Subject: Omega 15 alternatives?
Posted by reguax on Thu, 11 Dec 2008 16:52:11 GMT
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Hi everyoneOmega 15 is out of stock at my local dealer (I'm not in USA)KAPPA PRO 15 ALF2 seems to be a good replacementHas anyone tried it?Will it work in a 4Pi cabinet?I've seen posts about it, but they are very old, so I'm asking again in case someone has any news Thanks in advance!

Subject: JBL 2226
Posted by Wayne Parham on Thu, 11 Dec 2008 17:41:16 GMT
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provide uniform directivity. The crossover point has to be fairly high in order to match directivity of the midwoofer with the tweeter, because it requires the midwoofer's collapsing directivity to match the radiating angle of the tweeter. That doesn't happen until around 1kHz.As a result, midwoofer selection is critical. The quality of the midwoofer is extremely important, because it is what voices the speaker through the critical midrange.Try to find a JBL 2226 if you can.

Subject: Re: JBL 2226
Posted by reguax on Thu, 11 Dec 2008 17:53:06 GMT
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Ok, the warning is clear I'm considering JBL like an upgrade, I can't afford it at this time. I will manage to get the Omega Thanks Wayne!

Subject: Re: Omega 15 alternatives?
Posted by reguax on Fri, 12 Dec 2008 21:03:32 GMT
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I have a 'little' problem.I didn't notice that the required drivers for 4Pi are "Omega Pro 15" while the current eminence model is "Omega Pro 15A".Now, I'm the owner of a useless(???) pair of Omega Pro 15 A.Will the 4Pi work with Omega Pro 15 'A'?Should I throw them to the trash can?Thanks!

Subject: Re: Omega 15 alternatives?
Posted by Wayne Parham on Sat, 13 Dec 2008 00:18:12 GMT
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It's the same driver, no problem. I should probably be more specific, because Eminence refers to it as an Omega 15A.

Subject: Re: Omega 15 alternatives?
Posted by reguax on Sat, 13 Dec 2008 15:30:59 GMT
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Good news Wayne I thought I had purchased the wrong drivers However, I'm still a bit confused. The specs for 15A at eminence web site and the specs from the link at Pi site are different.Parhaps the values describe similar drivers and I can't see it?Could be the case, I just see numbers, I don't understand them. But these numbers look very different.For example, from eminence website:Resonance 33HzUsable Frequency Range 51Hz-1.7kHzSensitivity*** 97.3DC Resistance (Re) 5.28 Coil Inductance (Le) 1.04mHElectromagnetic Q (Qes) 0.33Mechanical Q (Qms) 5.69Total Q (Qts) 0.32Compliance Equivalent Volume (Vas) 9.1 cu.ft.From the PDF document at Pi web site:Resonance 39hzUsable Frequency Range 35Hz-2KhzImpedance (Re) 4.98ohmsCoil Inductance (Le) 1.48mHElectomagnetic Q (Qes) 0.37Mechanical Q (Qms) 8.57Total Q (Qts) 0.35Compliance Equivalent Volume (Vas) 6.92 cu. ft.Thanks!

Subject: Re: Omega 15 alternatives?
Posted by Wayne Parham on Sat, 13 Dec 2008 18:01:25 GMT
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Those specs describe a compatible alignment. You could almost say equivalent but since the numbers are different, I like to say they're compatible instead.Eminence has done this a lot over the years. They're fast and loose with their spec sheets. But don't take this as a slight on Eminence, in fact, maybe it's more honest to republish specs every year or two. After all, materials change slightly over the years, suppliers change, different vendors are subcontracted, etc. In fact, you can even take the same driver, test with a 0.1v signal and get one set of numbers, retest immediately with 1.0v and get a different set of numbers. Run the speaker at high power for a few minutes and retest and it wil be entirely different.The important thing is that the electro-mechanical specs, when used in a system, provide the desired response curve. They do in every case I've found of Eminence drivers that have shifted from one season to the next. They're different but not in a meaningful way. That's why I don't get too excited about changing spec sheets posted, if you sample a few yourself, you'll likely find matching numbers, or very nearly. They're compatible parts.

Subject: Interesting Delta 15A pro specs are similiar...
Posted by spkrman57 on Sat, 13 Dec 2008 18:33:50 GMT
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Wayne, I measured a pair of Delta 15A pro drivers I have and this is the result using WT2:Revc 5.7 ohmfs 40 hzQes .38Qms 3.99Qts .35Zmax 53 ohmLe 1 mHeff 97.8 db/watt (3.874 %)Vas 8.3 cu ftThe other driver measured really close to these specs also!I'm looking at using a 7.75 cu ft cab. What would you recommend for tuning the port frequency???Regards, Ron

Subject: Re: Omega 15 alternatives?
Posted by reguax on Sat, 13 Dec 2008 18:46:29 GMT
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Ok Wayne.It's clear No more bothering about the specs Thanks!

Subject: Vas=8.3, Fts=40, Qts=0.35
Posted by Wayne Parham on Sat, 13 Dec 2008 19:00:24 GMT
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I'd probably put a woofer with specs like that in a cabinet from 2.5ft3 to 5.03 tuned to 40Hz, just like the JBL 2226 or Omega 15. That is slightly overdamped, so it's good inside a room and also thermal shifts won't make it peaky down low.If using it in a larger box like you're talking about, I'd probably shift the Helmholtz frequency down a smidge, say 35Hz to 38Hz. All those values form kind of a continuum of alignments. Big box, from 6.0ft3 to 10.03, the port should be somewhere between 35Hz and 38Hz, larger tuned lower. Smaller box, below 5.0ft3, tune to 40Hz.

Subject: Re: Vas=8.3, Fts=40, Qts=0.35
Posted by spkrman57 on Sun, 14 Dec 2008 00:09:27 GMT
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Thanks Wayne!I have a JBL 4 cu ft box that pretty much fits those specs tuned to 40 hz!Regards, Ron