
Subject: DIY Theatre 4PI: First impressions (unforgiveably long)

Posted by [BillEpstein](#) on Thu, 25 Oct 2001 20:39:13 GMT

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They've been playing for just a few hours, being fed by my "B Team" A/V receiver and I'm very favorably impressed. Surprised, in fact! I shouldn't be, though. I went with this design over several others because I was so impressed with Wayne Parham; his knowledge, his facility for unraveling complexities and above all, his patience and sense of humor. When you can't audition, you have to hang your hat somewhere. Thanks, Wayne. And I'm a little nuts. I've never heard an SET amp, but I sold my wonderful RM-10 and ordered Bottlehead Paramours. My experience with speakers is limited to Acoustat 1+1's, JSE Infinite Slopes and Meadowlark Kestrels. So 15" woofers and horn tweeters? In a packing crate? I expected odd colorations and boomy bass. Figured it would be tamed by the 2A3's when they arrive. What I have is excellent clarity true to the recording (CD) and a nice tonal balance up and down the scale. More weight and authority in the bass but not out of synch with the mids and highs. Piano is more convincing, not just because it needs a bottom, but also the percussiveness of the top two octaves. That percussiveness was missing from the Kestrels. The Argerich Rachmaninoff re-issue; Phillips 50 Greatest, reveals what was missing before the Pi's. Pop female voice is very natural. I tried Joni's "Blue" and Emmy Lou's "Wrecking Ball". Joni's just as sweet as she should be and the title cut on "Wrecking Ball" reveals the excellent balance of the production which stops just short of overdone. The interplay between the electric bass and drums, as much as I've enjoyed it in the past with the transmission line Kestrel's, is a brand new experience with the big Pi's. There's no substitute for cubic inches. After some more break-in and the arrival and construction of the Paramours I'll revisit the sound. I haven't had any luck finding a digital camera among my poor acquaintances. For now I'll just say that I wired the attenuation with .47uF 200 volt Auricaps and 16 ohm 10% Mills wirewound resistors from Michael Percy. Internal wiring is Jena Wire, 18 ga. stranded copper in a poly dielectric, from Bottlehead, twisted double runs to the woofers. I debated over thicker cabinet walls but went with standard 3/4 Fibrecore. To dress things up a bit and re-inforce the baffle, I glued a second layer of MDF on top of the baffle full width from the bottom to just short of the horn. The reveal on the Eminence Delta 15 is 3/4" so now it is flush with the thicker baffle. I rounded over the edges of this second piece and painted it black: Rust-Oleum Textured; a little more "technoid" than regular enamel and not as rough as Hammerite. Makes a nice contrast with the birch veneer Fibrecore. If you're debating about something a little different in speakers, as I was, \$600 and a few evenings is all it takes. The results are gratifying.

Subject: Neat!

Posted by [mikebake](#) on Thu, 25 Oct 2001 23:05:50 GMT

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Subject: Very good review

Posted by [Wayne Parham](#) on Fri, 26 Oct 2001 00:01:38 GMT

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That was a very good review and I'm happy that you're satisfied. I do wish we could see your speakers, because the way you mounted the drivers sounds very attractive. I think I can imagine how they look with the textured finish that you've used, and I wish we could see them. Are the cabinet sides birch and the front baffle black, or is the entire cabinet black? I can imagine that a laquer piano black would be attractive. Does the textured paint provide a "sprackle" finish, like a rough vinyl, or is it more of a coarse grain like sandpaper? Thanks for sharing your impressions and please find a way to post pictures of your speakers sometime! And by the way, you're right - "There's no substitute for cubic inches."

Subject: Re: Very good review

Posted by [Bill Epstein](#) on Fri, 26 Oct 2001 06:46:53 GMT

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The problem with audio DIY projects is that they run counter to my commissioned furniture making: first you finish, then assemble and finally you get to listen. Being impatient means there's no way I would do piano black for myself, it's a one week multi-multi step process! Worse, the monarch grade quilted maple veneer I ordered turned out to be as wavy as burl and is currently getting the glycerine process to soften and flatten. Consequently, had I used just regular MDF instead of Fibrecore, I'd be looking at dull brown speakers, they're entirely unfinished except for the painted woofer baffle! That additional layer woofer baffle is 24" wide by 25" tall extending up the front baffle just enough to surround the woofer and leaving the horn area, 24X11 in birch. That's the contrast I mentioned. It gives a 3-dimensional look to the cabinet and a quasi, ersatz, imitation, almost time-aligned feature. Speaking of which, Wayne, I don't think I've seen you address the conflict between "slow" large woofers and "fast" tweeters. You must not give it much weight or Pi's would have multiple smaller woofers as everything else does, and then Pi's wouldn't be unique. And it's "going back to tubes" that drew me to "go back" to the Pi design. But there is a well-documented conflict, in the literature, there, what are your thoughts? Would there be a time-aligned Pi in the future? I don't feel like putting a rubber hose to the dust cap to hear the mids and then to the periphery to hear the bass, anyway.

Subject: "Time aligned" speakers (snicker)

Posted by [Wayne Parham](#) on Fri, 26 Oct 2001 08:00:01 GMT

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There's been a lot of discussions about that very thing. Check out the post called "Phase angles, crossovers and baffle spacing" and the posts contained therein. Recommended reading also in

the threads called "Extended bass response from small cabinets" and "Biamping-xovers-12, 18, or 24db/oct" and their contained posts. This last set of threads mentioned discusses woofer resonance, Q and specifically - overring

Subject: That's what I'm talking about!

Posted by [BillEpstein](#) on Fri, 26 Oct 2001 14:20:23 GMT

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I had come across some of these posts in the past but had avoided reading them until now. I'm used to the posts on other websites that are so full of jargon it might as well be Urdu. My ex-wife's cousin led the team that designed the program that allowed the Israeli's to loft a bomb like a missile into Iraq's Osirak reactor. When I finally met the great man, I made the mistake of asking what he could tell me about what he was working on. He replied that there was nothing he could say that I could understand. Family trait. My ex wasn't that smart but we couldn't communicate, either. Hey, I understood that stuff about time align and phase. Once again, Wayne takes complex concepts and explains them in a way an intelligent outsider can understand. I bought into that disappearing speaker stuff for years. Painstakingly moved speakers around millimeter by inch. The planar Acoustat's did the best at suspending a sound in the air independent of the speaker and to a lesser extent, the Kestrel's. Done right, even though an instrument is located in the same position as the speaker, it doesn't seem to come directly from it. Better yet, for one who attends a lot of orchestral concerts, good soundstage has the Clarinet and Bassoon behind the oboe and flute, Trumpets outside of the Trombones and both behind the Cello's and Viola's. Tympani waaay back. But How do you make a 24" wide box disappear? Or cut a woman in half? The Pi's seem to require a different vocabulary for soundstage. Allowing for the mediocre amplifier I'm using right now, there seems to be a "soundfront" that fills the room more than it hangs in space in a distinct plane. That certainly emulates a hall more truthfully. The sound of an orchestra doesn't "hang" just in front of the stage. But at the same time, the Patricia Barber combo on "Cafe Blue" has the intimacy of being in a club; she is clearly sitting with the piano perpendicular to the audience, keyboard on the left and the upper octaves closer to the room, lower octaves farther back. How real is that? I never knew how much bass line I've been missing. There's actually a tuba back there with the trombones! That's not just getting low but getting there with much less distortion than I've heard before. And the JBL drivers would have been better than the Eminence? I wonder what the guy that dropped 15 large on a pair of Eidolons would say after hearing the 4Pi's? Yikes!

Subject: Re: DIY Theatre 4PI: First impressions (unforgiveably long)

Posted by [replay](#) on Fri, 26 Oct 2001 19:49:41 GMT

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hi till, great review! the pi's are simply amazing speakers. i have a friend who considers himself a true audiophile. he has spent in excess of 50k on his system, yet you can never listen to it as it is always torn apart waiting for the latest upgrade. he just bought the latest blue heron's (10k) and i listened, okay sound but not great, the pi's are simply better. i think the hybrid plasma tweeter

closed him. he's scared to come over and listen to my pi's, maybe because he's spent more on speaker wire than i've spent on my whole system. and wayne, thanks for your no nonsense approach to audio, you've separated the snake from the oil and made listening to music fun again!!cheers,george
