

**EN-A01** 

**Creator 3 Pro** 

# USER GUIDE



This guide is only applicable to FLASHFORGE Creator 3 Pro 3D printer

#### **PREFACE**

Note: Every 3D printer has undergone printing test before leaving factory. If there are some residues in the extruder of the equipment or some slight scratches on the build plate, it is normal and will not affect its use.

Dear Flashforge users, thank you for choosing Flashforge products. Thank you for your great support and help for Flashforge. Please read this guide carefully before use and follow the instructions strictly. The whole Flashforge team will provide you with superior service. No matter what problems you encounter during use, please contact us according to the phone number and email address provided at the end of the guide.

In order for you to better experience our products, you can also acquire skills about the equipment operation from the following sources.

#### (1) User Guide:

Please unpack the box carefully. Then you can take out the attached documents from the top foam or browse the latest user guide from the USB disk. This will help you familiarize yourself with the equipment and successfully complete your first printing.

#### (2) Official Flashforge Website:

Flashforge Chinese website: www.sz3dp.com Flashforge English website: www.flashforge.com

You can visit the Flashforge official website to obtain information about related software and hardware, contact information, equipment operation, equipment maintenance and other related information.

#### **NOTICE**

#### PLEASE STRICTLY FOLLOW ALL THE SAFETY WARNINGS AND NOTICES BELOW ALL THE TIME.

#### **WORK ENVIRONMENT SAFETY**

- Keep Creator 3 Pro's work table clean and tidy.
- Do not operate Creator 3 Pro in the presence of flammable liquids, gases or dust. (The high temperature generated by equipment operation may react with airborne dust, liquids, and combustible gases and cause fire.)
- Keep Creator 3 Pro out of children and untrained persons' reach.

#### **ELECTRICAL SAFETY**

- Make sure to use Creator 3 Pro with a properly grounded outlet. Do not refit Creator 3 Pro's plug. (Ungrounded/improperly grounded/modified plug will inevitably increase the risk of electric leakage.)
- Do not expose Creator 3 Pro to damp or hot-sun environment. (Humidity will increase the risk of electric leakage./Exposure to sunlight will accelerate the aging of plastic parts.)
- Make sure to only use the power supply provided by Flashforge.
- Do not use Creator 3 Pro during an thunderstorm.
- Please shut down Creator 3 Pro and unplug it if it is not in use for a long time.

#### **PERSONAL SAFETY**

- Do not touch the extruder and build plate, etc during printing.
- Do not touch the extruder when finishing printing.
- Dress properly. Do not wear scarves, masks, gloves, jewelry ornaments or other objects that can easily get caught in the equipment when operating it.
- Do not operate Creator 3 Pro while you are tired or under the influence of drugs, alcohol or medication.

#### **CAUTIONS**

- Do not leave the running equipment for a long time.
- Do not make any modifications to the equipment.
- Please keep the distance between the extruder and the build plate for at least 50mm during filament loading operation. (Too-close distance may cause extruder blockage.)
- Operate the equipment in a well-ventilated environment.
- Do not use the equipment for illegal activities.
- Do not use the equipment to make any food storage products.
- Do not use the equipment to make any electrical appliances.
- Do not put the printed model into your mouth.
- Do not remove the printed models with brute force.
- Do not connect the equipment with the network cable longer than 3m.

#### **ENVIRONMENT REQUIREMENTS**

Temperature: RT 15-30℃Humidity: 20%-70%

#### **EQUIPMENT PLACING REQUIREMENTS**

• The equipment must be placed in a dry and ventilated environment. The distances of the left, right and rear side space of the equipment should be at least 20cm, and the distance of the front side space should be at least 35cm.

#### **COMPATIBLE FILAMENT REQUIREMENTS**

When using the equipment, please use Flashforge filaments or other filaments provided or specified by Flashforge.
 There is a wide variety of filaments on the market with varying quality. Poor quality or incompatible filaments can easily cause extruder blockage and extruder damage.

#### **FILAMENT STORAGE REQUIREMENTS**

• Do not unpack the filament until it is needed for use. Please store the filament in a dry and dust-free environment after unpacking.

#### **LEGAL NOTICE**

- Do not copy or print any items prohibited by law.
- According to local laws, it is generally illegal to copy or print the following items:
  - 1. Gun
  - 2. Copy works protected by the copyright. Some copyrighted works may be allowed to be partially copied for "fair use". Multiple copies will be regarded as improper use. Artistic works are equivalent to copyrighted works.
- The above list is for reference only and does not include all contents. Flashforge shall not be liable for its completeness or accuracy. If you have questions regarding the legality of copying or printing certain items, please consult the legal counsel.

#### **LEGAL STATEMENT**

- The user has no right to make any modification to this user guide.
- Flashforge will not be responsible for any safety accidents caused by disassembly or modification of the equipment by the customer. No one is allowed to modify or translate this guide without the permission of Flashforge.
- This guide is protected by copyright, and Flashforge reserves the right of final interpretation of this guide.
- Flashforge reserves the right to modify the guide due to subsequent equipment upgrades.
- First Edition (July 2021)
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### **SERVICE**

• Unplug the Creator 3 Pro before performing any service procedures. Failure to do so may result in personal injury and equipment damage. Only filaments and components approved by Flashforge can be used, otherwise the warranty may be invalid.

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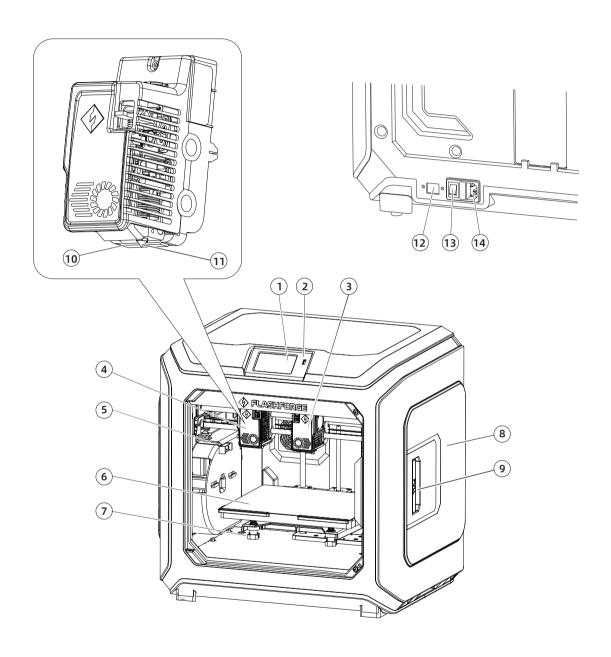
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# **Equipment Parameter**

Printer Name	Creator 3 Pro
Number of Extruder	2, independent
Printing Technology	Fused Filament Fabrication(FFF)
Touch Screen	4.3-inch color IPS Touch Screen
Build Volume	300×250×200mm
Layer Height	0.05 - 0.4mm
Printing Accuracy	±0.2mm
Positioning Accuracy	Z axis: 0.0025mm; XY axis: 0.011mm
Printing Filament	PLA/ABS/PETG/PA/PC/HIPS/ASA/PLA-CF/ PETG-CF/PACF/WOOD filament
Filament Diameter	1.75mm (±0.07mm)
Extruder Diameter	0.4mm
Printing Speed	10~150 mm/s
Software	FlashPrint
Supported Format	Input: 3MF/STL/OBJ/FPP/BMP/PNG/JPG/JPEG Output: GX/G
Operation System	Win XP/Vista/7/8/10、Mac OS、Linux
Printer Size	627×485×615mm
Net Weight	40Kg
Connectivity	USB Stick, Wi-Fi, Ethernet

# 1. Equipment Introduction

### 1.1 Creator 3 Pro Introduction



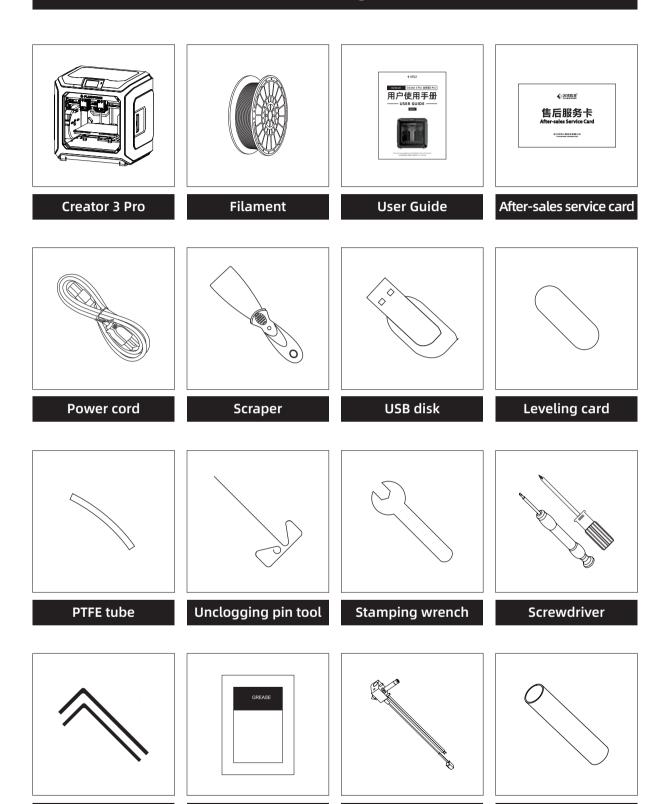
- 1. Touch screen
- 5. The anti-oozing metal plate 9. Filament holder cover handle 13. Power switch

- 2. USB disk port
- 6. Build plate
- 10. Wind guide nozzle
- 14. Power cord entry

- 3. Right extruder 7. Leveling nut 4. Left extruder

  - 8. Filament holder cover
- 11. Nozzle
- 12. Ethernet port

# 1.2 Packing List



Nozzle kit

Nozzle support tube

Lubricating grease

Allen wrench

# 1.3 Precautions for Unpacking the Equipment

- 1. Take out the top accessories and pearl cotton.
- 2. Remove the tape from the machine.
- 3. Take out the internal pearl cotton block.





4. Remove the buckles on the X-axis and Y-axis synchronous belts.





5. Connect the printer to the power supply, after power on, and then click [Tools] and [Manual] in turn on the touch screen to enter the manual control interface.

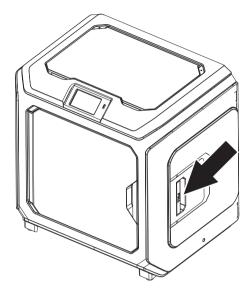




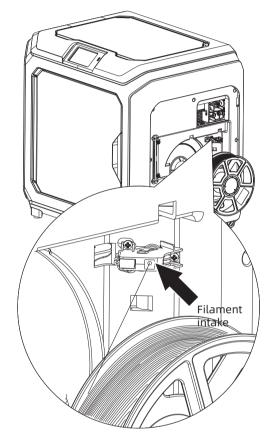
6. Press and hold [Z-] continuously until the build plate rises to a higher position, and then take out the foam block below.

# 2. Preparation for Printing

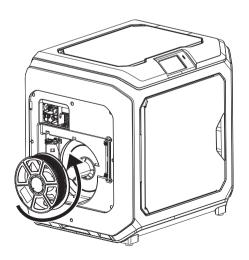
# 2.1 Filament Loading

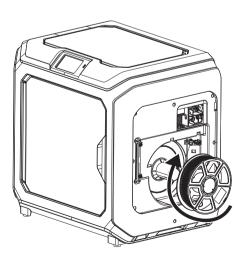


1. Open the filament holder cover.



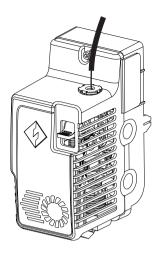
2. Take out the filament and insert it into the filament feeding inlet.



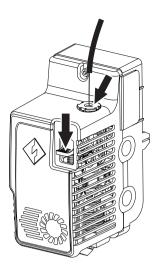


3. Attention: To facilitate smooth rotation of the filament, please install the filament in the direction shown in the figure.

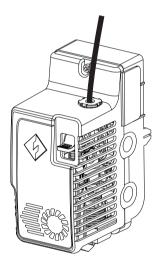
When installing the left-side filament, please make it run in the counterclockwise direction; When installing the right-side filament, please make it run in the clockwise direction.



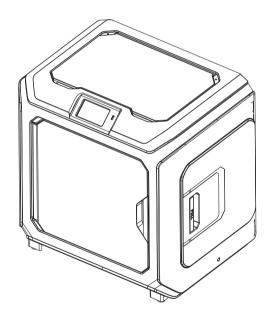
4. Insert the filament into the filament feeding inlet continuously until the filament goes through the filament guide tube.



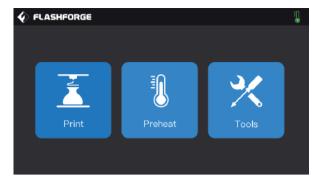
5. Press the filament feeding pressing plate in front of the extruder, insert the filament vertically into the extruder until it can't be inserted any further, and then loosen the filament feeding pressing plate.



6. Insert the filament guide tube into the filament inlet hole on the extruder to fix.



7. Finally, fix the filament spool on the filament spool holder and close the cover.





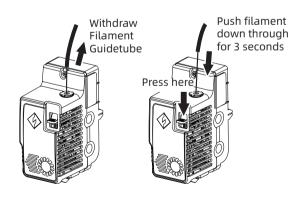






8. Filament feeding operation: Click the [Tools]-[Filament] button on the screen in turn, and set a reasonable heating temperature according to the required temperature value of the material; Operate according to the screen prompts, and wait for the nozzle to extrude uniform filament smoothly.





Filament unloading operation: Click [Unload], press down the filament pressing plate after the extruder temperature heating is completed, pull out the white filament guide tube, and pull out the filament upward quickly and then filament unloading is completed.

# 2.2 Leveling and Calibration

The equipment has been leveled and calibrated before leaving factory. However, the leveling plane may be damaged due to the vibration generated during transportation. It is recommended to perform leveling before the first printing. There are two leveling modes: auxiliary leveling mode and manual leveling mode. In the auxiliary leveling mode, all execution will be completed with the help of the extruder sensor and auxiliary prompts. When the function option is in the manual mode, the platform leveling in the auxiliary mode will not activate the sensor function.

In total, the equipment contains the following leveling calibrations: Platform Leveling, Calibration XY, Calibration Z and Auto level;

Please operate in the following order:

- 1. Click [Tools] and [Level Calibration] on the touch screen;
- 2. Select the auxiliary mode for leveling and calibration;
- 3. The extruder sensor calibration has been set before leaving factory, so there is no need to operate again; Click platform leveling and operate following the prompts on the screen.
- 4. Perform Z-axis calibration and operate following the prompts on the screen;
- 5. The X, Y axis have been calibrated before leaving factory, so there is no need to operate again;
- 6. The whole leveling and calibration is completed.





9-point leveling function: when the printing flatness is still poor after the platform leveling and XY/Z axis calibration, this function can be used to compensate for better flatness;



Manual leveling mode: Execute platform leveling, Z-axis calibration and X, Y axis calibration in turn. This is a complete set of leveling and calibration operation procedures.

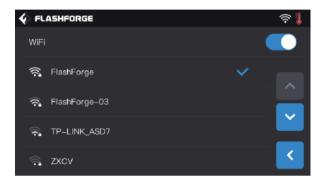
### 2.3 Internet Connection

#### · Wired network connection

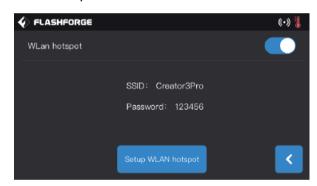
Plug the network cable into the equipment's network port, and an icon appears in the upper right corner of the screen, indicating that the equipment is successfully connected to the network.

#### · WLAN network connection

Click [Tools]-[Setting]-[WiFi] on the main interface of the touch screen of the equipment, turn on the WLAN and select the network to be connected. The icon papears in the upper right corner of the screen, indicating that the equipment is successfully connected to the network.



#### · WLAN hotspot connection



1. Click [Tools]-[Setting]-[WLan hotspot] on the main interface of the touch screen of the equipment, turn on the hotspot of the equipment. You can freely set the name and password of the hotspot. The icon appears in the upper right corner of the screen, indicating that the device has successfully turned on the hotspot.



2. Search for the hotspot you set with your laptop, connect it, and enter the password.

Note: If you have more than one Creator 3 Pro at the same time, please go to the WLAN hotspot setting to modify the hotspot names separately.

# 3. FlashPrint Installation

Method 1: Find the FlashPrint software installation package in the USB disk and select the corresponding system version for installation.

Method 2: Download the latest slicing software from the official Chinese website (www.sz3dp.com) or the official English website (www.flashforge.com) for installation.

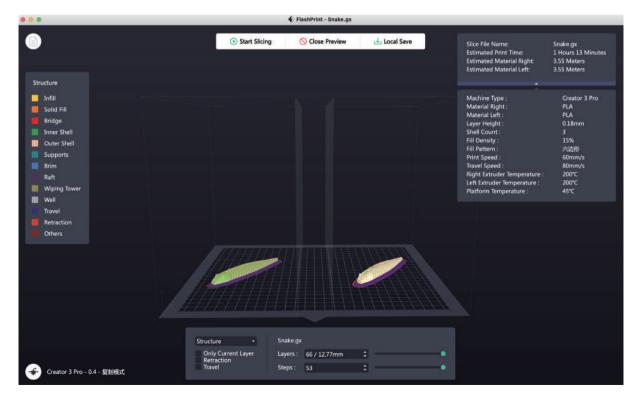
#### 3D printing process:

Get the model file - Slice with the slicing software - Transfer the file to the printer for printing.

# 4. First Printing

### 4.1 File Transfer: Wi-Fi transfer

Import the STL or OBJ file to FlashPrint for slicing, select Creator 3 Pro to connect to the machine (or by entering the IP address or by auto-scanning, while the IP address can be viewed in Device [About]). Then it will be sent directly to the printer after slicing is completed.



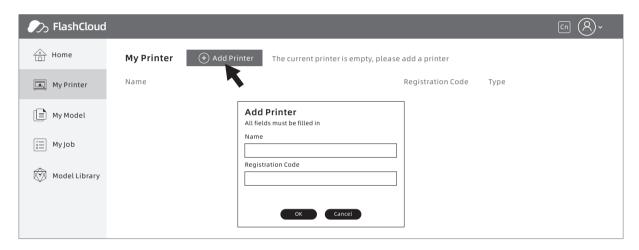
# 4.2 Printing via USB Disk

The equipment can perform printing via USB disk: save the sliced file to the USB disk, insert the USB disk into the equipment, and select the corresponding file to print.

# 4.3 Printing via FlashCloud

1. Enter the FlashCloud website, register your account, and then you can log in and use it after the email activation.

FlashCloud: https: cloud.sz3dp.com



2. Click [My Printer] - [Add Printer].

Fill in the registration number (cloud registration code) on the Add Printer page, and name the printer. After clicking OK, these information will appear in the FlashCloud interface of the printer.

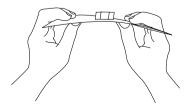
#### 4.4 Model Removal



Notice: Wait for the platform to cool down before operating.

Warning: Please be careful when removing the model from the build plate with hand tools. Sudden tool slippage and improper body position when removing the model from the build plate may result in personal injury.

Attention: Do not scratch the build plate when removing the model. Scratches in the build plate will lead to model creation errors.



Remove the magnetic steel plate and bend it and the model can be removed.

# 5. Equipment Configuration and Operation

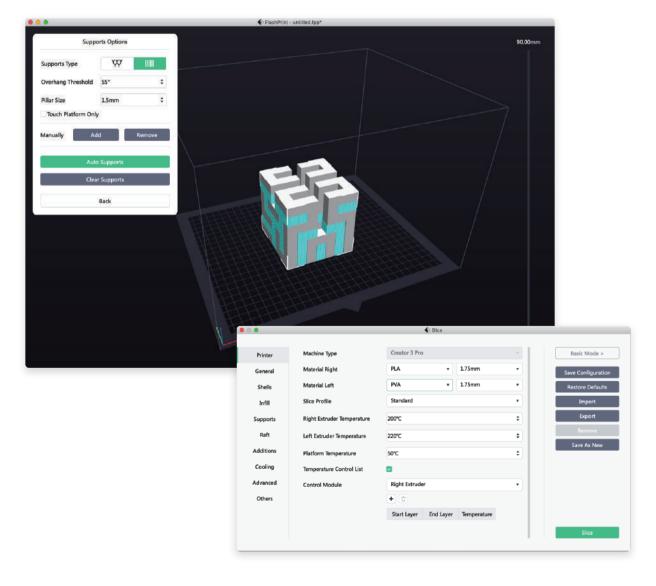
### **5.1 Dual-extruder Printing Mode Setting**

When printing dual-color/dual-filament models in thre dual-extruder printing mode, please make sure the nozzles are in contact with the anti-oozing plate. This will prevent the nozzles from overflowing during the printing process.

Creator 3 Pro defaults to the left extruder as the filament supporting extruder and the right extruder as the printing extruder. When printing a single-color model, the right extruder is automatically used as the printing extruder if not set by the user. The following modes can be set for printing:

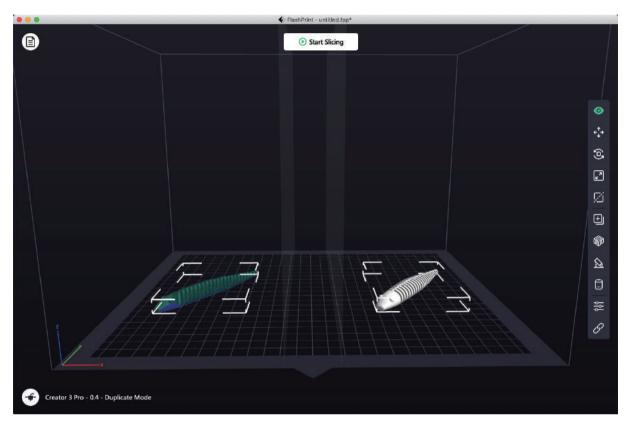
In the expert mode:

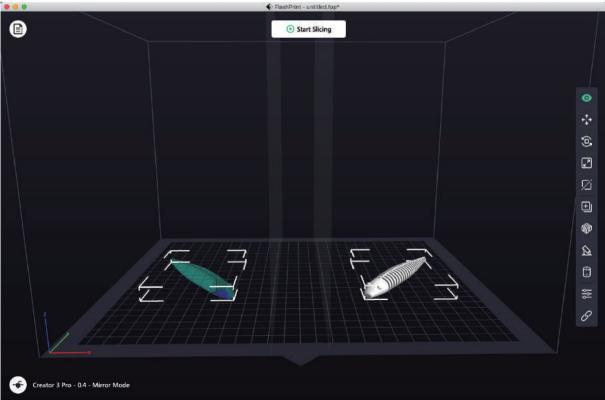
- 1. Load the model;
- 2. Select the support type, and click ;
- 3. Add the support automatically, and click [Supports] > [Auto Supports];
- 4. Click [Start Slicing], entering the parameter configuration screen;
- 5. Select the configured filament, such as Creator 3 Pro PLA + PVA;
- 6. Click [Slice].



# **5.2 Mirror/Duplicate Mode**

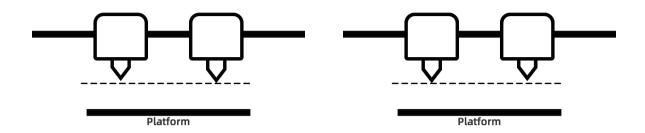
If you want to print two identical or mirror models, please choose the mirror/duplicate mode. In this mode, the left and right extruders will print the models at the same time. (Note that when in the mirror/duplicate mode, the X-axis size of the model only supports the models smaller than 133mm.)





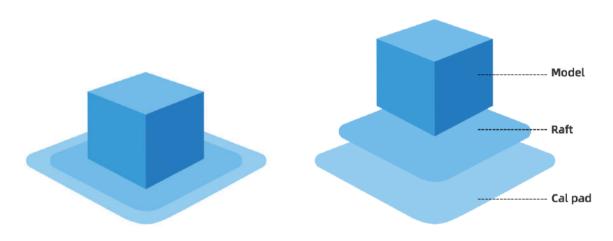
#### Compensation layer in the mirror/duplicate mode

**Mirror/duplicate mode:** Since the heights of the left and right extruders are different after installation, the software will automatically add a compensation layer to compensate for the height difference when slicing, so that the printing heights of the left and right sides are consistent. Z-axis calibration is based on the right extruder, and the height difference between the left and right extruders is recorded.



When the distance between the right extrudemr and the platform is small, the left extruder prints the compensation layer.

When the distance between the left extruder and the platform is small, the right extruder prints the compensation layer.



When the height difference is less than 0.2mm, the compensation layer is not printed.

The compensation layer is printed first, and it is easy to be removed by adhering to the raft. If the raft printing is not performed, the compensation layer will be directly applied to the model, which is difficult to remove.

## **5.3 Filament Configuration**

Creator 3 Pro is equipped with two independent extruders. It can be used for printing PLA, ABS, PETG, Nylon, PC, HIPS and PVA filaments. Creator 3 Pro's left extruder print support filaments by default.

Please refer to the table below for the combination of independent dual-extruder extrusion filaments.

#### Soluble filament combination:

Left extruder	Right extruder	
PVA	PLA	
PVA	NYLON	
HIPS	ABS	
HIPS	ASA	
HIPS	PC	
HIPS	PETG	
HIPS	HIPS	

PVA: Soluble in water; HIPS: Soluble in limonene.

#### Insoluble filament combination:

Left extruder	Right extruder
PLA	PLA
ABS	ABS
ASA	ASA
PC	PC
PA	PA
PETG	PETG
PA-CF	PA-CF
PA-GF	PA-GF

Note: Creator 3 Pro can print nylon carbon fiber and nylon glass fiber. However, because the nozzle is not made of high-strength material, it will cause wear on the nozzle. Therefore it is estimated that the nozzle needs to be replaced when printing one roll of 1kg nylon carbon fiber filaments. This situation can be switched to high-strength nozzle printing.

#### Storage of PVA/PA filaments

PVA filaments are water-soluble and have strong water absorption. Filaments will soften when absorbing water, which will easily lead to printing failure. PVA filaments should be placed in a drying box when printing. PA/PVA storage needs to be sealed and dried.

## 5.4 Filament Setting

For best results, each filament requires different settings.

If a model is prepared using FlashPrint, these settings will automatically be set correctly if the correct extruder and filament are selected.

#### Adaptability of filament parameters

Different filament brands correspond to different filament characteristics, so it is recommended to use the expert mode to fine-tune the parameters to ensure better printing quality when using Creator 3 Pro.

- Thickening the first layer height, and increasing the amount of the first layer filament output is conducive to the adhesion of the first layer;
- Please set the raft temperature at 45°C when printing small models with PLA (or ambient temperature is higher than 25°C);
- Please set the raft temperature at 70°C when printing large models with PLA (or ambient temperature is lower than  $10^{\circ}$ C);
- When using PVA support, it is recommended that the support speed be reduced to 40%.

For all materials supported by Creator 3 Pro, it is recommended to apply a thin layer of glue (using the glue stick in the accessory box) on the build plate before starting printing, which will ensure that the finished printing work adheres well to the build plate.

### 5.5 Removal Method of Water-soluble Support Filament

Models using PVA as the support filament require some subsequent treatment to remove the PVA support filament. This can be done by dissolving the PVA in water.

#### 1. Soak the model in water

The PVA model can be dissolved slowly by putting it into water. You can use the following methods to speed up the dissolution process:

- Using hotter water can reduce the dissolution time. If the construction material is PLA, please make sure that the maximum temperature of the water does not exceed 35°C to avoid PLA deformation. If it is of nylon, please make sure the water temperature does not exceed 50°C to prevent burning.
- Using stirred/flowing water can significantly reduce the dissolution time. PVA dissolves faster when water flows.
- Soak the model in water for about 10 minutes first, then remove most of the support with pliers, and then put the model back in water, so that PVA can be dissolved more easily.

#### 2. Wash with water

After the PVA support is completely dissolved, rinse the model with water to remove the remaining PVA.

#### 3. Dry the model

Dry the model completely and then perform additional post-processing on the model if necessary.

#### 4. Waste water treatment

Since PVA is biodegradable, it is easy to dispose of waste water afterwards. When the waste water pipeline is connected with the waste water treatment unit, the waste water can be discharged through the waste water pipeline. After the disposal of the waste water, flush the drain pipe with hot water for 30 seconds to remove excess PVA in the drain pipe and avoid long-term blockage.

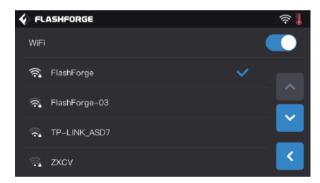
The water can be reused to soak multiple models, but it may increase the dissolution time. Therefore, it is recommended to use fresh water to achieve the fastest effect.

### **5.6 Camera Connection**

Before using the camera, please remove the cover at the front of the camera.



· WLAN network camera connection



1. Click [Tools]-[Setting]-[WiFi] in the main interface of the touch screen of the equipment in turn, turn on the WLAN network connection button and connect to the network.



2. Click [Tools]-[Setting]-[About] in turn in the main interface to query and record the equipment Wi-Fi IP address: 10.33.23.180 (The example is for reference only. The local IP address shall prevail.)



3. Open the browser, enter and go to the address 10.33.23.180:8080 (The example is for reference only. The local IP address shall prevail.), and click [Stream] to view the internal camera screen of Creator 3 Pro.

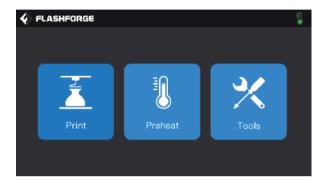
Note: The results of clicking [Stream] using a browser on a computer, mobile phone, or tablet computer are the same.

# 6. Equipment Operation Interface Introduction

▲ Note

Attention: The firmware is upgraded from time to time. Please refer to the actual display screen for the interface. The following is only a brief introduction of functions.

# **6.1 Printing Screen**



Click [Print] and select the model to be printed.



Select the path to read the printing file:

- 1. Read from the local memory card of the printer;
- 2. Read from the external USB disk.



#### Select the printing file from the file list

- 1. Print: Start printing;
- 2. **Copy:** Copy the file from the USB disk to the local memory card of the printer (This function is unavailable when local memory card printing is selected);
- 3. Delete: Delete this printing file.





#### Printing screen

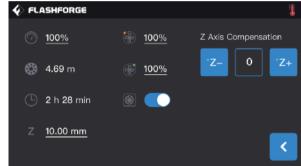
- 1. Stop: Cancel the printing operation;
- 2. Pause/Start: Pause printing/start printing;
- 3. **More:** Query or modify in real time during printing: light status, filament changing setting, printing progress, printing speed, filament usage, printing time and z-axis coordinates:
- 4. Left/right extruder temperature, build plate temperature: The temperatures can be modified during printing.

# Modify the left/right extruder temperature and raft temperature

When the extruder temperature reaches the target temperature value, click on the extruder temperature value after a underline appears. Select the number box, and click "-"and "+"to modify the set extruder temperature value.

Click [Yes] to save the set value; Click [No] to cancel the setting.

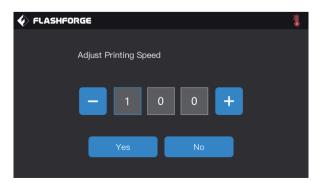




#### Click more buttons during printing

You can query or modify these in real time: filament changing setting, light-off setting, and printing details (printing speed, filament usage, printing time, and Z axis coordinates).

- 1. **Filament:** When you need to change the filament in the middle of printing, you can click the [Filament] button (This function is available after the printing is paused);
- 2. Light OFF: You can turn on or off the light in real time by clicking the [Light OFF] button during printing;
- 3. Details
  - a. Printing speed: You can click it to set the printing speed value during printing;
  - b. Filament usage: You can check the amount of the filament usage of the printing model (unit: meter);
  - c. Printing time: You can check the printing time;
  - d. **Z-axis coordinates:** You can check the Z-axis coordinates;
  - e. Z Axis compensation;
  - f. Back: You can cancel more commands and return to the printing screen.



#### Modify the printing speed

After starting printing, click on the printing speed value, select the number box, modify the set printing speed value by clicking "-" and "+", and click [Yes] to save the set value; Click [No] to cancel the setting.

# 6.2 Tools Screen





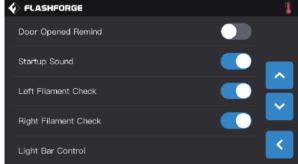
#### Tools screen function:

- 1. Filament: You can perform filament loading/unloading operation;
- 2. Level Calibration: You can level and calibrate the extruder and build plate values;
- 3. Home: You can make the X/Y/Z axis of the printer back to the mechanical origin;
- 4. Manual: You can manually adjust the position of X/Y/Z axis;
- **5. Setting:** You can set the relevant functions of the printer;
- **6. Status:** You can check the real-time status of the printer;
- **7. About:** You can check the version information of the printer, etc.

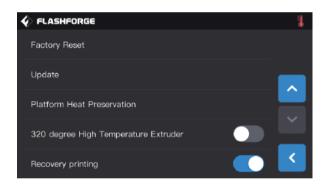
# **6.3 Setting Screen**

[Tools]- [Setting]Click the setting icon to enter the setting screen.





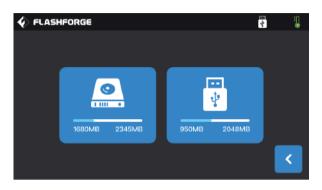
- 1. Language: To set the printer display language;
- 2. WiFi: To turn off/on the network connection;
- 3. WLan hotspot: To turn off/on the Wi-Fi hotspot;
- 4. FlashCloud: To turn off/on the cloud connection for downloading and printing function;
- 5. **Door Opened Pause:** To turn off/on the door-opened pause;
- 6. **Door Opened Remind:** To turn off/on the door-opened reminder prompt;
- 7. **Startup Sound:** To turn on/off the start-up sound of the machine;
- 8. **Left Filament Check:** To turn on/off the left filament inspection function;
- 9. **Right Filament Check:** To turn on/off the right filament detection function;
- 10. **Light Bar Control:** To turn on/off the light bar inside the machine;



- 11. Factory Reset: To return to factory settings;
- 12. Update: To reserve the updated function;
- 13. **Platform Heat Preservation:** After printing, the platform is still in heat preservation;
- 14. 320 degree High Temperature Extruder;
- 15. **Recovery printing:** Resume printing after recovering from power failure.

# 7. Maintenance

# 7.1 Copy the Log



- 1. Insert the USB disk, and an icon will appear in the upper right corner of the touch screen of the equipment.
- 2. Click the icon , wait for 10 seconds, and unplug the USB disk.
- 3. Insert the USB disk into the computer and open the USB disk folder to find the log file.
- 4. Please send the log file to Flashforge After-sales Service.

### 7.2 Maintenance and Service

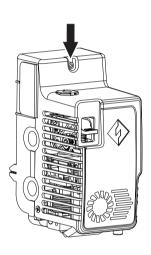
Problem	Cause	Solution
The extruder is off-center.	The equipment has lost the precise position track of the extruder and thus leading to printing failure.	Remove the model, clean the build plate, return the extruder back to its original position, and recalibrate. Then print a new model.
Filaments are not properly extruded or adhering to the build plate.	It may be that the build plate is not leveled and the distance between the build plate and the extruder is inconsistent.	Re-level.
The equipment does not respond before starting printing the model.	The equipment may have received conflicting commands.	Turn off the power switch, wait for 30 seconds, and then turn on the power switch.
At the end of printing, filaments are attached to the nozzle in blocks; Or filaments are scattered in the printer in the form of filaments.	A layer of the model did not adhere correctly, and the minimum surface area in contact with the build plate was adopted when saving the model; Or no support is selected when printing and it is suspended above the build plate.	Re-slice the model and add supports if necessary.
The model is only half printed.	The printing filaments run out. The extruder is blocked during printing.	Replace the printing filament, turn on the filament detection function, and continue printing; See "The printing filament cannot be extruded" below for more.
The printing filament cannot be extruded.	The extruder is blocked.	Use the unclogging pin tool to push the filament in the filament feeding state. Contact After-sales Service.
The extruder can not return to its original position.	Limit switch line fault.	Contact After-sales Service.
In the steep protruding part, the surface of the model is slender and sparse or worn.	The model protrudes too far or shakes too much. (angle less than 45 degrees).	Print with supports.

# 7.3 Unclog the Nozzle

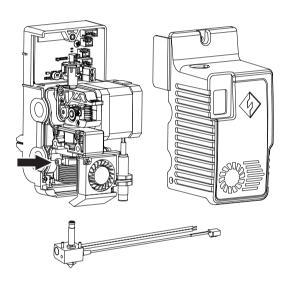
- 1. Click [Preheat], set the heating temperature, and tap the Return button.
- 2. Click [Tools]-[Filament]-target extruder [Load], wait for the extruder to heat up until the screen prompts for filament feeding, and insert the pin into the extruder inlet (top).
- 3. Push the blocked residue down and squeeze it out from the nozzle. If you encounter some resistance, you can push down. Be careful not to use brute force. If you have tried doing this several times and it still can not be clogged with force, then you need to replace the nozzle or contact after-sales customer service.

# 7.4 Replace the Nozzle Assembly

Please operate with the power off:



1. Unscrew the screws with an Allen screwdriver and remove the extruder cover;

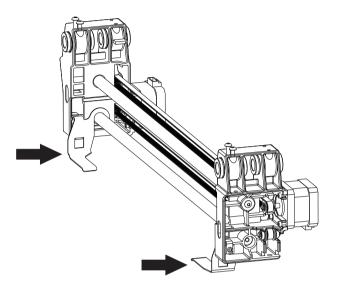


2. Unscrew the screws here and pull out the wire harness of the heating pipe and thermocouple;

3. Replace the nozzle assembly with a new one. Be sure to push the nozzle assembly to the bottom, and there must be no installation gap. Tighten the corresponding screws; Insert the wire harness into the extruder circuit board; Cover the housing and lock the screws.

### 7.5 Anti-oozing Plate

It is a normal phenomenon that the anti-oozing plate may have partial scratches on itself due to factory testing. With the continuous use of printing, scratches will become more obvious, but this will not affect the use of the nozzles, and the distance between the anti-oozing plate and the nozzles can be adjusted manually. Please make sure that the nozzles are always in contact with the anti-oozing plate when in use. If the scratches are deep, it can be replaced according to the actual situation.



# 7.6 Daily Maintenance and Use Suggestion

- 1. When the equipment is not used in daily life, please cover the top cover and close the front door to avoid dust falling on the equipment. If the equipment is not used for a long time, it is recommended to use original package for sealing.
- 2. Lubricate the moving parts regularly. If the equipment is used frequently, add lubricating oil (grease) at least once every three months; If the equipment is not used for a long time, add lubricating oil (grease) at least once every six months.
- 3. After each printing, please clean up the filament residue and other sundries in the printing cavity in time to avoid small sundries falling into the bottom circuit board and affecting the use of the equipment.
- 4. Printing stickers are consumables. When the adhesion of the build plate's stickers drops or even the sticks are damaged, please replace the printing stickers in time so as not to affect the printing effect.
- 5. After using the equipment for the first time or replacing the printing filaments, Flashforge official filaments shall be used until the colors of the filaments extruded from the nozzles are consistent with the colors of the filaments loaded.
- 6. At any time, it is recommended to place the model at the center of the build plate. You can set the placing position of the model in the slicing software.
- 7. Support printing is recommended for steep protruding parts (angle less than 45 degrees).

# 8. Support and Service

Flashforge professional after-sales service personnel and salesmen are on standby for you at any time, and are very willing to help you solve any problems you encountered during use. If you can't find the answer from the user guide, you can go to our official website to search for the solution of your problem, or contact us by phone.

Some explanations and solutions of common problems can be found in our official website. Many of your problems can be solved in www.flashforge.com, the official English website of Flashforge.

The Flashforge after-sales team can be reached by email or phone from 8:00 a.m. to 5:00 p.m. from Monday to Saturday to solve your problems. In case you contact us during off-duty time, your inquiry will be answered the next following business day immediately. We are sorry for any inconvenience caused.

Note: Due to the replacement of different filament, there will be a small amount of impurities left in the extruder, which will cause the extruder blockage. As this can be solved by just unclogging it, this is not a quality problem. If our user encounters this problem when using the equipment, please contact our after-sales department, and complete the unclogging work under the guidance of the after-sales personnel.

After-sales Service Tel: +86-400-886-6023

E-mail: support@flashforge.com

Address: No. 518, Xianyuan Road, Wucheng District, Jinhua City, Zhejiang Province, China

Note: Please provide the product serial number which is the barcode at the back of the printer before contacting our after-sales department.

S/N: FFAD\*\*\*\*\*

#### FCC Caution.

(1)§ 15.19 Labelling requirements.

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.

§ 15.21 Changes or modification warning

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

§ 15.105 Information to the user.

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.

#### RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.





Follow us

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