Subject: 2426 horn loading questions @ Altec 511 B, 2370 comparisons
Posted by jlharden on Sun, 10 Mar 2002 17:54:23 GMT
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Hi Guys!How low can we really take this 2426/2370 horn combo? The JBL literature shows loading down to 500 hz. with a 630 hz. minumum crossover(20 watt maximum cont.) At 20 watts we're close to 130 db, so shouldn't be a factor. Want to mate with a pair of 2226 J woofers per channel. I assume that 12 db low pass, 18 db high pass with Wayne's rc network would be the best implementation? Are there programs available to determine proper crossover components by simply plugging the numbers? Also, anyone used the JBL 2426 with the Altec 511 B horn? Any comparisons? Would the rc network still be appropriate? Thanks to all! Jerrod

Subject: Re: 2426 horn loading questions @ Altec 511 B, 2370 comparisons
Posted by Wayne Parham on Sun, 10 Mar 2002 20:41:48 GMT
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crossover is just right for the 511. I've sent schematics for these to your E-Mail address, in case you don't already have them.The 2426/2370 combo is usable down to 800Hz, which is the low frequency cutoff of the horn. You might be able to reach 500Hz on a larger horn, but below that, diaphragm excursion is too great on any horn except at very low power levels.

Subject: well damped 511's
Posted by Sam P. on Mon, 11 Mar 2002 18:09:15 GMT
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I have heard references to adding lots of duct seal, tar, etc to horns to reduce their "ring". Before cutting, the one pair of 511's would literally ring for seconds. It turns out that when welded, lots of internal stress must occur. When the recip saw blade was cutting thru, it would be "pinched" by the horn trying to close where the blade had passed, and as the blade exited, the first gap snapped shut like "snap". The gap the width of the metal saw blade had closed almost completely. So about a 1/8 inch section needed to be removed from each sectoral fin. Black tape was used to keep the rtv from dripping out the bottom of the cuts, once dry, it was removed. The horns then went "clunk" when struck...no further mods needed for now...even decided BBQ black was a more fitting finish than bare aluminum...lets the speakers "go away" in a darkened room...Sam

Subject: Re: well damped 511's (and structural mods)
Posted by Wayne Parham on Tue, 12 Mar 2002 02:43:08 GMT
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I have heard of people physically breaking the bell of their 811's and 511's and as crazy as that sounded, I'm sure it works to de-stress the structure and prevent it from ringing. It makes sense that cutting the cross-members would do this too. Reducing the tension in the structure would lower its resonant frequency, ideally putting it below the passband.

Subject: further mods...2035 update
Posted by Sam P. on Tue, 12 Mar 2002 13:46:29 GMT
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Wayne, I've seen at least one reference where a guy removed the sectoral fins completely, but left the bell lips...said it was not worth the many hours labor involved, and he had access to full boiler makers tools, grinders, etc. In the spirit of max benefit/least effort or $$, just cutting a slice out, and caulking is great. And most of these things, especially the cheaper ones offered, do need a coat of paint to look nice. Let the wife pick the color, match the decor, etc. Putty NEVER passes the WAF test, so that would be a small damping benefit, but cost you from the extra spousal static... Anyone considering powder coating might want a milling machine or something similar used to make the cuts, for a cleaner final appearance...the rtv can be black(usually), but clear looks OK too.2035 update...levels match pretty well using "12 dB Pi pad", 1.0mH/10uF LP w/ 4.4 ohm/10uF zobel...average LF level from 100 to 1000 Hz. was flat +/- 1 dB; from 2 to 11 kHz. the HF averaged about 1/2 dB lower than the LF, and from 8 to 16 kHz, HF averaged 1.5 to 2 dB hotter than from 2 to 11 kHz., and varied +/- 2.3 dB's average. HF F10 estimated somewhat more than 17 kHz...these were measured with the 4 Pi on the floor, and the mike about 2 meters away...mike height adjusted to put it in the "line of hearing" from the middle of the two drivers to the listening position, 12 feet away. hf readings averaged for the 8 to 16 Khz. response were "corrected" per data from a net posting. Since I need to go in and replace the port tubes with shorter ones, I will "boost" the overall HF by about 1 dB, getting it 1/2 dB hotter, rather than cooler than the LF. And seal the HF horn flares to the front baffle...did not see puffs of air, but the newspaper slid under one end of each H-290, gotta be a leak there! a machinist straight edge

says the H-290's are not flat...at least the fronts aren't! Drivers are sealed to the rear of the horns with a "certainteed" elastomer plumbing gasket...about 2.75 od, they just fit in between the two bolts. These are "done", and sound great...I'm just putting on the "auction wax" for that last 1% of "shine". Sam

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Subject: After all those mods you wind up with ....
Posted by ::mikeo:: on Tue, 12 Mar 2002 14:35:31 GMT
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...an Emilar 800 hz "bowtie" horn. It looks like an 811 with the last bit of the bell (or "lips") removed. There's a pair on ebay now for reference, but ebay is having trouble today, so I can't link it.

Subject: here it is
Posted by ::mikeo:: on Tue, 12 Mar 2002 15:19:40 GMT
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nm

Emilar bowtie

Subject: ask anyone with a fake rolex
Posted by Sam P. on Tue, 12 Mar 2002 15:59:40 GMT
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how well they tell time. Ten years from now, the 511 will still be a classic, very likely worth more

than what they cost today. And their rep for ringing...well, you just read the $53 "tweak", pretty inexpensive compared to a nice pair of IC's. Sam

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Subject: All I was trying to point out was...
Posted by ::mikeo:: on Tue, 12 Mar 2002 16:16:03 GMT
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... that by the time you cut the welds or remove the end bell of the 511/811 - you windup with the emilar horn.So, for anyone curious what that "sound" is like, it would be far easier to get a pair of the emilar horns and try them on for size. Rather that going thru the PITA mods to the 811/511 horns.A picture is worth a thousand words - right.What easier way to show what you would wind up with when radically modding the altec horn.That's the only thing I was trying to convey Sam::mikeo::

Subject: I understand the profile looks similar
Posted by Sam P. on Tue, 12 Mar 2002 16:38:32 GMT
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and may be an easy way to go. Price wise...how much are the emilars, anyway? I've bid and won as low as 100/pr on 511's, though 200 is probably more normal. And ABS is quiet, I won't argue that. The bowtie "smile"...that would take getting used to...removing the end bell from 511's,not something I advise, that would be a LOT of work. I'm just "knock off" phobic, I find "copies" of such american icons as the Buck 110 lockback knife personally distasteful, and am sorry to see it with horns too. If you like 'em, buy 'em. But patience will likely let you find "the real thing" cheap if you look around...Sam

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Subject: Reminds me of "The Joker"
Posted by ::mikeo:: on Tue, 12 Mar 2002 16:54:24 GMT
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from the old Batman series :)I gotta agree that whacking up a 511 makes no sense at all. ::mikeo::