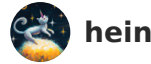




Desk Clamp (Modular)



[VIEW IN BROWSER](#)

updated 2. 3. 2024 | published 2. 3. 2024

Summary

A modular desk clamp design for large and small desks. Make your own attachment.



10.90 hrs



2 pcs



0.20 mm



0.40 mm



PLA



115 g



Prusa
MK3/S/S+

[Household](#) > [Other House Equipment](#)

Tags: [cup](#) [headphone](#) [desk](#) [modular](#) [spoolholder](#)
[wallmount](#) [customizable](#) [clamp](#) [step](#) [cupholder](#)
[headphoneholder](#) [f3d](#)

A modular desk clamp. Was inspired by the flash contest to finally do this idea. I was constantly changing the layout of the room and finding, that I need to print "another headphone holder" etc. because I wanted it on the other desk or the cupboard.
So why not try to make something, that I can mount everywhere. And why not make it modular?

Currently Included

- Desk Clamp (30 mm, 40 mm, 60 mm)
- Desk Clamp vertical (40 mm)
- Slim Edition 25 mm Clamp
- Bolts (50 mm, 60 mm, 80 mm)
- Bolt Cap for more grip (print from TPU)
- Wall Mount

Attachments:

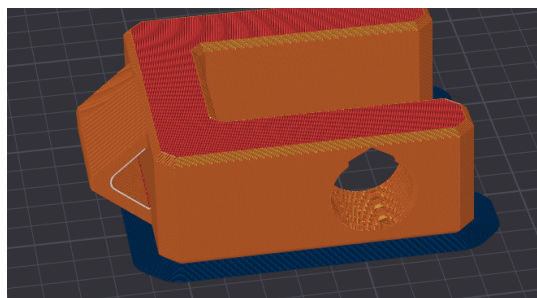
- Simple Spool Holder / Headphone Holder (included)
- A trash bin (included)
- **Cup Holder** (also included)
- Backpack Holder
- **Tape Dispenser for Modular Desk Clamp**
- Pencil Holder
- **Dice Tray**

More modules: See remixes, **Collection**, or make your own ;)

Print Settings

Should be fine with 0.4 mm nozzle, 0.2 mm layers. I would recommend 3 perimeters and 20 % gyroid infill for good measure.

I designed it in a way, that it can be printed completely without supports. Just print it laying on it's side as shown:



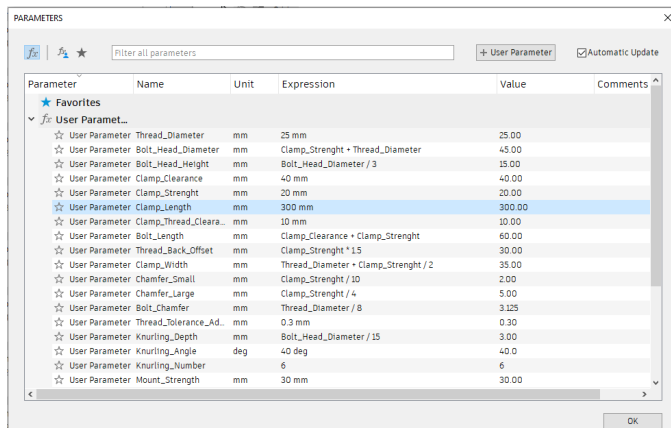
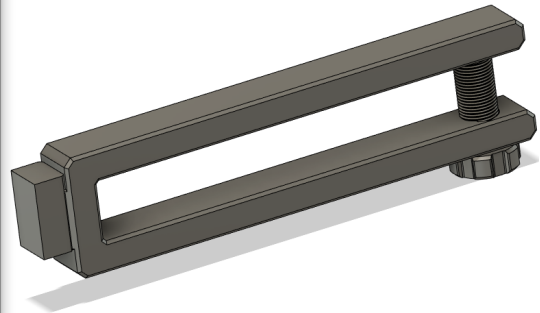
The mounting bracket does not need supports. The threads have a cutout at the top to prevent overhangs and print cleanly.

Modify for your needs, make your own attachment! (post Remix)

The mounting mechanism is intentionally simple to allow for custom attachments. The attachment slots in from the top and is held by gravity and friction. A template file of the attachment's mount is also available.

- STEP files, Fusion 360 files available

- Clamp size adjustable
- Template for Mounting Bracket included → modify to make your own attachment. (Post as Remix, so it can be found)



Tolerances

The threads and the mount are modeled with a 0.3 mm tolerance in the standard file. A high tolerance version (0.5 mm) is attached if you have issues with the fit.

If you only have issues with the threads, just print the higher tolerance bolt, no need to reprint the clamp.

There is also a “no tolerance” version of the mount, if you want to manually file it, or just send it with a hammer to have a permanent connection ... no guarantees.

Side Notes

Design goals

- Fit my stand desk (17 mm)
- Fit my several IKEA Kallax/Lack etc. (38-50 mm)
- No supports while printing (ideally also for attachments)
- Parametrization for “easy” adjustments

Fusion360 gripes

I was shocked to find there is no easy way to generate variants from your parametrized model in Fusion360? At least none that I could find ... Copy pasted a lot of files. If you have any suggestions, let me know.

Changelog:

2023/06/20: added “trash bin” model |fixed some dependencies in the Fuision360 file

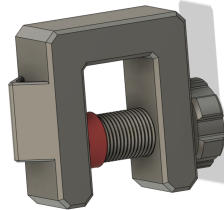
2023/06/21: added slim clamp

2023/06/23: added cup holder, added flush bin design, [tape dispenser](#)

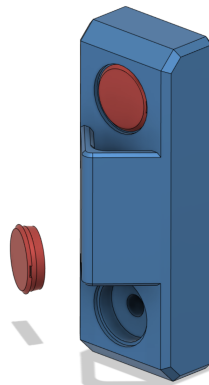
2023/06/25: added slim clamp variant with lower mount (for flush fit), added TPU bolt cap for more grip

2023/07/09:

- added a clamp variant with the mount on the other side to be able to mount in vertical orientation:



- Added a wall mount option with cosmetic lids for the screw holes.
Hole Diameter 6.5 mm - with space for washers (increased stability):



- added 90° variants for the cup holder

2023/07/16: added a STEP file for the connector ("Modular Clamp - Connector for your own design.stp")¹

2023/08/25: added STEP file for the slim version on request.

2023/10/30: Added Backpack holder (short version of the headphone/spool/whatever holder - thanks to [@tommifi](#) for the idea)

2024/03/01: added Pencil Holder

2024/03/01: added Pencil Holder

Model files



Clamps

8 files



wall-mount.stl



wall-mount-screw-lid.stl



modular-clamp-25-mm-slim-low-mount.stl



modular-clamp-25-mm-slim.stl



modular-clamp-30-mm.stl



modular-clamp-40-mm.stl



modular-clamp-60-mm.stl

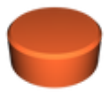


modular-clamp-40-mm-90-deg.stl



Bolts

8 files



bolt-cap-tpu.stl



bolt-35-mm.stl



bolt-50-mm.stl



bolt-60-mm.stl



bolt-80-mm.stl



bolt-50-mm-high-tolerance.stl



bolt-60-mm-high-tolerance.stl



bolt-80-mm-high-tolerance.stl



Attachments - Modules

11 files



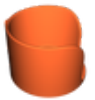
backpack-holder-v3.stl



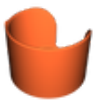
cup-holder-handle-left.stl



cup-holder-handle-center.stl



cup-holder-handle-right.stl



cup-holder-90-deg-right.stl



cup-holder-90-deg-left.stl



pencil-holder.stl



simple-spool-holder.stl



simple-spool-holder-sturdy.stl



bin-flush.stl



bin-for-modular-desk-clamp.stl



Templates

12 files



modular-clamp-v1-parametrized.f3d



modular-clamp-connector-for-your-own-design.step



modular-clamp-25-mm-slim.step



modular-mount-block-template.stl



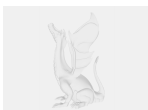
modular-mount-block-template-high-tolerance.stl



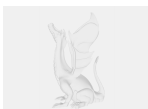
modular-mount-block-template-no-tolerance.stl



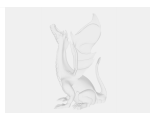
modular-clamp-v1.step



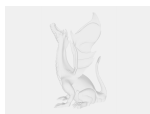
modular-clamp-wall-mount-v6.step



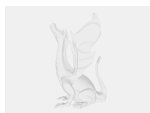
modular-clamp-v1-90-deg.step



modular-clamp-v1-no-tolerance.step



modular-clamp-v1-05-tolerance.step



cup-holder.f3z



3mf

3 files



modular-desk-clamp-bambu-x1c.3mf



modular-desk-clamp-ender-3-v2-neo.3mf



modular-desk-clamp-i3-mk3s.3mf

Print files



modular-desk-clamp-i3-mk3s_02mm_pla_mk3s_10h54m.gcode

PLA 0.40 mm 0.20 mm 10.90 hrs 115 g Prusa MK3/S/S+



modular-desk-clamp-ender-3-v2-neo_13h47m_020mm_210c... .gcode

PLA 0.40 mm 0.20 mm 13.78 hrs 127 g

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