

SauceForge - LGX Lite hotend for linear rails with modular/magnetic fan ducts



AverageSauce

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Summary

LGX Lite hotend for linear rails with modular/magnetic fan ducts

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[fan](#) [linear](#) [rail](#) [inserts](#) [fans](#) [lite](#) [ducts](#) [lgx](#)

This is the first version of the hotend I've been modeling for a while, and the base principle I followed was to make everything easily accessible, it is designed to support the LGX Lite from Bondtech but since the plate is removable other mounting plates could be made.

One cool (at least I think :D) detail is that fan ducts are attached with small 4x4 magnets, and that's because I like to be able to easily remove them for maintenance and maybe even design new duct versions in the future.

So far I've printed it in resin and it's working pretty great, but I'll soon try and print it in ABS (as soon as I get it dialed in), hardware needed to mount it is:

- 4x4 round magnets

- m3 bolts
- m3 nuts
- m3 heat inserts (only for the belt clips)
- square m3 nuts (slim ones, 1.8mm)

It's my first fully functional design so it definitely has flaws but so far it seems pretty reliable!

Edit:

I went over the whole design to apply some corrections:

- main body split in half and added pegs for easier printing/assembly
- various weak points reinforced
- removed some material to save carriage weight
- new/alternative belt mounting system

Model files

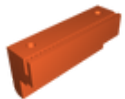


V2 (untested)

4 files



carriage-new-cover.stl



carriage.stl



body-left.stl



body-right.stl



V1

9 files



belt-clip-left.stl



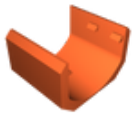
belt-clip-right.stl



motor-mount.stl



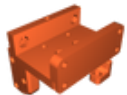
motor-cover.stl



cable-clip.stl



fanduct-right.stl



assemblybody.stl



fanduct-left.stl



carriage.stl

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