

FLASHFORGE USER GUIDE

Flashforge Printer and Controls



1: Turn on the Flashforge Creator

- Power the unit on using the switch on the rear of the printer
- After numerous beeps and 10 seconds the printer will complete the boot process



Home screen

2: Navigating the onboard settings-

- Gain access to-
 - o Leveling the build Plate
 - o Loading Filament
 - o Pre-heating the extruder
 - o Initiating a Print

3: Build Plate Preparation-

If a print releases from the build surface during a print, your model will be unsuccessful. A well prepared build surface is necessary.

- If existing tape is damaged complete steps below, otherwise move onto '4: leveling the build plate'
- Remove glass plate from printer, using the scraper lift one corner of the glass plate from the Aluminum build plate and place glass plate away from the printer. (leave the silicon squares on the black aluminum plate)
- Remove existing painters blue tape
- Place new blue tape down-, take your time, do not overlap each strip and no gaps (better to have small gap than overlapping) (for ultimate bond, use 120 grit sandpaper to rough up surface, then wipe with acetone)
- Return glass plate to printer, ensure the plate is centered and held securely in place.

4: Level the Build Plate (Very important)

This is a **critical** and needs to be **completed before every use**, if the plate is not leveled your print **WILL fail**.

- Using the onboard menu-
 - o Utilities » Level Build Plate. This routine will require you to adjust the gap under the extrusion nozzle at various points on the build plate
- A 0.10 mm (0.004") feeler gauge (or sheet of letter sized paper) is recommended. You should adjust the screws, starting at the front center, so you feel slight drag when moving the paper between the nozzle and build plate.
- Manually move the extruder assembly to various points on the print bed, adjusting the screws as required to maintain equal resistance.
- Note that if you are attempting large prints and the build plate is not flat, you will likely have adhesion problems and possible failures
- Turning the nuts on the bottom of the table CW (clockwise) makes the gap bigger (less resistance). CCW (counter-clockwise) makes the gap smaller (greater resistance).

```
The FF Creator
Print from SD
Preheat
→Utilities
```

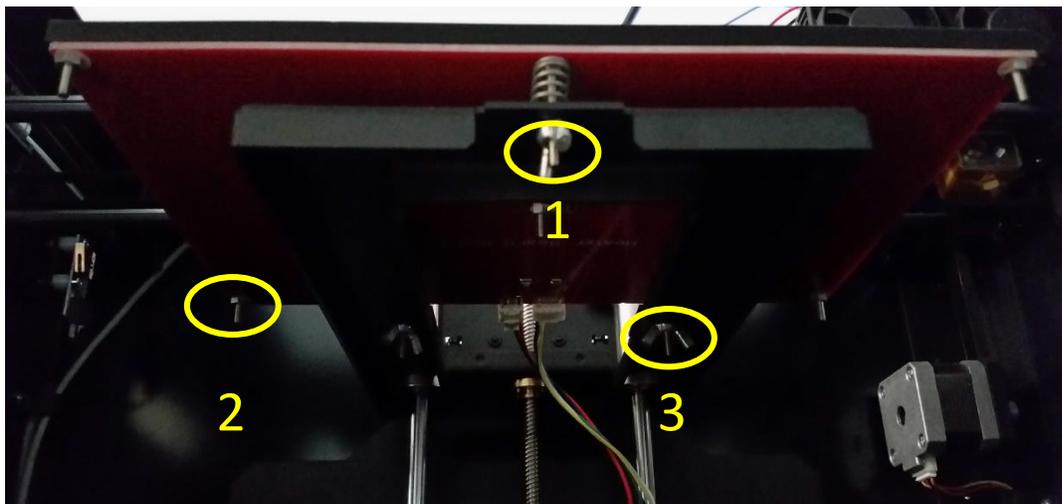
```
Monitor Mode
Filament Loading
Preheat Settings
↓Level Build Plate
```

Adjusting the three leveling screws on the bottom of the table to get a slight restriction while moving the paper.

```
Press "M" when level
```

See video- https://www.youtube.com/watch?v=_KU0Z4d9UGA

Although the video is mostly accurate, your printer is an updated Flashforge than the one shown in the video. Your printer has one screw in the front and two screws in the back (see photo below), use video as a reference only, follow the steps above.



Note: If during initial layers the printer makes a clicking noise, your print head gap is too small. This is an important process, take your time and set it correctly.

5: Filament Loading

Everyone likes a different color, if you would like to use a filament other than one that is pre-loaded in the printer you will need to complete the filament loading process.

- Set the spool so that it unrolls from the bottom of the spool and the spool should unwind counter-clockwise.
- Be sure to keep all spools free of dirt and particulates to prevent nozzle clogging!
- PLA will absorb moisture, keep it dry and in a low humidity environment.
- If your spool inside diameter is larger than the Flashforge holder, use one of the supplied adapters.

```
The FF Creator
Print from SD
Preheat
→Utilities
```

```
Monitor Mode
→Filament Loading
Preheat Settings
Level Build Plate
```

Unloading

```
→Unload
Load
```

```
Heating: █
```

```
Begin loading or
unloading. Press 'M'
to exit.
```

Remove the black filament tubing from the top of the extruder assembly. Gently pull the filament from the extruder. (I do mean gently, do not force it). Press 'M'

Loading

```
Unload
→Load
```

```
Heating: █
```

```
Begin loading or
unloading. Press 'M'
to exit.
```

Remove the black filament tubing from the extruder assembly. Gently feed the filament from the extruder. Stop pushing when you feel the extruder pulling. When filament begins extruding press M

See Video- <https://www.youtube.com/watch?v=Xkx2qMKlrwc>

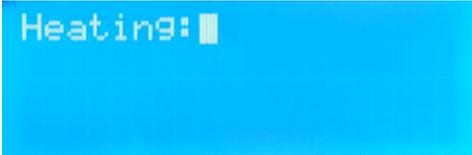
Loading Tips: During Loading, remove plastic tube on top, gently assist the filament when feeding it in. The drive wheel should catch the filament and begin extruding. Filament Not Advancing? If filament does not advance and start extruding from the nozzle, you likely have a jam. Contact the Digital Fabrication Supervisor.

6: Print

- Insert SD Card (slot on top, behind LCD screen)
- Select 'Build from SD' » find your file by scrolling up or down> Enter



Add picture of this menu



- Once the unit has finished heating, your print will begin

See Video- <https://www.youtube.com/watch?v=TLNw7HmLppY> (start watching at 1:36)

Note: Most print failures will happen within the first 50 layers. If this happens, repeat the built plate leveling process and start the print again.

7: Monitor

During your print monitor the Printer on a regular basis

- On Screen display
 - o Extruder: Value on left is actual head temp, value on right is target temp in Celsius.
 - o Percentage: Completion is shown in upper right corner while printing. It is believed that this percentage is based upon the number of layers processed, rather than the percentage of the actual volume of the model printed.
- Use navigation Buttons to:
 - o Cancel a print (if incorrect or a failure occurs)
 - o Pause (allows for filament change or just a pause)
- All our printers have sailfish firmware installed, by using the navigation buttons it is possible to change print head temperature and also speed settings.

8: Print removal

- Using a flat thin object (think metal ruler or putty knife), lift glass plate from aluminum build plate and remove glass plate from the printer enclosure
- Place glass plate on a flat surface (benchtop)
- Remove print from glass plate
 - o Small Prints- Use a small putty knife or razor scraper (sharp, be careful)
 - o Large Prints- Use a putty knife

Note: It is important to never use excessive force when removing a print, you can damage the printer and/or permanently mis-align the print bed (bent rails), you also run the risk of breaking the glass plate. Pull the painters tape from the glass plate if the print cannot be removed using a putty knife.

Get assistance if you find it difficult to remove your print.

9: Clean-up

- When complete clean the printer (all stray pieces of material)
- Remove your SD (push down the top of it) and turn the printer off

10: Prepare for your next print