

# SUPER 3D Super3D-A3 3D Printer User Manual

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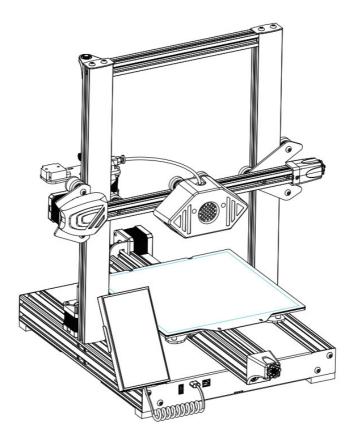


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## Super3D-A3 3D Printer

**Note:** Each 3D printer has undergone strict printing tests before leaving the factory. If there are filament residues in the nozzles of the equipment or slight scratches on the printing platform, it is a normal phenomenon and will not affect the use.



The product is subject to the actual product, and the pictures are for reference only.

## Thank you for choosing Super3D products!

For your convenience, please read this manual carefully before use. The precautions and usage skills in this article can better avoid wrong installation and use. If you encounter doubts or problems not included in this manual, please contact us through this email <a href="mailto:support@xdwdz.com">support@xdwdz.com</a>.

In order to provide you a better experience of our products, you can also obtain relevant equipment operation knowledge in the following ways:

- 1. You can find related product instructions and videos on the USB flash disk or our official website.
- 2. Official website: <a href="www.zgcfsw.com">www.zgcfsw.com</a>, log in to Super3D official website to find relevant equipment instructions, operation guides, contact information, etc.

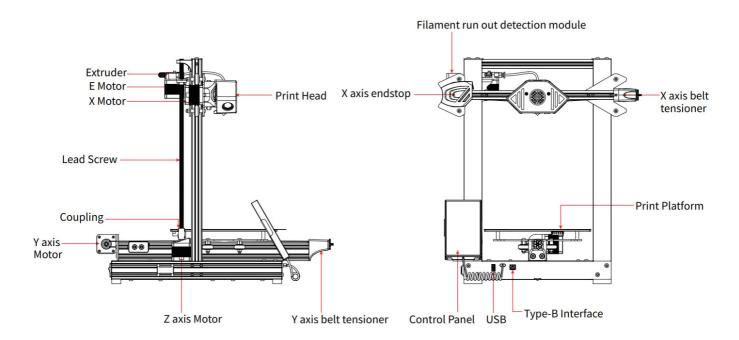
#### **Notice**

- 1. Do not place the printer in a vibrating or other unstable environment. The shaking of the machine will affect the printing quality.
- 2. Please do not touch the nozzle and heat bed when the printer is working, in case to avoid high temperature burns and personal injury risk.
- 3. After printing, please use the remaining temperature of the nozzle to clean the filament on the nozzle with tools in time. When cleaning, please do not touch the nozzle directly with your hands to avoid burns.
- 4. Please keep doing regular product maintenance. When the power is off, please clean the printer body with a dry cloth to wipe off dust and bonded printing materials.
- 5. The 3D printer contains high-speed moving parts, so be careful not to pinch your hands.
- 6. When the child uses the machine, please use the machine accompanied by adult to avoid personal injury.
- 7. In case of any emergency, please turn off the power directly.

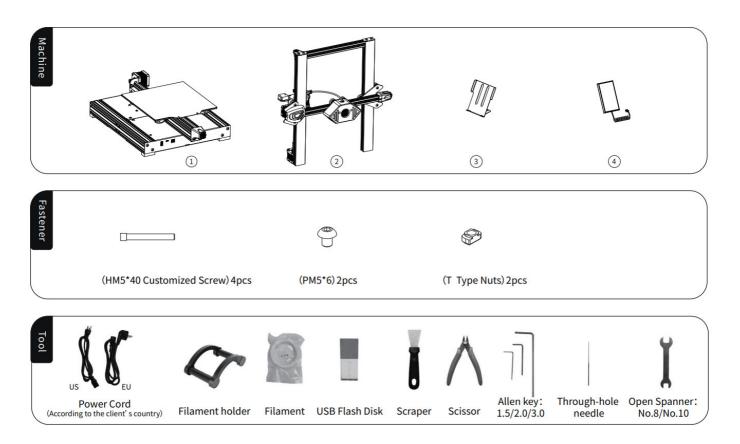
# **Machine Specifications**

Printing Parameter:		Software Parameter:	
Forming technology	FDM	Slicing Software	Super 3D
Build Volume	220X220X250(mm)	Input Format	STL, OBJ
Print Resolution	±0.1mm	Output Format	Gcode
Nozzle Diameter	0.4mm	Connectivity	WIFI/Type-b Interface
Print Speed	30-180mm/s	Power Supply Parameter:	
Temperature Parameter:		Rated Voltage	110/240Vac
Environment Temperatu re	5°C-40°C	Rated Power	350W
Max Nozzle Temperatur e	260°C	Physical Parameter	
Max Heat bed Temperat ure	100°C	Machine Size	522*448*500mm
		Net Weight	9.5kg

# **Machine Demonstration**

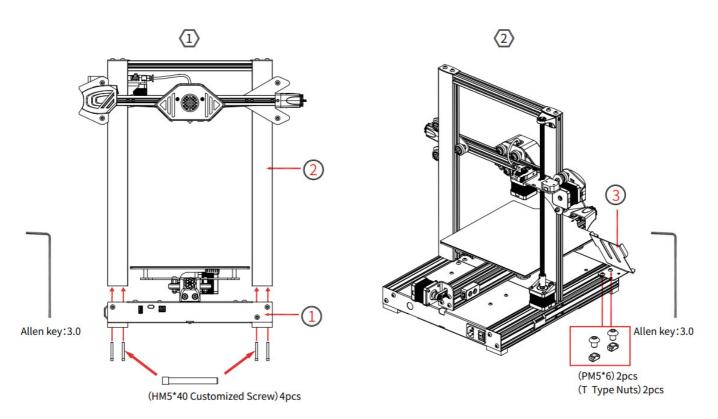


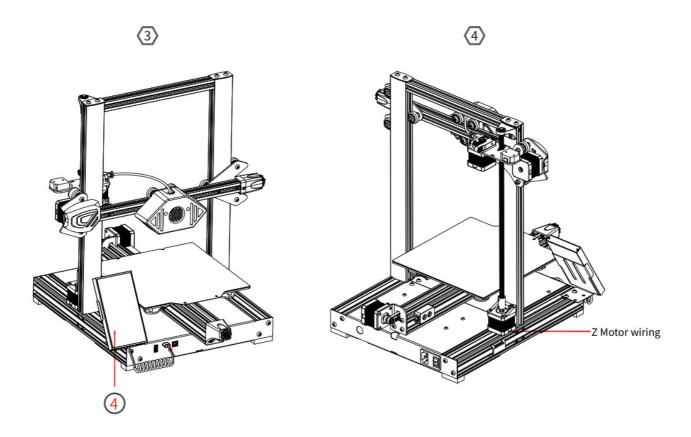
**Packing List** 



# **Machine Installation**

Installation instruction video is included in the USB flash drive



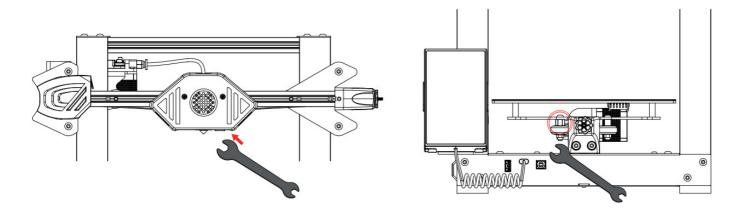


## 1. Heat bed pulley plate wobbles:

Installation instruction video is included in the USB flash drive

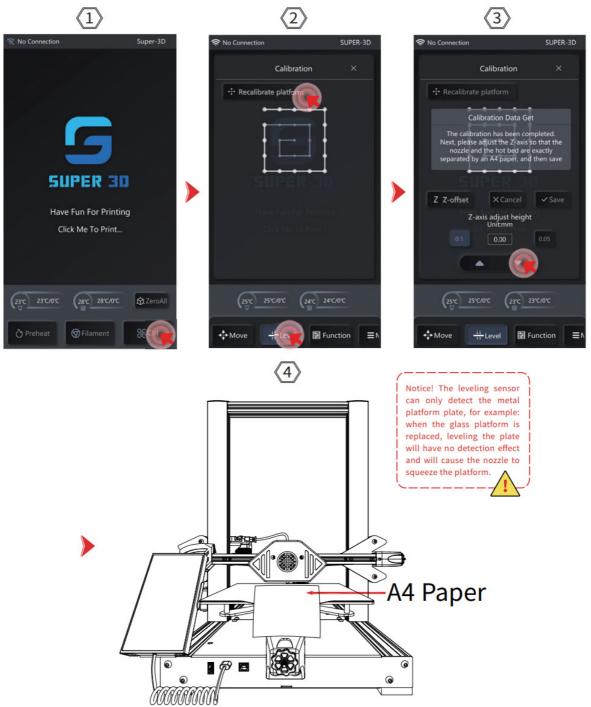
The Y-axis pulley plate has been adjusted before leaving the factory, but the pulleys of the machine may become loose during the transportation.

If the printing platform of the machine shakes or loosens, you can use an open-end wrench to turn the hexagonal isolation column slowly under the platform clockwise until the Y-axis pulley plate slides smoothly without loosening or shaking. If the print head shakes or becomes loose, The hexagonal isolation column below can be adjusted as well, and the pulleys on both sides of the Z-axis gantry also have corresponding isolation columns that can be adjusted.



## **Automatic Leveling**

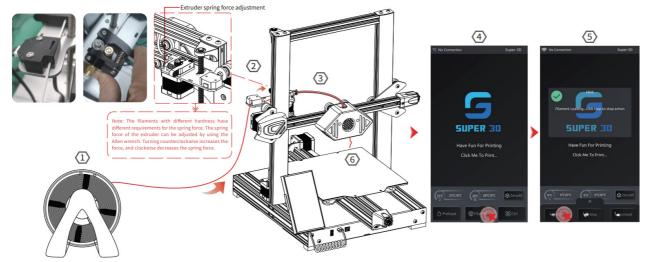
- 1. Before printing for the first time, platform slope and nozzle offset calibration is required.
- 2. Click [Control] [Leveling] [Recalibrate Printing Platform] on the screen. Each axis of the printer will automatically returns to the original point, and after entering the Auto leveling page, it starts to collect the height of the leveling point. During this period, no other operations can be performed, and finally theprint head will return to the center of the platform.



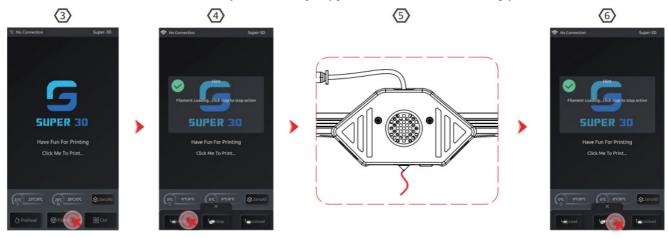
3. After the leveling is completed, begin the nozzle offset calibration. Please place a piece of A4 paper between the print head and the platform, adjust the gap between the print head and the platform by clicking [Up] and [Down], and keep push and pull the A4 paper, and compensation leveling can be completed when friction is generated.

## **Filament Feeding**

- 1. Please place the filament on the holder. (The USB Flash disk has the holder Gcode print file inside which can be printed by yourself.)
- 2. Filament Feeding Manually: Firstly, pass the filament through the filament run out detection module, and then push it into the extruder. When pushing into the extruder, pinch the side end of the spring and push in the filament until you feel some resistance at the bottom of the print head. On the home page, click [Refill] [Feed], The nozzle temperature will automatically preheat to 200°C, until the filament come out of the nozzle normally.



3. Filament Feeding Automatically: Firstly, pass the filament through the filament run out detection module before being advanced to the extruder. Tap the screen [Replacement] – [Feed], begin the preheat according to the prompt, then wait for the machine to automatically feed the filament, until the filaments are normally ejected from the nozzle, after the filament is ejected, click [Stop] to end the filament feeding process.



# **Model Printing**

- 1. Insert the USB Flash disk into the Flash disk slot of the printer.
- 2. On the home page, click [Start Printing] [Select File] [File Preview] [Print]. After the nozzle and the heat bed heat up to the set tempera-ture, the X, Y, and Z axis will return to the zero position and start to print the model.



**Note:** When printing a test model, please observe how the first layer prints, if A and C appear on the first layer, it means that the compensation setting is not adjusted properly. you can enter the compensation adjustment during the printing process to adjust the print head distance from the platform.

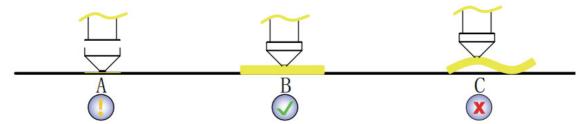
If it is case B, and it proves that the nozzle and platform have reached to a good print distance, you can

continue to print.

The distance between the nozzle and the platform is too low, and the extrusion is insufficient. It is necessary to fine-tune the compensation value to make the print head lift up to a suitable distance.

The distance between the nozzle and the platform is moderate, the amount of extrusion is moderate, and the adhesion to the platform is uniform.

Nozzle is too high from platform, poor adhesion. It is easy to cause the model to fall off from the platform during the printing process. Thus, it is necessary to fine-tune the compensation value of the print head and drop the appropriate distance.



- 3. **Z axis fine-tuning:** When adjusting, please switch the moving distance to 0.05mm or 0.1mm for fine-tuning to prevent the nozzle from excessively squeezing the platform or the discharge material is suspended.
- 4. **More function adjustments during printing:** [Speed], [Flow], [filament run out detection and fan activation status (uncontrollable, to prevent shutting down during printing, resulting in nozzle clogging)
- 5. Resume Print after Power Loss: When encountering a sudden power failure or turning off the power of the machine by mistake, if you want to resume printing, please turn on the power again, and click to resume printing after turning on the machine. (Please note that the model adhesion effect is better when the PEI platform is heated, but the printing platform plate will cool down after a long time of power failure, and the model will fall off easily, which will make it impossible to complete the ontinuous printing)
- 6. **Filament Runout Detection:** This function is to warn the user before the filament is exhausted when the model is halfway through printing, and the filament needs to be replaced before continuing to print, which can effectively prevent the failure of the odel to print due to lack of filament.

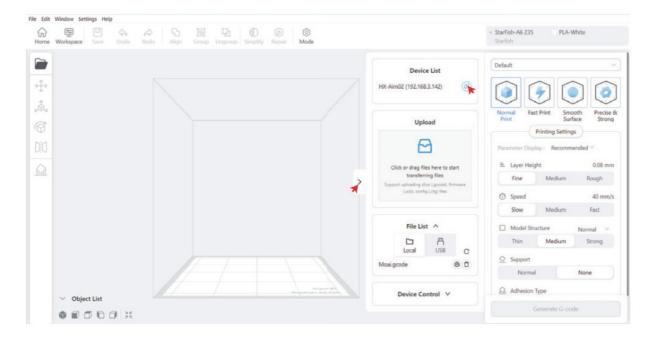
### **Skicing Softwae**

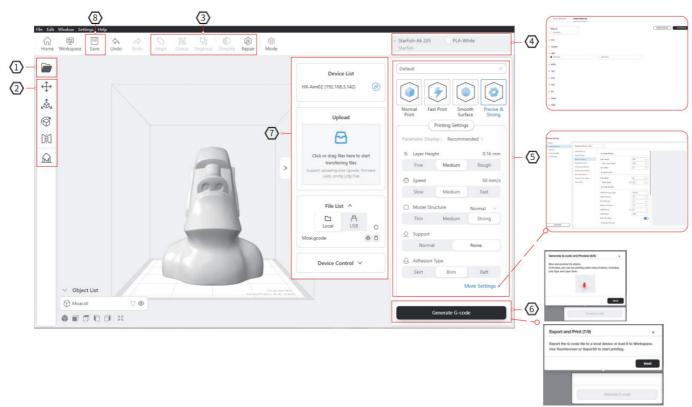
1. Installation



## 2. WiFi connect to the device

- **1.** Click [Control] [More] [WiFi] on the home page of the screen to select the local area network connection. (See screen function page for more details).
- 2. Refresh and connect the device within the installed slicing software.

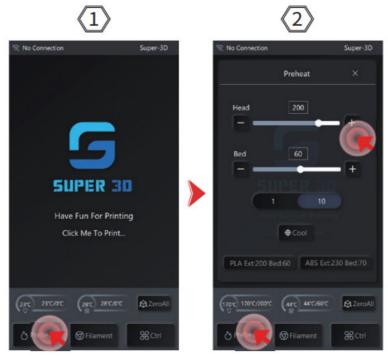




- 1. Import one or more model files.
- 2. Icons from top to bottom: model moving, zooming, rotating, mirroring, enter support edit mode.
- 3. Icons from left to right: edit object alignment, marshalling, unmarshalling, simplify model, repair model.
- 4. Select the machine model and materials used to enter the detailed editing interface.
- 5. Parameter configuration, with four printing modes: normal printing, fast printing, Table surface smooth, precise and firm. Expand Print Settings to adjust printing parameters.
- 6. Generate G-code and preview sliced objects. G-code document can be exported locally or upload to the device. Click print on the screen or within the slicing software.
- 7. Upload to the device and control the operation of the machine and equipment in the slicing software: file list, you can choose to print directly. Device Control: Temperature, Zero, Move.
- 8. Save Object.

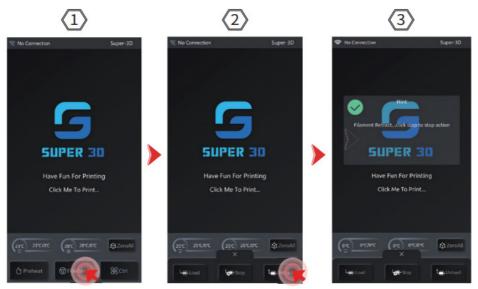
## **Screen Function**

## 1. Preheat

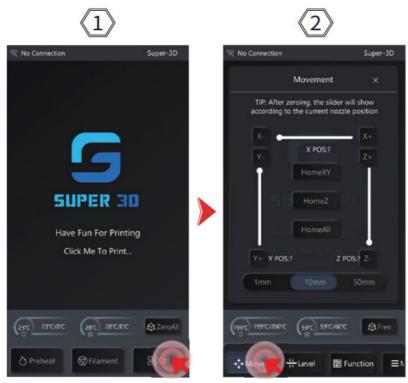


- (1) Preheat before printing.
- (2) Click [Preheat] on the interface, enter editing to adjust the Nozzle temperature and heat bed temperature.

# 2. Change the filament



- (1) In daily use, if you need to replace filament, follow the below steps.
- (2) Click [Replacement] on the interface, click [Return], wait according to the pop-up window and complete the return.
- (3) After the filament return is completed, perform the feeding operation to complete the replacement of filament.
- 3. Move



- (1) Click [Control] [Move] on the screen home page to enter the editing page.
- (2) Adjust the selection distance of the X, Y, and Z axis.

## 4. WiFi setting



- (1) Tap the screen homepage [Control] [More] [WiFi], Enter the local area network. Shortcut: top left corner of the home page. Click [WiFi] to enter the interface directly.
- (2) You can refresh and search LAN first, then select a nearby LAN network and connect.
- (3) In [More], you can change the device name in the slicing software, and then you can select the device name and IP for connection.

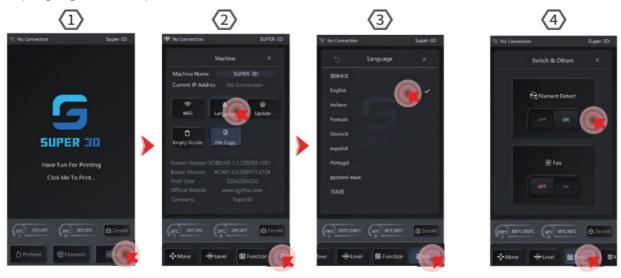
#### 5. Firmware upgrade



- (1) Click [Control] [More] [Upgrade and Configuration] on the home page of the screen to update the firmware.
- (2) After the firmware is updated, it will restart automatically.

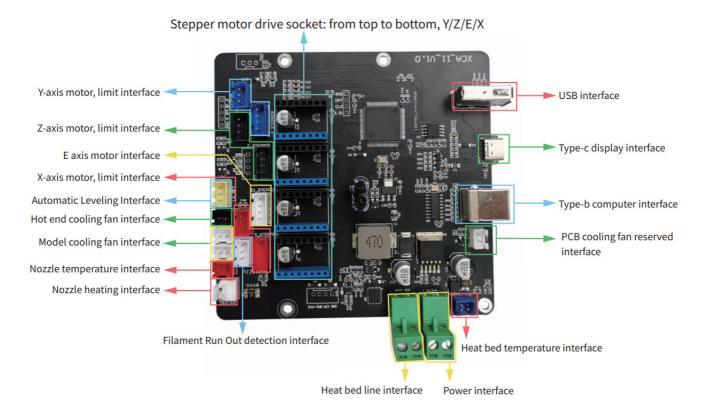
Note: Please upgrade the firmware in non-printing state.

# 6. Other (language, function)



- (1) Click [Control] [More] [Language] on the home page of the screen to choose more languages.
- (2) Function: Filament run out detection and fan switch.

# **Motherboard Wiring**



## **Troubleshooting Guide**

#### 1. A certain motor of X/Y/2 axis does not move or makes abnormal noise when it returns to zero.

- 1. The motor wire is loose, please check the wiring again.
- 2. The corresponding limit switch cannot be triggered normally. Please check whether there is interference with the movement of the corresponding axis and whether the limit switch line is loose.

#### 2. Nozzle Extrusion Abnormal

- 1. Check whether the extrusion motor wire is loose.
- 2. Whether the top wire of the extrusion gear locks the motor shaft.
- 3. The heat dissipation of the print head is not enough, please make sure that the heat dissipation fan of the print head is working normally.
- 4. Blockage at the nozzle. Try to briefly heat the nozzle to 230°C, and manually squeeze the filament hard to remove the blockage or use a fine needle to unclog the nozzle under heating.

## 3. The model does not stick to the platform and warps

- 1. The key to whether the model can stick to the platform is whether the filament can attach to the platform when printing the first layer. When printing the first layer, if the distance between the nozzle and the platform exceeds 0.2mm, the adhesion to the platform will be seriously reduced, and re-leveling is required.
- 2. Set the printing platform attachment in the slicing software, and select the attachment type (Brim), which is beneficial to enhance the attachment and prevent warping and other problems.

#### 4. Model dislocation

- 1. The moving speed or printing speed is too fast, try to reduce the speed.
- 2. The X/Y axis belt is too loose or the synchronous wheel is not fixed tightly.
- 3. The driving current is too small.

#### 5. Stringing badly

- 1. The retraction distance is not enough, set the retraction distance to be larger when slicing.
- 2. The retraction speed is too slow, set the retraction speed higher when slicing.

- 3. Set to retract lift Z, and the lifting height is about 0.25mm when slicing.
- 4. If the motor drive current is too small, the filament will have strong fluidity and paste, and the printing temperature will be lowered a little bit.

#### After-sale service card

## 1. Contact the purchased platform for after-sales service.

- 1. All 3D printer provide user with a 12-month warranty for the entire machine.
- 2. During the warranty period, if there is any non-human damage to the equipment (evaluated by Super 3D engineer), you will get free accessories and after-sales technical support.
- 3. The after-sales service cycle starts from the date of delivery of the product. If a clear invoice can be provided, then it will start with the invoice date.

## 2. The following accessories are not included in the scope of warranty

PEI platform metal plate, USB Flash disk, 3D Printer filament, through-hole needles, shovel, scissors, open-end wrench tool kit and tools in the bag.

## 3. The following conditions are not covered by the warranty

- Unable to provide a valid warranty card or serial number (lost, altered, blurred and cannot be confirmed) the complete machine and components have exceeded the warranty period.
- The device has been repaired at a repair shop which has not authorized by Super 3D.
- Equipment failure or damage caused by the use of the equipment in a non-product-specified working environment. Normal wear, aging, or appearance scratches or defects caused by operation.
- Equipment failure or damage due to the use of software not specified by Super 3D. Or Equipment failure or damage due to the use of other brand components.
- Equipment failure or damage caused by unauthorized modification of equipment. Or equipment failure or damage caused by wrong installation and use.
- Equipment failure or damage due to abuse (including excess work load), misuse. Or equipment failure or damage due to use of low-quality filament.
- Equipment failure or damage due to improper maintenance (damp, mold or exposure to extreme weather). Or equipment failure or damage caused by irresistible factors (such as fire, earthquake, lightning strike, flood, etc.).

# After-sales service registration form

Serial number: ———	- Where to buy:
ocharnamber.	which to buy.
Fault description: ———	<del></del>
Phone number:———	_
Address:	

Please be sure to fill out this form carefully, cut it out and send it back to Super 3D with the machine, or download this form from the service column of Super 3D official website and send it to support@xdwdz.com. Failure to complete this form will unable to provide after-sales service.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including

interference that may cause undesired operation.

**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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator& your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Due to each model is different, the actual product may be different, please refer to the actual product.



Website: <a href="mailto:www.zgcfsw.com">www.zgcfsw.com</a> Email: <a href="mailto:support@xdwdz.com">support@xdwdz.com</a>

Address: 2nd Floor, Building 5, Zone 1, JiadeMaluan Industrial Park, Pingshan District, Shenzhen

#### **Documents / Resources**



<u>SUPER 3D Super3D-A3 3D Printer</u> [pdf] User Manual 2BBR5-A3, 2BBR5A3, Super3D-A3, Super3D-A3 3D Printer, 3D Printer, Printer

Manuals+.