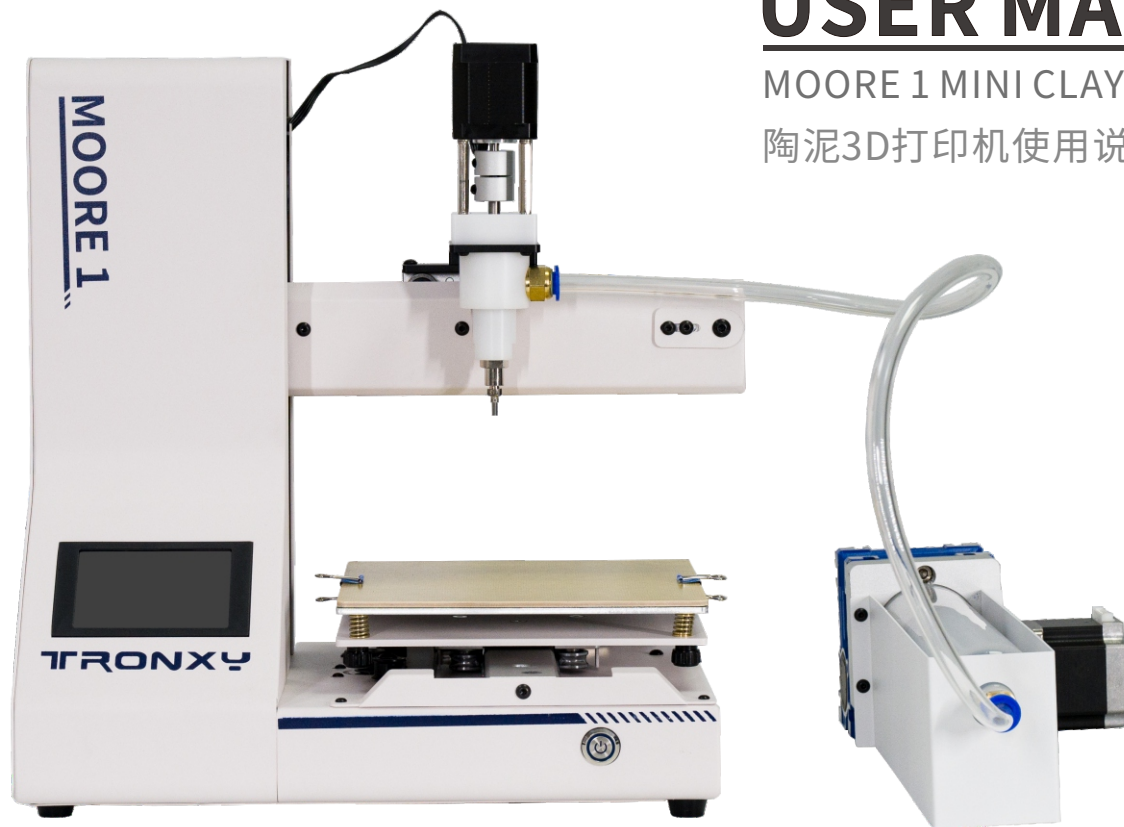


TTRONXY

USER MANUAL

MOORE 1 MINI CLAY 3D PRINTER

陶泥3D打印机使用说明书





When unpacking, please check the packing list to ensure that no parts are lost or damaged. If any, please contact our after-sales personnel immediately and we will reissue them for you in the shortest time.

开箱时,请对照装箱清单,确保无零件的丢失及损坏,如有发生,请立即联系我们的售后人员,我们会在最短时间内为您补发。



Please use the machine in a ventilated, dry, clean and flat environment.

请在通风、干燥、清洁、平坦的环境中使用机器。



The machine contains high-speed moving parts. Children are not allowed to use the printer alone. It is not recommended to use this 3D printer when unattended.

该机器包含高速运动部件,儿童不得单独使用打印机;无人看管情况下,不建议运行 3D 打印机。



The recommended room temperature for 3D printers is 8°C-40°C, and the humidity is 20% - 80%. If used outside this temperature and humidity range, it may lead to a bad printing effect.

3D 打印机的使用环境温度建议为 8°C-40°C,湿度为 20%-80%,在此范围之外使用,可能带来不良的打印效果。



In an emergency, you can turn off the power directly.

在紧急情况下,可直接关闭电源。



If the user's unauthorized modification or disassembly causes damage to the core components of the machine, the situation is not covered by the warranty.

如果用户擅自改装或者拆卸导致机器的核心部件损坏,则该情况不在保修范围内。



Video, software and other related information are stored in the SD card, please check.

视频,软件等相关信息存储在SD卡中,请查看。

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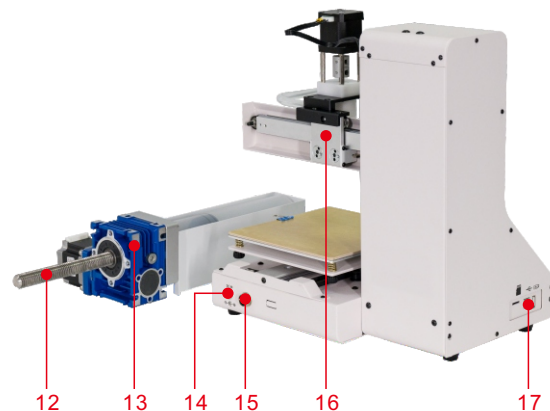
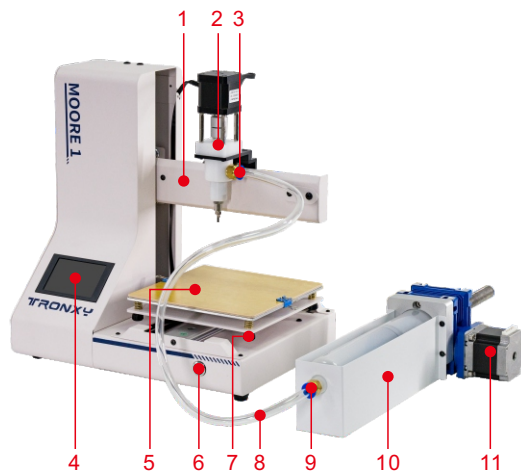
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打印完成注意事项	30
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Product Introduction and Parameters

产品介绍与参数

Introduction 设备简介



1 X axis system

X轴运动系统

2 Print head module

打印头模块

3 PC10-03 pneumatic connector

PC10-03气动接头

4 3.5 inch full color touch screen

3.5寸全彩触摸屏

5 Printing platform

打印平台

6 Power switch

电源开关

7 Leveling nut

调平螺母

8 Tube

料管

9 PC10-02 pneumatic connector

PC10-02气动接头

10 Barrel holder

料筒固定支架

11 57 feeding motor

57送料电机

12 M18 feeding screw

M18送料螺杆

13 Transmission

变速器

14 DC interface

DC接口

15 57 Extrusion motor interface

57挤出电机接口

16 X axis slider

X轴滑块

17 USB-A, USB-B and TF card sockets

USB-A、USB-B和TF卡插口

Parameter 设备参数

Print parameters

打印参数

Printing principle :	LDM (Liquid Deposition Molding)
打印原理	LDM (液体沉积成型)

Print volume :	
打印体积	180×180×180 (mm)

Printing accuracy :	
打印精度	0.3-3.0mm

Positioning accuracy :	
定位精度	X/Y: 0.00625mm, Z:0.00125mm

Number of printhead :	
喷头数量	1

Nozzle diameter :	1.0-3.0 mm (optional)
喷嘴直径	1.0-3.0 mm (可选)

Print speed :	10~40mm/s (30mm/s is recommended)
打印速度	10~40mm/s (建议30mm/s)

Moving speed :	
移动速度	60mm/s

Consumables :	Ceramic mud, porcelain mud, purple sand mud, etc
耗材	陶泥 瓷泥 紫砂泥等

Temperature parameter

温度参数

Ambient temperature :	
环境温度	8°C - 40°C

Software parameters

软件参数

Slicing software :	
切片软件	Cura

Input format :	
输入格式	.STL .OBJ

Output format :	
输出格式	G-Code

Connection method :	TF card, USB disk, USB cable (for skilled users)
连接方式	TF卡、U盘、USB线(适用于熟练使用者)

Power parameters

电源参数

Power input :	
电源输入	100V-240V AC, 50/60Hz

Power output :	
电源输出	24V/4A DC

Physical parameters

物理参数

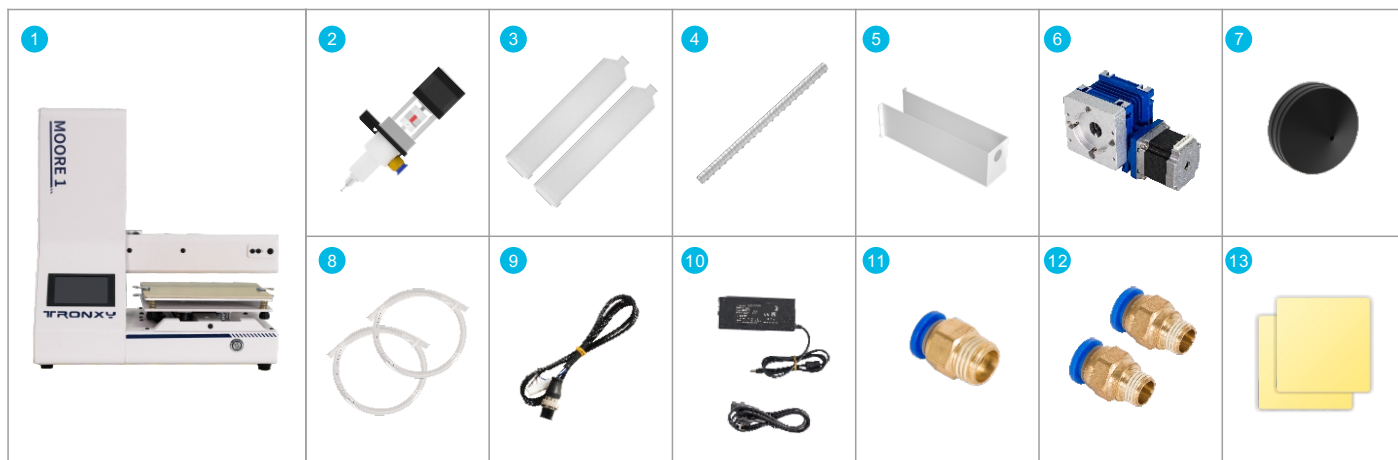
Machine size :	
机器尺寸	355*252*370 (mm)

Machine weight :	
机器重量	≈7.5kg

Packing list

包装清单

Packing list 包装清单



1 Moore 1 Main Body * 1 主机*1

2 Screw print head * 1 打印头*1

3 Barrel 0.5L * 2 0.5L料筒*2

4 M18 extrusion screw * 1 M18挤出螺杆*1

5 Barrel holder * 1 料筒固定支架*1

6 Feed transmission * 1 送料变速器*1

7 Piston * 1 活塞*1

8 Tube * 2 料管*2

9 57 Motor connection line * 1 57电机连接线*1

10 Power adapter*1+ Power cable * 1 电源适配器*1+电源线*1

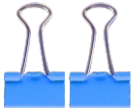
11 PC10-03 pneumatic connector * 1 PC10-03气动接头*1

12 PC10-02 pneumatic connector * 2 PC10-02气动接头*2

13 Firberglass plate * 2 玻纤板*2

Accessories and tools

配件与工具

14 	15 	16 	17 	18 	19 	20 
21 	22 	23 	24 	25 	26 	

14 M4*10 screws *10 M4*10螺丝 *10

15 M4*20 screws *4 M4*20螺丝 *4

16 Clip *2 夹子*2

17 Plastic wrap *1 保鲜膜*1

18 Card reader and TF card *1 读卡器和TF卡

19 USB cable *1 USB连接线*1

20 A box of nozzles *1 一盒喷嘴*1

21 Allen wrench *1 内六角扳手*1

22 Wrench *1 扳手*1

23 Wrench *1 扳手*1

24 L-shaped allen wrench *4 L型内六角扳手*4

25 Shovel *1 铲刀*1

26 Clay *2 陶泥*2

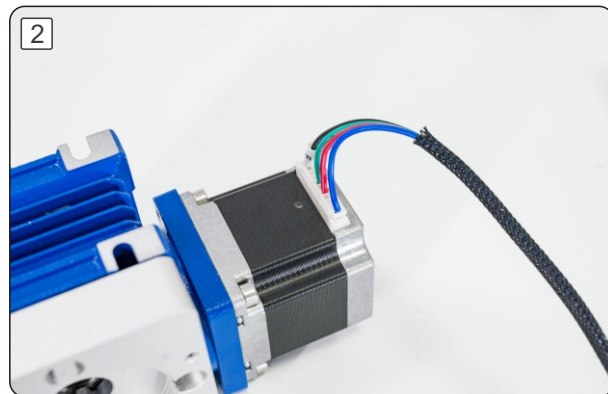
Product installation

产品安装

Product installation 产品安装



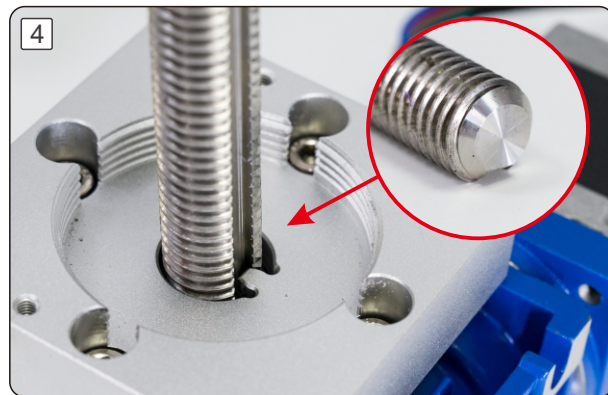
Insert the power cord and motor connection cable
插入电源线和电机连接线



Plug the other end of the motor connection wire into the motor
电机连接线另一头插在电机上



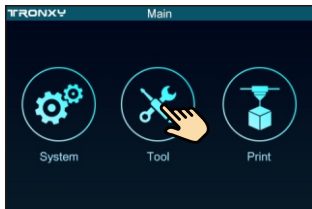
Turn on the machine
启动机器



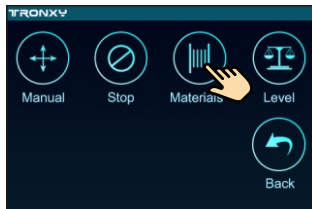
Insert the screw into the feeding transmission
将螺杆插入送料变速器

Product installation 产品安装

5



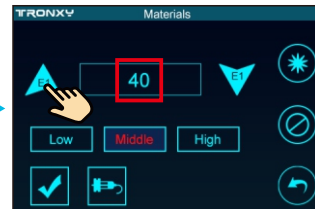
Select "Tool"
选择 "Tool"



Select "Materials"
选择 "Materials"

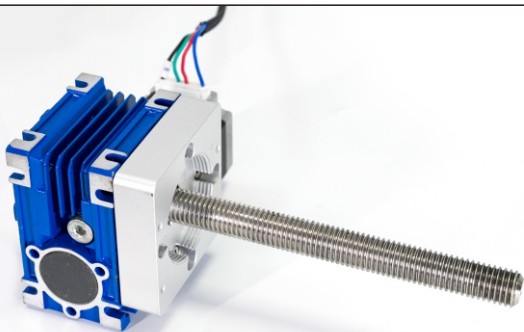


Click 点击  switch to 切换到 
(Speed range 0~40)
(速度范围0~40)



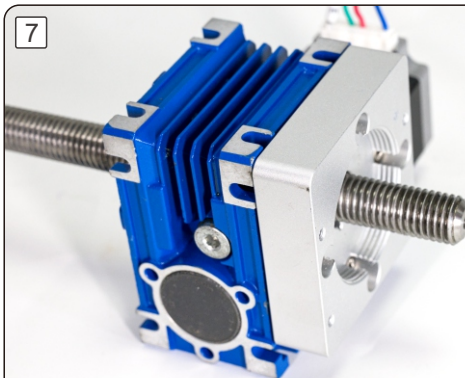
Set the speed to 40, click on  to return the material
设置速度为40, 点击  进行退料

6



Place the transmission horizontally and wait for the screw to automatically enter the transmission
平放变速器, 等待螺杆自动转入变速器内

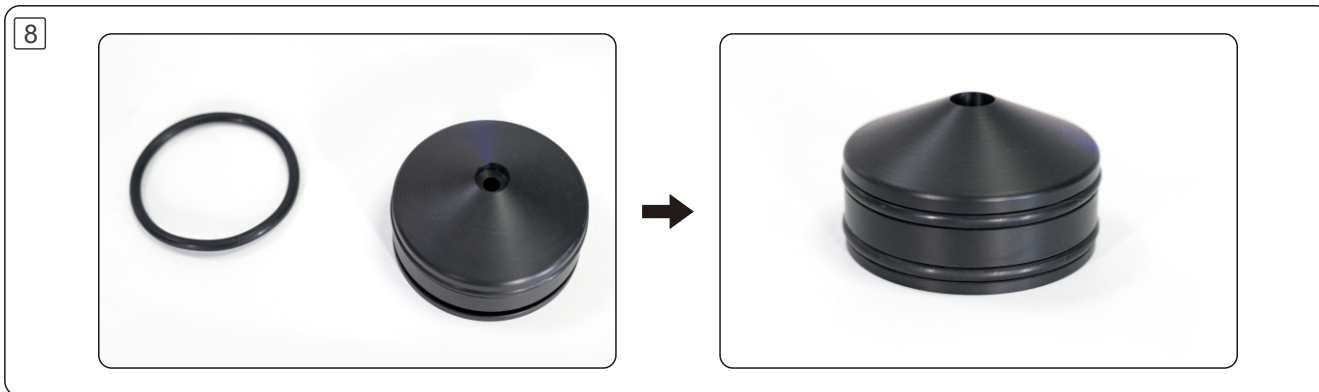
7



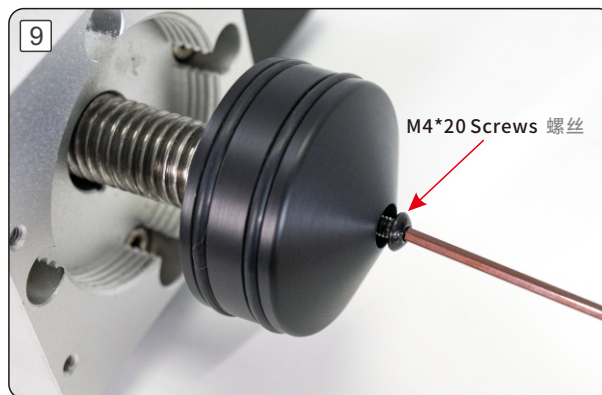
Leave 30-40mm of the screw outside for the installation of the piston
螺杆留30~40mm在外, 以便安装活塞



Click on  to turn off the transmission
点击  关闭变速器



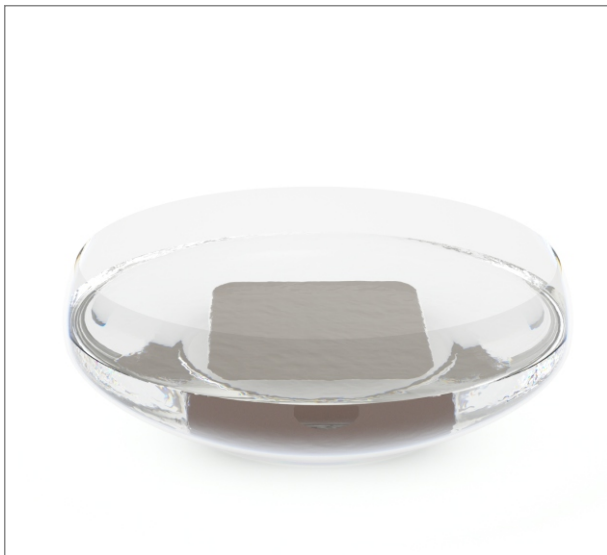
Place the rubber ring on the piston
将胶圈套在活塞上



Use M4 * 20 screws to install the piston on the screw
使用M4*20螺丝, 将活塞安装在螺杆上

10 Load the clay into the material barrel 将陶泥装入料筒里

1. Soak the clay 浸泡



Put the clay into a basin, add some water (which needs to spread over the clay), soak the clay for 2.5 hours.

将泥料放入盆中加入少量的水(需要漫过泥料) 浸泡两个半小时左右

2. mix/blend the clay 和泥



Take out the clay and mix it evenly by hand for 3-5 minutes. Shape the clay to be cylindrical by hand, and make sure its diameter is smaller than the barrel.

取出泥和均匀,大概和3-5分钟即可,最后将泥团揉成比料筒略小的圆柱形

3. Load the clay into the barrel 装泥



Put the clay into the barrel
将泥团放入料筒里

4. Squeeze the air/bubbles out 挤出气泡



Bubbles were found after filling the mud

装泥后发现气泡



Beat the barrel up and down

上下捶打料筒

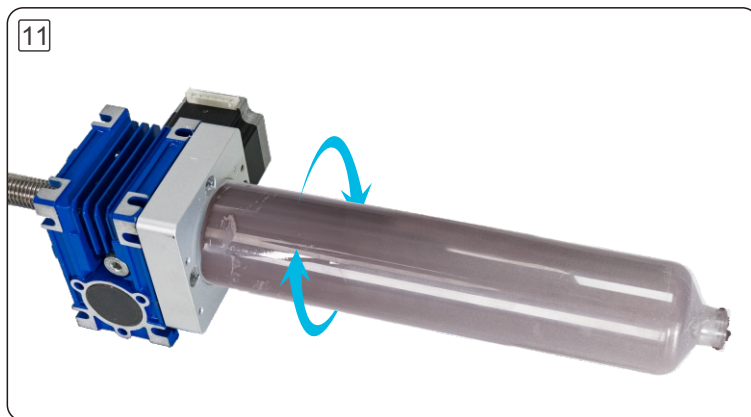


After squeezing out the bubbles

挤出气泡后

Find a piece of paper with a certain thickness and beat it up and down several times to squeeze out the bubbles in the barrel.

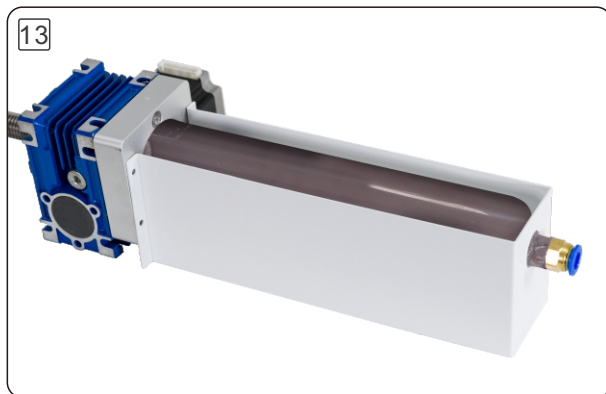
找一张有一定厚度的纸质材料，上下捶打料筒几次，将料筒中的气泡挤出。



Screw the material barrel clockwise into the transmission
将料筒顺时针拧进变速器内



Installation PC10-02 pneumatic connector
安装PC10-02气动接头

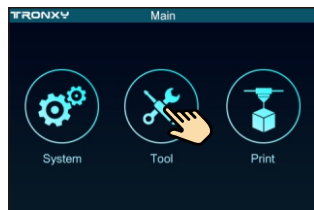


Install the Barrel holder
安装料筒支架

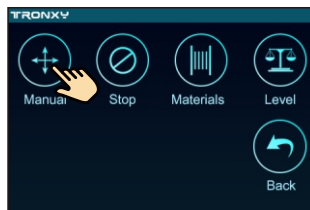


Lock with 4 M4 * 10 screws
使用4颗M4*10螺丝锁紧

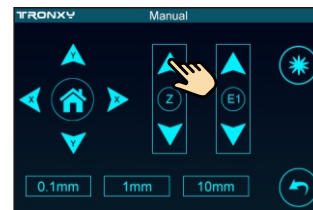
15



Select "Tool"
选择“Tool”



Select "Manual"
选择“Manual”

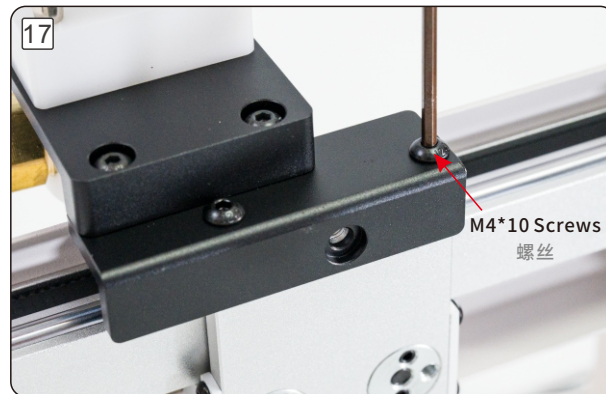


Click  on the Z-axis to move it up
点击Z轴的 ，将Z轴向上移动

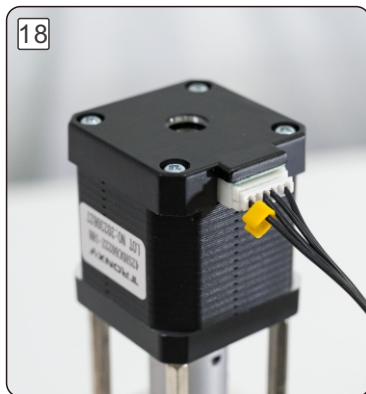




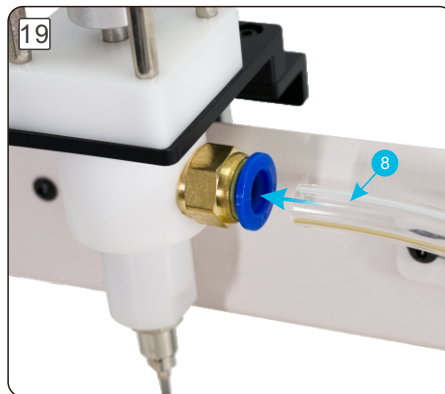
Installing the Print Head
安装打印头



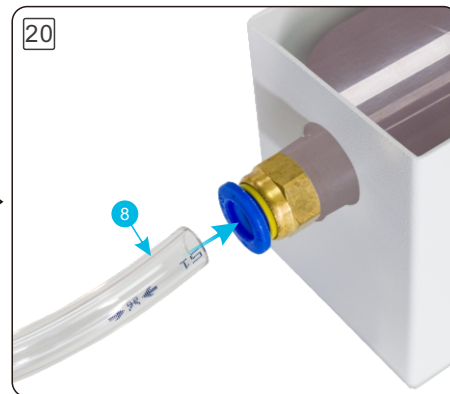
Lock with 2 M4 * 10 screws
使用2颗M4*10螺丝锁紧



Insert motor cable
插入电机线



Insert the material tube into the print head
将料管插入打印头

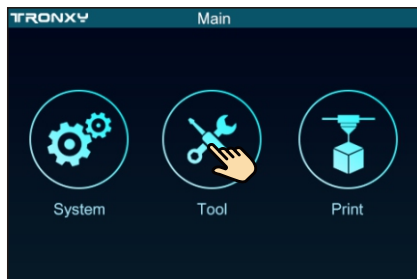


Insert the other end of the material tube into the material barrel, and the installation is complete
料管另一头插入料筒, 安装完成

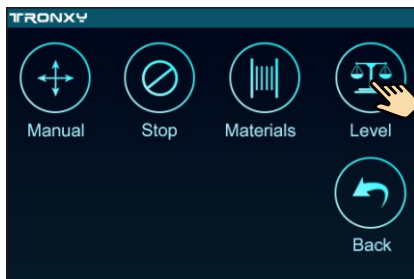
Platform leveling

平台调平

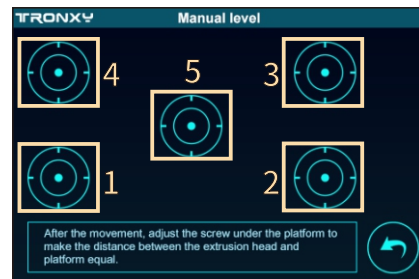
Platform leveling 平台调平



Select "Tool"
选择"工具"

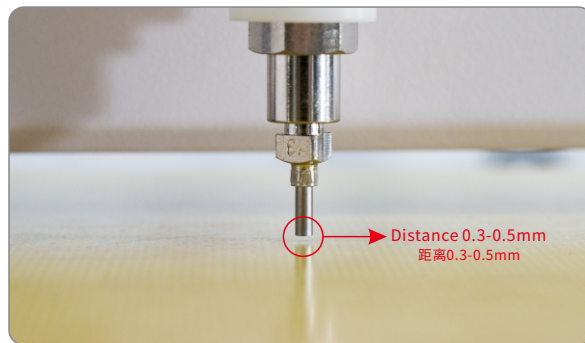
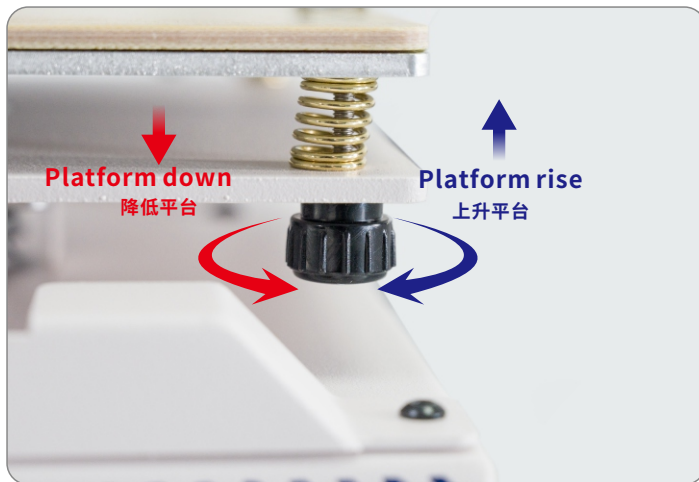


Select "Level"
选择"调平"



According to the sequence given in the figure, level the five positioning points one by one.
(Refer to the picture below for the leveling method)

按照图中给出的顺序, 将五个定位点一一调平, 最后点击返回。(调平方法参考下图)



Adjust the four nuts under the platform to make the distance between the nozzle and the platform 0.3-0.5mm.

调节平台下方的四颗螺母, 使喷嘴与平台的距离为0.3-0.5mm

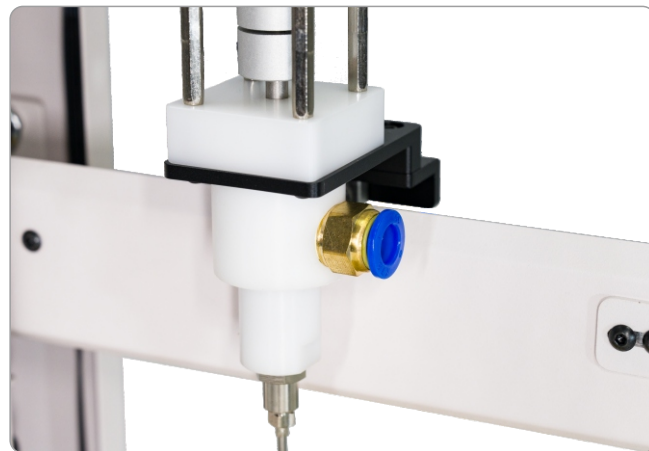
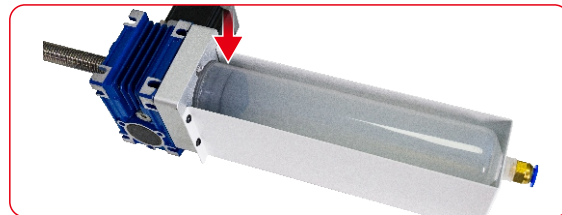
Precautions and operations for replacing the barrel

更换料筒的注意事项与操作

Precautions and operations for replacing the barrel 更换料筒的注意事项与操作



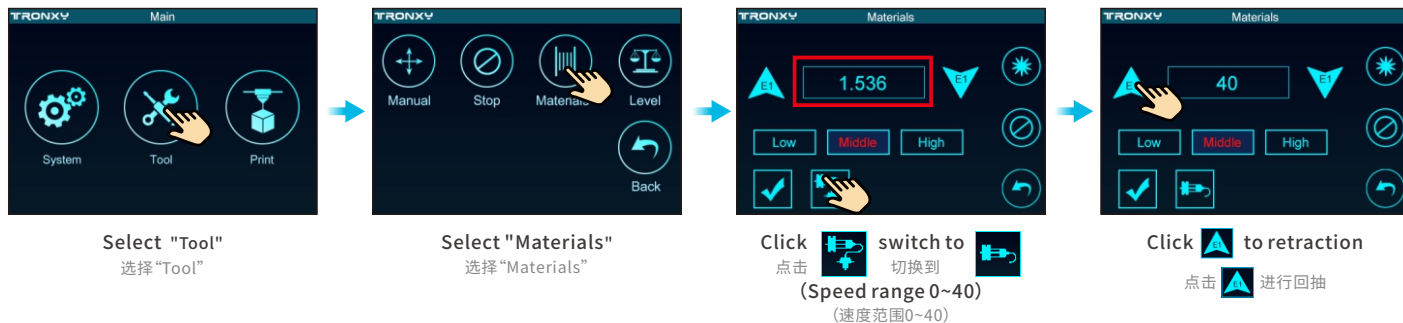
The piston must be moved to its original position before changing the barrel.
更换料筒前，必须将活塞移动到初始位置。



The feed tube of the print head must be unplugged before operation.

操作之前必须拔下打印头的进料管

Precautions and operations for replacing the barrel 更换料筒的注意事项与操作



Three control methods of Materials

耗材的三种控制方式



Linkage mode (default)

Can control the feeding device and the motor of the print head at the same time.

联动模式(默认)

可以同时控制送料装置与打印头的电机。



Feeding device mode

Separately control the motor of the feeding device.

送料装置模式

单独控制送料装置的电机。



Print head mode

Separately control the motor of the print head.

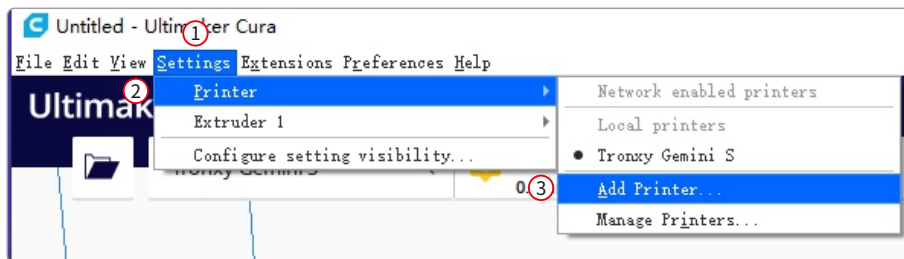
打印头模式

单独控制打印头的电机。

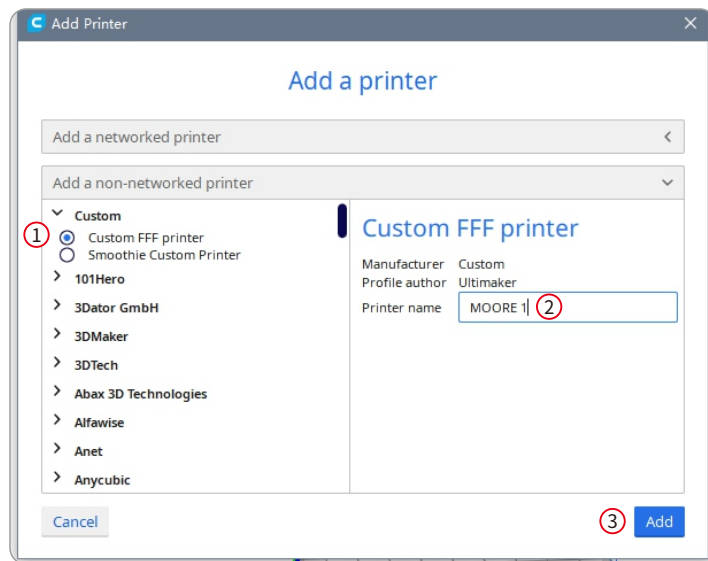
Slicing software settings

切片软件的设置

1. Model settings 机型设置



① Settings → ② Printer → ③ Add Printer...



① Custom FFF printer → ② Type "Moore 1" → ③ Add

Slicing software settings 切片软件 的设置

Add Printer X

Machine Settings

MOORE 1

Printer	Extruder 1
Printer Settings	Printhead Settings
X (Width) 180.0 mm	X min -20 mm
Y (Depth) 180.0 mm	Y min -10 mm
Z (Height) 180.0 mm	X max 10 mm
Build plate shape Rectangular ▾	Y max 10 mm
Origin at center ☐	Gantry Height 180.0 mm
Heated bed ☐	Number of Extruders 1 ▾
Heated build volume ☐	Apply Extruder offsets to GCode ☐
G-code flavor Marlin ▾	
Start G-code	End G-code
G28 ;Home	M104 S0

Next

Add Printer X

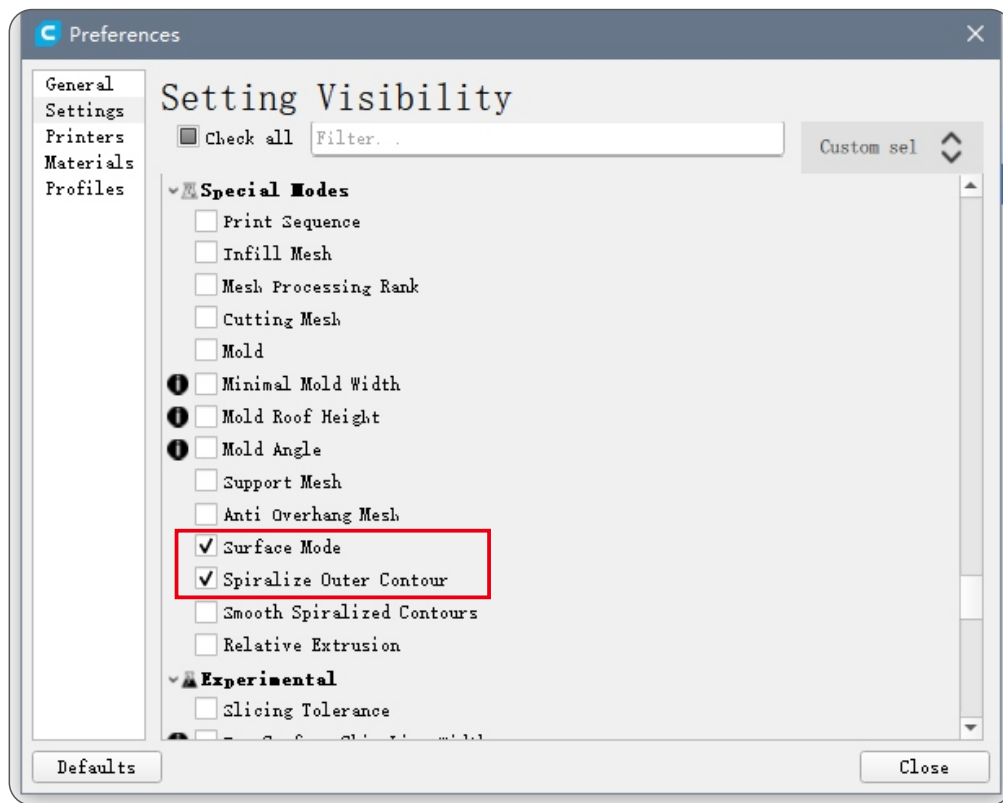
Machine Settings

MOORE 1

Printer	Extruder 1
Nozzle Settings	
Nozzle size 2.2 mm	
Compatible material diameter 3 mm	
Nozzle offset X 0.0 mm	
Nozzle offset Y 0.0 mm	
Cooling Fan Number 0	
Extruder Start G-code	Extruder End G-code

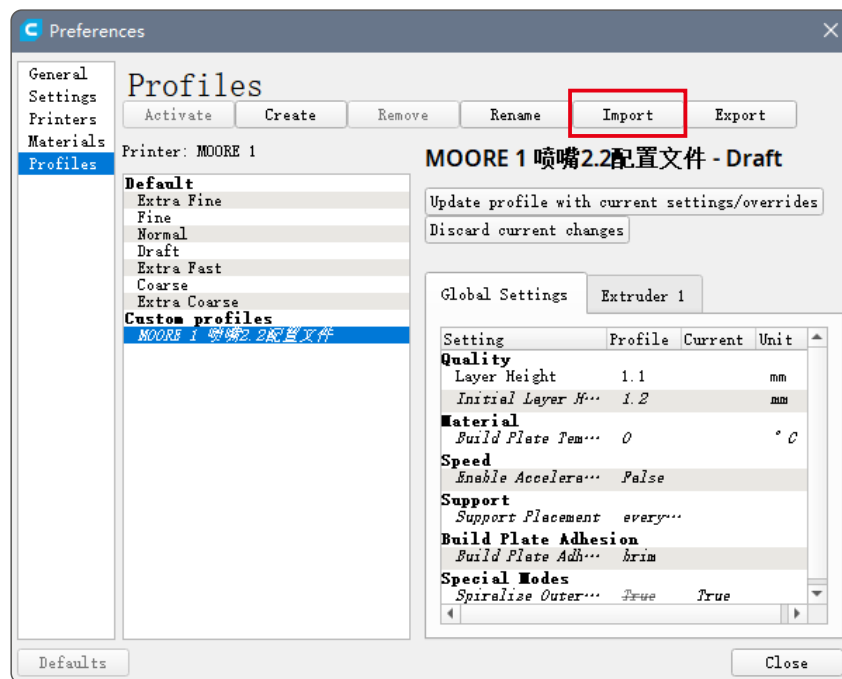
Next

Set the value as shown in the figure
如图所示设置数值



Select the option in the red circle

勾选红圈中的选项



Import the configuration file from the TF card to start slicing

导入TF卡内的配置文件,即可开始切片

Slicing software settings 切片软件 的设置

Print settings

Profile MOORE 1 喷嘴2.2配置文件 - Draft - 1.1mm

Search settings

Quality

Layer Height1.1mm

Initial Layer Height1.2mm

Line Width3.0mm

Wall Line Width3.0mm

Outer Wall Line Width3.0mm

Inner Wall(s) Line Width3.0mm

Initial Layer Line Width100.0%

Walls

Wall Thickness3.0mm

Wall Line Count2

Fill Gaps Between WallsNowhere

Print Thin Walls

Horizontal Expansion0.0mm

Hole Horizontal Expansion0.0mm

Z Seam AlignmentUser Specified

Seam Corner PreferenceSmart Hiding

Top/Bottom

Top/Bottom Thickness3.0mm

Top Thickness3.0mm

Top Layers3

Bottom Thickness3.0mm

Bottom Layers3

Infill

Infill Density0.0%

Material

Printing Temperature0.0°C

Flow120.0%

Speed

Print Speed20.0mm/s

Wall Speed20.0mm/s

Outer Wall Speed20.0mm/s

Inner Wall Speed20.0mm/s

Equalize Filament Flow

Enable Acceleration Control

Travel

Enable Retraction

Cooling

Enable Print Cooling

 **Cooling** 

Enable Print Cooling

☒

Fan Speed

100.0

%

 **Support** 

Generate Support

 ☐

 **Build Plate Adhesion** 

Build Plate Adhesion Type



Brim



Skirt/Brim Minimum Length

250.0

mm

Brim Line Count

1

 **Dual Extrusion** 

 **Special Modes** 

Surface Mode

Normal

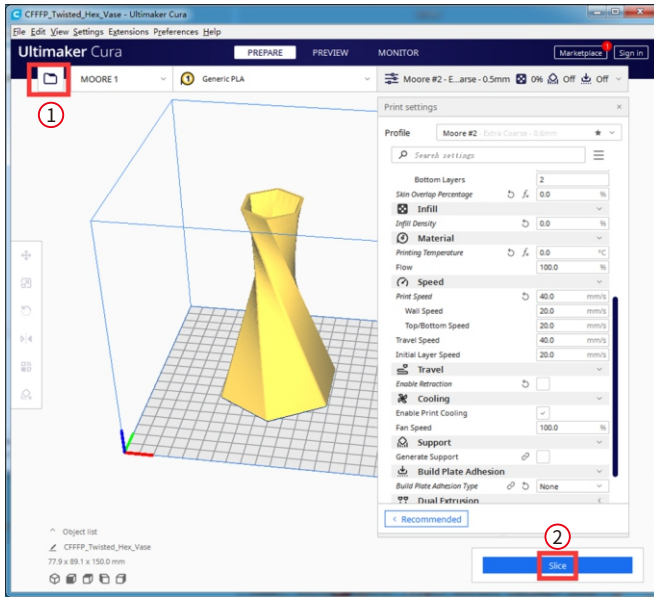


Spiralize Outer Contour

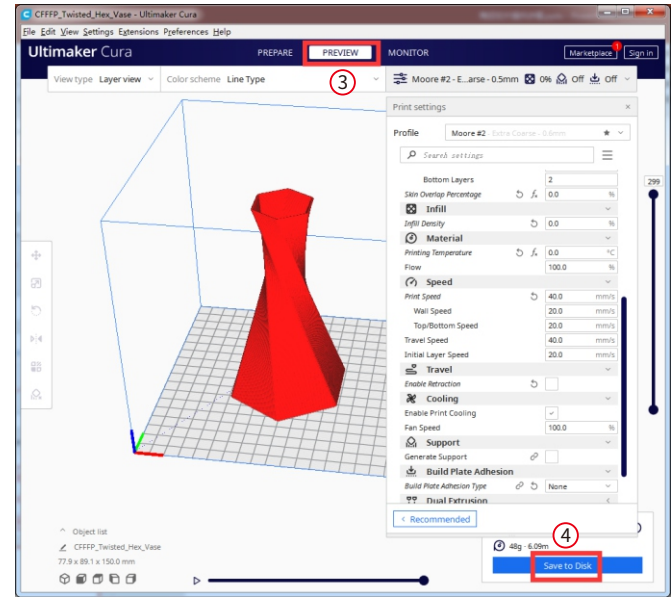
  ☒

 Recommended

Slicing software settings 切片软件 的设置



① Open a file → ② Slice



③ Preview → ④ Save to Disk



Note: soak the printhead/nozzle in the water after printing to prevent the mud from drying and clogging the printhead

注意:打印完将喷嘴浸泡在水中以防泥料干掉



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