



HexiBox Series: Piston Block



VIEW IN BROWSER

updated 21. 10. 2026 | published 21. 10. 2026

Summary

An isobaric soundbar with a usable response of 60Hz-20kHz.

[Gadgets](#) > [Audio](#)

Tags: [speaker](#) [vented](#) [stereo](#) [soundbar](#) [isobaric](#)

As seen on X and YouTube:

<https://www.youtube.com/watch?v=DeHr2oh5DBg>

Designed for use with the Dayton Audio DMA70-8 full range driver. Usable overall bandwidth of 60Hz - 20kHz.

Dayton Audio DMA70-8 Full Range Driver:

<https://www.parts-express.com/Dayton-Audio-DMA70-8-2-1-2-Dual-Magnet-Aluminum-Cone-Full-Range-Driver-8-Ohm-295-585>

M4x8.1 Threaded Inserts:

<https://cnckitchenus.store/products/heat-set-insert-m4-x-8-1-50-pieces>

M4x4 Threaded Inserts:

<https://cnckitchenus.store/products/heat-set-insert-m4-x-4-short-version-100-pieces>

M3x5x4 Threaded Inserts:

<https://cnckitchenus.store/products/made-for-voron-gewindeeinsatz-threaded-insert-m3x5x4-100-stk-pcs>

M4x6 Screws:

<https://www.amazon.com/dp/B0DYSVDTG1>

M4x20 Screws:

<https://www.amazon.com/dp/B0DYSQZHC9>

M3x6 Screws:

<https://www.amazon.com/dp/B0DJQH3WSX>

M3x12 Screws:

<https://www.amazon.com/dp/B0DJQGVK8S>

Terminal Cup:

<https://www.parts-express.com/Round-Speaker-Terminal-260-294>

Reusable Adhesive:

<https://www.amazon.com/dp/B001FGLX72>

18 AWG Wire:

<https://www.amazon.com/dp/B07CKVXHB5>

Recommended printing settings:

PLA is okay; PETG is better.

At least 6 perimeters / walls / loops all the way around.

At least 20% gyroid infill. (40% recommended.)

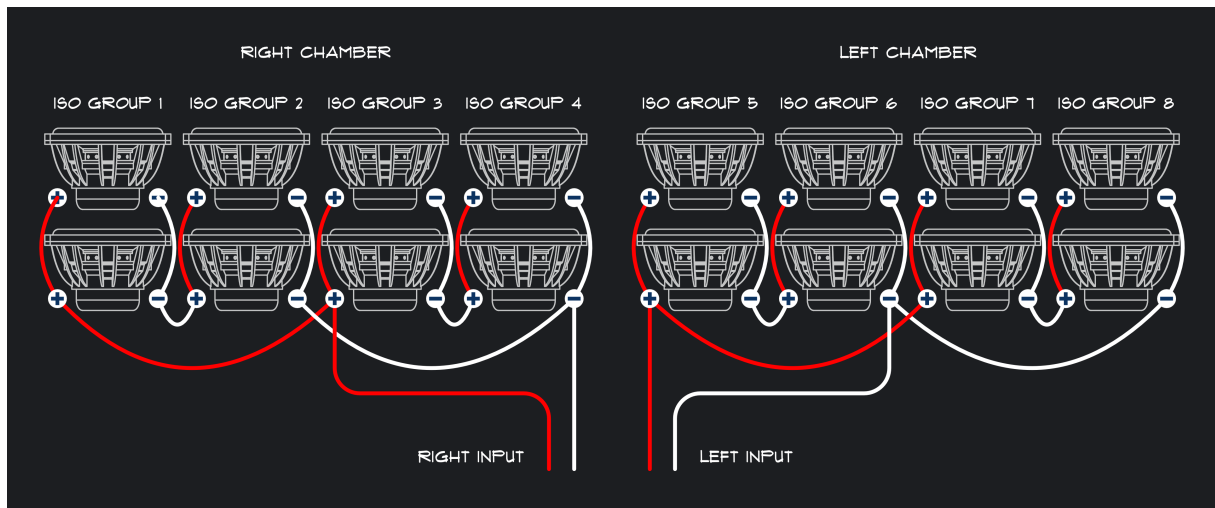
Disclaimer: This is an acoustic model. As such, it does not scale, nor is it compatible with drivers other than the ones specified. Scaling / incorrect driver(s) will result in **significantly** diminished performance.

Assembly notes: (See video.)

Note: If you plan to use the two halves of the soundbar separately as a pair of stereo speakers, be sure to seal the unpopulated screw holes.

Wiring / DSP / amplification:

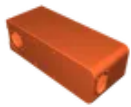
The Piston Block is an isobaric speaker. Each enclosure requires four pairs of the Dayton Audio DMA70-8 drivers; 16 in total. Use the following series-parallel arrangement:



Power handling is rated at 100W per channel.

If DSP is available, apply a 55Hz high pass filter to protect the drivers, and a broad Q -6dB peak filter around 600Hz to dial down the midrange.

Model files



enclosure.stl



face-left.stl



face-right.stl



vent.stl

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