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Subject: Differences between Pi Speakers

Posted by [Erik Johansson](#) on Sun, 11 Aug 2002 15:16:55 GMT

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What are the differences are between the Theater Series 3 Pi and 4 Pi speakers?Also, I would like to build this next pair of speakers out of plywood. I've had enough of veneering for now and I've seen a few Pi Speakers made out plywood so I suppose it would be ok right? Do I need to add any material thickness compared to MDF? I plan to use berch plywood like that in the picture. (They sell 18mm, 21mm and here. BIG (!) price differences between them!)/Erik

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Subject: I meant birch plywood (nt)

Posted by [Erik Johansson](#) on Sun, 11 Aug 2002 15:46:37 GMT

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Subject: Strengths and weaknesses

Posted by [Wayne Parham](#) on Sun, 11 Aug 2002 17:01:31 GMT

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similar sounding speakers.

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Subject: Begging the question, Wayne

Posted by [BillEpstein](#) on Sun, 11 Aug 2002 21:27:37 GMT

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Several different posts today about lowered output (which we are aware of) with the Theatre 4 above 10,000 Hz.Which little super horn would work to augment, preferably without crossover or just a few extra parts?How different, or similar is this issue with the JBL horns?

Subject: JBL 2405 and KSN 1038

Posted by [Wayne Parham](#) on Sun, 11 Aug 2002 23:44:57 GMT

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I've used both the Motorola KSN 1038 and the JBL 2405 quite a bit over the years for the top two octaves. Naturally, the 2405 is used in more expensive systems, and it's truly excellent. The KSN 1038 is a great part for its cost, so I tend to prefer it in smaller bang-for-the buck systems. One problem with using a super-tweeter is it throws constant-directivity out the window. There is no way to crossover to a super-tweeter without interference notches at narrow vertical angles near the forward axis. The distances are too large and the wavelengths too short. So what you get is a speaker that is only right straight-on axis, and any movement causes all sorts of response anomalies. I'm not sure that's a compromise I would make.

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Subject: Re: JBL 2405 and KSN 1038

Posted by [BillEpstein](#) on Mon, 12 Aug 2002 00:39:04 GMT

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I could hook up the KSN to the tweet output of the 3677 crossover in addition to the horn? Just to see? Before the attenuation? In parallel?

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Subject: Re: JBL 2405 and KSN 1038

Posted by [Wayne Parham](#) on Mon, 12 Aug 2002 01:04:14 GMT

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Use a 1uF capacitor in series, then a 16 ohm resistor in parallel, then a 2.2uF capacitor in series and a 20 ohm resistor in parallel across the KSN 1038 tweeter. Disconnect the 0.47uF C1 capacitor from the compensation circuit on the compression horn when you're installing this top octave tweeter subsystem. Let us know how you like it!

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Subject: Re: Strengths and weaknesses

Posted by [Erik Johansson](#) on Mon, 12 Aug 2002 07:24:48 GMT

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Is there any alternative for the PSD-2002 + H-290? It's a quite expensive part... Could it be build with something like two KSN-1038 next to each other until I could afford the PSD-2002 + H-290 (I

could just open up the two round holes to a single rectangular hole of the right size)?/Erik

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Subject: I'm stupid!

Posted by [Erik Johansson](#) on Mon, 12 Aug 2002 07:43:33 GMT

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Sorry I didn't think much when I asked whether the KSN-1038 tweeters could be used. There is no way I could cross those at the given 1.6kHz./Erik

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Subject: Re: Strengths and weaknesses

Posted by [Wayne Parham](#) on Mon, 12 Aug 2002 07:49:07 GMT

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The PSD2002 is the best compression driver for the money, in my opinion. As compression drivers go, it is very inexpensive.

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Subject: Re: Strengths and weaknesses

Posted by [Erik Johansson](#) on Tue, 13 Aug 2002 05:26:07 GMT

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Well I've got it figured out now. I'll build a pair of these speakers minus the compression drivers and horns and put my 1 Pi speakers on top of them until I get the money to buy the compression drivers and horns. That should be great, 1 Pi with REALLY thunderous bass :)As I get the money, I'll just open up the holes for the horns, then sand the entire cabinets a little and put a final layer of laquer on them.Should work well shouldn't it?/Erik

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Subject: Re: Strengths and weaknesses

Posted by [Wayne Parham](#) on Tue, 13 Aug 2002 05:46:20 GMT

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Sounds like a good idea. Cool!