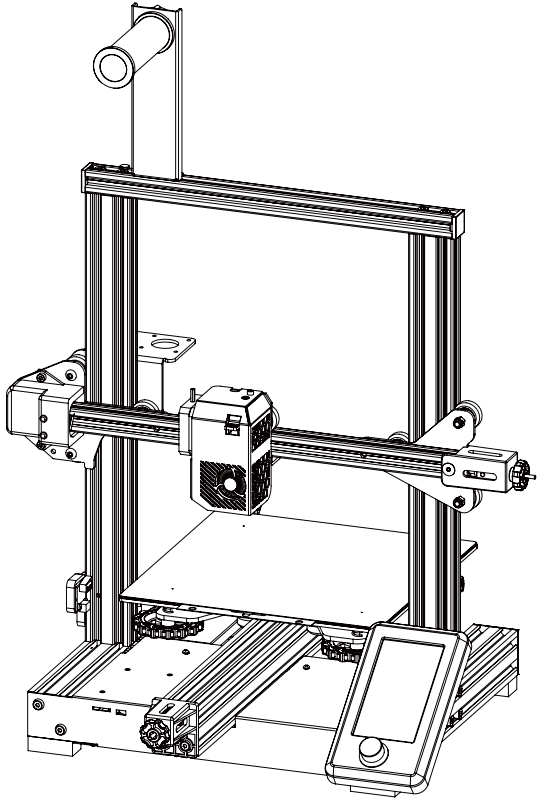
Voxelab



3D Printer User Manual

3D打印机使用说明书

Aquila S2

Note: Each printer is tested before leaving factory. It is normal if there are some residues in extruder or some tiny scratches on the build plate. It won't affect the printing quality.

注：每台 3D 打印机在出厂前都经过打印测试，若设备喷头内存在耗材残留或打印平台有轻微划痕，都属正常现象，不影响使用。

V1.1.2-20211202

Content 目录

Thank you for choosing Voxelab products. For your convenience, please read the manual carefully before using it. Operate the printer accordingly. Voxelab team is always at your service; contact us at any time if you need any assistance.

Official website: www.voxelab3dp.com
(Get tutorials, software, firmware, printer maintenance and relevant information)
Email：support@voxelab3dp.com

感谢您选择并使用Voxelab的产品：

为了让您更好地使用本产品，请您在使用之前仔细阅读本说明书，并严格按照说明书的指示进行操作。

Voxelab团队时刻准备为您提供最优质的服务。在使用过程中若遇到问题，请通过以下联系方式与我们联系。

邮箱：support@voxelab3dp.com
热线电话：400 886 6023
售后电话：0579-82238189

扫一扫
查看最新操作教程

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Notes 使用须知

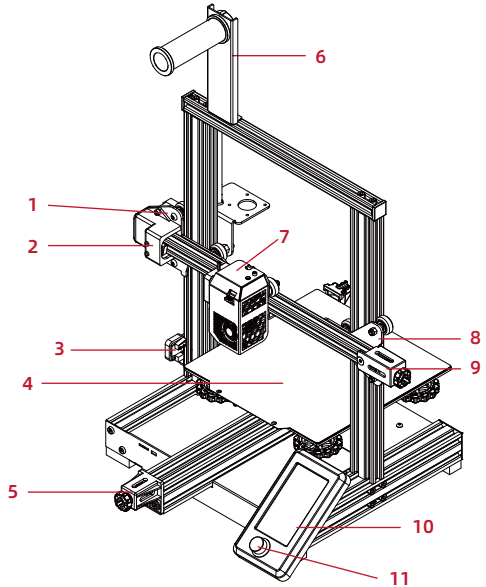
1. Do not make any modifications to the printer. To avoid personal injury or property damage please ensure your operation followed by the Guide.
2. Dress properly. Do not wear loose clothing or jewelry. Keeping your hair, clothing and gloves away from moving parts.
3. Do not directly touch the nozzle and build plate to avoid high-temperature burn.
4. Do not expose the printer in flammable liquid, gas or dust environment (The high temperature generated by operating printer may react with dust, liquid, and flammable gas in the air and cause fire).
5. Do not put the printer on a shaking place. It may affect the printing quality.
6. Children and untrained personnel are not allowed to operate the printer alone.
7. Operate the printer in a well-ventilated environment. Some materials may emit odors during the printing process.
8. Do not manually move the nozzle or printing platform while booting up, lest printer damage.
9. Never use the printer for illegal activities.
10. Never use the printer to make any food storage.
11. Never put the printed model into mouth.
12. Lower the build plate before loading/unloading filament. The distance between the nozzle and build plate should be at least 50 mm.
13. Ensure regular maintenance for the printer; use dry cloth to remove dust and adhered residues.

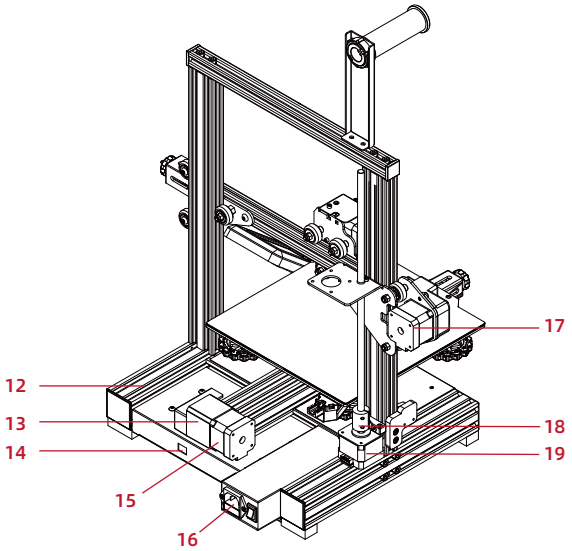
Watch out for the sharp edges and corners of the profile.

1. 请勿自行对打印机进行任何改装。请按照说明书操作，避免造成意外人身伤害和财产损失。
2. 在使用打印机时，请勿穿戴围巾、手套、珠宝装饰等容易卷入设备的物件。
3. 请勿在打印机工作时接触喷嘴和打印平台，防止出现高温烫伤。
4. 请勿将打印机放置在有可燃性气体、液体及灰尘的环境中（打印机运行产生的高温有可能会与空气中的粉尘、液体、可燃性气体反应引发火灾）。
5. 请勿将打印机放置在振动较大或其他不稳定的环境内，打印机晃动会影响打印质量。
6. 儿童及未经培训的人员请勿单独使用打印机。
7. 请在通风环境下使用打印机，部分耗材打印过程中可能产生异味。
8. 请勿在开机状态下手动快速移动喷头和打印平台，避免打印机故障。
9. 请勿利用该打印机进行违法犯罪的活动。
10. 请勿利用该打印机制作食物储存类产品。
11. 请勿将打印模型放入口腔。
12. 在打印机进行进退丝操作时，喷头和平台请至少保持50mm的距离（距离过近，有可能会造成喷头堵塞）。
13. 请定期维护打印机，用干布进行清洁，拭去灰尘与导轨上的异物。

型材边角比较锐利，注意安全。

Product Introduction 设备简介



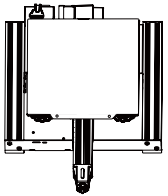


1. Z-axis left passive block Z轴左侧被动块
2. X-axis limit sensor X轴限位传感器
3. Z-axis limit sensor Z轴限位传感器
4. Build plate 打印平台
5. Y-axis tensioner Y轴张紧器
6. Material rack and spool holder 料架及料架筒
7. Extruded kit 挤出组件
8. Z-axis right passive block Z轴右侧被动块
9. X-axis tensioner X轴张紧器
10. Screen 显示屏
11. Knob switch 旋钮开关
12. Machine base 机器底座
13. Y-axis limit sensor Y轴限位传感器
14. Voltage regulator 电压调节档
15. Y-axis motor Y轴电机
16. Power switch and socket 电源开关及插座
17. X-axis motor X轴电机
18. Coupling 联轴器
19. Z-axis motor Z轴电机

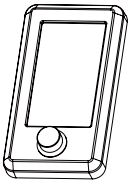
Equipment Parameters 设备参数

Model | 型号	Voxelab Aquila S2
Print volume | 成型尺寸	220*220*240 mm
Forming technology | 成型技术	FDM
Extruder quantity | 喷头数量	1
Layer thickness | 层厚	0.1 mm - 0.4 mm
Nozzle diameter | 喷嘴直径	Standard | 标配 0.4 mm
Print precision | 精度	±0.2 mm
Filament | 打印材料	ϕ1.75 mm PLA
File format | 支持格式	STL / OBJ / AMF
Connectivity | 打印方式	Memory card offline printing or online printing | 存储卡脱机打印或联机打印
Compatible slicing software | 可兼容切片软件	VoxelMaker / Cura / Simplify 3D
Power specification | 电源规格	Input | 输入：AC 115/230V 50/60Hz　Output | 输出：DC 24V
Total power | 总功率	350W
Hotbed temperature | 热床温度	≤100℃
Nozzle temperature | 喷嘴温度	≤300℃
Resume printing function | 断电续打	Yes | 支持
Language switch | 语言切换	English / Chinese | 英文 / 中文
Supports(OS) | 电脑操作系统	Windows 7/10 / Mac OS
Print speed | 打印速度	≤180 mm/s，30-60 mm/s normally | ≤180 mm/s，正常为30-60 mm/s

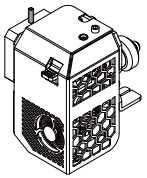
Spare Parts 零部件清单



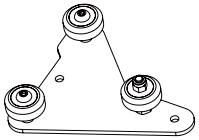
Printer base *1
底座组件 *1



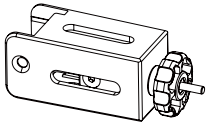
Screen kit *1
显示屏组件 *1



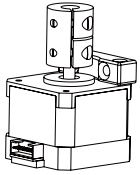
Extruder kit *1
挤出组件 *1



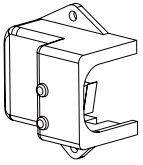
Z-axis right passive block *1
Z轴右侧被动块 *1



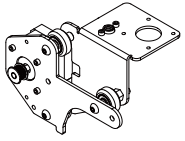
X-axis tensioner *1
X轴张紧器 *1



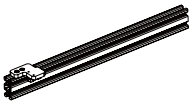
Z-axis motor kit *1
Z轴电机组件 *1



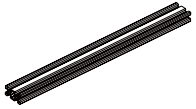
X-axis limit sensor kit *1
X轴限位传感器 *1



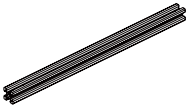
Z-axis left passive block *1
Z轴左侧被动块 *1



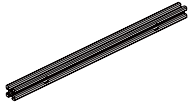
Z-axis profile (left) *1
Z轴型材 (左) *1



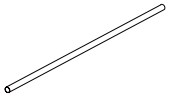
Z-axis profile (right) *1
Z轴型材 (右) *1



Gantry profile *1
顶部型材 *1

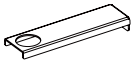


X-axis profile *1
X轴型材 *1

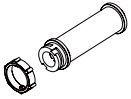


T-shaped screw rod *1
T型丝杆 *1

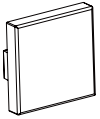
Spare Parts 零部件清单



Material rack *1
料架*1



Material pipe and nut *1
料架筒及螺母 *1

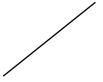


2020 profile cover *2
2020 型材盖 *2

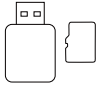
Synchronous belt *1
同步带 *1

Remove tool *1
金属铲刀*1

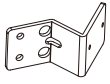
Cable tie *1
扎带 *1



Needle *1
通针 *1



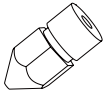
Storage card and card reader *1
存储卡及读卡器 *1



Screen bracket *1
屏幕支架 *1

Power cable *1
电源线 *1

Wrenches and screwdrivers
扳手和螺丝刀

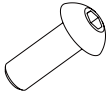


Nozzle *1
喷嘴 *1

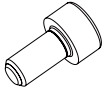
Filament *1
耗材 *1

Hexagon socket countersunk head screws M4x20 *2
内六角沉头螺钉M4x20 *2

Hexagon socket button head screws M4x6 *2
内六角平圆头螺钉M4x6 *2

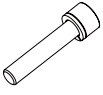


Hexagon socket button head screws M5x14 *6
内六角平圆头螺钉M5x14 *6

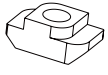


Hexagon socket head cap screws M4x8 *2
内六角圆柱头螺钉M4x8 *2

Hexagon socket head spring washer combination screws M5x45 *5
内六角圆柱头弹垫组合螺钉 M5x45 *5

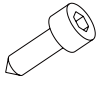


Hexagon socket head spring washer combination screws M5x25 *5
内六角圆柱头弹垫组合螺钉 M5x25 *5



M4 T nuts *2
M4 T型螺母 *2

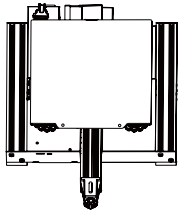
Hexagon socket button head screws M5x8 *2
内六角平圆头螺钉M5x8 *2



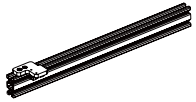
Hexagon socket head tapping screws ST2.9x9.5 *2
内六角圆柱头自攻螺钉 ST2.9×9.5 *2

1 Install Z-axis profiles
安装Z轴型材

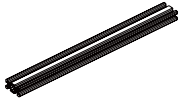
Installation video can be found on Voxelab Youtube channel



Printer base *1
底座组件 *1

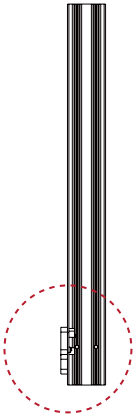


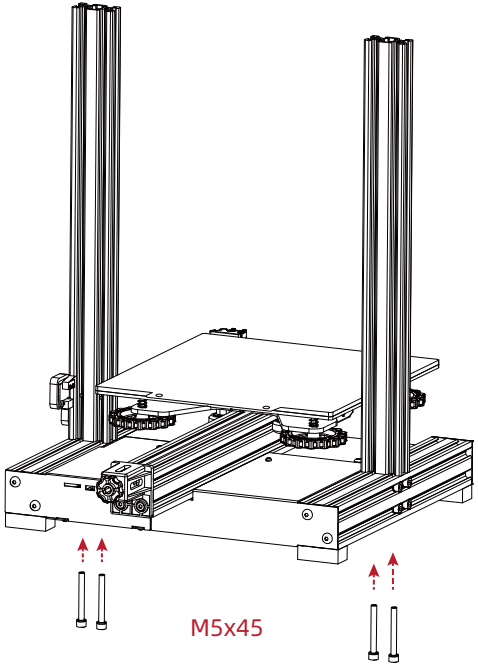
Z-axis profile (left) *1
Z轴型材 (左) *1



Z-axis profile (right) *1
Z轴型材 (右) *1

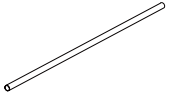
Hexagon socket head spring washer combination screws M5x45 *4
内六角圆柱头弹垫组合螺钉 M5x45 *4



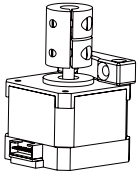


Step: Use four M5x45 screws to fix Z-axis profiles with the base.
步骤：使用4颗M5x45螺钉将Z轴型材固定在机器底座上。

2 Install Z-axis motor kit and T-shaped screw rod
安装Z轴电机组件，T型丝杆

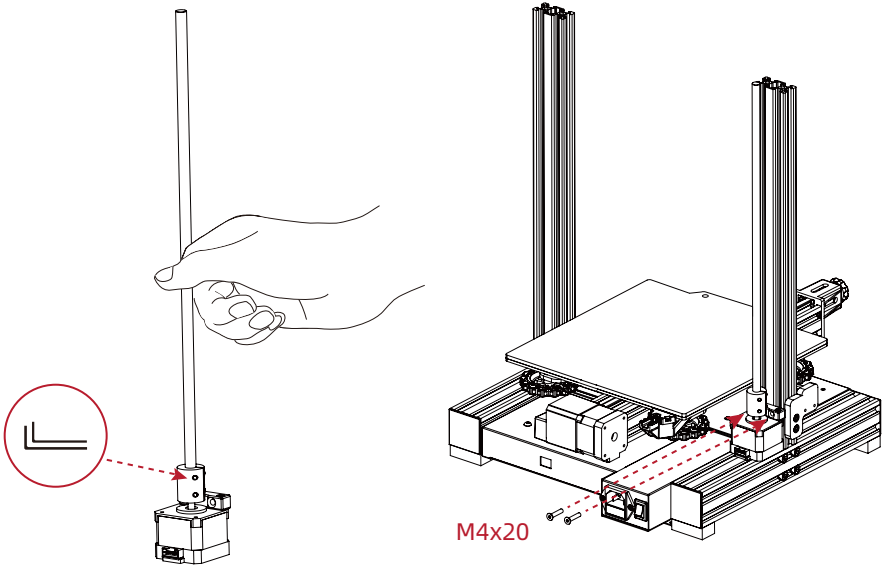


T-shaped screw rod *1
T型丝杆 *1



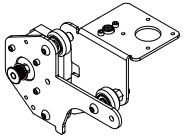
Z-axis motor kit *1
Z轴电机组件 *1

Hexagon socket countersunk head screws M4x20 *2
内六角沉头螺钉M4x20 *2



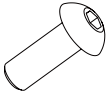
Step 1: Unlock the nut on Z-axis motor kit, insert the T-shaped screw road into the Z-axis motor kit, lock the nut (as showed above).
Step 2: Use two hexagon socket countersunk head screws M4x20 to install the Z-axis motor kit on the back of the Z-axis profile (left).
步骤1：先松开联轴器上的螺母，将T型丝杆插入联轴器后锁紧联轴器。
步骤2：用两颗M4x20沉头螺钉将组装好的Z轴电机安装在左侧Z轴型材背部。

3 Install Z-axis left passive block
安装Z轴左侧被动块



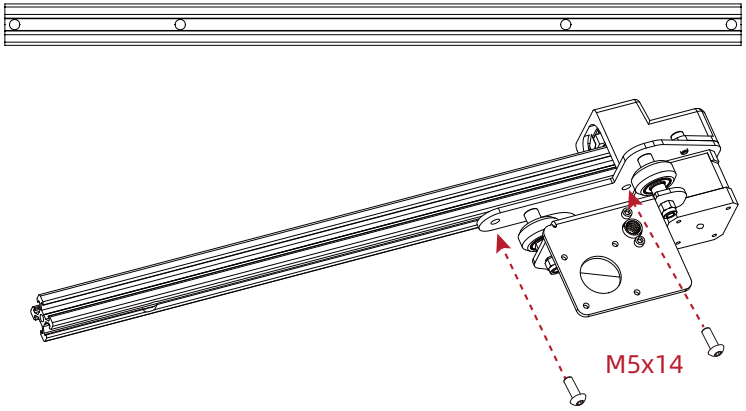
Z-axis left passive block *1
Z轴左侧被动块 *1

X-axis profile *1
X轴型材 *1

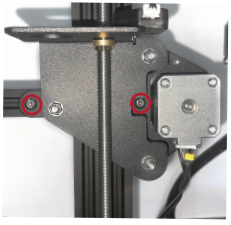


Hexagon socket button
head screws M5x14 *2
内六角平圆头螺钉M5x14 *2

X-axis profile
X轴型材

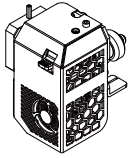


Fix the Z-axis left passive block with two M5x14 screws on X-axis profile.
用2颗M5x14螺钉将Z轴左侧被动块固定在X轴型材上。

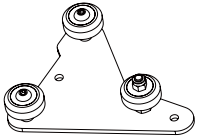


4 Install synchronous belt, extruder kit and Z-axis right passive block
安装同步带，喷头组件和Z轴右侧被动块

X-axis kit
X轴组件 *1

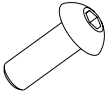


Extruder kit *1
挤出组件 *1



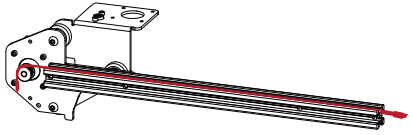
Z-axis right passive block*1
Z轴右侧被动块 *1

Synchronous belt *1
同步带 *1

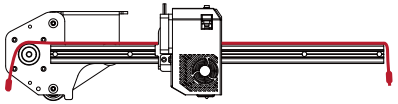


Hexagon socket button head screws M5x14 *1
内六角平圆头螺钉M5x14 *1

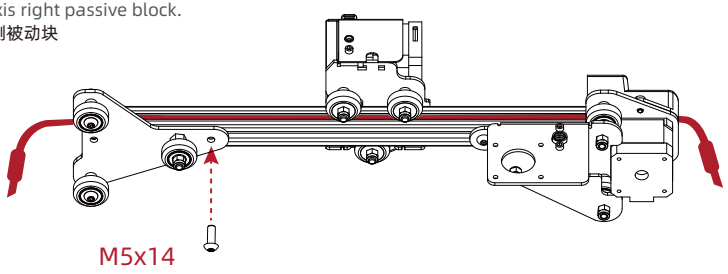
Put the synchronous belt into the profile along the V-wheel of the extruder kit (The belt is on the top of the profile and under the V-wheel when pushing extruder kit into the middle).
将同步带放入X轴型材凹槽中，挤出组件沿着V轮推进X轴型材（当把挤出组件推至X轴型材中间时，同步带在X轴型材和喷头V轮之间）。



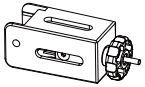
The highlighted red stripe is the synchronous belt.
红线代表同步带



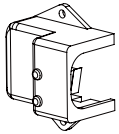
Install Z-axis right passive block.
安装Z轴右侧被动块



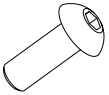
5 Install X-axis tensioner
安装X轴张紧器



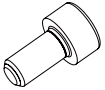
X-axis tensioner *1
X轴张紧器 *1



X-axis limit sensor kit *1
X轴限位传感器 *1

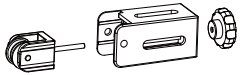


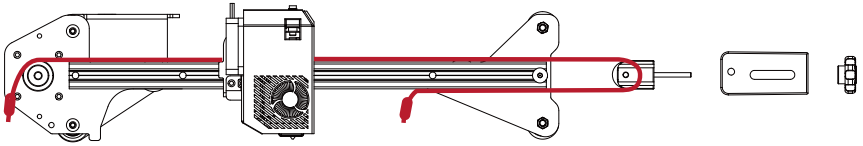
Hexagon socket button head screws M5x14*2
内六角平圆头螺钉M5x14 *2



Hexagon socket head cap screws M4x8*2
内六角圆柱头螺钉M4x8 *2

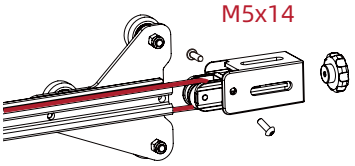
1. Disassemble the X-axis tensioner.
将X轴张紧器拆分为三个部分。



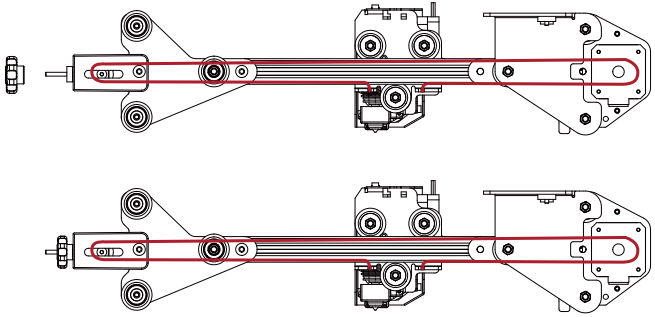


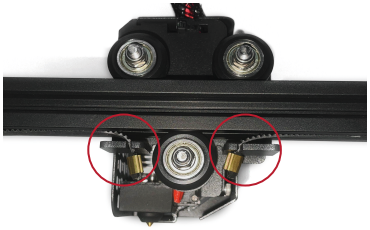
2. Insert the synchronous belt into the tensioner block, and reassemble the X-axis tensioner.
将同步带一头穿过张紧轮。

3. Tighten tensioner with a plastic hand screw nut, and then lock it with two M5x14 screws on X-axis profile.
锁紧张紧轮，用两颗M5x14螺母将X轴张紧器安装在X轴型材上（如图所示）。



Install X-axis tensioner
安装X轴张紧器

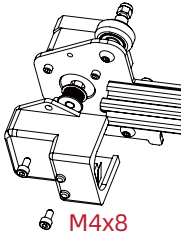




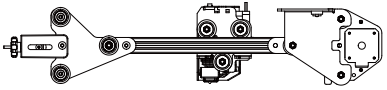
4. Insert the synchronous belt buckle into the sheet metal slot at the back of the extruder and tighten X-axis tensioner.
将同步带两端卡入喷头组件背部的卡槽中，调节张紧轮组件的塑料旋钮直至同步带达到合适的张紧度。

Attention: Please do not tighten the X-axis tensioner screws with too much force.
注意：切勿用蛮力锁紧张紧器的塑料旋钮。

5. Lock the X-axis limit sensor kit on the X-axis assembly with two M4x8 screws.
用2颗M4x8螺丝将X轴限位传感器固定在X轴组件上。

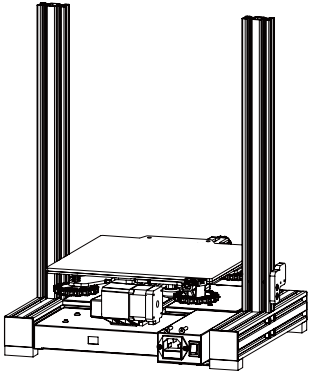


6 Install the X-axis moving kit and adjust the tightness of X-axis and Y-axis tensioners
安装X轴移动组件，调整X轴与Y轴的张紧器

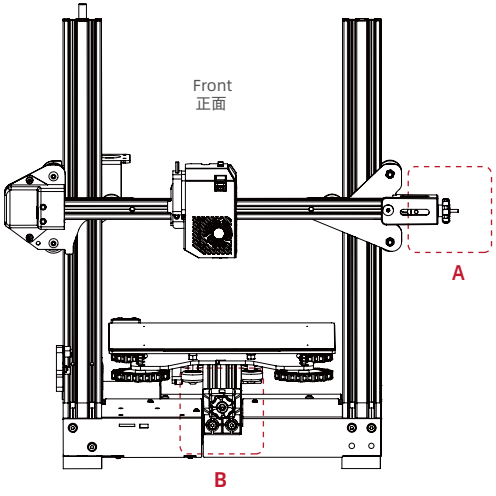


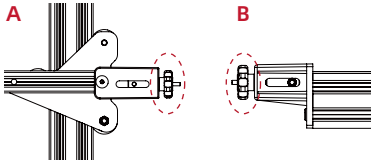
Back
背面

The components assembled in the fifth step
第5步装好的组件



The components assembled in the second step
第2步装好的组件





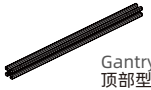
Tips: Manually rotate the X-axis and Y-axis tensioners to the appropriate tightness.
Reference standard: Press the synchronous belt to feel its tension. It is best when the belt is neither too loose nor too tense.
Belt being too loose or too tight both affect the printing effect, and being too tight may cause belt break.

注意：需手动将X、Y轴张紧器旋转到合适的松紧度。
A与B螺母位置参考：以手轻按压同步带有一点张力为参考标准。
同步带过松、过紧均会影响打印效果，过紧可能会造成同步带崩断。

1. Make the X-axis kit that moves along the V-wheel to be inserted into the two ends of the Z-axis profile (as shown in the figure above).
2. Move the extruder left and right to check whether it can touch the X-axis limit sensor and check the tension of synchronous belt. It is best when the extruder able to touch the X-axis limit sensor and synchronous belt in a proper elasticity.

1.将X轴组件沿着V轮缓缓滑入两侧的Z轴型材（如上图所示）。
2.左右滑动喷头，检查喷头是否可以触碰到X轴限位传感器，并查看同步带的张紧程度。以喷头可以触碰到X轴限位传感器，同步带松紧合适为宜。

7 Install the gantry profile and screen kit
安装顶部型材和屏幕组件

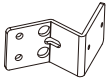


Gantry profile *1
顶部型材 *1

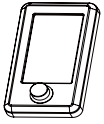
Hexagon socket head spring washer combination screws M5x25 *4
内六角圆柱头弹垫组合螺钉 M5x25 *4

Hexagon socket flat round head screws M5x8 *2
内六角平圆头螺钉M5x8 *2

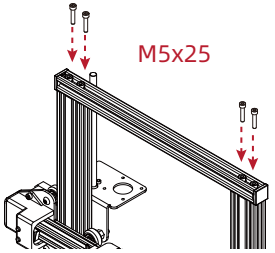
Hexagon socket head tapping screws ST2.9x9.5 *2
内六角圆柱头自攻螺钉 ST2.9×9.5 *2



Screen bracket *1
显示屏支架 *1



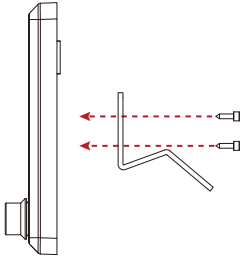
Screen kit *1
显示屏组件 *1



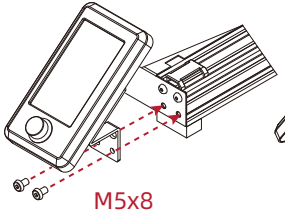
1. Fix the profile on the upper end of the gantry with four M5x25 screws.
用4颗M5x25螺钉将顶部型材安装在两侧Z轴型材的上方。

Note: Make the counterbores within the profile and face upwards. Four cap screws are slotted in the counterbores, please tighten the screws down to the profile edge.

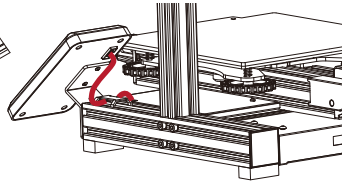
注意：顶部型材的沉头孔朝上，4颗螺钉头部藏在型材沉孔里面，螺钉安装好后与型材齐平。



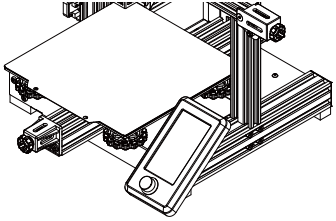
2. Lock screen bracket and screen kit with two pieces screws ST2.9*9.5.
用2颗ST2.9*9.5螺钉将屏幕支架固定在屏幕背部。



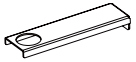
3. Lock the screen kit onto printer base side using two M5x8 screws.
用2颗M5x8螺钉将屏幕组件安装到设备底座右侧。



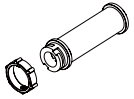
4. Connect the display screen kit with screen flat cable.
连接屏幕排线。



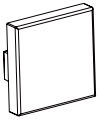
8 Install spool holder and profile cover
安装料架和型材盖



Material rack *1
料架 *1

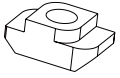


Material pipe and nut *1
料架筒和螺母 *1

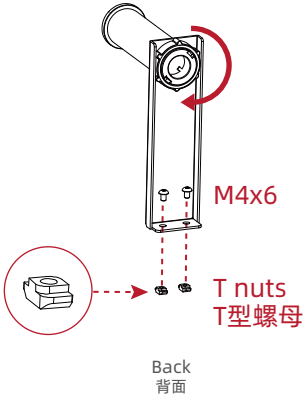


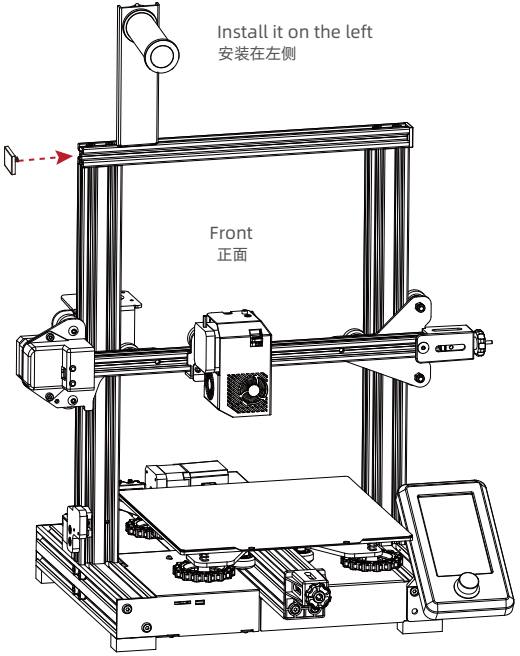
2020 profile cover *2
2020 型材盖 *2

Hexagon socket button head screws M4x6*2
内六角平圆头螺钉M4x6 *2



M4 T nuts *2
T型螺母 *2



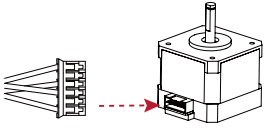


Step: Put two M4x6 screws and two T nuts into the material rack (as shown), place the spool holder on the rack and fix on the profile with screws (as shown); then place the 2020 profile cover on both sides.
将料架筒及料架螺母安装在料架上，用2颗M4x6螺钉及2颗T型螺母将组装好的料架固定在顶部型材上（如图所示）；将2020型材盖安装在顶部型材两侧。

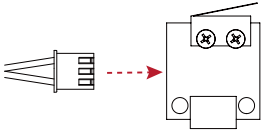
9 Wire connection
设备接线

1. Connect the yellow-labled cable with "X" on 6 pin (4wires) port to X-axis motor. 将6针（4线）端口上带有黄色标签丝印“X”的线与X轴电机连接。
2. Connect the yellow-labeled cable with "X" on 3 pin (2wires) port to X-axis limit sensor. 将3针（2线）端口上带有黄色标签丝印“X”的线与X轴限位传感器连接。
3. Connect the yellow-labeled cable with "Z" on 3 pin port to Z-axis limit sensor. 将3针端口上带有黄色标签丝印“Z”的线与Z轴限位传感器连接。
4. Connect the yellow-labeled cable with "Z" on 6 pin port to Z-axis motor. 将6针端口上带有黄色标签丝印“Z”的线与Z轴电机连接。
5. Plug in the power cord (as showed) and toggle the switch to turn on the power. 插入电源线(如图所示)并拨动开关以打开电源。

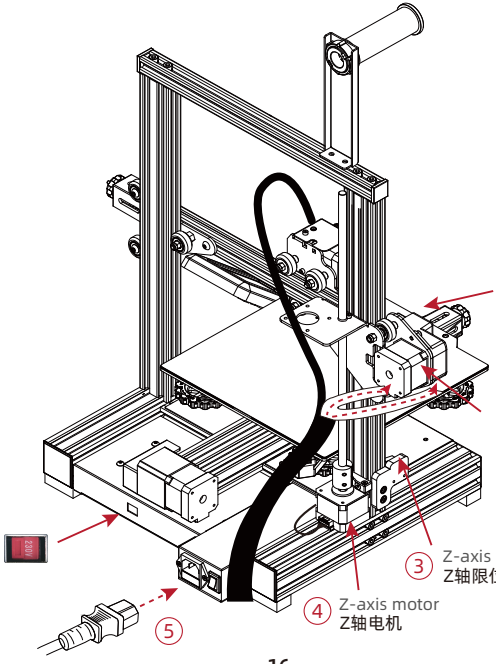
Power cable *1
电源线 *1



X、Z-axis motor port
X、Z轴电机接口



X、Z-axis limit sensor
X、Z轴限位传感器接口



Attention

· Damage might occur if voltage is set incorrectly. Make sure the current input voltage matches to your local mains **(115/230 V).**
· Plug in power cord and turn power switch to 1 to turn it on.
· Do not disconnect the cables when the printer is powered on.

注意

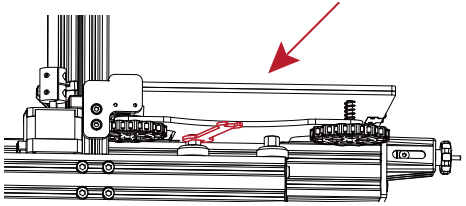
· 如果电压设置不正确，可能会造成损坏。选择正确的输入电压以匹配您的本地电源**（115/230V）**。
· 连接电源线并将电源开关拨至I档即可开机。
· 当机器通电时，请勿断开连接线。

10 Level 调平

Leveling operation video can be found on Voxelab Youtube channel

Check the steadiness of the build plate before leveing. If the build plate is unsteady, please use an open-end wrench to adjust the V-wheel to steady it.

调平平台前请确认一下平台有无晃动；若有，请使用开口扳手调节一下左右两侧v型轮松紧度，使得平台滑动顺畅且无晃动。



Choose [Auto Home] first to ensure the extruder in the home position; then choose [Disable Steppers] to assist in leveling.

选择【回零】，等待喷头自动回零；选中【关闭电机】以便进行下一步调平操作。

Please make sure the PEI plate is aligned with the heating board before leveling.

调平前请确保PEI钢板与铝基加热板齐平。

Note: The UI information is only for reference, the actual UI may be different.

注意：界面仅供参考，实际以UI为准。

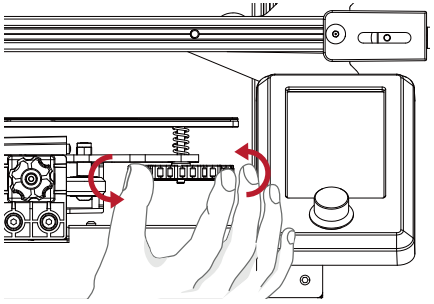
Level
调平

1. Move the nozzle to the top of the leveling nut. Screw the nut and adjust the distance between the nozzle and the printing platform to about 0.1 mm (thickness of a piece of A4 paper).
2. We can use a piece of A4 paper to assist in leveling, so that the nozzle only scratches on the A4 paper. Adjust the four leveling nuts in turn until you feel slight resistance from the nozzle when pulling the A4 paper.
3. Test whether the distance between the nozzle and the print platform is proper or not. Repeat the above steps 1~2 times if necessary.

1. 当喷嘴在调平螺母上方时，旋转螺母，调节打印平台，使二者间距约为0.1mm，刚好处于贴合状态（一张A4纸的厚度）；
2. 用一张A4纸辅助调平，使喷嘴刚好能在A4纸上产生划痕但不会划破纸张。依次完成底部四个调平螺母的调节，不断调整直到拉动A4纸时能感受到来自喷嘴的轻微阻力；
3. 测试平台中间间隙是否合适，如有必要可重复上述步骤1-2次。

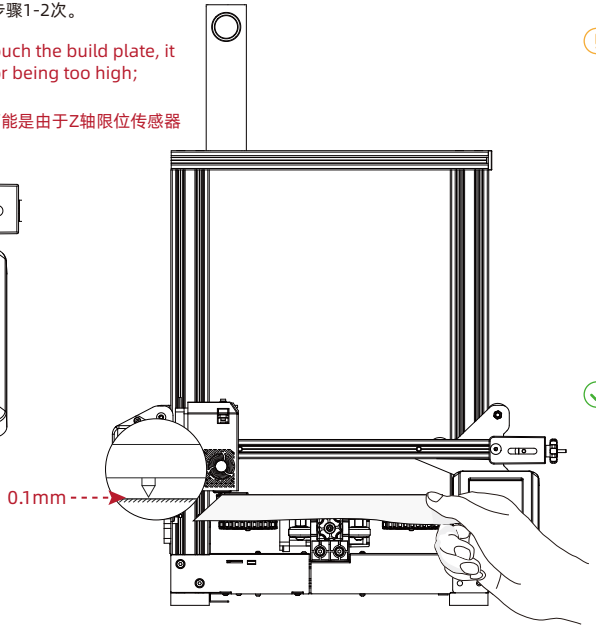
Note: If rotating nuts but the nozzle still cannot touch the build plate, it might due to the position of the Z-axis limit sensor being too high; please adjust it accordingly.

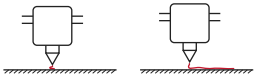
注意：如若旋转调平螺母无法使喷嘴触碰到平台，这可能是由于Z轴限位传感器位置安装过高，请适当调节。



It is suggested that the center position be checked after well adjusting the upper 4 positions.

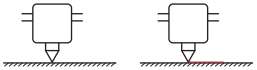
4个螺母上方位置调整后，
可适当查看中心位置是否合适。





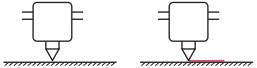
Nozzle is too far away from build plate that causes model unable to adhere to the build plate.

喷嘴离平台太远，耗材无法粘附在平台上。



Nozzle is too close to build plate that causes filament failed to sufficiently extruding. Nozzle may easily be damaged and clogged, build plate may be scratched.

喷嘴离平台太近，耗材挤出不足，喷嘴容易受损，造成堵头，刮伤打印平台。



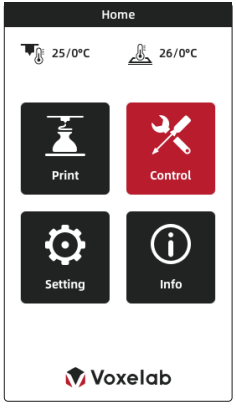
Perfect distance between nozzle and build plate ensures filament extruded evenly and adhering rightly on the build plate.

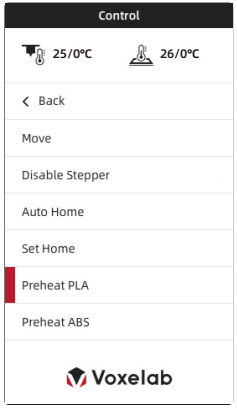
耗材挤出饱满均匀，刚好贴在平台上。

11 Preheat
预热

Note: The UI information is only for reference, the actual UI may be different.
注意：界面仅供参考，实际以UI为准。

Method 1



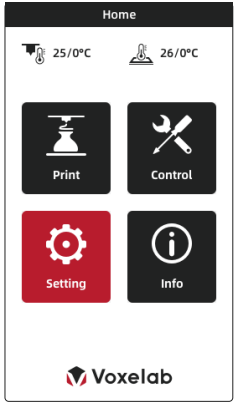


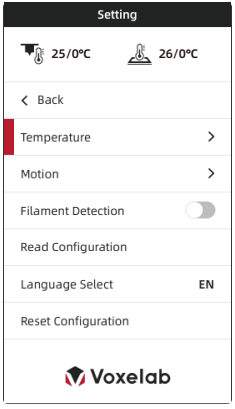
方法 1

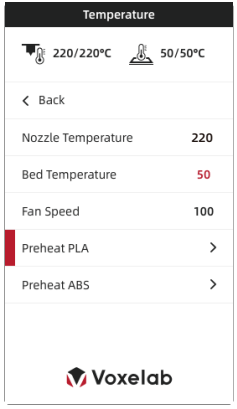
Preheat
预热

Note: The UI information is only for reference, the actual UI may be different.
注意：界面仅供参考，实际以UI为准。

Method 2





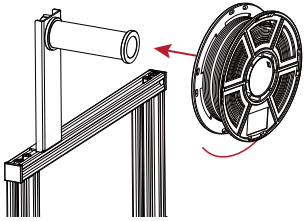


方法 2

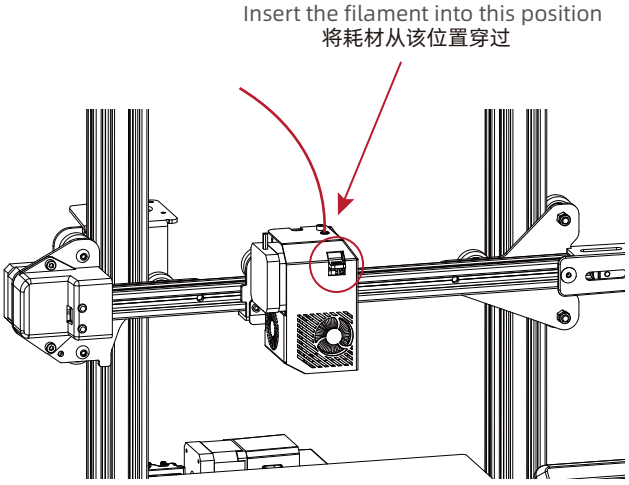
Note: If you need to adjust temperature for some reasons, please tap [Settings] - [Temperature] - [Preheat PLA/ABS] to adjust parameter.

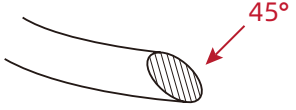
注意：若因打印材料或其他原因需要调整温度，可以在界面首页【设置】-【温度】-【PLA/ABS预热设置】调整参数。

12 Load the filament
装料



1. When waiting for preheating, please hang the filaments on the material rack.
1. 在等待温度上升时，将耗材挂在料架上。





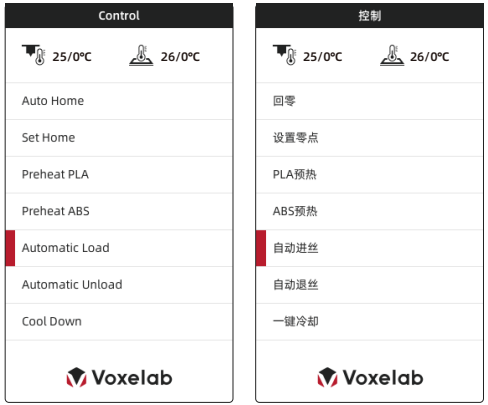
For better printing, the end of filament recommended as showed in the figure.
为使耗材能顺利进入喷头，请将耗材末端斜剪至约45°角（如图所示）。

2. Select [Control]-[Automatic Load], operate it by according the instruction on screen. Pull the filament to the feeding inlet on the extruder, and press the feeding handle, insert the filament into the extruder vertically until feel a slight resistance.
3. Wait for the extruder to heated up to the target temperature and loading starts. When the filament is extruded from the nozzle evenly, the loading is completed (When the printer has been preheated, it is suggested to insert the filament directly without pressing the feeding handle).

2. 在显示屏上选择【控制】-【自动进丝】，按照屏幕指示操作。手动将耗材拉至喷头上方进丝口，按压进丝把手，将耗材垂直插入喷头直至感受到轻微阻力即可。
3. 等待喷头自动加热至目标温度。当耗材开始均匀从喷嘴挤出时，进丝步骤完成（若设备已预热，可直接将耗材插入进丝口，无需按压送丝把手）。

Load the filament
装料

load
进丝



Unload
退丝

Unload:
Select [Control]-[Automatic Unload], wait for the extruder heating to the target temperature. Press the feeding handle, and press the filament down for 1-2 seconds, then pull out the filament quickly.

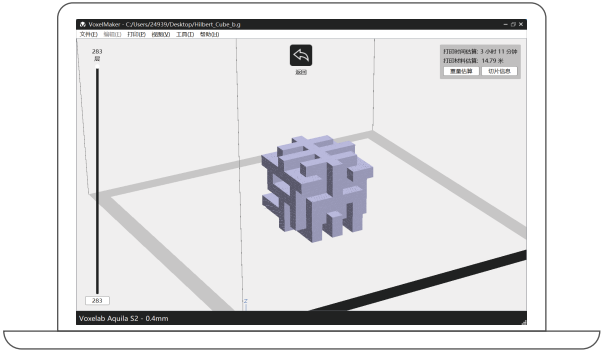
退丝：
在显示屏上选择【控制】-【自动退丝】，等待喷头加热至目标温度。按压送丝把手，先将耗材向下按压1-2秒，然后快速手动拔出耗材。

Replace the filament:
Replacement in daily life: unload the filament then repeat the load process. Replacement during the printing process：please slow the printing speed to 10% and cut off the filaments nearby the feeding inlet. Insert the new filament and repeat the loading operation, adjust the printing speed to 100%, and resume printing.

更换耗材：
日常生活中更换耗材：退丝后重复进丝步骤即可；打印过程中更换耗材：点击【设置】，将打印速度降低为10%，剪断送丝口处的耗材，将新耗材插入进丝口，重复进丝操作，打印速度调整为100%即可。

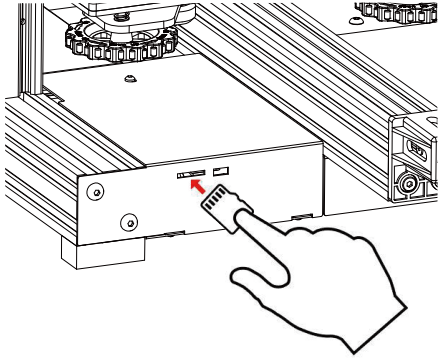
13 Start printing
开始打印

1. Ensure that the build plate has been leveled before printing. 打印开始前请确保打印机已经完成调平；
2. Ensure that the filament has been loaded in an appropriate approach. 打印开始前请确保耗材安装正确，没有打结或卡住；
3. Please clean extruder before printing (Load the filament for a while to extrude all the melted filament printed last time). 打印开始前请将喷头内的耗材清理干净（喷头内可能残留少量耗材，请进丝一段时间，确保上一次打印的耗材已全部挤出）；
4. Do not leave the printer unattended during operation. 不允许在长时间无人看守的情况下使用3D打印机。



Decompressed the slicing software package in the TF card and install it to your computer. Open the software, load the stl file for slicing, then saved the sliced file to the TF card.

将TF卡中的切片软件安装包解压并安装在电脑上。打开切片软件，导入stl文件进行切片，将切片后的模型文件存入TF卡。



Insert the TF card - Choose [Print]- select a file to print

插入TF卡，按压旋钮，选中【Print from Media】，选择要打印的文件。

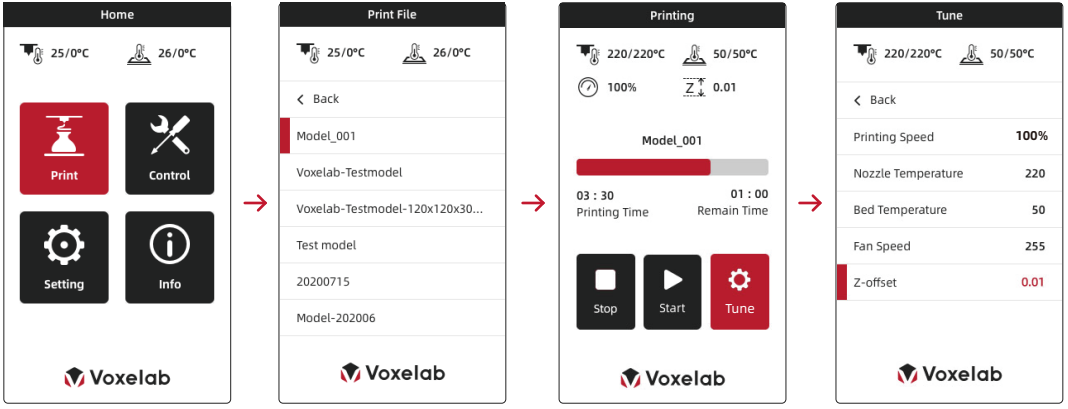
File names must be Latin letters or numbers, Chinese characters and other special symbols are unaccepted.

文件名需为拉丁字母或数字，不能为汉字或其他特殊符号

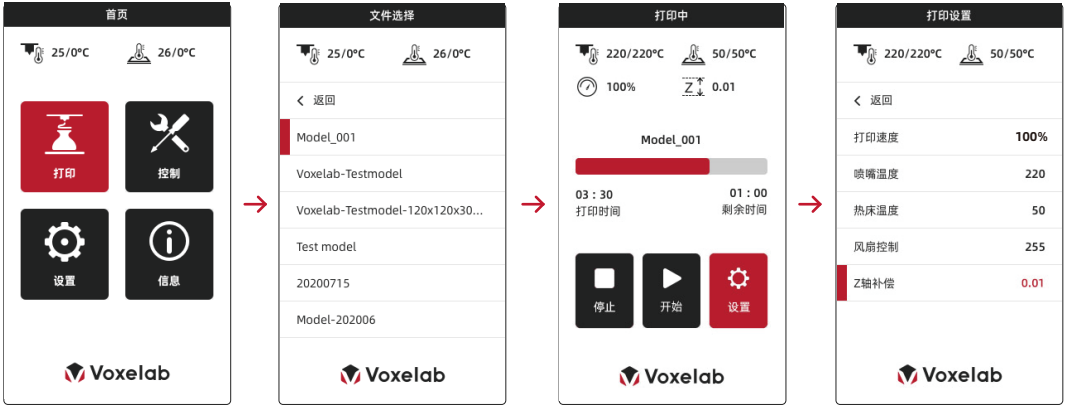
Start printing
开始打印

Note: Notice the distance between the nozzle and the build plate during printing the first layer. If the distance is improper, please select [Setting]-[Z-offset] to perform the Z-axis offset.
注意：当打印第一层时若发现喷头与平台之间的距离不合适时，请按压旋钮，选中【设置】-【Z轴补偿】进行Z轴补偿。

Print



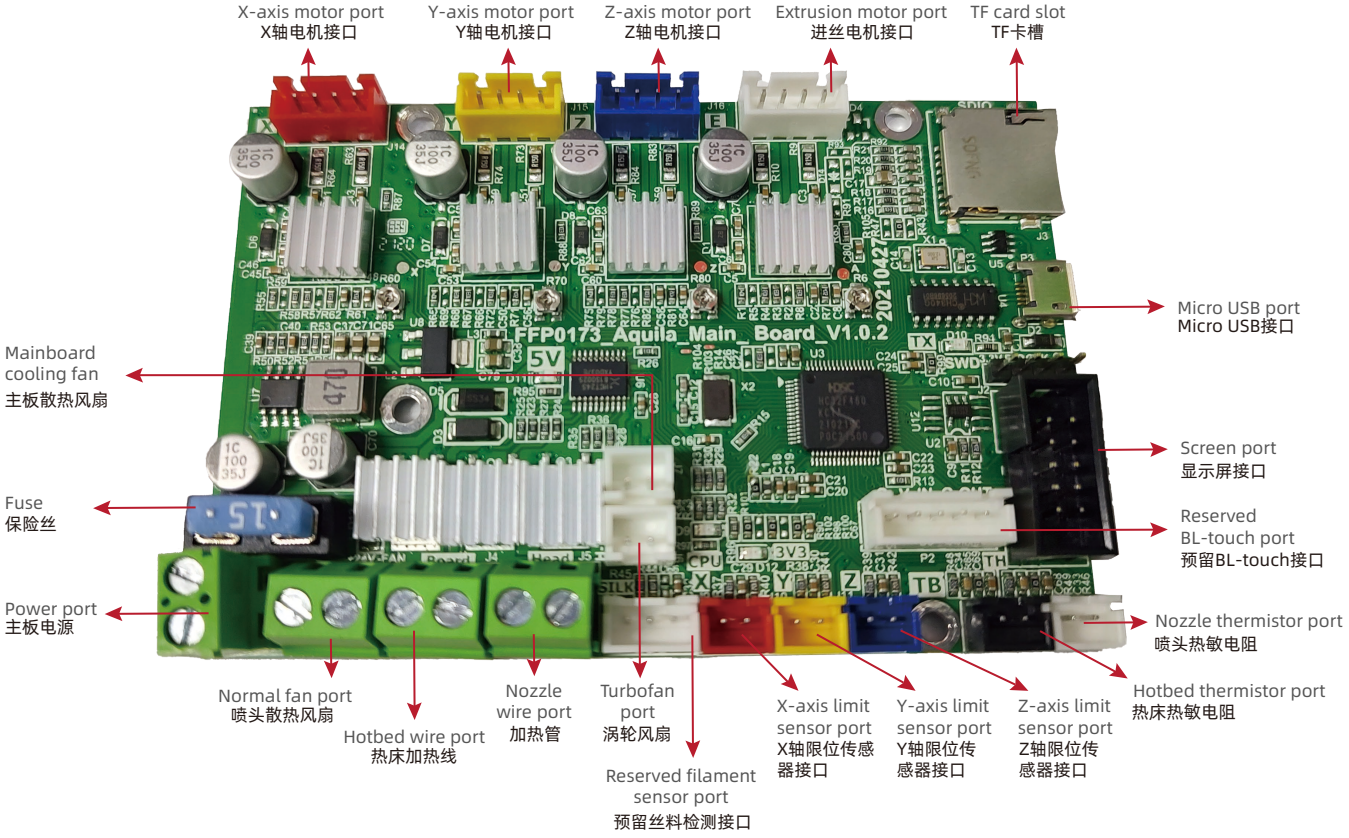
打印



When the offset value is positive, the nozzle and the build plate get farther; When the offset value is negative, the nozzle and the build plate get closer.

当补偿值为正时，喷头与平台间隙变大；当补偿值为负时，喷头与平台的间隙变小。

Motherboard Information
主板信息



Printing Notice
打印注意事项

1. Please do not apply glue to the PEI platform, lest it affects the printing effect. After printing, do not remove the model with a removal tool to avoid damage to the platform.
2. Do not pick up the printing platform immediately after printing to avoid burns due to high temperature.
3. Please keep a proper distance between the nozzle and the PEI platform to avoid damage.
4. It's not recommended to print ABS filament at extremely low temperature environment, as print will fail when printed model getting away from the build plate.
5. There is a certain quivering on the build plate during the printing which may cause flatness changed. Thus please pay attention to the adhesion of the first layer when printing model; if the distance between build plate and nozzle is improper, please re-level it.
6. If printing effect is not accurate enough, check the tension of synchronous belt and make it neither too loose nor too tight. When synchronous belt working well, please check the transmission ratio. Turn up the transmission ratio if the size gets smaller, or turns down the ratio if the size gets larger.
7. If the accuracy of Z-axis height dimension is not good enough, please adjust the compensation setting of Z-axis for precision compensation.
8. If the build plate shakes, use a wrench to adjust tightness of the pulley to the extent that the pulley cannot be rotated. Tightness is well adjusted when slightly sliding the plate there gets no shaking.
9. If X-axis assembly shakes, adjust the distance between the pulley and the structural section properly by using an open-end wrench; the pulley is well adjusted when you cannot go on rotating it.
10. Optimal temperature for printing is 18~30℃. Too high or too low temperature is not good for printing results.

1. 请勿给PEI平台钢板涂抹胶水，以免影响打印效果。打印完成后，请勿用铲刀取模型，以免造成平台损伤。
2. 打印完成后，请勿立即拿起打印平台，防止高温烫伤。
3. 喷头与PEI平台钢板请保持合适的距离，以免造成磨损。
4. 不建议在温度过低的环境打印ABS材料，模型容易从平台脱离。
5. 打印平台因在打印过程中可能存在抖动导致平面度发生变化。打印时请注意第一层的粘附是否正常；若不正常，请重新调平。
6. 若打印成品在尺寸上有较大误差，请先确认同步带安装是否异常，是否太宽松或者过紧。若是，请调节至合适状态。若同步带无异常，请调节传动比：若成品尺寸偏大，请调小传动比；若尺寸偏小，请调大传动比。
7. 若Z轴高度尺寸有误差，请对Z轴进行精度补偿。
8. 若发现平台有轻微晃动，请使用开口扳手适当调节滑轮的松紧度，使滑轮不可转动。当缓慢滑动平台时平台不再晃动，说明此时滑轮位置处于合适状态。
9. 若发现X轴组件有晃动，请使用开口扳手适当调节滑轮与型材的距离。当用手拨动轮子不可转动时，说明此时滑轮位置处于合适状态。
10. 建议打印环境温度为18-30℃，过高或过低的环境温度，都会影响打印质量。

Trouble shooting
故障检修

Q: How to upgrade the firmwares?
固件如何升级?

A: 1. Insert the TF card into the card reader;
2. Insert the card reader into the USB interface of the computer;
3. Create a new folder named firmware in TF card;
4. Copy the xx.bin file into the "firmware" folder;
5. Insert the TF card into the TF card socket of the machine;
6. Reboot the machine.

1. 将TF卡插入读卡器;
2. 将读卡器插入电脑USB接口;
3. 在TF卡中新建名为firmware的文件夹;
4. 打开firmware文件夹,放入已下载的xx.bin文件;
5. 将TF卡插入型材机的TF卡插口;
6. 重启机器。

Q: How to get the firmwares?
固件如何获取?

A: Enter the official website <www.voxelab3dp.com> and download them at the <Download Center>.
请联系售后邮箱 support@voxelab3dp.com 售后电话：0579-82238189

Q: What if the model warps or is unable to stick to the build plate?
打印模型起翘，粘不住打印平台怎么办?

A: 1. The temperature of build plate was too low; increase its temperature accordingly;
2. Distance between the build plate and the nozzle is too far or the build plate is not leveling enough; re-leveling the build plate accordingly.

1. 平台温度设置太低，请加高平台温度;
2. 平台与喷嘴距离太大，平台未调平，请重新调平。

Q: What if the accuracy of model is not good?
模型打印尺寸不良怎么办?

A: Please ensure the normal tension of the synchronous belt, neither loose nor tight.
确认同步带是否异常松或太紧，调整到合适状态。

Q: What if the screen turns dark?
黑屏或显示不良怎么办?

A: 1. Please check whether the screen flat cable has those questions: loose, plugged in reverse, plugged in wrong position, tilted plugging;
2. Refresh the firmware to see if the screen can recover to normal.
3. Contact the after-sales personnel if necessary.

1. 检查屏幕线束是否松动、插反、未插到位或倾斜错位，重新插拔一下;
2. 重装固件，是否能恢复，若不能请联系技术支持。

Q: What if the build plate cannot be heated?
热床无法加热。

A: Please check the digital display of the temperature. If the temperature is improper, please replace the thermistor. Otherwise, please replace the heating wires.

1. 查看温度显示是否异常，若异常则热敏电阻损坏，需要更换热敏电阻;
2. 温度显示正常不加热，加热板线损坏，需更换。

Q: What if the nozzle cannot be heated?
喷嘴不加热。

A: 1. Please check the temperature on display screen; if the temperature is shown abnormal, it is in the reason of thermistor. Please replace the thermistor and try again;
2. If the temperature is shown normal, it may be in the reason of heating cable. Please replace the heating cable and try again.

1. 查看温度显示是否异常，若异常则热敏电阻损坏，需要更换热敏电阻;
2. 温度显示正常不加热，加热管线损坏，需更换。

Q: What if the axis cannot be moved?
轴无法运动。

A: 1. Check the wire of the electric motor;
2. Contact us by email listed.
Email: support@voxelab3dp.com

1. 检查电机线束是否插好;
2. 联系技术支持。

Q: What if the files are garbled and cannot be read?
文件乱码了，读取不了?

A: Repair the model before slicing.
切片前请修复模型。

Trouble shooting
故障检修

Q: What if the files on the TF card cannot be identified?
TF卡中文件无法识别？

A: 1. Clean and wipe the TF card;
2. Format the TF card;
3. Replace the TF card.
1. 擦拭存储卡；
2. 格式化存储卡；
3. 更换存储卡。

Q: What if knock and noise occur when nozzle returning to zero point?
回零一直在撞击，停不下来，有异响产生。

A: 1. Check whether the zero sensor is knocked and broken;
2. Check the lines and see whether the noises stop when pressing the sensor by hand;
3. Contact us by email.
Email: support@voxelab3dp.com
1. 确认回零传感器是否有问题，是否有碰撞到传感器；
2. 检查线路是否异常，手动按压传感器查看是否停止；
3. 联系技术支持。

Q: Unable to resume printing from power failure?
断电续打功能不能使用。

A: It might be caused by different TF card. Make sure you are using the same TF card before and after the power cut off.
断电前后使用的TF卡不同，请保持断电前后是同一张TF卡。

Q: Too much filament oozing?
模型打印拉丝严重。

A: 1. Reduce the printing temperature by 5~10℃;
2. Increase the traveling speed, or increase the with retraction length and speed.
1. 适当调低打印温度5-10℃；
2. 适当调高空走速度，或者提升回抽速度以及回抽值。

Q: What if offset occurs on the printed model?
模型打印偏移怎么办？

A: 1. Check the tightness of the synchronous belt and ensure it is correctly installed;
2. Slice the model again;
3. Reduce print speed;
4. Make sure operating temperature doesn't exceed its assigned set-point temperature 30℃.
1. 确认同步带张紧力，查看同步带是否安装错误；
2. 打印模型重新切片；
3. 降低打印速度；
4. 确认机器使用环境温度是否超过机器限定最高温度30℃。

Q: Printer gets broken at the time of turning it on?
机器通电就烧坏了。

A: It might be caused by dialing to the wrong voltage. Please check whether the voltage is dialed correctly.
开关电源拨码不正确，检查电压是否拨到正确的电压值。

Q: No filament coming out during printing?
模型打印中不出丝了。

A: 1. Shorten the retraction length to avoid any abrasion;
2. Check whether the extruder is clogged, use a needle to clean it if necessary;
3. Confirm whether the filament feeding wheel is stuck, if it is, please clean it up.
1. 适当调低回抽值，回抽值过大容易磨损；
2. 确认喷头是否堵塞，若堵塞需使用通针清理；
3. 确认送丝轮部分是否卡住，若卡住请清理干净。

After-sales Service Registration Form
售后服务登记表

Series No.
序列号 _____

Purchase from
从何处购买 _____

Tel.
联系电话 _____

Contact
联系人 _____

Add.
地址 _____

Fault Description:
故障描述 _____

_____

_____

Please fill in this form carefully, cut out this form and mail it back to Voxelab together with the printer, or download this form from **www.voxelab3dp.com**, fill in this form and mail it to **support@voxelab3dp.com**. After-sales service shall not be provided without this form.
请务必仔细填写此表，剪下并随机器寄回Voxelab，未填写此表将无法进行售后服务。

Please contact your reseller to get after-sales service help if your printer is not purchased on official Voxelab website.
如您在非Voxelab官方平台购买机器，请直接联系您购买的渠道获取售后支持。

After-sales Service

< ASC20200701 >

Note: The one who sells you the printer should be responsible for your after-sales service.

1. Voxelab grants all end-users a 12-month limited warranty for all Voxelab 3D printers (except the Voxelab extruder) and a 3-month warranty for Voxelab FFF Extruder.
2. If Voxelab 3D printer fails during normal and proper use within the warranty period (judged by Voxelab engineers), Voxelab will provide users with free maintenance services or remote after-sales support.
3. The warranty period starts from the outbound date, or starts from the invoice date if clear and confirmed invoice is provided.
4. Voxelab will repair or replace only the defective parts with new or reconditioned parts that are functionally equivalent or superior to those original parts. The warranty period of replaced parts is the same as the printer.

Parts Excluded from This Warranty

Build Tape	Plastic Scraper
Build Plat	Metal Scraper
USB Stick	Allen Wrench
USB Cable	Stamping Wrench
TF Card	Tools Bag
Card Reader	Accessories
Filament	Glue
Filament Spool	USB Flash Disk

* Voxelab extruder kit is always on iteration and upgrading (Purchase separately if you need).

What is not covered

- Unable to provide valid After-sales Service Card or serial No. (Including but not limited to lost, alter or fuzzy cannot be confirmed);
- Damage(s) caused by improperly or incorrectly performed modifications, alterations or repair;
- Damage(s) caused by operation under improper environment (damp, wet or other extreme weather);
- Exterior scratch or flaw caused by abrasion, aging or normal use;
- The warranty period of printer or part has expired;
- ·Damage(s) caused because having the printer repaired in repair shops unauthorized by Voxelab;
- Damage(s) caused by improperly installation, use or operation;
- Damage(s) caused by abuse (overloaded working), misuse;
- Damage(s) caused by using unauthorized spare parts or poor quality filament ;
- Damage(s) caused by using 3rd party software;
- Damage(s) caused by force majeure (such as a lightning strike, fire, earthquake, floods or any other event beyond human control);
- Damage(s) caused by using 3rd party parts.

售后服务卡

<SAC20200804>

Voxelab采用谁销售谁服务的原则，如您的3D打印机是在非Voxelab官方平台购买，请向您购买的商家获取相关支持。

1. Voxelab所有3D打印机均为用户提供12个月整机有限质保。其中FFF技术3D打印机的喷头质保时间为3个月。
2. 质保期内若设备出现非人为损坏（由Voxelab工程师评定），您将获得免费配件及售后技术支持。
3. 售后服务周期以产品出厂日期为起始。如能提供清晰的发票，则以发票开具日期为起始。
4. 维修零配件可能为非全新配件，但甲方保证配件功能完全正常。维修配件质保时间与其整机质保时间相同。

以下配件不列入质保范围

平台贴纸	打印平台
平台金属板	金属铲刀
平台玻璃	内六角扳手
U盘、TF卡及读卡器	开口扳手
USB线	工具配件
打印耗材	丝盘轴

* 由于Voxelab产品喷头会有迭代升级，喷头升级套件需单独购买。

以下情况不在质保范围内

· 无法提供有效质保卡或序列号（遗失、涂改、模糊无法确认）；
· 整机及部件已经超过质保有效期；
· 设备曾经在未经Voxelab授权的维修店维修；
· 设备在非产品规定的工作环境下使用而造成的设备故障或损坏；
· 设备正常磨损、老化或因操作造成的外观划痕或瑕疵；
· 由于使用非Voxelab指定的软件而造成的设备故障或损坏；
· 由于使用其它品牌部件造成的设备故障或损坏；
· 由于私自对设备进行改装而造成的设备故障或损坏；
· 由于错误安装、使用而造成的设备故障或损坏；
· 由于滥用（包括超出工作负荷）、误用而造成设备故障或损坏；
· 由于使用低质量耗材而造成的设备故障或损坏；
· 由于维护不当（受潮、发霉或暴露在极端气候）造成的设备故障或损坏；
· 由不可抗因素（如火灾、地震、雷击、水灾等）造成的故障或损坏；

Physical objects and final images might be distinct from the user manual due to differences between printer models. Voxelab reserves final explanation rights.

因每款机型不同，实物可能有所差异，请以实物为准。本说明书最终解释归浙江闪铸三维科技有限公司所有。

Official Website

YouTube

天猫旗舰店

优酷自频道

Voxelab

Official Website: www.voxelab3dp.com E-mail: support@voxelab3dp.com
Address: Xianyuan Road NO.518, Wucheng District, Jinhua, Zhejiang, China.

Voxelab voxelabofficial

Voxelab Voxelab 3D Printing

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