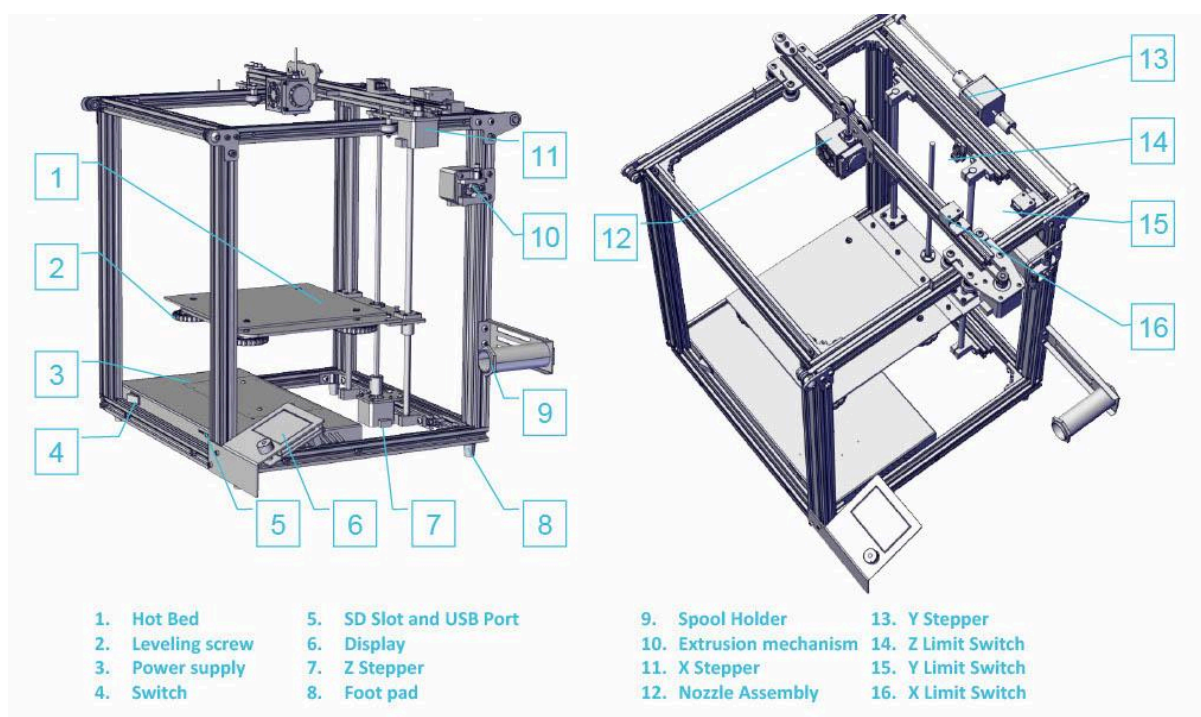


# 3D Printing guide updated

## Ender-5 printer

Ender-5 by Creality 3D is an FDM type of 3D printer. FDM stands for Fused Deposition Modeling, a printing process where melted thermoplastic is extruded onto a build platform, fusing layer on top of layer, until a 3D shape takes form.



## Preparing the files for print

The steps you need to take to get to printing:

1. Create the model using your favorite 3D software or download one from the digital libraries
2. Slice the model using the UltiMaker Cura
3. Print

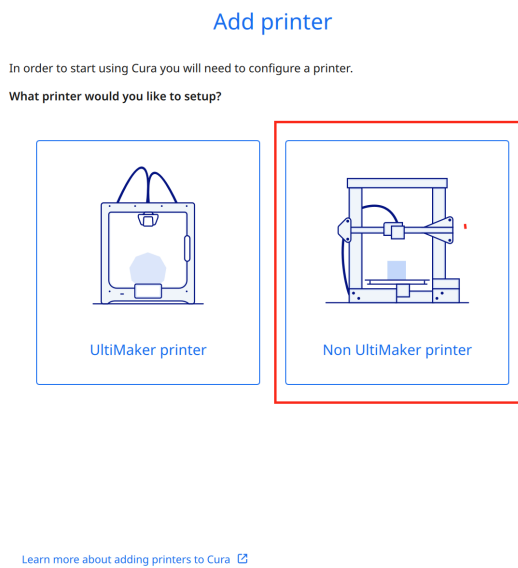
## The model

To start printing you'll first need a 3D file. This file can be created using your favorite 3D modeling program like Sketchup, Blender, SolidWorks, Rhino, etc. You can also use your 3D scans or downloaded models.

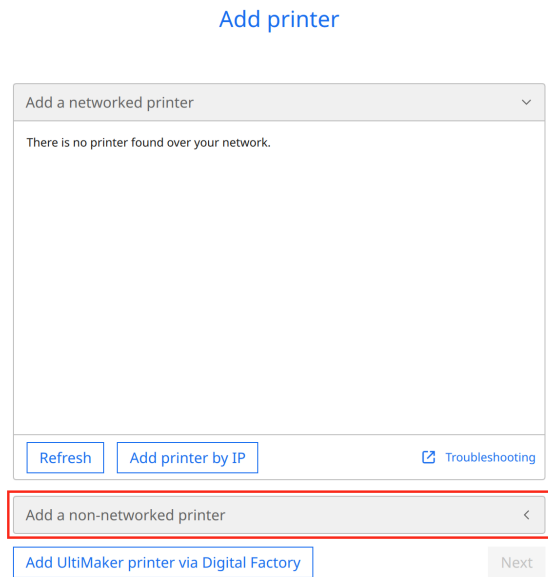
The file will later be loaded into Cura, the program that slices your model into layers. Cura accepts the following formats: binary **STL, DAE, OBJ, and AMF**. The units Cura expects your model to be in is **millimeters**. Make sure your model is **watertight (without any holes)**. If it is not, the result might not be what you expected. To check and fix your model you can use a program like Meshlab.

## UltiMaker Cura setup and slicing

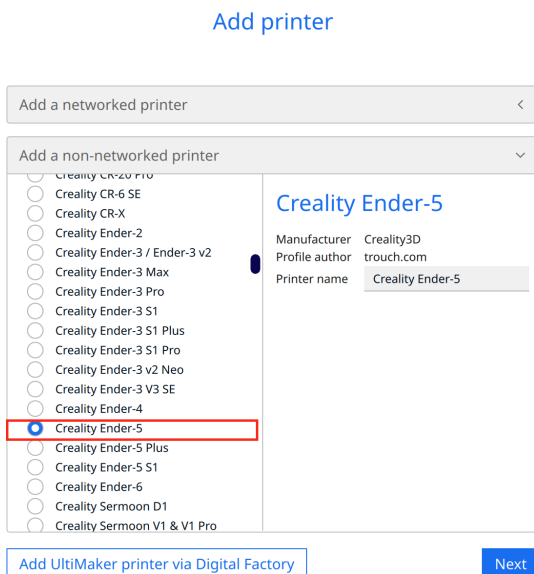
- 1. After you have prepared your model, you will first need to set up Cura for the Ender 5 printer.



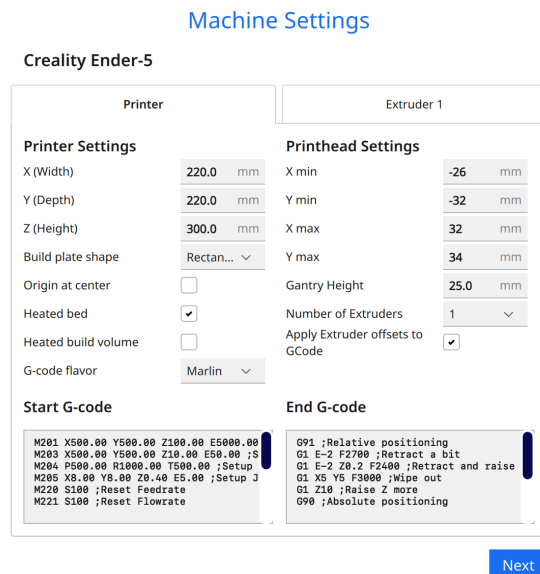
- a. Launch the program and choose the non UltiMaker printer



- b. Select 'add a non-networked printer'

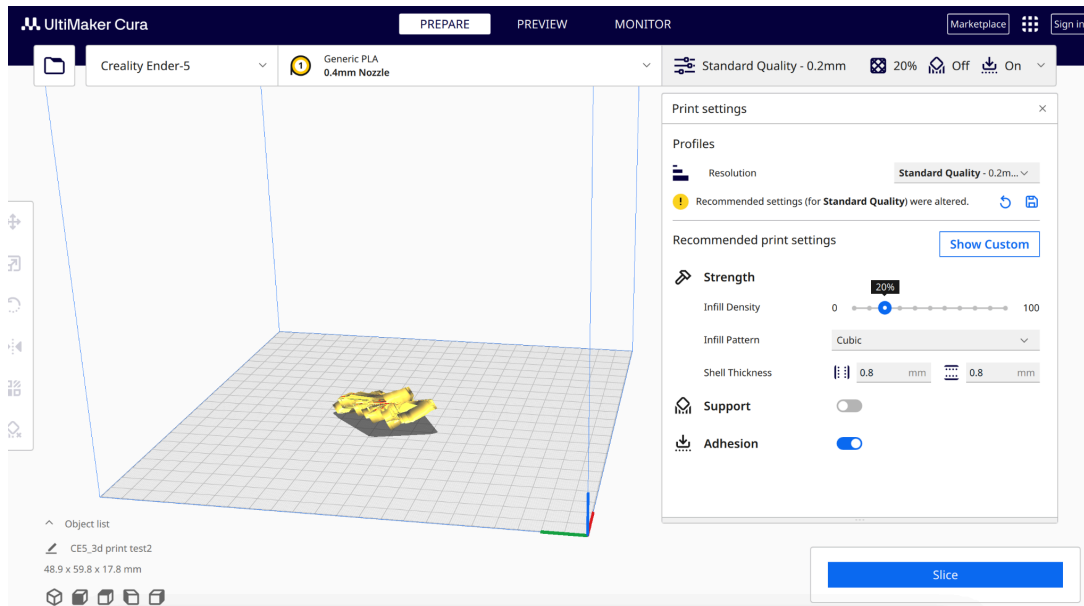


- c. Find Creality 3D group in the list on the left and choose Creality Ender 5



- d. The default settings should be fine to start, so click through to finish

- 2. When you finish your setup, load the file either by drag-and-drop or through File → Open file(s).
- 3. Adjust the model's positioning and size to suit your preferences, and choose the settings for the print. Take note that all of the settings influence the time for printing. Standard or low-quality resolution is good for starting or a test print.



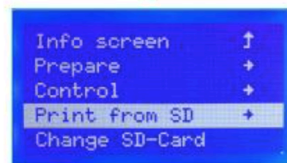
- 4. Slice and then upload the resulting file into an SD card.

## Printing

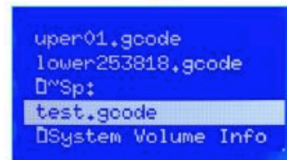
Insert the SD card into a slot at the bottom of the printer and then choose the right file from the options on the display on the right.



Insert the SD card

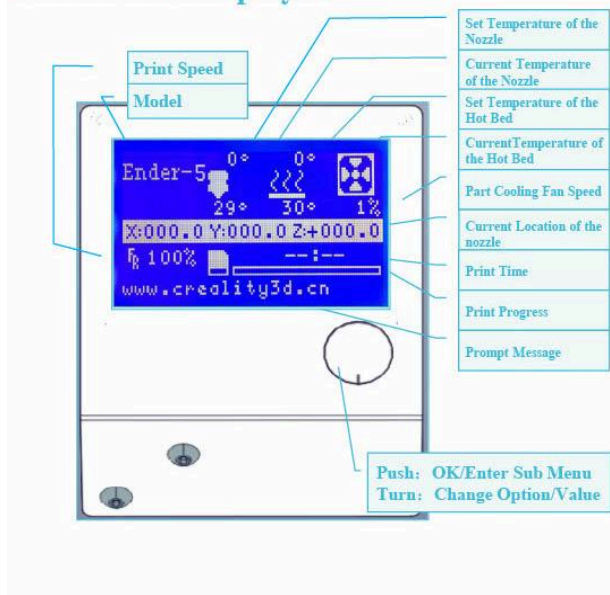


Select "Print from SD"



Select the file to be printed

## Information Displayed



# Loading and changing the filament

### 1. Preheat

#### Method 1

Info screen ↑  
 Prepare →  
 Control +  
 Print from SD +  
 Change SD-Card +

→

Main ↑  
 Disable Steppers +  
 Auto Home +  
 Preheat PLA +  
 Preheat ABS +

#### Method 2

Info screen ↑  
 Prepare +  
 Control →  
 No Card +  
 Init. SD-Card +

→

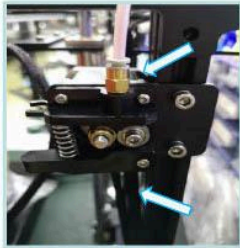

Main ↑  
 Temperature +  
 Motion +  
 LCD contrast +  
 Restore Fail-safe +

Control ↑  
 >Nozzle: 0  
 Bed: 0  
 Fan speed: 0  
 Autotemp: OFF

→

Nozzle: 200

### 2. Feeding

Press and hold the extruder lever then insert 1.75mm filament through the small hole of the extruder. Continue feeding until you see filament come out the nozzle.

**Tip : How to Replace the Filament ?**

- 1、Cutting filament near the Extruder and slowly feed new filament until they are fed into the new filament.
- 2、Preheating the nozzle and withdraw the filament quickly and feed the new filament.

After changing the filament, make sure to do the bed leveling:

Info screen ↑  
 Prepare →  
 Control +  
 Print from SD +  
 Change SD-Card +

→

Main ↑  
 Disable Steppers +  
 Auto Home +  
 Preheat PLA +  
 Preheat ABS +

1. Prepare → Auto Home. Wait for the nozzle to move to the left/front of the platform.

Info screen ↑  
 Prepare +  
 Control →  
 Print from SD +  
 Change SD-Card +


→

Main ↑  
 Disable Steppers +  
 Auto Home +  
 Preheat PLA +  
 Preheat ABS +


→

静音步进电机 xy  
 关闭步进电机

2. Prepare → Disable Steppers (Close stepper drive, release motor)



4
3



1
2

3. Move the nozzle the front/left leveling screw and adjust the platform height by turning the knob underneath. Use a piece of A4 paper (standard printer paper) to assist with the adjustment, making sure that the nozzle lightly scratches the paper.

4. Complete the adjustment of the screw on all 4 corners.

5. Repeat above steps 1-2 times if necessary.

