

# HOW TO OPERATE THE 3D PRINTER ULTIMAKER S5



### **Machine Operation**

1

Wipe the glass plate clean before printing since filament adheres poorly to dirty glass which can affect your print quality.



#### **CAUTION!!**

Always **make sure** that the build plate has cooled down. **Ensure** the build plate is lowered to the bottom of the Z axis.



#### **How to Clean The Glass Plate**

Α

**Remove** the build plate clamps on both sides.



B

With both hands, gently **remove** the glass plate. Be extra careful when taking out the glass as it is fragile.



C

To avoid scratching the glass plate, **prepare** a dry, clean towel or piece of tissue paper.



D

**Use** alcohol to gently clean the entire glass, then dry it off with a clean towel or tissue paper.



E

After cleaning, **reattach** the glass plate to the 3D printer.



2

**Plug in** the machine to the outlet.



3

**Turn on** the device behind the printer.



4

**Unload** the previous filament material.



5

**Load** it with your new selected filament material.



#### FAQ/s

### What are the types of Ultimaker fillaments and its uses?

#### **PLA**

Produces stiff and strong parts given its great physical properties.



#### **TOUGH PLA**

A technical PLA (polylactic acid) material with toughness similar to ABS.

It is ideal for printing functional prototypes and tooling at larger sizes.



#### **ABS**

Has a heat tolerance, which allows it to withstand hot temperatures, but where it really shines is its durability.

Ideal for items that are frequently handled, dropped. or heated.



Ultimaker https://ultimaker.com

### **How to Unload and Load the Filament**

A

**Click** the second icon on the left side of the screen and **click** the material and **press** "unload"



B

**Press** "confirm" to remove existing spool.



C

The filament will automatically exit the nozzle. **Pull** the lock upwards to open the feeder and take out the previous filament.



D

**Remove** the previous spool from the back by gently pullng it up.



E

**Place** the new material spool on the spool holder.



F

Before inserting the filament into the hole, **sharpen** it with pliers.



G

**Insert** the filament into the feeder 1 about 3 inches then **lock** by pulling it downward.

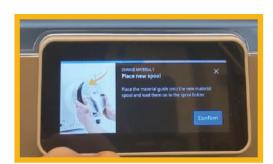


Н

**Press** "load" in the screen to load the new filament material.



**Press** "confirm" to place new spool.



J

**Press** "confirm" to verify the selected material used.



K

**Press** "confirm" when done inserting material and the filament will automatically go to the nozzle and extrude the material.



L

**Press** "confirm" after material extrusion and the type of material will display on the screen.



6

**Insert** flash drive to 3D printer.



7

**Press** "select from USB" to select yur file.



8

**Select** your file and **press** "Start Print"



9

You can leave the machine until print is finish.



#### FAQ/s

### Can you run a 3D printer for days?

The 3D Printer can run up to 24 hours or days but the problem is the wires get heat up and may result in any power failure and thus can lead to wastage of time. Like for example, if there is a brownout, for instance, it will cause and error and will retsart printing.

#### What if the filament runs out during the printing process?

It will be detected by the machine that there is no more filament and the printing will be paused. Then you will need to load a new filament.

### Does pausing a 3D print ruin it?

It is not recommended to pause prints a considerable ampount of time as the printed model will shrink and might warp during the pause. Also, layer bonding between the old and the new art after resuming will be weak, but this can be used to induce planned braking layers.

#### FAQ/s

What to do when there is a sudden power outage, a power surge, and a brownout?

#### STEP 1

Locate layer height to resume the print form and delete the entire g-code before that layer.

#### STEP 2

Make sure the bed and extruder temperatures are set to the correct values on the printer.

#### STEP 3

Save the g-code file and print it to resume your print from Z.

Also, if you know that exact height from which you want to start printing, you can also use the start printing from height-feature in Simplicity 3D.

Go to> Edit process settings> Advanced>Layer modifications and set the height.

Although these are very effective method to save a print, an irregulated layer might be visible at the height from which your print was reco vered. But this can be easily sandpapered to make it smooth.

10

When you finished printing, **press** "confirm removal" and allow the machine to cool down first before taking out the object.



11

**Take out** the object using a spatuka or scraper.

#### NOTE:

**Don't use** knife or any sharp objects to take out your objects as this can damage it.



12

**Close** the window and **eject** your flashdrive.



13

Turn off the machine.



14

**Unplug** the power.

