



Sonos Beam Mount for Apple Studio Display (height-adjustable stand)



Benjamin Schneider

[VIEW IN BROWSER](#)

updated 27. 10. 2026 | published 27. 10. 2026

Summary

Screwless Sonos Beam shelf that hooks into the Apple Studio Display stand. Cable routing, optional Car Thing holder.

[Hobby & Makers](#) > [Electronics](#)

Tags: [shelf](#) [sonos](#) [carthing](#) [studiodisplay](#) [sonosbeam](#)

Sonos Beam Mount for Apple Studio Display (height-adjustable stand)

A one-piece bracket that hooks into the cable slot of the **Apple Studio Display's tilt- and height-adjustable stand** and holds a **Sonos Beam (Gen 1)** right below the display. No screws, no glue, nothing to drill: the hook clamps onto the stand arm, a brace rests against the arm below it, and the Beam simply sits on the shelf.

Optional: a version with a **dovetail groove** under the shelf for add-ons, such as the included holder for the **Spotify Car Thing**, or your own designs.

Features

- **Hook mount:** a tongue and lip reach through the slot in the stand arm and clamp onto the 10 mm wall. A collar sits in the slot's front chamfer and centers the bracket.
- **Cable routing:** the Beam's HDMI and power cables go straight back through an 18.5 mm wide cable slot in the hook and out behind the stand. The round Sonos power plug (18 mm) fits through.
- **Add-on groove (optional):** the groove version has a dovetail groove on the underside of the brace. Add-ons slide in from the left and can be moved sideways. A Car Thing holder and a plain dovetail key for your own add-ons are included. With the default height, a tunnel guides a USB-C cable from the groove into the cable slot.
- **Customizable** in OpenSCAD: height, groove and support tower (see below).

Fits

- Apple Studio Display with the **tilt- and height-adjustable stand**. I only had this stand; other stands are not checked.
- Sonos Beam **Gen 1** (651 × 66 × 101 mm). I haven't checked the Gen 2.
- Spotify Car Thing (with the groove version and the holder).

All slot dimensions were measured on my stand with printed gauges: slot width 41.2 mm at the narrowest point, 10 mm wall, 8.2 mm deep front chamfer. If your print is too tight or too loose, print the fit test first (see below).

Also needed: a 90° HDMI angle adapter. To connect the HDMI cable to the Beam without problems, you need a 90° HDMI adapter (male to female), for example [this one on Amazon](#).

Height - please read

With the default settings (`shelf_drop = 0`), the top of the Beam ends up **about 210 mm above the desk**. The bottom edge of the display sits at about 215 mm when it's in its **highest position**, so the display **can no longer be lowered** with the Beam in place.

If you want to keep some of the height adjustment, lower the shelf with `shelf_drop` in the Customizer. Each mm lower gives the display 1 mm more travel:

<code>shelf_drop</code>	Top of Beam above desk	Display travel left	Car Thing holder	USB tunnel

0	210 mm	0 mm	yes	yes (groove version)
10	200 mm	10 mm	yes	no
20	190 mm	20 mm	yes	no
30	180 mm	30 mm	yes	no
37	173 mm	37 mm	yes (max.)	no
60	150 mm	60 mm	no (only without groove)	no

Files

File	What it is
sonos-beam-bracket.3mf / .stl	Bracket (default), without groove. 3MF = PrusaSlicer project (Core One, PETG), ready to slice. STL already in print orientation.
sonos-beam-bracket-groove.3mf / .stl	Bracket with the add-on groove (open on the left, closed on the right)
sonos-beam-fit-test.3mf / .stl	Short piece with only the hook, to check the fit in your slot
car-thing-holder.stl	Car Thing holder, for the groove version
dovetail-key-40mm.stl	Plain 40 mm dovetail key, as a starting point for your own add-ons
beam-mount.scad	OpenSCAD source for your own variants

All ready-made files use shelf_drop = 0.

Printing

Bracket and fit test

- Print **lying on its side**, in the orientation of the files.
- Material: PETG. Settings: 0.2 mm layers, 5 perimeters, 30 % gyroid, no brim.
- **Supports only under the hook.** The 3MF projects already contain a support enforcer there, and all other supports are off. If you use the STL in another slicer, add supports from the build plate under the hook only.
- Approximate print time on a Prusa Core One with a 0.4 HF nozzle: bracket 9 h / 295 g, groove version 10.5 h / 311 g, fit test 1 h 50 min / 46 g.
- A thin layer of adhesive (e.g. 3DLac) on the plate helps keep the tall part in place.

Car Thing holder and dovetail key

- Print them as in the file (holder standing, key on its base plate), no supports.

Installation

1. Remove the Beam and unplug the cables.
2. Thread the plugs through the cable slot from behind. The round Sonos power plug goes first. Pull them out through the window at the front of the bracket.
3. Lift the bracket about 18 mm, push the hook through the slot in the stand arm from the front and lower it. The lip slides down behind the arm and clamps onto it.
4. Plug the cables into the Beam and place it on the shelf.
5. Groove version: slide the Car Thing holder or your own add-on into the groove from the open side.

Customizer (OpenSCAD)

To render the Car Thing holder, download the STL of the original [Desk Stand for Spotify Car Thing](#) and save it as carthing-stand.stl next to beam-mount.scad. The bracket itself renders without it.

Open beam-mount.scad and go to **Window → Customizer**:

- **part:** what is shown or exported (preview with dummies of arm, Beam and display, bracket, Car Thing holder, fit test, dovetail key).
- **shelf_drop:** how much lower the Beam sits (0–60 mm, see the table above).

- **dt_mode:** add-on groove: none (default), open on both sides, open on the left, or open on the right.
- **dt_key_len:** length of the dovetail key.
- **cslot_w:** width of the cable slot (default 18.5 mm, enough for the Sonos power plug).
- **support_tower:** off = slicer supports under the hook (as in the files here). On = a built-in support tower that is connected to the bracket by breakaway tabs, for printing without any slicer supports.

Press **F6** to render, then export as STL.

If the hook is too tight or too loose in your slot, adjust lip_clamp (clamp fit at the lip) and gap (clearance of the tongue) at the top of the hidden parameters in the SCAD file.

Designing your own add-ons

The groove is meant for add-ons: anything that should hang under the shelf, like the Car Thing holder. The easiest start is dovetail-key-40mm.stl (or part = Dovetail key in the SCAD file): put your design on top of its base plate, or let it grow out of the plate.

The groove:

- **Profile:** dovetail, 12 mm wide at the opening, 18 mm wide at the base, 6 mm deep.
- **Where:** on the slanted underside of the brace, which rises toward the front at about 24° from horizontal.
- **Length:** open on the left (seen from the front) and straight for about 128 mm. Then it closes with a tapered end, about 52 mm right of center.

The key:

- **Fit:** 0.25 mm smaller per side than the groove. It slides easily and still sits firmly.
- **Base plate:** 30 mm wide and 6 mm thick, with a 0.25 mm gap to the brace surface.

Credits

The Car Thing holder is a remix of [Desk Stand for Spotify Car Thing](#) by **cawris**, licensed under CC BY 4.0. The holder uses the original stand unchanged and adds the dovetail key. The original file is not included here, please get it from the original model page.

This remix is based on



Desk Stand for Spotify Car Thing

by cawris

Model files



Sonos Beam Bracket with Groove

4 files



sonos-beam-bracket-groove.3mf

☐ With add-on groove. PrusaSlicer project (Core One, PETG), hook supports set up.



sonos-beam-bracket-groove.stl

☐ With add-on groove, in print orientation. Add supports under the hook only.



sonos-beam-bracket.stl

☐ Default bracket, no groove, in print orientation. Add supports under the hook only.



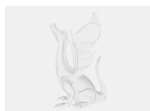
sonos-beam-bracket.3mf

☐ Default bracket, no groove. PrusaSlicer project (Core One, PETG), hook supports set up.



Make it your own

3 files



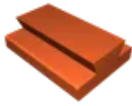
beam-mount.scad

☐ OpenSCAD source with Customizer: shelf_drop, groove, cable slot, support tower.



car-thing-holder.stl

☐ Car Thing holder for the groove version. Slides in from the left. Print standing, no supports.



dovetail-key-40mm.stl

☐ Plain 40 mm dovetail key for the groove, a starting point for your own add-ons. No supports.



Fit Tests

2 files



sonos-beam-fit-test.3mf

☐ Hook-only test piece to check the fit in your slot. PrusaSlicer project, hook supports set up.



sonos-beam-fit-test.stl

☐ Hook-only test piece, in print orientation. Add supports under the hook only.

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