TRONXY

user's manual

D01

Installation Manual

Attention

Note: Please make sure the voltage is consistent with the local voltage before printing.If not, please adjust it (110V-220V)

Please check if the all the items are included in the packing list before installing the printer . If you have any questions, please contact customer service.

Please use the machine in a ventilated, dry, clean and flat environment

The machine contains high speed moving parts and high temperature parts. Children are not allowed to use the machine without permission

Part of the accessories are consumable, the warranty time is different

Turn off the power in the urgent situation

Do not refit or disassemble the core parts of the machine without permission

Relevant information is stored in SD card, please check

Directory

Service email ：Support@tronxy.com

Tronxy Support FaceBook

1. Machine parameters

Print parameters：

Print size	:	220*220*220mm
Print accuracy	:	0.05-0.3mm
Print principle	:	FDM（fused deposition molding）
Nozzle size	:	0.4mm
Nozzle quantity	:	1
Print speed	:	20-150mm/s（advise 60mm/s）
Position accuracy	:	X/Y -0.0125mm，Z – 0.000625mm
Filaments support	:	PLA、ABS

Temp parameters：

Print environment	:	8-40℃
Nozzle temp	:	275℃（MAX）

Power supply： AC 110/220V 50/60Hz DC 24V/360W

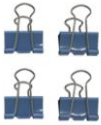
Software：

Slicer	:	Tronxy、Cura、Simplify3D
Input format	:	.stl、.obj
Output format	:	.gcode
Connection	:	SD card、USB cable

Machine parameters：

Machine size	:	380*400*405mm
Package size	:	470*450*310mm
Weight	:	≈15kg

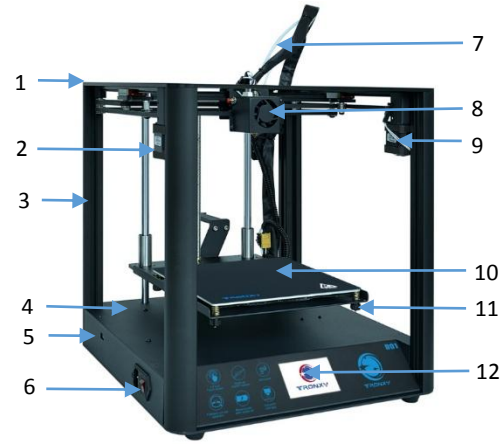
2、package list

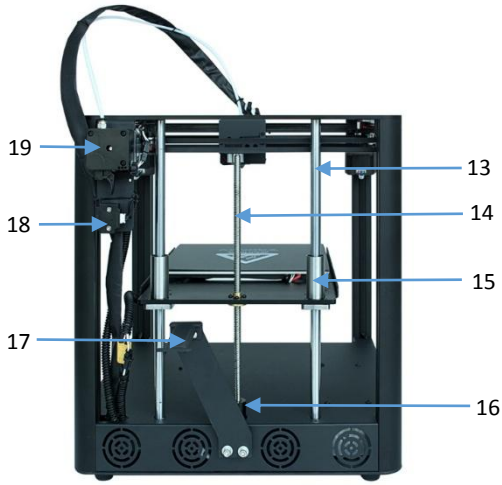
				
Above frame	Base	Aluminum	Polished rod	Screw
				
Flange linear bearing	Hotbed module	Lattice glass	TITAN Extruder kits	Filament holder
				
Filament	Filament tube	Power line	USB cable	Shovel
				
Clips	Aluminum cover	Reader (with SD Card)	Print head	Quick connector
				
Screws	Tools			

Notes：Please check the package list after receiving the printers

If you have any questions, please contact the after-service team

3、Machine Structure

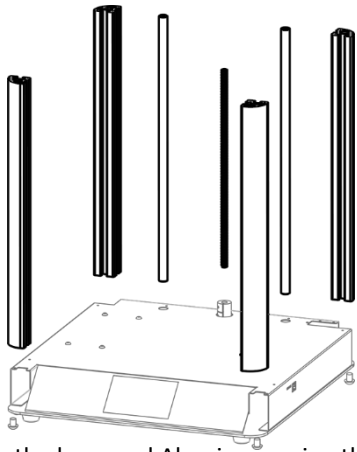




Number	Name	Number	Name	Number	Name
1	Above aluminum	8	Pint head	15	Flange linear bearing
2	X axis motor	9	Y axis motor	16	Coupling
3	3030R aluminum	10	Hotbed	17	Filament holder
4	Base	11	Hand screw nut	18	Filament sensor
5	110V-220V Trasfer switch	12	3.5 inches touch screen	19	TITAN Extruder Module
6	Power switch	13	polished rod		
7	Filament tube	14	Screw		

4、Installation steps

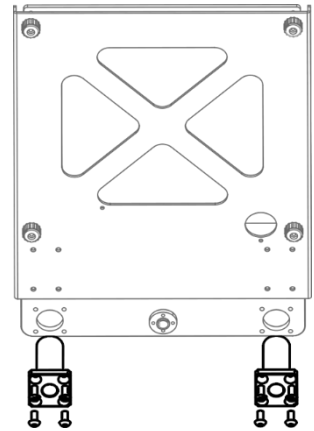
Install base . aluminum 、 polished rod 、 screws



1、Firm the base and Aluminum using the four HM8*10 screws
2、Firm the base and polished rod using two KM4*12 screws
3、Please loose the coupling screws then insert the screws ,finally, close the coupling

1

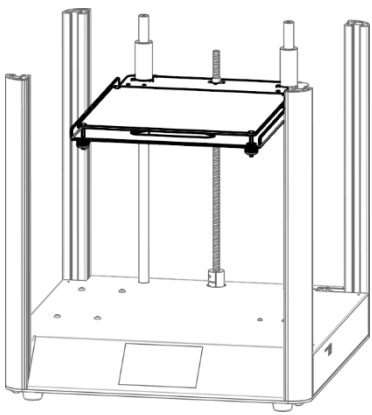
Install flange linear bearing



1、Using four HM4*8 screws to install the Flange bearing into the hotbed module

2

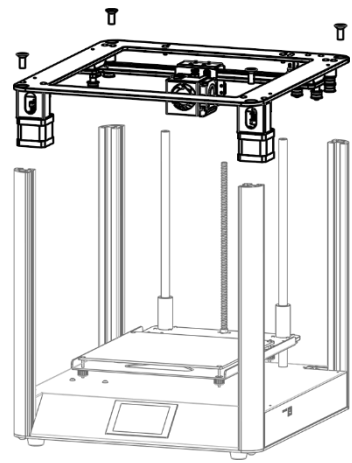
Install hotbed module



1、Slide the flange linear bearing to the polished rod and slide it slowly
2, Manually rotate the lead screw, let the brass nut slide into the lead screw

3

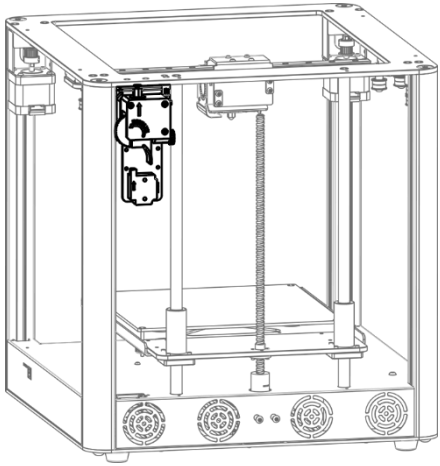
Install above frame



1、Using four KM8*16 screws to firm the above frame and aluminum
2、Using two KM4*12 nscrews to forn the polished rod and Aluminum

4

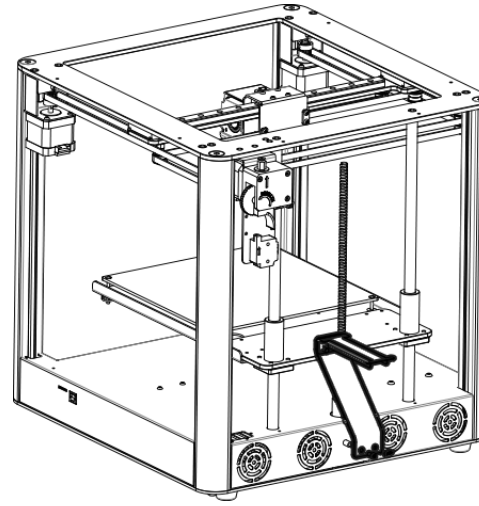
Install TITAN Extruder module



1、Install the TITAN extruder module into the above frame using the two KM3*8 screws

5

Install filament holder



1、Firm the filament holder into the base using the two HM4*8 screws

6

Install the filament pipe

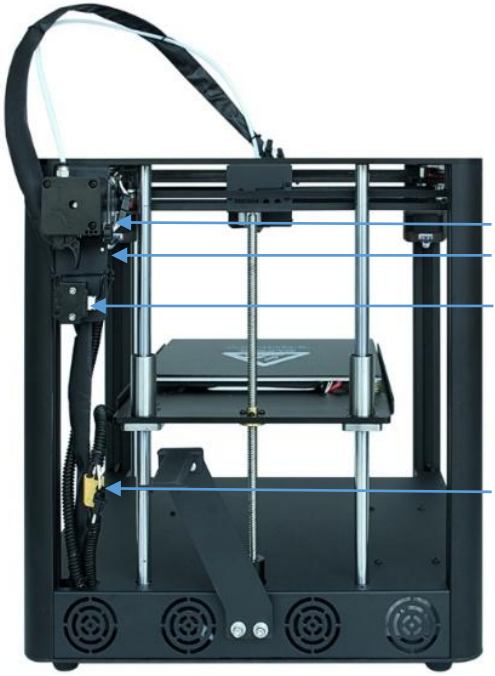
1、Connect the filament guide tube into the filament pipe of the print head and connect the other side of it into the Titan extruder filament pipe

Note : The print head filament guide tube must be inserted all to the end totally . Otherwise it will cause nozzle colgged.

7

Then we finished the installation. If the instruction is not so clear , please watch the install video or contact the after –service team .

5、 Wiring diagram



Z axis limit switch

E motor cable

Filament sensor

Hotbed lines and thermistor wire

16P Transfer cable

Y axis limit switch

Y axis motor wores

X axis motor cable

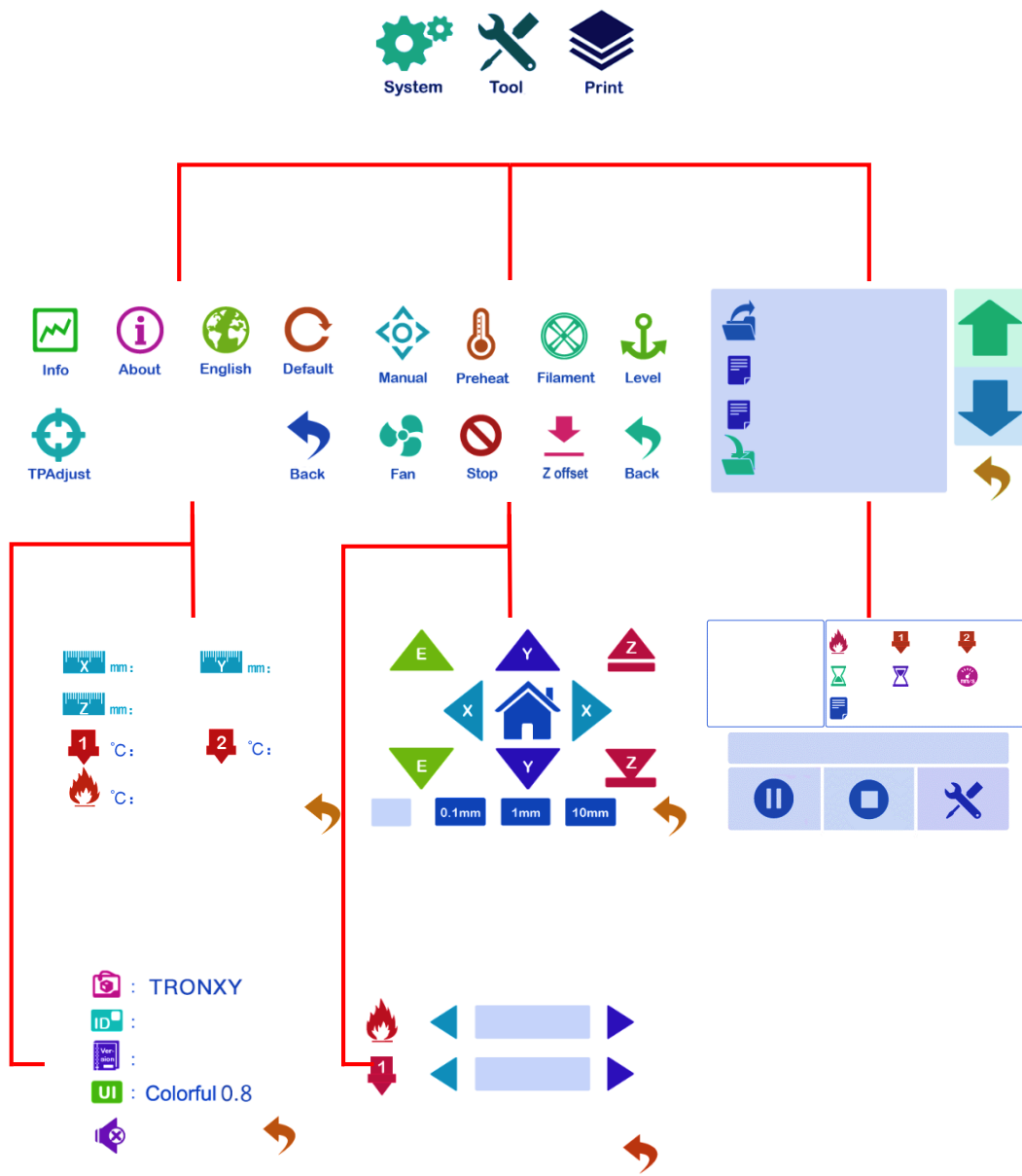
Power 110V-220V transfer switch

Note：The X and Y axis wires are inserted into aluminum and sealed them using the profile cover . Use the cable tie to tie the 16P transfer cable and the guide tube, The rest can be firmed on the TITAN extruder mounting plate with a tie.

6、Structure adjustment

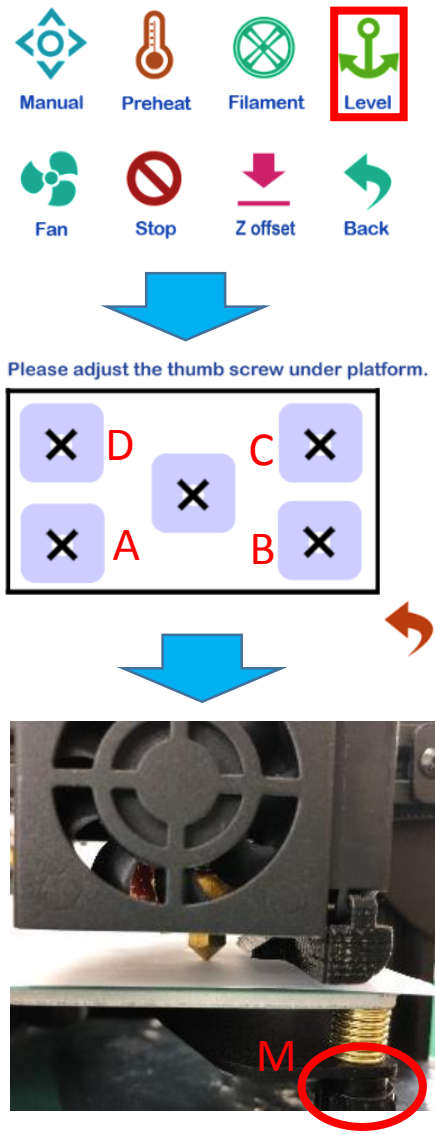
Slide the print heat to check if the movement is smooth 。Check if the belt is loose , if yes , tighten it and locking the screws **.** If the whole frame is loose we can tighten the screws directly **.** Make sure the printer is in a stable situation when beginning printing.

7. Operation & Print



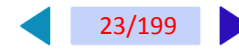
Manual leveling：

Click the four points of ABCD (see the picture), the print head will move to the corresponding position, and then adjust the leveling nut M, to ensure the space between the nozzle and the platform is a piece of A4 paper. After adjusting the four points in turn, it needs to be verified again. If the interval is appropriate, the leveling is completed.

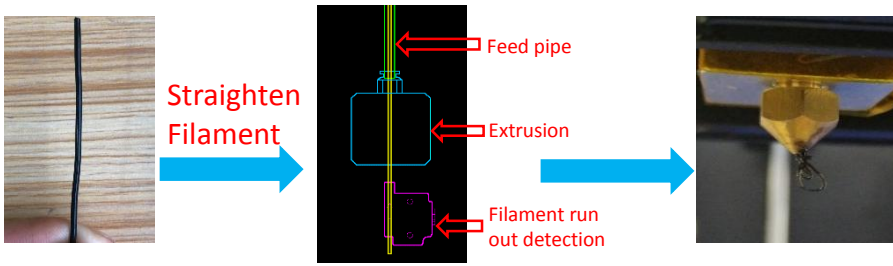


Load and unload filaments：

Click 



After waiting for temperature up to 180 ℃, filament go through from the filament detection, extruder and feed pipe to the nozzle until the filaments are squeezed , as the following picture shows :



Print test：

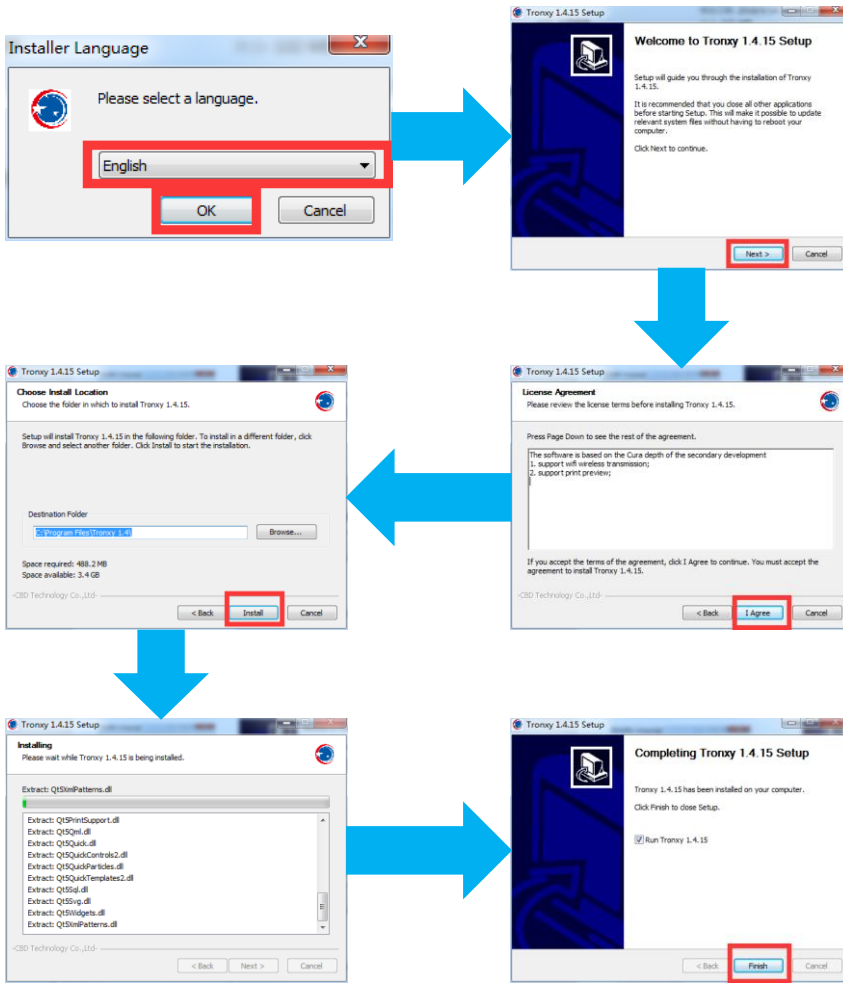
Click 

→"TEST FILE"→  Start printing

1. When you print the first layer , the filament is not stick into the hotbed , it is because the nozzle position is high . Reversing the hand screw nut in counterclockwise direction or set the lower position of the fist layer when slicing.
2. If the nozzle has a small mount of filament flowing , it is because the position of nozzle is low . Reversing the hand screw nut in clockwise direction or set the higher position of the first layer when slicing. （The opposite way of the first suitation）

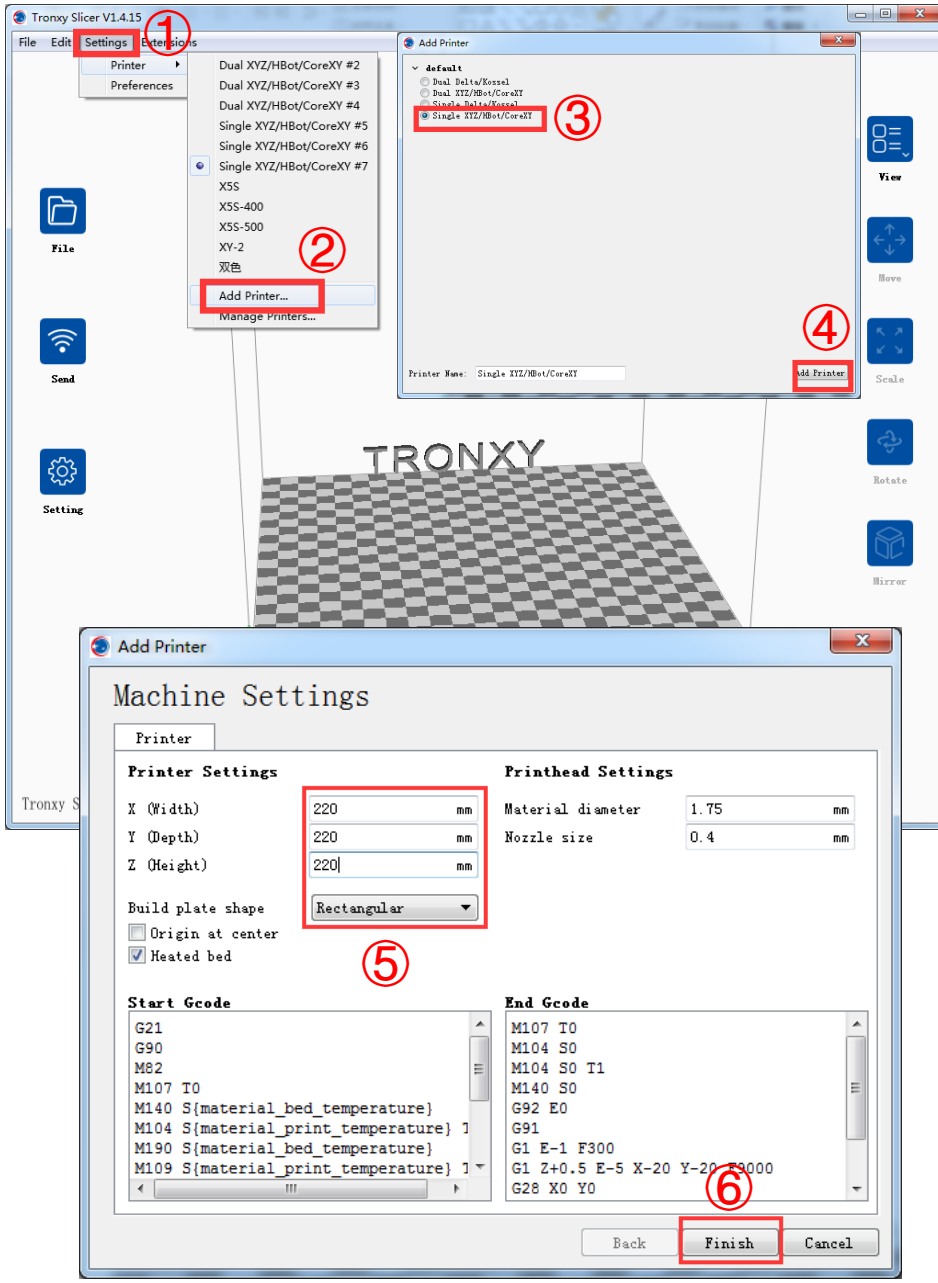
1. Installation

Find out slice software in SD card“TronxyInstall.exe ”click twice，
Then follow these steps to complete the installation.

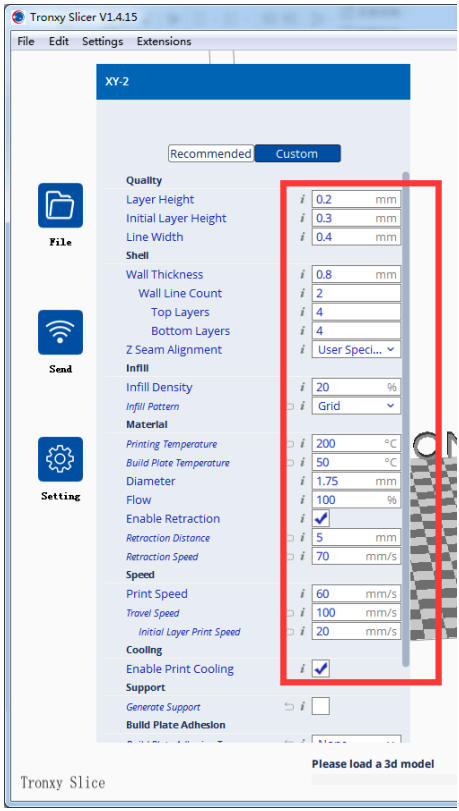


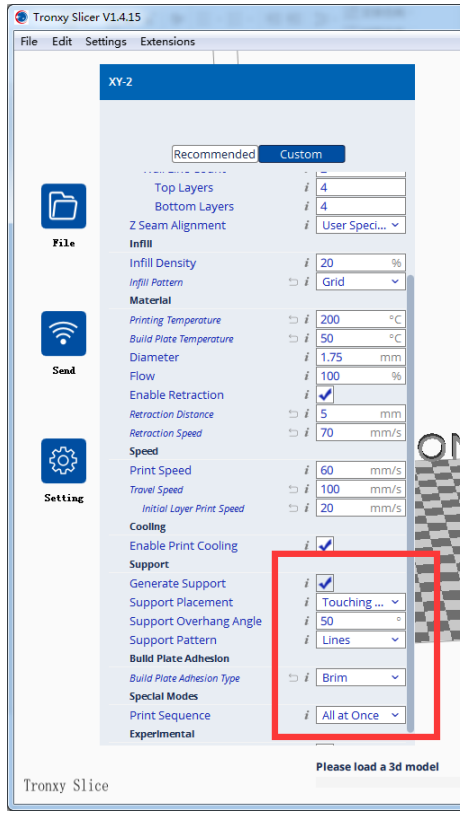
2. How to use slice software

① Type setting: follow the steps below to complete the setting.



② Parameter setting：（The following figure gives the reference value, according to their own needs can be modified）





Some parameters are set for reference：

Layer thickness	：	0.1-0.3mm
Print temp	：	PLA - 200 ℃ ABS - 240 ℃
Heatbed temp	：	PLA - 50℃ ABS - 80 ℃
Print speed	：	20-150mm/s （suggest 60mm/s）
Support	：	Choose according to the model structure
Platform support	：	It is recommended to use the model when the bottom contact is small

8. Failure cause analysis

1. Machine cannot start

1）Check the power line and other wires are connected well or not .
2）Check whether the supply voltage suits the local standard.
3）Check whether the screen or power supply is damaged and replace it in time.
4）Check if the wires are damaged or broken.
5）Check whether the power fuse is burnt out.

2. The contents of the SD card cannot be read

1）Check the card reader if it is good.
2）If the computer can’t read the SD card , please format it and try again.
3）Check whether the SD card is inserted correctly.
4）The filename has an illegal character, please rename it.
5）Please replace the damaged SD card and try again.

3. if the print head does not squeeze enough filament or can’t squeeze any filament.

1）Check whether the print head temperature reach 200 ℃ above (PLA), led to filament cannot squeeze, waiting for the temperature rises to the set target.
2）Check whether the filaments are knotted, which leads to unsmooth feeding.
3）Check whether the filaments or pipes are not inserted in place, resulting in the failure of feeding.
4）Check whether the temperature of the print head is too high, which leads to excessive softness of filaments and can't be extruded normally.
5）Check whether the diameter of filaments is consistent with the diameter set in the slicing software, so that the amount of extrusion filaments is not enough.
6）Check whether the consumables are blocked by dirt or nozzle blocked during extrusion.
7）Replace with better quality filaments.

4. If the first layer upwarp

1）Check if the hot bed has been leveled well.
2）Check the surface of the hot bed for dirt.
3）Check whether the distance between the nozzle and the platform is too high, resulting in insufficient adhesive force.
4）Check the hot bed for adequate temperature.
5）Check the first layer of the slicing software to see if it is printing too fast.

5. The model is not easy to take off

1）Try to heat the hot bed to 50-70 ℃ take off it by the shovel .
2) It is recommended to buy TRONXY magnetic stickers.

6. Can‘t heat it up

1）Check the heating rod and thermistor for poor contact or damage.
2) Check that the slice software has set the target temperature.
3) Check whether the thermistor wire falls off.

7. Motor out of step

1） Check the tightness of the belt, whether the pulley is not locked.
2） Check the current voltage.
3） Check X/Y/Z axis motion is smooth.
4） Print speed too fast.
5） Environment temp too high.
6） Need flash the firmware.

8. Abnormal motor noise or vibration

1） Check whether the motor line is in bad contact, loose or wrong connection.
2） Motor temperature is too high.
3） Check whether the motor is damaged.
4） Flash the firmware.
5） The printing load is too heavy.

9. Model dislocation and fault

1）Nozzle feeding not smoothly, please clean the nozzle or replace the nozzle
2）Check that if the printing speed is too fast
3）The quality of filaments is poor, please replace with new filaments

10. Abnormal sound and vibration of filaments feeding motor

1）Please check whether the nozzle is blocked
2）The nozzle feeding is not smooth, please clean the nozzle
3）Whether the software Settings are incorrect
4）Check whether the motor does not work
5）Check the motor working or not or feeding gear is not working

11. Screen related questions

1）No screen/blue screen, please restart or check whether the cable is plugged in
2）Touch screen malfunction, check whether the screws are installed too tight
3）Garbled/splash screen, static, ground connection or restart

12. Motherboard related issues

1）The wiring is not responding. Please check the wiring installation
2）Automatic shutdown restart, may be abnormal firmware or module of “resume print after power failure” damaged
3）Lack of heat dissipation, please lower the ambient temperature
4）No response due to motherboard damage

13. Unable to connect to printer

1）Check that the driver is not installed or properly installed
2）The serial port was not selected correctly
3）The software parameters do not match

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