
# 3D-Print Guide

This document is a short guide on how to properly print the CREOS Rehousing.

# Introduction

In this guide we will go over the materials, print settings and possibilities you have when printing the rehousing. We use FDM printing as this is our preferred method. If you choose any other method, you might need to find the right settings for your printer.

# Materials

We used ABS (*Acrylnitril-Butadien-Styrol)* for the most parts of the rehousing. ABS has some advantages over PLA. ABS is higher in strength and more withstanding against heat. Normal PLA starts deforming at around 60°C while our chosen ABS withstands up to 90°C. It is also much more resistant to impact, protecting the electronics inside.

We used the Formfutura ReForm-rTitan filament.

Datasheets

Buy it

Make sure to handle ABS with its recommended health precautions.

You can use any filament to your liking. Be careful to check the heat specs because especially in summer, when the camera works under heavy conditions, you may reach up to 60°C on the inside of the camera. If you use PLA, it might start deforming, especially with heavy rigging.

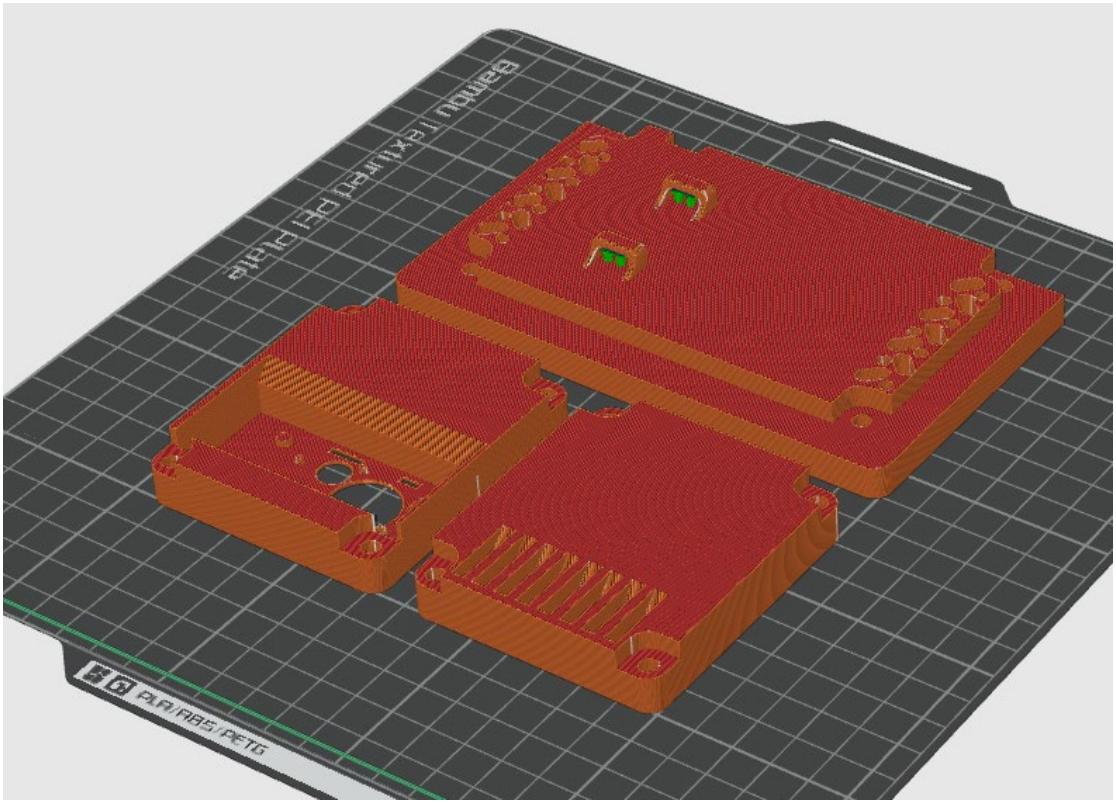
For the whole Rehousing, including the supports, we needed around 532 grams of filament.

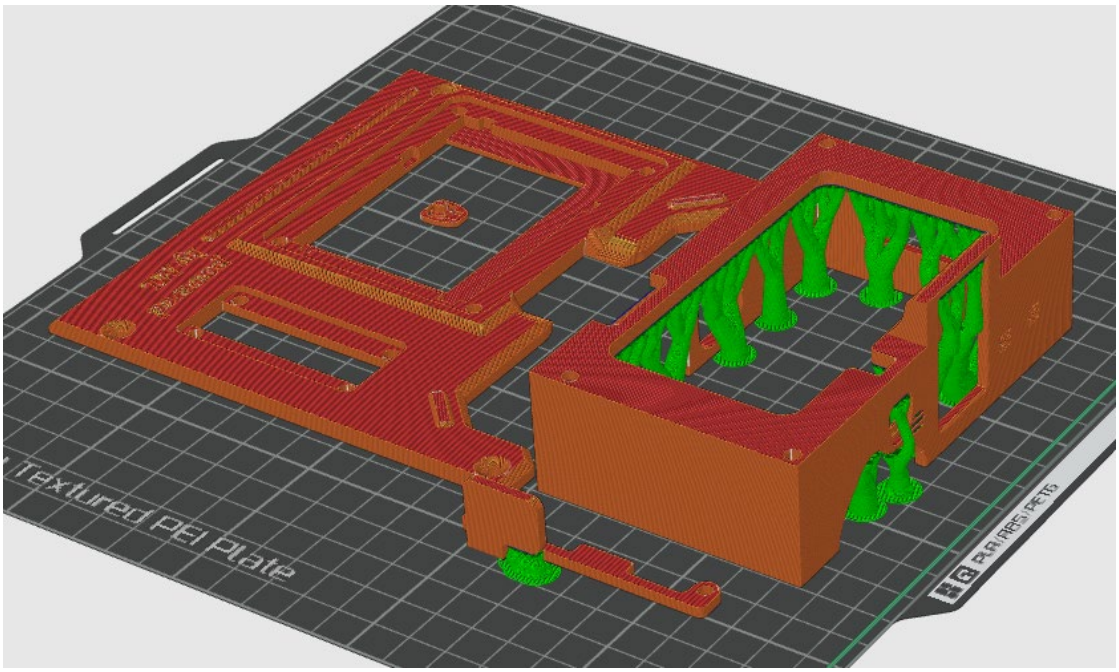
# Printing

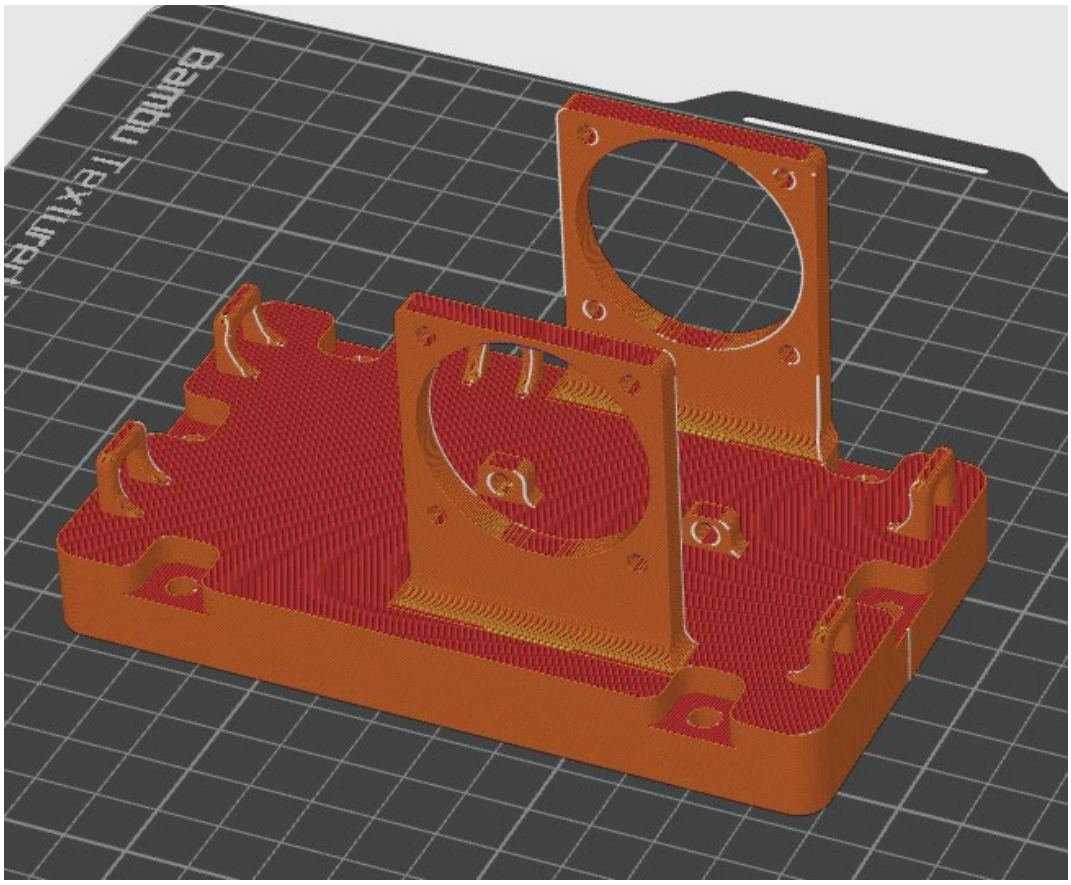
On our website you will find a download for all the .STL Files and .3mf Files. The .3mf Files contain our exact settings for the  printing we used.

We printed the Rehousing on a Bambulab P1s Printer. It’s an enclosed printer making it ideal for printing ABS. The need for support while printing might vary depending on your printer’s capabilities. We did print multiple parts at once making it more convenient.

The Rehousing was designed to be easy to print. Still, some parts need supports in order to achieve a high quality finish.


Bambu Textured PEI Plate
PLA/ABS/PETG


Textured PEI Plate
PLA/ABS/PETG


Bambu Textured