
Subject: Midrange in Pi 7's.

Posted by [Rider](#) on Fri, 07 Jun 2002 13:28:28 GMT

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Hi Wayne. I bought some midrange speakers to put in my Pi 7's. Adding the midranges was a suggestion you came up with at one point. If I'm following it right I'll end up with a horn bottom and top end and a standard midrange. A probability will be the midrange gets drowned out by bass and treble because of the horn loading. The advantage is I get the clearer midrange I'm looking for. I picked up some PHL 1660 6 1/2 inch midranges. (<http://www.phlaudio.com> - choose site map - 6 1/2 midrange if you're interested) These are speakers you probably aren't familiar with and you're thinking what the **** did this guy get himself in to. They have an SPL of 97 so are fairly efficient and are good for 250 watts (EAS) All other numbers (eg. Qms) seem close to the Emminence too. I don't know that it matters though since I'm not using these in horns. I'd like to do the crossover at 500 - 3500 hz. This leaves the Emminence doing what it does well (bass) and let's most of the vocals fall to the PHL's. I was thinking the speakers would potentially be bass heavy. The Emminence Delta 15's run 101 SPL and corner loading probably adds another +6 db from what I read. I figure I'll probably want to run an L-Pad on the top end to tone it down. From what I've been reading L-pads are used mid-range and top. Can you use them to cool the bottom end down too? I hope you're getting the nicer weather we're getting in Ottawa. It's great that it's finally here. Thanks in advance, Grant.

Subject: Re: Midrange in Pi 7's.

Posted by [Wayne Parham](#) on Fri, 07 Jun 2002 15:52:12 GMT

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I've used cone midranges both with and without horns, and I find them to be better sounding than compression units - by far - for the lower vocal range. But I would stay away from L-Pads on the woofer. Do not consider this to be an option, since it changes system tuning. You are actually modifying how the speaker motor interacts with the cabinet when you add an L-Pad to it. So find a way to bring the midrange and tweeter to match the woofer - Not the other way around. One of

Speaker, which used 2105's, a 2205 and a 2405. The JBL 2105 is a 5" cone midrange, and one was installed on the front baffle and one was installed on the back. Excellent sounding system! Others systems I've made over the years had large format horn midrange units installed on top of the cabinets. This is particularly attractive for high output use. You can build a horn for your midrange, or use one like is used in the JBL Cinema Speakers from the tent sale - the ones that have the midrange horn and tweeter horn combined on an ABS form. That's is an excellent option and the "price is right." So I think you'll find that there's more than one good way to "skin a cat."

Subject: Re: Midrange in Pi 7's.
Posted by [Rider](#) on Fri, 07 Jun 2002 22:25:33 GMT
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Hi Wayne. Continued thanks for the advice. I'm really looking forward to getting the PHL's in play. You've pointed out to people often they can't expect a low end Emminence speaker to compare to higher end products. I wasn't able to find much on the PHL's. I'll find out in a little while if I got sucked in by hype or what. This Pi cat's got a lot of skins left yet I'm sure. Play toys are good. Have a good week-end. Grant.
