

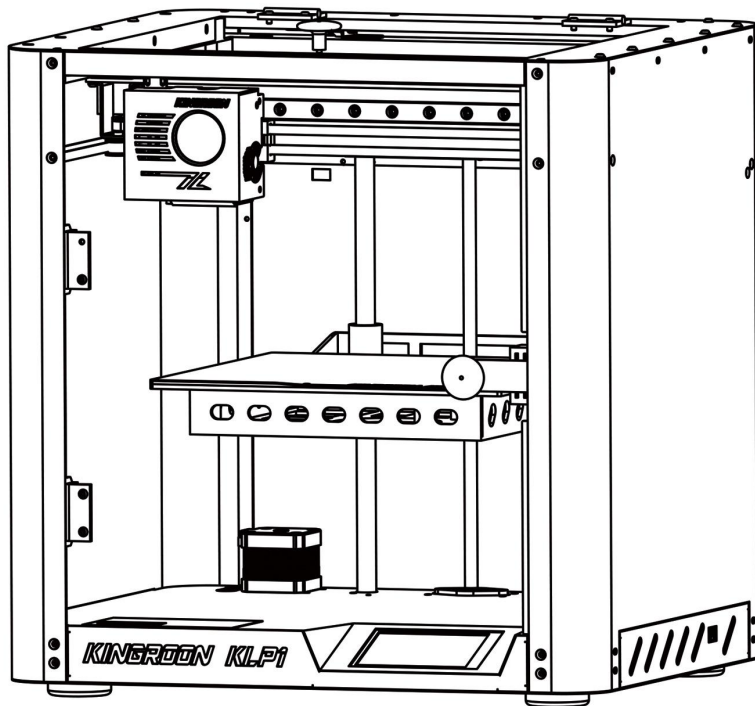
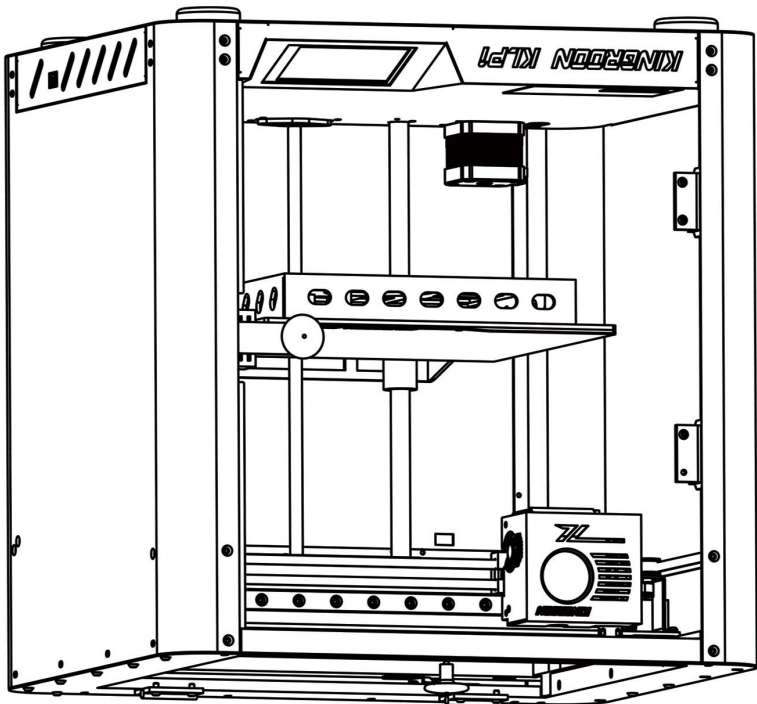
The product is based on the actual product, and the pictures are for reference only

# KINGROON | 启庞三维

## KLP1-FDM 3D打印机说明书

请先参考快速拆机引导指南卡完成打印机的安装

\*安全提示：请勿在打印机安装完成之前通电



产品以实物为准，图片仅供参考

Please refer to the Quick Disassembly Guide Card to complete the installation of the printer first  
\*Safety reminder: Do not turn on the printer until it is installed

### FDM 3D printer manual

# KINGROON KLP1

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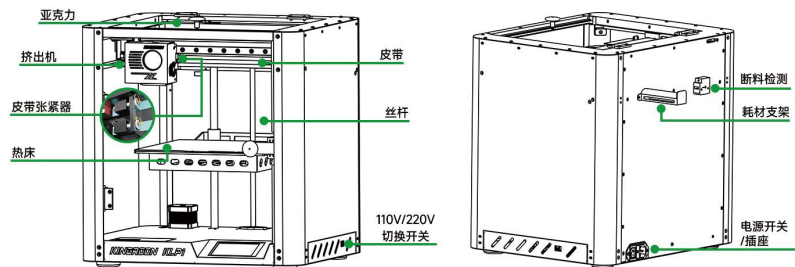
## 感谢您选择Kingroon 启庞的产品!

为了您使用方便,请您在使用之前仔细阅读引导指南卡和该说明书,文中的注意事项及使用技能更好地避免错误的安装和使用。  
如遇到此说明书未包含的疑问或问题请通过此邮箱联系我们: Support@kingroon.com  
Kingroon团队时刻准备为您提供优质的服务。  
为了您能更好地体验我们的产品,您还可以通过扫描二维码获取设备操作知识。

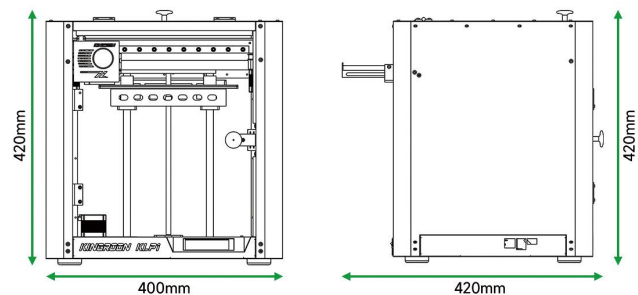


哔哩哔哩 (B站)

## 产品描述



## 机器参数



| 产品型号   | KLP1          | 系统要求     | Win7-10/Mac/Linux     |
|--------|---------------|----------|-----------------------|
| 成型技术   | FDM熔融堆积       | 切片软件     | Prusa /Orca /Cura ... |
| 喷嘴直径   | 0.4mm         | 构建板      | 柔性钢板                  |
| 喷嘴材质   | 硬质钢           | 固件       | Klipper               |
| 打印精度   | 0.05-0.3mm    | 产品功率     | 300W                  |
| 耗材直径   | 1.75mm        | 电源电压     | 110V-220V             |
| 支持耗材   | PLA/WOOD/TPU  | 电源功率     | 24V12.5A300W          |
| 喷嘴最大温度 | ≤300 °C       | 断料检测     | 支持                    |
| 热床最大温度 | ≤100 °C       | 自动调平     | 支持                    |
| 最大移动速度 | ≤500mm/s      | 触摸屏      | 支持 (TF35)             |
| 最大打印速度 | ≤500mm/s      | 免驱USB摄像头 | 支持 (选配)               |
| 推荐打印速度 | 350mm/s       | 产品重量     | 约15kg                 |
| 打印方式   | Web/USB drive | 产品尺寸     | 400*420*420mm         |
| 文件格式   | STL/Obj/Gcode | 打印尺寸     | 230*230*210mm         |

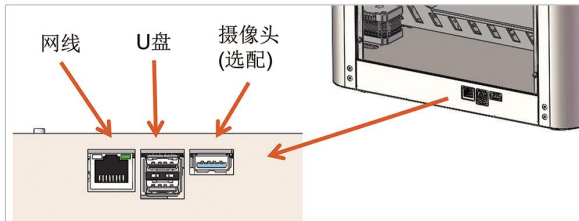
## 装箱配件



## 配置网络

### 第一步

1、网线连接：插入网线，插入电源线进行通电开机。（请注意：开机前请确认当地的电压要求，110V/220V切换）



2

## 配置网络

2、WIFI连接：使用U盘配置WIFI，打开U盘里的(wpa\_supplicant-wlan0.conf)文件，修改2.4GZ WIFI账号密码，在开机前将U盘插入机器里，插上U盘后通电开机。（注意机器与路由器距离不能超过5米）

**强烈建议使用网线连接您的打印机和路由器。**

```
country=GB
ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev
update_config=1

network={
    ssid="Your WIFI name"
    psk="Your WIFI password"
    key_mgmt=WPA-PSK
}
```

### 第二步

#### 3.5触摸屏：

点击设置→网络，已经联网成功可显示完整的IP地址。



(图1)



(图2)



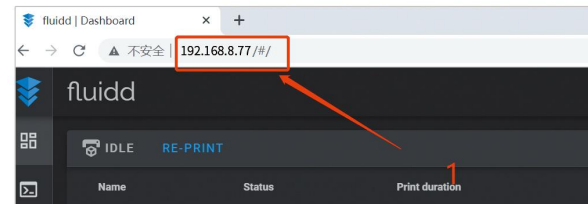
(图3)

### 第三步

在电脑浏览器输入IP进行访问，建议使用谷歌浏览器。

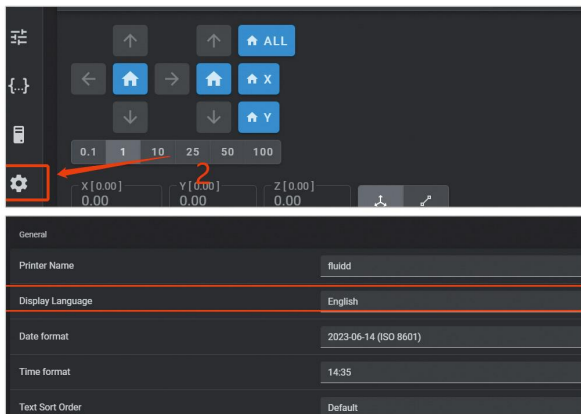
注意：机器和电脑只有在同一网段的局域网才能连接上。

进入FluidD的操作界面，FluidD操作界面可以在设置界面修改语言，目前支持English/ Čeština / 简体中文/繁體中文/Deutsch/Español/Français/Italiano/Magyar/Nederlands/Portugues/Русский язык/Українська Мова/한국어/ اللغة العربية / 日本語。



3

## 配置网络

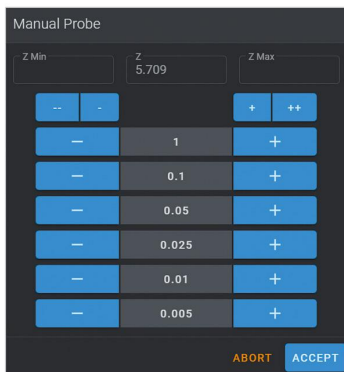
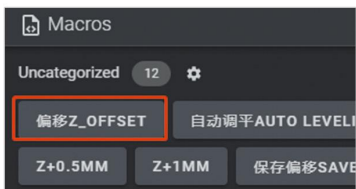


## 调平

### 第四步

网页端:

Macros选项, 点击偏移z\_offset按钮, 打印头会移动到热床中心位置, 在热床上方放一张A4纸, 使用Manual Probe上下调整, 调整喷嘴和热床之间的距离0.1mm(抽动A4纸有一定阻力), 调整完成后点击ACCEPT进行保存。点击自动调平进行36点调平。



### 3.5触摸屏:

点击设置→Z轴校准→开始,等待挤出头移动到热床中间,选中需要移动的距离后点击升高喷嘴或降低喷嘴的距离,调整喷嘴和热床之间的距离0.1mm(抽动A4纸有一定阻力),调整完成后点击应用→继续进行保存。

## 调平



(图4)



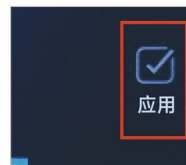
(图5)



(图6)



(图7)



(图8)

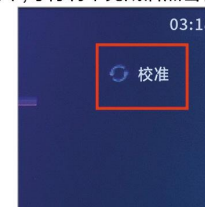


(图9)

点击热床网格→校准,进行36点调平,等待调平完成后点击保存。



(图10)



(图11)



(图12)

## 装载耗材

### 第五步 自动进料, 自动退料

网页端:

点击装载耗材(自动进料), 请将高速打印耗材穿过断料检测器, 送达挤出机, 等待触摸屏显示到达目标温度后, 稍微用力将耗材往里送至挤出轮边上, 等待喷嘴有耗材挤出。

点击退出耗材(自动退料), 此过程大概需要5分钟, 等待目标温度为60度以下或者鼓风机自动关闭后, 将耗材直接拔出。过程中请勿断电或进行其他操作。



## 装载耗材

3.5触摸屏:

载入耗材

点击装载耗材(自动进料), 请将高速打印耗材穿过断料检测器, 送达挤出机, 等待触摸屏显示到达目标温度后, 稍微用力将耗材往里送至挤出轮边上, 等待喷嘴有耗材挤出。



(图13)



(图14)



(图15)

卸载耗材

点击退出耗材(自动退料), 此过程大概需要5分钟, 等待目标温度为60度以下或者鼓风机自动关闭后, 将耗材直接拔出。过程中请勿断电或进行其他操作。



(图16)



(图17)



(图18)

## 震动补偿

第六步

网页端:

Macros选项, 点击震动补偿shaper, 等待震动完成。

注意: 在执行震动补偿过程震动补偿shaper中打印机会产生震动噪音。



3.5触摸屏:

点击设置→共振补偿→自动校准→Measure Both,等待震动完成后点击继续。

注意: 在执行震动补偿过程中打印机会产生震动噪音。



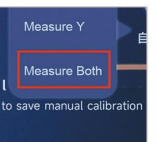
(图19)



(图20)



(图21)



(图22)



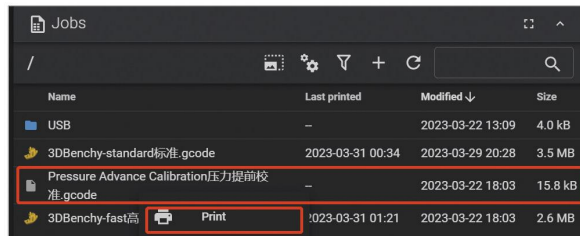
(图23)

## 压力提前

第七步

网页端:

Jobs选项, 打印Pressure Advance Calibration压力提前校准, 等待打印完成, 观察最均匀完整的一条线, 右边的数值即为压力提前数字。



3.5触摸屏:

点击打印→打印Pressure Advance Calibration压力提前校准。等待打印完成, 观察最均匀完整的一条线, 右边的数值即为压力提前数字。



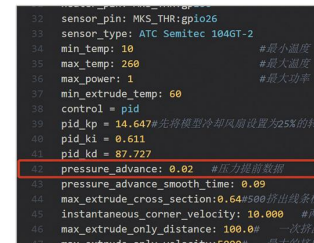
(图24)



(图25)

第八步

在配置文件中打开printer.cfg, 搜索pressure\_advance, 修改pressure advance压力提前数据, 然后再右上角保存并重启。

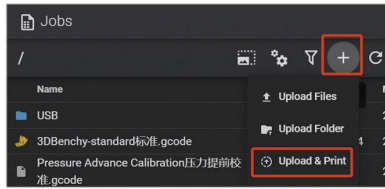


# 打印文件

## 第九步

网页端:

Jobs选项, 点击+上传已经切片打印文件并打印。等待热床和喷嘴加热到指定温度就会开始打印



## 第十步

3.5触摸屏:

将切片好的切片文件拷贝到U盘, 将U盘插入打印机USB口, 点击打印→USB文件夹。找到该文件进行打印。等待热床和喷嘴加热到指定温度就会开始打印。



(图26)

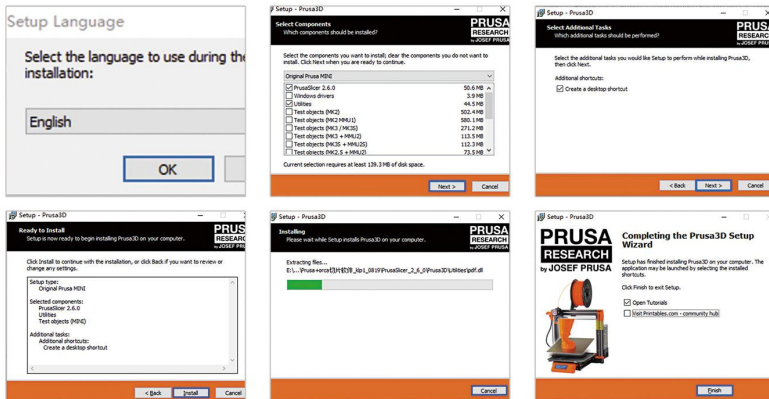


(图27)

# 软件安装

步骤1: 在U盘上找到prusa3d\_win\_2\_6\_0切片软件, 然后根据说明书详情如下安装

步骤2: 运行prusa3d\_win\_2\_6\_0.exe

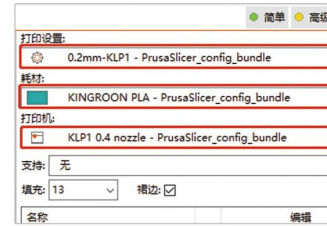
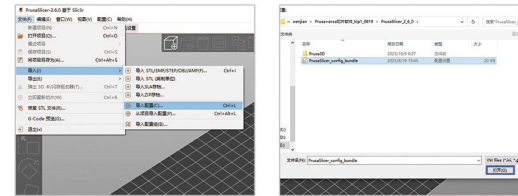


# 软件设置

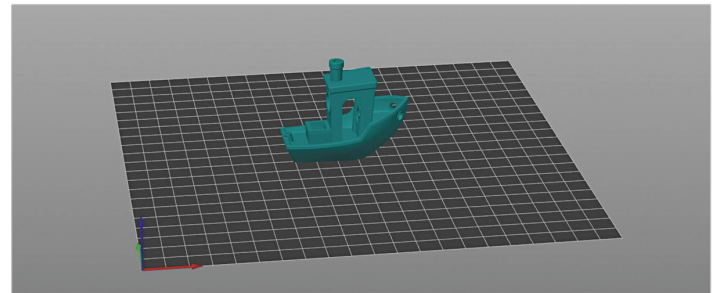
步骤3: 切换语言



步骤4: 导入配置, 点击软件左上角的文件-导入-导入配置, 选择在PrusaSlicer\_2\_6\_0 文件当中的PrusaSlicer\_config\_bundle.ini配置文件, 正确导入参数如下所示:



步骤5: 加载模型, 开始切片。



Kingroon已配置所有参数, 您可以直接将Gcode保存到U盘打印, 或者可以直接在网页端上传Gcode打印。如果有问题请联系KINGROON客服。我们会尽快为您解答, 您也可以加入Facebook讨论组。

## 其他设置

### 1、prusa切片完成直接打印的设置

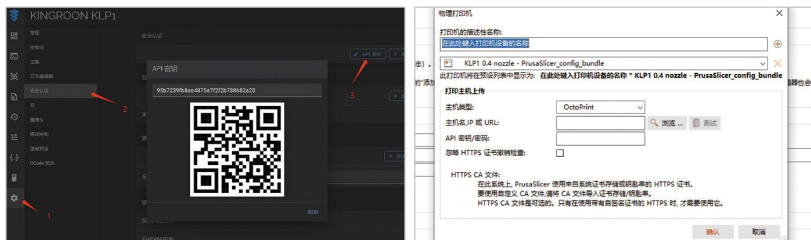
第一步：打开prusa，在界面的上方点击打印机设置。



第二步：点击旁边的小齿轮。

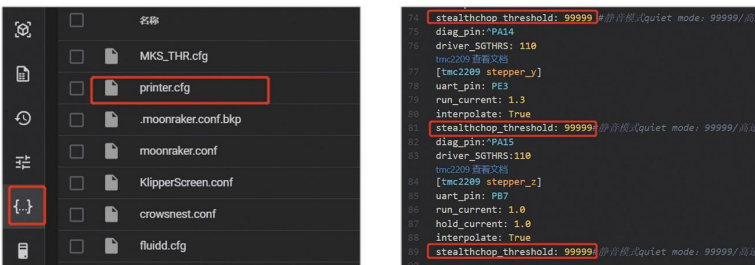


第三步:输入机器ip,然后在klipper网页端设置界面,找到安全认证-API密钥,复制API密钥进的API KEY,点击确认即可。在局域网内可以实现切片完就自动上传文件打印。



2、如果打印速度300mm/s以上请打开高速模式。在网页端设置,打开Printer.cfg修改XYZ轴的stealthchop\_threshold,静音模式:99999,高速模式:0。

高速模式能避免电机异响以及避免电机丢步,但是高速模式会增加机器的噪音。



## 安全说明

注意:每台3D打印机在出厂前都已经经过测试。如果还有一点细丝这是正常现象,不会影响性能。安全的工作环境。

KINGROON 3D打印机应配备原始变压器或电源。除此以外,可能会损坏机器甚至引起火灾,始终将打印机放在稳固的底座上不能倾倒。请确保打印机在打印时(运行时/工作时)远离可燃气体,液体和灰尘正在操作。(打印机运行时产生的高温可能会与灰尘产生反应,空气中的液体或易燃气体,可能会引起火灾。)

使用打印机的湿度为10°C-30°C,湿度为20%-70%。在这些范围之外使用打印件可能会导致打印效果差。请勿使打印机受潮或受热。在以下情况下切勿使用打印机:电风暴。打印机仅用于室内使用。如果长时间不启动打印机,请关闭打印机并拔下电源线。

### 安全手册

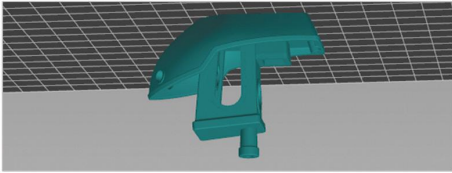
- 1.打印机工作时,请勿触摸发热部件,即使戴着手套也不要触摸发热部件。极高的热量会使手套融化,导致严重灼伤。警告:喷嘴提示可能会发热260°C,并且打印床可以加热到100°C
- 2.打印机正在打印时,请勿触摸任何工作部件。喷嘴头和其它机械零件将高速运行

### 日常保养

请进行除尘维护,并每月对打印机进行润滑。如果您不使用打印机很长一段时间,请取下材料并保持存储环境干燥,无尘。打印机应放置在温度稳定的环境中。温度的突然下降会影响打印质量。挤压打印喷嘴时,请确保喷嘴之间有足够的空间和平台;否则,喷嘴将被阻塞。

- 1.清洁/维护打印平台。如果使用,请更换胶带
- 2.预热喷嘴,并挤出少量细丝。
- 3.当喷嘴仍然很热时,用钢刷清洁多余的材料
- 4.预热打印台并使其平整。

Step5: Load the model and start slicing

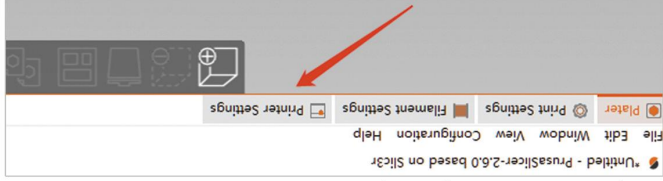


Kingroon has configured all parameters, and you can directly save Gcode to a USB flash drive for printing.  
Or you can directly upload Gcode for printing on the web interface.  
If you have any questions, please contact KINGROON Customer Service.  
We will solve the problem for you asap, you can also join our Kingroon 3D Official User Group

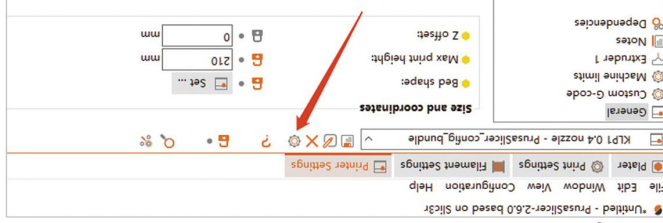
## Other Settings

1. Setting up Direct Printing After Prusa Slicing

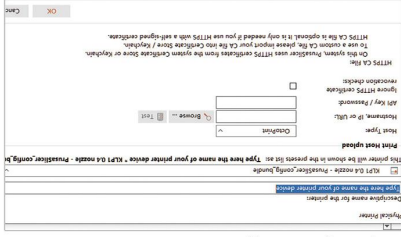
Step1: Open Prusa, and click on Printer Setting at the top of the interface



Step2: Click the small gear next to it



Step3: Enter the printer IP, then set up the interface on the kipperv web page, find the "Security Authentication-API Key" section. Copy the API KEY and paste it into the API Key field. Click "Confirm".  
Within the local area network, files can be automatically uploaded for printing after slicing.



## Safety Instructions

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

The KINGROON 3D Printer should be equipped with an original transformer or power supply. Otherwise, the machine could be damaged or even cause a fire. Always place the printer on a stable base where it can't fall or tip over. Please ensure the printer is far away from flammable gas, liquid and dust while it is being operated. (The high temperature generated by the operation of the printer may react with the dust, liquid or flammable gases in the air, which may cause a fire.)

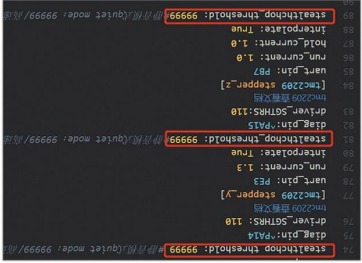
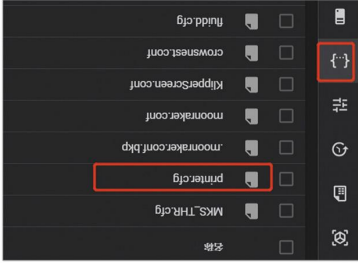
The ambient temperature recommended for using the printer is 10°C-30°C, and the humidity 20%-70%. Using the print outside these ranges may cause poor printing result. Please never expose the printer to moisture or heat. Never use the printer during an electrical storm. The printer is for indoor use only. If the printer is not in use for an extended period, please turn off the printer and unplug the power cord.

### Safety Manual:

1. When the printer is in operation, do not touch the heated components, even when wearing gloves. The high heat can melt up to 100°C gloves and cause severe burns. Warning: The nozzle can reach temperatures up to 260°C, and the print bed can heat up to 2. Do not touch any moving parts while the printer is printing. The nozzle and other mechanical components operate at high speeds.

### Daily Maintenance

Please do dust removal maintenance and lubricate the printer every month. If you do not use this printer for a long time, please remove the filament and keep the storage environment dry, dust-free. The printer should be placed in a temperature-stable environment. Sudden drops in temperature can affect print quality. When extruding filament, ensure there is sufficient space and clearance between the nozzle and the platform; otherwise, the nozzle may become clogged.  
1. Clean/maintain the print bed. Replace the tape if necessary.  
2. Preheat the nozzle and extrude a small amount of filament.  
3. Clean excess material while the nozzle is still hot using a steel brush.  
4. Preheat the print bed and ensure it is level.



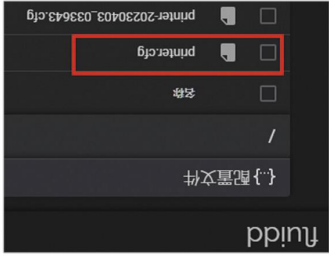
High speed mode can avoid abnormal motor noise and motor loss of step, but it can increase the noise of the machine.

2. If the printing speed is above 300mm/s, please turn on high-speed mode. On the web page, open Printer.cfg to modify the Stealthchop of the XYZ axis. Threshold, silent mode: 99999, high-speed mode: 0.



Step:

In the printer configuration file, open 'printer.cfg' search for pressure\_advance. Modify pressure\_advance value according to your preference. Then, click "Save" in the upper right corner and restart the printer.



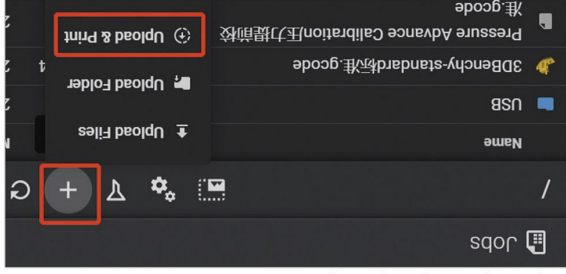
```
sensor_pin: MKS_THR_GPIO26
sensor_type: ATC Semitec 104GT-2
min_temp: 260
max_power: 1
control = pid
pid_kf = 0.611
pid_ki = 87.727
pressure_advance: 0.02 # 压力提前数据
pid_kf = 0.611
pid_ki = 14.647 # 先根据冷却风扇转速 50%的比例
max_extrude_cross_section: 64.500 # 最大挤出
pressure_advance_smooth_time: 0.09
instantaneous_corner_velocity: 10.000 # 挤出
max_extrude_only_distance: 100.0 # 一次挤出
```

## Print document

Step:

Web Interface:

Select "Jobs" option and click on the "+" button to upload the sliced print file for printing. Wait for the heated bed and nozzle to reach the specified temperature, and the printing will begin.



Step10: Copy 3.5 inches touchscreen. Locate the sliced file to USB drive, insert the USB drive into the printer's USB port, click Print→"USB folder" on the touchscreen, printing



(Figure 26)



(Figure 27)

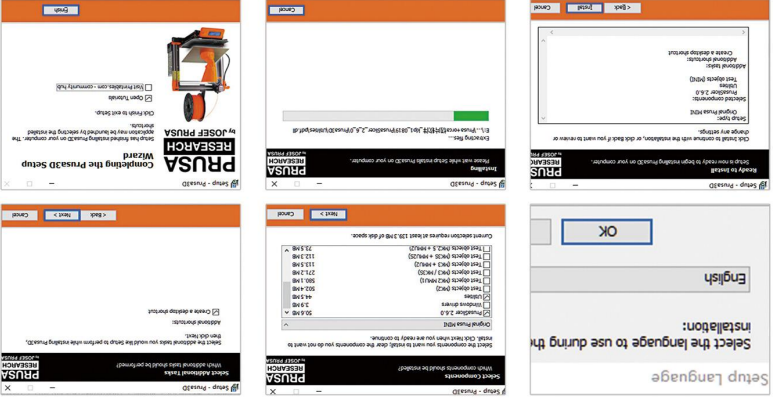
8

## Install Software

follows.

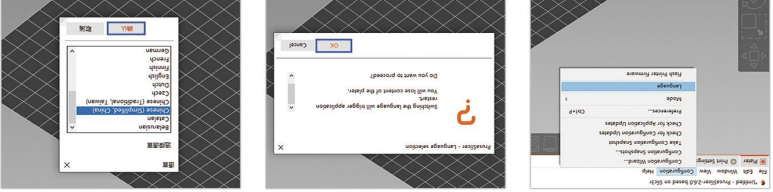
Step1: Find the prusa3d\_win\_2.6\_0 slicing software on the USB flash drive, and then install it according to the instructions as

Step2: Run prusa3d\_win\_2.6\_0.exe.



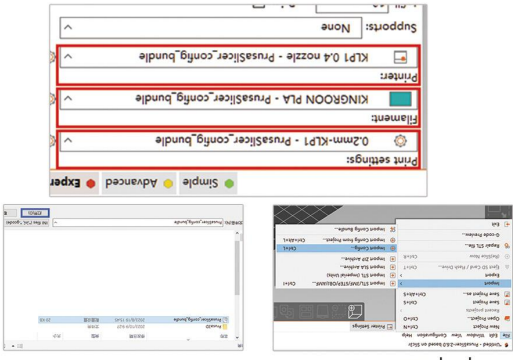
## Software Settings

Step3: Switch language



Step4: Import the configuration, click file-Import configuration in the upper left corner of the software, select the Prusa3-

cer\_2\_6\_0, and the correct import parameters are as follows:

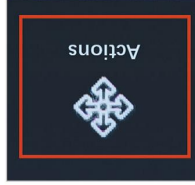


9

## Loading filaments

3.5 Touchscreen:

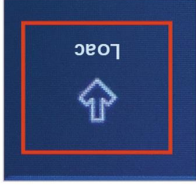
Click load filament(automatic filament feeding), pls thread the high-speed printing filament through the filament sensor, feed it to the extruder, and wait for the touchscreen to display the target temperature. Gently push the material to the side of the extruder wheel and wait for the filament to extrude from the nozzle



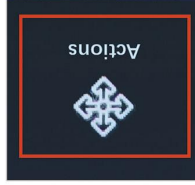
(Figure 13)



(Figure 14)



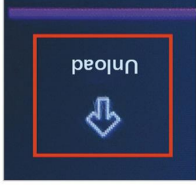
(Figure 15)



(Figure 16)



(Figure 17)



(Figure 18)

To unload filament(automatic filament unloading), this process takes approximately 5 minutes. Wait for the temperature to reach below 60°C or for the blower to automatically turn off. Then you can directly pull out the filament. Pls do not power off or perform any other actions during this process.

## Vibration compensation

Step6:

Web Interface:

Select the "Macros" option and click on Input shaper, Wait for the vibration compensation Process to complete.  
Note:The printer will generate the vibration noise during the input shaper



3.5 Touchscreen:

Click on Configuration, Input Shaper, Auto-calibrate, Measure Both, Wait for vibration compensation completely and click Continue. Note:The printer will generate the vibration noise during the

input shaper

6

## Pressure advance

Step7

Web Interface:

Select the "Jobs" option, choose "Pressure Advance Calibration,"

Wait for the print to finish and observe the most uniform and complete line.

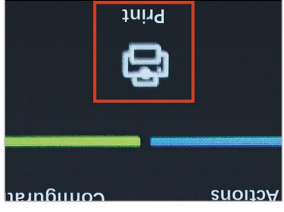
The value on the right side represents the pressure advance value.

| Name                              | Last printed     | Size    |
|-----------------------------------|------------------|---------|
| Jobs                              |                  |         |
| 3DBenchy-fast高逐                   | 2023-03-22 13:09 | 4.0 KB  |
| 3DBenchy-standard标准               | 2023-03-29 20:28 | 3.5 MB  |
| Pressure Advance Calibration压力提前校 | 2023-03-22 18:03 | 15.8 KB |
| 准gcode                            | -                | -       |
| 3DBenchy-fast高逐                   | 2023-03-31 01:21 | 2.6 MB  |

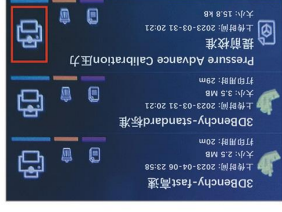
3.5 Touchscreen:

Click on "Printer", choose "Pressure Advance Calibration,"

Wait for the print to finish and observe the most uniform and complete line.The value on the right side represents the pressure advance value.

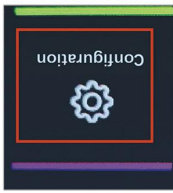


(Figure 24)



(Figure 25)

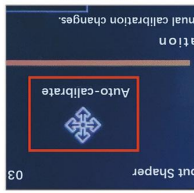
7



(Figure 19)



(Figure 20)



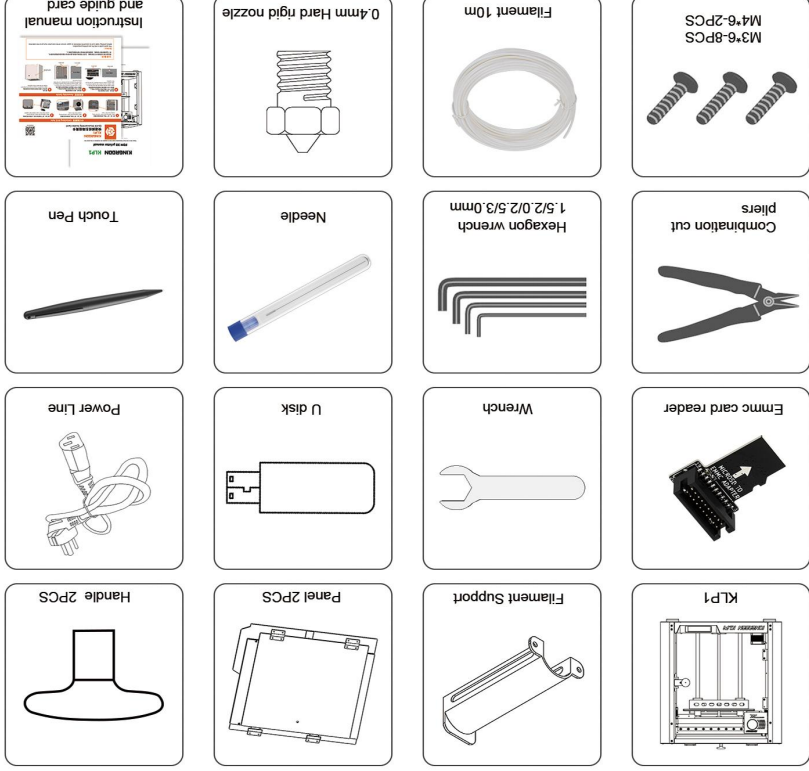
(Figure 21)



(Figure 22)



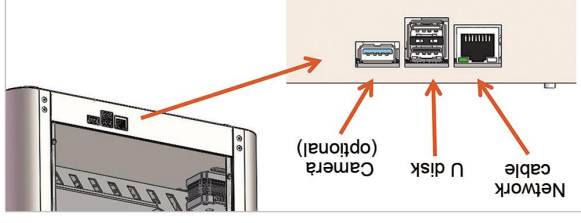
## Packing accessories



## Configure Network

Step 1

1. Network cable connection: Insert the network cable and power cord to power on and turn on. (Please note: Before starting the machine, please confirm the local voltage requirements and switch between 110V/220V)



2

## Configure Network

2. WIFI connection: Use a USB flash drive to configure WIFI, open the (wpa\_supplicant wlan0.conf) file in the USB flash drive, modify the 2.4GZ WIFI account password, insert the USB flash drive into the machine before starting up, and then power on the USB flash drive. (Note that the distance between the machine and the router cannot exceed 5 meters)

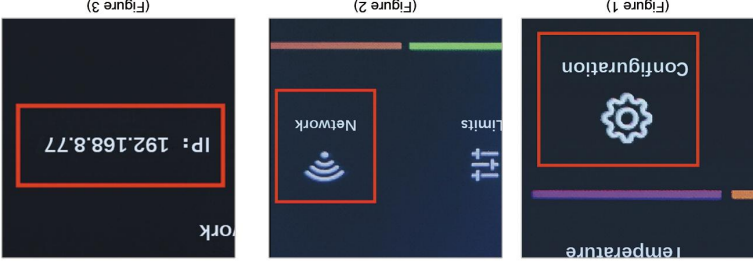
It is strongly recommended to use a network cable to connect your printer and router.

```
country=GB
ctrl_interface=DIR=/var/run/wpa_supplicant GROU=netdev
update_config=1
network={
ssid="Your WIFI name"
psk="Your WIFI password"
key_mgmt=WPA-PSK
}
```

Step 2

3.5 Touchscreen:

Click on Configuration, then Network, IP address will display when successfully connected on the network.



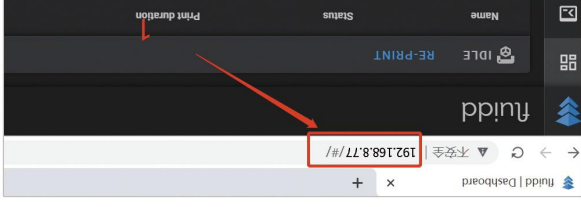
Steps

Enter IP address in a web browser on your Computer, Recommended use Google Chrome.

Note: Printer and Computer must be connected to the same local network segment in order to establish a connection.

简体中文/Deutsch/Español/Français/Italiano/Magyar/Nederlands/Portugues/Russkij Язык/Vrjatschka Moba/한국어/日本語/العربية/白

Access the Fluid interface. You can modify the language in the setting parts. Currently it supports English/ Castina / 简体中文/ 繁體中文/ Portuguese/Portugues/Russkij Язык/Vrjatschka Moba/한국어/日本語/العربية/白



3

# Directory

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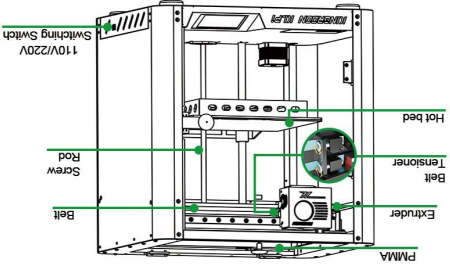
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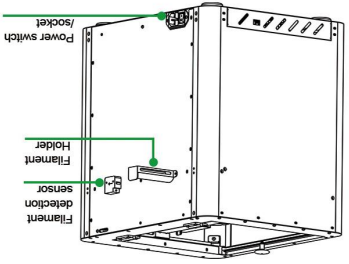
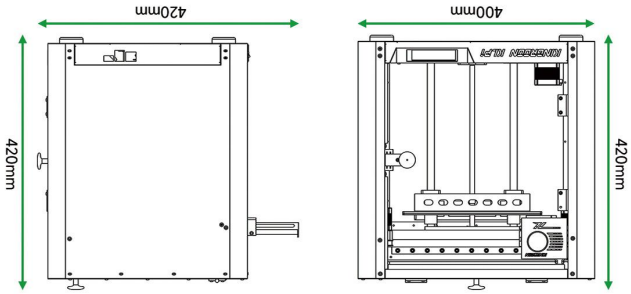
For your convenience, please carefully read the guide card and this manual before use.  
 If you encounter any questions or issues in the article, please contact us through the email:  
 support@kingroon.com / Official website: shop@kingroon.com / Aliexpress: susse@kingroon.com /  
 Alibaba: joan@kingroon.com / Amazon: jerry@kingroon.com  
 The Kingroon team is always ready to provide you with high-quality service.  
 In order for you to have a better experience of our products, you can also obtain equipment operation  
 knowledge by scanning the QR code.



## DESCRIPTION



## Machine parameters



|                               |                     |                            |                       |
|-------------------------------|---------------------|----------------------------|-----------------------|
| Model                         | KLP1                | System Requirements        | Win7-10/Mac/Linux     |
| Forming Technology            | FDM Melt deposition | Slicing Software           | Prusa /Orca /Cura ... |
| Nozzle Diameter               | 0.4mm               | Building board             | Flexible Steel plate  |
| Material of Nozzle            | Hard steel          | Firmware                   | Klipper               |
| Printing Accuracy             | 0.05-0.3mm          | Power                      | 300W                  |
| Filament                      | 1.75mm              | Supply Voltage             | 110V-220V             |
| Support Filament              | PLA/WOOD/TPU        | Power supply power         | 24V/12.5A/300W        |
| Maximum Nozzle Of Temperature | ≤300 °C             | Filament Exhaustion Sensor | Support               |
| Hot Bed                       | ≤100 °C             | Auto Levelling             | Support               |
| Maximum Movement Speed        | ≤50mm/s             | HDMI Touch Screen          | Support (TF35)        |
| Maximum Printing Speed        | ≤50mm/s             | Drive free USB Camera      | Support (Optional)    |
| Recommended Printing Speed    | 350mm/s             | Product weight             | ~15kg                 |
| Printing Method               | Web/USB drive       | KLP1 Size                  | 400*420*420mm         |
| File Format                   | STL/Obj/Gcode       | Print Size                 | 230*230*210mm         |