

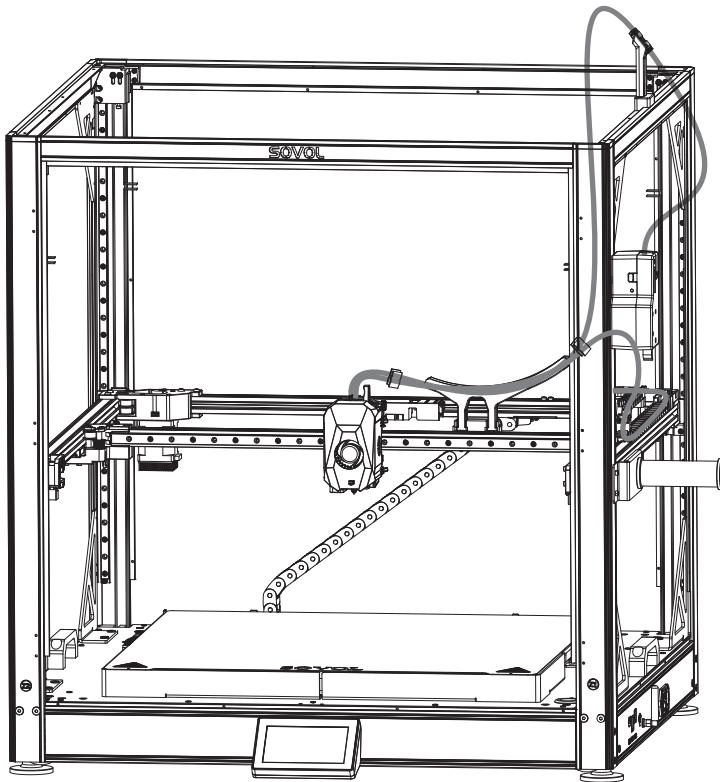
SOVOL



SV08 Max

User Manual

V1.3_EN



Dear customers:

Thank you for choosing Sovol printers! Sovol is committed to providing excellent machines to 3D printing enthusiasts all over the world. This manual is designed for SV08 Max owners to start their SV08 Max printing journey. We still recommend all the SV08 Max owners to read the manual carefully even if you are familiar with the 3D Printing technology, as there are lots of important information about the SV08 Max for you to learn and help you get better printing experience. In this manual there are some tutorials can be found on official website and group you can scan the QR-codes.



Sovol Support Group



Sovol Official Website

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Note



- Do not use the printer by any way except as otherwise described herein to avoid personal injury or property damage.
- Do not place the printer in an environment with heavy vibration or otherunstable factors. Printer shaking will affect printing quality.
- Do not place the printer near inflammables and explosives or heat sources.
- Keep the printer in a well-ventilated, cool and dust-free place.
- It is suggested to use the materials recommended by manufacturer in order to avoid machine damage.
- Do not use any power cord other than the accompanied one.
Use grounded three-phase power outlet.
- Do not wear cotton gloves while operating the printer. This type of fabric may be wound in the printer's motion parts, which can cause burns, personal injury, or printer damage.
- Wait for a moment after printing to remove the prints.
- It's not recommended to use the third party firmware or mainboard etc, or the warranty will be void.
- Clean the printer frequently. Prior to cleaning, turn off the power supply; use a dry cloth to wipe off dust, adhesive printed plastic or any other materials from the frame, rail or wheels. Use glass cleaner or isopropyl alcohol to clean printer surface.
- Children below 10 years old shouldn't use the printer alone.
- Do not move the nozzle and printing mechanism with your hands during printing.
- Users shall abide by relevant laws and regulations of the countries and regions where the printer is placed (used) and professional ethics perform safety obligations, and do not use our product or device for any illegal purpose. In no case shall Sovol bear any legal responsibilities for anyone breaching laws.

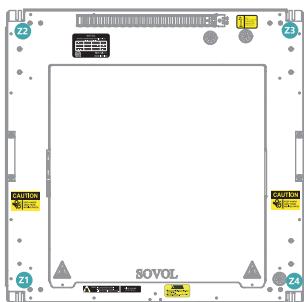
Equipment Parameters



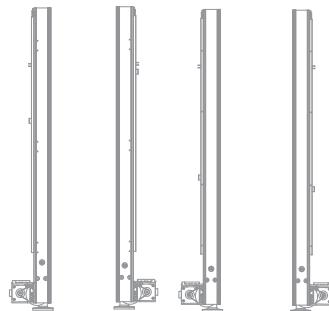
Model	SV08 Max
Software language	English,German,French,Italian,Japanese,Chinese
Print method	Network interface USB cord/Ethernet/WIFI(2.4G /5G, WPA3 not supported)
Type	FDM
Number of nozzles	1
Print size	500*500*500mm
Recommend Printing speed	MAX 700mm/s
Printing accuracy	±0.1mm
Nozzle diameter	0.4mm (Replaceable)
Nozzle temperature	≤300°C
Hot bed temperature	≤100°C
Applicable filament	PLA/ABS/ PETG/TPU
Diameter of filament	1.75mm
File format supported	G-code
Voltage	AC 100~120V / 200~240V, 50/60Hz,
Operation system	Windows,Mac
Power supply	150W/24V

Package List

>>>



Base

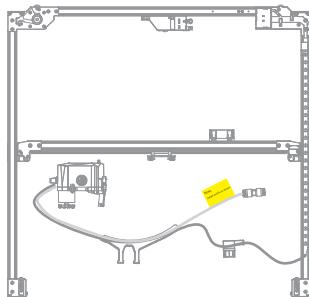


Z1

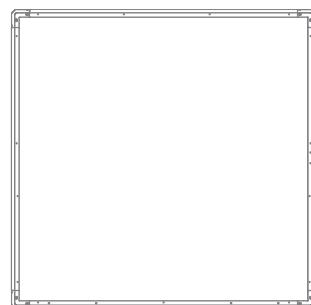
Z2

Z3

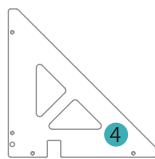
Z4



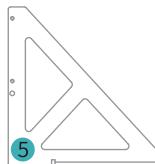
AB axis& Toolhead



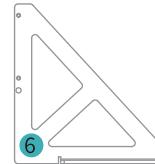
Top frame



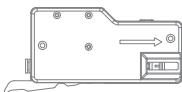
Stiffening rib 4*4



Stiffening rib 5*2



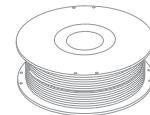
Stiffening rib 6*2



Auxiliary feed mechanism



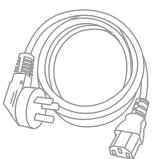
Screen



Filament(200g)

Package List

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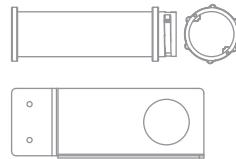
Power cord



PTFE TUBE



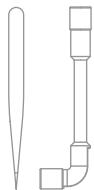
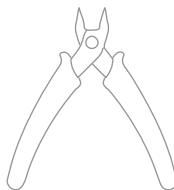
WiFi Antenna



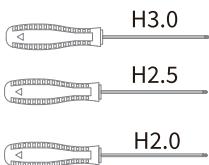
Filament Holder



Scraper knife

Socket wrench
and Tweezers

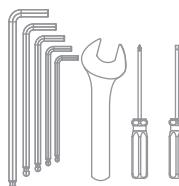
Diagonal pliers

Nozzle cleaner
and Zip Tie

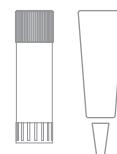
Toolkits



Guide element



Toolkits

Grease and solid
adhesive

USB Flash Drive



Silicone brush

Hardened
Steel Nozzle

Package List

>>>



step1 M5-15(x17)
(For Stiffening Rib x8)
(For Base frame x8)



step2 M4-20(x8)
(For Base frame)



step3 M4-8(x4)
(For Base frame)



step4 M3-16(x2)
(For Top frame)



step5 M3-6(x9)
(For Top frame)



step6 M4-30(x8)
(For AB axis)



step7 M3-12(x3)
(For Tool Head)



step8 M3-23(x2)
(For Drag Chain)



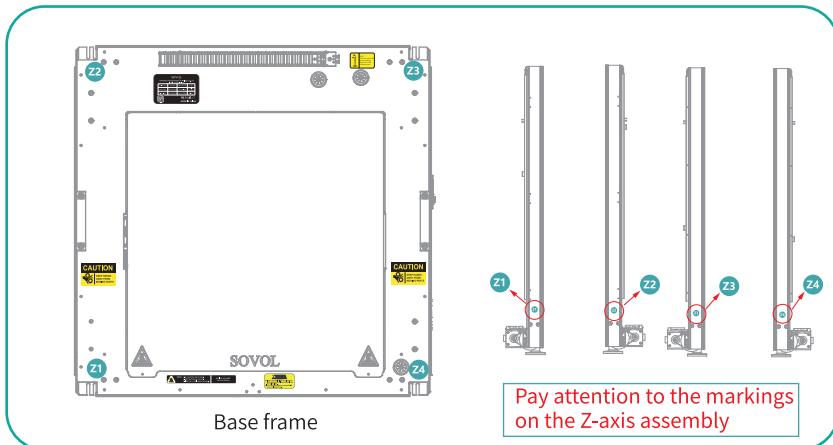
step9 M3-5(x2)
(For Filament Holder)



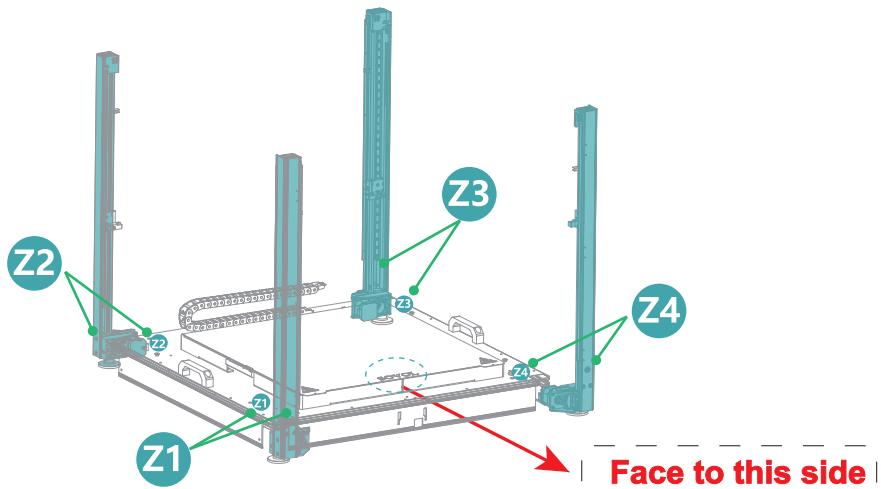
step10 M3-40(x2)
(For Auxiliary Feed
Mechanism)



step11 M3-6(x28)
(For Stiffening Rib)

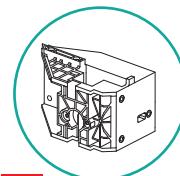
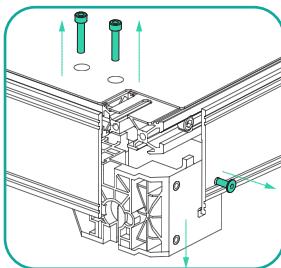
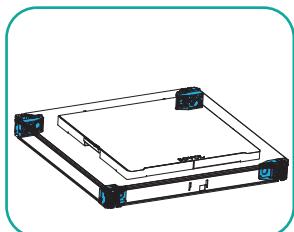


1. As shown in figure , take out the base components, Z1,Z2,Z3 and Z4 components, from the packaging box, and place all compoents on a table surface that is not easy to scratch.

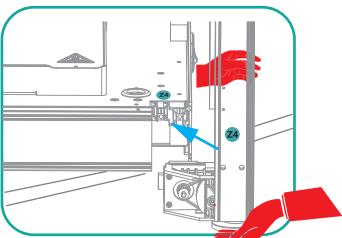


Notice:

There is a corresponding corner mark on the installation corner of the component. Z1 components are installed in the installation positions with the Z1 mark. Z2, Z3, and Z4 are also installed according to the corresponding icon positions.

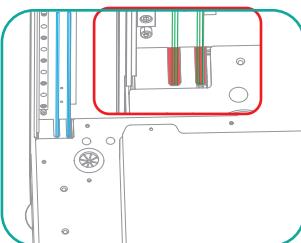


1. Remove this part before installing

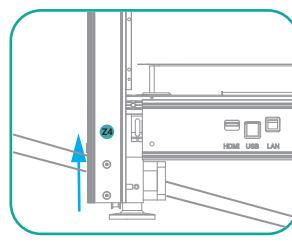


2. As shown in the figure, place the bottom component on a stable table and move the bottom of the Z4 direction to the edge of the installation table to instal.

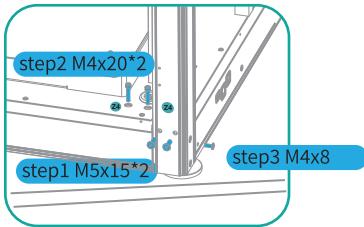
3. Hold the bottom of the Z4 component with your hand and align it with the Z4 on the bottom component. Tilt the Z4 component slightly by 5° and snap the Z4 component into the slot.



4. Note that the belt needs to be inserted into the groove of the profile.

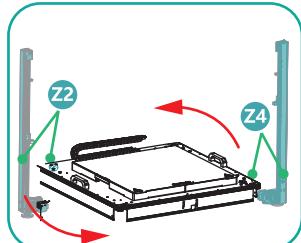


5. Push the Z4 assembly upwards and clip the Z4 assembly onto the bottom assembly.

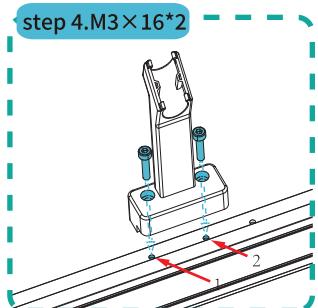


6. Push the component onto the table and place it steadily.

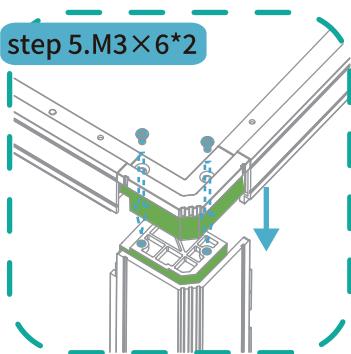
7. Use screws to fix the Z4 component as shown in the figure



8. Rotate the base assembly to the Z2 position and assemble the Z2(refer to the Z4 assembly installation steps)
9. Assemble the Z2(refer to the Z4 assembly installation steps)

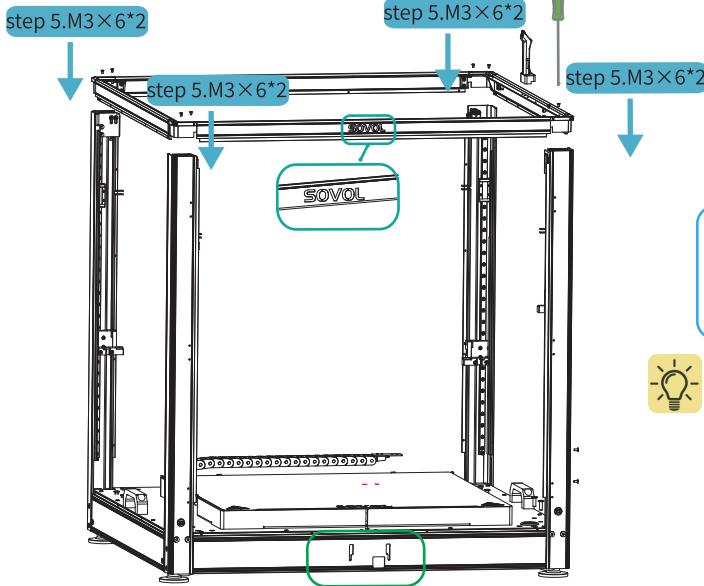


Use the M3X16 screws to secure the guide to the 1-2 screw holes on



The top frame is installed according to the corresponding position in the picture.

Use two step 5 screws in each mounting corner to lock in a total of 8 M3×6 screws.



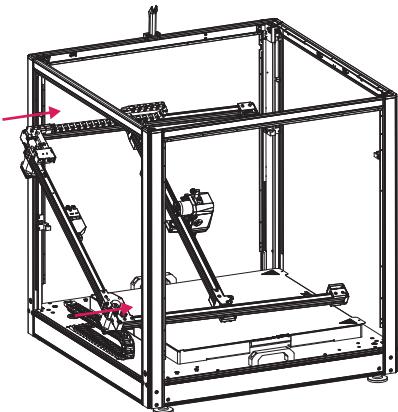
Use the M2.5 Allen screw-driver in the accessory box to tighten the screws in step 5



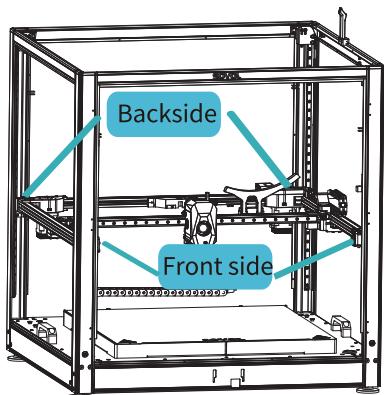
Notice:
The "Sovol" logo faces forward, corresponding to the screen installation position

When installing the top frame, all four corners need to be installed downward into the slots at the same time.

Take out the AB axis, as shown in the picture.
Place the AB axis on the Z -axis mounting base
according to the position in the picture.

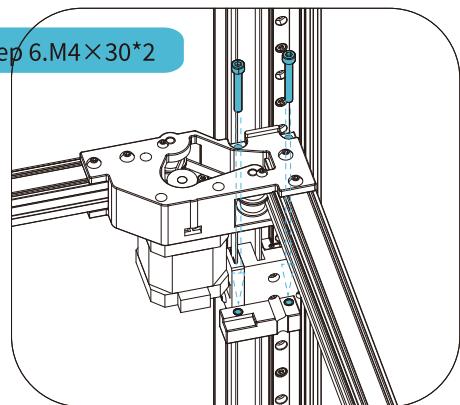


The AB axis assembly needs to be tilted
and placed sideways into the frame.



As shown in the figure on the right: To install
the front end of the AB shaft, take out the step 6
screw from the spare parts package and tighten
it with the M4 Allen screwdriver.

step 6.M4×30*2

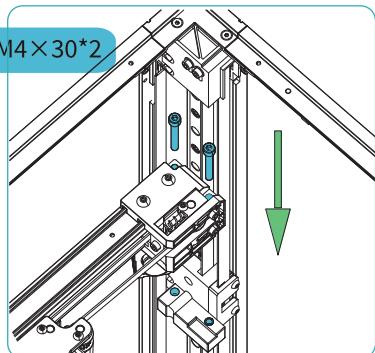


1. Installing the rear end of the AB shaft take the step 6 screw out of the spare parts package, place it into the screw holes, and lock it tightly.

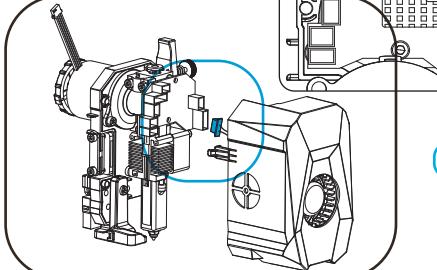


Note: When locking the screws, you
need to adjust the mounting hole
position of the AB axis and the mounting
threaded hole of the Z- Front side axis
component, and then lock the screws.
If necessary, you can pull the AB axis
frame to align the holes.

step 6.M4×30*2



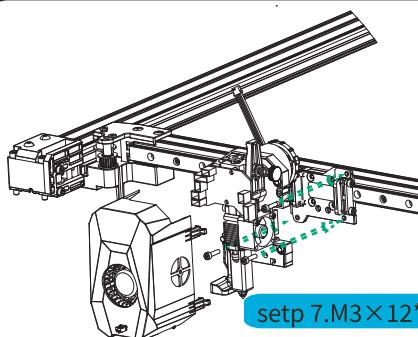
To prevent damage do not over tighten



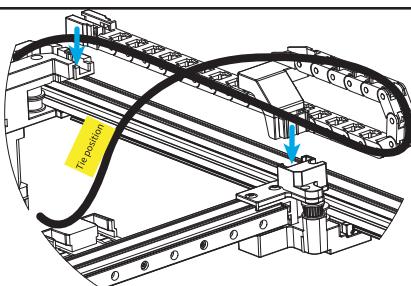
Please take off the cover before assemble the nozzle.



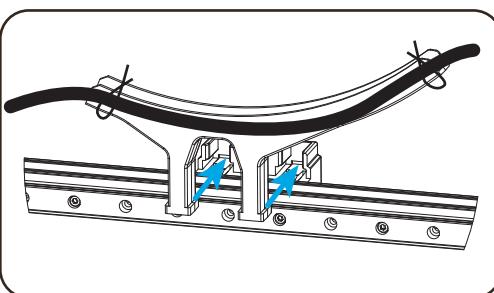
Notice: The nozzle cover is magnetically connected and is not fixed with screws.



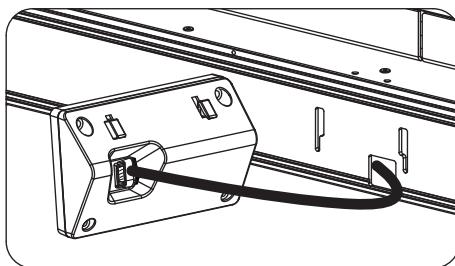
Use 3 step 7 screws to lock and tighten on the nozzle mounting sheet metal. Then connect the heat sink that was pulled out in the previous step.



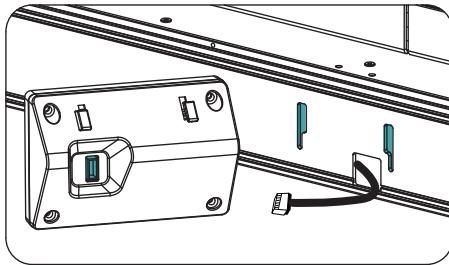
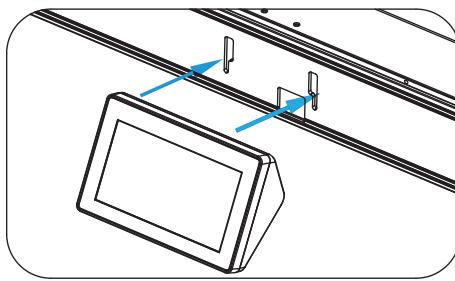
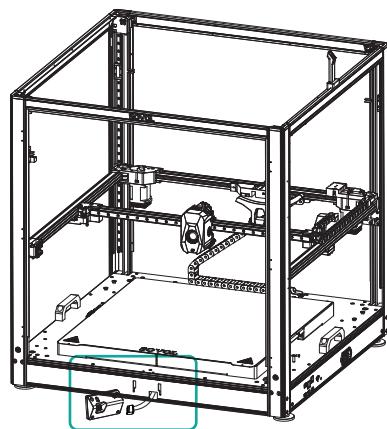
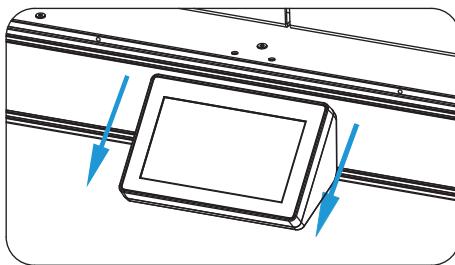
As shown, the method of installing drag chain is to disassemble and assemble quickly. Please buckle the adapters at both ends of the drag chain into the slot from top to bottom.



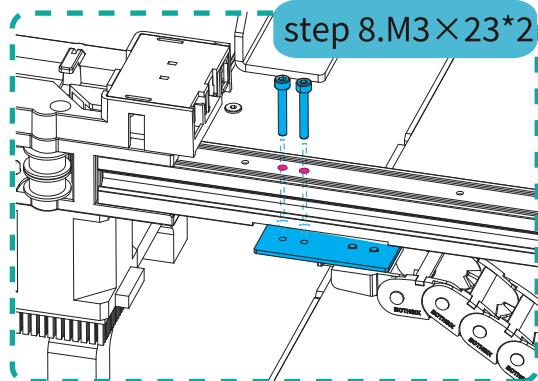
As shown, the method of installing wiring bracket is quick disassembly and assembly. Please push the bracket into the groove



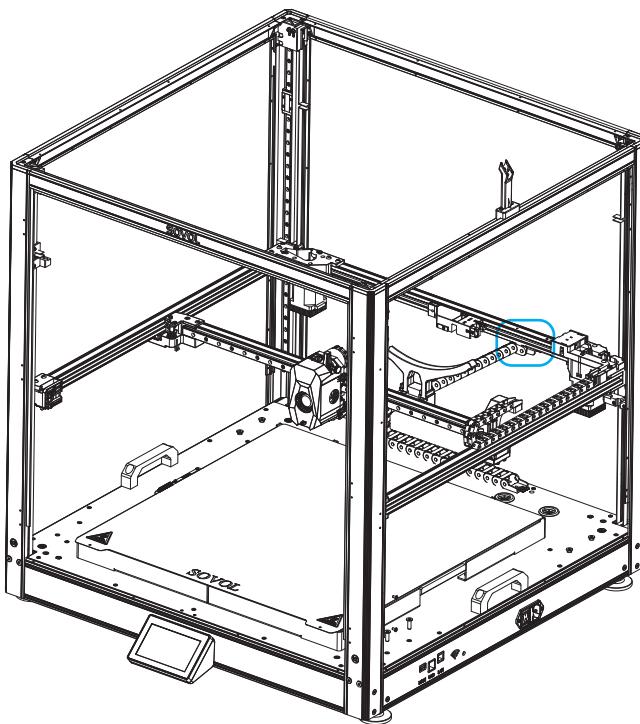
1. Prepare the touch screen and find the display cables on the base

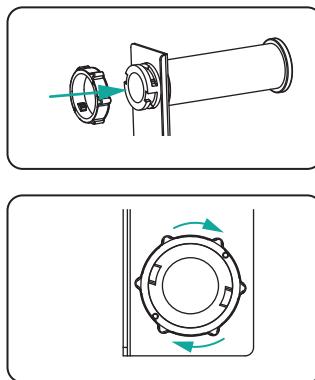
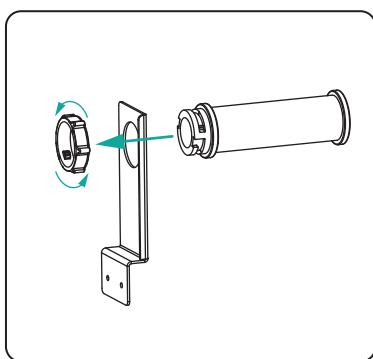


2. After the screen cable is connected, use the buckle to assemble the screen. Align the screen buckle and the base buckle into the correct positions, then press down to tighten the screen buckles.

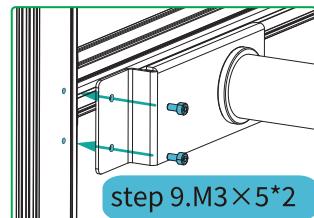
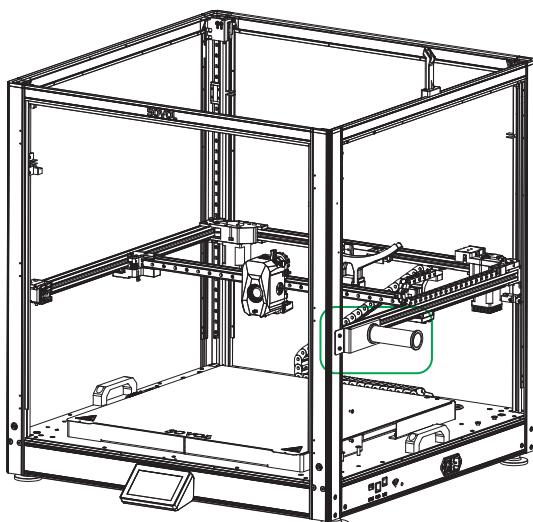


Fix the drag chain using the screws shown in the picture

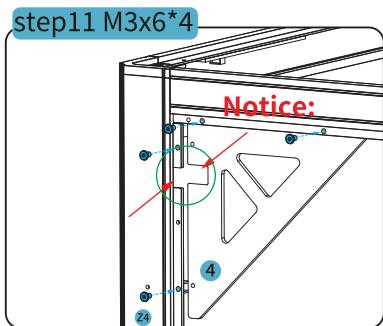
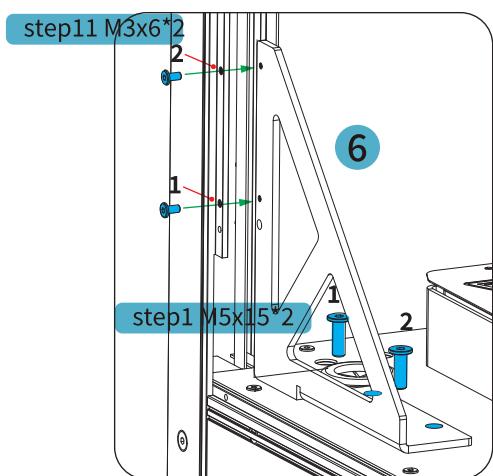
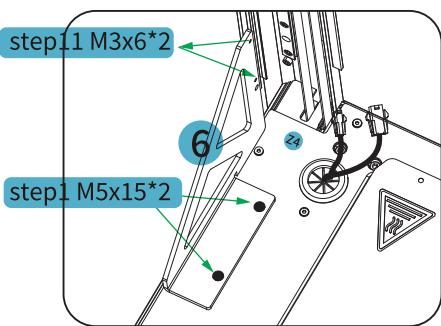




Turn counterclockwise to open the end cap, then insert the barrel into the circle of the barrel holder, then align the barrel cover with the barrel buckle and rotate it clockwise to tighten it.



After the bracket is assembled, use two step 9 screws to lock it.

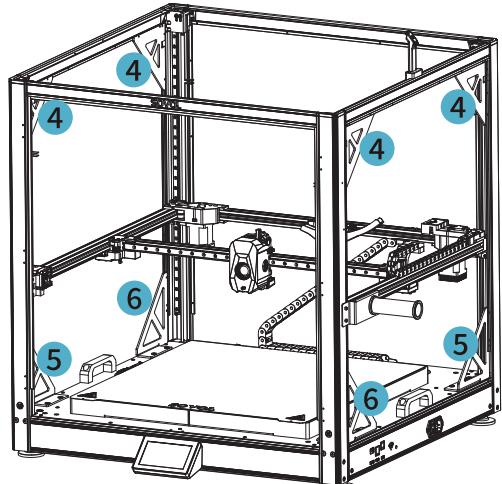


Install stiffening rib 4、5、
6 respectively

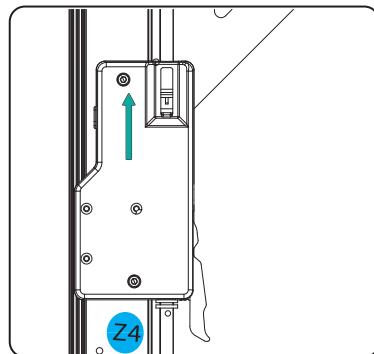
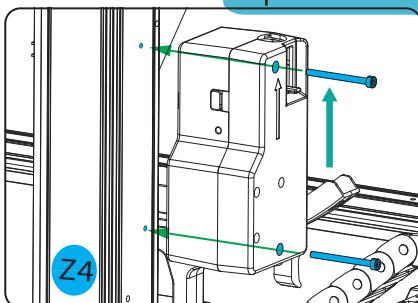


Note:

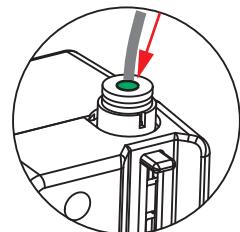
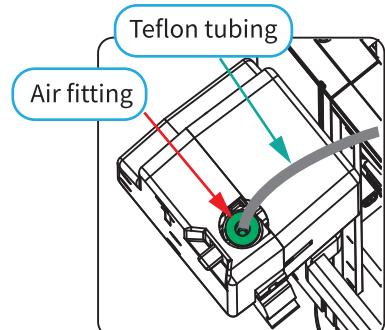
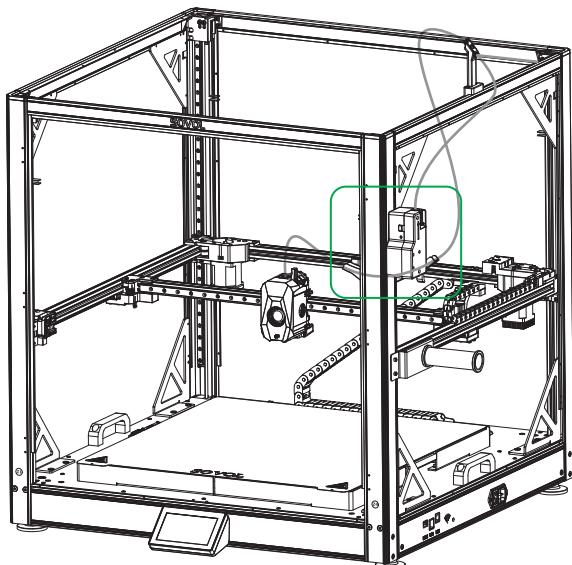
- 1.Before installation, please place the front of the machine towards you ("SOVOL" logo or display screen)
- 2.When installing the stiffening rib 4, please make sure to align the notch with the notch on the Z4



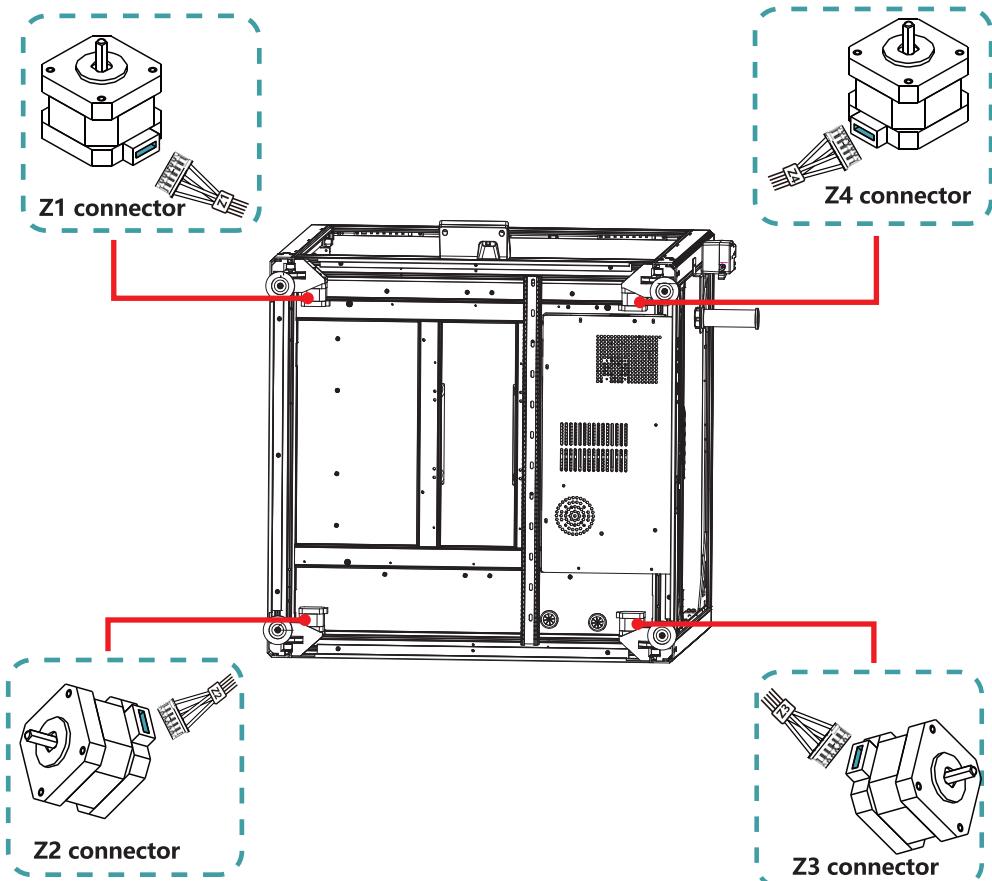
step 10.M3×40*2



Install the auxiliary feed mechanism on the hole position of Z4 with screws as shown in step 10.



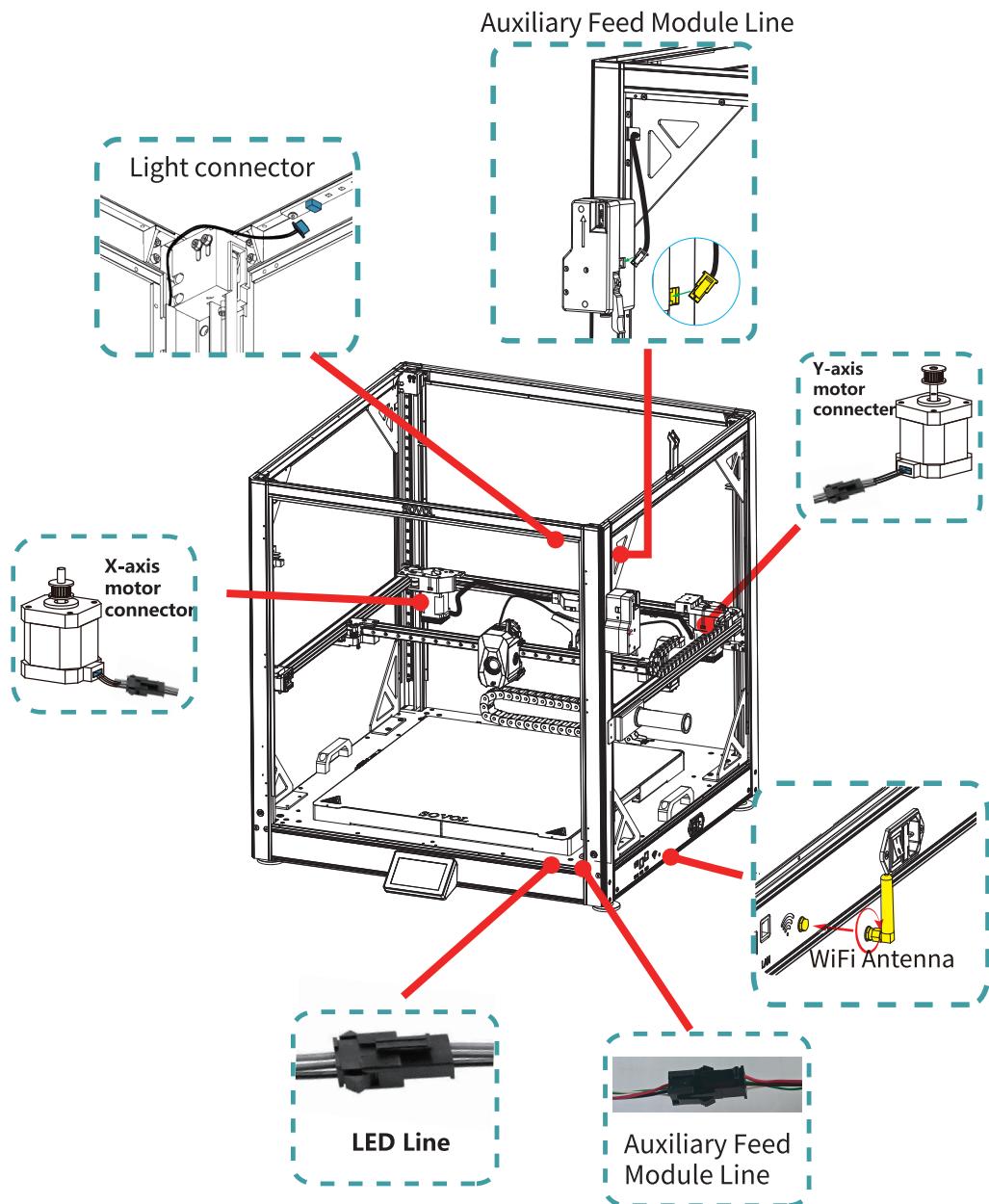
Insert Teflon tubing into air fitting

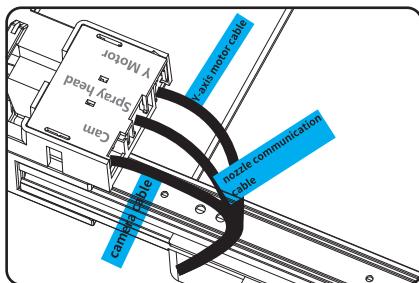


Put the printer vertically on
the desktop carefully

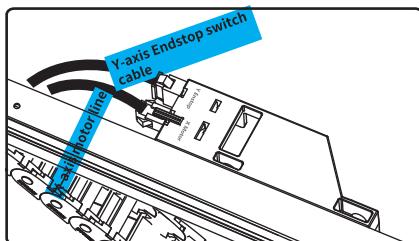
Assembly

Connect cable >>>

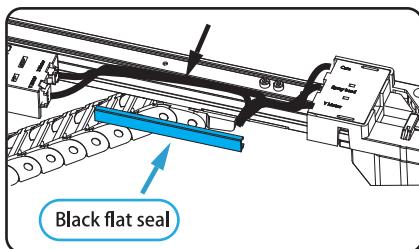




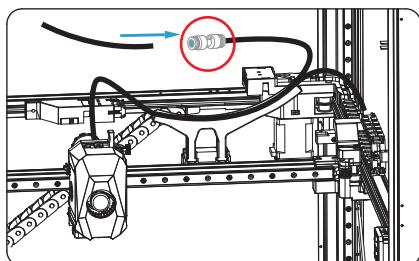
1. Connect the camera cable corresponds to the “Cam” logo
2. Connect the nozzle communication cable corresponds to the “Spary head” logo
3. Connect the Y-axis motor cable corresponds to the “Y Motor” logo



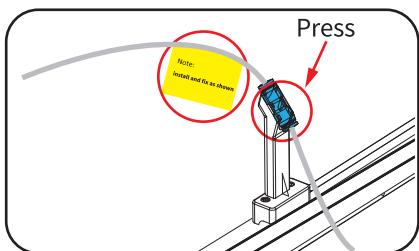
1. Connect the X-axis motor cable corresponds to the “X Motor” logo
2. Connect the Y-axis Endstop switch cable corresponds to the “Y Estop” logo



lower the black flat seal to cover the wire harness, adjust the position and press the flat seal tightly.



Installation of PTFE TUBE



Guides to connect Teflon tubing to the top frame



note:The current interface is for reference only,due to the continuous upgrading of functions,the actual latest software firmware UI on the official website shall prevail.

- 1 After the entire installation process is completed, plug in the power cord and toggle the power switch on the right side of the machine. The printer's display will light up, indicating that it has entered the booting guidance phase. Follow the steps below for operation.



Language Selection
(8 languages available)



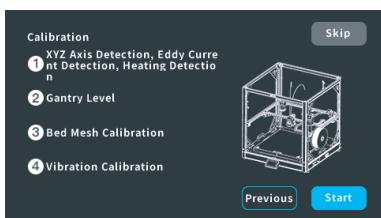
Connect to WiFi
Select your home WiFi network.



Enter the password and connect to the WiFi network



Power on calibration



Start Calibration complete
click start to print

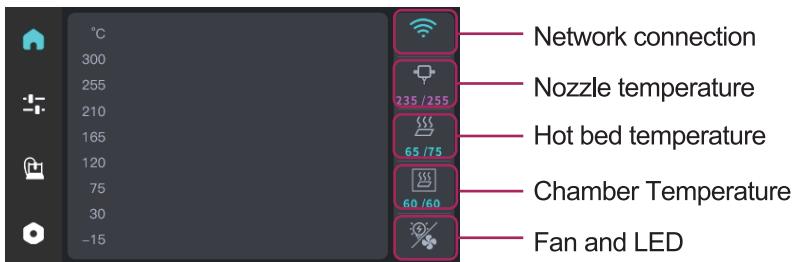


During vibration optimization, the machine noise may be louder,which is a normal phenomenon.

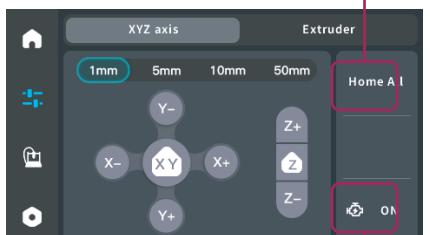
Product Usage

>>>

Main



Back to zero



Motor unlock



Firmware upgrade

>>>



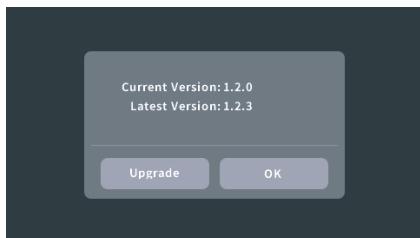
note:The current interface is for reference only,dueto the continuous upgrading of functions,the actual latest software firmware UI on the official website shall prevail.



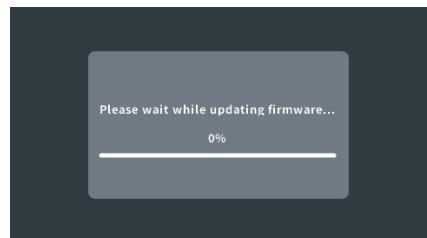
Click"Version"



Click"YES"



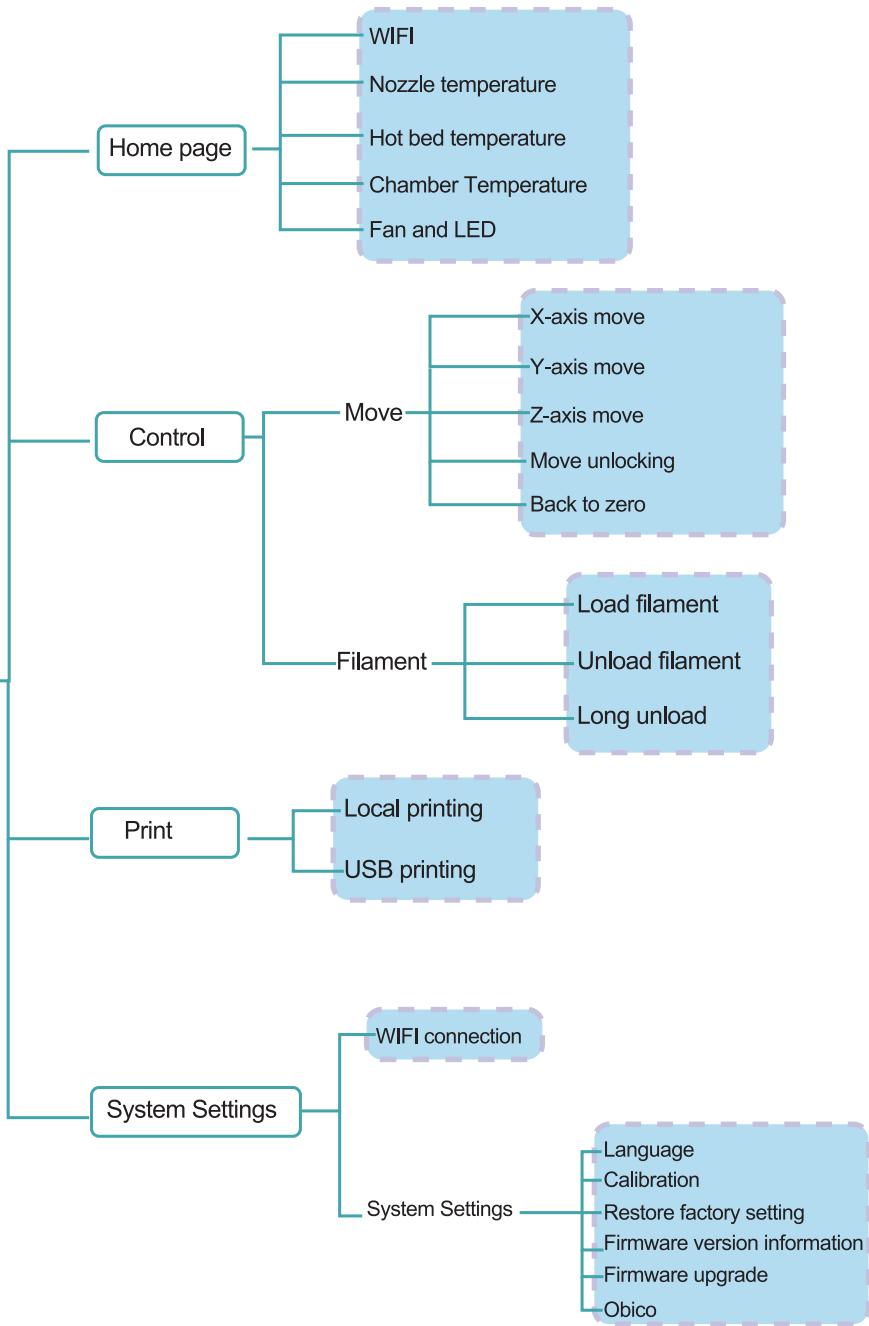
Click"Upgrade"



Do not power off the printer during the firmware upgrade process.

Function List

>>>

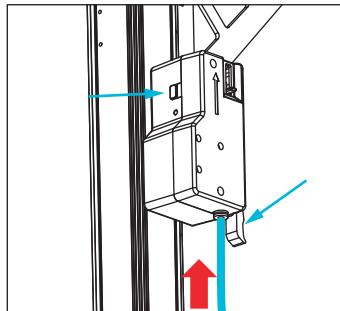
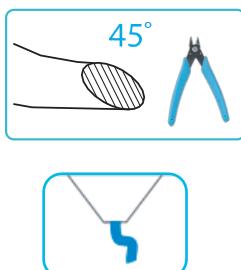


Function List

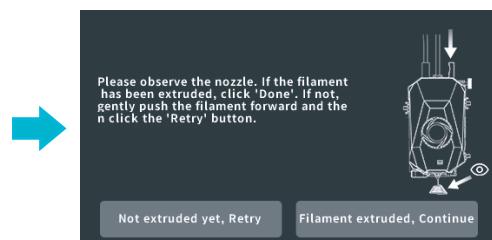
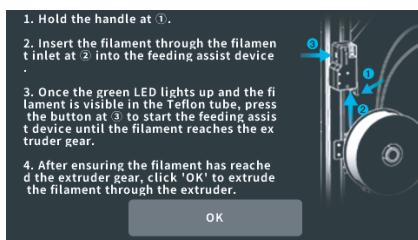
>>>

- 1 After completing the boot guide, please load the filaments before starting printing.

Cut the filament tip at a 45° bevel angle and insert it into the feeder, pushing it up to the gear.



- 2 Click on Filament on the main interface → Select PLA → Load Filament. The extruder will automatically rotate to feed the material in. Observe the material flowing out of the nozzle bottom to confirm the loading of the material



- 3 To replace the filament, click "Unload Filament." Once the filament is unloaded, remove it and refill it by following the steps above

Print the file

>>>

- 1 Plug in the USB and wait for the display to load the print content, and then follow the steps below to print.



- 2 Select the file you want to print

The diagram illustrates the printing process flow across four panels:

- Top Left Panel (XYZ axis):** Shows a spool of blue filament labeled "SOVO". Buttons include "Load", "Unload", and "Long Unload".
- Top Right Panel (Extruder):** Contains various adjustment sliders and buttons for flow and speed settings.
- Bottom Left Panel (Main View):** Displays the 3D model of the raptor skeleton, print statistics (600mm/s, 1d23h30m), and a progress bar at 42%.
- Bottom Right Panel (Fan Control):** Shows four fan controls with 0% settings: "Front Model Cool Fan", "Back Model Cool Fan", "Auxiliary Fan", and "Exhaust Fan".

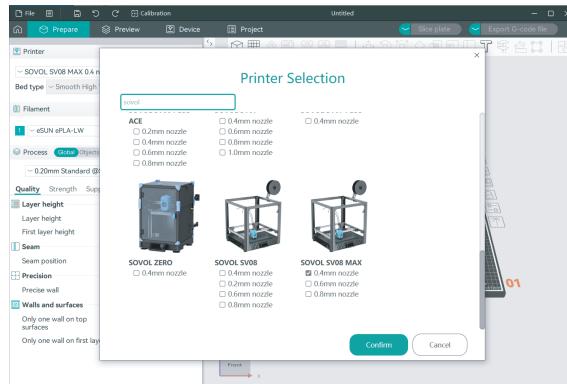
Slicing Software



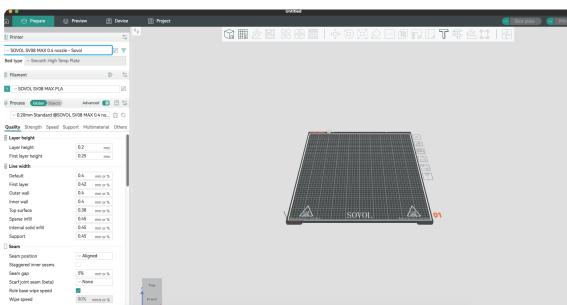
The latest version in official website shall prevail



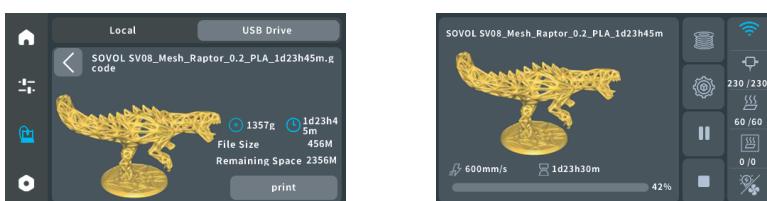
1 Files installed in the USB “OrcaSlicer”.



2 Select add “SOVOL SV08 MAX”.



3 Select and add the model you want to print.





Orca slicer import configuration file(Windows)

1. Find the download link of Orcaslicer in Github, Download the exe file that suits your current version on your PC.

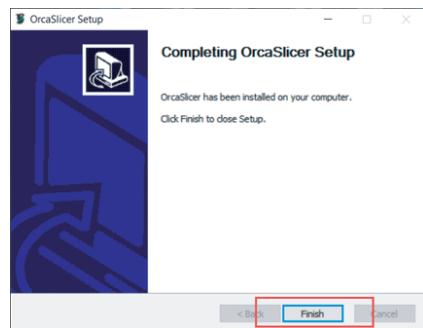
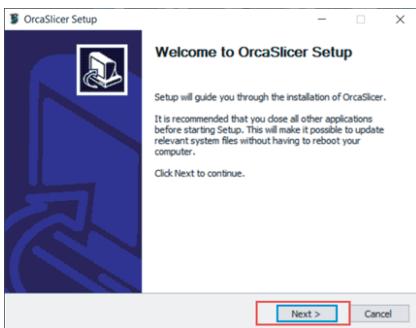
Link: <https://github.com/SoftFever/OrcaSlicer/releases/tag/v2.2.0-beta>

The screenshot shows the GitHub release page for the 'OrcaSlicer V2.2.0 Beta Release'. At the top, there's a message about the release date and commits. Below it, a heading says 'This is OrcaSlicer V2.2.0 beta release.' A warning about the security alert is present. The 'Assets' section lists several files:

Asset	Size	Last Updated
OrcaSlicer_Linux_Ubuntu2004_V2.2.0-beta.AppImage	109 MB	Sep 13
OrcaSlicer_Linux_Ubuntu2404_V2.2.0-beta.AppImage	110 MB	Sep 13
OrcaSlicer_Mac_arm64_V2.2.0-beta.dmg	131 MB	Sep 13
OrcaSlicer_Mac_x64_64_V2.2.0-beta.dmg	137 MB	Sep 13
OrcaSlicer_Windows_Installer_V2.2.0-beta.exe	87.6 MB	Sep 13
OrcaSlicer_Windows_V2.2.0-beta_portable.zip	106 MB	Sep 13
Source code (zip)		Sep 13
Source code (tar.gz)		Sep 13

At the bottom of the assets section, there are social sharing icons and a note that 119 people reacted.

2. Install the Orcaslicer, software according to the prompts.



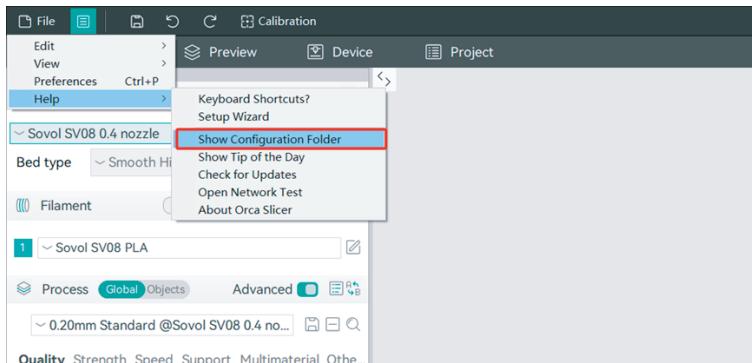
Slicing Software

>>>

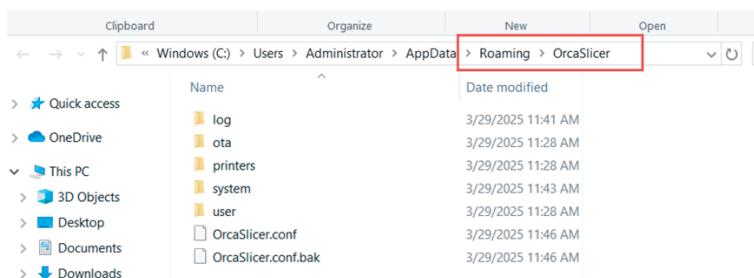
3. Open Orcaslicer, click "Help" "Show Configuration Folder" and delete all files in the OrcaSlicer folder under this path.



(Note: the previously added machine configuration will also be deleted.
Please export the configuration before deleting the folder. Please refer to step 5 to export your configuration file.)



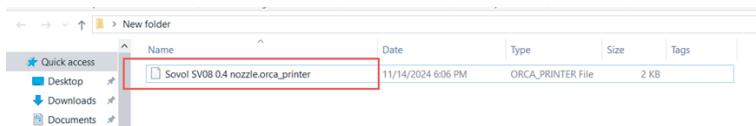
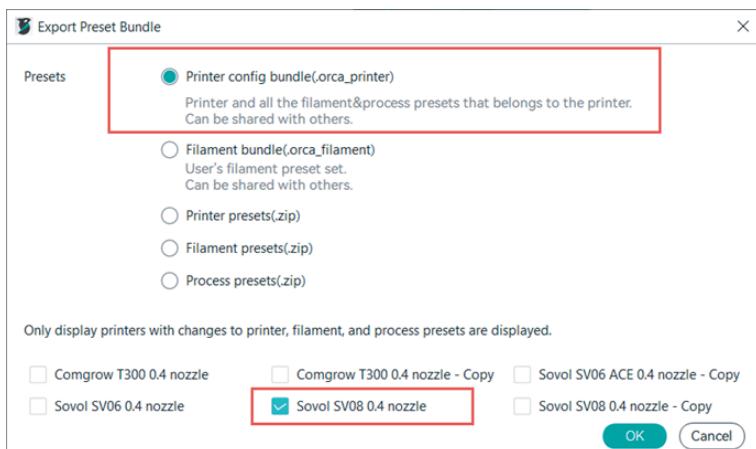
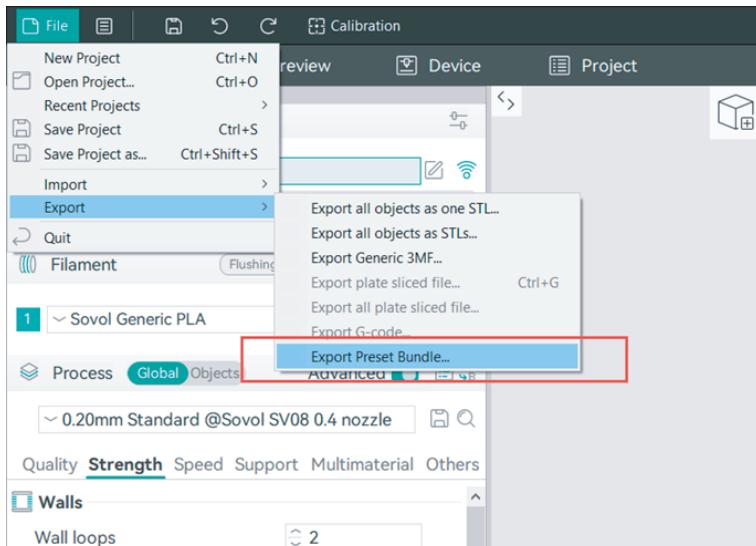
4. If you cannot open the configuration folder this way, please Open the location of the file under the installation path of Orcaslicer, find \Roaming\OrcaSlicer , and delete all files in the OrcaSlicer folder under this path.



Slicing Software

>>>

5. How to export the configuration file: Click "File" "Export" "Export Preset Bundle", select "Printer config bundle (.orca_printer)" and the model to be exported to complete the configuration file export.



6. Open the location of the file under the installation path of Orcaslicer

Name	Date modified	Type	Size
resources	11/15/2024 4:26 PM	File folder	
concr140.dll	9/9/2024 5:56 AM	Application extens...	315 KB
freetype.dll	7/17/2024 8:42 AM	Application extens...	669 KB
libgmp-10.dll	9/13/2024 7:22 AM	Application extens...	531 KB
libmpfr-4.dll	9/13/2024 7:22 AM	Application extens...	426 KB
LICENSE.txt	9/13/2024 7:22 AM	Text Document	35 KB
msvc140.dll	9/9/2024 5:56 AM	Application extens...	562 KB
msvc140_1.dll	9/9/2024 5:56 AM	Application extens...	35 KB
msvc140_2.dll	9/9/2024 5:56 AM	Application extens...	263 KB
msvc140_atomic_wait.dll	9/9/2024 5:56 AM	Application extens...	50 KB
msvc140_codevt_ids.dll	9/9/2024 5:56 AM	Application extens...	31 KB
OrcaSlicer.dll	9/13/2024 8:08 AM	Application extens...	61,378 KB
orca-slicer.exe	9/13/2024 8:08 AM	Application	267 KB
TKBO.dll	7/17/2024 9:13 AM	Application extens...	1,917 KB
TKBRep.dll	7/17/2024 8:58 AM	Application extens...	809 KB
TKCAF.dll	7/17/2024 9:14 AM	Application extens...	482 KB

7. Open the "resources" directory under the "OrcaSlicer" directory

8. Open the "profiles" directory under the "resources" directory.

> This PC > Local Disk (D:) > OrcaSlicer > resources > profiles

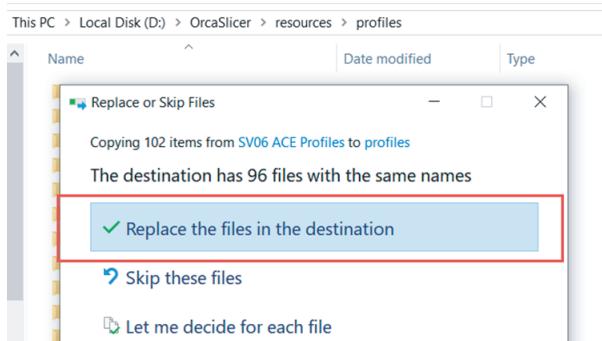
9. Copy the contents under the "Orcaslicer Windows" directory in the materials to the "profiles" directory.

Name	Date modified	Type
Sovol	11/5/2024 5:26 PM	File folder
Sovol.json	8/28/2024 8:18 PM	JSON File

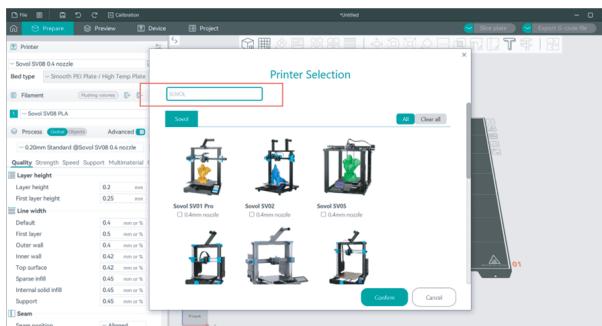
Slicing Software

>>>

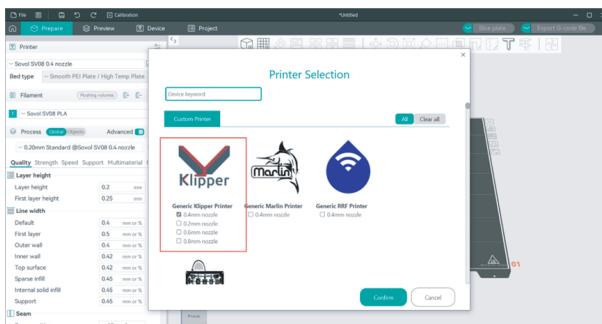
10.Click "Replace the files in the destination"



11.Reopen OrcaSlicer, search for "Sovol", and select the machine model want to add



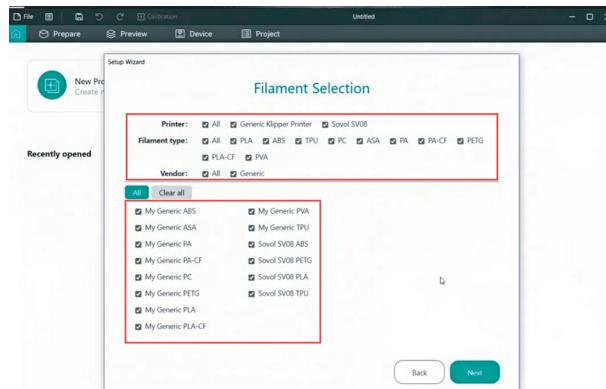
12.If the filament or model is not found, please return to the previous step and select Generic klipper Printer, then select the corresponding Sovol/Comgrow printer model, and click Next.



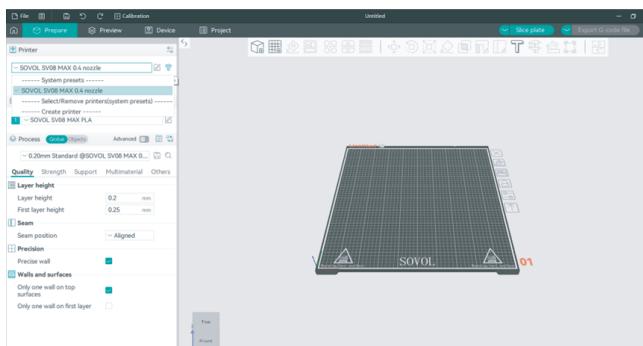
Slicing Software

>>>

13.Add Generic filament and complete the setup



14.Click Prepare to enter the main interface of the slicing software and switch to the printer model you selected



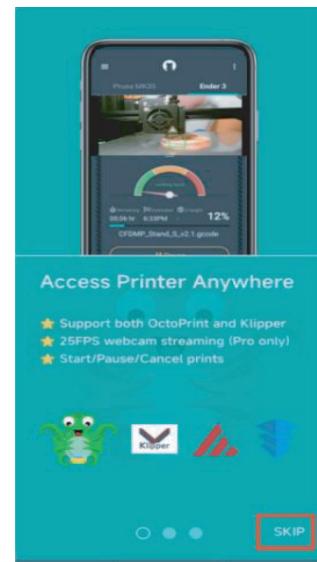
15.Complete the Orcaslicer installation

Obico Download

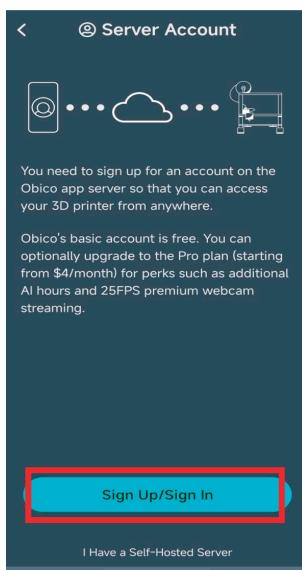
- For Android users: visit the Google Play store, search for “Obico” and select install app.
- For iOS users: Visit the Apple APP Store, search for “Obico”, and then select Install APP.
- Via Web interface: If you want to access via Web interface

<https://obico.io>

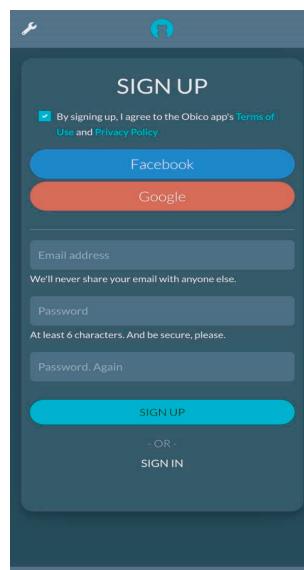
- Start the Obico operating interface of the printer and follow the steps below.
- Connect the Obico software on your phone. Open Obico downloaded from the above website



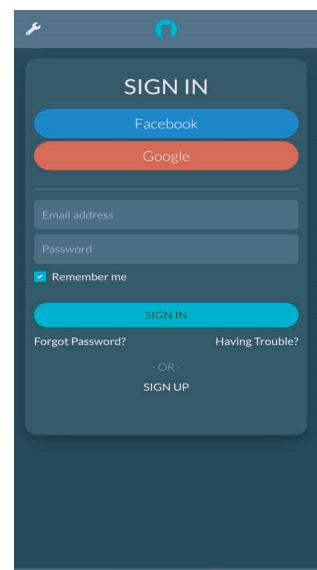
①.Click on 'SKIP'



②.Click on 'Sign Up/Sign in'



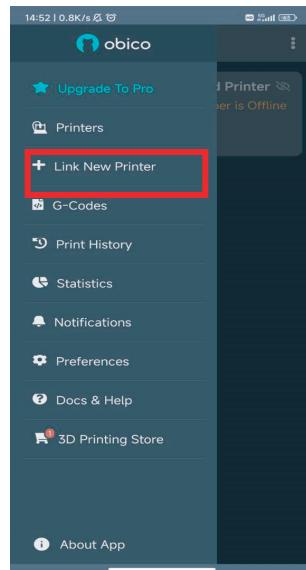
③.Register an account, enter the information, and click on 'SIGN UP'



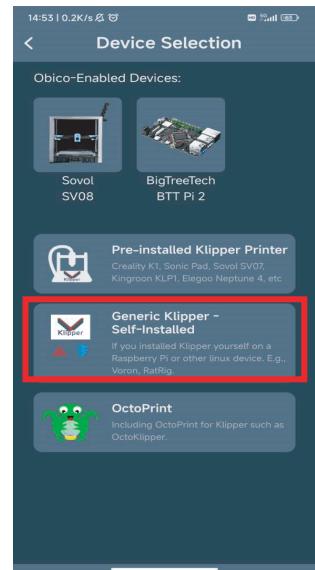
④.Enter the account information and click on 'SIGN IN'



⑤.Click on the menu page



⑥.Link New Printer

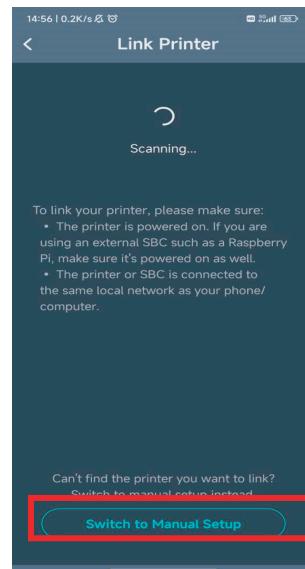


⑦.Click

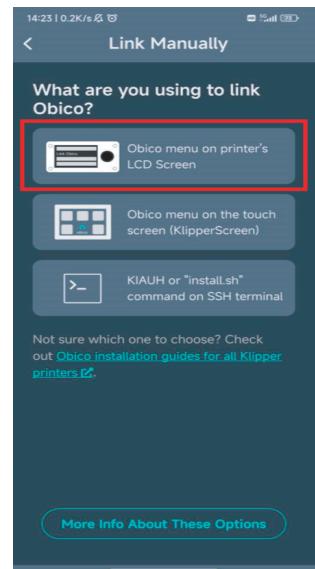


Yes, Obico is Installed

No, Show Me How



Switch to Manual Setup



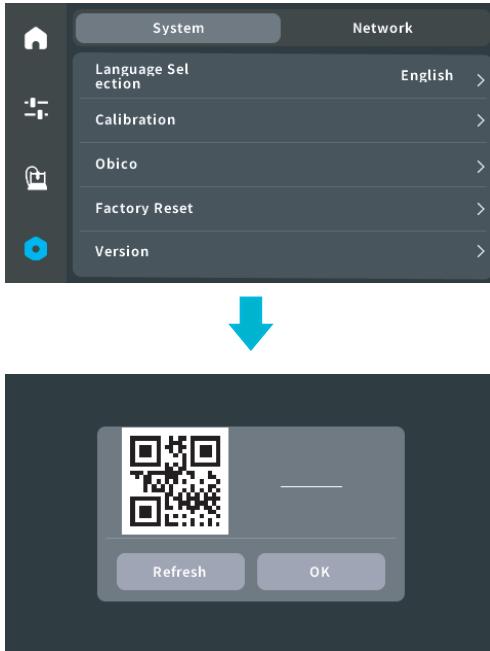
More Info About These Options

⑧.Click

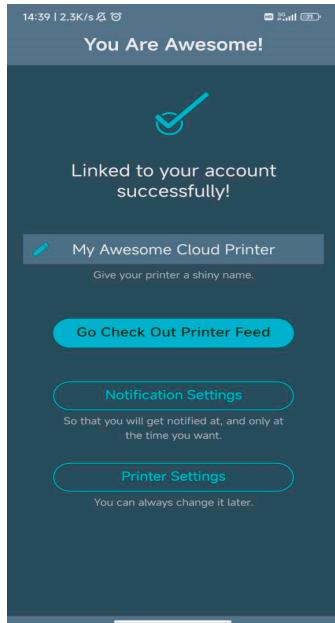
⑨.Click

⑩.Click

Select the obico function on the machine and a 5-digit verification code will appear.



Updates may differ, please refer to the latest firmware version. If you have any questions during use, please contact us, and we will respond as soon as possible.

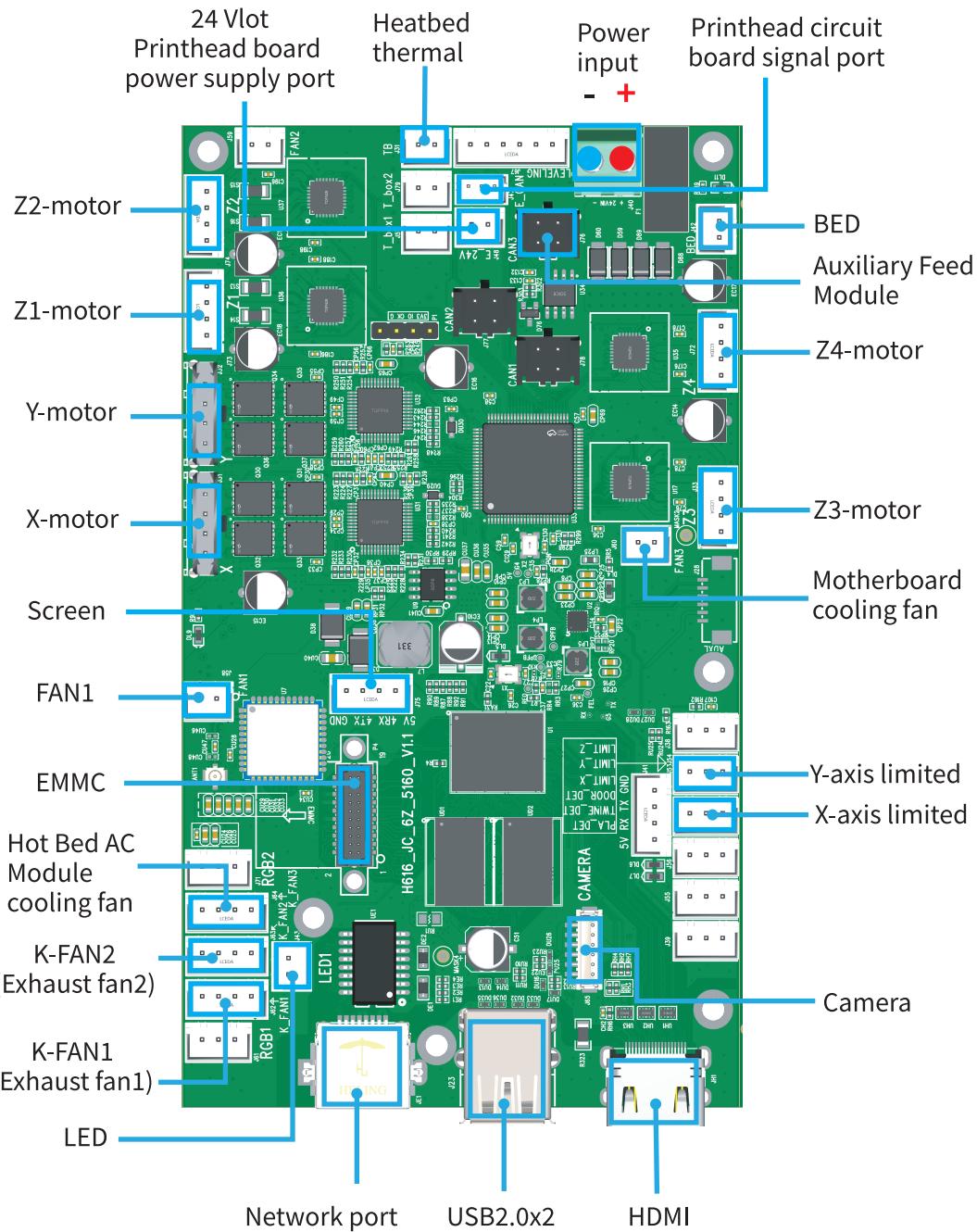


⑪ Printer connected successfully

After scanning the QR code on the screen, you will see what's on the right, indicating that your machine is now connected to obico. Proceed to operate according to your needs and embark on your 3D printing journey.

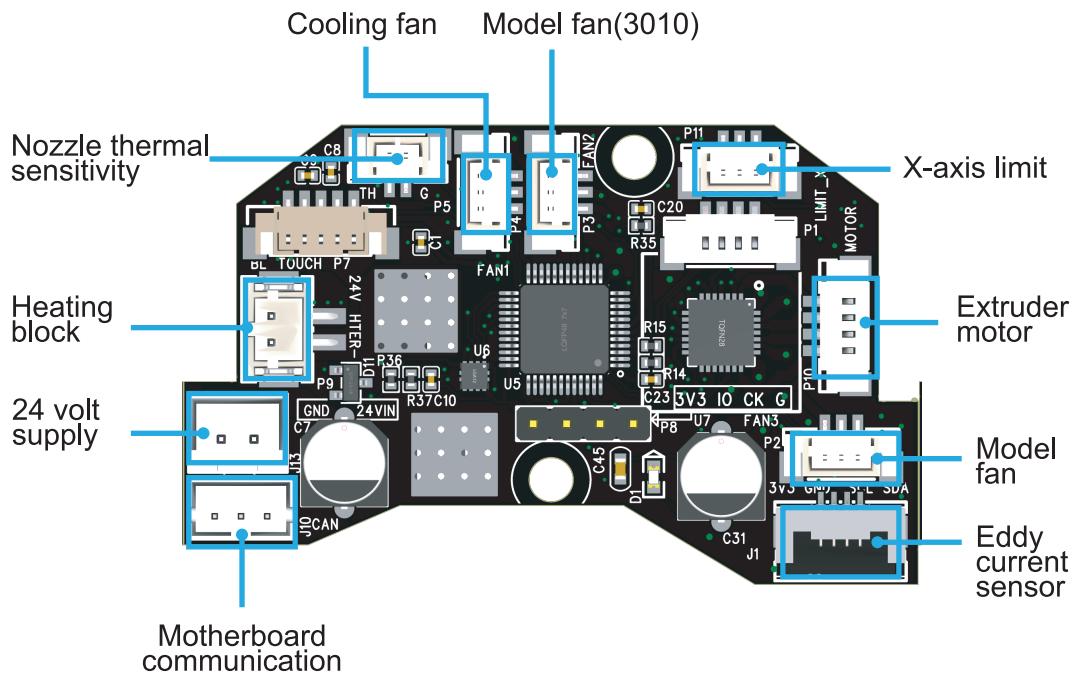
Mainboard

>>>



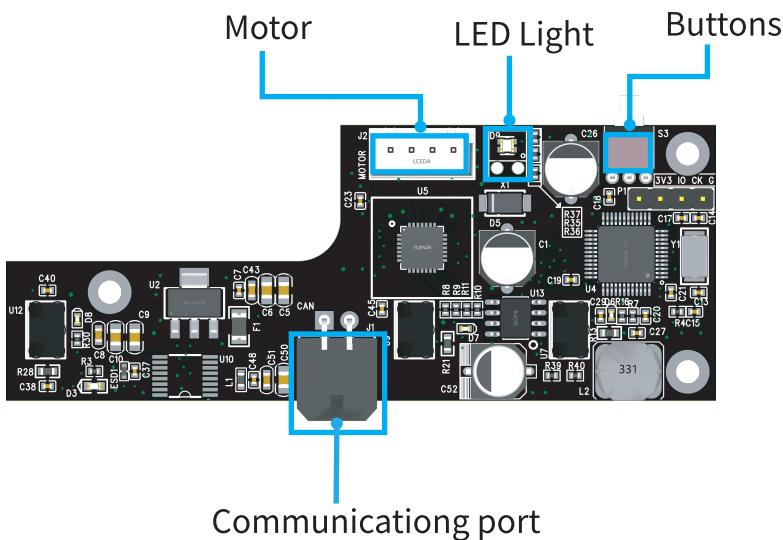
Nozzle adapter

>>>



Auxiliary Feed Module board

>>>





sovol support group



sovol official website

ShenZhen Liandianchuang Technology CO., LTD.

Official Website: sovol3d.com E-mail: info@sovol3d.com

