

Sidewinder X3 Plus 3D Printer User Manual

V1.0



Concerning

Thank you for you choosing ARTILLERY's products. For your convenience, please read this manual carefully before use, and strictly follow the instructions in the manual to operate. We are always ready to provide the excellent service to you.

No matter what problems you encounter during use, please contact us according to the phone number and email address which provided at the end of the manual. To make you have a better experience with our products, you can also obtain equipment operation knowledge from the following ways:

Random instructions: you can find relevant instructions and videos in the U-disk.

You can also log in the official website of ARTILLERY (www.artillery3d.com) to find information about hardware and software, contact information, equipment operation, equipment maintenance, etc.

Instructions for use

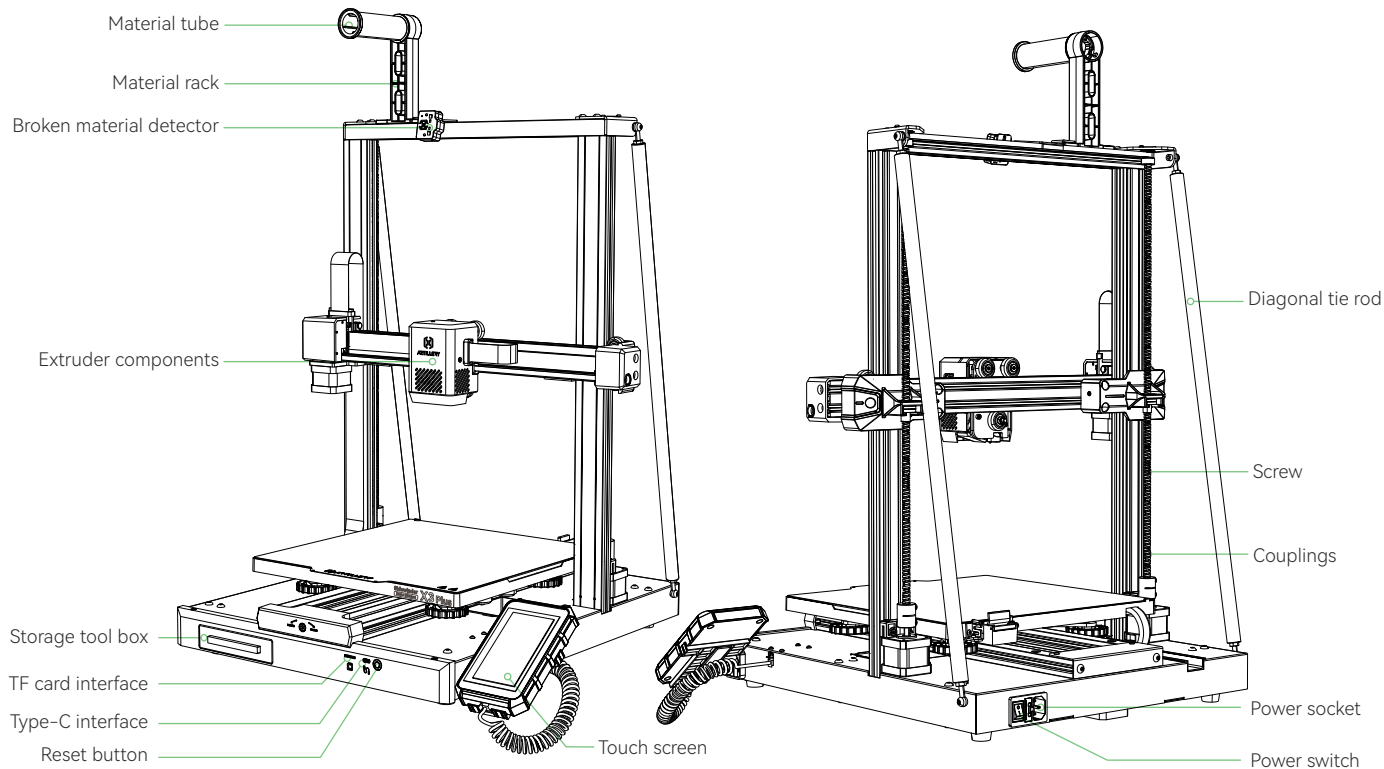
1. Do not try any method which not described in the instructions to use this unit to avoid causing accidental personal injury and property damage;
2. Do not place the machine in flammable and explosive materials or near a high heat source. Please place the machine in a ventilated, cool and dust-free environment;
3. Do not place the printer in an environment with high vibration or other instability, as shaking the machine can affect the printing quality of the printer;
4. It is advised to use the consumables which recommended by the manufacturer to avoid blockage of the extrusion head and damage to the machine;
5. Please do not use the power cable of another product during the installation process. Please use the power cable attached to the unit. The power plug must be connected to a three-hole socket with a ground cable;
6. Do not touch the nozzle and hot bed while the printer is working to prevent high temperature burns and causing personal injury;
7. Do not wear gloves or entanglements while operating the machine to prevent moving parts from causing personal injury such as entanglement, compression, and cutting;
8. Use the remaining temperature of the nozzle to clean the consumables on the nozzle with tools after printing. Do not touch the nozzle directly with your hands during cleaning to prevent burns;
9. Regularly maintain the product. Regularly clean the printer body with a dry cloth when the power is off, and wipe off the dust, sticky printing materials, and foreign matter on the guide rail;
10. Children under the age of 10, please do not use this machine without supervision to avoid personal injury;
11. Users should follow the laws and regulations of the corresponding country and region where the equipment is located (where it is used), strictly follow the professional ethics, and pay attention to safety obligations. It is strictly forbidden to use our products or equipment for any illegal purposes. We are not responsible for any relevant legal liability that violators should bear. We are not responsible for any relevant legal liability that violators should bear.
12. In case of emergency, please turn off the power directly.

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1. Device Information

1.1 Equipment introduction



1.Device Information

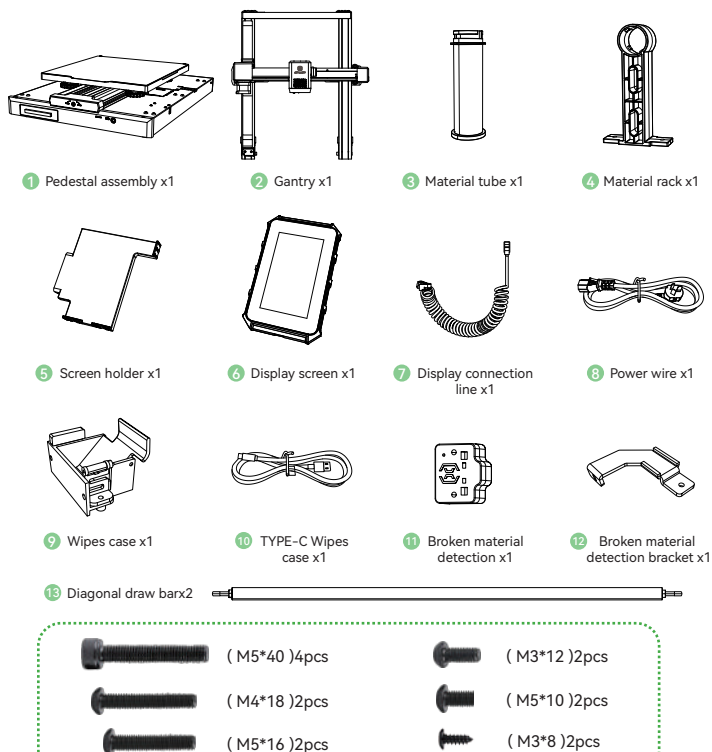
1.2 Equipment parameters

Basic parameters	
Product model	Sidewinder X3 Plus
Machine dimensions	492mm*507mm*610mm
Print size	300mm*300mm*400mm
The principle of printing	FDM
Print speed	30-250mm/s
Nozzle diameter	0.4mm
Operation environment temperature	10-35 °C
Extruder type	Proximal extrusion
Compatible material	PLA/TPU/PETG/ABS/PET/Carbon
Maximum nozzle temperature	300°C
Screen	4.3 inch touch screen
Maximum hot bed temperature	100°C
Printing method	TF card
Auto leveling	Support
Keep calling when power is cut off	Support
Material breakage detection	Support

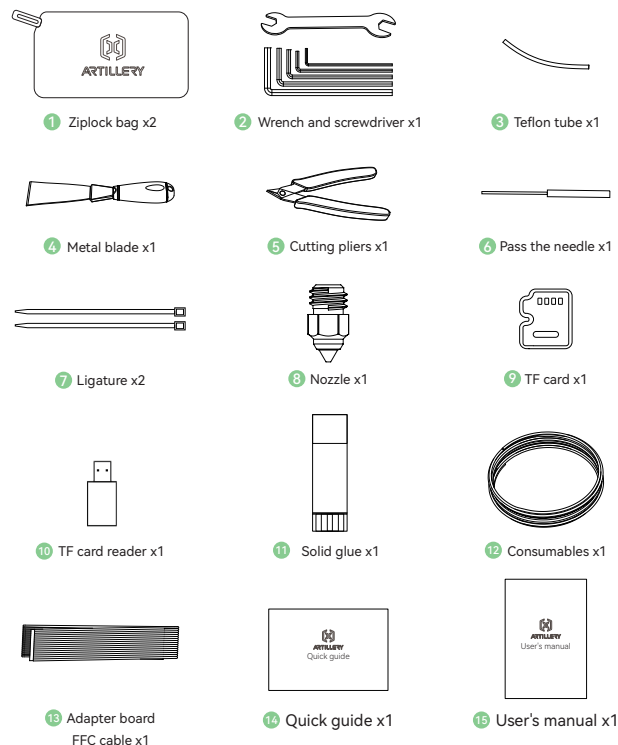
1. Device Information

1.3 Packing list

List of main parts and components



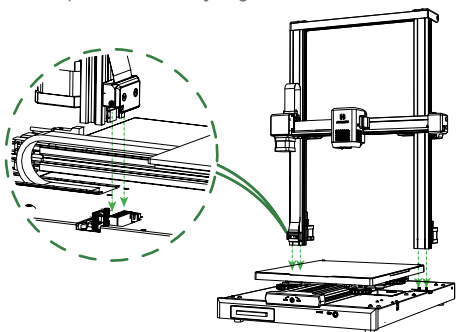
List of accessories and tools



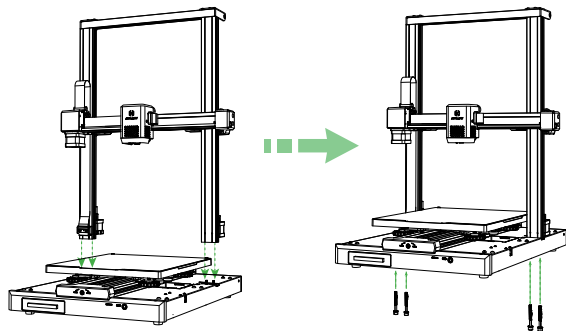
2. Unpacking operation

2.1 Product installation

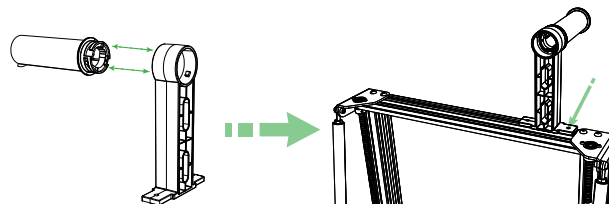
- ① Make the gantry align to the slot which on the base, and make sure the cable pins are correctly aligned with the slots.



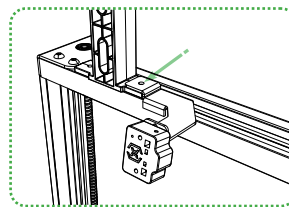
- ② Use the 4 pieces M5 screws which pre-embedded in the profile to lock the gantry on the base and lock it, firstly make ensure the section materials when screwing then tightly lock it, to prevent the appearance of the external character.



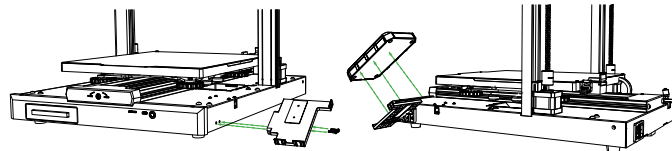
- ③ Assemble the material rack as shown in the following figure, install the roller onto the pre installed bearings on the sheet metal of the two material racks, and then install it onto the top crossbeam. Use an M4 * 18 screw to pre lock the left side of the material rack.



- ④ Fix the broken material detection kit on the right side of the material rack with an M4 * 18 screw.



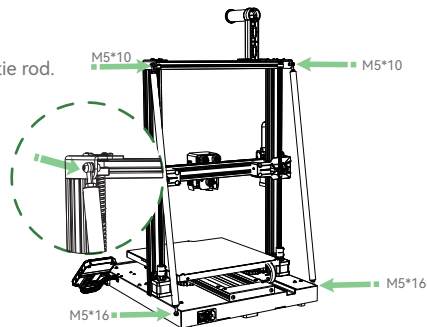
- ⑤ Place the screen bracket on the side of the right profile and secure it with two M3 * 12 screws. Then fix the display screen on the screen bracket.



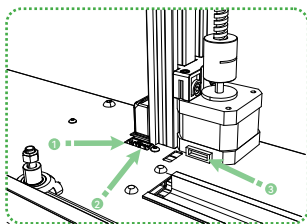
2. Unpacking operation

2.1 Product installation

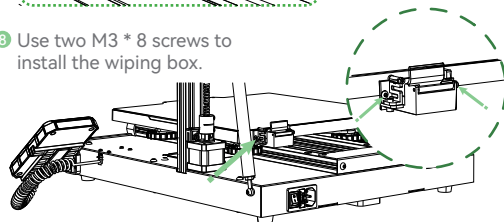
- 6 Install the diagonal tie rod.



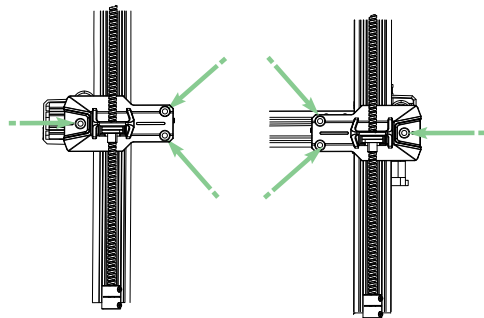
- 7 Connect the ribbon cable (1 is the lighting port, 2 is the break detection port, and 3 is the motor port).



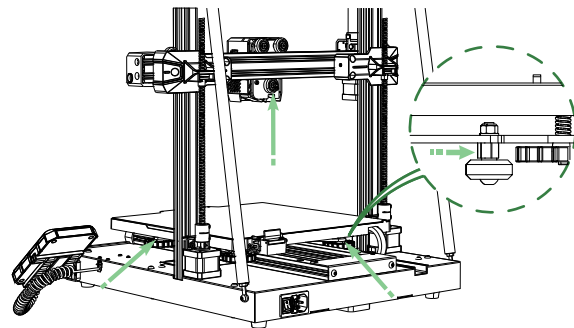
- 8 Use two M3 * 8 screws to install the wiping box.



- 9 When one wheel is not pressed against the aluminum profile, loosen 6 pieces screws which fix both side Z axes, then tightly twist again.

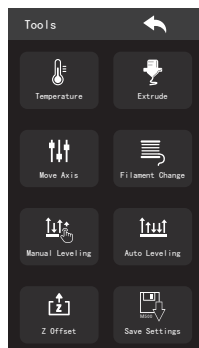


- 10 Use a hex wrench to adjust the tightness of the eccentric wheel of the hot bed and nozzle slider.

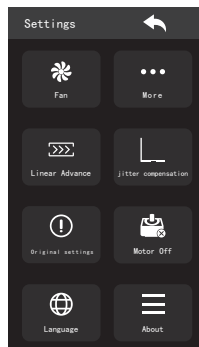


3. Introduction of the device screen interface

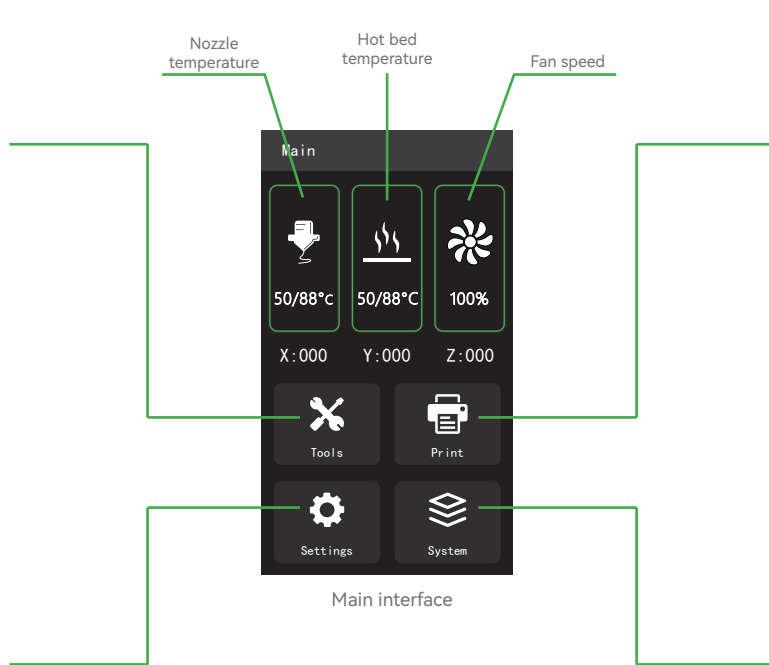
3.1 Main interface



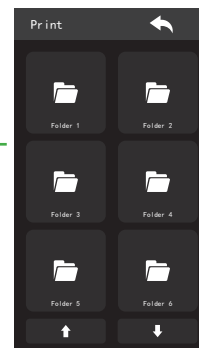
Tool interface



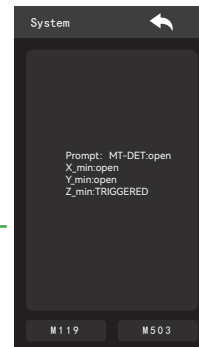
Settings interface



Main interface



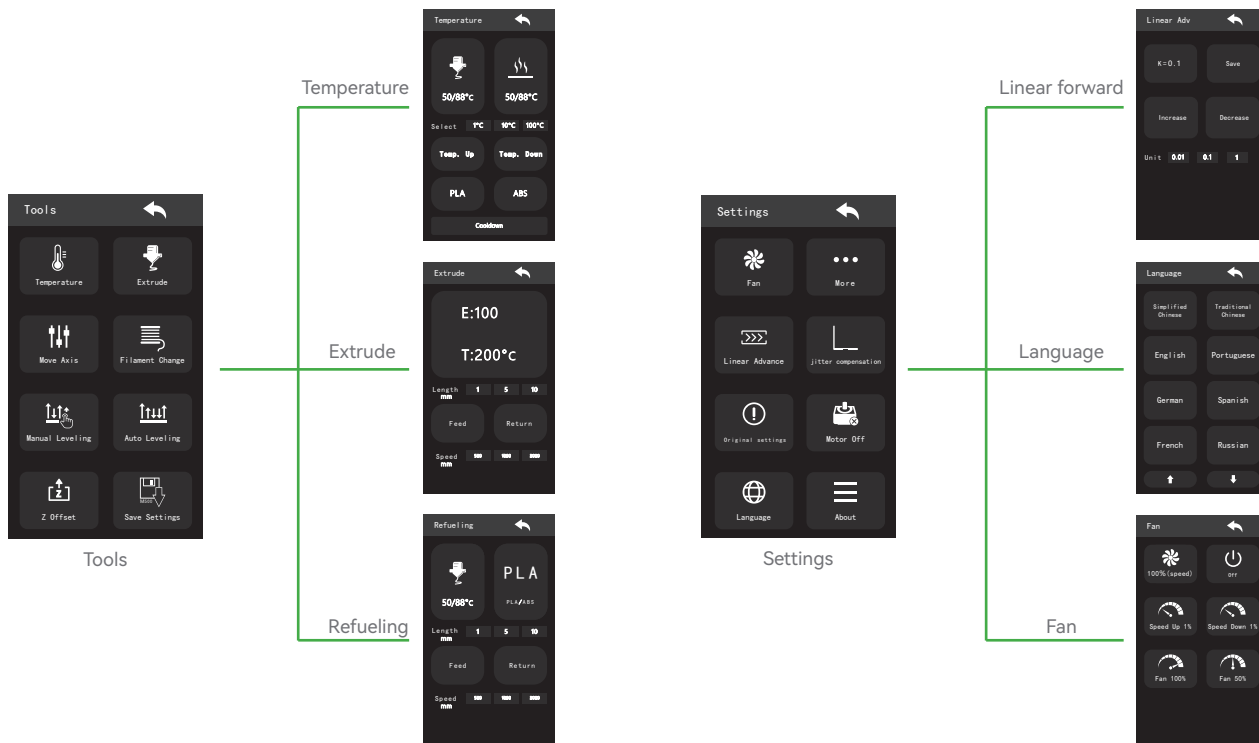
Print interface



System interface

3. Introduction of the device screen interface

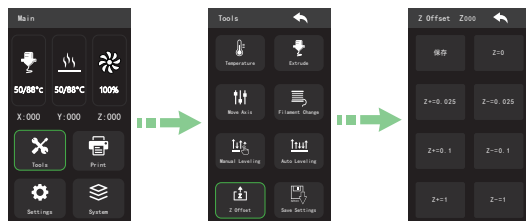
3.2 Commonly used functions



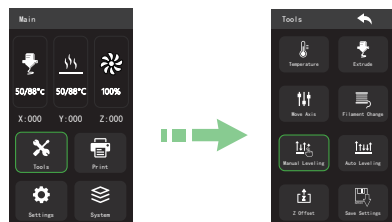
3.Introduction of the device screen interface

3.3 Preparation for leveling

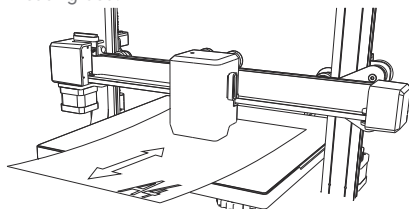
- ① Go to "Tools" → "Print Z-axis offset" and adjust the Z-axis offset value so that the height from the nozzle to the platform is approximately the thickness of A4 paper (0.08–0.1mm).



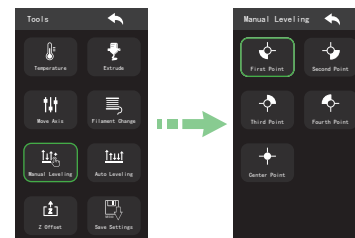
- ② Reset the printer and click on "Tools" → "Manual Leveling" on the touch screen.



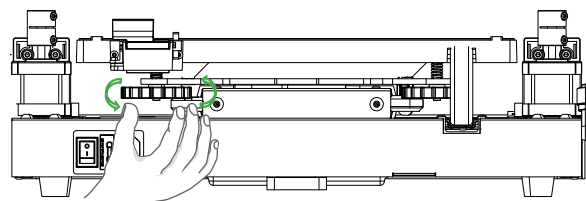
- ③ Place a piece of A4 paper between the heating head and the heating bed.



- ④ Move the heating head sequentially to 5 points through the touch screen.



- ⑤ Adjust the knob on the bottom of the hot bed to ensure that the height of the five-point nozzle to printing platform almost all are the thickness of A4 paper (0.08–0.1mm).



- ⑥ On the touch screen, click Tools → Auto Leveling, wait for the autoleveling procedure to finish.

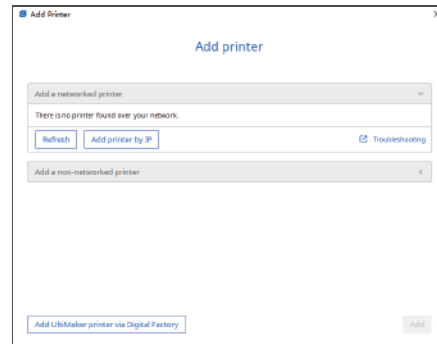
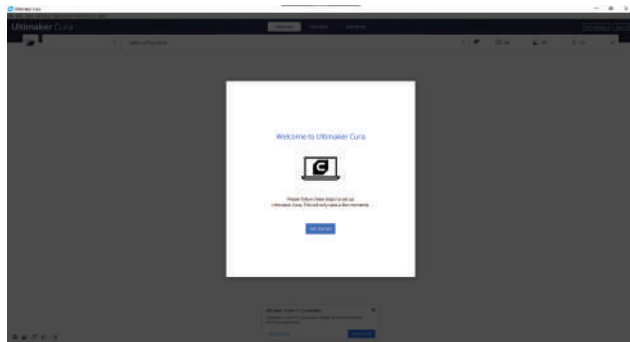


4. Printing for the first time

4.1 Local printing

This printer works with most slicing software, such as Slic3r, Cura, Simplify3D, etc. But we'll cover Cura software in detail and let you know how to set it up, convenient to your first time print.

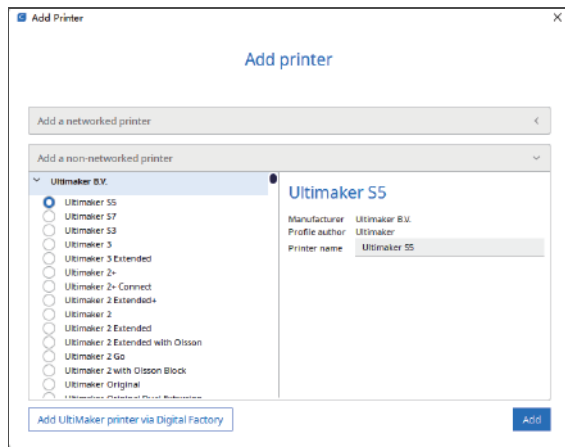
① First, please download it from its official website. After installing and starting the software, you can check the following screen and continue until you see the "Add Printer" page:



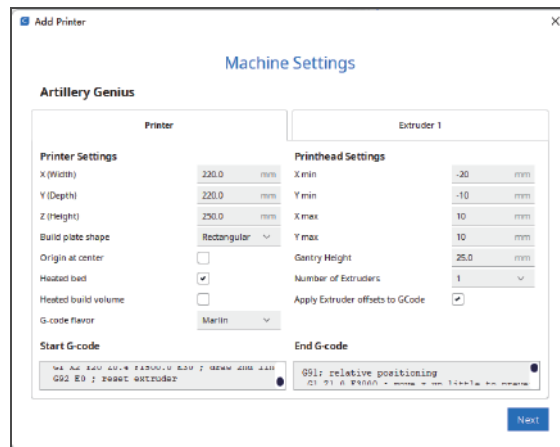
4. Printing for the first time

4.1 Local printing

- 2 In "Add a non-networked printer", scroll down to Artillery and select Artillery Genius, then type the machine model in the "Printer Name". Then click the "Add" button.



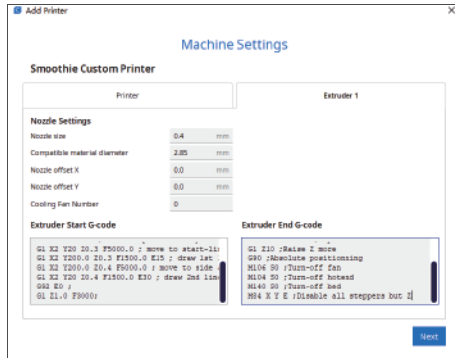
- 3 Set X (width), Y (depth) to 240, Z (height) to 260. Make sure you selected the heated bed.



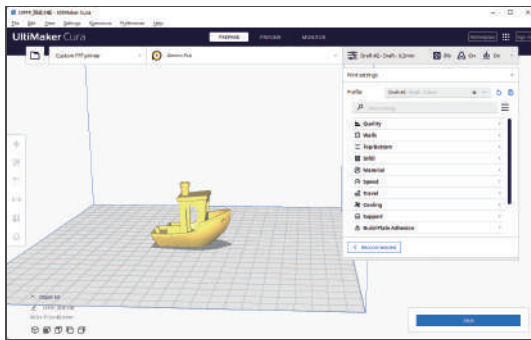
4. Printing for the first time

4.1 Local printing

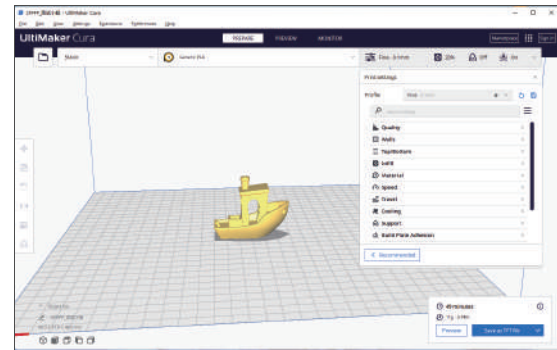
- ④ Change "Compatible material diameter" to 1.75.



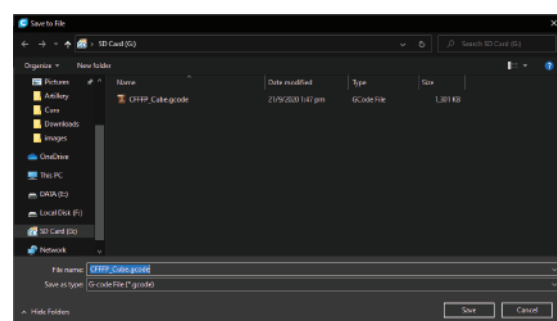
- ⑤ Drag and drop STL files (or other supported formats) onto slicing software, or use File -> Open File (O)... Load the model file. From the "Configuration File" drop-down list, select the configuration which you want to use.



- ⑥ Click the "Slice" button.



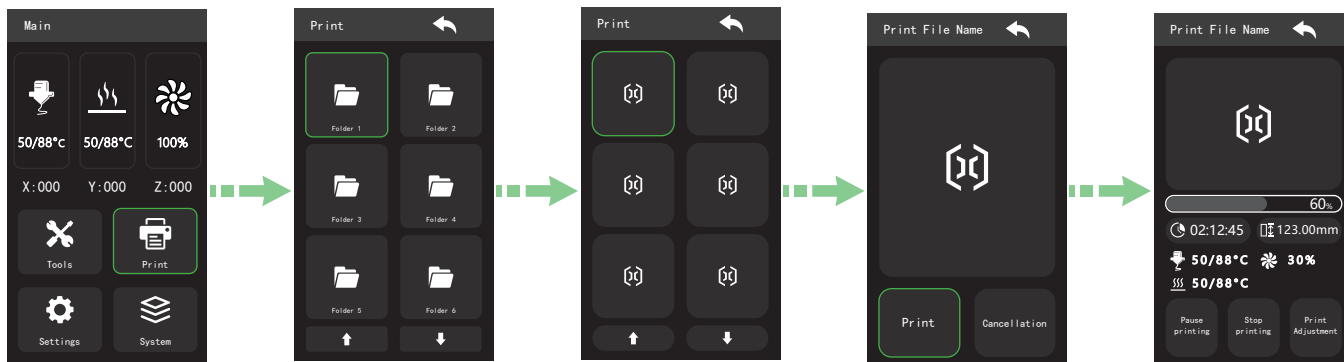
- ⑦ You can click "Save to removable disk" (if a memory card is detected) or "Save to File" button to save the sliced file to the memory card.



4. Printing for the first time

4.1 Local printing

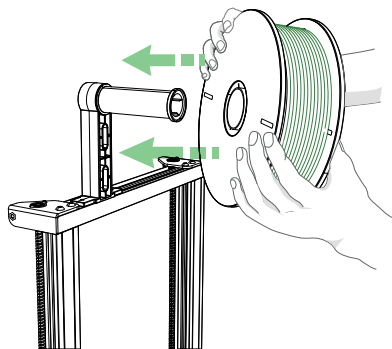
- 8 Insert the TF card into the printer's interface.
- 9 Click "Print" on the main menu and select "File" corresponding to "Print File".
- 10 When the nozzle and heating bed reach the given temperature, the X, Y and Z axes will return to the zero position, and then printing will begin.



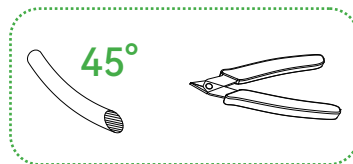
5. Machine function description

5.1 Loading

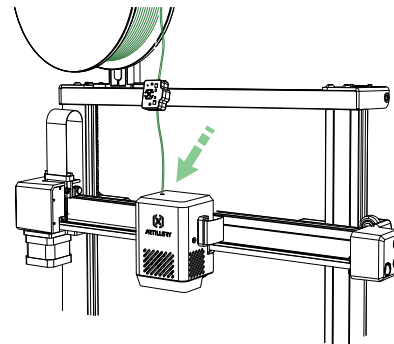
- ① Hang the consumables on the rack.



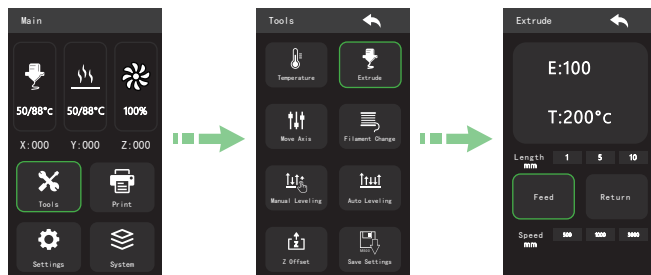
- ② In order to successfully complete printing, the end position of the consumables should be incline cut to be 45 degrees, as shown in the image.



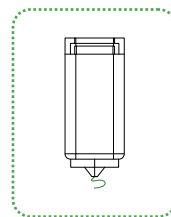
- ③ Pass the consumables through the broken material detection module along the extruder hole first then insert into feed port location.



- ④ Enter into "Tools→Extrusion→Feed" for printer feeding operation.



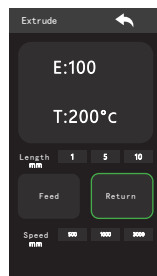
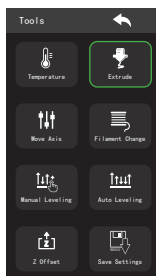
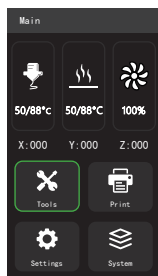
- ⑤ When the temperature reaches the set target value, able to check that has consumables flow out from the nozzle position, and the loading has been completed.



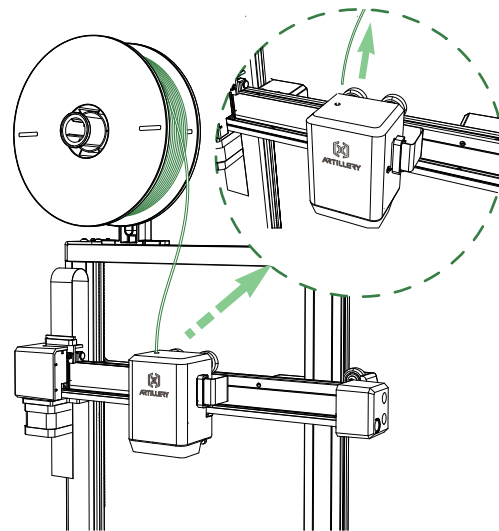
5. Machine function description

5.2 Return material

- ① Enter into "Tools→Extrusion→Return" to perform printer return material operation



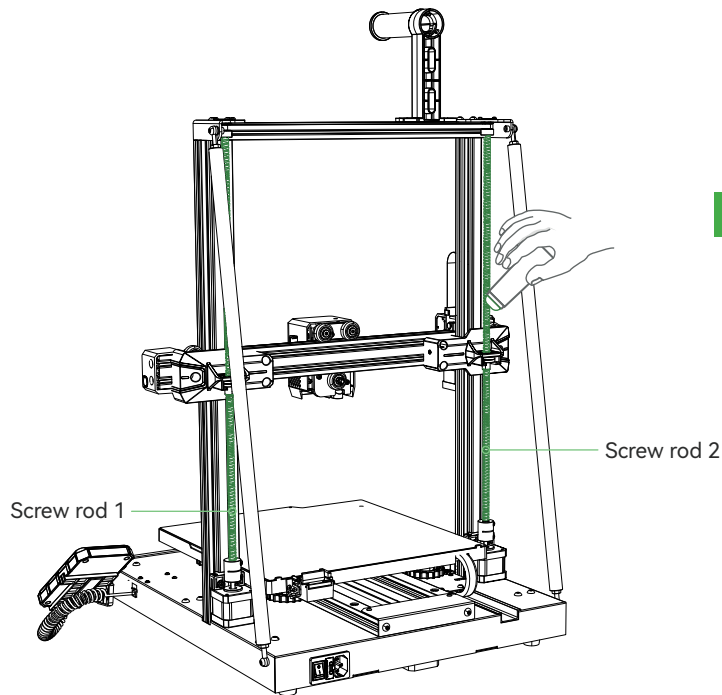
- ② After preheating the nozzle, push the consumables forward a little, then pull out the consumables.



6. Warmly reminding and daily maintenance

6.1 Printing Precautions

6.1.1 Lubrication maintenance

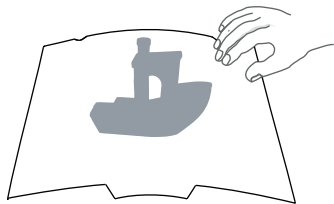


300 hours of regular maintenance: please regularly clean and lubricate the green area in the picture, grease just needs to be applied to the middle section, and automatic spreading evenly through movement. (users able to self purchase the grease and maintain the machine.)

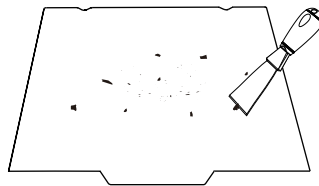
6. Warmly reminding and daily maintenance

6.1 Printing Precautions

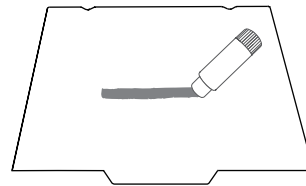
6.1.2 Flexible platform use and maintenance



- ① Wait for the printed model to cool down and pick out from internal equipment with the flexible platform, and the platform is slightly curved in parts to make the model and platform separated. (The platform shouldn't be bent too much to prevent the platform from being deformed and unusable)

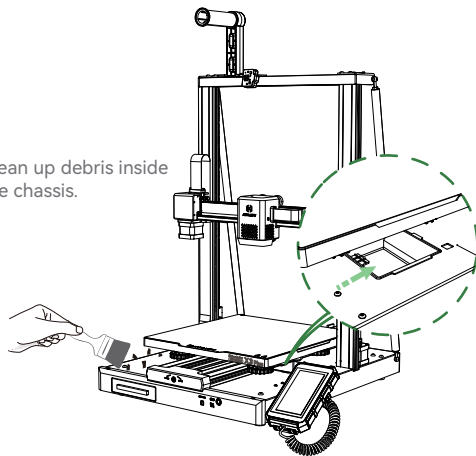


- ② Remains of platform consumables can be scraped off with a blade. Pay attention to safety when using.



- ③ When the first layer of the model does not stick, it is recommended to spray liquid glue evenly on the surface of the platform. Able to use the fresh water clean the residual liquid glue after printing finished.

- ④ Clean up debris inside the chassis.



Warmly reminding: when the device has been printed for more than 300 hours or the printing platform or nozzle has been replaced, the distance between the platform and the nozzle maybe changed so that the first layer of the model is not pasted firmly, resulting in printing failed, please calibrate the platform regularly.



Warmly reminding: the printing platform is a consumable part. It is recommended to replace it regularly to ensure that the first layer of the model is attached.

6. Warmly reminding and daily maintenance

6.2 Maintenance projects

In the process of use, if there is no solution to the problem:

- ① You can log in the official website of ARTILLERY (www.artillery3d.com) to find information on software and hardware, contact information, equipment operation, equipment maintenance, etc.
- ② Alternatively, please contact us according to the phone number and email provided at the end of the manual.

Maintenance instructions		
Machine cleaning	Clean up debris inside the machine to ensure that machine movement is not affected.	Every time before printing
Nozzle	When the nozzle is blocked, after preheating and pulling out the consumables, increase the temperature of the nozzle, and use the through needle to pinch the extruder from top to bottom until the consumables are poked out.	After each one time replacement of consumables
	Check whether the wire is normal. If it is not normal, please check whether it is blocked.	
	Check the nozzle for residual material and if so, remove with a tool after heating the nozzle.	
Printing platform	Check whether there are residual consumables and glue on the surface of the platform, and if so, clean the surface of the platform.	Every time before printing
Motion mechanism	XYZ shafts and screw rod lubrication.	Cumulative printing time of every 500 hours
Equipment self-inspection	Vibration optimization.	Cumulative printing time of every 300 hours
	Automatic leveling.	Cumulative printing time of every 300 hours
Consumable replacement	Replacement of the same type of consumables: follow the normal return-feed process.	
	Replacement of different consumables: the nozzle is preheated to the target temperature of the current consumables - return the material and replace it with the target consumables material, preheat the nozzle to the higher of the two consumables, nozzle temperature - feed for 30s, until the remaining consumable is fully extruded, set the nozzle temperature to the current consumable nozzle temperature, complete.	

6. Warmly reminding and daily maintenance

6.2 Maintenance projects

1.Warranty

The company provides a one-year warranty for the Artillery Sidewinder X3 Plus 3D printer, the detail contents and rules, please check www.artillery3d.com. If you need after-sales service, you can enter relevant information and submit an after-sales work order through the following website: 1. After sales work order: <https://evnovo.zohodesk.com/portal/en/newticket> 2. Facebook: <https://www.facebook.com/artillery3d>

2.Overall specifications

All information in this user manual ("Manual") is subject to change at any time without notice and is provided for convenience only. Shenzhen Yuntu Chuangzhi Technology Co., Ltd. and their respective affiliates and suppliers (hereinafter referred to as "Artillery") reserves the right to modify or revise this manual at any time in its sole discretion and makes no commitment to provide any such changes, updates, enhancements or other supplements to this manual in a timely manner or at all.

You agree to be bound by any modifications and/or revisions. Please visit the official website at www.artillery3d.cn for the latest product information.

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