
How to Scan using the Peel3 3D Scanner



Prepared By:

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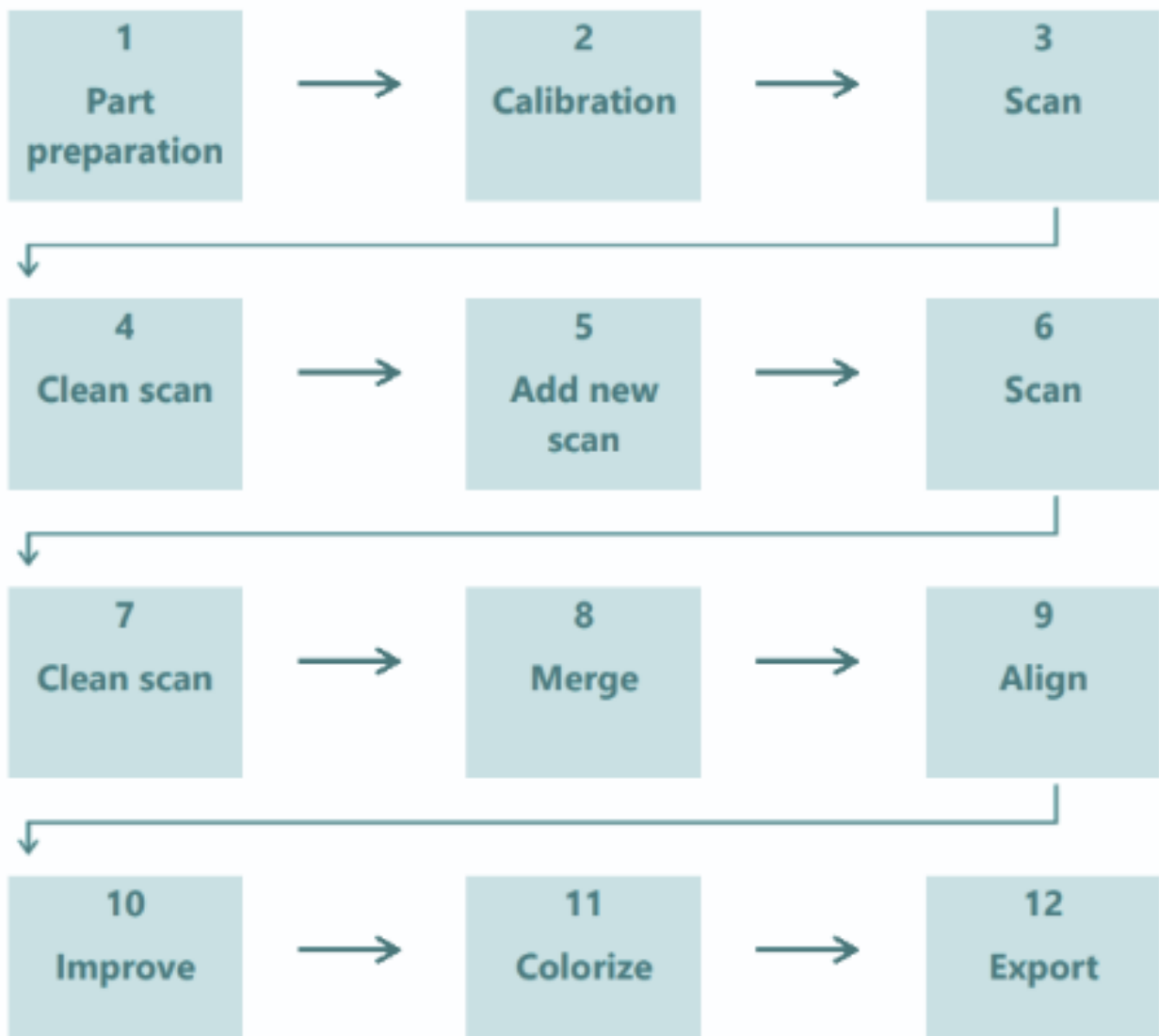
CLV Maker Center

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Created: 2024

Scanning Process Workflow



1 - Part Preparation

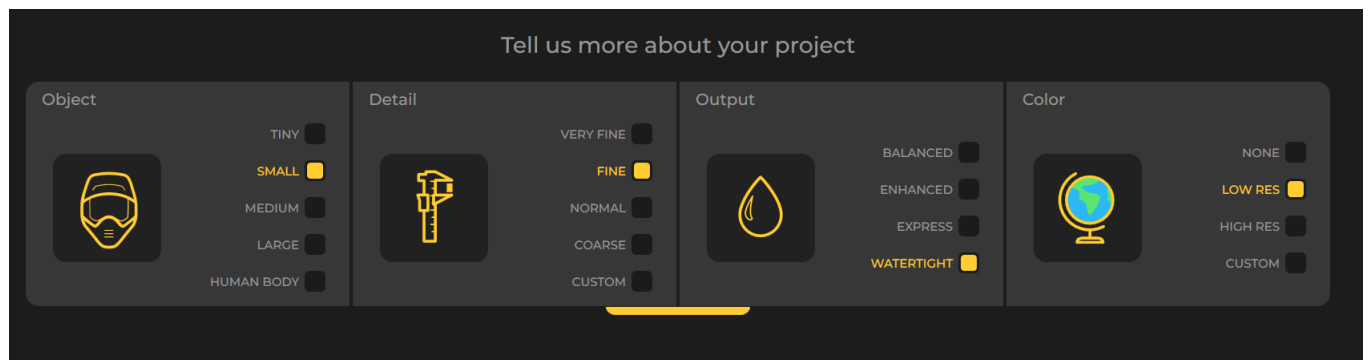


- What is the goal of the project?
- What areas are important and need to be present on the scan?
 - If the goal is to 3D print, resolution might not be as important.
- Do you need to have a complete scan of the part?
- Where should you put the targeting stickers?
- Will the targets be used for the merging process?
- What is the desired level of detail (resolution)?
- Do you want to activate the color function?

After asking yourself these questions, you can select the best parameters for your project by clicking '**New scan**'. By hovering over the options, the software will tell you more info about it.

If you plan on 3D printing your mode, select '**WATERTIGHT**' for your output.

Adding color is time consuming. If not needed, disable it will significantly reduce processing time.






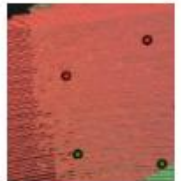
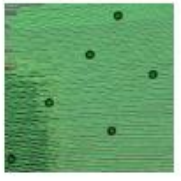
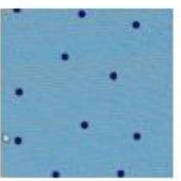
2 - Calibration

Check with a technician to ensure the scanner is calibrated. If it is not, a technician will help you.

3 - Scan

Make sure to scan all the desired surfaces. The scanner and software will guide you through scanning while staying at the right distance from the model through a color light on the touchscreen and vibration feedback.






LED color chart		
		
Scanner position: too close	Scanner position: correct	Scanner position: too far
Action: move back		Action: move forward
		

Use the following buttons on the touchscreen to aid you in scanning.

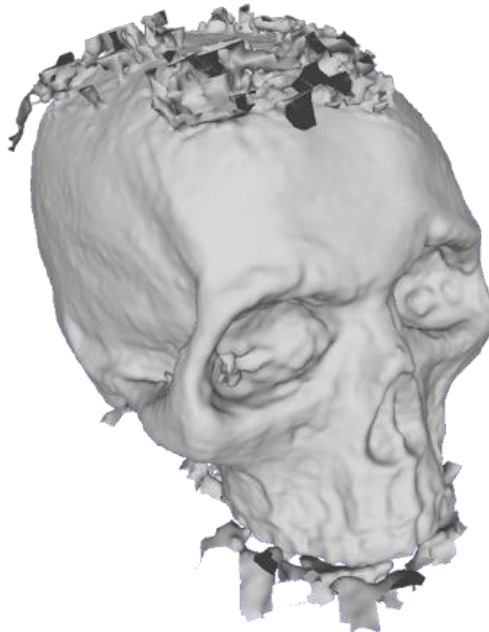
Shutter Time:

- **Dark-Colored Models (Black, Brown, Grey, etc.):** *Automatic/Dark*
- **Light Color Models (White, Red, Green, etc.):** *Light*

Button	Description
	Automatic/Dark/Light (Shutter time) ¹
	Zoom in/Zoom out/Reset zoom
	Start/Pause (Scan)

4 - Clean Scan

The software will automatically select the background to remove. Use the arrows and rotations to adjust and click the yellow '**Continue**' button to remove your selection. Make sure to delete all unwanted data from the scan. The scan below is an example of a model missing pieces and has unwanted data.



5 - Add New Scan (Optional)

Make sure your first scan is cleaned thoroughly, and all unwanted data is removed.

6 - Scan

A scan at a different orientation should be done at this step. (ex. On its side, turned over, etc.)

7 - Clean

Repeat the cleaning process.



Once multiple scans have been merged, it is not possible to go back and clean individual scan.

8 – Merge

The software will auto prompt a target best fit. This will align common targets together from the first and second scan. If the result is not correct you can align by pairing different points on the model.



Steps 5-8 can be iterated many times to merge multiple scans together. You can also skip steps and go from 4 to 9 directly.

9 - Align the Model

This step sets the origin of the model. The origin is auto placed at the center of mass of the part. The center of mass is a position defined relative to an object.

10 – Improving the Model

Removing spikes, smoothing the mesh, and filling holes are typical functions. There are many other options to enhance the shape and the result of the mesh.

11 - Colorize

If the color option was selected in the project parameters, this is where it will be applied.

12 - Export

Let a lab tech know you are done scanning your model and they will assist you with exporting the model and moving it to a workstation to modify on Blender and/or slice on your desired slicer software.