



User Manual

- IT3D H300 PRINTER -



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1. Packing List

		
	Wrench and screw	Diagonal pliers
		
IT3D H300	SD card	TF card
		
Power cable	Ethernet Cable	Nozzle
		
Spatula	Filament	Card reader
		
Grease	Glue stick	Nozzle cleaner

2. The Basic Parameters

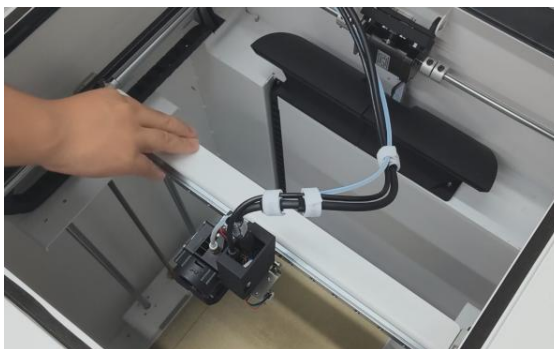
Printer Name	IT3D H300
Build Volume	300*300*450mm
Printing Technology	FDM
Nozzle Quantity	Single nozzle
Layer Thickness	0.05mm - 0.5mm
Nozzle Diameter (mm)	0.4 0.6 0.8 1.0
Printing Accuracy	±0.2mm
Materials	PLA/ABS/PETG/TPU...
Slicing Format	STL / OBJ/ Gcode
Connecting Method	Ethernet cable/WIFI/USB
Slicing Software	Orca Slicer
Heated Chamber Temp	By air fan (Max. 60°C)
Printing base	Flexible magnetic bed
Camera View	Yes
Max Temp of Hot Bed	120°C
Max Temp of Nozzle	500°C
OS compatible	Win 7 / Win 10
Max Printing Speed	300mm/s
Resume Printing	Yes
Filament Run Out Detection	Yes
Rated Power	600W
Output Voltage	24V
Rated Voltage	100 - 120V / 200 - 240V 50 / 60 HZ

3. Printer Installation

3-1. Cut all the cable tie, take out the tool box and filament.



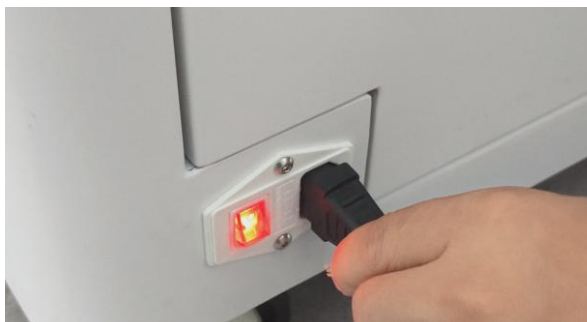
3-2. Move the extruder to the center position of the machine.



3-3. Adjust the Screen to the appropriate angle.



3-4. Plug in the power cord and turn on the Switch.



4. Auto Leveling

Reset X, Y, Z axis. Click “More”→“Z Calibrate”→“Start”. The printer will begin auto leveling.



5. Preheating the Extruder Temperature

Click the temperature displayed on the right side of the extruder and enter the temperature you need, then click “√” to confirm.



6. Extruding the Filament

6-1. Find the filament holder in the tool box.



6-2. Install the filament holder in the small hole at the back of the machine.

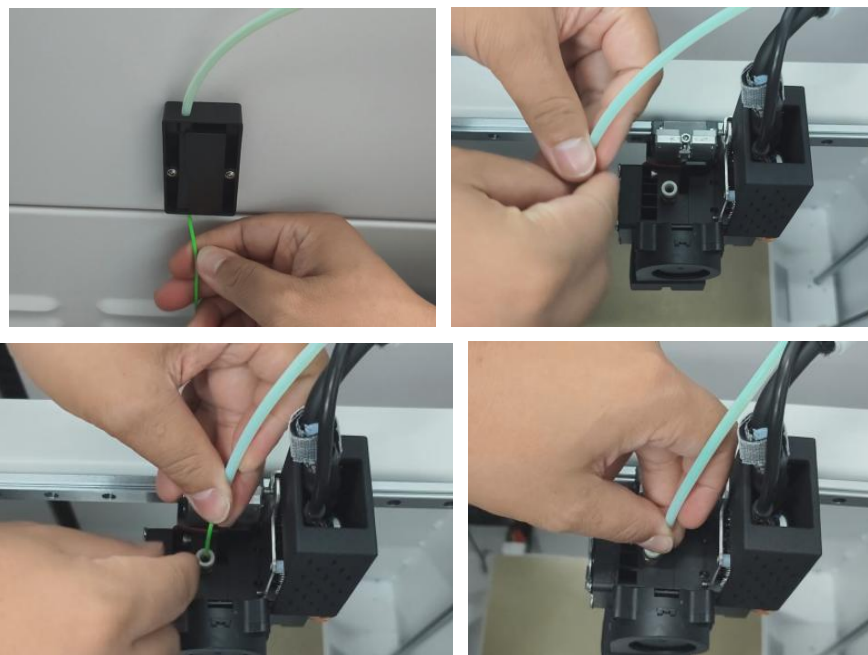


6-3. Hang the filament on the holder and cut the end of the filament into a 45-degree angle with diagonal pliers.



6-4. Push the filament into the material break detection sensor, remove the white pipe from the top of the extruder, pull out the filament and insert it into the small hole at the top of the extruder, then insert the white pipe back.

Note: The white pipe does not need to be pressed tightly for the time being.



6-5. Click the “Extrude” button on the screen, then click “Load”.



Note: If the extrusion is successful, please plug the white pipe at the top of the extruder head tightly.



7. About the Slicing Software

7-1. Orca Slicer installation version:

Orca Slicer 2.0 and above

7-2. Compatible operating systems:

Windows 10 or later, 64-bit

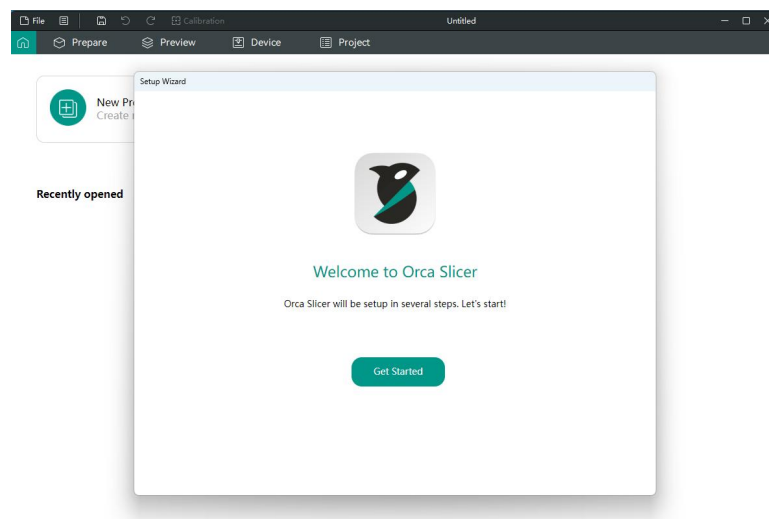
Mac OS X 11 Big Sur or later, 64-bit

Linux, 64-bit

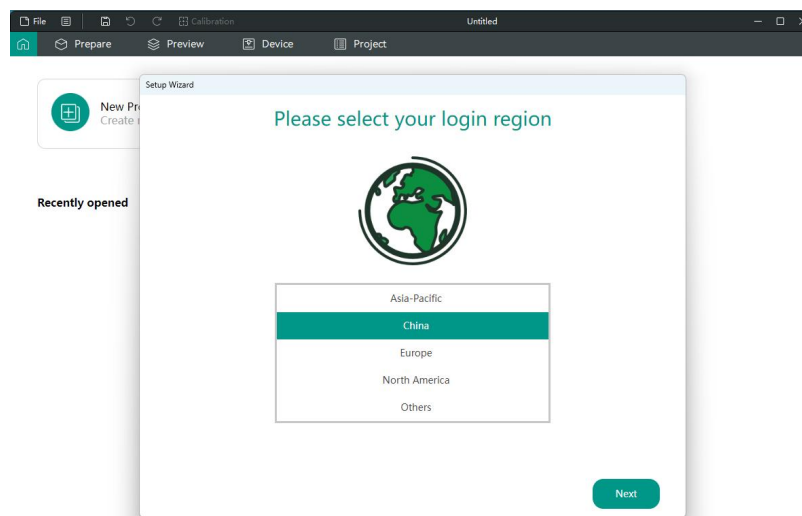
7-3. The configuration parameter is **only** for the model: IT3D H300

7-4. Find the USB drive in the tool box, open it, find the Orca software, copy it to the computer and open the software.

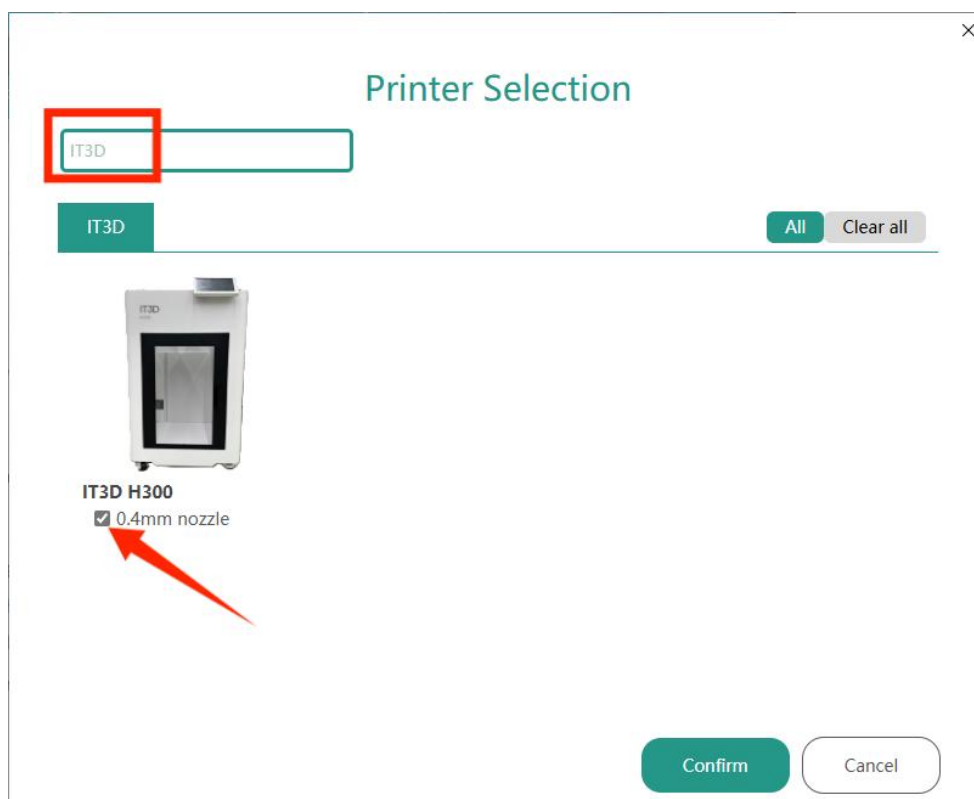
① After installation, open the software and click "Get Started" to enter the configuration wizard:



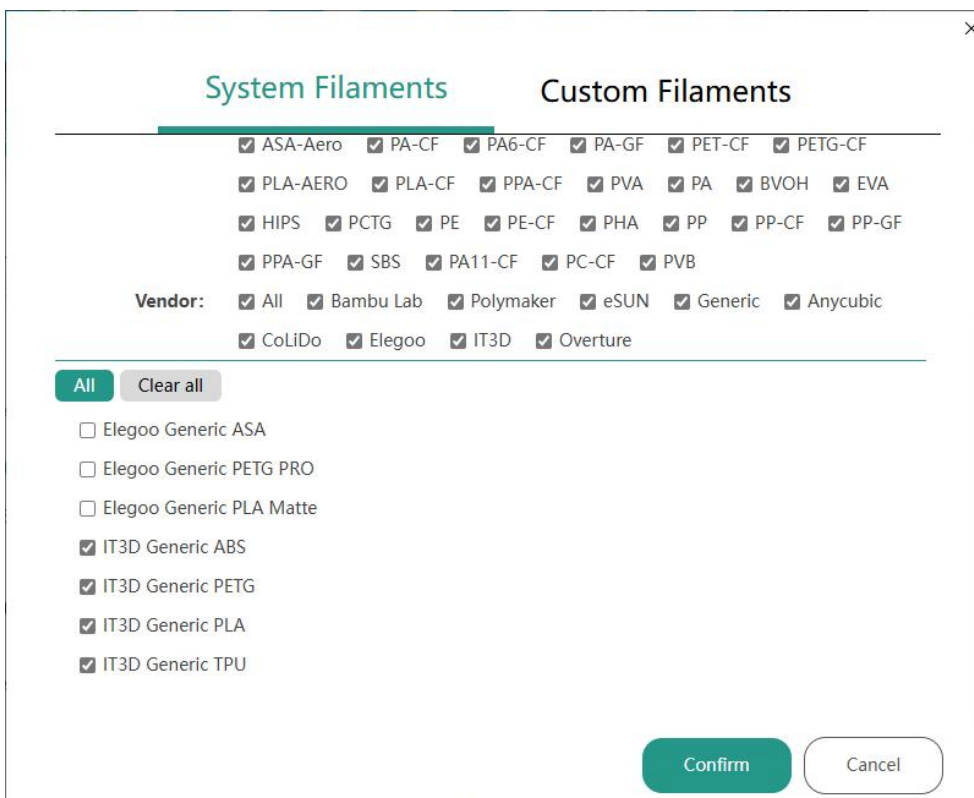
② Select your region:



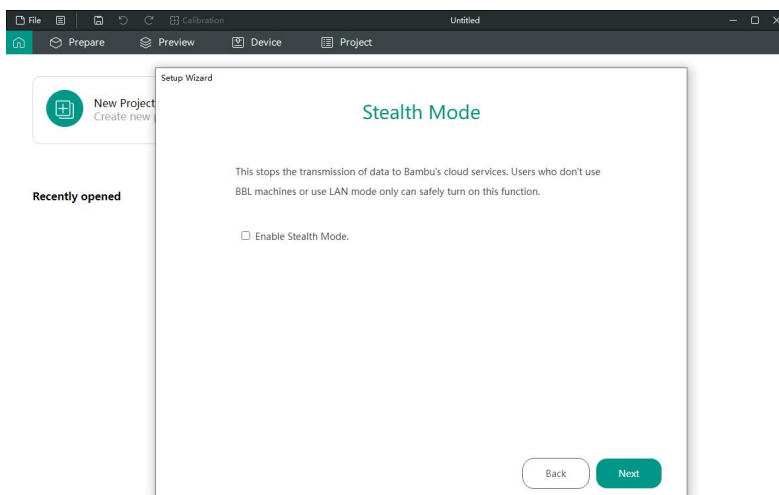
③ Select the printer you have:



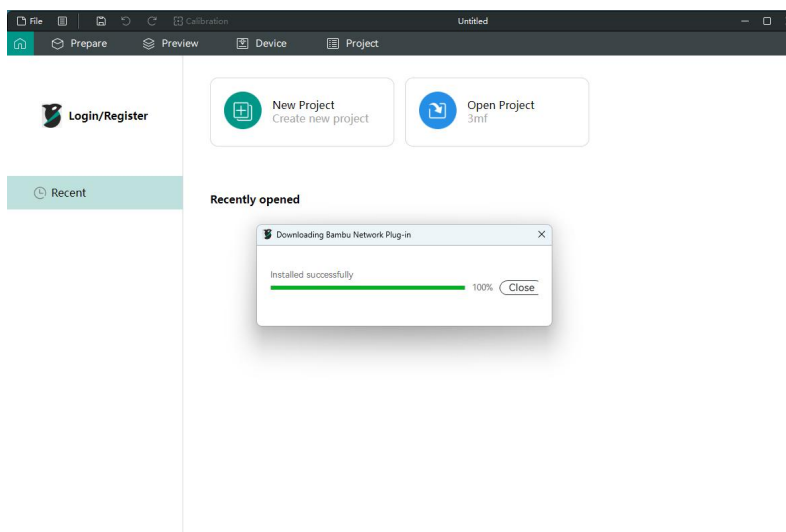
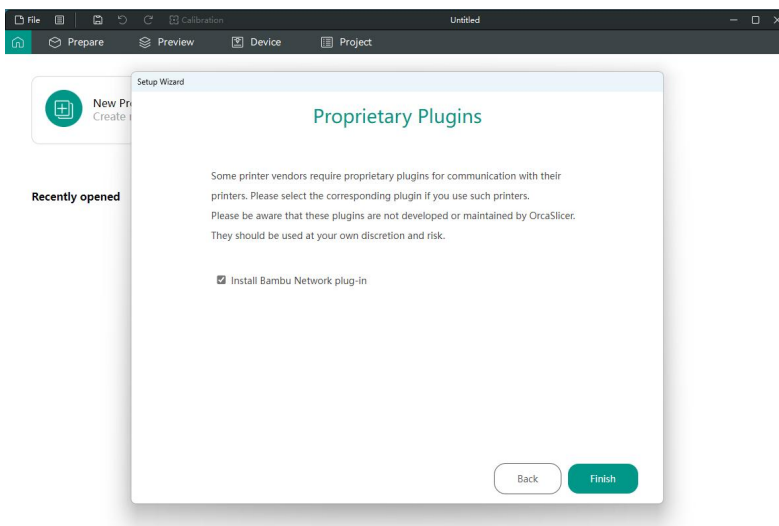
④ Select all "IT3D" brand filaments by default, and click "Confirm":



⑤ Network plug-in, just follow the default and click "Next":



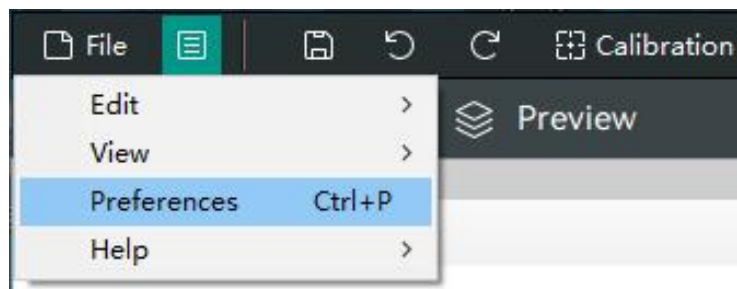
⑥ Next, click "Install Bambu Plugin," and then click "Finish" to complete the setup wizard.



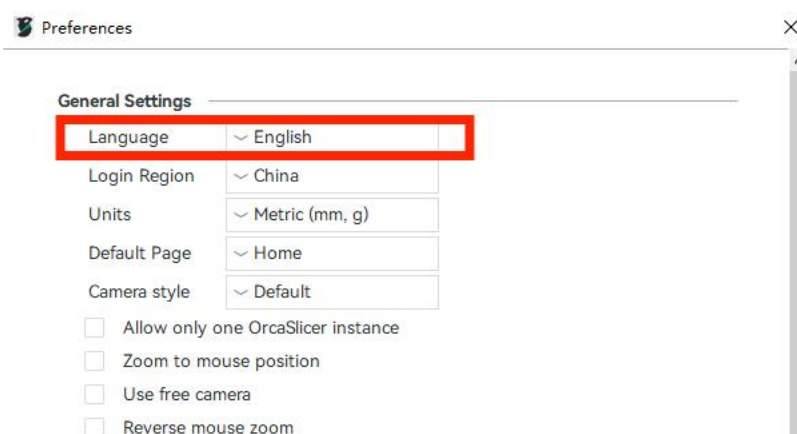
7-5. Modify the Language of the Software

Note: if you do not need to change the language, please ignore this step.

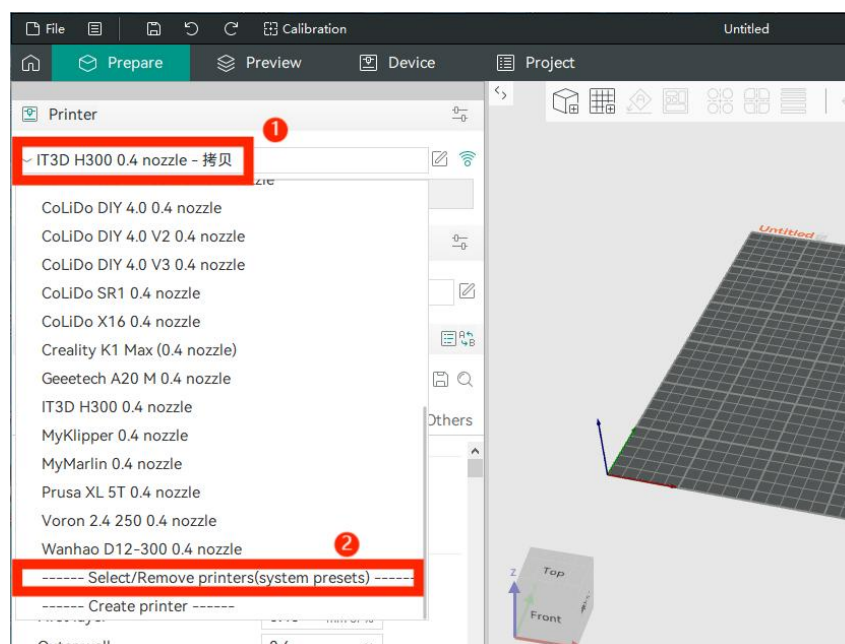
- ① Click the icon in the menu and select "Preferences":



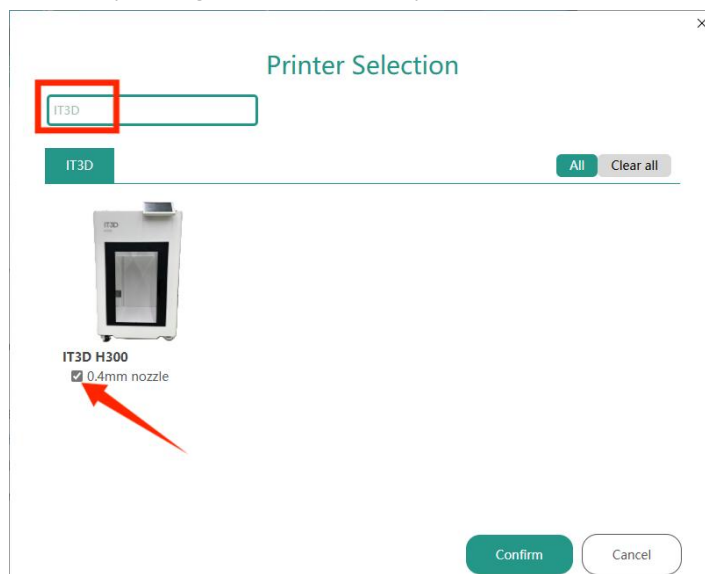
- ② Select the "Language" option in the pop-up window, set the required language, and restart the software.



- ③ After restarting the application, add the corresponding printer again after the printer has been added, and click "Select/Remove Printer (System Preset)":



- ④ Find the IT3D brand, select the corresponding model, click the option and confirm.

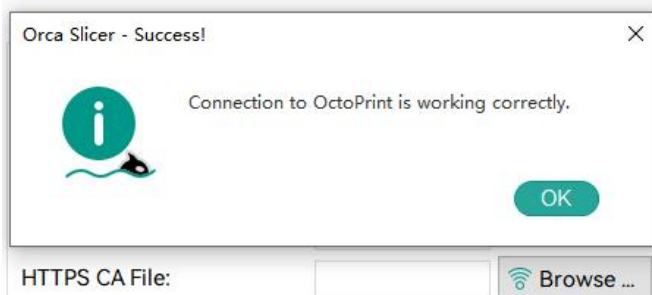
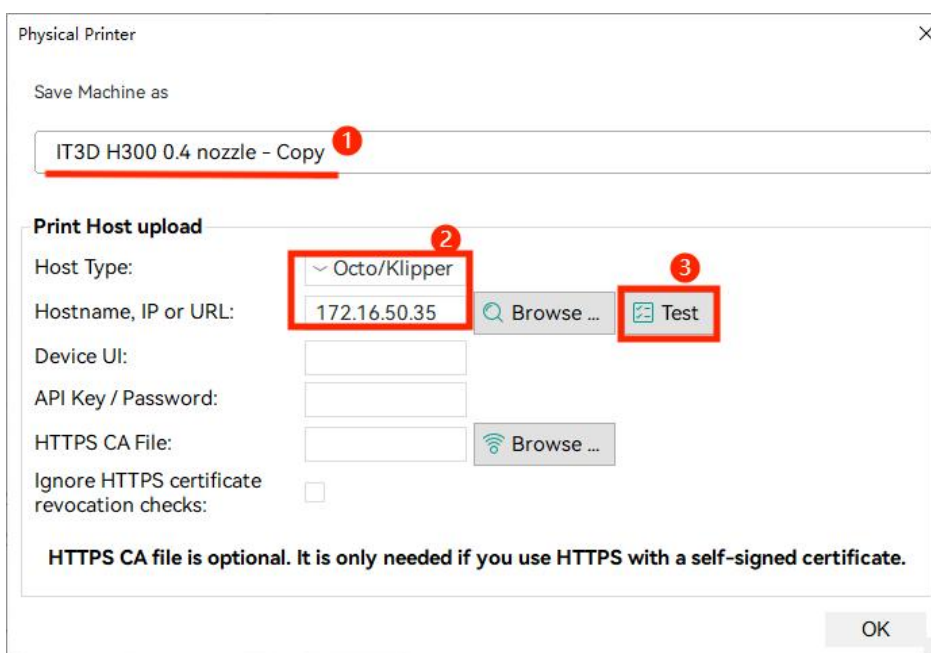
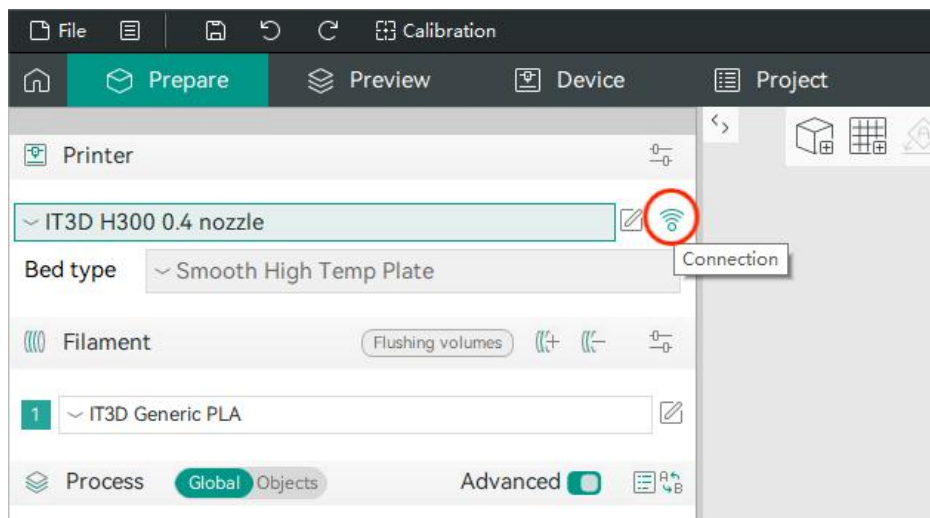


7-6. Connect WIFI

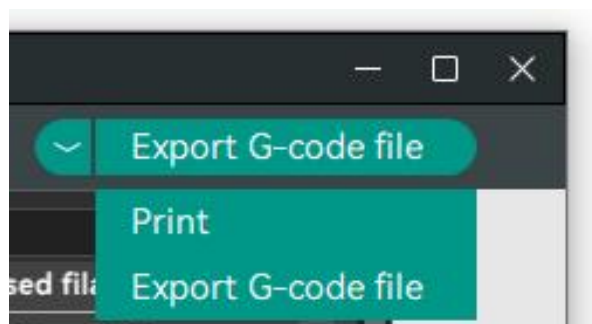
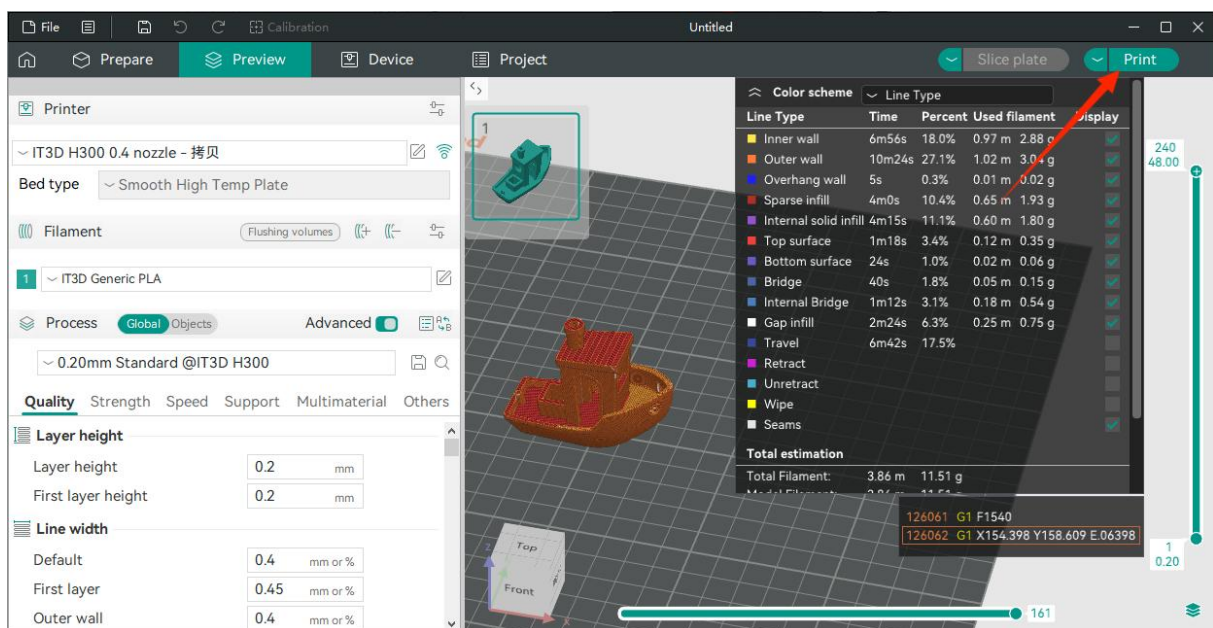
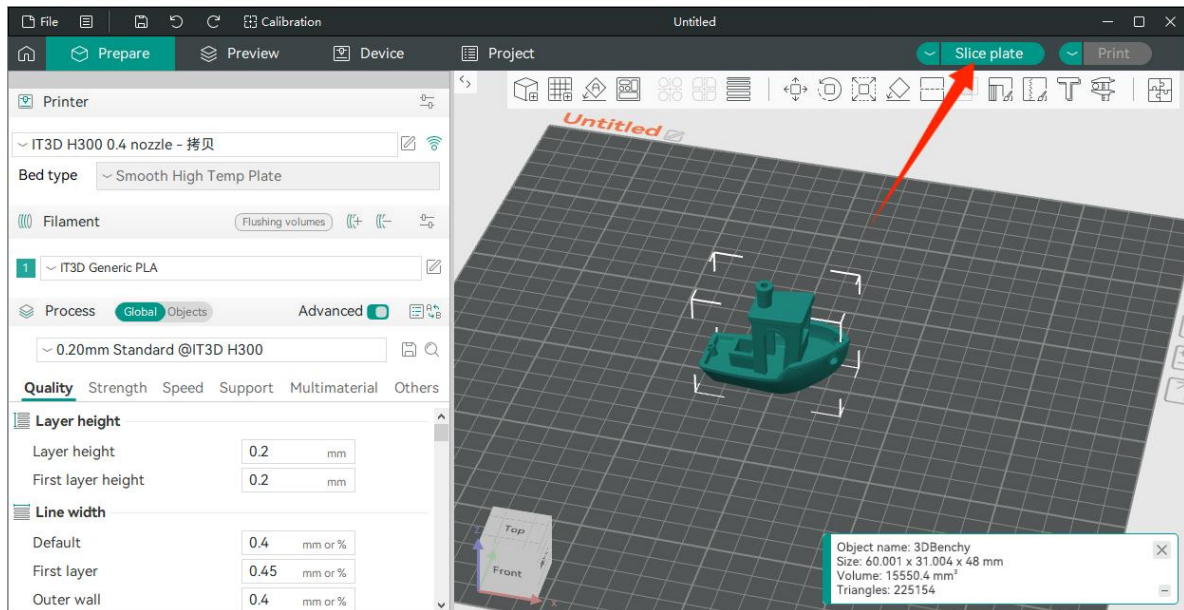
- ① Operate the printer control panel, select "More" -> "Network" on the homepage, click the right arrow ① to connect to the Wi-Fi in the same as the computer, and after success, record the IP address displayed on the screen ②, such as "192.168.1.63" in the figure below.



② Return to the slicing interface, click the "WIFI" icon, modify the name, enter the IP address displayed on the previous screen, click "Test", if it shows that it is successfully connected to OctoPrint, it means the input is correct, click "OK", and confirm again to complete the pairing of the slicing software and IT3D H300.



7-7. Wi-Fi configuration is complete. After clicking "Slice Plate", you can select the "Print" option to transfer directly to the printer via WiFi; you can also select the "Export G-code" file to save it to a USB drive.



8. Start Printing

8-1. Find the USB drive in the tool box, insert it, and choose the file you want to print.



All printing operations completed!

9. Machine Function Introduction

9-1. Screen Functions

9-1-1. The temperature is displayed on the left side of the screen, and the operating functions are displayed on the right side of the screen.



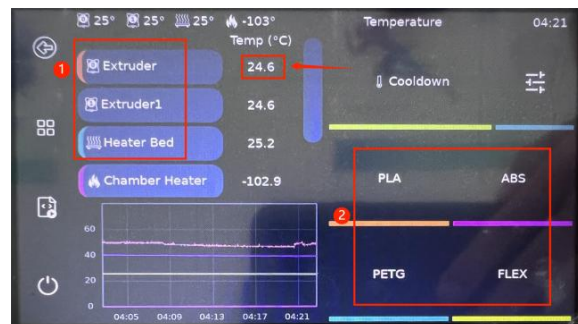
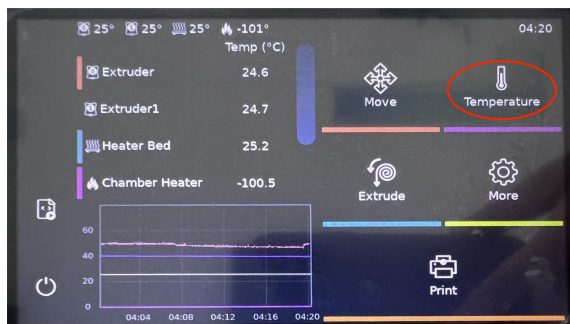
9-1-2. “Move” interface:

Each XYZ axis can be moved and reset to zero. Each time the machine is turned on, it is necessary to reset to zero before moving each axis.



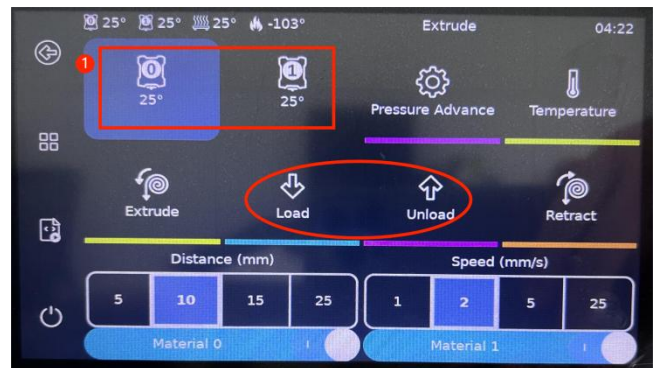
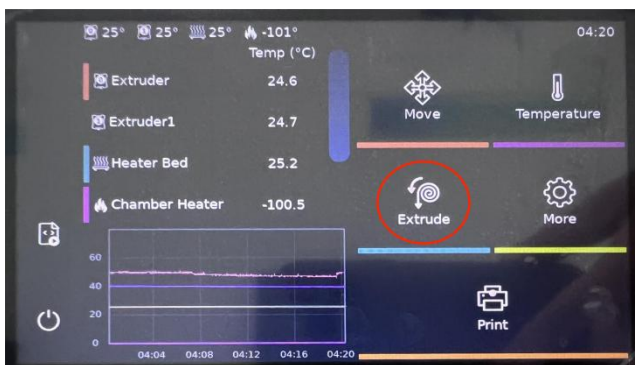
9-1-3. “Temperature” interface:

The preheating temperatures for various materials have been preset. Select the item you want to heat in the column on the left side of the screen, then click the button for the printing material currently in use in the lower right corner of the screen. You can also directly enter the temperature to adjust the temperature.



9-1-4. "Extrude" interface:

If the dual-nozzle machine can switch the nozzles and perform feed and retract operations, if you want to move the other nozzle, you need to complete the switch here and then return to the "Move" interface to move the extruder. "Load" and "Unload" are the preset feed and retract programs; "Extrude" and "Retract" perform filament extrusion and retract operations according to the "Distance" and "Speed" set on the screen.



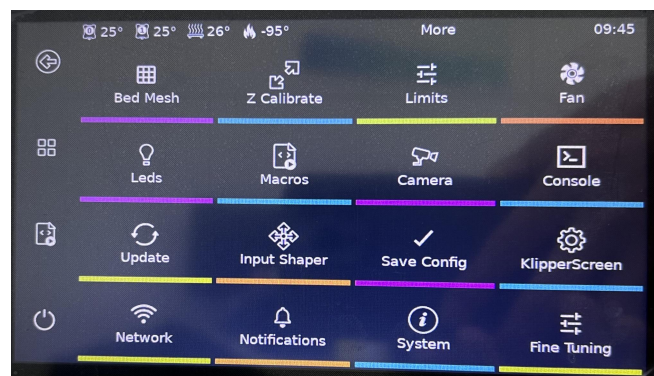
9-1-5. "Print" interface:

You can sort the files as needed at the top of the screen. Click the print button to print normally. If you use a USB storage device, you need to press the refresh button at the top after connecting it to read the information normally.



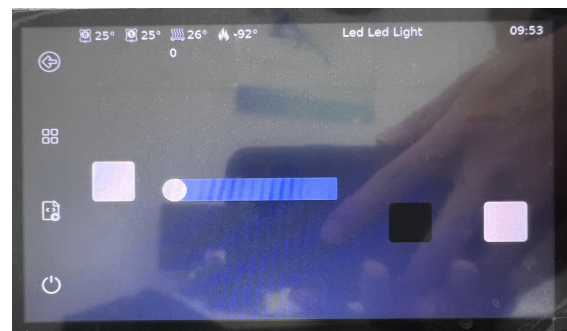
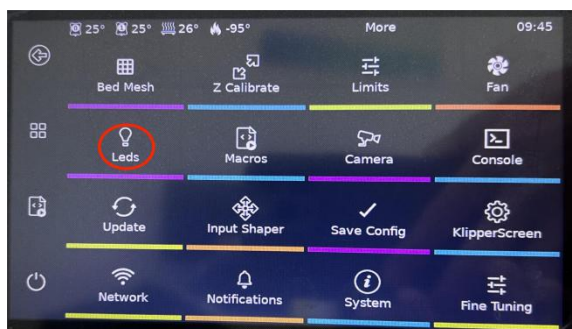
9-1-6. The "More" settings interface:

- Bed Mesh: The hot bed is leveled. It will be automatically leveled before you start printing. It is generally not needed.
- Z Calibrate: Calibrate the Z-axis leveling switch (z_offset). It will be calibrated before leaving the factory. It is generally not need to use.
- Fan: Fan speed adjustment.
- Leds: LED light brightness adjustment.
- Macros: Macro operation. It is strictly prohibited to use.
- Camera: Click to view the camera monitoring interface. Click again to exit.
- Input Shaper: Vibration compensation calibration. Calibration can be performed every once in a while as needed.
- Network: Connect to Wi-Fi for operation.



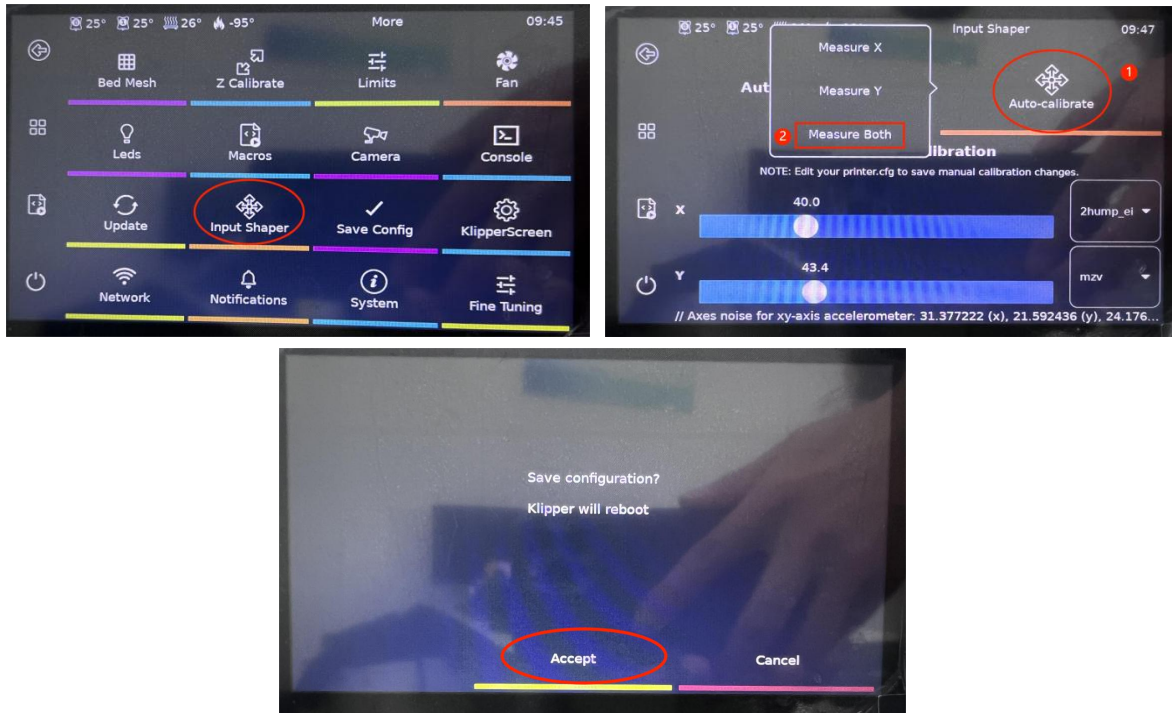
9-1-7. Built-in Light Control:

Slide the screen slider to adjust the brightness. Click the black block to turn off the brightness completely, and click the white block to turn on the brightness completely.



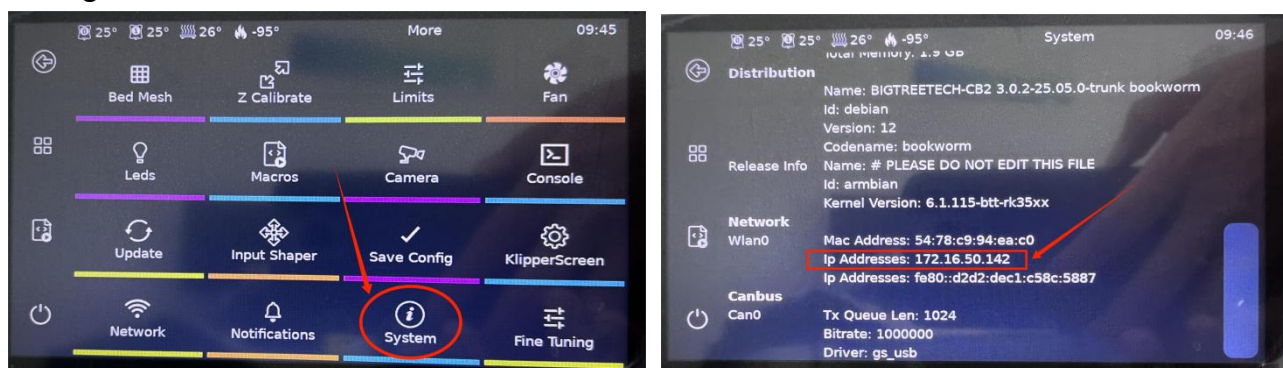
9-1-8. Input shaper calibration:

- ① After entering, wait for the sensor to initialize. After completion, "Auto-calibrate" will automatically light up.
- ② After it lights up, click "Auto-calibrate" and select "Measure Both" to automatically calibrate the vibration compensation value of the machine.
- ③ After the save interface pops up, click "Accept" to save the calibration parameters.

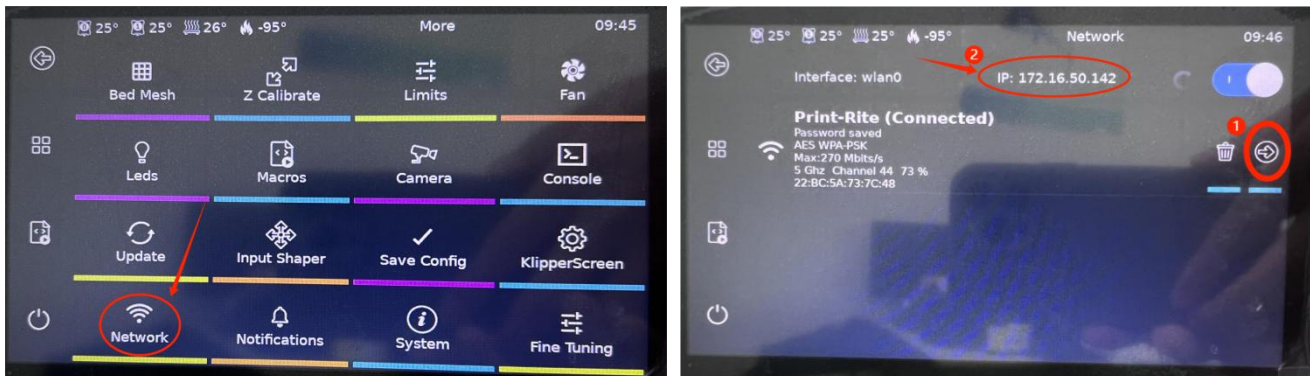


9-2. Remote Connection (two options):

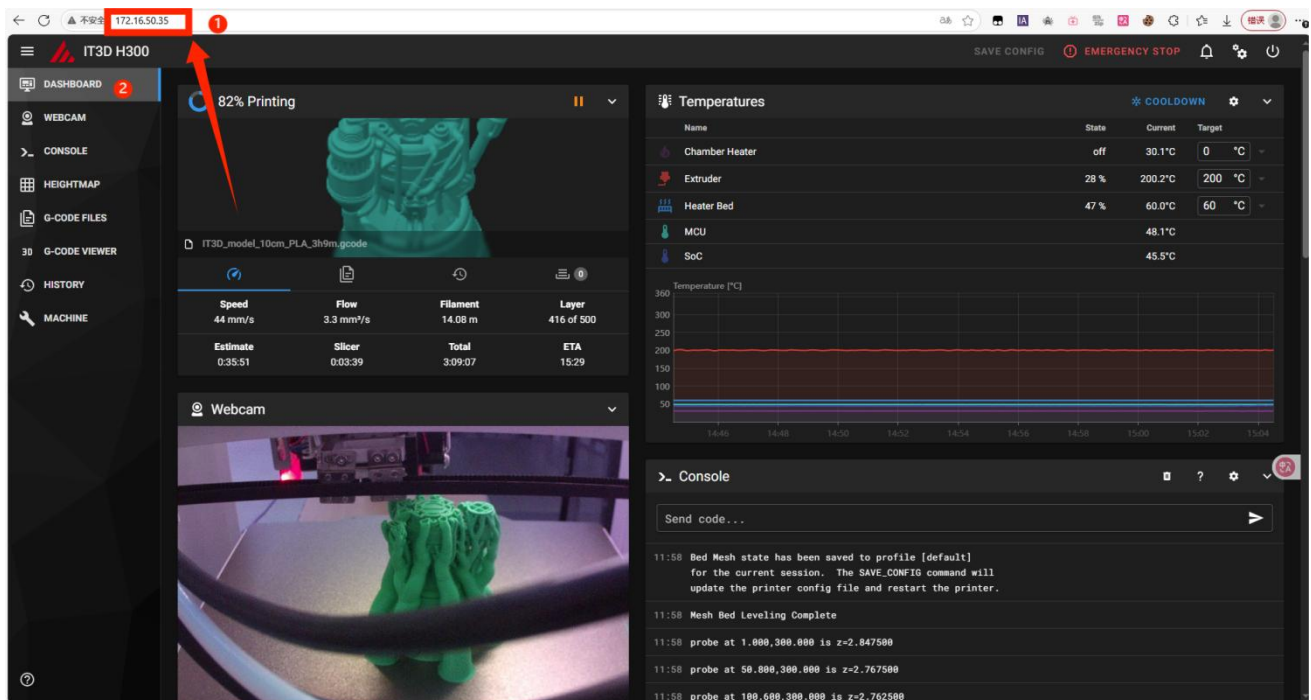
Option 1: Use an Ethernet cable to connect the machine to the router. Check the IP in System in the machine settings interface.



Option 2: Connect the machine to WIFI and check the IP in the Network of the machine setting interface. In the browser or slicing software, enter the IP address of the machine and enter the DASHBOARD column to access the printer control interface.

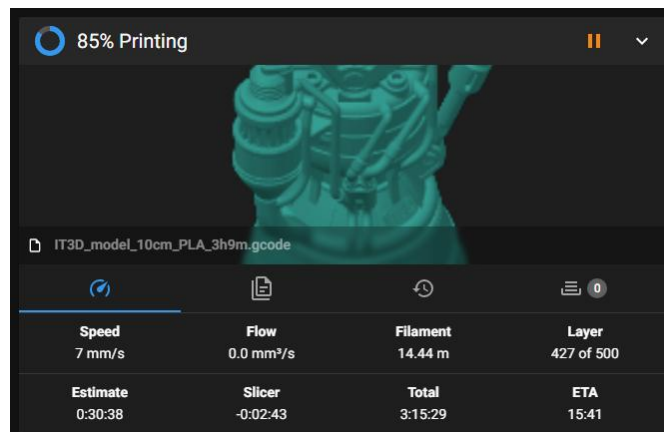


In the browser or slicing software, enter the IP address of the machine and enter the DASHBOARD column to access the printer control interface.

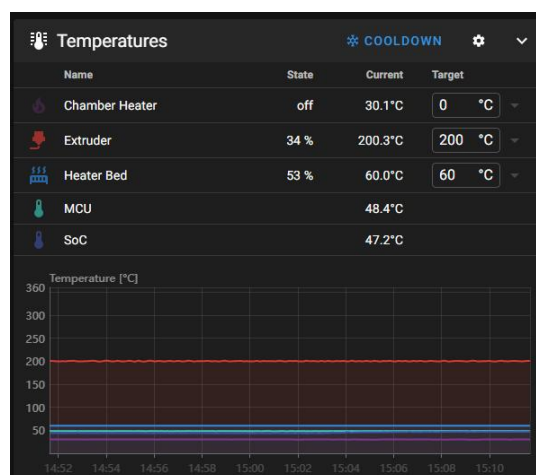


9-2-1. Introduction to the control interface:

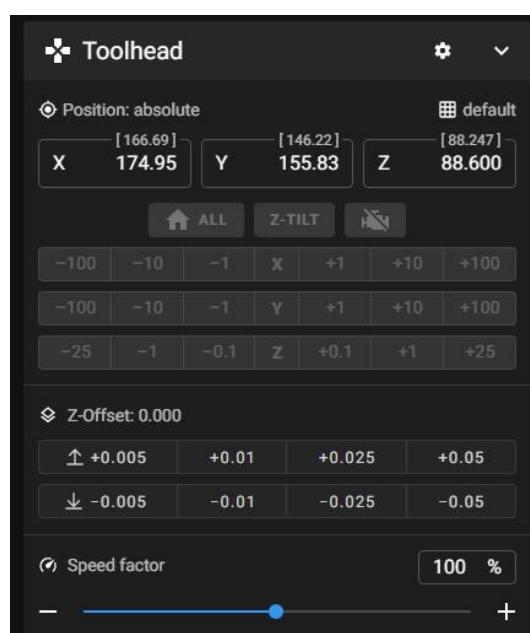
① Printing progress::



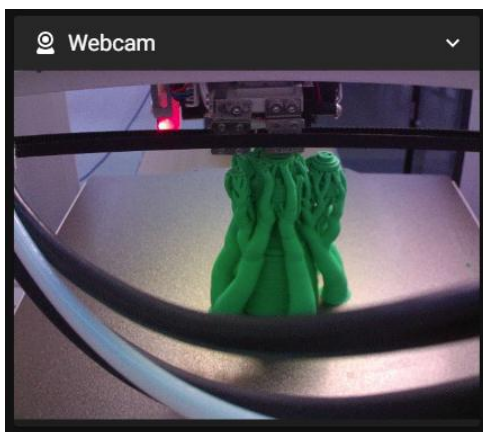
② Temperature control and visualization interface:



③ Reset and control the X,Y,Z axes:



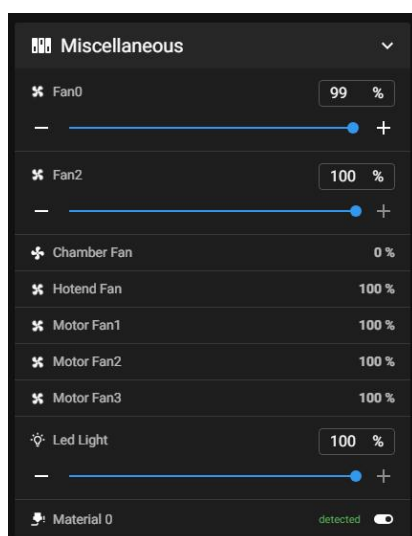
④ Camera interface:



⑤ Extruder Settings



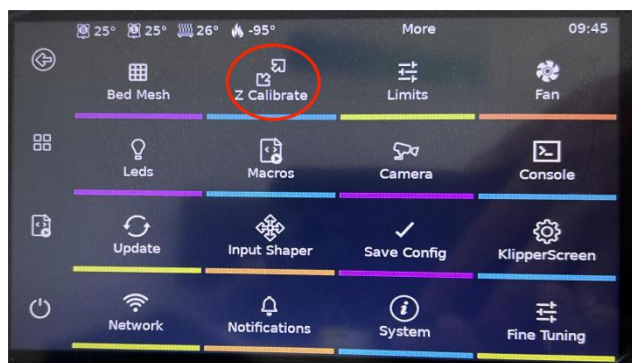
⑥ Fan and LED light control, you can adjust the fan speed or LED light brightness through the blue slider bar or directly enter the percentage:



9-3. The Z Calibrate interface:

① Note: Calibration has been completed before leaving the factory. Calibration is only required when the automatic leveling result is incorrect (the first layer is printed too tight or too loose). You can also achieve a similar effect by adjusting the z offset during printing.

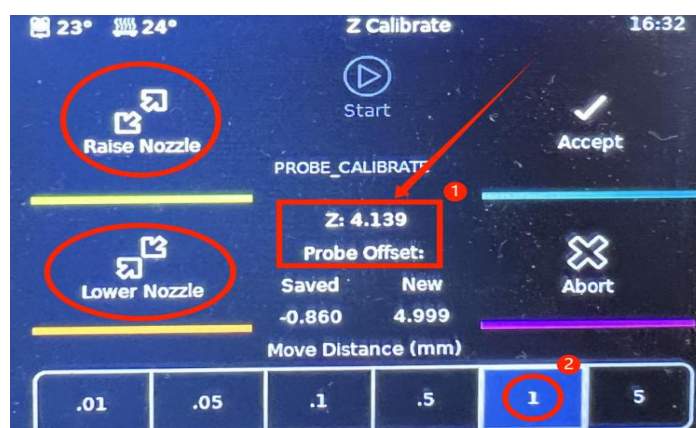
② Enter the Z Calibrate interface through the settings interface:



③ If there is filament residue on the nozzle, please clean the nozzle first (it may be necessary to heat and remove the filament).

④ After the nozzle is cleaned, click the return button in the upper left corner of the screen, select "Z offset calibration", and click "Start".

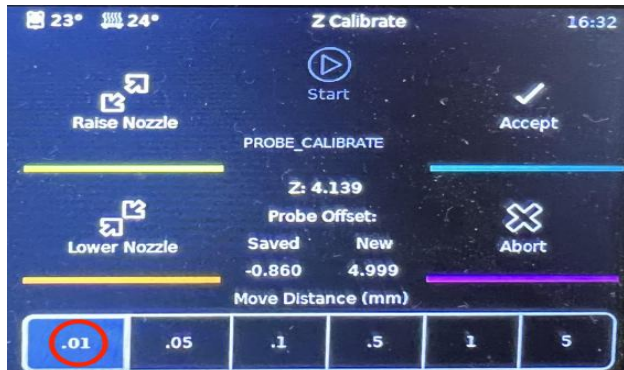
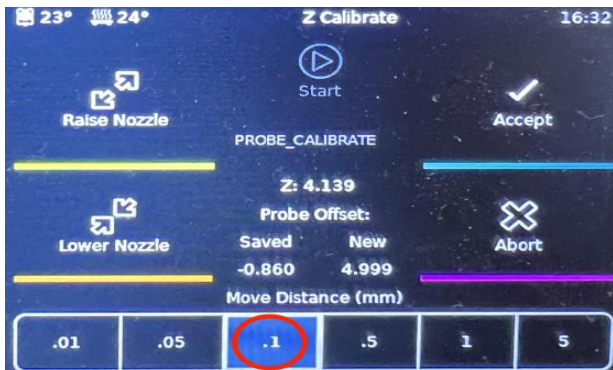
⑤ After starting, the XYZ three-axis zeroing operation will be automatically performed. After the movement stops, take an A4 paper and place it between the nozzle and the hot bed. The purpose is to allow a slight friction between the nozzle and the A4 paper (calibration standard). Too tight or too loose will affect the automatic leveling effect.



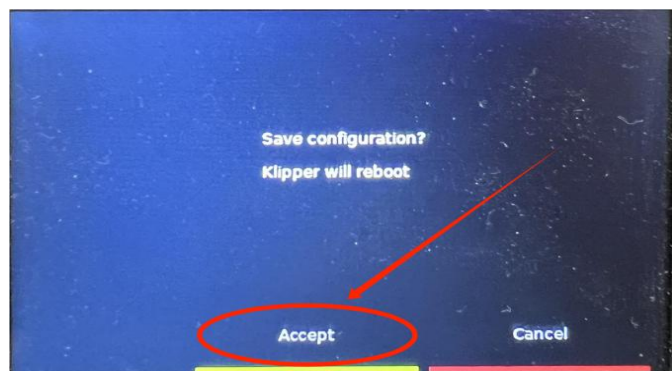
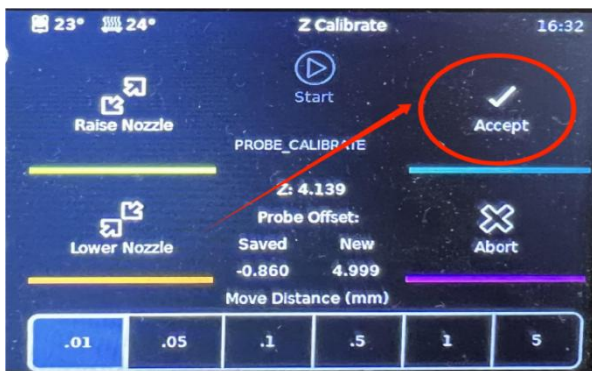
⑥ You can see the default Z position. At this time, pull the A4 paper back and forth, or observe the distance between the extruder and the A4 paper. In general, if the distance between the two is far, click "Lower Nozzle"; otherwise, click "Raise Nozzle". The following explains the situation where the nozzle is far away from the A4 paper.

By default, you can first select the moving distance as "1", then click "Lower Nozzle", lower it once and pull the A4 paper back and forth. Once you find it is too tight, immediately click "Raise Nozzle" once, and then change the moving distance to ".1".

Continue to click "Lower Nozzle" and pull the A4 paper back and forth. Once you find it is too tight, raise the nozzle and select the moving distance as ".01" again. Continue to click "Raise" or "Lower" the nozzle and pull the A4 paper back and forth, and finally make the A4 paper and the nozzle have a little friction.

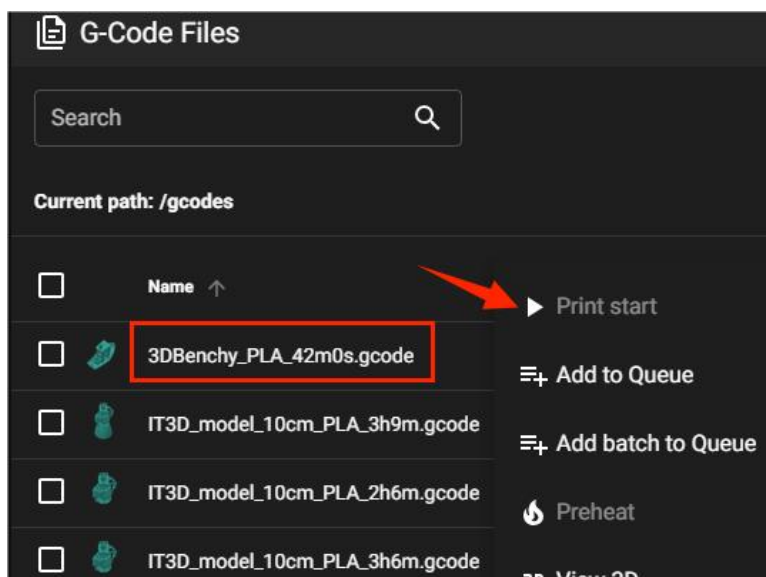
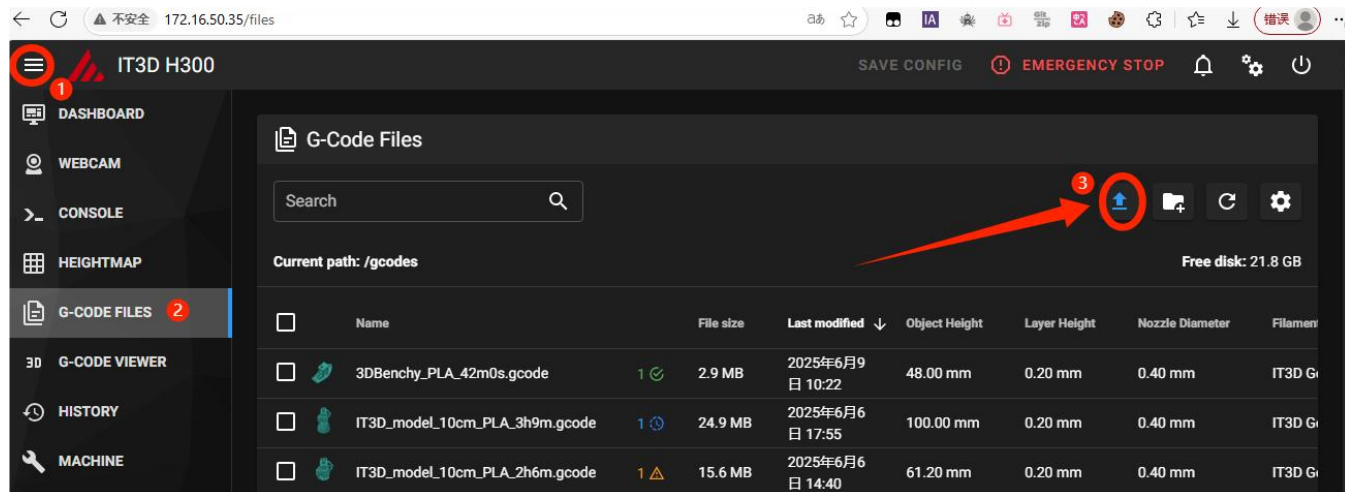


⑦ After confirming that there is a slight friction between the A4 paper and the nozzle, click the "OK" button in the upper right corner. When the "Save Settings" interface pops up, click "Confirm" again. After the firmware restarts normally, you can start printing. The parameters will be saved until you adjust them again next time.



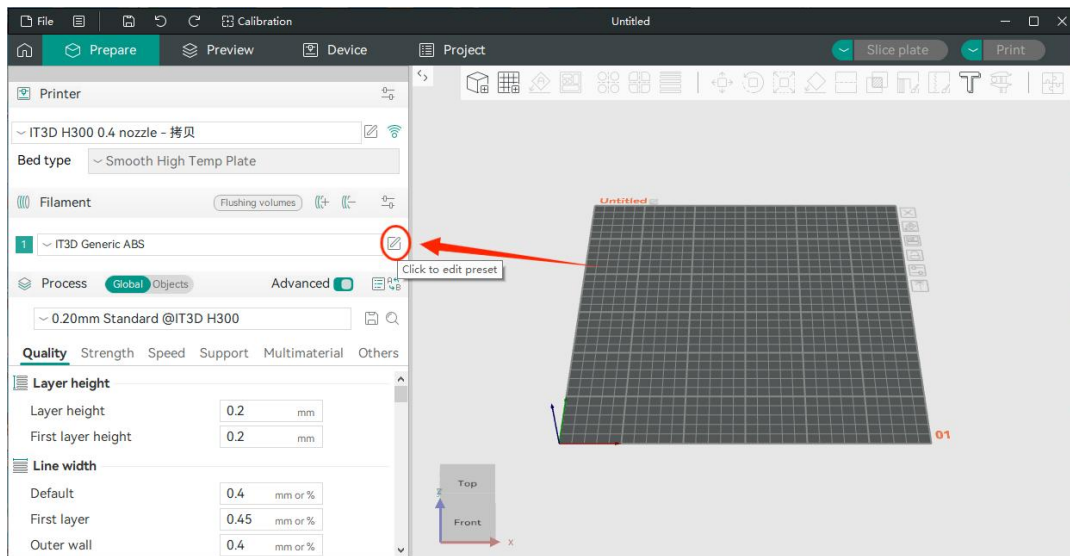
9-4. Upload the printing Gcode file (two options):

- ① You can slice and upload in the slicing software.
- ② Upload the file directly in the browser, select G-CODE FILES in the sidebar, and then click the upload button to select the Gcode file to be printed. After uploading, right-click the icon of the file to be printed, and select "Print start" to start printing.

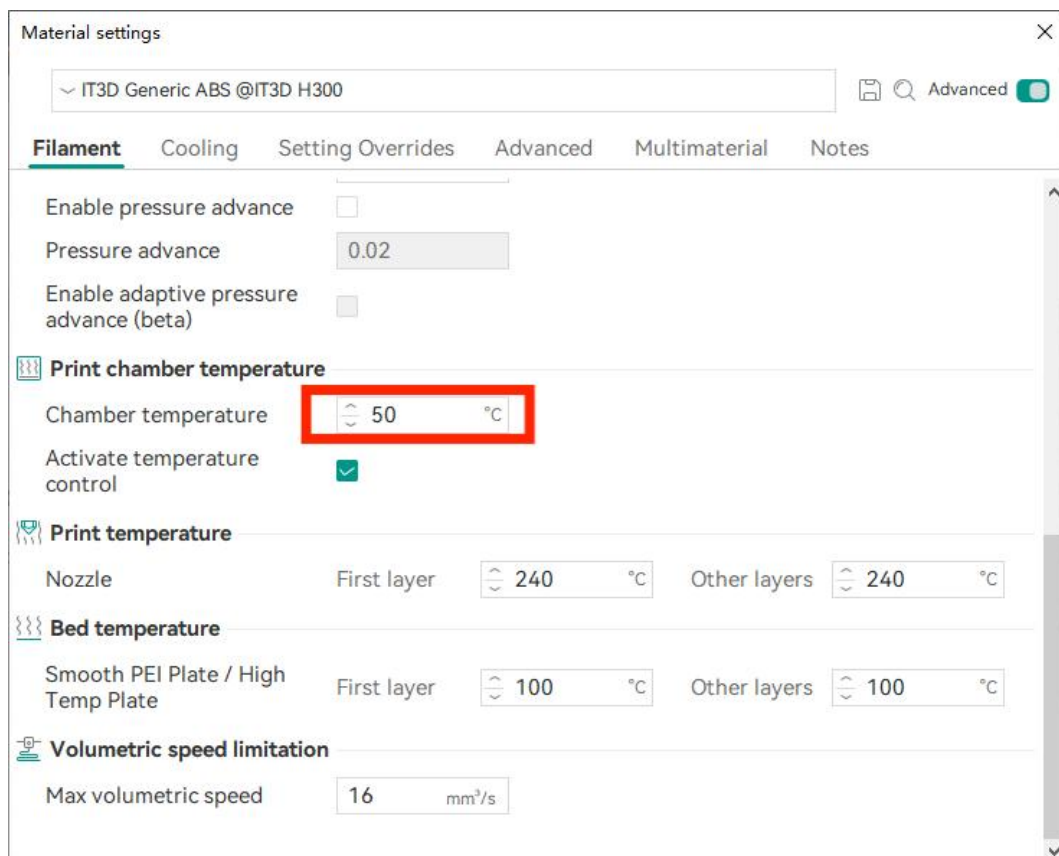


9-5. Printer chamber temperature settings:

① Generally, this setting is only required when printing with ABS consumables. Click the consumable edit button in the consumable column.



② Slide to find "Print chamber temperature" and change it to the required temperature, up to 60°C.



10. Printer Debugging Instructions

This method is applicable to the following models:

IT3D H300, IT3D H300 Dual, IT3D P300 Pellet, IT3D P300 Dual Pellet, IT3D HP300 Dual Mix.

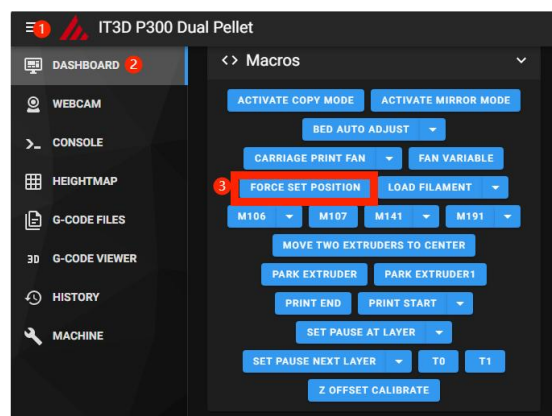
This method should be performed only when the machine needs to be debugged and should not be changed without permission!

10-1. Debug mode:

- ① Force the XYZ axis coordinates (0, 0, 100) to move the XYZ axis. By default, it needs to be reset after powering on before it can be moved. If you need to force movement, you can execute this mode. After debugging, you need to reset all XYZ axes once, or shut down and restart.
- ② Operation method on the machine: Enter the "More" setting interface, select "Macros", and finally execute "force_set_position", then you can return to the Move interface to move each axis.



- ③ Web operation method: Enter the DASHBOARD panel, find the Macros module, and click "FORCE SET POSITION"



Cautions!

1. Do not try to use the machine in any way not described in the instructions to avoid accidental personal injury and property loss;
2. Do not place the machine near flammable and explosive items or high heat sources. Please place the machine in a ventilated, cool and dust-free environment;
3. Do not place the printer on a platform with large vibration or other unstable platforms. The shaking of the machine will affect the printing quality of the printer;
4. It is recommended to use the consumables recommended by the manufacturer to avoid clogging the extruder and causing damage to the machine;
5. Do not use other product power cords instead during installation. Please use the power cord included with the machine. The power plug must be plugged into a three-hole socket with a ground wire;
6. Do not touch the nozzle and hot bed when the printer is working to prevent high temperature burns and personal injury;
7. Do not wear gloves or wraps when operating the machine to prevent movable parts from being squeezed and cut to human parts;
8. After printing, use the residual heat of the nozzle to clean the consumables on the nozzle with tools in time. Do not touch the nozzle directly with your hands when cleaning to prevent burns;
9. Perform product maintenance regularly. When the power is off, clean the printer with a dry cloth to remove dust, stuck printing materials, and foreign objects on the guide rails;
10. Children under the age of 10 should not use the machine without supervision to avoid personal injury.