Configurable Household Task Planner

D Dominik

VIEW IN BROWSER

updated 3. 6. 2024 | published 3. 6. 2024

Summary

A household task planner where everything can be configured. Inspired by Nils Kal's Household Task Planner.

3.32 hrs	3 pcs	0.10 mm 0.20 mm	0.40 mm	PLA	43 g	Prusa MINI / MINI+

Household > Kitchen

Tags: organizer household cleaning openscad configurable scad openscadcustomizer

V2 update

The items are now much easier to write - you can provide them as a comma separated list, which incidentally allows using of various online customizers.

Heavily inspired by Nils Kal's Household Task Planner, except everything is configurable using OpenSCAD customizer.

If you don't know how to use the OpenSCAD customizer, it's really simple:

1. Download & Install OpenSCAD
2. Download the Task_Planner.scad file here from the Files tab and open it in OpenSCAD
3. Configure the options on the right side of OpenSCAD as you see fit
4. Press F6, wait until it renders and press F7 to export the STL file
5. Continue as usual by opening the STL file in your slicer

   Note: The rendering (F6) might take a while depending on the quality settings and how many items does your configuration contain. With quality of 360 and 8 items it took me some 20 minutes to render.

Print settings

I printed the frontplate and backplate using the standard **0.20mm QUALITY** profile in PrusaSlicer, the sliders were printed using **0.10mm DETAIL** but I think the 0.2 mm profile would work as well. No supports are needed anywhere.

Add a color change to the frontplate and to the sliders (there are multiple).

The sliders go in this order:

1. bottom (text color)
2. right side
3. left side
4. handle

So in the photos the order of colors is like this:

1. white
2. green
3. red
4. white

   Note: There are 3MF projects for the MINI with correctly applied color changes. You may open them, delete the contained STL and put your own rendered STL in there, that way you don't have to apply the color changes in PrusaSlicer manually.

Configuration

Although I think the configurations are pretty self-explanatory, just in case here's a documentation:

What to render

In this section you can choose which parts of the design to render. This is useful if you only make change to one part of configuration - you would have to wait for rendering of the parts you didn't change which might take a while, like waiting for frontplate rendering even though you only changed slider.

renderSlider - whether to render the sliding part

renderBackplate - whether to render the backplate which contains hook holes, magnet holes and space for the sliders to slide in

renderFrontplate - whether to render the frontplate which contains the names of the items on the task list, the title of the task list itself and (visual) holes for the sliders

Backplate/Frontplate common settings

This section contains settings for stuff that changes both backplate and frontplate. Note that **item names** are here and not in frontplate settings because the count of the item names affects how large the backplate is.

leftSide - whether to render the left side sliders

rightSide - whether to render the right side sliders

> Note: With both sides rendered it doesn't fit on the MINI but rendering only one side works.

itemNames - list of all the item names, changes the height of frontplate and backplate and also renders the item names on frontplate, it's a comma separated list of items to render

displayTitleSection - whether a section with the task list title should be displayed, affects frontplate/backplate height and whether the title is actually displayed.

Frontplate settings

This section contains settings for frontplate stuff like text sizes, title etc.

textAlign - the alignment of the item names in a select box, can be **center**, **left** and **right**, play with this to see what looks the best

itemNamesSize - the font size of the item names, play with this to see what looks the best

title - the title of the task list, ignored if **displayTitleSection** is unchecked

titleSize - the font size of the title, play with this to see what looks best

Backplate settings

This section contains settings for backplate stuff like mounting mechanism configuration.

magnetHoles - whether to render holes for inserting magnets

hookHoles - whether to create holes for inserting hooks / nails / screws

magnetDiameter - the diameter of the magnet you want to use

magnetHeight - the height of the magnet you want to use, it's not wise to go above 4.5 as the magnet container would collide with the frontplate

magnetTolerance - the tolerance for the magnet, the real diameter is basically **magnetDiameter** plus this setting, I had success with value 0.1

holeDiameter - the diameter of the wider part of the hook hole (I'm not a native English speaker so if you tell me a better name for this I'd be grateful)

holeNarrowSize - the width of the narrower part of the hook hole (I'm not a native English speaker so if you tell me a better name for this I'd be grateful)

Slider settings

Controls settings for the slider.

sliderDescriptionLeftSize - the font size of the left part of slider, play with this until you're happy with how it looks

sliderDescriptionRightSize - the font size of the right part of slider, play with this until you're happy with how it looks

sliderDescriptionLeft - the text on the left side of the slider

sliderDescriptionRight - the text on the right side of the slider

Quality settings

This section contains a single parameter, **$fn**, which controls how round do round things appear. Multiple round things are used in this design (the

slider handle, corners of frontplate/backplate, magnet holes etc.) and this controls how round they look.

The bigger the number the rounder these things are and also that more time is needed to render. According to OpenSCAD documentation you shouldn't need to go above **120** (which indeed looks very decent) but in my experience **360** looks perfect. Be prepared that with 360 you can easily get to 20 minutes to render a single part (the frontplate takes the longest).

This remix is based on

Household Task Planner

by Nils Kal

Model files

Configurable SCAD 2 files

tasklist_v2.scad

The updated configurable SCAD file

tasklist.scad

The old configurable SCAD file

3MF Projects 3 files

tasklist_slider.3mf

tasklist_backplate.3mf

tasklist_frontplate.3mf

STL (4 items) 3 files

tasklist_slider.stl

tasklist_backplate.stl

tasklist_frontplate.stl

Print files

tasklist_slider_01mm_pla_mini_16m.gcode

PLA 0.40 mm 0.10 mm 0.27 hrs 1 g Prusa MINI / MINI+

tasklist_backplate_02mm_pla_mini_1h47m.gcode

PLA 0.40 mm 0.20 mm 1.79 hrs 23 g Prusa MINI / MINI+

tasklist_frontplate_02mm_pla_mini_1h16m.gcode

PLA | 0.40 mm | 0.20 mm | 1.26 hrs | 20 g | Prusa MINI / MINI+

License

This work is licensed under a
Creative Commons (4.0 International License)

Attribution

✖ | Sharing without ATTRIBUTION
✔ | Remix Culture allowed
✔ | Commercial Use
✔ | Free Cultural Works
✔ | Meets Open Definition