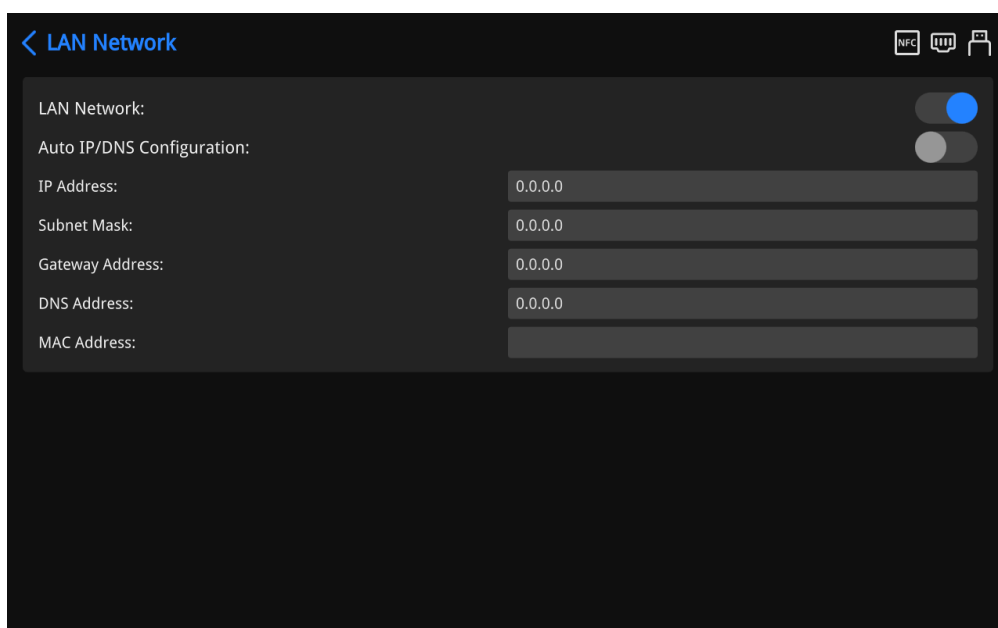
The icon  displays in the status bar upon successful network connection.



- **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.

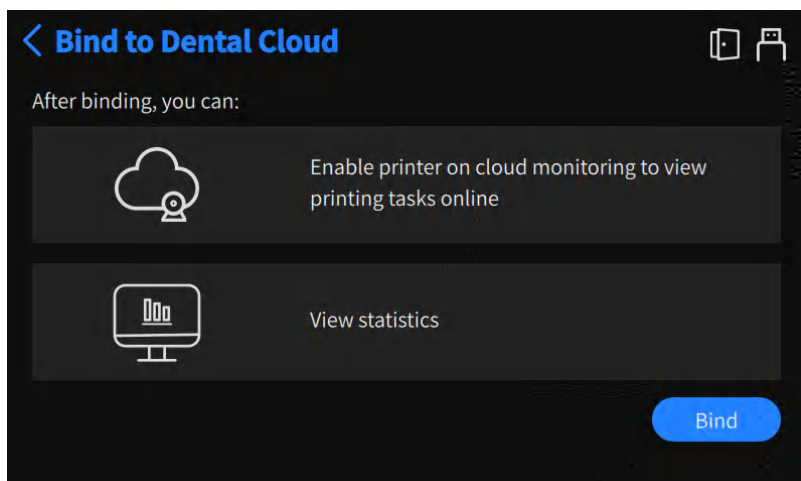


Note

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

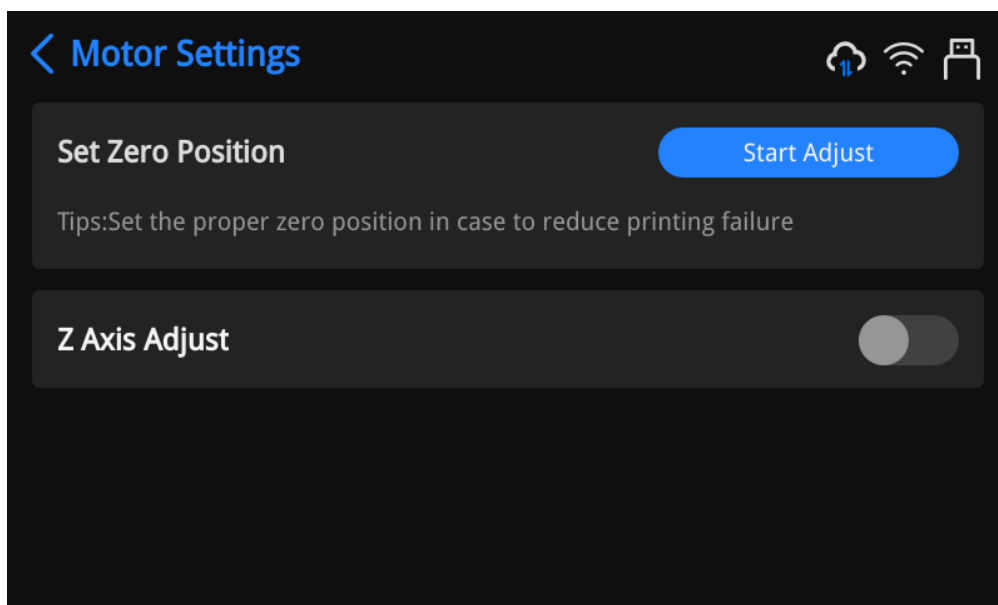


Hardware Settings

- **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.



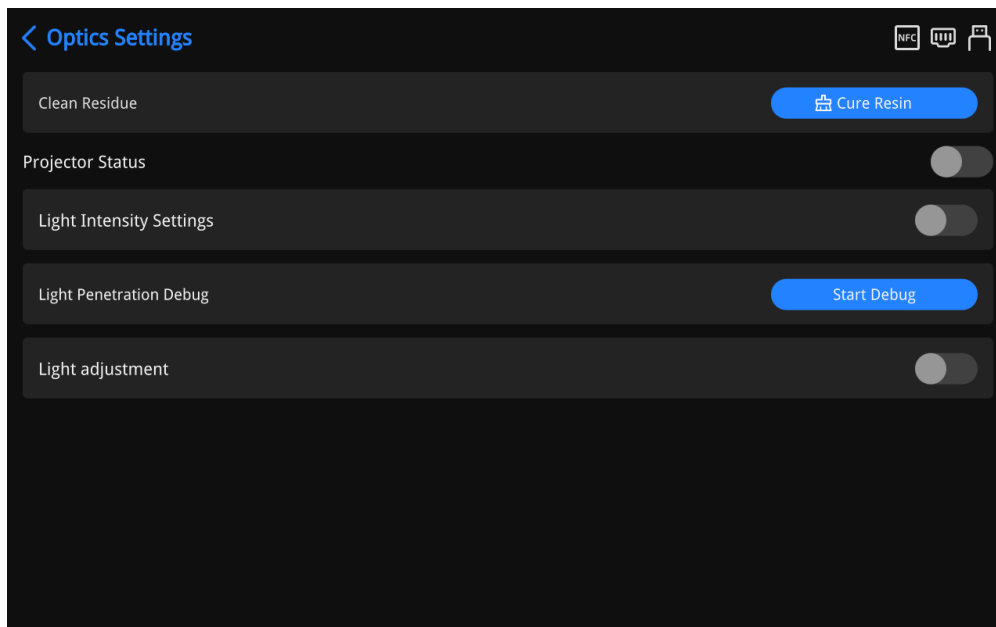
- **Set Zero Position:** Tap **Start Adjust** to enter the zero position adjustment guide. Please follow the guide to loosen the screws, lay out an leveling paper, tighten the screws, and so on.



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 device 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.

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 production 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 device will find power-on accessories (FabCure & FabWash) automatically and synchronize the data about the product material; and a window will pop up on the screen of an idle device 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 production parameters.
-  Disconnected: On the interface of "Connected", tap "Disconnect" in the lower right corner to manual disconnect the accessory.



Note

- Each device 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 device is connected is weak, it may affect the automatic search function.
- After the device 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 device and the accessory are connected automatically, the accessory will synchronize the product material of the slice file when the product completes; if the connected accessory is still in operation, it will synchronize related data afterwards.
- After the device 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.

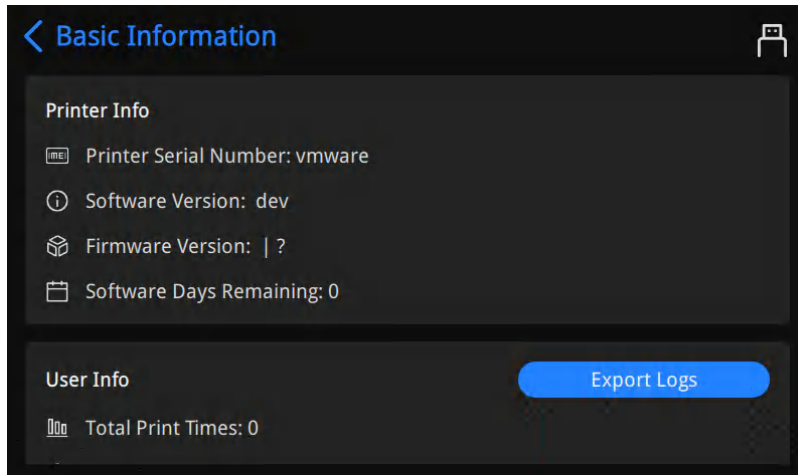
- **Skip Product Wizard:**

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

About

- **Basic Information:**

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



Note

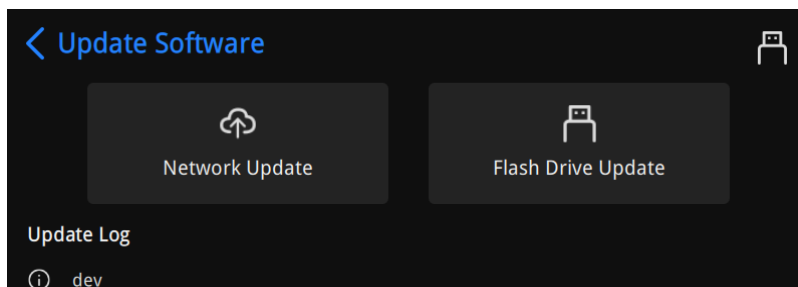
After inserting the flash drive, tap **Export Logs** to export the work log to the flash drive inserted.

The log records the volume of materials used in each completed production task and the temperature & humidity of the last 20 production 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.

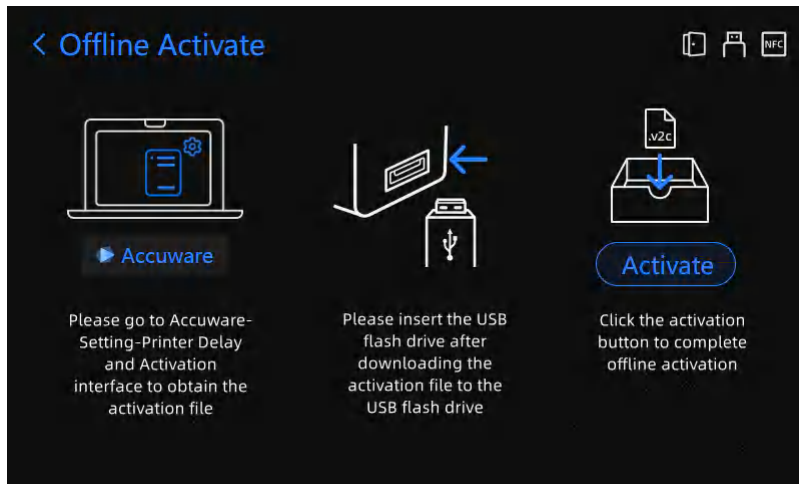


Note

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

If you are prompted that the remaining days are insufficient, please contact SHINING 3D technical support to activate the software using the activation file.

- **Recovery:**



: Burn all the data;



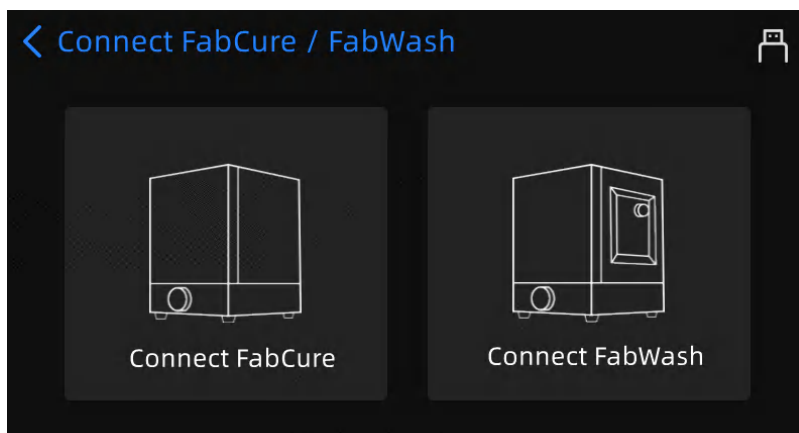
: Clear files on the **Queue interface**;



: 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 device 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 product 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 properly, and whether the sample is produced correctly during the guidance process. If there is any problem, contact SHINING 3D technical support for assistance.
- Damage to the device, data loss and any other accidents caused by procedures not specified in this IFU are not covered by the warranty.

Please follow the instructions to activate the license:

1 Select the language >

The device comes pre-installed with multiple languages, including Chinese, English, Japanese, Korean, and more.



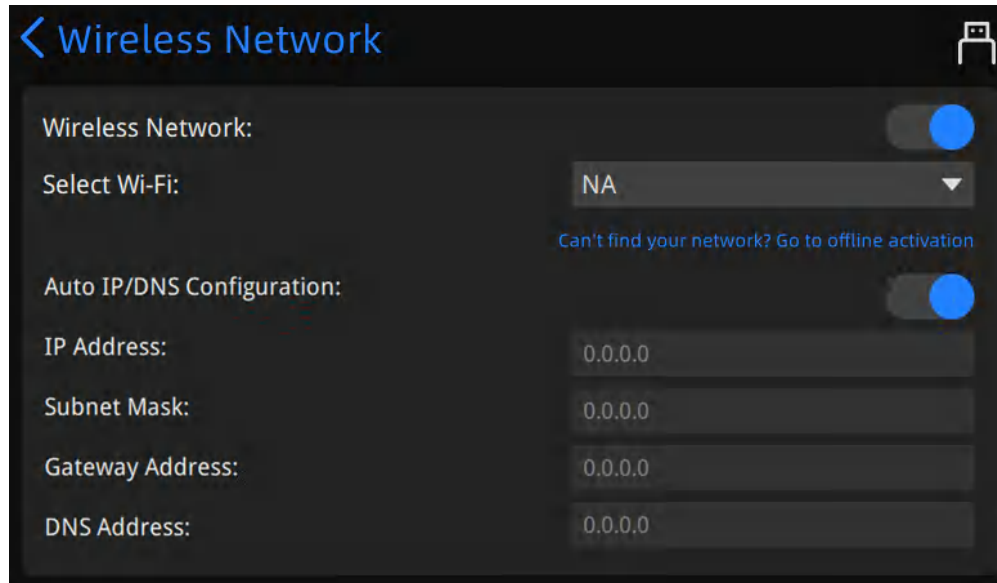
Note

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.



The screenshot shows the 'Wireless Network' settings interface. At the top, there is a back arrow and the title 'Wireless Network'. A toggle switch for 'Wireless Network' is turned on. Below it, 'Select Wi-Fi:' is set to 'NA'. A link 'Can't find your network? Go to offline activation' is visible. Further down, 'Auto IP/DNS Configuration:' is also turned on. At the bottom, there are input fields for 'IP Address:', 'Subnet Mask:', 'Gateway Address:', and 'DNS Address:', all of which currently show '0.0.0.0'.

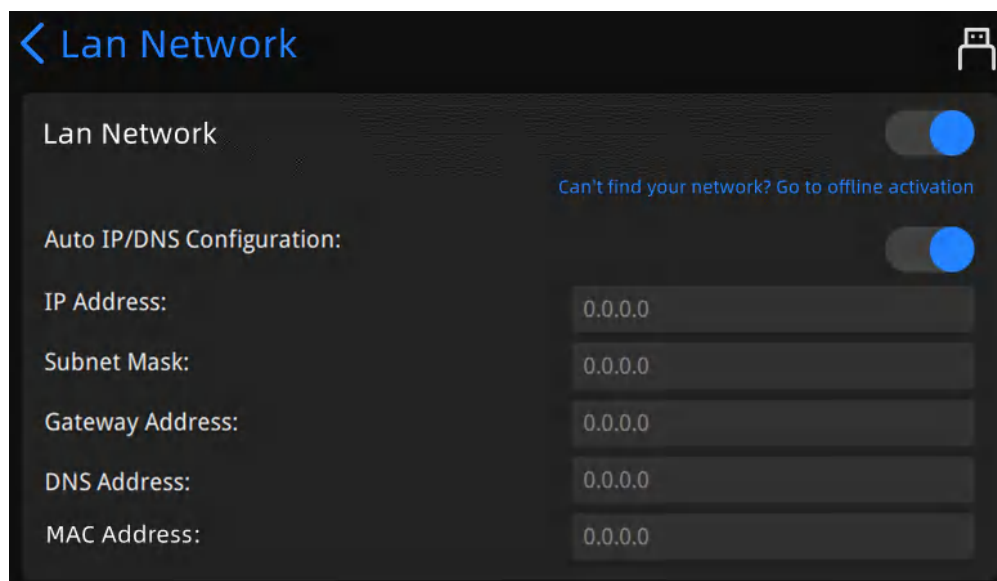


Note

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

Lan Network

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



The screenshot shows the 'Lan Network' settings interface. At the top, there is a back arrow and the title 'Lan Network'. A toggle switch for 'Lan Network' is turned on. Below it, a link 'Can't find your network? Go to offline activation' is visible. Further down, 'Auto IP/DNS Configuration:' is also turned on. At the bottom, there are input fields for 'IP Address:', 'Subnet Mask:', 'Gateway Address:', 'DNS Address:', and 'MAC Address:', all of which currently show '0.0.0.0'.



Note

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

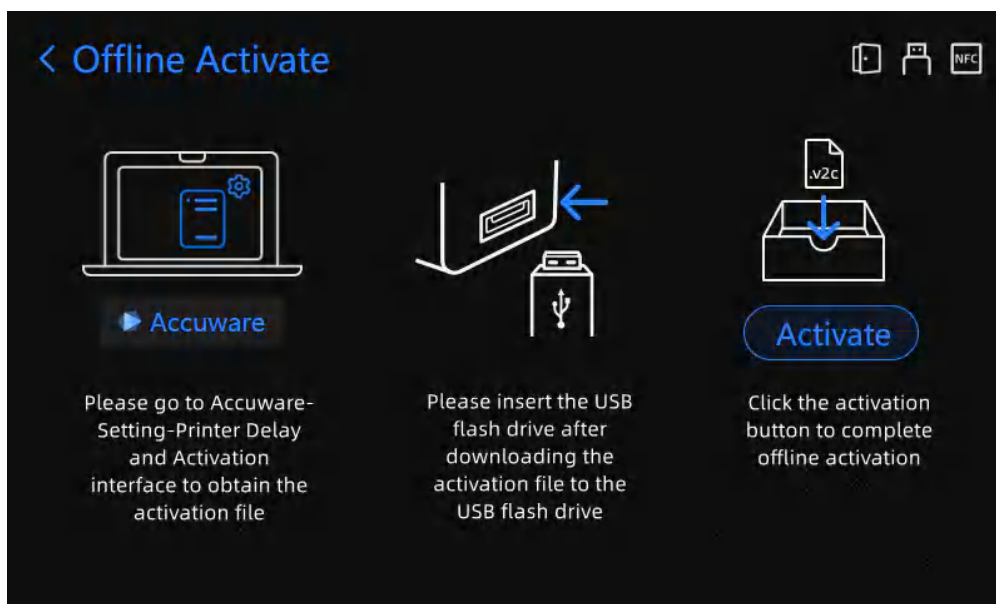
3 Activate the license

- **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 device](#).

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.**



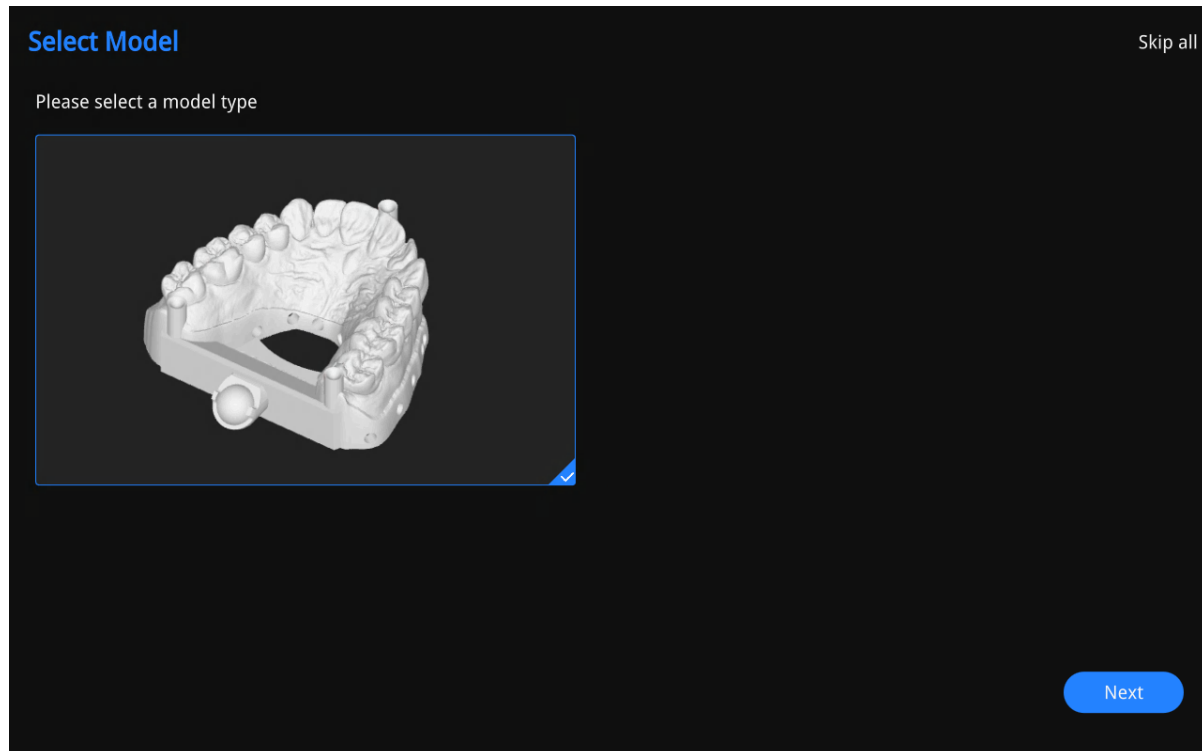
Warning

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

Sample Product Guide

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

1 Select Model >



2 Add Resin >

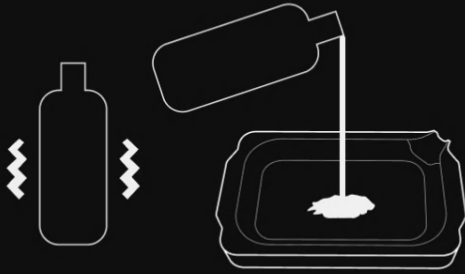
Warning

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 production without interrupting the production 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 production and ensure the production 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



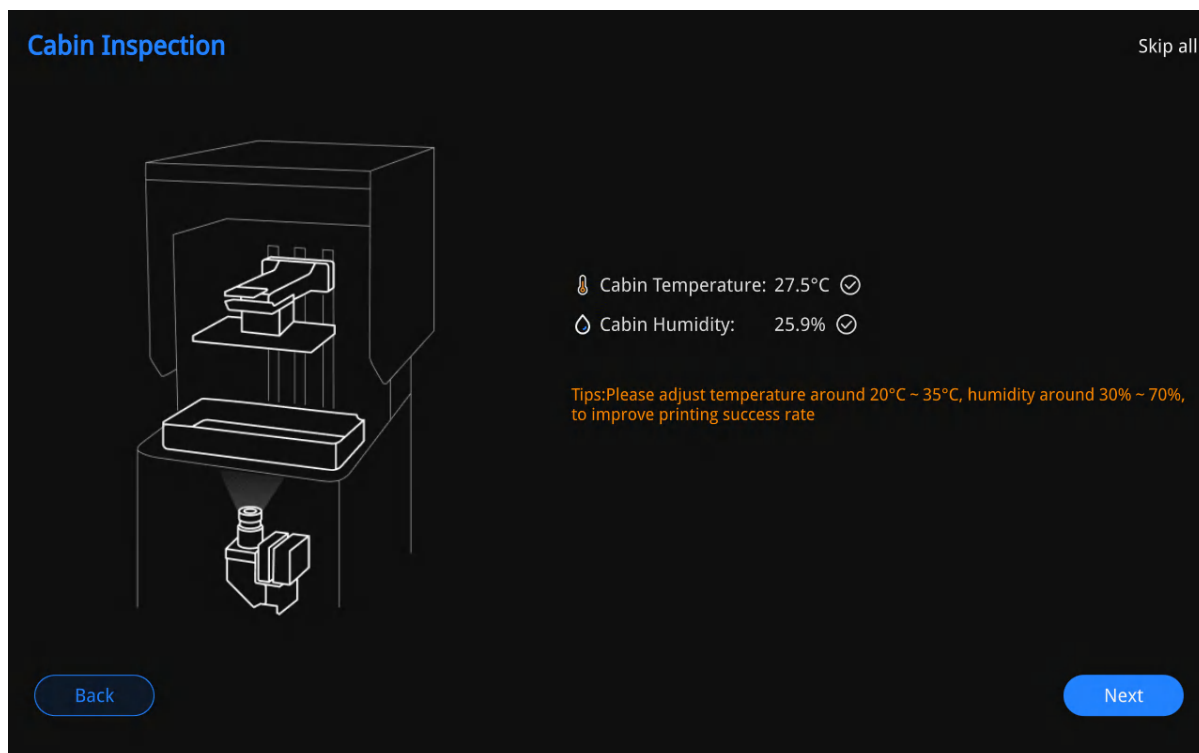
Caution

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

4 Cabin Inspection >

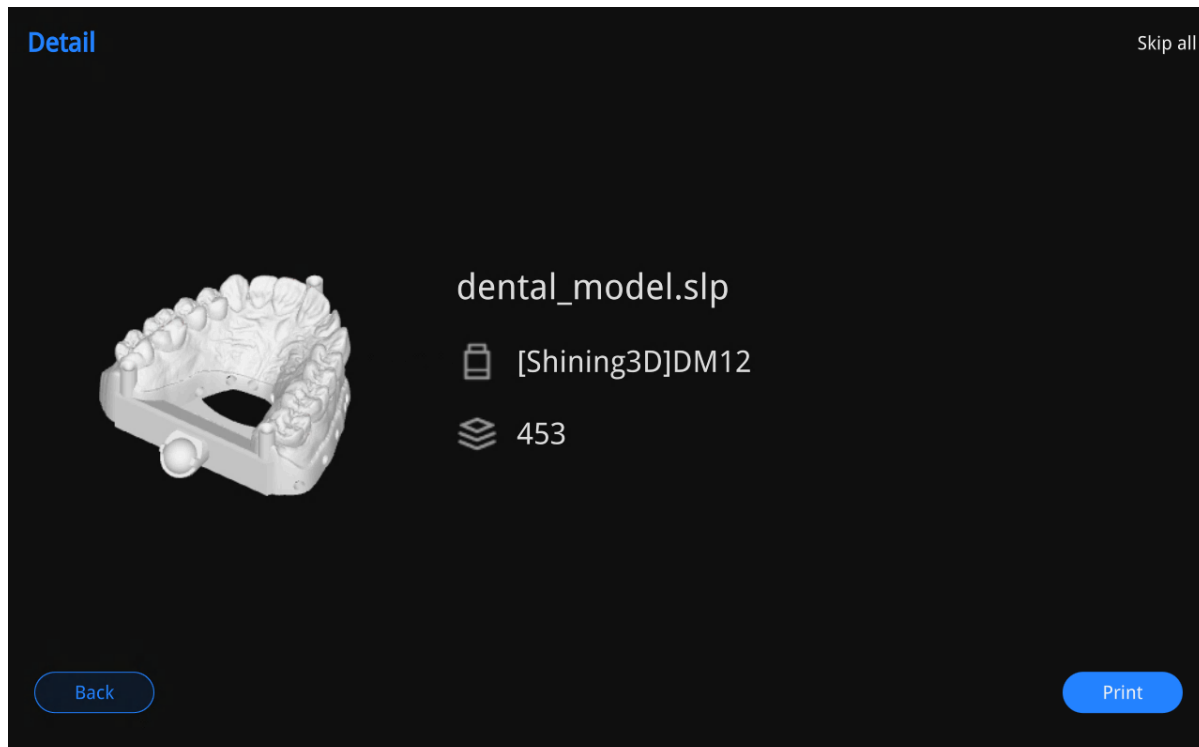
Please ensure the humidity and the temperature meets [environmental requirements](#).

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.



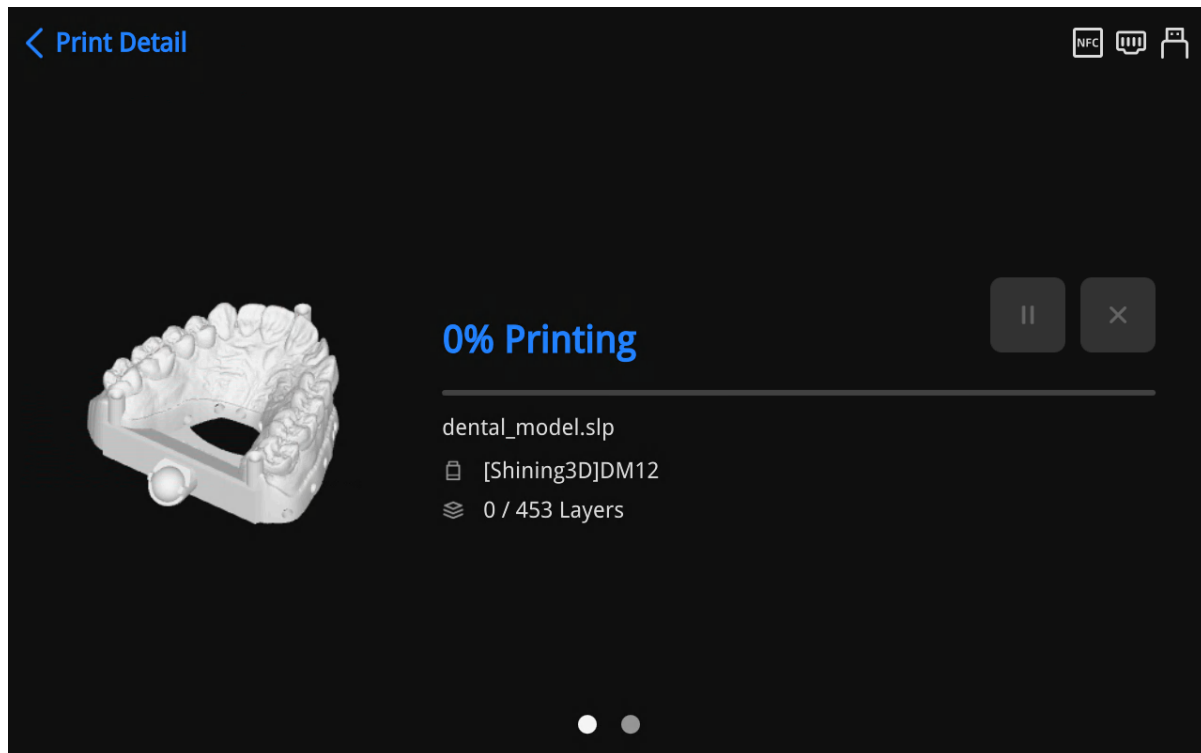
5 Detail >

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



After confirming the information, tap the **Product** button to start production the sample model.

6 Product Detail



Slide to switch between the left and right interface.

After the sample model is produced, the device will sound beeps, and the touch screen will display **Production Completed**.

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

About DentalCloud

Bind to Dental Cloud

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



Note

The device can only be bounded to 1 organization.



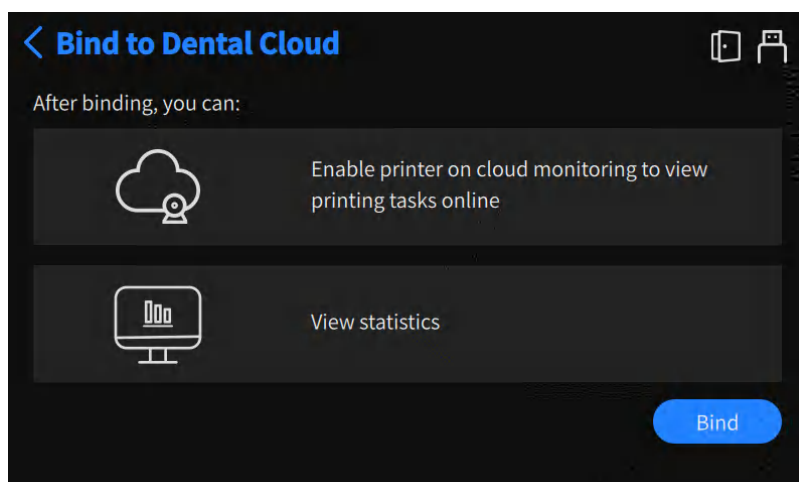
Caution

- **Administer Authority:** Only administer's accounts have the authority of adding device 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 device to your Dental Cloud account:

Step 1 >

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

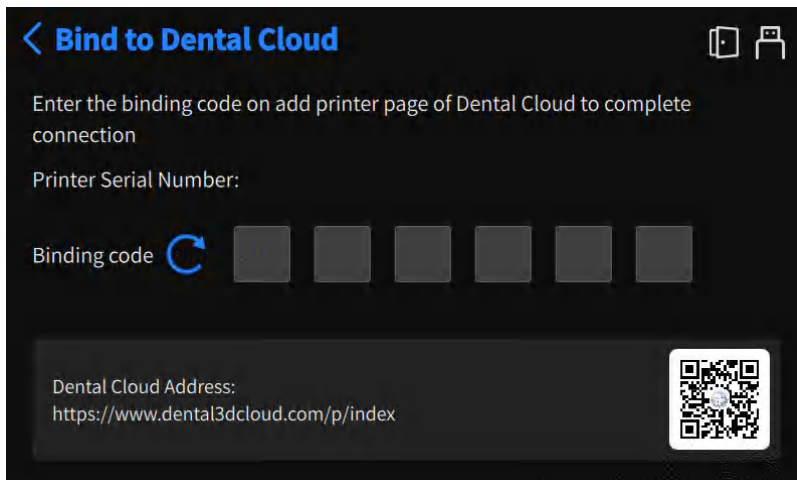


Caution

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

Step 2 >

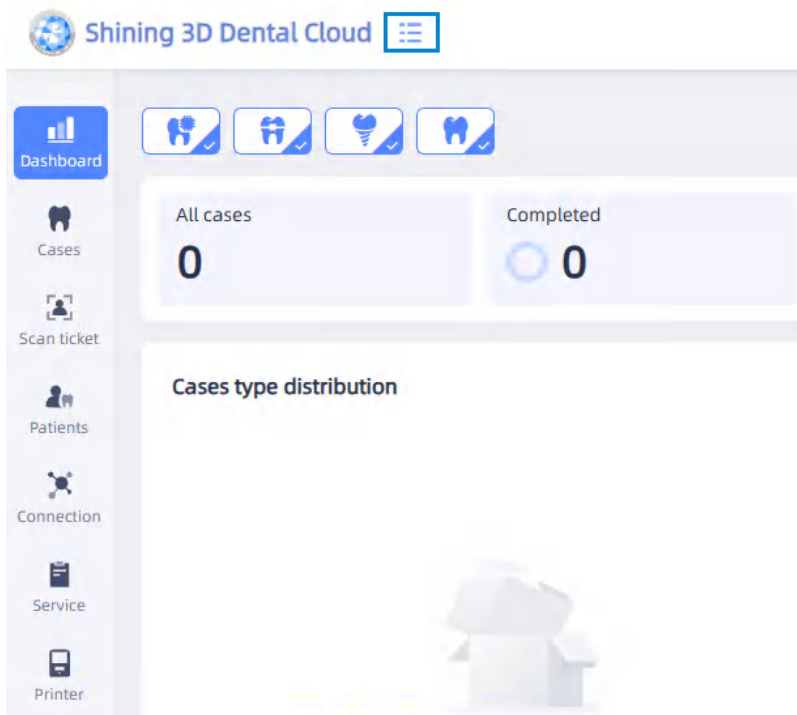
Tap  for loading the binding code.



Step 3 >

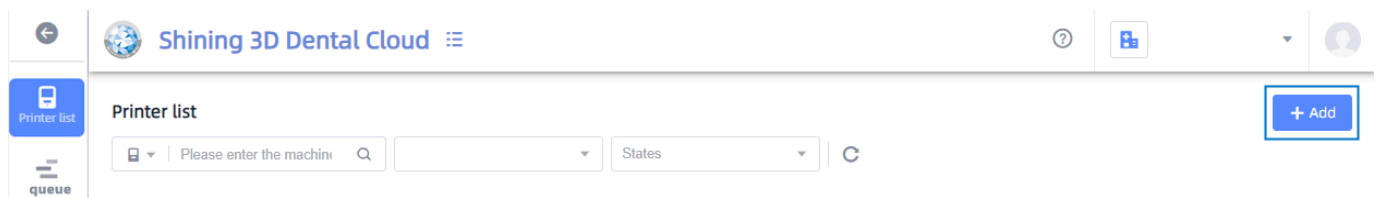
Open [the Dental Cloud](https://www.dental3dcloud.com/p/index) website through the QR code or the link on the interface.

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



Step 4 >

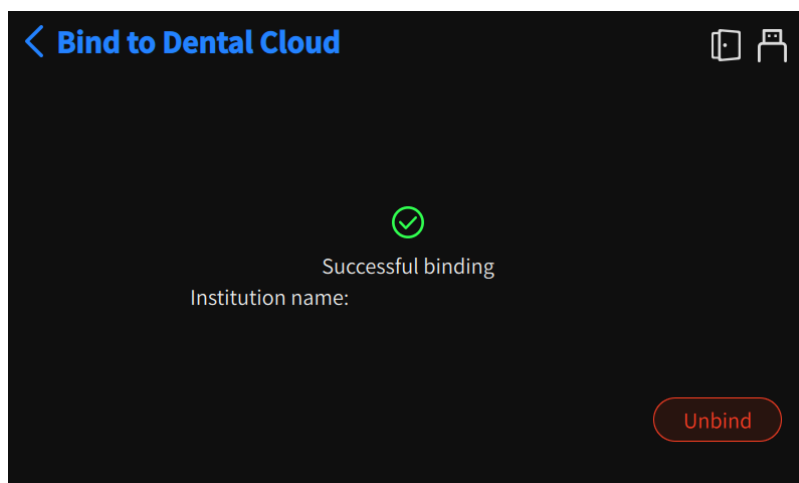
Click **+ Add** and enter the binding code.



Step 5

Click **Connect**, and the data for device will be loaded and added to the top of the **Device List**.

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



Note

- Dental Cloud icon:
 -  : The connection is active.
 -  : The signal is missing. Please check the network connection to the device.
- To unbind, tap the **Unbind** button on the touch screen and **Confirm**, or log in with an administrator account on the Dental Cloud and follow the [unbinding](#) steps. After unbinding, the data for the device will no longer be displayed on the Dental Cloud. To recover the missing data, simply rebind the device to the original organization.

Dental Cloud Operation

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



Note

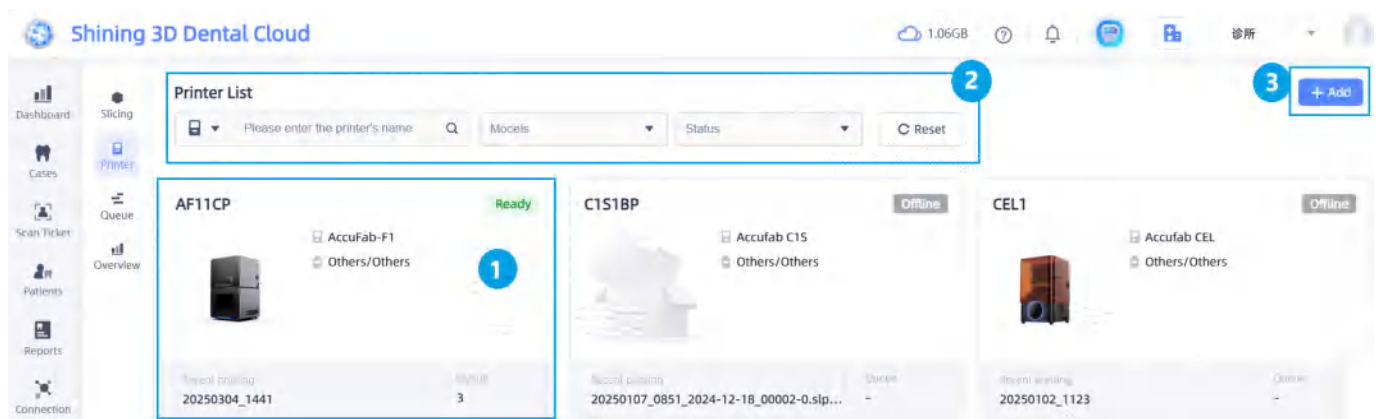
The Dental Cloud tracks data from devices and supports real-time data updating.

Dental Cloud Page



Device list

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



① Device cards:

- Click to view detailed information about the machine, including temperature and humidity, software and hardware versions, resin tank usage status, production data overview, etc.
- Click **Queue** on the bottom-left corner of the card to enter the **Queue** page while tracking the location of current machine.

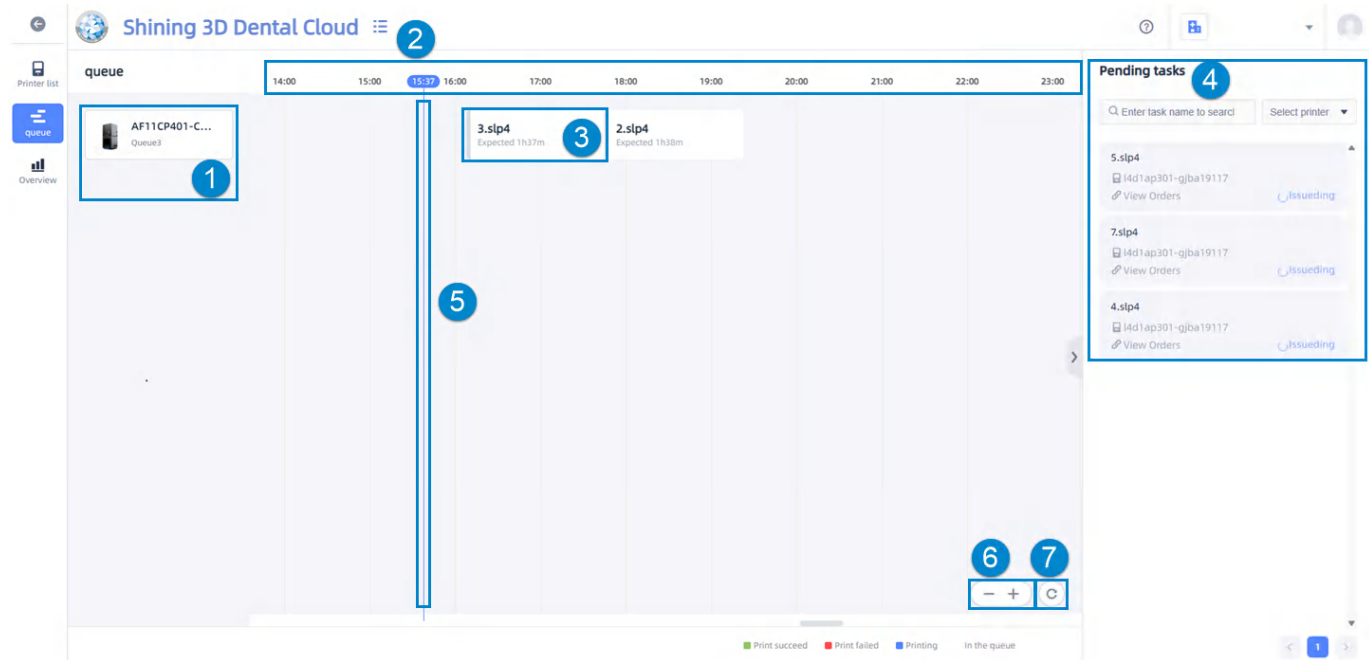
② **List Admin Widget:** Use filtering conditions such as machine name, serial number, type and status to [manage the Device list](#).

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



Queue

The **Queue** page records the tasks to all devices 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 devices bounded to the current organization.

② **Horizontal axis:** Time axis.

③ **Task card:** Click on the card to check detailed information about the corresponding production task (including the number of production layers, layer thickness, total duration, etc.).

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 device.

- 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 product tasks to the device'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**.

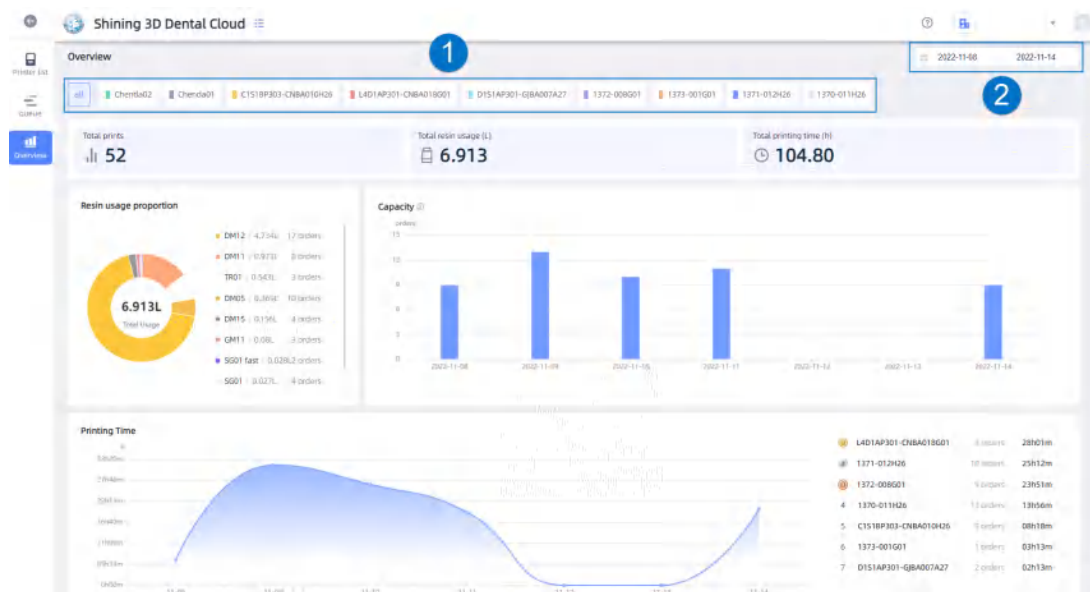


Overview

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

① **Devices buttons:** Select **all** for viewing the data overview to previous organization in default; select one device for viewing the production record to one machine; select multiple devices 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 Production

Check States

Enter the **Device List** page for checking devices' status.

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

Check Ongoing Production Tasks

Check Ongoing Production Within the Device List

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

Check Ongoing Production 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 **production time predication**.

Check History Production Tasks

Check History Production Tasks Within the Device List

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

Check History Production 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 Production 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 production status changing** sliders. The system will send the error message to the people uploading the production 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 production task.

Charge Devices

Enter the device list for charging devices.

Search Devices



Please enter the machine



Input keywords, then click  to filter device(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 device(s) of the same model.

Filter by States

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

Update Data

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

Bind

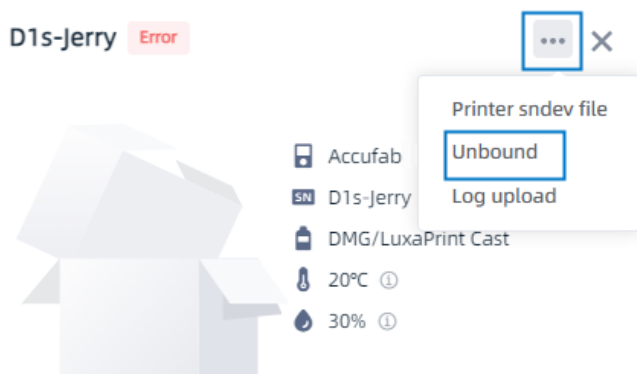
Specific operation steps are provided in the [Binding Dental Cloud Account](#) section.

Unbind

Caution

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

To unbind, click the card of the target device, then click the ... button on the detail information page, select **Unbind**, and confirm. The software built into devices also supports the unbind function.



Caution

After unbinding, the data for device will no longer be displayed on Dental Cloud. To recover the missing data, rebind the device to the original organization.

Production Process

Add Resin

Please select and add appropriate production material for the model to be produced.

Caution

- The manufacturer shall not be liable for damage or data loss resulting from unauthorized modifications or use not described in this manual.
- Any use of this device outside the specified procedures may compromise safety and performance, and is not covered by the warranty.

Resin Type

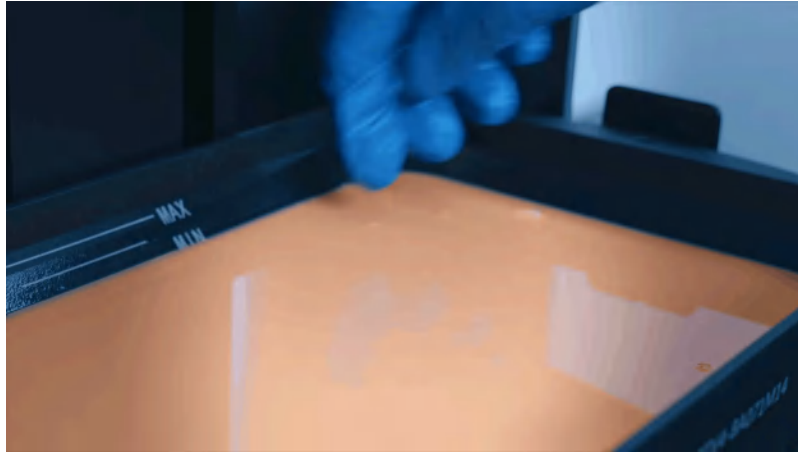
SHINING 3D provides various high-quality resin materials featuring different highlights to apply high-precision resin productions to multiple scenarios.

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 production 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.

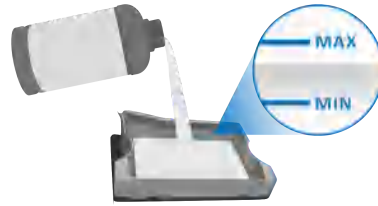
Warning

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 production and to ensure the production effect.



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



Note

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

3 Set the resin tank

Before production, set the resin tank.

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



Caution

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

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

Select and Product Files

Here are three ways to send a product job to the device:

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

Caution

Before selecting the file to product, please make sure that the production 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 device.
- 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 **product** to start production.

Select Cloud file

- ① Log in to the Dental Cloud and go to  **Device** >  **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 device.
- ② Once the file transmission is completed, the files will be downloaded in order and enter the **Pending** queue of the device 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 product 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 **product** to start production.

Select USB file

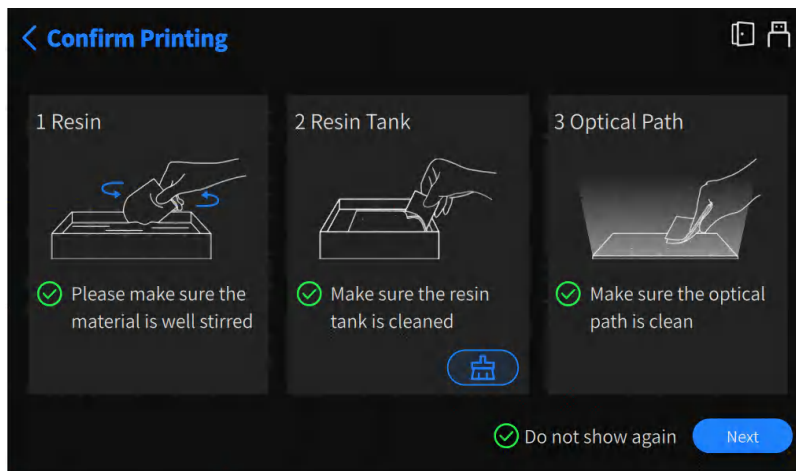
- ① Plug the flash drive that contains the slicing file into the device, and  **Queue** interface will show the  icon.
- ② Tap  to enter the **Flash Drive** interface, and tap the target file to enter the **Detail** interface and simultaneously import the file to the **Pending queue**.

Note

The device 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 **Product** to start production.

Finally, click **product**, and the software will display a window as shown below to remind you to check the relevant settings before production.



Caution

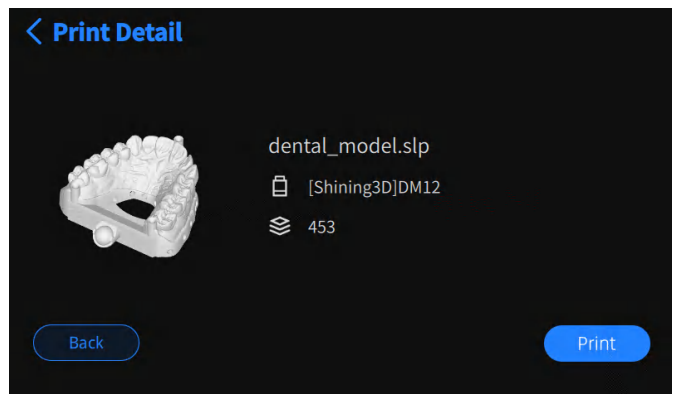
When starting to **product**, if there is a prompt for "Inconsistent material type," please tap  to modify the brand and type of the production material.

Check Production Details

During the production process, go to **Home > Product Detail** interface, and slide left or right to view the production information and control the production 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 production job.



Caution

Please use the pause button with caution, as interrupting the production task may lead to errors in the connection of slices and affect the production quality.

Right interface

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

Post-process

Remove the Model

Please follow the instructions below to remove the produced model.

1 Stand model >

After the production process is finished, the build platform will rise to allow the adhering 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 produced model from the build platform.



Caution

Be careful to keep the crescent ends flat on the surface of the 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 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 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 prevent residue.
- d. Replace the alcohol with a clean solution and clean it 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 out 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 it 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 to perform secondary curing on the produced 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. Additionally, its various properties, such as smoothness and hardness, are superior to those of the model before secondary curing.



Note

During the operation of the Curing Box (FabWare), a specific wavelength of UV light will cure the photosensitive resin to ensure the produced resin models are cured twice.

Please follow the instructions below to cure the produced model.

1 Place the model >

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

2 Cure the model

Close the chamber door and proceed with the curing operation.

Remove the Support



Warning

Proper protection is required when using sharp tools to remove supports.

Please use scissors to remove the supports from the surface of the model. Then, use sandpaper or a hand grinder to smooth the model and remove any remaining support points.



Note

A polishing machine is recommended for further processing and polishing.

Clean the Build Platform

Ambient light may solidify the liquid resin on the build platform, leading to adhesion problems. Therefore, the build platform must be cleaned immediately after each product job.

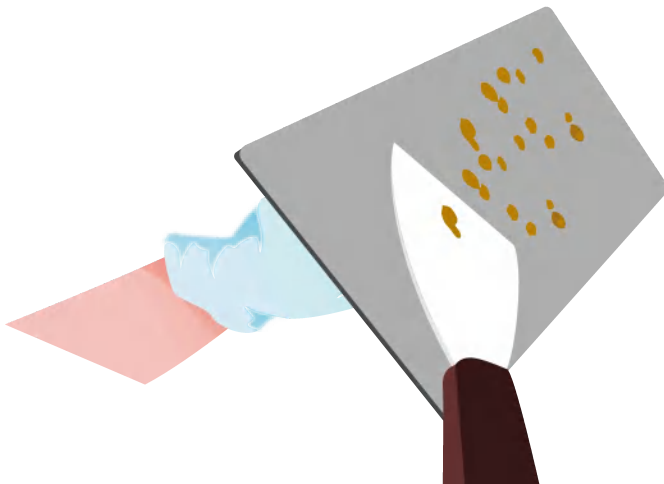


Warning

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

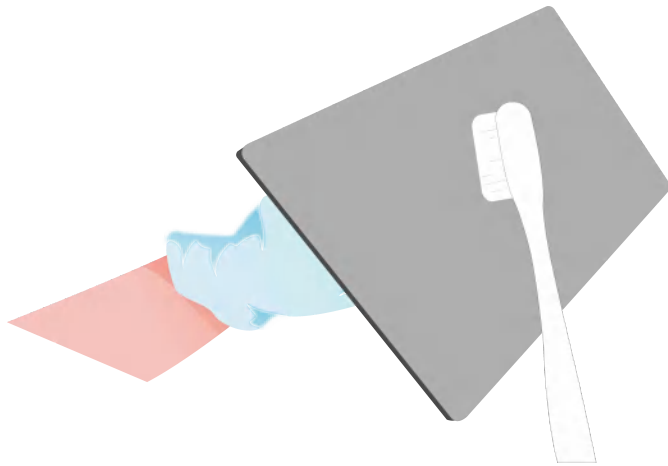
Please follow the instructions below to clean the build platform.

1 Remove residues >



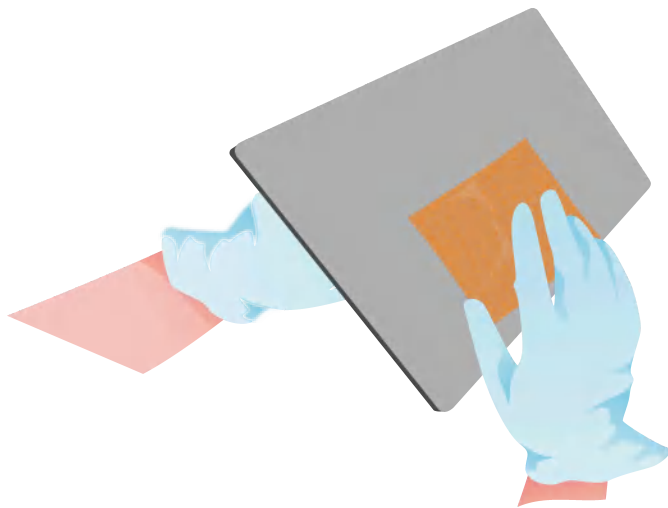
Use the [putty knife](#) to remove residues from the build platform.

2 Brush the build platform >



Soak the **brush** in ethanol and clean the resin liquid on the build platform.

3 Dry the build platform >



Gently wipe the surface of the build platform with a tissue. Place it in a cool, ventilated area to allow it to dry completely before the next use.

4 Install the build platform

Hold the build platform horizontally and slide it along the track. Then press down the locking lever to secure it.

Maintenance

Update the Software

During the device's upgrade process, the system will also require an update. To ensure optimal product 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 device 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 device **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 produced 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 device.



Caution

Damage to the device, data loss and any other accidents caused by procedures not specified in this IFU 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 products over a tank's lifetime.

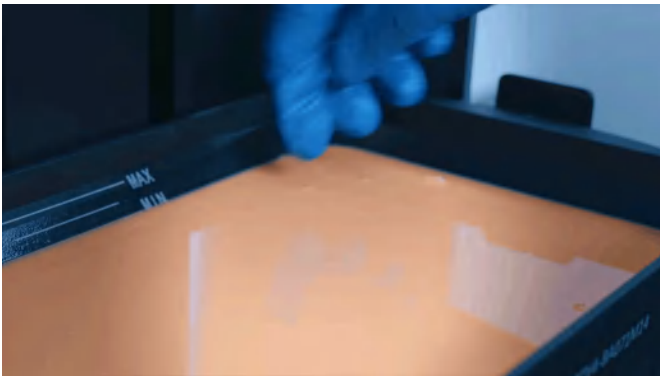
Warning

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 production 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

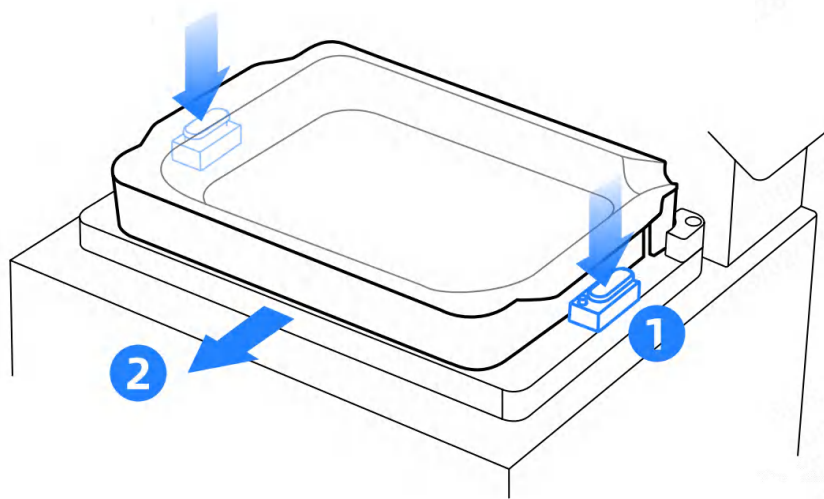
The protective film is a consumable part that needs to be checked regularly based on usage frequency. If you notice any damage or wear on the protective film, replace it promptly to ensure optimal performance.

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.



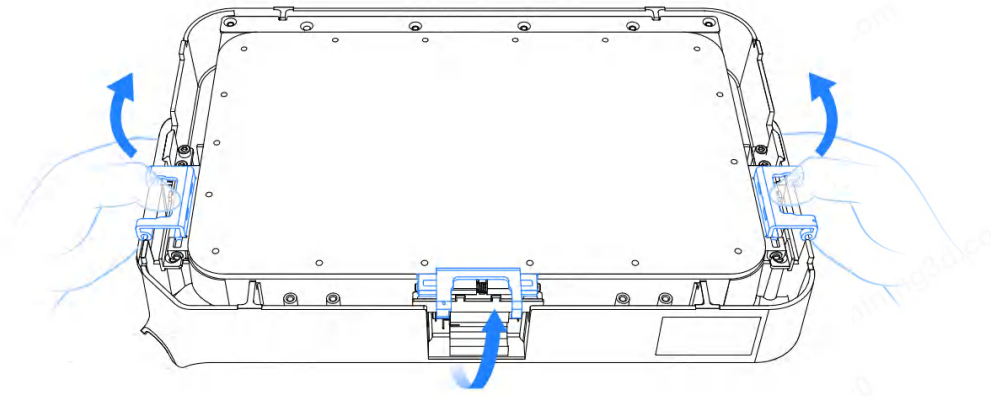
2. Put on disposable gloves and clean residual resin.



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.



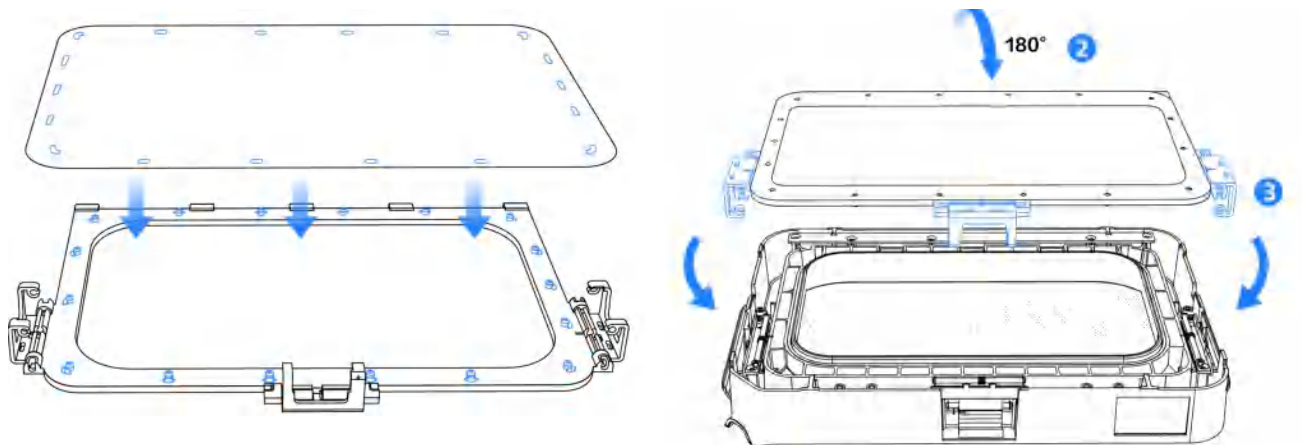
4. Wipe the resin tank with a cleaning cloth or soft cloth to remove any remaining impurities.

 Note

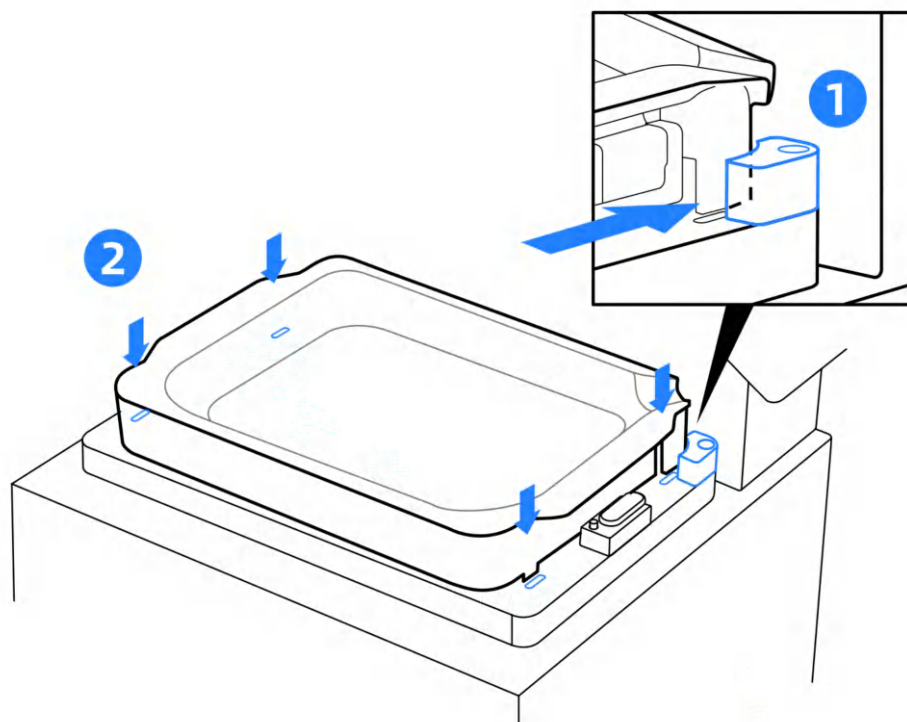
For stubborn stains, use alcohol wipes for more effective cleaning.

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 device according to the maintenance requirements and cycle in the table below to ensure product 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 product
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 device may fail to work.

Problem-solving Guide

? Only one side of the build platform can be used to product the model/ the model falls off during production/ 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 produced 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 "Product error" prompt pops out. ✓

Reason: The device does not function properly when production SLP files.

Solution: [Reproduct](#) or [restart the device.](#)

? 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.

Appendix

Wireless Compliance Notification

Symbol	Explanation
	Japan Ministry of Internal Affairs and Communications Certificate (MIC)

FCC Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.CAN ICES-3(B)/NMB-3(B).

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) L'appareil ne doit pas produire de brouillage, et (2) L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Radiation Exposure Statement Caution: This Transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

Déclaration d'exposition Attention: Cet émetteur doit être installé pour fournir une distance de séparation d'au moins 20 cm de toute personne.

RESTRICTIONS IN THE 5 GHZ BAND

Within the 5.15 to 5.25 GHz band, UNII devices will be restricted to indoor operations to reduce any potential for harmful interference to co-channel Mobile Satellite System (MSS) operations.

RESTRICTIONS DANS LA BANDE DE 5 GHZ

Dans la bande de 5,15 à 5,25 GHz, les appareils UNII seront restreints aux opérations intérieures pour réduire toute possibilité d'interférence pouvant nuire aux opérations du Système satellite mobile dans le même canal(MSS).