Model name: XY-2



Instructions



深圳市创星元科技有限公司 SHENZHEN TRONXY TECHNOLOG 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 $^{\circ}$ 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 $^{\circ}$ C, customers in the above 40 $^{\circ}$ C or below 5 $^{\circ}$ C 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.

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1、Machine parameter

Print parameter:

Print size : 220*220*260mm

Print accuracy: 0.05-0.3mm

Print principle : FDM

Nozzle size: 0.4mm

Nozzle quantity: 1

Print speed: 20-100mm/s (advs: 60mm/s)

Movement speed: 120mm/s

Position accuracy: X/Y - 0.0125mm, Z - 0.002mm

Print materials : PLA、ABS

Temperature parameter:

Print environment: 8-40°C

Nozzle environment : $\leq 275^{\circ}C$

Power: AC 110/220V 50/60Hz DC 12V/20A

Software parameter:

Slicing software : Cura Simplify3D

Input format : .stl、.obj

Output format : ..gcode

Connection: SD card、USB cable

Machine parameter:

Machine size : 460*423*470mm

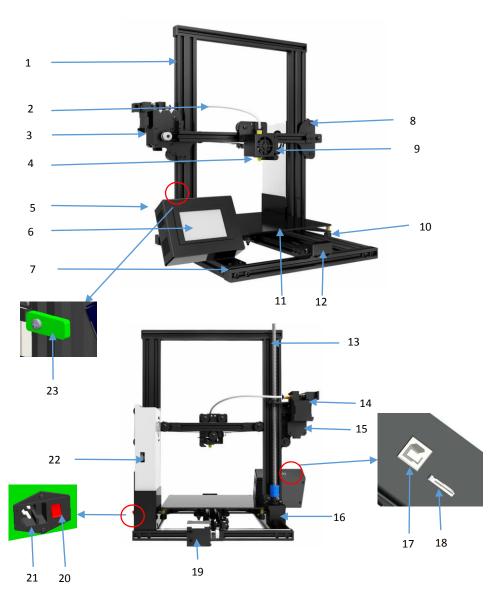
Packing size : 532*472*235mm

Weight : ≈ 8.5kg

2. Packing list

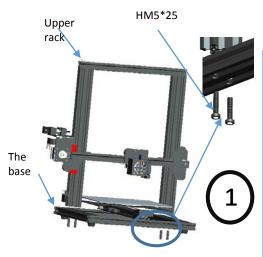
TRONXŸ				6
		Upper rack	Base	Power supply
1				
XY-2		Control box	Filament rack	PM5*25 4PCS
			= 100	
PM3*25 2PCS	USB cable	Power lines	Tie	Tools bag
	O	E PER PER PER PER PER PER PER PER PER PE		
Reader (incl SD card)	Filament	Hotbed sticker	Specification	

3. Introduction to machine structure

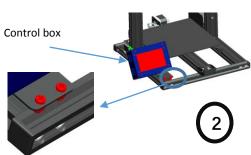


(1) Upper rack (2) teflon tube (3) Left slider assembly (4) extruder (5) control box (6) touch screen (7) bottom frame (8) right slider assembly (9) print head parts (10) leveling nuts (11) hotbed (12) Y axis wheel (13) lead screw (14) feeding motor (15) X axis motor (16) Z motor (17) USB interface (18)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

4. Installation instructions

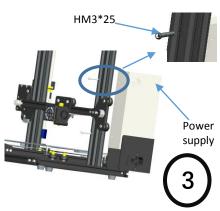


Put the four holes on the base, and lock the four holes on the base with four PM5*25 screws.

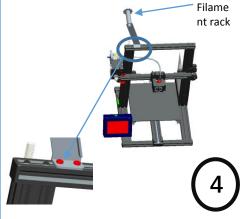


Tighten the boat nuts with a screwdriver, Fix the control box on the aluminum of the base.

Pay attention: The control box must be fixed on the beam, otherwise its easy to hit the print head.

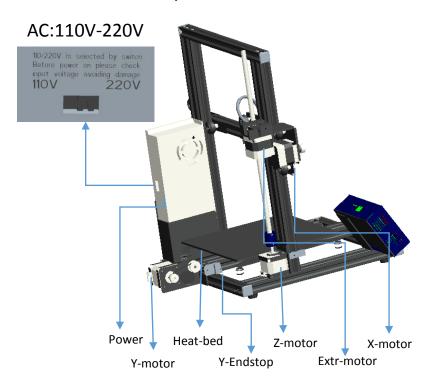


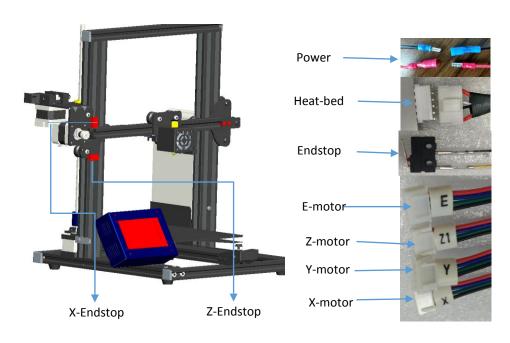
Run two PM3*25 screws through the front z-axis profile and lock the power on the back of the profile.



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

5. Connection



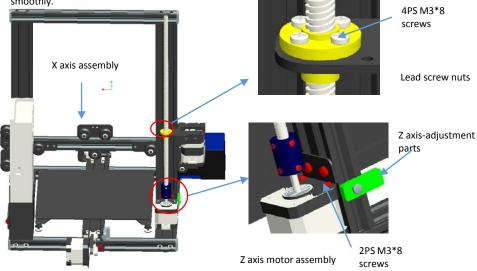


6. Production debugging

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.

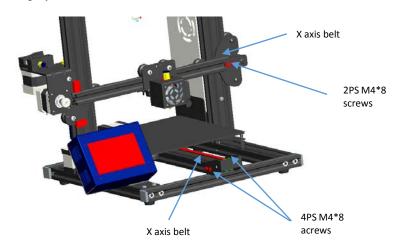
1. Z-axis screw debugging:

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.



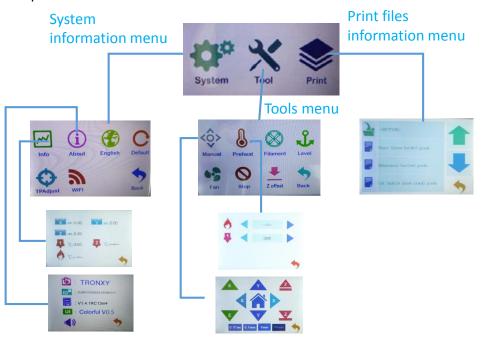
2. Belt adjustment:

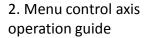
If the belt is too loose or too tight, loosen the M4*8 screw slightly, and then drag it back or move it forward. The elastic degree of the belt can be adjusted, and the screw can be locked after being adjusted

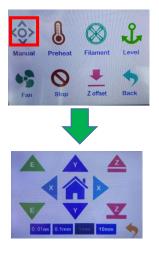


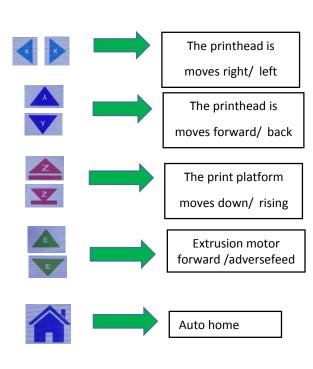
7. Print operation

1. Operation interface introduction:









2.Load and Unload filaments:



Click and wait for preheating





Click on the red

area to start

40/40

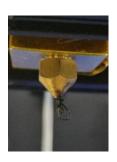
Wait for the temperature to reach the target temperature



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

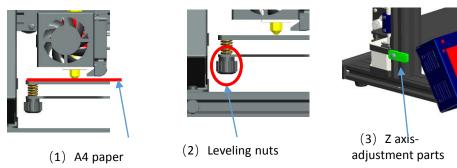




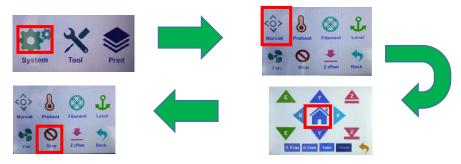


3. Verify platform flatness and print test

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).



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.



8. Analysis of common fault causes

- The printing head does not output material or less output material
- the print head did not reach a temperature of 170 °C 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.

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.