Subject: I went back to the "right x-over" and lost something
Posted by BillEpstein on Sun, 10 Apr 2005 08:59:01 GMT
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Now running the 8 Ohm 902's with 4Pi Pro Eminence 1.6k extra cap on the woofer removed.The extra detail and most of the sparkle is still there but some of the ambience is lost. And the Marantz receiver became shrill; the Ella necessary for listening above moderate levels.Am I missing the 1200 Hz crossover point? The 16 ohm caps: 5.6 and 16?The 1.5mH 15 ga. foil coil?

Subject: Re: I went back to the "right x-over" and lost something
Posted by Russellc on Sun, 10 Apr 2005 11:47:31 GMT
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I know you've checked this already but After hours of fiddling sometimes it is possible to have mis wired something. Altec drivers are also very phase dependant, try reversing the 902 leads in relation to the bass. They are also very picky about absolute phase, try reversing both the main speaker leads to your speakers. some phono sections may invert phase in relation to the line stage, and reversing the leads to both speakers is required to restore the air. I don't know what "woofer cap" you removed, but perhaps that changed the phase relation ship between the woofer and high end, giving a miss match at crossover frequency. As to the shrillness, I have heard others complain of this when replacing the original altec cross overs caps with modern film caps. I still use the original 501 8b crossovers in my altecs, with crossover at 500hz, which i myself have always prefered to the higher crossover point. I know the model 19 was around 1200 hz or so, but I (and many other altec fans) prefer 500 HZ.While I have not tried it myself, the end all way to crossover altec is electronically. EVERYONE I have disscussed this with says this brings unbelieveable improvements in altec drivers, beyond what would normally be expected.Russellc

Subject: I agree - try and swap the plarity
Posted by spkrman57 on Sun, 10 Apr 2005 12:33:34 GMT
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between the 2226/902 Ron

Subject: Re: I went back to the "right x-over" and lost something
Posted by spkrman57 on Sun, 10 Apr 2005 13:22:15 GMT
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Bill, Don't forget that you are still using a 16 ohm 2226. Therefore most likely you are still a few db shy of what the 8 ohm 2226 would give you. Also, i am using 14db attenuation on mine.I am ready to install my JBL E-130's reconed to 2225's which are slightly more efficient than the 2226, but mostly in the midrange area above 80hz. They might be around 98.4 db/watt per the LH forum gurus. The extra efficiency is due to the E-130 magnet structure which is more powerful than the stock 2225 magnetic structure.I am looking forward to incorporating my JBL 2242 sub to take care of any "BASS" duties! This is one "Bad-ass" driver (18")and I have a 1000 watt plate amp with adjustable EQ. I figure to use it up to maybe 60hz to 80hz. Hmmmmm wonder why "pipe organ" music is coming to mind..... Ron

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Subject: Re: I went back to the "right x-over" and lost something
Posted by Wayne Parham on Sun, 10 Apr 2005 14:31:21 GMT
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Hard to say what's going on without being there. You have a system that is very similar to a Pro

like these, the midwoofer is run as a wide range driver, through the vocal range and to a point where DI is closely matched to that of the horn. You've got about an octave wide range of values that will work well, basically from about 800Hz to 1.6kHz. I personally like to have the 200-2kHz range covered by a single driver, so that's one reason I like the higher 1.6kHz point. There are a few other reasons too. Compression drivers aren't driven hard and the summing works out very nicely when baffle mounted. Many companies make a 1.6kHz crossover, so you can source parts easily too. Everything just comes together nicely.But 1.2kHz is fine too. It's in the DI matching range and still above the vocal fundamentals. In fact, it's there's only four musical notes difference between 1.2kHz and 1.6kHz. If summing is right, I would expect them to act the same for the most part. Should work out very nicely. But you would probably need to get out the calculator or the scope to see if the summing was good in the crossover range. You might find a notch somewhere within an octave either side of the crossover point if things aren't right. The same could be true of your 1.6kHz crossover or any other. For crossover between 1kHz and 2kHz, the wavelengths involved in the overlap region are on the order of about 6" to 12". So you'll find that summing is pretty nice in this range with drivers and horns baffle mounted, but if you get too far off, you can get into a situation where there is destructive cancellation.
