

Cura print guide

Printing with two colors

Printing with two colors makes it easy to highlight aspects in a 3D model.
This guide provides step by step information on how to create a dual color print.

1. Load models

To create a dual color print, two model files (exported to fit together) are required. This is necessary to assign the two colors to the objects.

Load both parts into Cura by clicking the **Open File** folder icon in the top left corner. The file browser displays all files. Locate and select the relevant model file. Cura supports the following files: .3mf, .x3d, .stl and .obj.



*Note: On popular 3D model websites, search for 'Dual color' or 'Dual material' to find model examples.
Tip: Select multiple files in your file browser to load them simultaneously.*

2. Set print cores and materials

In the **Sidebar**, check if the **Print Cores** and **Materials** are correct. **Print core 1** should contain a print core AA 0.4 loaded with PLA (color 1). **Print core 2** should also contain a print core AA 0.4 loaded with PLA (color 2).

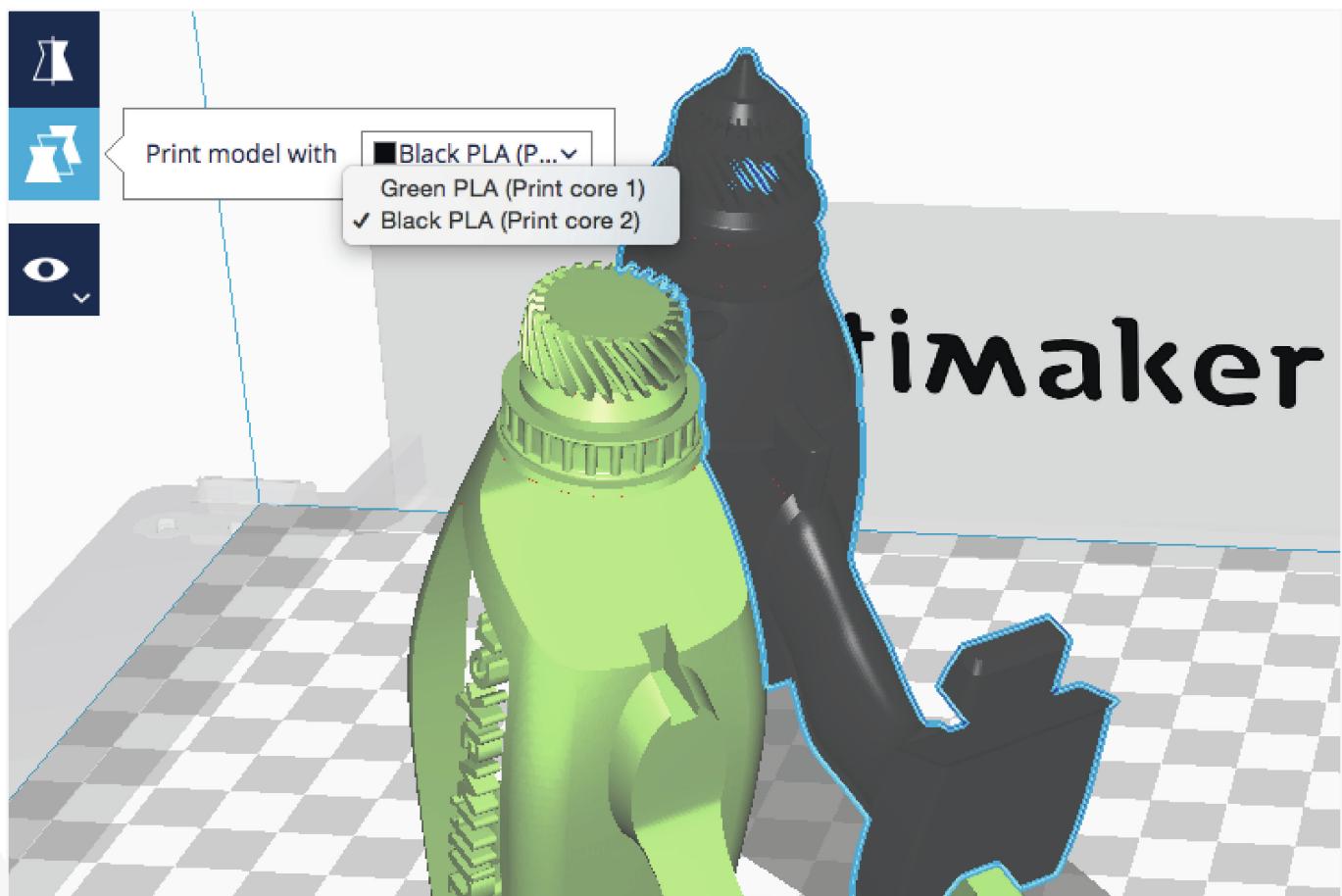


Note: If your Ultimaker 3 is connected via the network to Cura and loaded with the correct print cores and materials, Cura will sync automatically to your machine.

*Tip: Cura is loaded with generic materials, which do not represent colors. To choose a colored material, select **Ultimaker > PLA > Color**.*

3. Set print core per model

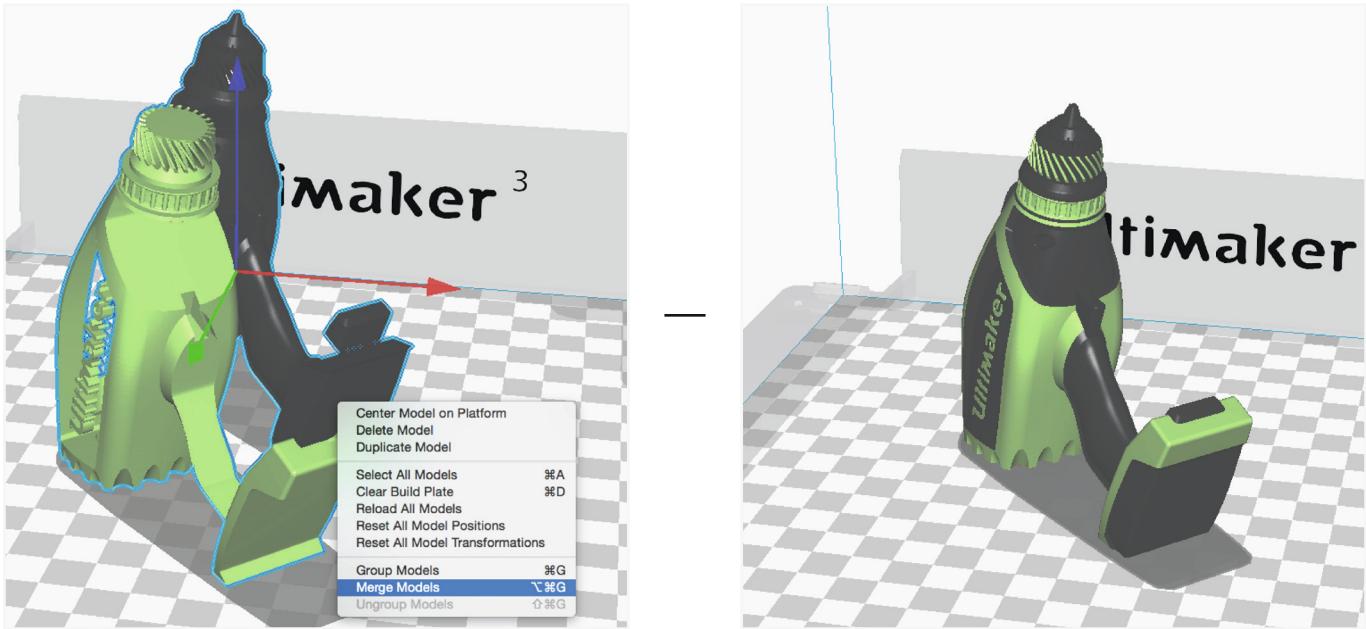
All loaded objects are printed with **Print core 1** by default. The material color set per print core reflects the color of the corresponding model. To change the print core, select the **Model** by left clicking it. Go to **Per Model Settings** (left side of the screen), and select **Print model with Print core 2**.



Note: The model color automatically matches the color of Print Core 2.

4. Merge models

After selecting the desired color for your **Models**, it's time to merge them. To select all models, hold shift and left click. When all models are selected (shown by a blue outline), right click and select **Merge Objects**. The models automatically merge, ready for dual printing.

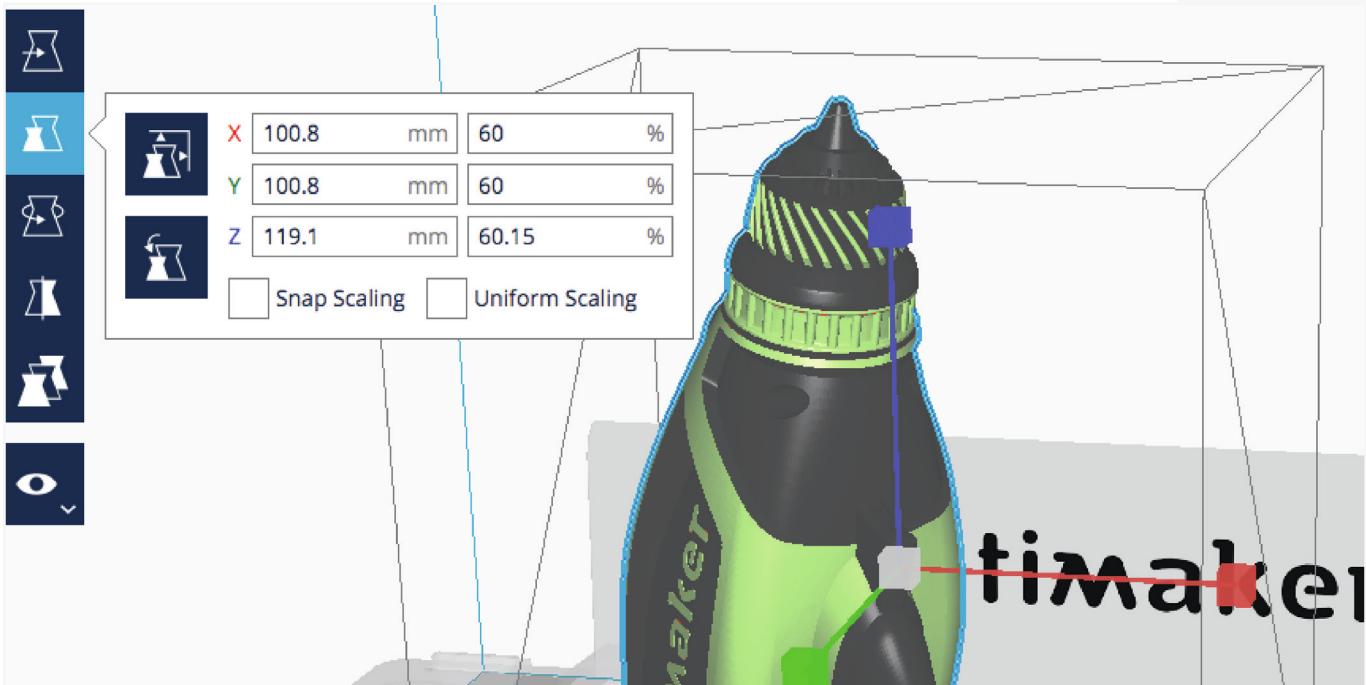


*Tip: If you've forgotten to set the **Material** color or any other setting, simply press CMD / CTRL + click on the model to select it inside the group.*

Note: If the models do not merge as intended, the model files have not been exported correctly. This must be resolved in the design software.

5. Adjust model

Adjustment Tools can be used to position, scale and rotate the object. To use the **Adjustment Tools**, left click on the merged model group. As the models are merged, they will be adjusted as a group.



Tip: When printing with two colors and no special support material, consider rotating the model to generate the least support and best surface finish.

6. Select profile

Select a **Profile quality**. Options include: Draft Print, Fast Print, Normal and High Quality. The layer height is displayed in light grey for indication.

Profile:

Normal Quality - 0.1mm

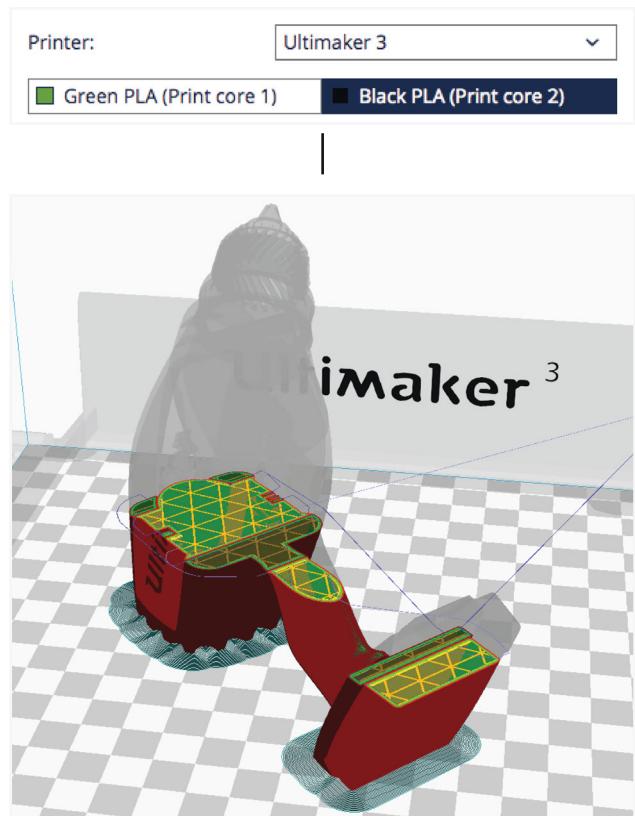
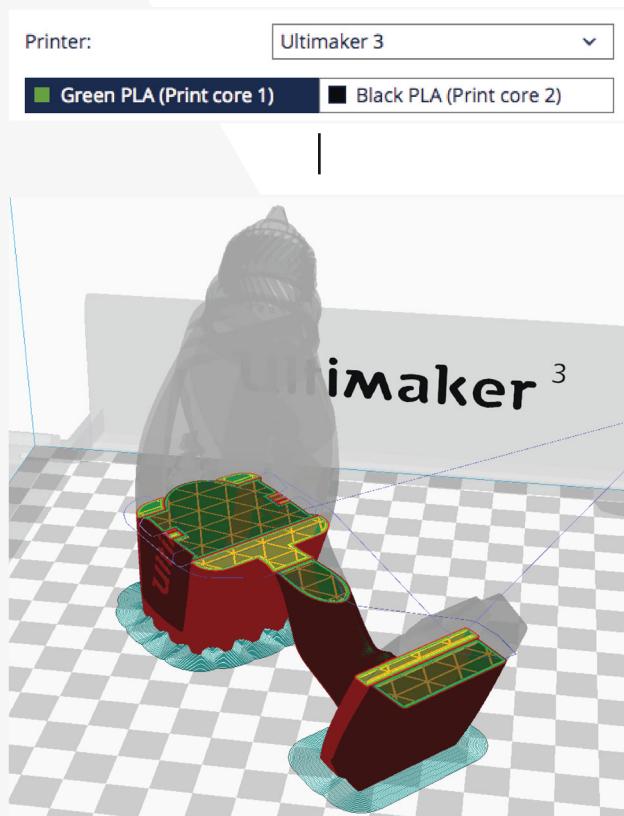


Tip: The material used is displayed per print core in the bottom right of the 3D viewer, indicating how much material is required per spool.

*Note: In the **Recommended mode** both print cores share the same settings. In the **Custom mode**, certain settings can be adjusted per print core, such as infill and number of walls.*

7. Layer preview

To view the result of the selected profile settings, go to the **View mode** and select **Layers**. With **Print core 1** selected in the **Sidebar**, the model is highlighted. This indicates which parts are printed with the corresponding **Print Core**. When switching visible **Print Cores**, (selecting the print core in the top right), the corresponding parts are highlighted, indicating the sections that will be printed with **Print core 2**.



8. Print!

In the bottom right corner, select **Save File**, **Save to USB** or **Print Over Network**, depending on the chosen printing method.

Ready to Save to File

Save to File

*Note: Click the top right button to enter the **Print Monitor**. Note, this can only be done when the printer is connected to the network.*

Thank you for choosing Ultimaker, happy printing!