

## SHENZHEN KYWOO 3D TECHNOLOGY CO., LTD.

**Address:** Room 1101, Yifenghua Building, NO.28 Yifenghua Innovation Industrial Park, Xinshi Community, Dalang Street, Longhua District, Shenzhen

**Official Website:** [www.kywoo3d.com](http://www.kywoo3d.com)

**Official Facebook Account:** KywooOfficial

**Tel:** +86 0755-21009224

**Email:** [service@kywoo3d.com](mailto:service@kywoo3d.com)

## 深圳市开物三维科技有限公司

**地址:** 深圳市龙华区大浪街道新石社区颐丰华创新产业园28号颐丰华大厦1101

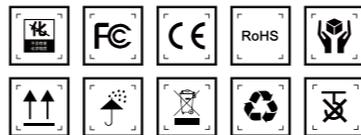
**公司网站:** [www.kywoo3d.cn](http://www.kywoo3d.cn)

**服务热线:** 0755-21009224

**邮箱:** [service@kywoo3d.com](mailto:service@kywoo3d.com)

Due to the differences between different machine models, the physical objects and the final images can differ. The right of final interpretation shall be reserved by Shenzhen Kywoo 3D Technology Co., Ltd.

因每款产品机型不同, 实物与图片可能有所差异, 请以实物为准, 最终解释归深圳市开物三维科技有限公司所有。



# kywoo3D

## Tycoon Slim

# User Manual

## 使用说明书



# Content 目录

## Dear Customers,

Thank you for choosing our products. For a better user experience, please read the instructions carefully before operating the printer. Our team is always be ready to provide you with the best customer service. Please contact us via the phone number or email address provided at the end of the manual if you encounter any problem with the printer.

You can also learn how to use the printer in the following ways:

- View the instructions and videos on the supplied TF card;
- Visit our official website [www.kywoo3d.com](http://www.kywoo3d.com) to find relevant firmware / hardware information, contact details and operation and maintenance instructions.

## 尊敬的开物三维用户：

感谢您选择和使用开物三维的产品，为了您使用方便，请您在使用之前仔细阅读该说明书，并严格按照说明书上的指示进行操作。

开物三维团队时刻准备着为您提供最优质的服务，在使用过程中无论遇到什么问题，请按照说明书结尾所提供的电话、邮箱与我们联系。

为了您能够更好地体验我们的产品，您还可以从以下方式获取设备操作知识：

- 您可以在随机附带的TF卡内找到相关使用说明及视频。
- 您还可以登陆开物三维官网[www.kywoo3d.com](http://www.kywoo3d.com)寻找相关软硬件、联系方式、设备操作、设备保养等信息。

<b>I</b> Notes 使用须知	2
<b>II</b> Introduction 设备简介	4
<b>i</b> Parts List 零部件清单	5
<b>ii</b> Tool List 工具包清单	5
<b>iii</b> Parameters 设备参数	6
<b>III</b> Assemble the 3D Printer 组装3D打印机	7
<b>IV</b> Screen Interface 屏幕界面	9
<b>V</b> Use the 3D Printer 使用3D打印机	12
<b>i</b> Home and Auto-level the Heated Bed 自动回零, 自动调平	12
<b>ii</b> Preheat 预热	12
<b>iii</b> Load the Filament 安装耗材	13
<b>iv</b> Adjust Z-axis Offset 调Z轴补偿	14
<b>v</b> Start Printing 开始打印	15
<b>VI</b> Filament Detection Function 断料检测	16
<b>VII</b> Frequently Asked Questions 常见问题解答	17
<b>VIII</b> Mainboard Information 主板信息	19
<b>IX</b> Troubleshooting 故障排除	21

## I Notes

- ◆ 1. After unboxing, please check whether the machine is damaged, bent, or scratched, and check the parts against your order. If you have any questions, please promptly contact our after-sales service via the Kywoo 3D official website or the email address provided on the manual.
- ◆ 2. Do not use the printer for anything other than described herein in order to avoid personal injury or property damage.
- ◆ 3. Do not place the printer near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.
- ◆ 4. Do not expose the printer to violent vibration or any unstable environment, as this may cause poor print quality.
- ◆ 5. Please use the recommended filaments to avoid the blockage of the extruder and damage to the machine.
- ◆ 6. Do not use any other power cable except the one supplied. Always use a grounded three-prong power outlet.
- ◆ 7. Do not touch the nozzle or printing surface during operation as they may be hot. Keep hands away from machine while in use to avoid burns or personal injury.
- ◆ 8. Do not wear gloves or loose clothing when operating the printer. Such clothes may become tangled in the printers moving parts leading to burns, possible bodily injury, or printer damage.
- ◆ 9. After printing, use the provided tools to clean up any filament on the nozzle while it's still hot. Do not touch the nozzle directly with your hands.
- ◆ 10. Clean the printer frequently. Always turn the power off when cleaning, and wipe with a dry cloth to remove dust, adhered printing plastics or any other material off the frame, guide rails and wheels. Use glass cleaner or isopropyl alcohol to clean the print surface before every print for consistent results.
- ◆ 11. Children under 10 years of age should not use the printer without supervision.
- ◆ 12. This machine is equipped with a security protection mechanism. Do not manually move the nozzle or printing platform while booting up, otherwise the device will automatically power off for safety.
- ◆ 13. Users shall comply with related national and regional laws, regulations and ethical codes where the equipment or prints produced by it are used, and users of our product shall not use aforesaid products to print any end-use products, objects, parts or components or any other physical prints that violate the national or regional laws, regulations and ethical codes where herein referred product and produced prints by it is located.

## I 使用须知

- ◆ 1、开箱后请先检查机器有无损坏、变形、外观有无刮伤，配单核对，如有问题，请及时通过开物三维官网或说明书上提供的电话或邮箱联系官方售后；
- ◆ 2、请勿尝试用任何使用说明中没有描述的方法来使用本机，避免造成的意外人身伤害和财产损失；
- ◆ 3、请勿将本机放置在易燃易爆物品或高热源附近，请将本机放置在通风、阴凉、少尘的环境内；
- ◆ 4、请勿将打印机放置在振动较大或者其他不稳定的环境内，因为机器晃动会影响打印机的打印质量；
- ◆ 5、建议使用厂家推荐的耗材，以免造成挤出堵塞和机器损坏；
- ◆ 6、请使用本机附带的电源线，请勿在安装过程中使用其他产品的电源线代替，电源插头需接插在带有地线的三孔插座；
- ◆ 7、请勿在打印机工作时接触喷嘴以及热床，以防止出现高温烫伤，造成人身伤害；
- ◆ 8、请勿在操作机器时佩戴手套或缠绕物，以防可动部件对人身造成卷入挤压或切割伤害；
- ◆ 9、在打印完毕后及时利用喷头的余温借助工具将喷头上的耗材清理干净，清理时请勿直接用手触摸喷头，以防烫伤；
- ◆ 10、常做产品维护，定期在断电的情况下，用干布对打印机做机身清洁，拭去灰尘和粘结的打印材料、导轨上的异物。每次打印之前，请使用玻璃清洁剂或异丙醇清洁打印台表面，以确保打印的流畅；
- ◆ 11、请勿让年龄在10岁以下的儿童在没有人员监督的情况下使用本机，以免造成人身伤害；
- ◆ 12、本机设有安全保护机制，请勿在开机状态下手动快速移动喷头及打印平台机构，否则设备会自动断电关机保护；
- ◆ 13、使用者应遵守设备打印产品与设备所在地及相应国家及地区法律、法规，恪守职业道德，严禁使用我司产品打印有违设备打印产品与设备所在地及相应国家、地区法律的任何产品或物件。

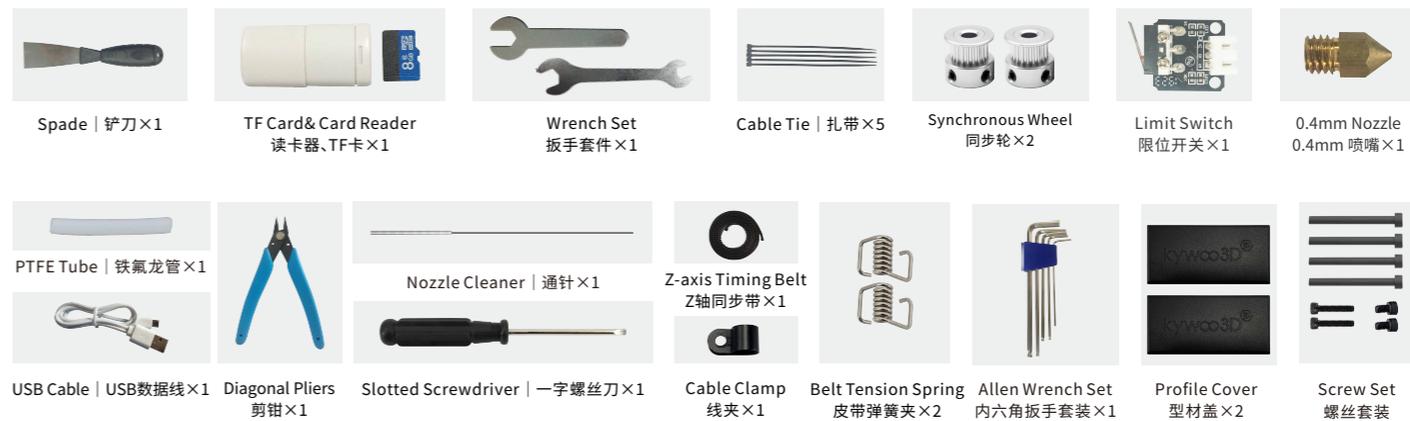
## Introduction 设备简介



### i Parts List 零部件清单



### ii Tool List 工具包清单



## iii Parameters 设备参数

Model   型号	Tycoon Slim
Molding Tech   成型工艺	FDM
Printing Size   打印尺寸	240*240*300mm
Printer Size   设备尺寸	464*552*522mm
Package Size   包装尺寸	560*505*240mm
Net Weight   净重	8.8kg
Gross Weight   毛重	11.6kg
Nozzle Temp   喷嘴最高温度	≤260°C
Bed Temp   热床最高温度	≤110°C
Total Power   额定功率	350W
Working Mode   打印方式	TF card/SD card   TF卡/SD卡
Power Supply   额定电压	Input   输入: 110/230V 6.8-3.4A    Output   输出: DC 24V
Recommended Printing Speed   建议打印速度	60-80mm/s
Precision   打印精度	±0.1mm
Filament   打印材料	PLA,ABS,TPU,PETG
Slicing Software   切片软件	Cura, Simplify 3D
Slicing Support Format   切片支持格式	STL,OBJ,AMF
Supported Languages   支持语言	1. English; 2. Spanish; 3. French; 4. Italian; 5. German 1. 英语; 2. 西班牙语; 3. 法语; 4. 意大利语; 5. 德语



## Assemble the 3D Printer 组装3D打印机

①Take out the machine and the screen, use M4\*16 screws to fix the screen on the base profile, plug in the cable, like shown in pic ① and ②.

①取出机器和屏幕,使用M4\*16螺丝将屏幕固定在底座的型材上,插上排线,如图①和图②。



①



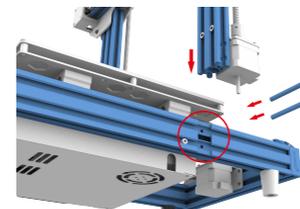
②

③Open the accessory box, take out the ring timing belt and 2 synchronous wheels, put the synchronous belt on the synchronous wheel, and then fix the synchronous wheels on the shafts of the Z-axis motor respectively, keeping the height consistent, and tighten the four screws on the synchronous wheels to fix, as in pic ⑤.

③打开配件包,取出环形同步带和2个同步轮,将同步带套在同步轮上,然后将同步轮分别固定在Z轴电机的轴上,保持高度一致,拧紧同步轮上面的四颗螺丝固定,如图⑤。

②With the extruder facing the same side of the screen, insert the gantry vertically along with the slot of the base frame, and tighten the 4 M5\*50 screws on both sides, like in pic ③ and ④.

②将挤出机面向屏幕的同一侧,将龙门架沿着底部框架的槽口垂直插入,并锁紧两侧的4颗M5\*50螺丝,如图③和图④。



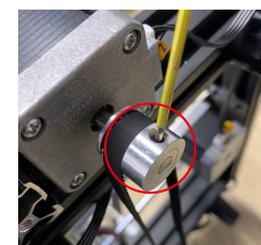
③



④



⑤



\*For the detailed installation, please refer to the installing video on the TF card.  
详细安装步骤请参考TF卡内的安装视频。

④ Take out the cable clamp and fix the nozzle wire harness with it, then use M4\*6 screws to fix it on the sheet metal of the left-side X-axis, and fix it with a cable tie above the cable clamp, like in pic ⑥.

④ 取出线夹，将喷头线束卡在在线夹里面，使用M4\*6圆头螺丝固定在左侧X轴的钣金上面，并在线夹上方使用扎带固定，如图⑥。



⑥

⑥ Take out the filament rack and barrel, use T-nuts to fix them on the top profile, hang up the filament, like in pic ⑩ and ⑪.

⑥ 取出料架和料筒，使用T型螺母将其固定在顶部的型材上，挂上耗材，如图⑩和⑪。



⑩



⑪

⑤ Connect the Z-axis motor wires. Connect the X-axis motor wire and end-stop switch wire, as shown in pic ⑦, ⑧, and ⑨.

⑤ 连接机身两侧的Z轴电机线，连接X轴电机和X轴限位开关线，如图⑦，⑧，⑨。



⑦



⑧



⑨

⑦ Connect the power cord and plug it in power supply. Insert the TF card, turn the power switch to "I" to turn on the printer, and "O" for off, like in pic ⑫. Do not disconnect the cord when the machine is powered on.

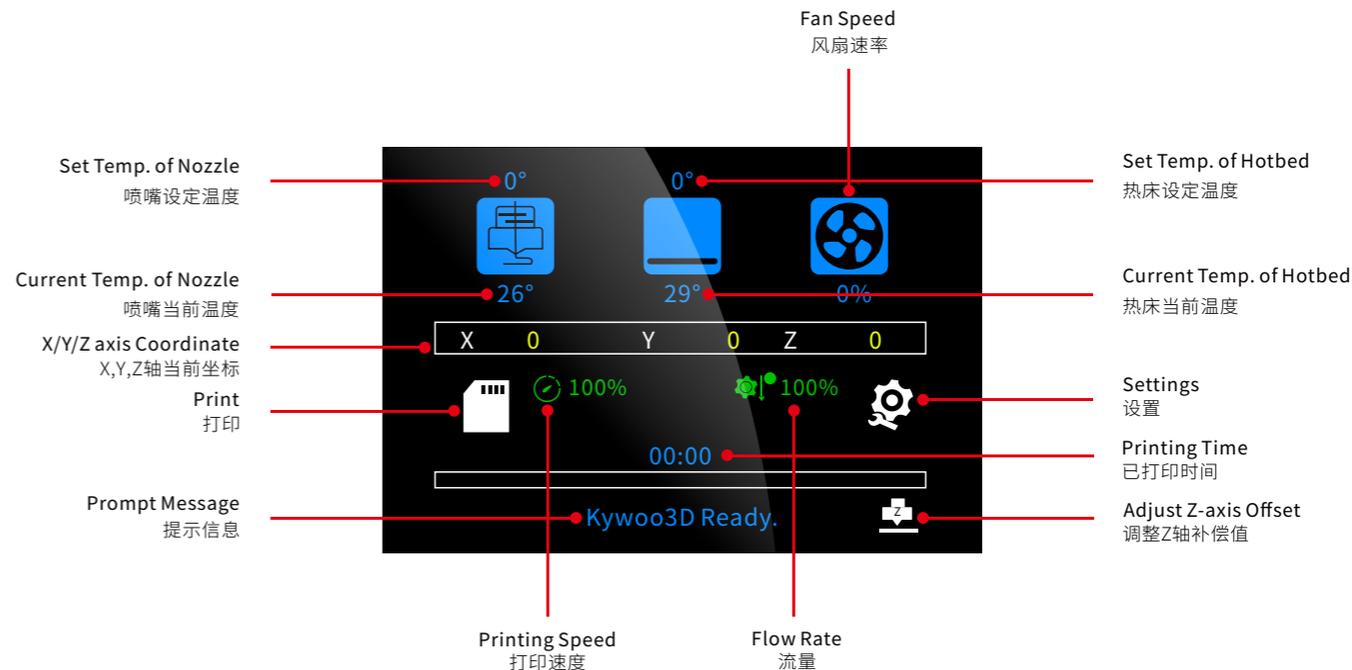
⑦ 将电源线接好，连通电源。插入TF卡，将电源开关调至"I"即可开机，调至"O"即可关机，如图⑫。当机器处于开机状态时，请勿断开电源线。

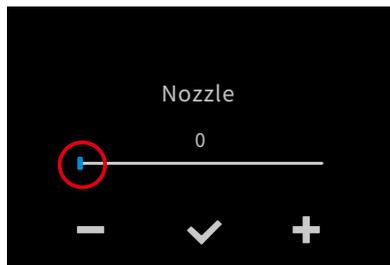


⑫



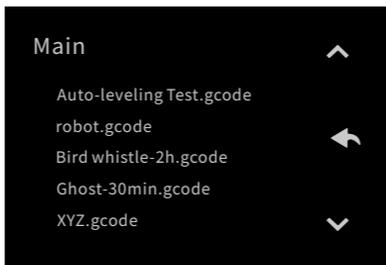
## IV Screen Interface 屏幕界面





Click "+" or "-" or drag the slider to adjust the nozzle temperature. Click "√" to confirm and back to the previous screen.

点击“+、-”或拖动滑块调整喷嘴温度，点击“√”确认并返回。



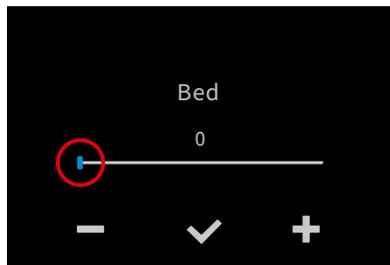
Choose a file to print.

选择文件进行打印。



Moving-axes Screen: click the corresponding axis icon to move the axis, click the central house icon to home all the axes, and click "level" to start auto-leveling. Click off to unlock the motor.

移动轴页面：点击对应的轴图标即可移动轴，点击中间房子图标即可回原点，点击“level”即可开始自动调平，点击off即可解除电机锁定。



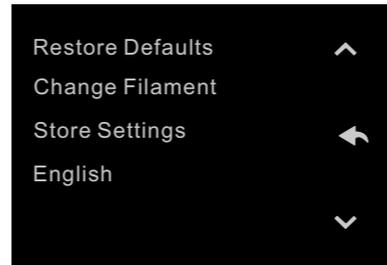
Click "+" or "-" or drag the slider to adjust the hotbed temperature. Click "√" to confirm and back to the previous screen.

点击“+、-”滑动调整热床温度，点击“√”确认并返回。



Click "+" or "-" or drag the slider to adjust the printing speed. Click "√" to confirm and back to the previous screen.

点击“+、-”滑动调整打印速度，点击“√”确认并返回。



Setting Page:

"Restore Defaults": Restore to factory settings. (Note: Screen calibration is required after restoring factory setting)

"Change Filament": Set automatic filament change.

"Store Setting": Save current settings.

"English": Change the language.

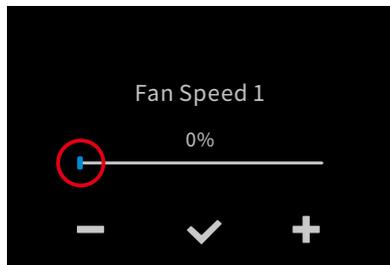
设置页面：

“Restore Defaults”：恢复出厂设置。(注：恢复出厂设置之后需要进行屏幕校准)

“Change Filament”：设置自动换料。

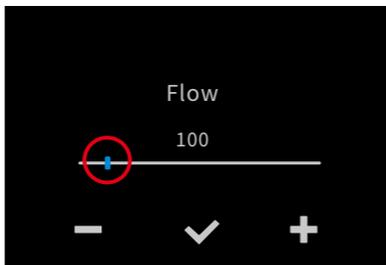
“Store Setting”：保存当前设置。

“English”：切换语言。



Click "+" or "-" or drag the slider to adjust the fan speed. Click "√" to confirm and back to the previous screen.

点击“+、-”滑动调整风扇速率，点击“√”确认并返回。



Click "+" or "-" or drag the slider to adjust the flow rate. Click "√" to confirm and back to the previous screen.

点击“+、-”滑动调整流量，点击“√”确认并返回。



Change Filament Page:

Click "Preheat PLA" to automatically preheat PLA and unload the current filament automatically.

Click "Preheat PETG" to automatically preheat PETG and unload the current filament automatically.

Click "Preheat Custom" to customize the preheating temperature, and automatically unload the current filament after preheating.

换料页面：

“Preheat PLA”：自动预热PLA，并自动退料。

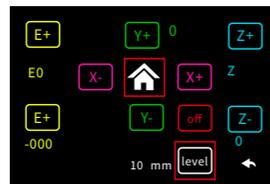
“Preheat PETG”：自动预热PETG，并自动退料。

“Preheat Custom”：自定义预热温度，预热完成自动退料。

## V Use the 3D Printer 使用3D打印机

### i Home and Auto-level the Heated Bed 自动回零, 自动调平

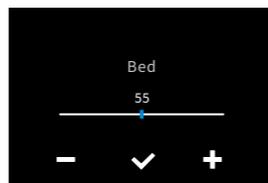
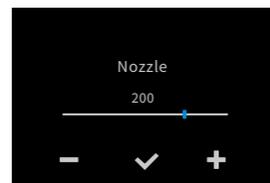
1. Turn on the 3D printer, click the coordinate box, click "🏠" and wait for all the axes homed.  
打开3D打印机, 点击坐标框, 点击“🏠”图标, 等待机器回零。
2. Click "level" to auto-level the printer. (Note: the printer needs to be auto-leveled whenever the nozzle or the printing bed is exchanged.)  
然后点击“level”进行自动调平。(注: 更换喷嘴或热床平台后需要重新调平)



### ii Preheat 预热

Back to the home page. Click on the "nozzle" and "hotbed" icons above, and adjust the preheating temperature by dragging the slider. For your reference: the preheating temperature of PLA filament is nozzle 200°C, hotbed 55°C.

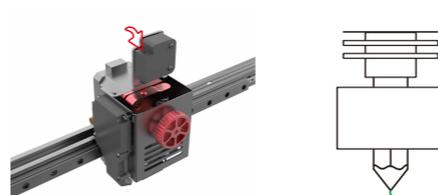
返回主页面, 点击上方“喷头”和“热床”图标, 通过滑动滑块调整预热温度, PLA材料预热温度为: 喷头200°C, 热床55°C。



### iii Load the Filament 安装耗材

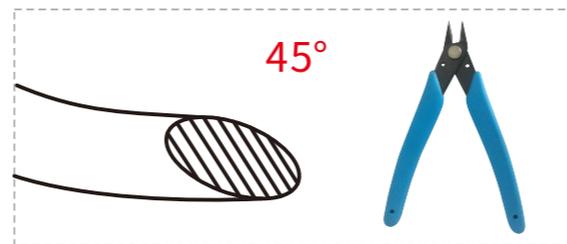
When the hotbed and nozzle reach their set temperatures, pass the filament through the filament detector module, then insert into the extruder and the nozzle. When you see the melted filament flow out from the nozzle, like the following picture, then the filament is successfully loaded.

当热床和喷嘴的温度都达到设定的目标温度时, 将耗材通过断料检测, 插入挤出机小孔直至喷嘴位置, 看到喷嘴处有耗材流出(如下图)即表示耗材已经装载完成。



To insert the filament more easily, you can cut the end of the filament diagonally as shown in the picture:

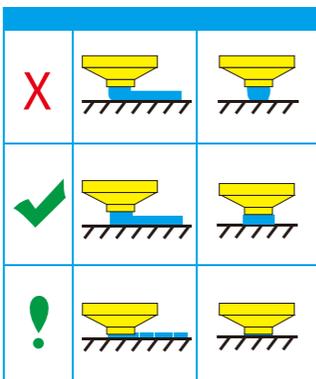
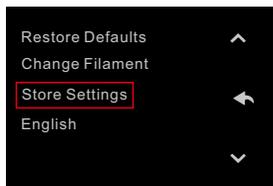
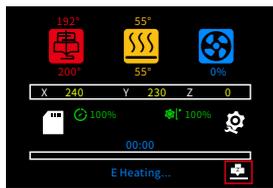
为了方便插入耗材, 可以将耗材末端斜着裁剪一下, 如图所示:



#### iv Adjust Z-axis Offset 调Z轴补偿

Insert the storage card→ Print→ Choose the "Auto-leveling Test" file. When printing the first layer, look at how well the model attaches to the hotbed, and adjust the Z-offset appropriately (when the filament can not be attached to the printing platform well, click - to lower the nozzle; when the nozzle is too close from the hotbed and the filament cannot be extruded properly, click + to raise the nozzle), until the model can be relatively firmly attached on the hotbed, as shown in the following picture.

插入存储卡→点击打印→选择“自动调平测试”。在打印第一层时，观察模型在热床上的依附情况，适当调整Z轴补偿（当耗材不能很好地依附在打印平台上时，点击-降低喷嘴；当喷嘴距离热床过近，耗材不能正常挤出时，点击+升高喷嘴），直至模型能够比较牢固地吸附在热床上，如下列图片。



✘ The nozzle is too far from the hotbed, click -  
喷嘴高度过高，点击-

✘ Perfect printing effect | 完美的打印效果

✘ The nozzle is too close from the hotbed, click +  
喷嘴高度过低，点击+



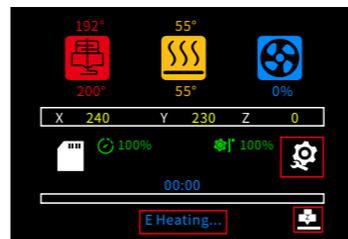
After the leveling test is finished, please return to the home page and click Settings→Store Settings to save the current configuration.  
调平测试结束之后请返回主页面，点击Settings→Store Settings，保存当前配置。

#### v Start Printing 开始打印

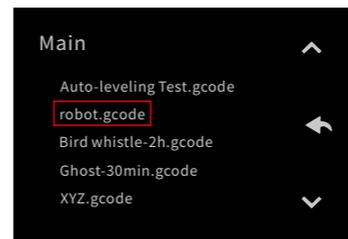
1. Click "Print"→choose a file to print→click "√" to confirm and the print starts. At the same time, the prompt message at the bottom of the home page will change from "Kywoo3D Ready" to "E Heating", the hotbed starts to heat up and the icon changes from blue to yellow.  
点击“打印”→选择打印文件→“√”即可开始打印，同时主页面底部的提示信息将由“Kywoo3D Ready”变成“E Heating”，热床开始加热并且图标由蓝色变成黄色。  
2. During the print, click "Settings" to choose to pause printing, stop printing, etc.; click the speed icons to adjust the Printing speed. **After starting the print, if you find the Z-axis height improper, you can click "-" / "+" to adjust Z-axis offset again.**  
打印过程中，点击“设置”可选择暂停打印、停止打印等；点击速度图标可调整打印速度。**打印开始后如果发现Z轴高度异常，可再次点击右下角Z图标上下调整Z轴补偿值。**



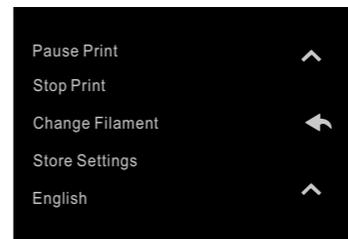
1. Click "Print" | 点击“打印”



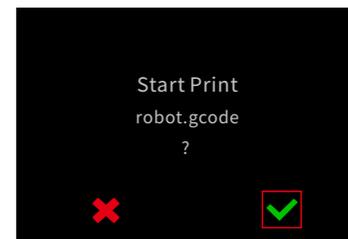
4. Preheating | 正在预热



2. Choose a file | 选择文件



5. Printing Menu | 打印菜单



3. Confirm the print | 确认打印



6. Z-axis Offset | Z轴补偿

## VI Filament Detection Function 断料检测功能

When the filament accidentally disconnected or runs out during printing, the printing will be paused and X & Y axis return the origin. The printer will unload the original filament, and make a buzz to alert the user. Then the user needs to manually insert the new filament into the extruder, the printer will automatically load the new filament and prompt whether to continue printing on the screen.

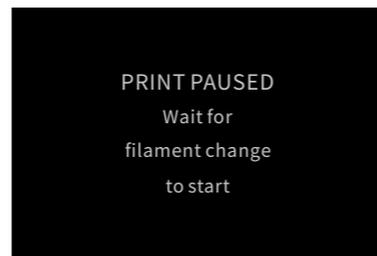
打印过程中耗材意外断开或耗材用完时, 机器会暂停打印, X、Y轴返回原点, 并将喷头中原有的耗材退出, 发出蜂鸣声提示用户, 此时需要手动插入完整的耗材, 挤出机会自动进料, 并且屏幕提示是否继续打印。



Normally printing  
正常打印中



Filament runs out, the printer buzzes  
耗材耗尽, 机器发出蜂鸣声



The screen shows printing paused  
屏幕显示暂停

**Resume Printing:** If power is interrupted during printing, the printer will prompt whether to continue the print when the power supply is resumed.

**断电续打:** 若打印机在打印过程中断电, 恢复供电后, 打印机将提示是否继续打印。

## VII Frequently Asked Questions 常见问题解答

Q: How to flash the firmware?

- A: 1. Download the corresponding firmware file on the Kywoo official website ([www.kywoo3d.com](http://www.kywoo3d.com)).
2. Copy the file to the TF card.
3. Insert the TF card into the printer and turn it on.

Q: White screen or poor display?

- A: 1. Check whether the LCD ribbon cable is loose.
2. Flash the firmware again; if the issue cannot be solved, please contact our customer support ([service@kywoo3d.com](mailto:service@kywoo3d.com)).

Q: The file name is garbled and cannot be read?

- A: 1. Modify the file name to a number or English format.
2. Re-slice the model file.

Q: The nozzle cannot be heated?

- A: 1. Check whether the nozzle harness is loose.
2. Check whether the current temperature of the nozzle is normal; if it is abnormal, the nozzle thermistor is damaged.
3. If the current temperature is normal, the heating tube is damaged.

Q: The hotbed cannot be heated?

- A: 1. Check whether the wiring harness under the heating bed is loose.
2. Check whether the current temperature of the hotbed is displayed normally; if it is abnormal, the hotbed thermistor is damaged.
3. If the current temperature is normal, the hotbed plate is damaged.

Q: 如何更新固件:

- A: 1、在开物官网 ([www.kywoo3d.com](http://www.kywoo3d.com)) 下载对应固件
- 2、将下载的文件拷贝到TF卡中
- 3、将TF卡插入机器, 开机即可

Q: 白屏或显示不良:

- A: 1、检查屏幕排线是否松动
- 2、重新更新一下固件, 若无法解决请联系售后人员

Q: 文件名乱码, 无法读取

- A: 1、将文件名修改为数字或英文格式
- 2、重新切片

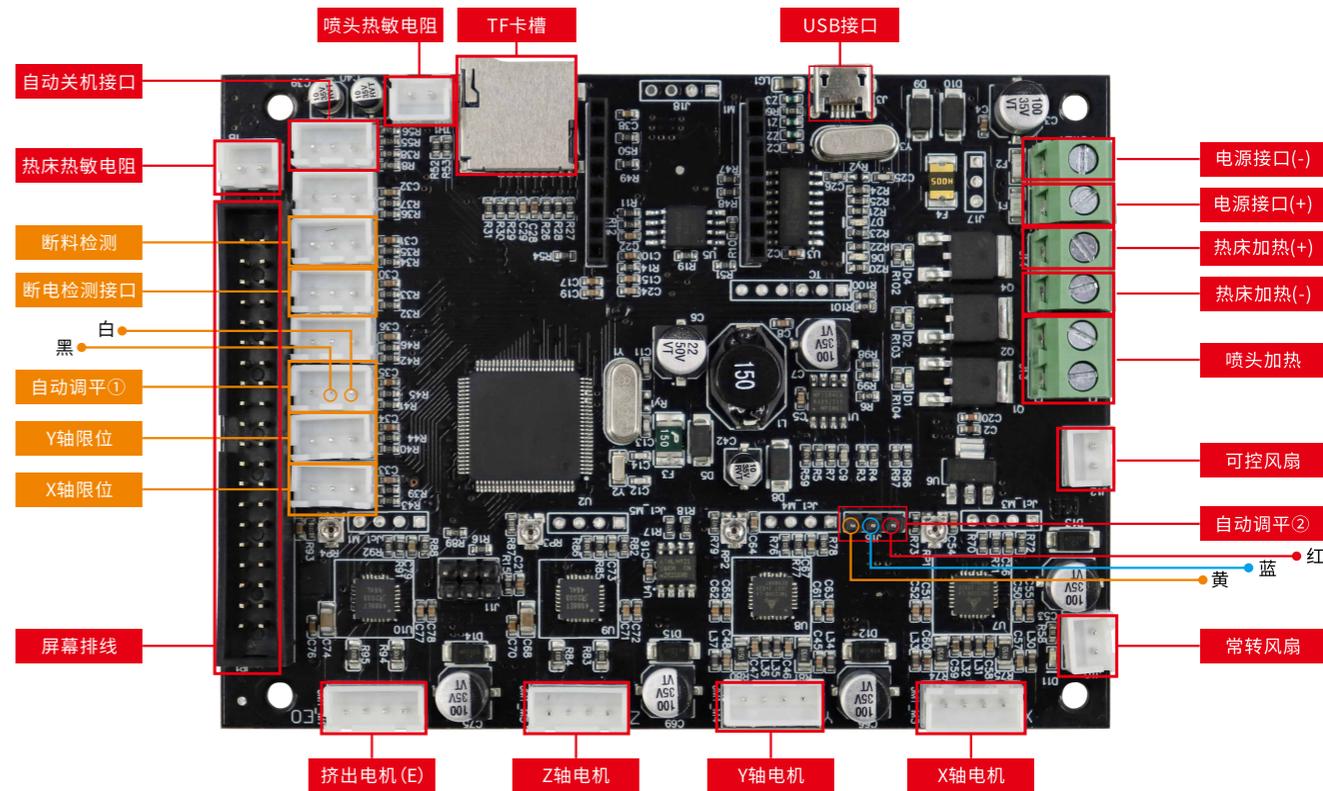
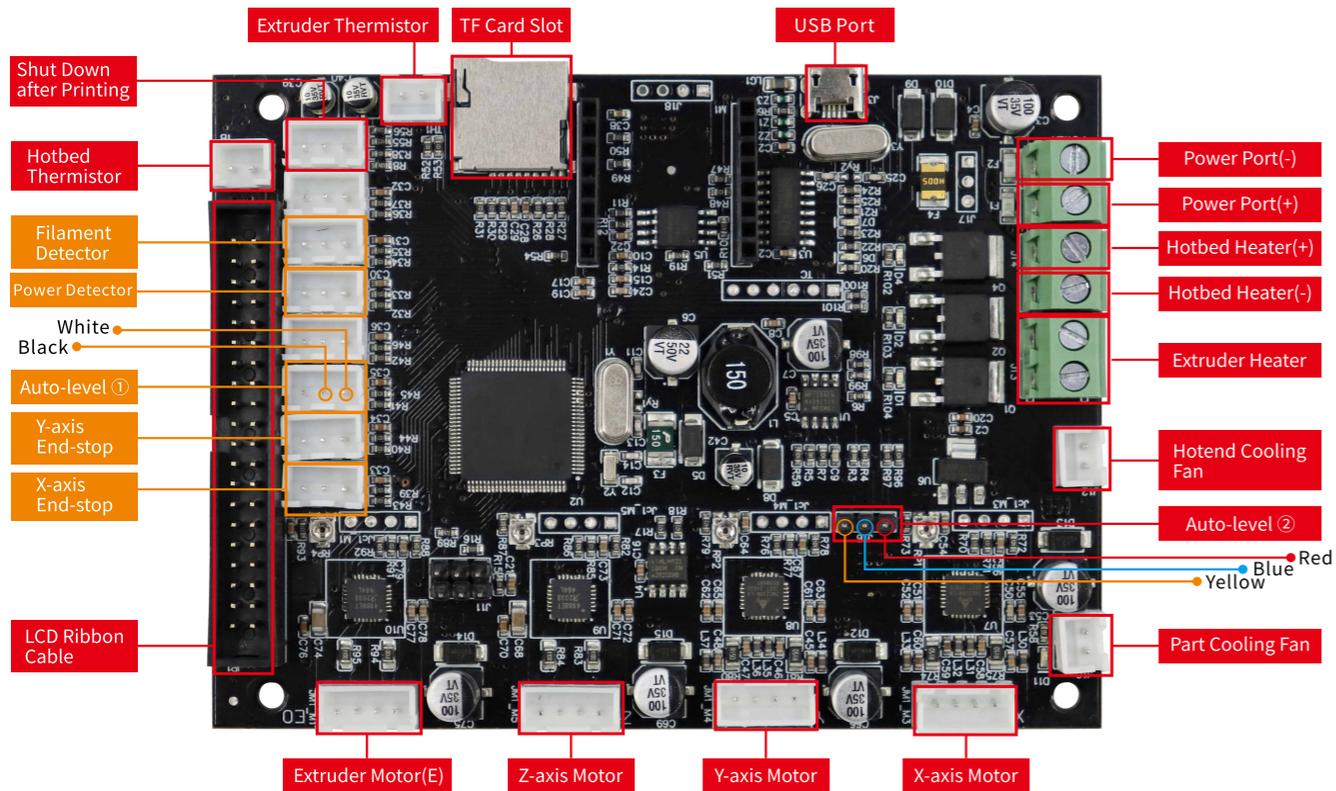
Q: 喷嘴无法加热

- A: 1、检查喷嘴线束是否松动
- 2、查看喷嘴当前温度是否显示正常, 若异常则为热敏电阻损坏
- 3、当前温度显示正常, 则为加热管损坏

Q: 热床无法加热

- A: 1、检查热床下方线束是否松动
- 2、看热床当前温度是否显示正常, 若异常则为热敏电阻损坏
- 3、当前温度显示正常, 则为热床板损坏

# VIII Mainboard Information 主板信息



# IX Troubleshooting 故障排除

