Subject: Got Coil? Got Coil! ...and pseudo 8Pi
Posted by GarMan on Sat, 26 Jun 2004 02:03:53 GMT
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With so much talk about the new midrange horn on the board these days, I decided to see what all the fuss was about. Got myself a 2x4 sheet of 1/4" and built myself a horn last night. Not very elegant craftsmanship, but got all the pieces together with lots of "liquid-nail".As luck would have it, I had everything to put together a 8PI-type speaker: a 2PI Tower, PSD2002 drivers and horns, crossover components, AND A PAIR OF 12mH COILS!Click on the link below to see pix.I've never heard a midrange horn before, so the sound was very different for me. The first time I heard these horns on the speaker, it made me say "WOW!", right after my wife said "WOW!" It really brings the music (and especially the vocals) front and centre. Now I understand what Wayne means when he talks about dynamic range.Compared to the "Thermionic 2PI Towers" I had running, the addition of the midrange horns gives a more forward presentation. Detail and "liveiness" are definiately improved, but without any additional edge. I am definately going to try and fit one of these things in my basement.Duncan, looking forward to your review when your coils arrive.Gar.
Click on Midrange Horn

Subject: Re: Got Coil? Got Coil! ...and pseudo 8Pi
Posted by Wayne Parham on Sat, 26 Jun 2004 05:41:19 GMT
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Cool, Gar, you've traveled exactly the same road I did. And I had the same reaction as you. That's fun, and I'm glad you took the time to mention what you did, and to "trace your mental steps," so to speak. Thanks!My son Michael and I got a big kick out of your midhorn installation

don't know why we got such a kick out of that, but it was really fun to see.

Subject: 2Pi turns into pseudo 8Pi
Posted by kupfer_m on Mon, 28 Jun 2004 19:04:15 GMT
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Hi Gar,Did you just add the horn to the speakercabinet without changing any dimensions ?Could this be done with a regular 2Pi also then ?Could you give some more info on your "Thermionic 2Pi" crossover ?Thanks,Jim

Subject: Which Horn?
Posted by GarMan on Mon, 28 Jun 2004 20:12:15 GMT
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Hi Jim,Not clear on which horn you're referring to. The connection of the midrange horn and the 1" compression was done as per Wayne's specifications for the 8PI in previous posts. The compression is hooked up by a 3rd order XO at 1600Hz with HF compensation. The Alpha10 is filtered with a 1.0mH coil, and padded down 10dB, but with LF compensation.The Towers are about 1 cubic foot less than the 8PI specs (4.5 vs 5.5), but this configuration approximates the 8PI quite well. I understand that Wayne tested out his idea for the 8PI the same way.Before I started messing around with the midrange, I was listening to my Towers with the PSD2002. Kind of like a "Thermionic 2PI". Crossover was stolen from the Thermionic 3PI and works quite well. You can find a copy of it in Wayne's Crossover document.Gar.

Subject: Re: Which Horn?
Posted by kupfer_m on Tue, 29 Jun 2004 12:24:45 GMT
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Hi Gar,I mean the midrange horn you added to your 2Pi towers.So you could just take the 2Pi cabinet and add a midrange horn withthe appropiate crossover, right ?Greetings,Jim

Subject: Re: Which Horn?
Posted by GarMan on Tue, 29 Jun 2004 20:08:11 GMT
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That's it. The internal volume of the Tower approximates the 8PI pretty well. But you will have to add the compression driver too. I don't think the midrange goes up high enough to meet the KSN1038.Gar.