FLASHFORGE®

Adventurer 3 Pro 2

User Guide

This guide is only applicable to FLASHFORGE Adventurer 3 Pro 2 3D Printer.

Scan the QR code to view the unboxing video.

CONTENTS

Preface
Notice
Terms

Preface

Note: Each device must be tested before leaving the factory. If there are some residues in the extruder or some tiny scratches on the build tape, it is normal and won't affect the printing quality.

On the completion of this User Guide, thanks all Flashforge engineers and Flashforge 3D printer users for their unremitting efforts and sincere assistance.

The Flashforge Adventurer 3 Pro 2 user guide is designed for users to start their printing journey with Flashforge Adventurer 3 Pro 2. Even if you are familiar with earlier Flashforge machines or 3D printing technology, we still recommend you to read this guide, as there is lots of important information about the Adventurer 3 Pro 2 for you to get a better 3D experience.

For a better and more successful printing experience, you can refer to the following materials:

Quick Start Guide:
Users will find the Quick Start Guide together with the printer accessories. The Quick Start Guide will help you start your print journey as soon as possible.

Official Flashforge Website: www.flashforge.com
The official Flashforge website contains the up-to-date information concerning Flashforge software, firmware, device maintenance and so on. Users are also able to get the contact information from there.

Notice

Safety Notice: PLEASE READ AND STRICTLY FOLLOW ALL THE SAFETY WARNINGS AND NOTICE BELOW.

Work Environment Safety

◆ Keep your work place tidy.
◆ Do not operate the printer in the presence of flammable liquids, gases or dust.
◆ Keep the printer out of children and untrained people's reach.

Electrical Safety

◆ Always use the printer with a properly grounded outlet. Do not refit Adventurer 3 Pro 2 plug.
◆ Do not use the printer in damp or wet locations. Do not expose the printer to burning sun.
◆ In case of device damage, please use the power cord provided by Flashforge.
◆ Avoid using the device during an thunderstorm.
◆ In case of uncertain accident, please unplug the device if you do not use it for long.

Personal Safety

◆ Do not touch the nozzle and build plate during printing.
◆ Do not touch the nozzle after finishing printing.
◆ Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.
◆ Do not operate the device while you are tired or under the influence of drugs, alcohol or medication.

Cautions

◆ Do not leave the device unattended for long.
◆ Do not make any modifications to the device.
◆ Lower the build plate before loading/unloading filament.
  [The distance between the nozzle and build plate should be kept for at least 50mm.]
◆ Operate the device in a well-ventilated environment.
◆ Never use the device for illegal activities.
◆ Never use the device to make any food containers.
◆ Never use the device to make any electrical appliance.
◆ Never put the model into your mouth.
◆ Do not remove the models with brute force.

Operating Environment Requirements

◆ Temperature: RT 15-30 ℃; Moisture: 20%-70%

Equipment Placement Requirements

◆ The device must be placed in a dry and ventilated environment.
The distances of the left, right and back side space should be at least 20cm, and
the distance of the front side space should be at least 35cm. Device storage
temperature: RT 0-40 ℃

Filament Requirements

◆ Please make sure you use the Flashforge filament or the filament from the brands
accepted by Flashforge.
Nozzle clogging and damage may be caused by non-Flashforge filament due to
inappropriate material properties.

Filament Storage

◆ All polymers degrade with time. Do not unpack the filament unless it is required for use.
Please keep the storage environment dry and dust-free.

Legal Notice

◆ All the information in this document is subject to any amendment or change without
the official authorization from Flashforge.

◆ Flashforge makes no warranty of any kind with regard to this document, including,
but not limited to, the implied warranties of merchantability and fitness for a particular
purpose.

◆ Flashforge shall not be liable for errors contained herein for incidental consequential
damages in connection with furnishing, performance or use of this material.

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.

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.
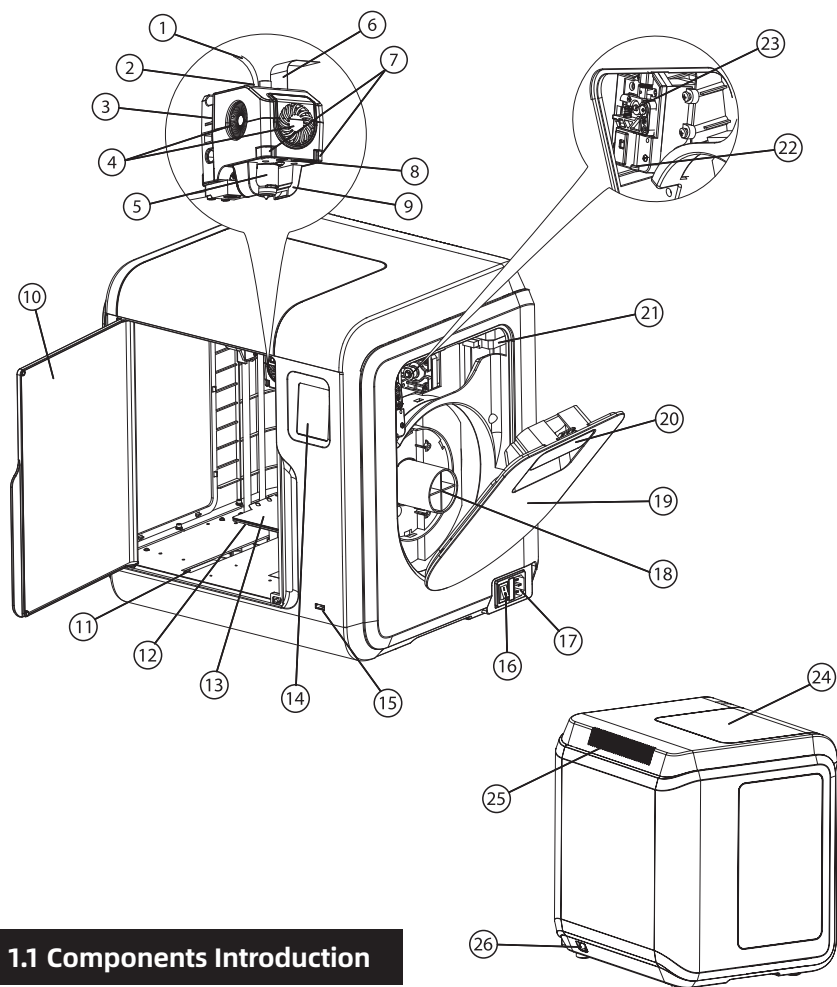-Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement
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.

Terms

Build Plate	The surface on which the Adventurer 3 Pro 2 builds an object
Build Tape	The black tape that covers Adventurer 3 Pro 2's build plate so that the object can stick to the build plate well
Build Volume	The dimensions of the space into which 3D prints can be produced. The largest build volume is 150*150*150mm.
Extruder	The integral extruder assembly is installed on X-axis. The extruder draws the filament from the filament spool, melts it and extrudes it through the nozzle into the build plate.
Nozzle	Also called 'print head', which is located at the bottom of the extruder where heated filament is squeezed out.
Cooling Fan	To cool the outer assembly of the extruder and gear motor
Filament Cartridge	A specific box for placing Flashforge filament, which is located on the right of the printer.
Filament Guide Tube	A white plastic tube that guides the filament from the filament box to the filament intake
Filament Intake	An opening located at the top of the extruder
Solid Glue Stick	A solid adhesive used for making the model stick to the build plate firmly

Chapter 1: Adventurer 3 Pro 2

1.1 Components Introduction

1. Filament guide tube   2. Filament guide tube joint   3. Extruder base   4. Cooling fan
5. Removable nozzle   6. Extruder cables   7. Clip   8. Led light   9. Air guide duct
10. Front door   11. Y-axis sliding slot   12. Platform base   13. Build plate
14. Touch screen   15. USB stick input   16. Power switch   17. Power input
18. Spool holder   19. Filament cover   20. Filament cover handle
21. Motor   22. Filament intake   23. Filament feeding wheel   24. Top cover
25. Air outlet   26 Ethernet input

1.2 Parameters

Name	Adventurer 3 Pro 2
Number of Extruder	1, Removable
Print Technology	Fused Filament Fabrication [FFF]
Screen Size	2.8" color Touch Screen
Build Volume	150*150*150 mm
Layer Thickness	0.1-0.4 mm
Build Accuracy	± 0.2 mm
Positioning Accuracy	Z-axis 0.0025mm; XY-axis 0.011 mm
Filament Diameter	1.75 mm [± 0.07 mm]
Nozzle Diameter	0.4 mm
Build Speed	10-300 mm/s
Software	FlashPrint
Supported Formats	Input: 3mf/stl/obj/fpp/bmp/png/jpg/jpeg File Output: gx/g File
Memory Size	8 G
OS	Windows XP/Vista/7/8/10, Mac OS, Linux
Input	150W [24V, 6.25A]
Connectivity	USB, Wi-Fi, Ethernet
Device Size	388*340*405 mm
Net Weight	9 kg

Chapter 2: Operation

2.1 Unpacking

1. Open the box.

2. Take out the wrapping paper box on the top.

3. Be careful! Filament and power cable are all placed inside the wrapping paper box.

4. Take out the printer from the box, and remove the bubble wrap around the printer. Tear off the fixing tapes and front door protective bag.

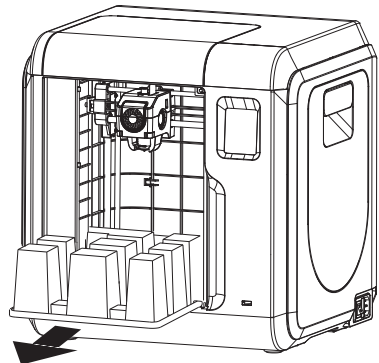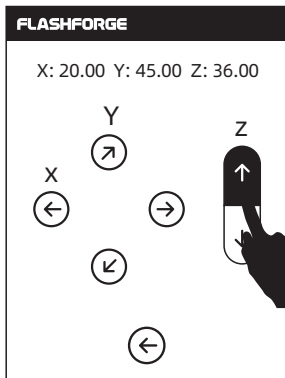5. Plug the power cable into the input on the right side, turn on the power switch, and the touch screen is turned on.

Power Switch

FLASHFORGE

Build

Tools

Filament

6. Click [Tools]-[Setting] in turn to enter pages like this, turn to page two, and click [Move].

FLASHFORGE

Network   Preheat

Setting   About

←

FLASHFORGE

Status   Language

Calibration   Homing

< 1/3 > ←

FLASHFORGE

Move   Camera

Filament Check   Led

< 2/3 > ←

7. Click the UP arrow in the page to raise the extruder for removing the bottom paper box easier.

8. Open the front door, take out the paper box inside the printer, and printer unpacking is completed.

FLASHFORGE

X: 20.00 Y: 45.00 Z: 36.00

Y
Z
X
← →
↙
←

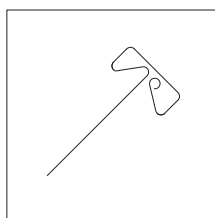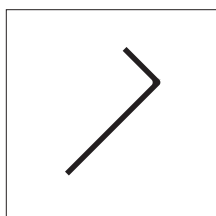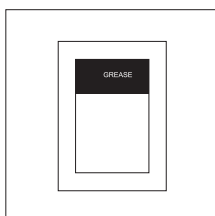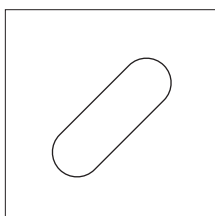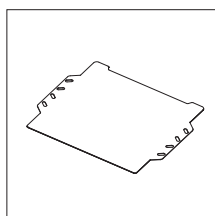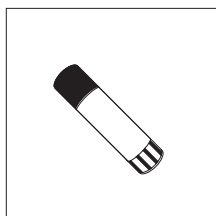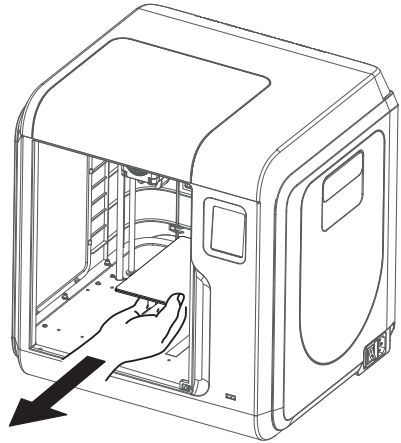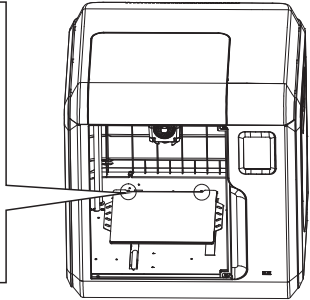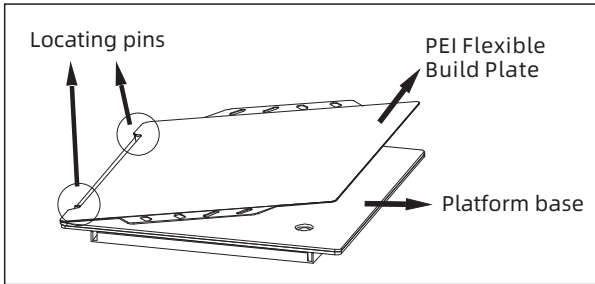|			
3D Printer	Filament	Power Cable	After-Sales Service Card
Quick Start Guide	0.6-265 Nozzle	Screwdriver	Unclogging Pin Tool
Allen Wrench	Grease	Leveling Card	PEI Flexible Build Plate
Glue Stick			

2.3 PEI Build Plate Installation

Note

Both sides are available. The gold PEI side can be used to print PLA/PLA-CF/PETG-CF High-Speed PLA. The other side can be used to print PETG/High-Speed PETG. Please choose according to the printing material.
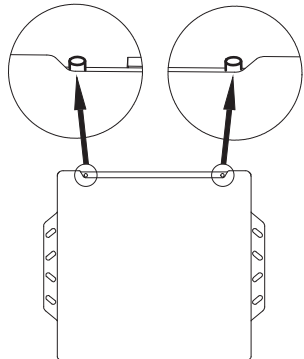
1. Manually pull the platform base inside the machine outward slightly to a suitable position.

2. Take out a PEI build plate from the accessories, and align the side with a groove inward with the two locating pins on the platform base.

Locating pins

PEI Flexible Build Plate

Platform base

3. When the locating pins just press against the groove of the platform plate, align the platform plate with the base along the outline of the platform base, and lightly place the platform plate and attach it on the platform base to complete the installation.

2.4 Printing

3D printing process is as follows:
(1). Obtain the 3D file;   (2). Download and install the slicing software;
(3). Prepare the equipment; (leveling, calibration and filament loading);
(4). Start printing (model file slicing, transmission and printing).

2.4.1 Software Installation

Find the FlashPrint software installation package in the USB flash drive, and select the corresponding system version for installation. As the software will be updated regularly, please pay attention to the update status of the software. The latest slicing software can be downloaded from the official website (www.flashforge.com) - [Support] - [Download Center] - [Software].
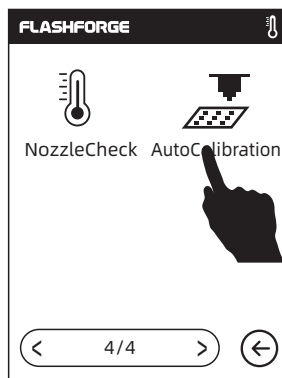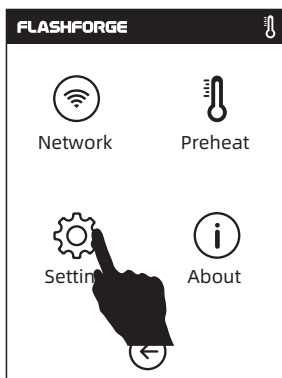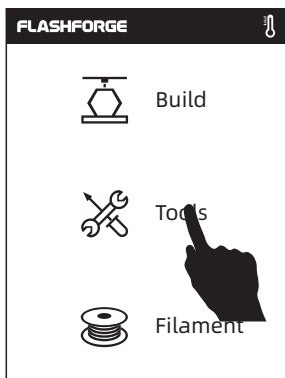
2.4.2 Equipment Preparation
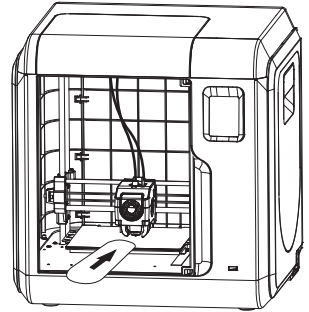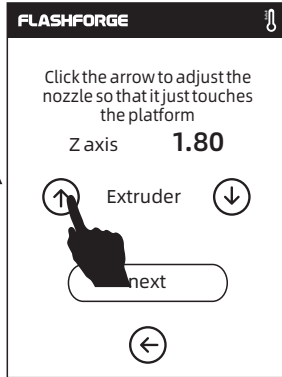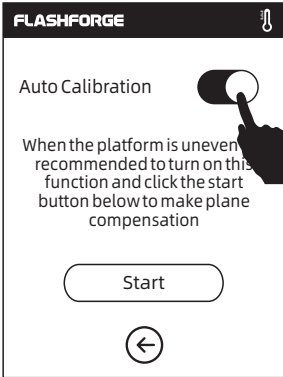
2.4.2.1 Leveling and Calibration

Note

The equipment has been leveled and calibrated before leaving the factory, but the leveling plane may be damaged due to the vibration generated during transportation. It is recommended to perform a calibration before first use. (This step is optional.)
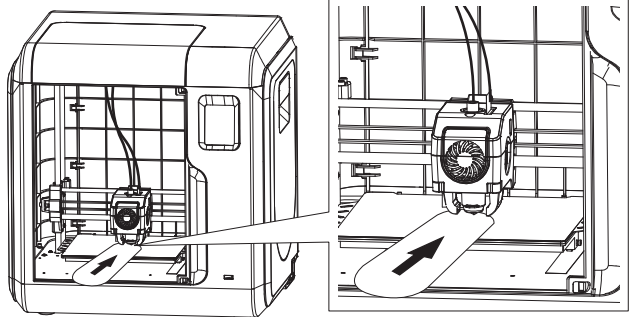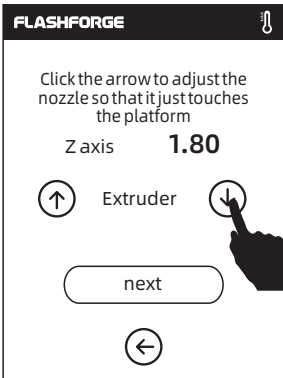
Click [Tools] - [Setting] - [AutoCalibration] and operate following the on-screen prompts.

1. Click [Start] and the machine starts pre-calibration. The first point is to calibrate the initial distance between the nozzle and the platform. Click the Up and Down arrows to adjust the Z-axis deviation value; Insert a leveling card between the nozzle and the platform. If it cannot be inserted, it means that the nozzle and the platform are too close. Click the Up arrow to make the nozzle away from the platform.

2. Insert and slide the leveling card. If there is no frictional resistance, click the Down arrow to make the nozzle closer to the platform; When there is slight friction resistance, it means that the distance is appropriate.

3. After calibrating the first point, please follow the on-screen prompts to continue the 9-point automatic leveling.

For specific operation, you can refer to the video. The link path is as follows:
Flashforge's Official Website（www.flashforge.com）- Support-Video Center - select [Operation Videos] - [Adventurer 3 Pro2].

Scan the QR code to view the video.

2.4.2.2 Flilament Loading

1. Open the filament cover, insert the filament into the filament intake, push the filament into the feeding wheel until some resistance is sensed.

Note: Please make sure the filament has been pushed into the feeding wheel!

2. Put the spool of filament on the spool holder and close the filament cover.
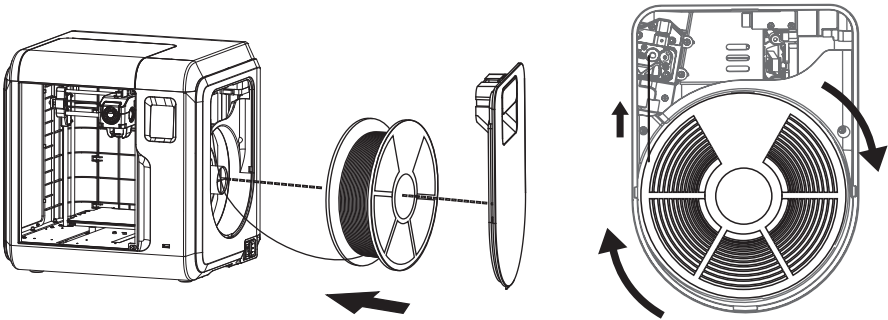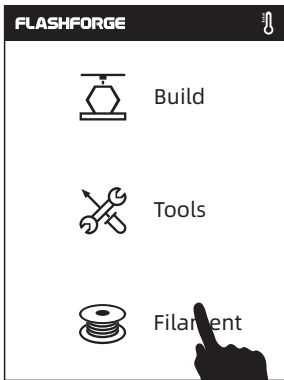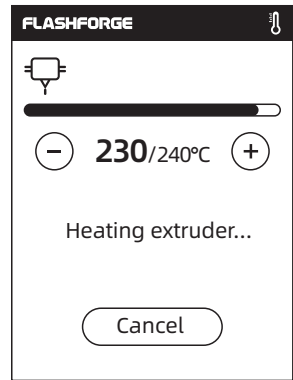
Mind the loading direction of filament. Make sure it is clockwise as the picture shows.

3. Tap [Filament].

FLASHFORGE
Build
Tools
Filament

4. Tap [Load] and the extruder starts heating.

FLASHFORGE
Load
Change
Manual

FLASHFORGE
− 230/240°C +
Heating extruder...
Cancel

5. As shown on the right, loading starts when the extruder is heated to the target temperature.

Note: The extruder will be heated to the highest temperature by default during automatic filament feeding and withdrawing. Actually, the extruder heating temperature can be adjusted according to the used filament when in practical use.

FLASHFORGE
− 240/240°C +
Preheat completed. Begin loading.
OK

6. Loading is completed when there is filament coming out of the nozzle. Then tap [OK].

FLASHFORGE

240/240°C

Press OK when new color appears

OK

2.4.3 Model File Transfer

After generating the Gcode file, you can transfer it to your printer with different network methods. If you choose to print from a USB flash drive, please insert the USB flash drive with the target file into the USB port on the printer. There will be no need to set network connection.
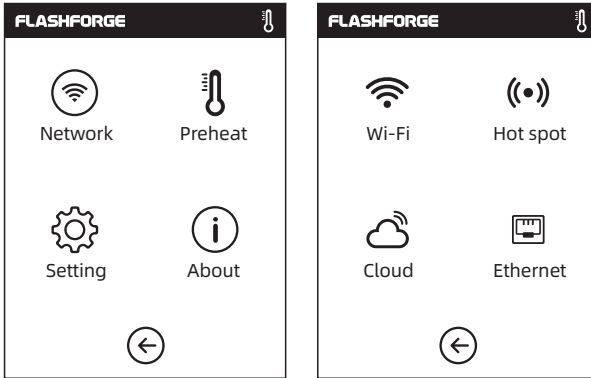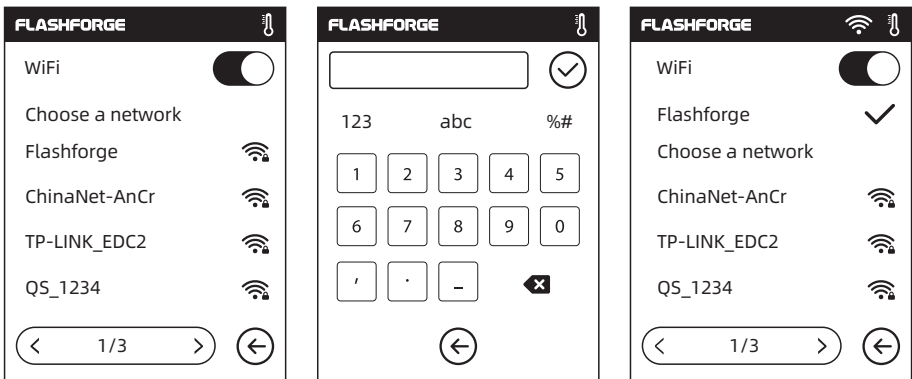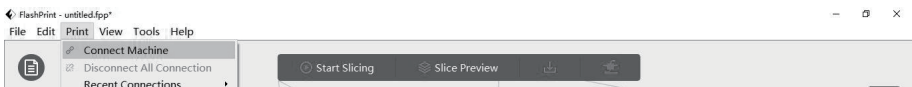
Method 1:
Wi-Fi Connection
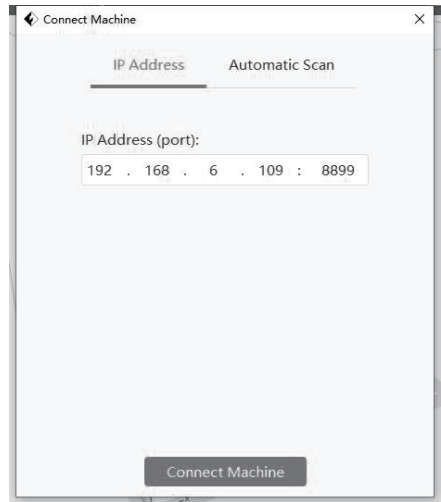
1. Tap [Tools] - Tap [Network] - Tap [Wi-Fi].

FLASHFORGE 🌡	**FLASHFORGE** 🌡
(🛜) Network	(🌡) Preheat	🛜 Wi-Fi	((•)) Hot spot
(⚙) Setting	(ⓘ) About	☁ Cloud	▦ Ethernet
(←)	(←)

2. Choose a network and input the password.

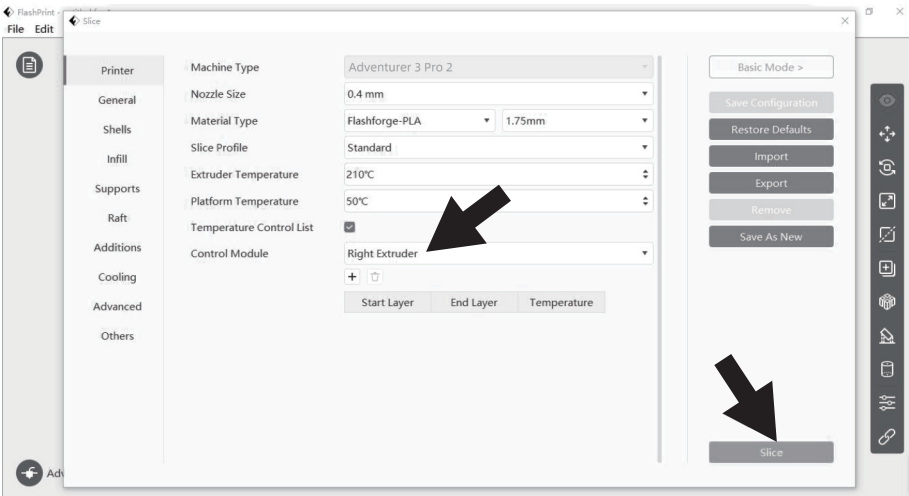|		
FLASHFORGE 🌡	**FLASHFORGE** 🌡	**FLASHFORGE** 🛜🌡
WiFi ⬤	[____] (✓)	WiFi ⬤
Choose a network	123 abc %#	Flashforge ✓
Flashforge 🛜	1 2 3 4 5	Choose a network
ChinaNet-AnCr 🛜	6 7 8 9 0	ChinaNet-AnCr 🛜
TP-LINK_EDC2 🛜	' . – ⌫	TP-LINK_EDC2 🛜
QS_1234 🛜		QS_1234 🛜
(‹) 1/3 (›) (←)	(←)	(‹) 1/3 (›) (←)

3. Open the FlashPrint software, click the icon at the bottom left corner of the interface to select the [Machine Type], select [Adventurer 3 Pro 2]. Then click [Print] - [Connect Machine].

FlashPrint - untitled.fpp*
File Edit Print View Tools Help
  Connect Machine
  Disconnect All Connection   Start Slicing   Slice Preview
  Recent Connections

Connect Machine

IP Address   Automatic Scan

IP Address (port):

192 . 168 . 6 . 109 : 8899

Connect Machine

4. For the connection method, you can choose to fill in the IP address of the printer or choose automatic scanning in the pop-up dialog box. Click [Tools] - [About] and turn to the second page, and there is the IP address. Click to connect when finishing the input.
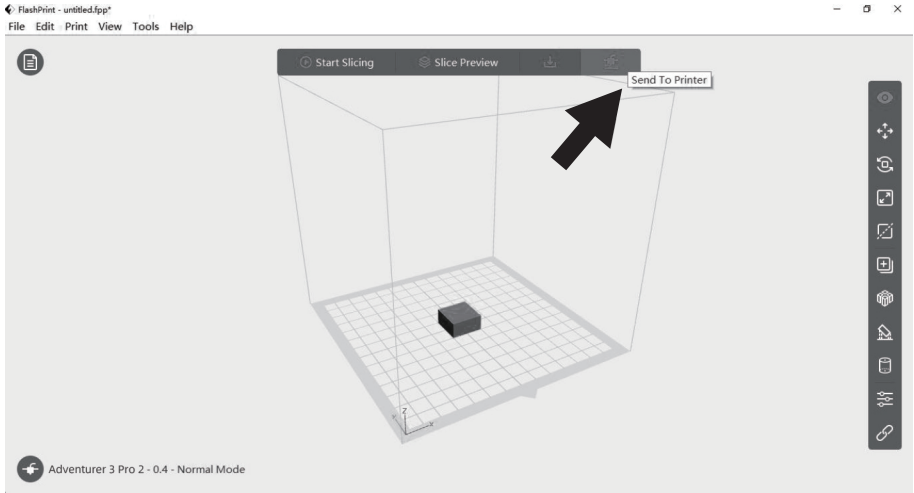
5. When the printer is connected successfully, the [Multi-Machine Control] interface, where you can view the printer connection status, will pop up. In this case, it will display the printer as a connected status. After finishing processing the model in FlashPrint, click [Start Slicing] - [Slice]. Select the appropriate location to save the sliced file.

⚠ **Notices**

When the user wants to use the browser to view the images, the printer and PC must be in an intranet [that is, the printer and PC should connect to the same router].
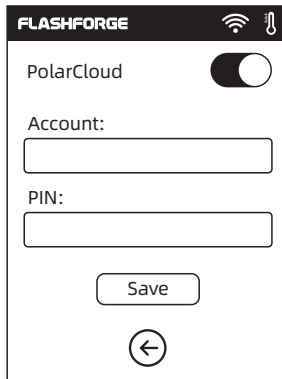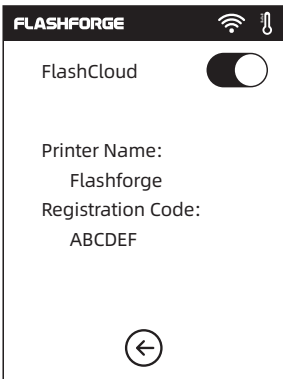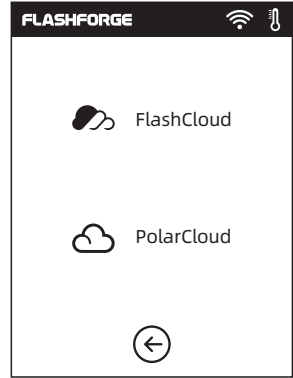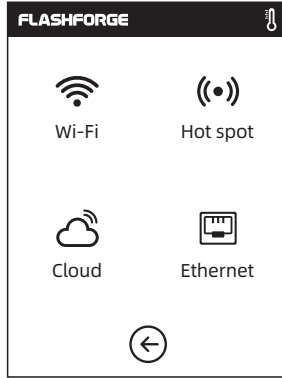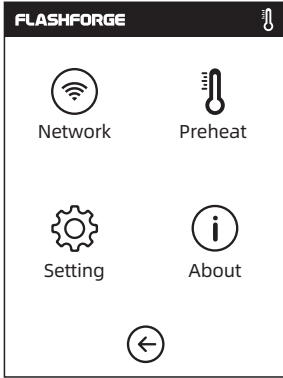
6. After slicing is completed, click [Send To Printer]. Then the printer starts preparatory work such as preheating, and automatically starts printing after it is ready.

Method 2: Cloud Connection

Use the cloud connection to process printing operation.

* See Section 2.4.4.1 for the usage of FlashCloud.

FLASHFORGE	**FLASHFORGE**
Network Preheat	Wi-Fi Hot spot
Setting About	Cloud Ethernet

FLASHFORGE

FlashCloud

PolarCloud

FLASHFORGE

FlashCloud ⬤

Printer Name:
    Flashforge
Registration Code:
    ABCDEF

FLASHFORGE

PolarCloud ⬤

Account:
[   ]

PIN:
[   ]

    Save

2.4.4 Printing

1. Tap [Build], and choose the file path: Printer internal memory, USB stick, or Cloud.

Build	6.62 GB
Tools	Not Available
Filament	No Job

2. Choose the model file, tap (▶) on its right to start printing; or tap the model picture or model name to enter the detail page, and then tap to start printing.

Ship-PLA.gx (▶)

20mm_Box-PLA.gx (▶)

1/1

20mm_Box-P...
0 h 10 min
0.70 M

3. The extruder will heat up and the printer will start printing when it reaches the target temperature. After printing is completed, the printer will make a beep sound and pop up a prompt on the touch screen.
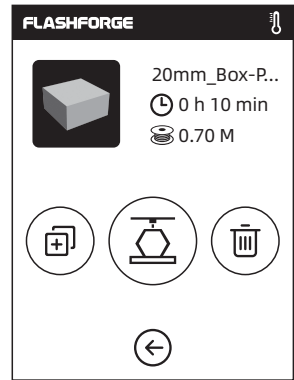
20mm_Box-PLA.gx

0 h **10** min
Time Remaining

Ship-PLA.gx (▶)

Build completed

OK

1/1

2.4.4.1 FlashCloud Printing

Login

E-mail

Password

☐ Remember Password

Login

Forgot password   Register

FlashCloud: Cloud.sz3dp.com

1. Register your FlashCloud account. After completing the activation via email, log in FlashCloud with your account.

2. After logging into your FlashCloud account, click [My Printer] - [Add printer].

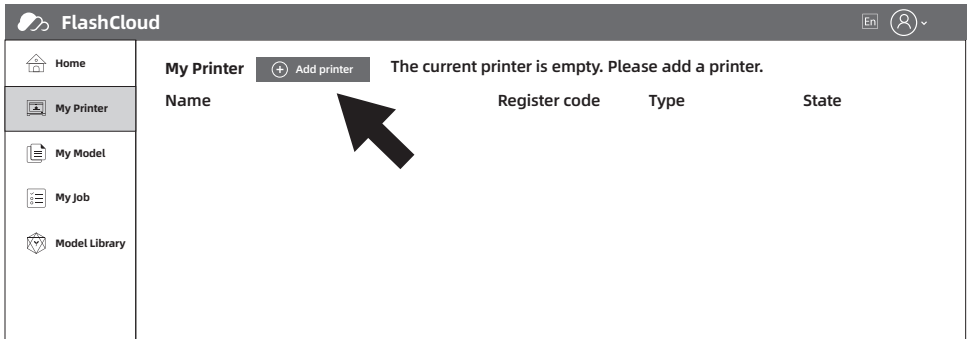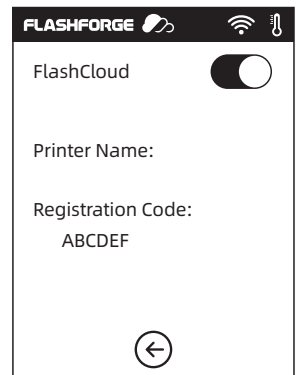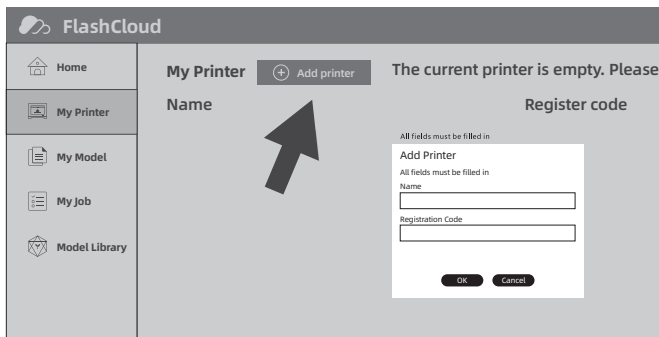**FlashCloud**

En

Home

My Printer   ⊕ Add printer   **The current printer is empty. Please add a printer.**

My Printer   **Name**   **Register code**   **Type**   **State**

My Model

My Job

Model Library

3. Fill in the printer name and registration code in the [Add Printer] interface. The information is displayed in the FlashCloud interface of the printer.

FlashCloud

Home

My Printer   ⊕ Add printer   **The current printer is empty. Please**

My Printer   **Name**   **Register code**

My Model

My Job   All fields must be filled in
                    Add Printer
Model Library   All fields must be filled in
                    Name

                    Registration Code

                    OK   Cancel

FLASHFORGE

FlashCloud

Printer Name:

Registration Code:
   ABCDEF

←

4. Printer added successfully.

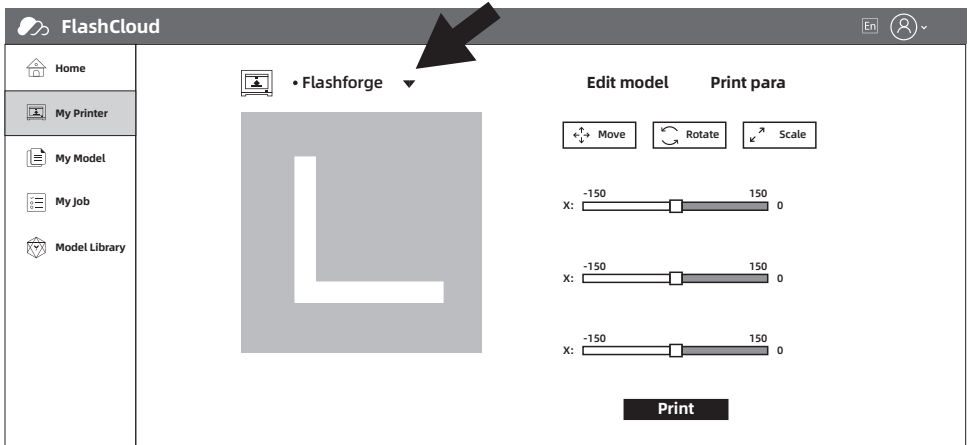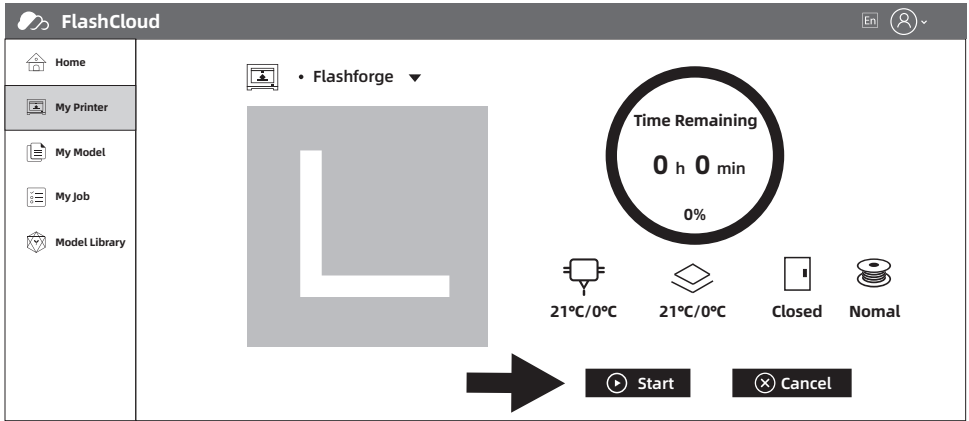| ☁ **FlashCloud**					En ⊗⌄
⌂ Home	**My Printer** ⊕ Add printer	The current printer is empty. Please add a printer.			
▣ **My Printer**	**Name**	**Register code**	**Type**	**State**	
▤ My Model	🖨 Flashforge	ABCDEF	Adventurer 3 Pro 2	• Idle	
▤ My Job					
⬡ Model Library					

5. Choose a model from the model library or upload your own model [.stl file], click [Print], and enter the editing interface to edit the model.

☁ **FlashCloud**		En ⊗⌄
⌂ Home	**User** **2023.3.2**	
▣ **My Printer**		**3D Model**
▤ My Model		**Model Detail**
▤ My Job		
⬡ Model Library		**Print**

6. The drop-down menu for the printer name allows you to select the printer for performing this print job. (The printer must be added to My Printer).

☁ **FlashCloud**			En ⊗⌄
⌂ Home	🖨 • Flashforge ▼	**Edit model**	**Print para**
▣ **My Printer**		⊕ Move	⟳ Rotate	⤢ Scale
▤ My Model		−150 150	
▤ My Job		X: ▭▭▭▭▭ 0	
⬡ Model Library		−150 150	
		X: ▭▭▭▭▭ 0	
		−150 150	
		X: ▭▭▭▭▭ 0	
		Print	

7. Finally, click [Start], and the selected printer will automatically start the print job.

2.4.4.2 Polar Cloud Printing

1. Register your Polar Cloud account.
   Visit **http://polar3D.com** to register the account.

2. Query the Polar Cloud PIN code.

[1]. After completing the Polar Cloud registration and logging into your account, click the
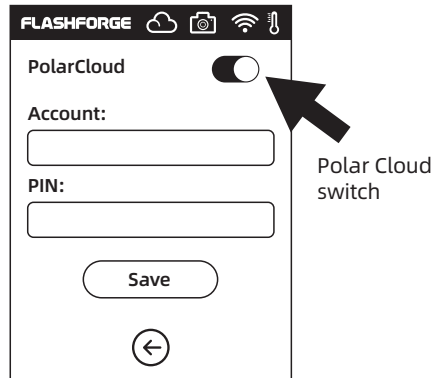   icon on the top right corner and click [Settings].

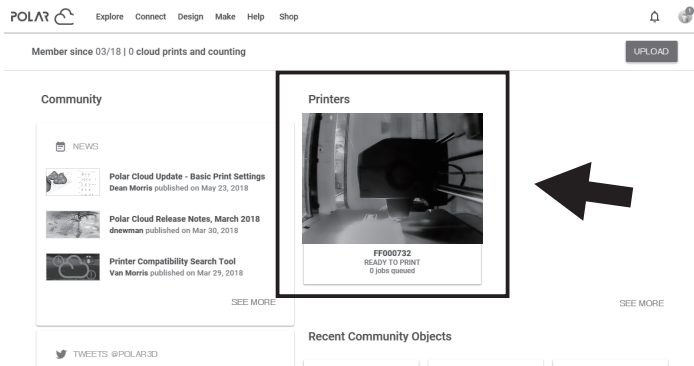[2]. Find the PIN Code in the page.

Location

Biography

Website URL
http://www.example.com/profile

Email

+ ADD Email

PIN Code
XXXX

---

3. Connect the Adventurer 3 Pro 2 to the Internet.
   Choose the appropriate network connection mode in the network
   interface to connect the network [see Section 2.5.2.1 for the connection method].

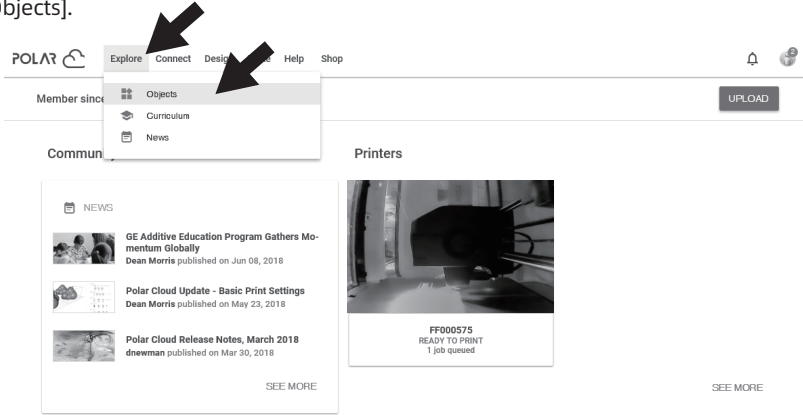4. Connect the Adventurer 3 Pro 2 to the Polar Cloud.

Enter the cloud connection interface
[click Tools > Network > Cloud], and turn
on the Polar Cloud switch [After it is
turned on, the switch will display green].
Fill in the Account and PIN bars with the
registered account before and the PIN
code queried before, and then click
[Save].

Polar Cloud switch

FLASHFORGE
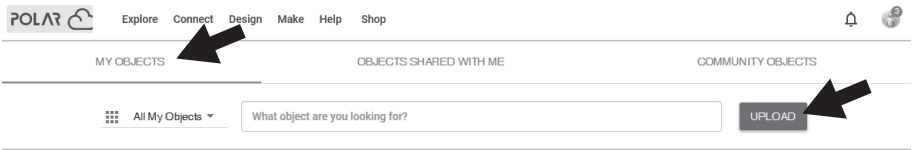
PolarCloud

Account:

PIN:

Save

5. After the connection is completed, you can see the printer information on the
   home page of Polar Cloud. [If the camera function is enabled, you can view the
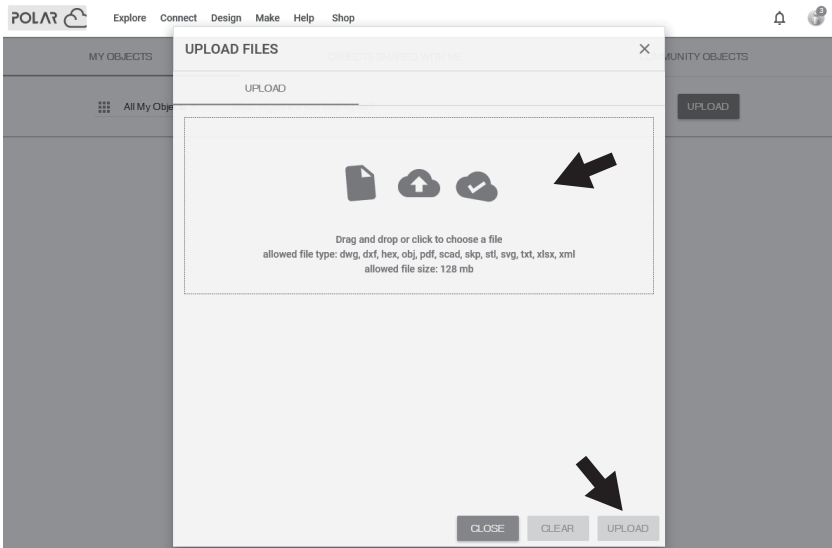   real-time images.]

6. Click [Explore] in the menu bar at the top of the home page of the website, and then click [Objects].
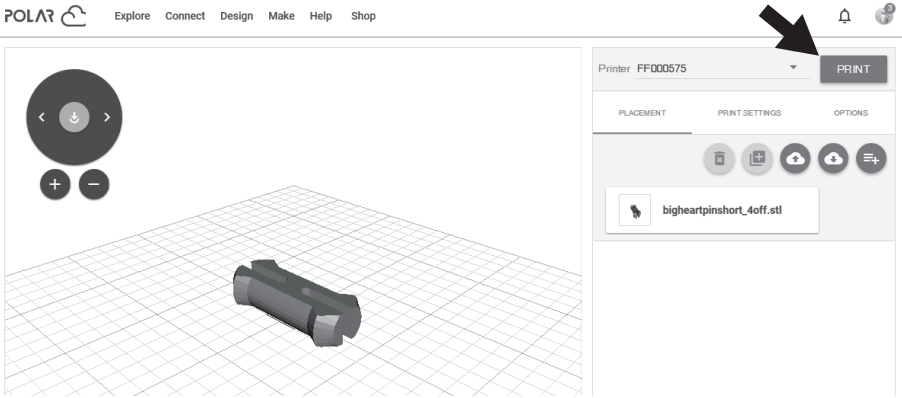

7. Click [MY OBJECTS], then click [UPLOAD] to upload the model.
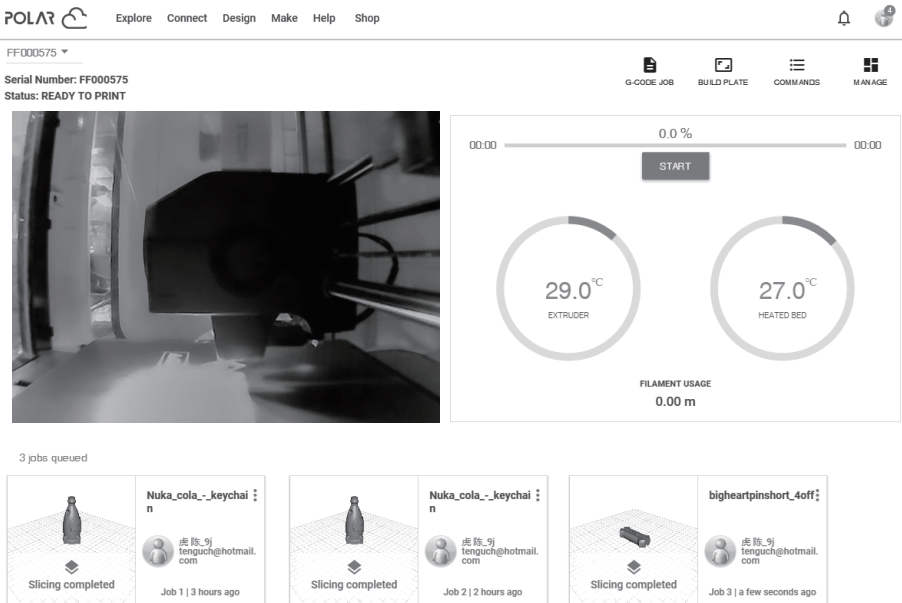

8. Drag and drop the model file to be uploaded to the box area or click the box area to select the model to be uploaded, and then click [UPLOAD] to upload the model.
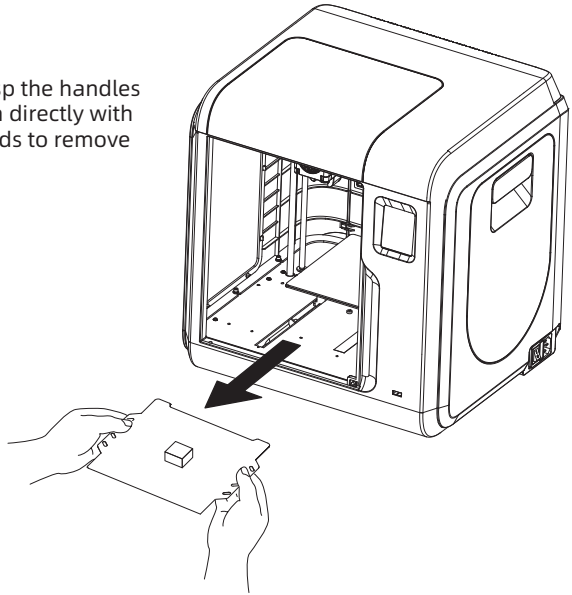
9. Click [PRINT].

10. Click [START], and the printer will start downloading cloud jobs, and then start printing after the download is finished.

2.4.5 Model Removal

As shown in the picture, grasp the handles on both sides of the platform directly with both hands, and pull outwards to remove the build platform.
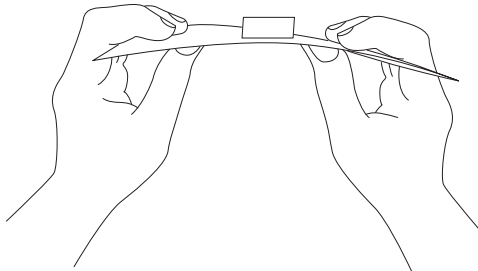

⚠ Notice **When printing is completed, the extruder and build plate may still be hot. Please start operating after cooling down!**

Please use the back side of the build plate when printing with PETG.
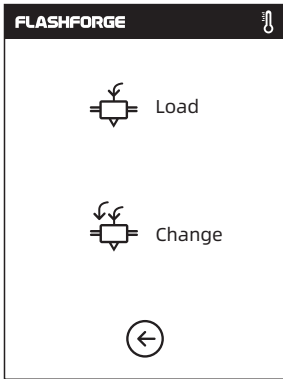
Please remove models after the platform has cooled down. If models are removed when the platform is not completely cooled down, bubbles will occur on the surface of the platform.

It is recommended to take the platform to the outside of the equipment for model removal, otherwise the model debris will remain in the equipment. Please keep the inside of the printer clean.
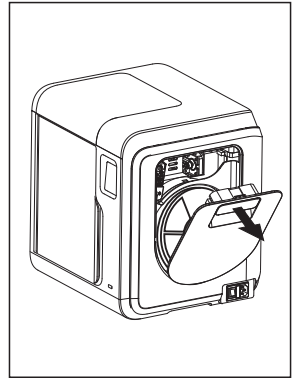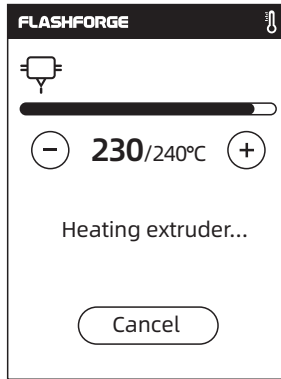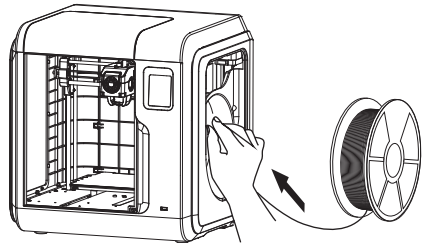
2.4.6 Filament Change

1. Tap [Filament] - [Change], and the extruder starts preheating.

2. Open the filament cover.

FLASHFORGE

Load

Change

FLASHFORGE

230/240°C

Heating extruder...

Cancel

3. Pull out the filament as the picture below shows.

4. Insert the new filament into the filament intake and push the filament into the feeding wheel until resistance is sensed.

5. Put the spool of filament on the spool holder, and close the filament cover.

6. When the new filament is extruded steadily, filament change is completed and tap [OK].

FLASHFORGE

240/240°C

Pull out filament,
feed new filament, press [OK]

OK

FLASHFORGE

240/240°C

Please insert the filament

OK

2.5 User Interface Introduction

Note: The interface layout may change whenever there is an upgrade of firmware. The functions below are only for demonstration purposes.

2.5.1 Build

1. Tap [Build].

2. Choose the print file reading path.

FLASHFORGE

Build

Tools

Filament
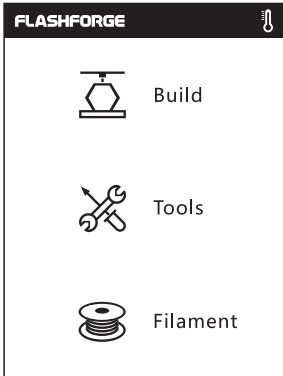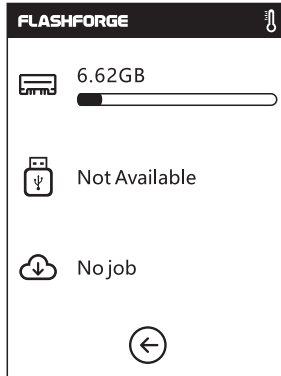
FLASHFORGE

6.62GB

Not Available

No job

←

Read the print file from:

The local memory card

The USB stick

The Cloud

Back: Back to the previous interface

3. File list

Tap ▶ to begin printing; tap the picture of the selected file to enter file details.

Page-flip: Tap the left/right arrow. ⟨ 1/1 ⟩

Long press the file picture or file name, and you can select all, copy 🔲 , or delete 🗑 .

Tap ✕ to exit the multi-selection interface.

FLASHFORGE

Ship-PLA.gx ▶

20mm_Box-PLA.gx ▶

⟨ 1/1 ⟩ ←

FLASHFORGE

◯ Select all 🗑

Ship-PLA.gx ◯

20mm_Box-PLA.gx ⊘

⟨ 1/1 ⟩ ✕

File details: Including the file picture, time needed, and filament needed.

Build: To begin printing the file.

Copy: To copy files from the USB flash drive to the printer's memory or copy files from the printer's memory to the USB flash drive.

Delete: To delete the print file.

FLASHFORGE

20mm_Box-P...
🕐 0h10min
🧵 0.7m

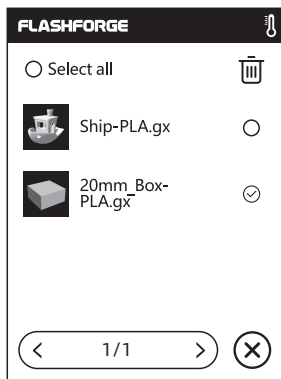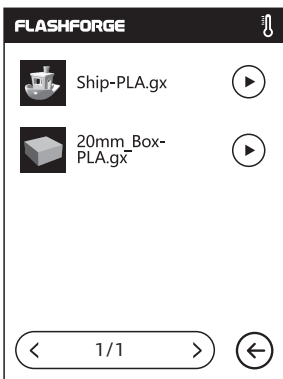**Print interface**

Cancel: To cancel the print job.

Pause/Resume: To suspend or resume the print job.

More: To check more settings and details information during printing.

FLASHFORGE

20mm_Box-PLA.gx

0 h **10** min
Time Remaining

More

Change: To change filament during printing.

Led Light: To turn on or turn off the led light.

Details: To check more detailed information.

Details

Extruder temperature

Build plate temperature

Used time

Printing progress

Total filament needed

FLASHFORGE

FLASHFORGE

🔧 **235** °C/235°C

🔲 **100** °C/100°C

🕐 **0** h **1** min

� **8** %

🧵 **0.7** M

2.5.2 Tools

Network: To connect the printer to your PC or the Internet.

Preheat: To preheat the extruder and build plate.

Setting: To implement relevant function setups.

About: Information about the printer.

2.5.2.1 Network

Wi-Fi

ON/OFF: To turn on/off the Wi-Fi connection.

Wi-Fi connection: To connect your printer with your PC via a stable Wi-Fi signal.

Hotspot

To set your printer as a WLAN hotspot.

Turn on/off the WLAN hotspot.

Hotspot setting: To set the hotspot name and password. Input the hotspot name with numbers, characters and symbols.

Tap to save the name and password.

Ethernet Connection

To connect your printer with your PC via the network cable.

Cloud Connection

1. Turn on the Wi-Fi or Ethernet connection, and connect the printer to Internet successfully.
2. Tap [Tools] - Tap [Network] - Tap [Cloud] on the printer.
3. Turn on the Cloud Connection function.
4. Register your cloud account and set your setting on **https://cloud.sz3dp.com** with the registration code on the printer's touch screen, or register your cloud account on **http://polar3d.com** to set your polar3d account and pin code.

2.5.2.2 Preheat

ON/OFF: Turn ON/OFF the preheating of the extruder or platform.

Tap (+)(−) , and you can set the preheating temperature.

Long press (+)(−) , and the temperature will change faster.

Extruder/Platform preheating interface

It contains the actual temperature, target temperature and heating progress.

Maximum extruder heating temperature: 265 ℃ (It's up to the chosen nozzle.)

Maximum platform heating temperature: 100 ℃

Tap (Abort) : Abort the preheating job.

2.5.2.3 Setting

Setting interface

Status   (A) Language   Calibration

HOME Homing   Move   Camera

Filament Check   Led   Buzzer

Factory Reset   Update   Extruder

Nozzle Check   Auto Calibration

FLASHFORGE

Network   Preheat

Setting   About

FLASHFORGE

Status   Language

Calibration   Homing

1/4

FLASHFORGE

Move   Camera

Filament Check   Led

2/4

FLASHFORGE

Buzzer   Factory Reset

Update   Extruder

3/4

FLASHFORGE

NozzleCheck   AutoCalibration

4/4

Status

It displays the real-time coordinates of X-axis, Y-axis, Z-axis and the real-time temperature of the extruder and platform.

FLASHFORGE

Status Language

Calibration Home

< 1/4 >

FLASHFORGE

20°C

20°C

Load

X: 20.00 Y: 45.00 Z: 36.00

Language

Choose the target language.

FLASHFORGE

Status Language

Calibration Home

< 1/4 >

FLASHFORGE

中 En

の De

Fr Es

< 1/2 >

FLASHFORGE

Ar

< 2/2 >

Calibration

↑ Up arrow: The extruder will rise, away from the platform.

↓ Down arrow: The extruder will descend, close to the platform.

FLASHFORGE

Status Language

Calibration Homing

< 1/4 >

FLASHFORGE

Click the arrow to adjust the nozzle so that it just touches the platform

Z axis **0.00**

↑ Extruder ↓

OK

 Calibration:

Extruder Calibration:
Click on [Calibration] to start pre-calibration. The first point is to calibrate the initial distance between the extruder and the platform [see z-axis deviation value]. Click on the up and down arrows to adjust the Z-axis deviation value. You can also feel if there is slight resistance by pulling A4 paper or leveling card between them to decide the appropriate distance.

Homing

HOME   To make the X, Y and Z axes back to the mechanical zero point.

→ The extruder moves to the right;   ↗ The build plate moves to the back;

← The extruder moves to the left;   ↑ The extruder moves upward;

↙ The build plate moves to the front;   ↓ The extruder moves downward;

Manual:
To manually adjust the positions of the extruder and build plate.

Camera:
Turn on or turn off the camera.

For more details about Camera, please refer to Chapter 2.6.

Filament check:
To turn on/off the filament check. When enabled, a prompt will pop up when filament is used up or broken.

LED:
To turn on/off the light.

Factory Reset:
Delete all data in internal memory, and reset the printer to factory settings.

Buzzer:
To turn on/off the buzzer.

Update:
To update the printer firmware.

Extruder:
Select the nozzle type.

FLASHFORGE	FLASHFORGE
Buzzer Factory Reset	**Please select extruder**
Update Extruder	240℃ 265℃
< 3/4 > ←	0.4-240 0.4-265
	< 1/2 >

Nozzle Check:
Use temperature calibration after nozzle change.

Auto Calibration:
When the calibrated extruder fails to satisfactorily print a large model, or failure occurs due to uneven platform, please enable this function.

FLASHFORGE	FLASHFORGE
NozzleCheck AutoCalibration	NozzleCheck AutoCalibration
< 4/4 > ←	< 4/4 > ←

2.5.2.4 About

Here shows the basic information about the printer.
Notice: When contacting after-sales support, please provide the Serial No., which is displayed in the [About] interface, to our after-sales engineers.

FLASHFORGE	FLASHFORGE	FLASHFORGE
Machine Type: Adventurer 3 Pro 2 Serial No.: 123456 Register Code: XXXXXX Polar Serial No.: XXXXXX	Firmware Version: v1.03-1.1 Build Volume: 150x150x150 Usage counter: 12 hours IP address: 10.90.243.184.8899	Wi-Fi Mac 02:00:00:00:11:66
< 1/3 > ←	< 2/3 > ←	< 3/3 > ←

2.5.3 Filament

Load

- ◆ The extruder is heated up to the target temperature.
- ◆ After heating is completed, insert the filament into the filament intake until some resistance is sensed (push the filament into the feeding wheel).
- ◆ Loading is completed when there is filament coming out of the nozzle.

FLASHFORGE	FLASHFORGE	FLASHFORGE	FLASHFORGE
Load	230/240℃	240/240℃	240/240℃
Change	Heating extruder...	Preheat completed. Begin loading.	Press OK when new color appears
Manual	Cancel	OK	OK
←			

Change

- ◆ The extruder is heated up to the target temperature. After heating is completed, filament will be withdrawn from the extruder.
- ◆ Pull out the filament according to the instructions.
- ◆ Insert the new filament into the filament intake, and tap [OK] ;
- ◆ The new filament will be fed into the extruder. Replacement is completed when there is filament coming out of the nozzle.

FLASHFORGE	FLASHFORGE	FLASHFORGE	FLASHFORGE
Load	240/240℃	240/240℃	240/240℃
Change	Unloading the filament, please wait...	Pull out filament, feed new filament, press [OK]	Please insert the filament
Manual		OK	OK
←	←	←	←

Manual

- ◆ Wait until the extruder is heated up to the target temperature, choose the loading length, and click on [Load];
- ◆ Insert the filament into the filament intake until some resistance is sensed.
- ◆ Filament coming out of the nozzle indicates a successful loading.

FLASHFORGE	FLASHFORGE
Load	240/240℃
Change	100 mm
Manual	200 mm
	300 mm
←	Load
	←

2.6 Camera Instructions

How to Use the Camera

The use of Adventurer 3 Pro 2's camera is introduced as follows.

1. Tap [Tools] - [Setting] - [Camera], and then turn on the camera.

FLASHFORGE	
Build	
Tools	
Filament	

FLASHFORGE	
Network	Preheat
Setting	About
←	

FLASHFORGE	
Move	Camera
Filament Check	Led
< 2/4 > ←	

2. After the camera is turned on successfully, the icon of camera will appear in the Status Bar.

FLASHFORGE	
Build	
Tools	
Filament	

2.6.1 FlashCloud Camera Use

1. Register your FlashCloud account. After completing the activation via email, log in FlashCloud with your account.

   FlashCloud website:
   http://cloud.sz3dp.com

Login

E-mail

Password

☐ Remember Password

Login

Forgot password   Register

2. After logging into your FlashCloud account, click [My Printer] - [Add printer].

3. Fill in the printer name and registration code in the [Add Printer] interface. The information is displayed in the FlashCloud interface of the printer. Please make sure that the printer is properly connected to the network (see Section 2.5.2.1), the FlashCloud function is turned on, and the camera function is turned on.

4. Printer added successfully

FlashCloud

En 👤⌄

- 🏠 Home
- 🖼 **My Printer**
- 📄 My Model
- 📋 My Job
- 🔷 Model Library

My Printer ⊕ Add printer   The current printer is empty. Please add a printer.

Name	Register code	Type	State
Flashforge	XXXXXX	Adventurer 3 Pro 2	Offline

5. Click the camera icon pointed by the arrow.

FlashCloud

⊞ 👤⌄

- 🏠 Home
- 🖼 My Printer
- 📄 My Model
- 📋 My Job
- 🔷 Model Library

🖼 ad3 pro 2 ● Idle

Model name:

Time Remaining

0 h **0** min

0%

6. The camera begins to work.

FlashCloud

⊞ 👤⌄

- 🏠 Home
- 🖼 My Printer
- 📄 My Model
- 📋 My Job
- 🔷 Model Library

🖼 ad3 pro 2 ● Idle

Model name:

Time Remaining

0 h **0** min

0%

🌡	◇	⊡	⊜
31℃ / 0℃	31℃ / 0℃	closed	norma

⊘ Pause   ⊗ Cancel

PRINT JOB(0)

2.6.2 Polar Cloud Camera Use

1. Register your Polar Cloud account.
   Visit www.polar3D.com to register the account.

2. Query the Polar Cloud PIN code.

   [1]. After completing the Polar Cloud registration and logging into your account, click the icon on the top right corner and click [Settings].

   [2]. Find the PIN Code in the page.

3. Connect Adventurer 3 Pro 2 to the Internet. Choose the proper connecting way in the Network interface [the details of connection methods can be found in the previous chapter].

4. Connect Adventurer 3 Pro 2 to the Polar Cloud.

Enter the cloud connection interface [click Tools - Network - Cloud], and turn on the Polar Cloud switch [After it is turned on, the switch will display green]. Fill in the Account and PIN bars with the registered account before and the PIN code queried before, and then click [Save].

FLASHFORGE

PolarCloud

Account:

PIN:

Save

Polar Cloud switch

After the connection is completed, you can see the camera images on the home page of Polar Cloud.

POLAR   Explore Connect Design Make Help Shop

Member since 03/18 | 0 cloud prints and counting   UPLOAD

Community

📅 NEWS

Polar Cloud Update - Basic Print Settings
Dean Morris published on May 23, 2018

Polar Cloud Release Notes, March 2018
dnewman published on Mar 30, 2018

Printer Compatibility Search Tool
Van Morris published on Mar 29, 2018

SEE MORE

🐦 TWEETS @POLAR3D

VIEW ON TWITTER

Printers

FF000732
READY TO PRINT
0 jobs queued

SEE MORE

Recent Community Objects

Surprising Gogo
by Tiffany McGuire
created on 06/21...

Jimi1234
by Destroyer of O...
created on 06/21...

alyssa
by McGlone, Alys...
created on 06/21...

📷 INSTAGRAM @POLAR_3D

Instagram is currently not viewable on the Polar Cloud.
Please click View On Instagram to see what's new on our
Instagram.

⚠ **Notice**

1. Make sure the printer is connected to the Internet.
2. Make sure the camera function is enabled. [There should be a camera icon in the Status Bar.]

FLASHFORGE

2.6.3 Cloud-Based Camera Control

1. Connect to Polar Cloud

The user can turn on or turn off the camera through Polar Cloud. Click [Tools] - [Network] - [Cloud] - [PolarCloud], enter the Polar Cloud setting interface, fill in the account and PIN code, and click to connect to Polar Cloud.

Polar Cloud account acquisition method
The Polar Cloud account is the email account when you sign up for Polar Cloud.
Polar Cloud website: www.polar3D.com

PIN code acquisition method

[1]. After completing the Polar Cloud registration and logging into your account, click the icon on the top right corner and click [Settings].

[2]. Find the PIN Code in the page.

Location

Biography

Website URL
http://www.example.com/profile

Email

+ ADD Email

PIN Code
XXXX ⬅

2. Open or close the camera though the cloud.

[1]. After successfully enabling the camera function, click the camera image on the home page to enter the interface shown above. Click [COMMANDS] pointed by the arrow.

POLAR ☁   Explore   Connect   Design   Make   Help   Shop

FF000732 ▾

Serial Number: FF000732
Status: READY TO PRINT

G-CODE JOB   BUILD PLATE   COMMANDS   MANAGE

0.0 %
00:00 —————————————— 00:00
START

29.0℃
EXTRUDER

28.0℃
HEATED BED

FILAMENT USAGE
0.00 m

0 jobs queued

[2]. You can choose to turn on or turn off the camera in the pop-up window.

CUSTOM COMMANDS

☐ open camera

☐ close camera

CANCEL   SEND

- a. When in the intranet [that is, the printer and computer are connected to the same router], Polar Cloud displays video streams and the printing status in real time. When in the extranet, only pictures are displayed (a picture is sent per 20s when printing; a picture is sent per 60s when idle).

- b. Every time the camera is turned on or off, the printer will be reconnected to Polar Cloud, so Polar Cloud will not respond for a while. The recovery time depends on the state of the network.

2.6.4 Error Handling

If an error is reported when the printer is not connected to Polar Cloud or when the printer is deleted from the Cloud, you can restore the printer to factory default settings to solve the problem. Please re-register if the printer is deleted from the Cloud after the computer is connected to the printer.

Chapter 3: Q&A

Q1. How to solve if the nozzle is clogged?

Method 1: Tap [Preheat], heat up the extruder to 240℃. After heating is completed, press the air tube joint and pull out the filament guide tube. Check whether the filament is bended or filament tip is not smooth. If so, make the filament smooth and flat, install the guide tube and filament back, and then tap [Load].

Method 2: If method 1 does not solve this, use an unclogging pin tool to unclog the nozzle.

Method 3: If method 1 and method 2 do not solve this, please replace the nozzle.

Q2. How to replace the nozzle?

> ⚠ **Notice**

Power off before replacing the nozzle! Please operate with the power off!

Please make the filament tip smooth and flat when cutting off the filament.

1. Press the left and right buckles and pull out the nozzle at the same time.
2. Push the filament manually at the filament intake, so that it extends out by a sufficient length to be cut off.
3. Manually rotate the filament spool counterclockwise to make the filament retreat back a little.
4. Press the left and right buckles, and install the new nozzle to ensure that the nozzle slot and the lower part of the extruder are on the same level.
5. Tap [Filament] - [Load], and nozzle replacement is completed when there is filament coming out of the new nozzle.

Buckle

Whether the assembly of the extruder is in place is judged as follows:
1. When installing, the extruder must be pressed hard to the end.
2. Check whether the installation is in place:
[1]. Touch the black buckle and the white extruder lower shell to see if there is sunken part;
[2]. Visually check if there is a big gap between the black buckle and the white extruder lower shell.

The buckle is not installed in place.   **The buckle is installed in place.**

Q3. Do we need to do extruder calibration again after replacing the nozzle?

Yes. It is recommended to perform extruder calibration again to ensure high print quality as minimal error may be caused by extruder installation.

Q4. How to solve if the displayed temperature is abnormal after replacing the nozzle?

The abnormal temperature indicates that the extruder sensor fails to work. Please check whether the nozzle is installed in place.

Q5. Click to start printing the model, and the extruder moves normally, but there is no filament extruded. How to solve it?

1. Observe the filament guide tube to confirm whether the filament enters the extruder; If not, please tap [Load] until there is filament coming out of the nozzle and then restart printing.
2. Check whether the nozzle is clogged. If so, please refer to Q1 for the solution.

Q6: How to replace the filament ?

1. Tap [Filament] - [Change], and the filament will be withdrawn after extruder heating is completed. Pull out the filament according to the instructions.
2. Insert the new filament into the filament intake, push it into the feeding wheel, and the filament will be fed into the nozzle.
3. Filament change is completed when the new filament is coming out of the nozzle.

Q7: How to remove the model?

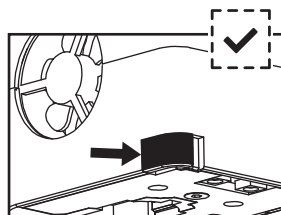1. Take out the removable build plate.
2. Bend the build plate to separate the model and the plate. [Please use a scraper to assist the removal if the model is too small or too big.]
3. Remove the model.

Q8: How to solve if the distance between the nozzle and the platform is too large [far away from the platform] or too small [hitting the platform] during printing?

1. Tap [Setting] - [Calibration].
2. Homing is performed automatically and then the extruder drops to a certain height.
3. According to the screen prompts, tap the UP and DOWN arrows to adjust the distance between the nozzle and the platform until the nozzle is just about to touch the platform.
4. Tap [OK], and the printer will memorize the current calibration position and start homing.

Q9: Can we use filaments of other brands which are not produced by Flashforge ?

Adventurer 3 Pro 2 generally supports ABS and PLA filaments, but the material formula of each brand varies. Adventurer 3 Pro 2 has tested out the default parameters such as the optimal temperature and filament extrusion according to the properties of Flashforge ABS and PLA filaments. Filaments of other brands can be used, but not recommended. If using non-Flashforge filament results in the clogged nozzle, poor printing quality or other failures, Flashforge will take no responsibility. These problems are not within the warranty scope of Flashforge.

Q10. Is Adventurer 3 Pro 2 compatible with all kinds of AC power input ?

Adventurer 3 Pro 2 is equipped with a built-in 24V/6.5A power supply, suitable for 110V-240V input voltage.

Q11. Can Adventurer 3 Pro 2 automatically shut down after finishing printing?

No.

Q12. What kinds of file formats does Adventurer 3 Pro 2 support?

Input: 3mf / stl / obj / fpp / bmp / png / jpg / jpeg files.
Output: gx/g files.

Q13. Does Adventurer 3 Pro 2 support other cloud platform besides the FlashCloud?

Yes. Adventurer 3 Pro 2 is open up to all other cloud platforms.

Q14. Is it safe to print ABS filament?

ABS filament will release toxic gases during heating, so it is recommended to place the printer in a well-ventilated environment when printing ABS. It is recommended to print nontoxic materials such as PLA in children's activity places.

Q15. How to solve if the printed model is warping?

Method 1: Heating up the platform can effectively alleviate this problem, as this can increase the adhesion between the platform and the model.
Method 2: Add a raft when slicing the model.
Method 3: Apply glue.

Q16. Is it a must to add a raft before printing the model?

Not necessarily. When printing the raft, the filament extrusion amount is larger and the printing success rate is higher. Under the heating condition, the adhesion between the model and the platform increases, which makes the model adhere to the platform well when printing, and also increases the printing success rate.

Q17. After nozzle replacement is completed, the extruder temperature is displayed as 300°C and the extruder fan is also working. How to solve it?

The nozzle is not installed properly, the temperature can not be read, and the printer displays the abnormal temperature. Please remove and install the nozzle again and push the nozzle to the end to ensure that the nozzle slot and the lower part of the extruder are on the same level.

Q18. The extruder makes chug noise and there is no filament coming out of the nozzle. How to solve it?

This indicates that filament has not been fed into the extruder. It is more likely the nozzle is clogged or the filament guide tube is not properly installed. Check the guide tube joint first. If it is normal, refer to Q1 for the solution.

Q19. What is the difference between [Load] and [Change]?

[Load]: Only include loading filament into the extruder.
[Change]: Include two functions of filament loading and unloading, with filament withdrawal followed by filament feed.

Q20. Adventurer 3 Pro 2 starts printing when the distance between the extruder and the build plate is still large, causing filament can not stick to the build plate and printing failure.

Please perform calibration or homing again. Then start printing to check results.

Q21. After inserting the USB flash drive, the print files can not be found. How to solve it?

The format of the USB flash drive is incorrect. Adventurer 3 Pro 2 only supports FAT32 file system. Please format the USB flash drive into FAT32 format.

Daily Maintenance Instruction:
When the printer is idle for a long time, please apply lubricating oil to the guide rails. Or regularly apply lubricating oil on the guide rails or lead screws every other month.

Chapter 4: Help and Support

FlashForge team is on standby and ready to help you with any challenges you may have with your Adventurer 3 Pro 2. If the issues or questions are not covered in this User Guide, you can seek for solutions on our official website or contact us via telephone.

There are solutions and instructions to common issues that can be found on our official website. Have a look first as most basic questions are answered there.

www.flashforge.com

The FlashForge support team can be reached by e-mail or phone between the working hours from 8:00 a.m. to 5:00 p.m. PST Monday through Saturday. In case you contact us during off-duty time, your inquiry will be answered the following business day.

Note: Due to the replacement of different filaments, there will be a small amount of impurities left in the extruder, which will cause the clogged nozzle issue. As this can be solved by just unclogging it, it's not owing to quality issue and it's not within the 400-hour life range. If users encounter this problem during use, please contact our after-sales personnel, and complete the unclogging operation according to their instructions.

Tel: +86 579 8227 3989
Email: support@flashforge.com
aftersales@flashforge.com
ADD: No. 518, Xianyuan Road, Jinhua, Zhejiang, China.

Please provide the serial number, which is the bar code at the back of your Adventurer 3 Pro 2, when contacting our after-sales personnel.

S/N: FFAD******

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Flashforge

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