
Subject: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Spinjack](#) on Wed, 02 Mar 2005 22:47:49 GMT

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Okay. I've settled on the corner horns (assuming the cardboard mockup doesn't turn out to take up half the room). However, the component level is still up in the air. Of course, like any good (i.e. pain in the butt) customer, I would like to have the Audiophile stuff at the Theater price. Since I know that isn't going to happen, could someone give me the relative differences in sound of the (strengths, weakness, quirks, nuances, etc.) of teh different levels. My original budget dictates the Theater components, but I may be willing to part with a bit more money if I feel teh extra expense is justified. Thanks in advance for the input.

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [BillEpstein](#) on Thu, 03 Mar 2005 00:10:01 GMT

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I had Theatre 4's and then Pro's but with Altec 806A not JBL 2446. The JBL 2226 woofer is quite a bit more detailed and puts up a more "realistic" soundstage. The Altecs go a little higher, I think than the PSD-2002's and, again, allow more detail and air. That said, the Eminence Delta/PSD-2002 combo is very musical, dynamic and has great weight in the bass.

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Russellc](#) on Thu, 03 Mar 2005 01:23:23 GMT

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I have to agree with Bill on this one, go JBL if possible. Shop for used, it isn't that bad. I bought them for about 1/2 of retail used. I am also a big altec user as well. my ears tell me the 2002 has a bit more high end than the altec, but I of course prefer the altec overall by a good bit. Also, Bill is using the 806, which I havent tried. I have tried other 1 inch throat compression drivers from altec, like the 802 8D, 808 8b, 902 8B, and 908 8B. That said, the 2002 is an excellent driver as many here will atest to. And it is at a very fair price point to be sure. If you do go with an altec high end, I would be glad to share what I know in sorting out the various models and prefered diaphragms/mods for them. Some of these models are very similar to each other with slight design changes for specific purposes. Most can be "changed" to equal other models. Different diaphragm materials and rear chamber dampening methods are typically all the differences are, along with magnet type alinco or ferrite. Some are set up to handle the extreme power and abuse of PA use. Some of these models don't work quite as well as others for home hifi, where extreme power handling is not am issue, but detailed reproduction is...oh no, another headache to sort out!Russellc

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Matts](#) on Thu, 03 Mar 2005 04:08:23 GMT

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awhile ago, Bill Martinelli (who makes wood horns and speakers) wrote a very good post or two about the differences. Search the archives and it should be very helpful for what you're trying to figure out....

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Wayne Parham](#) on Thu, 03 Mar 2005 07:33:01 GMT

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What amp will you be using? In general, the best sound comes from the best parts. But there are some cases that tilt the scales one way or the other. Those cases are usually set by the amp. I've used Eminence and JBL Pro drivers for over 25 years. In all this time, their basic characteristics haven't changed much in my opinion. Both sound good, but I can always tell the difference. I can usually tell the difference within a matter of seconds. Eminence has improved their cast frame drivers and recently come out with low distortion woofers with shorting rings. That's narrowing the gap. But I'd have to say that JBL still sets the standard. They're willing to go the extra mile in R&D, and it shows. Having said that, I'm very pleased with Eminence's Magnum drivers, as are used in the Audiophile Series. Eminence's introduction of shorting rings is a big step in the right direction, in my opinion. I hope they'll continue to focus on R&D and improve them further. I hope they'll bring out new models too. But they'll only do that if people buy them. Otherwise, they'll leave the premium driver market to JBL and other high priced competitors. Eminence also removed the dust cap and replaced it with a mesh on some speakers. The mesh doesn't contribute much to sound, and the end result is a big reduction of breakup modes. If you run high frequencies to Eminence drivers having the phasor and mesh dust cap, you'll find the upper

mentioning anyway. When using a solid state amp with a lot of power, the JBL 22xx woofers definitely sound cleaner to me. This is almost always the case with good tube amps too. The JBLs have very effective shorting rings, so that makes sense. They have reduced distortion. The Eminence Omegas sound very powerful to me, as do the Kilomax woofers. But they aren't quite as clean. The Magnums are squarely in the middle, if you asked me. But in some cases, if you're using a tube amp, your conditions may prove different. For example, I used a nice little SET amp on a pair of low distortion woofers for a while, and it sounded very nice. But I noticed that the bass was a little tubby, almost as if I was using a standard woofer that didn't have a shorting ring. The reason for this is probably that the reduction of even harmonics from the speaker was counteracted by the high amount of even harmonics made by the amp. Or maybe it was the matter of output impedance sending the alignment towards underdamping. I don't think that was it, because the speaker was very overdamped to begin with, and it would have taken more output impedance to shift the alignment than the amp had. In any case, whatever it was, on this particular amp, premium woofers didn't make any difference. Here's a condition that is even more striking. Think about the fact that push-pull tube amps reduce even harmonics, but odd harmonics aren't reduced. This is also the case for drivers with shorting rings. So if you have a

push-pull tube amp that makes a fair amount of third harmonics, it may sound really off with a high-quality driver that uses an alnico magnet or a ferrite structure with a shorting ring. Such an amp might sound more balanced with lower cost speakers with standard ferrite magnets. They will tend to balance second and third harmonics. I used to generalize amps into categories, and I still do sometimes. But the truth is that tube amps are much more varied than most solid state amps. Variables include tubes used, amp topology and output transformer among other things. Some generalizations are in order, like small output transformers will probably make weak and/or flabby bass. They aren't going to be helped much with a premium driver. But some amps will surprise you. If you're running a good solid state amp, I'd say that you can expect the good/better/best hierarchy pretty much follows the line. This is pretty much true for the high end tube amps too. But you might find that a \$500 flux stabilized woofer sounds artificial on some

I've swapped every part in. I've measured them all to quantify what I've heard. I could write a couple of books on what I've found with different drivers, different conditions, different crossover components, slopes and filters and different amps. There are bits and pieces of that here in the archives. But I think I can risk making some general statements of opinion and have them prove true in most cases. They have been recurring truths for me anyway. I like the low distortion woofers best no matter what. With exception of loading problems, efficiency, impedance peaks, etc, if an amplifier doesn't sound good with a woofer, it isn't helped by using a lesser woofer. In this case, the lower distortion you can get, the better. Even harmonics, odd harmonics, either one. Get rid of them, the less the better. So when I'm spending my money, that's what I'm focusing on. Midrange is where everyone says to place the emphasis. How true it is. But here is where I find people might be able to sneak in some second harmonics and get away with it. I love the sound of a midrange with a shorting ring, it is so crystal clear and pure. But sometimes a midrange with a regular ferrite magnet sounds richer, probably because it is. Richer in harmonics. In some cases, the driver is balancing other anomalies. So there, I'd try the premium driver first, but I might try the lesser driver in some cases. With solid state, I've never seen a case where a lesser driver sounded better than a premium driver with an effective shorting ring. But with tube amps, I have. Tweeters are easy to predict. Without considering directivity issues, differences in tweeters are pretty much shown in the response graph, and tweeters with smoother response sound better to me. Harmonics tend to be out of bounds, so we're not really talking about harmonic distortion when it comes to tweeters. The things that make a tweeter good or bad generally show up in the response curve. So that's my nickel's worth. Basically, I think you get what you pay for, and the more expensive drivers sound better. There are a few exceptions that prove the rule. But in general it's just like fast cars - If you want the best performance, buy the best parts you can afford.

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Spinjack](#) on Thu, 03 Mar 2005 13:20:52 GMT

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To answer the question poses at the beginning of your post: I will start off with an EL84 based push pull tube amp with wimpy output trannies driven by a Foreplay line stage. The amp is scheduled for a rebuild once I finish the Seal Electronics OptiMOS push pull (Class B) solid state amp I'm building. The OptiMOS will start of at about 100amps, which is a bit on the low side for

the design, and will be beefed up to about 200 amps once I get some bigger power trannies. The tube amp will be give larger, higher quality output transformers and will have all its caps and resistors replaced (the left/right gain is different and there is a buzz in the right channel). Once both amps are complete, they will be paired with speakers based upon what woks best. Right now the tube amp and Foreplay are driving a pair of Fostex 203FE based BLH's in the family room. Is teh crossover design the same for each component level? If so, I might start out with the lower cost design and upgrade later. My biggest concern with that route, though, is that there will be an audible 'mismatch' between the drivers. For instance, if I substitute a JBL for the midrange while still having a Eminence bass and tweeter unit, will there be a 'disconnect' in the sound?

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Spinjack](#) on Thu, 03 Mar 2005 21:13:04 GMT

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I read the thread you referenced. It was talking about 4 Pi's, but The discussion was still applicable. Thanks for the lead.

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Wayne Parham](#) on Thu, 03 Mar 2005 23:35:27 GMT

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There are a few combinations that I think sound good together, and those are the ones I have

you'll see the choices. Each of those are combinations I've made and really liked. There are a few other combinations I had hoped would work, but they didn't and aren't listed. So check there to know what choices I liked best. Each of the drivers chosen has good response characteristics and controlled cones. None has annoying breakup mode resonance or anything like that, and each covers the range, so response is nice. Also, since the range is the same, intermodulation isn't a function of drivers. The main differences between them are in their harmonic distortion and their general build construction. When making improvements, I prefer upgrading from the bottom up. Where harmonic distortion is concerned, it makes sense. The harmonics generated from woofers tend to be in the midrange and maybe that's why it is most noticeable to me. Harmonics from midrange drivers are shifted up into the overtone or treble region, which is another area that is important. But I think woofer harmonics are more noticeable. Harmonics from tweeters are shifted up very high in frequency, so while I think distortion performance is important there too, I think it's the least noticeable.

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Spinjack](#) on Fri, 04 Mar 2005 00:37:59 GMT

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Thanks for all the assistance. One last question: prices. Per pair or each?

Subject: Re: Theater vs. Stage vs. Premium vs. Audiophile vs. Pro

Posted by [Wayne Parham](#) on Fri, 04 Mar 2005 03:29:34 GMT

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All prices are for individual speakers.

Subject: OptiMOS

Posted by [GarMan](#) on Fri, 04 Mar 2005 13:02:02 GMT

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How did you find the service of Brad at Wilson Consulting. I was ready to buy into the OptiMOS last Nov, even though it was a little more than I wanted to spend. Traded a couple of emails with Randy who was great. Very helpful with information and fast to respond. He directed me to Wilson Consulting, but I found Brad frustrating. I had to keep sending him reminders to answer my email. And I was only asking very basic questions, like what boards are available and pricing. Finally, I got fed up and moved to another option. He never did get back to me with pricing information. Gar.

Subject: Re: OptiMOS

Posted by [Spinjack](#) on Fri, 04 Mar 2005 17:43:39 GMT

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Actually, I've never had to deal with Wilson Consulting. I worked entirely through Randy. But that's probably because it's been a year since I started on the things and I still haven't finished them (mainly for lack of the output inductors and an autotransformer to bring the voltage up slowly for the first test). It's a shame to read that Randy has pawned off his tech support to someone else. I know he licensed the rights to the design to Zus, but hadn't heard about Wilson.

Subject: Re: OptiMOS

Posted by [GarMan](#) on Fri, 04 Mar 2005 20:55:22 GMT

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Well, if you can get a hold of Brad Wilson, he has Randy Slone's power amp auxillary board available as a kit, which includes a soft-start circuit. No idea what it costs.

<http://pages.zdnet.com/diyamp/id7.html>
