

# Affordable\$\$Audio

*Issue Forty-Nine: January 2010*

## Audioengine P4 Mini-Monitors

By Dan Nielsen

[dannielsen@affordableaudio.org](mailto:dannielsen@affordableaudio.org)

### Specifications:

Type: 2-way passive, front ported design

Sensitivity: 88dB ([2.83v@1m](#))

Frequency response: 58Hz-22kHz

Nominal Impedance: 4-8 Ohms

Crossover Frequency: 2.8 kHz

Recommended Amplifier Power: 10-125W per channel

Tweeter: 3/4" (20mm) silk dome with neodymium magnets

Woofer: 4" (101mm) Kevlar cone

Enclosure: 3/4" MDF

Inputs: Gold-plated, 5-way binding posts

Magnetically Shielded Weight (each): 2.75 kg (6 lbs)

Total shipping weight: 6.5 kg (14 lbs)

Dimensions (each): 228 (H) x 140 (W) x 165 mm (D) (9 x 5.5 x 6.5")

Shipping box dims: 330 (H) x 460 (W) x 228 mm (D) (13 x 18 x 9")

Finish Options: Satin Black, Hi-Gloss White, Solid Carbonized Bamboo

Price: \$249pr.

[www.audioengineusa.com](http://www.audioengineusa.com)



Not many young audio companies have had the initial success like Audioengine. In just a 5 short years of production they have garnered an impressive 17 Awards from the audio press. It all began with a desire to listen to quality iPod/Airport Express sound. The A5 speaker became an instant hit with the built-in 50wpc amp combined with attention to actual sound performance. Since then, the gang from Audioengine have expanded the speaker line to include the A2 powered computer monitors, subwoofer, and the super-slick AW1 & 2 wireless iPod transceivers. For 2009, they went back to the drawing board to design a desktop monitor that could work for those who already have a small amp, especially class D and class T units. The result is the P4 passive mini-monitor.

Like all Audioengine speakers, the P4 are sold grill-less with the distinctive "eyeball" tweeter flange surrounding a .75 inch silk dome. The matching driver uses a 4 inch version of the Kevlar driver installed on the A5 and A2 speaker models. The material is strong enough to withstand all but the most violent pokes by children. The review pair came in a satin sheen flat black that can easily blend with most computer gear. Though, Audioengine also offers both white and a sharp-looking solid bamboo for an additional charge. The cabinet is made of traditional .75 inch mdf with smoothed, rounded edges. The front bass port is actually a horizontal slit running across the bottom of the front face. A nice touch is the isolation pad on the speaker bottom that also limit the speakers from sliding on the desktop; mounting points for those who desire to hang the speakers due to limited desk space or, in an home theater setup. A set of simple, but worthy binding posts are mounted near the top for easy access in an angled mounting setup.

### Listening

I setup the P4's in my home office. In order to test the speakers in a situation similar to their designed intentions, I borrowed a Trends chip amp from a co-worker for most of the review period. The Trends has developed a loyal following of its own and for good reason.



For music, I wanted to try something many now consider eclectic, but back in high school was considered the rock equivalent of free form jazz, Emerson, Lake, and Palmer. Granted they had a handful of mainstream radio hits including “Lucky Man”. At the end of that song there is a keyboard passage that can test the combo of left and right imaging along with speed of transients. The P4’s did an admirable job of quickly bouncing the sound back and forth between the speakers.

But, most of ELP’s work was out on the edge, using great deal of electric keyboards and guitars with sounds popping in as the mood fit the artists. Music of this type I believe, demonstrates in short order whether speakers can play together or fall apart in their ability to convey a consistent sound to the listener. The classic track “Nutrocker” shows how well the P4’s handle the upper octaves with a pleasant clarity. Just as impressive was the precision of the acoustic guitar play in “From The Beginning”.

Forward projection can be a bit tricky with small inexpensive monitors. It’s all about finding a balance between being forward and the sound breaking up from trying to do too much. The forward energy of the P4’s errors on the side of a light forward push. Considering that a large portion of buyers will be using them in a nearfield listening setup, it’s the smart choice, well proven in the track “The Endless Enigma”.

Bass response supposedly reaches 58hz, in my test tone listening I found a pretty quick drop below 70hz. But in playing music the combination of the design and the desk-top gave the impression that 60hz was being met. Keep in mind, the thump of bass improved with a closer placement to the back wall, though the frequency went up a bit. The point being the P4’s use proper placement to their advantage to give the listener a very pleasing audio experience. All in all, a worthy effort in a near-field setup.

Symphonic music worked well for background, but for serious listening, it really depended on the instruments in a passage. Trumpets sounded particularly strong and clean, the same could be said for other higher pitched instruments. Others, in the lower mids lacked individual detail. But remember, these are on \$249 desktop speakers, they can’t do everything. In fairness, the orchestral music fan will find much to like in hearing what the P4’s can do while they slave away at their desks.

For fun, I did spend sometime listening to the P4’s powered by my Cambridge 540v2 integrated amp. My great room at 14 x 21 feet with a 16 ft vaulted ceiling was just too big to give the P4’s much of a chance to perform well. But they tried and for simple soft background music the P4’s will work and guests won’t complain.

### Final Thoughts

As more and more people work from home, the desire to have quality-sounding music playing as a replacement for human interaction of a traditional workplace will only grow. The Audioengine P4 provides for budget solution to this goal. These pixie-sized desktop speakers are a big improvement over any traditional computer-direct model. The P4’s ability to give a strong near-field presentation making them an excellent choice for the small home office. In combination with a small chip or low-powered amp, the Audioengine P4’s are an easy answer for quality audio on a tight budget.

### Review Equipment

Cambridge Audio 540v2 Receiver  
Cambridge Audio 540v2 CDP  
Trends TA-01 Amplifier  
Apple iPod

Copyright 2010, Affordable\$\$Audio. All Rights Reserved.

