

3D Printer

Einstart-P

Product Manual



SHINING 3D



SHINING 3D Tech. Co., Ltd.

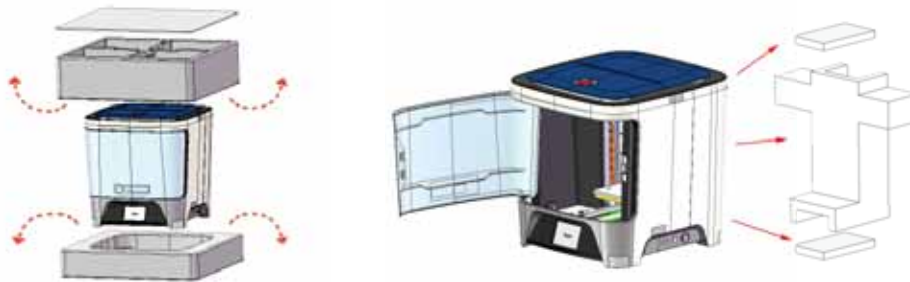
Stock Code : 830978

CONTENT

Einstart-P Quick Installation Guide.....	1
1. Overview.....	2
1.1. How to use this manual.....	2
1.2. Notice.....	2
1.3. Product model.....	2
2. Product introduction.....	3
2.1. Product appearance.....	3
2.2. Device parameters and accessories.....	3
2.3. Voice prompt.....	3
3. Product installation.....	4
3.1. Hardware installation.....	4
3.2. Software installation.....	5
4. Product functions and applications.....	11
4.1. Product using process.....	11
4.2. Product basic function setup and application.....	12
4.3. Selection and application of product printing function.....	16
5. 3Dker Platform （Website address: http://www.3dker.com/ ）	20
5.1. Model Downloading.....	20
5.2. Software and Firmware Down loading.....	20
6. Device maintenance.....	21
7. FAQ.....	23
Annex:.....	25
1.List of products and accessories.....	25
2.Product technical parameters.....	25
3.Technical support and help.....	26

Einstart-P Quick Installation Guide

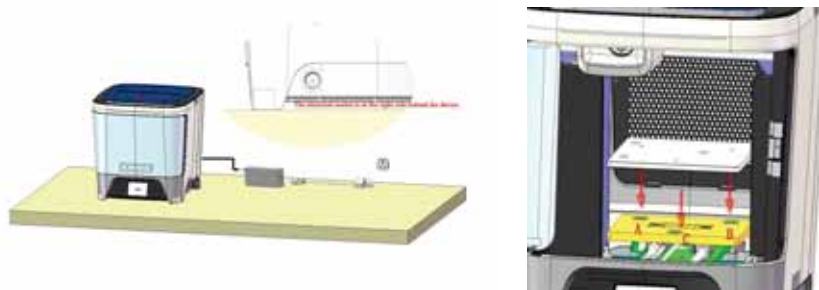
Step1: Unpack the device, dismantle internal and external packing materials, open the front door of the device, then remove its shockproof foam materials (three shockproof foam materials serve to fix nozzle module, XYZ axis and platform printing plate respectively);



Step2: Put the device on a horizontal working platform and connect power adapter as the picture shows;

Step3: Install printing platform

(1) Open the front door of the device and take out the printing plate from accessory box. (2) fasten ABC three points tightly following the installation picture;



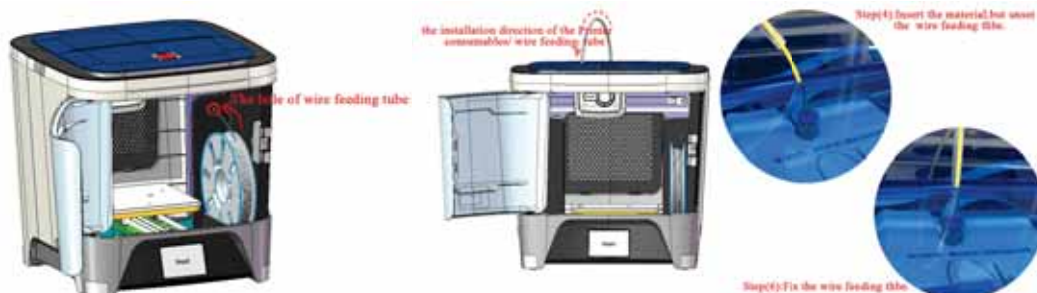
Step4: Install wire feeding tube and printer consumables;

(1) Find the wire feeding tube inside the device (one end of which has been installed and fixed in the device), make the unfixed end go through A hole from bottom to top and do not fix the position of B hole at first;



(2) Take out printer consumables from the accessory box, dismantle internal and external package; (3) The printer consumables will be placed in the wire plate shelf on the right side of the device; (4) Feed the head end of the printer consumables into the hole of wire feeding tube, make it go through A hole in above picture, then push it to quickly insert into the internal through the top of the print nozzle.

(5) Turn on the device, operate wire feeding with reference to the content in section 4.2.5; (6) Fix the end of the wire feeding tube on B point in the picture in (1) above, which is on the top of the print nozzle. Fix it by pressing to insert quick plug;



Description: Start printing after completing the above steps!

1. Overview

1.1. How to use this manual

This manual mainly features seven sections, including overview, product introduction, product installation, product functions and applications, 3D Zao brand service, device maintenance and FAQ. Please read this manual carefully before use, and use 3D printer correctly following this manual. Please carry this manual for reference when necessary.

1.2. Notice

Please read the following contents carefully before using 3D printer.

1.2.1. Safety

Einstart-P 3D printer can only use the power adapter provided by our company, or it may damage the device or even cause the risk of fire.

To avoid burns or model distortion, please keep the printer door closed during printing or upon the completion of printing. It is forbidden to touch the model, nozzle, print platform or other parts of the device with hands.

We advise that you wear goggles when removing the support material. In the process of printing, there will be a slight odor which will not make people feel uncomfortable. We advise you use the device in a well-ventilated environment. In addition, try to keep the printer door closed during printing and open less to isolate the outside airflow, as it may have an impact on printing quality.

1.2.2. Protection measures

1.2.2.1 Keep the printer from water, or it may cause damage to the machine.

1.2.2.2 Do not turn off the power or unplug the USB data connector at will during model printing, or the model may fail to print.

1.2.2.3 The normal room temperature for operation of Einstart-P 3D printer is ranged from 5 °C to 30 °C. If beyond this range, the model's molding quality may be affected.

1.3. Product model

Einstart-P



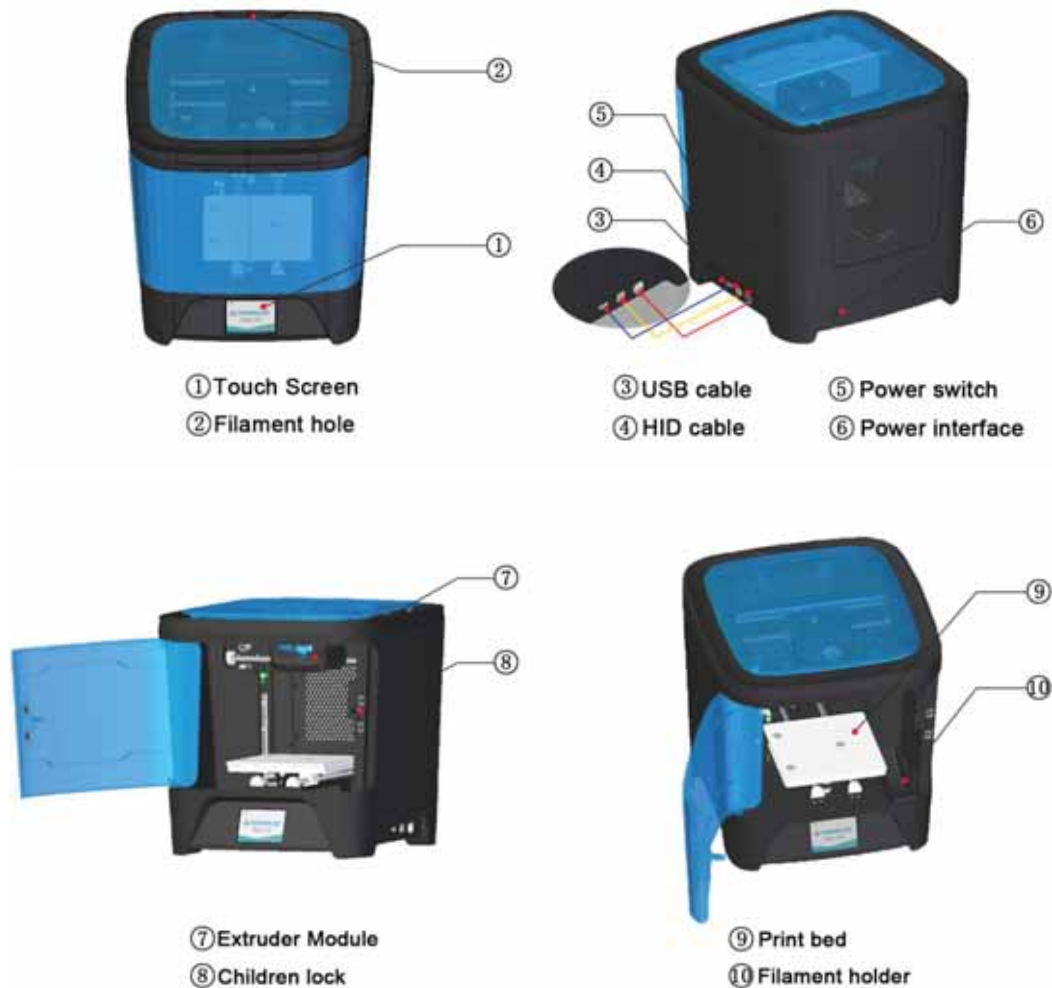
Special notice :

- **This product is suggested to use the original adaptive printing consumables to obtain best printing effect;**
- **Device problems caused by not using original printing consumables are not covered by the warranty.**

2. Product introduction

Einstart-P 3D printer is easy to carry and operate. You can print out your favorite model in several simple steps. The working principle of the printer is as the following: Melt printing material in high-temperature and then extrude it out ; pile it up to a well-designed model by digital control and make it solidify right after formation, so that the printed model will be strong and durable.

2.1. Product appearance



2.2. Device parameters and accessories

See the annex

2.3. Voice prompt

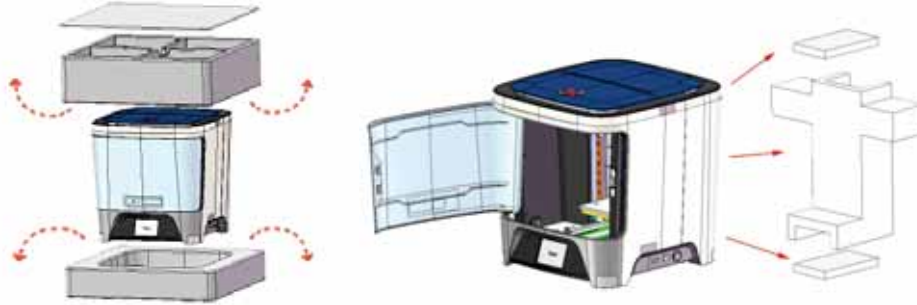
Einstart-P 3D printer has added voice prompts. There will be a short voice prompt after turning on the printer, the start and completion of printing, the completion of wire feeding and retreating, so that users can identify the operations.

3. Product installation

3.1. Hardware installation

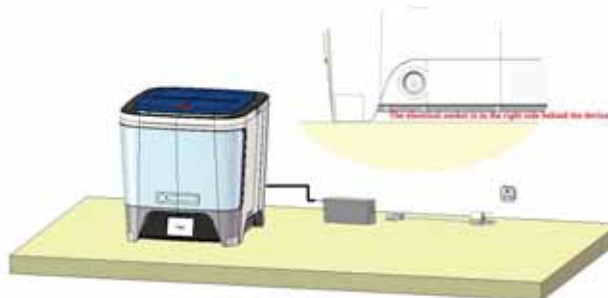
3.1.1. Remove the outer packing

Unpack the device, dismantle internal and external packing materials, open the front door of the device, then remove its shockproof foam materials (three shockproof foam materials serve to fasten nozzle module, XYZ axis and platform printing plate respectively);



3.1.2. The connection of the power adapter cable

Put the device on a horizontal platform, connect the device power adapter with the power cord. Meanwhile, insert the power cord into the socket and the plug of the adapter into the electrical socket in the right side behind the device.



3.1.3. Install the printing platform plate, make it fastened tightly

Take out the acrylic plate in the accessory list, open the front door of the device, put the acrylic plate (shiny side



facing up and magnetic side facing down) on the platform in printer chamber, match the magnets on ABC points with the positioning blocks, make them fastened tightly.

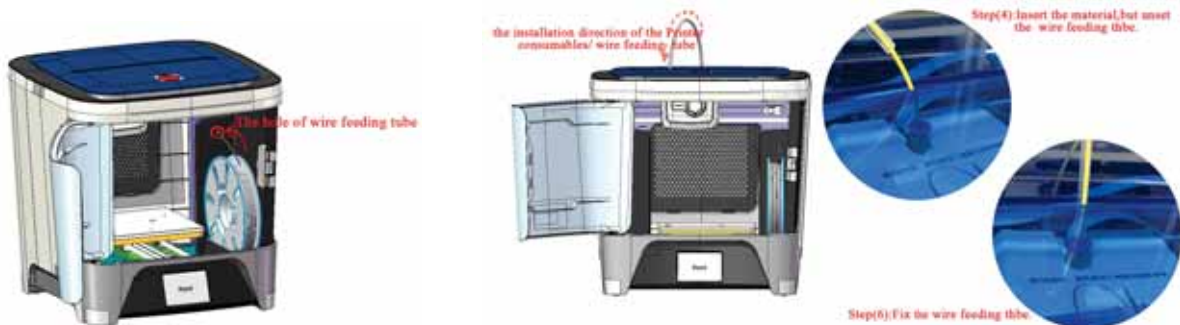
3.1.4. Install wire feeding tube and printer consumables;

(1) Find the wire feeding tube inside the device (one end of which has been installed and fixed in the device), make the unfixed end go through A hole from bottom to top and do not fix the position of B hole at first;



(2) Take out printer consumables from the accessory box, dismantle internal and external packings; (3) The printer consumables will be placed in the wire plate shelf on the right side of the device; (4) Insert the head end of the printer consumables into the hole of wire feeding tube,, make it go through A hole in above picture, then push it to quickly insert into the internal through the top of the print nozzle.

(5) Turn on the device, operate wire feeding with reference to the content in section 4.2.5; (6) Fix the end of the wire feeding tube on B point in the picture in (1) above, which is on the top of the print nozzle. Fix it by pressing to insert quick plug;



⚠ notice :

- Before model printing, you may evenly paint platform glue on the print platform in a proper way to ensure stability of your model printing.

3.2. Software installation

3.2.1. Initial installation of the software

3.2.1.1 Installation guide in WINDOWS

3dStar software supports 64bit WIN7, WIN8, WIN10 operating systems. There are printer control software, serial driver and device registration serial number in the USB drive. Please read the document “Read Me” and Software Operation Instructions carefully. The installation steps are as the following:

Open the file in the USB drive or the installation package downloaded on official website (download link:

The figure consists of two side-by-side screenshots of the Autodesk 3dsMax 2.8.5 installation process.

- Left Screenshot:** Titled "3dsMax 2.8.5 Setup". It shows the "Choose Install Location" screen. The text says: "Setup will install 3dsMax 2.8.5 in the following folder. To install in a different folder, click Browse and select another folder. Click Install to start the installation." Below this, there's a field for "Destination Folder:" containing "C:\Program Files\Autodesk\3dsMax 2.8.5". To the right of this field is a "Browse..." button. At the bottom, it lists "Space Required: 206 MB" and "Space Available: 75 MB". There are three buttons at the bottom: "< Back", "Install", and "Cancel". A red arrow points to the "Install" button.
- Right Screenshot:** Titled "3dsMax 2.8.5 P Setup". It shows the "Installing" screen. A green progress bar at the top indicates 100% completion. Below the bar, a list of files being extracted is shown, each followed by "... 100%":
 - Extract: 打印机电容数据.pdf...
 - Extract: them_xxxxxx.jpg...
 - Output folder: C:\Program Files\Autodesk\3dsMax 2.8.5\bin\chinese_CN
 - Extract: 视觉思维指导问题.doc...
 - Extract: 视觉思维指导问题.pdf...
 - Extract: 镜头模块结构.doc...
 - Extract: 镜头模块结构.pdf...
 - Extract: 处理路径.doc...
 - Extract: 处理路径.pdf...
 - Extract: 打印机电容数据.doc...
 At the bottom, there are three buttons: "< Back", "Next >", and "Cancel".

Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.30501

MICROSOFT SOFTWARE LICENSE TERMS

MICROSOFT VISUAL C++ REDISTRIBUTABLE FOR VISUAL STUDIO 2013

These license terms are an agreement between Microsoft Corporation (or one of its subsidiaries) and you. Please read them.

☒ I agree to the license terms and conditions

Install

Close

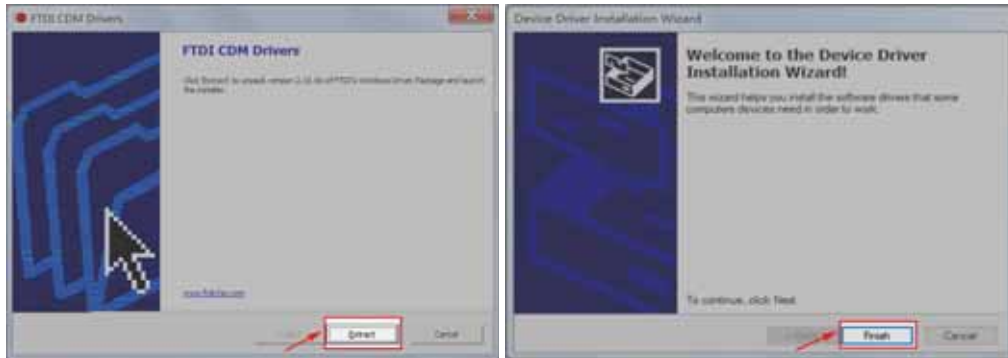
Microsoft Visual C++ 2013 Redistributable (x86) - 12.0.30501

Setup Successful

Close

➤ Users who have already installed 3dStar software may choose to repair the security components of “Microsoft Visual C++ 2013” according to installation wizard when reinstalling.

Install the USB driver, click “Extract”, operate step by step following the wizard prompts until the installation is completed, then exit the wizard;

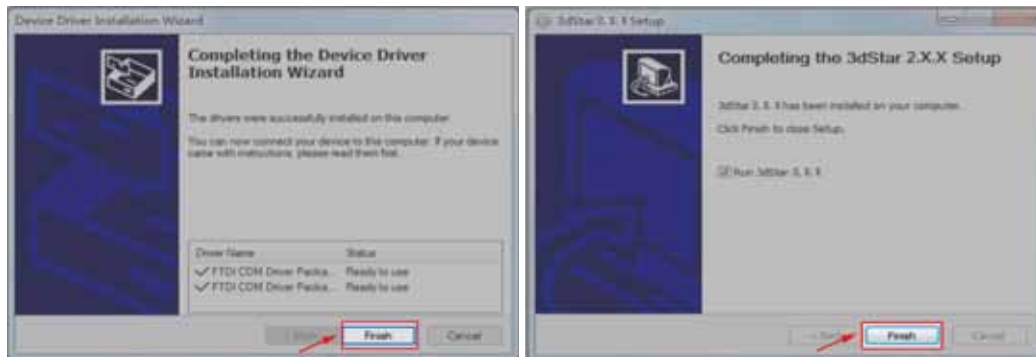


Click “Next” after the installation of the driver, exit the wizard after completing installation.

Notice :

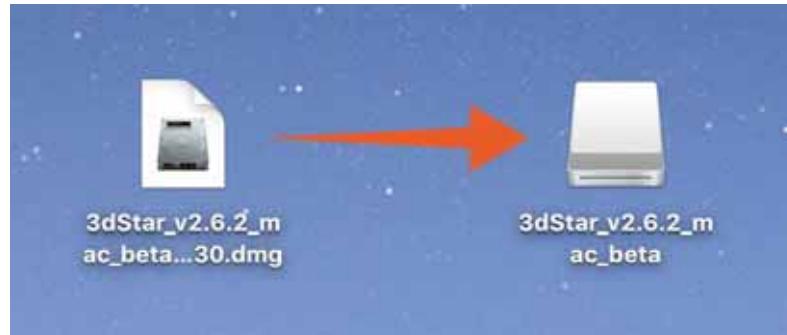
➤ After completing installation, if 3dStar software is unable to run and prompts that “The OpenGL extensions required to run this app are missing, the program will now exit” , it means the display card does not match the computer you are currently using. It is suggested to upgrade your display card on relevant websites and the issue will be solved.

➤ The detailed operation of 3dStar software will not be covered in this chapter and the specific use method please refer to “3dStar Software Operation Instructions”.



3.2.1.2 Installation guide in OS.

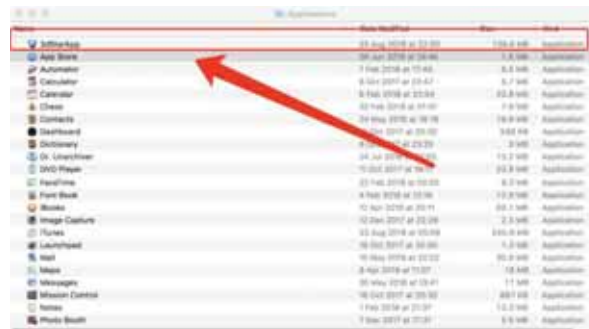
- Step 1 : Get install files in thumb drive or get it from website (http://www.shining3d.com/support_download.php), find dmg file , open it by double click or right button “open”.



- Step 2: Open the install file , find 3dstarApp, move it to “Application” by holding right button of mouse.



- Step 3: After installation, find 3dstarApp in “Application”, right click, use “open” to run the App



- The first time use 3dstarApp, the tips will come out as below, choose “open ”, then it works.



- Step 4: Find 3dstarApp on Launchpad, click it to run.



3.2.2. Registration of serial number

The device itself has a unique serial number of identification code and the registration file of this number is stored in the USB disk attached in the accessories. Please follow these steps to complete the registration of the serial number:

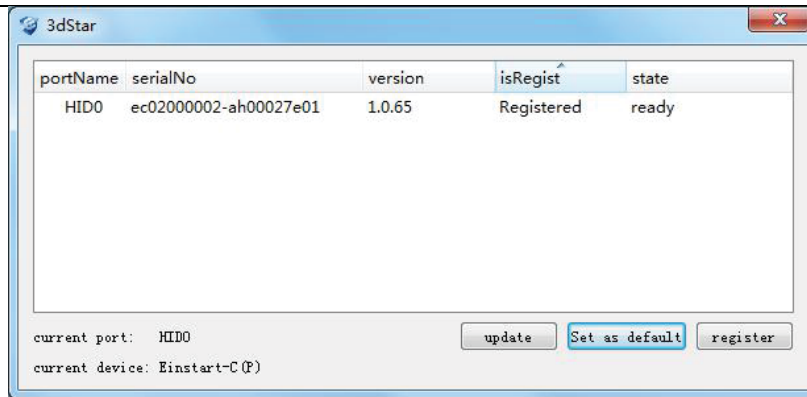
After the installation of the software, the user needs to register the device serial number in this computer, so that the device can print online normally. The registration methods of the serial number are as the following:

3.2.2.1 Auto-registration

Step 1: Keep the connection between the device and the computer USB, open 3dStar application, then click “tool- select device” in the menu bar and the following interface will appear;



Step 2: Insert a USB disk with registration file (.lic format) into the device. The 3dStar will execute auto-registration after recognizing the registration file and the user only needs to click the “Refresh” button in the interface. The registration is successful when the registration status shows “registered”.

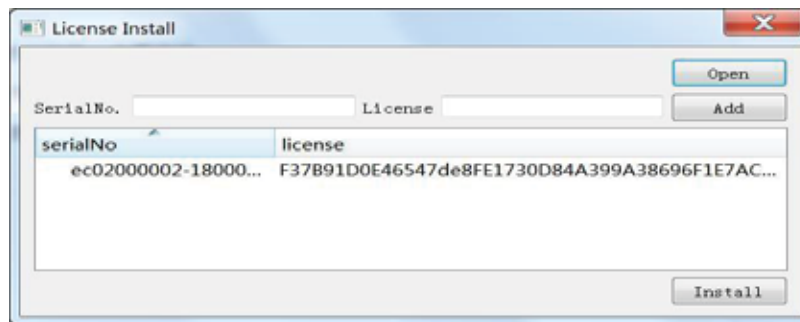


3.2.2.2 Register manually

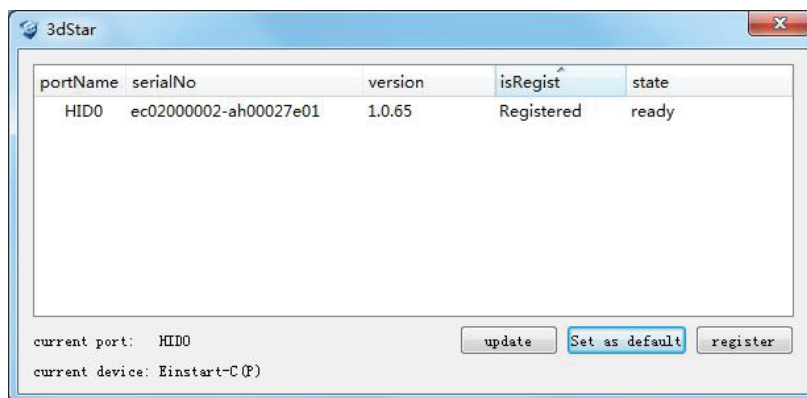
The user can also register the printer manually, mainly in the following way:

Step 1: Keep the connection between the device and the computer USB, open 3dStar application, then click “tool- select device” in the menu bar;

Step 2: Click the “Registration” button in the lower right corner of the pop-up interface, then click “Open” button to load the“.lic” file and click the “Install” button after that;



Step 3: Close installation dialog box, click “Refresh” button in the interface. The registration is successful when the registration status shows “registered”.

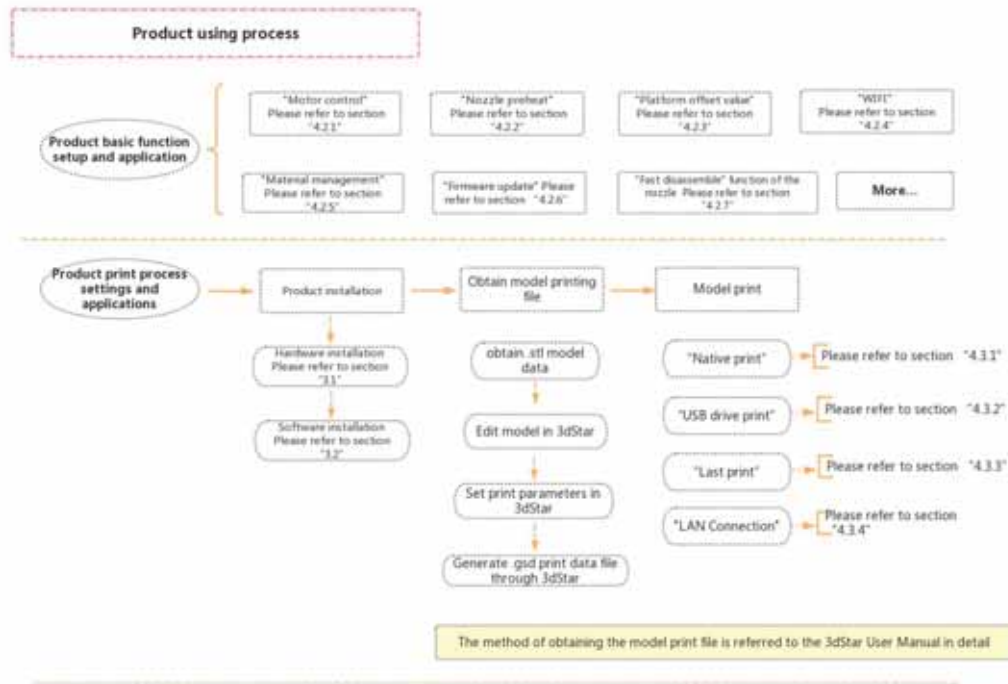


Notice :

➤ A serial number need to be registered only when device being used for the first time. There is no need of registration again in further online printing by the same computer.

4. Product functions and applications

4.1. Product using process



⚠ Notice :

➤ Product basic function setup and application mainly introduces seven most frequently used major functions and applications. Users can learn and grasp other simple functions by themselves.

⚠ Notice :

➤ For the safety of users, once the Einstart-P device starts child lock function, the door can't be opened before the model printing is completed. The methods to unlock the door are as follows:

- Lower the temperature of the printer nozzle to 60°C After the model printing is completed and the child lock will be unlocked;
- Operate wire retreating when printing has been paused and the child lock will be unlocked;
- Users can unlock the child lock manually through setting menu bar but opening the door when the cabin temperature is too high has a security risk, so please select carefully.

4.2. Product basic function setup and application

4.2.1. Product "Motor control" function setting and application

 Step 1: Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up	 Step 2: Click this icon to enter "settings" page	 Step 3: Click this "motor control" to enter the motor control page.	 Step4: On this page, you can adjust the coordinates of the print bed, print head, and platform.
--	---	---	--

"Motor control" function application scenarios: The user may need "Motor control" function to debug platform location when setting the height of the platform.

4.2.2. Product "Nozzle preheat" function setting and application

 Step 1 : Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up	 Step 2 : Click this icon to enter the "settings" page.	 Step 3: Click "preheat".	 Step 4: Manage the preheat on this page: (1) Use the switch 1 to start or finish heating. (2) Reset the temperature for preheat by clicking the up and down arrows(2-1 in the picture). The number at the top(2-2 in the picture) displays the temperature you are setting. Click apply(2-3 in the picture) to set the temperature.
--	--	---	--

"Nozzle preheat" function application scenarios:

(1) The device needs to set wire feeding and retreating temperatures of the nozzle when replacing different materials;

(2) The device needs to start "Nozzle preheat" function during the maintenance/ replacement of the printing nozzle.

4.2.3. Product "Platform offset value" (the height of the nozzle from the platform) function setting and application

			
Step 1 : Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up.	Step 2 : Click this icon to enter "settings" page.	Step 3: Click "z offset".	Step 4 : Adjust the offset for Z axis: (1) If the nozzle is too close to the print bed, e.g. the nozzle is scratching the print bed when printing. Click "z+" to raise the value until the proper distance between the print bed and nozzle has been reached. Then click "✓". (2) If the print bed is too far from the nozzle when printing, click "z-" until the proper distance between the print bed and nozzle is reached. Then click "✓".

"Platform offset value" (the height of the nozzle from the platform) function application scenarios:

- (1) The device needs to use "Platform offset value" function to set the height of the nozzle from the platform to a proper location during periodic maintenance;
- (2) In the process of printing, "Platform offset value" function is needed to readjust the height of the nozzle from the platform when it deviates from the set value.

4.2.4. Product "WIFI" function setting and application

			
Step 1: Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up.	Step 2: Click this icon to enter the "settings" page.	Step 3: Click this icon to enter the Wi-Fi page.	Step 4: Turn the wi-fi function on by clicking icon 1. Then Choose an available Wi-Fi network to connect to from the list.
			
Step 5: Input the password of the chosen Wi-Fi Network. You can use the included PLA handy tool to operate the keyboard. Click "✓" after entering the password.	Step 6: The Einstart-C is connecting to the Wi-Fi. It will prompt you once it has connected. Once connected, you can click the back icon on the top left corner to return to the operations menu.		

"WIFI" function application scenarios:

- (1) The device needs to start and apply the "WIFI" function when performing the "Firmware update" function;
- (2) The device needs to start and apply the "WIFI" function when performing the "Cloud print" function;
- (3) The device needs to start and apply the "WIFI" function when obtaining the dynamic activation code.

4.2.5. Product "Material management" function setting and application

			
Step 1: Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up.	Step 2: Click this icon to enter filament management page.	Step 3: Click "load" to load the filament or "unload" to unload the filament according to user need.	Step 4: When either "load" or "unload" are selected, the extruder will begin heating up. No further action is required until the temperature is reached.
			
Step 5: When the target temperature is reached, the page will prompt the user to install filament for "Load" or pull out the filament to "unload". WARNING: The extruder's operating temperature is very high. To avoid injury, Do Not touch the nozzle during loading or unloading.			

"Material management" function application scenarios:

- (1) Before printing, the device may check in advance if the nozzle is clear through "Wire feeding" function in material management;
- (2) When the "Suspend printing" command is executed during printing, the device may replace printer consumables (first "Wire retreating", then "Wire feeding") to achieve multi-color printing;
- (3) After the completion of the printing, the device may replace printer consumables with a different color or material (first "Wire retreating", then "Wire feeding") through material management function to print the next model.

4.2.6. Product "Firmware update" function setting and application

			
Step 1: Click this icon to enter the "settings" page.	Step 2: Connect your printer to a Wi-Fi network.	Step 3: Click "machine info" in the "Settings" page.	Step 4: This page shows the information of the printer, including the current firmware version, current software version, serial number and running hours, etc. Click "updates" and the printer will detect and update automatically. The icon "updates" is not available unless you are connected to Wi-Fi.

"Firmware update" function application scenarios:

As soon as your device is connected to WIFI, the device background will automatically retrieve the latest firmware for your device and you are required to perform a firmware update for better printing effect when the device retrieves a new firmware update in the background.

4.2.7. Product "Fast disassemble" function of the nozzle

The module of Einstart-P 3D printing device is demountable and the disassemble steps are simple and convenient. Users may refer to the following steps:

Step one: Open the cover plate at the top of the device, remove the 3M glue that cements the top cover plate and FCC wire harness. Notice that it needs to be removed from right to left with care and keep the FCC wire harness from being brought out from the installation card slot;



Step two: Press and pull out the plug of the nozzle's FCC wire from the socket at the left side of the device's top cover;



Step three: After taking out the FCC wire, grab two sides of the nozzle by hands, lift the whole nozzle gently and it can be removed from the machine.



⚠ Notice :

- The disassemble steps will be start from the end and operate backward when assembling the nozzle module: Step one: Grab two sides of the nozzle by hands, gently insert the plug of the nozzle into the slot of the device, then press the whole nozzle down to the end;
- Step two: Insert the plug of the nozzle's FFC wire into the socket at the left side of the device's top cover to complete the nozzle's assembly. Ensure that the nozzle temperature is less than 60°C to avoid burns by excessive heat.

Nozzle "Fast disassemble" function application scenarios:

- (1) The daily maintenance of the device;
- (2) There are broken wires in the nozzle module, which makes the device unable to print properly.

4.3. Selection and application of product printing function

4.3.1. Product "Native print" function selecting and application

			
Step 1: Turn the printer on using the switch on the bottom right of the printer. Click the "HOME" icon to enter the home page once the LED and touch screen have lit up.	Step 2: Click this icon to enter the print page.	Step 3: Click this icon to enter local file page.	Step 4: Choose one of the pre-saved files to print.
			
Step 5: Once the file is ready you will be prompted to continue. Click this icon to start printing.	Step 6: The printer will check the bed level once you start printing. No additional operation is required.	Step 7: The printer will start to heat up once the leveling is completed. Once the target temperature is reached, the print will begin.	Step 8: Wait until the print is completed. When the print is completed, use the scraper to assist with removal of the piece.

"Native print" function application scenarios:

- (1) Users can choose the "Native print" function to achieve fast printing when first use this product;
- (2) This device has attached "Connect Four", "Quick disassembly tools for feeding wire tube" and other models.

Users can print these models according to the model preview in this device.

4.3.2. Product “USB drive print” function selecting and application

 Ready to Print	 Let's make things!		
Step 1: Click this icon to enter the print page.	Step 2: Click the USB icon to print from your USB flash drive.	Step 3: Connect the USB flash drive, containing gsd file, to the printer.	Step 4: Choose the file you want to print. The printer will copy the file you chose into local storage. After that, you can unplug the USB flash drive for other usage.
 Do you want to print?	 Preparing to Print	 Printer Heating Up	 Printing
Step 5: Once the copy is done you will be prompted to continue. Click this icon to start printing.	Step 6: The printer will check the bed level once you start printing. No additional operation is required.	Step 7: The printer will start to heat up once the leveling is completed. Once the target temperature is reached, the print will begin.	Step 8: Once the print is completed (the percentage reaches 100%), use the scraper to assist with the removal of the printed piece.

"USB drive print" function application scenarios:

- (1) The printing data generated through 3dStar slicing software can be printed offline by means of USB print.
- (2) The printing data sources may be obtained through self-design, 3D Zao data web and many other 3D data sharing platforms. Users shall notice the protection of intellectual property rights;

4.3.3. Product “Last print” function selecting and application

 Ready to Print	 Let's make things!	 Copying File	 Do you want to print?
Step 1: Click this icon to enter the print page.	Step 2: Click this icon to print the latest model you printed.	Step 3: The Einstart.P will download the print file you printed last time. If the printer was reset or is in its initial use, no file will be detected in this function.	Step 4: Once the copy is done you will be prompted to continue. Click this icon to start printing.
 Preparing to Print	 Printer Heating Up	 Printing	
Step 5: The printer will check the bed level once you start printing. No additional operation is required.	Step 6: The printer will start to heat up once the leveling is completed. Once the target temperature is reached, the print will begin.	Step 7: Once the print is completed (the percentage reaches 100%), use the scraper to assist with the removal of the printed piece.	

"Last print" function application scenarios:

Users may choose “Last print” mode to improve work efficiency if they need to print the same model more than once.

4.3.4. Product “LAN Connection ” function selecting and application

- Step 1: Refer to ‘4.2.2.7’, Generate printing path file according to model.
- Step 2: Make sure 3dstar has been connected to LAN(take WIFI as example)



Step1:Check WIFI list, pick one to “LINK”.



Step2:Login WIFI with password.



Step3:Use “ LAN link ” function in 3dstar and make sure the WIFI name is the same one PC connected.

- Step 3: Make sure Einstart-P has been connected to the same LAN as 3dstar

Step 1: Turn the printer on using the switch on the bottom right of the printer. Click the “HOME” icon to enter the home page once the LED and touch screen have lit up.	Step 2: Click this icon to enter the “settings” page.	Step 3: Click this icon to enter the Wi-Fi page.	Step 4: Turn the wi-fi function on by clicking icon 1. Then Choose an available Wi-Fi network to connect to from the list.
Step 5: Input the password of the chosen Wi-Fi Network. You can use the included PLA handy tool to operate the keyboard. Click “✓” after entering the password.	Step 6: The Einstart-P is connecting to the Wi-Fi. It will prompt you once it has connected. Once connected, you can click the back icon on the top left corner to return to the operations menu.		

- Step 4: Get IP address of Einstart- P in LAN.

Step1: Return to the main interface and click the settings button.	Step2: Make sure Einstart- P has been connected to the same LAN as 3dstar.	Step3: On the settings menu page, flip the next page to find the LAN function button and click.	Step4: The “IP:192.168.x.x” string in this interface is the IP address number required for LAN connection.
---	---	--	---

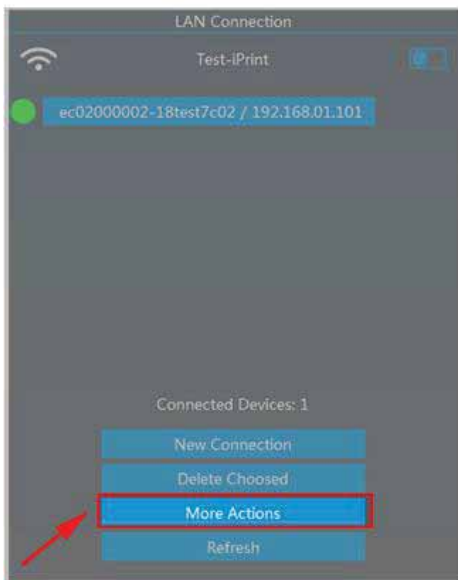
- Step 5: Input the IP address of Einstart-P to 3dstar, use the software control the printer.



Step1: Open LAN function in 3dstar, click "new connection".



Step2: Key in printer IP address manually, then click "Connect".



Step3: Back to main interface, you can monitor number and running state of printers. (green means waiting for job, red means printing), Use "more actions" to control printer via LAN.



Step4: Use "Send file" to send local .gsd file to printer via LAN to print. You can monitor the whole printing process on PC software.

"LAN Connection" function application scenarios:

- (1) "LAN Connection" can realize the unified management and control of multiple devices.
- (2) "LAN Connection" can realize printing without U disk and improve work efficiency.

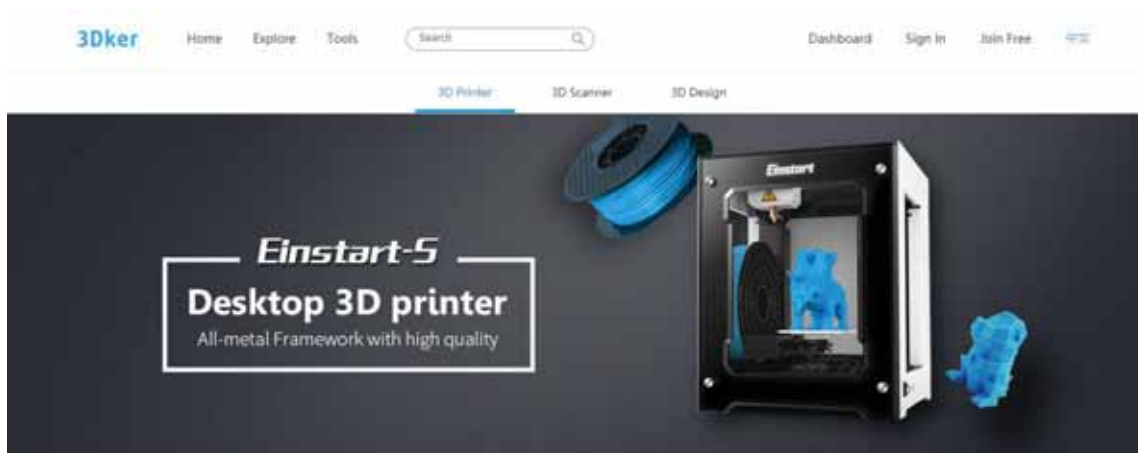
5. 3Dker Platform (Website address: <http://www.3dker.com/>)

5.1. Model Downloading

Visit the 3Dker platform where you can find and download 3D model data designed by other users or designers.

5.2. Software and Firmware Downloading.

Click “Tools” in the top menu to enter the downloading page and select “3D printer”.



Scroll down the page and download the newest software, firmware and user manual on the below page.



6. Device maintenance

6.1. Printer working environment

Ensure that the printer is working on a stable horizontal platform and do not obstruct the movement of the device during the printer's operation. Ensure that the print platform is flat and without any clutter, so as to prevent the device from operating obstructions and unnecessary malfunctions.

Please hold the print platform when turning off the power, so as to prevent the print platform from falling off due to interruption of power supply.

6.2. Ensure the cleanliness of the operating environment

If the operating environment features too much dust, there may be a bad lubricated printing track, resulting in inaccurate print position or print dislocation caused by striking the mechanical frame.

6.3. Notice on replacing material

The printing wire needs to be replaced before used up, lest the end of the printing wire be entangled in the gear and hinder the feeding of new printing wire. So users have to retreat the wire when 20cm-long printing wire has been left, then replace it by wire feeding.

6.4. Notice on wire feeding

Make sure that the temperature of the printer reaches the melting temperature of printing wire and deliver the sharp and straight printing wire to the inlet. The printer needs to preheat the nozzle before feeding the wire. When the temperature beats the target, the material will be extruded into the machine. The extruder will not deliver the wire until the target temperature is obtained. So please cut the printing wire head into a 45° tip, straighten it and put it into the wire feeding inlet.

6.5. STL data file and considerations

The printer slicing software 3Dstar supports only STL format. Models made with design software must be saved in STL format (if prompts Binary and ASCII, select Binary).

6.6. Print platform usage considerations

The print platform must be flattened before printing, and three magnets under the platform must be absorbed. For a daily-used platform, we advise you to observe the flatness after you take the printed model every time. If the flatness is obviously affected by printing platform glue, you can clear away redundant platform glue; If you find normal mechanical platform tilt caused by three-axis movement, you shall adjust timely with automatic leveling function of the device and make it return to initial state.

6.7. Maintenance of the motion guide rail

Lubricating grease ships with the device when leaving the factory and enables the device to operate smoothly. However, after running for a certain period of time, the printing effect may become poor due to the consumption of the machine itself. So we advise you to add grease to the motion guide rail once a year.

6.8. List of consumables

There are normal wear and tear on device parts during its operation and the following is the list of consumables provided by us and we advise you to maintain and replace them regularly to ensure the best printing quality:

No.	Accessory Picture	Accessory Name	Replacement period
1		Tube	3 months
2		Nozzle	3 months
3		Heating block	4 months
4		Heating rod	3 months
5		Thermistor	3 months

7. FAQ

7.1. The wire gets stuck during delivering or printing.

Phenomena: The nozzle makes a noise of clicking

Solution: First retreat the wire, cut flat the head of the print wire and deliver it again.

If there is still a sound of clicking, you need to remove the printer's nozzle module and clean it. Method for disassembly please refer to website: 3dzaocn. Search keyword "nozzle" in "experience case" in the menu area.

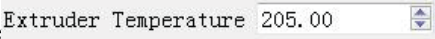
7.2. Method for setting the height of the platform

Phenomena: The first layer of the base is not wide and flat when printing the model, but in the form of spiral; or there are nozzle scratches on the platform.

Solution: Z-axis height adjustment. If the distance between the platform and nozzle is greater than 2 mm, you need to set the Z-axis height (please refer to section 4.1.3 of this manual).

7.3. The base cannot cement with the model

Phenomena: The model falls off from the base or the model has a curling edge.

Solution: Lower the "stripping coefficient"  " when generating the path. The smaller the stripping coefficient is, the model and base can cement more tightly. Range from 1.8 to 2.6 and "nozzle temperature"  " can also be adjusted higher (+-5~10 degree).

7.4. Abnormal wire retreating

Phenomena: The nozzle is filled with print wire and they form a block near the nozzle.

Cause: The print wire does not stick to the model. It is spit out by the nozzle, rewinds and gathers there.

Solution: Remove air channel screws of the nozzle, heat the nozzle, melt the material when the nozzle temperature reaches to 195 °C, then you can clear away the residual wire by plier. For cleaning operation, please refer to "After-sale maintenance" in 3Dzao website (Please refer to section 5.5 in this manual for information download)

7.5. The device cannot be connected due to the lack of print driver or the software get out of control after connecting to the device due to the lack of registration.

Phenomena: The software cannot control the device and fails to match the serial number Solution: Find the correct driver installation path, double-click the registration file of serial number.

Operation: Customers can solve the problem according to the driver installation document (To download information please refer to section 5.5 of this manual). If not resolved, remote assistance can be provided.

7.6. The data in USB drive cannot be read

Phenomena: It shows that there is no file and the USB drive and the model you want to print cannot be found.

Solution: Einstart-P printer only supports the printing of .gsd format file. Choose to insert USB drive, wait for the device to refresh the USB drive data, then select copy and enter the print waiting page. After this, you can pull out the USB drive.

Frequency of the problem: Depending on the user's own operating conditions.

Tools required by customer: None

Operation: Customers can solve the problem by themselves according to the driver installation video or document(To download information please refer to section 5.5 of this manual).If not resolved, remote assistance can be provided.Note that you cannot use card reader plus SD card to replace the USB drive.

7.7. The wire doesn't come out in midway of printing or tangles like cotton.

Phenomena: The wire gets stuck, dislocation, or dislocation layers.

Solution: First retreat the wire, check if the wire becomes thicker or there are uneven points. If so, remove the uneven parts, then feed the wire again, check if the wire feeding is smoothly; Check that there is no wire wrapped together.If not, turn off the device, manually move the X-axis and Y-axis of the printer to see if somewhere has been stricken.

Frequency of the problem: small, depending on the model data and the state of the machine.

Causes: a The print wire becomes thicker and makes a noise of clicking. It can spit cotton-shape wire when getting right after many times and spit nothing if not returns to normal; b In general, it will print without wire when the print wire is tangled; c The wire may become a pile of cotton-shaped wire or stick to the nozzle when the nozzle hits some hard place of the model; d The nozzle is blocked and the wire spitted out cannot stick to the model; e A bad temperature sensor may cause printing without wire and the noise of clicking; f Cooling fan does not rotate (blocked or burnt out).

Tools required by the customer: Tools in accessories may all be used.

Operation: First clean away messy wires and check if the nozzle is blocked or attaches a pile of materials. If so, you need to clear them away; If not, you may reprint a model to check whether it can print normally or not.If it cannot print normally, you may determine the problem according to the machine's condition and carry on maintenance.

7.8. Limit switch is broken

Phenomena: There is a noise of honk when power-on is turned to zero, one of XYZ axis is still in motion status limit, the iron sheet is not connected to the limit switch or the spring plate of the key is broken.

Solution: Users may bend the limit iron sheet when it is not connected to limit switch, let it hit the limit switch and make a sound of tick by manual adjustment.If the spring plate of the limit switch is broken, users need to replace a new limit switch.

Frequency of the problem: very small.

Causes: After the print wire becomes cotton-shaped, touch the Y-axis limit switch plate and break it when cleaning the wire or crash it during transportation.

Operation: To download the basic maintenance instructions please refer to section 5.5 of this manual.

7.9. USB drive cannot be recognized

Phenomena: The USB drive cannot be found and recognized when inserting it into the 3D printer.

Solution: Restart the device or pull out and plug in the USB drive again, confirm it is a USB drive, not card reader plus memory card.

Frequency of the problem: occasionally.

Causes: USB drive drive bit USB3.0, or the memory space of the USB drive is very large.

Operation: Use USB drive driven by USB2.0 or use USB drive with small memory space.

Annex:

1.List of products and accessories

Picture										
Productname	3Dprinter	Printing platform	Printer consumables	USB drive	Print wire feeding tube	Power line	Power adapter	USB cable	Scraper knife	Wirefeedingtoolfor quick disassembly
Material/type	Einstart-P	Acrylic	250g/roll PLA	4G	Length 60cm	Output19V/4.95A		USB data transmission	General specification	PLA print
Number	One	One	One	One	One	One	One	One	One	One

Parameters	
Product model	Einstart -P
Print technology	FDM
External dimension (mm)	364mm×386mm×380mm
Molding size (mm)	153mm×153mm×153mm
Slice thickness (mm)	0.1/0.15/0.2/0.25/0.4
Print speed (mm/s)	60-200 mm/s
Nozzle diameter(mm)	0.4mm
AC Input	100-240V, AC 50-60HZ
Power voltage	19V
Printing supplies	1.75mm diameter PLA
Display screen	3.5-inch full color touch screen
Local memory	4GB
Data transmission mode	U disk, WIFI (firmware updates)
Slice software	3dStar
File format	STL、GSD
Leveling method	Full-automatic leveling
Nozzle number	1
Door lock detection	possessed
Process prompt	possessed
Smart child lock	possessed
Support system	Mac, Win7 and beyond

3.Technical support and help

If you have further questions, please contact us



Shining QR Code



FDM Printer QR Code



3Dzao QR Code

SHINING 3D Tech. Co., Ltd.

Address: No.1398 Xiangbin Rd., Wenyan St., Xiaoshan District, Hangzhou China 311258

Postcode: 311258

Work time: 8:30-17:30

Telephone:0571-83821911/0571-83698030

Tax:0571-82999510/673317179

Skype:shining_support

Email: einstart_support@shining3d.com

Website:http://www.shining3d.com

All rights reserved

All rights are reserved by SHINING 3D Tech. Co., Ltd. This publication shall not be duplicated, transmitted and transcribed for any purpose or in any form, or translated into other languages without the permission of the company.

Disclaimer

This manual is a guide book for installation, operation and maintenance of the software, not product warranty. SHINING 3D Tech. Co., Ltd. shall ensure the accuracy and integrity of the manual and assumes no responsibility for the errors or omissions in this manual. Meanwhile, the company retains the rights of interpretation and modification for the typesetting or errors in this manual. There will be no further notice for information changes in this manual.

FCC Statement

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.

FCC Radiation Exposure Statement:

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.

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.