

LEO 3D printer Quick start manual



V 1.1

Contents

1.The machine frame.....	4
2.The machine module.....	5
3.Machine assembly.....	7
4.Wiring and filament installation.....	10
5.leveling.....	12
6.Print test.....	14
7.Loading and unloading of the filament.....	15
8.Motherboard wiring diagram.....	16

User notes

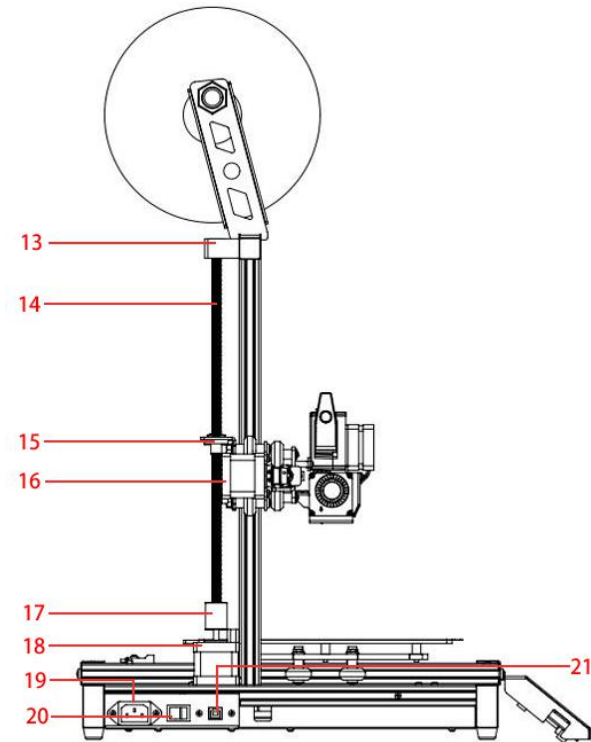
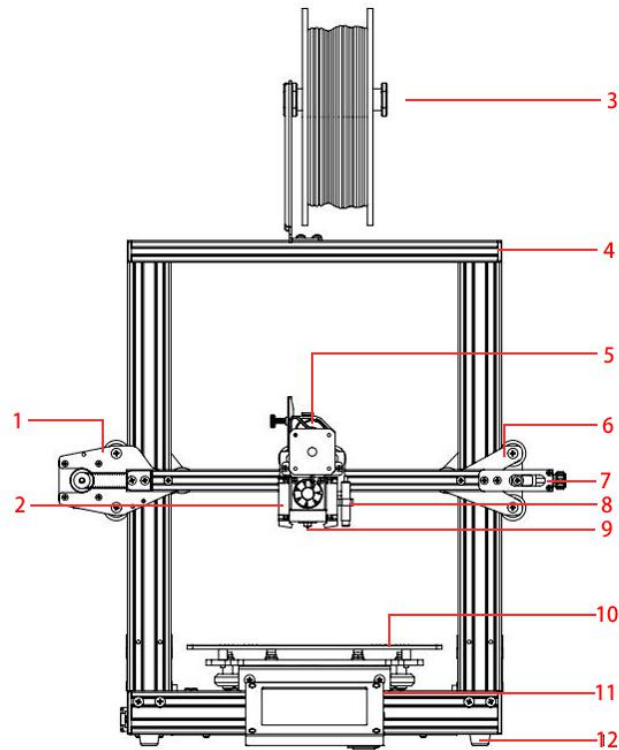
Thank you very much for your purchase and support of our 3D printer. You may have purchased other 3D products or know something about 3D printing technology. However, we still hope that you will read the product guide carefully, which contains a lot of important information about the use of the product for a better 3D experience. After reading and understanding the operation, you can immediately start your initial printing.

Be sure to read the following before using the machine:

1. Safety precautions for printer consumables: please use the consumables recommended by the original manufacturer, and do not use other manufacturers' consumables at will, so as not to cause nozzle blockage. Do not attempt to use this machine in any way not described in the instructions to avoid accidental personal injury and property damage.
2. The machine is suitable to be placed in a ventilated, dry and dust-free environment. Pay attention to the heat dissipation around the printer when using, avoid placing it on the thick carpet or close to the wall. Do not place the machine near inflammable and explosive articles or high heat source. Do not place the machine in a high vibration or other unstable environment. Do not accumulate heavy objects on this machine.
3. Please use the power cord attached to this machine when using power according to the specifications. Do not plug in and out when your hands are wet. Please use a qualified three-hole socket with ground wire. Please do not deliberately pull or excessively twist the wiring of the machine to prevent circuit breaking or short circuit. Ensure that the printer is grounded before running to protect it from static.

4. During the printing process, please note that the machine is equipped with an integral hot bed heating plate. When using the hot bed function, please do not set the temperature of the hot bed above 60 ° c to avoid scald. Under the age of 10, please do not use this machine without the supervision of personnel, so as to avoid personal injury. Avoid touching the structure of the printer head during the printing process and when the printing is just completed to avoid scalding. If abnormal noise occurs during printing, please turn off the power switch immediately, stop the printer and contact your buyer. Regularly do product maintenance, machine dust removal and lubrication on a regular basis. Do not attempt to disassemble or modify the unit using methods not described in this manual to prevent printer damage or other more serious security incidents. Regularly in the case of power failure, clean the printer with a dry cloth, wipe off dust and adhesive printing materials. If you must use a damp cloth to clean, do not use flammable solvents in case of contact with the printer's internal circuit may cause a fire or electric shock.
5. Power off after printing. After printing, use the residual temperature of the nozzle to clean up the consumables on the nozzle with the help of tools. Do not touch the nozzle directly. Try not to scratch the hot bed plate when taking the model with the spatula. Do a good job in the later maintenance, timely dust removal and lubrication, please power off the machine when the printer is not used for a long time, and dust the machine.
6. Please place the printer on a flat and solid platform for use. Before the first printing, please adjust the nozzle of the machine to be parallel to the printing platform to prevent the nozzle from scratching the platform.

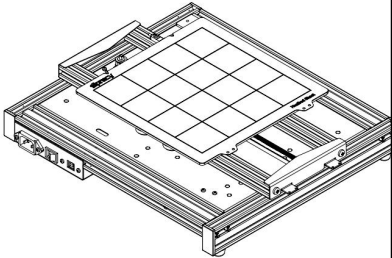
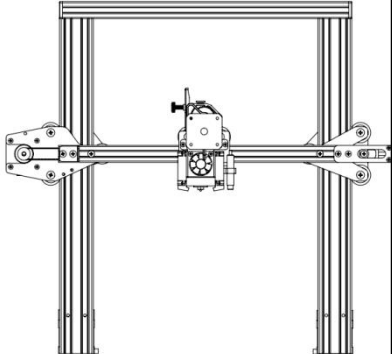
1.The machine frame

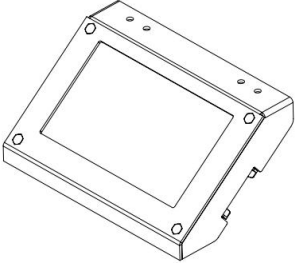
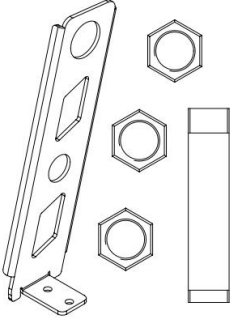
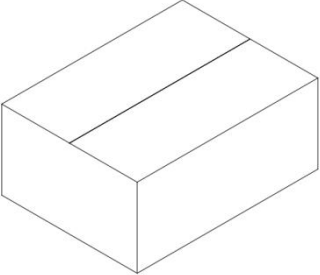


1. Left the slider of z - axis 2. Cooling fan 3. Filament support 4.The machine frame 5. Dual drive extruder 6.Right the slider of z - axis 7. The X axis belt regulator 8. Autoleveling switch 9. Nozzle 10. The print platform 11.LCD 12. Rubber foot 13. Screw fixed seat 14. Z axis screw 15. POM nut 16.The X axis motor 17.Coupling 18. The Z axis motor 19. Power socket 20 .power switch 21. The USB interface

2.The machine module

The whole machine is basically assembled into several modules before leaving the factory. We need to assemble these modules into the whole machine we need.

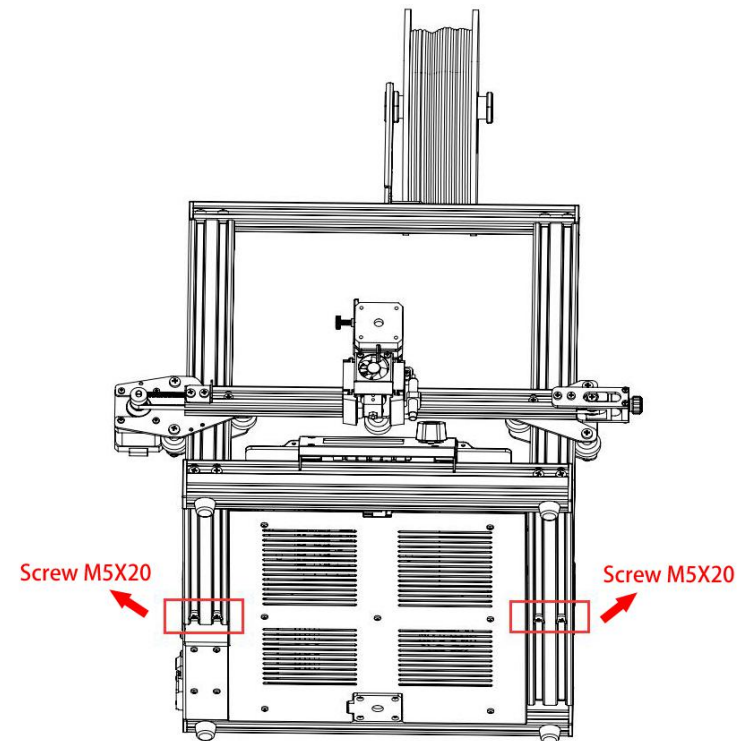
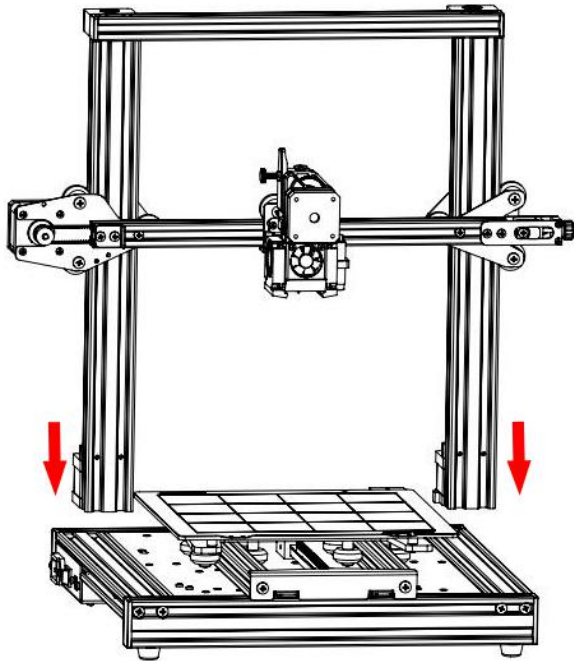
Number	picture	Name	Amount
1		Pedestal	1
2		Gantry-type	1

3		LCD	1
4		Filament support	1
5		Parts	1

3. Machine assembly

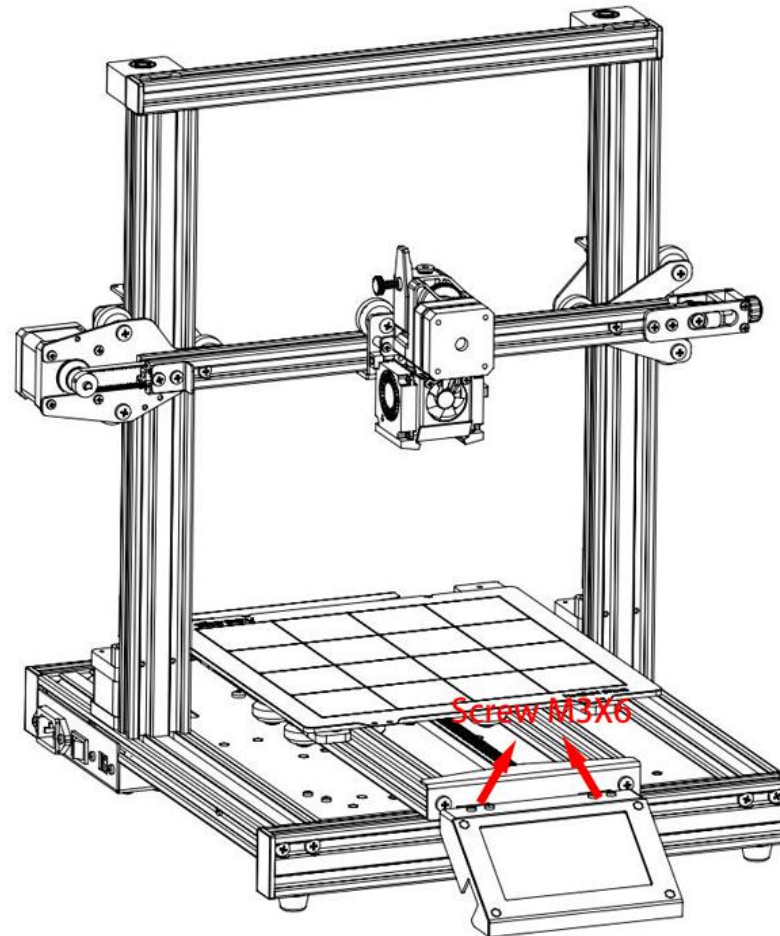
Step 1: Installation gantry frame

As shown in figure: 1 (Pedestal) and 2 (Gantry-type) are connected and installed with 4 M5X20 screws.



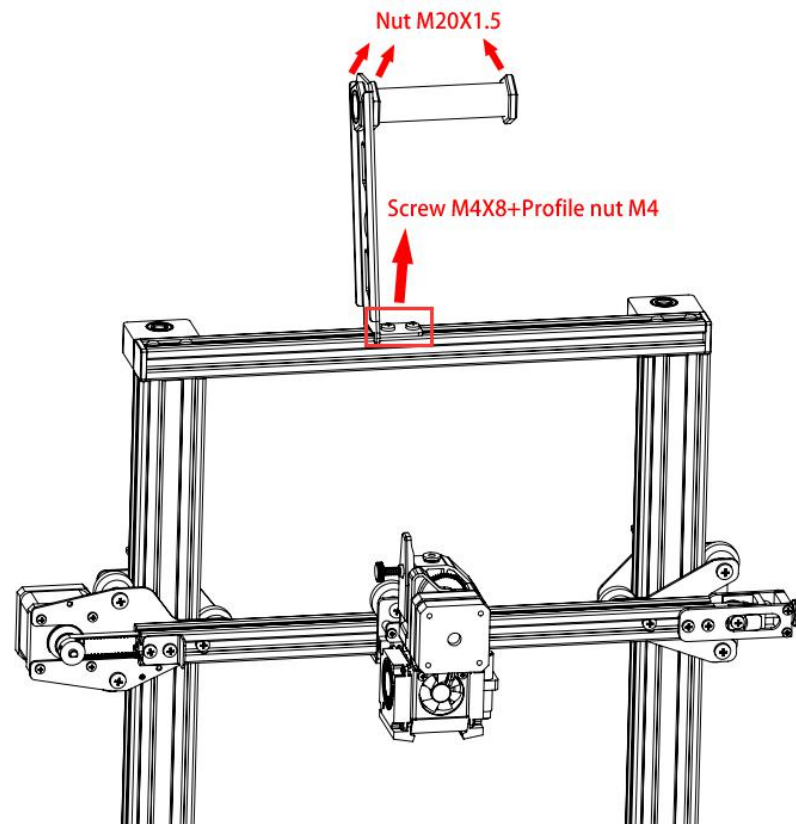
Step 2: install the display panel

As shown in figure: install the display screen on the front end of the machine with four M3X6 screws.



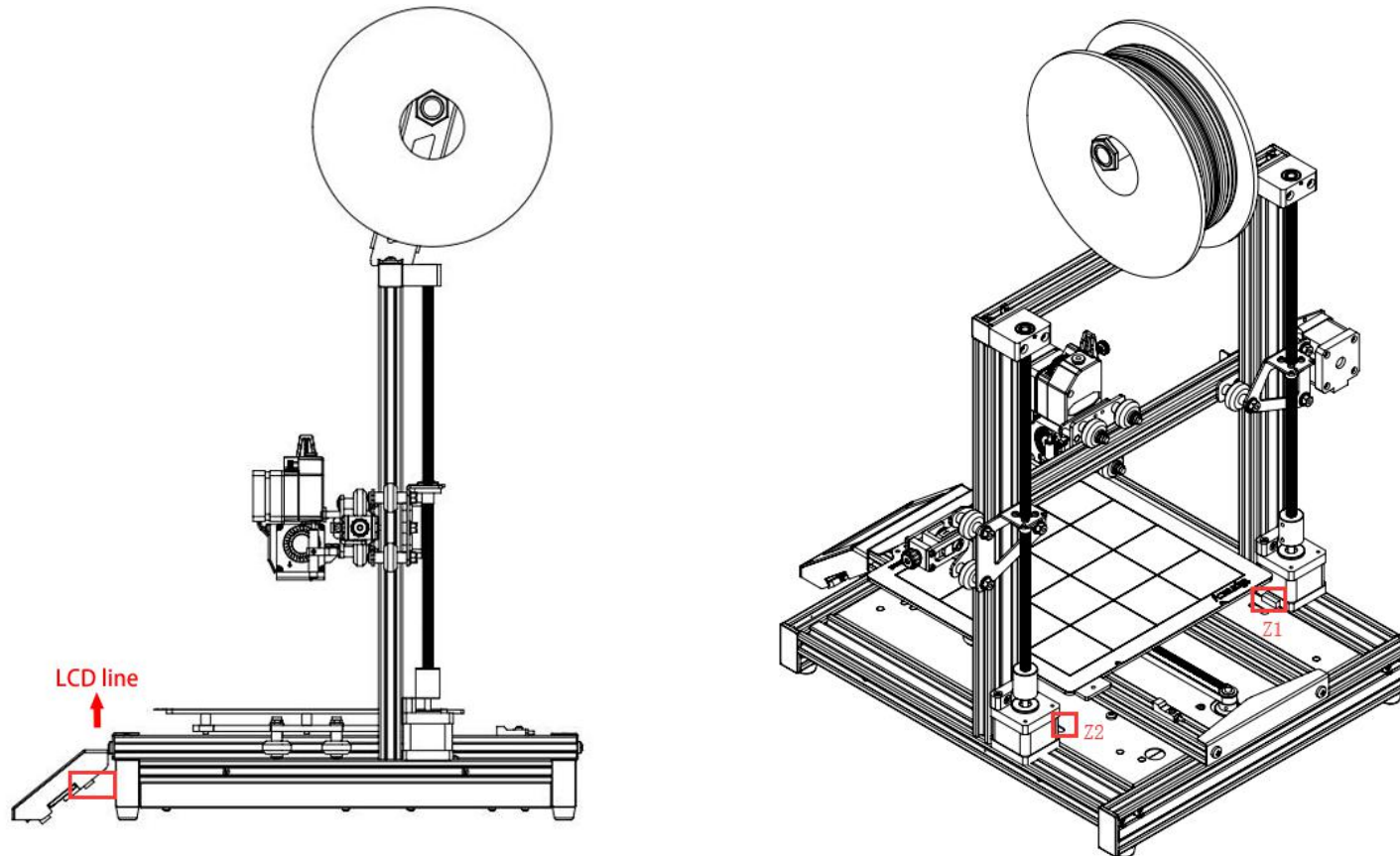
Step 3: install the Filament support

As shown in figure: mount the rack to the middle of the cross bar at the top of the rack with two M4X8 screws and two M4 profile nuts.

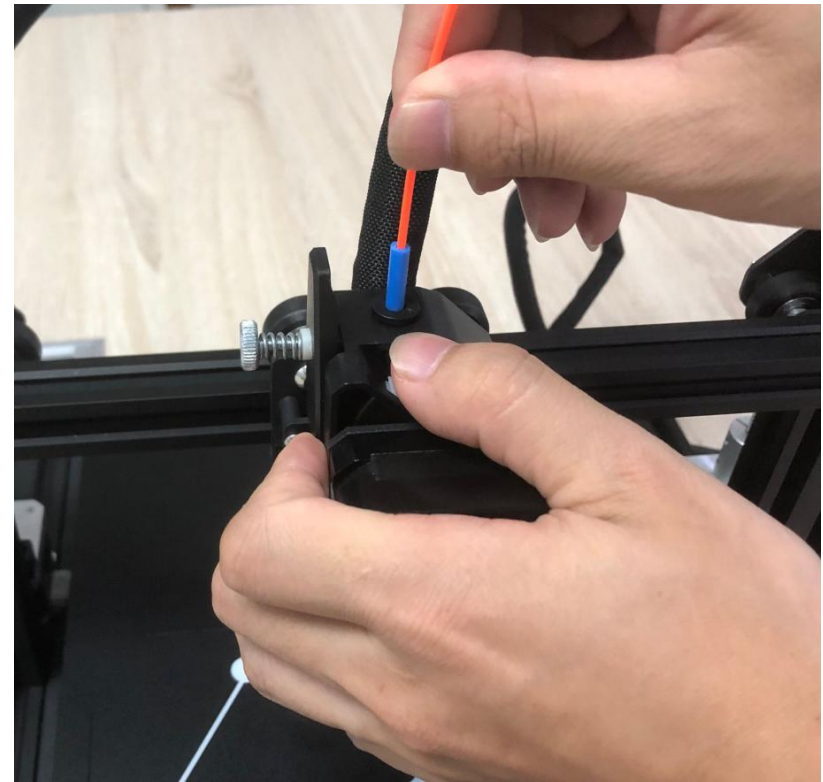
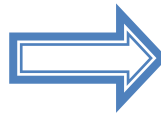


4. Wiring and filament installation

1) . Insert two z-axis motor wire harnesses as shown in the figure below, and then insert the display display wire harnesses (note the sequence of wire harnesses).

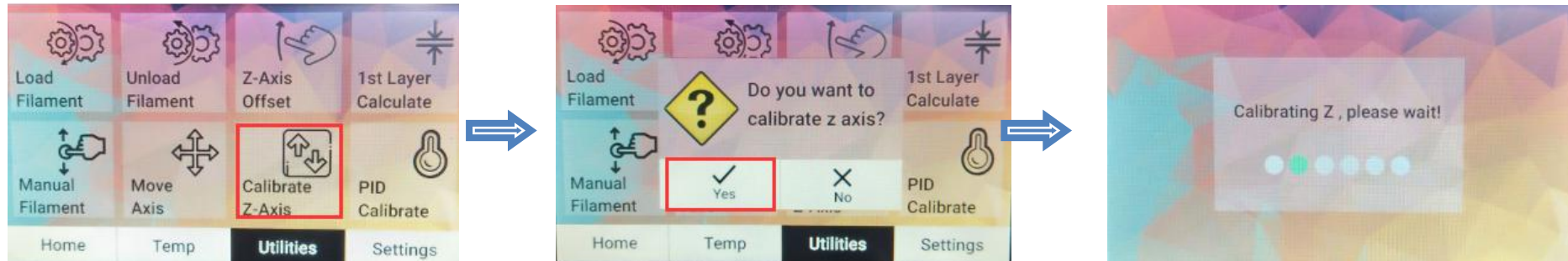


2).Installation of the filament (As is shown in) .

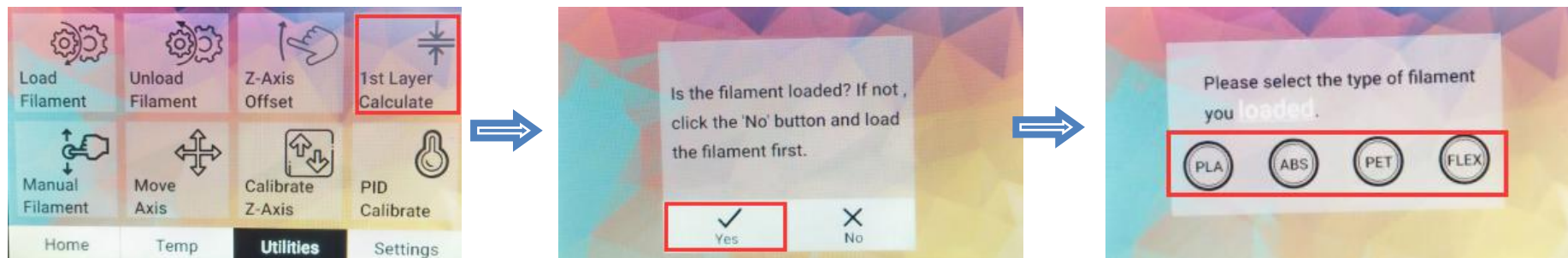


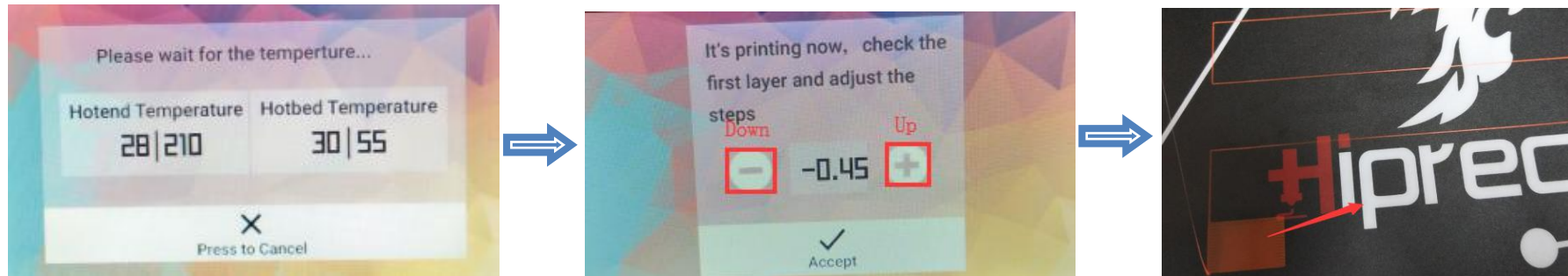
5. leveling

1) .Utilities→Calibrate Z-Axis, adjust the X-axis horizontal. The z-axis moves up, hits the top multiple times, and then moves down again.

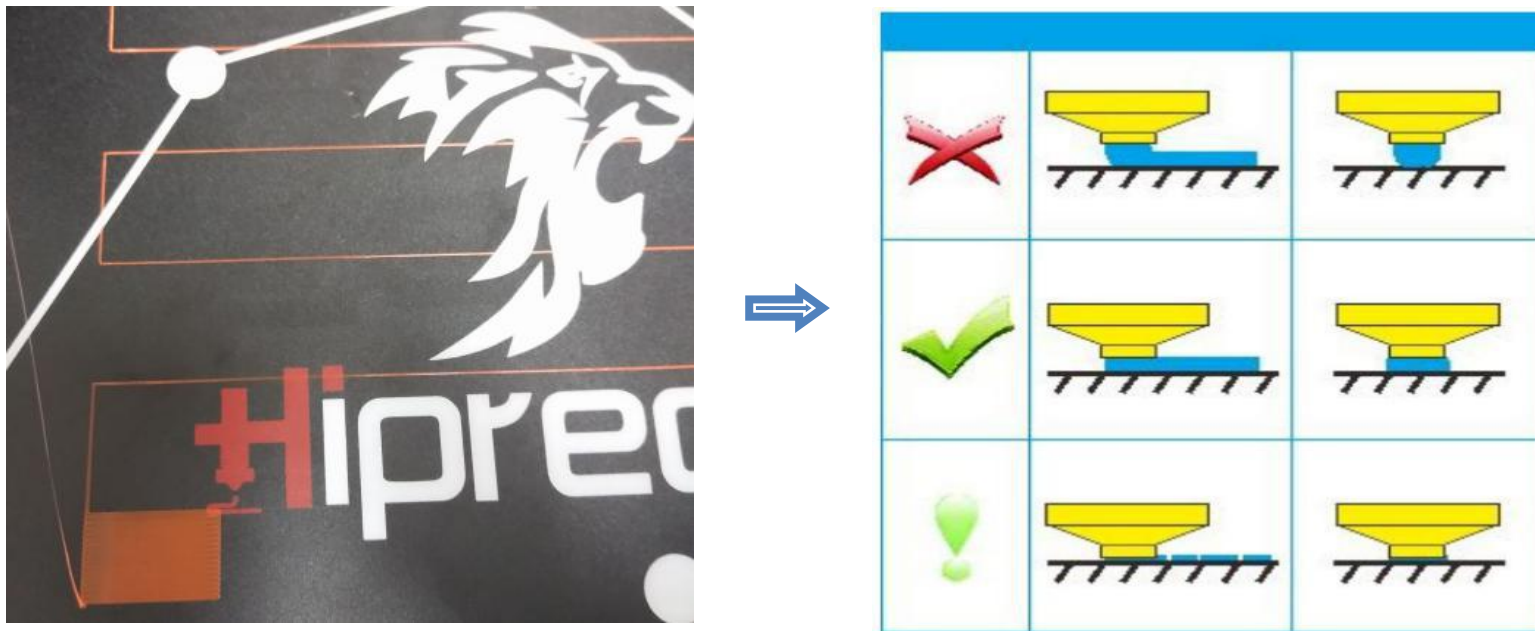


2) .Utilities→1st Layer Calculate, the first layer of nozzle shall be leveled. Confirm whether the consumables are inserted into the extruder, then select the type of consumables to be printed, wait for heating to be completed, and start printing the first layer.



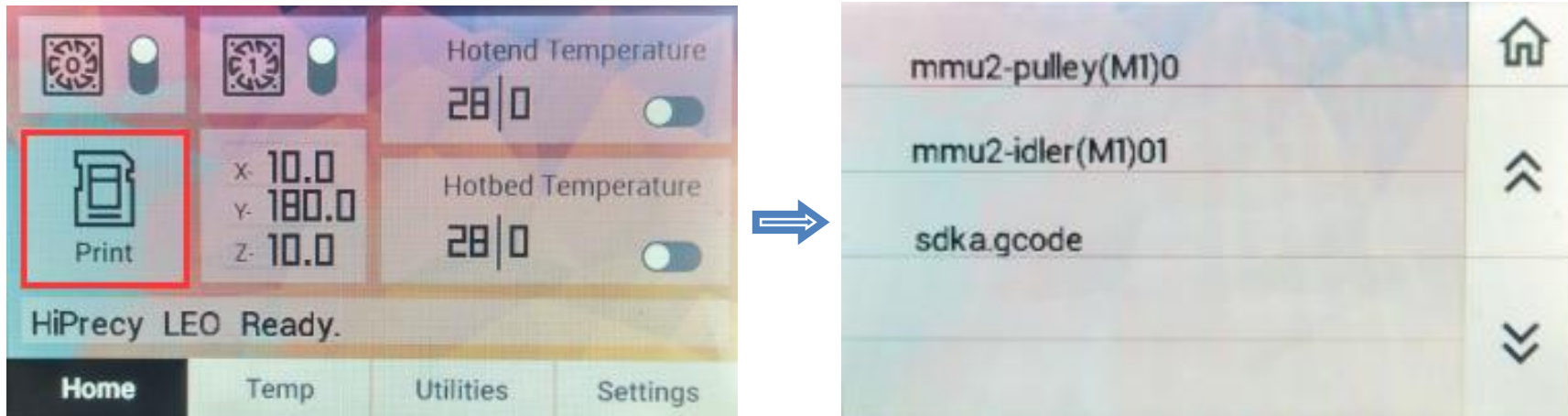


3) .When the nozzle extrusion consumables are too high from the platform and cannot be glued to the platform, select - (Down) lower the nozzle, and select + (Up) higher the nozzle when the nozzle touches the platform until the consumables are just spread flat to the platform with a gap of about 0.2-0.3mm.



6. Print test

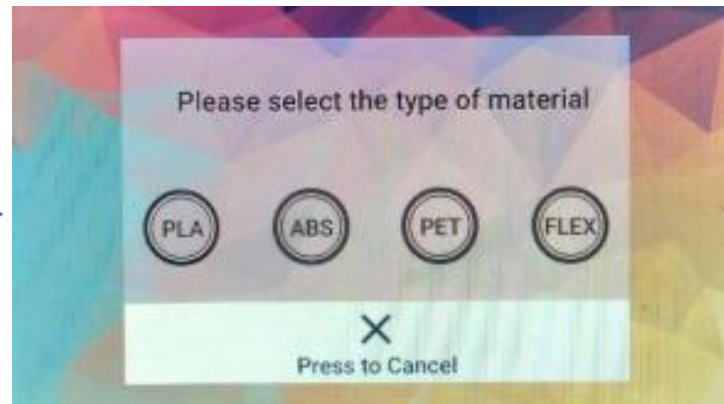
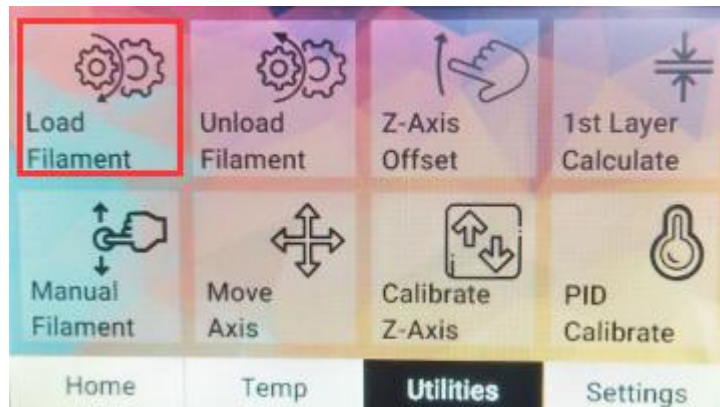
1) .Select from the menu to print from SD, click the required model file, and wait for the machine to preheat the hot bed and then preheat the extruder. After a few minutes, the machine will start printing.



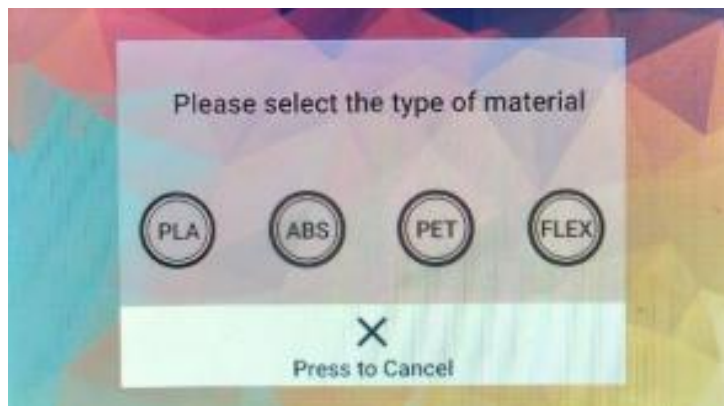
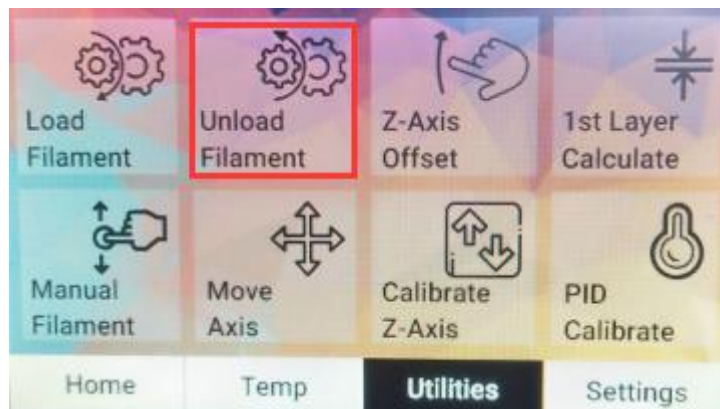
2) .Observe the printing situation, whether the first layer is printed smoothly.

7.Loading and unloading of the filament

1) .Utilities→Load Filament



2) .Utilities→Upload Filament



8. Motherboard wiring diagram

