Subject: One Pi
Posted by Stefan on Sun, 22 Jan 2006 12:46:25 GMT
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Hi WayneCan I build One Pi cab with Alpha 8" and Beyma CP-21F instead VifaPlease tell me what crossover (elements) and attenuator I have to use for HF driverThank you in advanceRegardsStefan

Subject: Re: One Pi
Posted by Stefan on Sun, 22 Jan 2006 12:50:58 GMT
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Please send me the One Pi plans too

Subject: You've got mail!
Posted by Wayne Parham on Mon, 23 Jan 2006 03:42:51 GMT
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Subject: Re: You've got mail!
Posted by Stefan on Mon, 23 Jan 2006 09:02:35 GMT
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Thanks a lot WayneWhat's your opinion about 2xAlpha 8 + Beyma CP-21FI'll corssover them around 80HzI want to use them like front, center and surround speakers with subwoofer system

Subject: Re: You've got mail!
Posted by Wayne Parham on Mon, 23 Jan 2006 15:12:57 GMT
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Sorry, no experience with the Beyma driver. But your idea is good, so if setup properly, it will be a winner.

Subject: Re: One Pi
Posted by dB on Tue, 24 Jan 2006 10:17:01 GMT
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Pay attention to big differences in speakers. Vifa DX-25 (DX25TG0504)Fs=650Hz dB=94 (97/98dB to 10K, 96dB to 20K). Beyma's CP21/F Fs=3500/4000Hz. Very high sensitivity (SPL 1W/1M= >100dB). Very good Super Tw but you have to cut-it around 5to7KHz to make the best of it. Very high inductance Le. Also very expensive. You cannot X-over the CP21/F as if it was the Vifa.

Subject: Re: One Pi
Posted by Stefan on Thu, 26 Jan 2006 09:20:53 GMT
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I'm agree with you dB.I'll make 2-way system and HP it 80Hz. CP-21F will cut 2-nd order 5kHz. I want to use high sensitivity Beyma because I'll use 2 of Alpha 8. I'll use L-pad for BeymaIn specifications of Alpha 8:Usable Frequency Range 65Hz - 5kHzDo you think that will be good frequency responce speakers?

Subject: Re: You've got mail!
Posted by Stefan on Thu, 26 Jan 2006 09:23:17 GMT
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Thank you WayneI hope that me and you soon know it

Subject: Re: One Pi
Posted by dB on Fri, 27 Jan 2006 12:08:59 GMT
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80Hz? You have Subs?

Subject: Re: One Pi
Posted by Stefan on Fri, 27 Jan 2006 12:34:27 GMT
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Yes I have 4x15" subs dBI want to have cinema system with extremely flat response and high SPL

Subject: Re: One Pi
Posted by dB on Fri, 27 Jan 2006 12:52:48 GMT
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80Hz Active Crossover? Bi-Ampli?

Subject: Re: One Pi
Posted by dB on Fri, 27 Jan 2006 13:10:49 GMT
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Do you mean 800Hz...? Or is it more like you say?

Subject: Re: One Pi
Posted by Stefan on Sat, 28 Jan 2006 10:31:33 GMT
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I mean 80Hz Active CrossoverBut at this moment I'll use 75Hz 3-rd order build in my amp (Crown CTs600)Do you think that is good idea?

Subject: Re: One Pi
Posted by dB on Sat, 28 Jan 2006 16:57:32 GMT
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No, no, no.Alpha 8 Resonant Frequency (fs) is 76Hz. You will get with that at 80Hz. From Eminence website Selection Guide http://www.eminence.com/eminence/pages/products02/pdf/selection.pdf you can find Alpha 8 to be great in the range of 50-2kHz but not Excellent. Alpha 8:---- Subwoofer (Not rec.)* * * * Woofer 50Hz--2kHz (Great)* * * * * Mid-Bass Woofer 200Hz--4kHz (Excellent)(...it doesn't get there)* * * * Midrange 600Hz--5kHz (Great)After all it does not connect with a super tweeter at 5K(87dB at 5K-going down). Maybe X-Over around 2000Hz max. Losing performance after

3.5kHz. If you want power, I can understand that, give a look at SMC2012/N beyma, with extended frequency range; 1-20 kHz (101dB). If you want to introduce some high quality Super tweeter as the beyma or JBL 2405H, you have to think how you get there either with a compression driver (for power) or a cone/dome mid-tweeter (for a silent environment, home or studio).

Subject: Re: Slot Tweeters
Posted by dB on Mon, 30 Jan 2006 01:47:17 GMT
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Hi, StefanI like your idea (of the CP21/F Slot Tweeter and 2 ALPHAS-dispersion at high and low freq.) that's why I keep looking. There is a similar TW from Selenium that has a Slot and that is ST324 with 103dB (and ST322 +2dB) for $25.13.http://www.partsexpress.com/pe/pshowdetl.cfm?&DID=7&Partnumber=264-360&ctab=2#Tabs The reason I say this is that maybe you can manage to find a fit. There is a kit with Selenium parts from France that uses a 10" Woofer and this Super Tweeter. http://www.mhdiffusion.fr/produits.php?de=0&m=SELENIUM&c=kit+hpThe difference is that the woofer goes a little bit further to 4k and the tweeter with Fs (resonance) a little bit earlier at about 2k7 what makes them suitable for a marriage. Now, I checked about APT's from Eminence and they seem very good with resonance at 2.5kHz. There is one APT50 and APT80 ($34.99)/APT150/APT200 pre-mounted 'to your choice of the horn lens' as an example from the site.http://www.partsexpress.com/webpage.cfm?&DID=7&WebPage_ID=113Since your ALPHA 8 rolls-off at 3K5 Hz there seems to be a good possibility...Again, I like the CP21/F from beyma but I would use it only as a super tweeter from 5K or even more from 7K to 20'sK Hz. I guess you are saving money here.With 2xAlpha 8's (96dBs) and a ST324 you need more or less 7dB Attenuation for the high frequencies.With 2xAlpha 8's (96dBs) and APT50 (104/105dB) you will need an 8 or 9dB Attenuation. That's my best guess. I bet that if you ask Wayne P. he can do a good 'Rolls-Royce/Ferrari/Lamborghini' X-over project that puts everything in place, with the power and dispersion that you need, and if you use the EMINENCE HF Drivers.Best Regards.

Subject: Choosing the Crossover Frequency
Posted by dB on Mon, 30 Jan 2006 12:11:05 GMT
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Hi, StefanCheck this about 'Choosing the Crossover Frequency' by Wayne Jaeschke, 2001.http://www.speakerbuilder.net/web_files/Articles/xover%20article/xpointmain.htm

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Subject: Re: Slot Tweeters
Posted by Stefan on Tue, 31 Jan 2006 21:12:44 GMT
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Hi, dBThanks for your support I know about Selenium ST324 & ST322 tweeters. Their price is attractive but I think that you get what you pay. I mean that their response curves are not like CP-21F. Selenium ST324 have poor sound above 15kHz and ST323 above 12,5kHz. Their horizontal dispersion is 120 degrees, CP-21F have 140 degrees. Also CP-21F is 25W AES, Selenium TWs are 20RMS. I bought 4x Beyma CP-21F before year ago and their sound is fantastic but they are in 3-way systems with 4x Alpha 8 and 4x 15" Cerwin Vega woofers with crossover between LF and MF about 800hZ. If you want I can send you photos of them Now I want to make speakers which have flat response from 80Hz-20kHz (THX crossover point is 80Hz) and four 15" Vega speakers I want to cut to 80Hz like subwoofers. Alpha 8 have 89db/5kHz and have 2 peaks about 2,5 and 3,5kHz - 97db (it's 8db). Selenium 12PW3 have 12db (min 92db/450hz, max 104db/3,2kHz)difference.Selenium 10PW3 have 10db (min 91db/300hz, max 101db/3,5kHz)difference.THX have requirement for 7db for surround speakers.I have bad opinion about APT:50Me and a frend of me used 2x Eminence APT:80 with 4x Eminence Alpha 8 in his car and HF was poor till we mount 2x CP-21F with L-padWhat's your opinion dBBest RegardsStefan

Subject: Re: Slot Tweeters
Posted by dB on Thu, 02 Feb 2006 09:24:05 GMT
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You may destroy your biloved CP-21F's.What components are you using for X-overs, Stefan?What freq's are you planning, for crossovers?Regards

Subject: Re: THX Speakers
Posted by dB on Thu, 02 Feb 2006 12:25:25 GMT
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'Now I want to make speakers which have flat response from 80Hz-20kHz (THX crossover point is 80Hz)' [STEFAN]'...if you are referring to "THX Approved" speakers, I think that any quality speaker is going to play music or home theater just fine...'[member in a HT forum]Speakers complete list of THX testing categories (from www.thx.com Product Test): Axial Frequency Response Analysis Directional Characteristics Sensitivity Impedance Harmonic Distortion Low Frequency Cut Off Phase Angle Stray Magnetic Flux Maximum Output Level Acoustic Noise Level Polarity

Subject: Re: Slot Tweeters
Posted by Stefan on Thu, 23 Feb 2006 08:08:15 GMT
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We used 3-rd order 5kH X-over point.X-over was the same like we use with Eminence APT:80 but we want to make this test only for comparison between them.

Subject: Re: THX Speakers
Posted by Stefan on Thu, 23 Feb 2006 09:16:17 GMT
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I search in www.thx.com for "Speakers complete list of THX testing categories" but i can't find it.Would you send me link where I can find this list?Thanks in advance dBRegards Stefan

Subject: Re: THX Speakers
Posted by dB on Thu, 23 Feb 2006 10:04:41 GMT
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THX Tests for Performance(http://www.thx.com/mod/products/performance.html#speakers)Also check this one. It have a Forum, also, with a "Do It Yourself area"(WELCOME TO) HOME THEATER TALK(http://www.hometheatertalk.com/index.html)