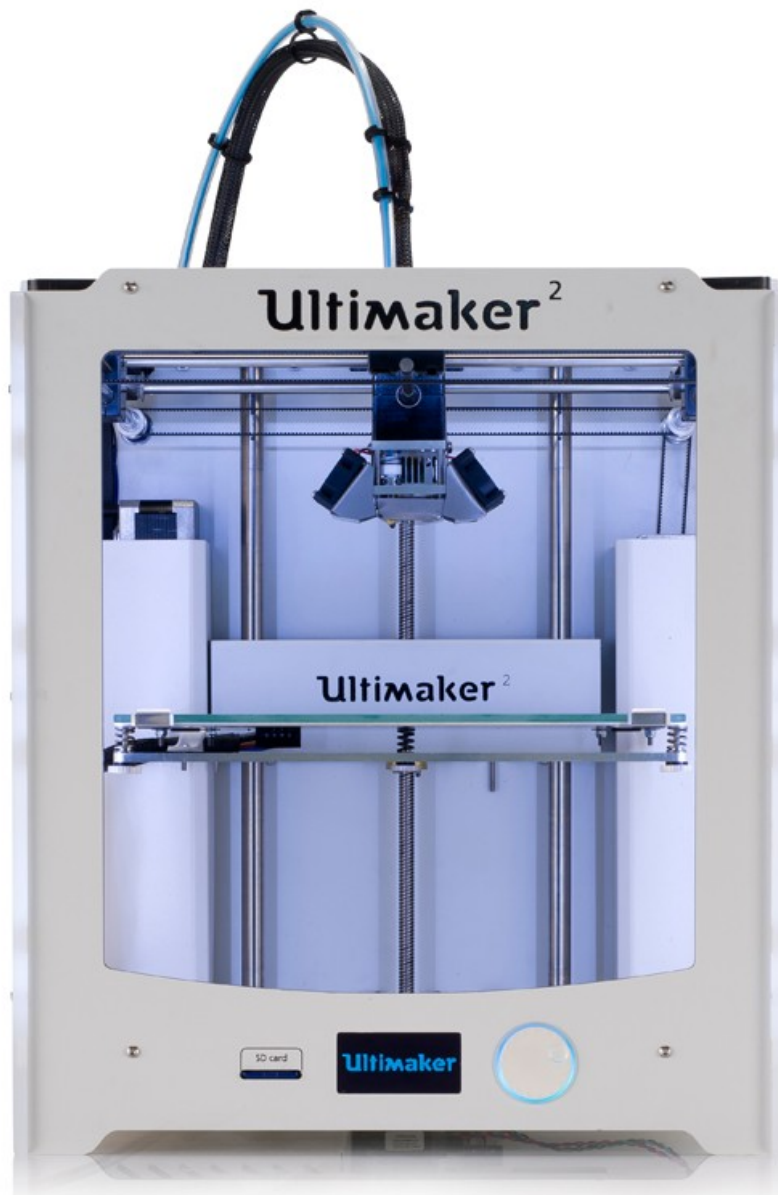


# ULTIMAKER 2+

The Software and Printer User Guide



Ålesund 2016

## WARNINGS

- Do not proceed to use the printer if you have any doubts after reading this manual - ask the FabLab staff before doing anything.
- If you notice that one printer is broken or is not working properly, do not try to fix it, report what is happening to the staff, they will help you to solve the problem.

## STEP 1 Preparation of a model for printing

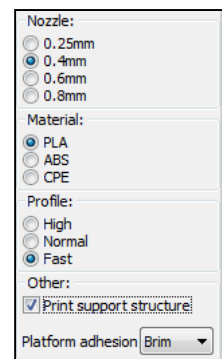
1. Prepare a 3D model and convert it into one of the following formats using any of the available 3D-modelling software (Siemens NX, AutoCad, Inventor, Rhino, etc.):

**.STL      .OBJ      .DAE.      .AMF**

2. Load the suitably converted 3D model file into Cura<sup>1</sup> via the “Load” button. Adjust the model’s scale and position in a virtual space of the Ultimaker 2+ presented in Cura.

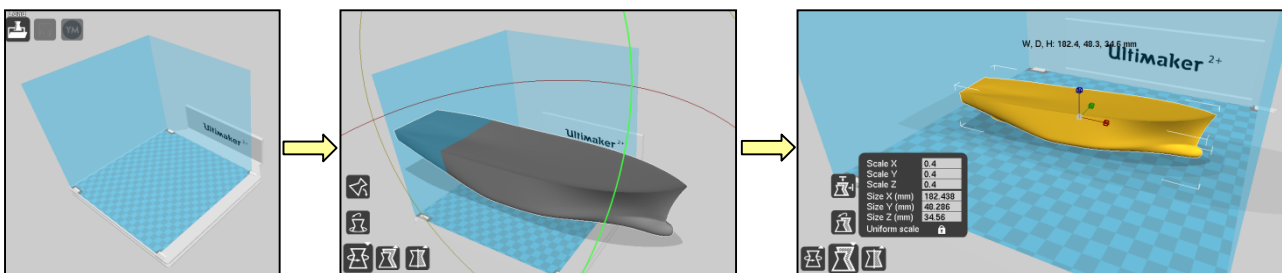
\*If necessary for the construction, don’t forget to utilize “Support Structure”.

Customize the nozzle / material / speed settings in the upper left corner of the Cura Software.



Wait for the software to process the model and the settings. After a while you will get the result with “Time”, “Length of plastic wire”, “Mass of plastic” specified. If the results are satisfying, proceed with saving.

Save the model to the SD-card (from Ultimaker 2+) by pushing  button.



<sup>1</sup> The Cura Software is specifically developed to operate with Ultimaker 2+ and could be downloaded here: <https://ultimaker.com/en/products/cura-software>

## STEP 2 Printing the model in Ultimaker 2+

1. Insert the SD-card with the saved 3D-model from the Cura software (in G-code format) into the slot on the Ultimaker 2+.



2. Using the LCD (display) Check if the material installed corresponds with the specified in the Cura software. Use the following steps:

MATERIAL – SETTINGS

3. If necessary<sup>2</sup>, using the LCD level the build-plate with the following steps:

MAINTENANCE – BUILD-PLATE

...follow the described on the display procedures.

4. Go to the PRINT section using the LCD. Find your model. Push the button on the disk and start printing<sup>3</sup>.



5. Printing takes time. Check your model constantly, and never touch the model or the machine while printing.

6. Detach the printed model from the glass-plate.

7. Clean the printed model from the supports, excesses of the material, etc.

**...enjoy your printed model and continue to be creative!**

<sup>2</sup> After several prints you should level the build-plate in order to keep the XYZ coordinates for printing

<sup>3</sup> If necessary put glue on the build-plate