Subject: Altec 511B Ringing Update
Posted by AstroSonic on Mon, 12 May 2003 20:24:33 GMT
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Hi all,This post is a follow-up to my question about remedies for 511B horn ringing posted about a week ago.I have made some modifications to my 511B horns and can report the following;1) De-stressing by gapping the fins greatly reduces the 'theater type' sound (obvious lower treble dominant and sharp (dynamic?)mid-upper treble) they initially had, but leaves some residual glare and hardness. The sound jumps out at you as this range is crossed.Note that after de-stressing, I could still easily detect vibration in the central area of the large gently curved portions of the horn bell, and in the throat area.2) I applied constrained-layer damping material in 2 steps. In the first step I covered the horn bell from behind the front mounting flange back to the narrow throat - this substantially reduced the glare and hardness, and added considerable definition/resolution. In the second step I covered the horn throat, from the rear (driver) mounting flange up to the rapid horizontal expansion - this resulted in another gain in resolution, especially in the upper treble. Cymbals are now much more clearly defined, no longer just a textured 'pff'. And...the soundstage really opened up. It's a whole new ballgame. The sound quality is now very similar to that from my JBL 2446/2380's. Very smooth, dynamic and detailed, and lacking in tonal coloration. The small format drivers (Iconic Model 102-16) are a bit more agile though, so the sound from the 511B's is a little more detailed and more extended in the HF (w/o compensation). As a bonus, they present a nice wide and deep soundstage - on good recordings, the speakers are replaced by the recorded acoustic space. They do not quite diasappear like LS 3/5a's, but then neither do the dynamics. The JBL 2380 CD horns simply do not image. They do produce a very appealing 'they are here' (as contrasted with 'you are there') presentation.The material I used was Dynamat Xtreme. Other similar products would probably work just fine, but the Dynamat was available locally. I used about 7 square feet of material. It took about 3 1/2 hours to make some measurements on the horns, layout the cuts on the material and apply it to the horns. Total coat: about $60 with sales tax. Worth every penny! As always, YMMV.Thanks to everyone here for help, humor and encouragement.Regards,AstroSonic

Subject: Re: Altec 511B Ringing Update
Posted by Wayne Parham on Mon, 12 May 2003 21:10:55 GMT
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horns are very popular. So I think there are a lot of people that are interested in what you've done. I know that Sam P. is a big advocate of this process, and of carefully placing his HF horns so that the vertical lobes are equidistant from the on-axis centerline. He likes to use the reverse-polatity crossover droppout method to achive this, so do a search for Sam's posts if you're interested.

Subject: Re: Altec 511B Ringing Update
Posted by Larry Moore on Tue, 13 May 2003 17:10:29 GMT
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FWIW, when I had 511Bs, cutting the webs out completely and in particular that little vertical spacer right in fron of where the driver mounts made as much, and probably more difference than "gapping the webs."

Subject: Re: Altec 511B Ringing Update
Posted by bmar on Tue, 13 May 2003 19:01:08 GMT
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Hey Larry, never new anyone had cut them out before. cool beans! good to have the feedback on this since you cant go back with out a tremendous amount of work.bill

Subject: Re:cutting vanes out completely is a waste of time IMO
Posted by Tom Brennan on Fri, 16 May 2003 09:13:48 GMT
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I cut the vanes out of a 511B and it was a waste of time, I heard no difference in the sound nor did my friends. And removing them was no little work; first I used a plasma cutter, then a 5" angle grinder and then flapper wheels for the final finish. I wanted to hear a difference after all that work but there was none.

Subject: Altec 511B Ringing - damp the lips!
Posted by AstroSonic on Fri, 16 May 2003 13:17:46 GMT
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Previously reported modifications to my 511B horns:gapped finsgap dampedsupport stub removedconstrained layer damping sheet material on bell and throat of hornNew Mod: damped horn lips with viscoelastic damping sheet material (VE-1 from Parts Express)This last mod took a little more edge off the sound - they are now ever so smooth. Note that what remains is even greater resolution and dynamics, not euphonic smothering of the sound. The VE-1 has a black, fine textured surface and blends in well with the finish of the horn interior. Most people don't even notice it. Inexpensive and very effective.AstroSonic

Subject: Re: Altec 511B Ringing Update
Posted by Dave Aukerman on Mon, 19 May 2003 11:50:51 GMT
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I'll second that. When I first got my 511's, Larry kept telling me to remove the webs and after swapping lens' a couple times with his, there was no question as to the route that I had to take. A bit of work, but definately worth it. Much smoother and open.Dave