
Subject: New Pic & Observations
Posted by [zincman](#) on Fri, 24 Jun 2005 21:16:35 GMT
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Well after a little paint and made up some port covers the A7 cabs are starting to look a little better. As for the sound I am still blown away. I should say I am not a technical expert in audio and could not tell you what is rolling where and at what db, but as a 30 plus year audio lover I can tell you how it sounds to me. OBSERVATION 1: My CD collection is horrible for critical listening and all CD's are not equal. Great speakers really nail down shortfalls elsewhere and many CD I thought sounded pretty good with other setups really sound like crap. So any suggestions for Jazz, Vocals, let me know. OBSERVATION 2: The Altec 416-16 is a wonderful speaker. Solid bass you can feel in your gut, hard to get out of most speakers. OBSERVATION 3: 802/811 horn combo has very lush mids and highs. Horns(SAX) in my house have never sounded better. Ron AKA Sprkman57 is going to do some horn swapping and assures me he has an even better set up, CAN'T Wait OBSERVATION 4: The A7 can in my modest opinion be almost overwhelming. I have so much sound in my room it is incredible. OBSERVATION 5: I can't imagine listening to anything else, at least right now this set up is the best I have ever owned and would take a lot to change my mind about the Altec sound.

Looking Better

Subject: Re: New Pic & Observations
Posted by [Wayne Parham](#) on Fri, 24 Jun 2005 21:42:29 GMT
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That really is a good looking speaker. Awesome!

Subject: Re: New Pic & Observations
Posted by [zincman](#) on Fri, 24 Jun 2005 21:51:09 GMT
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Thanks Wayne and the best part is they sound pretty darn good too!

Subject: Re: New Pic & Observations
Posted by [Wayne Parham](#) on Sat, 25 Jun 2005 04:14:13 GMT
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I'll bet they do!

Subject: Re: New Pic & Observations
Posted by [colinhester](#) on Sat, 25 Jun 2005 15:07:01 GMT
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Wife's been in Boston this week, so I have not had much of a chance to play. I know what you mean by some CD's sounding like shit. The first time I went to Ron's house I took some "audiophile" Cds along. About 5 seconds into the first recording, I was actually embarased by the sound. What sounded good on my system was anything but. I'm just not blown over by the bass of the 416. I suspect I've just been accustomed to over-bloated (not accurate) bass reproduction. Alos, my 416 still have very few hours on them, and I suspect are still breaking in. Don't get me wrong. I love the sound.The horns do reproduce a sax like no other combination I've heard. I love the sax (used to play) and I know what one should sound like.I know exactly what you mean by TONS of sound in the room. Good, ain't it I told Ron this is the best system I have ever heard, and could not imagine anything better, at least for my needs. He assured me I WILL be changing; this is just the first step. I'm not changing anything until: 1) I get my SE 811-10 tube amp up and running. I have 50% of the parts ordered, and the remaining should be selected this weekend. Shit, this project got expensive very quickly; and 2) I got the green light from the wife to start finishing the basement. I have about 2000sf to complete and, honestly, this will take about a year. The basement will include a pool area, library, full kitchen, full bath with walk-in shower and sauna, small HT, dedicated listening room (9' x 13' x 22')and office. How are you with a hammer and nail?.....Colin

Subject: Re: New Pic & Observations
Posted by [zincman](#) on Sat, 25 Jun 2005 18:07:57 GMT
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I got to say in all honesty I can't hammer or cut straight but always up to helping out.

Subject: Re: New Pic & Observations
Posted by [colinhester](#) on Sun, 26 Jun 2005 02:24:01 GMT
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If you can pull a trigger or operate a miter saw, you're hired.....Colin

Subject: Tip from fellow A7 owner
Posted by [wardsweb](#) on Sun, 26 Jun 2005 21:11:46 GMT
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Hello - a friend of mine send me a link to your post and ask that I take a look at what you have done. First off, you did a very nice job on putting these together. They are truly something to be proud of. As for your harsh mids and highs, may I ask a question, make a comment and add a suggestion. What crossover are you using with the 811 horn? If you ever come across a pair of 511B you may find them more to your liking. Now for something you can do now, dampen your horn. This can be done in several ways. The first two are easy: 1 - You may take some modeling clay and partially fill the upper lip in your horn. 2 - go buy a couple 2 pound "soft" weights made for diving (cloth bag filled with lead shot) and lay one in the top lip of each driver. Either of these will take out almost all the "ring" in your horns and tame some of the harshness you speak of. This next option is a little more involved: You cut the welds out of the divider veins in the mouth of the horn, then fill it back in with some long life silicone glue like Permatex Blue gasket cement. The last option is to dampen the outside of the bell with any number of sound dampening materials that add mass. You can buy spray on deadener like used in car audio applications, you can build up layers of latex paint and sand mixed together (layer it until the bell no longer rings when tapped with your knuckle), or line the lip of the bell with sound deadening rubber sheets.

Subject: Re: Tip from fellow A7 owner
Posted by [Manualblock](#) on Sun, 26 Jun 2005 23:14:17 GMT
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I have noticed a lot of posts concerning dampening of the 811/511 and when they are not firmly attached to the enclosure they ring; but when I bolt mine tight to the box I hear no ring even with a forcible rap to the bell. So how can they ring when they are in fact dampened by the simple act of tightening the mounting bolts? Has this been brought up before?

Subject: Re: Tip from fellow A7 owner
Posted by [zincman](#) on Sun, 26 Jun 2005 23:22:55 GMT
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Thanks for the kind words on the cabs. I have read a lot about damping these horns and you are the first person to actually give specific information on how to. Thanks for that. At this point I think Ron AKA Sprkman57 and I are going to do some horn swapping to start with, the 511 and see how they run. I have noticed these cabinets have quite a bit of resonance to them. I also have placed what I think is too thick of insulation inside. So the bottom line is I have a lot of tuning to do and I really appreciate your help and insight. Tim

Subject: Re: Tip from fellow A7 owner

Posted by [GM](#) on Mon, 27 Jun 2005 01:08:55 GMT

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Greetings! Only pretty regularly. If they are mounted like in a Model 19, this damps the bells somewhat, but not enough. Plus, when you move back into the horn where it really counts, they ring like crazy until you get back near the throat even when clamped like in the consumer models, so it's worse with the A7's metal brackets. If mounted only on one flange, then obviously it's much worse. To ~effectively damp these requires several pounds of oil based clay, or better still, build a box for them and fill it with either sterilized sand or Portland cement, filling the bells also. Or if you're lazy, just toss a bag of kitty litter on top of them. This still doesn't address the stress issues due to welding that can only be resolved by cutting out the vane welds and interior vertical brace, filling the vane's voids with a lossy material and adding exterior stiffeners (if you don't do the filled box tweak). GM

Subject: Re: Tip from fellow A7 owner

Posted by [Manualblock](#) on Mon, 27 Jun 2005 01:35:53 GMT

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It sounds true enough; and since I won't be cutting the vanes on mine I probably won't find out. But let me just repeat a conversation I had with Bill H at GPA where he basically said he thought after trying both ways that he could not conclusively identify either pair. So I guess I am saying is the change a serious or just a minor difference?

Subject: Re: Tip from fellow A7 owner

Posted by [GM](#) on Mon, 27 Jun 2005 02:08:55 GMT

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Greetings! It depends. If it's not highly stressed, it's a subtle difference, but quite a few I've 'liberated' were so stressed it made a big difference. Some are so bad that the vanes don't line up once cut. Sustained notes, such as in organ music, is where it's the most obvious. Some folks prefer them with the vanes removed, or at least the two outside ones like some early W.E. lens, but HF dispersion suffers even more, requiring a super tweeter IMO. GM

Subject: Re: Tip from fellow A7 owner

Posted by [Wayne Parham](#) on Mon, 27 Jun 2005 03:36:32 GMT

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Swap amps too. Some of the resonant sound that you're hearing is the parafeed circuit too, not just speaker panel resonance. I heard this kind of resonance on some of Johan Van Zyl's speakers during a recent trip to Dallas. It sounded just like the speakers were slightly underdamped, or a panel was unbraced. I mean, it really sounds like the speakers. But I knew that the amp he was using gave a little bit of bass bloat just like that, because I had one just like it for a couple years. It sounds good, but tends to make speakers have an underdamped sound. It's a pretty good match for very small high Q single drivers, but it's a little thick for larger, more balanced speakers. So I went out to the car and brought in one of the amps I took to show and viola! Perfect! No more bass resonance. Swapping out the amp to one with more bass control gave his speakers the balance they really needed. I like your amps, and think they sound nice in the mids, and provide deep, full bass. That's a nice change from some of the other low power SET amps that don't have any bass response. But the bass is a bit bloated, and it will be hard to tell that symptom from speaker resonance. Trust me, it isn't all the speakers.

Subject: Former owner of several A7 VOTT's
Posted by [spkrman57](#) on Mon, 27 Jun 2005 10:05:13 GMT
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Just my 2 cents worth here but, I have found the horn ringing to not be a issue for me. If you truly want damped horns, get some wood horns and you get good looks and no ringing. But I have found the aluminum horns (511B/811B) to sound more lively and sound better with the very low powered amps. I'm glad that there is plenty of opinions and ideas on what to do with these VOTT systems, that way Tim and Colin can take them all in and decide what direction they want to go. I may be wrong, but I advised both of them to listen and enjoy them for awhile before starting to tweak those systems. The sky is the limit on tweaking the A7 VOTT, but either way they sound pretty good in stock form. Dr Bruce Edgar when asked to compare his "Edgarhorn" system to the VOTT's replied that the VOTT's are good at "vintage horn" sound vs his "modern horn" sound. I have had both and like most things in life they both have their good points. I like wood horns now but still enjoy a good listen to a pair of A7's now and then. For the money though it's hard to beat a pair of used VOTT's if you search for their parts at their best prices. Ron

Subject: I don't know if this is relevant or not
Posted by [wunhuanglo](#) on Mon, 27 Jun 2005 10:16:48 GMT
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The drivers/horns I've been using have had some harshness at higher levels that just bothered the hell out of me. Rated at "109 dB in their passband" I'd have thought 40 WPC would be plenty enough to make them happy. But this weekend I moved them up to 100 WPC and the harshness is gone - you can crank them to 11 without adding any strain whatsoever to the sound. Another point is that the Altec horns were made to be screwed down, but most people just plop them on top. With the flange screwed tight to the bass box there's a world of difference, even without

additional damping of the horn itself.

Subject: Re: Former owner of several A7 VOTT's
Posted by [Wayne Parham](#) on Mon, 27 Jun 2005 15:56:50 GMT
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All due respect to Bruce Edgar, I'd say his design style is more vintage than Altec's. Bruce's loudspeaker designs hearken back to the very first horn loudspeakers. They use simple crossovers and horns that provide acoustic EQ instead of pattern control. They're from a time when the most important thing for a horn to do was to make the sound louder. Pattern control and summing through the crossover range are not part of the design requirements. Altec introduced the concepts of pattern control and driver interaction, and some of their early thrusts in this regard were included in the VOTTs. The sectional horn was designed to put the sound where they wanted it, and their method of adjusting its position was a way to improve summing through the crossover range. Altec developed the Manta Ray horn, which was one of the first constant directivity horns. We're really only just now starting to move past the Manta Ray, and there are a lot of modern production horns that still employ its design features. So I'd say Altec actually used more modern design approaches. I don't think the difference in sound is due to modern verses vintage as much as it is due to implementation, to the differences between two-way and three-way loudspeakers and due to differences in equalization used. Two-way speakers have the advantage of simplicity and coherence over three-way systems, much like single drivers have this over two-way speakers. But the disadvantage is that frequency extremes are harder to push. A midwoofer in a two-way loudspeaker has to run clear into the upper mids and overtone region, and it also has to go deep in the bass. Altec chose a large two-way for their VOTT system, and they weren't expected to be used with soundtracks having deep bass rumbles or much content above 10kHz. Edgar prefers to run three-way systems, because horns are relatively narrow bandpass devices and his speakers are intended for home hifi use, covering a wider total audio band. Another thing is the equalization curves in each of these speakers. The VOTT is horn loaded through the midrange, and uses an even more efficient horn loaded tweeter. Bass is generated by simple direct radiation from the woofer, loaded by a bass-reflex rear chamber. So the system has rising response, with a few pretty distinct steps. But most people don't use equalization with VOTT speakers, so they can sound somewhat strident. Bruce's basshorns are generally used with equalization, which helps ensure the bass response is deep and full. So there are a lot of differences in implementation that make any comparison less one of vintage verses modern and more really just an apples and oranges thing.

Subject: Re: Former owner of several A7 VOTT's
Posted by [Bill Wassilak](#) on Wed, 29 Jun 2005 14:37:32 GMT
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I thought EV was the first to come out with the constant directivity horns with there 9040, 6040,

and 4020 series also known as the big white ghosts. Then Altec came out with the Manta Ray horns about a year or 2 later. I could be wrong. Bill W.

Subject: Re: Former owner of several A7 VOTT's
Posted by [Wayne Parham](#) on Wed, 29 Jun 2005 15:04:17 GMT
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Both were mid-seventies. My point was that Altec was an innovator of horns, and that their designs represented the state-of-the-art. Edgar prefers old school methods. Beyond that, I think the sound difference is due to the characteristic response of the VOTTs. That particular family of loudspeakers was made to be used in theaters with a large number of people, and the most important thing was good coverage over the majority of the audio range, roughly from 100Hz to 10kHz. What I'm saying is that I don't think it's a vintage versus modern thing here. I think the difference is due to configuration. Take a couple of Edgar's horns, make a two-way loudspeaker for theaters and compare it with the VOTTs. Or take a 511 or Manta Ray, a 100Hz Altec midhorn and a subwoofer below it, setup for balanced response and compare that with one of Bruce's three-way systems. I think that's a more valid comparison.

Subject: Re: Tip from fellow A7 owner
Posted by [zelgall](#) on Wed, 06 Jul 2005 03:22:03 GMT
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I cut the vanes out of a pair of 811's and in my system I prefer the sound without the vanes. It may have some thing to do with the short length of the vanes and room interaction, who kows? I have 3 pairs of 811's and have switched them in and out, both with the same 802 drivers and with others. They just sound better without the vanes.
