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# da Vinci Jr. WiFi Pro User Manual

The purpose of this user manual is to help users understand and use the da Vinci Jr. WiFi Pro 3D printer correctly. It contains the operating instructions, maintenance information and application skills of the da Vinci Jr. WiFi Pro 3D printer. To learn more about the latest news of the da Vinci Jr. WiFi Pro 3D printer, please contact local dealers or visit the official website of XYZprinting: <http://www.xyzprinting.com>

## Trademarks

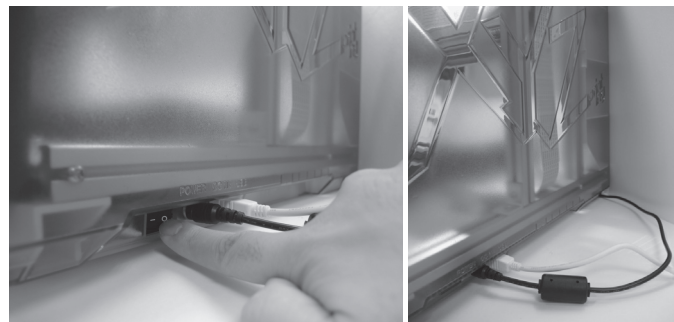
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## Editions

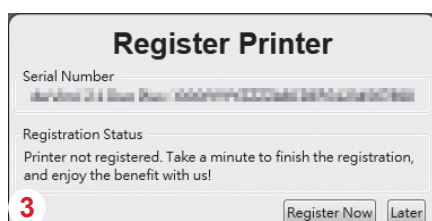
New editions of this manual incorporate new and changed material different from previous editions. Minor corrections and updates may be incorporated into reprints of the current edition without releasing additional announcements or documentation regarding the updated version. The User Manual is for user reference only. If you need to obtain the latest information, you are welcomed to visit the XYZprinting website: [www.xyzprinting.com](http://www.xyzprinting.com)



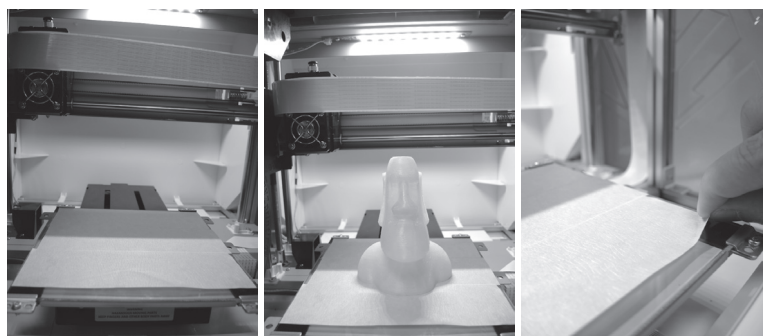
- 1 Before using this printer, please first remove the fixed materials from the extruder module and print bed. Switching on the printer's power without removing these fixed materials may damage the machine.



- 2 Before launching XYZmaker Suite, connect the PC to the printer by using the USB cable. For a better user experience, it is strongly advised to follow the proper procedure for using the product.



- 3 Registration via XYZmaker Suite before your first print is strongly recommended. When registered with XYZprinting, you will receive latest technical supports and updates. To register, simply click "Register Now" to begin.



- 4 Before you start printing, please affix the bed tape on the print bed. The bed tape may be removed after printing is complete. (Bed tape can be reused.)

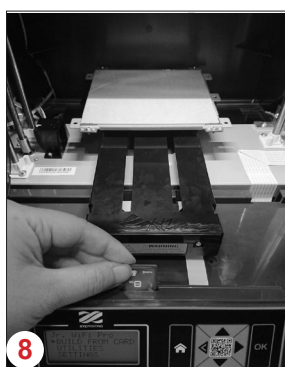
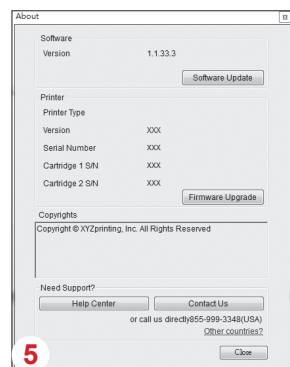
- 5 You may use XYZmaker Suite to initiate manual updates to the printer firmware and software. When using the printer for the first time, we recommend connecting to the Internet and performing manual update once to obtain the latest resources.

- 6 The optimal room temperature for printing is 15-32 °C (60-90 °F). Printing quality may be affected if room temperature is higher or lower.

- 7 If you need more detailed technical support and program resources, visit the website: <https://support.xyzfamily.com/en-GB/Help>

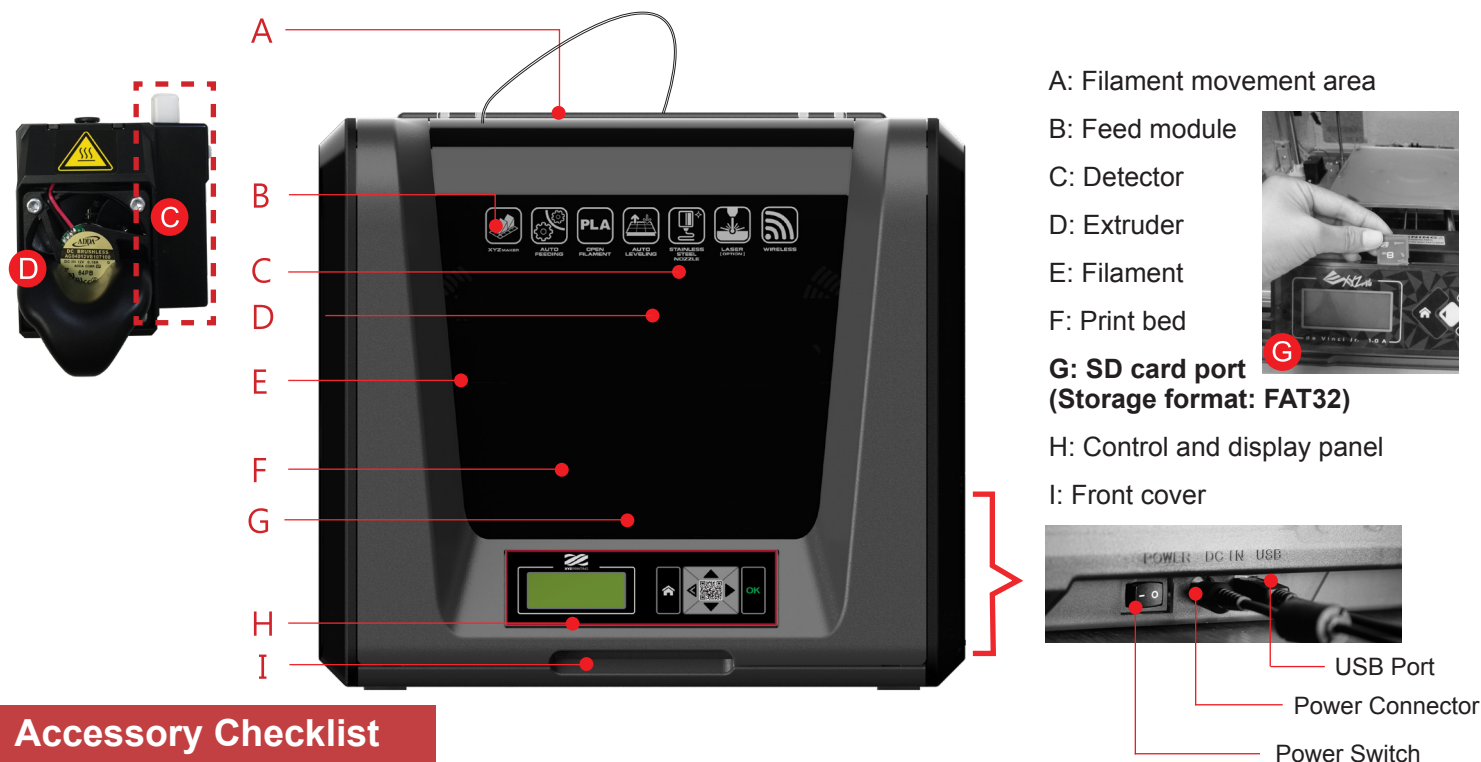
- 8 Before operating the printer, insert the SD card in the SD card port to make sure that the printing program is able to run properly.

- 9 Please retain all original packaging material when shipping your product for warranty purposes. Shipping without original packaging materials may cause product damaged during the shipment and may cause chargeable service fees.

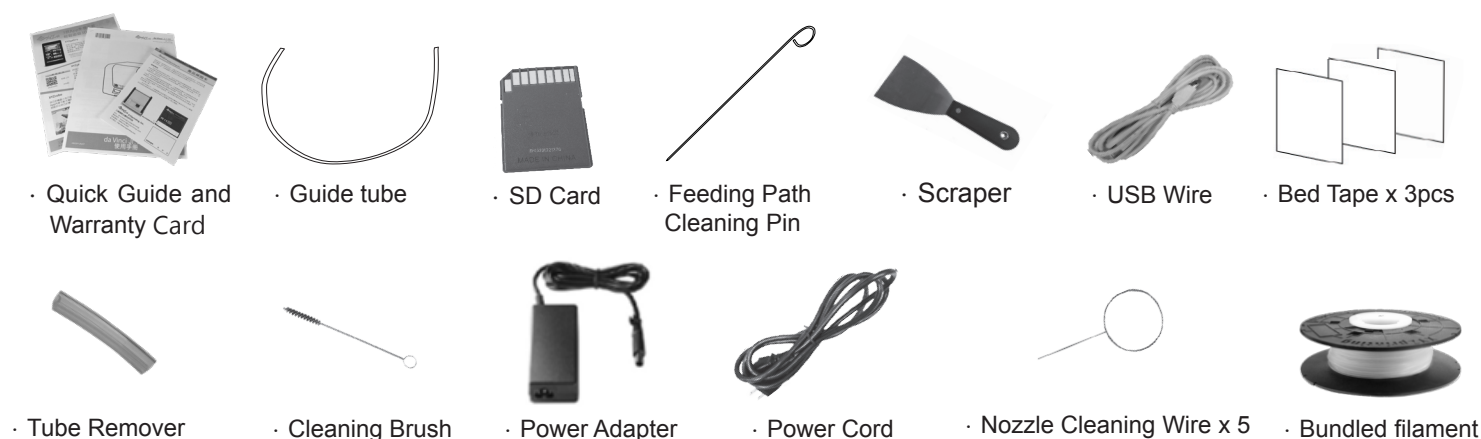


**Please carefully read the contents of the product instruction manual before using this product.**




## Product Overview







## Accessory Checklist



## Important Safety Instruction for Use of Maintenance Tools

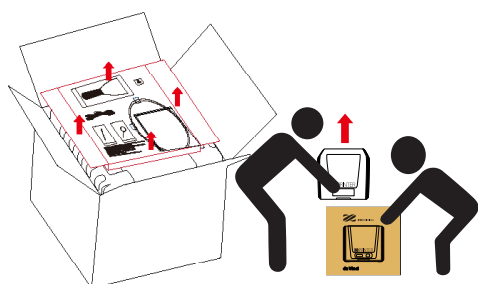
-  The maintenance tools provided should be only handled by an adult. Please keep the tools away from children.
-  Store the gear cleaning brush properly. This tool shall only be used to clean the specified parts of the machine and should not be used for the cleaning of other parts to prevent damaging the machine.
-  The scraper is used to remove the object from the print bed when printing has finished. The bed tape is reusable and it can be replaced when it has worn out.

## Important Safety Instruction

-  Do not place the printer in humid or dusty environment such as bathrooms and high traffic areas.
-  Do not place the printer on a rickety surface and/or inclined position. Printer may fall down/or tumble and it may cause serious injury.
-  Please keep the front door closed during printing to avoid injury.
-  Do not touch the interior of the printer while printing. As it may be hot and include moving parts.

# Product Overview

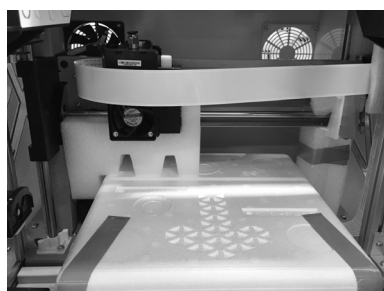
## Unpacking the Product



- 1 Open the box and then remove the accessories and cushions.



- 2 Remove the plastic bag and the tape.



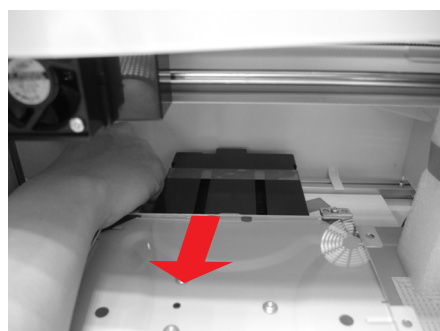
- 3 Remove all fixing tapes and the cushion between print bed and extruder module.



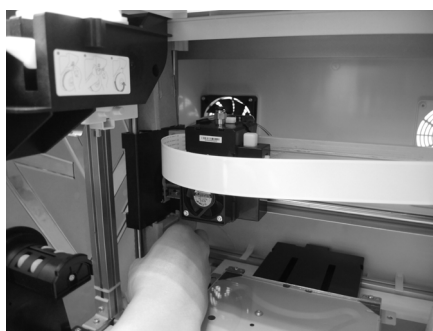
- 4 Be sure to remove the fixing cushion from the axis.



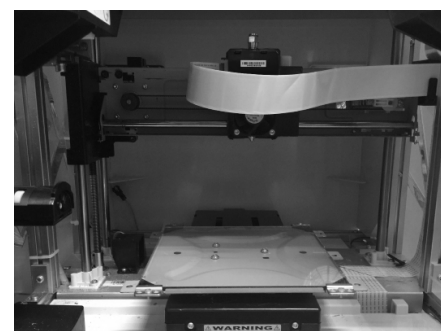
- 5 Remove the securing styrofoam and fixing tapes on the print bed.



- 6 Be sure to remove the fixing tapes at the back of the print bed.



- 7 Be sure to remove the paper cardboard near the Y-axis.



- 8 Please removal all fixed materials before turning on the printer to prevent the machine from damage.



- 9 Insert the SD card that came with the printer into your computer or download the latest XYZmaker Suite from the official Website and install it on the computer.



- 10 Use the USB cable to connect the printer to PC. Connect the power cord to the printer then turn on the power switch.

**⚠ Please use the original power adapter and power cord along with the printer in order to prevent product damage or safety hazards caused by differences in voltage specifications.**

# Unpacking the Product



## Software Introduction

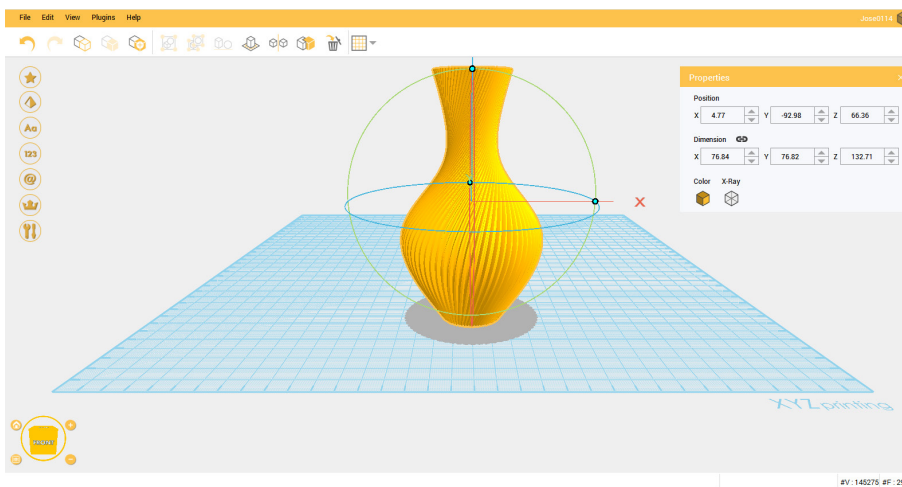


XYZmaker Suite is an all-in-one 3D design software application that provides a comprehensive range of 3D tools for XYZprinting's 3D printers.

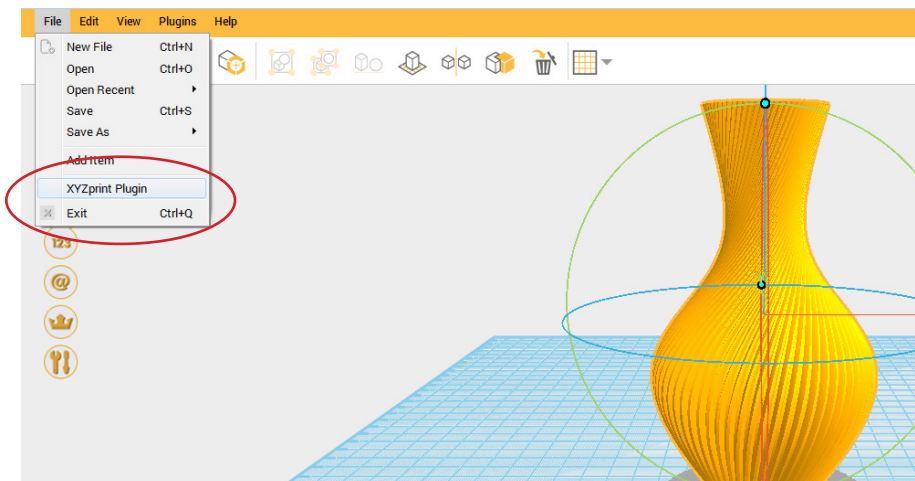


XYZmaker is a 3D modeling application that comes with an intuitive user interface and a wide range of interesting 3D modeling tools and 3D model templates. You can use XYZmaker to do the 3D modeling and print out with XYZprint.

1. Open the XYZmaker and build the model on the operating platform.



2. Click [File] > [XYZprint Plugin] to open the printing software XYZprint.

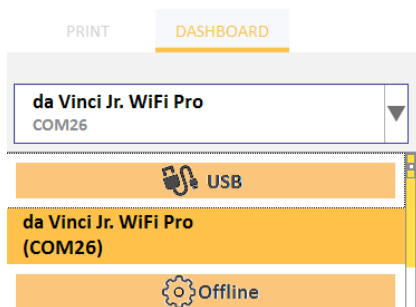


XYZengraver is an engraving software tool designed for our laser engraver module. Please refer to the "Software Functions" section in the "Optional Modules" chapter on Page 20.

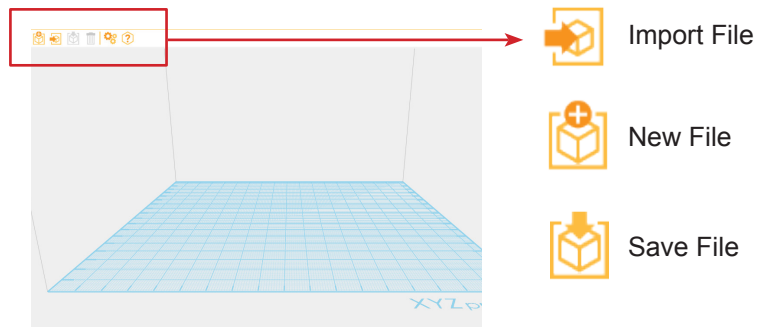


XYZprint is a 3D printing application with fast slicing capability. It lets you preview your 3D models in full color and monitor printing progress in real time.

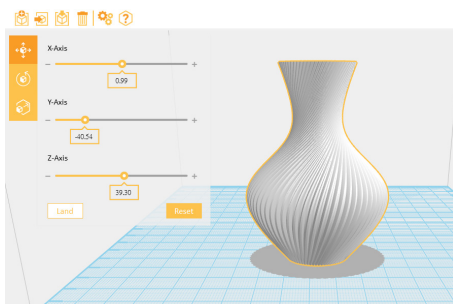
1. Open the XYZprint software and choose **DASHBOARD** and select the 3D printer that is connected.



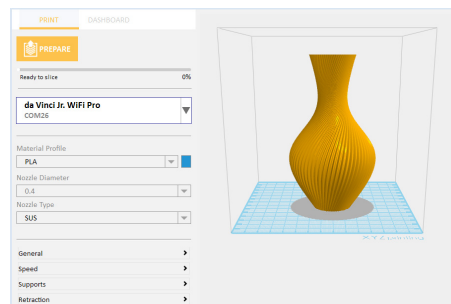
2. Import your favorite 3D files.



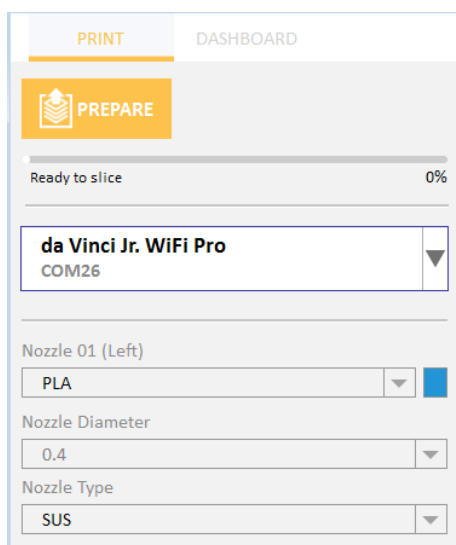
3. Click on the object to adjust the size you want.



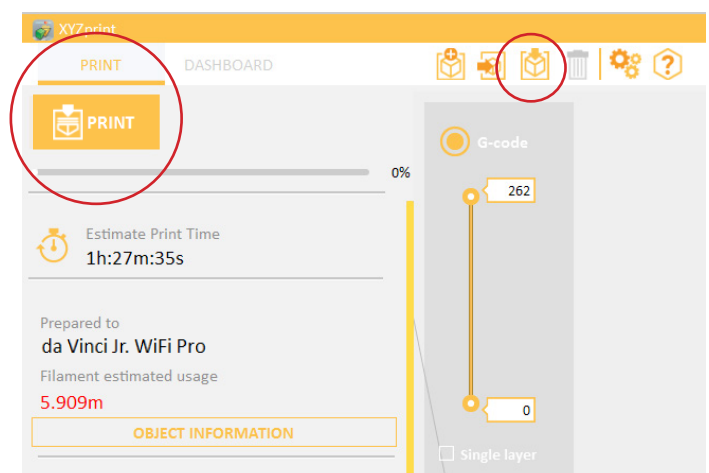
4. In the Print menu, adjust the print parameters.



5. When you're done adjusting the print parameters you need, click **[PREPARE]**.

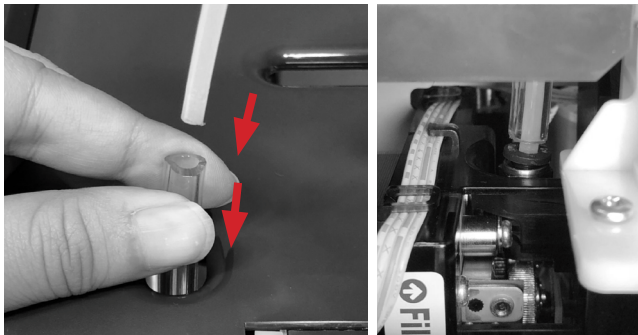


6. After preparing, please check if the object is a complete model. After the confirmation, you can click **[PRINT]** or **[SAVE]**.

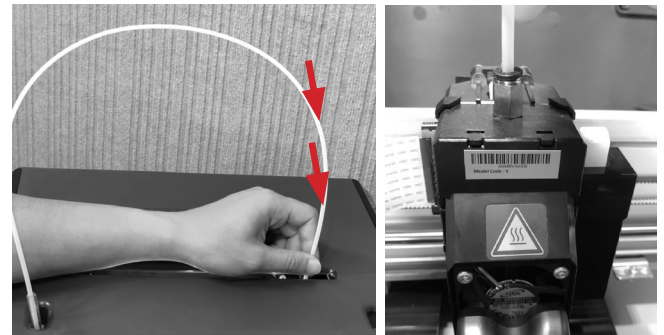


# Software Introduction

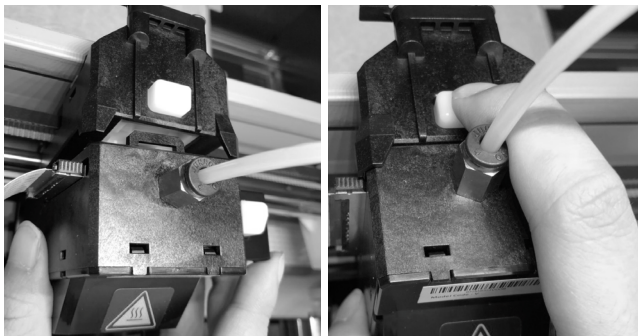
## Guide Tube Installation



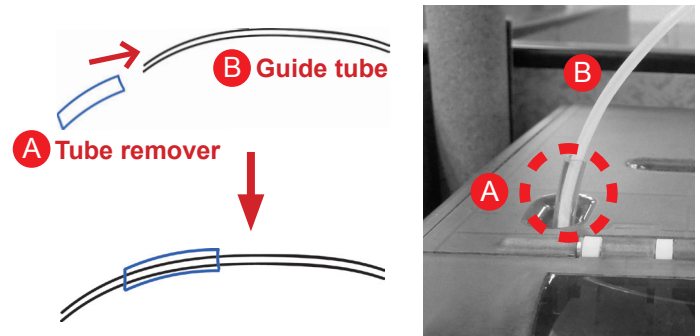
- 1 Please push the tube remover into the extruder module port then ensure that the guide tube has been tightly inserted into the extruder module port.



- 2 Put a guide tube through the guide tube movement area and then insert it into the extruder module. To finish the installation, insert the guide tube downward firmly.

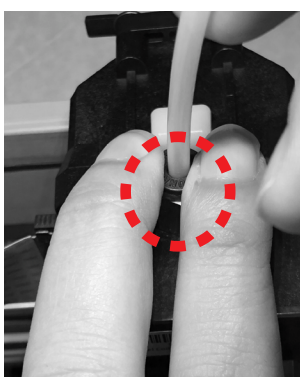


- 3 Place the extruder module that the fitting pin is secured the proper location. Then, insert the black ribbon connector to complete the installation.

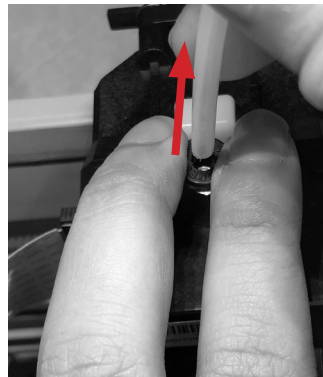


**Note:**  
Please insert the **guide tube (B)** into the **tube remover (A)** which assist to the guide tube installation and remove. Please keep the tube remover on the guide tube after guide installation.

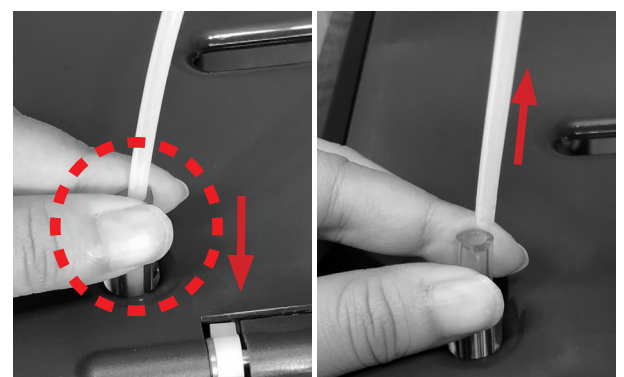
## How to Remove the Guide Tube



- 1 Use two fingers press the Feeder on the Feed module.



- 2 Pull out the guide tube.

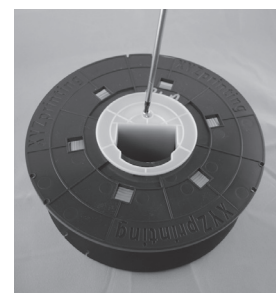
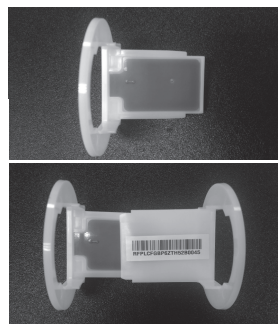
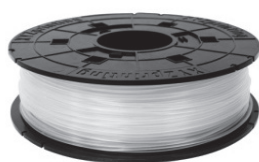
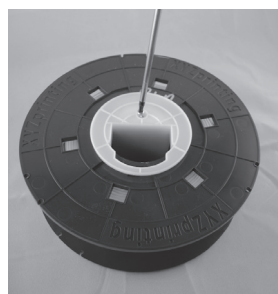


- 3 Please gently press the tube remover, pull the guide tube upwards to remove the guide tube.

# Accessories Installation

## Filament Spool Ring Installation

**Note:** Please refer to this step if the axle ring is not installed on the spool.



**1** Loosen the spool ring mounting screw from the used filament spool with a screwdriver, and remove the spool ring.

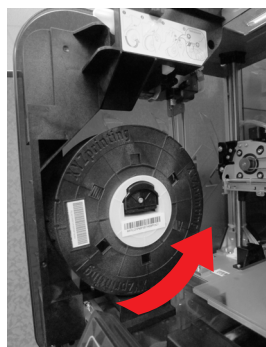
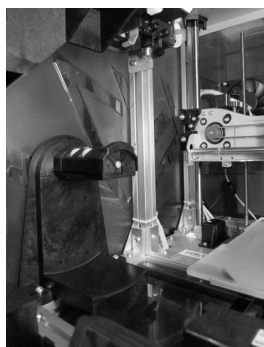
**2** Remove the genuine filament and chip, and then install the sensor chip. Please note the direction of the mounting hole on the chip to attach the chip correctly.

**3** Insert the spool ring from both sides of the new filament spool. Tighten the spool ring with a screwdriver to finish the installation process.

## Filament Installation

 **Filament here** 

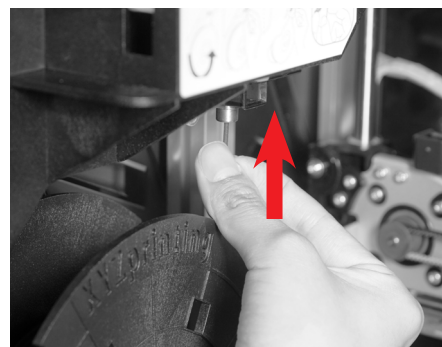
**Note:** If you are not too sure where the feed module tube port is, you may open the casing of the machine to see the indication label.



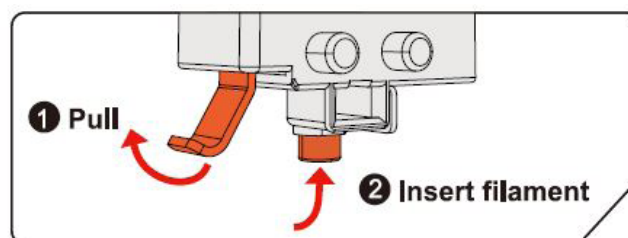
**1** Place the assembled filament spool (with the spool axle rings) on the filament holder on the left side of the printer.

**⚠ Caution:** Pay attention to the direction the filament is being pulled out and ensure that the filament spool axle is rotating smoothly.

**Note :** Before pushing the filament into the guide hole, please cut the tip of the filament off at a 45° .



**2** Click "LOAD FILAMENT", pull out a section of the filament and insert it into the feed port. Push the filament all the way to the top so that the front end of the filament is completely inserted into the feed module. (Please refer to the "LOAD FILAMENT" sections in the "UTILITIES" chapter)









# Accessories Installation



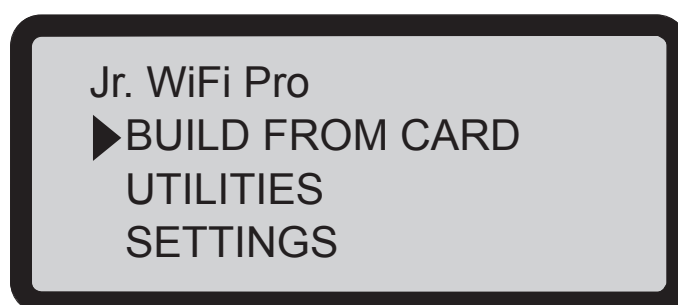
## Button Instructions

After switching on the printer's power, the user may use the display panel at the front of the printer to understand its status and usage data. The functional buttons on the right allow the user to perform the relevant operations.

Button		Functions
Up		Direction Up
Down		Direction Down
Left		Back to previous menu / Reduce the adjustment value
Right		Forward to submenu / Increase the adjustment value
OK		OK; confirm selection/settings
HOME		Home Button, return to main menu



Function	Description
<b>BUILD FROM CARD</b>	Sample print from SD card
<b>UTILITIES</b>	Features such as filament replacement, module replacement and print bed calibration
<b>SETTINGS</b>	Settings such as language display and energy saving
<b>INFO</b>	The firmware and printer statistical information
<b>MONITOR MODE</b>	Monitor of extruder and print bed working temperature and printing progress



# Functions

Home Menu	Top Menu	Sub Menu	Page
BUILD FROM CARD			P11
UTILITIES	CHANGE SPOOL	LOAD FILAMENT	P11
		UNLOAD FILAMENT	P11
	HOME AXES		P12
	Z OFFSET		P12
	JOG MODE		P12
	CALIBRATE		P13
	CHANGE NOZZLE		P14
	CLEAN NOZZLE		P15
SETTING	USER FILAMENT		P24
	BUZZER		P16
	LANGUAGE		P16
	ENERGY SAVE		P16
	AUTO LEVEL		P16
	RESTORE DEFAULT		P16
INFO	STATISTICS		P16
	SYSTEM VERSION		P17
	SPOOL STATS		P17
	WIRELESS INFO		P17
	LEVELING INFO		P17
	NOZZLE STATS		P17
	HELP		P17
MONITOR MODE			P17

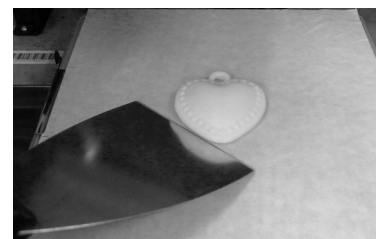
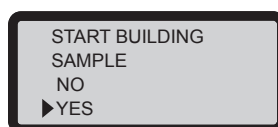
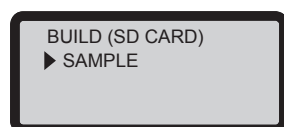
The map above shows the functions your may access with the control panel on the printer.  
For detailed descriptions of each function, please refer to their respective pages in this user manual.

# Maps of Functions

## BUILD FROM CARD

1 sample models are built into the printer. You may begin your first 3D prints with the samples.

To print a sample :



1 Select a sample to print.

2 Put the bed tape on the print bed.

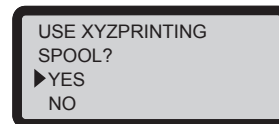
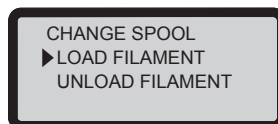
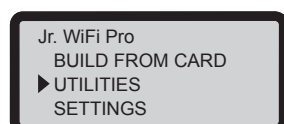
3 Select "YES" to start printing.

4 Remove the printed object when the printing has finished and the print bed has descended. The bed tape is reusable and it can be replaced when it's worn.

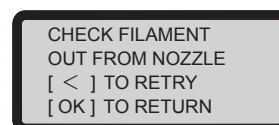
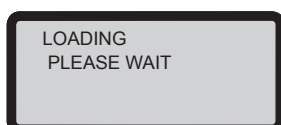
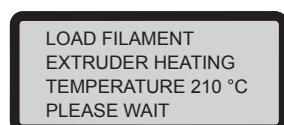
## LOAD FILAMENT

\*Please refer to P.24 for third party filaments.

Enable the LOAD FILAMENT function on the control panel...



1 Select "UTILITIES" > "CHANGE SPOOL" > "LOAD FILAMENT" > "USE XYZPRINTING SPOOL?" > "YES".

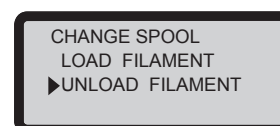
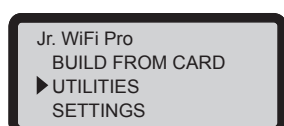


2 Insert the filament right into the feed hole. The printer will load the filament automatically. After loading, select "OK" to continue. The printer will warm up to the operating temperature and load the filament.

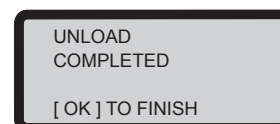
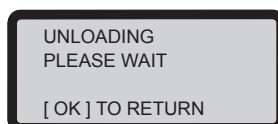
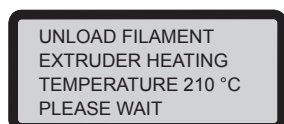
3 Confirm that the filament is flowing out from the extruder; If the filament flows out, press "OK" to exit.

## UNLOAD FILAMENT


Enable the UNLOAD FILAMENT function on the control panel...



1 Select "UTILITIES" > "CHANGE SPOOL" > "UNLOAD FILAMENT".



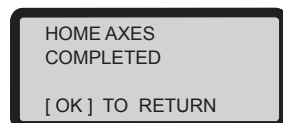
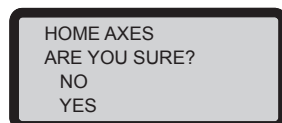
2 Wait for the extruder to heat up and unload filament. Press "OK" and pull out the filament.

 **Note:** Always implement the "UNLOAD FILAMENT" function when replacing the Spool in order to ensure proper removal of the filament. Cutting filament too closely to the Extruder Module may result in residual filament blocking and causing damage to your Extruder Module.

# UTILITIES

## HOME AXES

"HOME AXES" moves the extruder to the lower left corner.  
To home axes :

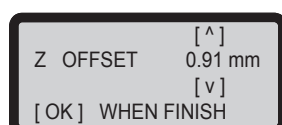


Select "YES" to proceed.

## Z OFFSET

The user may use the Z OFFSET function to adjust the gap between the printing nozzle and the printing bed.

When adjusting the gap, use  and  keys to increase or decrease it (the minimum adjustment scale is 0.05mm).



After adjusting, press "OK" to exit.

Note:

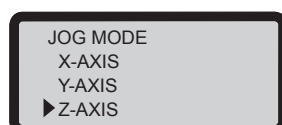
- 1 The product has been tested and adjusted with precision at factory. We suggest that you write down the default Z OFFSET value before performing adjustment.
- 2 The recommended distance between the nozzle and print bed(with bed tape securely fastened) is 0.3mm. This should allow two sheets of copy paper to be drawn out smoothly but six sheets of copy paper cannot be passed.



## JOG MODE





"JOG MODE" is used to manually move the extruder and the print bed.  
Before you carry out this function, move the extruder module back to its original position (HOME AXIS).

How to move the extruder:



- 1 Select the direction of the module or the print bed to be moved.  
Note: "X-AXIS": left and right movement of the extruder module, "Y-AXIS": front and back movement of the print bed, "Z-AXIS": up and down movement of the extruder module.



- 2 Select desired increment of travel with  and  buttons, and press  or  button for desired direction to move the extruder.

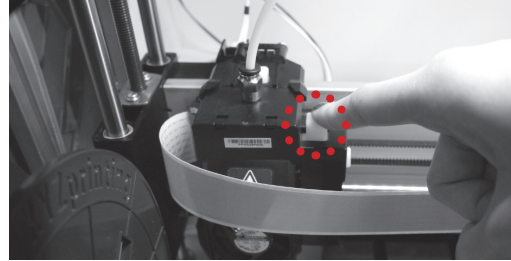


## CALIBRATE

**Note: Please remove print bed tape before you activate the calibration function on your printer.**

- 1 Calibration is enabled for this new extruder module.  
Please update printer firmware via XYZmaker Suite before using the new extruder.
- 2 Press the detection head on the right side of the print head according to the instruction of screen message, followed by pressing OK.

PRESS SWITCH  
NEXT TO EXTRUDER  
[OK] TO CONTINUE



- 3 Results displayed after the print bed calibration:

A. If the printer shows "CALIB COMPLETED", and "AUTO-LEVELING IS DISABLED NOW" is displayed on the 3rd line, it indicates that the levelness of the print bed is good. Press "OK" to exit and print.

B. If "AUTOLEVELING IS ENABLED NOW" is displayed under "CALIB COMPLETED", it indicates that the print bed is tilted slightly. The printer has enabled the auto-leveling function.

**Note: The auto-leveling function can improve the printing quality, but the printing time will be longer. You can disable this function in Settings depends on your needs.**

CALIBRATE  
SUCCESS  
AUTO LEVEL OFF  
[OK] TO RETURN

CALIBRATE  
SUCCESS  
AUTO LEVEL ON  
[OK] TO RETURN

**Note:** If the detection result is "FAIL", press "OK" continuously to exit. Select "INFO" > "LEVELING INFO" to check the print bed levelness data, and contact our customer service to inform the measurement data.

CALIB FAILED  
[OK] TO CONTINUE

PLEASE CONTACT  
CUSTOMER SERVICE  
FOR LEVEL ISSUE  
[OK] TO RETURN

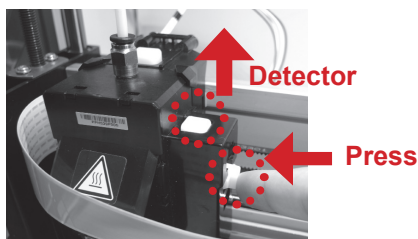
A 0317 0320 0313  
B 0318 0323 0308  
C 0312 0300 0440  
[OK] TO RETURN

**NOTE :** 1. The stains on detection head and the top of the extruder module will affect the detection result. Before the calibration, please remove the dirt. Please remember to install and position the extruder module.  
2. If there is residue on the top of the extruder module, the detection result will be shown as below.  
Please be sure to remove the dirt and recalibrate.

A 0000 0000 0000  
B 0000 0000 0000  
C 0000 0000 0000  
[OK] TO RETURN

## CALIBRATE COMPLETED

After detecting the print bed, the detector by the extruder module may be switched off automatically. Ensure the detector is switched off before printing.



## CHANGE NOZZLE

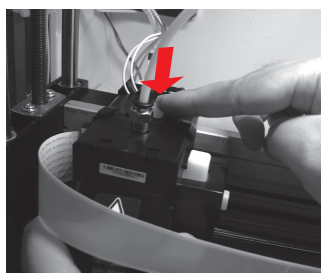
Carry out the CHANGE NOZZLE function before changing modules. Once the extruder module has moved to the operating position, you can **turn off the power** and change the module.

CHANGE NOZZLE  
MODULE NOW?  
NO  
▶ YES

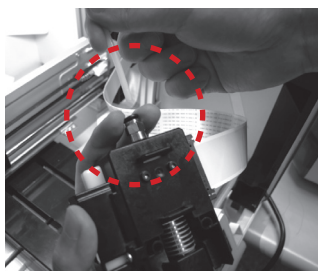
REPOSITION NOW  
  
PLEASE WAIT

YOU CAN TURN OFF  
POWER & CHANGE  
NOZZLE NOW

## CHANGE NOZZLE



- 1 Remove the extruder**  
"Press the white button  
at back of the extruder to  
release it."



- 2 Exchange the extruder module**  
Lightly press the spring around the  
feed hole and remove the filament  
guide tube.



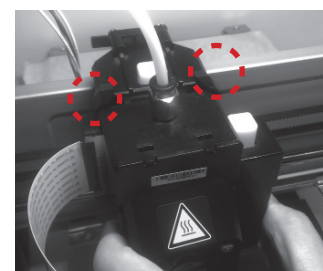
- 3** Press on the harness chips  
and disconnect the cable.



- 4** Connect the flat cable to the  
new extruder module.  
( Be sure to insert the flat cable  
in the right direction. )



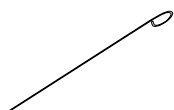
- 5 Install the filament guide  
tube to the extruder module**  
Insert the guide tube into the  
feed hole all the way down and  
install the extruder back to the  
printer.



- 6 Install the extruder**  
Press the white button and align  
the extruder module with the  
bracket. Once aligned, release  
the white button to connect the  
extruder module with the bracket.

## CLEAN NOZZLE

### ● Tools Preparation



A. Feeding Path Cleaning Pin

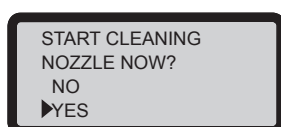


B. Cleaner Wire

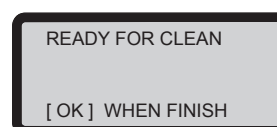
Carbon deposits and dirt accumulated in the nozzle will increase with the printing times and impact the printing quality. We suggest that you clean the nozzle after every 25 hours of printing.

### ● Guide to Clean Nozzle

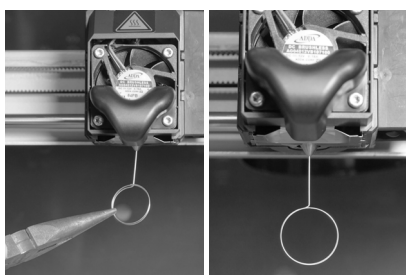
- 1 Select "UTILITIES" > "CLEAN NOZZLE" > "YES".



- 2 Wait for the printer to warm up to the operating temperature. You can start cleaning when "READY FOR CLEAN " is displayed.

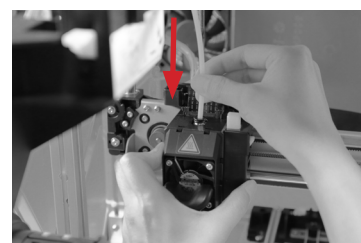
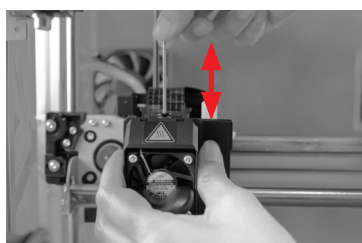
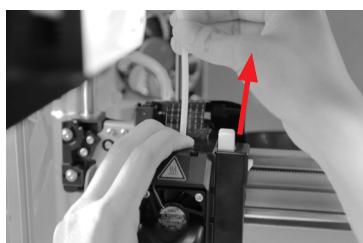


- 3 Insert the cleaner wire into the hole of the nozzle carefully with a nipper. After inserting the wire, press "OK" to exit.



**Note: If the materials still cannot extrude normally after performing the CLEAN NOZZLE function, please follow the steps below to clean the feeding path again.**

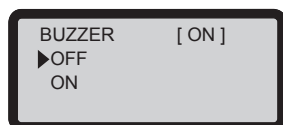
- 1 "CLEAN NOZZLE" function again and wait until the extruder is heat up to working temperature. (Care should be taken during the operation to avoid potential burn injuries.)
- 2 Press the spring around the feeding path and pull out the guide tube. (Do not detach the white flat cable above the nozzle.)
- 3 Insert the feeding path cleaning pin into the feeding path as far as it can go, and stick it back and forth to remove the carbon deposits and dirt completely.
- 4 After cleaning, insert the guide tube onto the nozzle.



- 5 Please place the extruder to original position (HOME AXIS) and calibrate the print bed (CALIBRATE). Then, do print bed leveling after completing clean nozzle. (Please refer to the "Print Bed Leveling" section).

## BUZZER

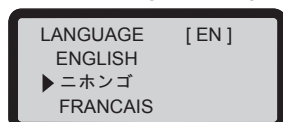
When the buzzer is turned on, the printer will output an audible signal when a button is pressed, print job is finished, or issue is detected. Buzzer is turned on by default. To switch off the buzzer:



Select "OFF" and press "OK" to change the setting.

## LANGUAGE

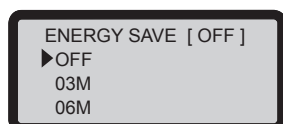
You may switch the display language on the printer between English and Japanese. The default language is English. To switch to Japanese:



Select "ニホンゴ" and press "OK" to change the setting.

## ENERGY SAVE

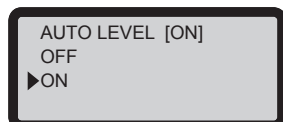
LED luminaires are installed in the printing chamber. To save energy consumed, the lighting will go off after idling for 3 minutes (shown as 03M on the display) by default. To select a longer time interval:



Select "06M" (for auto off after 6 minutes) or "OFF" (for never turn off the LED) and press "OK" to change the setting.

## AUTO LEVEL

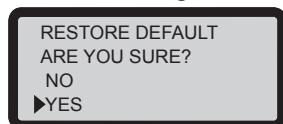
The printer will adjust the configuration based on the detecting result automatically while "AUTO LEVEL" is enabled. The printing mode helps to improve printing quality with slower printing speed. You may switch off the function if necessary. To change the setting of auto-level:



Simply select "OFF" and press "OK" to change the setting.

## RESTORE DEFAULT

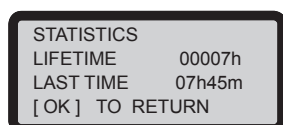
All settings can be reset to factory default with a few clicks. To reset all settings at once:



Simply select "YES" and press "OK" to reset.

## STATISTICS

In "STATISTICS", you can check the accumulated print time and last print time.



# SETTINGS



## SYSTEM VERSION

Firmware version is shown here. For stable printing performance, it is advised to keep the firmware up to date. To check for firmware updates, please go to XYZmaker Suite.

SYSTEM VERSION  
0.1.3  
[ OK ] TO RETURN

## SPOOL STATS

“SPOOL INFO” provides the information on cartridge level (see REMAINING), and the capacity, color and material of the filament. Press to “OK” to the second page.

SPOOL STATS  
REMAINING 000m  
CAPACITY 100m  
[ DOWN ] NEXT PAGE

COLOR  
BLUE  
[ DOWN ] NEXT PAGE

MATERIAL  
PLA  
[ OK ] TO RETURN

## WIRELESS INFO

The “WIRELESS INFO” function displays the WIFI information of the printer; click “OK” if you want to exit.

IP ADDRESS  
XXX.XXX.X.XXX  
[DOWN] > NEXT PAGE

## LEVELING INFO

“LEVELING INFO” function shows print bed leveling data and press “OK” to change the setting. If the detection result is “FAIL” when you use CALIBRATE function and contact our customer service to inform the measurement data.

A 0246 0256 0260  
B 0232 0243 0250  
C 0219 0227 0235  
[ OK ] TO RETURN

## NOZZLE INFO

“NOZZLE INFO” shows nozzle information and lifetime. If you want to change setting, please press “OK”.

TYPE : EXTRUDER  
DIAMETER : 0.4mm  
LIFETIME 00007h  
[ OK ] TO RETURN

## HELP


The URL to XYZprinting website can be found here. You may go to the website for the latest information, product documents, tutorial video and more.

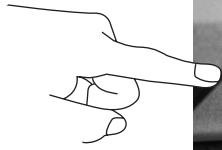
MORE INFO  
www.xyzprinting.com  
[ OK ] TO RETURN

## MONITOR MODE

“MONITOR MODE” shows the temperature of the extruder. See below for the working temperature for the parts in different modes.

MONITOR MODE  
EXTRUDER 024 °C  
[ OK ] TO RETURN

 **Note:** The machine can be turned off only when the cooling fan of the print head stops running after the print is completed. Turning off the power directly may clog the print head.



References:  
Please refer to CLEAN NOZZLE  
to remove the blocks out of the  
print head.

This section describes how to clean the feed module. After heavy use of printer, if feeding of material becomes difficult or impossible, please follow these steps.

## Preparation of Tools



A. Cleaning brush that comes with the printer



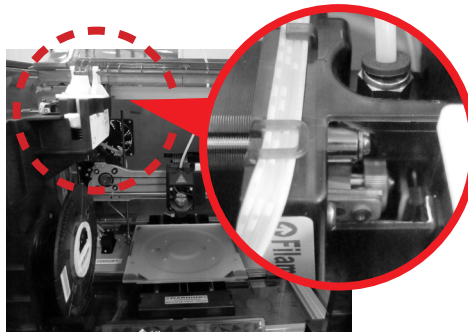
B. Screwdriver (T10) for standard cleaning procedure

## A. Quick Cleaning

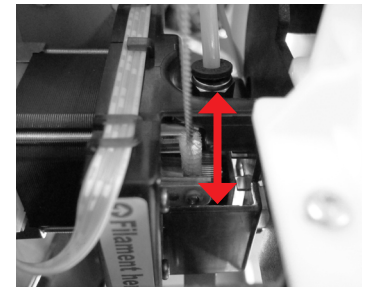
CHANGE SPOOL  
LOAD FILAMENT  
► UNLOAD FILAMENT



**1** Use the "UNLOAD FILAMENT" function to loosen and remove the filament.



**2** Open the front cover to clean the feeding module on the left side of the printer.



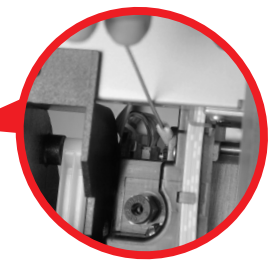
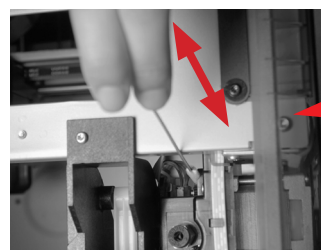
**3** Use the cleaning brush to scrub the gear. After removing the filament residues on the gear, you can insert the filament back and enjoy printing.

## B. Standard Cleaning

**1** Please remove filament, extruder model and guide tube.  
(Please refer to "Guide Tube and Extruder Module Removal" section of the "Accessories Installation" chapter and the "UNLOAD FILAMENT" section of the "UTILITIES" chapter.)



**2** Use the screwdriver to remove the screw (red circle) and open the top cover to see this part clearly.



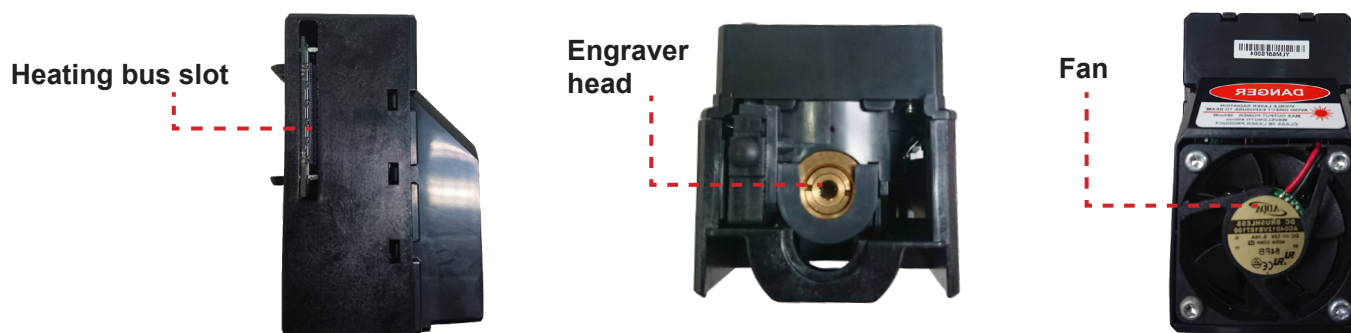
**3** Use the cleaning brush to scrub the gear; after removing residues of filament on the gear, you can insert the guide tube and put the cover back and then enjoy printing again.

# Clean Instruction

## Laser Engraving Module

Laser engraver module must be purchased separately. Please read through this manual and all safety reminders carefully before using, operating, dismantling, replacing, or removing this product. Please also comply with relevant safety reminders and instructions.

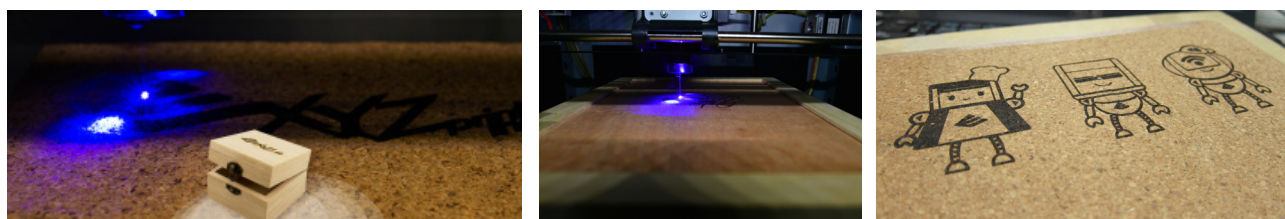
### • Product Overview



### • Recommended laser engraving material:

- ◆ Paper
- ◆ Cardboard
- ◆ Leather
- ◆ Wood
- ◆ Plastic

**Note:** Avoid using materials that are light colored, white, or have glossy surfaces for laser engraving. Achieve the best engraving results with gray colored or dark colored materials. Plastic materials (such as PP / ABS / PE) may be engraved. However, please avoid using materials that are transparent, white, or lightly colored. The engraving module is only capable of engraving planar objects. The target should thus be placed flatly on the panel. Avoid engraving warped or curved objects that are not completely flat.



### • Replace and Installing the laser engraving module:

Before replacing the extruder module with the laser engraving module, check if there are remaining filaments in the nozzle and remove them accordingly. After removing the filament, please select [CHANGE NOZZLE].

- ◆ Wait for the panel to display the message that allows you to switch off the power to replace the printing module.

#### To release the extruder:

1. Press the white button at the back of the extruder to release it. 2. Lightly press the spring around the feed hole and remove the filament guide tube. Press on the harness chips and disconnect the cable.

#### Installing the laser engraving module:

1. Connect the flat cable to the laser engraving module. (Remind the flat cable direction.)
2. Align the laser engraving module with the bracket and press it to fix the holder.

#### Dismantling the laser engraving module:

1. Press the white button at the back of the laser engraving module to release it. 2. Detach the connected cables.
3. Complete dismantling and provide proper safekeeping of the laser engraving module.

### • Functions of the laser engraving software:

Once the laser engraver module has been installed, open the "XYZengraver" software. Select the laser engraving function located at the upper right of the toolbar. Import the picture file to be engraved, edit and set laser engraving effects, and initiate the engraving process.

# Selective Module

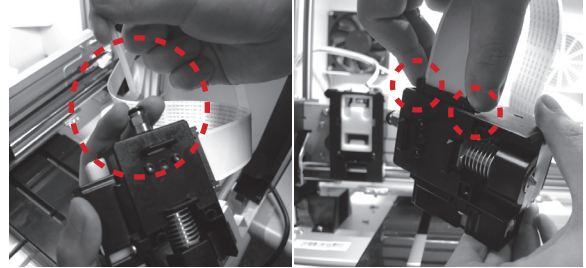
## CHANGE NOZZLE

- 1 Please operate the "UNLOAD FILAMENT" function and remove filament spool in the printer.
- 2 Please select "CHANGE NOZZLE "and smart extruder will reposition to working position.  
Then, screen on the printer will show "TURN OFF PROWER AND THEN CHANGE NOZZLE MODULE" and you can turn off power.

UTILITIES  
CALIBRATE  
BUILD SAMPLE  
▶ CHANGE NOZZLE

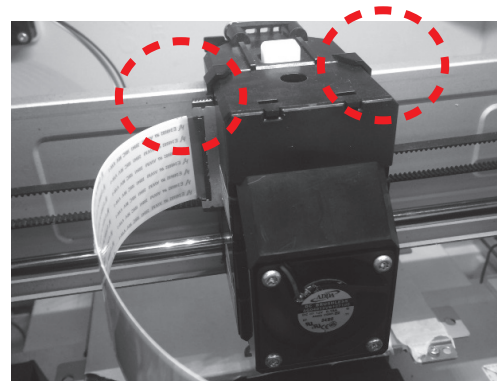
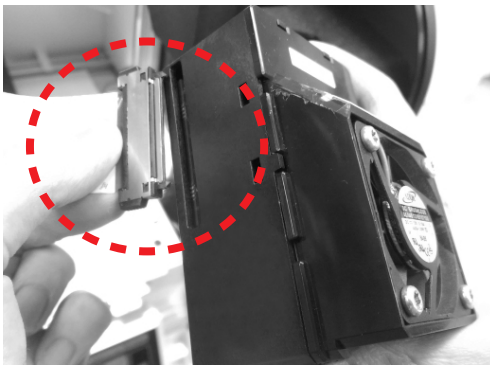
TURN OFF POWER  
AND THEN CHANGE  
NOZZLE MODULE

- 3 Please remove extruder model and guide tube.  
(Please refer to "Guide Tube and Extruder Module Removal" section in the "Accessories Installation" chapter.)



## Install Laser Engraving Module

- 1 Connect the flat cable to the laser engraver.  
(Remind the flat cable direction.)
- 2 Align the laser engraver with the bracket and press it to fix the holder.



**NOTE :** To disassemble the extruder module, gently press the sides of the flat cable, remove the white flat cable, and then press the white quick release button.

## Software Functions

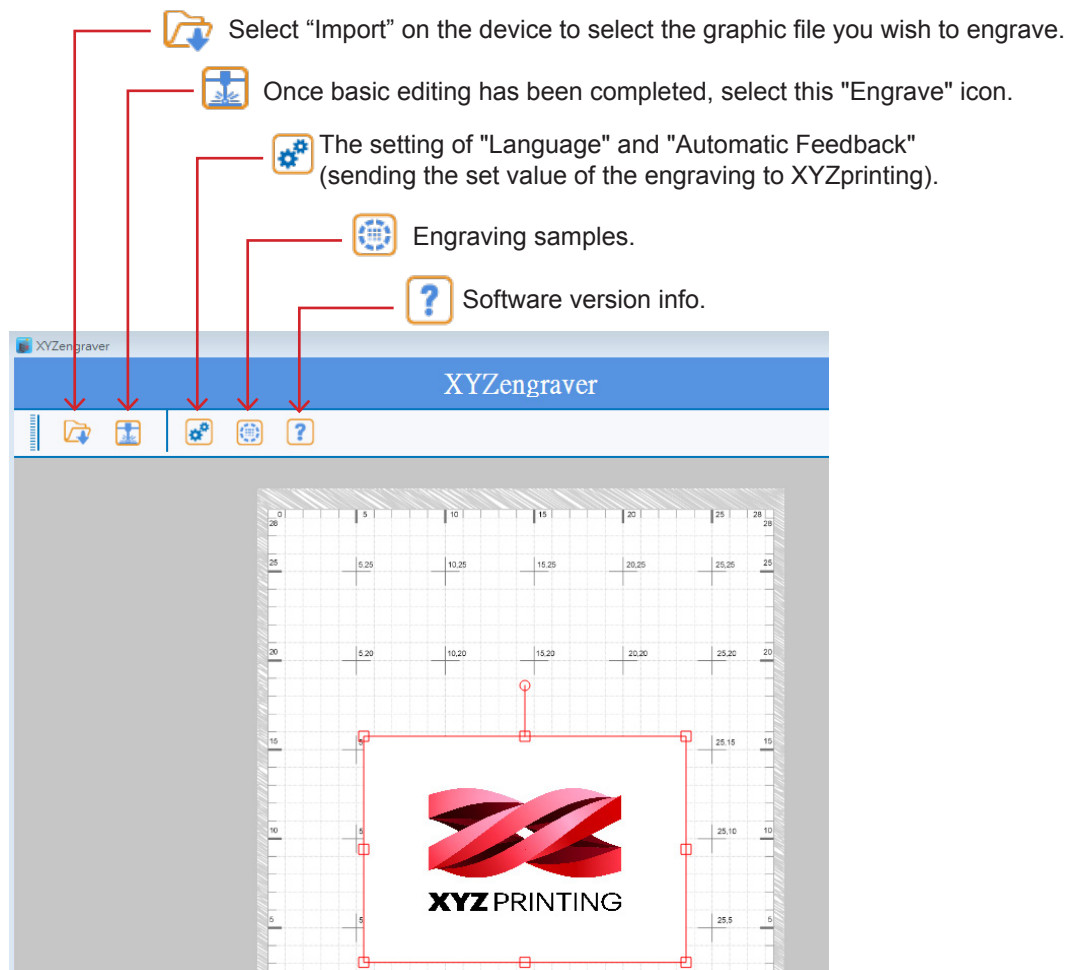
Please select "XYZengraver" software and select the laser engraving function in the toolbar. At the same time, import the file you want to edit, edit and set the laser engraving effect then operate the laser engraving.

**For more detailed laser engraving instructions, please refer to the laser engraving manual.**

**(Official website: [www.xyzprinting.com](http://www.xyzprinting.com))**



## • Function Description:



## • Select "Edit". The software screen shall display the laser engraver settings.

The user may choose between Vector / Pixel engraving modes (default software setting is Vector mode).  
Set engraving speed, number of engraving layers, contour detection sensitivity, or color depth detection sensitivity.

## • Pause and cancel the laser sculpting

PAUSE: Select "PAUSE" to pause the laser engraving process.

RESUME: To cancel the pause and resume the printing, select "RESUME". A screen will appear to confirm whether to resume the engraving process. Select "YES" to continue the laser engraving process.

CANCEL: To cancel the laser engraving job, select "CANCEL". A screen will appear to confirm whether to cancel the engraving process. Select "YES" to cancel the laser engraving process.

## • Laser Specification

Laser Wavelength	450nm+5nm/-10nm InGaN	Laser Power	350mW $\pm$ 10%
Laser Power for Classification	Class 3B	Beam Diameter	$\leq$ 1mm
Engraving area	15 x 15 cm / 5.9" x 5.9"	File Types	JPG / PNG / GIF / BMP
Mode of Operation	CW (Continuous Wave)		

**For more details on laser engraving settings and methods, please refer to the "Laser Engraving Module User Manual".**

## Wireless printing

This chapter introduces how to carry out the setting correctly and to operate the wireless printing function. To understand if your product is designed with wireless printing function, please refer to the table below.

●da Vinci 1.1 Plus ●da Vinci Jr 1.0w ●da Vinci Jr. WiFi Pro

### Before setting up

The network printing function is only available when the printer and the computer are both connected to the same wireless network.

Before connecting the printer, your wireless network settings need to be adjusted. For more information, refer to the instruction manual of your wireless router.

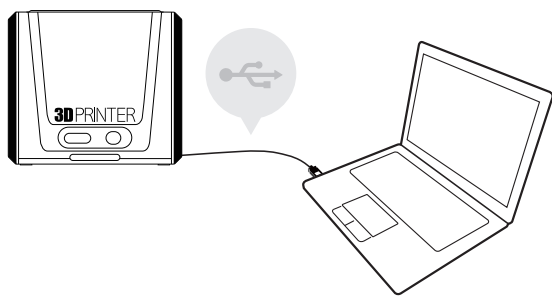
The wireless network's channel width needs to be set to 20 MHz for the printer to connect to it wirelessly. Refer to the vendor instruction manual for more information.

The printer supports WEP, WPA, and WPA2 security encryption standards. Wireless pass word information will be requested when setting up the printer connection.

## Setting up WiFi

### 3D Printer WiFi Setting

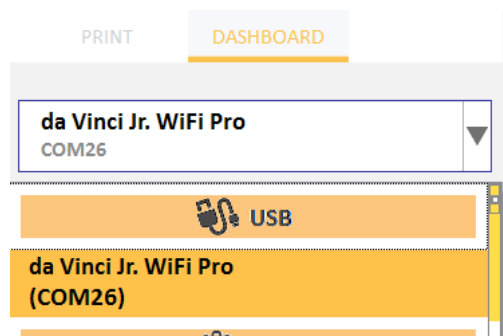
Connect the printer to your computer with the USB cable, open "XYZprint" and turn on the printer.



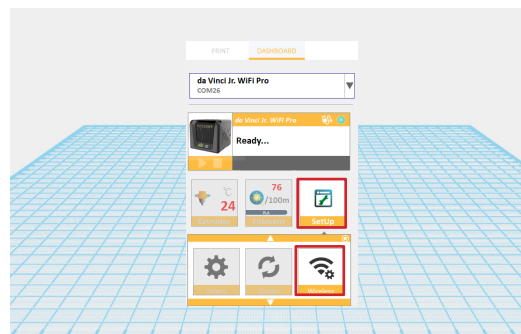
Click the [XYZprint] to open printer operating dashboard.



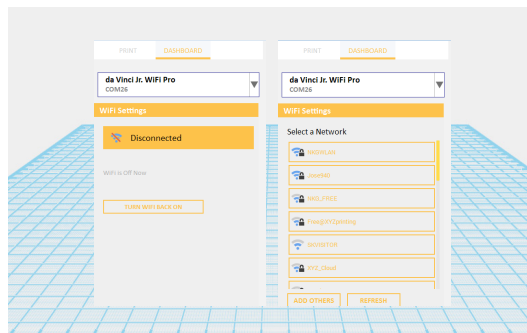
Select the connected 3D Printer on Dashboard page.



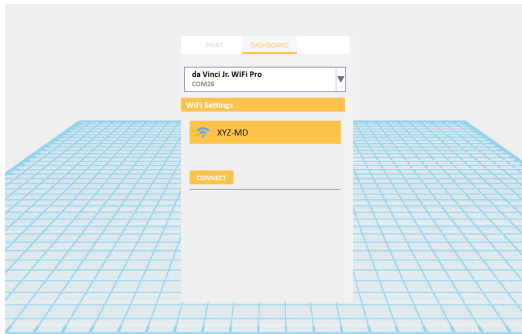
Select the [SetUp] > [Wireless] to open the WiFi connection settings.



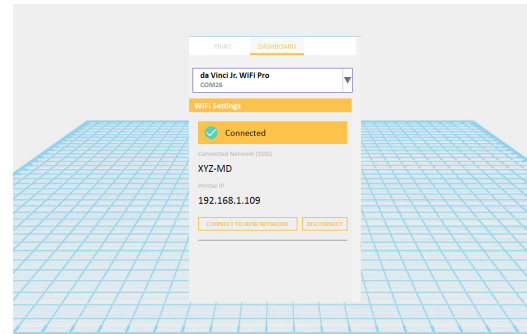
In the [WiFi setting] window, please follow the onscreen instruction to key in the related information to complete wireless connecting setup.



# Wi-Fi Setting



Once the connection method has been changed from USB to WiFi, you can unplug the USB cable and continue with the printing process.



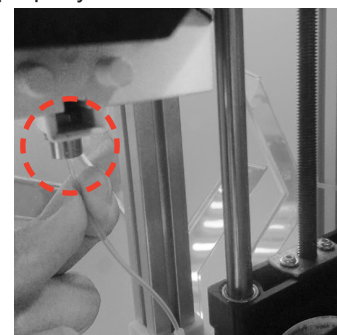
If you need to stop or change the wireless setting, please click **[Connect to new network / Disconnect]**.

### Note:

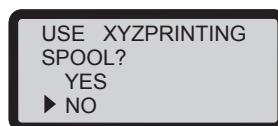
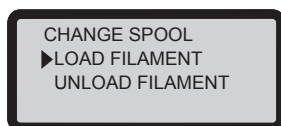
- Name the printer and wireless network with the alphanumeric characters only.
- If no connection is detected within 90 seconds, the printer will time-out. If this is the case, check that the configuration process is correct and try again.
- Confirm your wireless network's security key on the router's wireless settings page.
- The recommended wireless connection distance between your printer and the wireless networking device needs to be within 10 meters. The connection quality, will depend on the power of your networking device, and the environment you are connecting the two devices in. For more information, please refer to your networking device's instruction manual.

## Open Filament

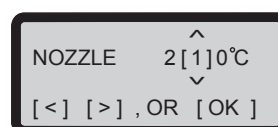
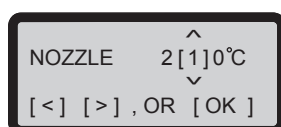
- 1 If you're using third party filaments, please secure the filament using the holder.
- 2 Load the filament from the back of the printer.
- 3 In the printer, insert the filament into the feed port. Open the release arm so that the front tip of the filament can be properly inserted into the feed module.



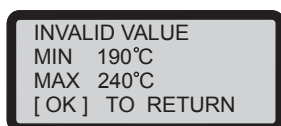
- 4 Load the filament function of the printer function. When the panel displays: "USE XYZPRINTING SPOOL?", select "NO" > "APPLY SETTING" (and enter temperature settings).



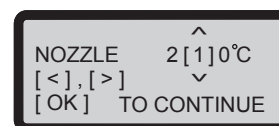
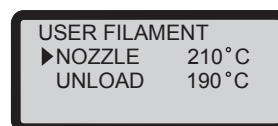
- 5 Adjust the nozzle temperature according to the supplier's recommendations. Use the left [ < ] and right [ > ] buttons to select the digits. Use the up [ ^ ] and down [ v ] buttons to increase or lower the number.



- 7 The recommended printing temperature range is 190 to 240°C. The screen would display a temperature range reminder if the temperature settings exceed this recommended range.



- 8 The user may go to SETTING > USER FILAMENT > NOZZLE to set the nozzle temperature.



## REMARK

- \* Hang the spool on the filament spool holder prepared by yourself, we recommend use the support bracket to avoid collapsing when printing.
- \* Print quality cannot be guaranteed if filaments from other brands are used instead.
- \* The warranty does not cover stuck filaments, product failure, damage or defects resulting from the use of other brand's filament or 3rd party slicing software.

# OPEN FILAMENT

## da Vinci Junior Wifi Pro 3D Printer

Model Name	da Vinci Jr. WiFi Pro 3D Printer
Dimensions	16.54 x 16.93 x 14.96 inches ( 420 x 430 x 380 mm )
Weight	26.46 lbs (12kg)
Display	2.6" FSTN LCM
Language	Multi language
Connection method	USB Wire / SD Card / Wi-Fi 802.11 b/g/n
Print Technology	FFF (Fused Filament Fabrication)
Build Volume	150 x150 x150 mm
Print resolution (Layer Hight)	20 - 400 microns
Print module	Single Nozzle
Nozzle diameter	0.4mm(Stainless Steel) / 0.4mm ( <del>High Carbon</del> Steel) (Optional)
Filament diameter	1.75 mm
Files supported	.stl , XYZ Format (.3w),windows(.3mf), G-code
Operating system	Windows 7 - 8 above (for PC) Mac OSX 10.10 64-bit above (for Mac)
Hardware requirement	X86 64-bit compatible PCs with 4GB+ DRAM (for PC) X86 64-bit compatible Macs with 4GB+ DRAM (for Mac)

## Environmentally friendly materials-PLA

PLA filaments are made using polymerized lactic acid, which is extracted from corn, sugarcane or other sugar-containing crops, and is regarded as the most environmentally friendly 3D printing material. Unwanted PLA printed objects can be simply discarded in the soil where it will naturally decompose.

PLA materials printed at low temperatures are not only suitable for family settings, its bright texture also makes it a favorite amongst our clients. You may observe the characteristics of PLA during printing.

- Despite their harmlessness, PLA placed in an environment or water bath exceeding 50 °C (122 °F) will soften and deform.
- Hence, overly humid areas are not suitable storage environments for PLA. We recommend properly sealing and stashing away unused PLA filaments.
- A sugary smell is often generated when printing with PLA filaments, giving yet another attractive feature.

# Specifications

The troubleshooting instruction may guide you to fix the problem. If any error persists, please contact customer service. When an error occurs, please refer to the service code shown on the printer and/or in the software, and check the suggestions below for troubleshooting.

Technical Support

Website: <http://support.xyzprinting.com>

Email: US - [supportus@xyzprinting.com](mailto:supportus@xyzprinting.com)

EU - [supporteu@xyzprinting.com](mailto:supporteu@xyzprinting.com)

Other regions - [support@xyzprinting.com](mailto:support@xyzprinting.com)



**Please retain all original packaging material when shipping your product for warranty purposes. Shipping without original packaging materials may cause product damaged during the shipment and may cause chargeable service fees.**

Service Code	Symptom	Action
0 0 0 7	Cartridge chip error	Reinstall the cartridge or change a new cartridge.
0 0 0 8	Cartridge chip error	Reinstall the cartridge or change a new cartridge.
0 0 1 1	Extruder heating problem	Check connections, reboot the printer.
0 0 1 4	Extruder heating problem	Check connections, reboot the printer.
0 0 1 6	Cartridge installed incorrect	Install/reinstall cartridge.
0 0 2 8	Cartridge not installed	Install/reinstall cartridge.
0 0 2 9	Cartridge chip error	Replace cartridge 1 before printing.
0 0 3 0	X-axis movement abnormalities	Check motor/sensor connections.Check sensor position.
0 0 3 1	Y-axis movement abnormalities	Check motor/sensor connections.Check sensor position.
0 0 3 2	Z-axis movement abnormalities	Check motor/sensor connections.Check sensor position.
0 0 4 0	SD card error	Check SD card installation
0 0 5 0	Internal communication error	Reboot the printer.
0 0 5 1	Internal communication error	Reboot the printer.
0 0 5 2	Extruder storage error	Replace the extruder.
0 0 5 7	Unable to detect extruder	Please reinstall the extruder and reconnect the flat cable, then restart the printer.
0 2 0 1	Computer and printer connection error	Please reinstall the extruder and reconnect the flat cable, then restart the printer.
0 2 0 B	SD card error	Check SD card installation.
0 2 0 C	SD card error	Check SD card installation.
0 2 0 D	File format is not support	Please use correct print model.



## Other Information

Error message	Action
The printer is handling other task	Try again after all tasks are completed. Also check the information shown on printer display.
Unable to update printer firmware	Check Internet connectivity / Update firmware again later.
Filament 1 jammed	Unload and reload cartridge 1 and clean the nozzle.
Filament 1 loading problem	Unload and reload cartridge 1.
Filament 1 installation problem	Reinstall the cartridge 1 or change a new cartridge.
Top cover open	Close the top cover.
Filament 1 level low: 30m left	Replace cartridge 1 when necessary.
Filament 1 level low: 5m left	Replace cartridge 1 immediately.

1. This product is guaranteed for specific period from the purchase date against any breakdown within the scope of proper and reasonable usage of their product as defined by XYZ printing.  
Presentation of warranty card with the product will ensure free service and repair of inherent faults in the product within the warranty period. However, the following items are separate and dealt with under conditions of other related warranty services:
  - Printing modules / printing platforms / motor modules
  - Attached consumables (including housing, packing materials, power cords, USB cables, coil consumables, user manuals and software CD's): no warranty is given.
2. To protect your right and interests, please request that the dealer fill in the product information and purchase date on the product warranty card, and also make sure that they affix their official seal.
3. Please keep this warranty card in a safe place because if it is lost or destroyed a new one will not be issued.  
Make sure to present the card if you require any repairs, service or maintenance to the product during the warranty period.
4. XYZprinting may levy charges under any of the following circumstances:
  - Man-made damages: In the case of damage to the product caused by incorrect use, wrong installation, abnormal wear, physical damage or deformation caused by falls or blows, burnt circuits resulting from actions from the user, broken or bent interface or pins or any other physical damage to the product caused by misuse.
  - Incompatibility issues: anything unconnected with product malfunctions such as conflict with electronic equipment, expectation of use, noise of operation, speed, discomfort or heat.
  - Damage caused by force Majeure (such as lightning strike, fire, earthquake, floods, civil disturbance or war or any other event beyond human control).
  - Any request of warranty service after expiration of the warranty period.

If you need warranty service, please contact the original dealer or send a ticket via XYZprinting website. If you need more information about our warranty services, please log in to [www.xyzprinting.com](http://www.xyzprinting.com), select "support (product support)" where you will find complete details of all the warranty conditions.

## Other Information

### Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

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.

XYZprinting is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications 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.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

# Warning

- Do not let children operate this device without adult supervision. Electric shock hazard. Moving parts can cause serious injury.
- Do not place the printer on an unbalanced or unstable surface. Printer may fall or tumble causing harm and/or injury. Printer may fall or tumble causing harm and/or injury.
- Do not place any objects on top of the printer. Liquids and objects that fall into the printer can lead to printer damage or safety risks.
- Do not use flammable chemicals or alcohol wipes to clean this device.
- Do not disassemble or replace the printer cover with non-XYZprinter covers.
- Do not touch heated surfaces during or after operation. Heated surfaces can cause severe burns.
- Insert and secure the power cord firmly for proper usage and to avoid potential electricity and fire dangers.
- Do not attempt to service the printer beyond the instructions specified in this document. In the case of irrecoverable problem, contact XYZprinting service center or your sales representative.

# Warning!