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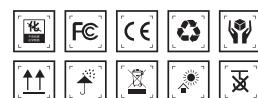
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Due to the differences between different machine models, the physical objects and the final images can differ. The final explanation rights shall be reserved by Shenzhen Kywoo 3D Technology Co., Ltd.

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。



Tycoon

User Manual

使用说明书



V1.0

Content 目录

Dear Customers,

Thank you for choosing our products. For a better using experience, please read the instructions carefully before operating the printer. Our teams will always be ready to provide you with the best services. Please contact us via the phone number or e-mail address provided at the end of the manual when you encounter any problem with the printer.

For a better experience when using our product, you can also learn how to use the printer in the following ways:

- View the accompanied instructions and videos in the TF card;
- Visit our official website 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、邮箱与我们进行联系。

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寻找相关软硬件、联系方式、设备操作、设备保养等信息。

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I Notes

- ◆ 1. After unboxing, please check whether the machine is damaged, deformed, or scratched, and check with the order. If you have any questions, please contact Kywoo 3D official website or after-sales service in time.
- ◆ 2. Do not use the printer for any way 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 the 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 cloths 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 the filaments on the nozzle with the help of the residual temperature of the nozzle in time. 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, or 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 and printing platform mechanism manually while booting up, otherwise the device will automatically power off for safety.
- ◆ 13. Users shall comply with related nation and region's laws, regulations and ethical codes where the equipment or produced prints by it is 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.

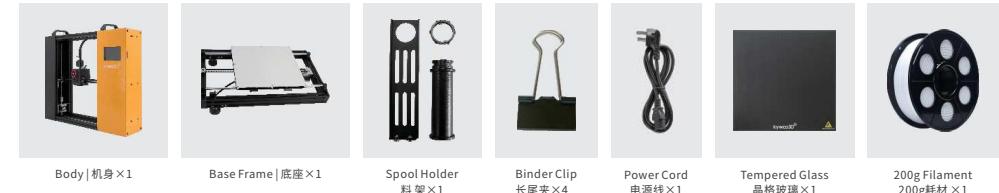
I 使用须知

- ◆ 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，请及时联系开物三维官网或官方售后；
- ◆ 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，以免造成挤出头堵塞和机器损坏；
- ◆ 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带手套或缠绕物，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。

II | 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
Printing Size 成型尺寸	240*240*230mm
Molding Tech 成型技术	FDM
Nozzle Number 喷头数量	1
Slice Thickness 切片层厚	0.1mm-0.4mm
Nozzle Diameter 喷嘴直径	Standard 0.4mm 标配0.4mm
Precision 打印精度	±0.1mm
Filament 打印材料	PLA/TPU/PETG/ABS/Wooden PLA/TPU/PETG/ABS/木质
File Format 切片支持格式	STL/OBJ/AMF/G代码 STL/OBJ/AMF/G Code
Working Mode 打印方式	Micro USB/TF card /SD card/Wifi
Slice Software 可兼容切片软件	Cura/Repetier/Simplify3D
Power Supply 额定电压	
Total Power 额定功率	350W
Bed Temp 热床最高温度	≤110°C
Nozzle Temp 喷嘴最高温度	≤260°C
Resume Print 断电续打	Yes 支持
Filament Detector 断料检测	Yes 支持
Dual Z-axis 双Z轴	Yes 支持
Auto Leveling 自动调平	Yes 支持
Wi-Fi Printing WiFi 打印	Yes 支持
Octoprint Octoprint打印	Yes, need an additional accessory 支持, 需要另外的配件
Recommended Printing Speed 建议打印速度	80-100mm/s
Operating System 电脑操作系统	Windows XP/7/8/10 MAC/Linux
Language Selection 多语言切换	Yes, support nine languages 支持九种语言
Supported Languages 支持语言	1. Simplified Chinese; 2. Traditional Chinese; 3. English; 4. Russian; 5. Spanish; 6. French; 7. Italian; 8. German; 9. Japanese 1. 简体中文; 2. 繁体中文; 3. 英语; 4. 俄语; 5. 西班牙语; 6. 法语; 7. 意大利语; 8. 德语; 9. 日语

III Assemble the 3D Printer 组装3D打印机

i Install the Base 安装底座

①As shown in picture 1, pick up the base with the foot mat towards front, and cross the base through the gantry frame from the front of the body, then install four M5×25 screws in the picture2 indicated places to fix the body and base together.
①如图1所示,拿起底座,脚杯在前,将底座从机身前面穿过龙门架,在图2所示的四个位置上安装M5×25螺丝,将底座与机身固定。



① From the front side of the body, with the foot mat towards ahead, from the front side of the body, with the foot mat towards ahead.



② Connect the cable with the Y-axis motor and connect the end-stop switch cable, as shown in the picture3&4.
②连接Y轴电机线和Y轴限位开关的线,如图3和图4。



③Then connect the hotbed heater wire and thermistor wire, like in picture5.
③连接热床加热线和热敏电阻线,如图5。



④Install two foot leveling pads as shown in picture6, and adjust the height of the foot leveling pads to make the printer stable or to the height that you need.

④接着装上两个脚杯,适当调整脚杯的高度,调到机器稳定的位置或者自己需要的高度,如图6。



Foot mats to be installed is behind the body
待安装的脚杯在机身后面

⑤As shown in the picture7, fix the filament holder on the top profile, then screw the T-rod nuts of the holder.

⑤如图7所示,将料架固定在顶部型材上面,锁紧料架上的T型螺母。



ii Install the Tempered Glass Platform and Connect the Power Cord 安装平台(晶格玻璃)和电源线

①As shown in picture8 and picture9, place the glass on the silver-white platform and clamp it with the binder clips. Be careful not to clamp the hotbed cable.

如图8和图9,把晶格玻璃放在银白色平台上,用长尾夹固定,注意不能夹到热床板线。



8



9

②Select the proper input voltage to match your local mains (115/230V), 230V by default. Damage may occur if the voltage is set incorrectly.

选择合适的输入电压以匹配您的本地电源(115/230V),默认230V。如果电压设置不恰当,可能会造成机器损坏。

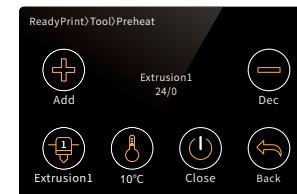


③Connect the power cord and plug it in power supply. Turn the power switch to 'I' to turn on the printer. "I" means power on, and "O" means off. Do not disconnect the cord when the machine is powered on.

将电源线接好,连通电源。将电源开关调至I档即可开机。"I"表示开机,"O"表示关机。当机器处于开机状态时,请勿断开连接线。



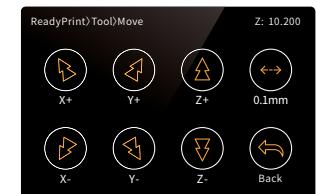
IV Screen Interface 屏幕界面



Adjust the temperature of nozzle/ hotbed



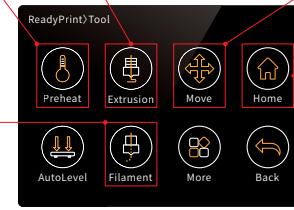
Filament in/out of the extrusion



Move X/Y/X Axis



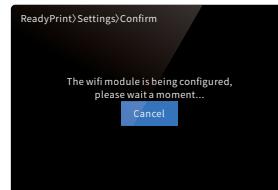
Filament load/unloa



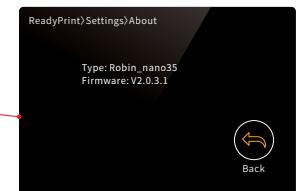
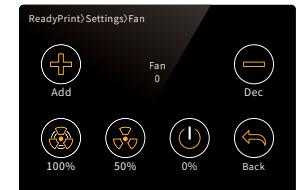
Screen Info>Tool



Home X/Y/X Axis

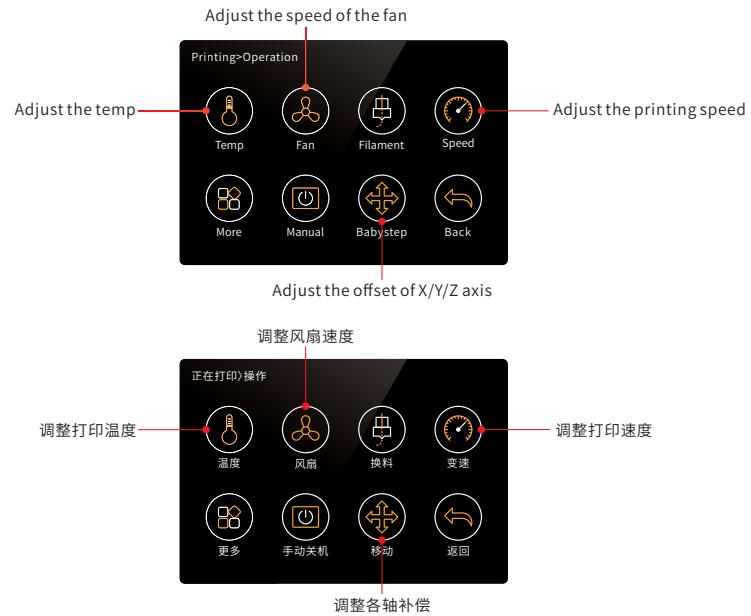


Connecting WiFi



Change language





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

After the printer powered on, there are three options on the screen page. Select Tool-Home-ALL, the printer automatically starts homing. After homing is finished, go back to the previous step and select Auto-level. Waiting for the printer to finish auto-leveling, then you can start to print. (Note: The printer needs to be auto-leveled after the nozzle or the printing bed is exchanged.)
 开机后屏幕页面分三个选项,选择工具-回零-ALL,机器自动开始回零。回零完成后返回上一步选择自动调平,等待调平完成即可打印。(注:更换喷嘴或热床平台后需要重新调平。)



ii Preheat 预热

Note: The print preheating parameters can be set in the slicing software, or in Tools-Preheat, and select the nozzle or hotbed board that you need to adjust the temperature. For your reference, the preheating standard of PLA filament: the nozzle temperature is 200°C and the hotbed temperature is 50°C. You can directly choose the sliced model to print, or choose the test model that comes with the storage card.

注意：打印预热参数可以在切片软件里面设置，也可以在打印机页面的工具-预热里选择需要的喷头或者热床板进行温度调整，例如：PLA耗材预热标准为喷嘴温度200°C，热床温度50°C。用户可以直接选择已经切片好的模型打印，也可以选择存储卡里面自带的测试模型。

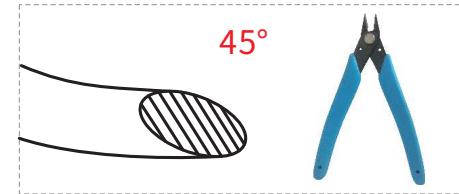
Notes: For details on the slicer instructions, please refer to the slicing software manual in the TF card.

温馨提示：关于切片软件使用说明详情，请见存储卡内切片软件的使用手册。



When waiting for the temperature to rise, you can place the filament on the holder. For a smoother printing, you can cut the end of the filament diagonally as shown in the picture.

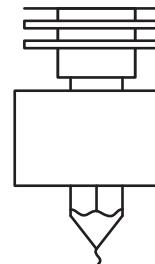
当您在等待温度上升时，请把耗材放置在料架上。为了方便打印，可以将耗材末端斜着裁剪一下，如图所示：



iii Load Filament 装料

When the temperature of the hotbed and nozzle reaches the set temperature, pass the filament through the filament detector module, then insert it 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。



Tips: How to Replace the Filament?

1. Cut the filament near the extruder and slowly feed new filament in.

2. After the nozzle is preheated, push the filament a little forward and withdraw it quickly, then feed the new filament in.

注：如何更换耗材？

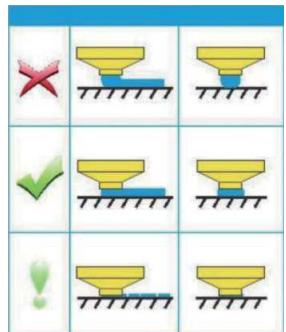
方法一、在靠近挤出机处将耗材剪断，将新耗材缓缓送入，直到耗材被送入导料管为止。

方法二、预热喷嘴后，将耗材往前推进，然后迅速抽出耗材，将新耗材送入即可。

iv Adjust Z-axis Offset 调Z轴补偿

Insert the TF card → Print → Choose the “Auto-leveling Test” file. When printing the first layer, please observe the attachment of the model on the hotbed, and adjust the Z-offset appropriately (when the filament cannot be attached to the printing platform well, click Z- to lower the nozzle; when the nozzle is too close from the hot bed and the filament cannot be extruded properly ,click Z+ to higher the nozzle), until the model can be firmly attached on the hotbed, as shown in the following picture.

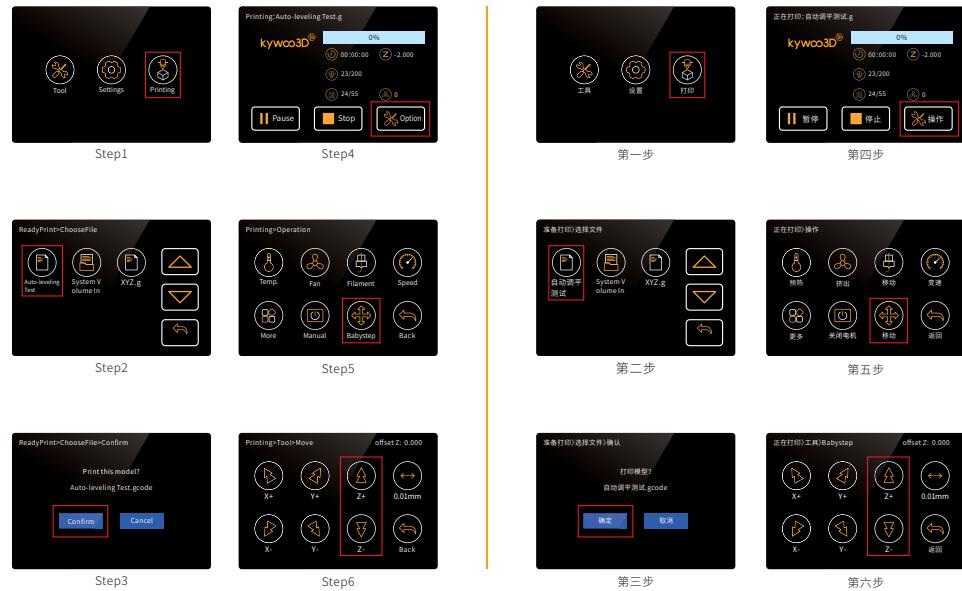
插入存储卡→点击打印→ 选择“自动调平测试”。在打印第一层时,观察模型在热床上的依附情况,适当调整Z轴补偿(当耗材不能很好地依附在打印平台上时,点击Z-降低喷嘴;当喷嘴距离热床过近,耗材不能正常挤出时,点击Z+升高喷嘴),直至模型能够比较牢固地吸附在热床上,如下列图片。



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

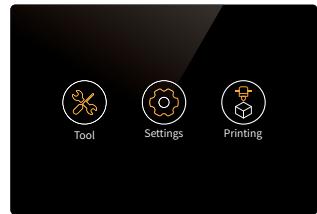
※ Perfect printing effect | 完美的打印效果

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

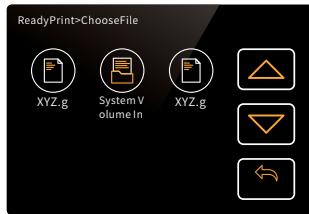


v | Start Printing 开始打印

After adjusting the Z-axis offset, you can start printing the model needed. Click "Printing", choose the file to be printed, and click "Confirm".
(Note: If the nozzle distance to the hotbed is found to be improper during printing, you can adjust the Z-axis offset again.)
调整完Z轴补偿之后，即可开始打印所需的模型，点击打印-选择打印的文件-点击确定即可（注：打印过程中如果发现Z轴距离不合适，可再次调整Z轴补偿。）



Step1



Step2



Step3



第一步



第二步

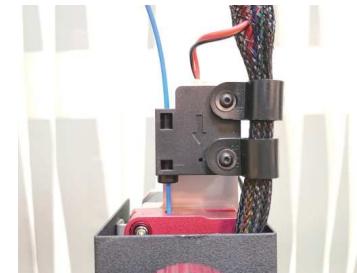
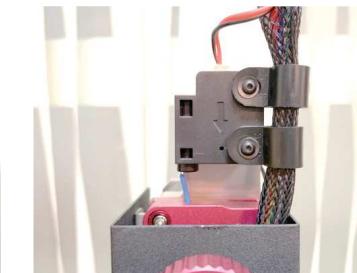


第三步

VI | Filament Detecting Function 断料检测功能

The printer comes with filament detecting function, that is, when the filament accidentally disconnected during printing, the printer will make a loud buzz to remind the user and pause printing. The filament detection module is above the nozzle. The user needs to use the filament unload function to withdraw the original filament, reinsert the new filament into the extruder, and then click "Resume" on the screen to continue printing.

本机标配断料检测功能，即打印过程中耗材意外断开，设备会发出很大的蜂鸣声提示使用者，并暂停打印。断料检测模块在喷头上方，使用者需要使用退料功能将原有耗材退出来，将完好的耗材重新插入挤出机，然后点击屏幕上的恢复选项继续打印。

Normally printing
正常打印中Filament disconnected, the printer buzzes
耗材断开，机器发出蜂鸣声The screen shows printing paused
屏幕显示暂停

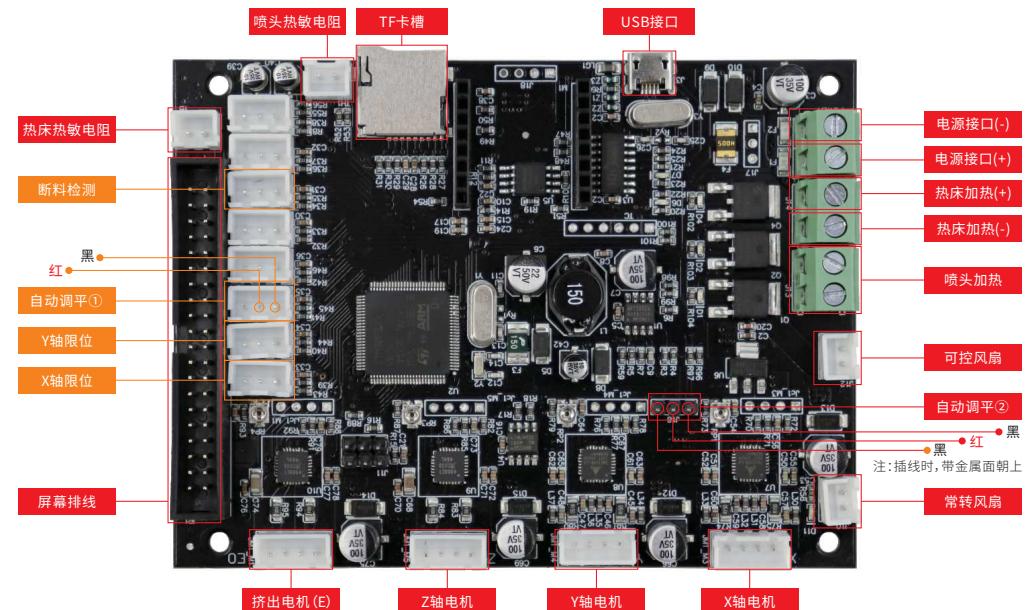
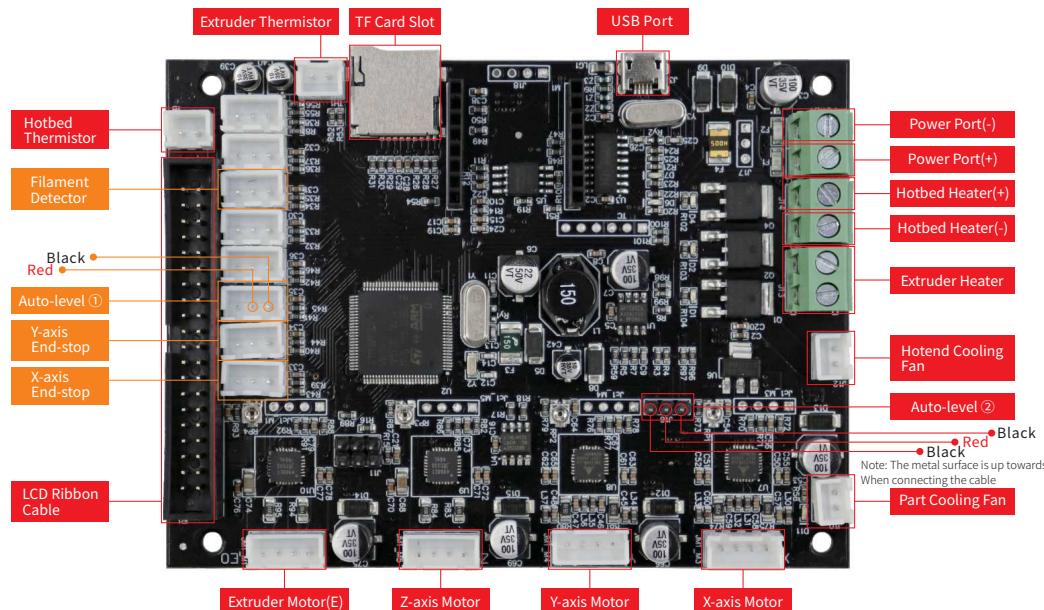
Resume Printing: After the power is interrupted during printing, when the power supply is resumed, the printer will prompt whether to continue printing.

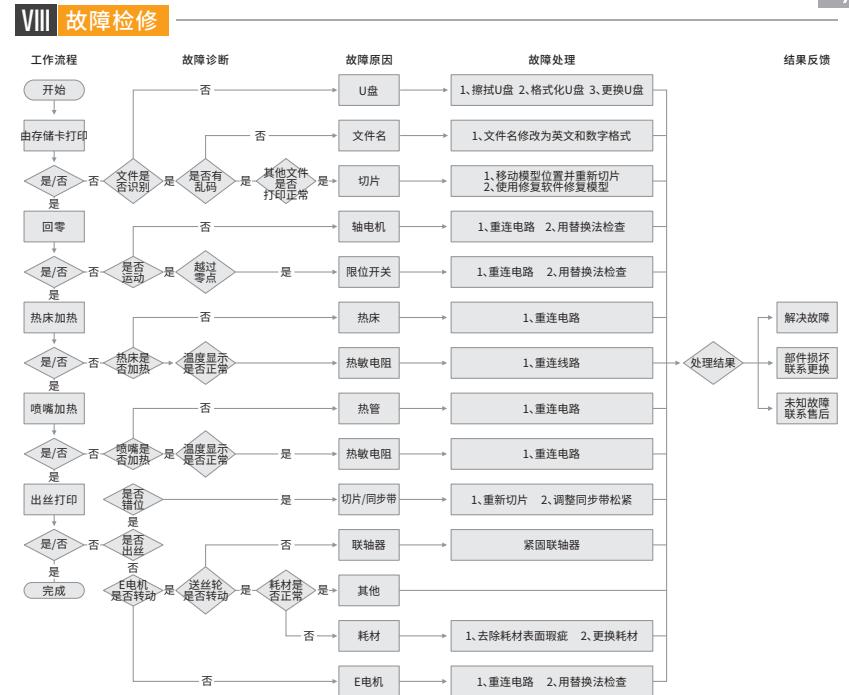
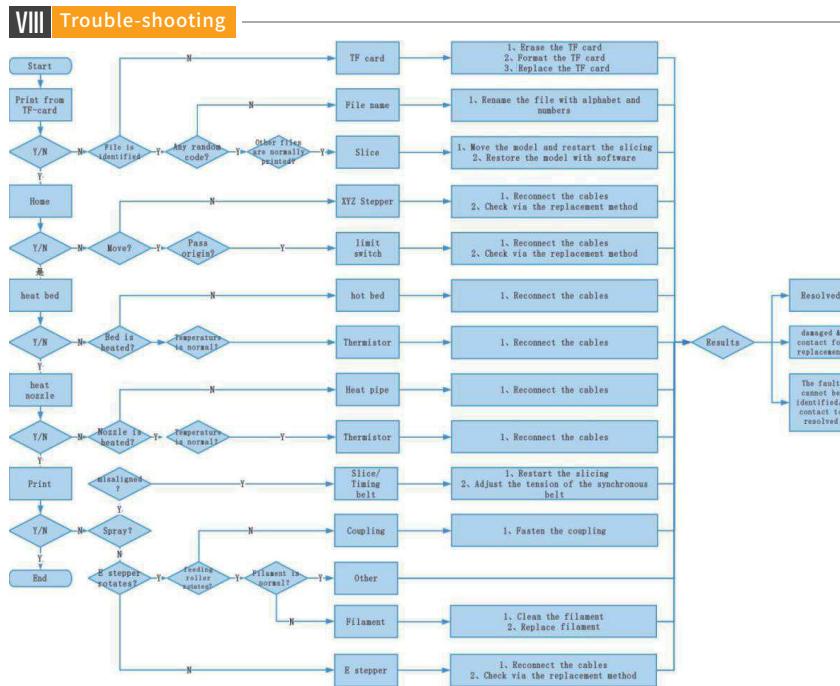
WiFi Printing: Please refer to the WiFi instruction in the TF card.

Cold-Resumption: During printing, if the power is cut off, the printer will prompt whether to continue printing.

WiFi Printing: Please refer to the WiFi instruction in the TF card.

VII Circuit Wiring 电路接线





This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.