

# da Vinci Pro EVO User Manual

## **Important Safety Precautions (P.2)**

- Safety and Regulation (P.2)
- Safety Instructions (P.2)
- Note on Power Supply (P.3)
- Safety Notice and label (P.3)

## **About da Vinci Pro EVO (P.4)**

- Introduction (P.4)
- Specifications (P.5)
- Accessory Checklist (P.6)
- Precautions and Instructions of Maintenance Tools (P.6)
- Maintenance and Service (P.7)

## **Unpacking and Installation (P.7)**

- Unpacking (P.7)
- Hardware Installation (P.9)
- Software Installation (P.12)

## **Feed Module Adjustment (P.14)**

## **Operating The Printer (P.16)**

- Main Screen Function Introduction (P.17)
- Function and Description (P.17)
- Printing (P.34)

## **Operating The Software (P.36)**

- Software Interface (P.36)
- Connecting to the Printer (P.37)

## **Laser Engraver Module (Optional) (P.38)**

## **Support Information (P.39)**



Please read the product User Manual carefully before using this product.

This user manual is mainly intended for users to understand how to use the da Vinci Pro EVO 3D printer ( "Pro EVO" ) correctly. In the user manual, users can learn more about the operating tips, application skills and maintenance of the Pro EVO 3D printer.

For more information on the Pro EVO, please contact your local dealer or visit the official website of XYZprinting : <http://www.xyzprinting.com>.

## **LIMITATION OF WARRANTY AND LIABILITY**

XYZprinting is responsible for the device in its original configuration. Any changes to the configuration of the machine must be performed or authorized by the XYZprinting technical department. XYZprinting is not responsible for the problems and warranty dues to the use of not original spare parts or printing materials.

## **Trademarks**

All trademarks and registered trademarks are the properties of their respective owners.

## **Print History**

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)

## **Important Safety Precautions**

### **Safety and Compliance**

Please read through this manual and all safety precautions carefully before using, operating, unpacking, replacing, removing any part or maintaining this product. Please also comply with the instructions of relevant safety.

### **Safety Instruction**



- Do not move the machine by yourself as it is heavy.
- Do not place the printer on a soft or tilted surface. Otherwise, the machine will fall / flip over and become damaged or cause personal injury.



- Do not place the printer in a dusty, humid or outdoor environment.
- Weak odors may be generated during the printing process. We recommend working in a well-ventilated.
- Do not leave the product or power cord to unattended children. Otherwise, personal injury or electric shock might occur.
- Do not place any liquid container on top of the product. Otherwise, overflow or spill might go into the machine and pose the risks of danger or safety concern.
- Do not wipe the printer with alcohol or flammable chemicals. Otherwise, danger might occur.
- Do not move the machine when it' s powered on.
- Please use the provided power cord. Otherwise, incorrect grounding might lead to damage.



- Do not reach into the machine with your hands during operation. Otherwise, risks of impact from moving printing parts or burn from high temperature might occur.
- The machine becomes hot during operation and thus run in high temperature. Do not touch or replace parts when they are not cooled down.
- After startup, the parts in the machine will heat up or move depending on the user' s instructions. During product operation, do not touch or block the operation of the parts.
- Defect reparation must be carried out according to the contents of this instruction manual. Where the defect cannot be repaired, please contact your printer dealer or the customer service center.

## Note on Power Supply

- Do not use with damaged cord or plug. To unplug grasp the plug, not the cord. Do not handle plug or machine with wet hands.
- Do not handle plug or machine with wet hands. Turn off the power switch before unplugging.
- Do not run the machine over cord. Keep cord away from heated surfaces.
- If the system is left in idle mode for an extended amount of time, turn off the main switch.

## Safety Notice and label

### Warning

Class I Equipment. This equipment must be earthed. The power plug must be connected to a properly wired earth ground socket outlet. An improperly wired socket outlet could place hazardous voltages on accessible metal parts.

Marking of hazardous moving parts



#### **WARNING**

HAZARDOUS MOVING PARTS KEEP  
FINGERS AND OTHER BODY PARTS AWAY



#### **Power Off before Extruder Installation**

- 1.Connect the bus (make sure the latch on both sides the bus click into the place).
- 2.Check if the print head is secured without shaking.

# About da Vinci Pro EVO

## Introduction



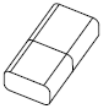
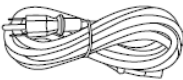

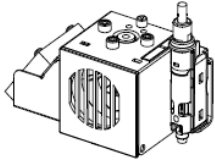
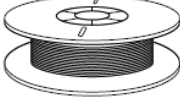



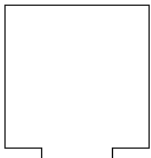
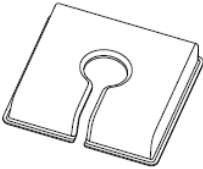



1. Extruder module
2. Print bed and removable metal print bed
3. 5 inch touch screen
4. USB socket/USB Port
5. USB socket/USB Port
6. USB cable port
7. Power switch
8. Power inlet
9. Feeding motor system
10. Filament holder
11. Top cover



## Specifications

Print technology	Fused Filament Fabrication( FFF )
Max. build area (WxDxH)	220 x 200 x 200 mm
Material compatibility	TPU / Nylon / Premium Metallic PLA / Carbon Fiber / PP GF30 / Tough PLA / PETG / ABS / PLA / PC / *PC/ *Carbon PET(PET CF15) / *Carbon Nylon(PAHT CF15) *Optional High Temp extruder module
Filament diameter	1.75 mm
Layer resolution	0.05 mm ~ 0.4 mm
XY positioning precision	X / Y : 0.0125 mm
Auto calibration	Yes
Filament feeding system	P-Motor gap adjustment
Offline printing	Yes (USB)
Support 3rd party material	Yes
Print head diameter	0.4 mm
User interface	5 inch touch screen
Print bed	Heated, removable metal print bed
Print bed temperature	40 ~ 110 °C
Connectivity	USB 2.0 cable, Wi-Fi dongle, USB flash drive
Printing software	XYZprint 3
Supported file formats	.stl / .3mf / .obj / .igs / .stp / .ply / .amf / .3cp / .iges / .step / G-code
Operating systems	Microsoft Windows 10 / 11 (64-bit)
	macOS 10.14及以上
Product dimensions (WxDxH)	485 x 532 x 572 mm
Net weight	24 kg
Operating temperature	15 ~ 32 °C
Storage temperature-Filament	10 ~ 40 °C

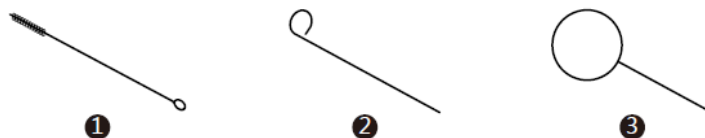
## Accessory checklist

 <p>1. Quick guide X1 Warranty card X1</p>	 <p>2. USB drive X1 (Contains quick guide, software installer and print test file.)</p>	 <p>3. Wi-Fi dongle X1</p>	 <p>4. Power cord X1</p>	 <p>5. USB cable X1</p>
 <p>6. Extruder module X1</p>	 <p>7. Bundled filament X1</p>	 <p>8. Guide tube X1</p>	 <p>9. Clear tube X1</p>	 <p>10. Rubber magnet X1 (Please paste on the print bed)</p>
 <p>11. Removable metal print bed X1</p>	 <p>12. Top cover X1</p>	 <p>13. Side cover X2</p>	 <p>14. Top cover buckle X1 15. Guide tube clips X5</p>	 <p>16. L shaped torx key(T10) X1 17. Screw X6</p>

※ The company reserves the rights at any time under the specific circumstances of accessory to improve the right of specific style and size to actual supply prevail.

## Maintenance Tools

- The following tools are intended for use under the guidance or guardianship of an adult only. Do not allow children unfamiliar with the tools to have access to them in case of danger.



## Precautions and Instructions of Maintenance Tools

- ① Gear cleaning brush X1: 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.
- ② Feed hole cleaning wire X1 (only use to clean the feed hole of the extruder module)
- ③ Nozzle cleaning wire X5

- Regular cleaning of the print nozzle facilitates to not only extending service life of the printer, but also improves print quality.

To prevent the incomplete flow of the filament as to affect the print quality, as may be caused by the remaining and the stacking of the filament after the print head is operated for a longer time, please select "Clean Nozzle" option in "Maintenance" menu of the Printer and then clean

the steel wires or that remained in the feed hole with the Nozzle in order to remove the residual debris.

\* Filament should be unloaded from the extruder module before cleaning the feeding path.

\* Care should be taken during the operation to avoid potential burn injuries.

- Filament scraps generated during printing may remain on the feeding motor and gear, which will affect the printing quality and operation of the printer. In this case, please clean the scraps.

## Maintenance and Service

- If an abnormal sound is heard from the Z-axis when the machine is operating, please apply grease to protect the machine.
- When the printer needs to be serviced during the term of the warranty, it is recommended that the machine is packed with original packaging materials prior to shipment. For this purpose, the packaging materials are better to be kept. If other packaging materials are used instead, the printer might be damaged during printing. We reserve the right to assess relevant service fees.

## Unpacking and Installation

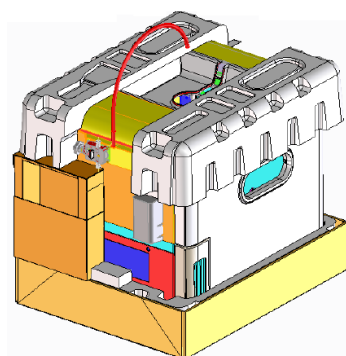
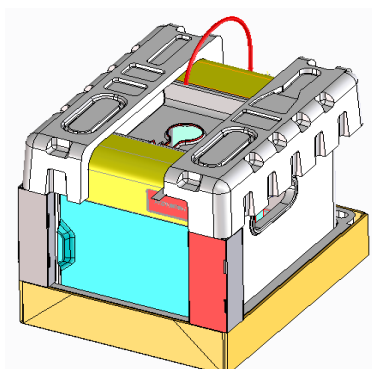
### Unpacking

Please follow the instructions to unpack the product. Failure to follow the procedure may result in damage to parts.

1. Open the outer box to pull it out.

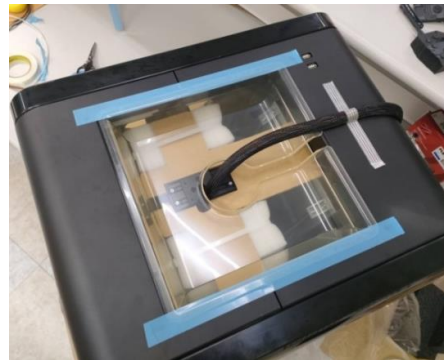


2. Remove the cushions of accessories on the upper two sides and all fixing materials at the front and rear.

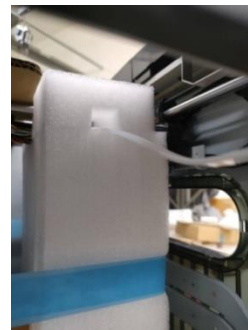
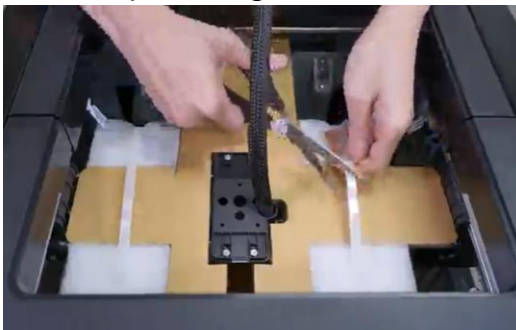




3. Remove the cushions and accessories above the machine.
4. Remove the packaging bags and take out the printer, then remove all fixing tapes on the printer and take off the top cover.



5. Open the front cover and remove the tapes and cardboard above the front of the printer and the tape below.
6. Cut the tape binding the cushions on both sides and remove the cushions.



7. Remove the fixing cardboard above the printer.



8. Remove the tape on the fixing cushions on the left and right sides, and remove all cushions inside the machine.





9. Take out the filament box and extruder module accessory box.
10. Please remove the two clips from both sides of the belt before using.



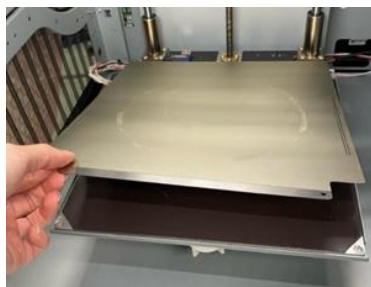
## Hardware Installation

- Print Bed Installation

Tear off the tape affixed to the backside of the Rubber Magnet (Accessory 10) and then align the magnet with the corner of the print bed. Next, press the magnet down until it is attached to the print bed securely.



After that, load the Removable metal print bed (Accessory 11) on the magnetic-bonded print bed.



- Extruder Module Installation

Hand Tools: L shaped torx Key(accessory 16) or T10 Torx Screwdriver.

Disconnect the power. Insert the heated flat cable and then align the extruder module with the correct position of the 3-point screw hole. After that, tighten these 3 screws with the L-shaped torx key (Accessory 16) respectively until the extruder module is secured in position.



Mind the pinching position (as shown in the figure) when inserting the heating cable into the interface, and confirm the fool-proof position, then align the two ends and insert with even force.

- **Extruder Module Removal**

Filament should be unloaded from the extruder module before module removal.

Loosen the screws at the three holes (loosening instead of taking down the screws, and keep the screws on the holes), support the extruder module by hand, then press both ends of the heating cable to pull it out.



Mind the pinching position (as shown in the figure), and pull out the heating cable with even force.

- **Guide Tube and Clear Tube Installation**

Insert one end of the guide tube (accessory 8) into the feed module and secure it tightly.

Insert the clear tube (accessory 9) into another end and be sure to complete this installation, in order to press the clear tube down to remove the guide tube in the future. (Please be sure to complete this step to facilitate pressing down the clear tube and removing the guide tube)

Press the filament guide tube goes into the feed hole of the extruder module tightly and the installation of the filament guide tube is duly completed.

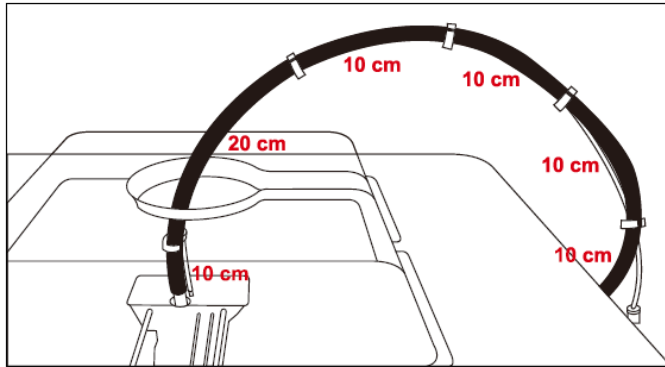


- **Guide tube clips (This file is stored on USB drive) and Top cover buckle Installation**

Guide tube clips (accessory 15) is used to fix the wires and guide tube, and can stabilize when moving of the wires and tube during printing.

Please avoid the distance position that will touch the upper cover when the printing moves.

The recommended installation position is as follows:



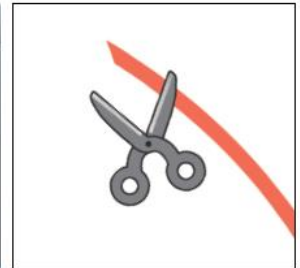
\* The top cover buckle file can be downloaded from the website.  
It is recommended to print the top cover buckle in ABS material.

- **Filament Installation**

The feeding module is located at the back of the printer. Put down the filament holder first, and place the filament on the spool holder. Pull out a section of the filament and insert it into the feed port.

Note :

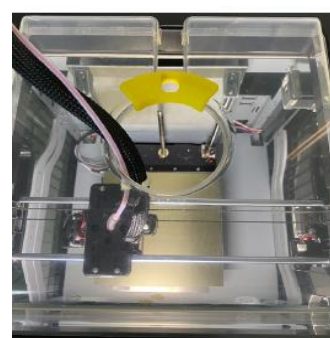
Before pushing the filament into the guide hole, please cut the tip of the filament off at a 45°.



- **Side cover and Top cover installation**

Starting from the internal side of the printer, install the side cover towards the latch direction.

The top cover is placed directly on the top of the printer.



# System requirement

## Operating Systems

### Windows

Microsoft® Windows® 8, 10, 11 (64 bit)

Mac OS® X 10.15, 11, 12

## Minimum Hardware Requirements

CPU : 4th Generation Intel® Core™ i5 Processor or above

RAM: 8GB

Hard disk space: 20GB or more


Storage : 1GB above ( Recommended 20GB)

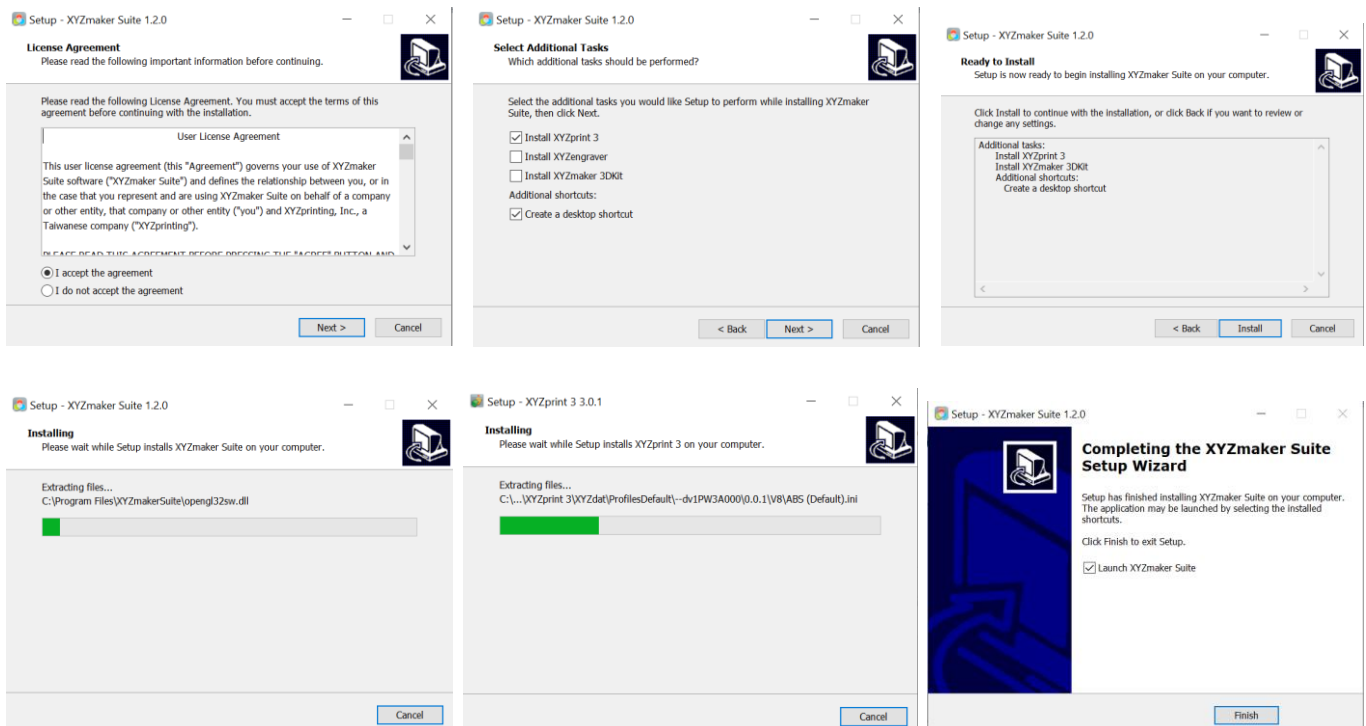
1GB free storage for installation.

For MAC: RAM: 8GB / Hard disk space: 20GB or more

## Software Installation

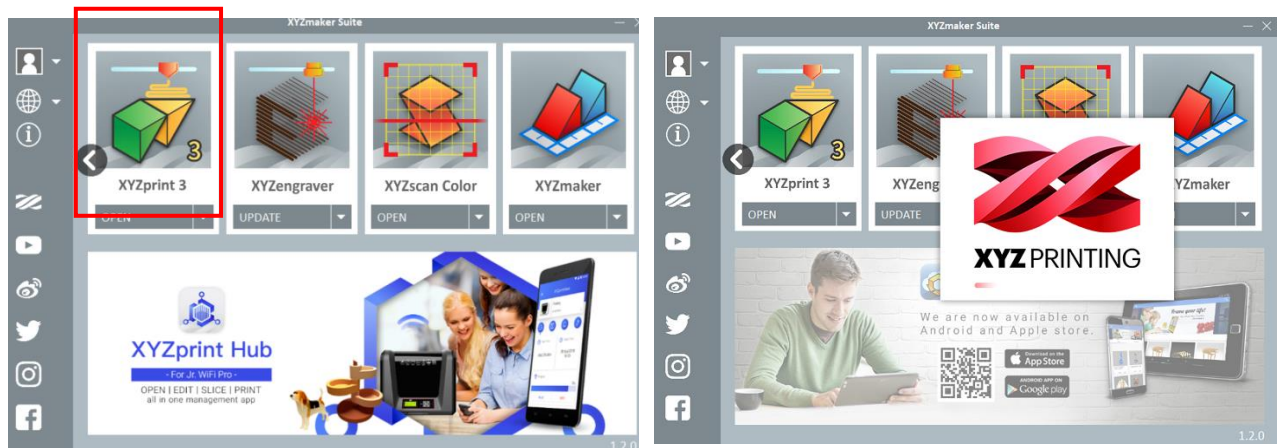
“XYZprint 3” should be installed on the service PC for preparing the files for production. Connect the USB drive provided with the printer to your PC. After booting the software driving procedure, the installation program will appear on your PC screen. Click the program twice to start installation.

 XYZmaker\_Suite\_1.1.5\_1B14690 (1).exe

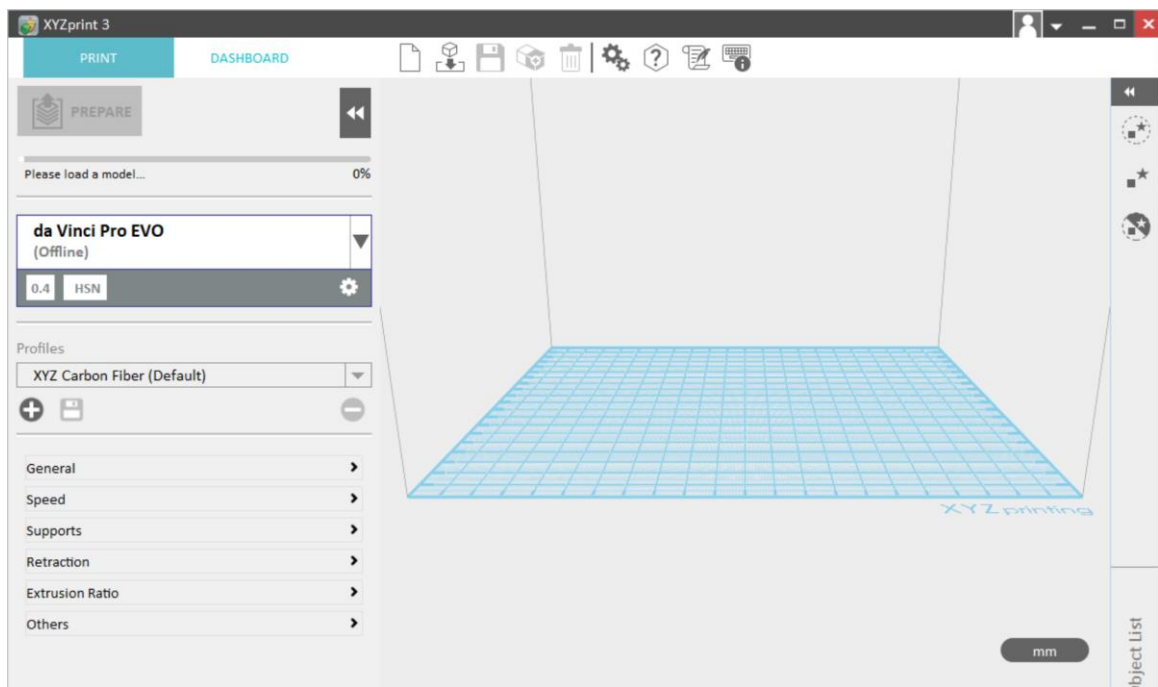




Start XYZmaker Suite, select and start "XYZprint3" to perform printing.



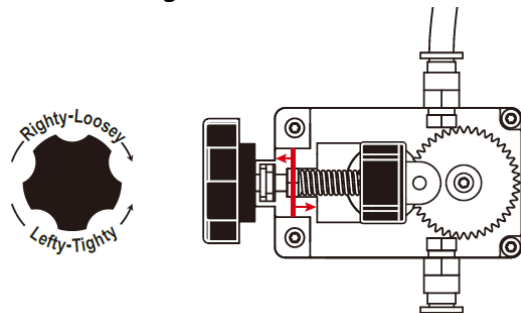
## XYZprint 3 Interface



# Feed module adjustment

Before loading the filament, please set the middle value of the temperature on the operation panel according to the recommended printing temperature range of the filament you are using, as the temperature of the loaded filament, and then observe the feeding condition to make adjustments.

The tightness of the gear in the feed module can be adjusted according to the material of the filament being used.



The gear tightness of the feed module can be adjusted with the material used. Please make sure to tighten or loosen the gear of the filament feeding module correctly. It must be tight enough to grab the filament and push them into the extruder hole, but must not be tightened excessively, If the gear screw of the feed module is too tightly, the gear will not be able to push the filament correctly.



Pay attention to the gear loosening position.  
If turning the gear towards the loosening direction when the gear of the feed module is under the loosest condition, it may result in an abnormal adjusting function.


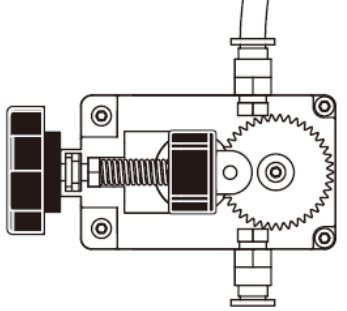


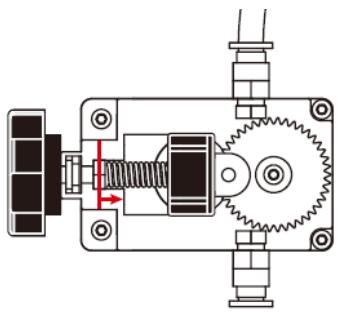

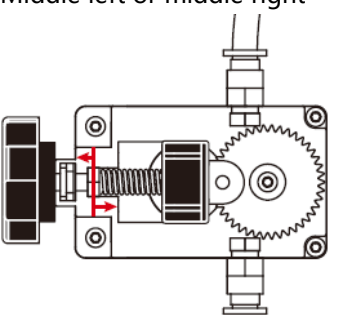
- Filament Properties
- 1. Check the properties of the filament  
Cut off 15~20cm of filament. Grasp both ends with both hands respectively and then loosen either end horizontally and vertically. If the filament is sagging, it belongs to soft material; otherwise, it is hard material.

Soft material (per the schematic diagram)	Hard material (per the schematic diagram)

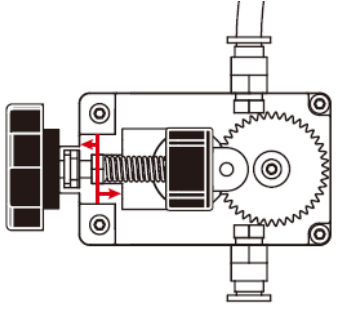
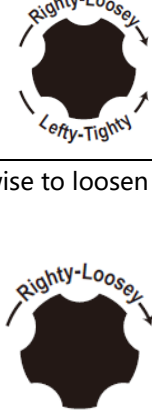
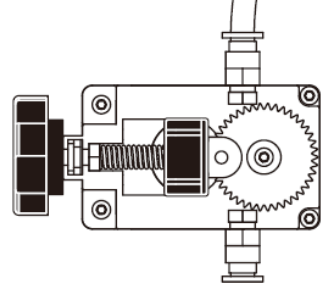
- 2. Identify the touching effect of the filament surface
  - A. Take out the filament and then lightly press the surface of the filament with a fingernail. If a trace remains, then it means the filament is not made of rigid-base material.
  - B. Take out the filament and then lightly scrape the surface of the filament with a fingernail. If a trace or debris remains, the filament is not made of abrasion-resistant material.

Non-rigid material	Not hard wearing

When loading the filament, the material used for presetting the printer will be located at the center position of the nut in the feed module. You may adjust the gear tightness according to the clamping force indicated in the following filament characteristics. During the printing process, you may also execute fine-tuning of the gear for the feed module in order to achieve the desired tightness.

Material	Observe the feeding condition	Adjustment Methods	Hex nut position
Soft material	Observe whether the filament inside the guide tube is excessively squeezed, twisted, or unsmooth feeding conditions, and whether the flow of filament is stable. If the filament is presenting any squeezing, warping or unsmooth feeding sign, please adjust the clamping force of the gear in order that the filament will be extruded steadily from the print head.	Clockwise to loosen  	Middle left  
General	When it is impossible to judge the material characteristics or when using general materials, it is recommended to adjust the nut to the center position first, and observe whether the filament feeding condition inside the guide tube is stable. If the flow of the filament is not smooth, please adjust the gear clamping force.	Adjust the net to the center position    If the filament cannot be extruded, turn the nut leftward until tight (adjust in a counterclockwise direction)  	Center or middle right  
Hard material	Observe whether the filament flows out stably and smoothly, or whether there are mechanical abnormal noises during the process.	If the filament cannot be extruded, turn the nut leftward until tight (adjust in a counterclockwise direction)  	Middle left or middle right  



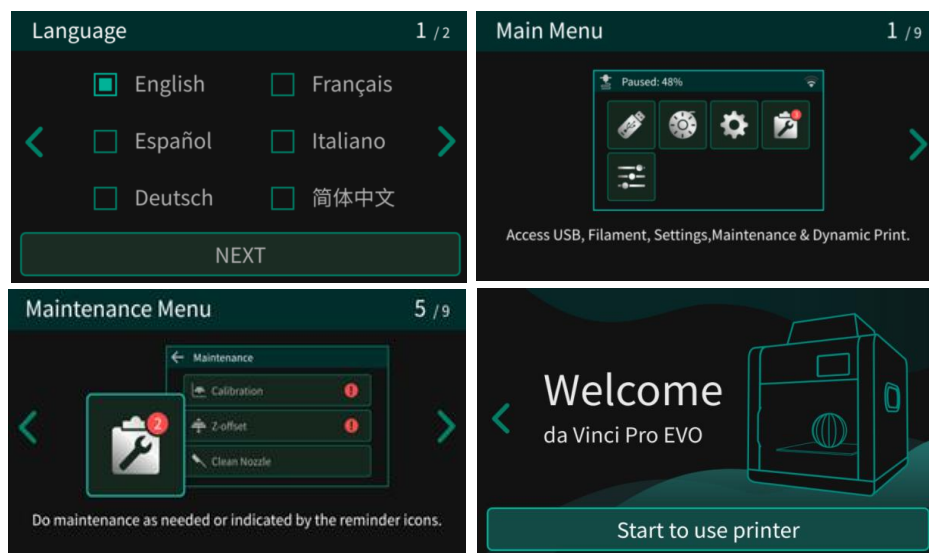
Hard material	If there is no flow or abnormal sound, try to loosen or tighten until the abnormal sound is eliminated and the filament flows out stably.	If there is abnormal sound, turn the nut leftward until tight (adjust in a counterclockwise direction) or turn the nut rightward to loosen (adjust in a clockwise direction)	Middle left or middle right 
Non-rigid material, not hard wearing, Fiber material	When extruding the filament from the print head, please check if any scraped debris remains in the gear-clamping area. If the filament cannot be extruded or if an abnormal sound is heard, you may loosen or tighten the gear until the sound stops and the print head is steadily extruding the filament.	Clockwise to loosen 	Middle left 

\* If the gear of the feed module is loosened, you may execute the adjustment. In this case, the gear of the feed module should be tightened correctly.

\* Specific conditions may exist in the filaments supplied by different manufacturers. Please make the adjustment according to the conditions of the filament that will be used.

## Operating the Printer

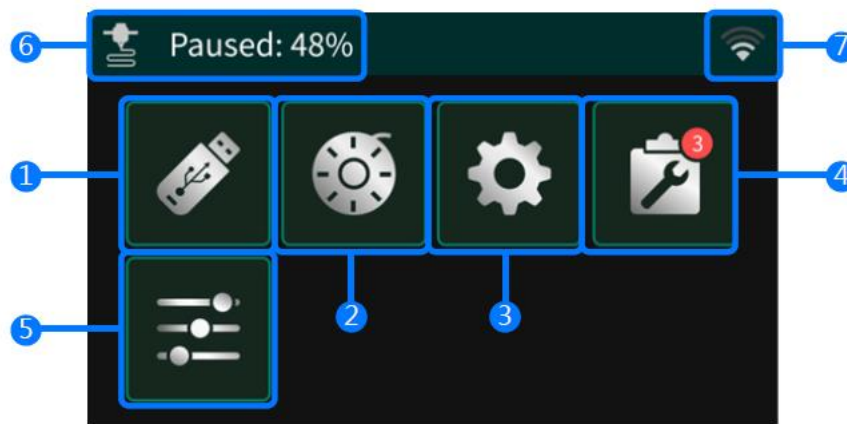
Setting the language shown on the printer screen before use, and through the **Quick Tour** to quickly understand content of each function of the main screen.



You can also select "Qui Tour" in the "Settings" function later to learn about the various functions. In order to ensure the print quality, please perform maintenance according to the reminder items first to exclude reminder symbols.

# Main Screen Function Introduction

Users may get the printing status and use information through the display panel, and carry out function operation by pressing keys.

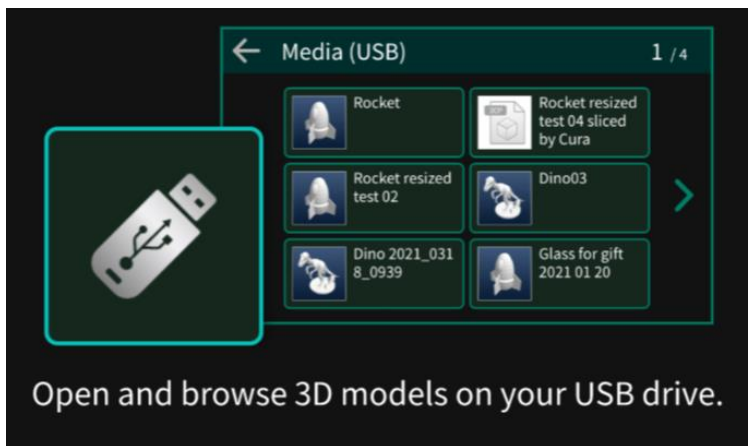


Function		Description
①	USB drive	3D models can be browsed and print directly from the flash drive.
②	Filament	You can see filament information on this page.Including the Load, Unload and temperature adjustment of the filament.
③	Setting	Set up the printer, check related info & perform maintenance.
④	Maintenance	Do maintenance as needed or indicated by the reminder icons.
⑤	Dynamic Adjust	Adjust print bed height, temperature, fan speed, and more while printing.
⑥	Printer Status	The top displays related information, printer status, etc.
⑦	Wi-Fi	Check the Wi-Fi signal and set up your network here. When starting the WiFi online function, the icon will indicate the online status. Click on such icon and you may access the online setup page instantly (shortcut). You can select this function from the setup function options in the menu to start the online setup process.

## Function and description

### 1. USB drive:

Users may browse the 3D model stored in the USB drive, or directly select the.3cp file, import it into the printer and carry out printing without importing the file by the computer. Reminder: Please put the print bed in place before printing, complete the feeding procedure and confirm that the front cover is closed.



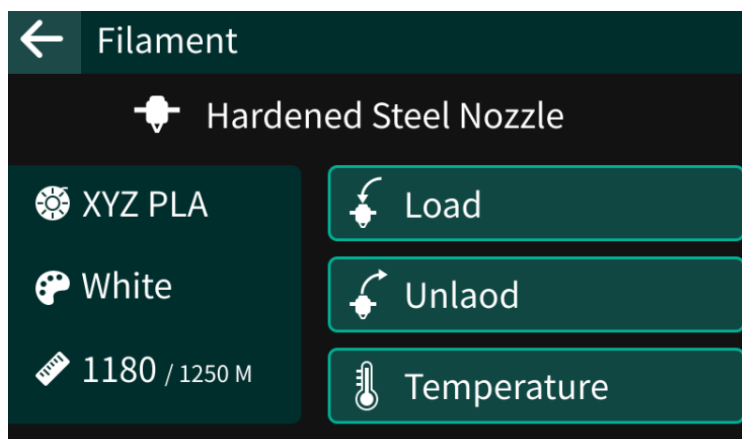
Check if the USB drive is plugged to the printer.

Tap the USB Printing Menu in the main screen. Browse the file information from the USB or select the file (.3w file) to print.


## 2. Filament:

You can see filament information on this page.

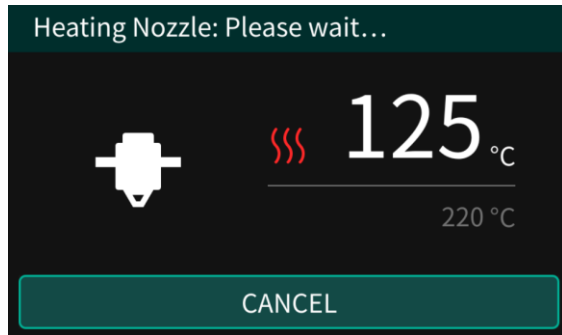
Including the " Load" , " Unload" and " Temperature" adjustment of the filament.



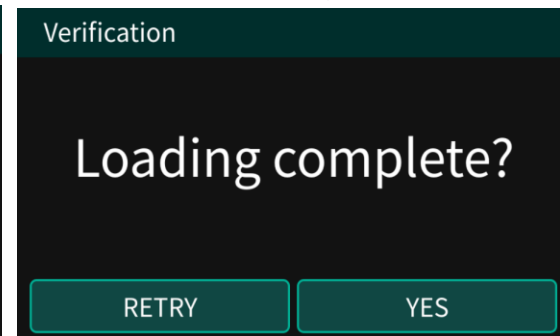
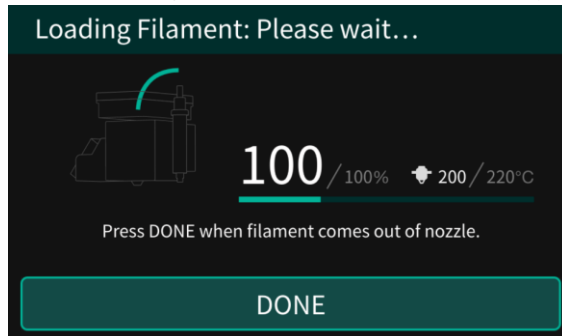
### 2-1 Load filament: Filament > Load

 Please pay attention to the filament direction and the rotation direction of the filament holder when feeding.





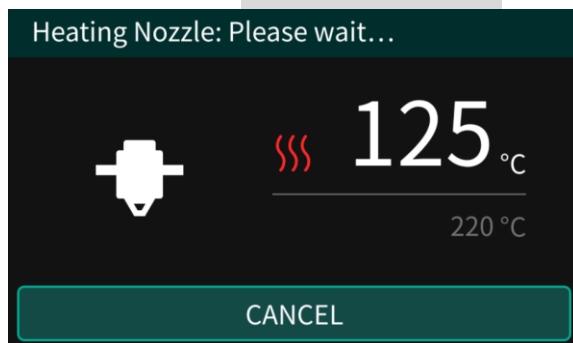
Wait for the extruder module to be heated to the working temperature after confirming that the filament is loaded, which will be driven by the feeding system to push the extruder module along the filament tube; or directly press and hold the "up" key to speed up the feeding.



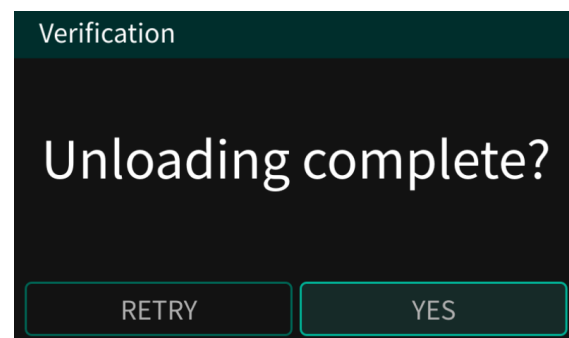
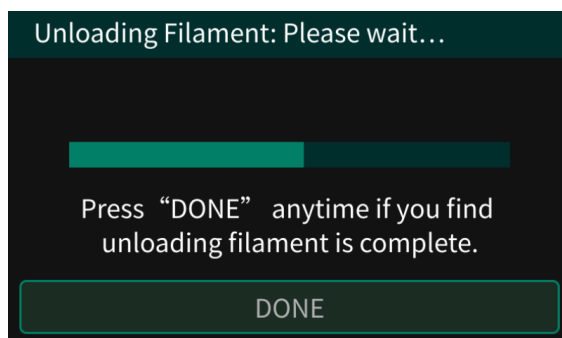
Press "DONE" anytime if you find filament is comes out of print head.

When the loading operation is complete, tap to "YES" confirm.

## 2-2 Unload filament: Filament > Unload



When the print head has been warmed up to working temperature, the feeding motor will eject the filament.



Press "DONE" if you find filament is ejected from the feed module.

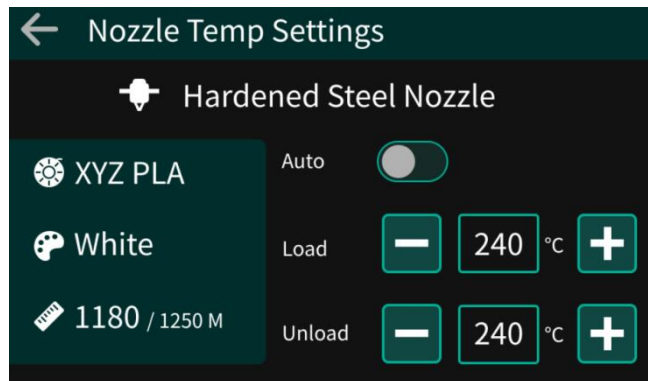
When the unloading operation is complete, tap to "YES" confirm.

## 2-3 Nozzle temp setting: Filament > Temperature

### Auto detect

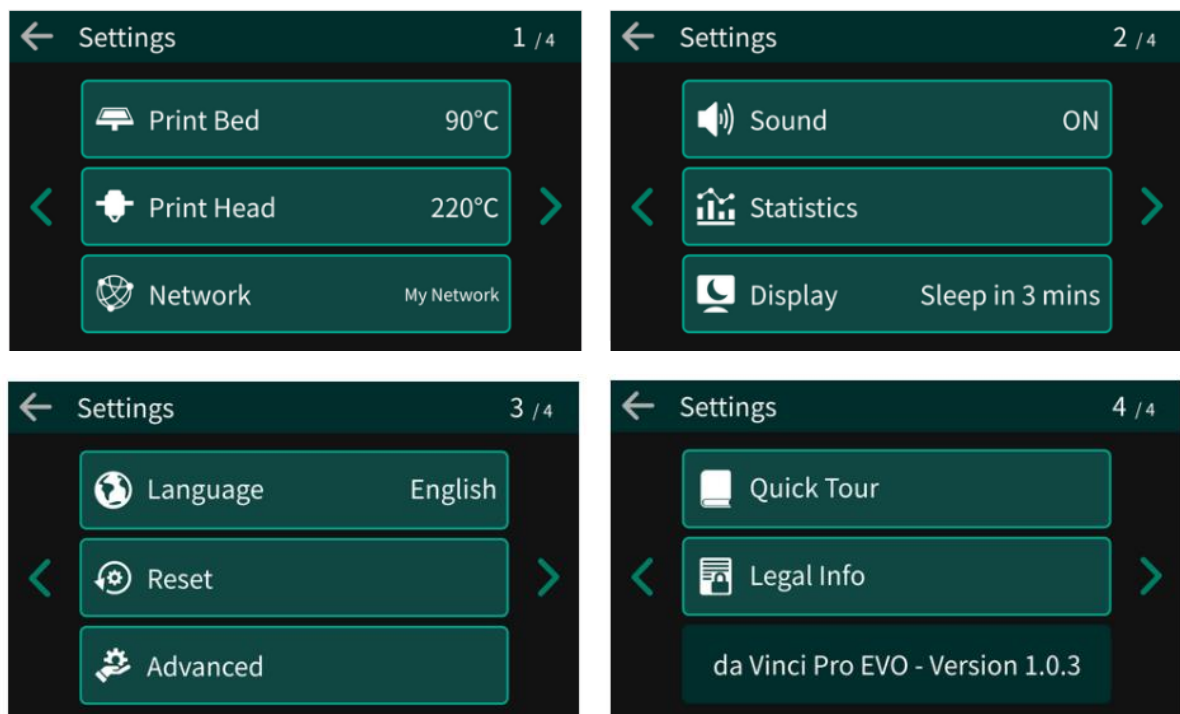
The printer will automatically detect the filament reel data when XYZprinting filament is used, and automatically adjust the temperature of loaded and unloaded filament.

Preset temperature value will be imported regardless of the filament system. Users may set the temperature values of loaded and unloaded filament by manual according to the characteristics of the filament used.



## 3. Setting:

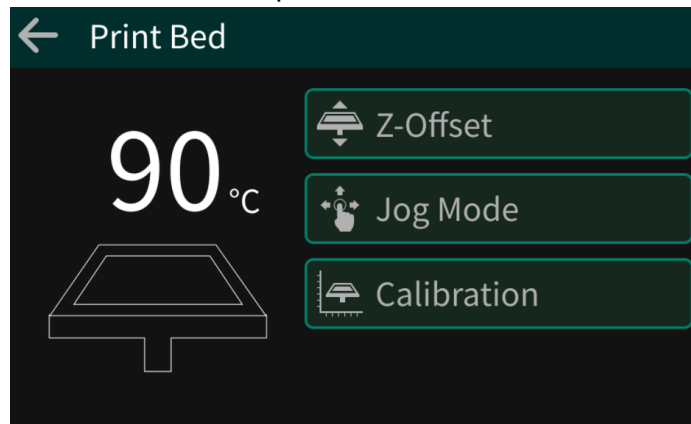
This includes: Print Bed, Print Head, Network, Sound, Statistics, Display, Language, Reset, Advanced, Quick Tour and Legal Info. The version used is shown below.



### 3-1. Print-Bed:

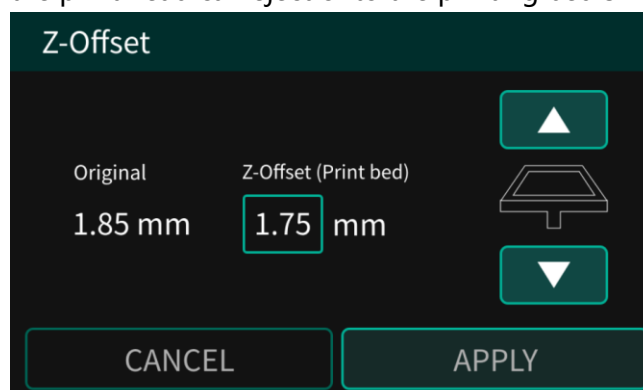
It is recommended to perform "Calibration" before printing, and then complete "Z-Offset" to ensure the level of the print bed and the optimum printing distance between the print head and the print bed.

Please make sure the print bed is clear.

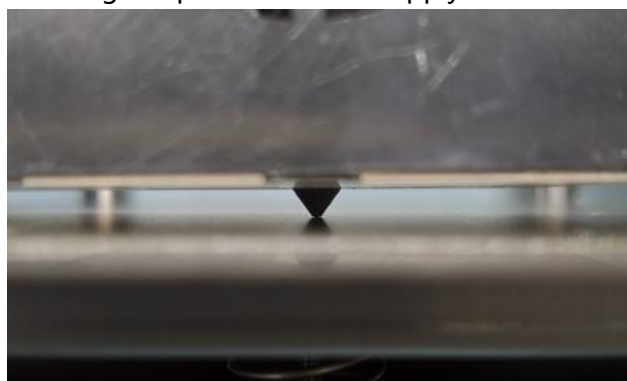


#### (1) Z-Offset

When the printing bed is calibrated, perform the vertical calibration of Z-offset to ensure the print head can eject onto the printing bed smoothly.



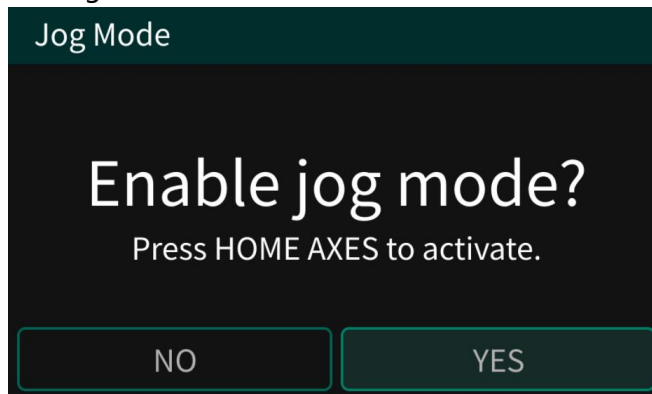
Wait for the extruder module to automatically move to the adjusted position, check the distance between the nozzle and the print bed after positioning, and then evaluate the height of Z axis to be adjusted. It is recommended to adjust the nozzle to the position touching the print bed. Click "Apply" to save the settings after the adjustment.



## (2) Jog Mode

The Jog Mode is for manual control of the positions of X, Y and Z axes. Test the smoothness of movement.

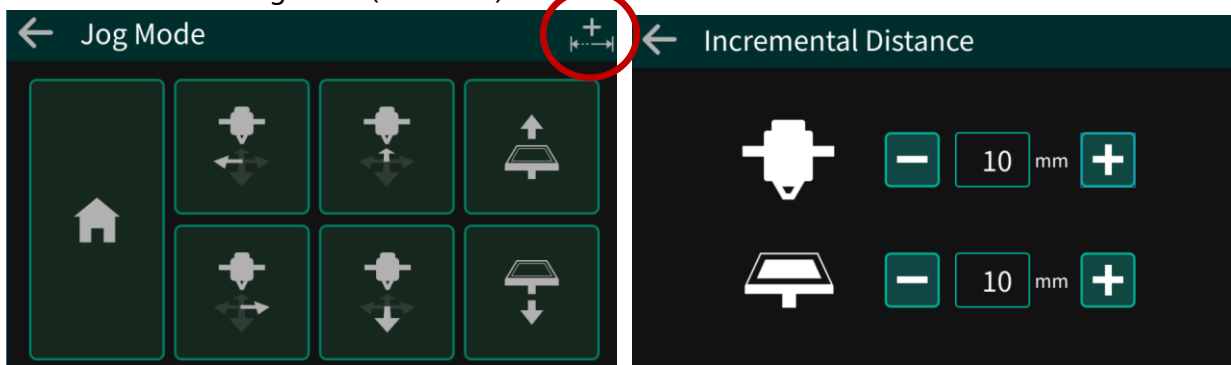
The system will automatically reset the extruder module (home axes) when users enter the Jog Mode.



Select the moving direction and distance of extruder module or print bed:

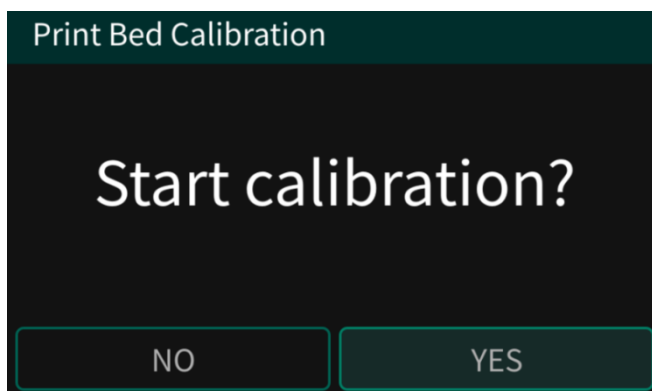
- Select "Move print head module left and right" (direction of X axis).
- Select "Move extruder module forward and backward" (direction of Y axis).
- Select "Move print bed up and down" (direction of Z axis).
- Back to home: for reposition.

Users may also enter the distance setting through the figure at the top right to adjust the moving value (1~20mm).



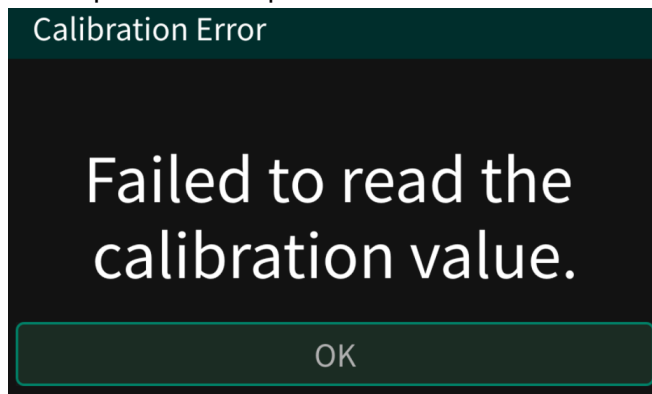
## (3) Calibration

Adjust the levelness of the print bed to keep the bed flat to ensure printing quality.

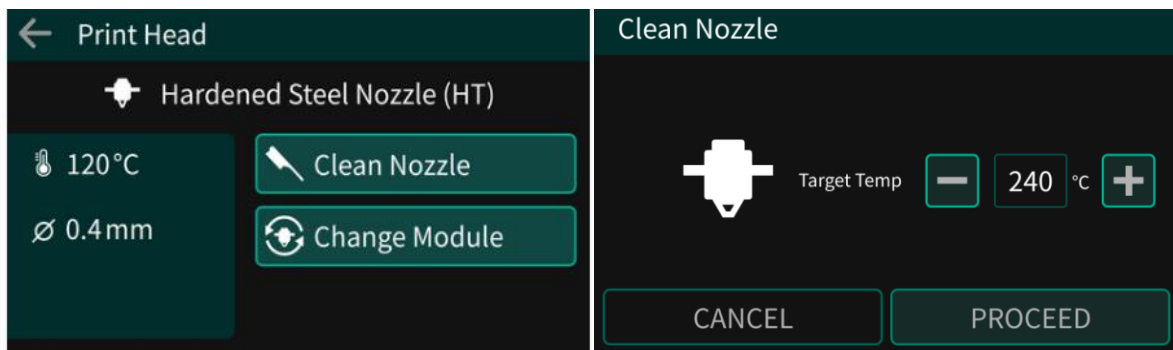




When calibration fails, please check the installation of print head to confirm whether the flat cable is installed stably and whether the print head touches the print bed when the bed drops to the low point.



### 3-2. Print Head:



#### (1) Cleaning the print head

\* Please upload the filament before cleaning the feed path.

When cleaning the print head, the preset temperature value will be displayed according to the installed extruder module.

Users may adjust the heating temperature according to the filament used. Wait for the print head to be heated to the cleaning temperature before cleaning.

(General extruder module can set within the temperature range of 190-260°C; optional high-temperature extruder module can set within the temperature range of 250-300°C)

- (a) Insert the feeding path cleaning wire into the feed hole, and push the filament out from the nozzle (It is recommended to carry out the operation from the top of the printer).
- (b) Clean the head with a nozzle cleaning wire: Please clamp the nozzle cleaning wire with needle-nosed pliers to insert it into the opening of the nozzle carefully for cleaning.
- (c) When cleaning is complete, press DONE.

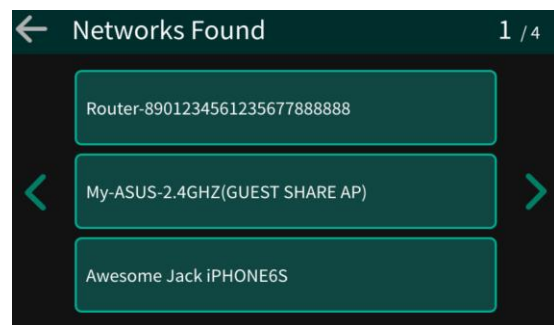
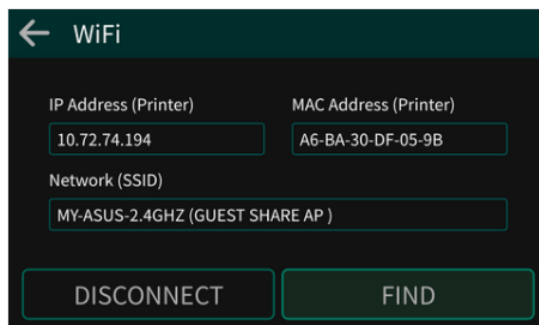
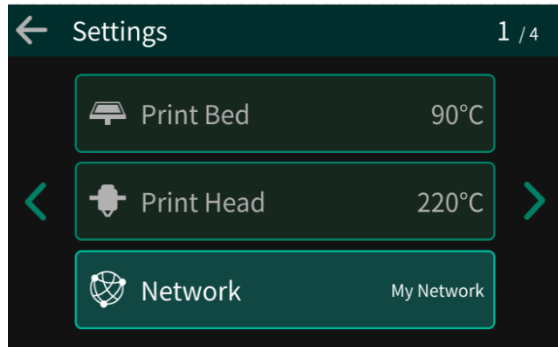
#### (2) Change Module

Please make sure that there is no filament in the extruder module.

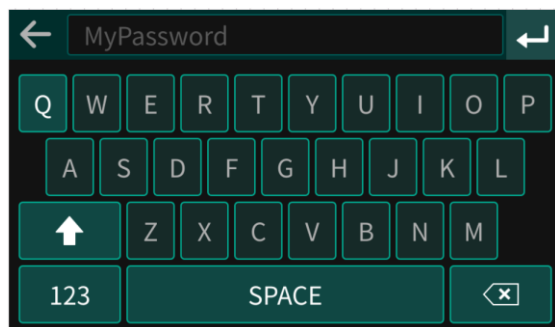
Wait for the extruder module to move to the position before replacing the module.

### 3-3. Network

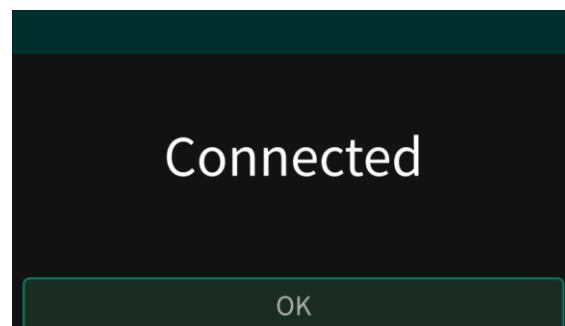
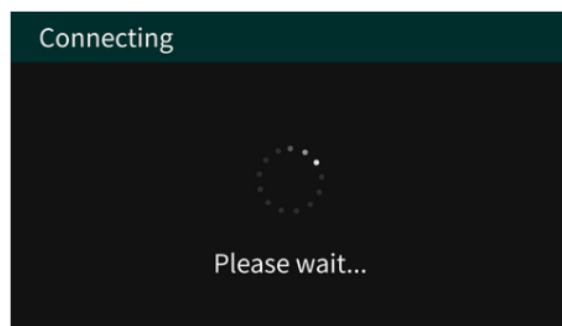
Please make sure that the Wi-Fi dongle has been plugged into the USB port on the top of the printer



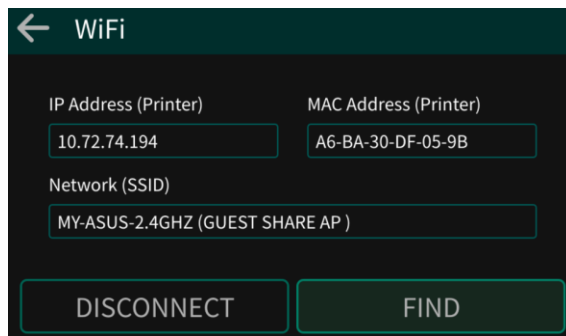
Click "FIND", the printer will search for available access points.



Click the Access Point you want to connect to and enter the access password.



Wait for the connection, and confirm that the connection is complete.



WiFi

IP Address (Printer): 10.72.74.194

MAC Address (Printer): A6-BA-30-DF-05-9B

Network (SSID): MY-ASUS-2.4GHZ (GUEST SHARE AP)

DISCONNECT FIND

#### When connection failed

Please confirm whether the printer is connected to the WiFi dongle  
Please confirm whether the password entered is correct.

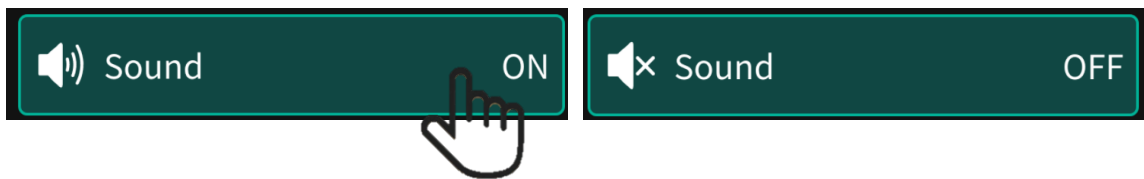
Please confirm whether the network to be accessed to is stable.

The name of access point will be displayed when connection succeeded.

### 3-4. Sound

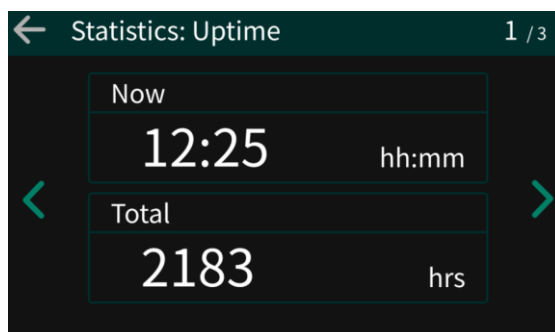
Sound will be heard when users click the touch screen.

The printer is preset on. Users may click the button to set it On or Off.



### 3-5. Statistics

The statistical function will record the startup and use history of the printer.

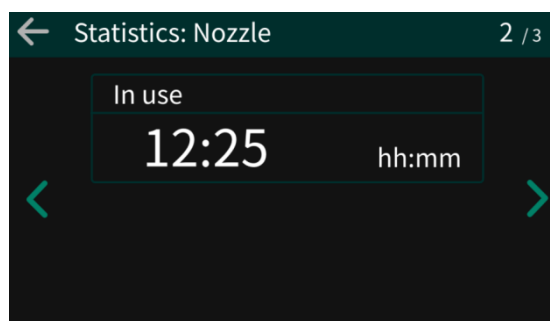


Statistics: Uptime 1 / 3

Now: 12:25 hh:mm

Total: 2183 hrs

Uptime: Display the cumulative time of this use and the total cumulative time after the machine is started and used.

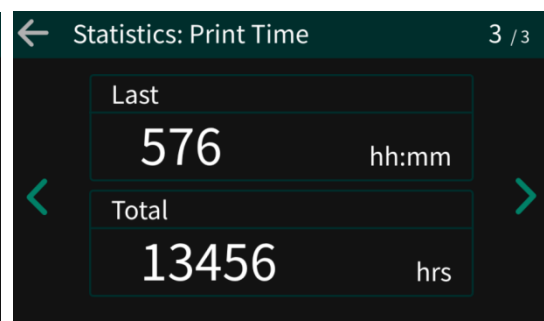


Statistics: Nozzle 2 / 3

In use: 12:25 hh:mm

#### Nozzle:

The time of the installed extruder module itself.



Statistics: Print Time 3 / 3

Last: 576 hh:mm

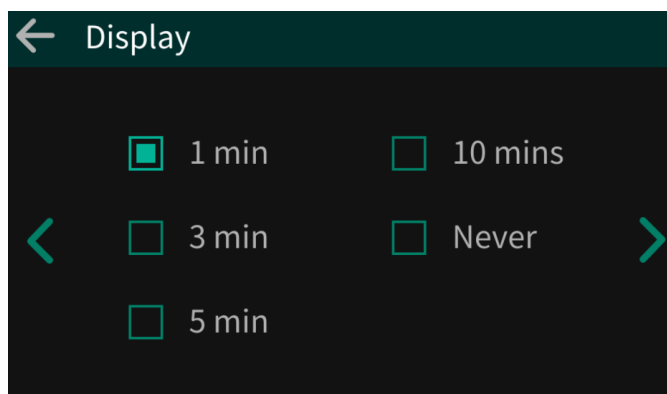
Total: 13456 hrs

#### Print Time:

Display the last printing time and the total cumulative printing time of the printer.

### 3-6. Display

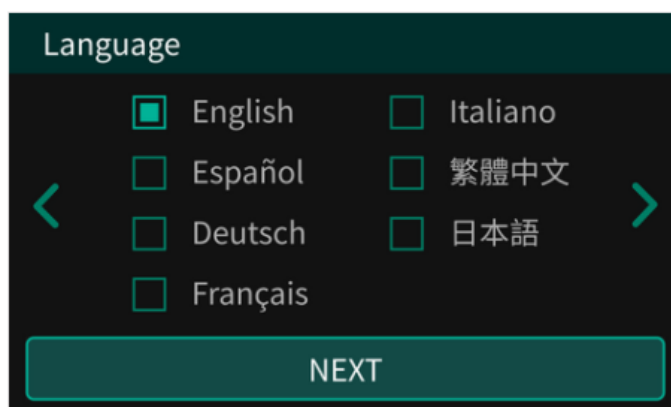
Users may set the touch screen to turn off the display during the time when it is not in use. There are five different settings: one minute, three minutes, five minutes, ten minutes and never.



### 3-7. Language

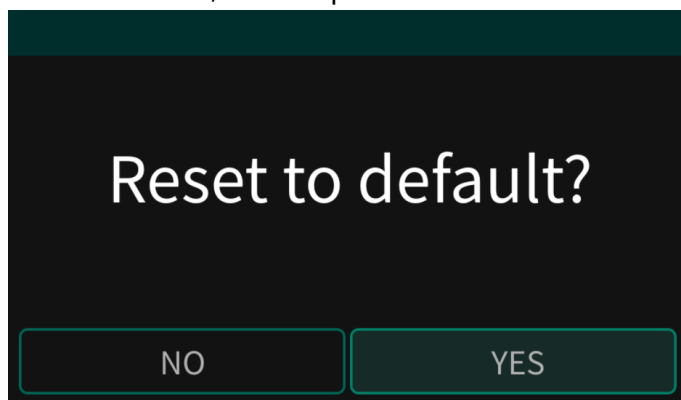
A total of seven languages are supported.

You can select Settings > Languages on the main screen. Including English, Español, Deutsch, French, Italiano, 日本語, 繁體中文 and 简体中文.



### 3-8. Reset

Confirm the reset, and the printer data will be deleted and returned to the default settings.



### 3-9. Advanced

#### (1) Axis Step Calibration

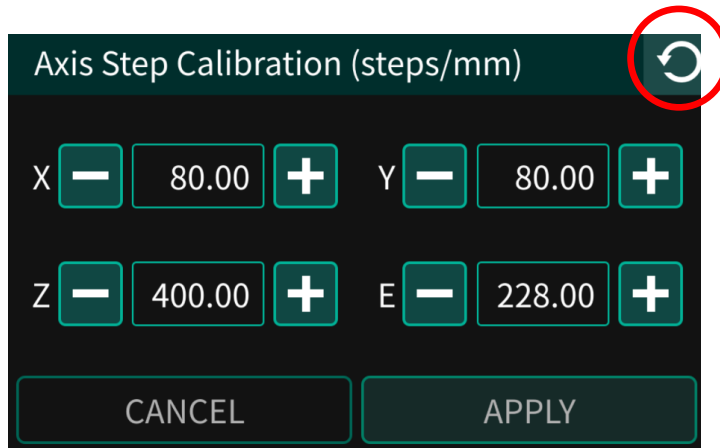
Enter this page to display the current values of X, Y, Z and E axes. Users may make advanced adjustment of X, Y, Z and E axis values under non printing state to correct inaccurate moving distances.

E axis is the advancing distance of the jogging filament of the feed module.

Definition: the number of steps required to move 1mm.

For example: when the X/Y axis moves 100mm, if it actually moves 100.5mm, the adjustment value should be 79.6.

Or if it actually moves 99.5mm, the adjustment value should be 80.4.

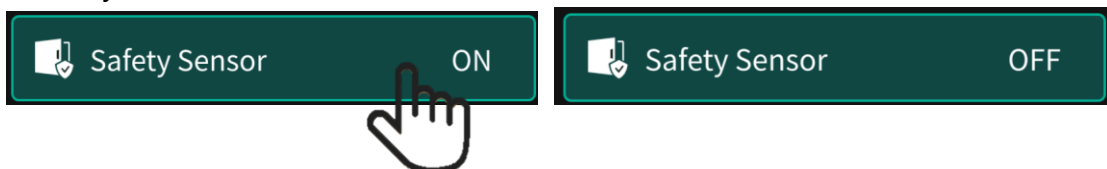


The preset values are listed in the figure showed upper right.

#### (2) Safety Sensor

The front cover detection system is set On by default. When the front cover is opened during printing, printing will stop and a reminder message will appear.

Directly click the button to set it On or Off.



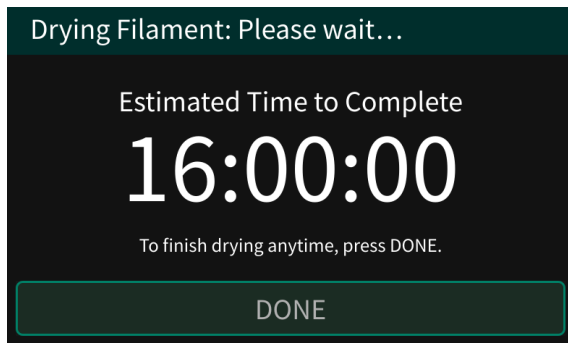
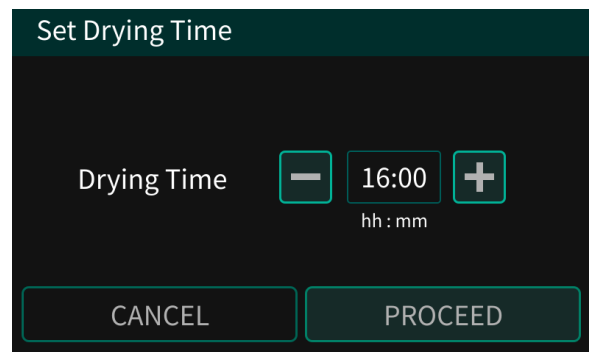
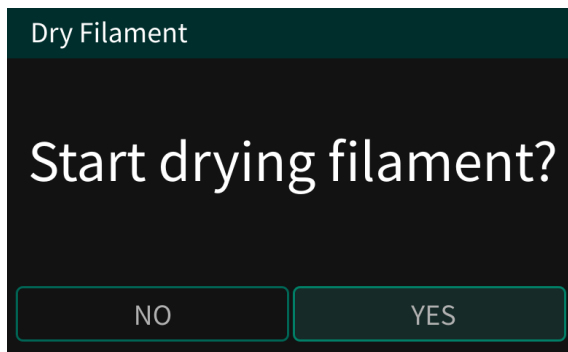
#### (3) Dry Filament

Please install the upper cover and the left and right sides first, then place a baking sheet / common photocopy paper on the bed, put the filament to be dried, and close the front cover.

The print bed will be heated to 80°C during filament baking. The preset baking time is 16 hours. Users may adjust the time upward in 1 hour to the maximum of 48 hours, and press "Done" at any time during the countdown to cancel / end the work.

\* The filament reel box can be baked only after it can resist the temperature of 80°C.

\* When taking out the wire, it is **recommended to wear gloves** when taking out the filament to avoid burns due to high temperature.

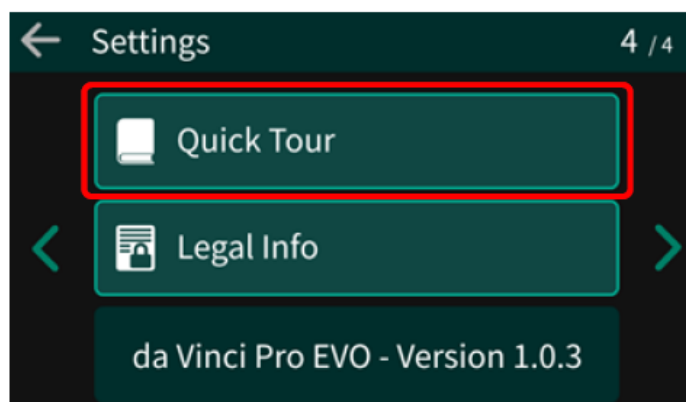


In case of the following situations, judge the printing of filament before improving the drying.

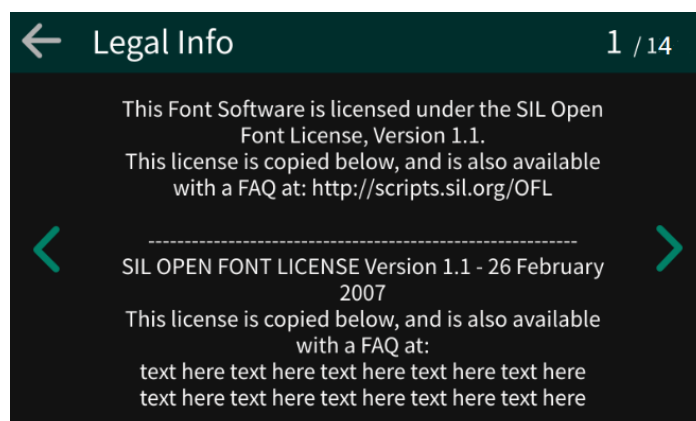
- Abnormal popping sound are heard when loading filament, and bubbles are found on the filament.
- Abnormal popping sound are heard during printing.
- Uneven discharging with viscosity decreased.
- Poor print strength or adhesion between layers.
- Filament drawing, sag, and overflow between layers.
- Rough surface or bubbles.

### 3-10. Quick Tour

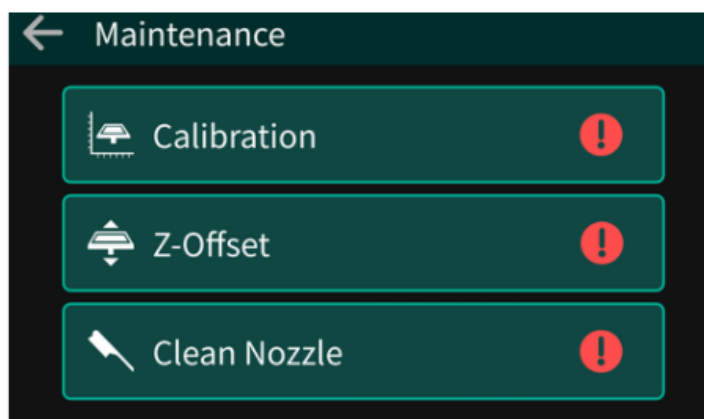
It introduces the function and the content of the main page provided by the printer for you to quickly understand and start the printing process.



### 3-11. Legal Info



## 4. Maintenance



### 4-1. Calibration

When the calibration starts, the print bed rises and the nozzle moves to the test point in sequence for measurement. After measurement, the screw will be driven to adjust and complete the levelness adjustment of the print bed.

### 4-2. Z-offset

Wait for the extruder module to automatically move to the adjusted position, check the distance between the nozzle and the print bed after positioning, and then evaluate the height of Z axis to be adjusted. Click the icon on the screen to adjust the up and down of the print bed. The higher the value is, the longer the distance is, and the lower the value is, the shorter the distance is. It is recommended to adjust the nozzle to the position touching the print bed.

Click "Apply" to save the settings after adjustment.

\* For the operations of Calibration and Z-offset, please refer to 3-1. Print-Bed.



### 4-3. Clean Nozzle

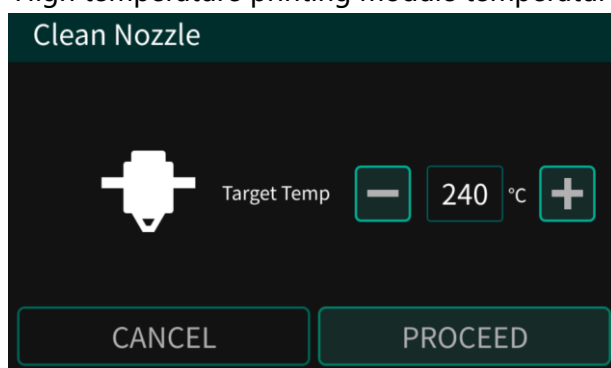
Be sure to unloaded the filament and unplug the guide tube before cleaning the nozzle. The print bed will move down when cleaning the nozzle, and the extruder module will move to the cleaning position.

Start cleaning the nozzle after it is heated up to the working temperature.

Or adjust the heating temperature according to the filament used, and wait for the print head to be heated to the cleaning temperature before cleaning.

General printing module temperature range: 190-260°C

High temperature printing module temperature range: 250-300°C

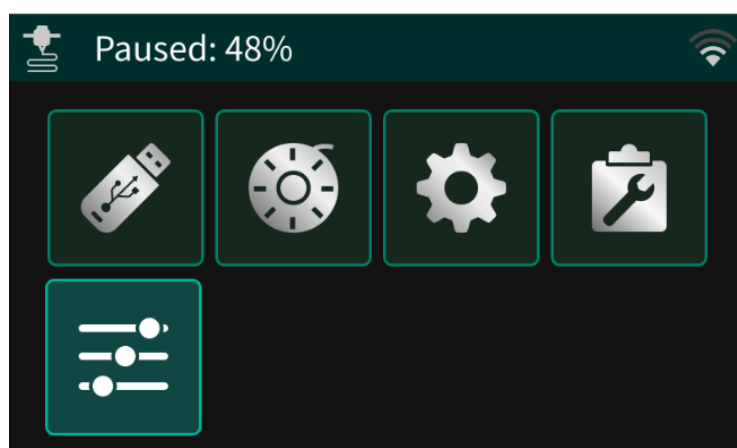


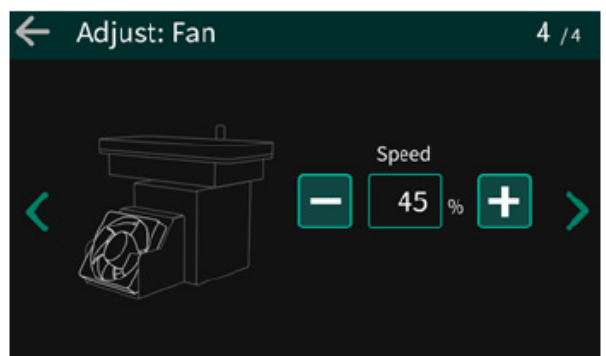
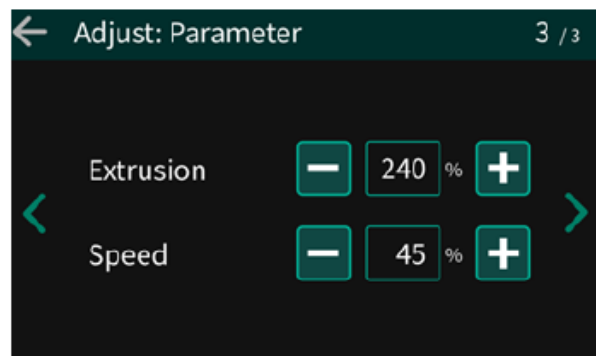
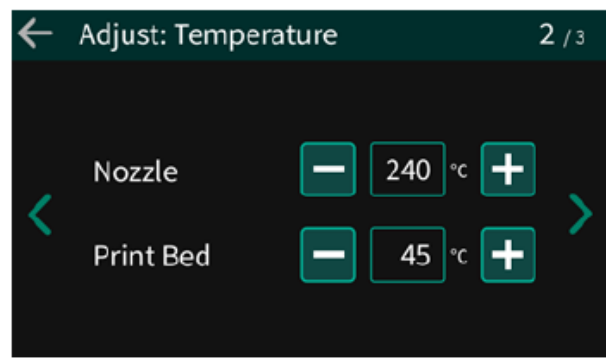
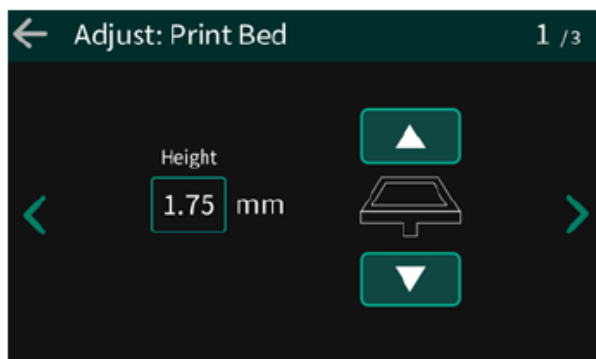
\* For the operation of Clean Nozzle, please refer to 3-2. Print Head.

## 5. Dynamic Adjust

The setup function will appear under the Printing status.

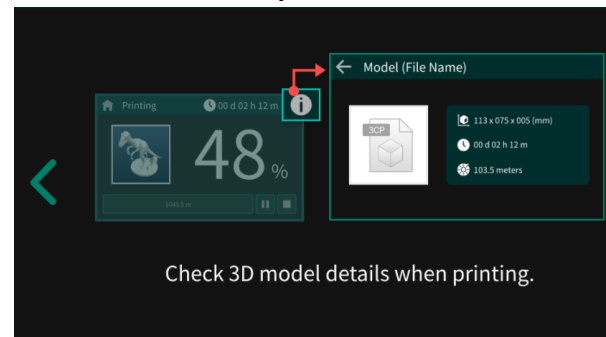
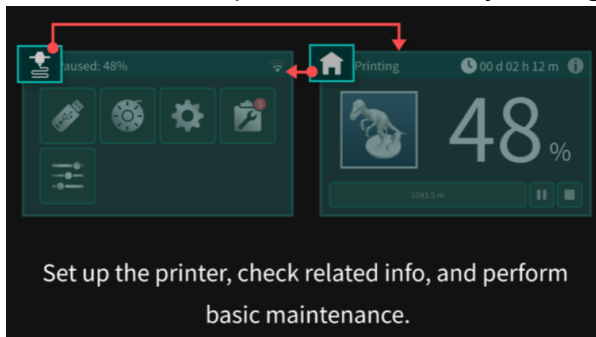
During the printing process, you may fine-tune the required parameters such as "Print Bed", "Extruder Module", and "Fan". These parameters can be adjusted according to the printing status to improve the printing quality.





## 6. Printer Status

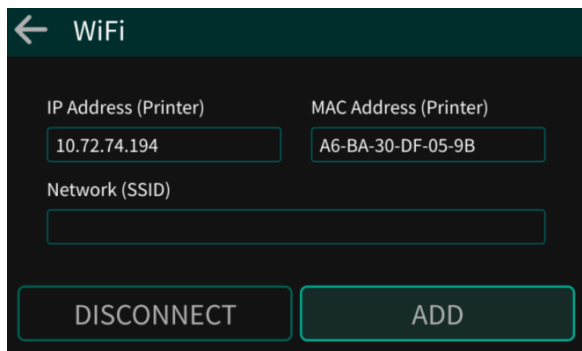
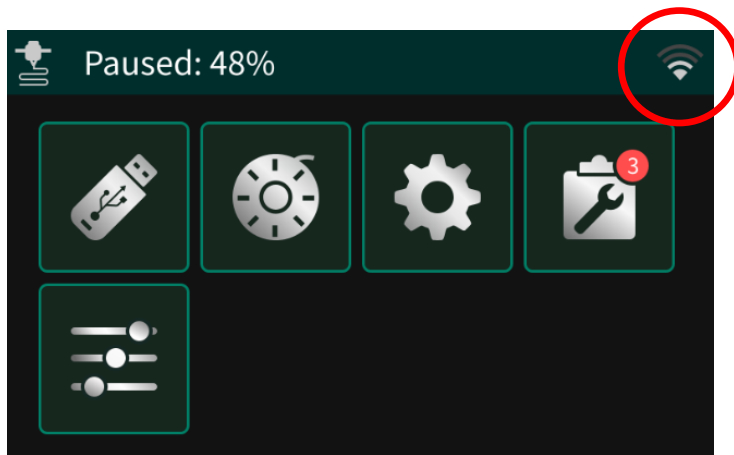
The function setting, adjustment, number of pages and the current state of the printer will be displayed on the screen for quickly check of the printer; or users may enter the message / function operation interface by clicking the icons (shortcut keys).



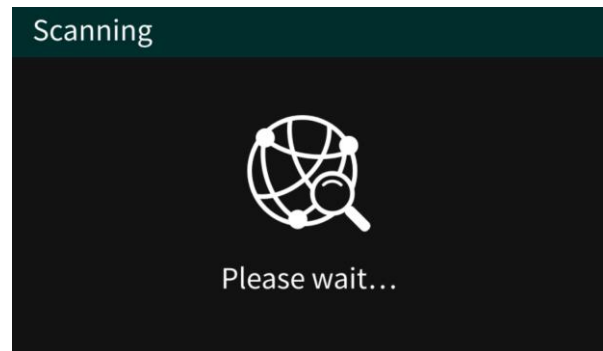
## 7. WiFi

Click the WiFi icon on the upper right to quickly enter the wireless transmission settings. Before entering the wireless settings, please insert the WiFi Dongle into the USB port on the top of the printer.

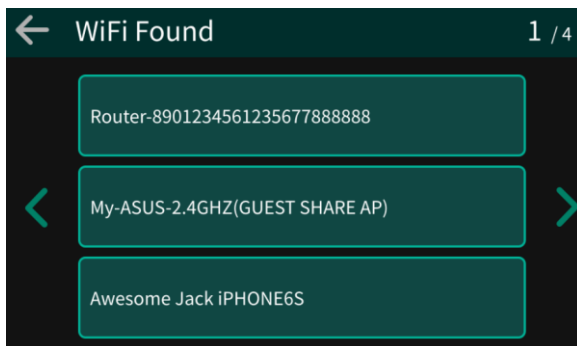
\* For the operation of WiFi connection, please refer to 3-3. Network.



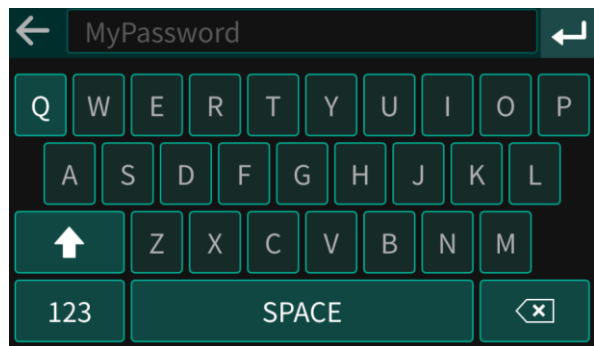
Click "ADD", the printer will search for available Access Point.



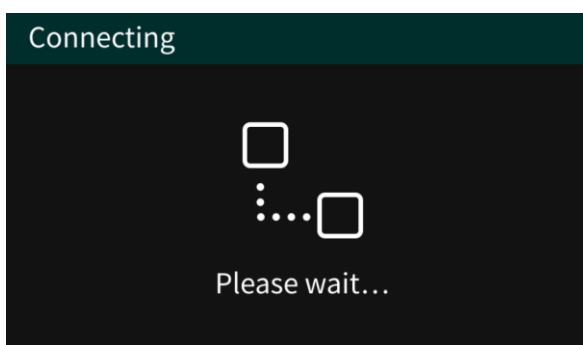
Wait for the Access Point scanning.



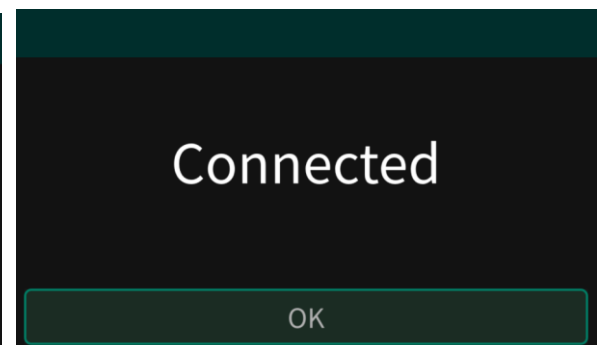
Click the Access Point you want to connect to.



Enter the access (Access Point) password.



Wait for the connection.



Confirm that the connection is complete.

WiFi

IP Address (Printer) 10.72.74.194

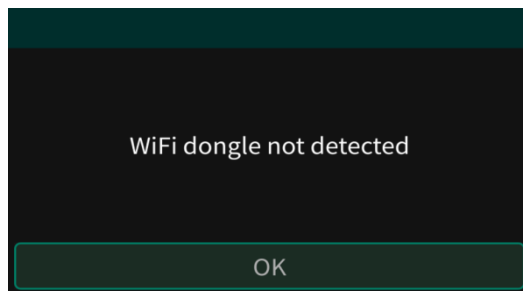
MAC Address (Printer) A6-BA-30-DF-05-9B

Network (SSID) MY-ASUS-2.4GHZ (GUEST SHARE AP)

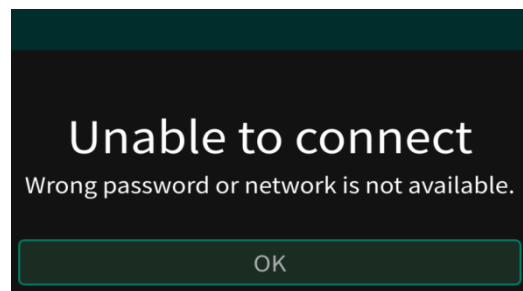
DISCONNECT ADD

The name of access point will be displayed when connection succeeded.

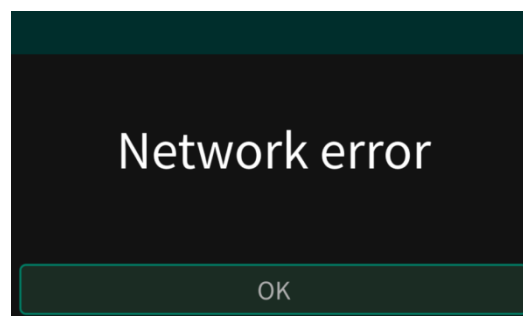
#### Invalid connection



Please confirm that the "WiFi Dongle" is plugged into the printer.



Please make sure your passwords match.



Please confirm that the network is stable.

#### Disconnect

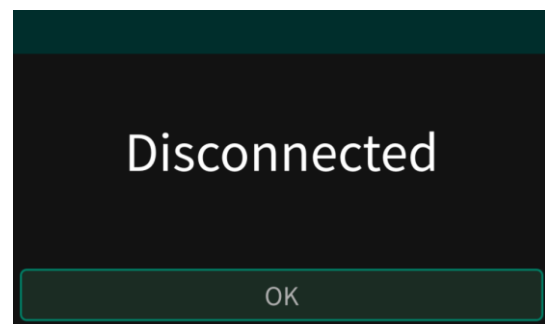
WiFi

IP Address (Printer) 10.72.74.194

MAC Address (Printer) A6-BA-30-DF-05-9B

Network (SSID) MY-ASUS-2.4GHZ (GUEST SHARE AP)

DISCONNECT ADD



# Printing

After loading the filament, you may start the printing process with the following method.

- Start the software printing using the USB cable.

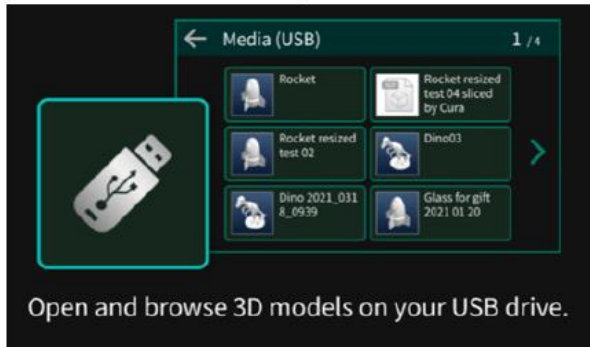
Use the USB cable to connect the printer to the computer, and open the software **XYZprint 3**.

"Ready" appears in the software, indicating that the USB connection is successful.

Click "Control Panel" (DASHBOARD) to monitor the printer or click "PRINT" to print files.

- USB drive

Save the sliced graphical file (.3cp) in the USB drive. After that, you may insert the drive into the USB slot to access the USB printing function.

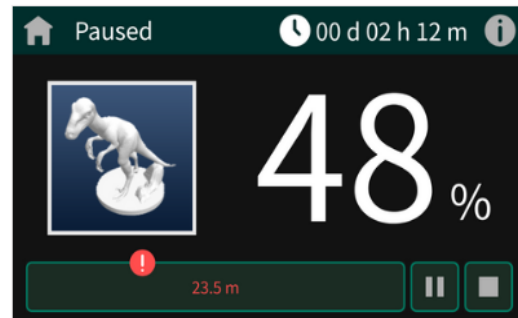


- Wi-Fi

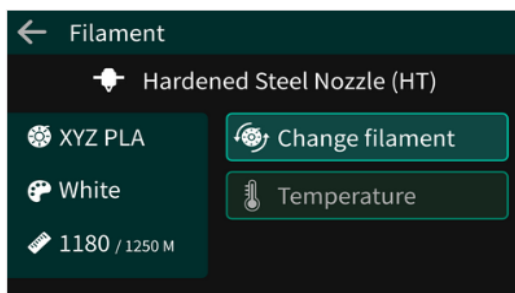
Please make sure that the Wi-Fi dongle has been plugged into the USB port on the top of the printer

\* Refer to 3-3 Network for the operation of WiFi connection.

## Printing screen



Click the "filament data button" on the screen to check filament status, or click this button (filament data button) to access the "replace filament" function when there is a reminder of insufficient filament.



In case of warped bottom / adhesion failure of printed object, it is recommended to use glue stick to increase adhesion. Or stick masking tape on the metal bed before gluing.

## Operating the Software

Please install XYZmaker Suite before printing, and start **XYZprint 3**.

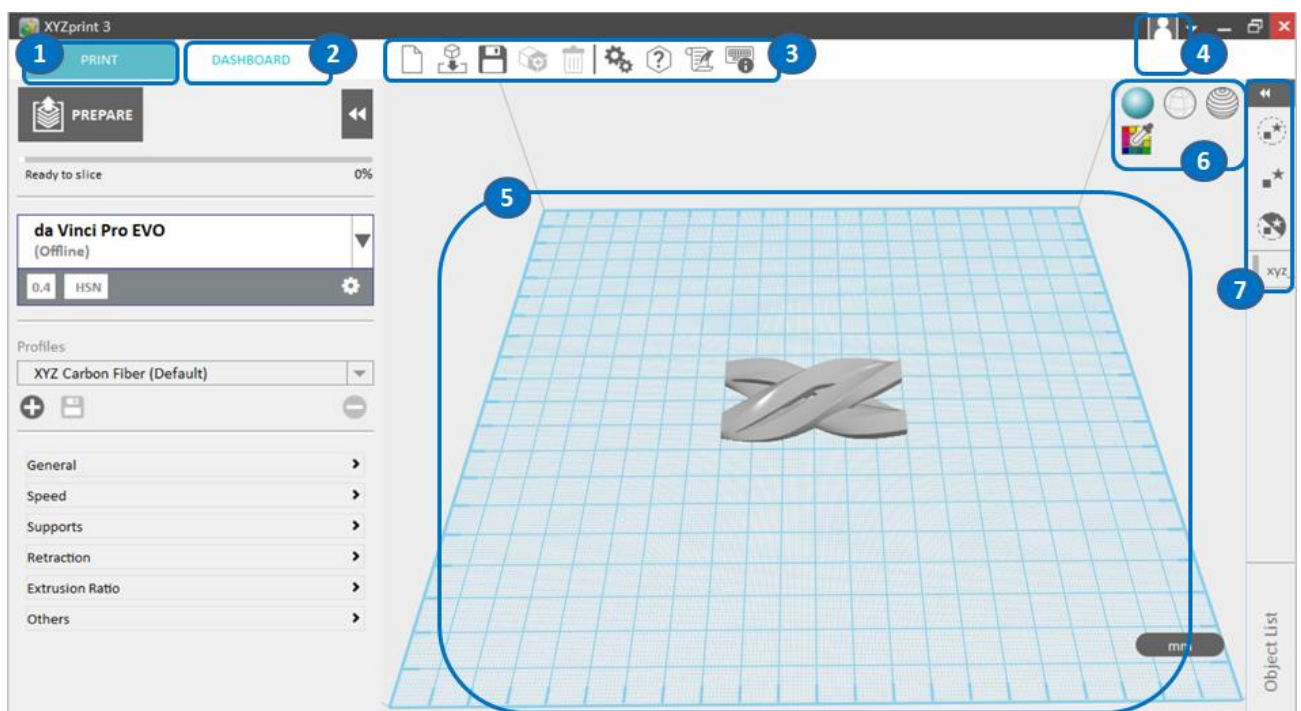
Insert the attached USB drive into the computer or download the latest version of "XYZmaker Suite" from the official website of XYZprinting, and install it on the computer.



## Software Interface

The main window includes: 1) Print, 2) Dashboard, 3) Tool bar, 4) Login, 5) View area, 6) Object display effects, 7) Quick setting of View area.

Each function can be started by clicking.



Function		Description
1	PRINT	Select print parameters and print parameter settings, including print speed, support, retraction, output ratio, and other settings.
2	DASHBOARD	Check the printer status, and renew anysoftware version.
3	Tool bar	3D cache drawing gallery, click and immediately using; language setting.
4	Login	Sign in your register account.
5	View area	Can switch the view angle, allow to viewthe object each angle; setup the object side, position, etc.
6	Object display effects	Geometry (which can be used to set the object display color), perspective effect and preview effect are available.
7	Quick setting of View area	Select all, deselect all, reverse selection, hide in shadow.

## Connect to printer

Users may connect the printer with the computer directly through the USB to turn on the software to control printing; or carry out printing on the Internet.

Internet printing function is only in printer and computer, both need to connect to the same WiFi of using.

Connect the USB to Pro Evo printer, set WiFi connection on the computer, then turn to the software to finish WiFi settings.

Press DASHBOARD → SetUp → Wireless

Select the same wireless network that the computer is connected to.

Input password, press Start Wi-Fi. Start internet connection.

Once connect to internet, the original Wi-Fi activation button will become Stop Wireless Connection/ Change Setting.

When WiFi connection has been completed through the "Network" function on the printer, it is not necessary to connect the printer with the software by USB, and WiFi connection can be completed directly by clicking Print → right side of the printer name → pull-down menu, and select the IP previously set on the printer.

For more software function introduction, please refer to the software manual

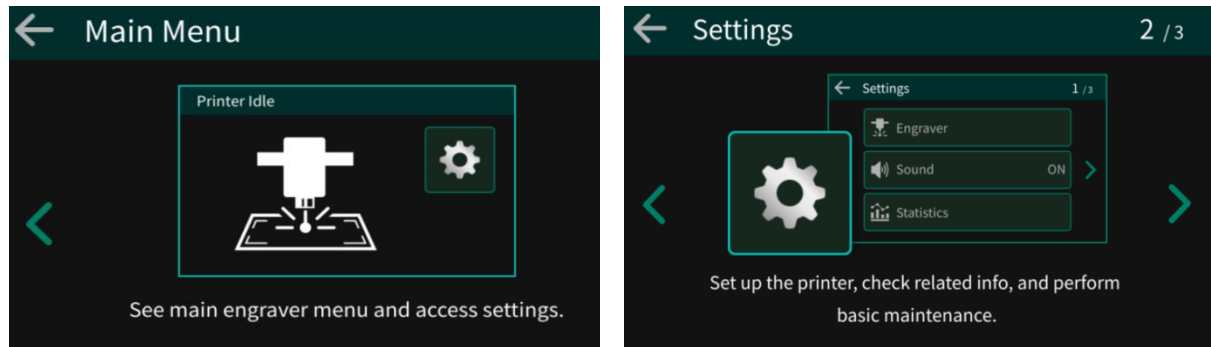
Go to our official website: <http://www.xyzprinting.com/> for the latest information about the software.



## Laser Engraver Module (Optional)

For this model, engraving function can be achieved by the "laser engraving module", which can only be installed on this model.

- The laser engraving function can be started after the laser engraving module is installed.
- To ensure safety, do not open the front cover during the whole process of laser engraving; engraving will be automatically suspended when the front cover is opened.



Before the operation, use, disassembly or replacement of the product, please read the safe use instructions of the laser engraving module provided in the user manual carefully, and follow the safety precautions.

## Specifications

Engraving area	22 cm x 20 cm
Laser wavelength	406 nm + 8 nm/-6 nm InGaN
Engraving power	350 mW $\pm$ 10%
Laser engraving software	XYZengraver
Supported image formats	.jpg / .png / .gif / .bmp
Laser power type	Class 3B

Users may use the attached USB drive, or access the official website of XYZprinting <http://www.xyzprinting.com/> to download and install XYZmaker Suite, and start "XYZengraver".

For more details of the laser engraving module, please refer to the instructions attached.

## Support information

When the problem occurs with the printer, please refer to the following troubleshooting instructions. If the problem persists, please contact the Customer Service Center.

### Problem code and handling

When a problem occurs with the printer, the service code will be displayed on the printer screen or the software interface. Please refer to this service code description form for preliminary testing.

Service code	Symptom	Troubleshooting
0 0 1 0	Print bed heating timeout	Reboot the printer. Contact the service center for help.
0 0 1 1	Extruder module heating timeout	Check the flexible flat cable and reboot. Contact the service center for help.
0 0 1 3	Print bed heater out of control	Contact the service center for help.
0 0 1 4	Extruder module heater out of control	Check the flexible flat cable and reboot.
0 0 1 6	Warm fan heating timeout	Reinstall the extruder. Contact the service center for help.
0 0 1 7	Warm fan heater out of control	Reinstall the extruder. Contact the service center for help.
0 0 3 0	X-axis go home failed	Check the cable of the motor and the sensor, and check the position of the sensor. If the problem persists, please contact customer service.
0 0 3 1	Y-axis go home failed	Check the cable of the motor and the sensor, and check the position of the sensor. If the problem persists, please contact customer service.
0 0 3 2	Z-axis go home failed	Check the cable of the motor and the sensor, and check the position of the sensor. If the problem persists, please contact customer service.
0 0 5 2	Extruder module type error Unable to detect extruder module	Reinstall /replace the extruder. Please reinstall the extruder and reconnect the flat cable, then restart the printer.
0 0 5 4	Nozzle type mismatched	Please turn off the printer, replace it with a compatible extruder module, and reboot the printer.

## Maintenance and Service

Keep original packaging material in the event of sending your unit back for repair during the warranty period. If other packing materials are used instead, the printer may be damaged during the transportation process.. In such situation, the XYZprinting the right to charge repair fee.

#### Federal Communications Commission (FCC) Statement

You are cautioned that changes or modifications not expressly approved by the party 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.



[www.xyzprinting.com](http://www.xyzprinting.com)