

Creality Sonic Pad User Manual



Thank you for choosing our products. For the better experience, please read the entire instruction before operating the product. Our teams will always be ready to provide you the best service. Please contact us by phone or email provided at the end of this document if you encounter any problem with our product.

In addition, you can visit our official website at www.creality.com to find relevant software/hardware information, contact details, operation, and warranty instructions.

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1. Product Description

When the Creality Sonic Pad is connected to the FDM printer via a USB cable, it becomes the core system of the printer.

Hardware Specifications

CPU	T800
RAM	2GB
ROM	8GB
USB 2.0 interface	4
Screen resolution & size	1024x600 & 7 Inch
Wi-Fi protocol	IEEE 802.11b/g/n
LAN interface	100M
Gsensor interface	PS/2
Power interface	DC 2.5
Input voltage	12V

2. Packing list



1. Creality Sonic Pad x1
2. 12V power adapter (including adapter) x1
3. G-sensor data cable x1
4. G-sensor x1
5. USB cable x1
6. USB drive x1
7. MicroUSB to MiniUSB connector x1
8. MicroUSB to Type-C connector x1
9. Instructions x1
10. Screw Pack x1
 - M3*8 self-tapping screw X2
 - M3*8 machine screw X2
 - M3*6 machine screw X2

3. Interface and button description





4. Operation Precautions

1. Please use the product strictly in accordance with this manual to avoid personal injury and property damage.

2. Do not place the machine near any heat source or flammable or explosive objects. We suggest placing it in a well-ventilated, low-dust environment.

3. Please use the power adapter that comes with the machine to prevent damage to the machine.

4. Do not place this product in a vibration or unstable environment.

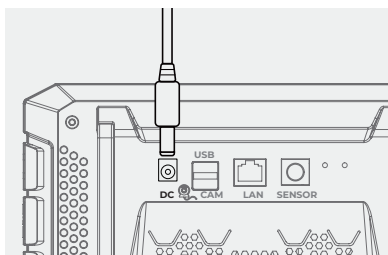
5. Please power off to clean the product regularly.

6. Users should comply with the laws and regulations of the corresponding countries and regions where the equipment is located (used), abide by professional ethics, pay attention to safety obligations, and strictly prohibit the use of our products or equipment for any illegal purposes. Creality will not be responsible for any violators' legal liability under any circumstance.

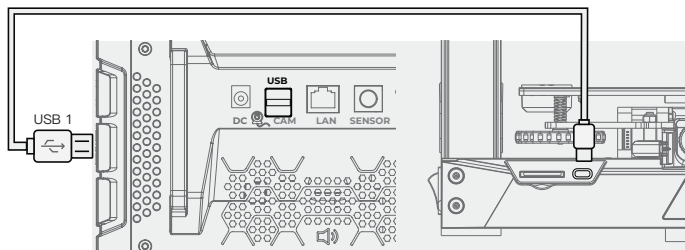
5. First use

1. Device connection

1.1 Connect the Creality Sonic Pad to the AC110V/220V power supply using the power adapter.

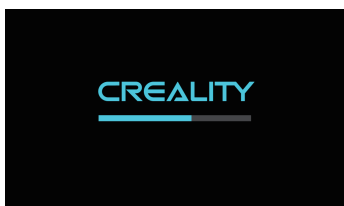


1.2 Connect the Creality Sonic Pad USB1 port to your printer (use the correct adapter if necessary) with a USB cable. (The first printer must be connected to the USB1 port of the Sonic pad, otherwise it will not connect).

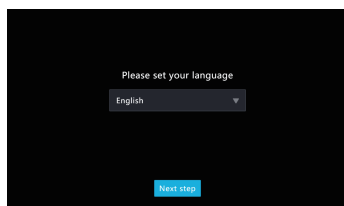


2. Boot Settings

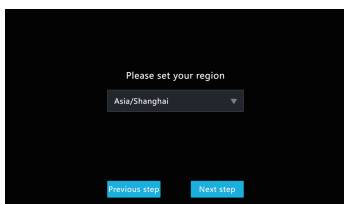
After the connection is completed, press the power button of the Creality Sonic Pad to enter the boot-up operation (follow the order of the guide instructions to configure the product).



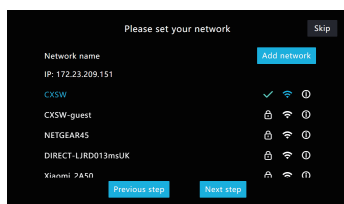
2.1 Startup screen



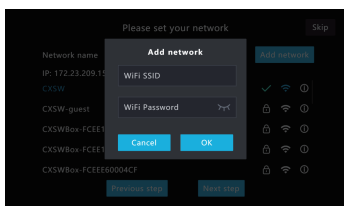
2.2 Select language



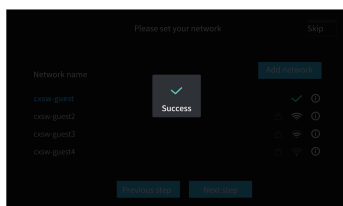
2.3 Select region



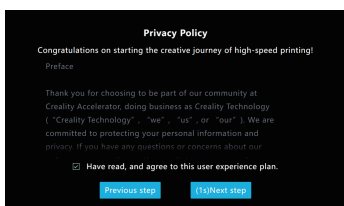
2.4.1 Network settings (optional)



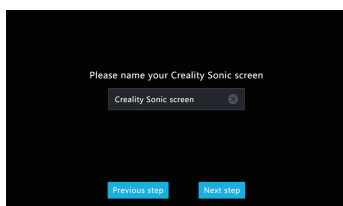
2.4.2 Add a network(optional)



2.4.3 The network connection is completed(optional)



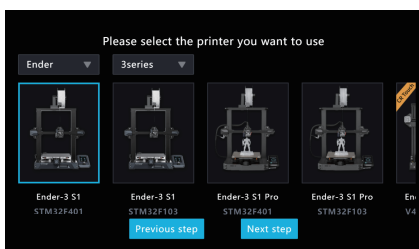
2.5 Privacy setting, click next after reading and agree by selecting the checkbox



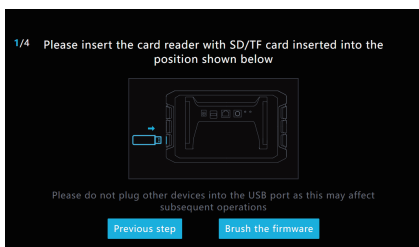
2.6 Device Rename

2.7 Printer firmware flashing (upgrade via SD/TF card)

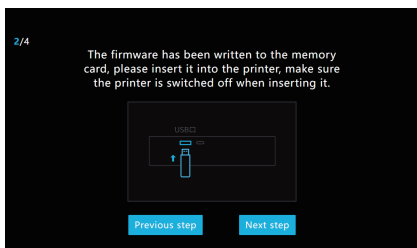
2.7.1 Select printer model(users need to open up the printer to check the mother-board chip model).



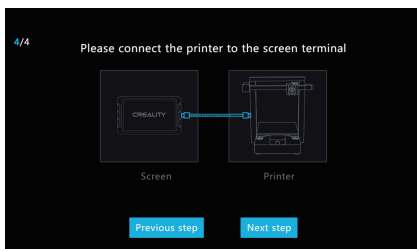
2.7.2 Taking the model Ender-3 S1 as an example, after selecting the model, you will enter the flashing guide page. Please prepare a card reader and memory card for the printer flashing.



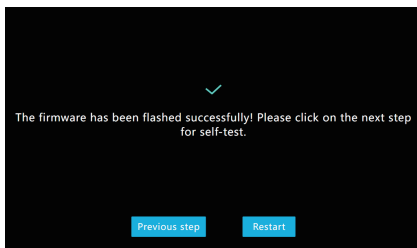
2.7.3 Write the firmware to the SD/TF card, then insert the SD/TF card into the printer, click Next step.



2.7.4 After the printer is powered on, the Creality Sonic Pad will automatically connect to the printer. (the firmware in SD/TF will be automatically flashed after the printer is powered on)

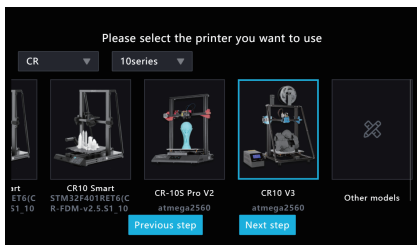


2.7.5 After the printer firmware is flashed, click Restart.

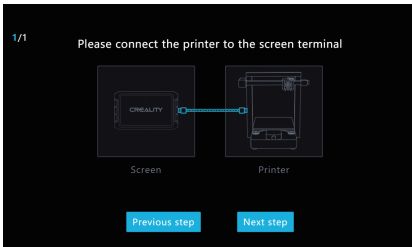


2.8 Printer firmware flashing (upgrade via USB cable)

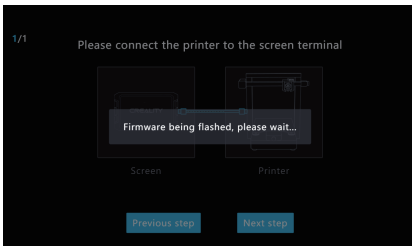
2.8.1 Select the printer (motherboards with chips such as atmega 2560 cannot be upgraded via SD/TF card)



2.8.2 Take the CR10 V3 as an example. After selecting the model to enter the flashing guide page. Please connect the printer to the screen terminal with a USB cable.



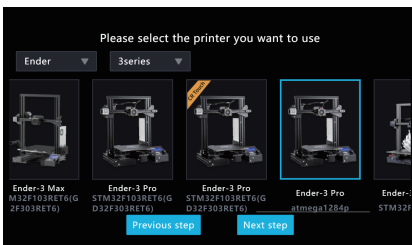
2.8.3 After clicking Next step, the Creality Sonic Pad will start flashing the firmware to the printer and wait for the flashing to complete.



2.9 Printer firmware flashing (update BootLoader)

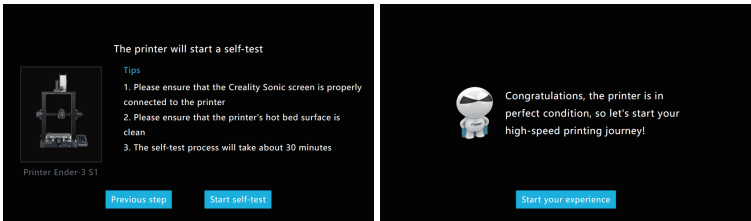
Please note that if the printer with atmega1284p chip cannot successfully flash the firmware, you need to update the BootLoader of the motherboard first, and then flash the firmware. For the BootLoader update tutorial, please check the official website.

<https://www.creality.com/pages/download> → Ecosystem



3. Functional self-check

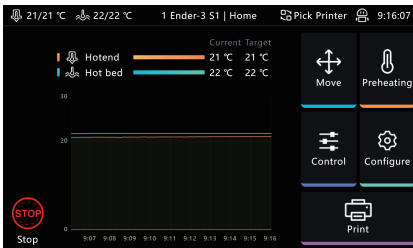
After the printer firmware is flashed, the Creality Sonic Pad will automatically restart the printer. After restarting, it will enter the function self-test and follow the on-screen instructions. After the self-test is completed, click Start your experience, the screen will save the relevant user configuration, and the system will be reloaded. After entering the Home page, you can start using this product.



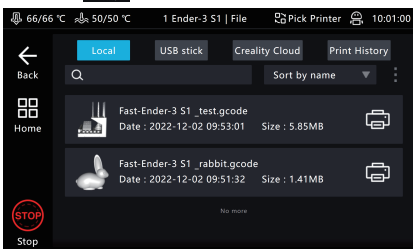
6. Daily use

1. Print

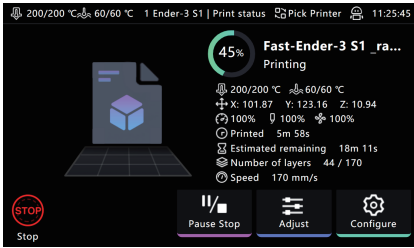
1.1 Enter the Home page and click "Print".



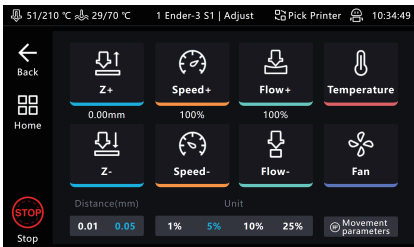
1.2 Select the gcode file saved locally or in the USB drive, click on the to print the file.



1.3 Enter printing interface, the printer starts to print, and the screen will display printing information such as estimated time.

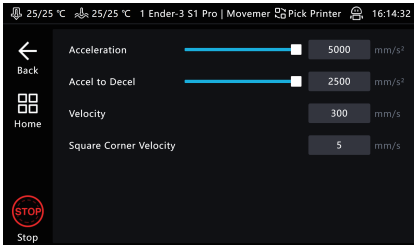


1.4 Parameters can be adjusted during the printing process, the specific parameters are shown in the figure.

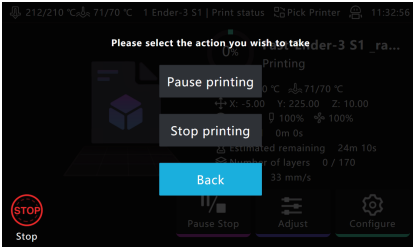


Note: Parameter adjustment can only be performed after the printer starts printing, and cannot be adjusted during the preparation process (such as heating).

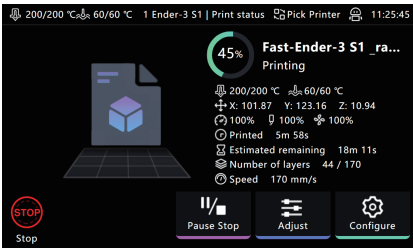
1.5 Click to enter the motion parameter interface, you can adjust the upper limit of the motion parameters (actual speed please refer to the slice parameter setting).



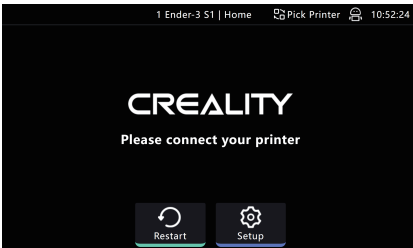
1.6 During the printing process, you can choose to Pause/Stop printing. It can resume after pause, but it will exit the printing interface and go back to Home page if you stop printing.



1.7 If you need to terminate the print process, you can click 




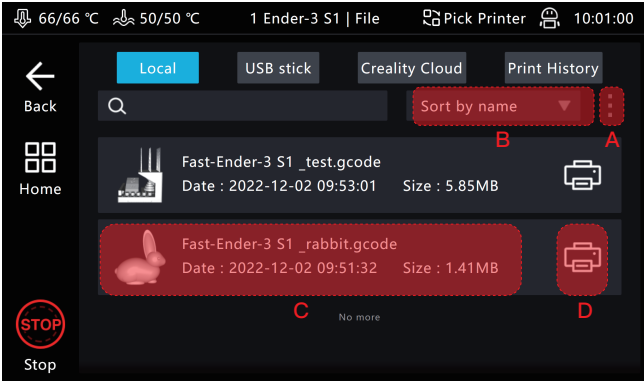
1.8 Creality Sonic Pad will jump to the following interface after Emergency Stop, you need to manually click Restart to restore the connection.




2. Slicing file management

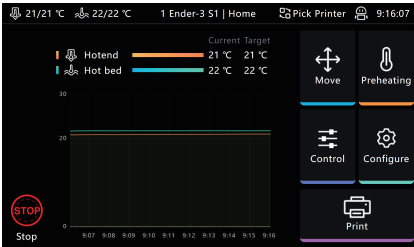
2.1 Enter the gcode selection page and perform the following operations.

- A Manage gcode files, USB drive and local files can be copy from and to each other or vise versa. Files can also be delete from here.
- B The sort type of the file.
- C In the model preview area, you can view the details of the slice file.
- D Click on  to print the gcode file.

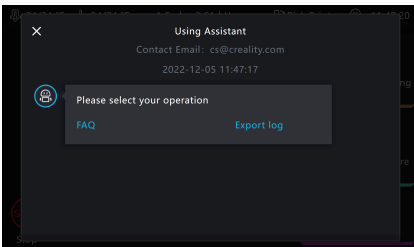


3. Using assistant

3.1 Click the icon  at the top of the page to enter the using assistant interface.

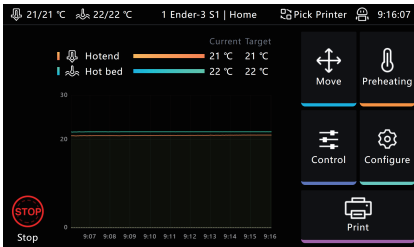


3.2 In the using assistant interface, you can view FAQ and export system logs.

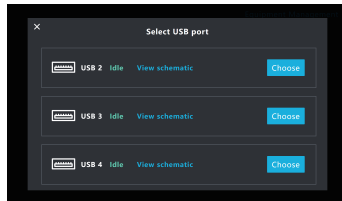
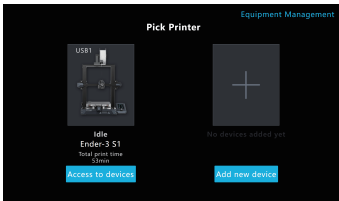


7. Connect multiple printers

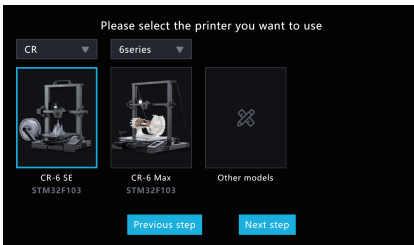
1. Add the first 3D printer (must be connected to the Sonic pad's USB 1 port), click Pick Printer at the top of the page.



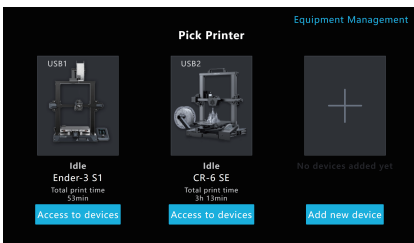
2. Add a new printer and select the corresponding USB port (up to 4 printers can be connected).




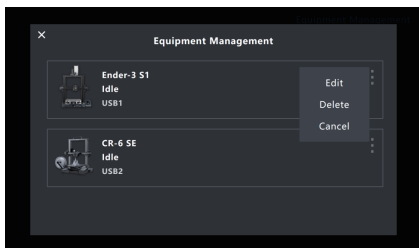
3. Take CR-6 SE as an example, after selecting the model, follow the connection process to add a new printer.



4. After the connection is successful, click Access to devices on the Pick printer interface to control the corresponding printer.



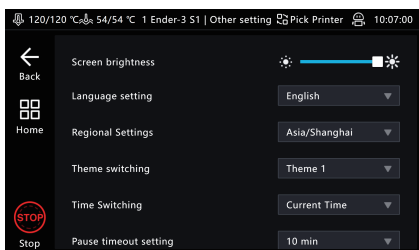
5. Click Equipment Management on the Pick Printer interface to enter the equipment management interface, click the icon  to edit the printer name and delete the printer.



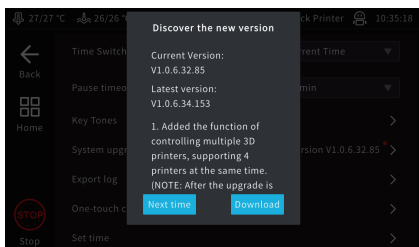
8. System upgrade

1. Online upgrade

1.1 On the home page, go to "Configure" > "Other Settings" to check for new version.



1.2 Click System Upgrade and follow the on-screen prompts. After the upgrade is complete, the system will restart automatically.




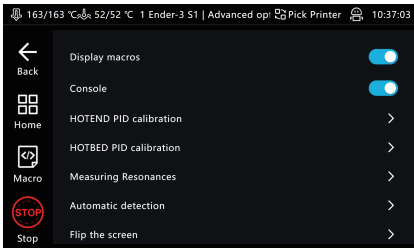
2. USB drive upgrade

2.1 Please go to <https://www.creality.com/pages/download> → Ecosystem to download the corresponding upgrade file. Decompression it and copy to the root directory of the USB drive. After inserting the machine, an upgrade prompt will pop up automatically. Follow the instructions to upgrade.

9. Advanced options

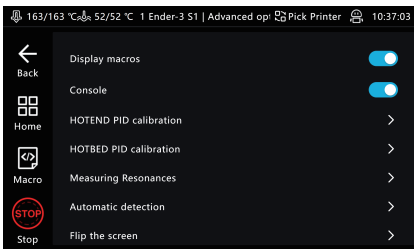
1. Display macros

Click the  button to display/hide the macro functions. (left sidebar and in the control interface).



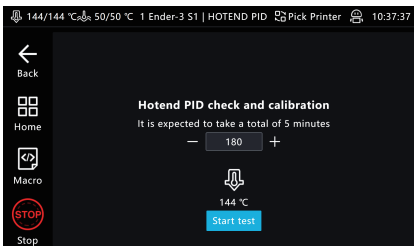
2. Console

Click the  button to show/hide the console.



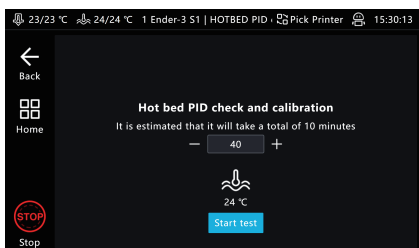
3. HOTEND PID calibration

Click to enter the calibration page, set the hotend calibration temperature, click to start calibration, and confirm that the calibration is completed according to the prompts, the system will automatically save.



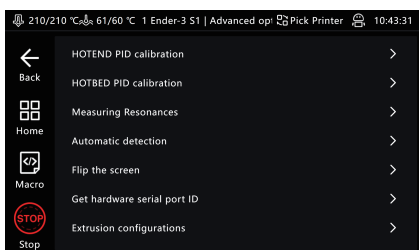
4. HOTBED PID calibration

Click to enter the calibration page, after setting the calibration temperature of the hotbed, click to start the calibration, and confirm the completion of the calibration according to the prompt, the system will automatically save.



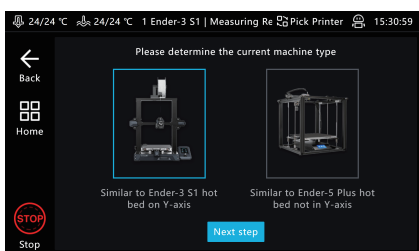
5. Measuring resonances

Adjust the extrusion parameters and upper temperature limit according to the printer configuration. Go to Other settings, Advanced options, and click Measuring resonances.

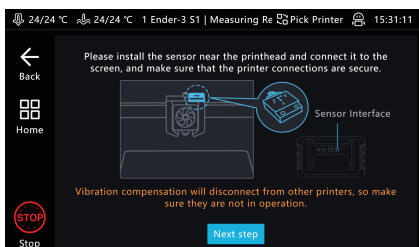


5.1 Similar to Ender-3 S1 hotbed Plus on the Y axis.

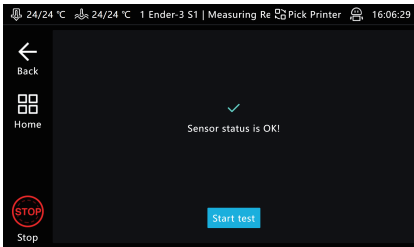
5.1.1 Enter the vibration compensation page, select the current machine type and click Next step.



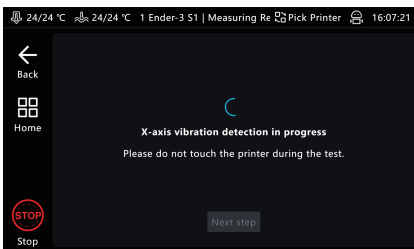
5.1.2 After connecting and installing the sensor as shown, click Next step.



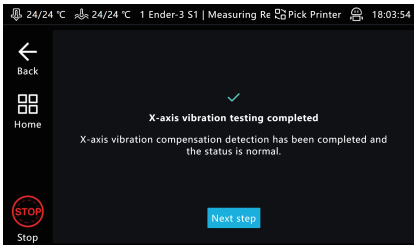
5.1.3 When the sensor status is OK, click the Start test.



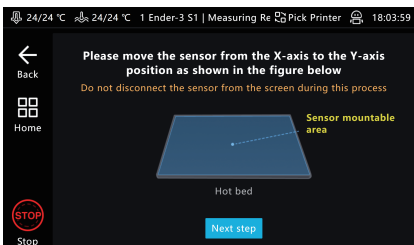
5.1.4 After the printer is reset to zero, the X-axis vibration compensation detection will start.



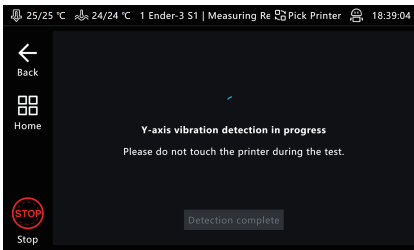
5.1.5 After the X-axis vibration compensation detection is completed, click Next step.



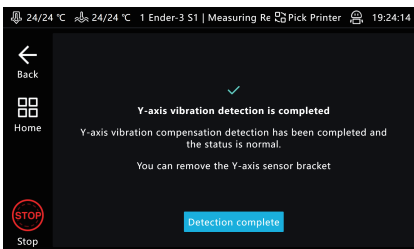
5.1.6 Install the sensor on the Y-axis as shown and click Next step.



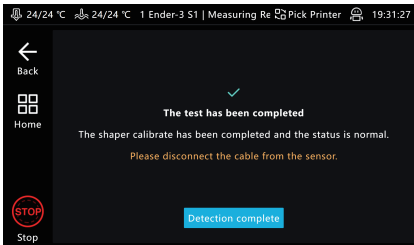
5.1.7 Wait for the Y-axis vibration compensation detection to be completed.



5.1.8 The sensor bracket can be removed after the Y-axis vibration compensation test is completed.

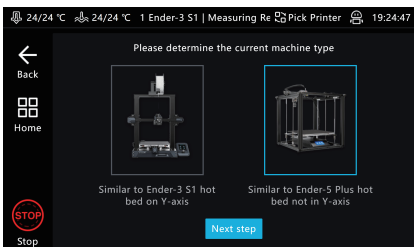


5.1.9 After the vibration compensation test is completed, please remove the sensor and disconnect the cable (the data has been saved).

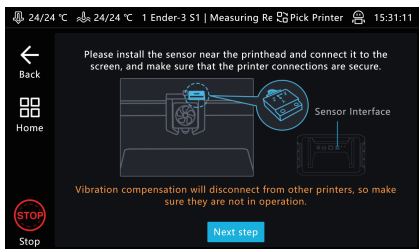


5.2 Similar to Ender-5 Plus hot bed not on Y-axis

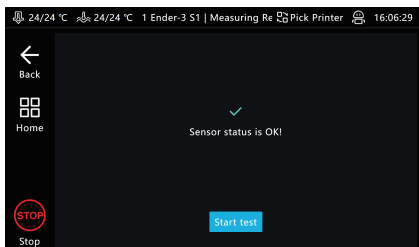
5.2.1 Enter the vibration compensation page, select the current machine type and click Next step.



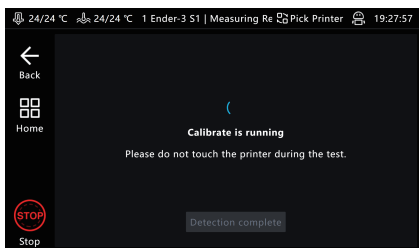
5.2.2 After connecting and installing the sensor as shown, click Next step.



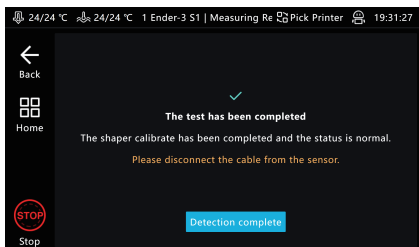
5.2.3 When the sensor status is OK, click the Start test.



5.2.4 After the printer is reset to zero, the X-axis vibration compensation detection will start.

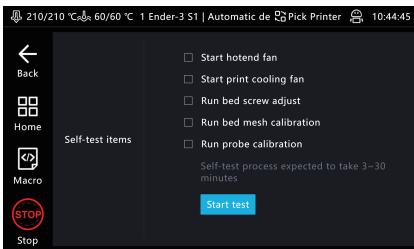


5.2.5 After the vibration compensation test is completed, please remove the sensor and disconnect the cable (the data has been saved).



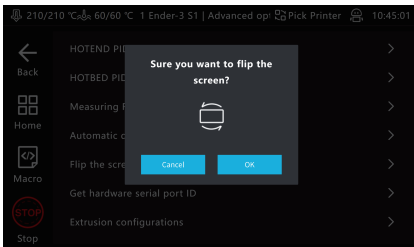
6. Automatic detection

The self-test items can be freely selected. After selecting, click to start the detection and follow the guidance to complete the detection. After completion, you need to save the configuration.



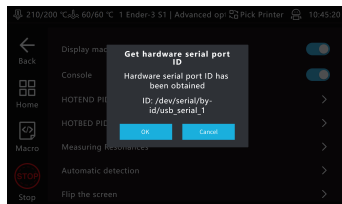
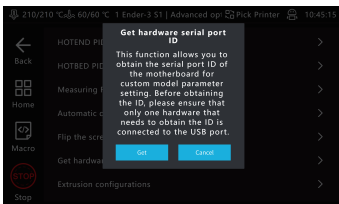
7. Flip the screen

Click OK and the screen will flip 180°.



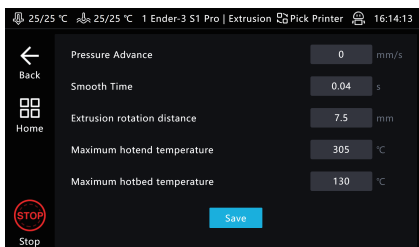
8. Get hardware serial port ID

Click Get to get the serial port ID of the motherboard, which is used to customize the parameter settings of the printer model.



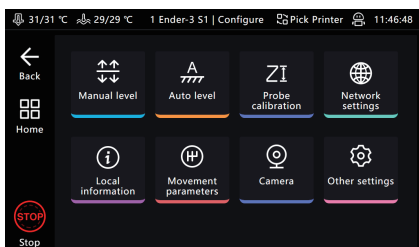
9. Extrusion configurations


Adjust the extrusion parameters and upper temperature limit according to the printer configuration.

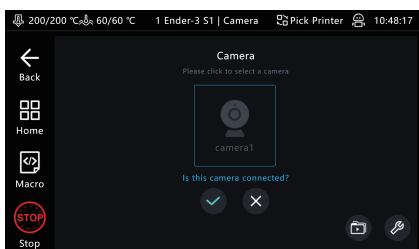


10. Time lapse video

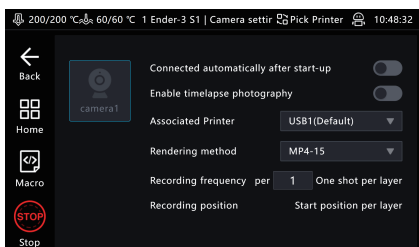
1. Power off the Creality Sonic Pad before connecting the camera to the USB interface. Power it on then enter the Configure page and click the camera.



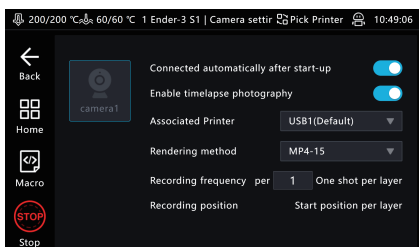
2. Go to the Camera page, click the camera icon, and check Connect camera; Click the  logo in the lower right corner of this page to enter the setting page.




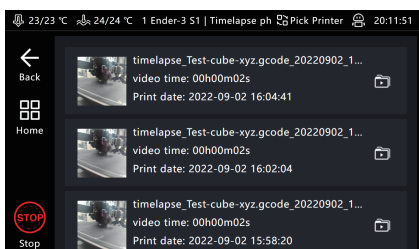
3. Click Connect automatically after activation, the camera will be enabled when the Creality Sonic Pad is powered on. Click to enable time lapse video, and the camera will shoot the printed model according to the set number of layers and rendering methods.



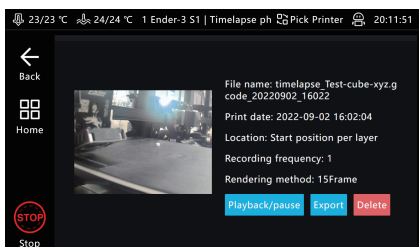
4. In the associated printer option, you can switch the USB port and take photos corresponding to the associated printer.



5. After the shooting is completed, a time lapse video file will be automatically generated. Click the  icon in the lower right corner to view.



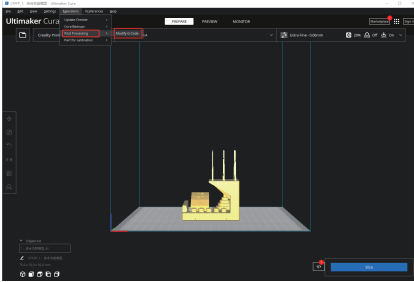
6. Enter the file management mode, you can choose to play, export and delete videos.



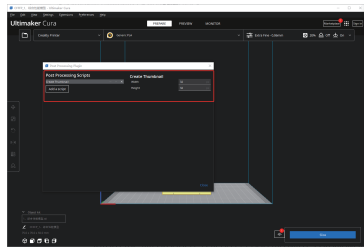
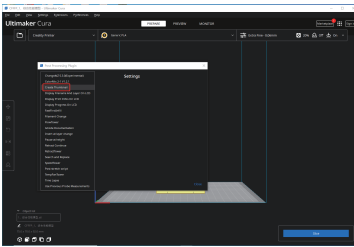
11. Slicing software displays previews and thumbnails

1. Ultimaker Cura 5.1.0

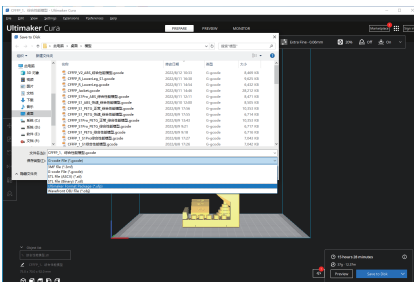
1.1 Add thumbnails on Ultimaker Cura 5.1.0, select "Extensions" - "Post Processing" - "Modify G-code".



1.2 After entering, select the post-processing script shown in the figure ("Add a script"->"Create Thumbnail"), and a red dot will appear in the post-script prompt box next to the slice button.

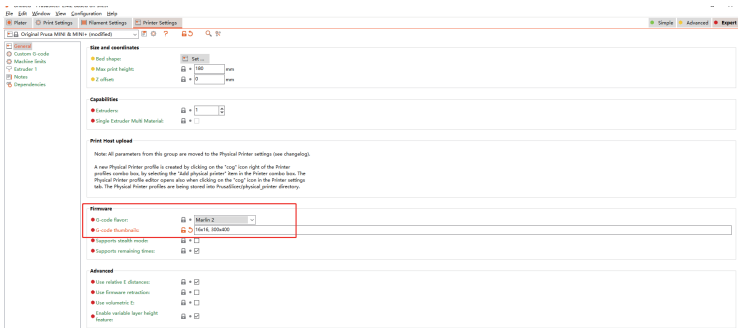


1.3 After the slicing is completed, export it in ufp format and upload it using a U disk or WEB terminal. The Sonic Screen will automatically produce a sliced G-code file with a preview image.



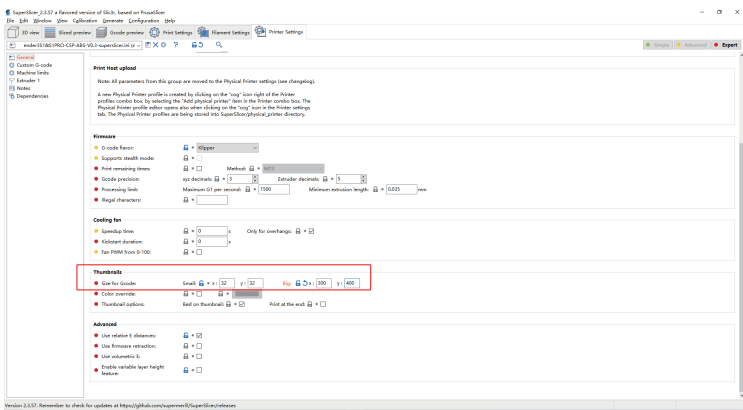
2. PrusaSlicer 2.4.2

2.1 Added thumbnails and previews on PrusaSlicer 2.4.2. In "Expert" mode, you can add a custom-sized thumbnails and previews in "Printer Settings"- "Firmware"- "G-code thumbnails".

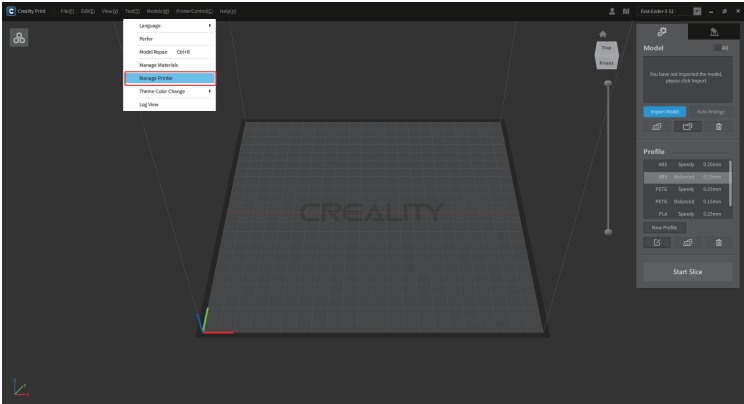


3. SuperSlicer 2.3.5

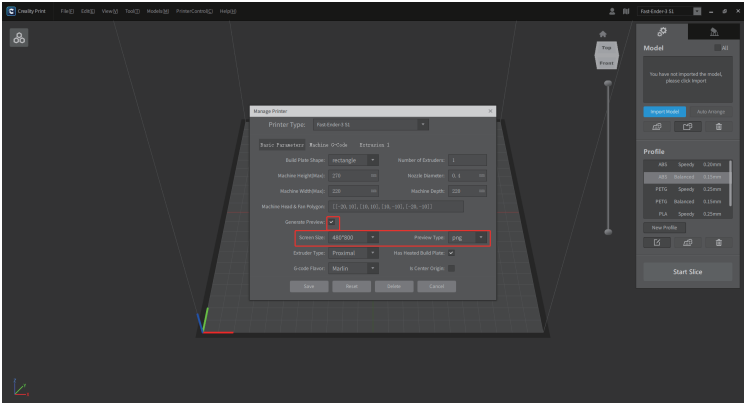
3.1 Added thumbnails and previews on SuperSlicer 2.3.5.7. In expert mode, you can add custom size thumbnails and previews in "Printer Settings" - "Thumbnails" - "Size for gcode".



4.1 Add thumbnails and preview images on Creality Print, select "Tool" - "Manage Printer" to enter the printer management interface.



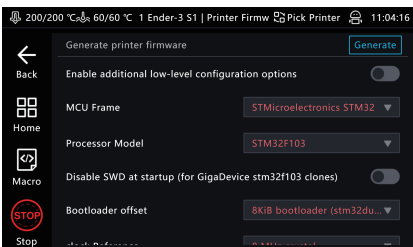
4.2 In the printer management interface, check "Generate preview", and select the preview image size to add a preview image of a custom size.



12. Adaptation of other models

1. User-defined printer configuration process

1.1 Configure the printer firmware using the Printer Firmware Tool in the Creality Sonic Pad.



1.2 Configure the printer.cfg file

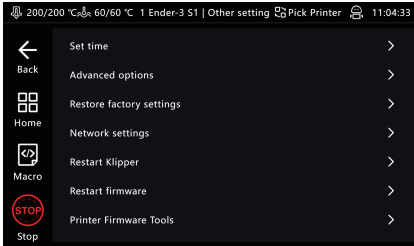
Please check the configuration tutorial on the official website
<https://www.creality.com/pages/download> → Ecosystem

1.3 Configure user-defined models on the Creaity Sonic Pad.

2. Printer Firmware Tools Entry.

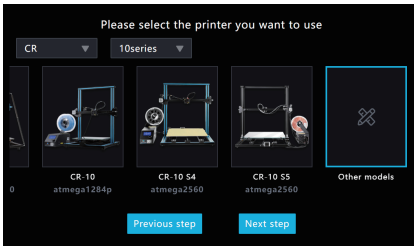
2.1 When a printer is connected.

Go to Configure---Other Settings---Printer Firmware Tools.

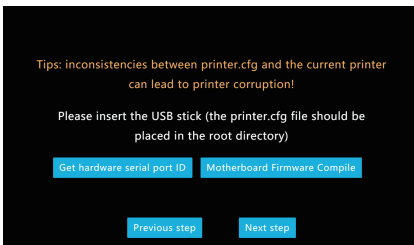


2.2 When no printer is connected.

2.2.1 On the model selection interface, select the other models.



2.2.2 Motherboard firmware compilation.

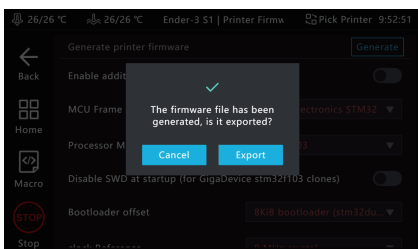


3. Configure the firmware.

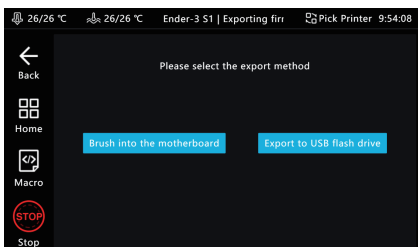
3.1 Please select the options according to the motherboard parameters, then click Generate.



3.2 Export the firmware after generating.

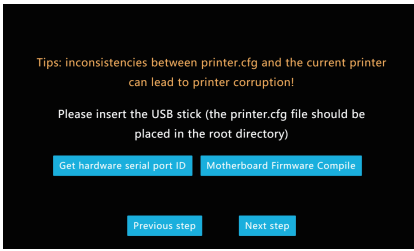


3.3 Follow the prompts to export to a USB drive or upgrade the printer firmware via a USB cable.

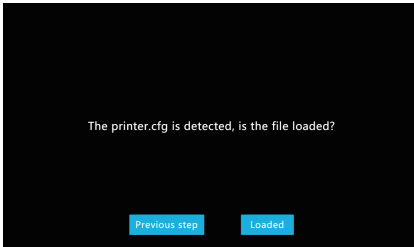


4 Configure user-defined models.

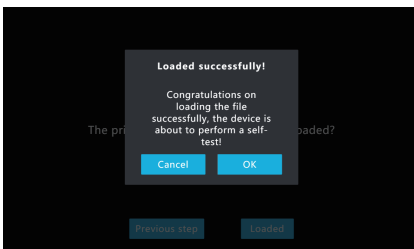
4.1 Insert the USB drive into the Creality Sonic Pad and click Next step. (Please upgrade the printer firmware and configure printer.cfg file first, and connect the printer to the Creality Sonic Pad via a USB cable)



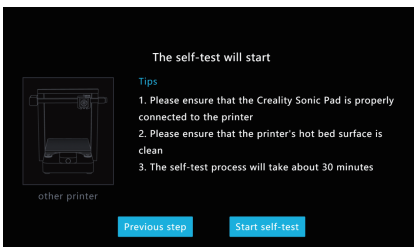
4.2 After detecting the printer.cfg file, click Loaded.

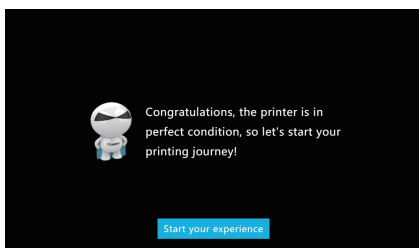


4.3 Printer self-check will be performed after successful loading.



4.4 After entering the self-test process, please follow the instructions on the screen. After the self-check is completed, the system will be restarted. After the restart is completed, you can enter the home page and start using it.

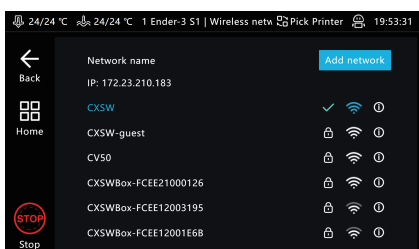




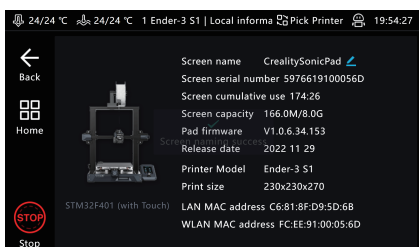
13. The use of WEB operation terminal

1. Obtaining the IP address of the Creality Sonic Pad

Enter "Configure - Network Settings - Wireless Network/Wired Network" to obtain the current LAN IP address of the Creality Sonic Pad.

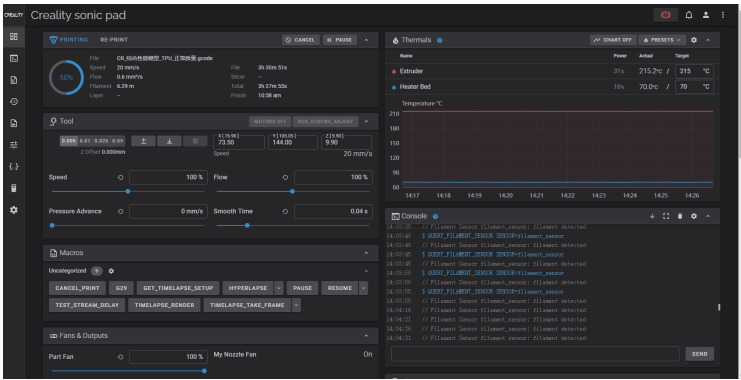


2. Obtaining the serial number (DN number) of the Creality Sonic Pad screen.



3. Fluid LAN background login.

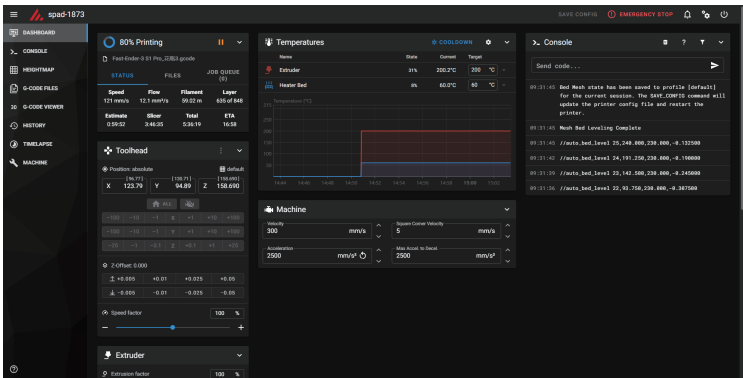
Make sure that the PC and the Creality Sonic Pad are in the same local area network, enter the obtained IP address of the Creality Sonic Pad into the browser, or the local area network domain name `spad-DN.local` (DN is the first four digits of the screen serial number). (Example: `http://172.23.214.236` or `http://spad-8888.local`)



4. Mainsail LAN background login

Make sure that the PC and the Creality Sonic Pad are in the same local area network, add: 8819 after the obtained IP address and enter it into the browser.

(Example: <http://172.23.214.236:8819>).



14. SSH account

Account: creality

Password: creality

SSH command format: `ssh reality@172.23.209.153` (This is an example, please obtain the IP address refer to the use of WEB operation terminal)

15. FAQ

Please visit the official website for more solutions to common problems:
https://www.creality.com/pages/faq?spm=..page_1934481.header_1.1 → Ecosystem

● Failed to upgrade online

1. Check whether the network is normal, and the upgrade package can be downloaded only if the network is normal;
2. If it prompts "download failed" when the network is normal, please check whether the storage of Creality Sonic Pad is more than 500MB. If the storage is insufficient, please try to clean up some of the slice files or time-lapse video files to ensure that the available space is more than 500MB before trying to upgrade.
3. If it still prompted with "upgrade failed" when the network is normal and the available storage is sufficient, please contact the after-sales service.

● Abort printing during printing

1. Check that the printer is properly connected to the Creality Sonic Pad.
2. Check whether the power connection of the Creality Sonic Pad and the printer is normal.

● Time-lapse photography did not shoot successfully

1. Enter configuration-camera to see if there is a real-time image, if there is no real-time image, it should be turned on first;
2. Confirm that the camera is a general-purpose USB camera, and the real-time screen has been turned on;
3. Enter Configure - Local Information to check whether the available storage is insufficient;
4. Check whether the time-lapse video has been turned on and whether the frequency of the time-lapse video is set correctly. (the frequency should be less than the number of slice layers)

● Where should the vibration sensor be placed when resonance compensation is automatically detected? Are there any orientation requirements ?

The vibration sensor should be installed on the hotend . You can print the bracket which the model file provided by Creality, and then use the screws to fasten the sensor to the bracket without direction requirement.

● Printed model with poor edge quality. What are the appropriate acceleration and speed settings when slicing?

You can refer to the slicing software configuration parameter suggestions provided by Creality. The default supported printers (Ender-3 V2 / Ender-3 S1 / Ender-3 S1 Pro) can directly import the corresponding parameter configuration files in the slicing software.

● How to configure the file to be compatible with filament run-out detection function ?

add in config file
[filament_switch_sensor filament_sensor]

pause_on_runout: true

switch_pin: ^!PC15

Notice! switch_pin needs to be confirmed as the connection PIN for the filament run-out sensor

● Can't connect to the printer successfully

1. Check whether the printer is powered on;
2. Check if the printer is flashing the correct firmware version;
3. Check whether the configuration file matches correctly;
4. Check whether the USB connection is stable.
5. Check whether the current version of the Creality Sonic Pad software is the latest version.

● Abnormal reading of U drive

1. Check whether the USB drive is normal, insert the USB drive into the computer, try to repair the USB drive file system or format, or replace the USB drive and try again;
2. Check whether the USB interface is normal, and try another USB interface;
3. If the card reader is used, please try to replace the card reader (or memory card) to determine whether the function is normal.

● The print is misplaced

1. Check whether the X, Y axis motors are normal, and whether the belt is loose;
2. Confirm whether the slicing printing speed and acceleration exceed the normal range of the printer, and adjust the printing speed and acceleration appropriately. (refer to the slicing parameters provided by Creality)

● Severe stringing when printing

Check whether the relevant parameters of the slicing file match the connected printer model, such as whether to enable retraction, retraction distance, retraction speed, printing speed and other parameters. If they do not match, you need to re-adjust the parameters and re-slicing.

● Can't connect to Wi-Fi network

1. Try to search for other Wi-Fi and connect to confirm whether it can be connected normally (the current device supports WPA2 encryption method, but does not support WPA3, and only supports the 2.4G frequency band);
2. Check the correctness of the password and whether the router is normal.

● How to transfer the time-lapse photography files to PC ?

1. Download from fluid: Open the WEB page of the device in a PC browser (refer to the instruction manual), and download it under the time-lapse photography menu;
2. Download via USB drive: Insert the USB drive, click the "Export" button on the video details page (Configure-Camera-Timelapse video), export the video file to the USB drive, and then copy it from the USB drive to the PC.

● The camera can't be used normally after it is connected ?

1. The Creality Sonic Pad loads the camera device by default; if the camera is plugged in after booting, after selecting and enabling the camera, the camera will display enabled, wait for 2 minutes before the screen appears (sometimes need to switch pages), or after inserting the camera, the screen will appear after restarting the Creality Sonic Pad;
2. Some cameras are customized cameras, which are not output in YUV and Mjpeg formats. Try to replace the camera and use it again;
3. Pull out the camera and use a U disk to check whether the USB is normal. If it is not normal, please contact the after-sales service.

● How to compile firmware and modify configuration files for non-default printers ?

Please refer to the printer adaptation guide link.

● What should I do if the Ender-3 V2 cannot be connected during the booting operation or one-touch change?

The model should be selected according to the actual situation when booting up or one-touch change. The motherboard version needs to be disassembled to check, and the corresponding relationship between the four choices of Ender-3 V2

- a.[CR Touch logo in the upper left corner of the model diagram]Ender-3 V2 (V4.3.1 or V4.2.2)----Corresponding to the model with CR Touch installed, the motherboard version is V4.3.1 or V4.2.2
- b.Ender-3 V2 (V4.3.1 or V4.2.2) ----Corresponding to the model without CR Touch installed, the motherboard version is V4.3.1 or V4.2.2
- c.Ender-3 V2 (V4.2.7) ----Corresponding to the model without CR Touch installed, the motherboard version is V4.2.7
- d.[CR Touch logo in the upper left corner of the model diagram]Ender-3 V2 (V4.2.7) ----Corresponding to the model with CR Touch installed, the motherboard version is V4.2.7

● The SD card is inserted into the printer, but the corresponding file cannot be found in the Creality Sonic Pad?

Please save the file in a USB disk and insert it into the Creality Sonic Pad USB interface to read the corresponding file.

● How to choose a camera?

Choose a common camera by yourself or refer to the recommended camera list provided by Creality:

- 1 Logitech 920
- 2 Logitech C270i
- 3 HIKVISION DS-E12
- 4 Blue Enchantress T3300
- 5 PHILIPS SPL6506BM
- 6 X-LSWAB M600

- **Why can't resume printing after a power outage?**

Crealty sonic pad temporarily does not support resume printing function.

- **How to generate time-lapse photography files?**

The photographic file will not be generated until the printing of the file model is completed.

The time-lapse photographing file cannot be generated if the printing is stopped, powered off, or the camera is pulled out.

- **After pausing printing, when resuming printing, the screen reports that the error is out of range?**

Open the printer setting option of the slicing software, and add the G90 command before the other motion commands in the initial Gcode.

It is recommended to use the Creality Print slicing software, and the required starting Gcode instructions have been added by default.

- **How to import user-defined profiles?**

Using the WebUI, enter the configuration file option, click Upload user-defined configuration file.

- **Why does a prompt box pop up to prompt saving after printing is completed after adjusting the Z-axis height during the printing process?**

During the printing process, adjusting the Z axis is effective for the current printing. If it is saved during the printing process, SAVE_CONFIG will be triggered, which will cause the printer to disconnect and cause the printing to fail. Therefore, it is adjusted to save after printing.

- **How to export logs?**

1. On the home page or printing page: insert the USB flash drive, click "Configure"--"Other Settings"--"Export Log", select the export location and click the export button, the default export location is the root directory of the USB flash drive.

2. In the disconnected page: insert the USB flash drive, click "Settings" - "Export Log", select the export location and click the export button, the default export location is the root directory of the USB flash drive.

FCC WARNING

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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.



Join the Facebook Community

<https://www.facebook.com/groups/sonicpad>

+86 755 3396 5666

cs@creality.com



SHENZHEN CREALITY 3D TECHNOLOGY CO.,LTD.

Official Website: www.creality.com

Business Tel: +86 755-8523 4565 E-mail: cs@creality.com

Company Address: 18th Floor, JinXiuHongDu Building, Meilong Road, Xinniu Community, Minzhi Street, Longhua District, Shenzhen City, China.

MADE
IN
CHINA



Creality Sonic Pad

使用说明书



感谢您选择创想三维的产品。为了您使用方便，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。创想三维团队时刻准备为您提供优质的服务。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。

您还可以登陆创想三维官网 (www.creality.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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一. 产品说明

Creality Sonic Pad 通过USB数据线连接FDM 3D打印机后，变为打印机工作的核心系统。

硬件规格

CPU	T800
运行内存	2GB
存储内存	8GB
USB 2.0 接口	4
屏幕分辨率&尺寸	1024x600 & 7 Inch
WIFI 协议	IEEE 802.11b/g/n
LAN 口	100M
Gsensor 接口	PS/2
电源接口	DC 2.5
输入电压	12V

二. 包装清单



1. 主机 x1
2. 12V电源适配器（含转接头）x1
3. G-sensor 数据线 x1
4. G-sensor x1
5. USB连接线 x1
6. U盘 x1
7. MicroUSB 转 MiniUSB x1
8. MicroUSB 转 Type-C x1
9. 说明书 x1
10. 螺丝包 x1
 - M3*8自攻螺丝 X2
 - M3*8机牙螺丝 X2
 - M3*6机牙螺丝 X2

三. 接口及按键说明





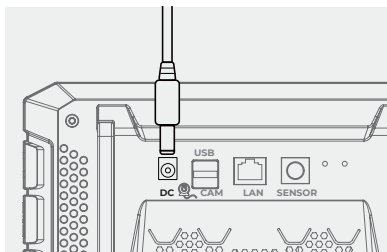
四. 运行注意事项

1. 请严格按本说明书使用产品，避免造成意外的人身伤害和财产损失；
2. 请将本机放置在通风、阴凉、少尘的环境中，远离易燃易爆物或高热源环境；
3. 请使用本机附带的电源适配器，防止造成机器损坏；
4. 请勿将本产品放置在震动或者其它不稳定的环境中；
5. 请定期在断电的情况下用干布对机身做清洁；
6. 使用者应遵守设备所在地国家、地区法律法规，恪守职业道德，注意安全，严禁将我司的产品或设备使用在任何非法用途上。如有违反，产生的相关法律责任我司概不负责。

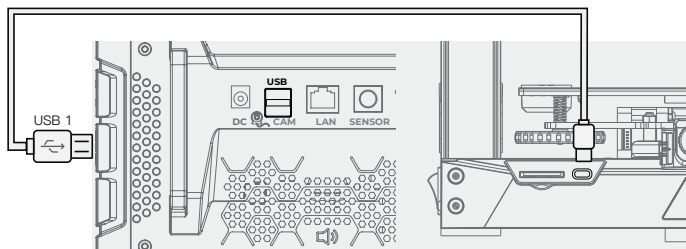
五. 首次使用

1. 设备连接

- 1.1 先连接Crealty Sonic Pad电源线，再将适配器接入AC110V/220V。

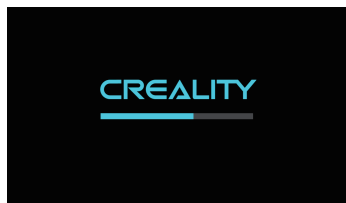


1.2 USB数据线一端连接Creality Sonic Pad USB 1接口（第一台打印机必须连接USB1接口，否则无法连接），另一端连接3D打印机（请选择相应的打印机转接头）。

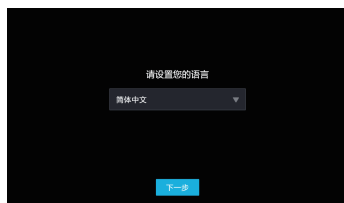


2. 开机设置

连线完成后，按下Creality Sonic Pad电源按键，进入开机引导操作（按引导指示顺序进行产品配置）。



2.1 开机画面



2.2 选择语言



2.3 选择地区



2.4.1 网络设置（此步骤可跳过）



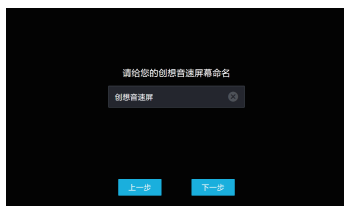
2.4.2 添加网络（接上一步，跳过则无此步骤）



2.4.3 网络连接完成（接上一步，跳过则无此步骤）



2.5 隐私政策，用户阅读同意后点击下一步。



2.6 设备重命名。

2.7 打印机固件烧录（通过SD/TF卡升级）

2.7.1 选择机型（用户需要拆开打印机查看主板芯片型号）。



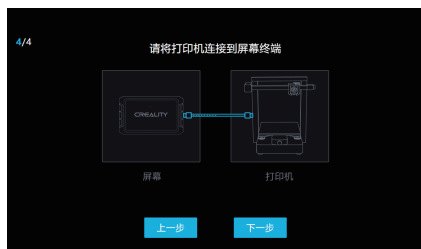
2.7.2 以Ender-3 S1机型为例,选择机型后进入刷机引导页面，请自行准备读卡器及存储卡，用于打印机刷机使用。



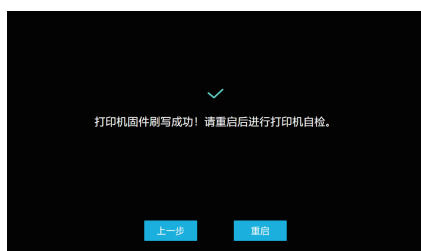
2.7.3 将固件写入SD/TF卡，然后将SD/TF卡插入打印机后，点击下一步。



2.7.4 打开打印机电源后，Creality Sonic Pad将自动连接打印机（打印机开机后会将SD/TF中的固件自动刷入）。



2.7.5 打印机固件刷写完成，点击重启。

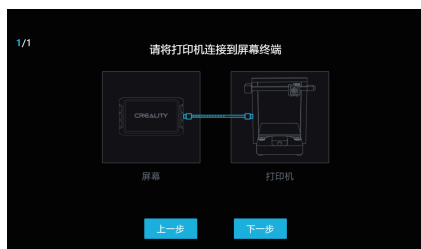


2.8 打印机固件烧录（通过USB数据线升级）

2.8.1 选择机型（atmega 2560等芯片无法通过SD/TF卡升级主板）



2.8.2 以CR10 V3机型为例，选择机型后进入刷机引导页面，请用USB数据线将打印机连接到音速屏。



2.8.3 点击下一步后，Creality Sonic Pad开始给打印机刷写固件，等待刷写完成。



2.9 打印机固件烧录（更新BootLoader）

请注意，芯片型号为atmega1284P 的机型，如果无法成功刷新固件，需要先更新主板的BootLoader，再刷新固件，更新BootLoader教程请在官网查看：

<https://www.creality.com/pages/download> → Ecosystem



3. 功能自检

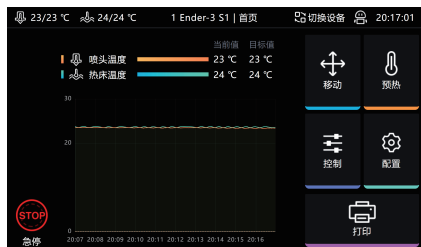
打印机固件刷写完成后，Creality Sonic Pad会自动重启打印机，重启后进入功能自检，按照屏幕指示进行操作。自检完成后，点击立即体验，屏幕将会保存相关的用户配置，并重载系统，进入主页面后，即可开始使用本产品。



六. 日常使用

1. 打印

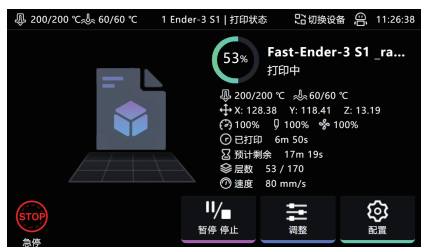
1.1 进入主页面，点击“打印”。



1.2 选择本地或U盘中保存的gcode文件，点击 打印此文件。



1.3 进入打印界面，打印机开始工作，界面中会显示预计时间等打印信息。

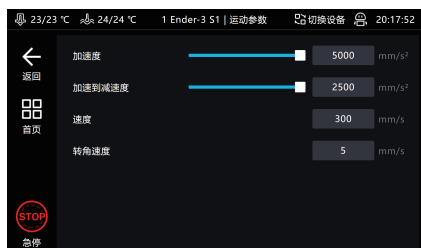


1.4 打印过程中可调整参数，具体参数如图所示。



注意：参数调整只有在打印机正式开始打印后才能进行调整，准备过程中（如加热中）无法调整。

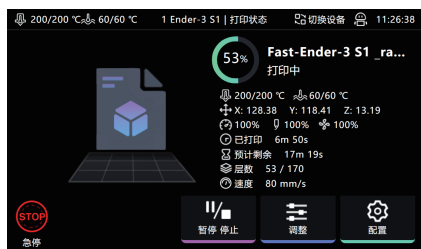
1.5 点击运动参数进入界面，可调整运动参数上限(实际速度请按照切片参数设置为准)。



1.6 打印过程中可选择暂停/停止打印，暂停后可继续打印，停止打印则会退出打印界面，进入主界面。



1.7 打印过程中如需立即停止工作，可点击 。




1.8 急停后Creality Sonic Pad会跳到如下界面，需要手动点击重启图标恢复连接。



2. 切片文件管理

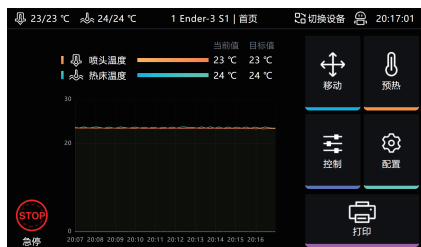
2.1 进入gcode选择界面，可进行以下操作。

- A 管理gcode文件,U盘和本地文件可以相互复制及删除。
- B 可选择文件排序类型。
- C 模型预览区域可查看切片文件详情。
- D 点击  可以直接打印此gcode文件。



3. 使用帮助

3.1 点击页面顶部的  图标可进入使用帮助界面。

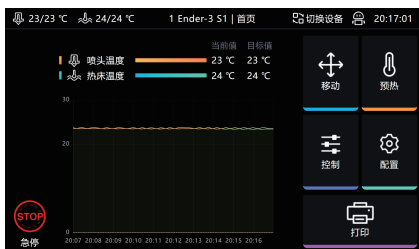


3.1 使用帮助界面可以查看FAQ与导出系统日志。



七. 连接多台打印机

1. 首先连接第一台3D打印机（必须连接USB 1接口），点击页面顶部的切换设备。



2. 添加新设备，选择对应的USB接口（最多连接4台打印机）。




3. 以CR-6 SE为例，选择机型后，按照流程连接新打印机。



4. 连接成功后，在切换设备界面点击进入设备即可操控对应设备。



5. 在切换设备界面点击设备管理可进入设备管理界面，点击  图标可编辑设备名称和删除设备。



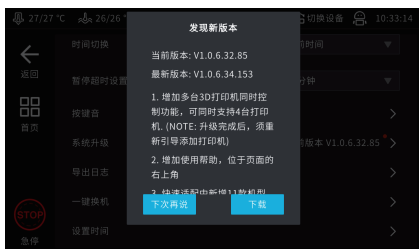
八. 系统升级

1. 在线升级

1.1 在首页页面，依次进入“配置”——“其他设置”，查看系统是否有新版本发布。



1.2 点击系统升级，按屏幕提示操作，升级完成后，系统会自动重启。




2. U盘升级

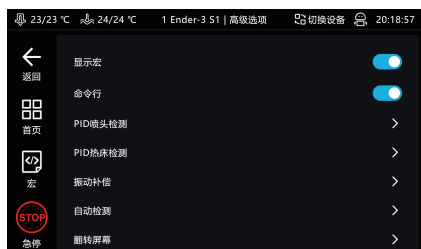
2.1 请到 <https://www.crealitty.com/pages/download> → Ecosystem

下载对应的升级文件，解压后复制至U盘根目录，插入本机后会自动弹出升级提示，按引导升级。

九. 高级设置

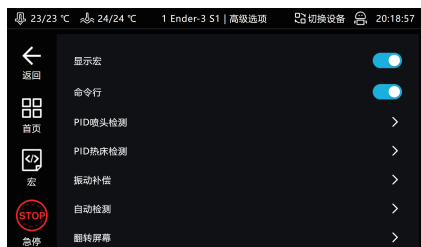
1. 显示宏

点击  按钮可显示/隐藏宏功能（左侧栏和控制界面内）。



2. 命令行

点击  按钮可显示/隐藏命令行。



3. PID喷头检测

点击进入检测页面，设置喷头检测温度后，点击开始检测，根据提示确认检测完毕后，系统会自动保存。



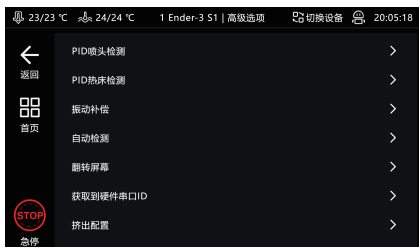
4. PID热床检测

点击进入检测页面，需要设置热床检测温度后，点击开始检测，根据提示确认检测完毕后，系统会自动保存。



5. 振动补偿

传感器安装支架下载地址：<https://www.creality.com/pages/downloadEco-system>。进入配置，高级设置，点击振动补偿。



5.1 类似Ender-3 S1热床在Y轴上机。

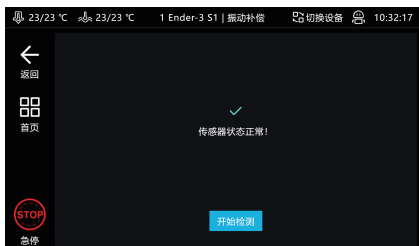
5.1.1 进入振动补偿页面，选择当前机器类型后点击下一步。



5.1.2 按图所示连接和安装传感器后，点击下一步。



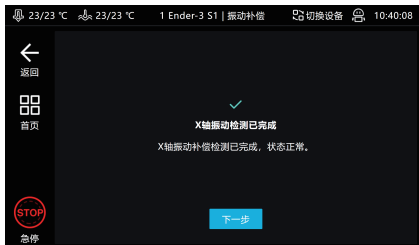
5.1.3 等待传感器确认正常后，点击开始检测。



5.1.4等待打印机归零后开始X轴振动补偿检测



5.1.5 X轴振动补偿检测完毕后点击下一步



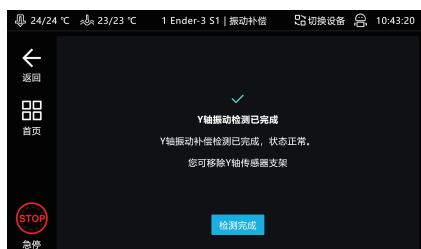
5.1.6 按图所示将传感器安装至Y轴后点击下一步



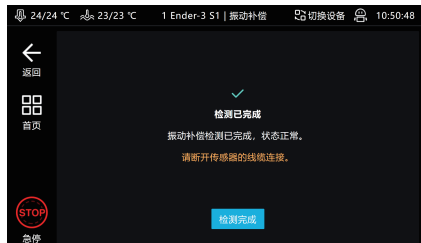
5.1.7 等待Y轴振动补偿检测完成。



5.1.8 Y轴振动补偿检测完成后即可拆除传感器支架。



5.1.9 振动补偿检测完成后请将传感器拆下，断开线缆连接（数据已保存）。



5.2 类似Ender-5 Plus热床不在Y轴机型

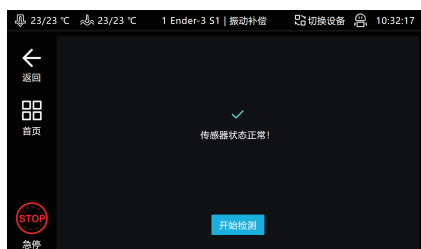
5.2.1 进入振动补偿页面，选择当前机器类型后点击下一步。



5.2.2 按图所示连接和安装传感器后，点击下一步。



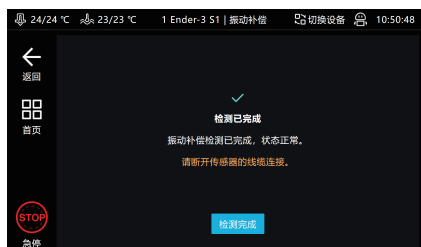
5.2.3 等待传感器确认正常后，点击开始检测。



5.2.4 等待打印机归零后开始振动补偿检测。

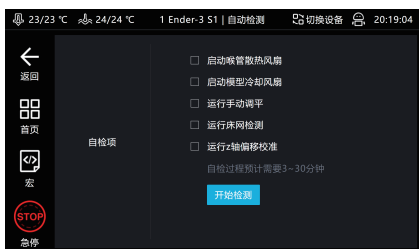


5.2.5 振动补偿检测完成后请将传感器拆下，断开线缆连接（数据已保存）。



6. 自动检测

自检项可自由选择，选取后，点击开始检测，跟随引导即可完成检测，完成后需要保存配置。



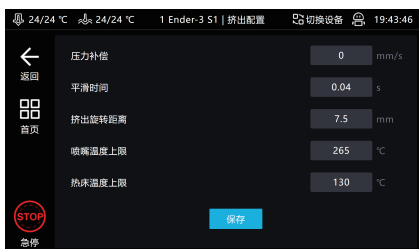
7. 屏幕翻转，点击确定，屏幕将翻转180°。



8. 获取硬件串口ID，点击获取，获取主板串口ID，用于自定义机型参数设置。




9. 挤出配置，按照打印机配置调整挤出参数与温度上限。



十. 延时摄影

1. 在关机状态下，将摄像头连接到Creality Sonic Pad USB接口，进入配置页面点击摄像头。



2. 进入摄像头页面，点击摄像头图标，勾选连接摄像头；点击此页面右下角的  标志，进入设置页面。



3. 点击启动后自动连接，摄像头会在Creality Sonic Pad 开机时启用，点击启用延时摄影，摄像头工作时，将对打印的模型按照设置的层数和渲染方式进行拍照。



4. 在关联打印机选项可切换USB接口，拍摄对应打印机的照片。



5. 拍摄完毕后会生成延时摄影文件，点击此页面右下角  图标进入查看。



6. 进入延时摄影文件存放文件夹，展示文件缩略图和打印信息，点击展示列表可进入文件管理模式。



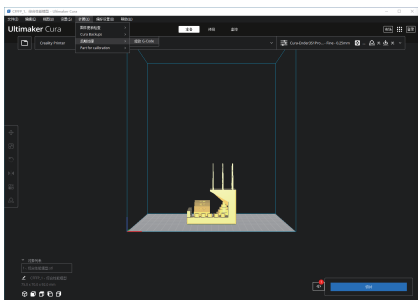
7. 进入文件管理模式，可选择播放，导出，删除视频。



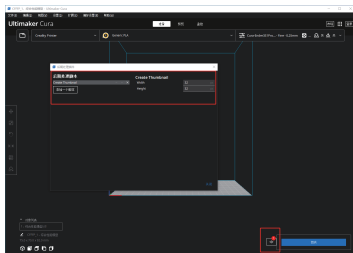
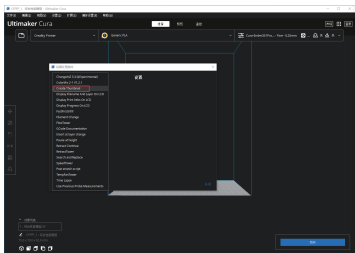
十一. 切片软件显示预览图和缩略图

1. Ultimaker Cura 5.1.0

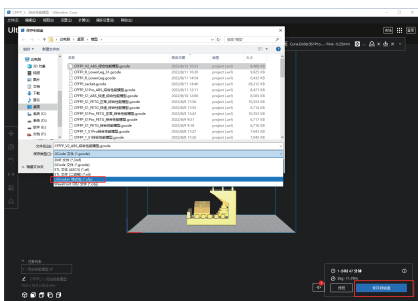
1.1 添加缩略图，选择“扩展”-“后期处理”-“修改G-code”。



1.2 按图所示添加后期处理脚本，成功后脚本提示框会出现红点提示。

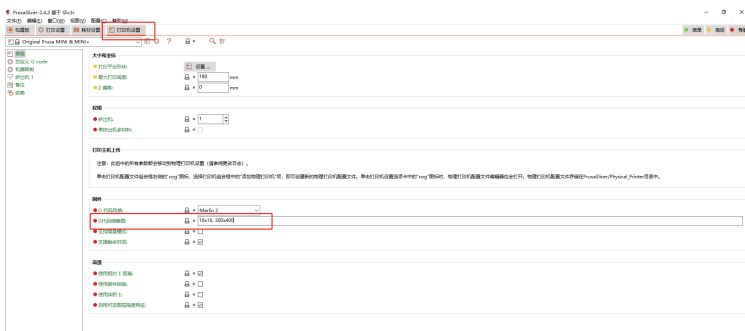


1.3 切片完成后，以ufp格式导出，使用U盘或WEB端上传Credity Sonic Pad将自动生产带预览图的切片G-code文件。



2. PrusaSlicer 2.4.2

2.1 添加缩略图和预览图，在“打印机设置”中修改“G代码缩略图”大小，即可添加自定义大小的缩略图和预览图。



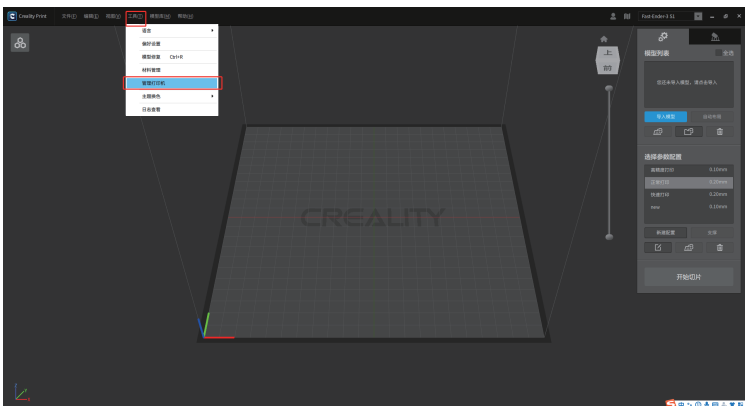
3. SuperSlicer 2.3.5

3.1 添加缩略图和预览图，在“打印机设置”中修改“缩略图大小”，即可添加自定义大小的缩略图和预览图。

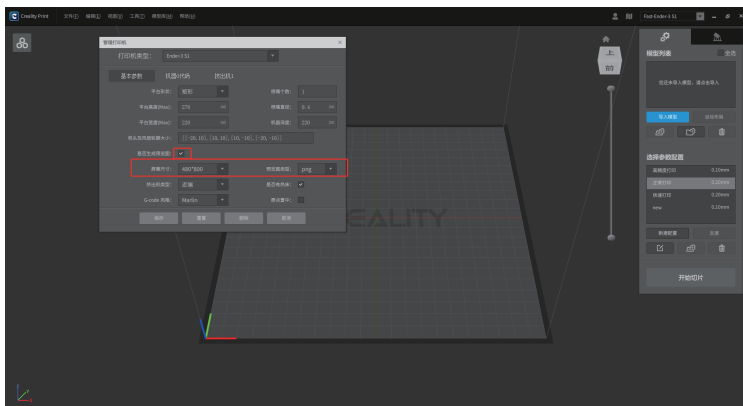


4. Creality Print

4.1 添加缩略图和预览图，选择“工具”-“管理打印机”，进入打印机管理界面。



4.2 打印机管理界面勾选“是否生成预览图”，并选择预览图大小，即可添加自定义大小的预览图。



十二. 自定义机型适配

1. 自定义机型配置流程

1.1 升级打印机固件

可通过Creality Sonic Pad内的打印机固件工具配置打印机固件。



1.2 配置printer.cfg

配置教程请在官网查看

<https://www.creality.com/pages/download> → Ecosystem

1.3 在Creality Sonic Pad上配置自定义机型。

2. 打印机固件工具入口

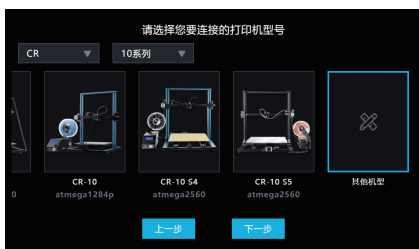
2.1 已连接打印机时

进入配置---其他设置---打印机固件工具。



2.2 未连接打印机时

2.2.1 选择机型界面，选择其他机型。



2.2.2 主板固件编译。

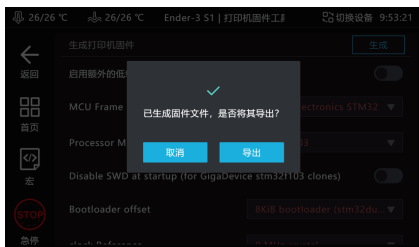


3. 配置固件

3.1 请按照主板参数配置选项后点击生成。



3.2 生成固件后导出。



3.3 按提示导出U盘或者通过USB数据线升级打印机固件。



4. 配置自定义机型

4.1 将U盘插入Credality Sonic Pad后点击下一步

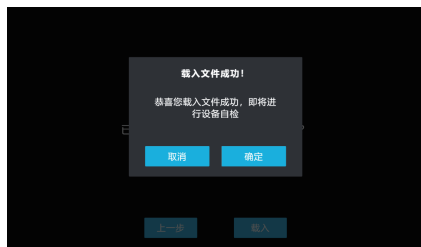
(请先升级打印机固件和配置printer.cfg，并将打印机与Credality Sonic Pad通过USB数据线连接)。



4.2 检测到printer.cfg文件后点击载入。



4.3 载入成功后将进行打印机自检。



4.4 进入自检流程后, 请按照屏幕指示操作。自检完成后会重启系统, 重启完成进入主页面后, 即可开始使用自定义机型。



十三. WEB操作端的使用

1. 获取Creality Sonic Pad IP地址

进入”配置-网络设置-无线网络/有线网络”，获取Creality Sonic Pad当前局域网IP地址。



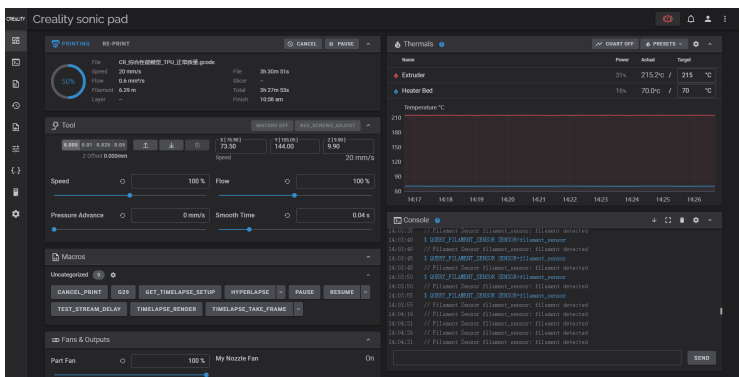
2. 获取Creality Sonic Pad序列号 (DN号)



3. 登录fluidd局域网后台

确定PC和Creality Sonic Pad在同一局域网的情况下，将获取到的IP地址输入到浏览器，或使用局域网域名spad-DN.local，DN为屏幕序列号前四位。

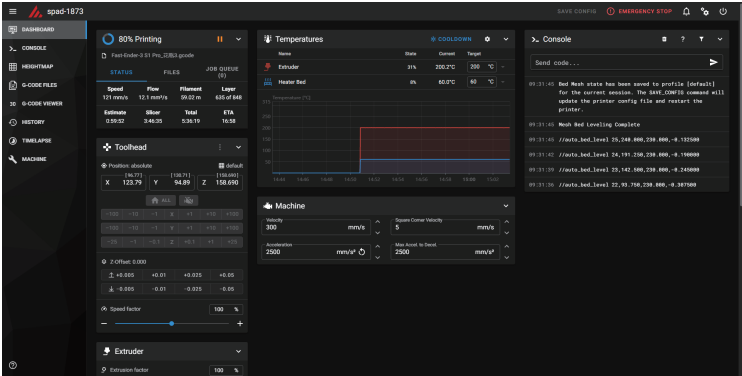
(示例：<http://172.23.214.236>或<http://spad-8888.local>)



4. 登录mainsail局域网后台

确定PC和Creality Sonic Pad在同一局域网的情况下，在获取到的IP地址后增加：8819并输入到浏览器

(示例：<http://172.23.214.236:8819>)



十四. SSH账户

账号：creality

密码：creality

SSH 指令格式：`ssh creality@172.23.209.153`（示例，请按照WEB端的说明获取IP地址）。

十五. FAQ

请登录官网查看更多常见问题的解决办法:

https://www.creality.com/pages/faq?spm=..page_1934481.header_1.1 → Ecosystem

● 为什么会出现在线升级失败?

1. 检查网络是否正常,需要保证网络正常才可下载升级包;
2. 网络正常的情况下如果提示“下载失败”, 请查看本机是否有大于500MB空间,如空间不足, 应尝试清理部分切片文件或延时摄影视频文件保证可用空间大于500MB再尝试升级;
3. 网络正常且可用空间足够时若还提示“升级失败”, 需联系售后处理。

● 打印过程中终止打印?

1. 检查打印机与Creality Sonic Pad连接是否正常;
2. 检查Creality Sonic Pad和打印机电源连接是否正常。

● 延时摄影为什么没有拍摄成功?

1. 进入配置-摄像头查看是否有实时画面, 如无画面应先开启;
2. 确认摄像头为通用摄像头, 并已打开实时画面;
3. 进入配置-本机信息查看本机容量是否不足;
4. 检查是否已开启延时摄影, 延时摄影拍摄频率是否设置正确 (频率应小于切片层数)。

● 谐振补偿自动侦测时, 振动传感器应该安装在什么位置? 有无方向要求?

振动传感器应该安装于打印喷头上, 可以使用我司提供的模型文件打印支架, 然后使用螺丝紧固于支架上, 无方向要求。

● 为什么打印的模型边缘质量不好? 切片时加速度、速度设置多少合适?

可参考我司提供的切片软件配置参数, 默认支持的机型 (Ender-3 V2 / Ender-3 S1 / Ender-3 S1 Pro) 可直接在切片软件中导入对应的参数配置文件。

● 为什么U盘读取异常?

1. 检查U盘是否正常, 将U盘插入电脑, 尝试修复U盘文件系统或格式化, 或更换U盘重试;
2. 检查USB接口是否正常, 换其它USB接口尝试;
3. 如采用读卡器方式, 请尝试更换读卡器 (或者存储卡) 来判断功能是否正常。

● 怎么配置文件才能兼容断料检测功能?

配置文件中添加

```
[filament_switch_sensor filament_sensor]
```

```
pause_on_runout: true
```

```
switch_pin: ^!PC15
```

注意! switch_pin需要确认为断料检测器连接PIN。

● 为什么一直无法成功连接打印机？

- 1.检查打印机是否通电；
- 2.检查打印机固件是否为正确的版本；
- 3.检查配置文件是否正确匹配；
- 4.检查USB连接是否正常；
- 5.检查当前Creality Sonic Pad软件版本是否为最新版本。

● 为什么打印错层？

- 1.检查X, Y轴电机是否正常，皮带是否松动；
- 2.确认切片打印速度和加速度是否超过打印机正常范围，适当调整打印速度和加速度（可参考我司提供的切片参数）。

● 为什么打印时拉丝严重？

需要确认切片文件相关参数（是否启用回抽，回抽距离，回抽速度，打印速度等）与连接的打印机机型是否匹配，如不匹配需要重新调整参数并重新切片。

● 为什么无法连接WIFI网络？

- 1.可尝试搜索其他WIFI并尝试连接，确认是否可以正常连接；当前设备支持WPA2的加密方式，不支持WPA3，且只支持2.4G频段；
- 2.检查密码正确性，检查路由器是否正常。

● 如何将延时摄影文件传输到PC上？

- 1.fluiddd下载：PC浏览器打开设备WEB页（参照使用说明），在延时摄影菜单下下载；
- 2.U盘下载：插入U盘后，在配置-摄像头-延时摄影视频-视频详情页面点“导出”按钮，导出视频文件到U盘，再从U盘复制到PC上。

● 为什么我的摄像头连接上之后无法正常使用？

- 1.Creality Sonic Pad默认开机加载摄像头设备；如果在开机后再插入摄像头，选中摄像头并选择启用后，摄像头显示已启用，等待2分钟方可出现画面（有时需要再切换一下页面），或插入摄像头后重启Creality Sonic Pad后可出现画面；
- 2.某些摄像头是定制化摄像头，未采用YUV和Mjpeg格式输出，可尝试更换摄像头再使用；
- 3.拔出摄像头改用U盘查看USB是否正常，如不正常请联系售后处理。

● 针对非默认机型如何编译固件及修改配置文件？

请参考我司提供的打印机适配指引链接。

● 开机引导或一键换机时Ender3 V2机型无法连接如何处理？

开机引导或一键换机选择机型时应根据实际状况选择,主板版本需拆机查看，Ender-3 V2机型的四种选择对应关系；

- a.[机型图左上角CR Touch标志]Ender-3 V2 (V4.3.1或V4.2.2)：对应已安装CR Touch的机型，主板版本为V4.3.1或V4.2.2
- b.Ender-3 V2 (V4.3.1或V4.2.2)：对应未安装CR Touch的机型，主板版本为V4.3.1或V4.2.2
- c.Ender-3 V2 (V4.2.7)：对应未安装CR Touch的机型，主板版本为V4.2.7
- d.[机型图左上角CR Touch标志]Ender-3 V2 (V4.2.7)：对应已安装CR Touch的机型，主板版本为V4.2.7

- 为什么把SD卡插入打印机，在Creality Sonic Pad找不到对应文件？

请将文件存于U盘，插入Creality Sonic Pad USB接口，便可读取到相应文件。

- 如何选择摄像头？

自行选择通用摄像头或参考本司提供的推荐摄像头列表

- 1 罗技920
- 2 罗技C270i
- 3 HIKVISION DS-E12
- 4 蓝色妖姬T3300
- 5 PHILIPS SPL6506BM
- 6 炫光M600

- 为什么断电后无法续打？

音速屏暂时不支持断电续打功能。

- 如何生成延时摄影文件？

文件打印完成后才会生成摄影文件，打印中途停止，断电，拔出摄像头等，都无法生成延时摄影文件。

- 暂停打印后，恢复继续打印时，报错超范围？

打开切片软件的打印机设置选项，在起始Gcode中其他运动指令前加入G90指令。
推荐使用Creality Print切片软件，已默认添加需要的起始Gcode指令。

- 如何导入用户自定义配置文件？

使用WebUI，进入配置文件选项，点击上传用户自定义配置文件。

- 为何打印过程中调整Z轴高度后，打印完毕才弹出提示框，提示保存？

打印过程中，调整Z轴对当前打印是生效的，打印过程中保存的话会触发SAVE_CONFIG，使得打印机断连，导致打印失败，所以调整为打印完毕后保存。

- 如何导出日志？

- 1.处于首页或打印中页面：插入U盘，点击“配置”--“其它设置”--“导出日志”，选择好导出位置后点导出按钮，默认导出位置为U盘根目录
- 2.处于断连页面：插入U盘，点击“设置”--“导出日志”，选择导出位置后点导出按钮，默认导出位置为U盘根目。

中国制造



加入Facebook社区

<https://www.facebook.com/groups/sonicpad>

400-6133 882

cs@creality.com



深圳市创想三维科技股份有限公司

公司官网: www.creality.cn 服务热线: 400 6133 882

电子邮箱: cs@creality.com

办公地址: 深圳市龙华区民治街道新牛社区梅龙大道锦绣鸿都大厦18F

工厂地址: 深圳市龙华区大浪街道浪口社区华旺路156号厂房

