

SOVOL Printer

Guide Book

To make Top-quality 3D printer

- This guide book is for standard SOVOL.
- Select the correct input voltage to match your local mains (220V or 110V).
- Please plug the power cord into a three-hole power jack.
- Detailed instructions for use are available on the TF card.

Notes

- 1 not use the printer any way other than described herein in order to avoid personal injury or property damage.
- 2 Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.
- 3 Do not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.
- 4 Before using experimental or exotic filaments, we suggest using standard filaments such as ABS or PLA to calibrate and test the machine.
- 5 Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.
- 6 Do not touch the nozzle or printing surface during operation as they may be hot. Keep hands away from machine while in use to avoid burns or personal injury.
- 7 Do not wear gloves or loose clothing when operating the printer. Such cloths may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.
- 8 When cleaning debris from the printer hotend, always use the provided tools. Do not touch the nozzle directly when heated. This can cause personal injury.
- 9 Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame, guide rails, or wheels . Use glass cleaner or isopropyl alcohol to clean the print surface before every print for consistent results.
- 10 Children under 10 years of age should not use the printer without supervision.

Contents

Preface

This Guide is designed for the Sovol users to start their printing journey.

We still recommend that please read this guide even if you are familiar with 3D Printing technology, as there is lots of important information about the sovol for you to get a better 3D experience.

For a better printing experience with sovol, you may review the information below:

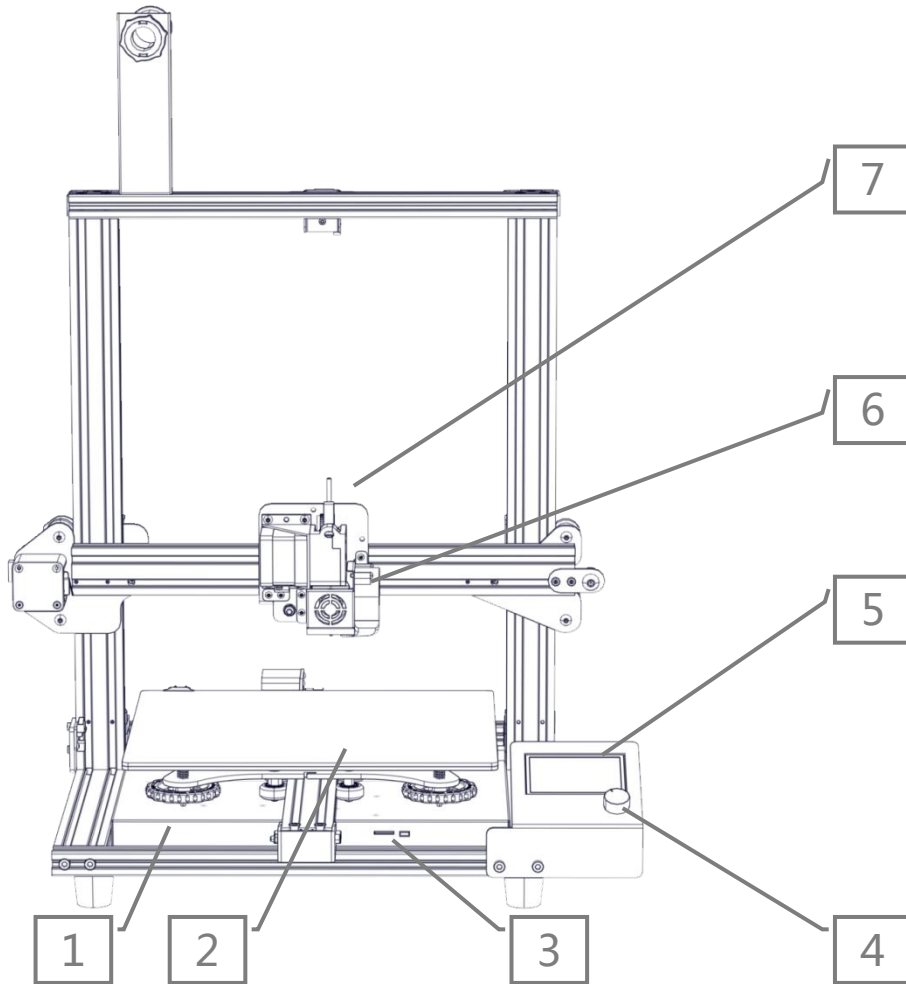
(1) Quick Start Guide

Quick Start with user guide or view the video on the TF card.

(2) Official Website: <http://www.sovol3d.com>

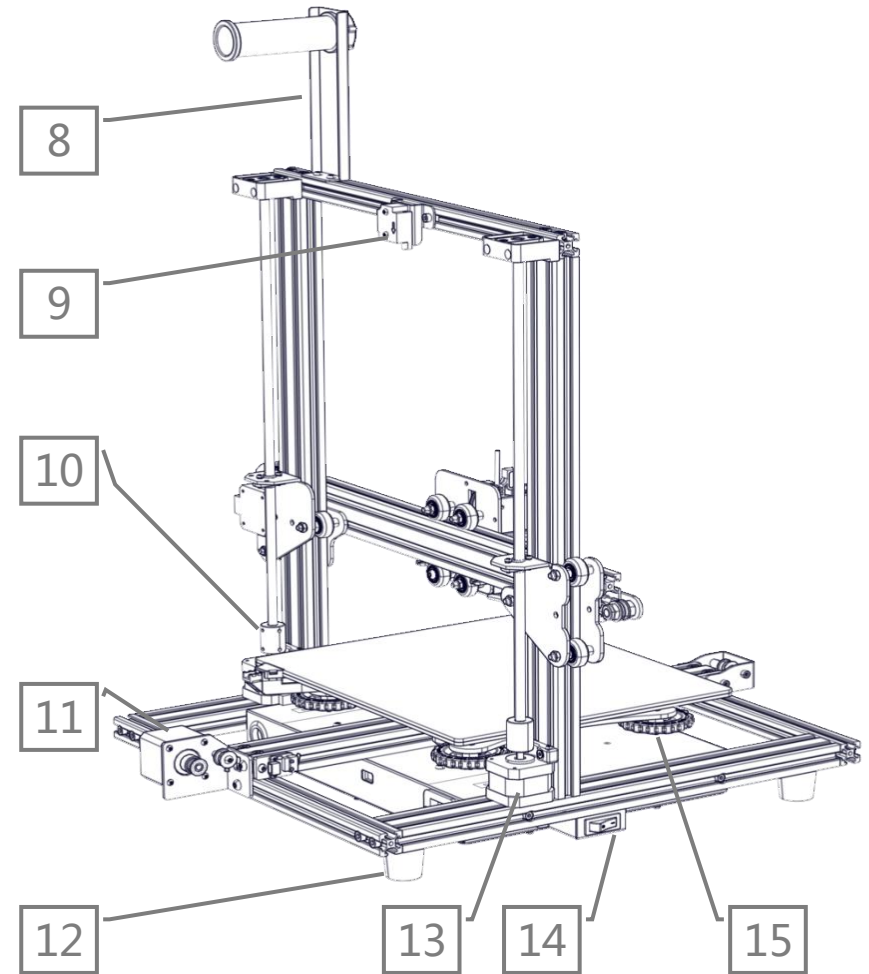
Find out all latest news which contains the up-to-date information concerning software, firmware, device maintenance and so on.

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03	General List
04	Assembly
06.....	Cable Connection
07	Screen Information
08	Loading Filament
09	Bed Leveling
10	Software Installation
11	Preparing to Printing
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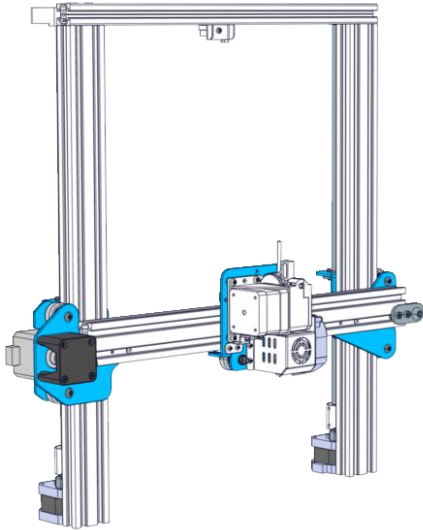
- 1. Main control box
- 2. Hot Bed
- 3. TF Card & USB
- 4. Button knob
- 5. Display Screen

- 6. Nozzle kit
- 7. Extrusion Kit
- 8. Filament Holder
- 9. Broken filament detecting device
- 10. Coupler

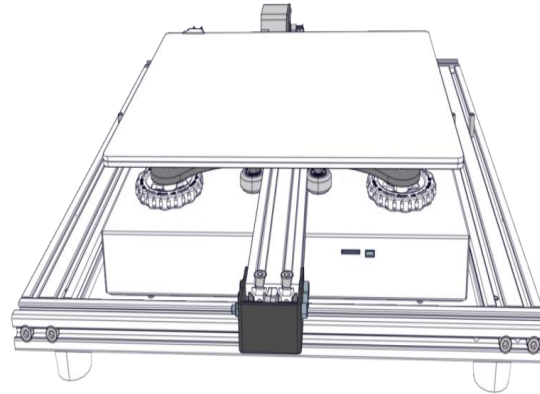


- 11. Y-axis motor
- 12. Foot pad
- 13. Z-axis motor
- 14. Power switch
- 15. Leveling nut

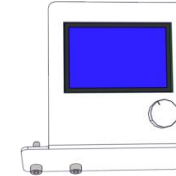
Gantry



Base



Display screen










Filament Holder









Tool Box

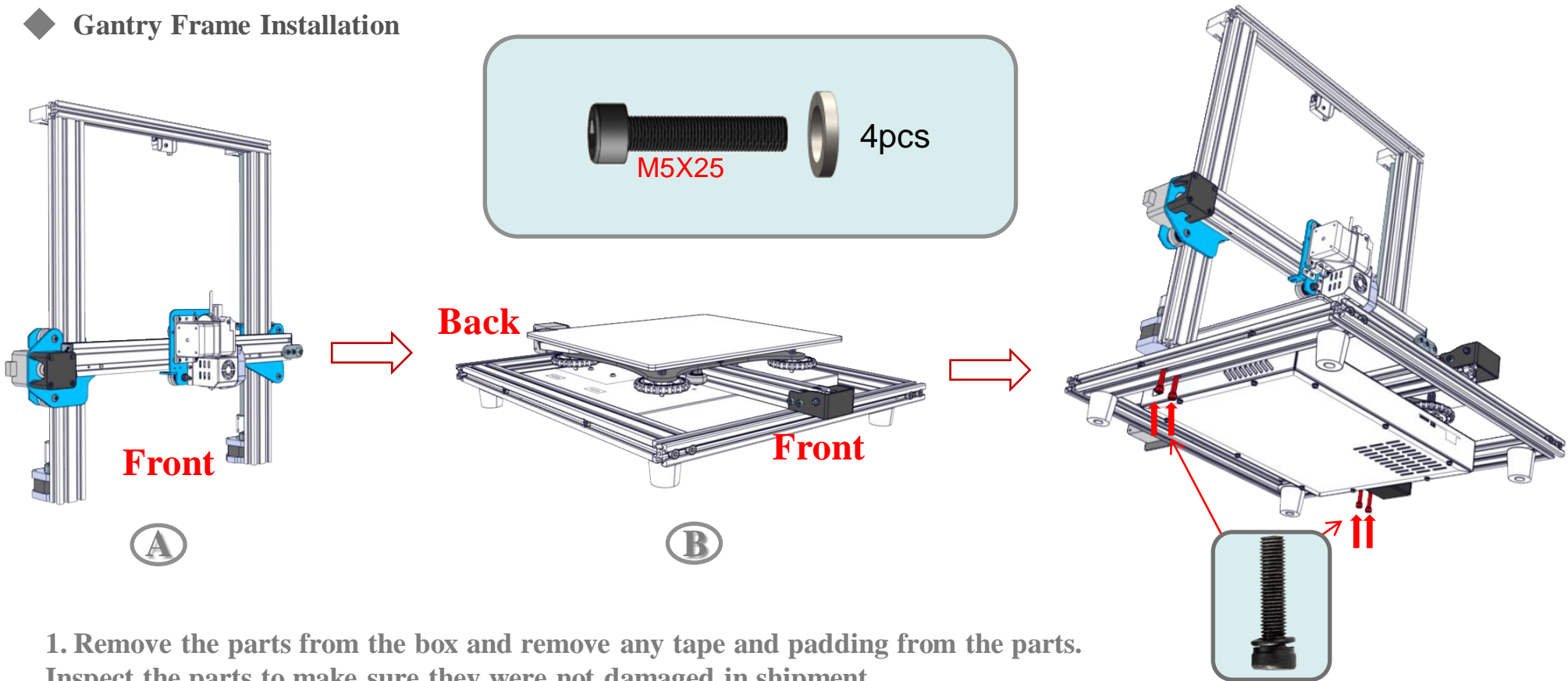


◆ Tool List

No.	Image	Name	Qty
1		Wrench & Screw driver	1 Set
2		TF Card & Reader	1 Set
3		Cable Ties	1 Set
4		Pliers	1
5		0.4mm Nozzle Cleaner	1
6		Spatula	1
7		USB Cable	1

No.	Image	Name	Qty
8		Power Cable	1
9		Filament (200g)	1
10		Spare Parts	1
11		M5X25 black Hex-Bolt and Lock Washer	4
12		M5X20 black Hex-Bolt	2
13		Z-axis limit plate installation	1

◆ Gantry Frame Installation



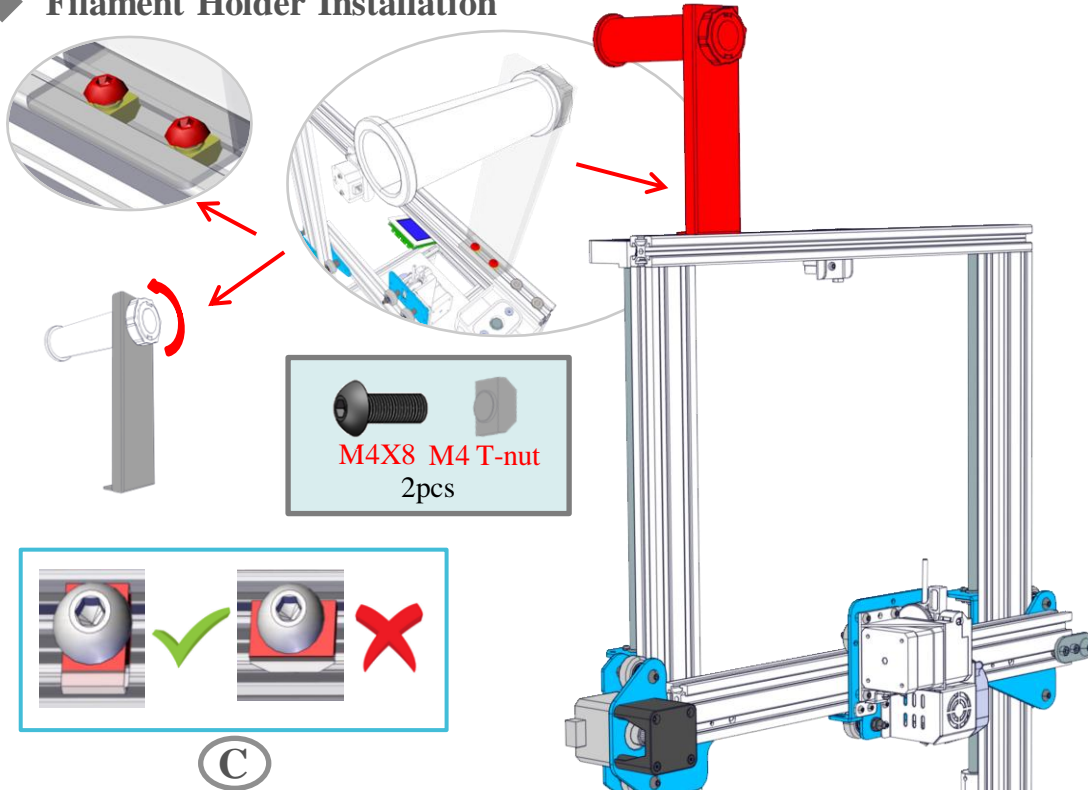
1. Remove the parts from the box and remove any tape and padding from the parts. Inspect the parts to make sure they were not damaged in shipment.

2. Install the gantry frame (A) to the base frame (B).

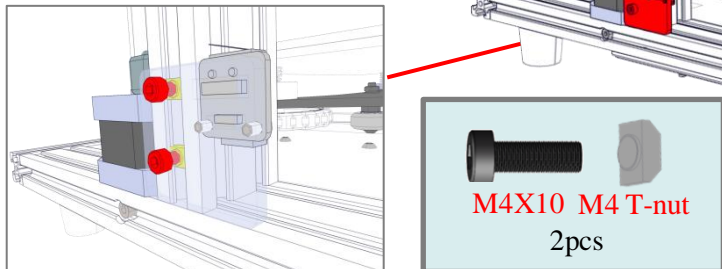
a. On the gantry frame, make sure the nozzle assembly is to the front, and the long vertical lead screw is to the back. On the base frame, make sure the black belt cover is on the front, and the stepper motor is on the back.

b. Use the M5x20 screws (4) and lock washers (4). Lift the base frame. Install the screws through the base frame into the threaded holes in the gantry frame. Tighten with the M5 hex key (Allen) wrench.

◆ Filament Holder Installation



◆ Z-axis limit plate installation



3. Install the filament spool holder.

a. Secured in the screw hole of the filament holder with two M4*8 screws and two M4 T-nuts. Loosen the t-nuts by hand and turn them so they will fit inside the grooves on the frames. You want the nuts to be loose so that when you tighten the bolts, the nuts will rotate 90° and grab onto the inside of the groove.

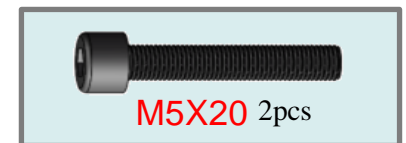
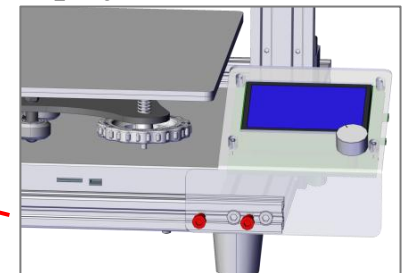
b. Align the nuts to the grooves and insert the T-shaped plates into the frames.

4. Install the Z-axis limit plate.

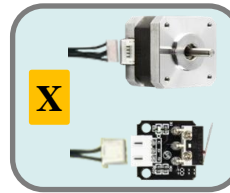
a. The Z-axis limit switch board is installed at the lower left of the gantry, and the installation method is the same as that of the filament bracket.

5. The display screen is mounted on the right front of the bottom frame using M5x20 screws (4) and lock washers (4).

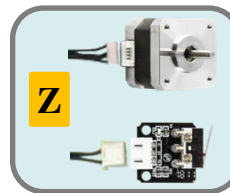
◆ Display screen Installation



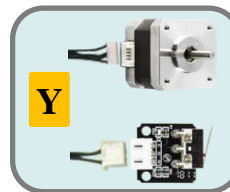
Select the correct input voltage to match your local mains (220V or 110V).



According to the yellow label on the side, the X cable is connected to the motor and running belt switch

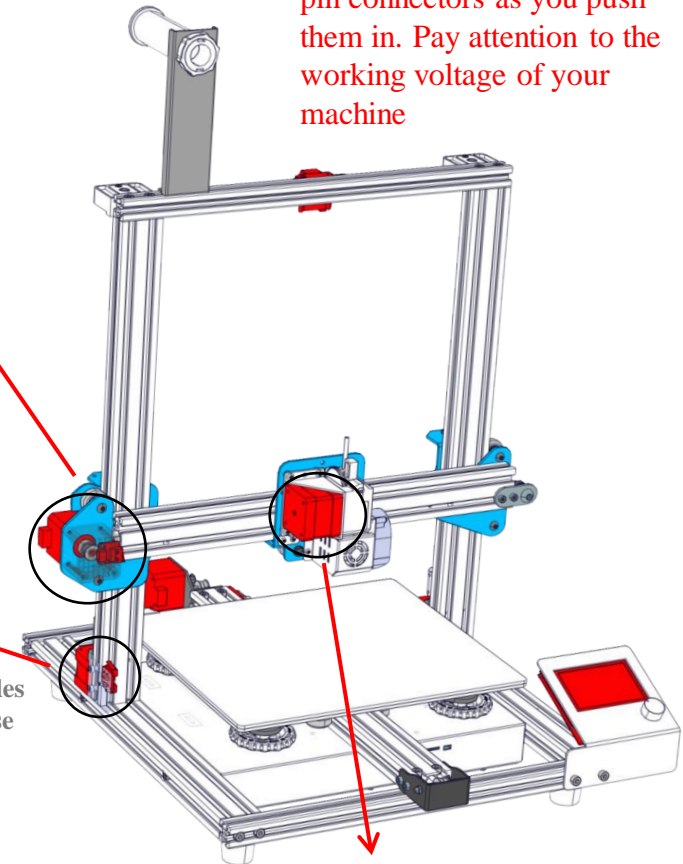


According to the yellow label on the side, the Z cables go to the motor and switch on the left side of the base frame that raise and lower the nozzle.

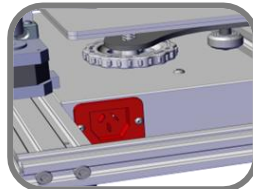
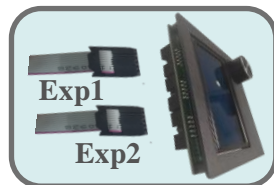


According to the yellow label on the side, the Y cables go to the motor and switch at the back of the base frame that move the build plate.

Tip: Try not to bend the pin connectors as you push them in. Pay attention to the working voltage of your machine

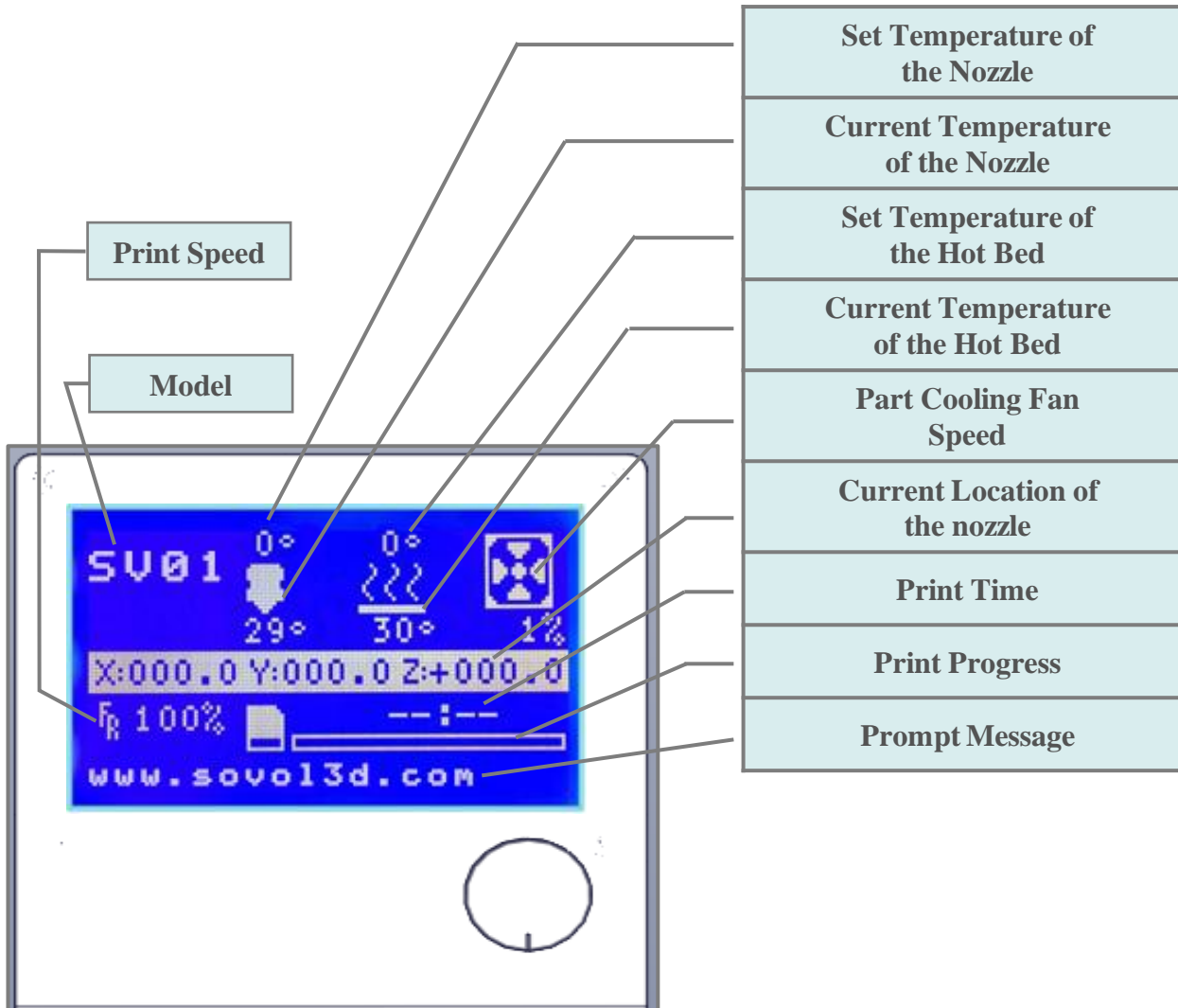


The E cable goes to the motor that feeds the filament.



*Plug the power cord into a three-hole power jack.

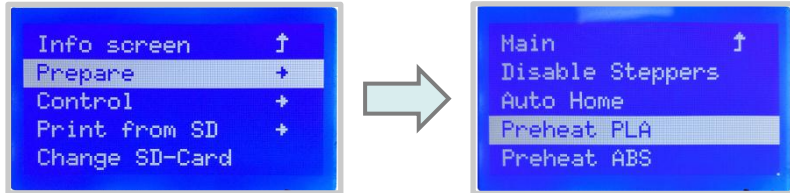
Information Displayed



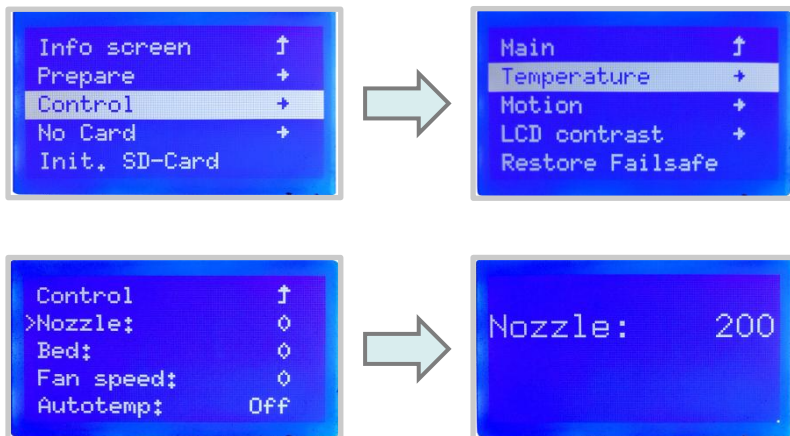
Screen Information		
Menu	Sub Menu	Explanation
Not Printed (www.sovol3d.com)		
Info Screen ↑	Main ↑	Return
Prepare→	Disable Steppers	Close motor and move X Y Z axis by hands
	Auto Home	Return to Zero
	Preheat PLA	
	Preheat ABS	
	Cooldown	Close and cooldown the nozzle
	Move Axis→	Moving X Y Z axis or Extruder by inputting
Control→	Temperature→	Heat the nozzle and bed or change fan speed by inputting number
	Restore Failsafe	Restore factory setting
No card/ Print from TF	Select the printing model	
Printing		
Tune→	Speed	Change Printing Speed by inputting
	Nozzle	Change the temperature by inputting
	Bed	Change the temperature by inputting
	Fan Speed	Change Fan Speed by inputting
	Flow	Change filament flow by inputting number
Pause	Can choose to continue printing	
Stop	Reprint or choose another model to print	

1. Preheat

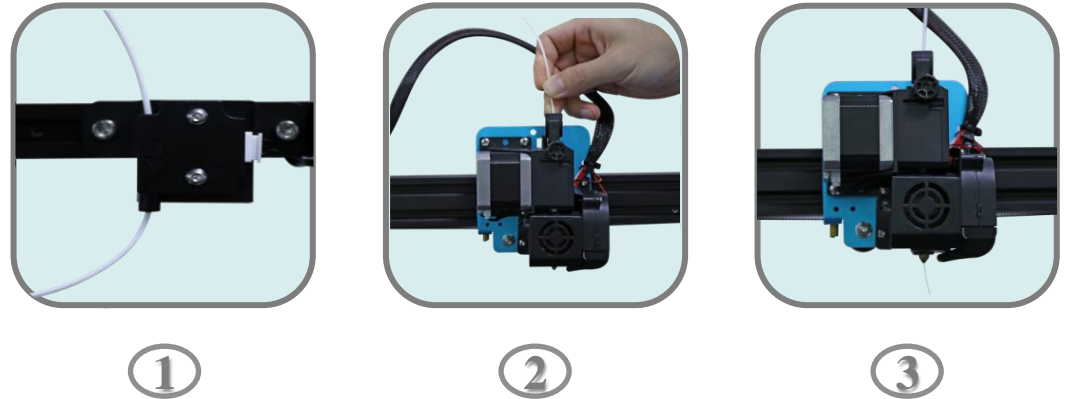
Method 1



Method 2



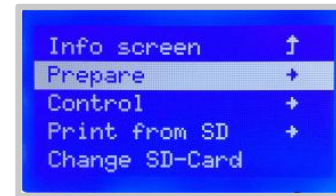
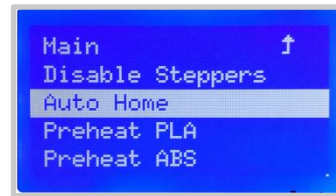
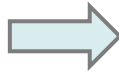
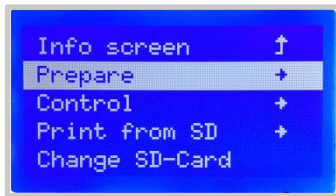
2. Feeding Filament



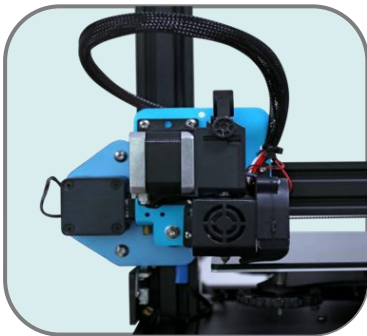
Press and hold the extruder lever then insert 1.75mm filament through the small hole of the extruder. Continue feeding until you see filament come out the nozzle.

Tip : How to Replace the Filament ?

1. Cutting filament near the Extruder and slowly feed new filament until they are fed into the new filament.
2. Preheating the nozzle and withdraw the filament quickly and feed the new filament.



1. Prepare → Auto Home. Wait for the nozzle to move to the left/front of the platform. → Prepare → Disable Steppers (Close stepper drive, release motor)



		<p>The nozzle is too far away from the platform, so the filament can not adhere to the platform.</p>
		<p>Filament are extruded evenly, just sticking on the platform.</p>
		<p>The nozzle is too close to the platform, and the filament are not extruded enough, even scraping the platform.</p>

2. Slide a piece of paper between the nozzle and the build plate.

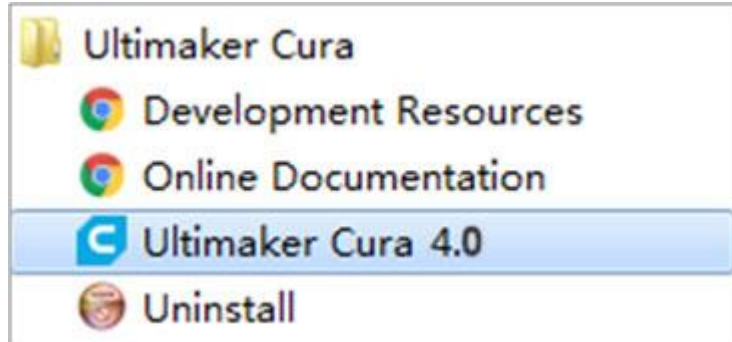
3. Adjust each of the four thumbscrews under the bed until the piece of paper slides, with just a tiny bit of drag, in all locations on the build plate.

Pro Tip: The Z axis stepper is also disabled. So you should handle the printer gently during the leveling process. Keep it flat and move the nozzle assembly carefully.



Cura.exe

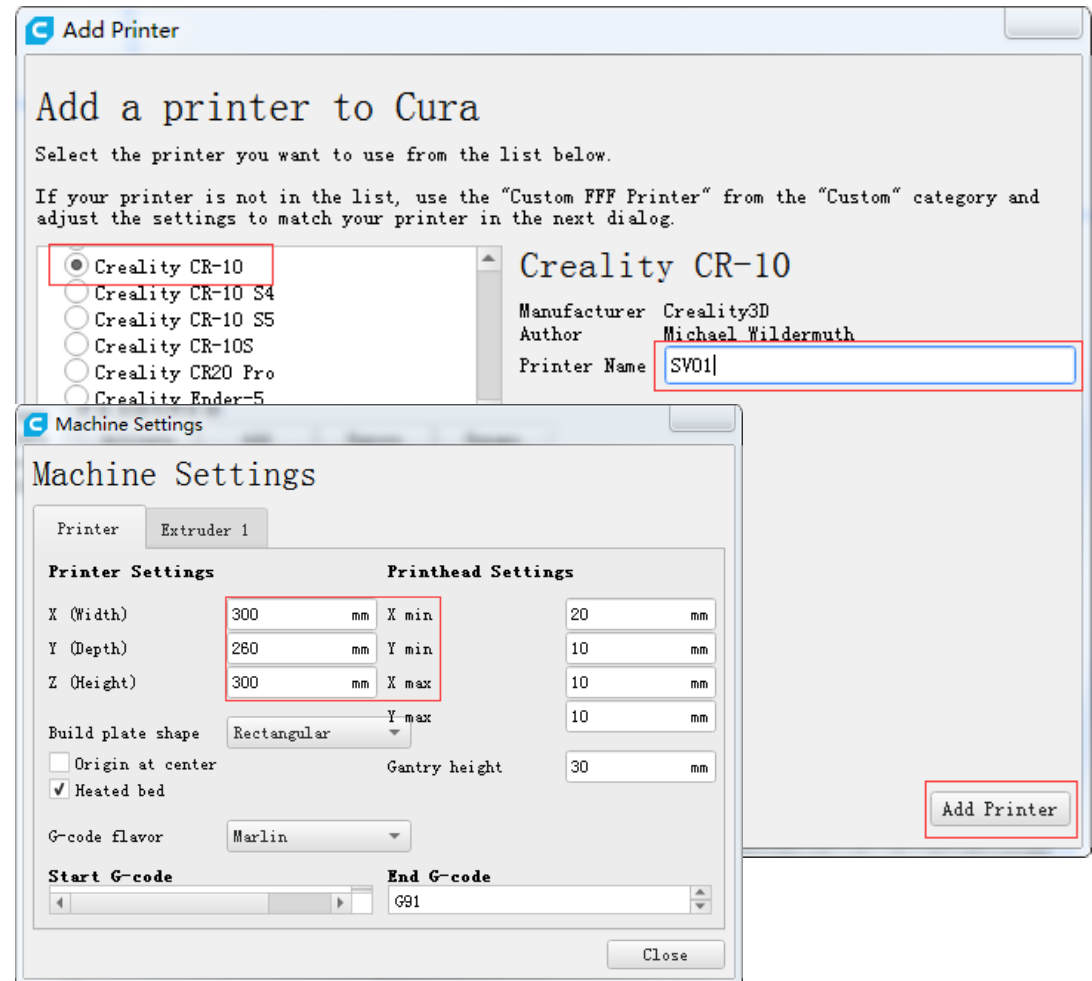
1. Install the Cura



2. Start Cura from the Start Menu.

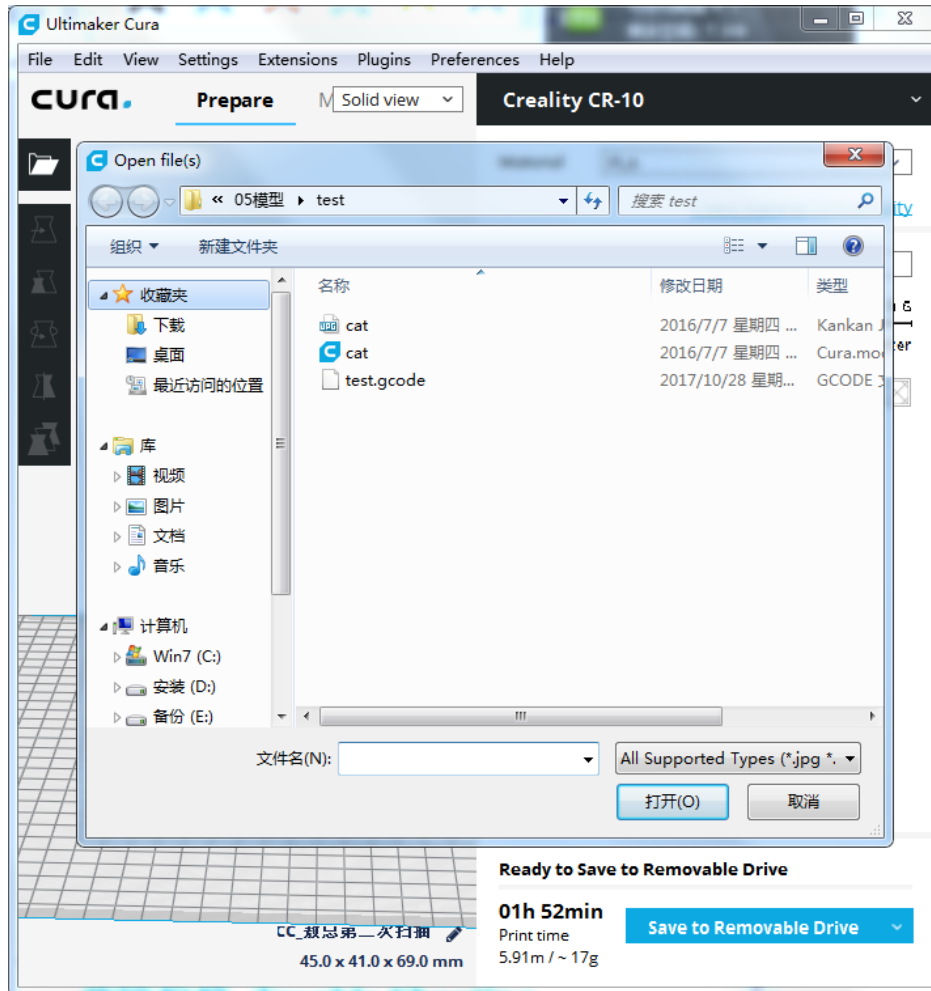
3. Select Other → Creality CR-10 → Rename the printer : SV01 → Add Printer.

4. Machine Settings → Change Printer Settings to (300, 260, 300) .



1. Slicing

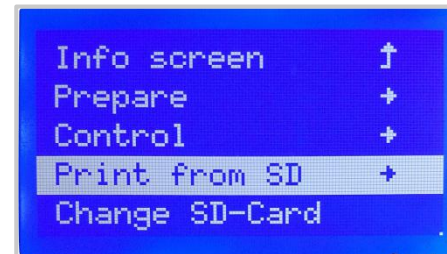
Insert SD card into computer with Reader.



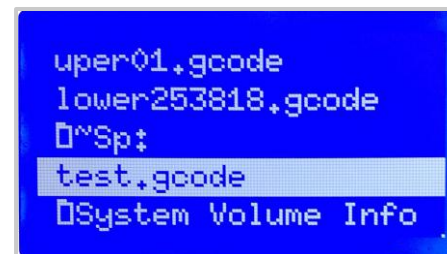
2. Printing



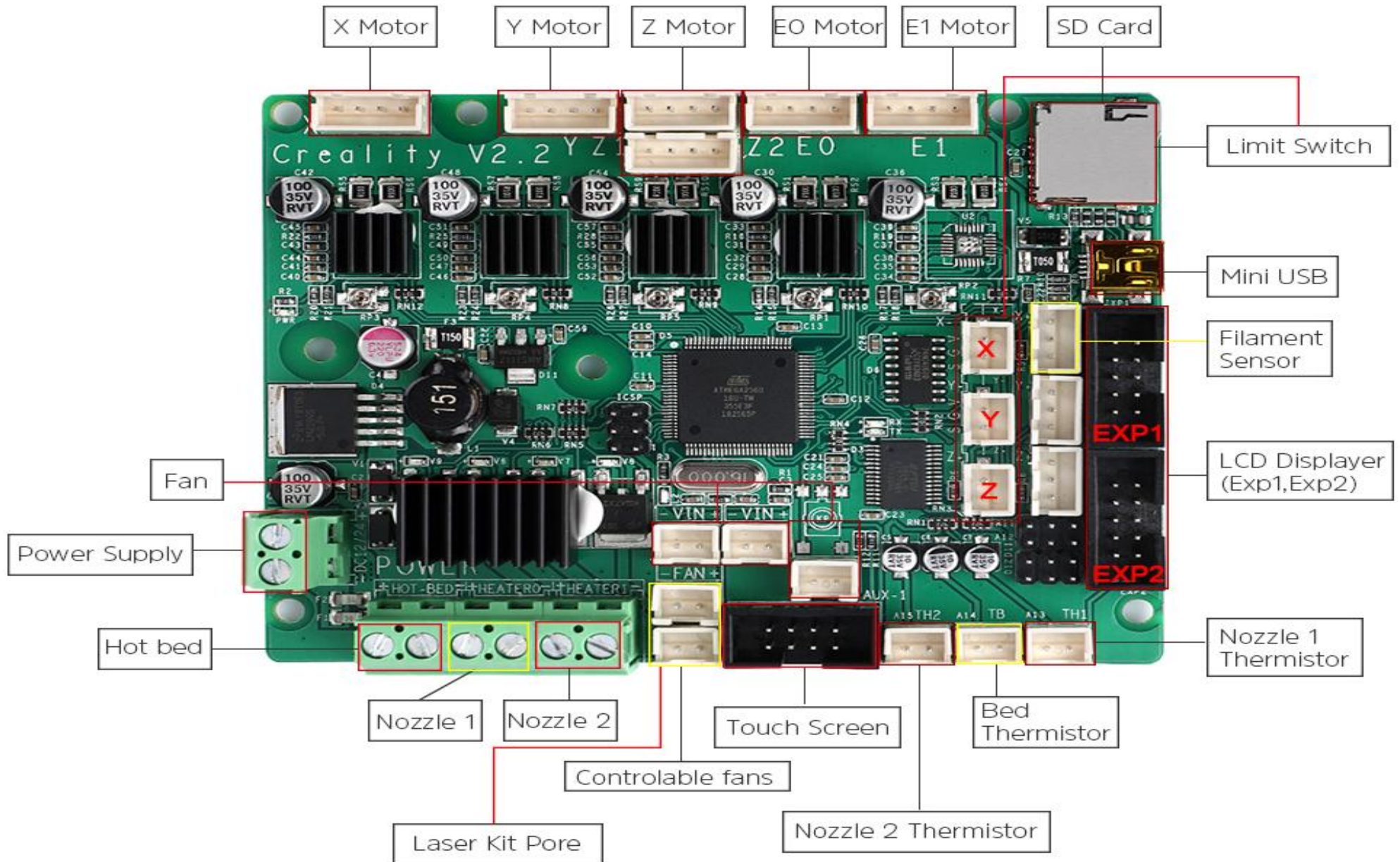
Insert the SD card



Select "Print from SD"



Select the file to be printed



Service

1. The printer can be returned within seven days, 15 days replacement, one year warranty, lifetime maintenance.

Replacement requirement

1. The appearance of the product is intact, without damage, scratches, smudges, cracks, deformation, etc.;
2. Machine parts, tools and others are complete;
3. Provide a complete and valid purchase invoice and warranty, product number should be the same.

Warranty coverage

1. The following accessories are not included in the warranty coverage if they are not damaged by transportation: platform sticker; platform forming plate; acrylic cover; card reader and TF card; platform glass; USB cable; filament; rack and tools, etc.
2. Profile: Before we deliver the goods, we will do the machine test, so maybe there will be light scratch, or due to long-distance transportation, which scratch the profile a little bit. in the premise of not affecting the normal use, in principle, not within the scope of warranty;
3. Nozzle assembly (nozzle, heating block, throat pipe, heat sink, Teflon tube, etc.) warranty period is 3 months, if it is damage after the warranty expires, you need to purchase another one;
4. Motherboard, LCD display, power supply, hot bed, warranty period is 12 months, if there are quality problems, you can get free maintenance; over the warranty period, can be sent back to the original factory maintenance, the users need to bear the return shipping and maintenance costs;
5. Not included in warranty coverage:
 - (1) It is not possible to provide an effective after-sales service card or serial number;
 - (2) The whole machine and components exceed the warranty period;
 - (3) Equipment failure or damage caused by unauthorized modification of the equipment (private modification includes: 1. modification of the nozzle assembly; 2. modification of the machine structure; 3. use of third-party components; 4. use of third-party firmware procedures or change the original Factory firmware program, etc.);
 - (4) Equipment failure or damage due to incorrect installation and use;
 - (5) Equipment failure or damage caused by the use of the equipment in a working environment not specified by the product;
 - (6) Equipment failure or damage due improper use (beyond workload, etc.) or maintenance (moisture, etc.);
 - (7) Equipment failure or damage due to the use of other branded components or low quality consumables.



Facebook QR Code



www.sovol3d.com

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