Model name：XY-3

Instructions

SHENZHEN TRONXY TECHNOLOGE CO.,LTD

Notice

Before using this machine, please carefully read this notice and the following notes:

1. Children should stay away from the machine when using the machine. Children are forbidden to touch the machine in use.
2. Please put the machine on a stable surface before using the machine.
3. Please keep this notice for future reference.
4. The open hole of the housing is strictly prohibited to be covered for ventilation and heat dissipation of the machine to avoid overheating.
5. Please pay attention to the notice and warning posted on the machine to avoid danger or injury.
6. It is strictly forbidden to use the machine in the environment of inflammable and explosive substances.
7. It is strictly prohibited to pour any liquid or dust into the machine, or it will damage the machine or even cause a dangerous accident.
8. Please do not disassemble and repair the machine without permission. In addition to normal quick assembly steps and common problems, please ask a professional to deal with them.
9. Do not use the machine under high temperature (above 85 ° C) environment, otherwise may damage to the machine.
10. It is recommended not to run the printer when unattended.
11. The machine is not covered by warranty as follows:

A. Product damage caused by abnormal external force (such as falling, extrusion, knock, collision);

B. product damage caused by violation of product operation manual;

C. Product damage caused by use of materials that are not compatible with or have not been recognized by relevant national standards;

D. beyond use under the conditions of use (such as the mainboard working environment for 5 to 40 ℃, customers in the above 40 ℃ or below 5 ℃ when used under the condition of damage).

E. damage caused by privately modifying firmware and appearance structure.

F. Damage caused by improper storage (such as dampness, mildew, etc.).

G. Damage caused by irresistible external factors.

H. Use parts normally, such as printing baseplate, nozzle and other accessories.

I. pure artificial condition damage.

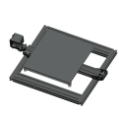
J. If the warranty period is exceeded or the valid documents for the warranty period are not available.

Catalogue

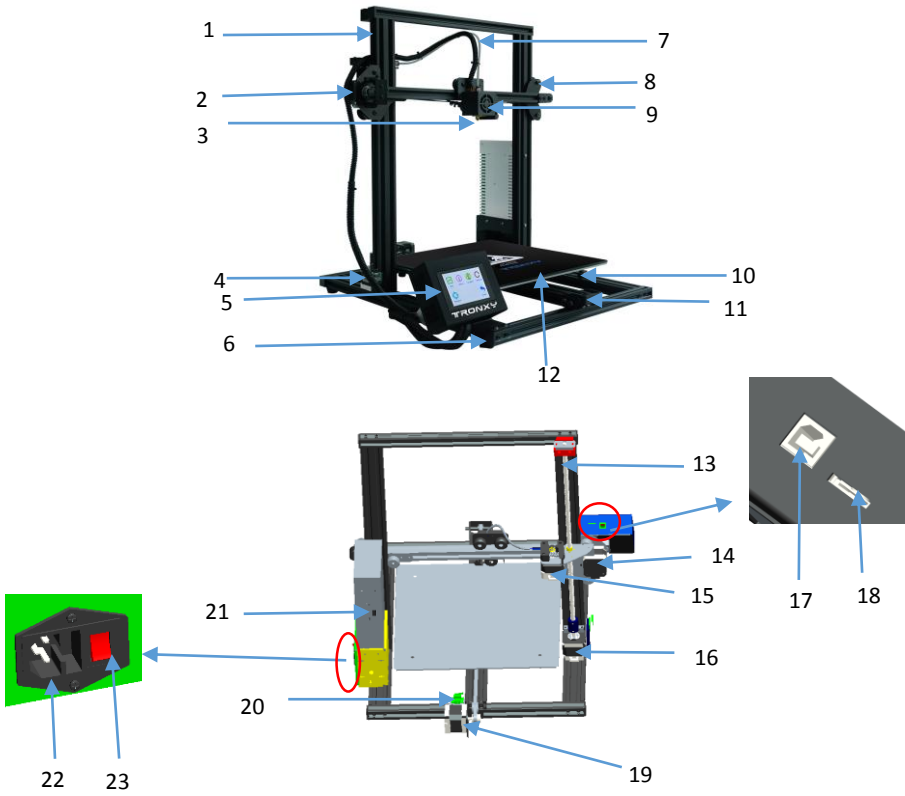
1、Machine parameter

Print size	310*310*330mm	Power inpout	110V/220V AC，50/60Hz
Positioning accuracy	X/Y0.0125mm，Z0.02mm	Power output	DC 12V 30A
Print speed	20-100mm/s(advs 60mm/s)	Connection	USB interface.SD card
Nozzel size	0.4mm optional	Hotbed temperature	Support
print color	single color	Nozzle temperature	≤260°C
Materials support	PLA.ABS.HIPS.WOOD.PC.PVC	environmental temperature	8-40°C
print thickness	0.1mm-0.4mm optional	Environmental humidity	20-80%
Machine materials	Aluminium and sheet metal	Slicing software	TRONXY exclusive slice software
Machine weight	9.5kg	File format	STL.OBJ.DAE.AMF.G-Code
Packing weight	≈ 11kg	Operate software	Repetier-Host.Cura
Packing size	630*552*195mm	Operate system	WinXP/Win7/MacOS
Machine size	588*544*529mm	Power failure resume print	Support
Display	3.5 inches full color touch screen	Certificates	CE FCC
		filament runout detector	optional

2、Packing list

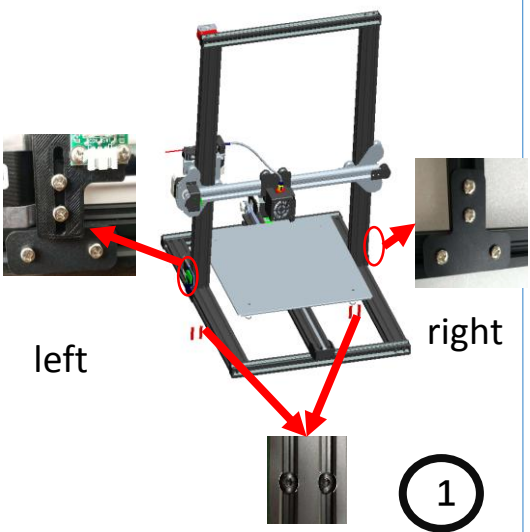
							
		Upper rack	Base	Power supply	Power lines	Reader（incl SD card）	printer head
							
XY-3		Control box	ilament rack	HM5*25 4PCS	PM4*25 2PCS	quick coupling M6	Filament
							
USB cable	Hotbed sticker	Tie	screwdriver	Scrabble knife	Hexagonal wrench	Specification	reinforced p late

3、Introduction to machine structure



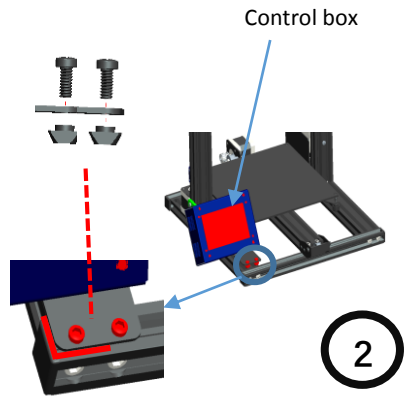
Serial number	Name	Serial number	Name	Serial number	Name	Serial number	Name
1	Upper rack	8	right slider assembly	15	feeding motor	22	power interface
2	Left slider assembly	9	print head parts	16	Z moto	23	voltage change-over
3	extruder	10	leveling nuts	17	USB interface	24	
4	Z-Endstop	11	Y axis wheel	18	SD card interface	25	
5	control box	12	hotbed	19	Y axis motor	26	
6	bottom frame	13	lead screw	20	Z-Endstop	27	
7	teflon tube	14	X axis moto	21	Power switch	28	

4、Installation instructions



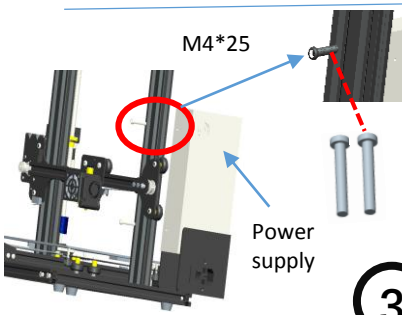
1

Put the four holes on the base, and lock the four holes on the base with four PM5*25 screws.
Take left and right reinforced plate, Install on the pr inter as shown



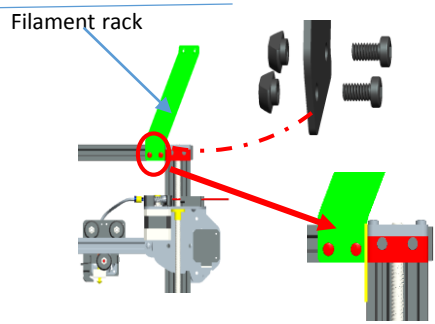
2

Tighten the boat nuts with a screwdriver, Fix the control box on the aluminum of the base.
Pay attention: The control box must be fixed on the beam, otherwise its easy to hit the print head.



3

Run 2PCS M4*25 screws through the front z-axis profile and lock the power on the back of the profile.

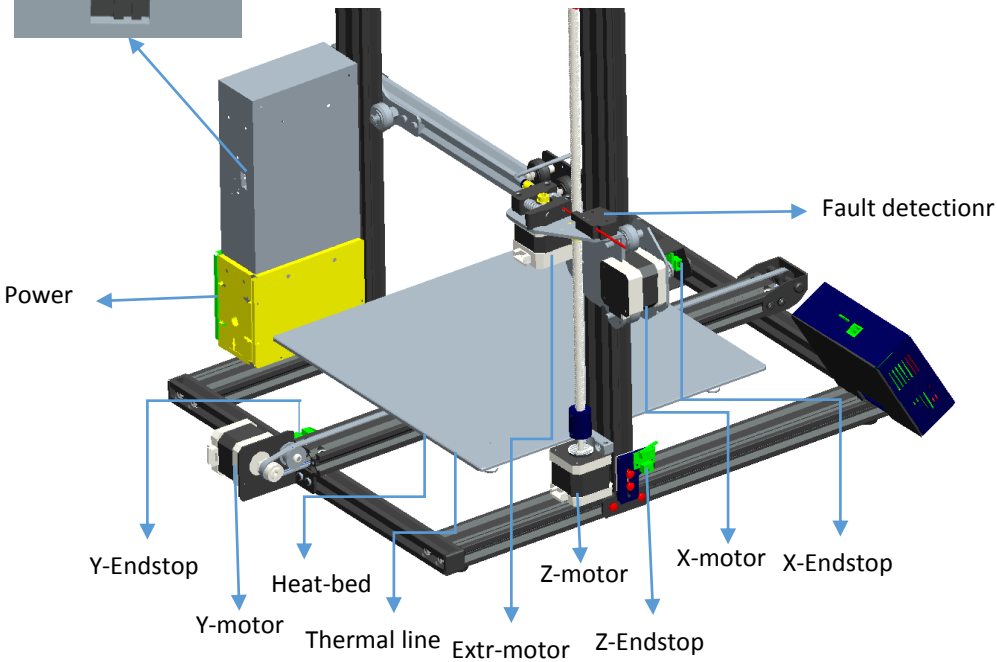


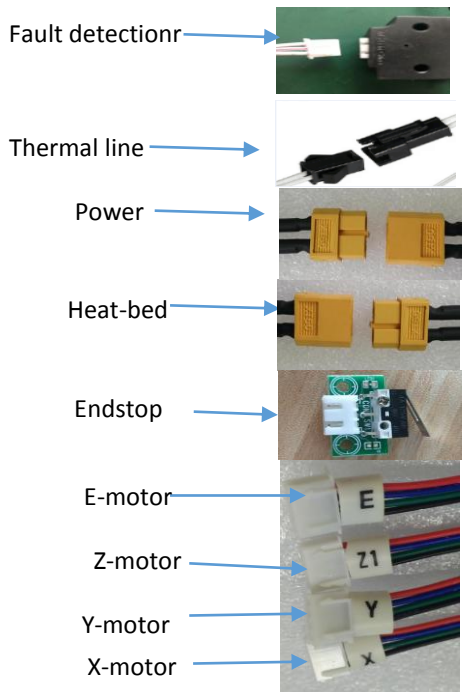
Take out the material rack, lock the boat nut with the screw knife, and fix the material rack on the upper beam.

4

Connection

AC:110V-220V



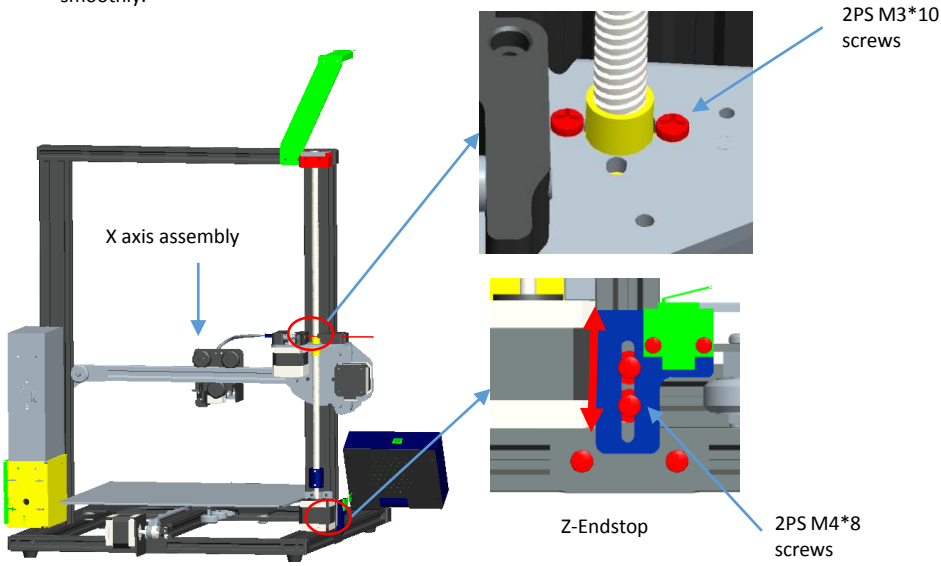


6、Production debugging

Due to transportation reasons, the Z axis wire rod may not move smoothly or get stuck, the belt is loose, and so on. The following steps can be used to fine-tune the product.

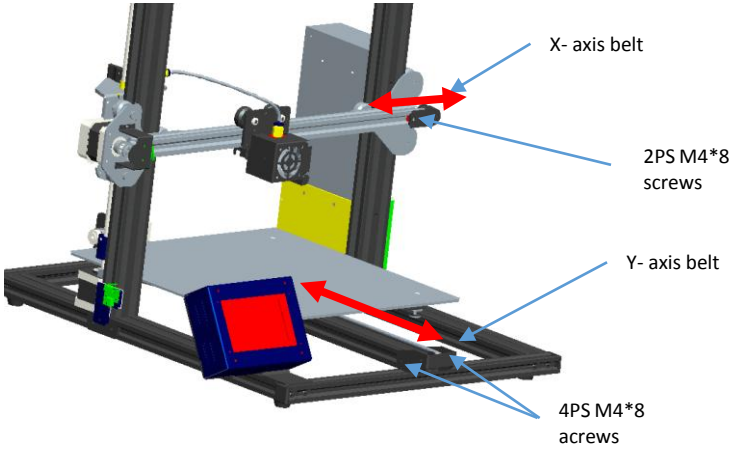
1. Z-axis screw debugging:

When the machine is not moving smoothly in the direction of the Z axis or is stuck, please loosen 2 M3 fixing screws of the motor components of the right and left Z axis or 4 M3*8 fixing screws of the screw nut. Manually rotate the X-axis assembly to the highest point, then lock the 4 M3*8 screws in the screw nut. Also, manually turn the X axis component to the minimum, and then lock the power unit 2 M3*8 screws (4 M3*8 screws of proper screw rod screws can be unscrewed if there is any problem. The power will not be switched until the X-axis component is returned smoothly.



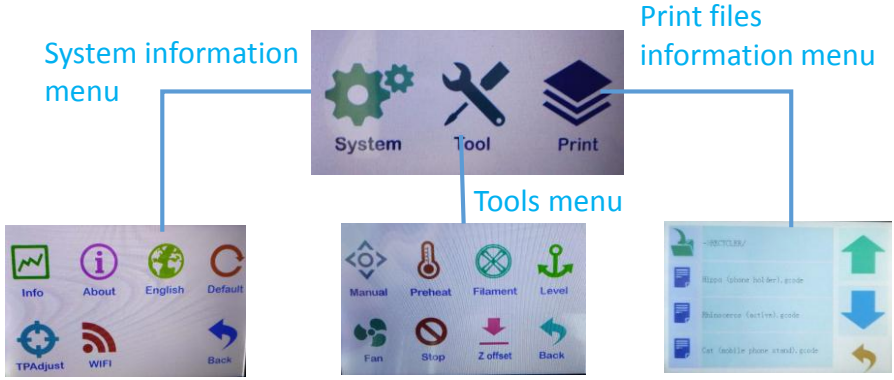
2. Belt adjustment:

If the belt is too loose or too tight, loosen the M4*8 screw slightly, and then drag it back or move it forward. The elastic degree of the belt can be adjusted, and the screw can be locked after being adjusted



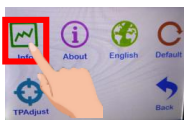
7、Print operation

1. Operation interface introduction：

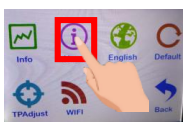


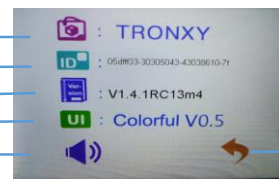
(1)、System menu

1. State



2.Machine details





3. Language selection

English/Chinese switch

4. Factory Settings

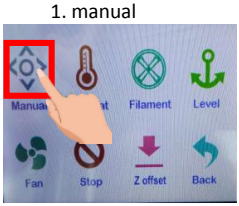
factory data reset

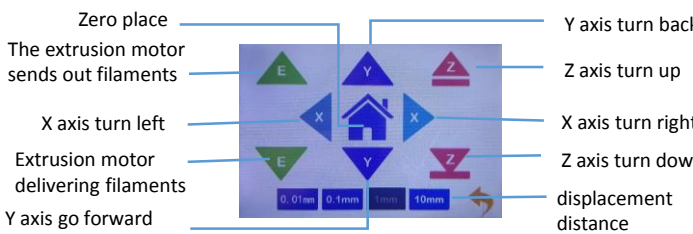
5. Screen correction

screen test

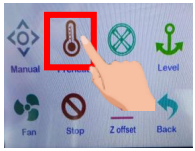
(2)、Tools menu

1. manual





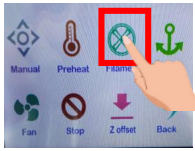
2. preheating



Hot bed current temperature/target temperature

Nozzle current temperature/target temperature

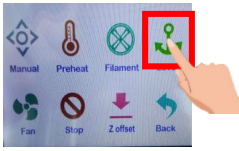
3.Unload filaments

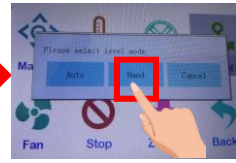


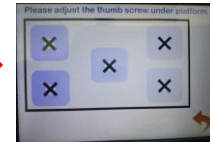
Extrusion motor delivering filaments

Extrusion motor sent out filaments

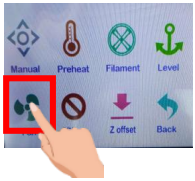
4. Automatic leveling

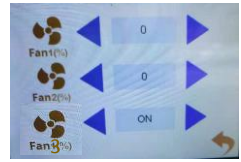






5.Fan

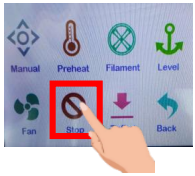




Fan 1 switch

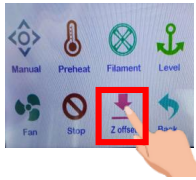
Fan 2 switch

6. Emergency stop



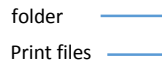
Emergency stop task

6. Z axis set zero (this function only automatically leveling before it takes effect)



Set Z to 0

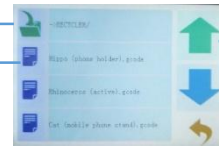
(3)、print



folder

Print files

1.Print file information menu

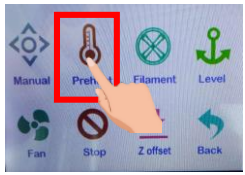


upturn

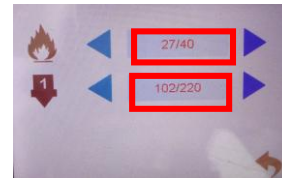
Turn down

return

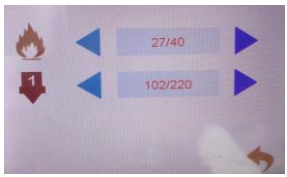
3.Unload filaments：



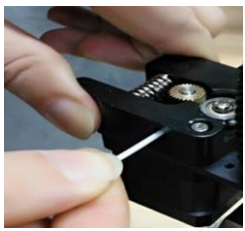
Click preheating

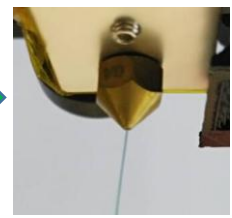


Click on the red area to start heating



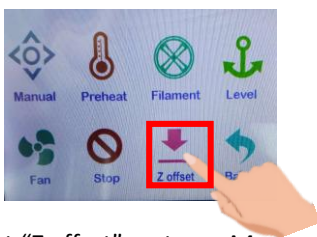
The temperature reaches the target temperature





Straightening the front end of the filaments, press the extruder clip with your hand, insert the filaments into the hole of the extruder until the nozzle is in position. When the filaments flow out of the nozzle, the filaments have been loaded

4.Unload filaments：

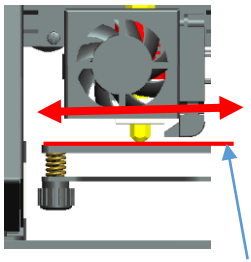


select “Z offset”. put one A4 paper between the nozzle and platform, pulling the paper backwards and forwards, if it happens to have a little bit of resistance, that is well spaced.Then click "Set Z to 0".

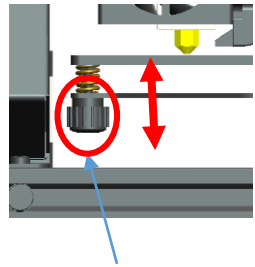
(Observe distance)

4. Verify platform flatness and print test ：

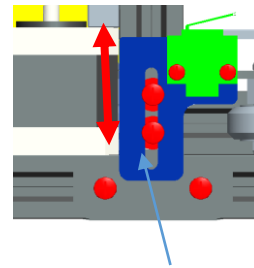
Step 1: move the printing head to the nearest boundary point of the platform by hand, as shown in FIG. (1). Then place an A4 paper between the nozzle and the platform (2).Then move the printing head to another boundary point of the platform, and repeat the above operation to adjust the leveling, until the four points around the platform and the middle of the platform have been leveling completed (if leveling nut adjustment fails to meet leveling, it can be adjusted via upper and lower adjustment of z-axis adjusting block, and then fine-tuning with leveling nut until the platform leveling).



（1） A4paper

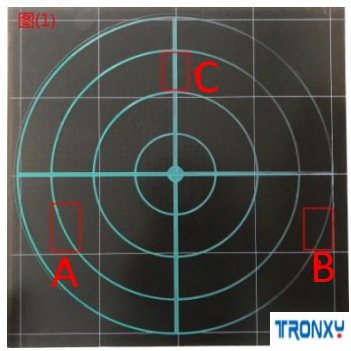


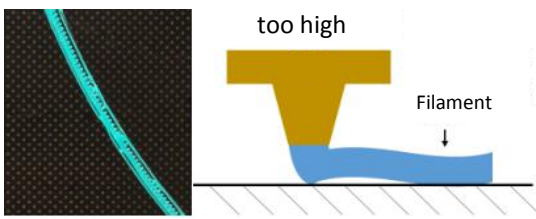
（2） leveling nuts



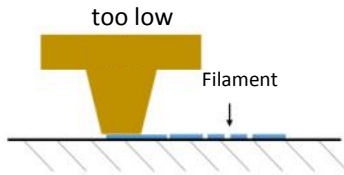
（3） Z-Endstop

Attention!!!If the platform is uneven, the first layer of printing may be as follows :(1) too high (partial/integral) (2) too low (partial/integral) (3) moderate ; As shown in the following figure

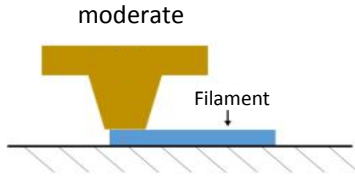




A phenomenon: the gap between extruded consumables is too large to even touch the platform

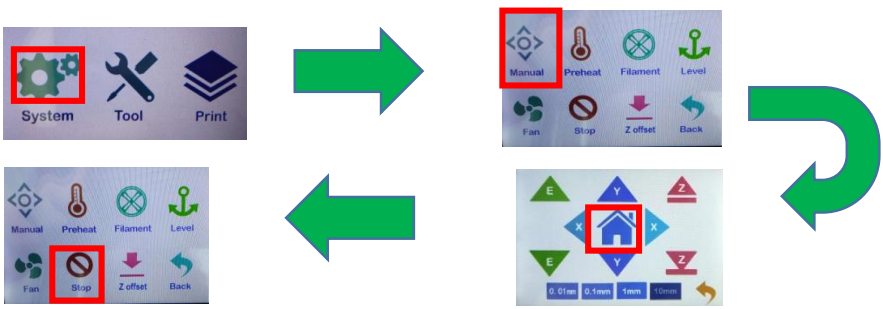


B phenomenon: inadequate extrusion consumables, or even scraping the platform

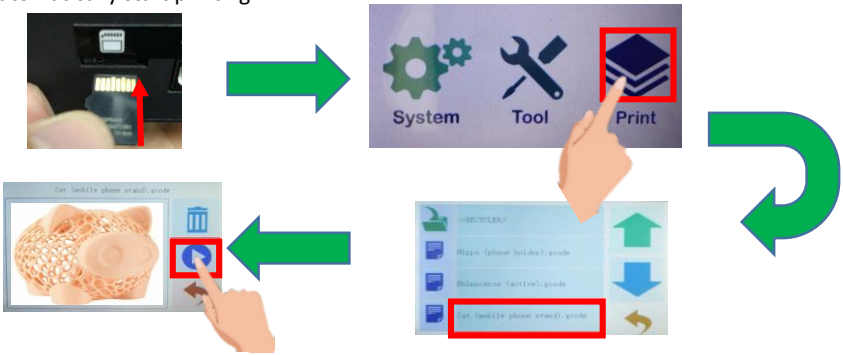


C phenomenon: extrusion consumables uniform, just to the platform

Step 2: click "tool"→ "manual" →"return to zero", then the three axis will automatically return to the origin, and then click" emergency stop "to close the motor.



Finally, plug in the SD card and click "print". (attention direction) The model has been sliced and attached to the card. Choose one of them to print, such as "Cat (mobile phone stand)", After waiting for the temperature to reach the target temperature, it will automatically start printing.



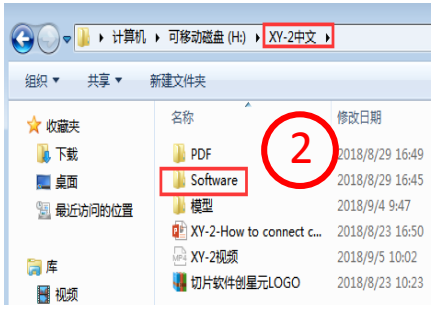
How to connect computer printing

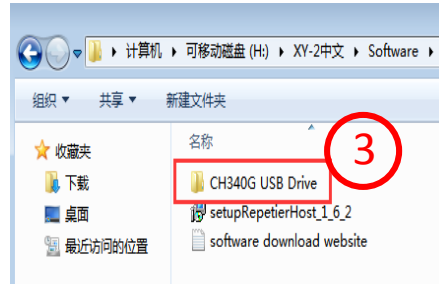
1、 Connection

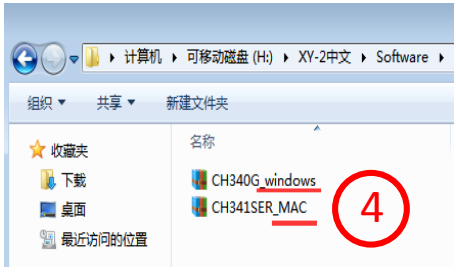
1、Connect power2、Connect the USB cable to the computer3、Connect the USB cable to the motherboard

2、Driver setup

1、The SD card has the installation program of USB driver 2, click "Software" 3, and click "CH340G USB Drive" 4. According to the computer system, select decompress 5 and get the installation driver after decompress







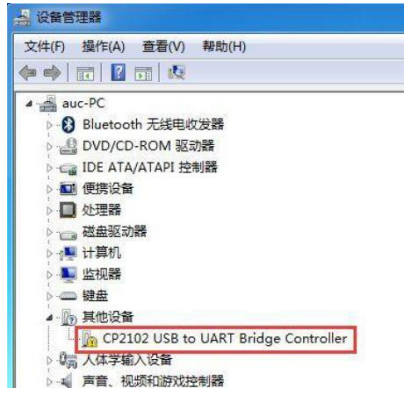
There are 2 modes of 3D printing: offline printing and online printing

Print mode

- Offline printing → Insert the card into the machine for printing → Select model print
- Online printing → Computer connect computer → After the drive is installed, the printer is controlled by computer

The on-line printing signal is transmitted by the computer through the data line, and the unstable factors such as signal interference are very easy to exist. Therefore, it is recommended that customers use offline printing as much as possible

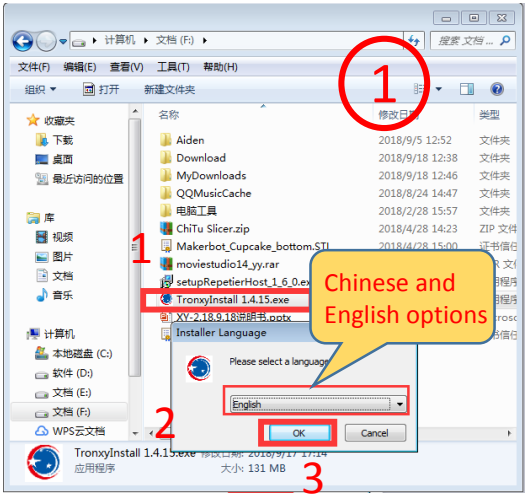
Connect the computer with data cable, it is not possible to install the driver automatically when you first connect to the computer, so to check whether the driver is installed successfully, right-click on the computer and select "my computer", click properties and select "equipment manager". If the exclamation mark as shown in the figure below, you need to manually install the printer driver to the computer

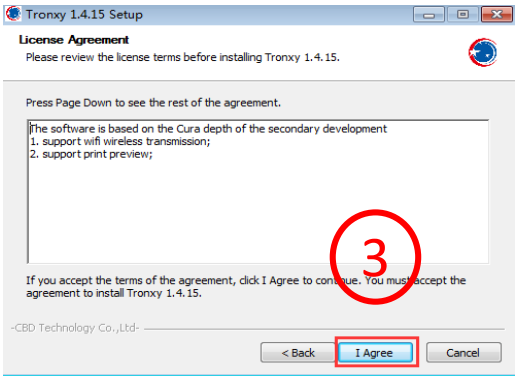


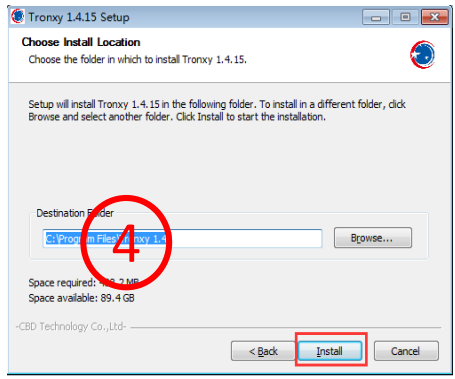
Slice software

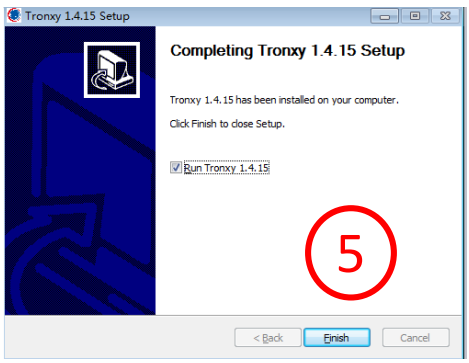
1、Slice software installation

1） install file → click “TRONXY” → choose langrage → OK → next → accept→ install → complete



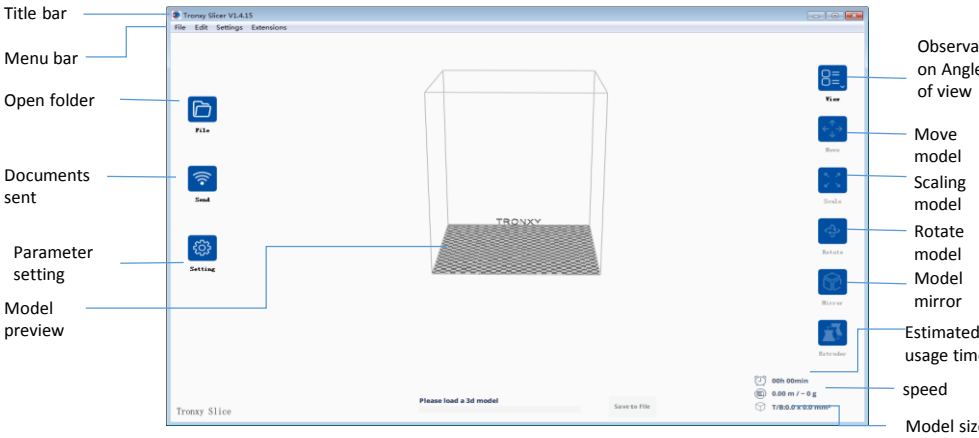




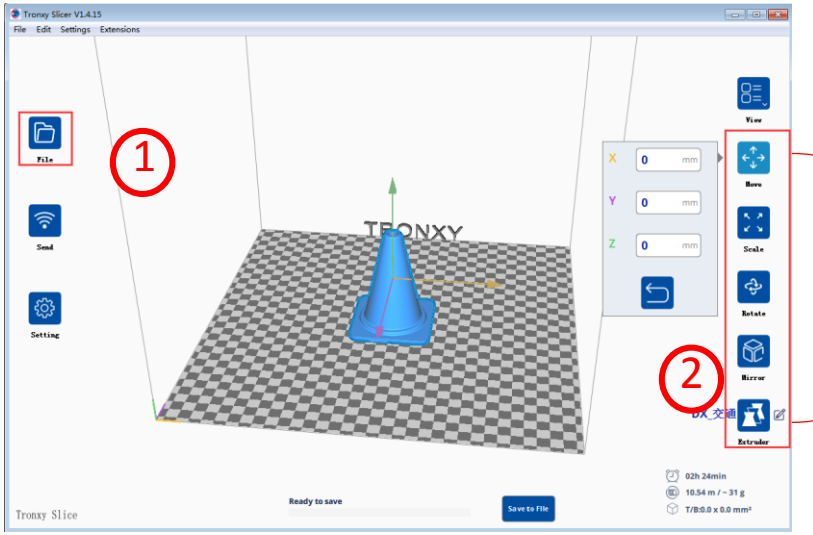


2. Use of slicing software

1. The user can double-click the slicing software of "TRONXY" installed on the desktop to launch it to the following interface and conduct the module slicing.



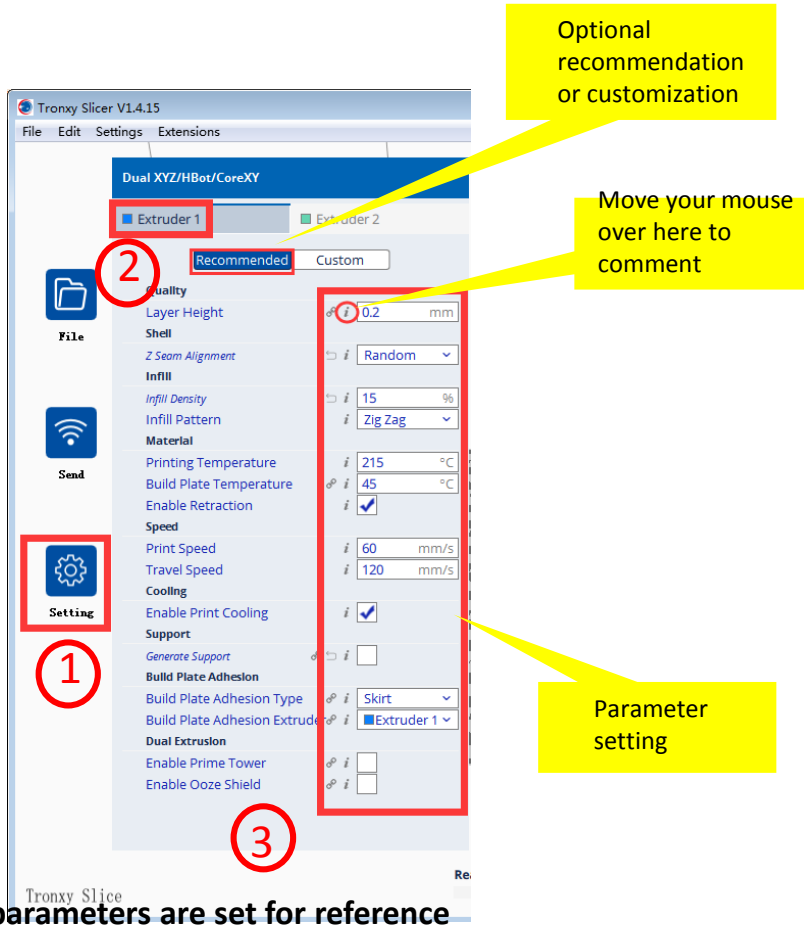
2. Model operation: file -- select model -- move/zoom/rotate/mirror.



Other operations:

1) right click on the blank part of the model to rotate the model.
2) click the left mouse button on the blank part of the model to move the model.
3) scroll the scroll wheel in the middle of the mouse to zoom the perspective.
4) right click the blank of the model, and the dialog box can be operated accordingly.

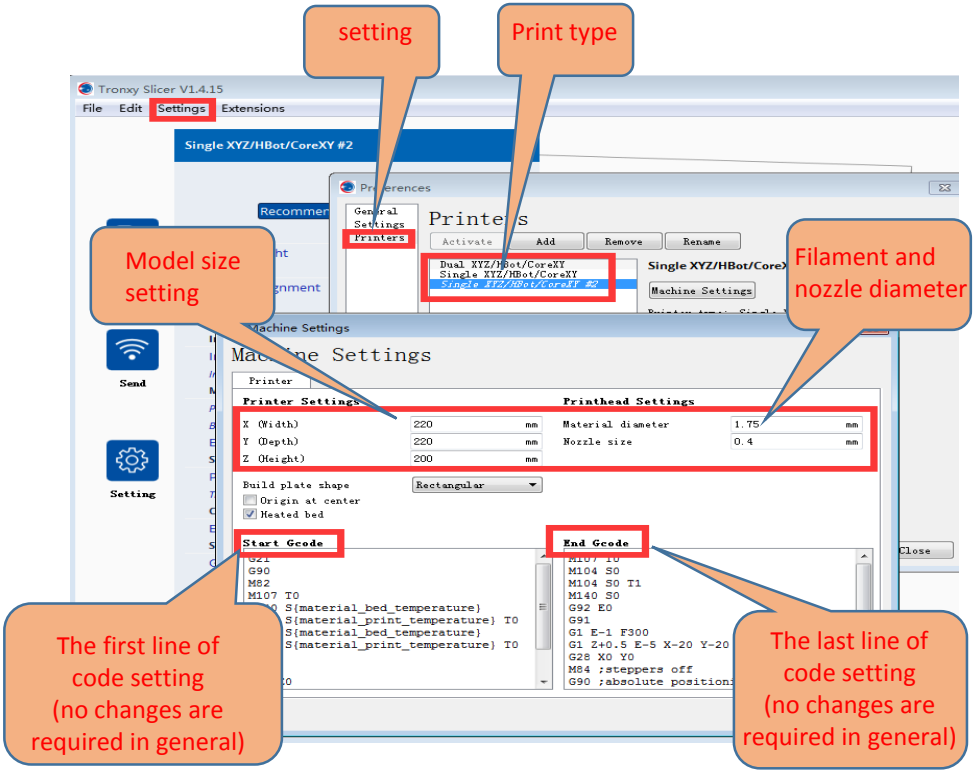
3、Model parameter Settings: file - select model.



Some parameters are set for reference

Thickness：Important parameters that determine the print quality, typically 0.4 nozzle is set to 0.2
Print temperature：PLA 200 ℃， ABS 240 ℃， Other filaments can be consulted
Platform temperature：PLA:45 ℃; ABS:80 ℃， Other filaments can be consulted
Adhere type：Increase the adhesion of the first layer of the platform model and reduce the edge sticking or peeling when the model is printed
Filament diameter: filament diameter is 1.75mm
Nozzle size：The nozzle diameter is usually 0.4mm
Print speed：advs 60mm/s， Do not set too fast, too fast will affect printing accuracy

4、Menu bar Settings - preferences - printers - printer Settings



8、Analysis of common fault causes

1. The printing head does not output material or less output material

· the print head did not reach a temperature of 170 ℃ above (PLA), led to filaments cannot feeding.
· the material is knotted, resulting in poor discharge.
· the filaments were not delivered to the pipe and nozzle accurately, resulting in the failure of normal discharge.
· the temperature of the extruder is too high, so that the softening of filaments cannot be extruded normally.

2. Motor shake, abnormal noise

· the motor line is loose and poor contact leads to abnormal sound due to shaking. Check the wiring.
· the driving voltage is too large or too small, adjust the driving voltage of the main board.
· motor damage.

3. Unable to read SD card content

· it is not displayed when inserted on the computer. It needs to be used after formatting SD card.
· there are illegal characters in the filename, and rename.
· the SD card is damaged and a new one is replaced.

4. Model mismatch

· the belt is too loose, and the belt should be tightened again.
· the jacking of the synchronous wheel is loose, and the jacking is tightened again.
· the drive current of the motor is too high, and the drive current is reduced.