
Subject: old version of Pi4 pro
Posted by [vladimir4](#) on Tue, 16 Sep 2008 16:19:43 GMT
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Hi Wayne,I finally started to build my new-old project - 4 pi pro-like using Beyma 15M300, JBL 2426h & Eminence H290. I've two questions:I saw that you've developed recently new crossovers, I'd like to ask if it fits also to my configuration - or I better stay with the old-one. Is there any benefits (audiophile point of view) to add Deltas in mid-horns to this configuration ? Could you resend me plans for this configuration please ? Thank you in advance, Vlad.

Subject: Re: old version of Pi4 pro
Posted by [Wayne Parham](#) on Tue, 16 Sep 2008 17:15:29 GMT
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Use the new crossover, as it has smoother response through the crossover region. The two-way matched-directivity configuration trades simplicity and fewer crossover points for higher bandwidth required of the midwoofer. The three-way cornerhorn configuration reduces bandwidth, in turn reducing IMD, while retaining matched directivity but it is a more complex system with one more crossover point. Both designs offer controlled directivity that results in smooth response on and off axis over a wide 90 x 40 pattern. The two-way has collapsing directivity up to 1kHz, becoming constant by 2kHz or so. The three-way begins to become directional down around 300Hz, just above the room's modal region.

Subject: Re: old version of Pi4 pro
Posted by [vlad](#) on Thu, 18 Sep 2008 23:44:33 GMT
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Wayne, Thank you for reply. I will stay with 2-way. Regarding your new xover, as 15M300 is in 100dB/W range so I suppose I need 2-3dB less attenuation for the compression driver - how to do it? I suppose I could also adapt C5 R3 to fit Beyma's Le ; any other adaptation to be considered ? Thanks, Vlad

Subject: Re: old version of Pi4 pro
Posted by [Wayne Parham](#) on Fri, 19 Sep 2008 02:31:33 GMT
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From the spec sheets, it looks a lot like the JBL 2226H. I'd start from there. Don't use the standard formula for Zobel's, that's the way the old crossover was. I found that this design

responds favorably to a smaller capacitor in the Zobel. Of course, I haven't tested with the 15M300, so there may be some differences but I would suggest starting out with the assumption that it acts similarly to the JBL 2226H and make changes if needed.

Subject: Re: old version of Pi4 pro
Posted by [vlad](#) on Fri, 19 Sep 2008 23:55:20 GMT
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Wayne, thanks a lot Vlad.

Subject: Re: old version of Pi4 pro
Posted by [vlad](#) on Sat, 20 Sep 2008 10:43:45 GMT
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Wayne, could you please resend me plans for professional 4Pis (so with 15" and 1" JBL components ?) TIA, Vlad

Subject: You've got mail!
Posted by [Wayne Parham](#) on Sat, 20 Sep 2008 18:20:35 GMT
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