Subject: Pro essional 7 Pi's with 2123J midrange
Posted by jlharden on Fri, 09 Jan 2004 17:18:28 GMT
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Hi guys!I've seen very favourable reviews of the 2245 based cornerhorns using the 2123J 10" midrange handling the midrange between the 18" woofer and compression driver. Has anyone made the Professional Series 15" variants a three way in this manner? It would seem to offer the same advantages to the 15" system as the 18", though I'd assume it's more necessary with the larger driver to avoid beaming, breakup, etc. I'm getting ready to draw my final "psuedo-pi" configuration, and am considering building the cabs with the midrange sub-enclosure in place, so I can add the midrange as an upgrade path. I'll be using a JBL 2226J, 2426J, and 2370A horn per cabinet. Any experience, thoughts, or random comments appreciated. Take care! Jerrod

Subject: Where in the f is my f? ;) nt
Posted by jlharden on Fri, 09 Jan 2004 17:20:14 GMT
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Subject: Re: Professional 7 Pi's with 2123J midrange
Posted by Wayne Parham on Fri, 09 Jan 2004 17:50:58 GMT
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2205 used the JBL 2105 midrange, and it was an excellent speaker. You could also do this with a 2225 or 2226. Since 2105's are scarce these days, you might use a 2123 or 2012 instead.In the 90's, I started making a lot of two-way systems. Construction is simpler and they have a certain magic. But the three-ways described above are really sweet too.

Subject: Re: Pro essional 7 Pi's with 2123J midrange
Posted by GrantMarshall on Sun, 11 Jan 2004 14:57:27 GMT
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Hi Jerrod.The JBL's look pretty good.A small box required with a sensitivity of about 101 SPL. I notice JBL goes out of their way to say the sensitivity rating isn't done on a 1Kh tone, it's done on a sweep of a range, and it may be higher sensitivity. (

http://www.jblpro.com/pub/obsolete/2123.pdf) That's good. I used a PHL midrange with a rating of 97 spl and used L-pads to take the top horns down. Now that I've heard them I would have liked a closer SPL match like the JBL will give you. You'd probably want to cross these at under 500 on the low end and JBL suggests 3000 as a max high crossover. A lot of people like to go to 3500 for the high end from what I've been reading. That will keep voices on the same driver for the most part instead of splitting them. You might get away with resistors to tame the top end, you might need l-pads. (maybe tri-amp ;-).) There also seems to be a lot of talk about some mid-range horns showing up at some point which may be worth waiting for. You'll probably want to at least bi-amp because the low end on the corner horn is very strong and the best way to balance it is to put the low and high end on seperate power sources.I used the non-horn midrange because I just use my Pi 7's in my living room and with the high SPL midrange they're more than enough for what I use them for. The guys doing professional sound would like to stay with horns because they want the power. My ears tell me the non-horn midrange has a better sound stage than most of the horns I've heard. (I "might" be asking for a fight here ;-)).Feel free to comment Wayne. These are just my (limited) experiences.Have fun,Grant.

Subject: Re: Pro essional 7 Pi's with 2123J midrange
Posted by jlharden on Sun, 11 Jan 2004 15:34:08 GMT
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Hi Grant, Thanks for the comments. My speakers will be used in a home enviroment and will rarely be pushed(comparitively speaking anyway). The 2226J loaded in the conical horn should get close to the efficiency of the 2123J mid. The 2426J will of course need some padding. So, I'm certain the individual drivers will match well in terms of efficiency. The bigger obstacle, of course, is the crossover network. I'll need to do some more research on it, and see what looks like the best/least compromise and then see what I can come up with in Spice. I'll keep the group posted. Thanks! Jerrod

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Subject: Re: Professional 7 Pi's with 2123J midrange
Posted by Wayne Parham on Sun, 11 Jan 2004 17:28:23 GMT
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radiating midrange.

But I think there are advantages to using a horn loaded midrange too, one that matches directivity at 90° horizontal and with limited vertical pattern too. The corner limits the radiating angle, to be sure, but at higher frequencies it is nice to have the pattern control, reducing early reflections. It also allows the vertical pattern to be set within the nulls. That's another thing to consider, a possibility worth looking at. A midhorn like this is relatively easy to build.