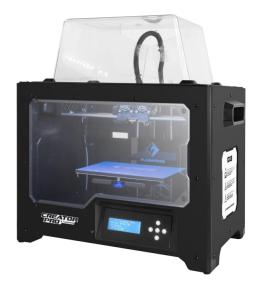


FlashForge Creator Pro 3D Printer User Guide



Creator Pro User Guide | www.FlashForge.com

Contents

Contents	2
Preface	3
Introduction	4
Notice	5
Chapter 1: 3D Printing Technology	8
Chapter 2: About Creator Pro1	0
2.1 About Your Creator Pro1	0
Chapter 3: Unpacking14	4
Chapter 4: Hardware Assembly1	7
Chapter 5: Build Plate Leveling2	1
Chapter 6: About Software2	2
6.1 Software Installation	2
6.2 Exploring FlashPrint	2
Chapter 7: Basic Printing4	1
7.1 Generate a Gcode4	1
7.2 Loading the Filament Using the LCD Panel4	5
7.3 Unloading the Filament Using LCD Panel4	6
Chapter 8: Supports and Service	3

Preface

Note: Each device must be tested before leaving factory. If there are some residues in 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 the FlashForge 3D printer users for their unremitting efforts and sincere assistance.

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

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

(1) 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.

(2) Official FlashForge Website: <u>http://www.FlashForge.com</u>

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.

Introduction

Notes:

- Please read FlashForge Creator Pro 3D Printer User Guide carefully before use.
- The User Guide is written based on Windows 7 OS.
- The version of the FlashPrint is the latest.

The *FlashForge Creator Pro 3D Printer User Guide* contains the information needed for you to set up and use this device.

This User Guide includes the following parts: Preface, Introduction and Aftersale service.

The Preface section includes resource acquisition channel, the overall framework of the manual, and the problems that should be paid attention to.

The introduction section contains the presentation of 3D printing technology, equipment introduction, unpacking and installation of equipment, software installation and usage.

After-sale service section tells the user how to get the support and help.

Notice

! Notices: Read all the instructions in the manual and familiarize yourself with the FlashForge Creator Pro User Guide before setting-up and using. Failure to comply with the warning and instructions may result in individual injury, fire, equipment damage or property damage.

PLEASE STRICTLY FOLLOW ALL THE SAFETY WARNINGS AND NOTICE BELOW ALL THE TIME.

Work Environment Safety

- (1) Keep your work place tidy.
- (2) Do not operate Creator Pro in the presence of flammable liquids, gases or dust.
- ③ Creator Pro should be placed out of children and untrained people's reach.

• Electricity Safety

 Always use the Creator Pro with a properly grounded outlet. Do not refit Creator Pro's plug.

② Do not use Creator Pro in damp or wet circumstance. Do not expose Creator Pro to burning sun.

- ③ In case of device damage, please use the power supply provided by FlashForge.
- ④ Avoid using the device during a thunderstorm.
- (5) In case of uncertain accident, please unplug the device if you do not use it for long.

•Personal Safety

- ① Do not touch the nozzle and build plate during printing.
- ② Do not touch the hot nozzle after finishing printing.
- ③ Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing
 Creator Pro User Guide | www.FlashForge.com 5
 400-699-1063

and gloves away from moving parts.

④ Do not operate the device while you are tired or under the influence of drugs, alcohol or medication.

•Cautions

- ① Do not leave the device unattended for long.
- ② Do not make any modifications to the device.
- ③ To lower the build plate before loading/unloading filament. (The distance between
- the nozzle and build plate should be kept for at least 50mm)
- ④ Operate the device in a well-ventilated environment.
- (5) Never use the device for illegal activities.
- (6) Never use the device to make any food storage vessels.
- ⑦ Never use the device to make any electrical appliance.
- (8) Never put the model into your mouth.
- (9) Do not remove the models with force.

• Environment Requirements

Temperature: RT 15-30℃

Moisture: 20%-70%

• Place 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.

• Filament Requirements

Do not abuse the filament. Please make sure you use the FlashForge filament or the Creator Pro User Guide | www.FlashForge.com 6 400-699-1063 filament from the brands accepted by FlashForge.

• Filament Storage

All polymers degrade with time. Do not unpack filament until necessary. Filament should be stored in clean and dry conditions.

Legal Notice

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

FLASHFORGE CORPORATION MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS DOCUMENT, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRATIES 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

This document contains proprietary information protected by copyright. Copyright © 2017 FlashForge Corp. All Rights Reserved

Chapter 1: 3D Printing Technology

3D printing refers to transforming three-dimensional models into physical objects that you can hold and touch. It is also called additive manufacturing because the 3D model is created by "adding" layers upon layers of material until the object is fully formed.

Fused Filament Fabrication (FFF) is the most common method of 3D printing. It is also the method that the Creator Pro uses. It works by melting plastic material called filament onto a print surface in high temperature. The filament solidifies after it cools down, which happens instantaneously after it is extruded from the nozzle. 3D objects are formed with the filament laying down multiple layers.

1.1 Process

- 3D printing involves three steps:
- 1.) Make or download a 3D model
- 2.) Slice and export the 3D model
- 3.) Build the 3D model

1.1.1 Make a 3D Model

Currently, there are three ways of making a 3D model.

• **Designing From Scratch** You can use free CAD (computer-aided design) software such as 3DTADA, AutoCAD, SolidWorks, Pro-E, and our own software Happy 3D, which is suitable for the beginners, to design your own 3D model.

• **3D Scanners** An alternative method to making a 3D model is to scan an object. 3D scanners work by digitizing a physical object, collecting its geometric data, and saving it to a file on your PC. There are also apps that can turn a mobile device into a 3D scanner.

Creator Pro User Guide | www.FlashForge.com 8

• **From the Cloud** The most popular way of obtaining a 3D model is to download it from websites that allow users to upload 3D models that they designed.

E.g. www.thingiverse.com

1.1.2 Slice and Export the 3D Model

Slice software is the software that prepares 3D models for printing and turns them into instructions for the 3D printers. FlashPrint is the slicing software used for the FlashForge Creator Pro.

Using FlashPrint, you can prepare .stl files to be .x3g files for printing. Then users can print files via SD card.

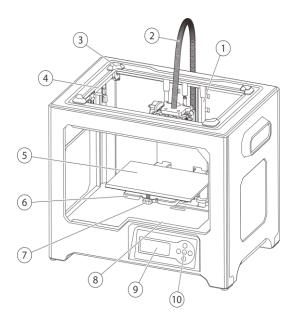
1.1.3 Build the 3D Model

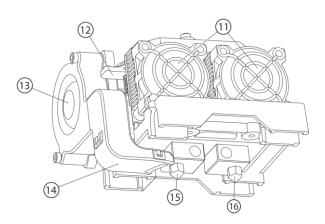
Once the output file has been transferred to your Creator Pro, it will start to turn the 3D model into a physical object by laying down layers of filament.

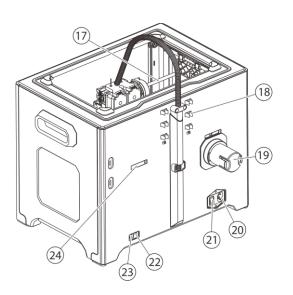
Chapter 2: About Creator Pro

2.1 About Your Creator Pro

2.1.1 Views







1.Z-axis guide rod	13.Turbofan
2.Extruder cable bunch	14.Turbofan baffle
3.Slot	15.Left nozzle
4.Y-axis guide rod	16.Right nozzle
5.Build plate	17.X-axis guide rod
6.Build platform	18.Filament guide
7.Leveling knob	tube buckle
8.SD card slot	19.Spool holder
9.LCD panel	20.Power input
10.Buttons	21.Power switch
11.Cooling fan	22.Reset button
12.Spring presser	23.USB input
	24.Spool holder slot

Creator Pro User Guide | www.FlashForge.com 10

400-699-1063

2.1.2 Accessories

Along with your Creator Pro 3D printer, the box also contains the followings:

On the top of the PE foam sheet, you'll find:

- Filament guide tube*2
- Quick start guide*1
- User guide*1
- Build tape*2
- Leveling card*1
- After-sales service card*1

Within the accessory PE foam

- Power cable *1
- USB cable*1
- Spool holder*2
- Dual extruder*1
- Tool bag(Allen Wrench/Leveling knob/Bolt/Stamping Wrench/Unclogging Pin Tool)
- Extruder's accessory kit(Bolt/Turbofan baffle)
- SD card *1
- Grease*1

Under Creator Pro's build platform:

- Filament*2
- Lid*1

2.1.3 Terms

Build Plate	The surface on which the Creator Pro builds an object.
Build Tape	The blue tape that covers Creator Pro's build plate so that the object can adhere to the build plate well.
Build Volume	The three dimensional amount of space that an object will use once it is completed. The largest build volume of Creator Pro is 227*148*150
Leveling Knobs	Knobs under the build platform that are used for adjusting the distance between the nozzle and build plate.
Extruder	The device that draws the filament from the spool, melts it and extrudes it through a nozzle onto the build plate.
Nozzle	Also called "print head", which 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 Intake	An opening located at the top of the extruder.
Filament Guide Tube	A plastic piece that guides the filament from the filament box to the filament intake
Unclogging Pin Tool	A tool that used for cleaning and unclogging the extruder
Stamping Wrench	A tool that used for seizing the nozzle's metal cube

2.1.4 Parameters

Name	Creator Pro
Number of Extruder	2
Print Technology	Fused Filament Fabrication (FFF)
Screen	LCD Panel
Build Volume	227×148×150mm
Layer Thickness	0.1 - 0.2mm
Build Precision	±0.1-0.2mm
Positioning Precision	Z axis 0.0025mm; XY axis 0.011mm
Filament Diameter	1.75mm (±0.07)
Nozzle Diameter	0.4mm
Build Speed	10-200 mm/s
Software	FlashPrint/Simplify3D/Makerware/RepeliactorG
Support Formats	Input:3MF/STL/OBG/FPP/PNG/JPG/JPEG Output:X3G
OS	Win xp/Vista/7/8/10、Mac OS、Linux
Device Size	526*360*403(550)mm
NET Weight	14.8Kg
AC Input	100V-240V/4.5A-2.5A
Connectivity	USB Cable, SD Card



Chapter 3: Unpacking

(reference video: <u>Creator Pro Unpacking</u>)

The Creator Pro was carefully packaged at FlashForge manufacturing facility. Please follow the unpacking steps laid out below.

CAUTION

Handle the package and its contents with extra care; do not use any unnecessary force.

Do not remove the wrapping around the nozzle. It consists of a ceramic fiber fabric and heat resistant tape that helps to keep the nozzle at a constant temperature.

 (3-1)Place your Creator Pro on a clean and stable surface, open the carton and then take the foam sheet out. Within the PE foam sheet are lying two filament guide tubes, two pieces of build tape, a FlashForge leveling card, a User Guide and a Quick Start Guide.



3-1

2. (3-2)Firmly grasp the two side handles of FlashForge Creator Pro. Lift it out of the box and place it on a stable surface. Then open and remove the transparent covering.



3-2

3. (3-3)The FlashForge Creator Pro and its accessories will be displayed in front of you. Take the dual extruder out and place it onto a clean ground.

Note: To avoiding scratching the dual extruder and affecting the printing precision, please do not put the nozzle onto the surface.



3-3

4. (3-4)Take the accessory foam container out, within which are lying **a power cable**, **a USB cable**, **two spool holders**, **a bag of tools**, **a SD card**, **a bag of extruder accessories**.



3-4

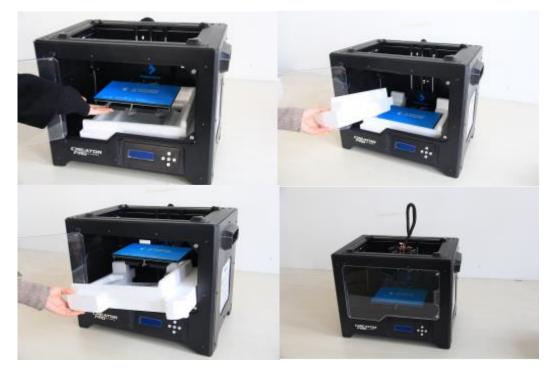
5. (3-5)Slide the X-axis rods to the very back. Take the transparent lid together withCreator Pro User Guide | www.FlashForge.com 15400-699-1063

two spools of filament out from the printer. Take the two spools of filament out from the lid.





6. (3-6)Elevate the build plate to its limit. Take the side protective foam sheets out from the printer. Take the bottom protective foam out from the printer.

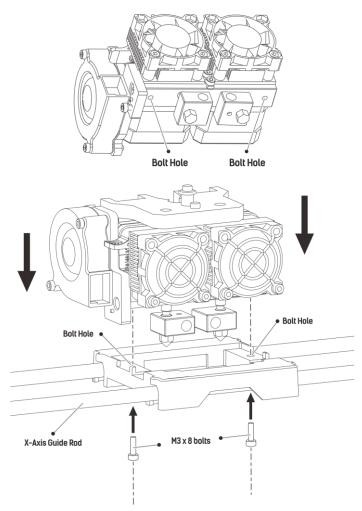


3-6

Congratulations! You've finished the unpacking process. (Tip: Save your FlashForge Creator Pro packaging for future transportation and storage.)

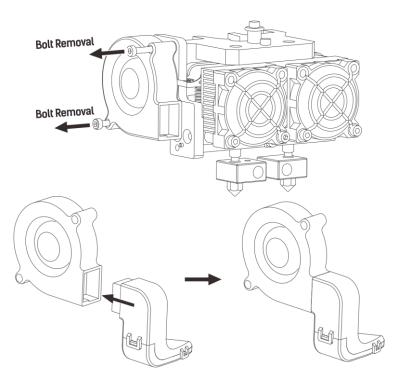
Chapter 4: Hardware Assembly

First, you need two M3*8 bolts from the extruder's accessories kit (including bolts and turbofan baffle), and the 2.5mm Allen Wrench. Lower the build plate as much as possible, hold the extruder by both sides, take it out of the accessory sleeve and position it on the extruder support with the fan facing forward. Align the screw holes and fasten with the two short silver bolts (see 4-1).

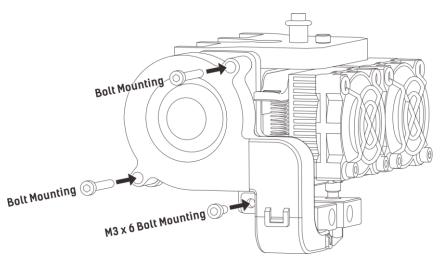


4-1

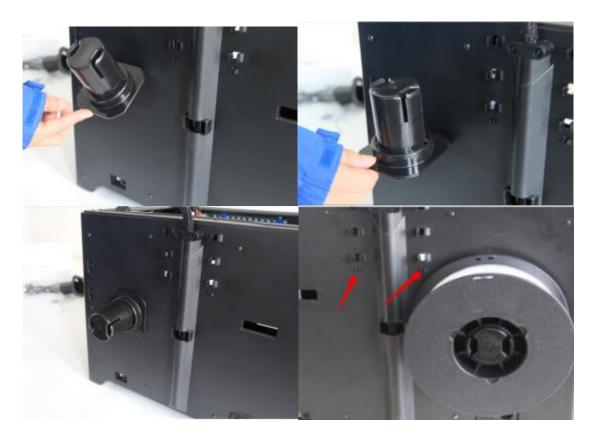
(4-2) Unscrew the two turbofan bolts and take out the turbofan baffle to install.(Note: Beside the turbofan bolt hole locates a small hole. You need to insert the bump of turbofan baffle to this hole) Take out a M3 x 6 bolt and a 2.5mm Allen Wrench to secure the turbofan baffle onto the extruder. (4-3)Finally, screw the two turbofan bolts.



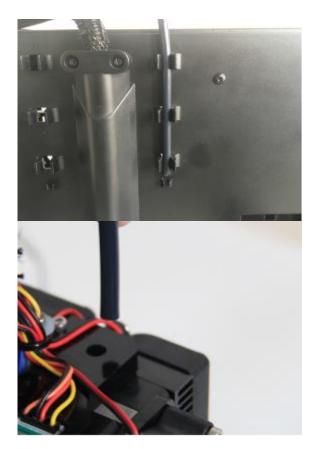




(4-5)The next step goes to the installation of the spool holders. Install one on each side. To install a spool holder, level it and insert the end into one of the openings. Turn down the spool holder to make the holder bottom cleave to the printer back.



To lock the filament guide tube with R-shape buckles and insert another end to the filament intake. To avoid filament jams, always ensure that any filament spool you mount on the Creator Pro feeds from the bottom of the spool toward the top. Filament mounted on the right spool holder when viewed from the back should always unspool clockwise and filament loaded onto the left spool holder should always unspool counterclockwise.

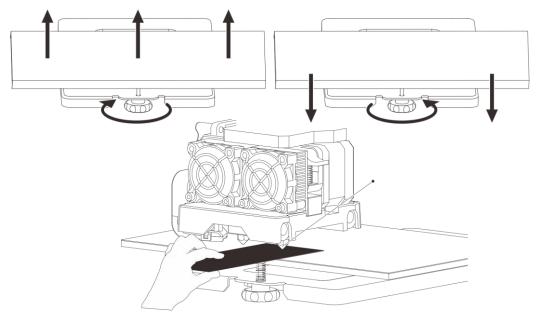


Chapter 5: Build Plate Leveling

Every printer will be leveled before shipped out, but we can't ensure that the platform won't move during delivery, so it will be better to level platform before you begin to print. We should tighten the three knobs under the build platform, then put one SD card within the 3D printer, there is a file named **PlateLeveling.x3g**. Put the SD card into the slot, choose **Print from SD**, select **OK**, then choose **PlateLeveling.x3g** and press OK button, you will see the content below: **Find the 3 knobs under the build platform and tighten four or five turns. I'm going to move the extruder to various position for adjustment. In each position, we will need to adjust 2 knobs at the same time. Nozzles are at the right height when you can just slide a sheet of paper between the nozzle and the platform. Grab a sheet of paper to assist us. Please wait.** (During the process, what you should do is only select **OK** continuously, the screen will go to next page.)

(1) Then the build plate and the nozzle start moving, once they suspend, you need to adjust the corresponding knob under the build plate individually. Use the leveling card or a thin piece of paper to check the distance between the build plate and the nozzles.
 (2).As you adjust the knob, make sure the leveling card just slides between the nozzle and build plate. You should feel somewhat friction on the card but still be able to easil y pass the card between the nozzle and build plate.

When you finish leveling the first point, repeat the steps above to finish leveling the rest three points.



Creator Pro User Guide | www.FlashForge.com 21



Chapter 6: About Software

This chapter talks about the basic function of FlashPrint. For more information about advanced function, you can browse our website www.flashforge.com.

6.1 Software Installation

6.1.1 Software Acquisition

Method 1: To get the installation package from the SD card in the accessory kit.

Method 2: Open the link below to download the installation package:

http://www.flashforge.com

Steps: Support---Downloads---FlashPrint---Choose Software Version---Download

6.1.2 Software Installation and Start-up

1. Decompress the zipped file or start the installation program, and then install the software according to the direction.

Start the software with the start menu shortcut or by clicking the software icon.(See 6-1)



6-1

6.2 Exploring FlashPrint

6. 2.1 Machine Type Selection

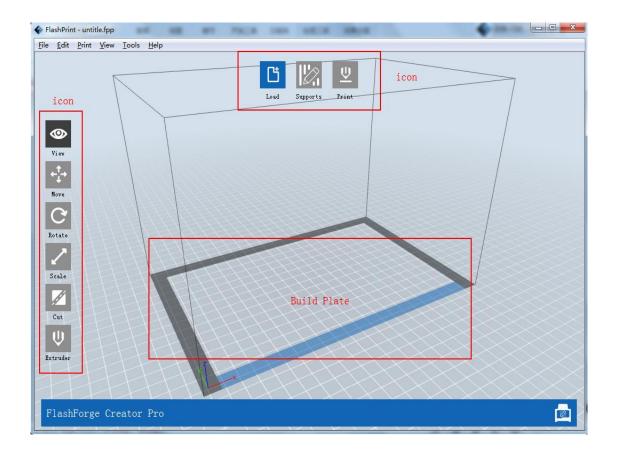
Attention! After starting FlashPrint, you need to select the target machine type first.

When you start FlashPrint, a dialog box will pop up. Just need to select FlashForge Creator Pro in the machine type list and click **[OK]**. You can also change the machine type via clicking **[Print]--[Machine type]**. Please see graphic 6-2:

Creator Pro User Guide | www.FlashForge.com 22

File Edit	Print	View	Tools	Help					
	<u>U</u>	Print		Ctrl+P					_
		Machine	Туре	•	•	FlashForge Creator Pro		<u>"</u> <u>/</u>	
						FlashForge Dreamer FlashForge Finder FlashForge Guider	Le	oad Supports Prin	-
View									

6.2.2 Software Introduction



Ľ	Load files.
	Enter into the support edit mode
<u>U</u>	Print it directly with your Creator Pro or export to your USB Stick
0	View FlashPrint home screen from one of six viewing angles
$\overset{+}{\overset{+}{\overset{+}{\overset{+}{\overset{+}{\overset{+}}}}}$	Move model around on XY- axis; shift+click to move along Z axis
C	Turn and rotate your model
2	Scale the size of your object
Ø	Cut model into several parts

6.2.3 Loading

You can load a model file or Gcode file into your FlashPrint by the following six methods:

Method 1: Click the Load icon on the main interface. Then select the object file.

Method 2: Select the file for loading and drag the file to the main interface of the software.

Method 3: Click [File]--[Load File]. Then select the object file for loading.

Method 4: Click [File]--[Examples] to load the example files

Method 5: Click [File]--[Recent Files] to load the files opened recently.

Method 6: Select and click-drag the target file to the icon of FlashPrint.

Note: 3D models can be stored as **.STL**, **.OBJ**, and **.FPP file and** support editing by FlashPrint.

Creator Pro User Guide | www.FlashForge.com 24

Generating Rilievo

Load a png, jpg, jpeg, bmp picture file into the FlashPrint. And the following dialogue box (6-4) will pop up. The setting box includes settings for shape, mode, maximum thickness, base thickness, bottom thickness, width, height, top diameter and bottom diameter.

Shape: including plane, tube, canister and lamp.

Mode: including "darker is higher" and "lighter is higher".

Maximum thickness: Z value of the model

Base thickness: The minimum raft thickness and the default value is 0.5mm

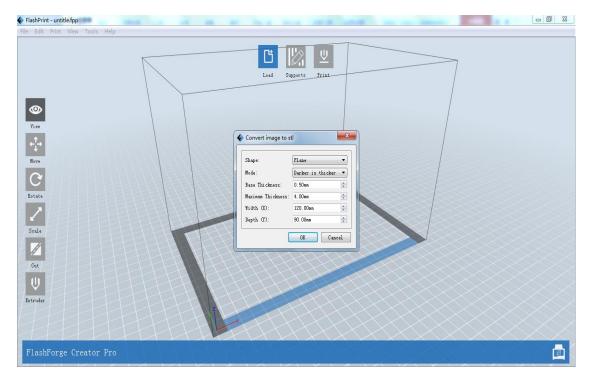
Width: X value of the model

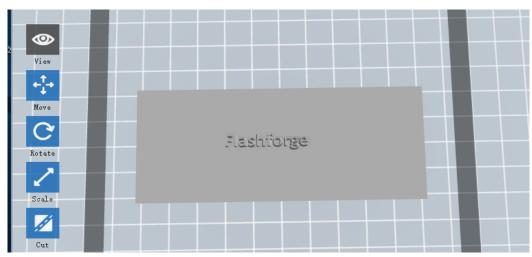
Depth: Y value of the model

Bottom thickness: For tube, canister and lamp to set up bottom thickness

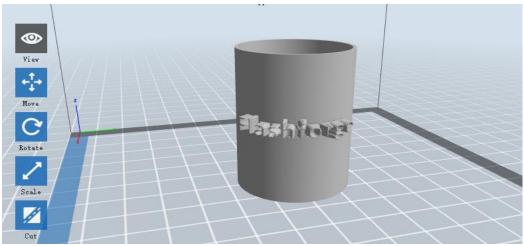
Top diameter: For tube, canister and lamp to set up the top diameter

Bottom diameter: For tube, canister and lamp to set up the bottom diameter

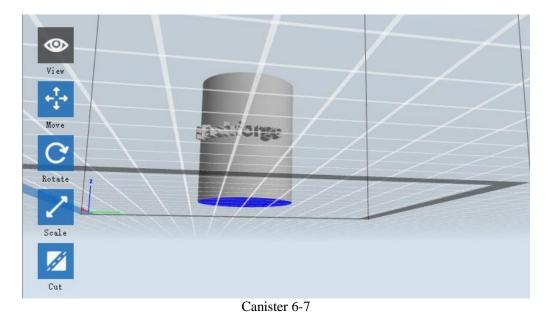


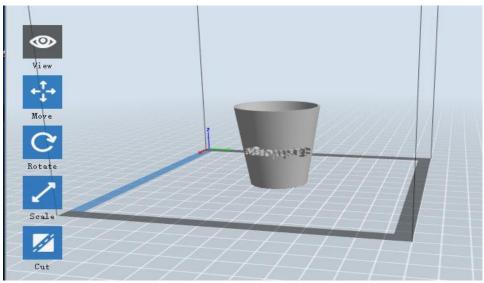




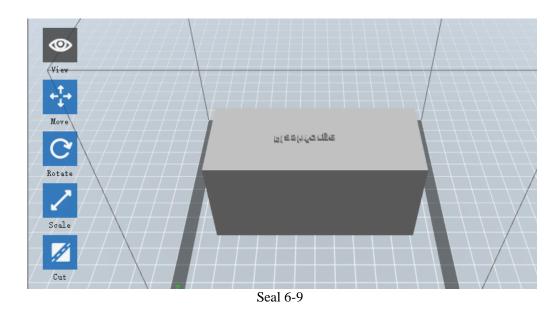


Tube 6-6





Lamp 6-8



6.2.4 Views

1Changing views

Change model views by moving, rotating, scaling.

• Drag

Click the [View] icon and then you can move the object by the following three

methods:

Method 1: Hold down the left mouse button and drag.

Method 2: Hold down the mouse wheel and scroll up and down.

Method 3: Hold down the Shift key, hold down the right mouse button and drag.

Creator Pro User Guide | www.FlashForge.com 27

400-699-1063

• Rotate

Click the **[View]** icon and then you can rotate the object by the following two methods:

Method 1. Hold down the right mouse button and drag.

Method 2. Hold down the Shift key, hold down the left mouse button and drag.

• Scale

Scroll the mouse wheel to enlarge or shrink the build plate.

2Set View

Allow users to view the object on the build plate. Six views are under the view menu, that is, bottom view, top view, front view, back view, left view and right view. **Method 1:** Click the the **[View]** button, there are six views in the drop- down list **Method 2:** Click the the **[View]** icon on the left, click it again and a submenu will appear with six views for selecting.

3Reset View

Allow users to reset views by the following two methods:

Method 1: Click the [View] menu and select [Home View]

Method 2: Click the **[View]** button on the left, click it again and you will see the viewing options, you can click **[Reset]**.

(4) how Model Outline

Click [View]--[Show Model Outline], it will highlight the yellow border of the object

(5) how Steep Overhang

Click [View]--[Show Steep Overhang]. When the intersection angle between the model surface and horizontal line is within the overhang threshold value, the surface has steep overhang and it becomes red in the software. Overhang threshold value could be set as needed. The default value is 45 degree.

6.2.5 Move

Select the object and move the object by the following two methods:

Method 1: Click the [Move] icon on the left, hold down the left mouse button and drag it to adjust the location of the model in XY direction. Hold down the **Shift** key, hold down the left mouse button and drag it to adjust the location of the model in Z direction. The distance and the direction of the movement will be displayed.

Method 2: Click the [Move] button on the left and then enter the distance value to move the model. You can also click [Reset] to reset distance values.

Note: Users shall click **[Center]** and **[On Platform]** after the location adjustment to ensure the model(s) be within the build area and on the build platform. If a specified position is needed, only click **[On Platform]**.

6.2.6 Rotate

Select the target object and rotate the object by the following two methods:

Method 1: Click the **[Rotate]** icon on the left and three mutually perpendicular rings appear around the object Click one ring and rotate on the present axis, you will see the rotation angle and direction in the center of circle. In this way, you could make the model rotate on X/Y/Z axis.

Method 2: Click the **[Rotate]** icon on the left, and then enter into rotating angel values in X/Y/Z axes positioning. Click **[Reset]** to reset rotating angel values.

6.2.7 Scale

Select the target object and scale the object by the following two methods:

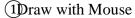
Method 1: Click the **[Scale]** icon on the left, hold down the left mouse button and scale the model. The corresponding values will display near the object..

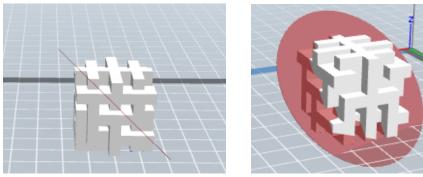
Method 2: Click the **[Scale]** icon on the left and then enter into scale values in X/Y/Z axes positioning. Click the **[Maximum]** button to get largest size possible for building. Click **[Reset]** to reset the size of model.

Note: If the **[Uniform Scaling]** radio button is clicked, it will scale the model in equal proportion when changing **value** in any positioning of the model. Otherwise it will only change the value of the corresponding positioning.

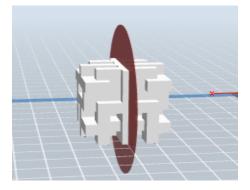
6.2.8 Cut

Click on the model to select it and click on the **Cut** icon to set the cut plane. The direction and position are available for setting.



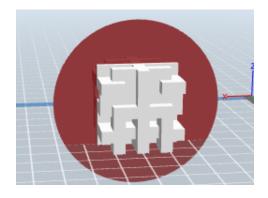


2X Plane

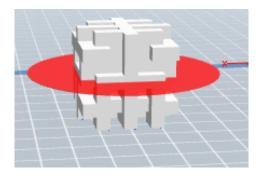


Creator Pro User Guide | www.FlashForge.com 30

(3)Y Plane



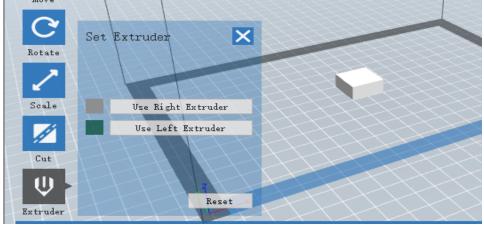
(4) Plane



5Keep Parts in Place

6.2.9 Extruder

(6-10) Click the model to select it, then double-click the Cut icon in the left to choose L/R extruder to print .

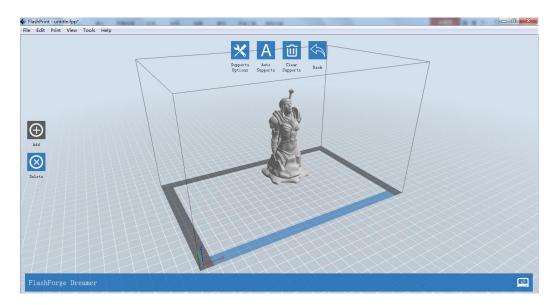




Creator Pro User Guide | www.FlashForge.com $_{31}$

6.2.10 Supports

After loading the model, click [Edit]--[Supports] or click the Supports icon directly, then you will enter the support edit mode (as shown in the picture below). Click [Back] to exit when you finish editing.



1Support Options

Click the Support Options, an option box will appear, supports options include "treelike"and "linear", when choose "treelike", click **[OK]**, then it will generate treelike structure; when choose "linear", click **[OK]**, then it will generate linear structure.

Treelike Supports: You can set up treelike specifications such as overhang thresh, post diameter, base diameter and base height.

Linear Supports: You can set up linear specifications such as overhang thresh and pillar size.

If it is a model with supports, when you choose one of the supports options, the software will judge whether existing supports need to be deleted or not on the basis of the type of existing support, and will pop up the corresponding prompt to let you make the choice.

Supports Type:	💿 Treelike 🛛 💿 Linear	
Overhang Thresh:	45°	-
Post Diameter:	3. Omm	-
Base Diameter:	6. Omm	-
Base Height:	6. Omm	*
	Cancel Restore D	
Supports Option	s	X
Supports Option	s 💿 Treelike 💿 Linear	×
		×

6-12

2Auto Supports

Click the **[Auto Supports]** button, the software will judge the position where supports are needed and generate corresponding treelike or linear supports. If it is a model with supports, the existing supports will be deleted and new supports will be generated.

3Add Supports

Supports will be added once clicking the [Add] button. Move the cursor to the position where supports needed, left-click to choose the starting point of supports, hold down the left mouse button and drag the mouse the supports preview will show up(if support surface doesn't need support or the support column angle is too large, the support review will be highlighted). Loosen the left mouse button, if support column doesn't meet with model, then support will be generated on origin and terminal point(the highlighted preview support won't generate support structure)

(4)Clear Supports

Click [Clear Supports], all supports will be deleted. The operation can be repealed via clicking [Undo] or pressing the shortcut key Ctrl+Z.

5 Delete Supports

Supports will be deleted once clicking the [Delete] button. Move the cursor to the supports needed deleting, current supports and its subnode support will be highlighted, click the left mouse button to delete these highlighted support.

6.2.11 Print

I want to:	🗹 Previe	*					
Machine Type:	FlashForg	ge Creator	Pro		v		
Material Right:	ABS	ABS 👻					
Material Left:	ABS						
Supports:							
Raft:	Disable				•		
Resolution:	O Low (F	aster)		🗌 Wall			
	🖲 Standa	rd		🗌 Brim			
	○ High (Slower)					
More Options >>							
Layer Height	Shells	Infill	Speed	Temperature	Others		
Cooling Fan Co	ntrols:		Automate	n	•		
				-			
				Rest	ore Defaults		
		OK		Cancel Sau	ve Configurati	op	
		01		ouncer Day	e courigati	out	

Preview: Choose to enter preview interface or not

2Machine type

Material right/left: Choose a type of material according to the type of model

(A) upports: When print suspended structure models, support is necessary. Click **[Supports]** to create support part for the printing.

SRaft: This function will help the model to stick well on the platform.

(6)Wall: During dual color printing, this function will help to clear the leaking Creator Pro User Guide | www.FlashForge.com 34 400-699-1063 filament of another extruder.

7Brim

Resolution: You have three resolution solution(with default setting)to choose from, high resolution is corresponding with slow printing speed, opposite for the low resolution.For PLA printing, an extra solution "Hyper" is available.

More options: Click **[More options]** to set for layer, shell, infill, speed and temperature. Different resolution solution is corresponding to different defaults, click **[Restore Defaults]** to back to default setting.

•Layer Height

a. Layer Height: Layer thickness of the printing model. With a small value, the surface of the model will be smoother.

b. First Layer Height: This is the first layer of the model, which will affect the sticking performance between the model and platform. Maximum is 0.4mm, and usually the default is OK.

c. Shells: Contains the outside shell value, capping layer value (under vase mode, top solid layer setting is invalid.)

- Perimeter Shells: Maximum is 10
- a. Top Solid Layers: Maximum is 30, minimum is 1.
- **b. Bottom Solid Layers:** Maximum is 30, minimum is 1.
- Infill

a. Fill Density means fill rate.

b. Fill Pattern is the pattern of filling shape which effects printing duration.

c. Combine Infill: You can select the layers for combining according to the layer thickness. The combined thickness should not exceed 0.4mm. "Every N layers" is for all the infills while "Every N inner layers" is only for inner infills, which generally can save print time.

Layers Shells	Infill	Speed Temperature Others					
Fill Density:		15%					
Fill Pattern:		Hexagon 💌					
Combine Infill:		Every 2 Sparse Layers 🔹 🔻					
6-14							

• Speed

Creator Pro User Guide | www.FlashForge.com 35

a. **Print Speed** is the moving speed of the extruder. Generally, the lower speed is, the better print you will get. For PLA printing, 80 is recommended.

b. Travel Speed is to control the moving speed of the extruder under non-printing Status during work. For PLA printing, 100 is recommended.
Note: Modify parameters settings to get better prints as different models need different parameters.

• Temperature

Extruder Temperature: Recommended extruder temperature is 220°C. **Note:** Different temperatures have subtle influences in prints. Please adjust the temperature according to the condition in order to get a good print.

Platform Temperature: To set the temperature of Platform.

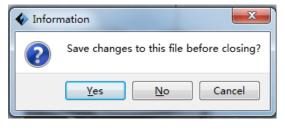
• Others

Cooling Fan Control: Set up the time to turn on the cooling fan. You can pre-set the height and make the cooling fan begin to work at the point.

6.2.12 File Menus

1New Project

Click **[File]--[New Project]** can build a blank project. If there is an unsaved modification on previous project, then it will inform you whether the modification needs to be saved or not. Click **[Yes]** will save the modification, and then click **[No]** will abandon it. If click **[Cancel]** or close tool tip, then it will cancel the new project.



2Saving

After finishing the model edit and adjustment, there are two ways below to save all models in the scene.

Method 1:

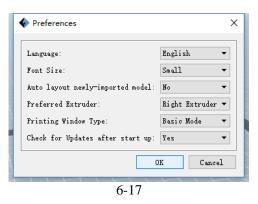
Click **[File]--[Save Project]** in the menu bar to save the file as a project file with the ".fpp" suffix, all models in the scene (include support) are independent. If reloading the files, extruder configuration information and model position will be the same as the configuration during saving.

Method 2:

Click on **[File]--[Save As...]** to save the model as project file .fpp or .stl and .obj. For .stl and .boj, models are integrated as one (include support part). If load it again, only the position of the model was saved, not included the printing parameters.

③Preferences

Click [File]--[Preferences], you can choose language and if needs detecting update when start



• Language: The software supports several languages, namely, Chinese

(simplified Chinese and traditional Chinese), English, French, Korean, Japanese and so on.

- Font Size
- Auto layout newly-imported model
- Preferred Extruder

• Printing Window Type

• Check for Update after start up: It is used to preset if it is necessary to activate the online automatic update function, if choose yes, every time when you open software, it can online detect if it is the latest version, once a new version found, it will reminds users to download and install the new version.

6.2.13 Edit Menus

1Undo

Allows users to undo the recent edits by the following two methods:

Method 1: Click [Edit]--[Undo].

Method 2: Press the shortcut key Ctrl+Z.

2Redo

Allows users to redo the most recent edit you have undone to your model file by the following two methods

Method 1: Click [Edit]--[Redo]

Method 2: Press the shortcut key Ctrl+Y.

3 Empty Undo-stack

To clean up the recorded operating steps so as to release the memory.

4Select All

By the following two methods, you could select all models in the scene. (When

models are too small to be seen or out of viewing scope, please click [Center] and

[Scale] buttons to adjust the model.)

Method 1: Click [Edit]--[Select All].

Method 2: Press the shortcut Ctrl+A.

5Duplicate

Select the object and duplicate the object through the following two methods:

Method 1: Click [Edit]--[Duplicate]

Method 2: Press the shortcut key Ctrl+V

6Delete

Select the object and delete the object through the following two methods:

Method 1: Click [Edit]--[Delete]

Method 2: Press the shortcut key Delete

7 Auto Layout All

Click [Edit]--[Auto Layout All] after loading one or more than one models, all models will be placed automatically as automatic placement rule.

BRepair Models

9Supports

6.2.14 Tools

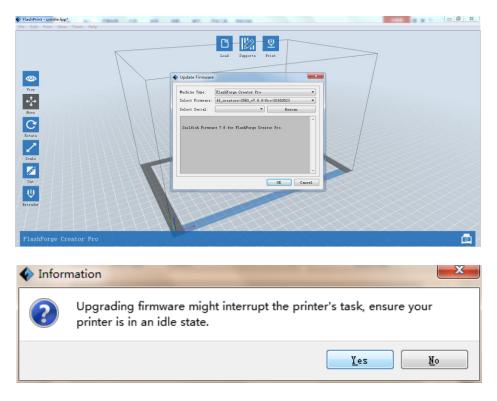
6.2.14.1 Update Firmware

Before updating firmware, you need to find and depress "driver-creator-pro" in the SD card.

Click and install the relevant installation program.



Launch the FlashPrint (Now your computer and Creator Pro are connecting with each other), click [Tools] and [Update Firmware], then click [OK] and a dialog box will pop up. Click [Yes] to start firmware update.



6-20

6.2.15 Help Menus

1First Run Wizard

(2)Help Contents: Click [Help]--[Help Contents], you can read the help contents.

3Check for Updates: Click [Help]--[Check for Update] to detect the available updates online.

(About FlashPrint: Click [Help]--[About FlashPrint], the software information box will pop up. The contents include the current software version and copyright information.

Chapter 7: Basic Printing

This chapter will provide a step-by-step guide on turning a 3D model into a physical reality. Before proceeding, it is recommended that you go over prior chapters on loading/unloading filament, leveling the build platform, and the functions and capabilities of FlashPrint.

7.1 Generate a Gcode

(7-1)Double-click the icon of FlashPrint to start the software.



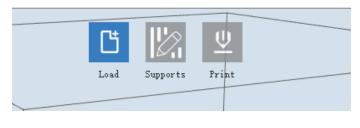
(7-2)Click [Print]--[Machine Type] to select FlashForge Creator Pro

•	FlashPrint - untitle.fpp*								
	File	Edit	Prin	t View	Tools	Help			
		😃 Print		Print	Ctrl+P				
l		Machine Type 🕨			۲	FlashForge Creator Pro			
	<	9			T			FlashForge Dreamer FlashForge Finder FlashForge Guider	



(7-3)Click the [Load] icon to load a .stl model file and the object will display on the

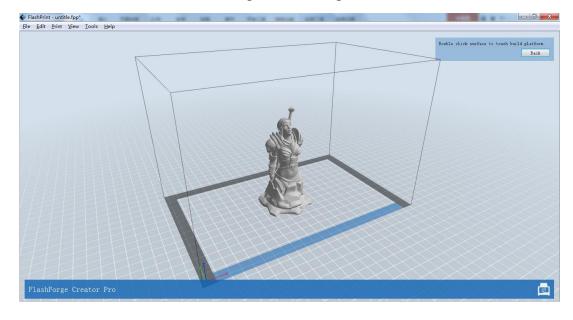
build area.



7-3

(7-4) Click the model to select it, then click the icon in the left [Rotate]--

[Surface to Platform] to make your model perfectly positioned on the build area. Creator Pro User Guide | www.FlashForge.com 41 400-699-1063 Click **[Back]** and double-click the **Move** icon again, then click **[On the Platform]** and **[Center]** to ensure the model be placed on the platform.



7-4

Note: If you've placed your model in a right place, you can skip the step above.

(7-5) Click the **Print** icon on the top, and you should make some setups for your print job.

Print								
I want to:	🗹 Preview							
Machine Type:	FlashForge Creator Pro 👻							
Material Right:	ABS 👻							
Material Left:	ABS 👻							
Supports:	Automatch							
Raft:	Disable 👻							
Resolution:	🔾 Low (Faster) 🗌 Wall							
	● Standard 🗌 Brim							
	○ High (Slower)							
More Options >>]							
Layer Height	Shells Infill Speed Temperature Others							
Cooling Fan Co	ntrols: Automatch 💌							
	Restore Defaults							
	OK Cancel Save Configurati	0						

Preview: If you check the **[Preview]** box, you can preview your model after slicing is done.

Machine Type: FlashForge Creator Pro

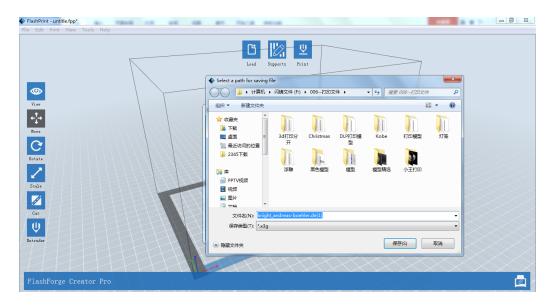
Supports: If you print a model with supports, you should click the inverted triangle and select **[Enable].**

Raft: You are suggested to select [Enable].

Resolution: You are suggested to select [Standard].

More Options: You are suggested to keep them default.

Click **[OK]** to select the path to save the Gcode file. You can rename the file as you like and save it as a x3g file, click **[Save]** to generate a Gcode file.



7-6

Next, we are going to print the model.

Before printing, users should

- (1) properly install the dual extruder.
- (2) properly install the filament guide tube
- (3) properly mount the filament spool and feed the filament

To make the process of feeding or withdrawing the filament easy, please follow the

next few steps carefully:

After inserting the filament into the filament intake, do not push it further until the

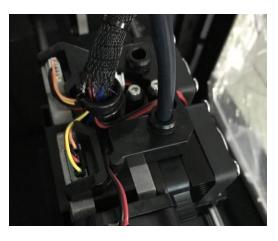
Creator Pro User Guide | www.FlashForge.com 43

400-699-1063

extruder temperature reaches 200°C or higher. Once the machine reaches this point, you will feel the filament being pulled into the extruder head.

7.1.1 Installing Filament

(7-7) First, remove the filament guide tube from the extruder.



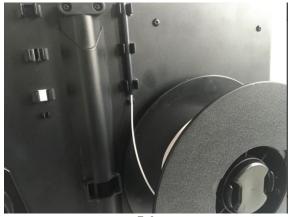
7-7

(7-8) To avoid filament jams, always ensure that any filament spool you mount on the Creator Pro feeds from the bottom of the spool toward the top. Filament mounted on the right spool holder [When viewed from the back] should always unspool clockwise and filament loaded onto the left holder should always unspool counterclockwise. Moreover, when you insert the filament into the filament intake, you should press down the spring presser first.



7-8

Note: The left extruder is suggested to print with PLA while the right extruder is suggested to print with ABS. Because the left extruder locates beside the turbofan baffle, which is more beneficial for cooling down the PLA models.



7-9

7.2 Loading the Filament Using the LCD Panel

1. Turn on the Creator Pro; the display will indicate:

Print from SD
 Preheat
 Utilities

2. Using the directional arrow buttons in the right of the screen, to select **Utilities** and then press the **OK**. The display will show:

 Monitor Mode
 Filament loading Preheat Setting General Settings

3. Select Filament loading; press the OK key of the keypad. The display will show:

Load Right
 Unload Right
 Load Left
 Unload Left

4. Select the appropriate side of the extruder you wish to load (Left or Right for models with dual extruders). Press the **OK** key again on the keypad. The display will indicate: I'm heating up my extruder!" At this time, the temperature of the right nozzle is being heated up. When the temperature of the nozzle reaches its target temperature, Creator Pro User Guide | www.FlashForge.com $_{45}$ 400-699-1063

pressing the **OK** key on the keypad, and the nozzle should start extruding filament. If not, keep pressing the **OK** key until it does.

7.3 Unloading the Filament Using LCD Panel

CAUTION

If you just finished your printing or already extruded the filament and want to withdraw the filament, at this moment, the extruder is still over 200°C, first push the filament in a little further, and then directly pull it out.

If you want to change another color filament, first you need to withdraw filament and then load in. Please do as following shown to avoid filament jam.

- 1) Turn on the Creator Pro, the display will indicate: Build from SD
 - ► Preheat
 - Utilities

2) Using the directional arrow buttons in the right of the screen to select Preheat,

Press **OK** key on the keypad, then you will see:

 Start Preheating 	
Right Extruder	OFF
Left Extruder	OFF
Platform	OFF

3) Press **page down** key to select **Left Extruder (or Right Extruder)**, press **OK** key, you will see:

Start Preheating

Right Extruder	ON
Left Extruder	ON
Platform	OFF

4) Press page up key back to Start Preheat, and Press OK key, you will see:

R Extruder: 033/230C L Extruder: 033/230C Platform: 024

This means the left extruder is heating up, when it reaches 220°C. First **push in** the filament **a little bit until you see filament come out of the nozzle**, then **pull it out quickly**. This will ensure you have withdrawn the filament inside the nozzle successfully.

Then, users should

- 1. Insert your SD card with target x3g file to your Creator Pro. .
- 2. Turn on the Creator Pro.
- 3. Select [Print from SD] on the LCD panel.
- 4. Select the file you want to print and press [OK].

5. And the printer will heat up the nozzle and the build plate automatically and start to print after the nozzle and the build plate reaches the aimed temperature.

Chapter 8: About function

In this chapter, we will introduce the Creator Pro function to you. We will mainly introduce Utilities function and other available functions in printing process, as Print from SD and Preheat are introduced in prior chapters.

Turn on your Creator Pro

Turn on your Creator Pro; the display will indicate:

Print from SD Refer to Chapter 7

Preheat Refer to Chapter 7

Utilities

Utilities

Using the directional arrow buttons in the right of the screen to select Utilities,

Press OK key on the keypad, then you will see:

• Monitor Mode

select it and then press OK ; the display will indicate:

Printer name

Printing progress

R Extruder

L Extruder

Platform

• Filament loading Refer to Chapter 7

• Preheat Setting Refer to Chapter 7

•General Settings

select it and then press OK ; the display will indicate:

Ditto Printing (The dual-extruder print one model simultaneously)

Override GcTemp (Reselect)

Pause with Heat (Whether continue heating when pause printing)

Creator Pro User Guide | www.FlashForge.com 48

400-699-1063

Sound

Acceleration

Extruder Count

•Level Build Plate

Build plate leveling refers to Chapter 5

•Home Axes

Select it and then press OK. The dual-extruder will move backwards, and the build plate will elevate up. It means Creator Pro is ready for printing.

•Bot Statistics

select it and then press OK ; the display will indicate:

Lifetime (Accumulated time for printing)

Last Print (Spent time for the last printing)

Filament (Accumulated filament length for printing)

Fil. Trip (Accumulated filament length for printing)

• Filament Odometer

select it and then press OK ; the display will indicate:

Life (Accumulated filament length for printing) Trip (Accumulated filament length for printing)

Reset (Press OK to reset the Trip data)

• Profiles

select it and then press OK ; the display will indicate:

ABS

PLA

Profile1

Profile2

Select any option and press OK; the display will indicate:

Restore (Back to Utilities)

Display Config

select it and then press OK ; the display will indicate

Config X Offset Y Offset Z Offset Right Temp Left Temp Platform Temp

Change Name

Save To Profile

•Home offsets

select it and then press OK ; the display will indicate:

X Offset

Up/Dn/Left/OK to Set (Press Up button and Down button to

change the X/Y axis coordinate; press OK to confirm; press Left button to back)

- •Toolhead Offsets
- Jog Mode

select it and then press OK ; the display will indicate:

X+

Y-

Х-

Press Right/Left button change the X/Y/Z axis interface; press

Up/Dn button to change the coordinate; press OK button to back.

•Enable steppers

select it and then press OK ; the display will indicate:

Disable steppers

Steppers is lock. It means the position of extruder or build plate cannot be manually adjusted. Press OK button again to back to Enable steppers. It means the position of extruder or build plate can be manually adjusted.

- •Auto-Level Adj
- Auto-Level Variance
- Max Z Probe Hits

select it and then press OK ; the display will indicate the distance build plate descending after printing job completed.

•Calibrate Nozzles

select it and then press OK ; the display will indicate:

X Axis Line

Y Axis Line

Done

•Restore Settings

select it and then press OK ; the display will indicate:

```
Restore factory settings?
NO
YES
```

• Eeprom

The setting is not suggested modified by users. Improper operation may cause the device shutting down.

• Version Information

select it and then press OK ; the display will indicate the basic information of the printer.

•Exit Menu

Options during printing process: In the process of printing, we may encounter

the inevitable problem. At that situation, we have to pause printing.

First, press OK button or Left button to back to the menus. Then you will see:

• Back to Monitor

select it and then press OK ; the display will indicate:

Printer name Printing progress R Extruder L Extruder Platform

- •Cancel Print
- Pause
- Pause at ZPos
- •Change Speed
- •Change Temperature
- •Change HBP Temp
- Set Cooling Fan

When it display ON, press OK button. Then it will display OFF. It means the cooling fan starting working;

When it display OFF, press OK button. Then it will display ON. It means the cooling fan stopping working.

- •Set Lights Off
- Print Statistics

select it and then press OK ; the display will indicate:

Print Time (Spent time for printing)

Time Left

Filament (Accumulated filament length for printing)

Auto-level inactive (build plate cannot move)

•Cold Pause

After selecting it and pressing OK, the extruder and build plate will move to the initial position. It may cost several seconds. And then the display will indicate:

- •Back to Monitor
- •Cancel Print
- •Unpause

After selecting it and pressing OK, the extruder begins heating up. The printer will resume printing when the extruder reaches the target temperature.

- •Jog Mode
- •Filament Loading
- •Change Speed
- •Change Temperature
- •Change HBP Temp
- •Set lights OFF
- Print Statistics

Chapter 9: Supports and Service

FlashForge team is on standby and ready to help you with any problems you may have with your Creator Pro. 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 in our knowledge base. Have a look first as most basic questions are answered there. http://www.flashforge.com

The FlashForge support team can be reached by e-mail or phone between the hours of 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: Because of change different filament the exturder maybe blockaded. It's not owing to quality issue, and outside the scope of 400 hours life. If users encounter this problem, please contact our after-sales department and finish clean work according to their instruction.

Tel: 86-400-699-1063

QQ: <u>2850862986</u> <u>2850863000</u> <u>2853382161</u>

Email: support@ff3dp.com

ADD: No. 518, Xianyuan Road, Jinhua, Zhejiang

*When contacting support, please have your serial number ready. The serial number is a bar code on the back of your Creator Pro."

