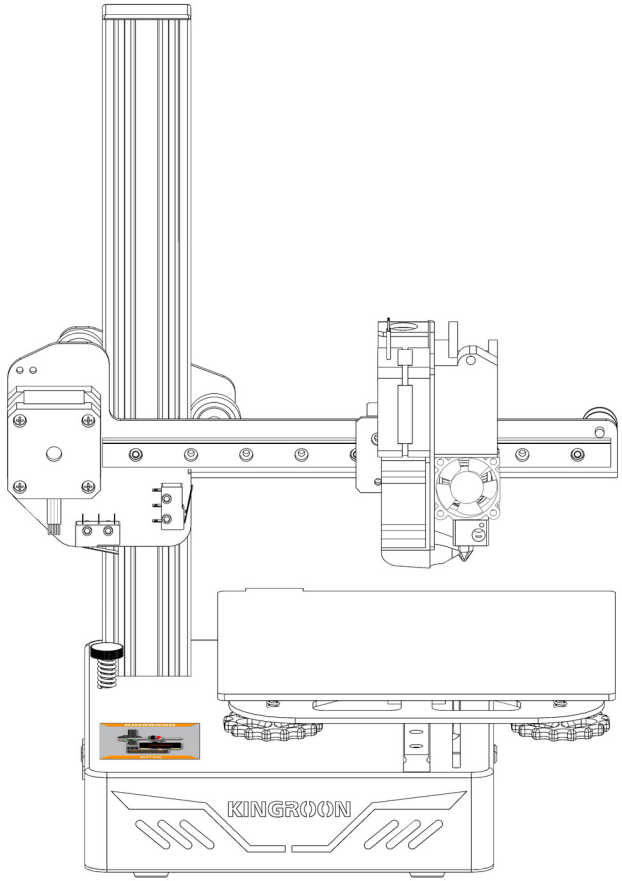
KINGROON

KP3S-FDM 3D Printer Instructions



KINGROON

3D PRINTER

Shenzhen Kingroon Technology Co.,Ltd

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Shenzhen, Guangdong Province

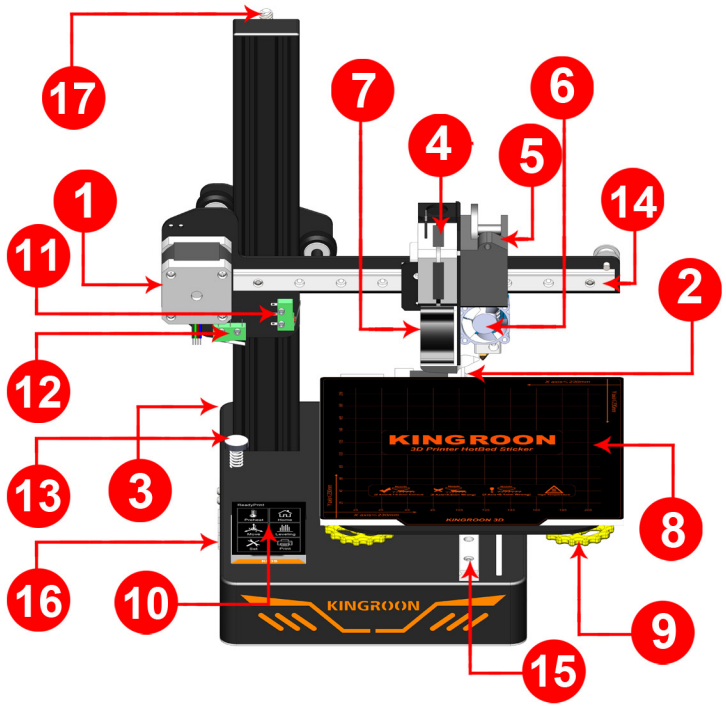
Facebook/YouTube: KingRoon 3D Printer

Contents

Notes:

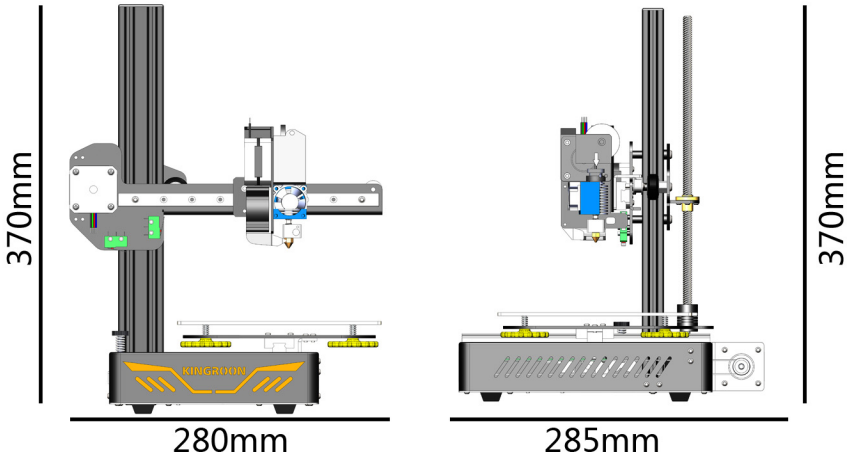
In order to use the product correctly, please read the manual completely

1.Product description



1.X-axis Motor	11.X-axis Limit Switch
2.Y-axis Motor	12.Z-axis Limit Switch
3.Z-axis Motor	13.Z Leveling Nut
4.E-axis Motor	14.X-axis Linear Guide
5.Extruder	15.Y-axis Linear Guide
6.Extruder Fan	16.Power DC Port
7.Filament Fan	16.USB Port
8.Hot Bed	16.TF Card Port
9.Leveling Nut	17.Z-axis Screw
10.LCD Touch Screen	

1.Product Description



Model Number：KP3S
Technology：FDM
Nozzle Quantity：1
Nozzle Diameter：0.4mm
Print Resolution：0.05-0.3mm
Filament Diameter：1.75mm
Applicable Filament: PLA/WOOD/TPU
Max Nozzle Temperature：≤260℃
Max Hotbed Temperature：≤110℃
Movement Speed：≤200mm/s
Print Speed：≤100mm/s
Proposal Speed：20mm-60mm/s
Print Via：USB/TIF Card
Supported File Format:STL/Obj/Gcode

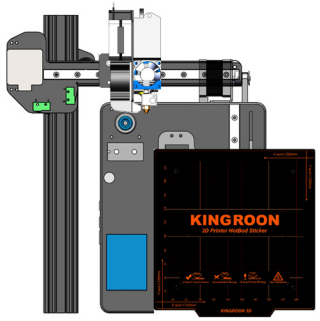
System Compatibility：Win7-10/Mac/Linix
Software：Cura/Slice/Host...
Screen Language：CN/DE/EN/RU/JP/FR/IT

Machine Power：240W
Input Voltage：110v-220v
Power Supply：24V15A360W

Filament Motor：Upgradeable
Auto Leveling：Upgradeable 3D Touch
Resume Printing After Power-off：Support

Net Weight：6kg
Machine Size：280*285*370mm
Paking Size：400*390*200mm

2.Packing List



3D Printer Part

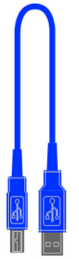
Power Supply

Power Cable

Micro Shear

Hex Wrench 1.5mm
Hex Wrench 2.0mm
Hex Wrench 2.5mm
Hex Wrench 3.0mm

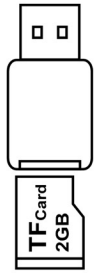
8-10mm Wrench



USB Cable

M5*20

Filament Holder



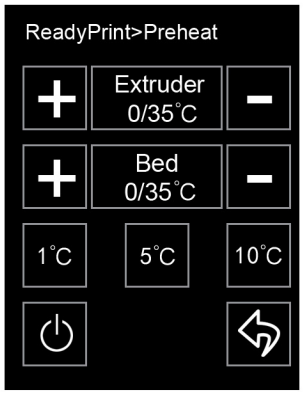
TF Card

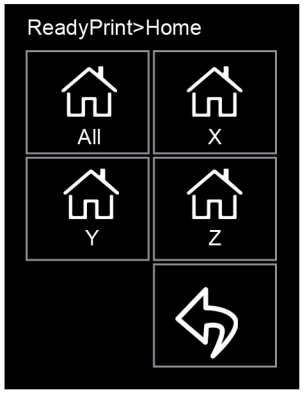
PLA Filament

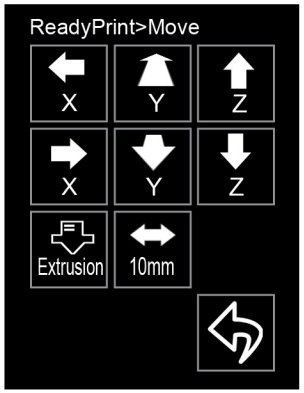
0.4mm Nozzle

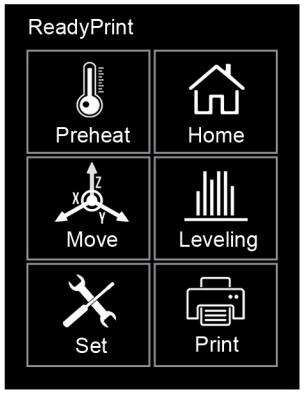
5*8mm Coupling

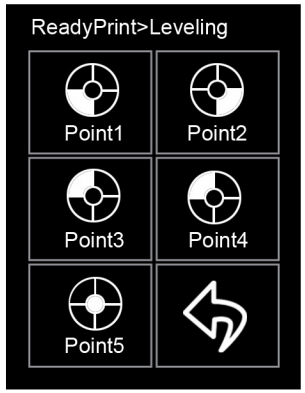
3.Touch Screen Introduction

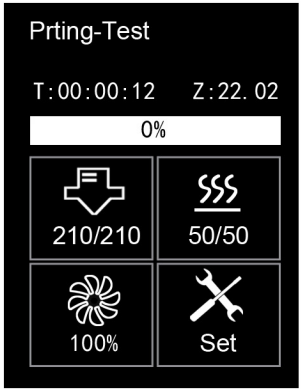




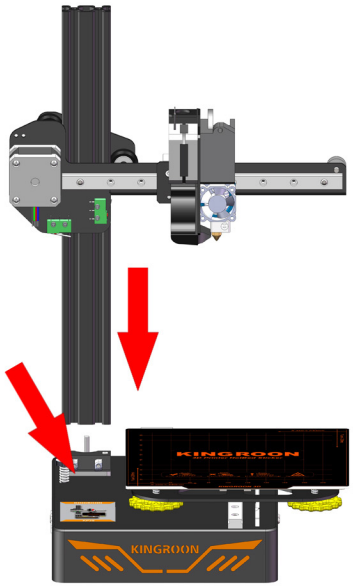






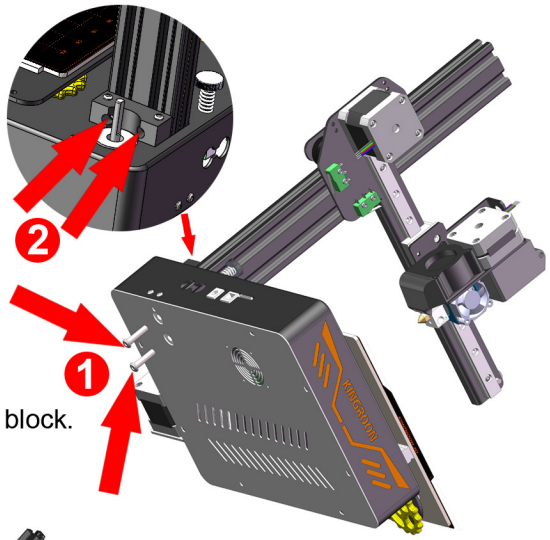


4.Assembly Instructions



Step1

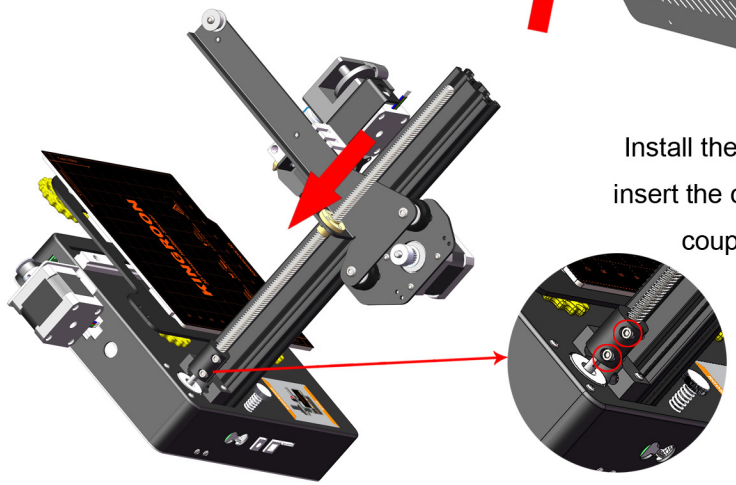
Take out the 3D Printer kit and insert it into the specified position as shown.



Step2

1:Take the 3# hex wrench and fix the xz axis from bottom with the M5 screws.

2:Then tighten the Z axis fixing block.

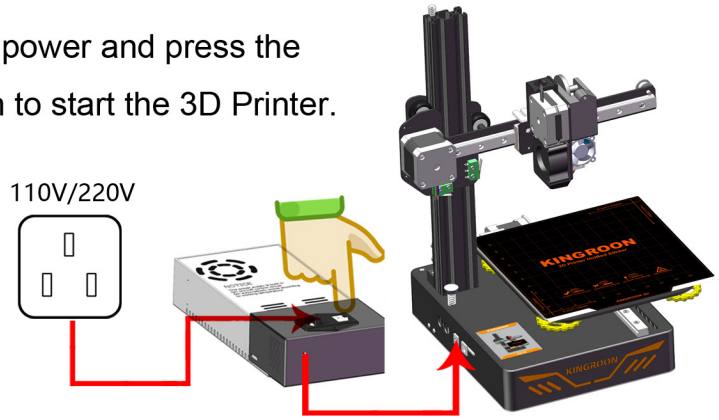


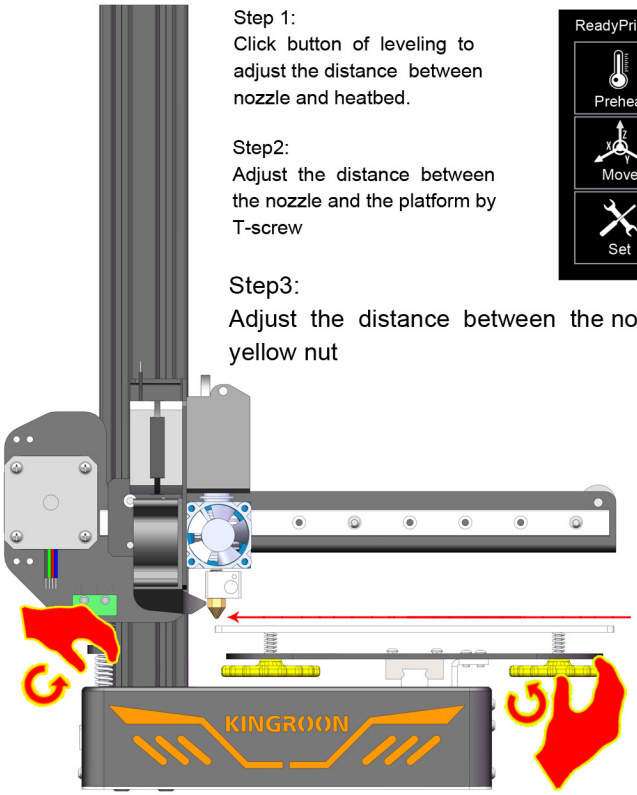
Step3

Install the T-screw rod and insert the coupling.Lock the coupling with T-screw

5.Operation Usage Instruction / Bed Leveling

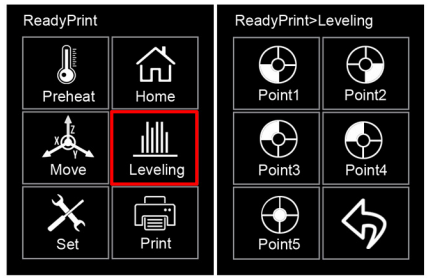
Connect the power and press the power switch to start the 3D Printer.





Step 1:
Click button of leveling to adjust the distance between nozzle and heatbed.

Step2:
Adjust the distance between the nozzle and the platform by T-screw



Step3:
Adjust the distance between the nozzle and the platform by the yellow nut

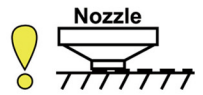
The correct distance is 0.1mm - 0.2mm, which can be adjusted through ordinary A4 paper for assistance.

6.Bed Leveling / Filament Insertion

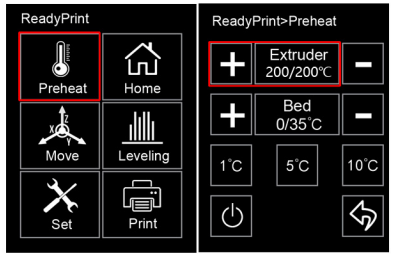
1.The distance between nozzle and platform is from 0.1mm-0.2mm, the squeezing filament is able to stick to the platform perfectly. Then go on printing.
2.The distance between nozzle and platform is less than 0.1mm, the nozzle is not able to squeeze filament completely. Please adjust the the yellow nuts below the platform until to an appropriate distance.
3.The distance between nozzle and platform is over than 0.2mm, the squeezing filament is not able to stick to the platform. Please adjust the the yellow nuts below the platform until to an appropriate distance.

(Z Axis=0.1-0.2mm Correct)

(Z Axis>0.2mm Wrong)



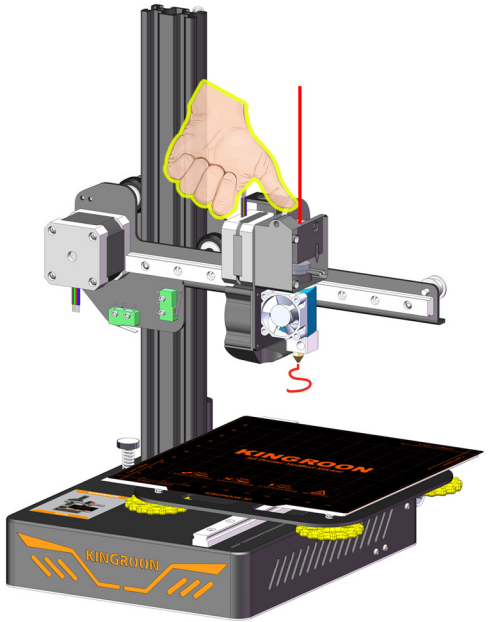
(Z Axis<0.1mm Wrong)



Preheat the nozzle up to 180°C or above.

Press the extruder by hand to insert the filament.

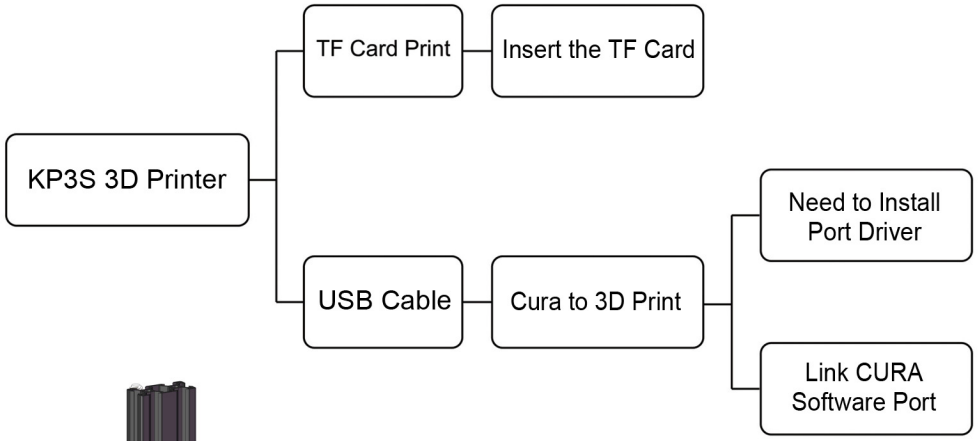
Pay attention to high temperature

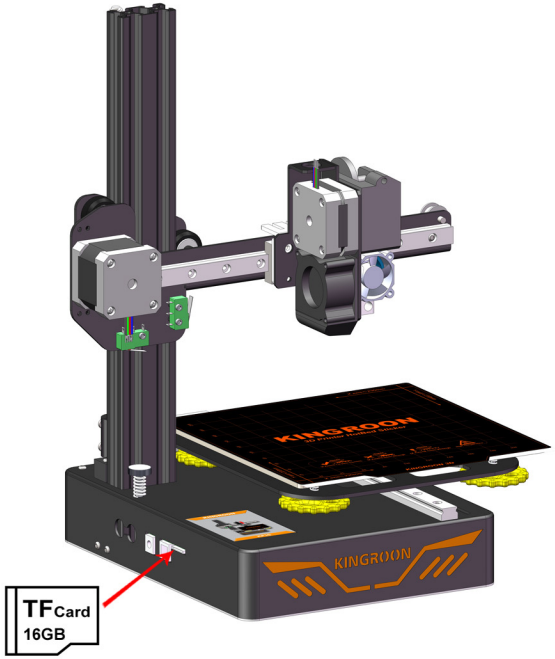


6.How to Print

Printing method: Online printing and TF card printing

1. Online printing:Connects the computer to the printer via the USB cable and open chip software, such as Cura, is used to control the printer work. Due to the fact that it's easy to be interfered and interrupted via the USB cable, this way is not highly-recommended.
2. TF card printing: After Leveling, insert the TF card into the printer and select the file to print by touching the LCD screen.



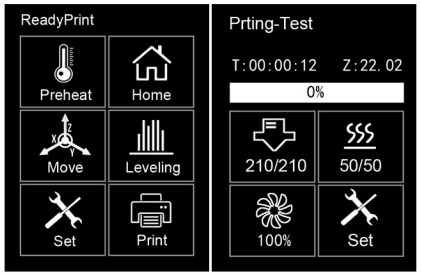


Step1:

Insert the TF card into the card slot.

Step2:

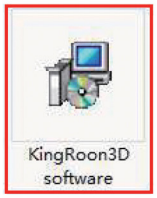
Click Print button, choose the right printing file to print.

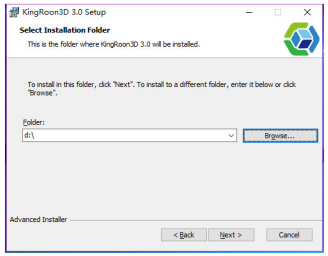


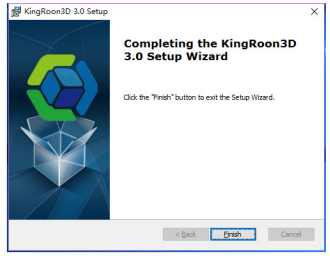
7.Software Installation

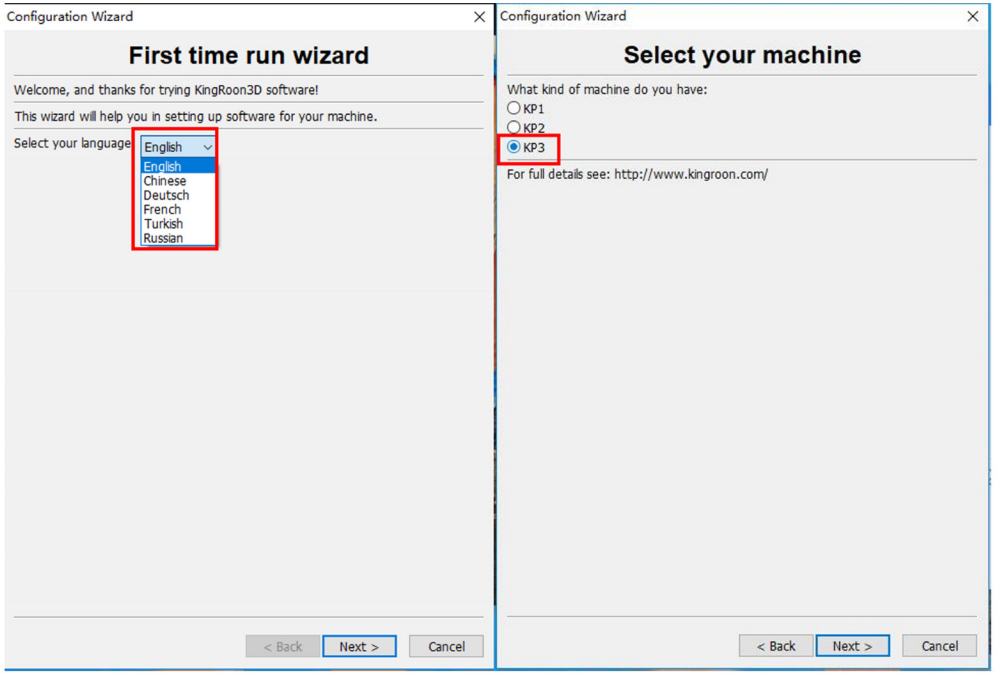
Step1: Find out software in the TF card and then install it according to the guidence.

Details as below:





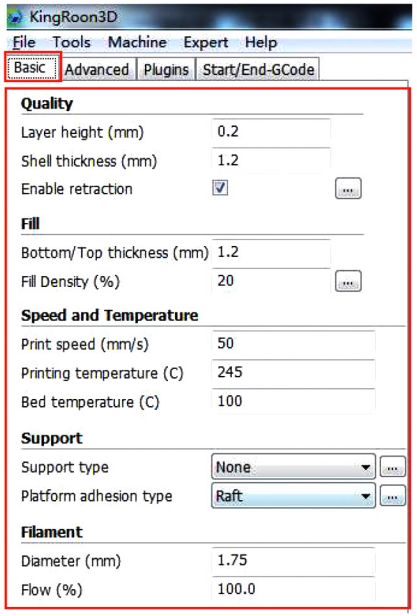




Step2: Open the Kingroon software which has been installed earlier and then set it up preliminarily.

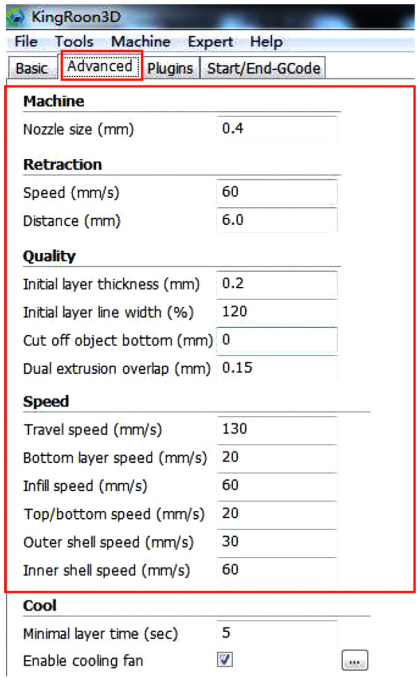
Step3: Select Laguage and choose 3D printer module number(KP3),then finish installation and run it.

Step4: Open the file of models, slice them and then save them as Gcode format.



Basic setup

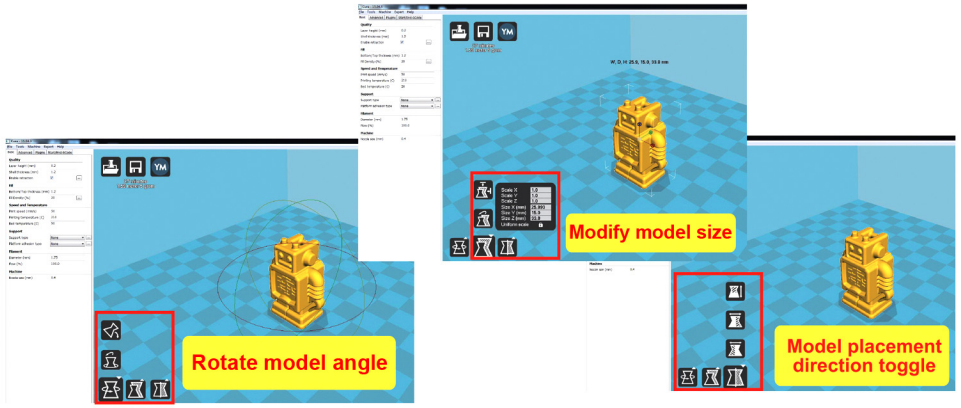
Layer height(mm) 0.05-0.3mm,0.2mm recommended
Shell thickness(mm)0.8-1.6mm,>0.8mm
Bottom/Top thickness(mm)0.8-1.6mm,>0.8mm
Fill Density(%)0-50,>0
Print Speed(mm/s)30-150mm/s,30-50mm/s recommended
Printing temperature:190-220°C (PLA) 220-250°C (ABS)
Bed temperature:40-60°C (PLA) 80-100°C (ABS)
Support type: Models support type
Platform adhesion type:Make models and Bed better attached
Filament Diameter(mm):1.75
Flow(%):100.0
Machine Nozzle size(mm):0.4

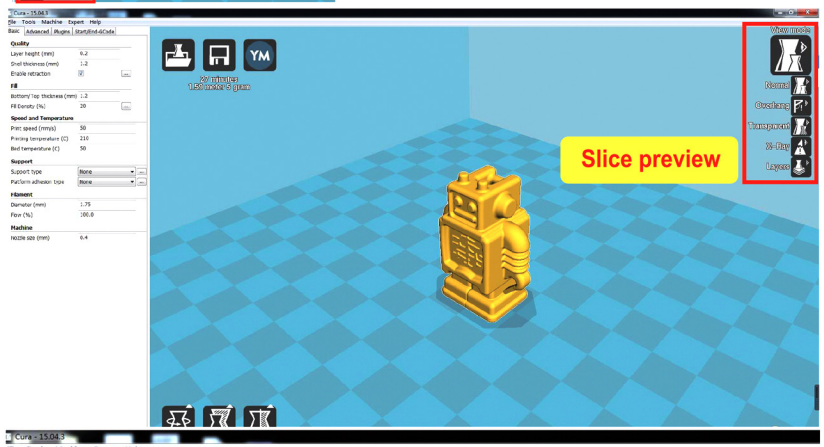


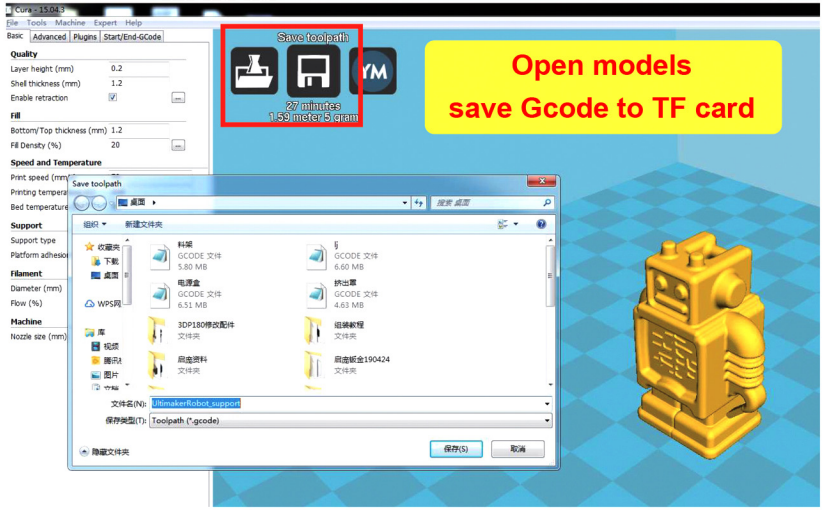
Advanced setup

If stringings appear during printing process,
Please modify the retraction.
Retraction Speed(mm/s):40-80mm/s
Retraction Distance(mm):4-8mm
About Quality,Speed, Cool, you can keep their default parameters.

8.Slice Settings







FAQ

>An error occurred on the screen:

Err1: hot bed MAXTEMP; Err2: nozzle MAXTEMP;

Err3: hot bed MINITEMP; Err4: nozzle MINITEMP;

Err5: Nozzle heating failure; Err6: Hot bed heating failure;

Err7: Thermal Runaway;

Check the nozzle temperature or hot bed temperature by tapping "Preheat" button. A negative number indicates that the thermistor is in poor contact or damaged.

>Layers are misaligned and shift relative to one another

a) Loosing XY timing belt will cause the model to shift, tighten the timing belt and fix it as well.

>Extrusion stuck without discharging:

a) Heat up the nozzle,then remove the material remained in nozzle. Use a 1 .5# wrench to clean the nozzle, or replace it with a new one.

>3D printing model warping:

a) Set different temperatures according to different filament, check the software settings for details.

b) The distance between nozzle and platform is large, please re-leveling. Check out the leveling method for details.

c) The printing speed of first layer is too fast, 20mm/s for first layer printing speed is highly recommended.

Note:Each 3D printer has been tested before leaving the factory. If there is a little filament remaining in the nozzle or a slight scratch on the printing platform, it is normal and it will not affect the performance.

Safe Working Environment

The KINGROON 3D Printer should be equipped with an original transformer or power supply. Otherwise, the machine could be damaged or even cause a fire.Always place the printer on a stable base where it cannot fall of tip over.Please ensure the printer is far away from flammable gas, liquid and dust while it is being operated. (The high temperature generated by the operation of the printer may react with the dust, liquid or flammable gases in the air, which may cause a fire.)The ambient temperature recommended for using the printer is 10℃-30℃, and the humidity 20%-70%. Using the print outside theses ranges may cause poor printing results.Please never expose the printer to moisture or heat. Never use the printer during an electrical storm. The printer is for indoor-use only.If you are not suing the printer for a long time, please turn off the printer and unplug the power cord.

Safety Manual

1. When the printer is working, DO NOT TOUCH the heat generating parts,NOT even with gloves, as the extreme heat can melt the gloves causing severe burns. WARNING: THE NOZZLE TIP CAN HEAT TO 260℃ AND THE PRINT BED CAN HEAT TO 100℃.

2. DO NOT TOUCH any working parts while printer is printing. The nozzle tip and other mechanical parts will run at high speed. Contact with any running parts may cause damage and injury.

3. When printing with PLA or Wood materials ensure the printer is in a well ventilated environment, due to the fumes released by the plastic materials.

4.NEVER allow children or untrained people to operate the printer.

Daily Maintenance

Please do dust removal maintenance and lubricate the printer every month. If you are not using the printer for a long time, please remove the filament and keep the storage environment dry, dust-free. The printer should place in a temperature-stable environment. The sudden drop in temperature can affect the printing quality. When the print nozzle is squeezing, please make sure there is enough space between the nozzle and the platform; otherwise the nozzle will be blocked.

1.Clean/Maintain the print platform, replace the tape if used.

2.Preheat the nozzle and extrude a small amount of filament.

3.While the nozzle is still hot, use a steel brush on it to clean any excess filament.

4.Preheat the print bed and level it.